Yokohama ServiceNow AI Platform user interface

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Configure user experiences

Interact with ServiceNow AI Platform applications and data in the way that works best for you.

Get started

Click any of the tiles below to learn more about the variety of customizations, communications, and other options for a user experience unique to your enterprise on the ServiceNow AI Platform.

Configure UIs and Portals	Provide user assistance	Personalize your experience
Build user interfaces and create custom user experiences with this versatile suite of tools.	Give users assistance on the ServiceNow AI Platform with knowledge articles, step-by-step tutorials, and more.	Create visual timelines and task tracking.

Configure UIs and portals

Improve workflow and data retrieval using Workspace and Core UI apps. Take user interface development further with custom menus and pages from the Next Experience, or integrated apps with the Content Management System. Customize catalogs at any developer skill level with Service Portal, and enable your customers to get the services and products that they need.

Provide user assistance

Inform, educate, and assist your users with a full set of guidance and knowledge apps on the ServiceNow AI Platform. Help users get familiar with the ServiceNow AI Platform using the Onboarding Experience, and give Guided Tours of the UI. Provide further assistance with step-by-step instructions from Guided Setup, and on-demand knowledge with In-Product Help.

Personalize your experience

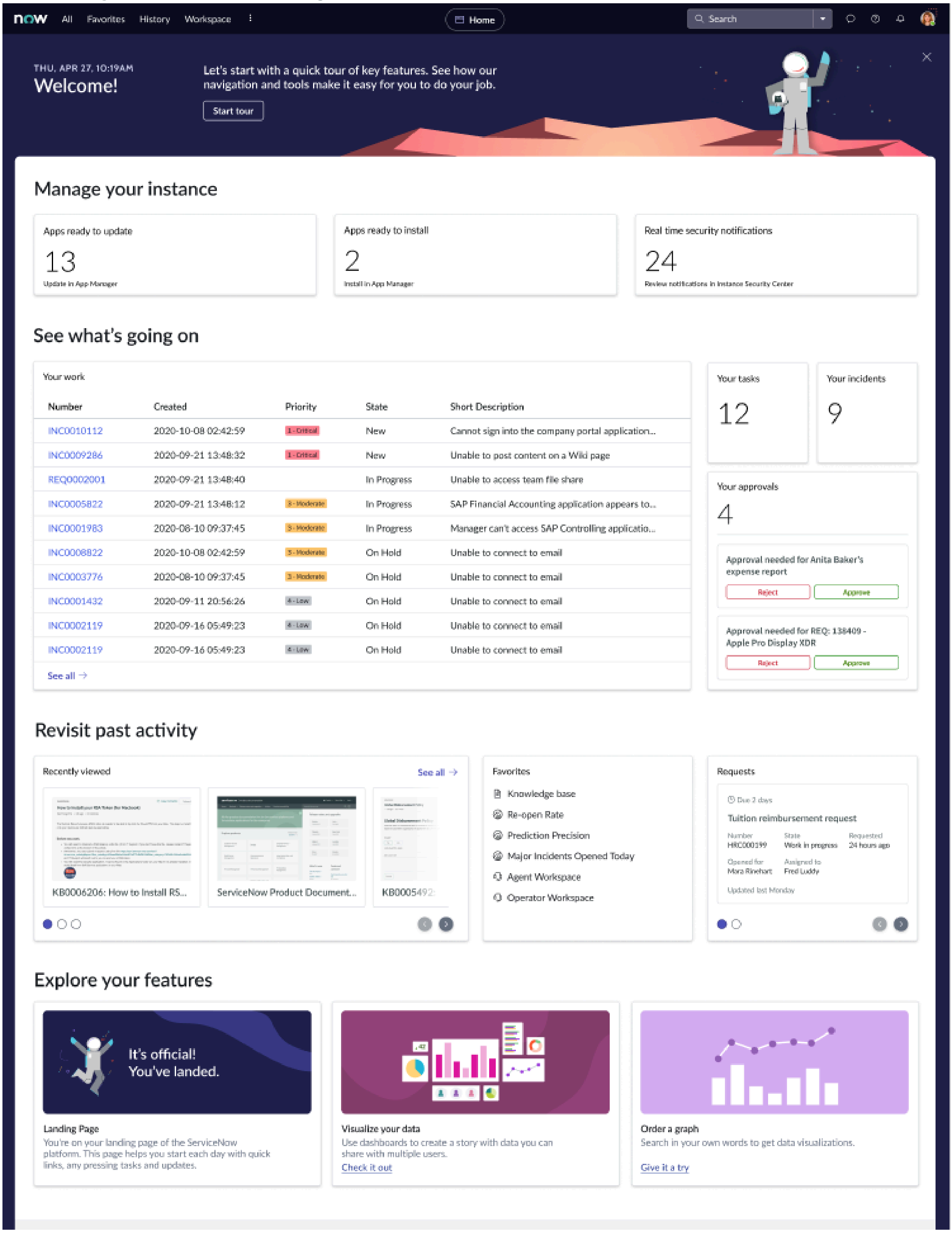
Get a graphical breakdown of workflows and give users customized views in your enterprise on the ServiceNow AI Platform. Visual Task Boards and Timeline Visualization help you manage projects, lists, and other aspects of your business, in two- or three-dimensional views. A further host of settings for users is available in Homepage administration, to fine-tune page rendering, user access, dashboards, and other options.

Access data on any device through a configurable web-based interface

Access workspaces, Core UI, applications, history, and favorites through the single pane Next Experience UI.

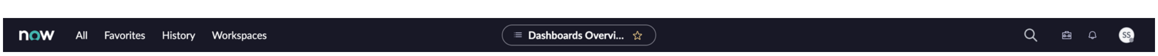
For highlights, see the Next Experience UI landing page.

Provide just the data that you need



Access the data that you need and get to work immediately. Next Experience landing pages are personalized according to user and role.

Access your instance in single pane



Navigate to modules in your instance without opening multiple windows. Favorite the modules, explore modules you visited, and search your instance. Receive web and email notifications in one location too.

servicenow

Personalize your user interface

Next Experience preferences

Display

Accessibility

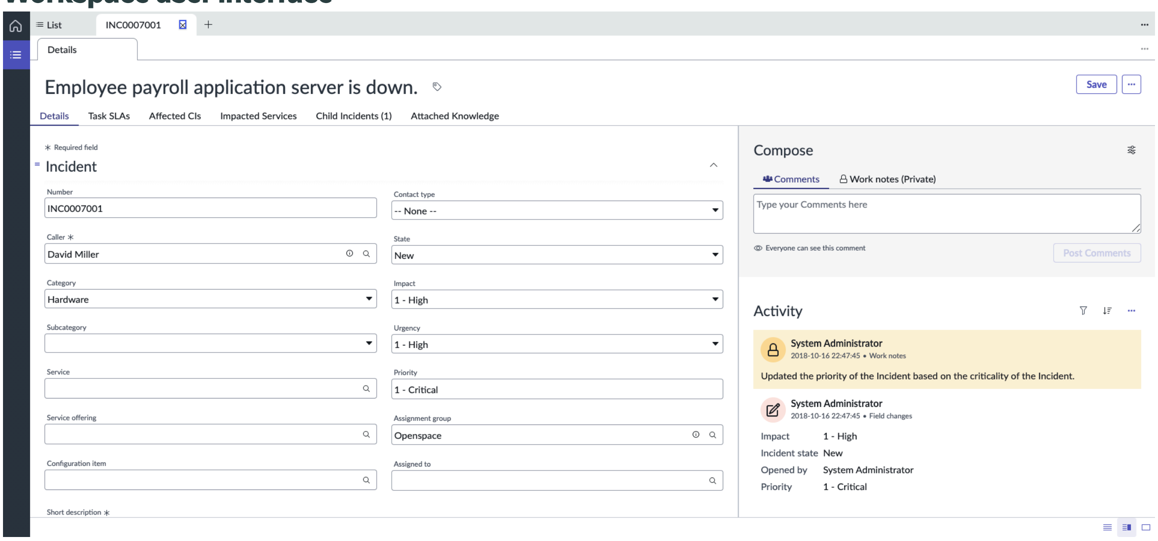
Notifications

Workspace

You can customize the UI to determine the information that you want to see, that's accessible, and in the format that works for you.

Improve agent efficiency with Workspace

Workspace user interface



Solve issues faster with a workspace that is built to facilitate resolutions. Agents get full context and AI-assisted recommendations in a single view to resolve issues quickly. Agents can communicate with customers from the same interface while reviewing issues.

Applications and features

- Next Experience UI
- Workspace UI
- Working in Core UI
- Content Management System (CMS)
- Service Portal
- Adoption services
- Visual Task Boards (VTB)
- Timeline Visualizations

Configure UIs and portals

Customize your interface to create an efficient, unique experience for users and customers.

Next Experience UI	Workspace UI	Working in Core UI
Unify your instance apps and reduce clicks with the ServiceNow® Next Experience.	Improve agent efficiency with Workspace UI, to offer better customer experience.	Upgrade the user experience with custom homepages and URL navigation, all in Core UI.
Service Portal	**Content Management System**	
Build the perfect self-service interface for your customers with the mobile-friendly Service Portal.	Design custom interfaces for the ServiceNow platform and its applications using this highly flexible application.	

Next Experience UI

Personalize your experience to increase productivity and engagement. With the Next Experience UI, you can take control of navigation with all app shell items in one place. The ServiceNow AI Platform lets you create custom menus and landing pages. You can easily move between core UI apps and personalized workspaces.

Workspace UI

Create a workspace that works perfectly for you and your business needs. The Workspace UI offers improved agent efficiency, swifter resolution, and monitoring for major incidents. All this data is provided from a single view, complete with analysis and AI-based recommendations.

Working in Core UI

Explore improvements in both usability and design with Core UI. Easy URL-based navigation to records or modules brings you the data that you want in an instant, from full addresses to tiny-URL-supported links. Building homepages to your specifications lets you have all the navigation, controls, and system info you need to work most efficiently.

Service Portal

Design the optimal self-service experience with Service Portal. Connected to the ServiceNow AI Platform, the Service Portal brings you the platform features that enhance your user experience. Whether a new developer or veteran engineer, you can customize the UI with everything from basic configurations to in-depth scripts and web apps to best serve your customers.

Content Management System

Build everything from full websites to integrated apps using CMS. This powerful application offers a range of solutions for your business, whether you need an interface based on a simple search bar, or detailed text-and-image-based layouts. Options such as full internationalization and translation further expand your customer reach and influence.

Next Experience UI

The Next Experience UI delivers a next generation, intuitive, personalized experience to drive productivity, improve engagement, and surface insights across the ServiceNow AI Platform. The UI unifies your instance apps and reduces clicks to access the items you need to get working.

Get started

Work	Configure	Migrate
Learn about Next Experience concepts and features.	Configure environments, tools, and user access.	Migrate to Next Experience UI.

Benefits

New features and benefits when working in the Next Experience:

Unified Navigation

https://player.vimeo.com/video/995182005?h=9e4dcc44a5&badge=0&autopause=0&player_id=0&app_id=58479

- Access app shell items—such as the contextual app pill, menu items, notifications, and search—all in one place across the entire platform, no matter which application you're using.
- Pin and unpin navigation menus to access menu items or free up screen real estate.
- Find your favorite pages quickly by organizing your favorites into folders.

Additional menus

- Navigate to and save important resources with the Favorites, History, and Workspaces menus. Find your recently-viewed items in a single menu.
- Easily switch between classic environment applications and configurable workspaces.
- Create custom menus for your end users. For more information, see Configure custom menus for Unified Navigation.

Next Experience landing pages

- Start your day with everything you need right when you log in.
- View content specific to your role and tasks all in one location.
- Designate a start page for your users, or allow them to choose their own.

Functionality not supported

Important:

Connect Chat is not available in Next Experience. Starting with Yokohama, certain Connect Chat functions are available in Next Experience by using Sidebar. See KB1123615 – Moving from Connect Chat to Sidebar for more information about the differences between Connect Chat and Sidebar.

Connect Support is not available in Next Experience and is scheduled to be completely deprecated in Utah. If you want to automatically assign chat requests and other work items to agents in Next Experience, you must migrate to Advanced Work Assignment and Agent Chat. For details, see Move from Connect Support to Advanced Work Assignment and Agent Chat.

These features and products are not currently supported with Next Experience:

- The functionality found in homepages, arranging information from your instance to tell a story about your data, is found in dashboards on new instances. On upgraded instances with Next Experience enabled, users can view existing homepages if they have a direct URL, but they can't create or edit them. Responsive dashboards and Analytics Center dashboards take over homepage functionality. Use the Homepage deprecation help tool to convert the homepages on your instance to responsive dashboards.
- Custom header menus are not supported.
- Live Feed is not supported.
- The JavaScript console log isn't supported in the Next Experience framework.
- ATF doesn't support these elements of Next Experience, but support for these features is planned for future releases:
  - Pages built with UI Builder, including pages with lists and form components.
  - Configurable Workspaces
  - Landing pages

  Note: ATF still supports the Core UI, including Classic Environment (such as classic lists and forms).

For more information, see:

- KB1156736 – Moving from Connect Chat to AWA and Agent Chat
- KB1123615 – Moving from Connect Chat to Sidebar
- KB1157068 – Live Feed Is Not Supported in Next Experience

Learn more

- View Next Experience articles on the community at the Next Experience Center of Excellence.
- Review answers to common questions on the community. See Getting Started with Next Experience UI FAQs.

Working in the Next Experience UI

Learn about the key Next Experience features.

Next Experience user interface

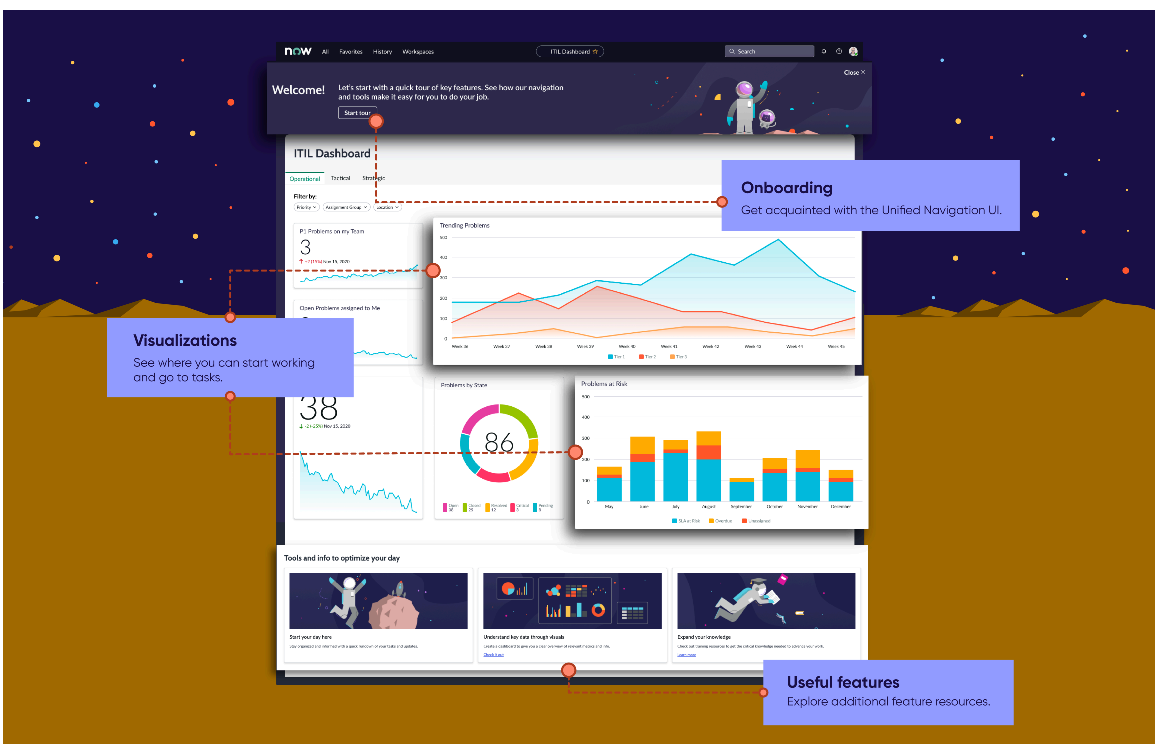
Next Experience unifies the apps in your instance. Unified Navigation enables you to access content across your instance in a single pane, simplifying access to the items you need to get working. Access the Core UI and dashboards in the same pane as your Workspace. Contextual navigation shows you where you are while you're working.

Note:

Your Next Experience UI might not look like these examples due to your access or customizations made by your system administrator.

Next Experience landing page

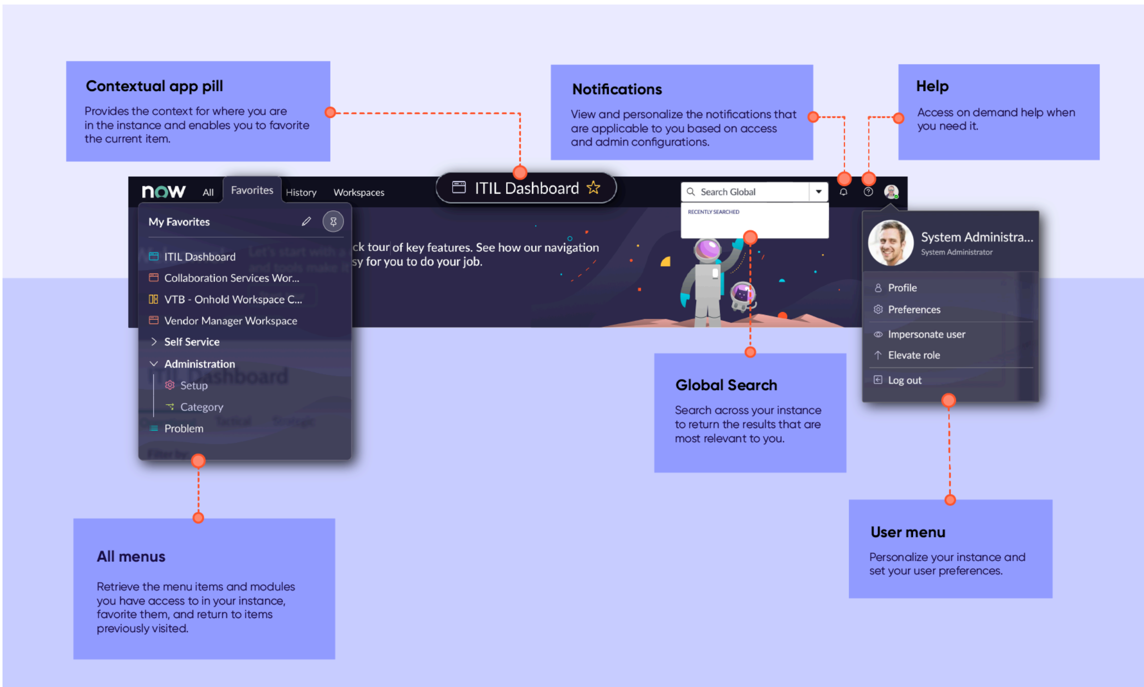
Next Experience landing pages provide the information you need to start working. These landing pages typically present content specific to your role and tasks. Landing pages can include lists, Performance Analytics and Reporting (PAR) information, and other features to access your new and prioritized tasks from one location.



- **Onboarding**: Get acquainted with the Unified Navigation UI.
- **Visualizations**: See where you can start working and go to tasks.
- **Useful features**: Explore additional feature resources.

Next Experience Unified Navigation

The Next Experience Unified Navigation provides the tools you need to navigate your instance and set your preferences.



- **All menus**: Retrieve the menu items and modules you can access in your instance, favorite them, and return to items previously visited.
- **Contextual app pill**: See where you are in the instance and favorite the current item if desired.
- **Global Search**: Search across your instance to return the results that are most relevant to you.
- **Notifications**: View and personalize notifications applicable to you based on access and admin configurations.
- **Help**: Access on-demand help when you need it.
- **User menu**: Personalize your instance and set your user preferences.

Get help with Next Experience

To get help with Next Experience, your ServiceNow instance, plugins, permissions, and more, watch a short video to contact the ServiceNow admin who works in your company.

Get help now from your Now Support administrator

The ServiceNow admin in your company can help you with things like activating plugins, kicking off upgrades, unlocking accounts, updating user permissions, and much more.

https://player.vimeo.com/video/1056112088?h=1a5cd3b245&badge=0&autopause=0&player_id=0&app_id=58479

Helpful resources

Some ServiceNow resources that can provide you with helpful information are:

ServiceNow Community

Next Experience Community

Next Experience Quick Start Guide

Next Experience Resources

ServiceNow Workshop

ServiceNow Next Experience Workshops and Lab guides

FAQs

Next Experience FAQs

Exploring your Next Experience default landing page

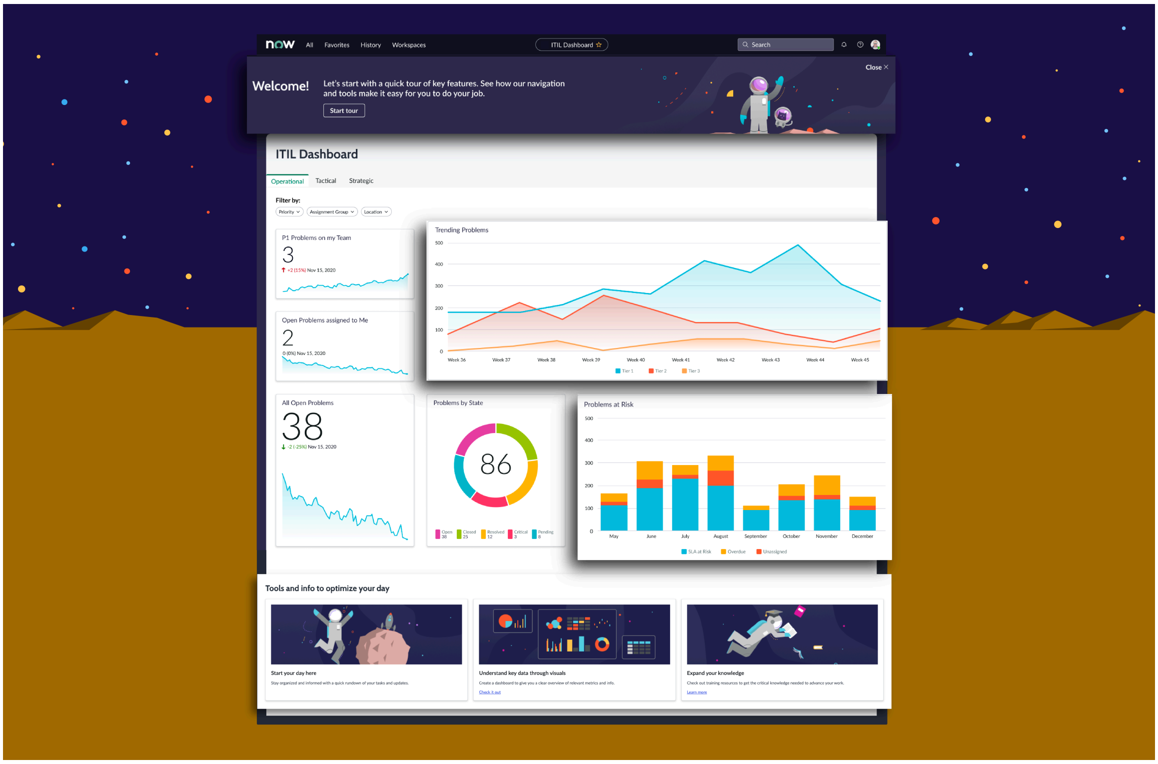
Access the Next Experience default landing page to see your work at a glance and identify where you can start.

When the Next Experience framework is installed, your landing page is the first thing you see when you log in to your ServiceNow® instance. It provides information to help orient you to your tasks.

Default landing pages are available in instances that have the Unified Navigation enabled. Note that if you have existing dashboards, landing pages, or logic that have been configured, your current dashboard displays instead of the default Next Experience landing page.

Landing pages may include the following items based on your role and tasks:

- A banner containing a link to learn about the Next Experience Unified Navigation
- New and critical tasks to keep up to date with the status and priority of your work
- Your tasks that are currently open by priority
- Lists with task records assigned to you to work on
- Performance Analytics and Reporting (PAR) data relevant to completing your tasks
- Approvals that are actionable on the landing page
- Your favorite items
- Your open requests
- More resources to identify useful features



Using the Next Experience Unified Navigation

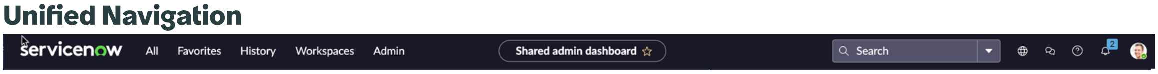
Improved navigation to access records and data, check your notifications, and set your preferences in the Next Experience Unified Navigation.

The Next Experience Unified Navigation runs across the top of every page and includes controls that help you in navigating your instance. Easily access your workspaces and classic environment, search your instance, and receive notifications.

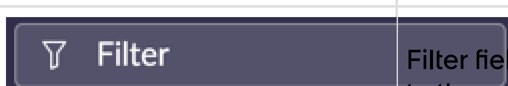
Select the pin icon ( ) to pin a menu to the page.

Note: The Unified Navigation items described in the following table might not be available to all users. The items that appear are determined by user access and administrator customizations.

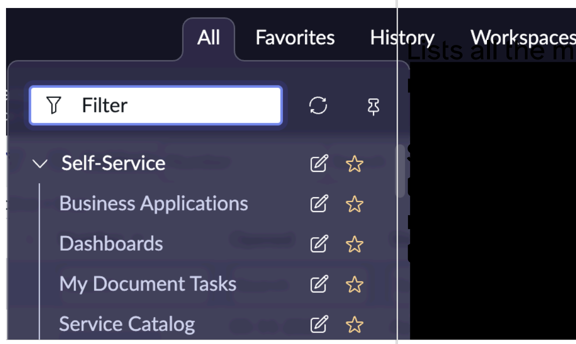
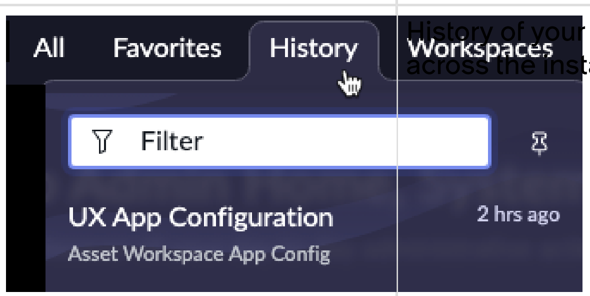
Unified Navigation



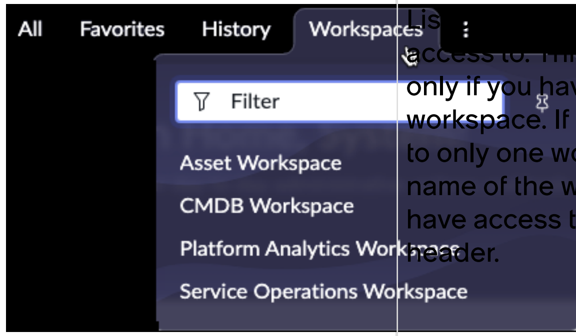
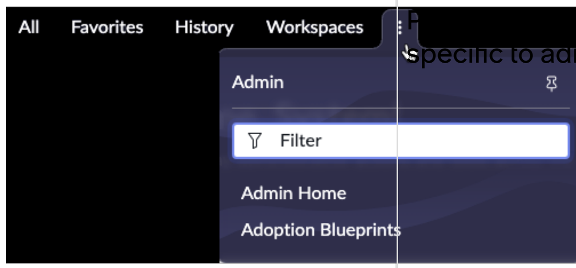
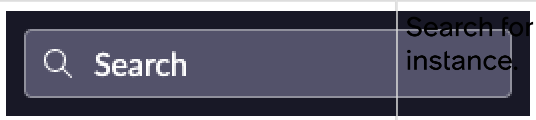
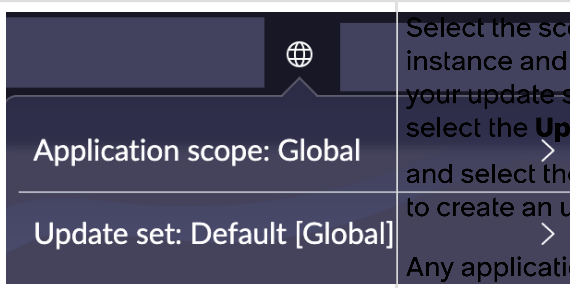
Next Experience Unified Navigation items

Header items	UI depiction	Description
Logo	servicenow	Returns you to the Next Experience landing page. You can replace this logo with your company logo.
Filter		Filter field to quickly navigate to the module you want. The search functionality accommodates missing letters in your queries. The default accuracy score

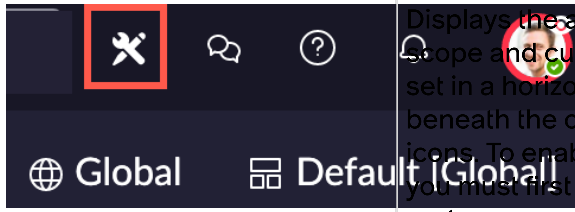
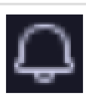
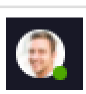
Next Experience Unified Navigation items (continued)

Header items	UI depiction	Description
		can be updated by your system administrator. For more information, see Next Experience system properties. For a list view, enter the table name in the format `name.list`, for example, sys_properties.list. For a form view, enter the table name in the format `name.do`, for example, sys_user.do. By default, filtering in any of the menus returns results from all menus, except the History menu.
All menu		Lists all the menu items and [redacted] instance. [redacted]esh icon ( ) [redacted]in the latest [redacted]thout the need [redacted]ear the cache.
Favorites menu		[redacted]e marked as fav[redacted]r example, favorit[redacted]paces, classic enviro[redacted]and records. Select[redacted] icon ( ) to open the edit modal. For more information on adding and editing favorites, see Managing your favorites in Next Experience.
History menu		History of your activities across the instance.

Next Experience Unified Navigation items (continued)

Header items	UI depiction	Description
Workspaces menu		Lis[illegible]aces you have access to. This item displays only if you have access to a workspace. If you have access to only one workspace, the name of the workspace you have access to displays in the header.
Admin menu		P[illegible]ss to items specific to admin functions.
Contextual app pill		Provides the context for where you are in the instance. Select the star icon to favorite the displayed page.
Global search field		Search for a string across your instance.
Globe		Select the scope of your instance and the scope of your update sets. You can also select the **Update set** option and select the Plus sign ( ) to create an update set. Any application scope other than Global displays a red circle ( ).
Now Assist		Enables you to address and help solve customer issues. You can generate summaries for records using the natural language interface of the Now Assist panel. The Now Assist panel is configured using the Now Assist Admin console.

Next Experience Unified Navigation items (continued)

Header items	UI depiction	Description
Show instance tools		Displays the application scope and current update set in a horizontal row beneath the other tool icons. To enable this feature, you must first create a system property called `glide.ui.next_experience.instanc` and set it to **false**. When this feature is enabled, the Globe icon is hidden.
Sidebar discussions		Engage in real-time collaboration with others based around a Workspace task-based or interaction-based record. Sidebar discussions facilitate the exchange of information and knowledge to help resolve issues faster and with higher-quality outcomes.
Help		Two tabs are displayed: Get help and What's new. The **Get help** tab enables you to get on-demand help when you need it. The **What's new** tab shows the things that have been introduced since the last release. Additionally, the Help icon displays a blue dot when **What's new** content is available. A **Provide Feedback** button is available that enables you to provide feedback about the functionality of the associated page to ServiceNow®.
Notifications menu		View and personalize the notifications that are applicable to you across your instance at a central location. Receive notifications across your instance, including Workspace notifications, regardless of which page you're on. Your notifications are based on access and admin configurations.
User menu		Menu items to personalize your instance.

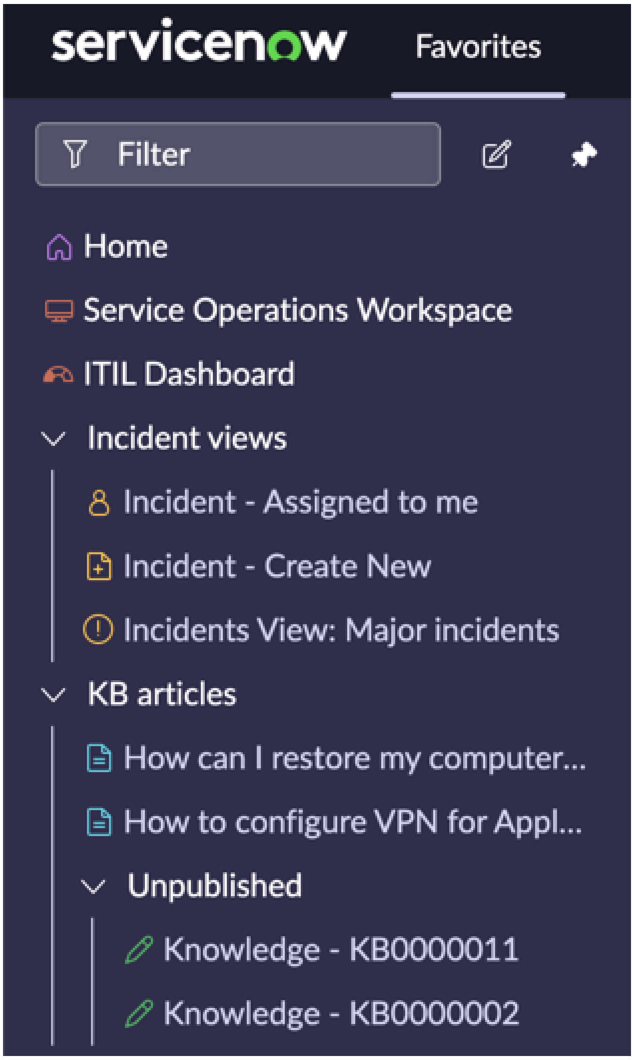
Next Experience Unified Navigation items (continued)

Header items	UI depiction	Description
		• **Profile**: Your instance profile, which includes your personal information displayed in the instance. • **Preferences**: Display, accessibility, notifications, and Workspace preferences. • **Keyboard shortcuts**: Display a modal with keyboard shortcuts that are specific to the screen you're viewing. For more information on the keyboard shortcut modal, see Next Experience keyboard shortcuts. The keyboard shortcuts modal can also be accessed using **Command +/** (Mac) or **Control+/** (Windows). • **Impersonate user**: Administrators can impersonate other authenticated users for testing purposes and view impersonation logs. For more information, see Impersonating users. • **Elevate role**: Designate any role as an elevated privilege role, and then assign that role to one or more users. Do this when you want to restrict users from having access to the rights that the role provides immediately after login. • **Printer friendly version**: A printer-friendly version of the current content frame. **Note:** The Printer-friendly version option is available in the classic environment but not in Workspace.

Managing your favorites in Next Experience

Favorites help you quickly find and go to your most used Next Experience pages.

After you add favorites, they appear in the **Favorites** menu in the Next Experience Unified Navigation. You can customize how favorites appear in the menu by editing their names, icons, and colors, and their position in a folder structure.



Add favorites in Next Experience

Find and access your most used pages quickly by adding them to the Favorites menu in the Next Experience Unified Navigation.

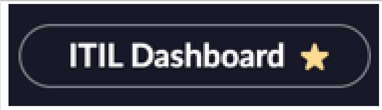
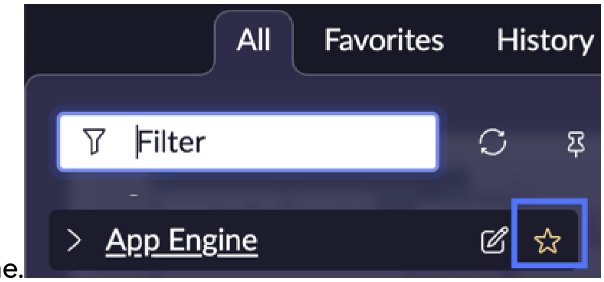
Before you begin

Role required: none

Procedure

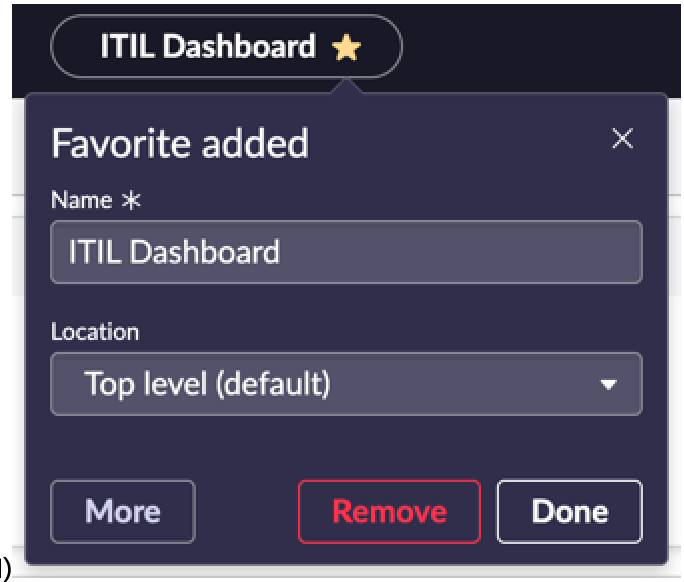
1. Add a favorite in one of the ways listed in the following table.

Option	Description
From any page	From any page, select the star icon in the con textual app pill.

Option	Description
	
From the All menu	○ To add a single module: In the application navigator, select the star icon next to the module name. ○ To add all the modules under an applica tion: In the application navigator, select the star icon next to the application name.
From a list or record in the classic environ ment	**a.** Open a list or record in the classic environ ment. **b.** Select the context menu icon (≡) next to the list or record title. **c.** Select **Create Favorite**. You can add a different favorite for each view of a list or record.
From a knowledge base article	**a.** Navigate to **All** > **Self-Service** > **Knowl edge**. **b.** From the Knowledge Homepage, select a knowledge article. **c.** In the header, select the star icon (If the knowledge article has multiple versions, on ly the currently viewed knowledge article version is added to favorites).

2. **Optional:** In the **Favorite added** dialog box, modify the favorite.
   A sample initial dialog box is shown in the following example.

(Optional)



a. In the **Name** field, edit the name that appears in the Favorites menu.

b. In the **Location** field, if you have created groups for the Favorites menu, select a group for the favorite to be listed in.
For information about creating groups to organize the Favorites list, see Organize favorites in Next Experience.

c. Either save your changes, make further modifications, or remove the favorite.

- To make no further modifications, select **Done**.
- To modify the favorite's icon and its color, select **More**, select an icon and its color, and select **Save edits**.
- To remove the favorite, select **Remove**.

Organize favorites in Next Experience

Find entries in the Next Experience Favorites menu quickly by organizing your favorites in a folder structure.

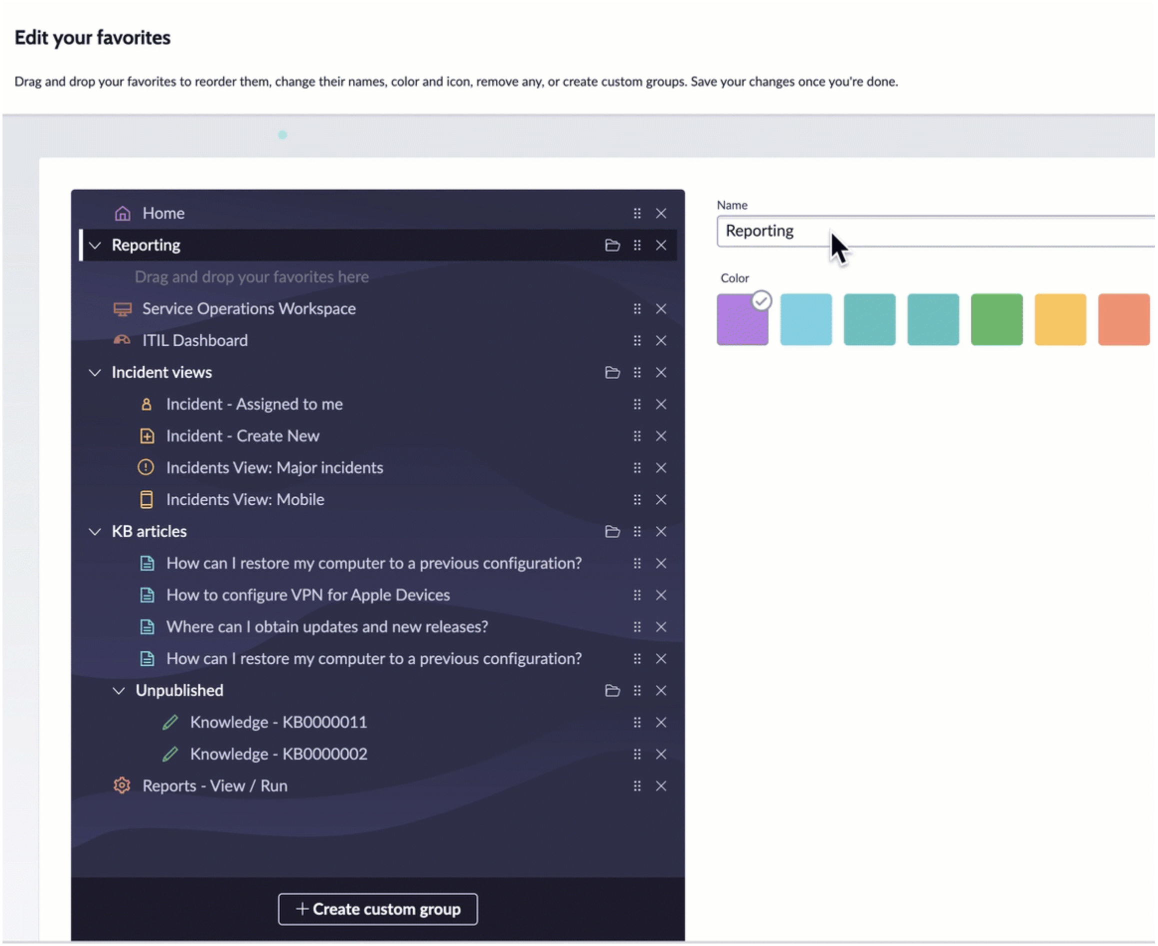
Before you begin

Role required: none

Procedure

1. Select the **Favorites** menu in the Next Experience Unified Navigation.
2. Select the Edit your favorites icon ( ).
3. Select **Create custom group**.
4. In the **Name** field, enter a name for the group.
5. **Optional:** Select a color for icons associated with the favorites in this group.
   You can also set colors specific to each favorite in the group.
6. Move favorites into the group by dragging them under the group's name.

Example



7. **Optional:** Repeat the previous steps to create additional custom groups or subgroups.
8. Select **Save edits**.

Edit favorites in Next Experience

Keep your Next Experience Favorites menu updated by editing the names and icons of favorites, reordering favorites, moving them into groups, or deleting favorites you no longer need.

Before you begin

Role required: none

Procedure

1. Select the **Favorites** menu in the Next Experience Unified Navigation.
2. Edit or delete favorites.

Option	Description
Edit a favorite	**a.** Select the Edit your favorites icon (). **b.** In the favorites panel, select a favorite. **c.** Modify the favorite.

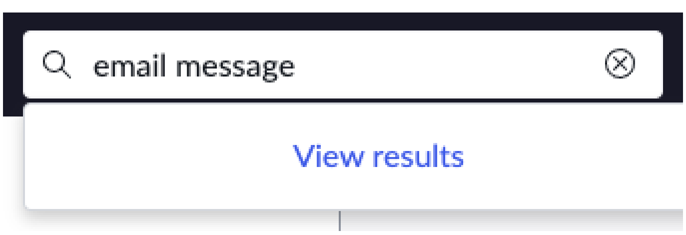
Option	Description
	▪ To reorder the favorite, drag it to a new lo cation in the list. ▪ To move the favorite to within a group, drag the favorite under the group's name. ▪ To customize the name, enter a different name in the **Name** field. ▪ To change the icon, select a different icon from the Icon list or color from the Color list. **d.** Select **Save edits**.
Delete a favorite	Select the Remove favorite icon (×).

Using search in Next Experience

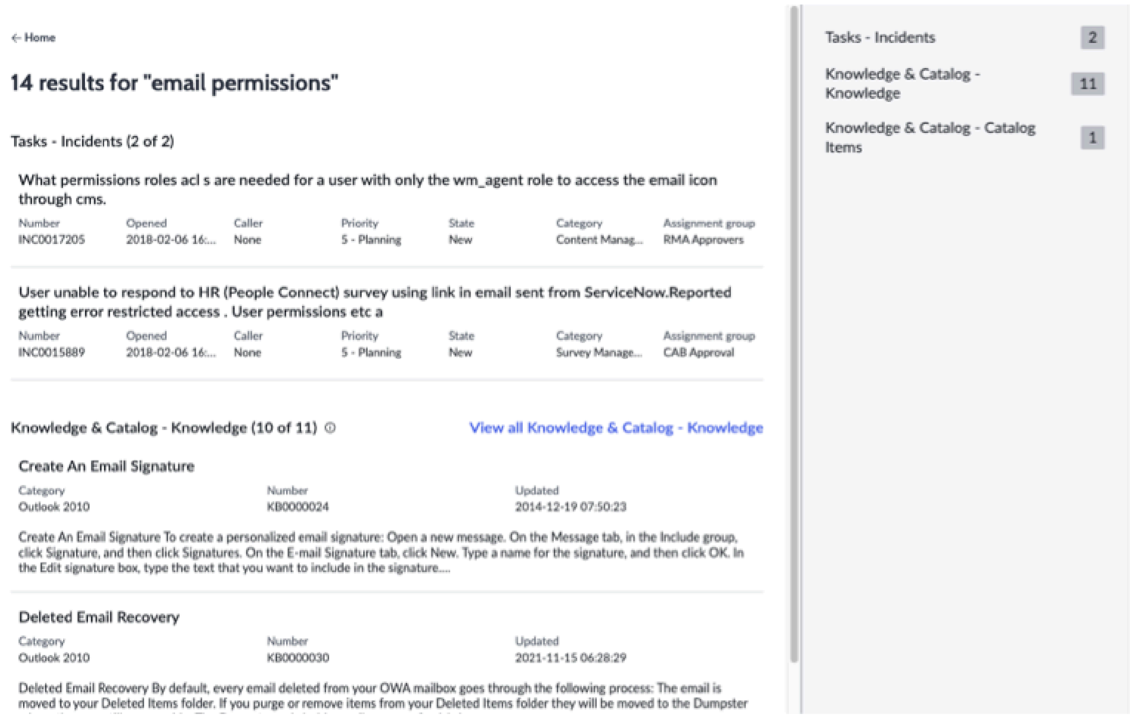
Global search enables you to search multiple record types at once from the Next Experience Unified Navigation search field. Search returns the results that are most relevant to you, grouped by source, or takes you directly to a record that exactly matches your search query. You can switch between global search results and results from workspace applications that you have access to.

Search in the Unified Navigation search field

To perform a global search, enter your search query in the Unified Navigation search field, then select **View results** or press Enter.



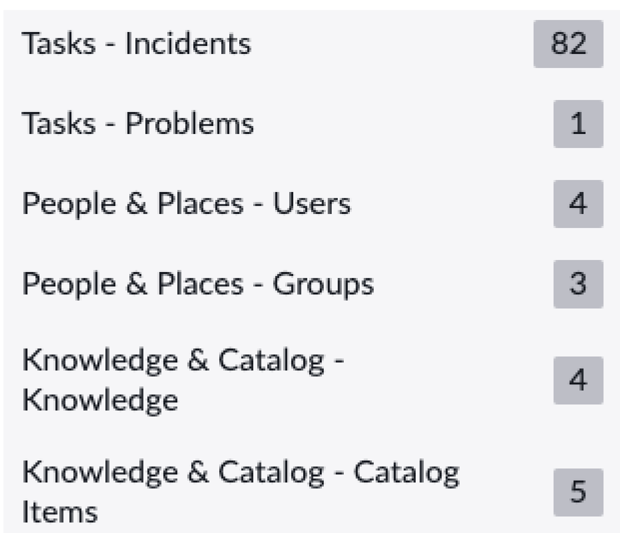
The search results page reports the total number of records that matched your search and previews a selection of results from each searchable table that contains matching records. You can open any search result record by selecting it in the preview list.



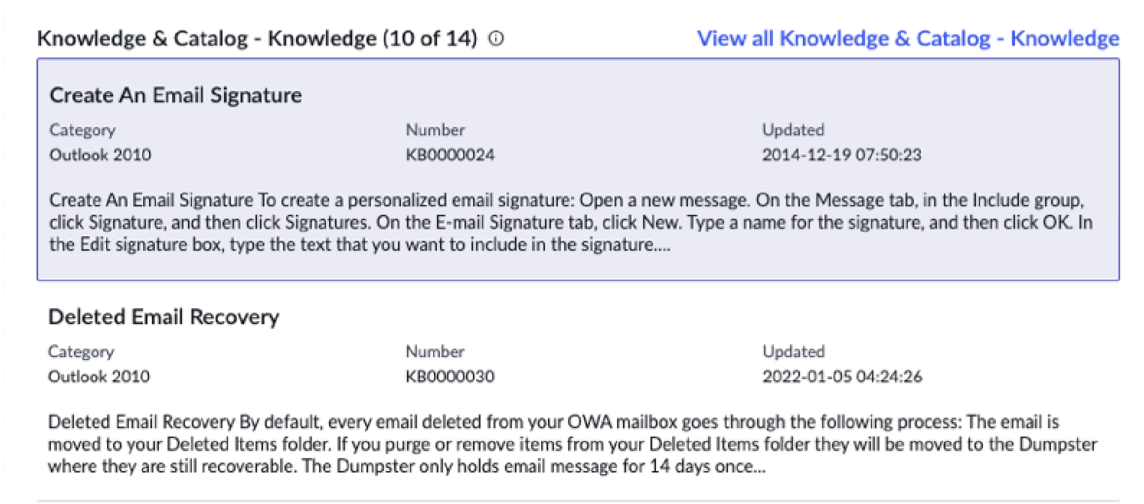
For more details on the contents of the Next Experience search results page, see Search results page in Next Experience.

Narrow your search by source on the search results page

The search results page includes a list of source tables showing the number of matching records each contains. Select an entry to see search results from the specified source table.



When there are more matching records from a source table than can be previewed, the results page displays a **View all** link next to the table title. Select this link to view all matching records from the specified table.

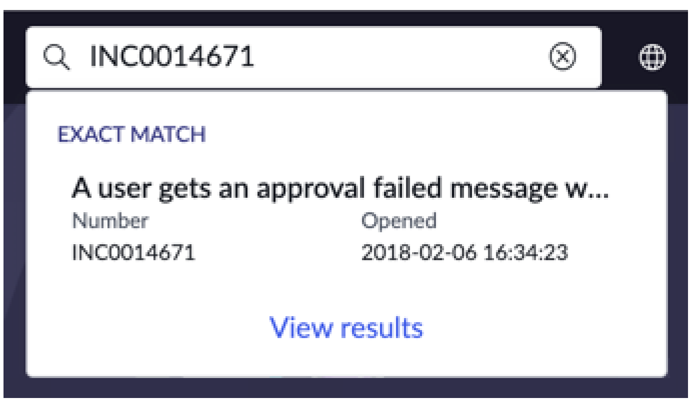


Return to your starting point from the search results page

To return to the page where you initiated your search, select the link with a left arrow that appears above the total results count on the search results page. The title of this link indicates the page it returns you to. For example, if you searched from the Home page, the link text would be **Home**, but if you searched from the Dashboards page, the link text would be **Dashboards Overview**.

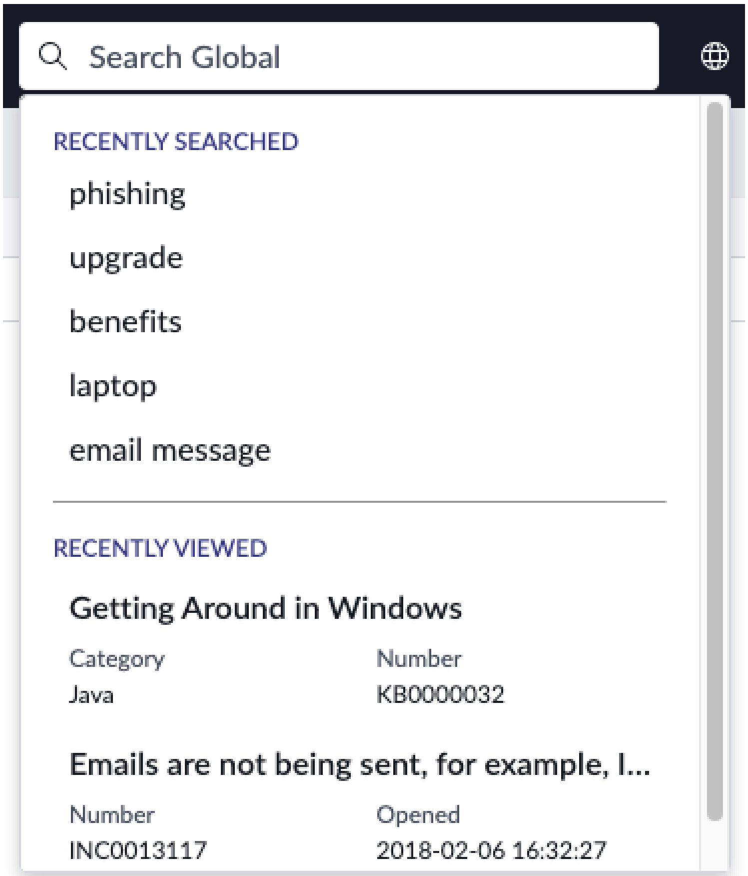
Search for a specific record using Exact Match

Enter a record number into the Unified Navigation search field but don't press Enter or select **View results**. The search field displays a preview of the record with an **Exact Match** tag. Select the preview to go directly to the matching record, bypassing the search results page.



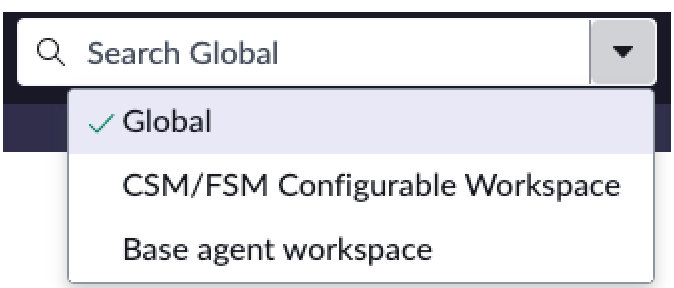
Access your most recent search queries and results

When you select the empty Unified Navigation search field, the system displays lists showing your most recent search queries and your most recently viewed search results. Select a **Recently Searched** query to repeat it, or select a **Recently Viewed** search result record to navigate to it.



View results for your search in an available workspace application

If you have access to search in workspace applications, an arrow appears at the right of the Unified Navigation search field after you search that enables you to switch between the results in global search and in your workspace applications.



For example, if the context menu in the illustration was available after you performed a global search, you could select **CSM/FSM Configurable Workspace** from the context menu to view results for the search in CSM/FSM Configurable Workspace.

Exact matches open in the selected workspace application. For example, if you selected **CSM/FSM Configurable Workspace**, entered a record number, and selected the record preview in the search results, the record would open in CSM/FSM Configurable Workspace.

For information adding a workspace to the Unified Navigation search menu, see Add a workspace application to the Unified Navigation search context menu.

Configuring Next Experience start page options

Multiple start page options help you determine where best to start your day in Next Experience. Configure the landing page so that you and your users start on a page tailored to your needs in ServiceNow.

There are several options for the page that opens when you launch ServiceNow® or select the logo at the top of the screen.

Start page options

Any page can have redirect rules as the page is loading to take the user to a different page.

Next Experience default landing page

The default landing page provides information to help orient you to your tasks in an instance enabled with Next Experience. Variants of this page are available, depending on your setup. For more information, see Exploring your Next Experience default landing page.

Configurable workspace home

Any page within a configurable workspace can be the start page. For more information about configurable workspace options, see Configuring Configurable Workspace.

User-selected landing page

You can select any page on the platform to be your start, based on a user preference. A user-selected landing page can be any page inside a configurable workspace as well. For more information, see Configure a user-selected start page.

Admin-selected landing page

This option can be any page inside a workspace, but also a classic dashboard. The admin can include role-based logic to direct users to configurable workspaces. For more information, see

- Configure a Core UI global landing page in Next Experience-enabled instances
- Configure per-user landing pages in Next Experience

Responsive dashboards

You can start with a responsive dashboard created in the classic environment to use an existing dashboard that isn't available in a configurable workspace. For more information, see Set responsive dashboards as your home.

Homepages

Homepages are a deprecated feature. Homepages from earlier releases are read-only from the Tokyo release. For information on converting homepages to Responsive dashboards, see Homepage deprecation help tool.

How to choose a start page

The different options for start pages serve different purposes. For example, choose a responsive dashboard for your start page if most of your data is in the classic environment, rather than in configurable workspaces.

Upgrade considerations

When you upgrade to an instance with Next Experience enabled, it's best to convert homepages to responsive dashboards, so that you don't lose editing capabilities. Homepages are turned off by default when Next Experience is enabled. For more information, see Homepage deprecation help tool.

Next Experience administrator start options

As an administrator, you can configure where users start when they log in to ServiceNow.

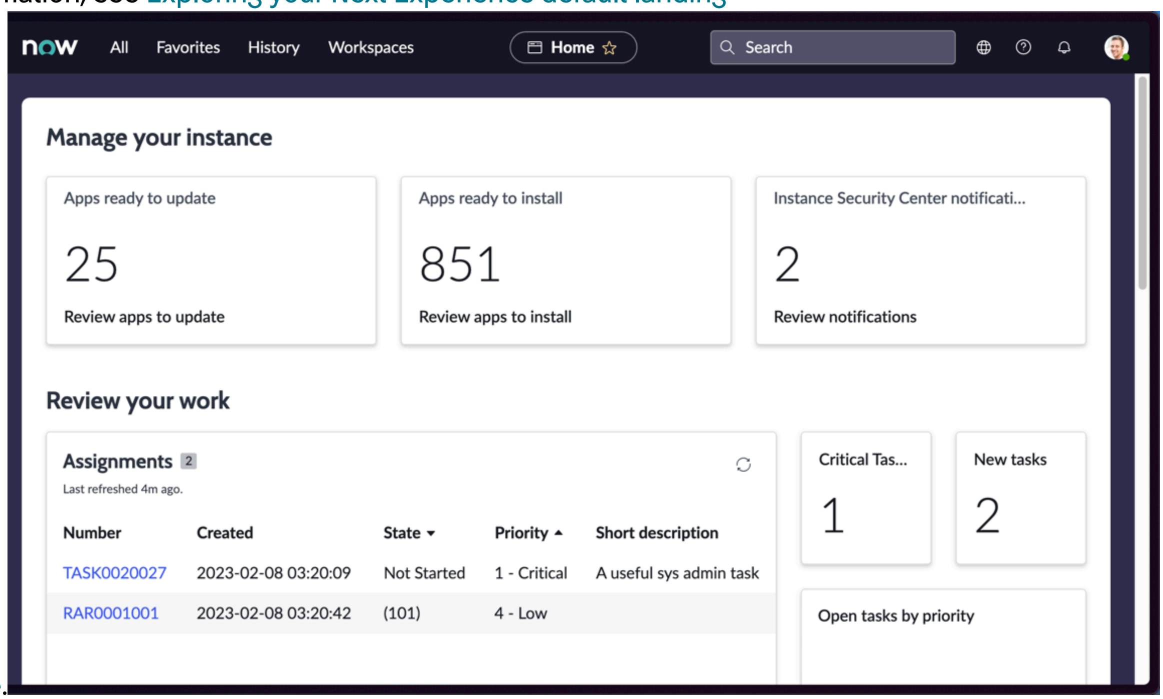
Determine the start page

The start page that you configure should address your needs and the needs of your organization. Next Experience default landing pages show visualizations that you can select to address immediate tasks. Dashboards and configurable workspaces can provide more focused information.

Options

Next Experience default landing page

The default landing page provides information to help orient you to your tasks in an instance with Next Experience enabled. Variants of this page are available, depending on your setup. For more information, see Exploring your Next Experience default landing page.



Custom Next Experience landing page

You can provide users the information that they need to start working by creating custom Next Experience landing pages for different audiences. For more information, see Create a Next Experience landing page.

Configurable workspace home

Any page within a configurable workspace can be the start page. For more information about configurable workspace options, see Configuring Configurable Workspace.

Admin-selected landing page

The admin can set a default landing page for all users that may override a user-selected page. This option can be any page inside a workspace, but also a classic responsive dashboard. The admin can also include role-based logic to direct users to configurable workspaces. For more information, see

- Configure a Core UI global landing page in Next Experience-enabled instances
- Configure per-user landing pages in Next Experience

Responsive dashboards

You can start with a responsive dashboard created in the classic environment to use an existing dashboard that isn't available in a configurable workspace. For more information, see Set responsive dashboards as your home.

Next Experience user start options

As a user, you can specify where you want to start when you log in to ServiceNow.

Determine your start page

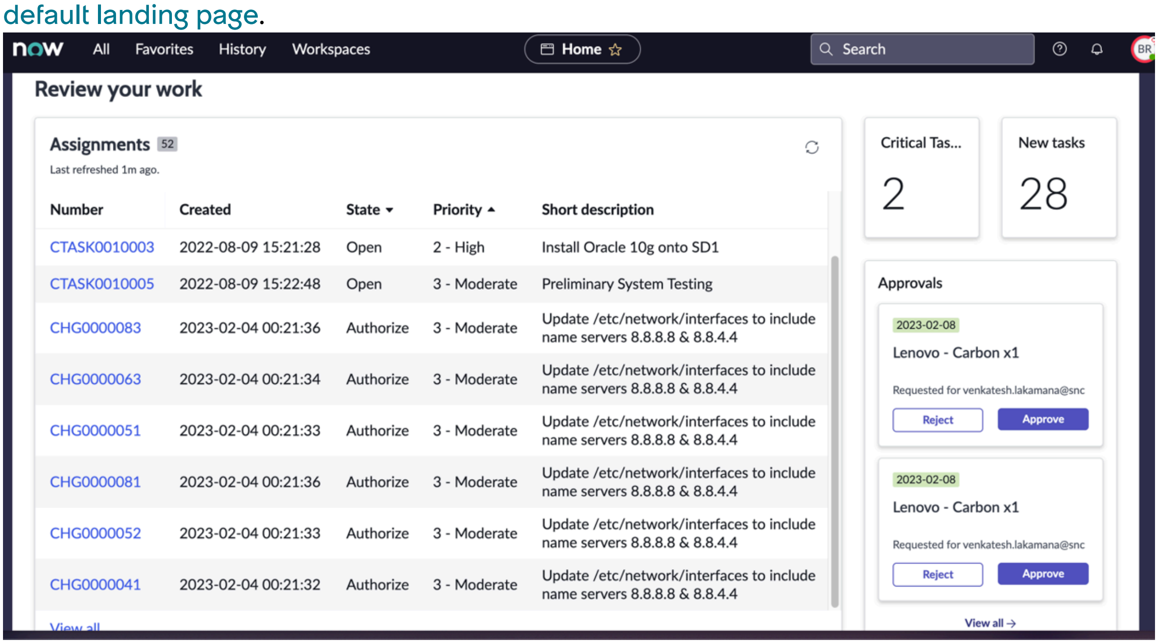
The start page that you configure should address your daily needs. Next Experience default landing pages show visualizations that you can select to address immediate tasks. Configurable workspaces can provide more focused information.

Note: Your administrator can configure a start page that individual users cannot override.

Options

Next Experience default landing page

The default landing page provides information to help orient you to your tasks in an instance with Next Experience enabled. Variants of this page are available, depending on your setup. For more information, see Exploring your Next Experience default landing page.



Configurable workspace home

Any page within a configurable workspace can be the start page. For more information about configurable workspace options, see Configuring Configurable Workspace.

Another user-selected landing page

You can select any page on the platform to be your start, based on a user preference. A user-selected landing page can be any page inside a configurable workspace as well. For more information, see Configure a user-selected start page.

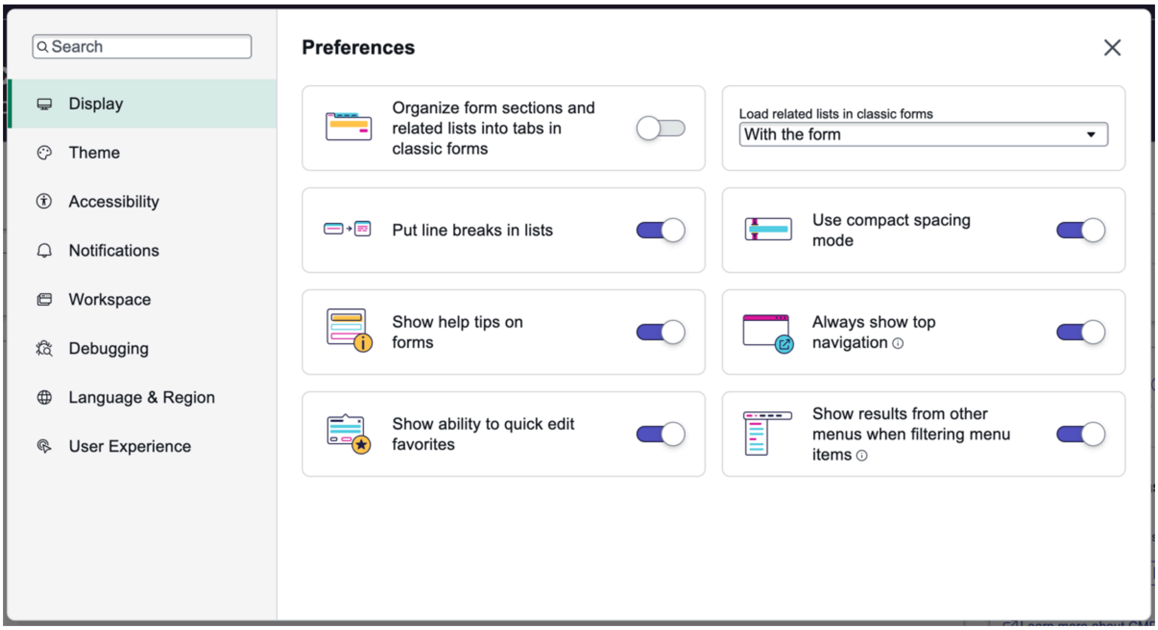
Next Experience preferences

Next Experience offers user preferences to personalize your instance UI.

If you have the admin role, you can customize the behavior of Next Experience across your instance by setting global preferences.

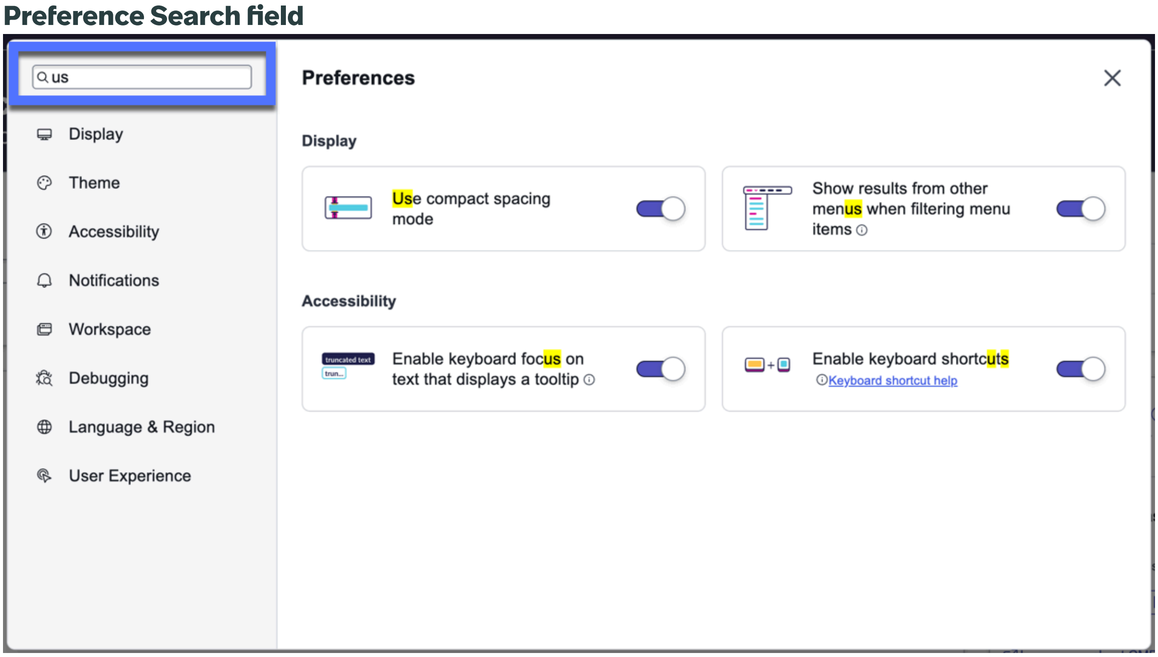
The modal is divided into three parts: a search field, preference category panel, and a preferences panel that displays the associated preferences for each selected preference category. Once a preference category is selected you see all the preference toggles for that category listed in the Preferences panel.

Preference modal



As you enter text into the **Search** field, the Preferences panel dynamically updates to show relevant user preference toggles, organized by category. The search function uses a fuzzy search filter, which finds applicable results even with shortened text.

Preference Search field



The following table shows how you can customize different preference types.

servicenow

Next Experience preferences

Preference	Description
Display	Configure Next Experience display preferences: Achieve a UI that works for you.
Accessibility	Configure Next Experience accessibility preferences: Configure your accessibility preferences.
Debugging	Configure Next Experience debugging preferences: Debug your Next Experience instance to detect and remove the existing and potential errors in your Next Experience components and scripts. **Note:** The debugging preferences only appear for users with the admin role.
Theme	Select a theme in Next Experience: Personalize your Next Experience instance by choosing from the multiple themes that are available to you. **Note:** The themes that appear in the Theme user preference are determined by the user access and admin customizations.
Notifications	Configure Next Experience notification preferences: Set up web and email notifications across your instance.
Language & Region	Configure Next Experience language and region preferences: Set up the date and time formats, your time zone, and preferred language.
Workspace	Configure Next Experience Workspace preferences **Note:** The workspace preferences appear only if you have access to Workspace and the workspace is in focus.

Next Experience preferences (continued)

Preference	Description
User Experience	Configure Next Experience user experience preferences: Set up your user experience for your Next Experience instance.

Configure Next Experience display preferences

Configure Next Experience display preferences to achieve the UI that works best for you.

Before you begin

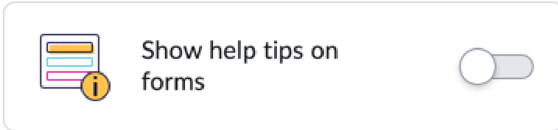
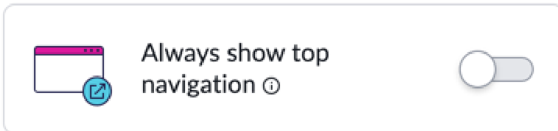
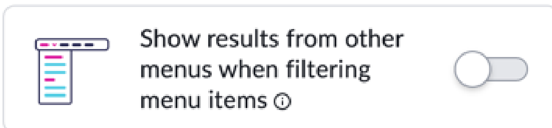
Role required: none

Procedure

1. Navigate to **User Menu** > **Preferences** > **Display**.
   The user menu is represented by your user icon or initials in the Next Experience Unified Navigation.
2. Select the toggle next to each option to turn the preference on or off.

Display preferences

Option	Description
Organize form sections and related lists into tabs in classic forms	Displays forms and related lists in tabs so you can navigate directly to form sections.
Put line breaks in lists	Enables you to create a new line within the same list entry.
Show ability to quick edit favorites	Enables the ability to edit the name and location of a favorite when adding it.
Load related lists in classic forms With the form	Loads related lists in classic forms at one of the following times: ◦ With the form ◦ After the form loads ◦ On demand
Use compact spacing mode	Optimizes the spacing between form fields, controls, and list rows and columns, displaying more content on forms and lists.

Option	Description
	Provides tooltips to use and configure features in the instance.
	Sets persistent top navigation when opening a new window from the menu so you can continue to access your menus.
	Shows results from all menus except the History menu when filtering from any menu in the Unified Navigation. If turned off, menus show results only from the menu you're filtering from. The **All** menu returns results from all menus except the **History** menu regardless of this setting.

Configure Next Experience accessibility preferences

Set up Next Experience accessibility preferences to achieve a UI that's most accessible to you.

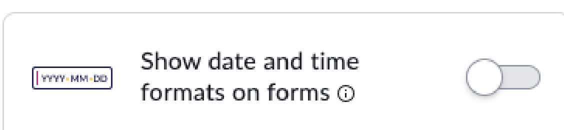
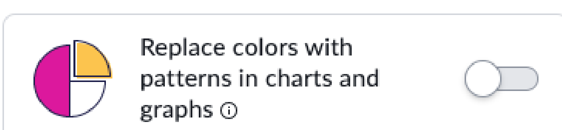
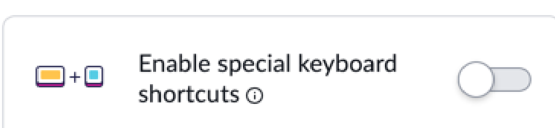
Before you begin

Role required: none

Procedure

1. Navigate to **User Menu** > **Preferences** > **Accessibility**.
2. Select the toggle next to each option to turn the preference on or off.

Accessibility preferences

Field	Description
	Displays the date and time format (yyyy-MM-dd-HH:mm:ss) next to the form fields, enclosed in parentheses.
	Adjusts charts and graphs to display with a pattern such as stripes or dashed lines instead of just a color.
	Use keyboard shortcuts to quickly perform common actions in the user interface. The keyboard shortcuts that display in the modal are specific to the screen you are viewing. For more information, see Next Experience keyboard shortcuts. **Note:** If you're working in the Classic Environment, see Core UI keyboard shortcuts.

Field	Description
Show all buttons without the need to hover	Displays all hidden fields, buttons or other UI elements, eliminating the need to hover over them. Tooltip is inactive.
Enable data table for charts and graphs	Shows a table with chart and graph data for easier screen reader access.
Reduce motion	Reduces the speed of the animations when switching between screens. This reduction pertains mainly to login animations.
Enable accessibility in classic	Extends keyboard navigation and enables more tab stops in the classic environment so you can tab to icons and buttons in lists, form fields, and cards. This option also presents additional info on forms.
Enable keyboard focus on text that displays a tooltip	Allows keyboard-only users to access truncated text. Truncated text is text that doesn't fit on the screen and is indicated by an ellipsis (•••). When this preference is enabled, keyboard-only users can access the truncated text as they Tab through the focus order, revealing the full text of each tooltip as they navigate the screen.
Enable voice input for the Now Assist panel	Activates voice-to-text in the Now Assist panel. With this feature, use your voice to access Now Assist skills in the Now Assist panel in any supported language. **Note:** This preference appears only if your system administrator has enabled Now Assist voice input for your instance. For more information, see Enable voice input for the Now Assist panel.

Note: If users have configured operating system-specific settings, such as forced colors or contrast in Windows, those settings are not overridden by Next Experience user preferences or themes. If those OS-specific settings are inactive, color and theme behaviors will revert to those behaviors defined in the Next Experience UI.

For detailed instructions on each of the accessibility preferences, see the Quick Guide to Accessibility Preferences on the ServiceNow Community.

Configure Next Experience debugging preferences

Debug your Next Experience instance to detect and remove existing and potential errors in your Next Experience components and scripts.

Before you begin
Role required: admin

Procedure

1. Navigate to **User Menu** > **Preferences** > **Debugging**.
2. Select one of the debugging options.

Debugging

Field	Description
Script Debugger	Opens a JavaScript debugger with a script tracer and a session log. For more information, see Debugging scripts.
UX Source Maps	Enables you to perform debugging using UX source maps in your browser. For example, when used with Firefox v102+, the user can set a break point in component code and, when the browser stops at that break point, variable names should appear in the scope section. **Note:** When you are not debugging using UX source maps, it is best to toggle this user preference off as it can cause performance degradation of the instance.
Automated Test Framework Page Inspector	Enables you to identify and inspect pages created in classic custom UI pages using the page inspector. For more information, see Page Inspector.
Seismic Developer Tool	Opens a link to the Chrome web store Seismic Developer Tools download page. The Seismic Dev Tools (SDT) Chrome Extension is a tool that helps Seismic developers effectively identify, diagnose, and resolve defects and performance issues. **Note:** This option can be removed from the Debugging user preferences by setting the *`glide.ui.next_experience.seismic_develo`* system property to **false**.

Configure Next Experience language and region preferences

Configure Next Experience language and region preferences to achieve the UI that works best for you.

Before you begin
Role required: admin

Procedure

1. Navigate to **User Menu** > **Preferences** > **Language & Region**.
2. Select the preferences that you want to configure.

Display preferences

Option	Description
Date and time format YYYY-MM-DD 09:00:01	Sets the format in which dates and times appear. The options include: **a.** YYYY-MM-DD 09:00:01 5 min ago **b.** YYYY-MM-DD 09:00 5 min ago **c.** YYYY-MM-DD 09:00:01 **d.** YYYY-MM-DD 09:00 **e.** 5 min ago **Note:** If you select **YYYY-MM-DD 09:00 5 min ago** or **YYYY-MM-DD 09:00** for the current year, the current year (YYYY) will be omitted. The option **5 min ago** refers to a relative time format that displays how much time has passed since a specific event has occurred.
Timezone America/Los_Angeles	Determines the time zone or returns to the default time zone for the current session. Upon the next login, the time zone setting reverts to the system default, or user profile setting for time zone.
Language English	Sets the language used for your instance when you have access to more than one language. This preference displays only if the language plugin is installed. For more information, see Activate a language.

Select a theme in Next Experience

Personalize your Next Experience instance by selecting a theme variant or alternate color palette in the user preferences menu.

Before you begin

Note: An administrator must enable at least one theme before you can select one as described in this task. For information about theme variants and alternate color palettes, see Core styles, colors, variants, and alternate color palettes.

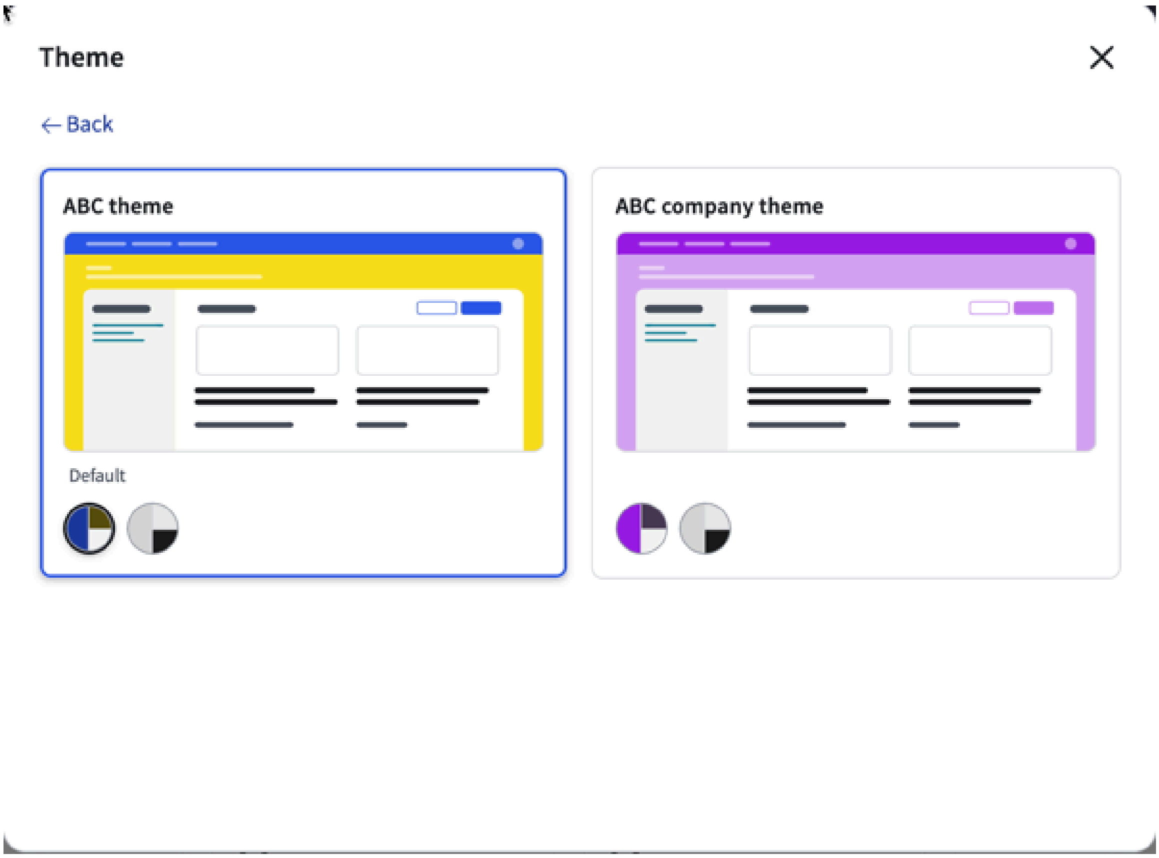
Role required: none

Procedure

1. Navigate to **User Menu** > **Preferences** > **Theme**.
2. Select an available theme.

The themes that are displayed in your Theme user preference depend on the customizations that were made by your administrator.

Each theme card displays the core theme and all variants or alternative color palettes that are associated with that core theme. Hover over the circles beneath the core theme to view a preview of the variant or alternate color palette. A colored border appears around the theme card that has been applied to your instance.



Configure Next Experience notification preferences

Set up how you receive in-product and system notifications in Next Experience.

Before you begin

Role required: none

Procedure

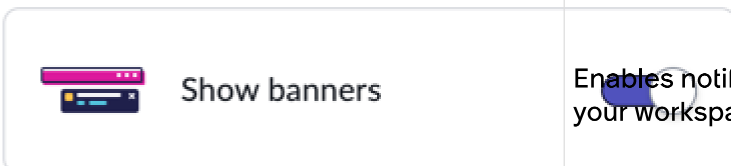
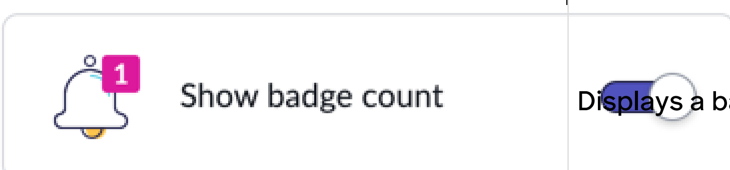
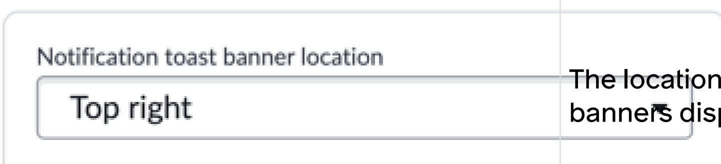
1. Navigate to **User Menu** > **Preferences** > **Notifications**.
2. Select the **General** tab.
3. Configure your preferences for system notifications outside of the platform.

Option	Description
Allow Notifications	Enable or disable all notifications.
Advanced Preferences	Customize notification preferences for sys tem notifications, custom notifications, and delivery channels.

Option	Description
System notifications	Enable or disable system notification cate gories, for example, Approval or Connect noti fications.
Custom notifications	Enable or disable custom notifications.
Delivery Channels	Enable or disable individual delivery chan nels.

For more information about advanced notification preferences, see System and custom notification and delivery channel preferences in Next Experience.

4. Select the **Next Experience** tab.
5. Configure your preferences for in-product notifications.

Option	Description
	Enables notification banners to display in your workspace.
	Displays a badge count of notifications.
	The location on the screen where notification banners display.

Configure Next Experience Workspace preferences

Set up your Workspace display preferences.

Before you begin

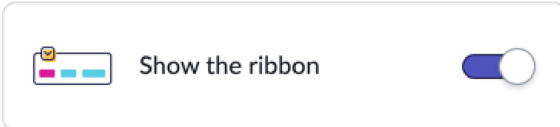
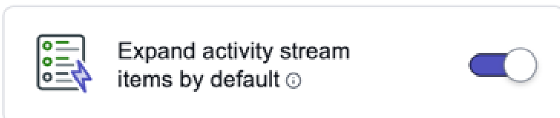
Workspace preferences display only if you have access to a Workspace and the Workspace is in focus.

Role required: none

Procedure

1. Navigate to **User Menu** > **Preferences** > **Workspace**.
2. Select the toggle next to each option to turn the preference on or off.

Workspaces

Field	Description
	Shows the ribbon widget by default when the form loads.
	Shows the contextual side panel by default when the form loads.
	Expands all activities in the activity stream automatically.

Configure Next Experience user experience preferences

Configure your user experience preferences for your Next Experience instance.

Before you begin

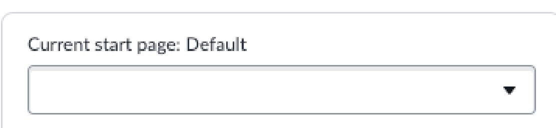
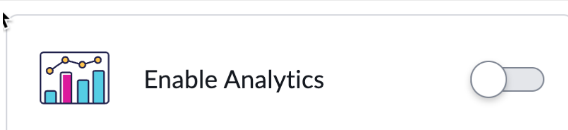
Role required: none

Procedure

1. Navigate to **User Menu** > **Preferences** > **User Experience**.
2. Select the preference that you want to configure.

   Note: The preferences that are described in the following table might not be available to all users. The items that appear are determined by the user access and the customizations from your administrator.

User Experience

Field	Description
	Start page that appears when users log in to their Next Experience instances. For more information on start page options, see Configure a user-selected start page.
	Option that lets you turn on or off usage analytics tracking on your Next Experience instance.

Field	Description
	Option that lets you turn off the Next Experience UI on your instance. The Core UI appears when you turn off the Next Experience UI on your instance. **Note:** Administrators can enable this option by setting t *glide.ui.polaris.on_off_user_pref_enabl* to **true**.

Next Experience keyboard shortcuts

You can use keyboard shortcuts to quickly perform common actions in the user interface.

The keyboard shortcuts that display in the modal are specific to the screen you’re viewing. Keyboard shortcuts depend on the browser and operating system that you’re using. The Linux operating system is not currently supported.

To enable keyboard shortcuts for your instance, see Configure Next Experience accessibility preferences.

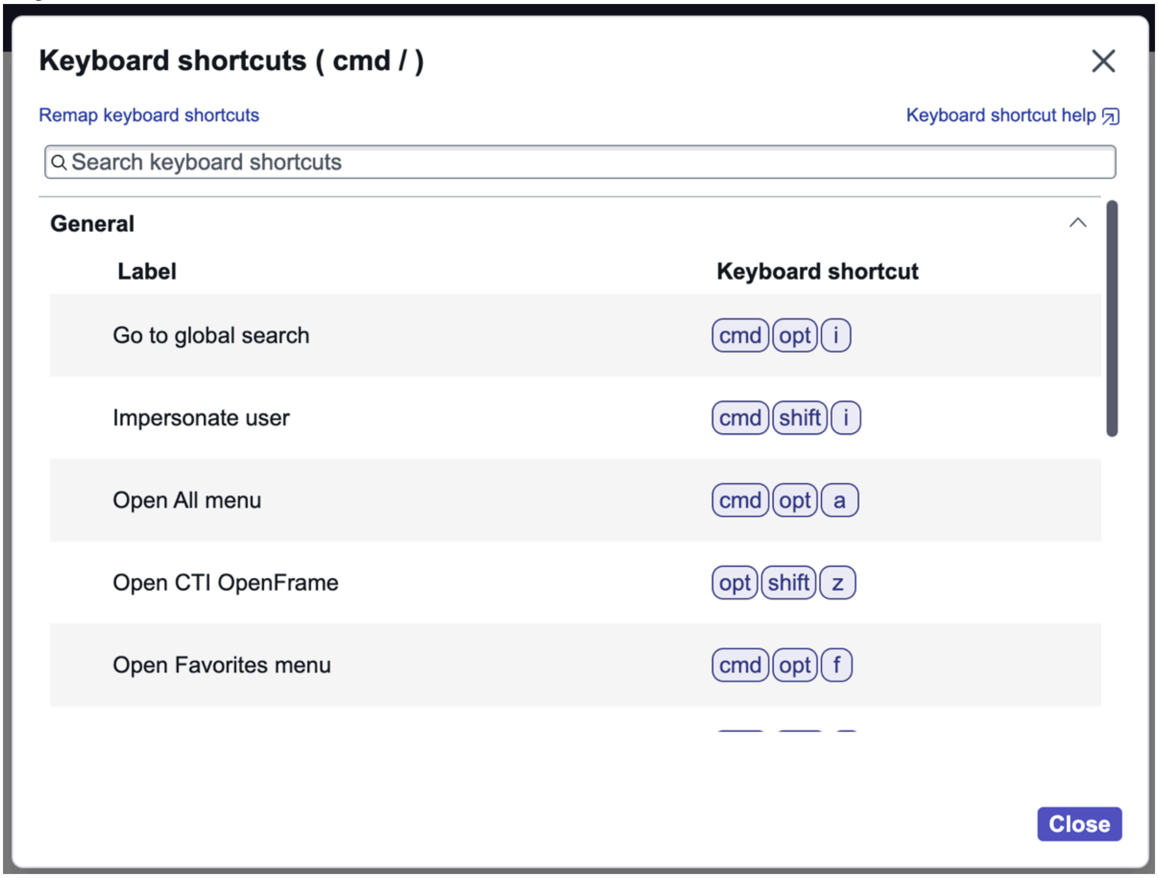
To customize the Next Experience keyboard shortcuts for your instance, see Customize the Next Experience keyboard shortcuts.

Learn more about Next Experience keyboard shortcuts from the following tutorial:

https://player.vimeo.com/video/1080716309?badge=0&autopause=0&player_id=0&app_id=58479

The keyboard shortcut modal contains a search field which searches available keyboard shortcuts specific to the screen you're viewing. The available shortcuts are grouped by category: Page Action, Page Navigation, Global Navigation, and General.

Keyboard shortcut modal



Common Next Experience keyboard shortcuts

The most common key combinations for Microsoft Windows and macOS keyboards are listed in the following table.

Common Next Experience keyboard shortcuts

Action	Windows keyboard shortcut	macOS keyboard shortcut
Show the shortcuts for the page that you're viewing in a modal	Control+/	Command+/
Compose an email	Control+Alt+e	Command+Option +e
Create a new record	Shift+Alt+n	Shift+Option+n
Favorite or unfavorite the current page	Control+Shift+f	Command+Shift+f
Impersonate a user	Control+Shift+i	Command+Shift+i
Open the instance landing page	Control+Alt+z	Command+Option +z
Open the instance toolbar to change domains	Control+Alt+t	Command+Option +t
Refresh the list	Shift+Alt+r	Shift+Option+r
Save the record	Control+s	Command+s

Next Experience keyboard shortcuts for showing menus

The keyboard shortcuts for showing menus for Microsoft Windows and macOS are listed in the following table.

Next Experience keyboard shortcuts for showing menus

Open this menu	Windows keyboard shortcut	macOS keyboard shortcut
All menu	Control +Alt+a	Command +Option +a
Admin menu	Control +Shift+a	Command +Shift+a
Favorites menu	Control +Alt+f	Command +Option+f
Help menu	Control +Shift+/	Command +Shift+/
History menu	Control +Alt+h	Command +Option +h
Workspaces menu	Control +Alt+w	Command +Option +w
Notifications menu	Control +Shift+k	Command +Shift+k
Now Assist menu (text entry mode)	Alt+Shift +a	Option +Shift+a
Now Assist menu (voice input mode) **Note:** Availability of voice input mode in the Now Assist menu is controlled by a user preference. For more information, see Configure Next Experience accessibility preferences.	Alt+Shift +v	Option +Shift+v
User profile menu	Control +Shift+u	Command +Shift+u

Next Experience keyboard shortcuts for applying focus

The keyboard shortcuts for applying focus for Microsoft Windows and macOS are listed in the following table.

Next Experience keyboard shortcuts for applying focus

Apply focus	Windows keyboard shortcut	macOS keyboard shortcut
Global search	Control+Alt+g	Command+Option +g

Next Experience keyboard shortcuts for applying focus (continued)

Apply focus	Windows keyboard shortcut	macOS keyboard shortcut
Main content of a page	Control+Alt+p	Command+Option +p
Breadcrumb navigation	Control+Shift+c	Command+Shift+c
Side navigation page	Control+Alt+1	Command+Option +1
Workspace tab	Control+Alt+2	Command+Option +2
Page tab	Control+Alt+3	Command+Option +3
Record tab	Control+Alt+4	Command+Option +4
Contextual sidebar	Shift+Alt+x	Shift+Option+x
Activity Stream Compose text field	Shift+Alt+c	Shift+Option+c
First action button	Shift+Alt+t	Shift+Option+t
First field in the form	Shift+Alt+f	Shift+Option+f
First tile in the Activity Stream	Control+Alt+x	Command+Option +x
Move focus forward through major elements of the page	Control+j	Command+j
Move focus backward through major elements of the page	Control+Shift+j	Command+Shift+j
Move focus through the headings of the form	Shift+Alt+h	Shift+Option+h

Additional Next Experience keyboard shortcuts

Additional keyboard shortcuts for Microsoft Windows and macOS are listed in the following table.

Additional Next Experience keyboard shortcuts

Action	Windows keyboard shortcut	macOS keyboard shortcut
Open the instance toolbar to change domains	Control+Alt+t	Command+Option+t
Open the Agent inbox	Shift+Alt+i	Shift+Option+i
Open the sidebar discussions chat	Shift+Alt+d	Shift+Option+d
Open the list search	Shift+Alt+s	Shift+Option+s
Open the list filter	Shift+Alt+b	Shift+Option+b
Open the OpenFrame window	Shift+Alt+z	Shift+Option+z
Cycle through the page layouts	Shift+Alt+l	Shift+Option+l

Additional Next Experience keyboard shortcuts (continued)

Action	Windows keyboard shortcut	macOS keyboard shortcut
Expand/collapse the resizable pane	Shift+Alt+p	Shift+Option+p
Reply to the most recent email correspondence	Shift+Alt+e	Shift+Option+e

Customize the Next Experience keyboard shortcuts

Customize the Next Experience keyboard shortcuts to streamline your workflow and boost productivity.

Before you begin
Role required: none

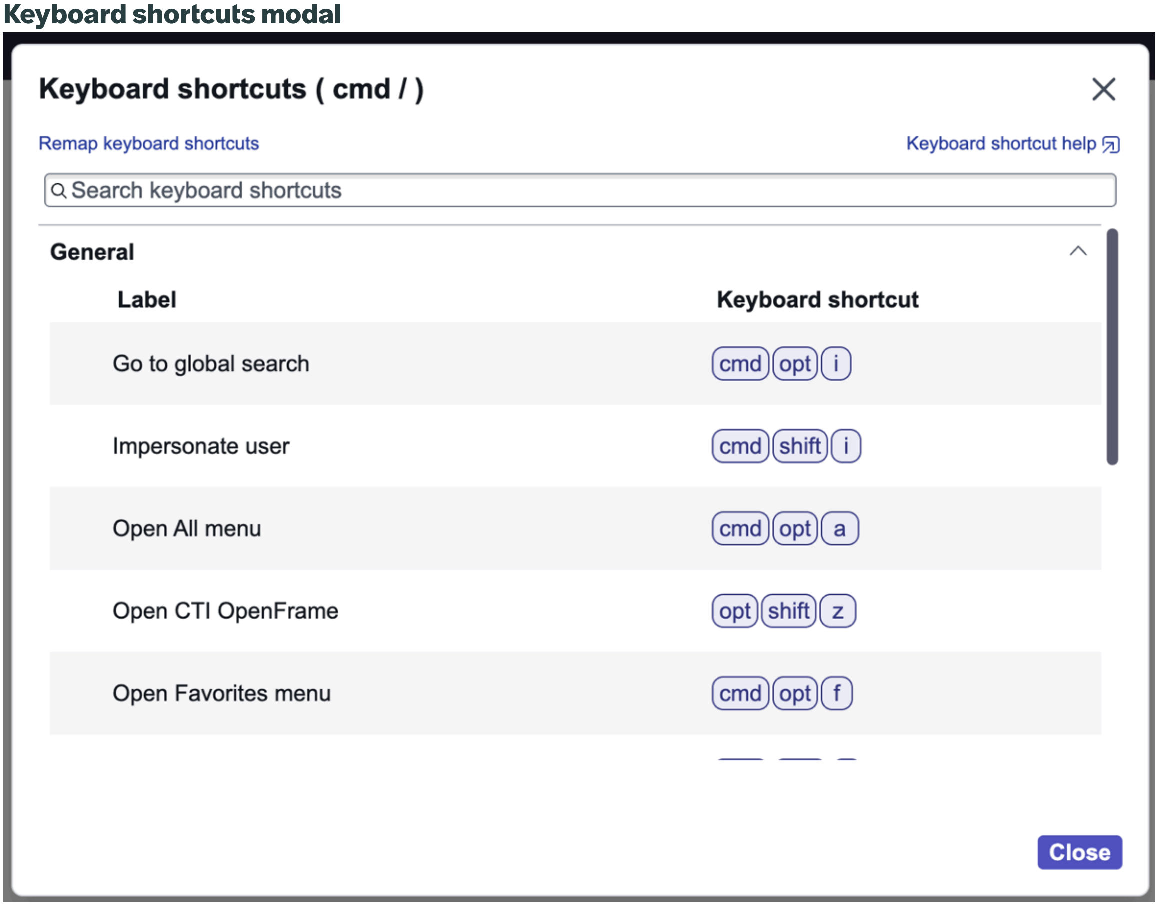
About this task
Learn more about customizing keyboard shortcuts from the following tutorial:

https://player.vimeo.com/video/1082927783?h=3263013a03&badge=0&autopause=0&player_id=0&app_id=58479

Procedure

1. Navigate to **User Menu** > **Keyboard shortcuts**.
   The keyboard shortcuts modal opens.

Keyboard shortcuts modal



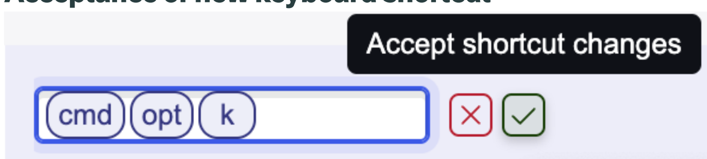
2. Select **Remap keyboard shortcuts**.
3. Find an existing keyboard shortcut that you want to customize by either scrolling or entering text.
   - Scroll vertically through the list of available keyboard shortcuts.
   - Enter text into the **Search** field to search through the entire list of available keyboard shortcuts.

   Note: The pencil icon ( ) appears for those keyboard shortcuts that are customizable. Currently, not all existing shortcuts are customizable.

4. Open the keyboard shortcut field for editing by selecting the pencil icon ( ).
5. Enter the key combination that you want to use as the keyboard shortcut and select the green check mark to accept and save your entry.

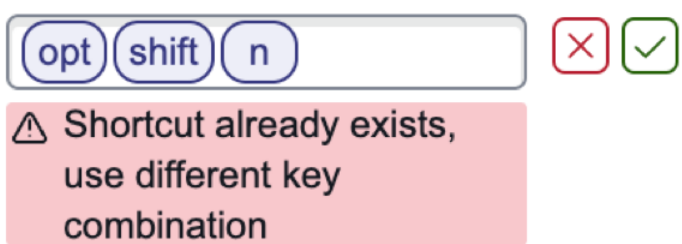
   Note: A keyboard shortcut must include at least one modifier and one letter. For example, Command + K.

   Acceptance of new keyboard shortcut

   Note: The modal notifies you if you enter a key combination that is already in use.

   Keyboard shortcut already exists message

6. **Optional:** If you decide not to save your new shortcut, select **X** or **Close** to cancel.
7. **Optional:** To restore all remapped keyboard shortcuts to their original values, select **Restore Defaults**.
   A dialog box appears for you to confirm or deny this request.

Follow records in Next Experience

Get notified when a work note or comment is added to a record by following it in the classic environment in Next Experience.

Before you begin
Role required: none

About this task
Following a record in Next Experience is more streamlined. You receive instant confirmation when you start following or unfollowing a record via a banner message and persistent alerts under the notifications menu for updates such as Work Notes and Additional Comments.

Procedure

1. Navigate to a record in the classic environment.

   For example, navigate to **All** > **Incident** > **Assigned to me** and select an incident to follow.

   Note: Following records from within a workspace isn't supported.

2. Select **Follow**.

   Note: To stop receiving notifications about a record, select **Following/Unfollow**.

Result

When comments or work notes are added to the record, you receive notifications as banners and in the Notifications menu according to your notification preferences. You can select the notification to open the record that was updated.

The following example shows a sample notification.

Related topics

Configure Next Experience notification preferences

Configuring the Next Experience UI

Set up your ServiceNow Next Experience to drive productivity, improve engagement, and reveal insights across the ServiceNow AI Platform.

Select the following links to learn about Next Experience functionality with the admin role and configuring the Next Experience UI. Configuration of the Next Experience UI is available only to users with the admin role.

Considerations for activating Next Experience

Next Experience delivers a next generation, intuitive, personalized experience to drive productivity, improve engagement, and surface insights across the ServiceNow AI Platform. Your path to activating Next Experience may depend on your instance's level of customization.

Guidance and support from the engineers who helped you customize your instance, or another certified partner, will help to ensure that your move to Next Experience goes smoothly.

Note: You must have UI16 installed before activating the Next Experience.

Enable Next Experience during an upgrade or manually at any time after an upgrade. If you don't see the migration modal, your instance has already completed the upgrade and you must enable Next Experience manually.

New customer starting on the Yokohama release

If you're a new customer, you automatically have Next Experience enabled and you don't need to modify the UI to get the newest user interface.

Existing customer upgrading instance without UI customization

If you're an existing customer, but haven't implemented UI customizations or invested significantly in adopting Workspace, the Next Experience UI is turned on when you upgrade.

Existing customer upgrading instance with UI customization

If you're an existing customer who has made any of the following modifications to your instance, you might need assistance from the modification authors, or an established partner, to ensure a seamless activation.

- Customized your user interface. For example, if you created hard-coded styles or implemented UI scripts.
- Adopted a classic Workspace and want to adopt a new configurable workspace alternative.
- Created custom components in a classic Workspace and want to adopt a new configurable workspace alternative.

You can use the following tools and APIs with your implementation partner to help adjust your customizations to work well with the new Next Experience theme:

- Scriptable PolarisUI API
- Next Experience client scripting globals
- Jelly tags

Existing customer who upgraded previously

If you upgraded your instance in an earlier release and no longer see the Turn on Next Experience modal, you can still activate Next Experience manually. The modal is displayed only during the upgrade experience and does not appear again after the upgrade is complete.

This approach applies to existing customers who deferred adoption during upgrade or who are activating Next Experience at a later time. To migrate to Next Experience after an upgrade:

1. Enable the Next Experience using the system property described in Enable Next Experience.
2. Reload your instance.

Existing customer opting out of the Next Experience UI prior to an upgrade

If you are an existing ServiceNow customer and decide that you do not want to turn on the Next Experience UI during an upgrade, you can create a system property called `glide.ui.next_experience.opt_out` and set the value to **true**.

During the upgrade, the Next Experience UI is not turned on.

Functionality not supported

Important:

Connect Chat is not available in Next Experience. Starting with Yokohama, certain Connect Chat functions are available in Next Experience by using Sidebar. See KB1123615 – Moving from Connect Chat to Sidebar for more information about the differences between Connect Chat and Sidebar.

Connect Support is not available in Next Experience and is scheduled to be completely deprecated in Utah. If you want to automatically assign chat requests and other work items to agents in Next Experience, you must migrate to Advanced Work Assignment and Agent Chat. For details, see Move from Connect Support to Advanced Work Assignment and Agent Chat.

These features and products are not currently supported with Next Experience:

- The functionality found in homepages, arranging information from your instance to tell a story about your data, is found in dashboards on new instances. On upgraded instances with Next Experience enabled, users can view existing homepages if they have a direct URL, but they can't create or edit them. Responsive dashboards and Analytics Center dashboards take over homepage functionality. Use the Homepage deprecation help tool to convert the homepages on your instance to responsive dashboards.
- Custom header menus are not supported.
- Live Feed is not supported.
- The JavaScript console log isn't supported in the Next Experience framework.
- ATF doesn't support these elements of Next Experience, but support for these features is planned for future releases:
  - Pages built with UI Builder, including pages with lists and form components.
  - Configurable Workspaces
  - Landing pages

  Note: ATF still supports the Core UI, including Classic Environment (such as classic lists and forms).

For more information, see:

- KB1156736 – Moving from Connect Chat to AWA and Agent Chat
- KB1123615 – Moving from Connect Chat to Sidebar
- KB1157068 – Live Feed Is Not Supported in Next Experience

Enable Next Experience

How to enable or disable the Next Experience UI.

Before you begin

Role required: admin

About this task

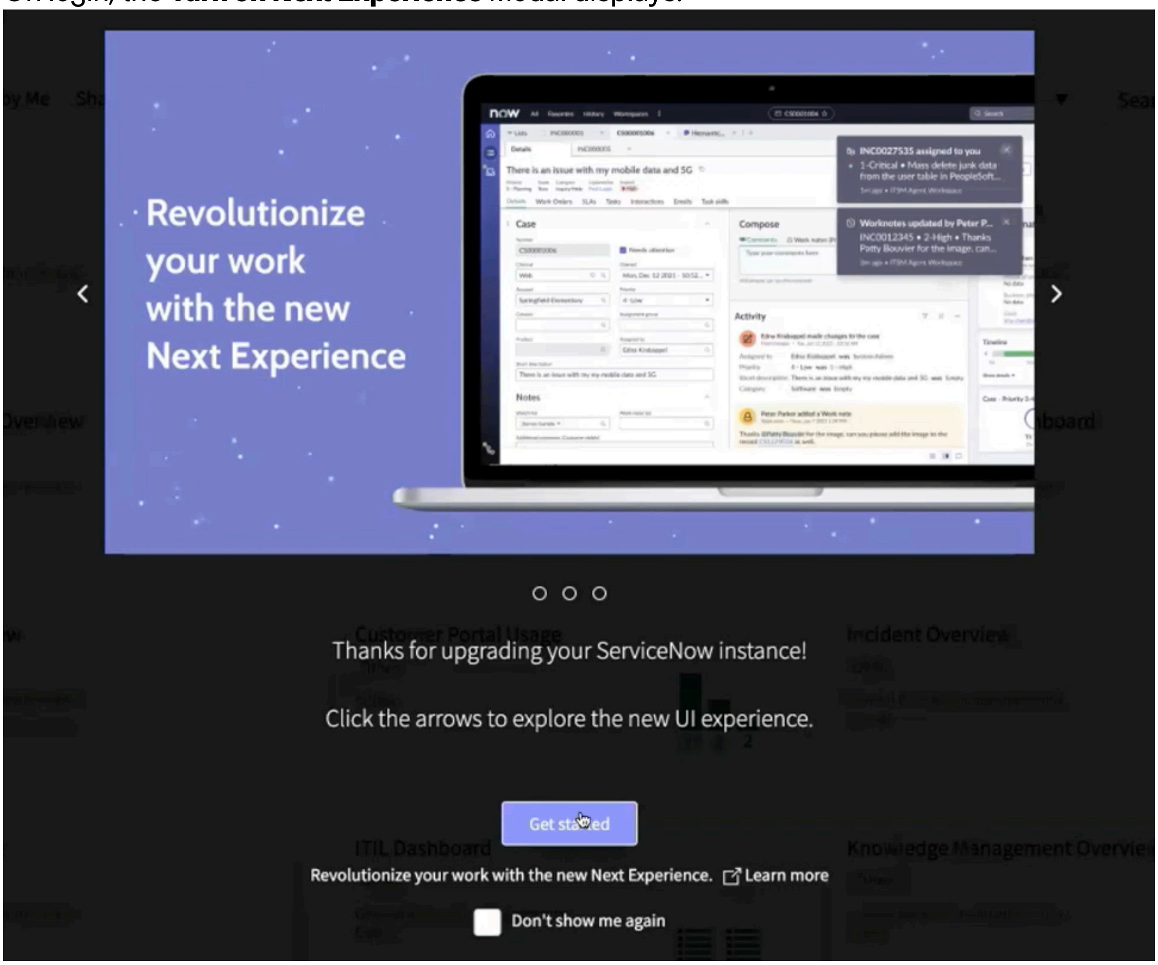
As an administrator, you can enable Next Experience for all users on your Yokohama instance, or let users enable or disable unified navigation for themselves.

If you're a new customer running the Yokohama release, Next Experience is enabled by default. If you're upgrading, see the information at Considerations for activating Next Experience before you enable Next Experience.

Warning: It's not recommended that you enable or disable the Next Experience UI until you've learned the impact of how that might affect your instance functionality. You might need assistance from the modification authors or an established partner to ensure a seamless activation.

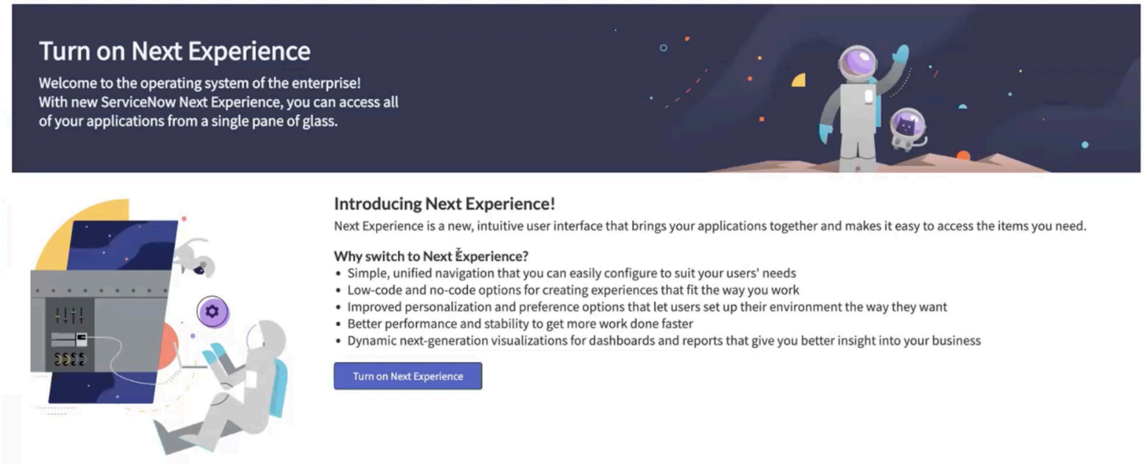
Procedure

1. On login, the **Turn on Next Experience** modal displays.



2. Select **Get started**.

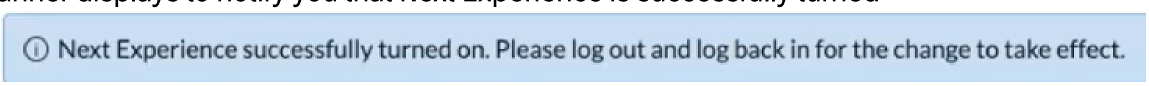
3. Read and determine if Next Experience is for your users.



Note: Be aware that enabling the Next Experience UI will affect all users on your instance, not just the system administrator.

Note also that if the admin is on a production instance, a warning appears to notify them of functionalities not supported in Next Experience.

4. Select **Turn on Next Experience**.
   A banner displays to notify you that Next Experience is successfully turned on.



5. Log out and back into your instance.
6. To disable Next Experience in your instance, do the following:
   a. Navigate to **sys_properties.list**.
   b. Set the value of the `glide.ui.polaris.experience` property to **false** to disable Next Experience.
   c. Reload your instance.

Next Experience Readiness Checker

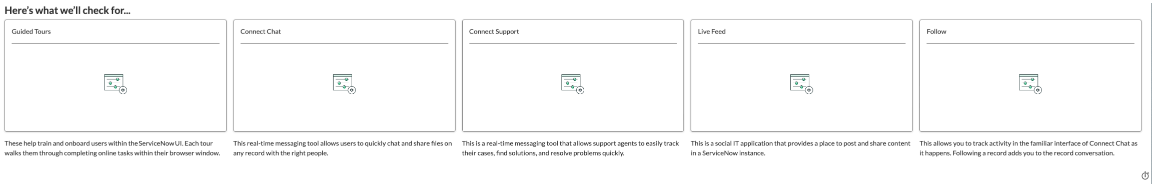
The Next Experience Readiness Checker assists users with deciding whether to turn on Next Experience after an upgrade.

Overview

The Next Experience Readiness Checker tool enables admin users to examine their instance to see if agents and other users are currently using applications that aren't compatible with Next Experience. Based on the usage found, the tool makes a recommendation regarding turning on Next Experience immediately or doing additional due diligence before turning it on.

To access the Next Experience Readiness Checker, navigate to **Now Experience Framework** > **Next Experience Readiness Checker**.

Results



The Next Experience Readiness Checker results section displays the application cards for each of the applications that are checked for compatibility with Next Experience. The applications that are checked are as follows.

- Guided Tours
- Connect Chat
- Connect Support
- Live Feed
- Follow

Descriptions are provided below each card that tell you whether your application is supported in the Next Experience, and also provides links to alternatives available for the applications that aren't yet or no longer supported.

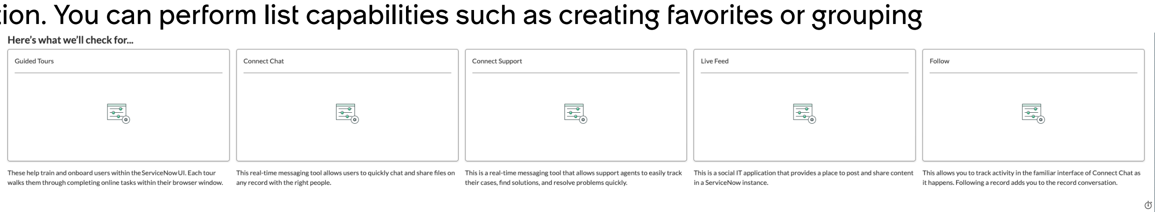
Current version

The Next Experience Readiness Checker tool calls out the current version of your instance.

Run Compatibility Scan

Note: These section options are dynamic based on the current instance version that you're running. If applications are available for your version, links to the documentation are provided.

The compatibility scan examines your instance for usage of applications that aren't compatible with Next Experience. Usages instances are displayed after running the scan, and shows the number of usages for each application. You can select the **View usage list** link to navigate to a list of the usage records for your application. You can perform list capabilities such as creating favorites or grouping



records.

If there are no errors, select the **Turn on Next Experience** button to enable Next Experience.

Working with themes in Next Experience

Themes enable you to tailor the visual experience for your users, helping to update the look and feel to be more like your brand.

Quickly create, edit, preview, and publish themes to your experiences using Theme Builder. See Configure Next Experience with Theme Builder for more information.

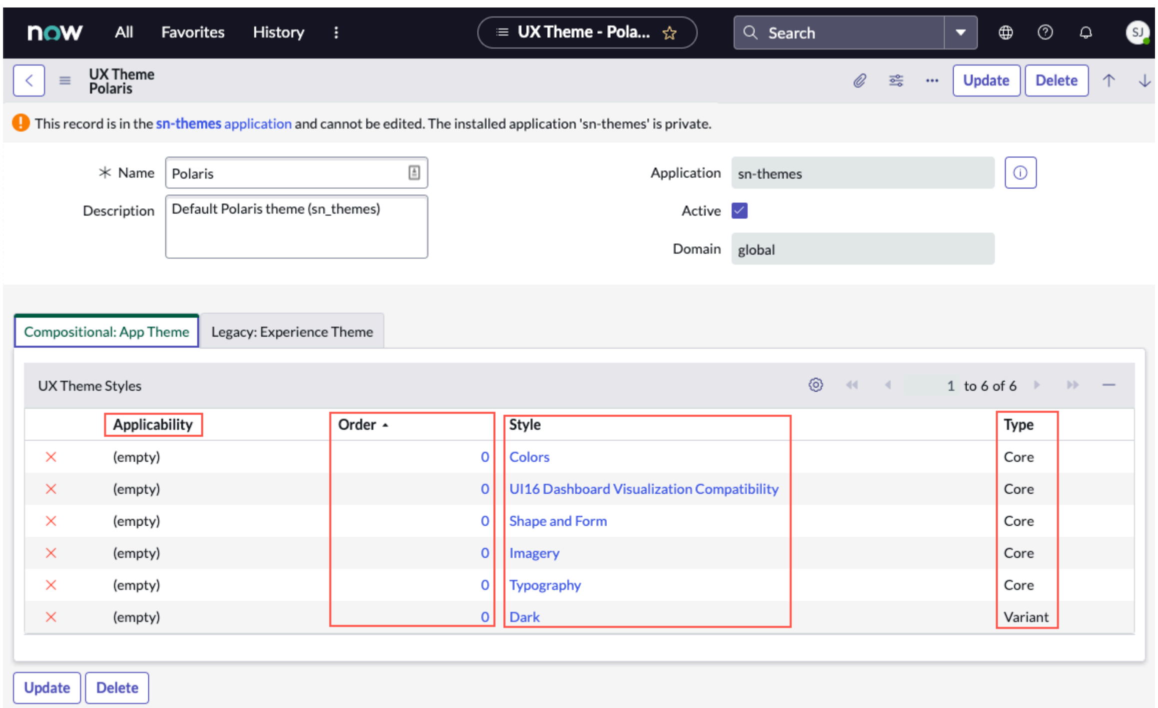
Important: Theming applies to the classic environment in Lists, Forms, and Dashboards. Custom components don't reflect theming.

Theming at a glance

- Theming is the ability to customize the Next Experience Design System to reflect your product or brand.
- Theming means styling various aspects of the ServiceNow® platform while maintaining the overall look and feel.
- Theming typically involves changing the colors to your company brand colors but can also include typography, imagery, shape and form.

Theme record

This image shows the default Polaris theme, which is read-only. You create your own themes and styles to be used by experiences in your instance by either cloning the Polaris theme or by cloning a Theme Builder theme record. If you clone the Polaris theme, you also must clone the styles under UX Theme Styles and make changes to those styles, as desired. At least one Core type style must be defined.



Theme styles

You can configure a theme to match your company brand look and feel in ServiceNow. When you configure a theme, you adjust the color schemes, fonts, and images of your applications. On the Theme Builder Theme form, you configure Order, Style, and Type settings.

Order

Style records with higher-order values override styles with lower values. The base system styles all have the order 0. If you meet the Applicability constraint, styles with higher values override the base system styles. If not, the lower-value style is used.

Style

Style records define reusable styles that together comprise a theme. Core styles include color, shape and form, typography, and imagery. Variants are a different version of the theme, commonly different colors, that users can select in preferences. The most common use of variants is for accessibility purposes, particularly to account for color blindness. If you decide to use a dark theme, consider selecting the Polaris theme or create a dark alternate color palette in Theme Builder. For more information, see Add an alternate color palette.

Type

Styles can be of either the Core type or the Variant type. Core styles are active by default. Users can choose from available variants for themselves from the User Preferences, and those variant styles override the core style. Theme Builder doesn't automatically generate dark theme variants; however, you can create a dark alternate color palette with limited customization. For more information, see Add an alternate color palette. The Polaris theme includes a Dark Theme variant that is available on instances with Next Experience enabled.

Get help with Theme Builder

To get help with Theme Builder, your ServiceNow instance, plugins, permissions, and more, watch a short video to contact the ServiceNow admin who works in your company.

Get help now from your Now Support administrator

The ServiceNow admin in your company can help you with things like activating plugins, kicking off upgrades, unlocking accounts, updating user permissions, and much more.

https://player.vimeo.com/video/1056112088?h=1a5cd3b245&badge=0&autopause=0&player_id=0&app_id=58479

Helpful resources

Some ServiceNow resources that can provide you with helpful information are:

ServiceNow Community

Next Experience Community

ServiceNow University

Getting Started with Theme Builder

ServiceNow Store

ServiceNow Store

Video

Watch Next Experience Academy: Theme Builder and Creator Toolbox: Theme Builder.

Configuring Next Experience with Theme Builder

Reflect your company's brand on your ServiceNow instance by managing, editing, and implementing Next Experience themes in an easy, efficient, and upgrade-safe way using Theme Builder. As of the Yokohama release, Theme Builder is included as a core plugin with the Next Experience and is available by default.

Theme Builder main features

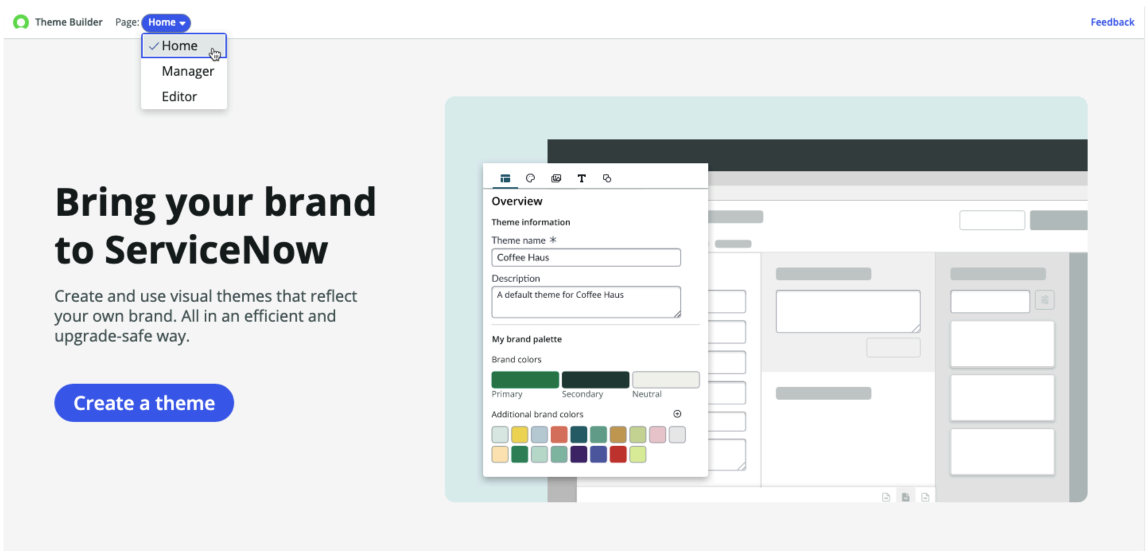
- Create and manage Next Experience themes for your mobile and web experiences without needing to write code.
- Customize the look of your core theme by creating alternate color palettes, enabling users to select a version that suits their preferences. An alternate color palette enables you to create additional color schemes beyond the primary theme colors.

- Preview your changes in real time before publishing your theme to the entire instance and easily revert to your original colors, if needed.
- Publish multiple themes to your web experience and enable users to select the one that suits them best, improving the overall user experience.
- Quickly apply branding changes, such as colors, logos, and typography, across your instances.
- Use the Accessibility Inspector to verify sufficient contrast for text and backgrounds, which helps to comply with accessibility standards while enhancing user experience.

Theme Builder includes an option on the home page that you can use to provide feedback to ServiceNow® about your experience with the current product. All feedback is reviewed and may be used to improve the product.

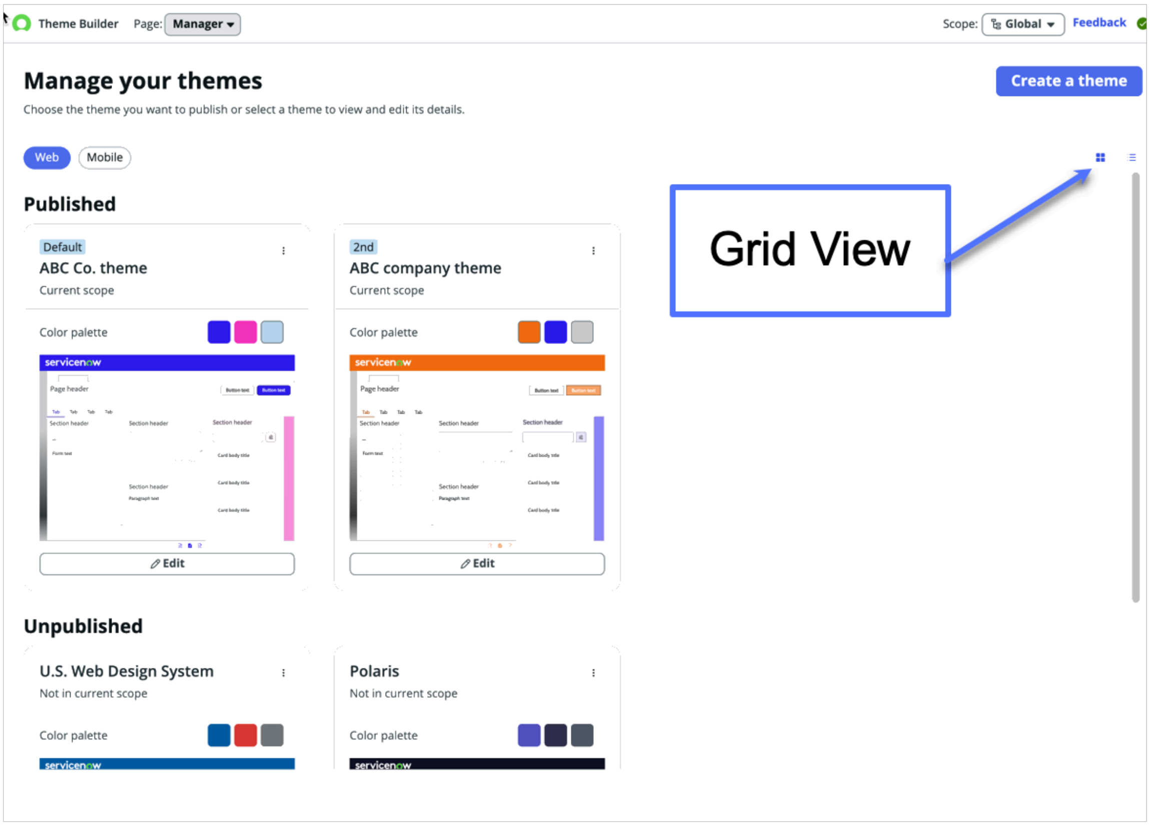
Theme Builder Home page

- Provides an introductory overview of Theme Builder
- Offers a **Create a theme** option to begin the theme creation process



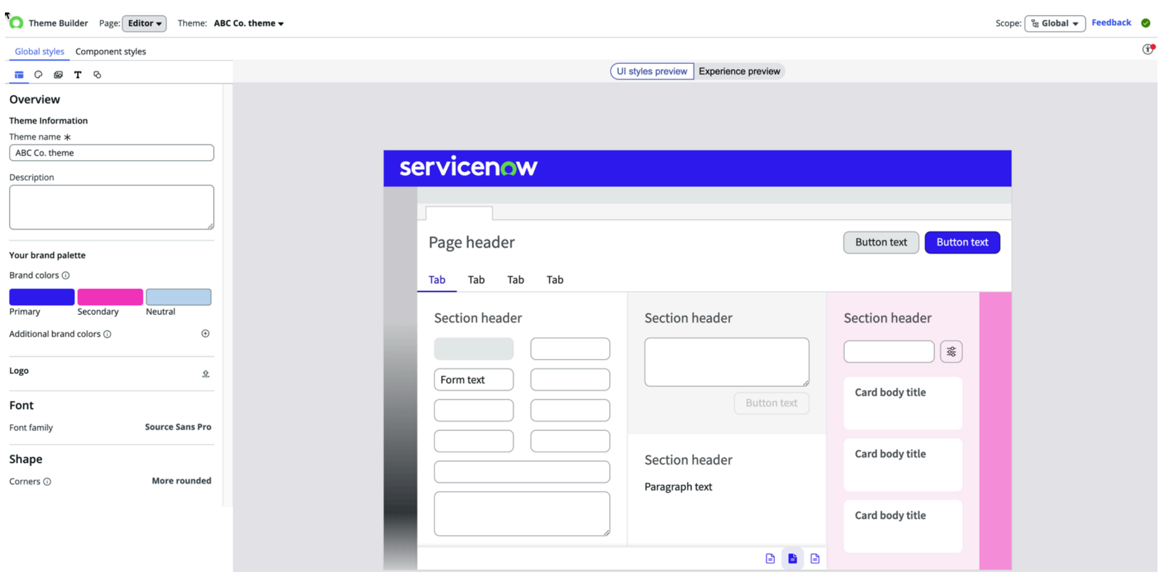
Theme Builder Manager page

- Displays all themes created using Theme Builder
- Enables adding alternate color palettes to existing themes
- Enables publishing or unpublishing your themes to your experience



Theme Builder Editor page

- Customize your themes in the Editor page, including color palette customization, logo, typography, shape adjustment, and component editing
- Offers real-time preview of theme changes



Create a theme with Theme Builder

Create a theme record for your web or mobile experiences by using the Home view in the Theme Builder application.

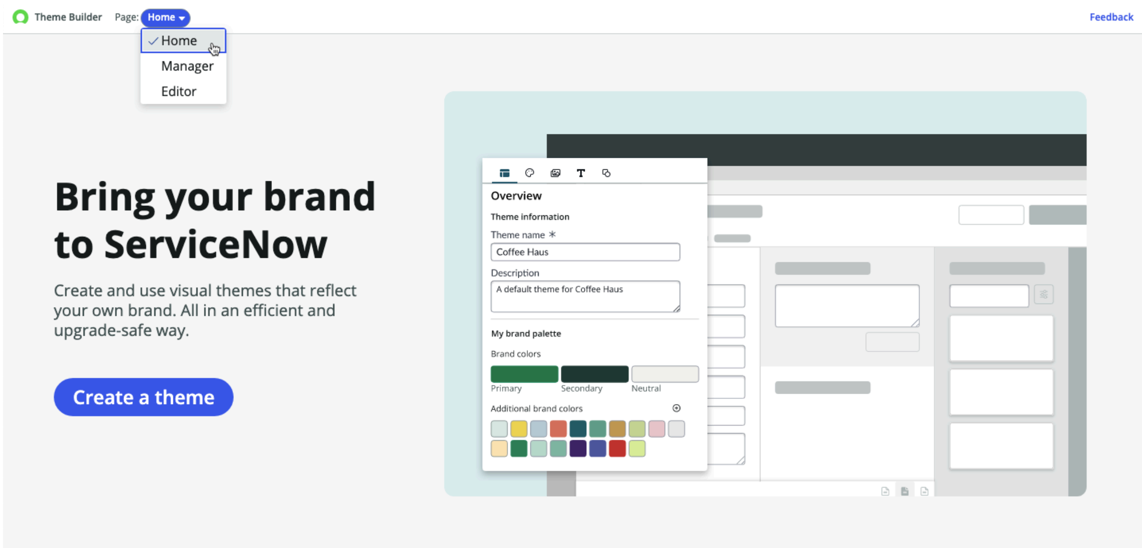
Before you begin

Role required: admin

Procedure

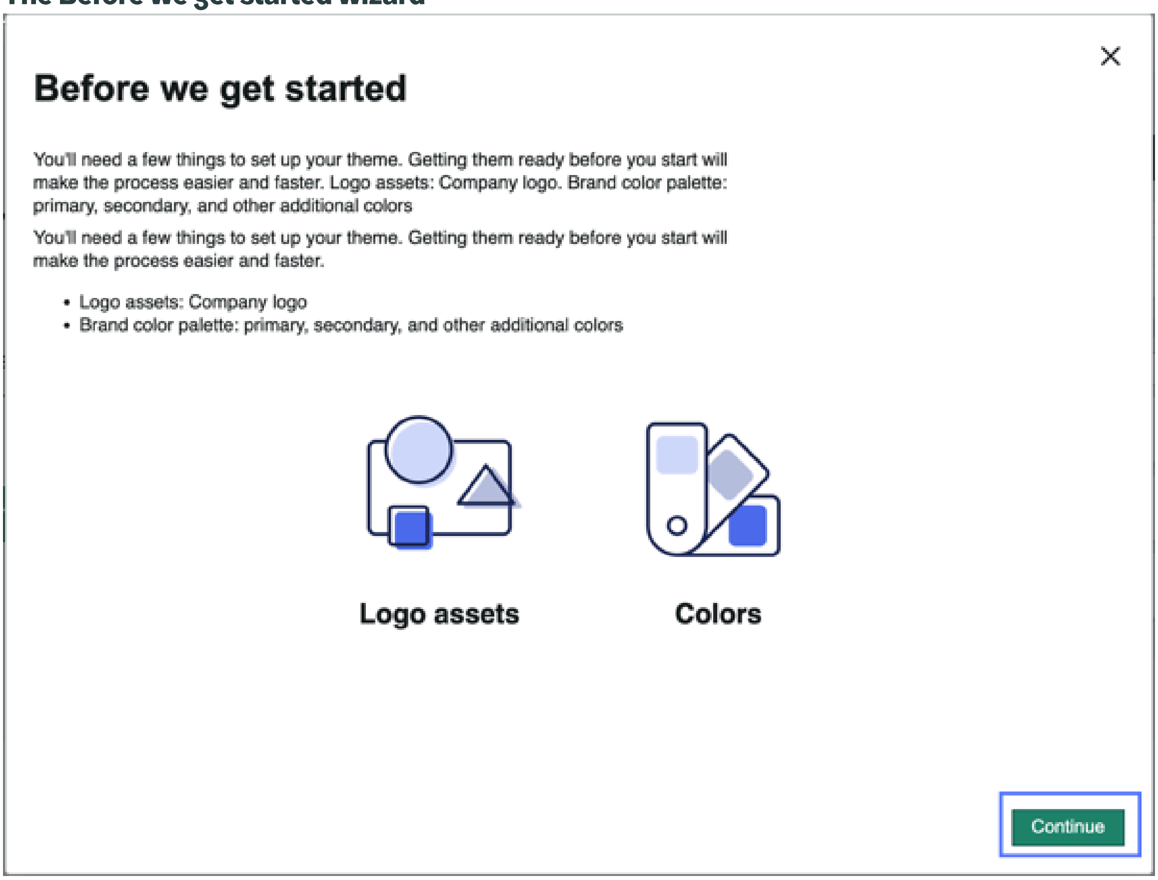
1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
   The Theme Builder landing page opens in a new tab and is displayed in the Home page view.

   Theme Builder Home screen

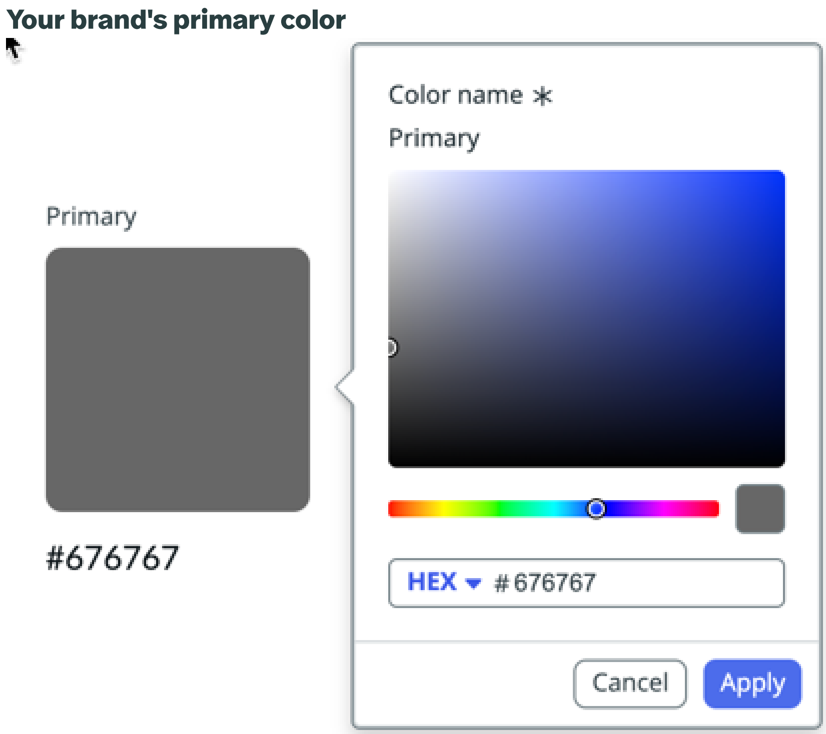
2. Select **Create a theme**.
   The Before we get started wizard appears to guide you through your brand configurations, as described in the next steps. The theme record is saved automatically as you work.

   The Before we get started wizard

3. Start defining your new theme by selecting **Continue**.
4. Insert the name and a description of your new theme, and select **Next**.
5. Select the **Primary** tile, select your brand's primary color, and review the simplified preview to see where the selected color displays in your instance.

   Note: In the Color Name dialog box, you can select the color model that you prefer: HEX, RGB, or HSL.

6. After you identify the primary color of your brand, select **Apply**, and then select **Next**.
7. If your brand includes a secondary color, repeat the previous step on the secondary color screen.
8. Repeat the previous step to define a neutral brand color for divider lines and surface containers.
9. **Optional:** Choose additional colors for your brand and select **Next**.
10. Upload your brand logo and review the simplified preview to verify that it appears as expected with the primary color you chose, and then select **Next**.

    Note: If you don't add a logo, the ServiceNow logo will be used.

11. Select the preferred font for your text and select **Next**.
12. Select the corner shape of your components in the interface, such as the buttons, modals, and drop-down menus, and select **Next**.
13. Review your selections and select **Create theme**.

    Note: You can select **Back** to make changes in the wizard before selecting **Create theme**. After creating a theme, any edits you make are automatically saved.

    After creating your theme in the wizard, you're directed to the Editor view of the theme where you can continue modifying or publish your theme.

Manage or edit a theme with Theme Builder

Customize and manage your theme and styling in a time and cost efficient way. After customizing, publish your new theme to either a web or mobile implementation of your instance.

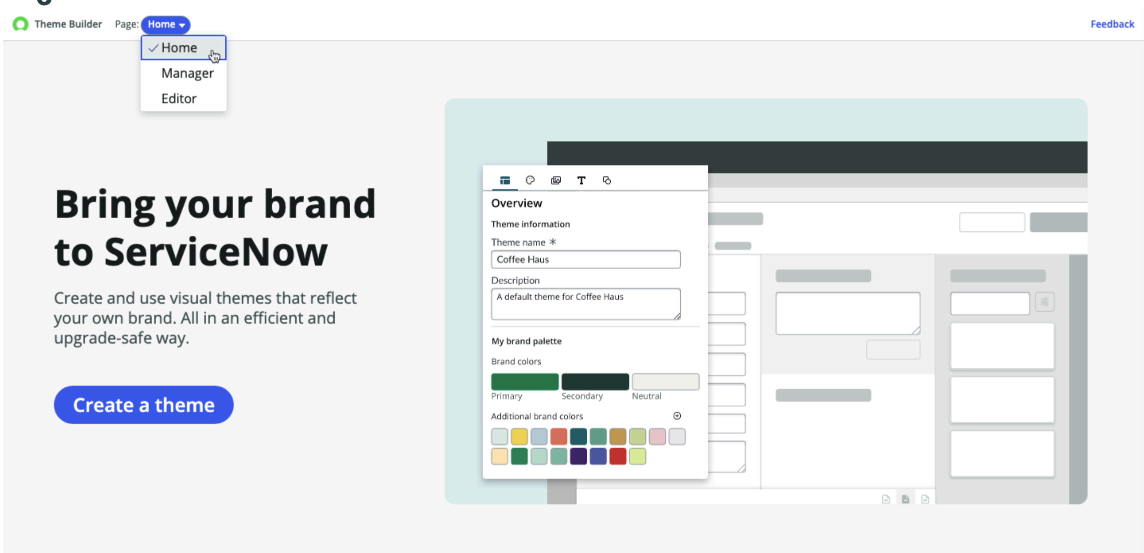
Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
   The Theme Builder landing page opens in a new tab and is displayed in the Home page view.
2. From the Home page view, select Manager page view to see all available themes.

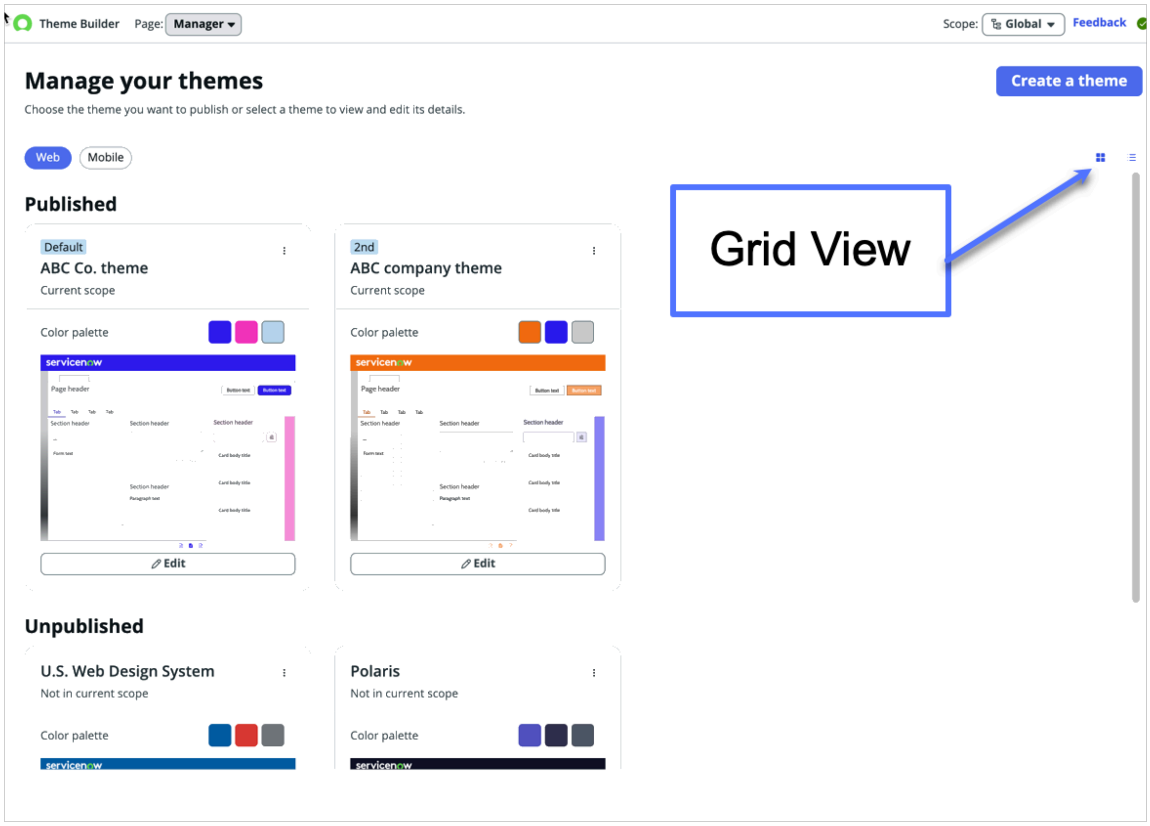
   Page menu

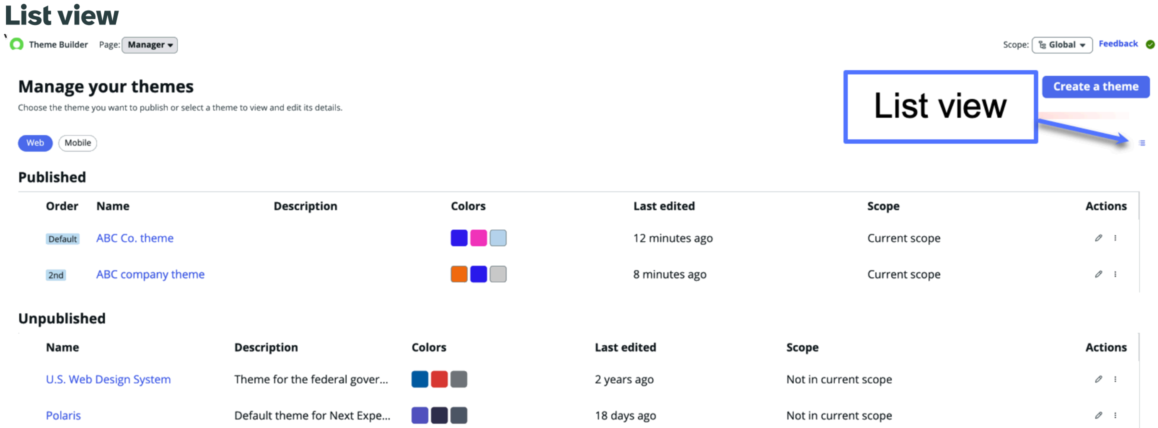
   From the Manager page view, you have the choice of viewing existing themes in two ways. You can choose the Grid view or the List view.

   Note: In both the Grid and List views, your published and unpublished themes are grouped separately. The published themes are themes that appear in the user's theme preference. View your web and mobile themes by selecting either the **Web** or **Mobile** button.

Grid view



List view



The More actions (⋮) icon for published themes contains the following options:

- Duplicate
- Delete
- Add alternate color palette
- Unpublish
- Mark as default

  Note: This option appears if the theme isn't the current default theme.

The More actions (⋮) icon for published themes with the alternate color palettes defined contains the following options:

- Edit group name
- Duplicate
- Delete
- Unpublish
- Mark as default

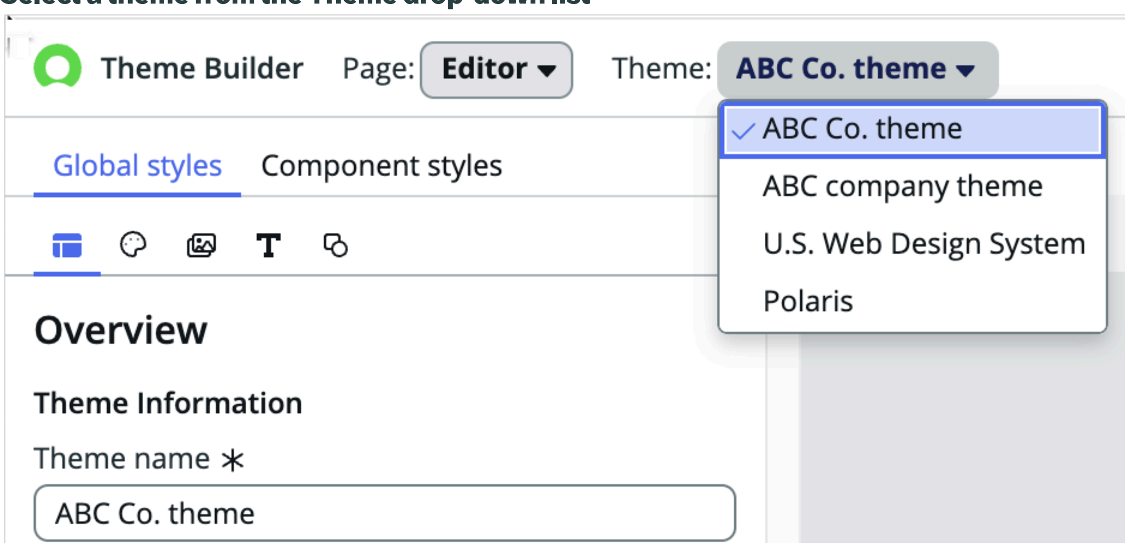
    Note: This option appears if the theme isn't the current default theme.

The More actions (⋮) icon for the unpublished themes contains the following options:

- Duplicate
- Delete
- Add alternate color palette
- Publish

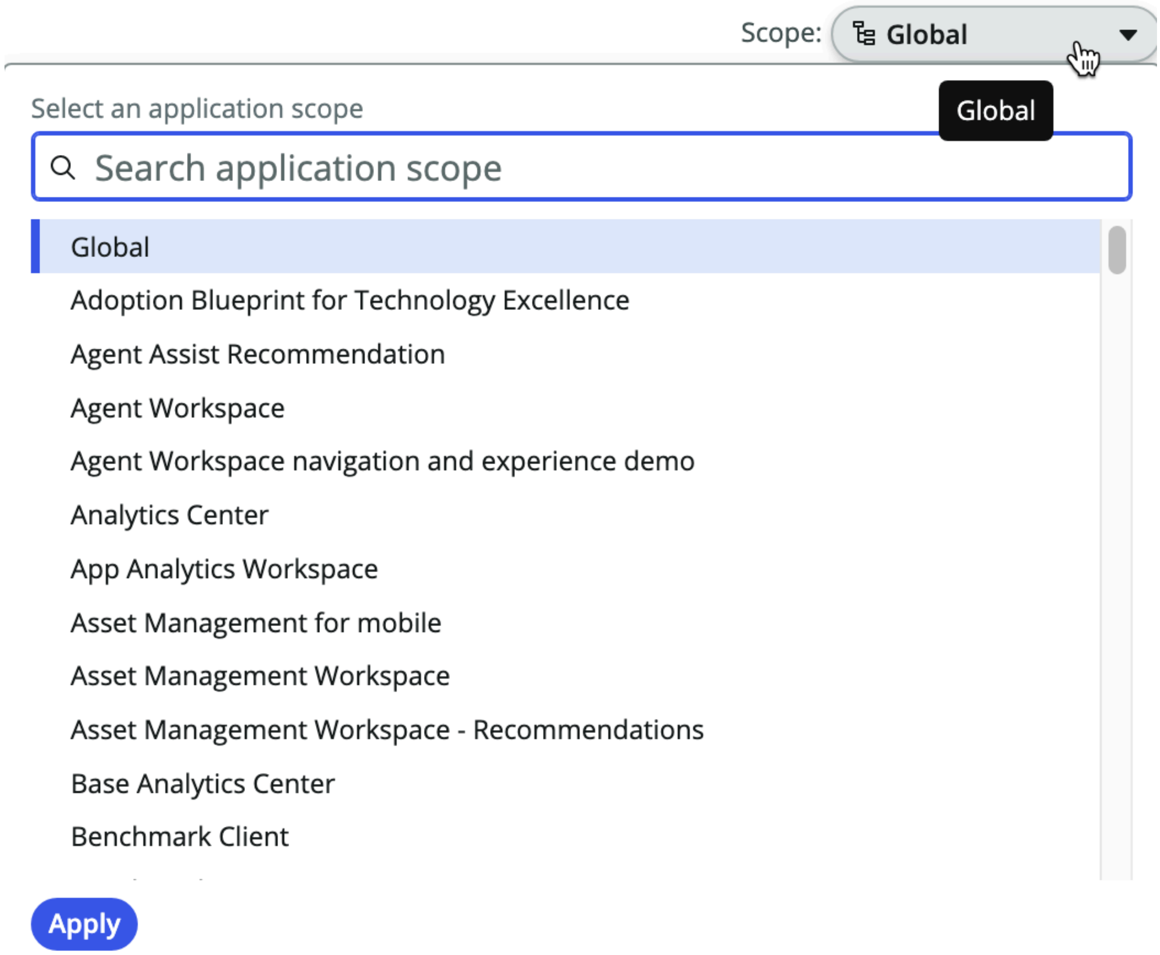
3. Select Editor page view and choose the theme you want to edit from the Theme drop-down list. In the Editor page view, you can see only the theme that you select.

Select a theme from the Theme drop-down list



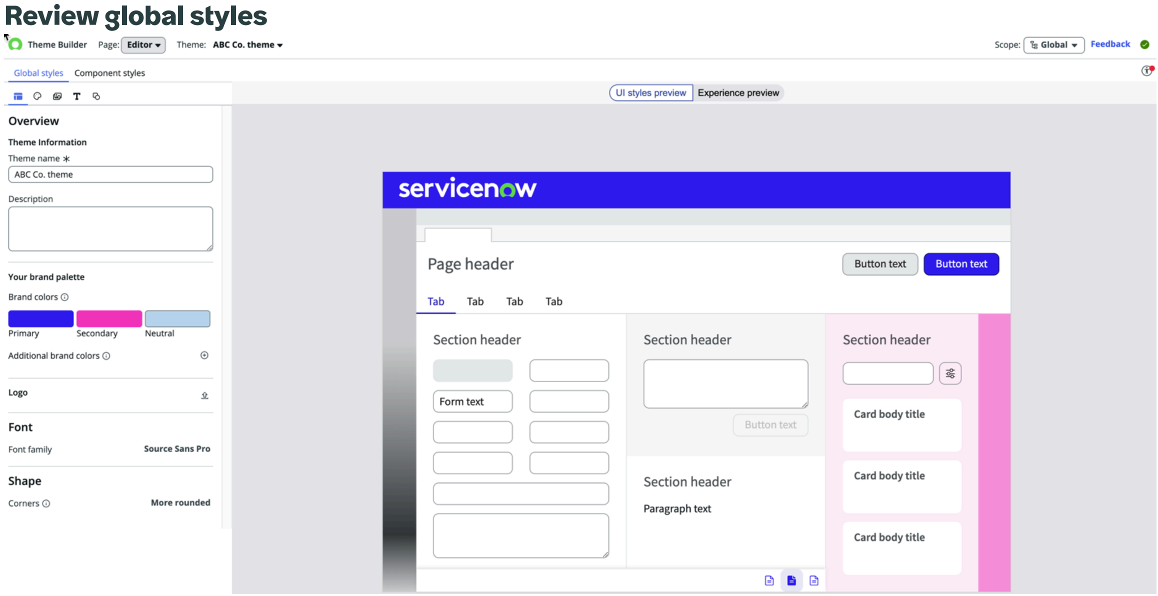
Note: When you select the theme you want to work on, verify that you selected the correct scope for the theme from the application scope picker.

Application Scope Picker



4. Review and update the Global styles, as needed.

Review global styles



Note: The following style records are generated with your theme:

- **Your brand palette**: Update the interface colors for your brand.
- **Logo**: Update the logo. You can upload the logo during the theme application either from imagery or the overview page. For more information, see Upload a logo while publishing a theme with Theme Builder.
- **Font Family**: Update the fonts applied globally to your experience. The fonts are used in headlines, titles, subtitles, body text, and captions.

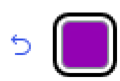
  Note: If you prefer to customize your font, see Create a Next Experience style. After you save your customized font type and refresh the page, the new font appears as `Custom Font`. If you delete the custom font from your theme record, the font reverts to `Source Sans Pro` as the default.

- **Shape**: Update the corner shapes of on-screen components.

  Note: If you prefer to customize your shape, see Create a Next Experience style. After you save your customized shape and refresh the page, the new shape appears as `Mixed`. This custom value is also displayed in the **Component Styles** tab, where you can edit the custom value.

a. **Optional:** To change the auto-generated UI colors for more in-depth editing, select the Color palette icon from the Global styles color panel. Use the drop-down list next to each UI element to access the color options.

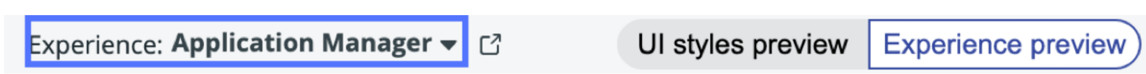
   Note: After you have saved changes to any of the color hooks, a Remove override symbol appears. Select the Remove override symbol to revert your changes back to the original auto-generated colors.

5. **Optional:** To preview your theme before publishing it to your instance, select the **Experience preview** tab.

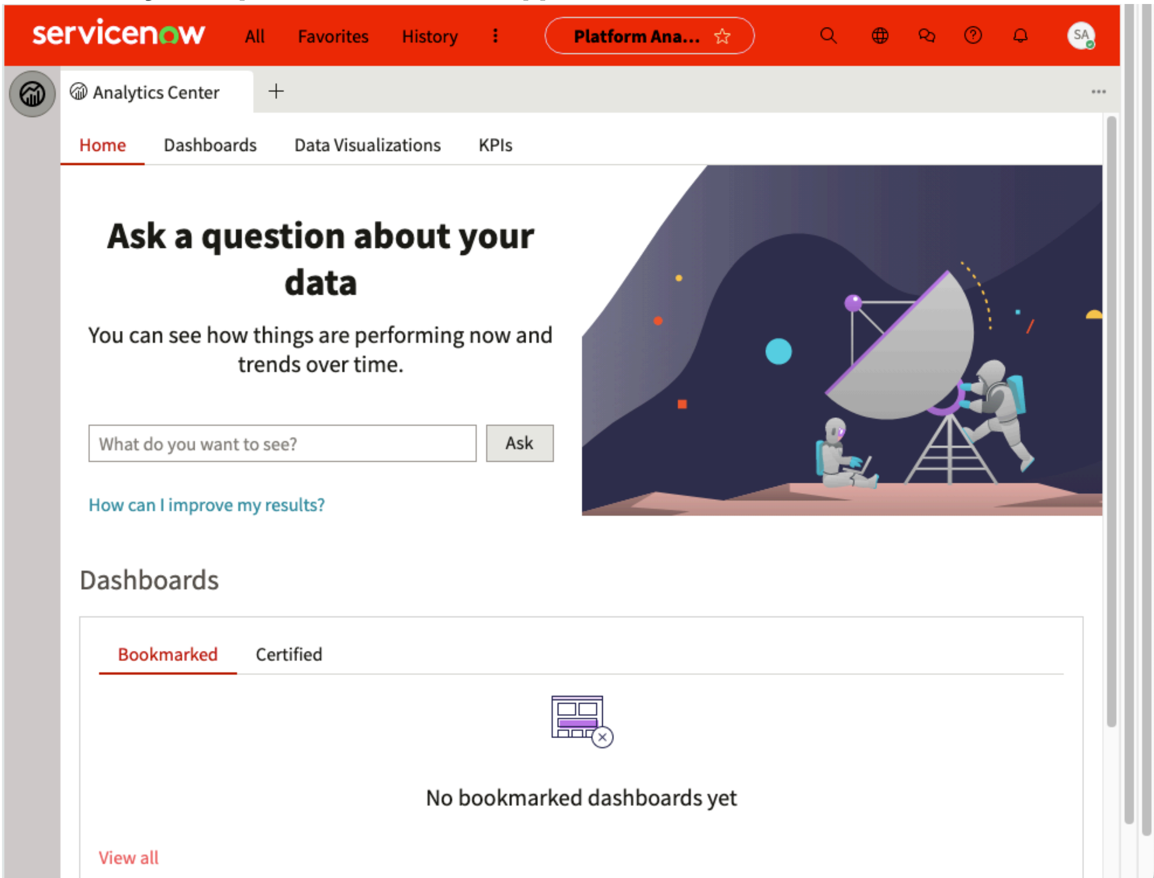
   Select the experience that you want to preview from the Experience drop-down list.

   An actual live instance appears with all the theme selections applied. You can preview it before implementing the selected themes on the actual instance.

   Note: Select the Open in new tab icon to open the experience in a new tab. You can see how your unpublished theme interacts with your selected experience.

Preview of your experience with theme applied



Note: For published themes, data in the Experience preview is live data. The changes that you make in the preview are reflected on your instance.

6. Publish your theme.
   For more information, see Publish your themes with Theme Builder.

Core styles, colors, variants, and alternate color palettes

You can tailor the look and feel of the Next Experience UI for different users by configuring the core styles, variants, and alternate color palettes.

Core styles in Theme Builder

A core style is the base version of a style. Core styles include color, shape and form, typography, and imagery.

Colors in Theme Builder

When editing components, use the color picker to change the background color of the canvas to view how the component colors will render on different backgrounds.

Note: Updating the canvas color doesn't apply to the instance. Only hooks specific to components are applied on the instance if you publish an edited theme to the instance.

When editing theme colors, you can view the contrast ratio in the color picker. The value updates when you change the color from the palette or My colors view.

Variants/Alternate color palettes in Theme Builder

Both variants and alternate color palettes are types of UX style records categorized as Variant.

A variant is an alternate version of an existing theme, usually designed for accessibility, that your users can select in preferences. An example of a variant is the Dark version of the default Polaris theme that is shipped with Next Experience. The Dark variant can be used to enhance accessibility for visually impaired users by replacing light backgrounds with darker ones and contrasting the text colors accordingly.

An alternate color palette is a modification that you can make to a theme's colors and is designed for cosmetic purposes. You can define this palette in the Theme Builder Manager page for any theme, except for the default Polaris theme. When you use an existing theme to create an alternate color palette, the alternate color palette is grouped with that primary theme, and initially shares its logo, color, typography, and shape styles. At first, the only difference from the primary theme is that you assign it a unique name.

Next, you define the primary color for the alternate color palette. This color is used to identify the navigation bar, menus, and other common components. Likewise, define a secondary color, if needed. If your interface doesn't require a secondary color, the primary color is used. Lastly, you define a neutral color to help define divider lines and containers. There are two base palettes available, light and dark.

Note: Secondary and neutral colors cannot be edited in the dark alternate color palette.

When the palette is created using the colors you selected, you have the option of renaming it. You can also preview all the UI assets available on the ServiceNow AI Platform to visualize how they are rendered when you apply them to your instance.

Note: Dark variants don’t apply to the Core UI, previously referred to as UI16. The Core UI is the interface you use if Next Experience is inactive. However, dark variants extend to most aspects of the Next Experience.

Add an alternate color palette

Customize a Theme Builder theme by creating an alternate color palette for the theme and publishing it to your instance.

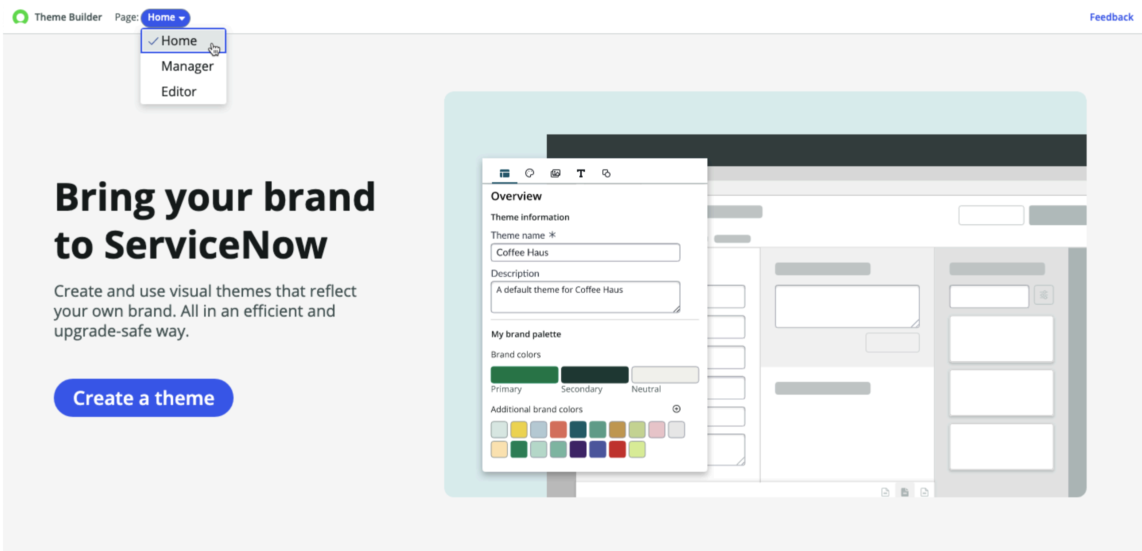
Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
   The Theme Builder landing page displays in the Home page view.

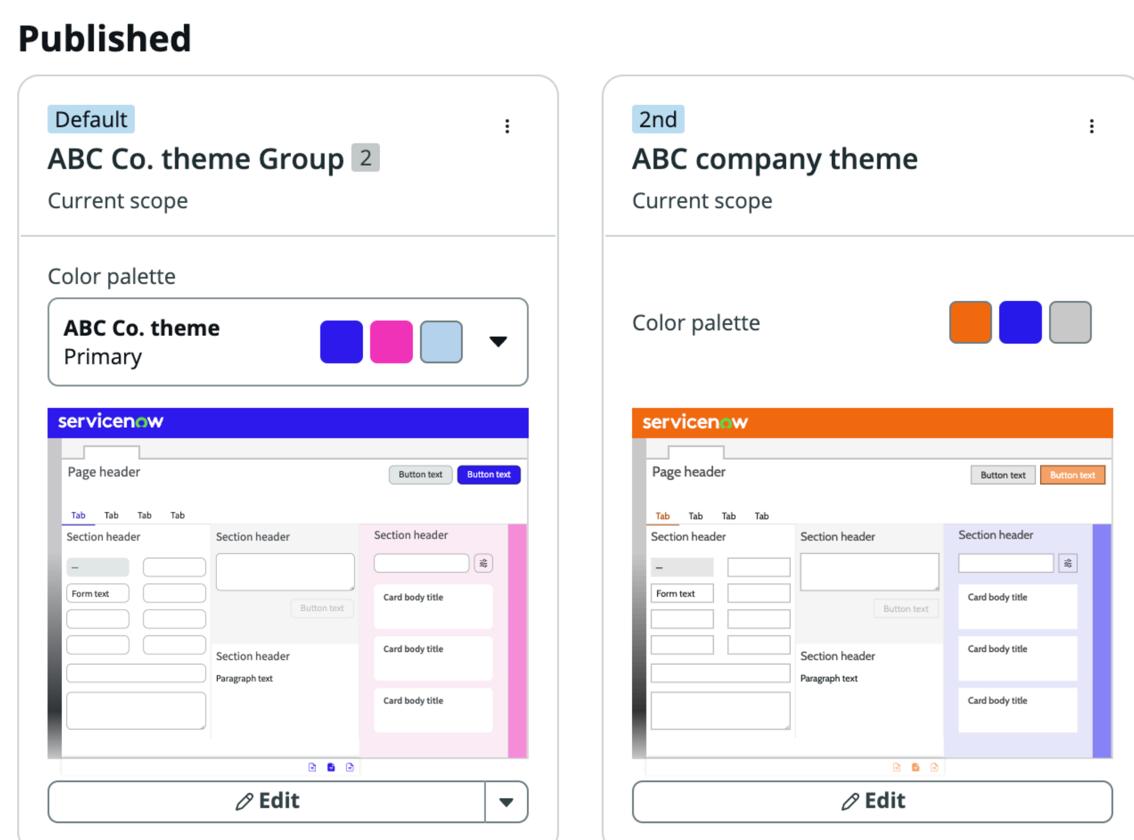
Page menu



2. From the Home page view, select the Manager page view to see the themes you have previously defined.

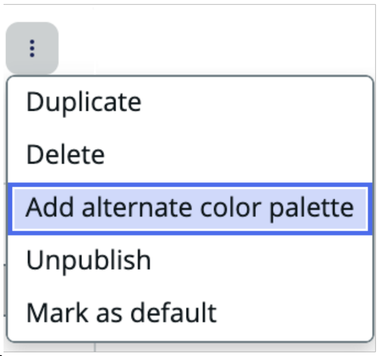
> **Important:** When you have selected the theme you want to work on, verify that you have selected the correct scope for the theme from the application scope picker.

Available themes

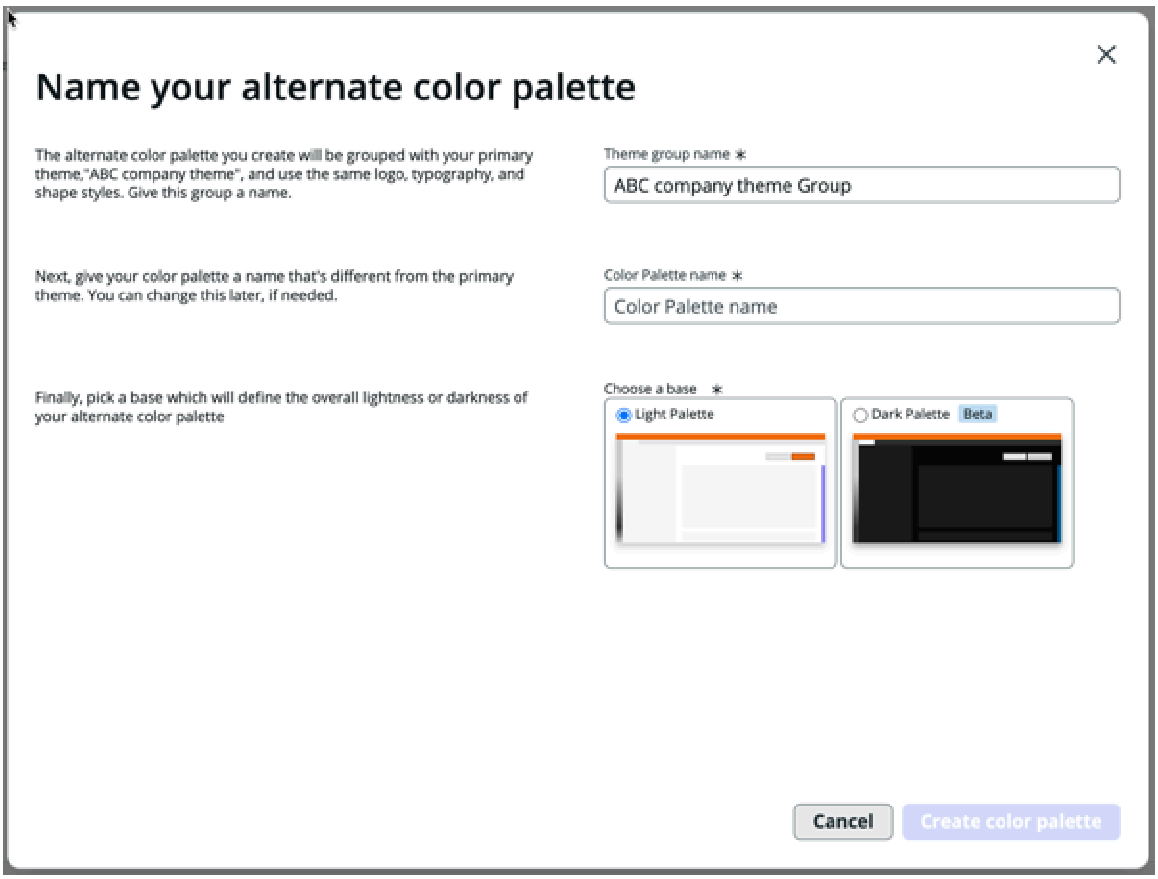


3. Select the theme to which you want to add an alternate color palette to.

- For a published or unpublished theme group, which has alternate color palettes defined, navigate to the Edit drop-down list and select **Add an alternate color palette**.
- For published or unpublished themes without an alternate color palette defined, select the More actions (⋮) icon, and select **Add alternate color palette**.

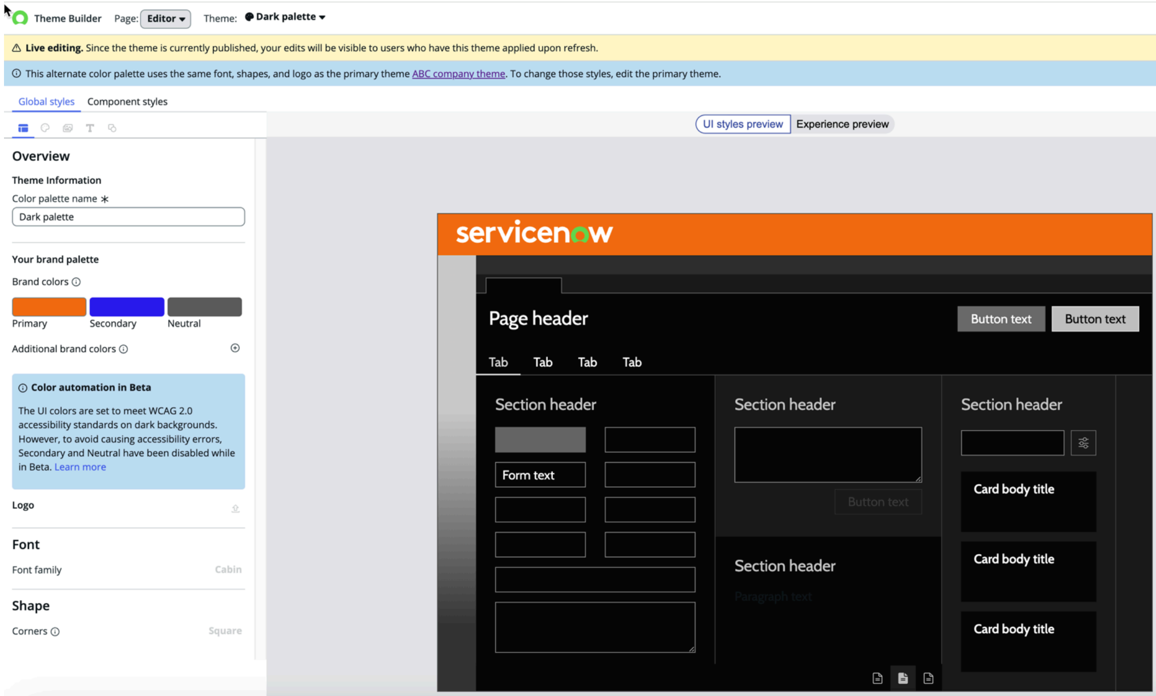


The alternate color palette wizard appears.



4. Provide a **Theme group name** and the **Color Palette name** as needed, and then choose a base from either **Light Palette** or **Dark Palette**.
5. Select **Create color palette**.
   The Editor page for the current palette appears.

Edit color palette

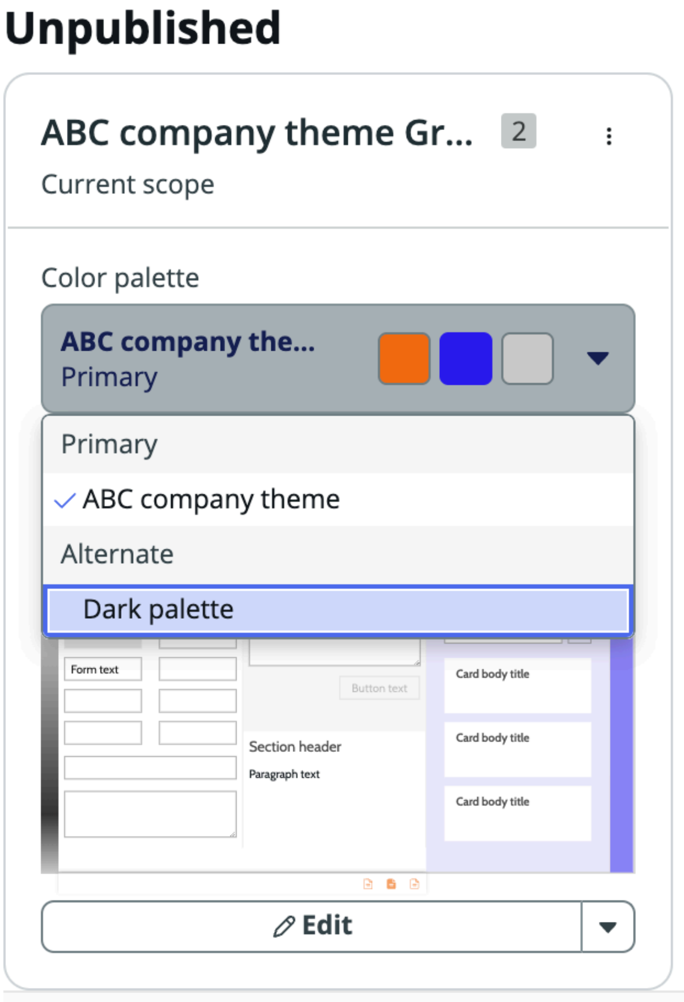


6. **Optional:** On this screen, you can perform the following actions if needed:
    - In the **Color palette name** field, change the color palette name.
    - Select any of the three brand colors defined in this palette and change them from the color picker.

Note: For dark palettes, only the primary color can be edited. If you want to customize further, see Edit components.

Result

The alternate color palette has been added to your core theme. The theme name now appears as a theme group with the palette recorded under the Color palette drop-down list within the



Manager page.

If your theme is currently published, your alternate color palette is available for selection in the user's Theme preferences. For information on publishing your theme, see Publish your themes with Theme Builder.

Preview components

As you’re creating or managing your theme, you can preview the components available for inclusion on your instance.

Before you begin

Role required: admin

About this task

The components you can preview in Theme Builder were created in the Now Design System. For more information, see Next Experience Components on the ServiceNow Developer Site.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
   The Theme Builder landing page displays in the Home page view.
2. Use the **Page** drop-down list to select the Editor page view.

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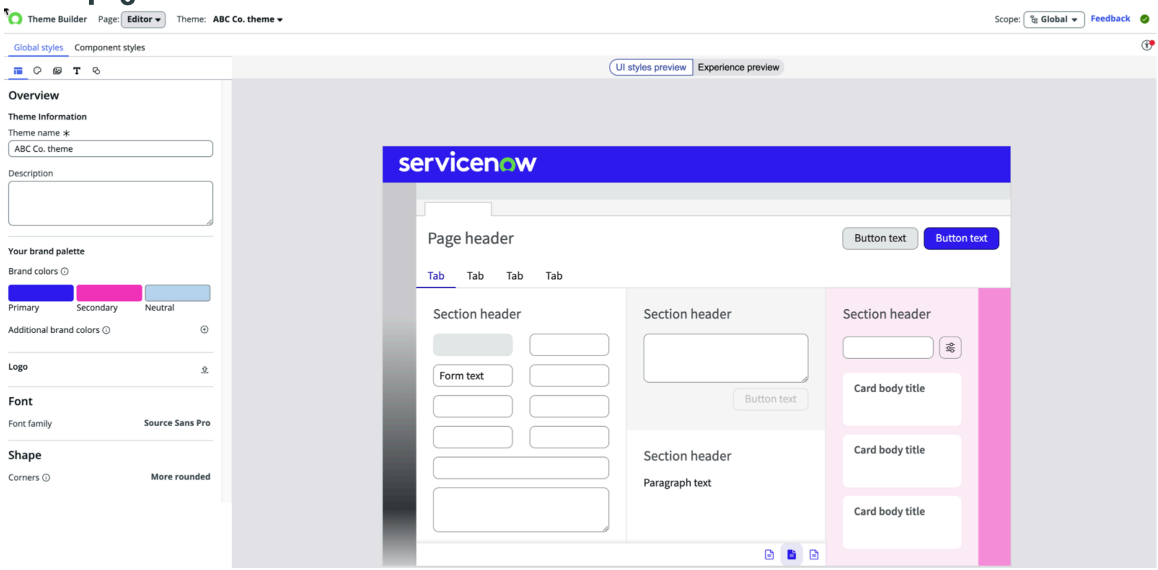
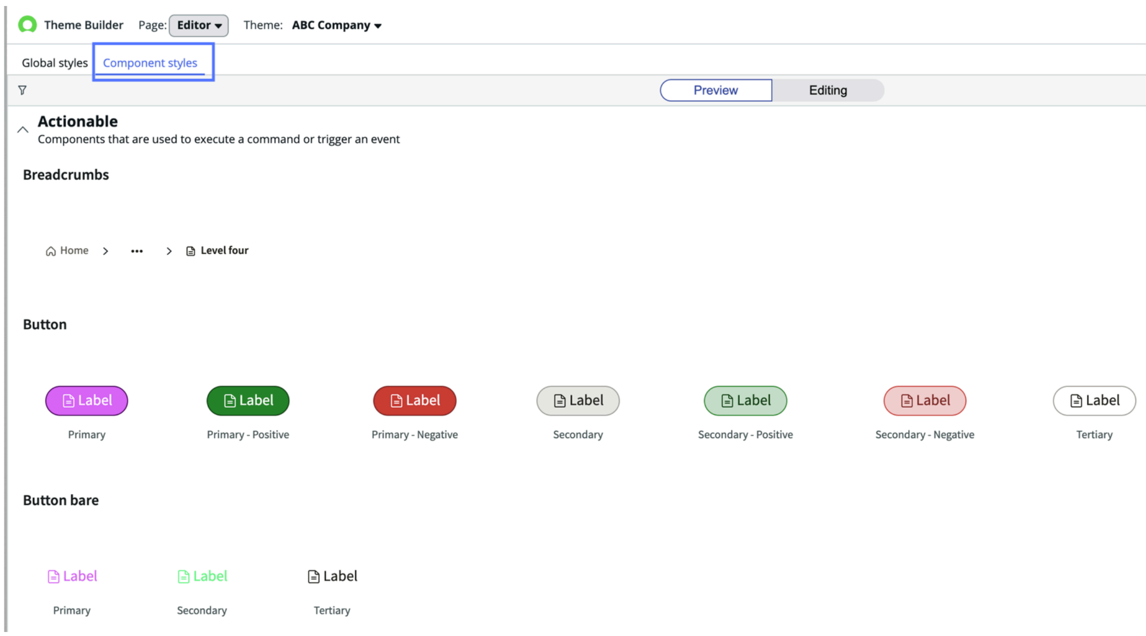
Editor page view

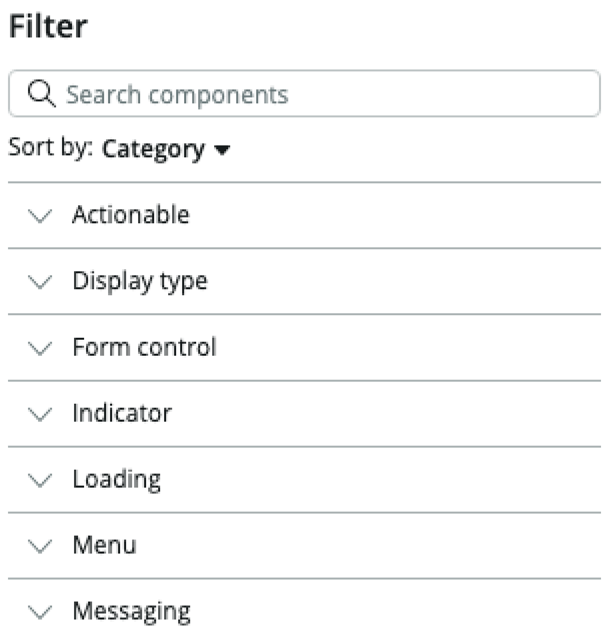


3. Select the **Component styles** tab.
The component styles are graphically listed.



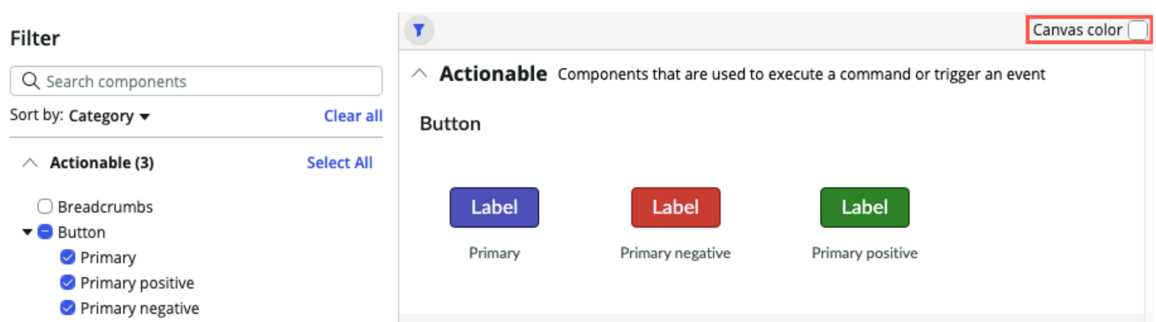
4. You can scroll through the list to view all available components, or filter the list to view specific types of components.

a. Select the Filter icon ( ).

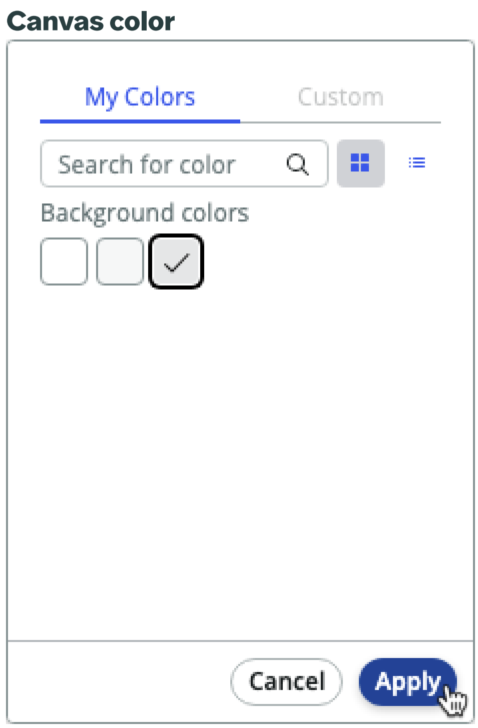


b. Expand the categories of components that you want to view and select the specific components within those categories you want to view.

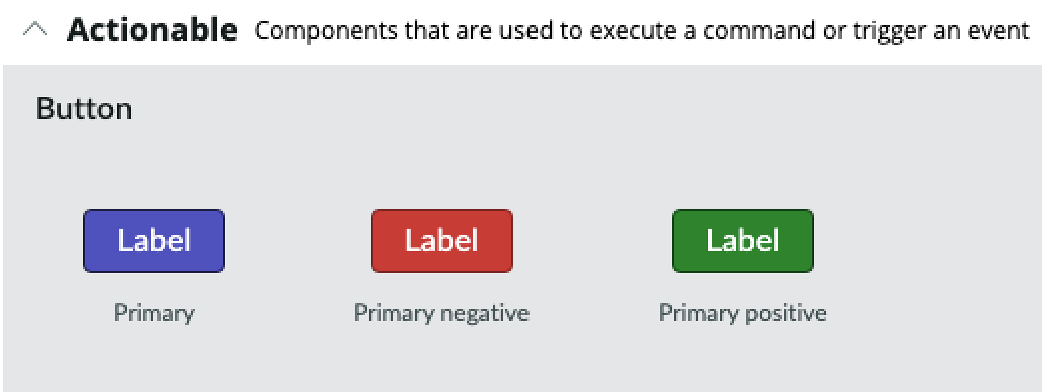
Note: For example, to view components for all primary buttons, expand the **Button** category and select the **Primary**, **Primary positive**, and **Primary negative** components. The list shows the components that you selected.



5. To test how the components render using different background colors, select the **Canvas color** check box.



6. Select the **Background color** you want to view and select **Apply**.



Edit components

Edit Theme Builder individual components to better suit your brand and to meet accessibility compliance standards. The theme hooks that you can edit are specific to each type of component.

Before you begin

Role required: admin

About this task

The components that you can edit in Theme Builder were created in the ServiceNow AI Platform Design System. For more information, see Next Experience Components on the ServiceNow Developer Site.

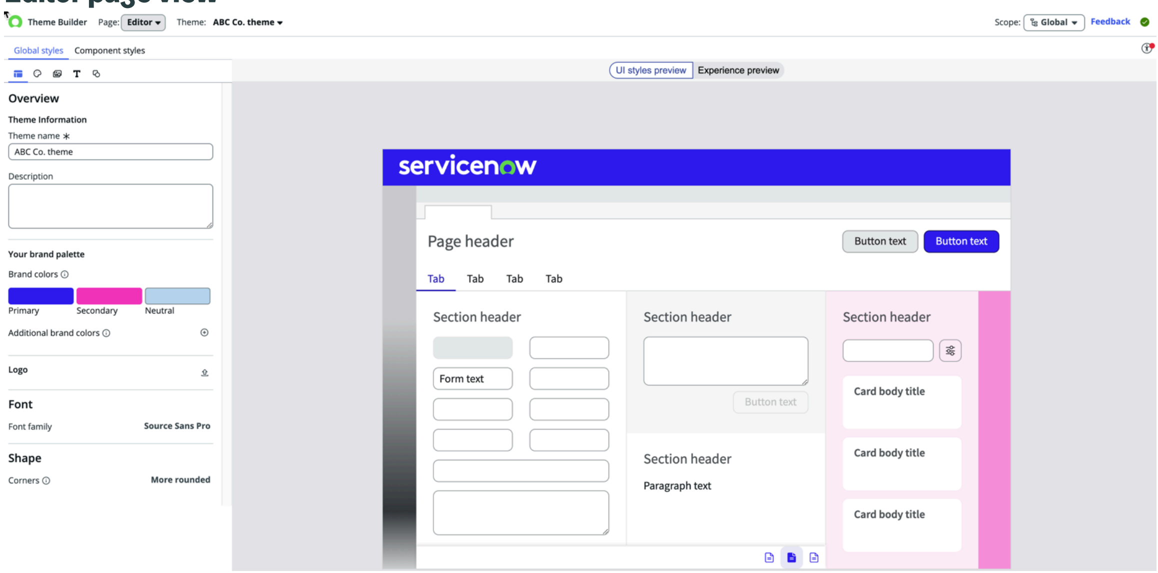
For instructions on editing the Unified Navigation component, see Align with your brand by using the Unified Navigation component.

The total number of accessibility violations is indicated on the red numbered badge icon alongside the Accessibility inspector panel. 

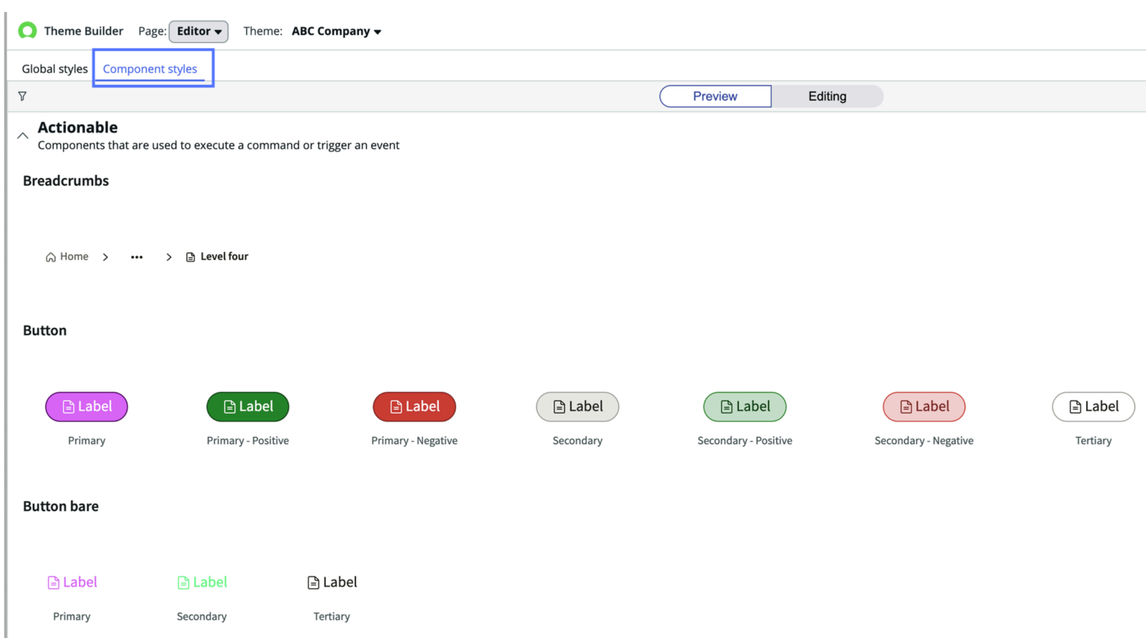
Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
   The Theme Builder landing page displays in the Home page view.
2. Use the Page drop-down list to select the Editor page view.

Editor page view



3. From the Theme drop-down list, select the theme that you want to edit components for.
4. From the Editor page view, select the **Component styles** tab.
   The component styles are graphically listed.



5. Select the **Editing** tab.

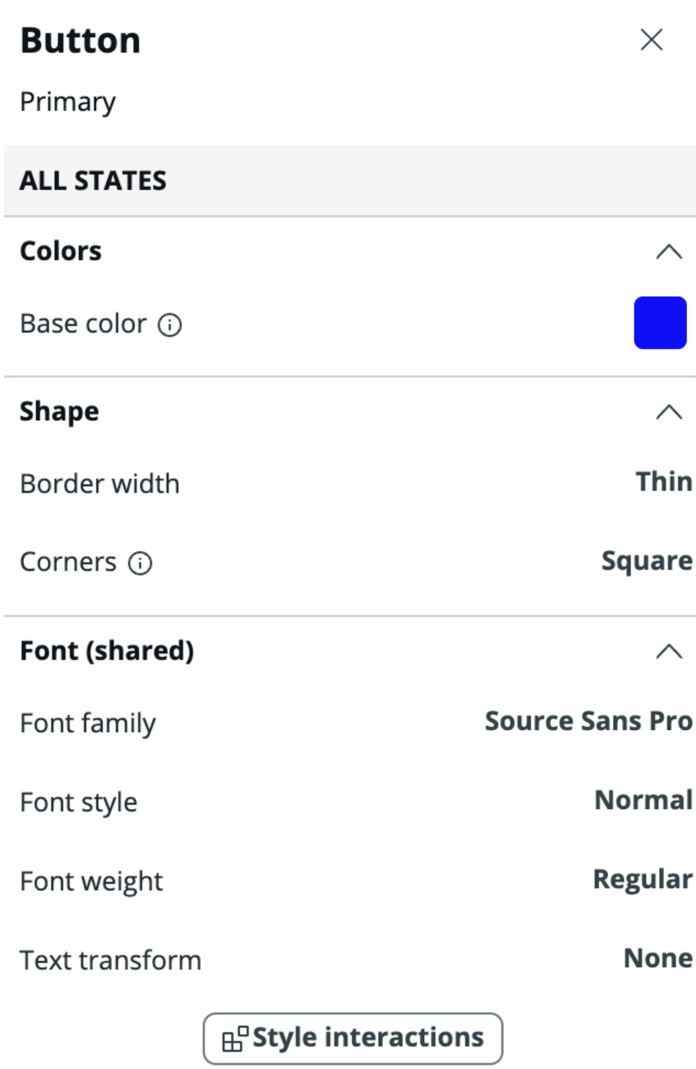
Note: The components that can be edited are displayed. For information on how to filter the list of components to locate the component you want to edit, see Preview components.

6. Select the component that you want to edit to access the Configurable Style panel. When you're looking at the components listed in the Editing page, notice that some components may display the following symbol.

Note: The accessibility warning symbol indicates that the color contrast of the selected component doesn't adhere to Web Content Accessibility Guidelines (WCAG) 2.1 accessibility standards for color contrast. For information on editing components with accessibility violations, see Adjust a component to meet accessibility standards.

7. In the Configurable Style panel, edit the theme hooks that are available for the selected component, as needed.

Configurable style panel

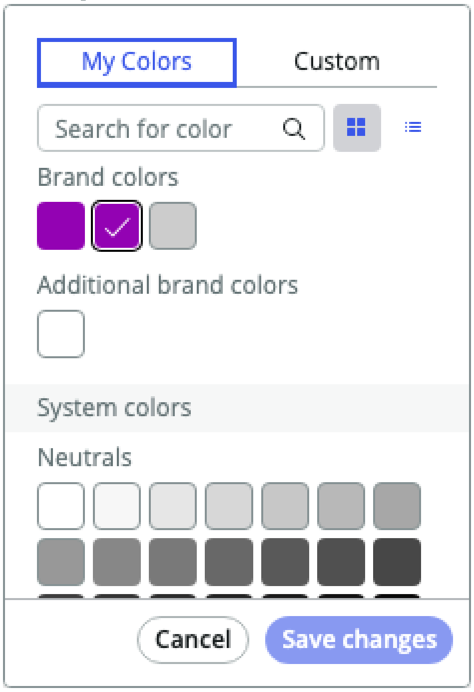


The editable theme hooks that are available depend on the type of component you selected. For example, if you select a Badge component, you can edit the colors and accessibility hooks for the badge. If you select a Text link component, you can edit the base color and accessibility hooks.

Note: After you update the component-specific hooks, any changes that you make to the global style won't update the component styles because component-specific styles take precedence over globally defined styles.

8. If you select a color to be edited, the color picker opens.

Color picker

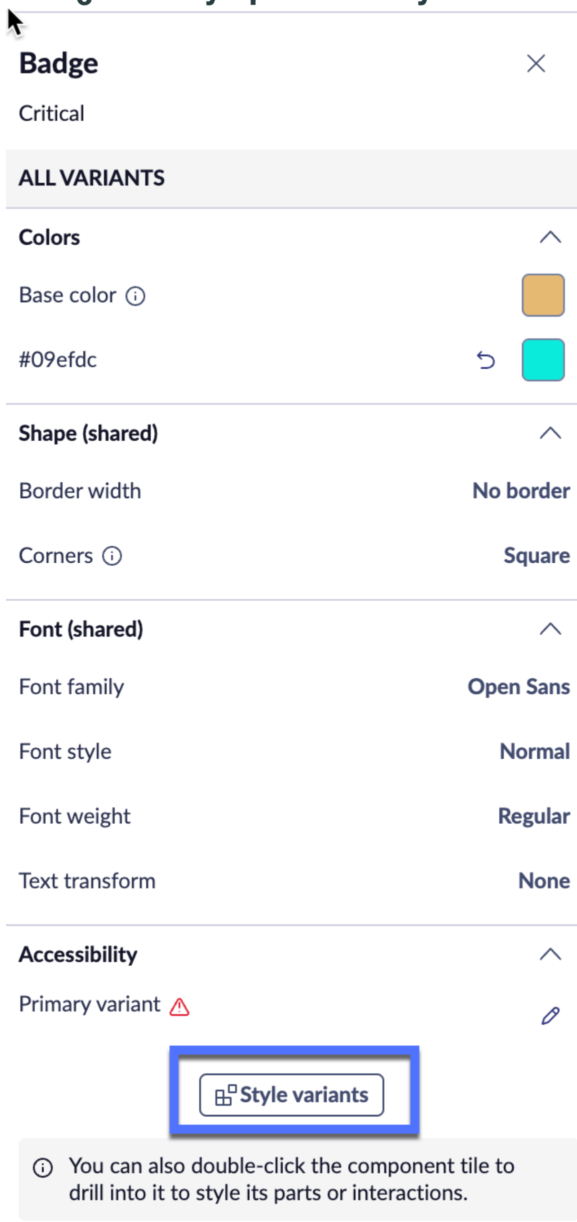


Note: By default, the color picker shows all the available colors for the component. You can select the Hide inaccessible choices slider to limit the color choices to those colors identified as accessible, based on Web Content Accessibility Guidelines (WCAG) guidelines.

9. When you have completed your changes, select **Save changes**.
10. Access the Component Editor where you can style various aspects of a component by using one of the two ways listed:
    - Double-click the component tile.
    - Select either the **Style interactions**, **Style subcomponents**, or **Style variants** button within the configurable styles panel, depending on what is available for that specific component.

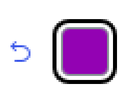
Note: Not all components contain editable parts.

Configurable style panel with Style variants button



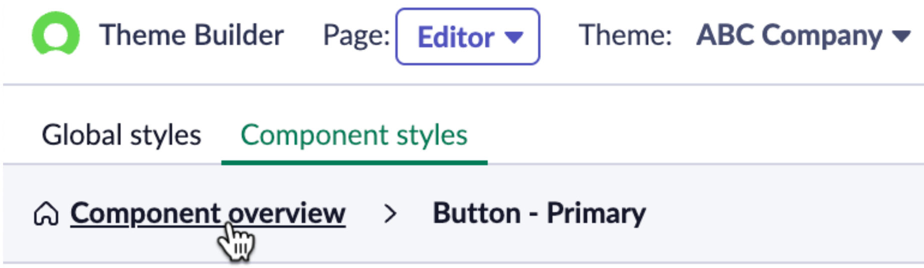
11. From the Component Editor, choose the interaction, variant, or subcomponent of the selected component, then edit the available theme hooks.

   Note: After you save the changes to any of the color hooks, a Remove override symbol appears. The Remove override symbol enables you to revert your color changes back to the original auto-generated colors.

12. **Optional:** Return to the Component Overview screen using the links within the navigational path.

Component editing breadcrumb navigation



Result

If your theme is published, your component edits are visible to users who have your theme applied on refresh. For information on publishing your theme, see Publish your themes with Theme Builder.

Align with your brand by using the Unified Navigation component

Align your experience more closely with your brand by editing the Unified Navigation component and its subcomponents.

Before you begin

Role required: admin

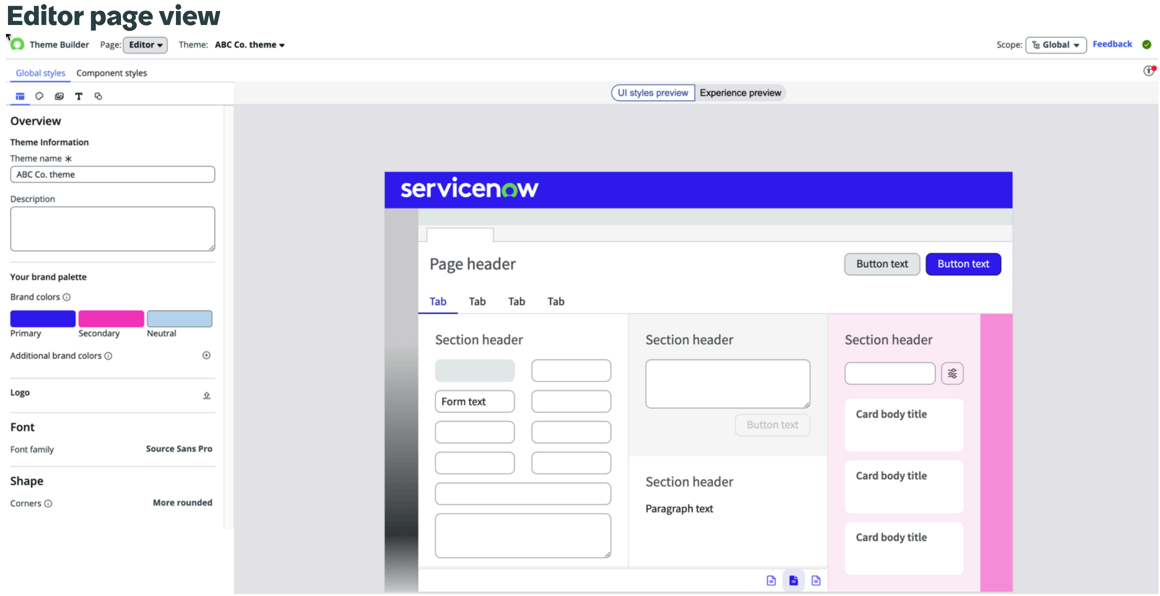
About this task

The Unified Navigation component is made up of several subcomponents that you must style individually. In the Theme Builder 5.0 release, editing of the Unified Navigation is limited to the header and menus, although some styling may apply to all aspects of the Unified Navigation component and subcomponents.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
2. From the Page drop-down list, select the Editor page view.

Editor page view



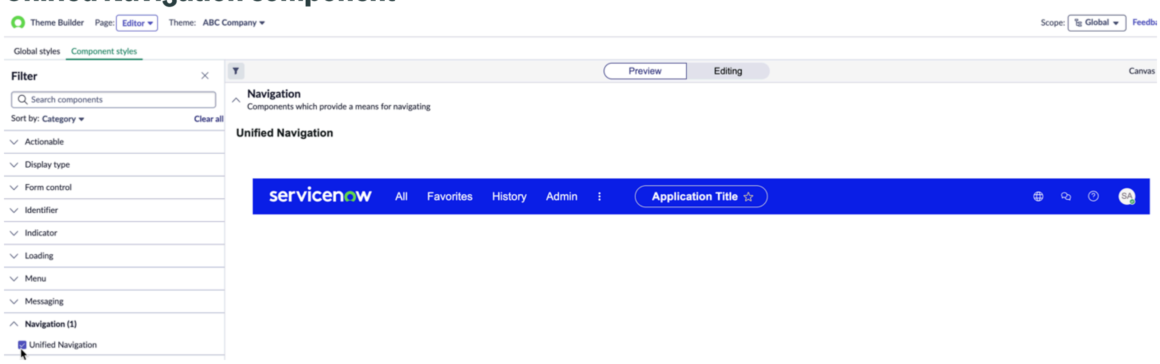
3. From the Theme drop-down list, select the theme that you want to edit the Unified Navigation component for.
4. Select the **Component styles** tab.
5. Select the **Editing** tab.

6. Filter the list to view the Unified Navigation component.

    a. Select the Filter ( ) icon.

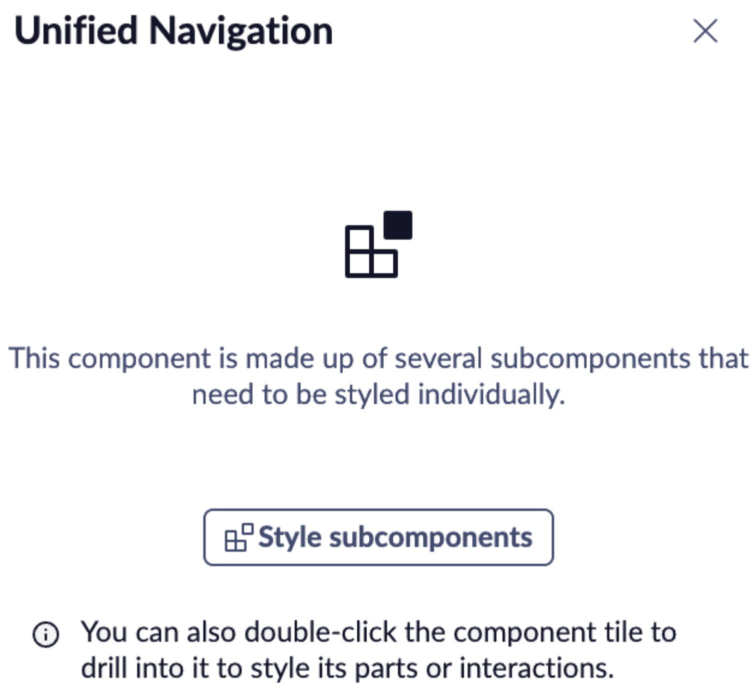
    b. Expand the Navigation category and select the Unified Navigation component.

Unified Navigation component



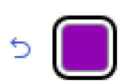
7. Access the Component Editor where you can style various aspects of the Unified Navigation component by using one of the two ways listed:
    - Double-click the Unified Navigation component tile.
    - From the Unified Navigation editing panel, select **Style subcomponents**.

Unified Navigation editing panel



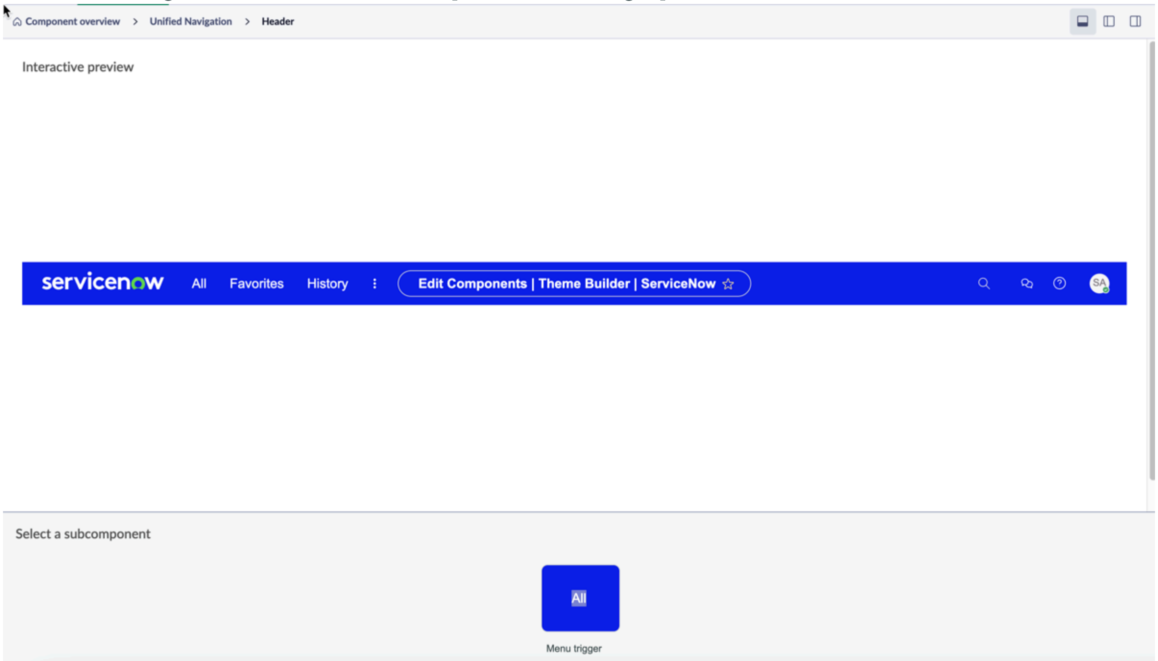
8. Select the **Header** or **Menu** tile to open the configurable styles panel where you can edit the available theme hooks.
   The editable theme hooks that are available depend on the type of subcomponent that you have selected. For example, if you select a Header subcomponent, you can edit the background colors for the Header. If you select a Menu subcomponent, you can edit the background, text, and icon colors.

   Note: After you save the changes to any of the color hooks, a Remove override symbol appears. Select the Remove override symbol to revert your changes to the original auto-generated colors.

9. Double-click the **Header** or **Menu** tile or select **Style subcomponents** to edit the available subcomponents.
   A Subcomponent is a smaller piece of a larger component. For example, the Unified Navigation Header or Menu subcomponent is a smaller piece of the Unified Navigation component.
   An interaction describes the different ways the component or subcomponent behaves. For example, the Default or Hover interactions are interactions of the Menu Trigger subcomponent.

Unified Navigation Header subcomponent editing options

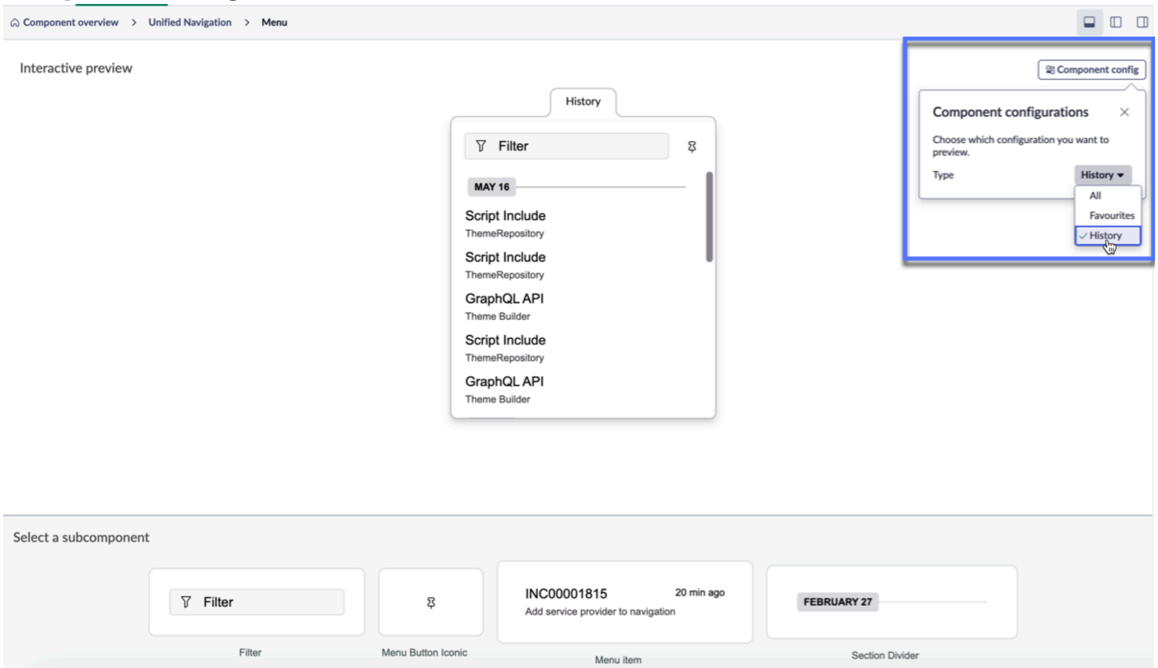


10. Continue editing each subcomponent and interaction until you complete styling the Unified Navigation component.
For example, after you double-click the Header Menu Trigger subcomponent, the interactions of the Menu Trigger are available for styling. Likewise, if you double-click the Menu subcomponent, the subcomponents and interactions for each menu are available.

> **Note:** The canvas color feature automatically applies the background color from the parent subcomponent.

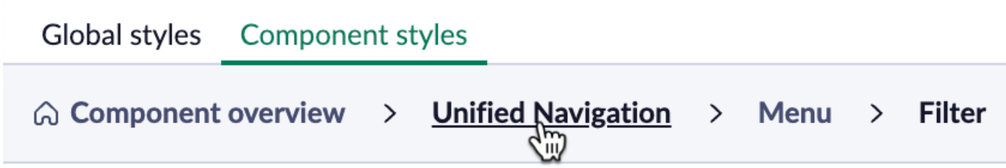
11. **Optional:** When editing certain subcomponents, such as the Menu, choose which configuration you want to preview.
For example, when editing the Menu subcomponent, after you select **Component config**, you can select the specific menu that you want to edit from the Type drop-down list. After you select the desired menu, all available subcomponents for that particular menu are listed.

Component config menu



12. **Optional:** To return to a previous component editing screen, select one of the breadcrumb links.

Component editing breadcrumb navigation



Result

If your theme is published, your Unified Navigation edits will be visible to users who have your theme applied upon refresh. For information on publishing your theme, see Publish your themes with Theme Builder.

Adjust a component to meet accessibility standards

Adjust a component to meet the Web Content Accessibility Guidelines (WCAG) 2.1. When you're editing a component in Theme Builder and see a warning symbol, that indicates that the component doesn't comply with the guidelines for color contrast.

Before you begin

Role required: admin

About this task

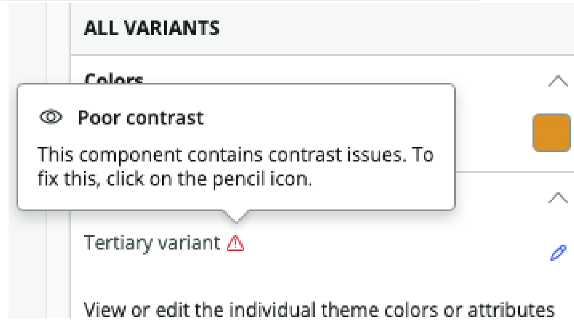
When you're editing a component in Theme Builder, you may encounter a warning symbol (⚠), which indicates that the component doesn't comply with the Web Content Accessibility Guidelines (WCAG) 2.1 for color contrast. The WCAG 2.1 contrast ratio that Theme Builder targets for content and UI variables is 3:1. This ratio determines the contrasts between brighter and darker screen colors and how they relate to the user interface. The first digit shows the level of bright colors, and the second digit shows the relative level of dark colors. The 3:1 threshold provides optimal visibility to visually challenged users. For more information, see the W3C Recommendation site for WCAG 2.1.

The total number of accessibility violations are indicated on the red numbered badge ( ) alongside the Accessibility inspector panel.

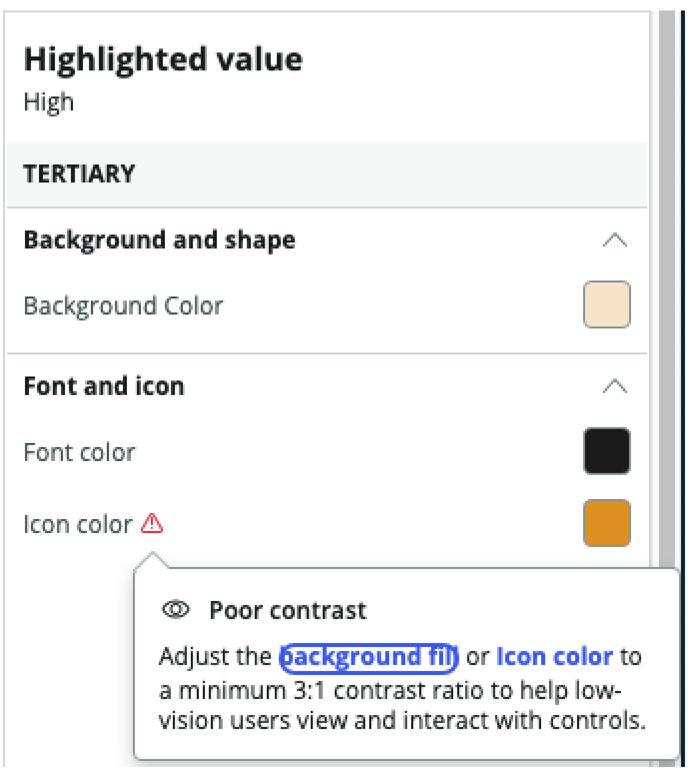
Procedure

1. From the Editor page, access the accessibility violations in one of the two ways listed in the following table.

Option	Description
From Accessibility inspector	**a.** Select the Accessibility inspector ( ) icon to display a list of components with accessibility errors. A red badge displays the number of accessibility issues within your theme. **b.** Select the Accessibility warning symbol to view a description of the warning for the component state you want to improve. **c.** Select the pencil ( ) icon next to the component state that you want to improve. **Note:** The Component Editor page appears and the configurable style panel displays the editable hooks available for the selected component.
From the Component styles menu	**a.** Select the **Editing** tab.  **b.** Select a component that displays the accessibility warning symbol.  **c.** From the configurable style panel, select the accessibility warning symbol to view a description of the warning.

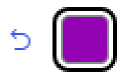
Option	Description
	 **d.** As indicated in the warning message, you can select the pencil ( ) icon to improve the contrast issue. **Note:** The Component Editor page appears and the configurable style panel displays the editable hooks that are available for the selected compo nent.

2. Select the accessibility warning symbol in the configurable style panel to obtain more information for fixing the issue.



3. Select the link in the warning to fix the contrast issue.

Note: After you have saved changes to any of the color hooks, an undo symbol appears. Select the undo symbol to revert all of your changes back to the original color.



4. When you complete your changes and the accessibility warning symbol is no longer visible, select **Save changes**.
   For example, after you select a color that passes the contrast ratio violation, the warning symbol turns green in the color picker.

Working with Image styles

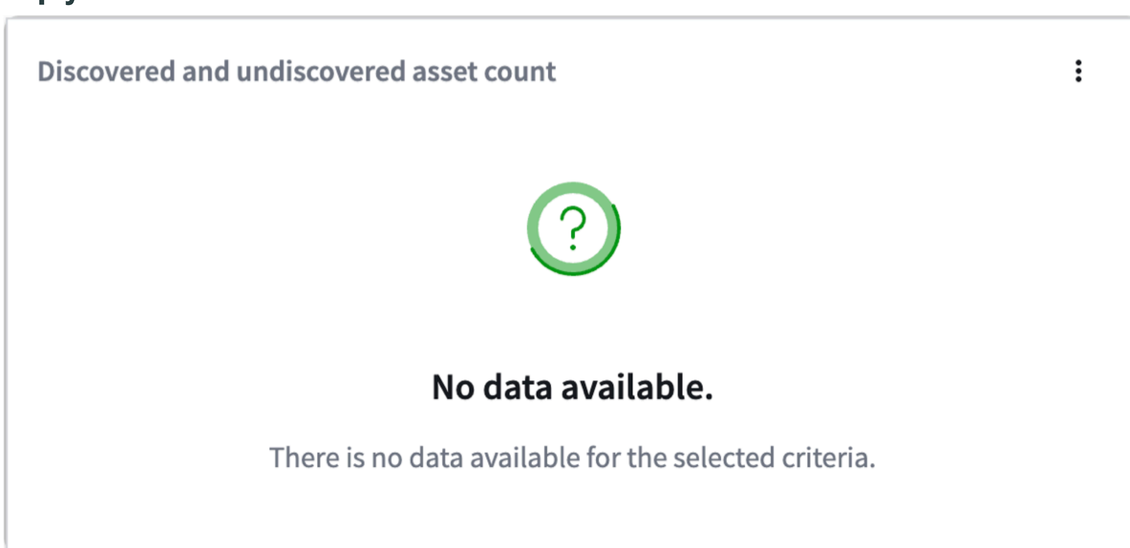
Image styles enable you to experiment with different color schemes for illustrations and replace default illustrations with your own custom images. The Image styles feature provides flexibility in customizing the visual elements of your theme.

Empty state illustrations

When a component or a part of your Next Experience web page doesn't contain data, an empty state illustration appears. Empty state illustrations are theme-able, and adapt to the theme colors of your instance.

Important: Empty state illustrations apply to Workspaces and are not supported in the Core UI.

Empty state illustration



The Image styles feature offers the following types of empty state illustration types, each including a small, medium, and large version:

- Add attachment
- Add data
- Completed tasks
- Completed tasks
- Error
- First time user

- Interrupted
- No activities
- No data
- Completed tasks
- No permission
- Completed tasks
- No search results
- Completed tasks
- Offline
- Unconfigured

Custom images

Upload your custom images to Theme Builder to replace the default empty state illustrations.

To override the default empty state illustrations with custom images, upload each image size individually. You can choose to override just one size or all three sizes of an empty state type. The size and format limitations for each of the three file sizes are as follows:

Small image size and format limitations

Field	Description
Dimensions limit	w56 x h56 px
Format	SVG
File size limit	2 MB

Medium image size and format limitations

Field	Description
Dimensions limit	w216 x h168 px
Format	SVG
File size limit	2 MB

Large image size and format limitations

Field	Description
Dimensions limit	w350 x h318 px
Format	SVG
File size limit	2 MB

Empty state illustrations are dependent on two design tokens that handle their color:

- --empty-state--main-object--fill
- --empty-state--main-object—outline

Custom images don't automatically reflect your theme colors. To make your image theme-able, add these tokens to your code using your preferred text editor before uploading the custom SVG to Theme Builder. After adding these tokens to your image code, the images will adopt your theme colors and enable you to edit the colors when uploaded to Theme Builder.

The following example shows the design tokens applied.

```
<style>
      .main-object--outline {
            fill:rgb(var(--empty-state--main-object--outline,
 var(--main-object--outline, var(--now-color--interactive-3,
 51,53,123))));
      }
      .main-object--fill {
            fill:rgb(var(--empty-state--main-object--fill,
 var(--main-object--fill, var(--now-color--interactive-1,
 144,146,213))));
      }
   </style>
```

Customize the colors for empty state illustrations and custom images

Customize and control the colors automatically applied to empty state illustrations and your custom images to keep your visual experience engaging while maintaining brand recognition.

Before you begin

Before you can edit the colors of your custom image, you must append two design tokens to your image code before uploading the image to Theme Builder. For information, see Override empty state illustrations with custom images.

Role required: admin

About this task

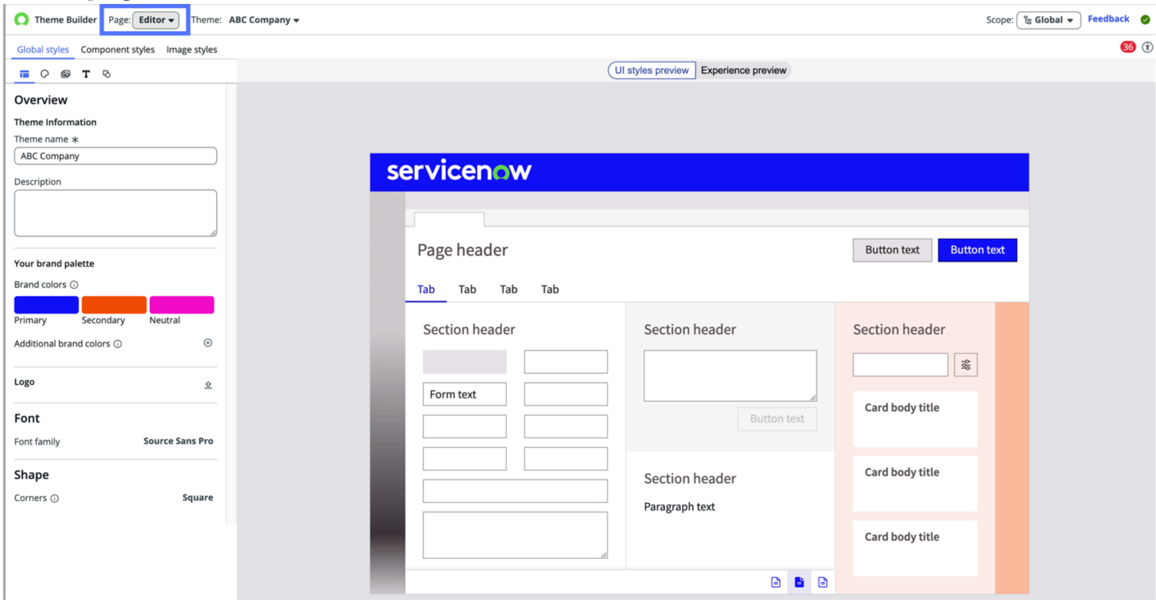
As a category, all empty state illustrations share color hook mappings. As a result, the colors that you apply to one empty state illustration type are also applied to the entire empty state illustration category.

Important: Customization of empty state illustration colors applies to Workspaces and is not supported in the Core UI.

Procedure

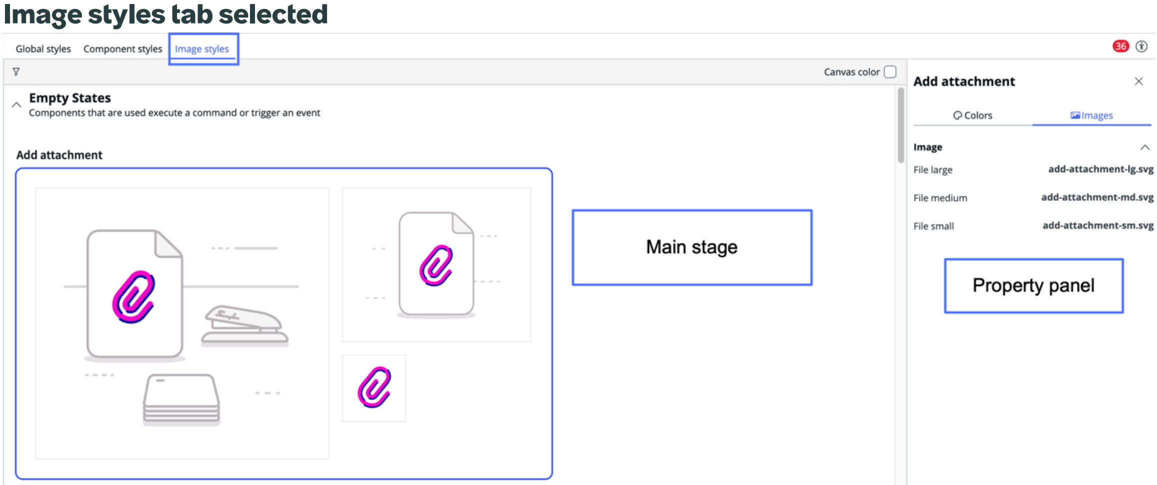
1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
   The Theme Builder landing page opens in a new tab and is displayed in the Home page view.
2. Use the Page drop-down list to select the Editor page view.

Editor page view



3. From the Theme drop-down list, select the theme that you want to edit.
4. Select the **Image styles** tab from the general styles panel.
   The empty state illustrations available for editing are displayed on the main stage and grouped by type.

Image styles tab selected

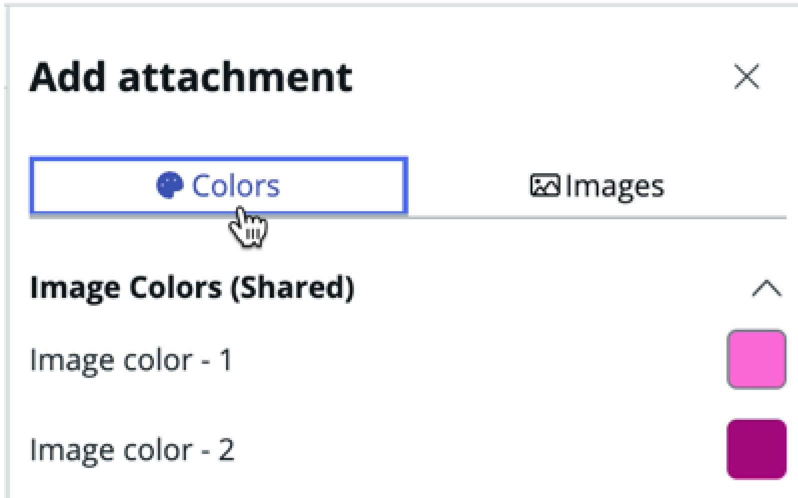


5. Select any empty state illustration type from the main stage.

   Note: Customizing the colors of any empty state illustration type will apply the color change to the entire empty state category, regardless of which type you select.

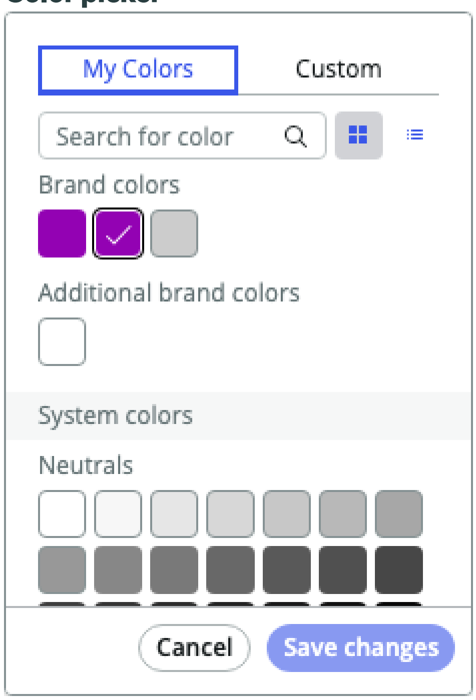
   The property panel opens automatically.
6. From the property panel, select the **Colors** tab.

Property panel Colors tab



7. Select an image color to edit the color using the Color picker.

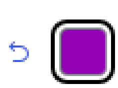
Color picker



Note: By default, the My Colors tab shows all of the available colors for the illustration. You can also use the Custom tab to select a new color.

8. When you have completed your changes, select **Save changes**.

Note: After you have saved changes to any of the color hooks, a Remove override symbol appears. The Remove override symbol enables you to revert your color changes back to the original auto-generated colors.



Result

The new colors are applied to all empty state illustration types including any custom images you've previously uploaded with design tokens applied.

If your theme is published, your empty state illustration edits are visible to users who have your theme applied upon refresh. For information about publishing themes, see Publish your themes with Theme Builder.

Override empty state illustrations with custom images

Modify or override the default empty state illustrations with your own custom images to ensure that visual elements reflect your company's branding.

Before you begin

To make your image theme-able, add the following two design tokens to your code using your preferred text editor before uploading the custom SVG to Theme Builder.

- `--empty-state--main-object--fill`
- `--empty-state--main-object—outline`

For more information, see Working with Image styles.

Role required: admin

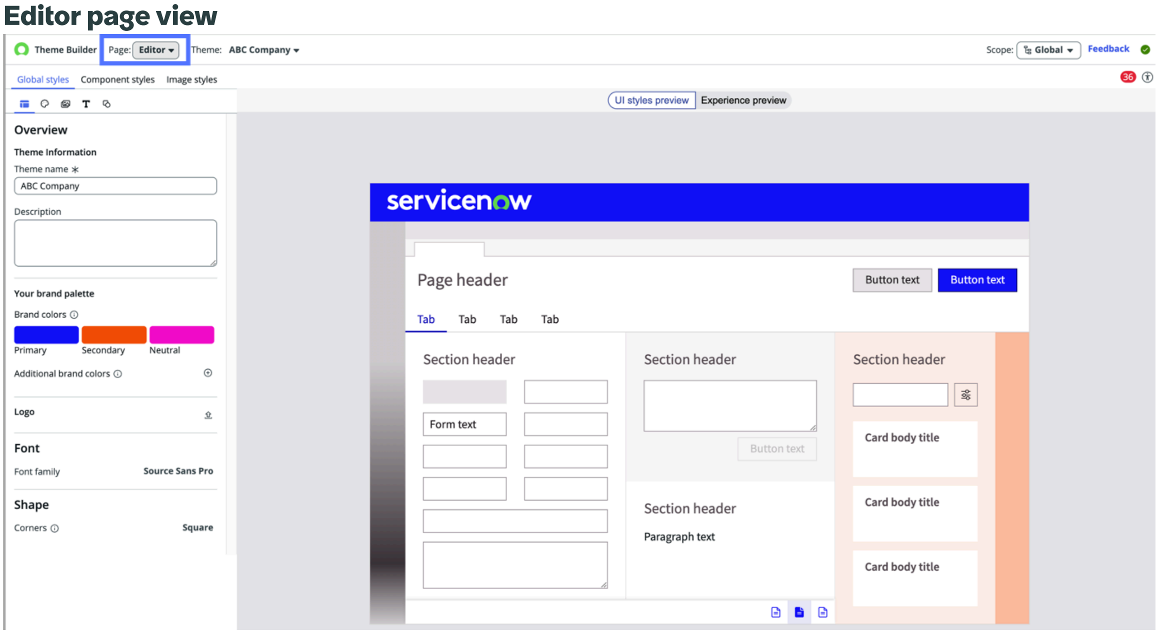
About this task

> **Important:** Custom images apply to Workspaces and are not supported in the Core UI.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
   The Theme Builder landing page opens in a new tab and is displayed in the Home page view.
2. Use the Page drop-down list to select the Editor page view.

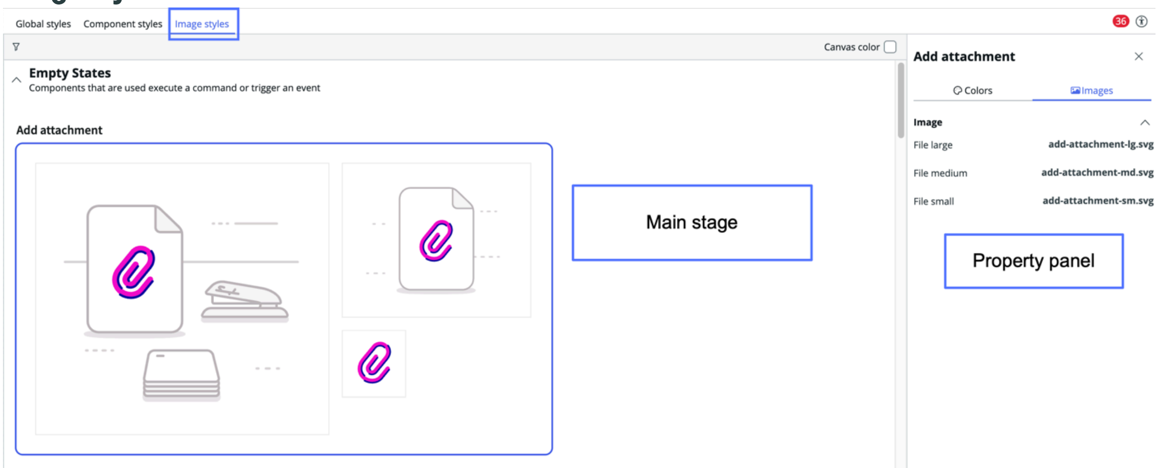
   Editor page view

3. From the Theme drop-down list, select the theme that you want to edit.

4. Select the **Image styles** tab from the general styles panel.
   The empty state illustrations are displayed on the main stage and grouped by type.

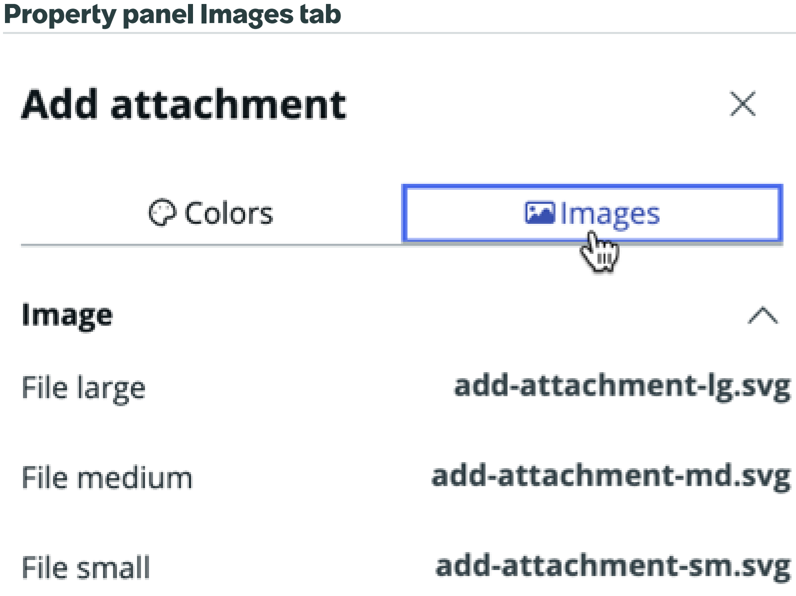
Image styles tab selected



5. Use one of the following options to select the empty state illustration that you want to override.
   - Select the Filter ( ) icon and expand the empty states category to select the specific empty state illustration that you want to override.
   - Scroll through the list of empty state illustrations within the main stage.

   The property panel opens automatically.
6. From the property panel, select the **Images** tab.

Property panel Images tab

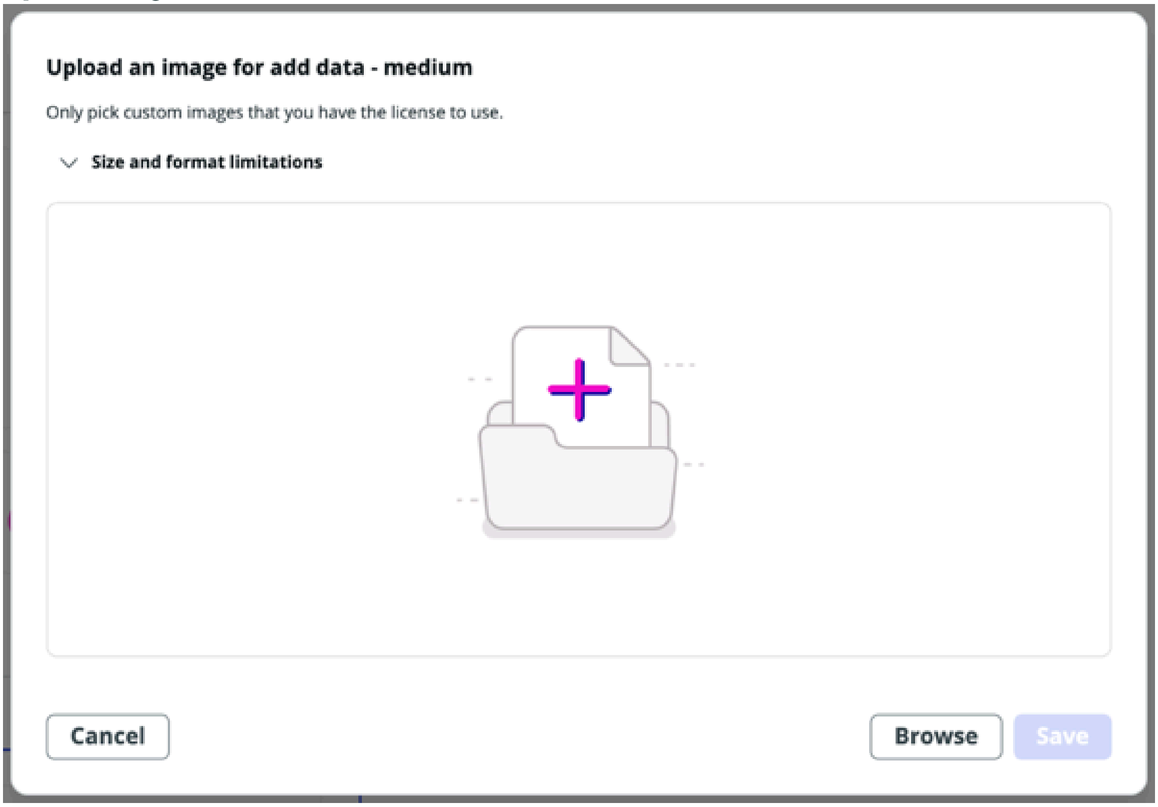


7. Select either the large, medium, or small image file of the illustration you want to override.

   Note: You can only override one image size at a time.

   The upload images modal appears.

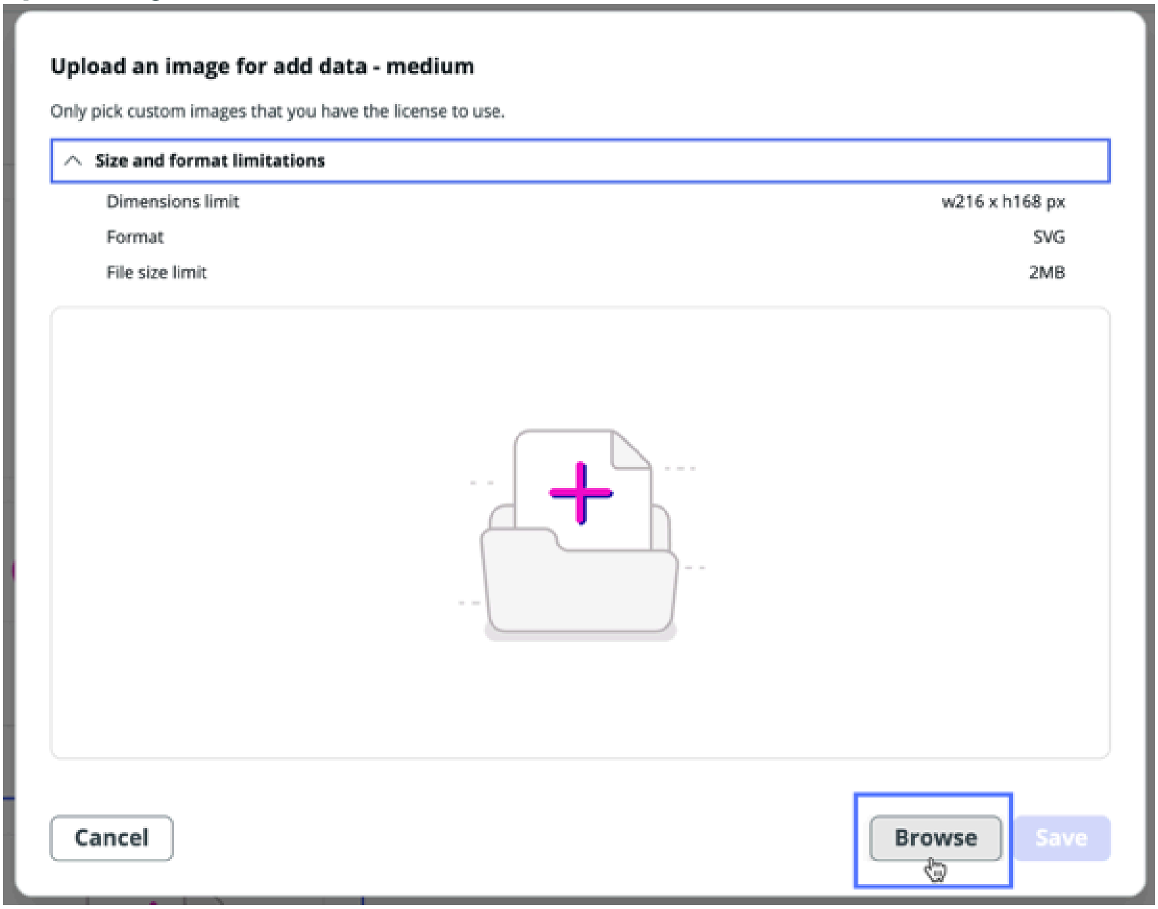
Upload images modal



8. Use one of the following options to upload your custom image:
   - Select **Browse**, choose your custom image file from your computer's file browser, and select **Open**.
   - Drag your custom image file from your computer's file browser and drop the image directly into the modal.

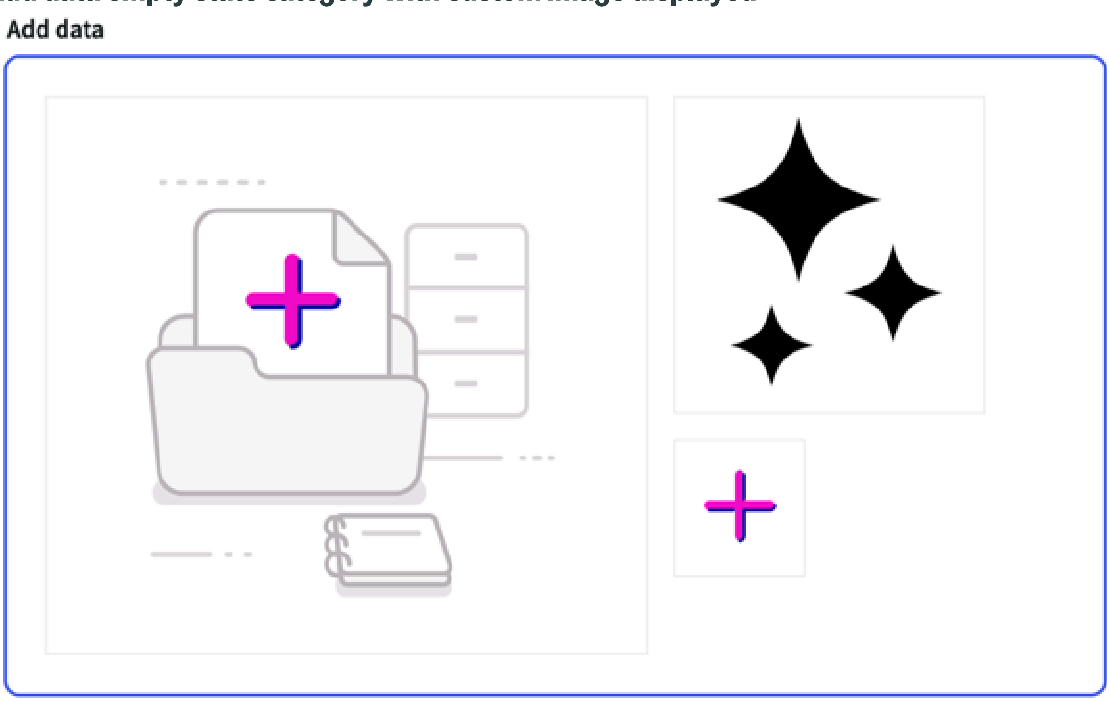
   Refer to the upload image modal for size and format limitations. If your custom image doesn’t meet the required size and format, your image isn’t saved.

Upload image modal with size and format limitations

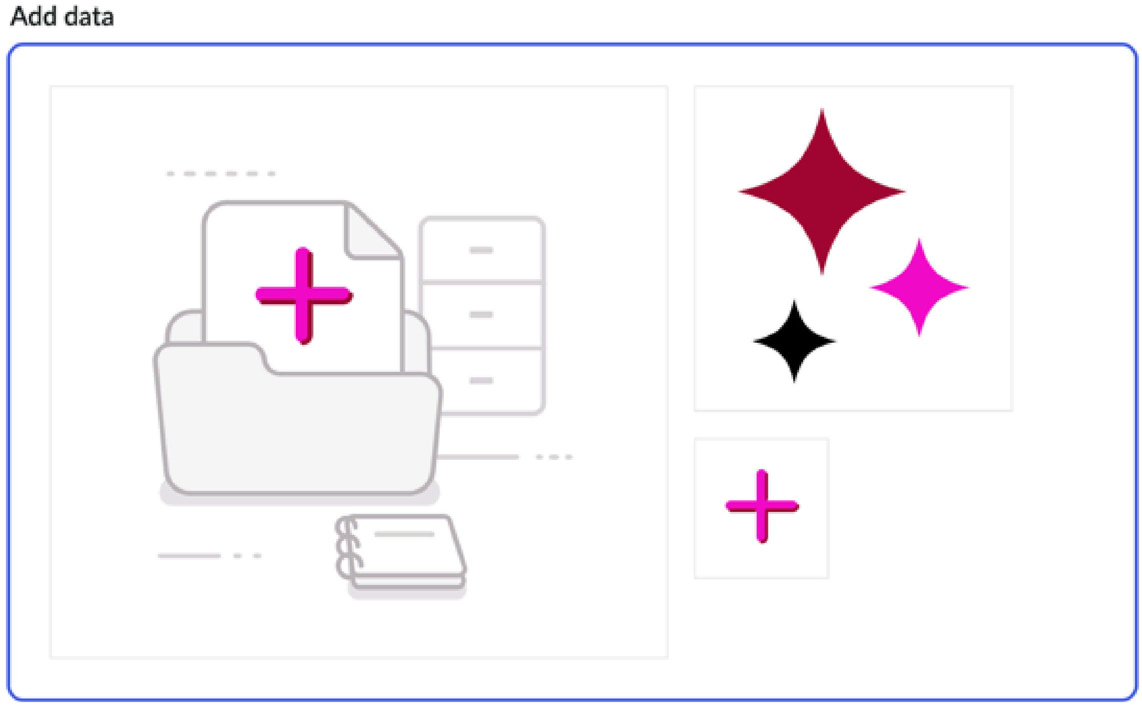


9. Select **Save**.
   Your custom image appears on the main stage within the empty state category you have chosen.

Add data empty state category with custom image displayed

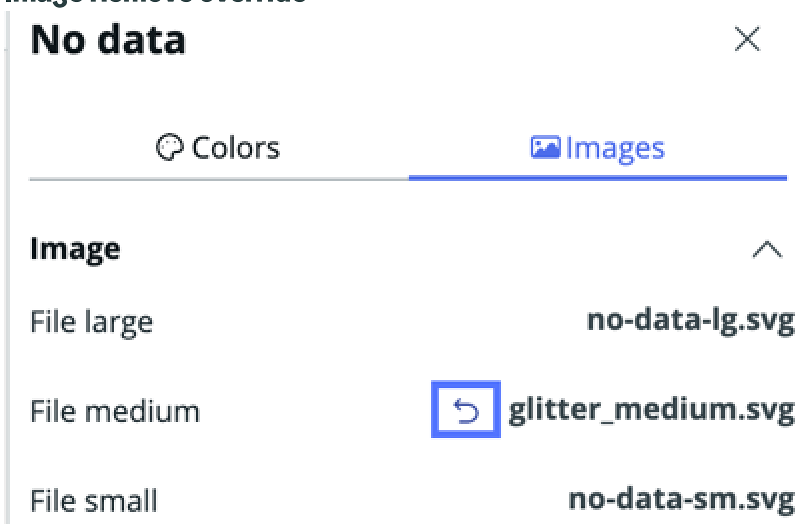


Add data empty state category with custom image displayed (design tokens applied to image)



10. **Optional:** Select the Remove override symbol if you want to restore the default empty state illustration.

Image Remove override

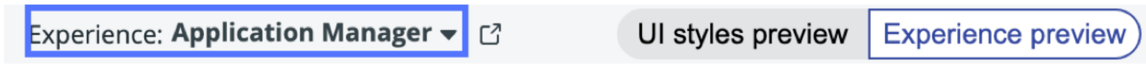


11. **Optional:** Preview your edits before publishing your theme to your instance.

    a. Select the **Experience preview** tab from the Global styles panel.

    b. Select the experience that you want to preview from the Experience drop-down list.



c. Select the Open in new tab icon to open the experience in a new tab.

Result

Once you've uploaded your custom image with the two design tokens applied, you can customize the colors using Theme Builder just as you would for default empty state illustrations. For information on customizing colors, see Customize the colors for empty state illustrations and custom images.

If your theme is published, your custom images are visible to users who have your theme applied upon refresh. For more information about publishing themes, see Publish your themes with Theme Builder.

Publish your themes with Theme Builder

Publish multiple themes to your web instance or a single theme to your mobile instance to reflect your company's brand.

Before you begin

Role required: admin

About this task

Currently, mobile instances can only accommodate one published theme at a time.

If you want to publish a theme to specific mobile applications, you can use Mobile App Builder. Any themes that are created using Theme Builder are available for publishing in Mobile App Builder.

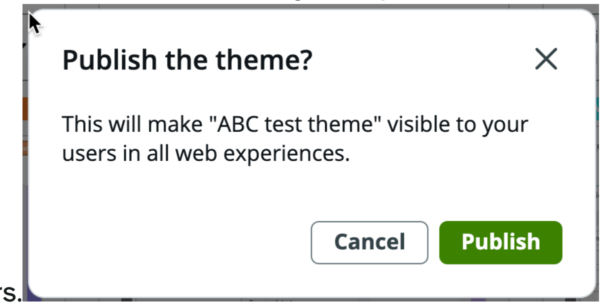
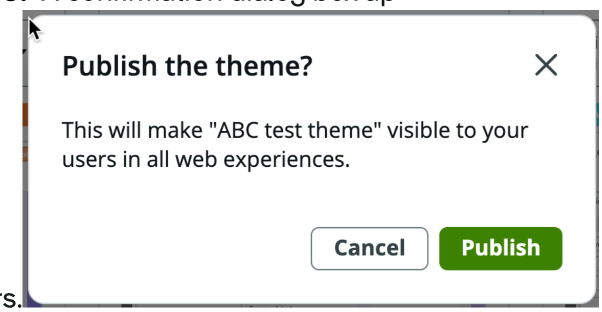
Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
   The Theme Builder landing page appears in the Home page view.
2. From the Home page view, select the Manager page view to see the themes that you have created.
3. Decide which theme that you want to publish from the Unpublished section.

   Note: When you have selected the theme that you want to publish, verify that you have selected the correct scope for the theme from the application scope picker.

4. To publish your themes, complete any of the following actions.

Option	Description
Publish using the List or Grid view More Actions menu	From the Unpublished section, select the More actions (⋮) icon from the theme that you want published, and select **Publish**.

Option	Description
	Note: A confirmation dialog box appears.
Publish using the List view drag-and-drop feature	From the Unpublished section, hover over the theme you want published, and drag the theme into the Published section. **Note:** A confirmation dialog box appears.

5. Select **Publish**.
   The theme appears in the Published section of the Manager page.

   Note: After you have published your theme to your instance, the theme is available for selection in the user's Theme preferences. For more information, see Select a theme in Next Experience.

6. **Optional:** Select one theme as the default if you have published multiple themes to your web instance.

   (Optional) For more information, see Set the default theme.

   If you have published only one theme to your web instance, that theme is the default theme. The default theme appears first in the user's Theme preference.

7. **Optional:** Set the presentation order of your themes if you have published multiple themes to your web instance.

   Note: The presentation order determines how the themes appear in the user's Theme preference.

   For more information on setting order using the List view drag-and-drop feature, see Set the presentation order of your Theme Builder themes.

   For information on setting order using the Next Experience, see Publish multiple themes in Next Experience.

8. Refresh your browser to view the new theme published to your instance.

   Note: Only themes that are created in Theme Builder can be edited and published using Theme Builder. Web and mobile themes you may have created outside of Next Experience (for example, in the mobile legacy UI or Core UI) can't be viewed or edited within Theme Builder. To reuse these legacy themes, you must re-create them in Theme Builder.

   Additionally, if you created and published themes outside of Theme Builder, and you want to revert them, you must navigate to the tables that they're stored in and reapply them. If, however, you want to change themes in individual mobile applications, you can do so using Mobile App Builder.

Set the default theme

Set a preferred Theme Builder theme as the default for your web experiences when multiple themes are published.

Before you begin

Role required: admin

About this task

If you have published only one theme to your web instance, that theme is automatically set as the default theme.

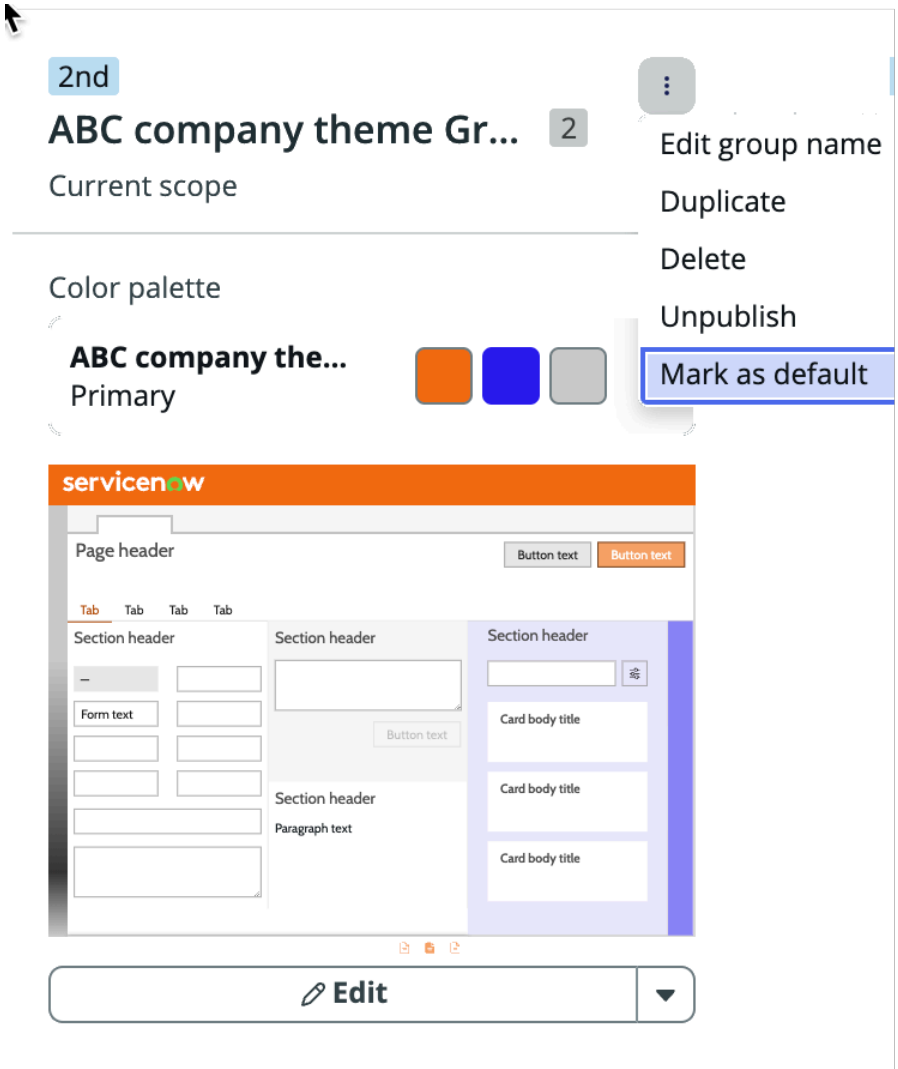
The default theme is treated as the first theme that is displayed in the Next Experience Theme user preference. If a user has not made a selection from the Theme user preference, the default theme is displayed.

Procedure

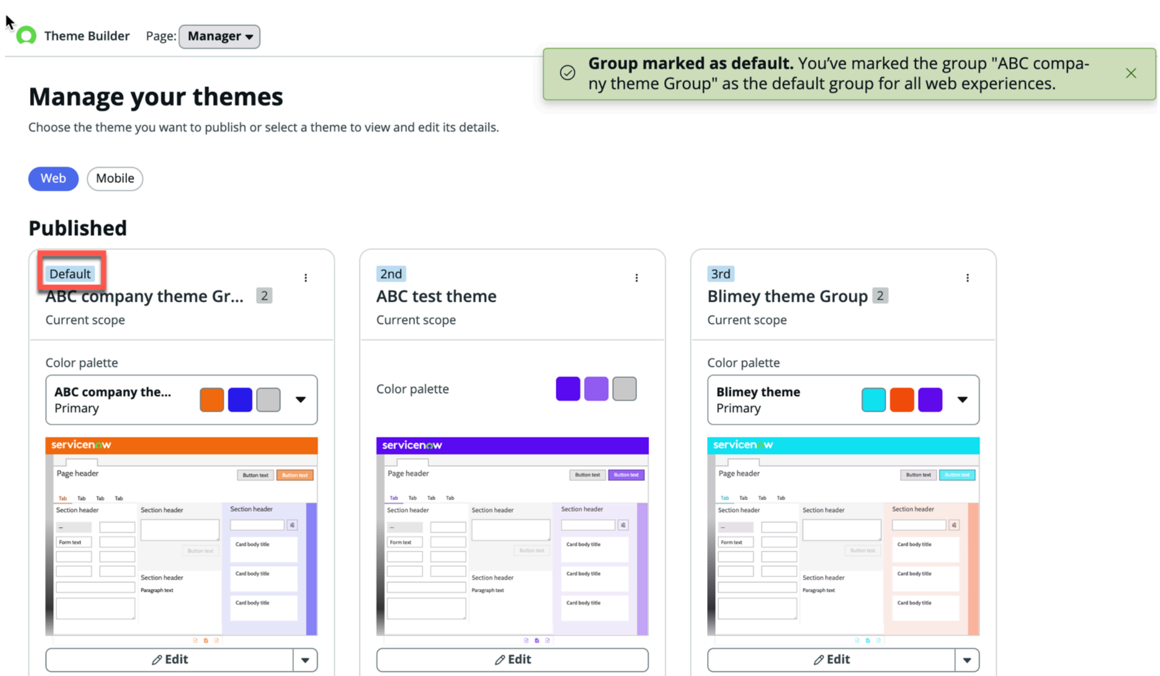
1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
   The Theme Builder landing page appears in the Home page view.
2. From the Home page view, select the Manager page view to see the themes that you have created.
3. Choose the theme that you want to set as the default from the Published section.

   Note: When you have selected the theme that you want to set as the default, verify that you have selected the correct scope for the theme from the application scope picker.

4. Select the More actions (⋮) icon from the theme that you have selected, and select **Mark as default**.



The theme is listed as the Default within the Published section. The default theme is treated as the first theme and each theme listed after the default theme follows a sequential order.



5. Refresh your browser to view the new theme.
The default theme appears first in the user's Theme preference.

Set the presentation order of your Theme Builder themes

Set the order of your Theme Builder themes to configure how they're displayed in the user's Theme preferences.

Before you begin

- Before setting the order of your themes, verify that you have more than one theme published. For more information on publishing your Theme Builder themes, see Publish your themes with Theme Builder.
- Verify that you have selected the correct scope for the theme from the application scope picker.

Role required: admin

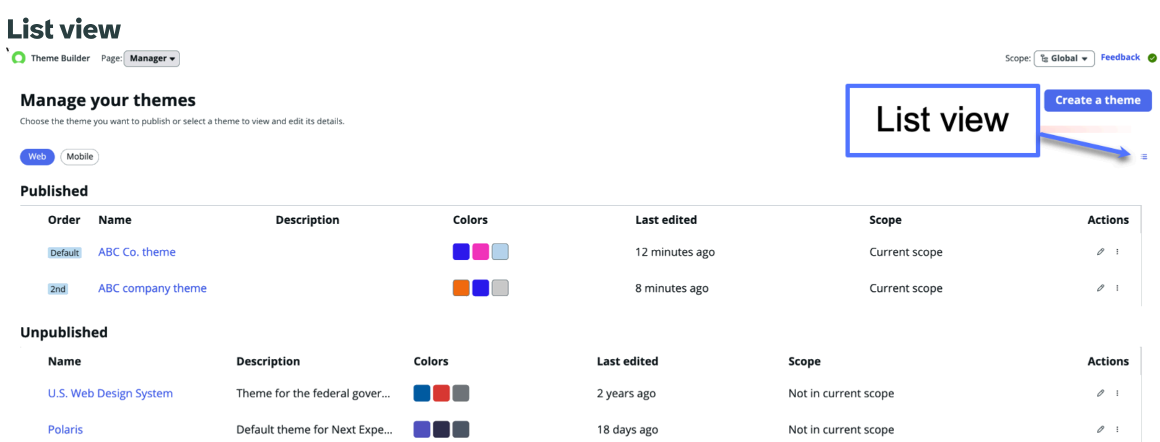
About this task

Setting the order to your Theme Builder themes enables you to control how your themes are displayed in the Next Experience Theme user preference.

Currently, setting order to your themes is only available to web instances. Mobile instances can only accommodate one published theme at a time.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes** > **Theme Builder**.
The Theme Builder landing page appears in the Home page view.
2. From the Home page view, select the Manager page view to see the themes that you have created.
3. Select the List view to view a list of your published and unpublished themes.



4. From the Published section, hover over your chosen theme and drag the theme into the order you prefer.
The default theme is treated as the first theme that is displayed in the Next Experience Theme user preference. If you delete or move the default theme from its position, then the next theme listed becomes the default. If a user has not made a selection from the Theme user preference,

the default theme is displayed. Each theme listed after the default theme follows a sequential order and is displayed in that order in the user's Theme preference.

Note: If you have themes that are created outside of Theme Builder, the order displayed might not be reflective of all the themes available in the Theme user preference.

Upload a logo while publishing a theme with Theme Builder

Upload your logo while publishing a theme to your instance using the Editor view. If you previously applied a logo to your theme, you can upload a new one in Theme Builder.

Before you begin

In Theme Builder version 1.0, if you wanted a new or updated logo to override a previously uploaded logo in your theme, it was necessary to set the *glide.ui.polaris.theme_builder.override_logo* system property to True. Beginning in version 1.1, this requirement has been removed.

Role required: admin

Procedure

1. If **Editor** is not selected from the **Page:** menu at the top of the screen, select it.

   Note: You can also upload the logo from the **Home** view, but only Editor view is used to upload a logo while publishing a theme.

2. Upload the logo in the Logo section of the **Overview** tab.

   Note: Alternatively, you can upload your logo using the Imagery tab.

3. Select the theme and click **Publish**.
   The uploaded logo appears in the newly published theme.

Resize a logo for your login screen

After you have uploaded a logo for your login screen, you can resize the logo by creating and setting a system property.

Before you begin

Role required: admin

Procedure

1. In the Navigation filter, enter `sys_properties.list` and press **Enter**.
   The entire list of properties in the System Properties [sys_properties] table appears.
2. Add a system property called glide.ui.polaris.login.logo.height.
3. Set the system property **Value** to the maximum CSS height value for your logo.
   For example, any of the following would be valid entries:
   - 150px
   - 6em
   - 75%
   - auto

   If you select *auto*, the browser calculates a height for the specified element.

Note: An entry of 100% returns the logo to its original size.

4. Save the system property.
   At the next launch, your logo is resized based on how you configured the system property.

Theme Builder and domain separation

Domain separation enables you to separate data, processes, and administrative tasks into logical groupings called domains. You can control several aspects of this separation, including which users can see and access data.

Support level: No support

- The domain field may exist on data tables but there is no business logic to manage the data.
- This level is not considered domain-separated.

For more information on support levels, see Application support for domain separation.

Related topics

Domain separation for service providers

Working with the dark theme

The dark theme emits less blue light, making the display easier for your eyes and less disturbing in low-light settings. The dark theme is supported for configurable workspaces, lists, forms, dashboards, and reports.

The Next Experience theme has a dark variant that is enabled by default, but dark variants may not apply to all experiences.

Note: Some custom pages don't inherit the dark theme, which may create visual inconsistencies in the classic environment. This behavior is expected and it's the responsibility of your administrator to exclude the dark theme from your classic environment if the inconsistencies are unacceptable for your company.

Open the theme menu

Use the Next Experience Theme menu to quickly change your theme.

Before you begin

Role required: admin

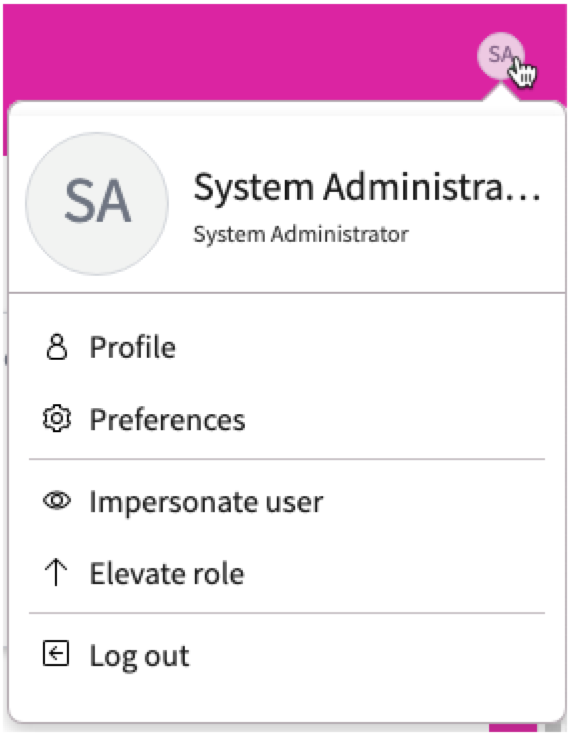
About this task

When you select which theme record is active for the instance, any associated variants and alternate color palettes are displayed in the Themes menu. Your users can select from the available variants and alternate color palettes that are associated with the current theme from the Themes menu.

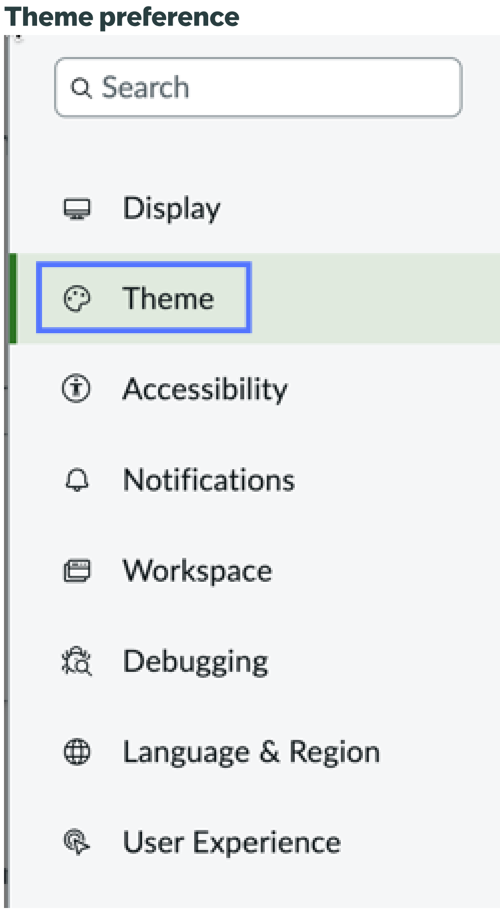
Procedure

1. Select the user menu, represented by your user icon or initials in the Next Experience Unified Navigation.

User menu

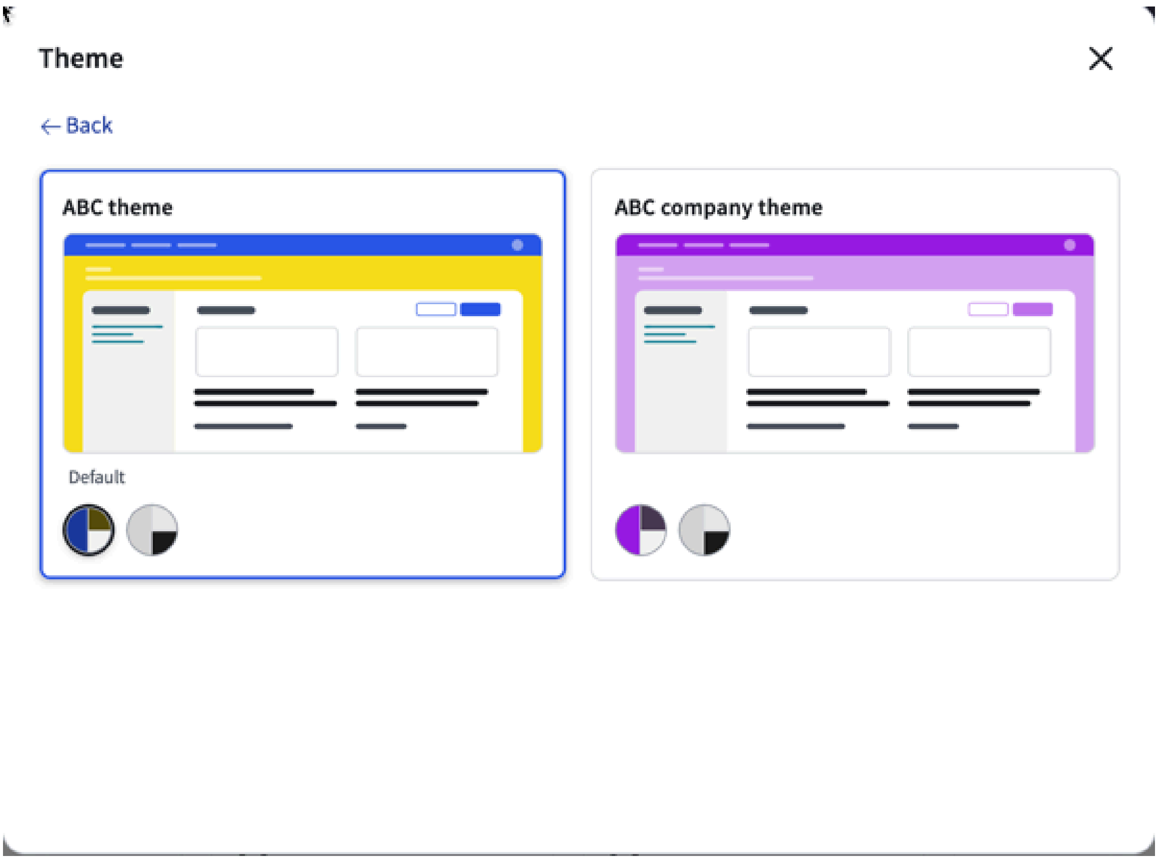


2. Select **Preferences**.
3. Select **Theme** from Preferences menu.



4. Select the **Theme** tile you want to apply.

Theme



> **Note:** The theme images that are displayed depend on the theme record that you selected for the instance. Your users can select the variant or alternate color palette that are attached to that theme record they want to use for their own work environment.

Each theme card displays the core theme and all variants or alternative color palettes that are associated with that core theme. Hover over the circles beneath the core theme to view a preview of the variant or alternate color palette.

Your users can select the variant or alternate color palette that they want to adopt for their instance.

Enable the Next Experience dark theme for limited classic environment and configurable workspaces

Enable the Next Experience dark theme for limited classic environment and configurable workspaces by using system properties.

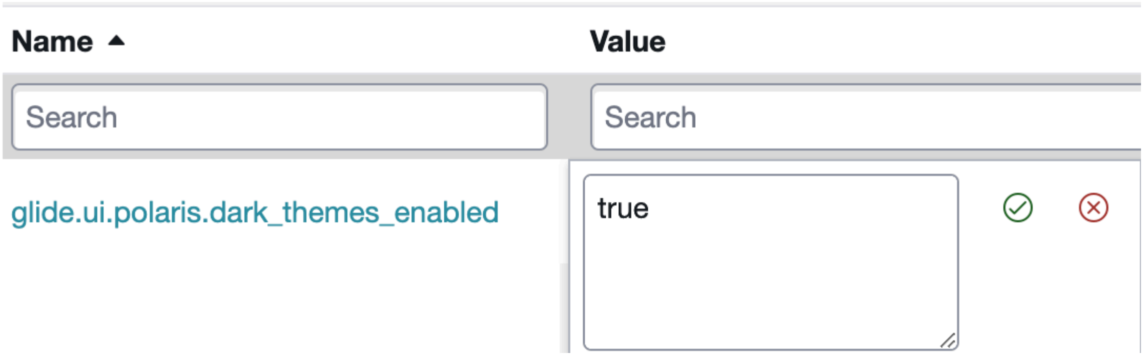
Before you begin

Role required: admin

Procedure

1. Navigate to **All** and then in the filter navigator, search for `sys_properties.list`.
2. In the list search bar, search for `glide.ui.polaris.dark_themes_enabled`.

3. Enable the dark theme for use in your Next Experience limited classic environment and configurable workspace instances by setting `glide.ui.polaris.dark_themes_enabled` to **True**.



Disable the dark theme in all Next Experience instances

Disable the Next Experience dark theme in all of Next Experience instances.

Before you begin
Role required: admin

Procedure

1. Navigate to **All** and then in the filter navigator, search for `sys_properties.list`.
2. In the list search bar, search for `glide.ui.polaris.dark_themes_enabled`.
3. Disable the dark theme in all of your Next Experience instances by setting `glide.ui.polaris.dark_themes_enabled` to **False**.

Enable the dark theme in configurable workspaces

Enable the Next Experience dark theme in configurable workspaces only, and not for the classic environment. The dark theme emits less blue light, making the display easier for your eyes and less disturbing in low-light settings.

Before you begin
Role required: admin

Procedure

1. Navigate to **All** and in the filter navigator, search for `sys_properties.list`.
2. In the list search bar, search for `glide.ui.polaris.dark_themes_enabled`.
3. Enable the dark theme in all of your Next Experience configurable workspaces by setting `glide.ui.polaris.dark_themes_enabled` to **True**.
4. In the list search bar, search for `glide.ui.polaris.core_ui_exclude_dark_mode`.
5. Exclude the dark theme in the classic environment by setting `glide.ui.polaris.core_ui_exclude_dark_mode` to **True**.

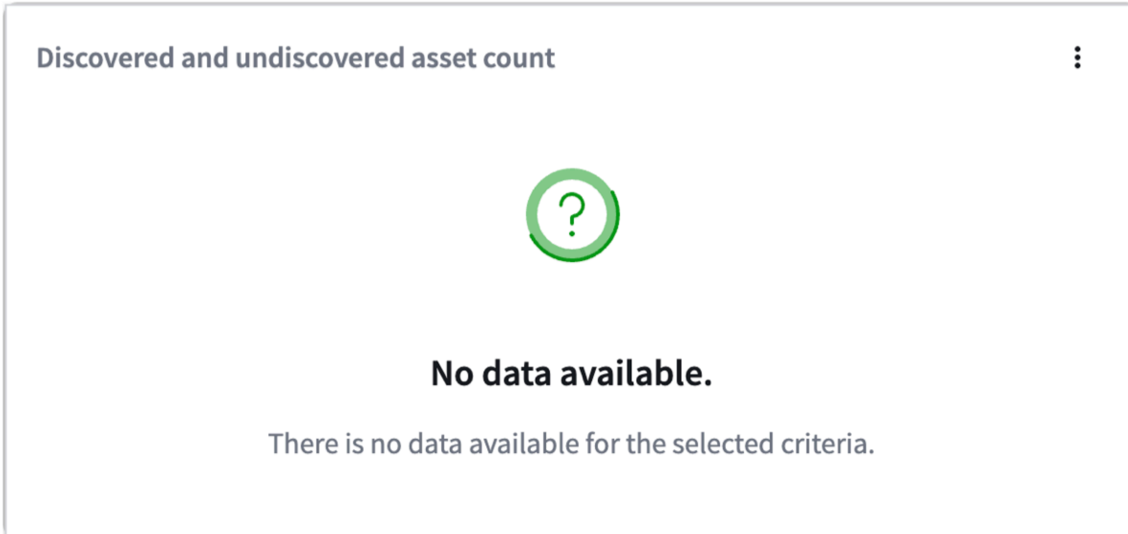
   Note: If you select the dark theme, the dark theme only applies to the configurable workspaces. The classic environment remains in the default theme.

Working with theme-able empty state images

Add theme-able empty state images to customize empty states and improve the user experience. Empty states include guidance or actions for users to add or create content.

When a component or a part of your Next Experience web page doesn't contain data, an empty state image appears. Empty state images are theme-able, and adapt to the theme colors of your instance.

Empty state image



There are 12 empty state image types available, each including a small, medium, and large version. When creating a theme using Theme Builder a UX Styles Imagery record is created however, the record is empty. In this case, your theme defaults to using a base system empty state theme-able images. If you choose to override these images, see Customize theme-able empty state images for your theme.

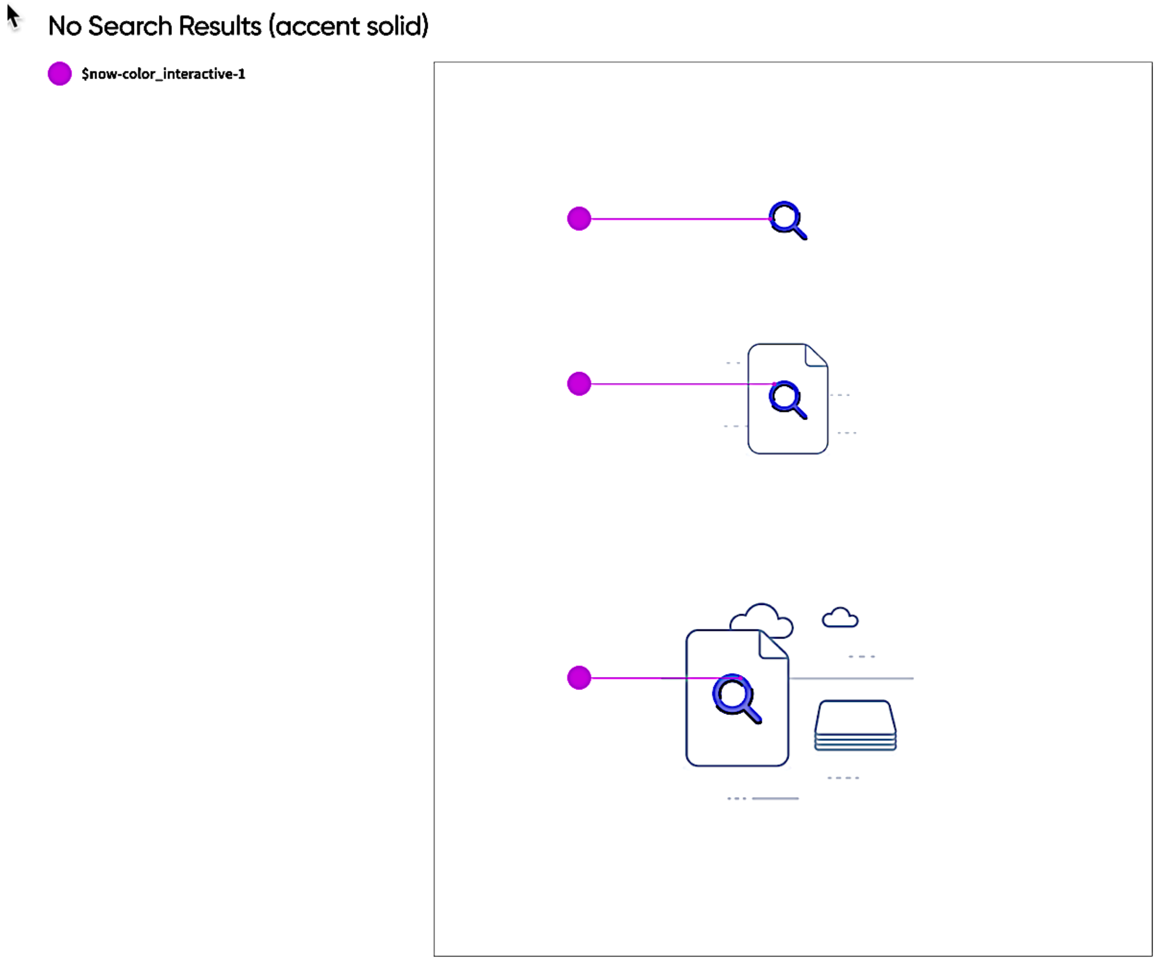
You can insert an empty state image into your custom experience by using the Illustration component in UI Builder. The Illustration component displays all available empty state images. For more information on the Illustration component, see Horizon Design System Empty State.

You can also add custom images using the Custom Illustration component in UI Builder.

Theme-able empty state image with theme hooks

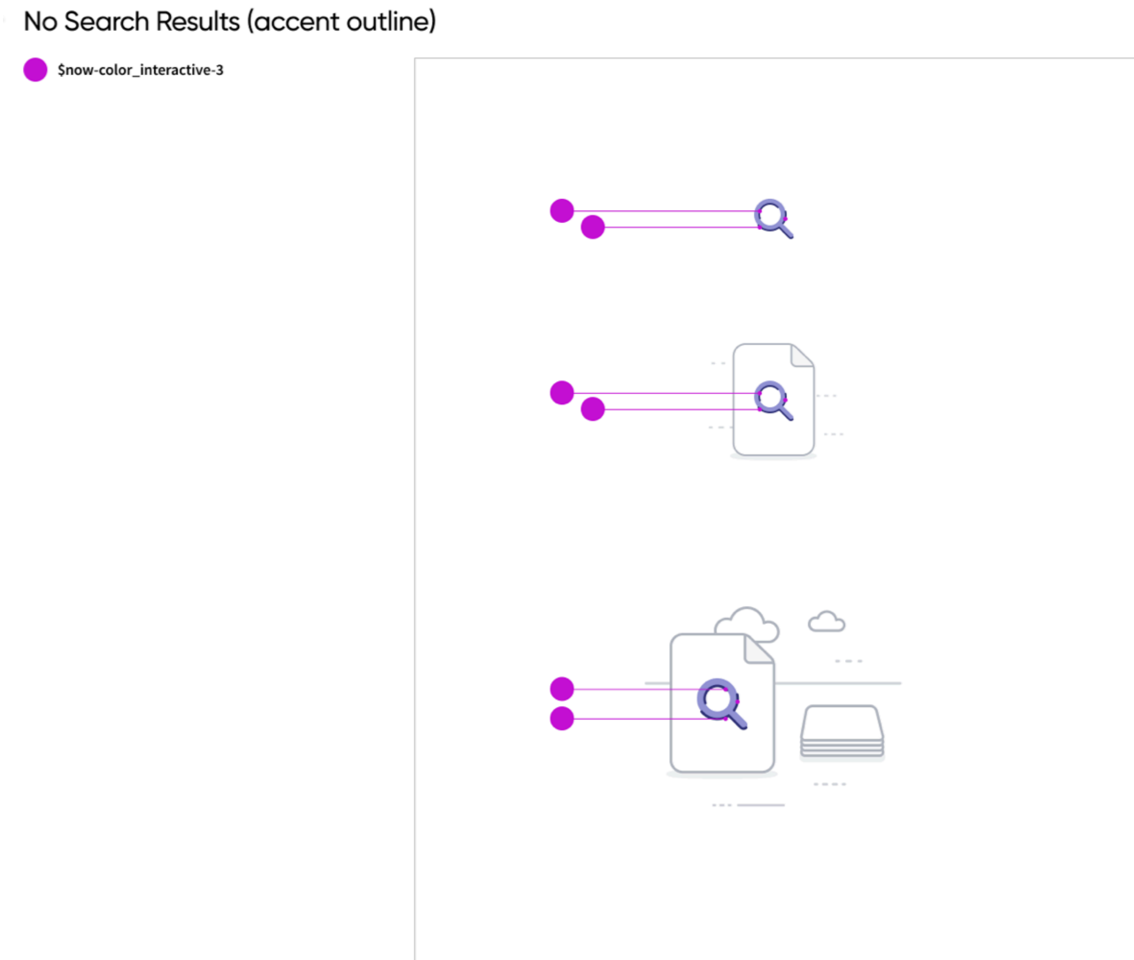
The following images represent the No Search Results empty state image along with the theme hooks required for each variation.

No Search Results (accent solid)



The theme hook required for this variation is `$now-color_interactive-1`.

No Search Results (accent outline)

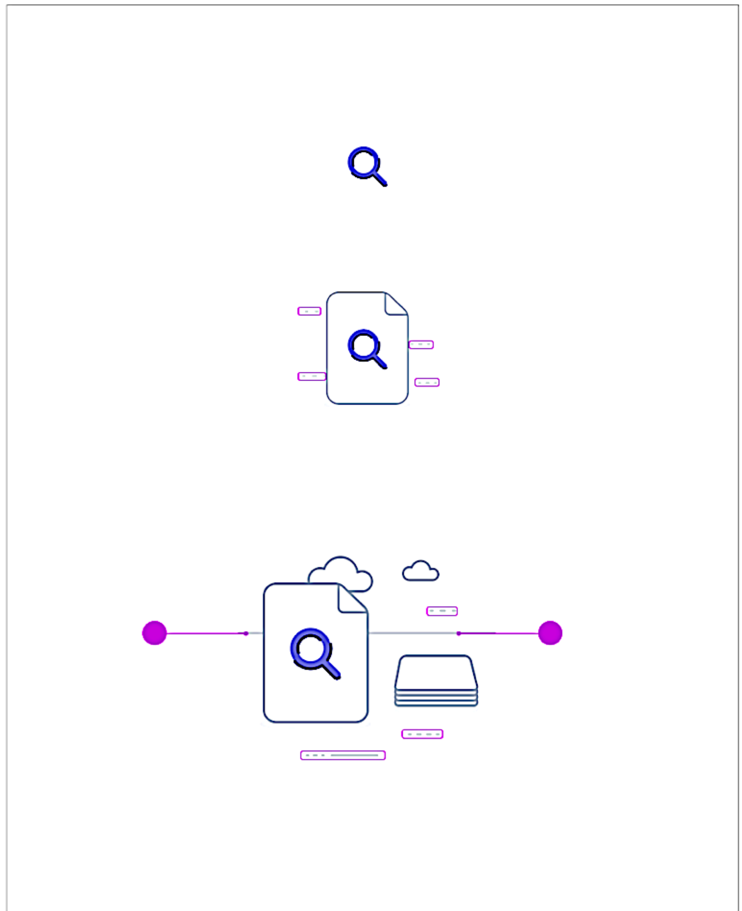


The theme hook required for this variation is `$now-color_interactive-3`.

No Search Results (subtle outlines)

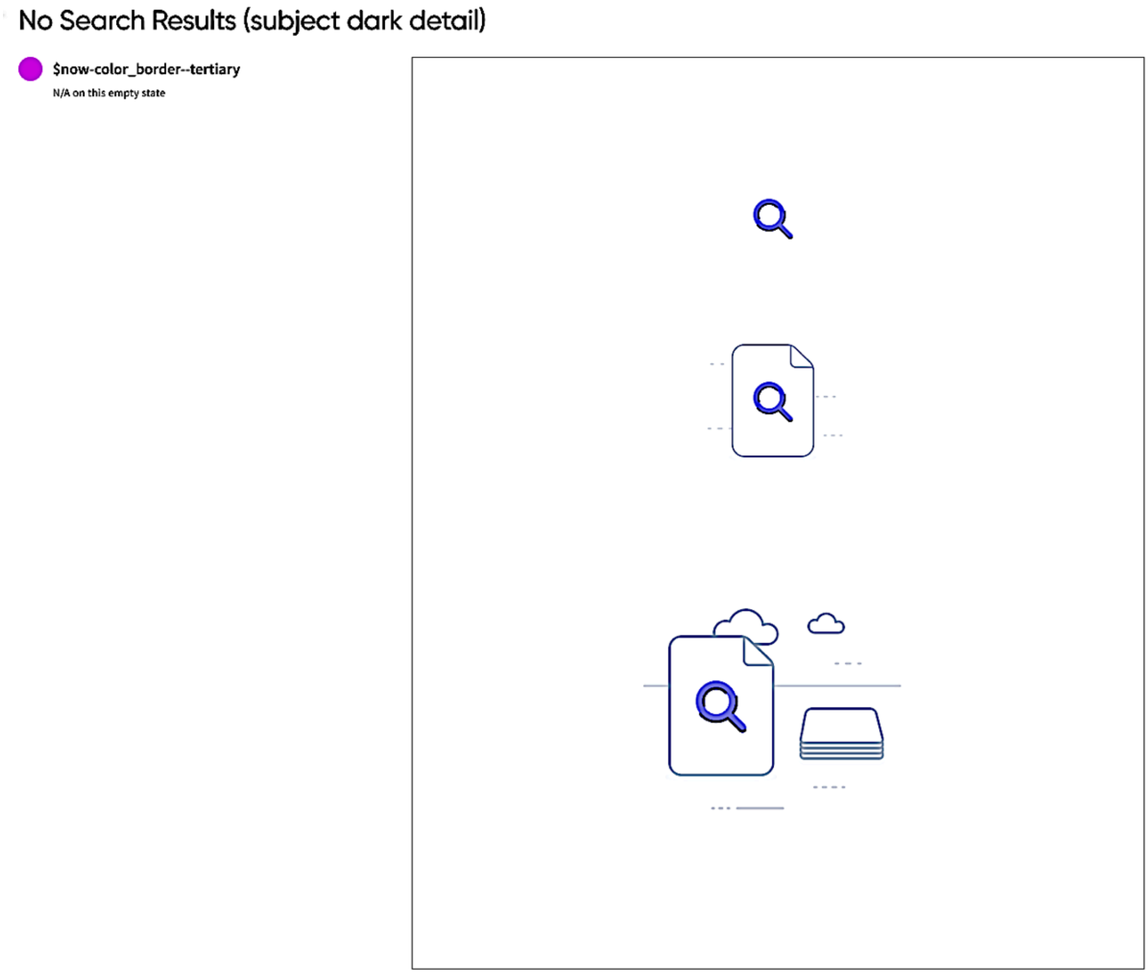
No Search Results (subtle outlines)

$now-color_border--secondary
60% opacity



The theme hook required for this variation is `$now-color_border-secondary`.

No Search Results (subject dark detail)

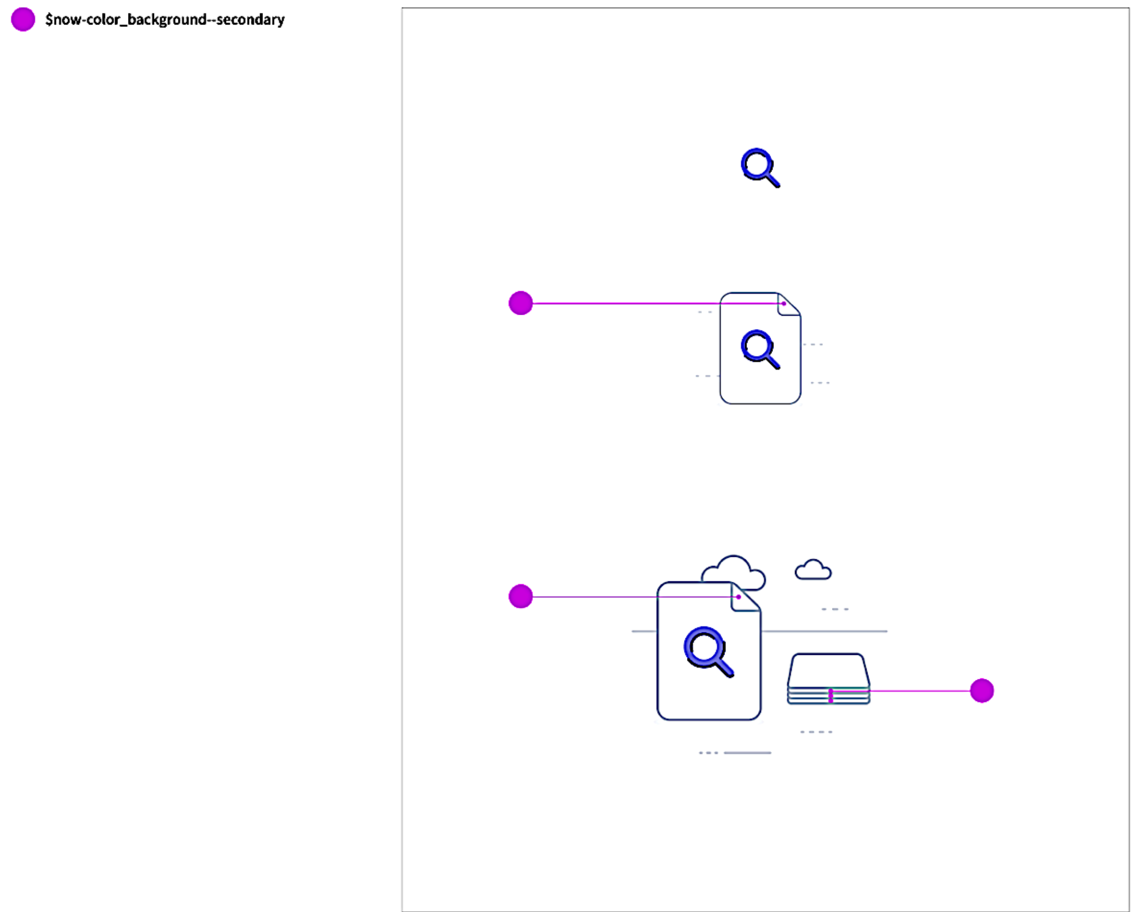


The theme hook required for this variation is `$now-color_border-tertiary`.

servicenow

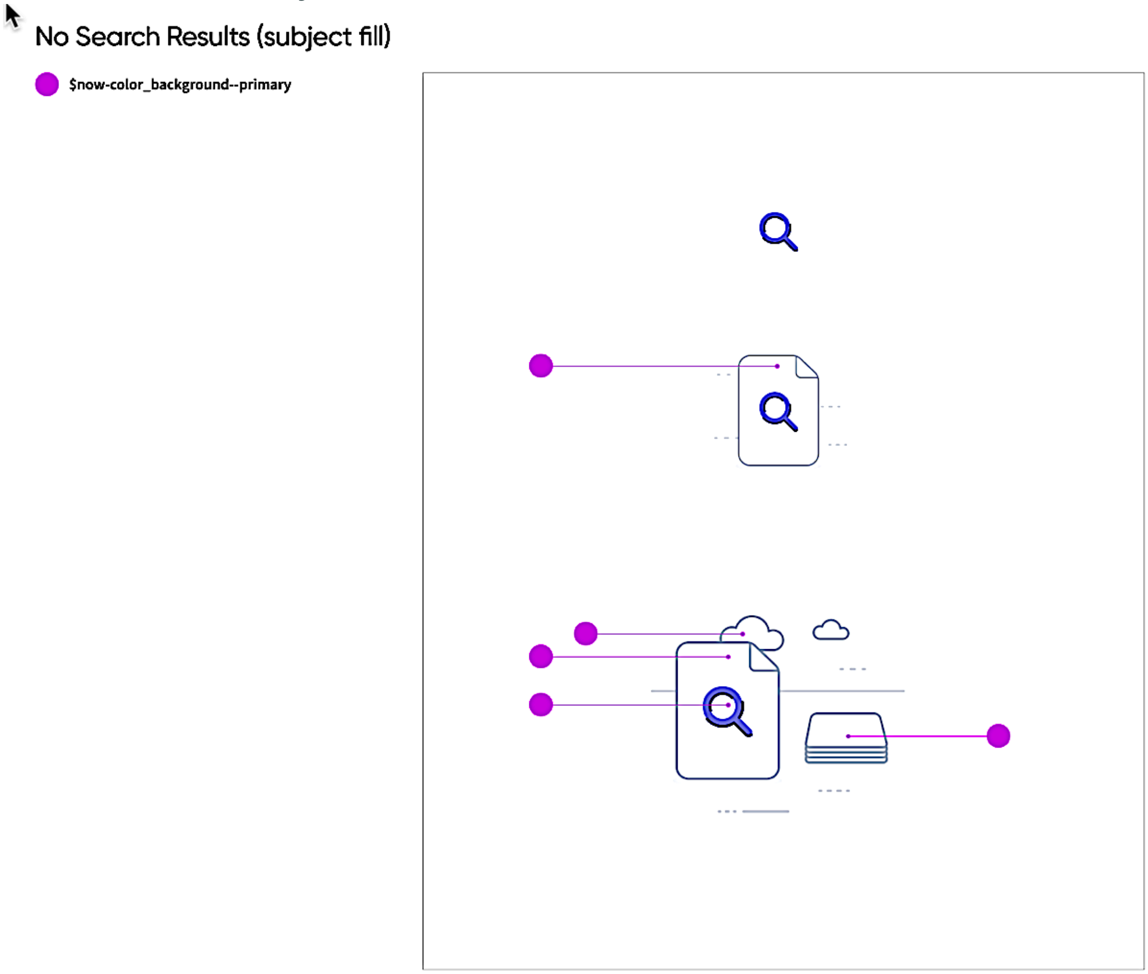
No Search Results (subject light detail)

No Search Results (subject light detail/fill)



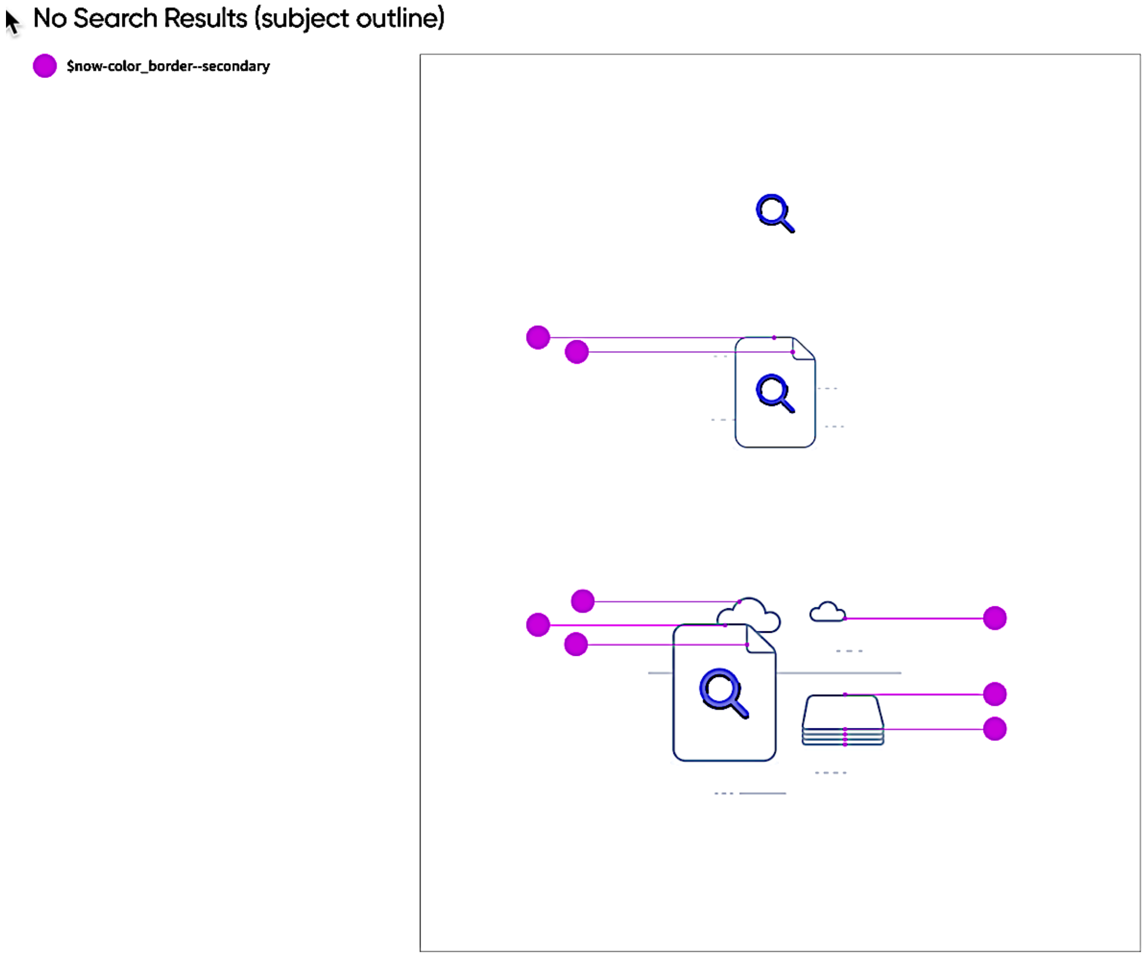
The theme hook required for this variation is `$now-color_background--secondary`.

No Search Results (subject fill)



The theme hook required for this variation is `$now-color_background-primary`.

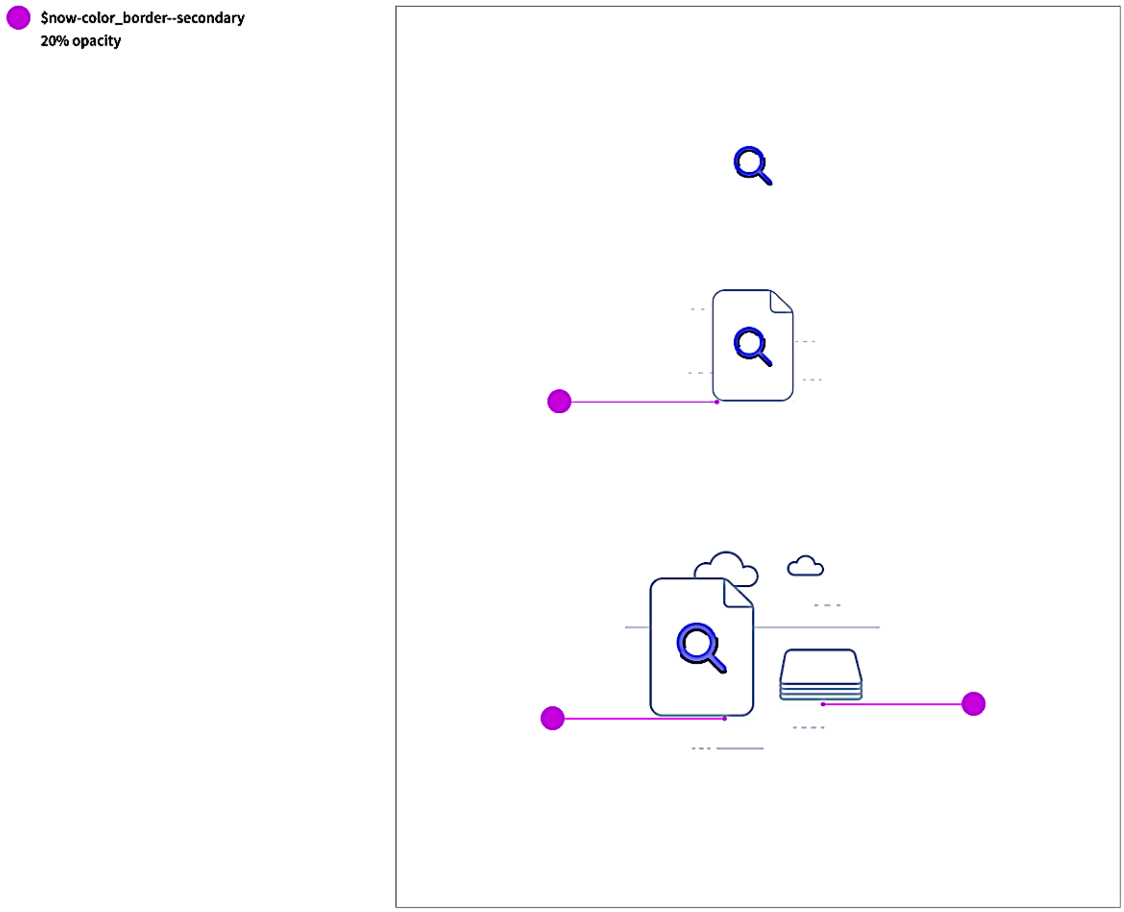
No Search Results (subject outline)



The theme hook required for this variation is `$now-color_border-secondary`.

No Search Results (subject shadows)

No Search Results (subject shadows)



The theme hook required for this variation is `$now-color_border-secondary`.

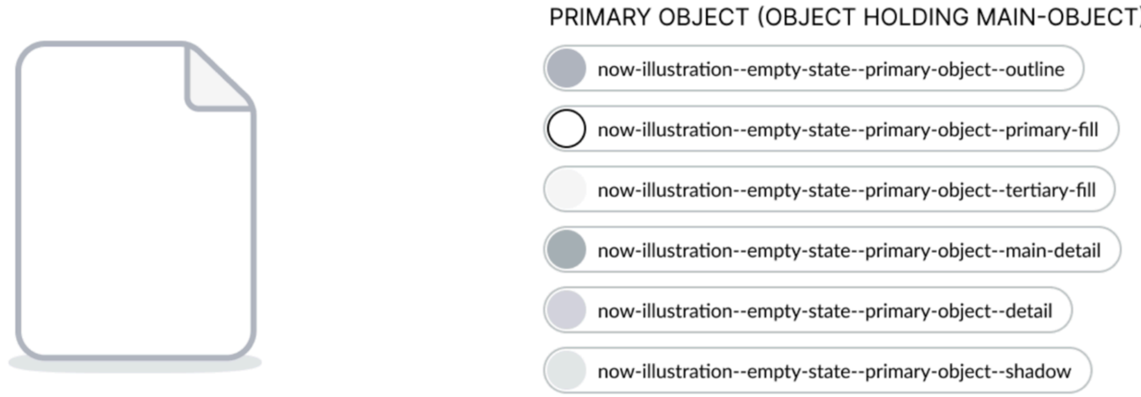
Empty state light mode tokens

Main Object empty state image

The theme hooks used to override the main object empty state image.

- now-illustration--empty-state--main-object--outline
- now-illustration--empty-state--main-object--fill

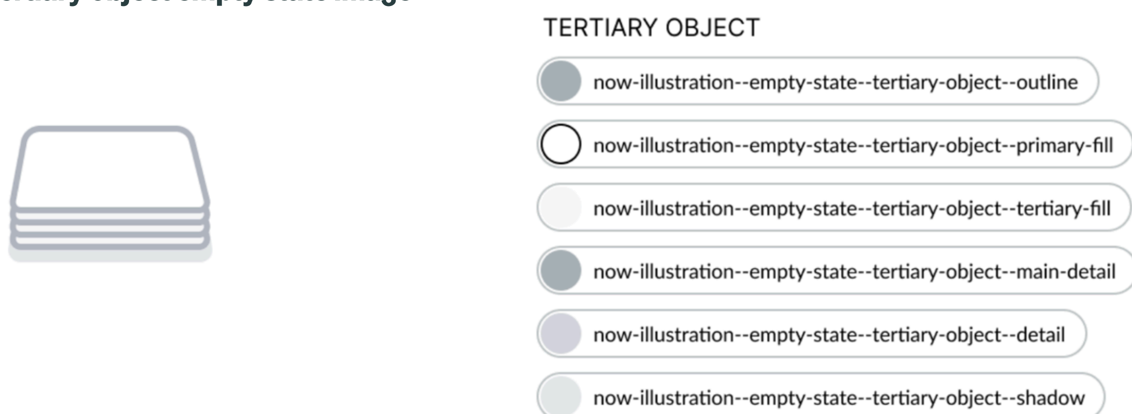
Primary object empty state image



The theme hooks used to override the primary object empty state image.

- now-illustration--empty-state--primary-object--outline
- now-illustration--empty-state--primary-object--primary-fill
- now-illustration--empty-state--primary-object--tertiary-fill
- now-illustration--empty-state--primary-object--main-detail
- now-illustration--empty-state--primary-object--detail
- now-illustration--empty-state--primary-object--shadow

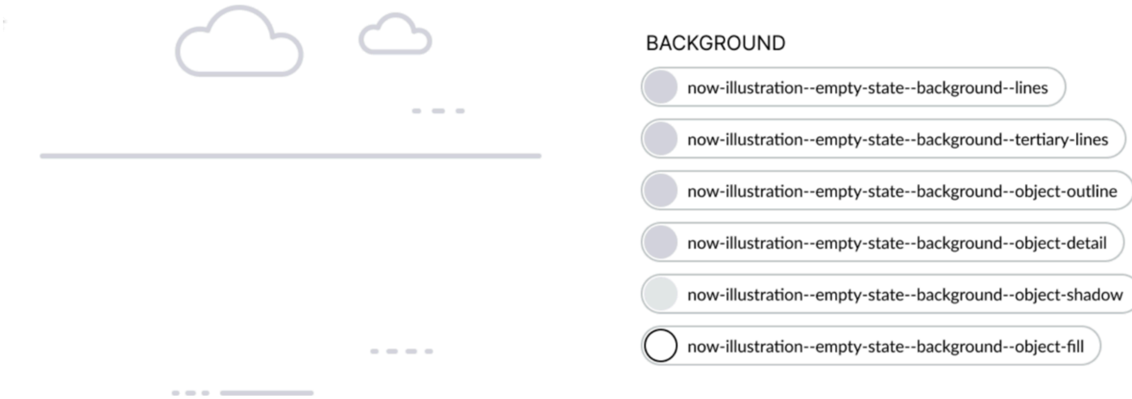
Tertiary object empty state image



The theme hooks used to override the tertiary object empty state image.

- now-illustration--empty-state--tertiary-object--outline
- now-illustration--empty-state--tertiary-object--primary-fill
- now-illustration--empty-state--tertiary-object--tertiary-fill
- now-illustration--empty-state--tertiary-object--main-detail
- now-illustration--empty-state--tertiary-object--detail
- now-illustration--empty-state--tertiary-object--shadow

Background empty state image



The theme hooks used to override the background empty state image.

- now-illustration--empty-state--background--lines
- now-illustration--empty-state--background--tertiary-lines
- now-illustration--empty-state--background--object-outline
- now-illustration--empty-state--background--object-detail
- now-illustration--empty-state--background--object-shadow
- now-illustration--empty-state--background--object-fill

Empty state light mode fallbacks

Empty state light mode fallback style declarations

Object	Style declaration
Main object	`.main-object--outline { fill:rgb(var(--empty-state--main-object--outline), var(--main-object--outline), var(--now-color--interactive-3), 51,53,123); }`
	`.main-object--fill { fill:rgb(var(--empty-state--main-object--fill), var(--main-object--fill), var(--now-color--interactive-1), 144,146,213); }`

Empty state light mode fallback style declarations (continued)

Object	Style declaration
Primary object	`.primary-object--outline { fill:rgb(var(--empty-state--primary-object--outline), var(--primary-object--outline), var(--now-color--border--secondary), 176,181,191); }`
	`.primary-object--primary-fill { fill:rgb(var(--empty-state--primary-object--primary-fill), var(--primary-object--primary-fill), var(--now-color--background--primary), 255,255,255); }`
	`.primary-object--tertiary-fill { fill:rgb(var(--empty-state--primary-object--tertiary-fill), var(--primary-object--tertiary-fill), var(--now-color--background--secondary), 246,246,248); }`
	`.primary-object--main-detail { fill:rgb(var(--empty-state--primary-object--main-detail), var(--primary-object--main-detail),`

Empty state light mode fallback style declarations (continued)

Object	Style declaration
	`` var(--now-color--border--seco ndary), 176,181,191); } ```
	`` .primary-object--detail { fill:rgb(var(--empty-state--p rimary-object--detail), var(--primary-object--detai l), var(--now-color--border--tert iary), 211,214,220); } ```
	`` .primary-object--shadow { fill:rgb(var(--empty-state--p rimary-object--shadow), var(--primary-object--shado w), var(--now-color--backgroun d--tertiary), 228,230,234); } ```
Tertiary object	``` .tertiary-object--outline { fill:rgb(var(--empty-state--t ertiary-object--outline), var(--tertiary-object--outlin e), var(--now-color--border--seco ndary), 176,181,191); } ```
	`` .tertiary-object--primary-f ill { fill:rgb(var(--empty-state--t ertiary-object--primary-fill), ```

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Empty state light mode fallback style declarations (continued)

Object	Style declaration
	` var(--tertiary-object--primary-fill),` ` var(--now-color--background--primary),` `       255,255,255);` `}`
	` .tertiary-object--tertiary-fill {` ` fill:rgb(var(--empty-state--tertiary-object--tertiary-fill),` ` var(--tertiary-object--tertiary-fill),` ` var(--now-color--background--secondary),` `       246,246,248);` `}`
	` .tertiary-object--main-detail {` ` fill:rgb(var(--empty-state--tertiary-object--main-detail),` ` var(--tertiary-object--main-detail),` ` var(--now-color--border--secondary),` `       176,181,191);` `}`
	` .tertiary-object--detail {` ` fill:rgb(var(--empty-state--primary-object--detail ),` ` var(--primary-object--detail ),` ` var(--now-color--border--tertiary),` `     211,214,220);` `}`

Empty state light mode fallback style declarations (continued)

Object	Style declaration
	` .tertiary-object--shadow {` ` fill:rgb(var(--empty-state--t` `ertiary-object--shadow),` ` var(--tertiary-object--shado` `w),` ` var(--now-color--backgroun` `d--tertiary),` `    228,230,234);` `}`
Background object	` .background--lines {` ` fill:rgb(var(--empty-state--b` `ackground--lines),` ` var(--background--lines),` ` var(--now-color--border--tert` `iary), 211,214,220);` `}`
	` .background--tertiary-lines {` ` fill:rgb(var(--empty-state--b` `ackground--tertiary-lines),` ` var(--background--tertiary-li` `nes),` ` var(--now-color--border--tert` `iary), 211,214,220);` `}`
	` .background--object-outline {` ` fill:rgb(var(--empty-state--b` `ackground--object-outline),` ` var(--background--object-outl` `ine),` ` var(--now-color--border--tert` `iary), 211,214,220);` `}`

Empty state light mode fallback style declarations (continued)

Object	Style declaration
	`.background--object-detail {` `fill:rgb(var(--empty-state--background--object-detail),` `var(--background--object-detail),` `var(--now-color--border--tertiary),` `211,214,220);` `}`
	`.background--object-shadow {` `fill:rgb(var(--empty-state--background--object-shadow),` `var(--background--object-shadow),` `var(--now-color--background--tertiary),` `228,230,234);` `}`
	`.background--object-fill {` `fill:rgb(var(--empty-state--background--object-fill),` `var(--background--object-fill),` `var(--now-color--background--primary),` `255,255,255);` `}`

Customize theme-able empty state images for your theme

Customize default theme-able empty state images for your Next Experience and Theme Builder themes using the theme's Imagery record.

Before you begin

Role required: admin

About this task

Important: This procedure applies only to Next Experience themes that use the now-illustration component. You can customize empty state images for Workspaces, but customization is not supported in the Core UI.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes** > **UX Themes**.
2. Select your custom theme from the UX Themes table.
   The UX Theme record for your chosen theme appears.
3. From the **Compositional App Theme** tab, select the **Imagery** record.
4. From the Imagery style record, enter the following empty state image theme hooks into the **Style** field.

```
{
    "properties": {
        "--now-illustration--add-attachment-sm--url": "",
        "--now-illustration--add-attachment-md--url": "",
        "--now-illustration--add-attachment-lg--url": "",
        "--now-illustration--add-data-sm--url": "",
        "--now-illustration--add-data-md--url": "",
        "--now-illustration--add-data-lg--url": "",
        "--now-illustration--completed-tasks-sm--url": "",
        "--now-illustration--completed-tasks-md--url": "",
        "--now-illustration--completed-tasks-lg--url": "",
        "--now-illustration--error-sm--url": "",
        "--now-illustration--error-md--url": "",
        "--now-illustration--error-lg--url": "",
        "--now-illustration--first-time-user-sm--url": "",
        "--now-illustration--first-time-user-md--url": "",
        "--now-illustration--first-time-user-lg--url": "",
        "--now-illustration--interrupted-sm--url": "",
        "--now-illustration--interrupted-md--url": "",
        "--now-illustration--interrupted-lg--url": "",
        "--now-illustration--no-data-sm--url": "",
        "--now-illustration--no-data-md--url": "",
        "--now-illustration--no-data-lg--url": "",
        "--now-illustration--no-search-results-sm--url": "",
        "--now-illustration--no-search-results-md--url": "",
        "--now-illustration--no-search-results-lg--url": "",
        "--now-illustration--offline-sm--url": "",
        "--now-illustration--offline-md--url": "",
        "--now-illustration--offline-lg--url": "",
        "--now-illustration--permissions-sm--url": "",
        "--now-illustration--permissions-md--url": "",
        "--now-illustration--permissions-lg--url": "",
        "--now-illustration--unconfigured-sm--url": "",
        "--now-illustration--unconfigured-md--url": "",
        "--now-illustration--unconfigured-lg--url": "",
        "--now-illustration--no-activities-sm--url": "",
        "--now-illustration--no-activities-md--url": "",
        "--now-illustration--no-activities-lg--url": ""
    }
}
```

5. Add your custom image in one of the following ways.
    - Add image to UX Style Assets list.
        a. On the **UX Style Assets** tab, select **New**.
        b. Select the Lookup icon( ) next to the **Asset** item.
        c. In the UX Theme Assets list, select **New**.
        d. Select the Manage Attachments icon ( ) to add an image.
        e. When the image asset is uploaded, close the Attachments window.

            Note: Verify that your image is in SVG format.

        f. Enter the file name of the asset in the **Name** field and select **Submit**. The asset is added to the UX Style Assets list.
        g. Select and hold (or right-click) on the asset from the UX Style Assets list, and select **Copy sys_id**.
        h. Enter the sys_id into the Style field using the following format: `"/uxta/ENTERYOURSYSID.assetx"`
    - Add your custom image to the Images [db_images_list.do] table.

        Note: Verify that your image is in SVG format.

        a. For detailed instructions, see Upload one or more images.
        b. From the Imagery style record, enter the image file name into the **Style** field using the following format: `"/FILENAME.svg"`.
6. Select **Update**.
   The custom images appear in your theme.
7. **Optional:** Customize the colors of your empty state images using the UX Style color record associated with your theme to override the default theme hooks.

   (Optional) For a step-by-step tutorial on editing your UX Style color record, see Exercise 3, Activity 2 and 3 of the Next Experience Workshop in the ServiceNow Community.

   Note: Using the default theme hooks is recommended.

Configuring Next Experience themes and preferences

Theming in Next Experience applies to individual experiences. As an admin user, you can configure the variables for colors, shapes, fonts, and other aspects of the user experience.

To configure a theme, you create one or more styles with overrides to the default styles. Your new style records override the default Polaris style. For example, the default Next Experience font is Lato. To override this font, you would upload a font asset and change the associated font properties in the style that you create.

Note:

Usually, you are working with the Compositional Theme. The exceptions are when the experience you are configuring does not have a parent app or it uses an app shell UI other than the Breadcrumb App Shell or the Agent Workspace App Shell. If you are configuring a theme for one of these exceptions, see Manage the visual style of UI Builder experiences.

Create a custom theme by cloning a Theme Builder theme record

Create a custom theme in the Next Experience more efficiently using a published Theme Builder theme record.

Before you begin

In order to clone a Theme Builder theme, the theme must be published. For information on publishing your Theme Builder theme, see Publish your themes with Theme Builder.

Role required: admin

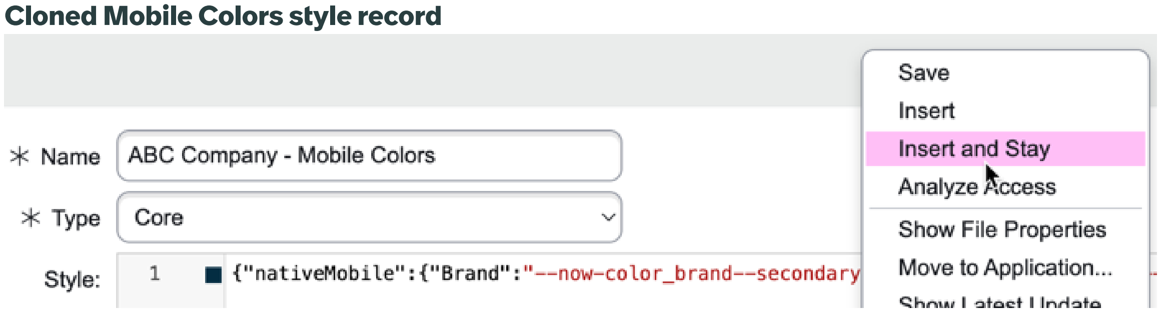
About this task

To avoid your work from being overwritten, your new cloned theme isn't editable in Theme Builder.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Themes**.
   The UX Themes table appears.
2. Under the Name column, search for the Theme Builder theme you want to clone and select the record.
3. Clone the five UX Theme style records.
   a. From the **Compositional: App Theme** tab, select and hold (or right-click) the Mobile Colors style record and select **Open link in new tab**.
   b. In the **Name** field, enter your theme name.
      For example, `ABC Company - Mobile Colors`.
   c. Select and hold (or right-click) the header bar and select **Insert and Stay**.
      This action creates a copy of the style record and redirects the information to the new style record.

      Cloned Mobile Colors style record

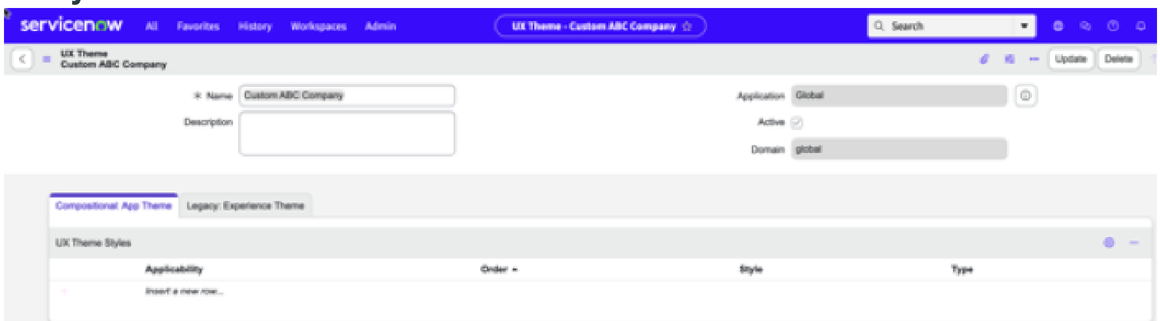
      

   d. Close the open tab.
   e. Repeat this process for the Shape and Form, Colors, Imagery, and Typography style records.

      Note: The cloned style records don't appear in the current theme record and this behavior is expected.
4. Clone the UX theme record.
   a. From the **Name** field, change the name of the theme record.
      For example, `Custom ABC Company`.

b. Select and hold (or right-click) the header bar and select **Insert and Stay**.
Your new UX theme record appears. The style records within this theme are empty and this behavior is expected.

Newly created UX Theme record



5. Add the newly created style records to your theme.

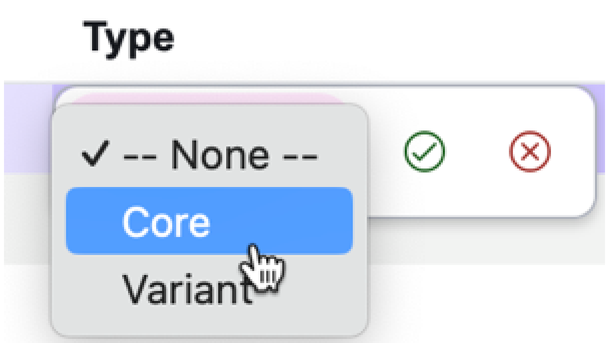
a. Double-click under the Style column to expose the lookup field.

b. Search for and select one of your new style records from the drop-down.

c. Save your selection by selecting the green checkmark.

d. Double-click under the Type column to expose the drop-down list and select **Core**.

Style Type drop-down list



e. Save your selection by selecting the green checkmark.

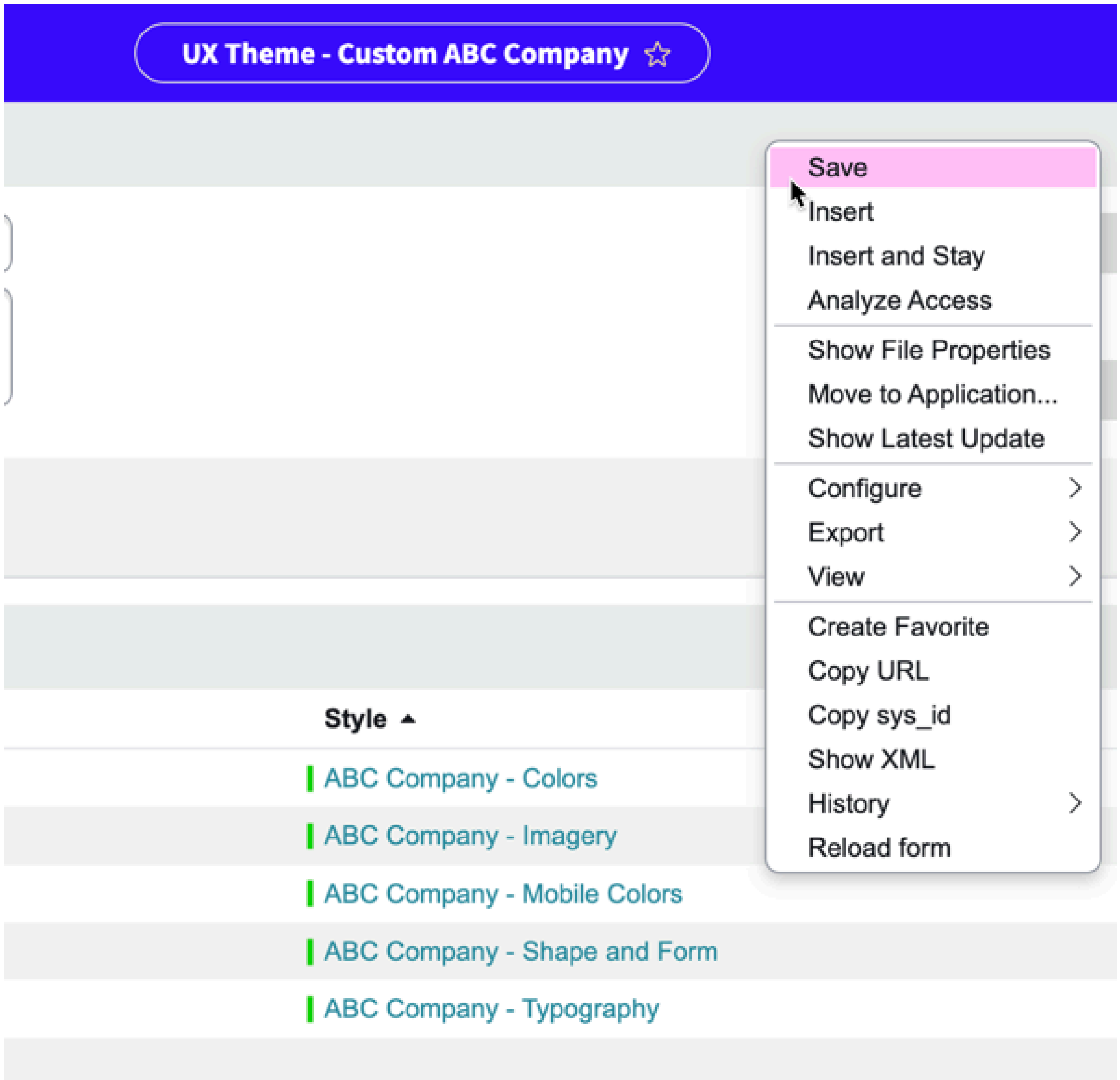
This action associates your style record to the current theme.

f. Repeat this process for the remaining four style records.

g. Select and hold (or right-click) the header bar and select **Save**.

If the changes haven't been saved, green bars are displayed next to the style records that you have added.

UX Theme record before the record is saved



6. Publish your custom theme.
   To publish your custom theme, see Publish multiple themes in Next Experience.
   Now that your custom theme is published, you're ready to customize your theme. For a step-by-step tutorial for editing your UX Style color record, see Exercise 3, Activity 2 and 3 of the Next Experience Workshop in the ServiceNow Community.

Create a Next Experience style

When you create or modify a Next Experience theme, you create and edit one or more styles. Styles include typefaces, colors, images, and shapes and forms. The style records you create override the default Polaris theme in Next Experience.

Before you begin
Role required: admin

About this task
When you edit Next Experience styles, you work in raw JSON code. Edit with care.

You upload new typefaces or images in a separate process. See Add Next Experience font and image assets.

Procedure

1. In the filter navigator field, enter `sys_ux_style.do` to create a style record.
2. Name the style and specify whether it's a Core style or a Variant.

   Note: The Dark theme is the only variant shipped with Next Experience.

3. In the **Style** field, add the base and properties blocks to contain overrides in the style record.

```
{
  "base": {
},
  "properties":{
  }
 }
```

4. **Optional:** To save your work between steps, select the **Additional actions** menu () and choose `Save`.
5. In the **Style** field, edit the JSON code to reflect the overrides you want the style to contain.

   a. Add or edit your main colors in the base section of the JSON code.
   Use RGB values.

   The following example shows sample color overrides.

Style:

```
{
  "base": {
    "--now-color--neutral": "255,51,255",
    "--now-color--primary": "255,42,0",
    "--now-color--secondary": "79,82,189",
    "--now-color_selection--primary": "0,123,88",
    "--now-color_selection--secondary": "79,82,189",
  "properties": {
  }
}
}
```

   b. Edit versions of the colors in the properties section of the JSON code.

   c. Add or edit shapes in the properties section of the JSON code.

The following example shows sample shape overrides.

Style:

```
{
   "properties":   {
    "--now-actionable--border-radius": "4px",
    "--now-actionable--border-width": "1px",
    "--now-container--border-radius": "4px"
}
}
```

6. Add fonts, images, and other theme assets.
   For more information, see Add Next Experience font and image assets.
7. If you have uploaded fonts, add or edit typefaces in the properties section of the JSON code and select **Update**.

Style:

```
{
    "base": {
    "--now-color--neutral": "255,51,255",
    "--now-color--primary": "255,42,0",
    "--now-color--secondary": "79,82,189",
    "--now-color_selection--primary": "0,123,88",
    "--now-color_selection--secondary": "79,82,189"
 },

    "properties":   {
    "--now-actionable--border-radius": "4px",
    "--now-actionable--border-width": "1px",
    "--now-container--border-radius": "4px",

    "--now-font-family": "Courier, Arial, sans-serif",
    "--now-line-height-crop--before": "-0.25775em",
    "--now-line-height-crop--after": "-0.27825em"
    }
}
```

Result

The updated colors, shapes, and typefaces are visible in your theme.

Configure a Next Experience theme

Add the styles that you have created to your Next Experience theme to modify the look and feel of the user experience.

Before you begin

Ensure that the following system properties that are located in `sys_properties.list` are set to **True**:

- *`glide.ui.polaris.experience`*
- *`glide.ui.polaris.dark_themes_enabled`*: To reuse the Next Experience dark variant in this theme.

Role required: admin

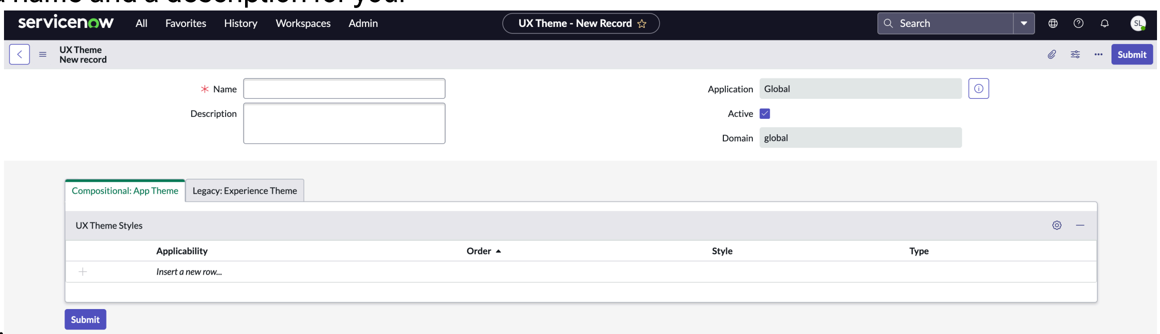
About this task

The default Next Experience theme is called Polaris. You can reuse or customize the theme as a starting point when you create or modify your own themes.

About this task

Note: If you're customizing a theme that you created with Theme Builder and enter invalid JSON code, you can't save your theme record. While working in the UX theme record, you can navigate to the Editor page by using the **Open in Theme Builder** button. For more information, see Manage or edit a theme with Theme Builder.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Theme Management** > **Themes**.
2. Create a theme record by selecting **New**.
3. Enter a name and a description for your theme.


4. Select the Additional actions icon () and select **Save**.
5. On the **Compositional: App Theme** tab, insert rows to add styles that are associated with your theme.
   You assign values in four columns:

   Applicability

   Overrides the base theme. Users who meet the applicability constraints see those overrides in their theme rather than the base style. For example, a style with different fonts can be applied to managers. Users who meet the manager applicability see the different fonts in the Next Experience UI, which overrides the base system theme values. Administrators do not have to copy or create an entire theme with changes for the applicable audience.

   Note: Leaving the Applicability constraint to empty will apply the style to all users.

   Order

   Specifies when the style is applied. The higher the order means that the greater its priority is.

   Note: If you want to use a custom style, make sure that your style order number is higher than the standard Polaris style.

   Style

   Configures four main styles. You can't edit the style names that are used in the Polaris theme, but you can copy the JSON code that is associated with each style from this theme and paste and edit it in your custom style's form.

  - **Colors:** Specifies the color properties of the theme and any base variants that you want to add. In the base section of the color style, a subset of the colors that the theme uses are defined with Red, Green, Blue (RGB) values. The theme generates more than 20 gradients of those colors in the application.
  - **Shape and Form:** Specifies the look and feel of the borders as well as the buttons and other UI controls.
  - **Imagery:** Adds images that are used in your application's theme.
  - **Typography:** Specifies the fonts that are used throughout the application.

Type

Specifies two types: Core and Variant. The Core styles include the color, shape and form, typography, and imagery. Variants specify a different version of the theme, such as the different colors that users can select. The most common variant is a dark version of the theme. The Dark theme is the only variant that is shipped with Next Experience. For more information, see Working with themes in Next Experience.

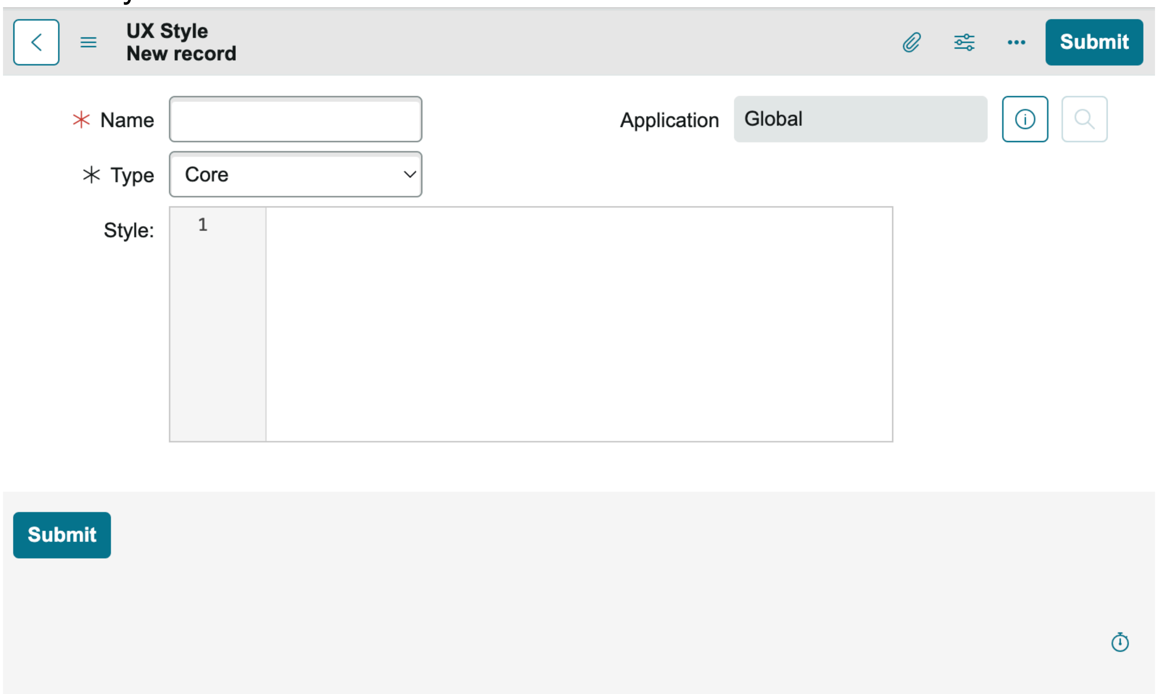
6. Select the **Style** field and select the .
7. Select **New**.
8. Select Primary, Secondary, and Neutral colors.

   Note: A theme is made up of multiple variables, so you may notice the default Polaris theme coloring coming through in different places.

9. When you have your organization's branding colors, navigate to the color generator at https://theme.deoprototypes.com/color-generator-algo-v1 .
10. Select the **Auto Generate** button.

    A modal pops up and asks you to enter in the three colors from your organization.
11. Enter your hex code values for your organization's colors.
12. Select **Generate**.
13. Gather your CSS variables by selecting **Copy JSON**.

14. Fill in the UX style



form.

Field	Description
Name	Name of your UX style.
Type	○ Core ○ Variant For more information on types, see Difference between core styles and variants.
Style	Values for the colors, shapes, and forms. Some of the values are colors and some, like borders, are pixel values. **Important:** JSON code must be wrapped as shown in the following example. `{` `"properties": Enter your copied JSON here, it will contain the necessary braces.` `}`
Application	Scope of the UX style.

15. Select **Submit**.

16. Select **Update**.

What to do next

To publish your custom theme, see Publish multiple themes in Next Experience.

Add Next Experience font and image assets

Add assets to your Next Experience themes and styles to store extra information associated with a theme, including fonts and images.

Before you begin

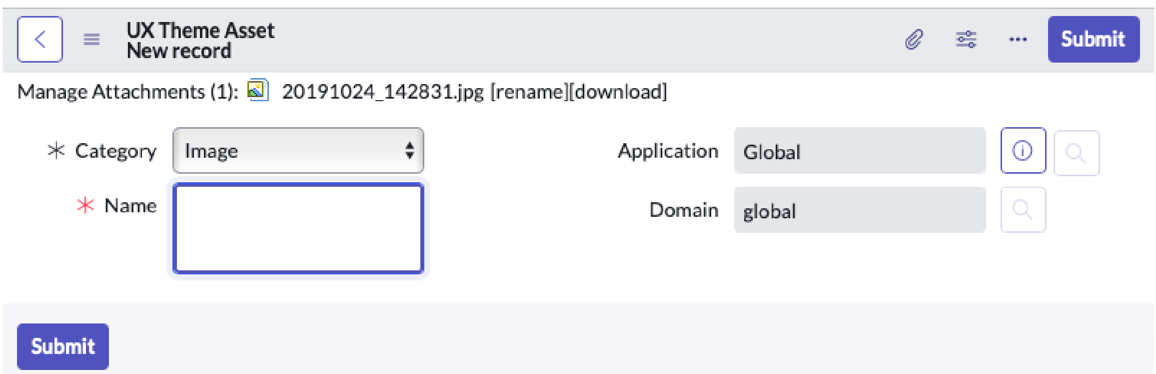
Role required: admin

About this task

Upload images associated with your theme including banner images and logos. Add typefaces to match Next Experience to your corporate look and feel.

Note: You can't add assets or otherwise edit the styles associated with the default theme.

Procedure

1. In the filter navigator field, enter `sys_ux_theme_asset_list.do`.
2. In the UX Theme Assets list, select **New**.
3. Select the Manage Attachments icon ( ) to add an image or font.
   Your font asset may have separate files for different characteristics such as bold or italic. Upload each of these files. Verify that your image is in SVG format.
4. When the asset is uploaded, close the Attachments window.
5. Type the file name of the asset in the **Name** field and select
   

   Submit.
6. **Optional:** Add a script to the asset in the **Asset Properties** box.
7. Select **Submit**.

Result

The font or image is available to use in your theme.

Change instance banner logo in Next Experience

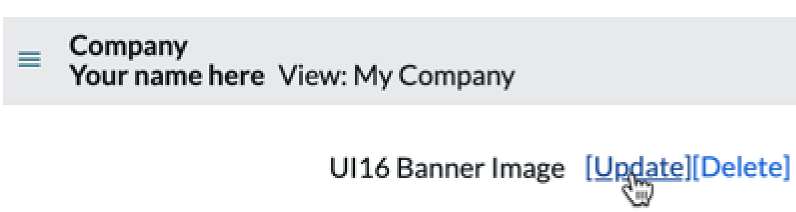
Change the instance banner logo displayed on the Unified Navigation and the login page to reflect your company logo.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Properties** > **My Company**.
2. To upload your company logo, select **Update** beside **UI16 Banner Image**.



3. Click **Choose file** and select the file, and then click **OK**.
   To use an image URL instead of a file on your hard drive, enter the URL in the file upload window.

   Note: The image can be high resolution, but when it displays it is scaled based on the aspect ratio. It scales to a maximum of 20px high.

4. Click **Update**.
5. **Optional:** If new banner image doesn't display, perform a `cache.do` and `logout.do` and log back into your instance.
6. **Optional:** To restore the default instance logo, update the *`glide.product.image.light`* system property value to **now-next-experience-logo.svg**.

Override the Next Experience theme

Override the Next Experience theme with your custom theme.

Before you begin

The *`glide.ui.polaris.theme.custom`* was used to override the Next Experience theme prior to the Xanadu release. As of Xanadu, you are able to publish multiple themes and select a theme for the Next Experience. The *`glide.ui.polaris.theme.custom`* system property is only considered if the UX Parent App Themes table is empty. For more information, see Publish multiple themes in Next Experience.

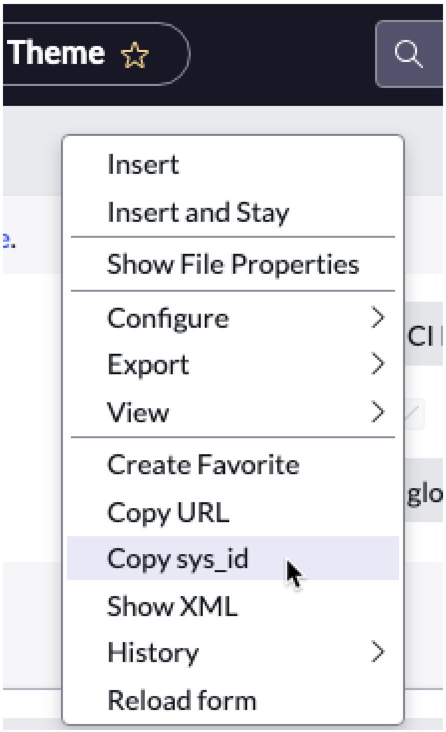
Role required: admin

About this task

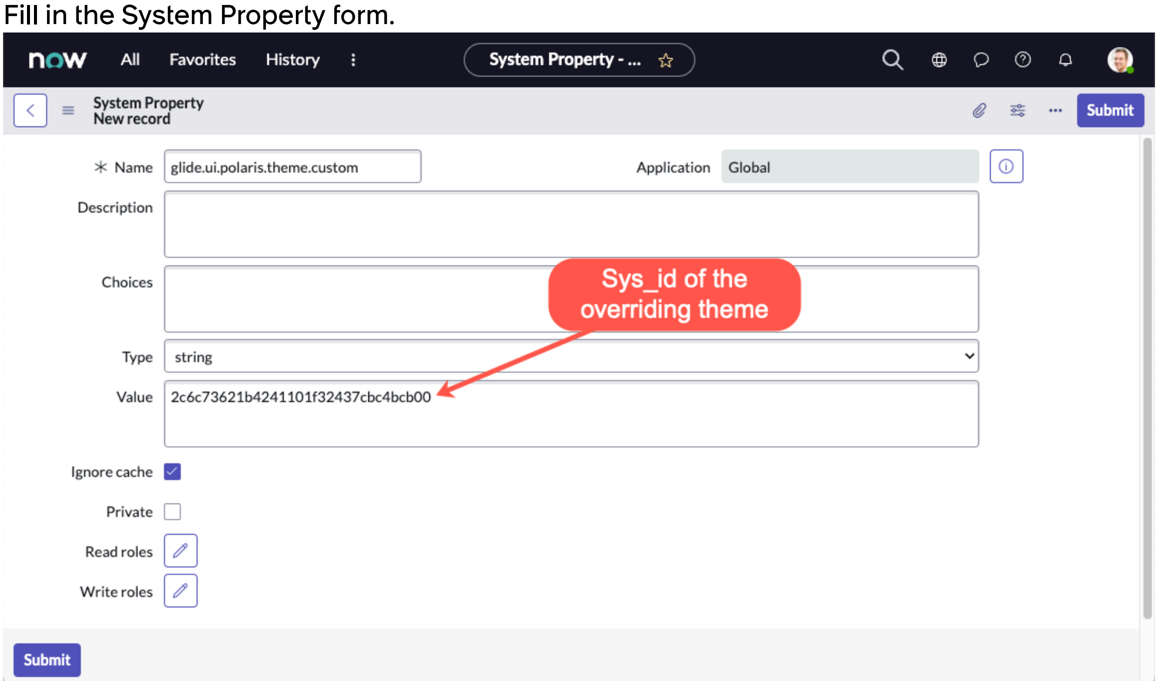
Override the default Next Experience theme while keeping the Next Experience UI.

Procedure

1. In the filter navigator field, type `sys_ux_theme.list` and press **Enter**.
2. Select the theme you want to override the Next Experience theme with.
3. Right-click the header and select **Copy sys_id**.



4. In the application navigator field, type `sys_properties.list` and press **Enter**.
5. Select **New**.
6. Fill in the System Property form.



- Name the system property `glide.ui.polaris.theme.custom`.
- Set the type value to string.
- In the value field, paste the sys_id you copied in step 3.
- A **Suffix** field will appear on the System Property form when you want to apply a custom theme to a specific application scope. This field is required.

7. Select **Submit**.

Your custom theme appears. If necessary, refresh your browser.

Note: If, for any reason, you decide to revert back to the Polaris theme, repeat steps 4 through 7, replacing the sys_id in the **Value** field with the sys_id of the Polaris theme.

Set the location of a notification toast banner

A toast message provides simple feedback about an operation in a small pop-up. Choose which corner of the screen that you would like your notification toast message banners to appear in for the purpose of improving usability.

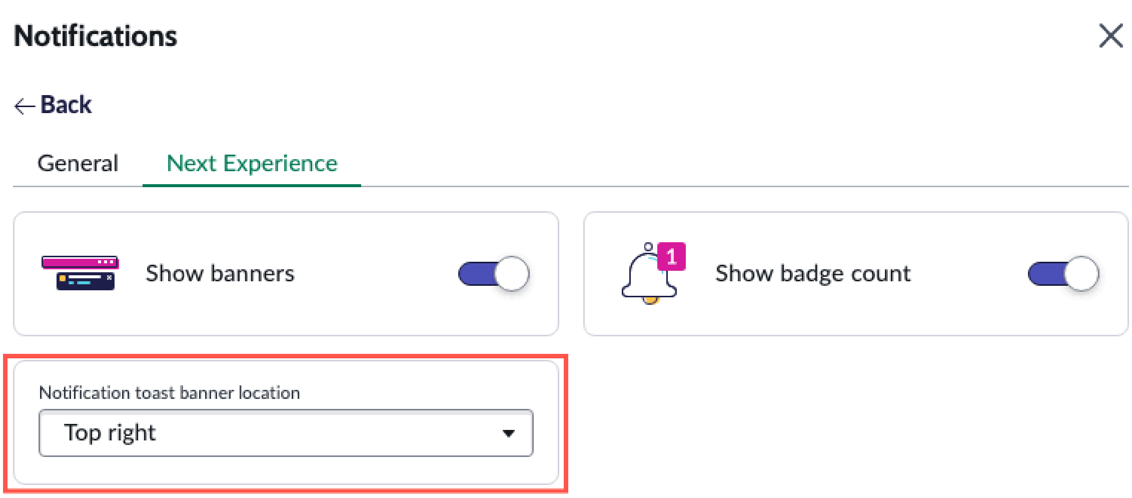
Before you begin

Role required: admin

Procedure

1. In your instance, select the **User Menu** .
2. From the user menu list, select **Preferences**.
3. Select **Notifications**.
4. Select the **Next Experience** tab.

Next Experience notification preferences



5. In **Notification toast banner location**, choose your preferred location for banners:
   - Top left
   - Top right
   - Bottom left
   - Bottom right

Note: The default location is in the top right of your instance. If the banner doesn't appear in the expected location, try refreshing your browser.

Preserve your custom Next Experience theme during a clone

Preserve your custom Next Experience theme during a clone by using a data preserver.

Before you begin

Role required: admin

About this task

This procedure preserves theme-related data during a clone. If the theme is not published before the clone, you must publish it after the clone to apply it in the target instance.

Procedure

1. Navigate to **All** > **System Clone** > **Clone Definition** > **Preserve Data**.
2. Select **New**.
3. On the form, fill in the fields.

   Clone Data Preserver form

Field	Description
Name	Unique name for your data preserver. An example is Next Experience Theme Properties.
Theme	Option to determine whether this preserver is theme-related. In this case, select the option to mark it as true.
Table	Table that is affected by this data preserver. In this case, use `System property [sys_properties]`.
Conditions	Conditions that this data preserver acts on. Build the condition as `Name is glide.ui.polaris.theme.custom`.

4. Right-click the header and select **Save**.
   The Clone Profiles related list appears.
5. Create a new record for each of the following tables, and leave the condition field empty.
   - `sys_ux_theme`
   - `sys_ux_style`
   - `m2m_theme_style`
   - `m2m_style_asset`
   - `sys_ux_theme_asset`
   - `sys_ux_theme_m2m_asset`
   - `sys_ux_theme_customization`
   - `m2m_app_theme`
6. Create a new record for each of the table, including the associated condition.

   Clone Data Preserver for table and condition fields

Table	Conditions
`sys_properties`	`Name is glide.ui.polaris.theme_builder.override_logo`.
`sys_user_preference`	`Name is glide.ui.polaris.theme`.
`sys_user_preference`	`Name is glide.ui.polaris.theme.variant`.

Table	Conditions
Add this table for themes with custom logos: *sys_attachment*	Name or unique identifier of the sys_attachment record on the target.

7. **Optional:** If you have a clone profile you would like to add, select **Edit**, move your clone profile to your data preserver, and select **Save**.

    Note: A clone profile enables you to store predefined target and clone options. If you don't have a clone profile, or don't need one, skip this step.

Multi-theme management

Next Experience multi-theme management offers a more personalized experience by enabling users to choose a theme that aligns with their personal preferences.

Multi-theme management is available for custom Next Experience themes and themes created with Theme Builder.

- Publish multiple themes to your web experience and make your themes available to users for selection within the Next Experience Theme user preference. For more information, see Publish multiple themes in Next Experience and Publish your themes with Theme Builder.
- Themes are stored and managed within the UX Parent App *[m2m_app_theme]* table. Themes created with Theme Builder are automatically added to this table after publishing.
- Set one theme as the default to display first in the user's theme preference if they haven't made a selection.
- Control the order in which themes appear in the user's theme preference.

Publish multiple themes in Next Experience

Publish multiple themes and set the order of your Next Experience custom and Theme Builder themes to configure how they're displayed in the user's Theme preferences.

Before you begin

Role required: admin

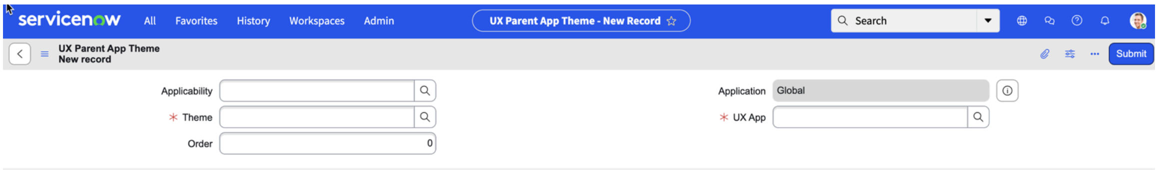
About this task

Publishing multiple themes applies to web instances only.

Procedure

1. In the filter navigator, enter `m2m_app_theme.list` and press **Enter**.
   The UX Parent App Theme table appears. This table is used to store the association between multiple themes and a parent application.
2. Select **New**.
3. On the form, fill in the fields.

    Note: Themes created with Theme Builder are automatically added to the UX Parent App Theme table during publishing and don't require a new record form. To create a theme with Theme Builder see Create a theme with Theme Builder.



UX Parent App Theme record form

Field	Description
Applicability	Audience that the theme should apply to. For example, you might want to specify that the theme appears only for those users with an admin role. **Note:** Leaving the **Applicability** field empty applies the theme to all users.
Theme	Theme that you want to add to the table.
Order	Order in which the theme is displayed in the Next Experience Theme user preference. **Note:** The applicable theme with the lowest order is considered as the default and appears first in the Next Experience Theme user preference. If the user has not made a selection from their Theme user preference, the theme with the lowest order in the UX Parent App Theme table is set as the default theme.
Application	Application scope.
UX App	Parent application that you want the theme to apply to.

4. Select **Submit**.
   After the record has been added to the UX Parent App Themes table, you're able to change the **Applicability**, **Order**, and **UX App** fields, as needed. If no records are listed in the table and the *`glide.ui.polaris.theme.custom`* value is empty, the Unified Navigation base theme is displayed.

Configure login theming in Next Experience

Configure Next Experience login illustrations and welcome text to provide a login experience that reflects your branding.

Before you begin

Role required: admin

About this task

This procedure is specific to login pages and does not apply if you are using Single Sign-On (SSO).

Procedure

1. In the filter navigator field, enter `sys_properties.list`.
2. Prevent the login screen from showing any illustrations by setting the property *`glide.ui.polaris.login.show_illustrations`* to **false**.
3. Show welcome text by set the property *`glide.ui.polaris.login.show_welcome`* to **true**.

If this property doesn't exist, add it as a true/false property. For more information, see Add a system property.

4. Edit the welcome page text.

    a. Navigate to **System UI** > **Welcome Page Content**.

    b. Select **New** to create a welcome page content record or open an existing one that you want to display on the login page.

    c. In the Condition field, enter `!gs.getSession().isLoggedIn()`the content displays only on the login page before a user signs in
    The content displays only on the login page before a user signs in.

    d. In the Text field, enter the welcome message or login information you want users to see.

    e. Select the Active check box.

    f. Select **Update**.

Result

The welcome text appears on the Next Experience login page when users are not logged in and is hidden after authentication.

Next Experience landing pages

Modify the landing pages on your Next Experience instance so that users see a landing page tailored to their experience in ServiceNow.

In Next Experience, you can configure multiple landing pages. Next Experience landing pages provide the information you need to start working. These landing pages typically present content specific to your role and tasks. Landing pages can include lists, Performance Analytics and Reporting (PAR) information, and other features to access your new and prioritized tasks from one location.

By default, users on new Next Experience instances see the Next Experience landing page. Users on upgraded instances see the landing pages they had before in the Next Experience UI. You can also set a Core UI landing page for all users and configure user-specific landing pages.

Note: If you want to turn off the welcome splash screen after upgrading your instance, see Turn off the Next Experience welcome screen after upgrading your instance.

Create a Next Experience landing page

Provide users the information that they need to start working by creating custom Next Experience landing pages for different audiences.

Before you begin

Creating custom Next Experience landing pages requires configuring page components in UI Builder. For a quick tutorial on using UI Builder, see UI Builder quick start in the UI Builder documentation.

Role required: ui_builder_admin or admin

About this task

Administrators can set various types of pages as the start pages that different users see when they log in to an instance. By default, a Next Experience landing page is the start page for all users.

To customize a Next Experience landing page for different audiences and use cases, you can create a variant of the default Next Experience landing page using UI Builder, as described in this procedure. You can also create a Next Experience landing page from scratch by creating a new page in UI Builder.

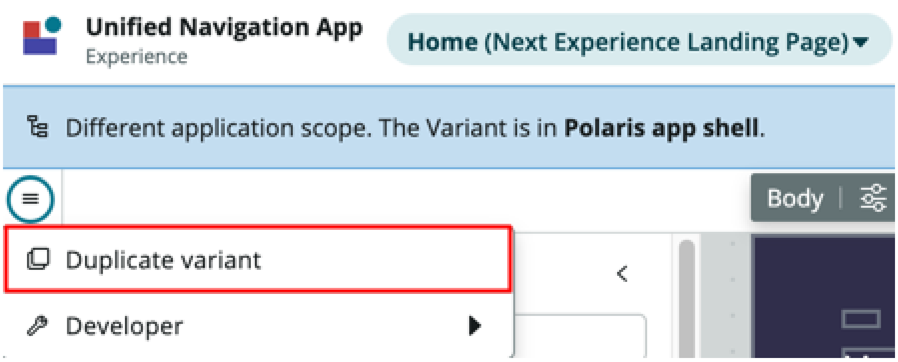
Note: This procedure doesn't apply to creating landing pages for Configurable Workspaces.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **UI Builder**.
2. From the Experiences list, select **Unified Navigation App**.
3. In the Pages and variants list, under Home, select either **Next Experience Landing Page** or **Next Experience Landing Page - Admin Role**.
   The Next Experience Landing page is the default landing page for non-admin users, and the Next Experience Landing Page - Admin Role is the default landing page for admin users. Select the page that aligns with the audience for which you need to create a custom landing page.
4. **Optional:** From the top bar, change the application scope you work in by selecting the application scope from the application picker.
5. Create a variant of the default landing page by duplicating it.

   a. From the left vertical bar, select the context menu and then select **Duplicate variant**.

      Example

   b. In the **Name** field, enter a name for the page variant.

   c. **Optional:** Next to the **Audiences** field, select **Add** and then select an audience from the list.

      (Optional) The audience defines who can see a page. By default, all users can see a page. For more information about audiences, see Learn about audiences in the UI Builder documentation.

   d. **Optional:** In the **Conditions** field, add criteria for when to display the page by entering an encoded query string.

      Example
      For example, the query string `table=incident^sysId!=-1` will only show this page variant if the table field is incident and the sysId field isn't -1.

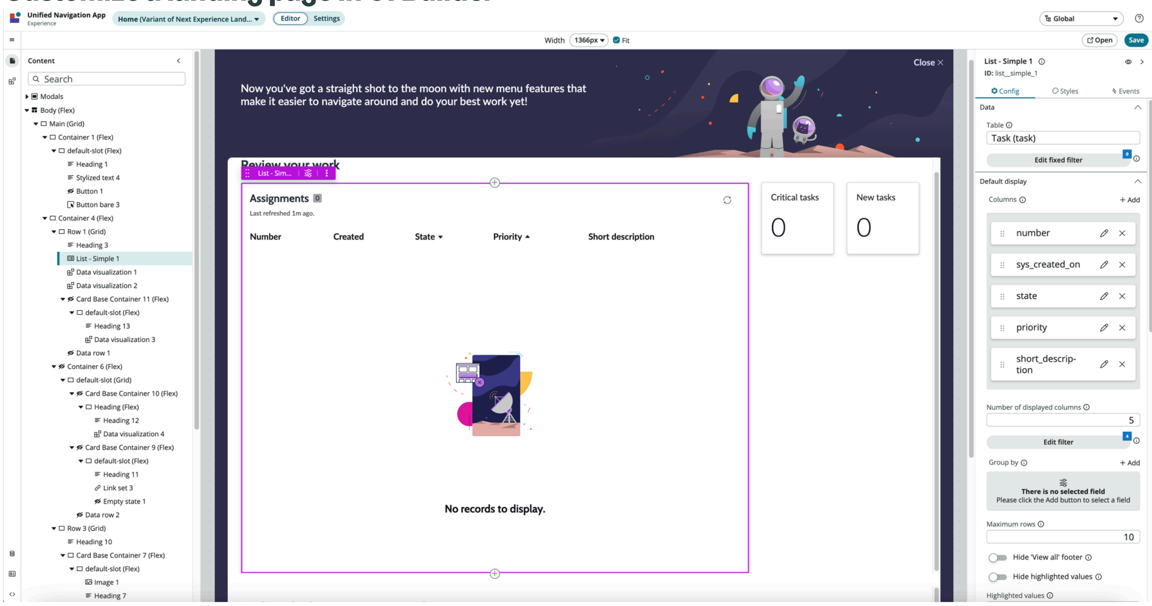
   e. Select **Create**.

6. Customize the components on the page according to the needs of your audience.

You can customize what components are included on the page, the data they connect to, their style, and event mappings. To learn more about how to customize components on a page, refer to Customize UI Builder pages using components in the UI Builder documentation.

To enable a footer for the page, see Configure a Next Experience landing page footer.

Customize a landing page in UI Builder



7. Select **Save**.
8. Set this page variant as the start page for the selected audience.

   a. From the top bar, select **Settings**.

   b. In the **Order** field, set the priority order of the page variant to a lower number than the order of the default Next Experience landing page.

      By default, the order of the default Next Experience Landing page is set to 1000, and the order of the Next Experience Landing Page – Admin is set to 99. The lower the number, the higher the priority.

   c. Select **Save**.

Configure per-user landing pages in Next Experience

Users on new Next Experience instances see the Next Experience landing page. Users on upgraded instances see the landing pages that they had before, in the Next Experience UI. You can also configure user-specific landing pages.

Before you begin

Role required: admin

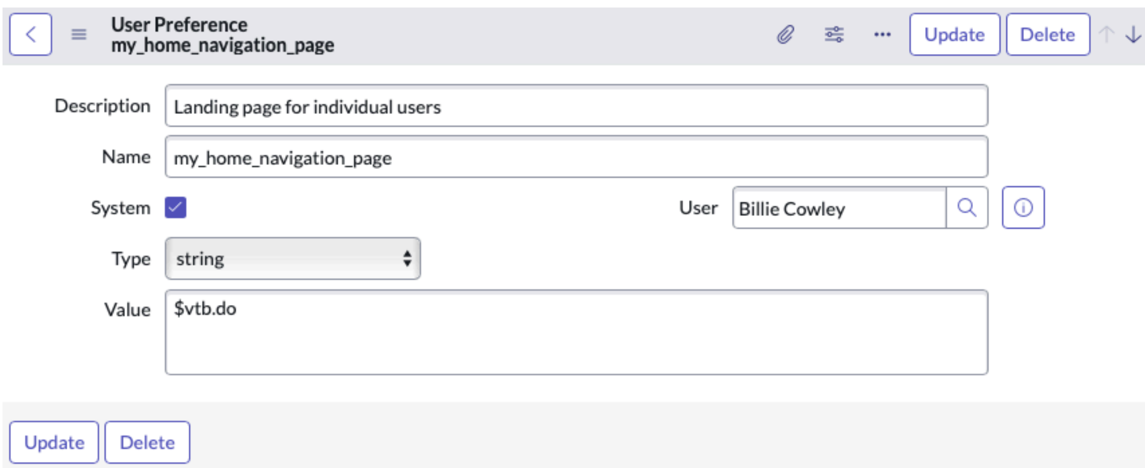
About this task

Next Experience landing pages provide the information you need to start working. These landing pages typically present content specific to your role and tasks. Landing pages can include lists, Performance Analytics and Reporting (PAR) information, and other features to access your new and prioritized tasks from one location.

Procedure

1. Navigate to **User Administration** > **User Preferences**.
2. Select **New**.
3. In the **Name** field, enter `my_home_navigation_page`.
4. In the **User** field, select the Lookup using the list icon ( ) and assign a user.
   You can have multiple entries of this preference for different users.
5. Specify the value of the landing page.
   For example, to use the Visual Task Board overview as the landing page, you would enter `$vtb.do`. The value for any selected landing page is found within the URL. To assign a specific VTB, you would enter the portion of the URL from `$vtb.do` onward.

   Note: When you copy the URL information, be sure to replace any HTML entities with their decoded values. For example, replace the entity `%24` with $.



6. Select **Update**.

Result

The user sees the specified landing page when they log on to ServiceNow® or when they select the company logo.

Configure a user-selected start page

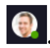
Configure a user-selected start page to override the administrator-configured default landing page to appear when you log in to ServiceNow.

Before you begin

Ensure you have enabled the Next Experience prior to beginning this task. For more information, see Considerations for activating Next Experience.

Role required: none

Procedure

1. The admin must enable the *glide.next_experience.user_selected_landing_page_enabled* system property.
   a. Select **All** to open the navigation filter, enter `sys_properties.list`, and press Enter to view the System Property table in list view.
   b. Locate and open the *glide.next_experience.user_selected_landing_page_enabled* property.
   c. Verify that **Value** is set to true.
2. In your instance, select the user menu .
3. In the user menu list, select **Preferences**.
4. Select the **User Experience** tile.
5. Select the **Current start page** list.
6. Choose your start page from these options.

Current start page list

Field	Description
Use the default	The default landing page as configured by the administrator.
Use Dashboards	If using Core UI responsive dashboards, the start page is set to the last dashboard you visited.
Use the page that I'm on now	Set the current page as your default start page.
Continue where I last left off	Set the last page you visited in ServiceNow as the start page when you next log in.

Configure a Core UI global landing page in Next Experience-enabled instances

Set a Core UI landing page for all users so users on instances with Next Experience enabled see the same landing page as users on upgraded instances. Upgraded users see the landing pages they had before in the Next Experience UI.

Before you begin

Role required: admin

About this task

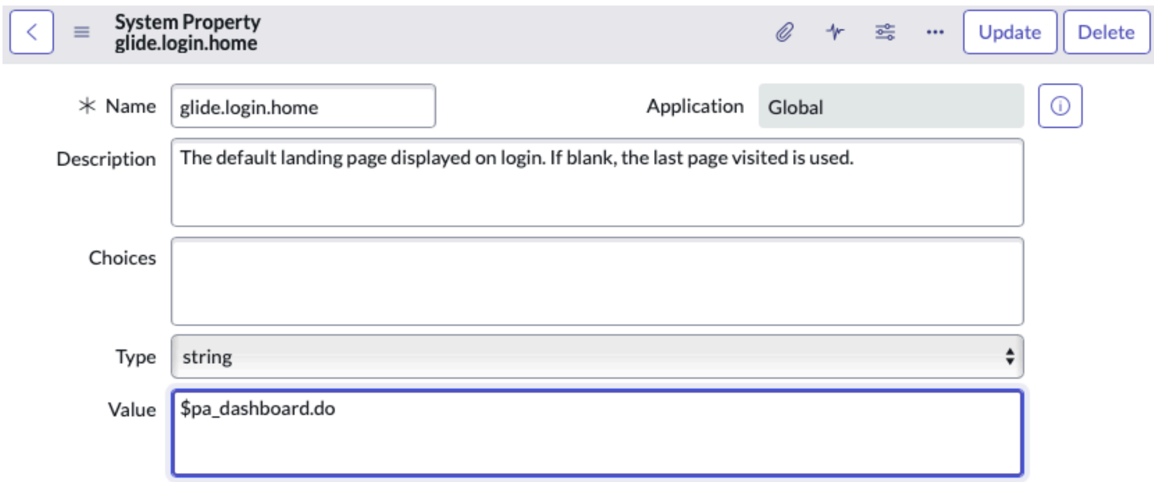
Next Experience landing pages provide the information you need to start working. These landing pages typically present content specific to your role and tasks. Landing pages can include lists, Performance Analytics and Reporting (PAR) information, and other features to access your new and prioritized tasks from one location.

Values in the user preference *my_home_navigation_page* override the value in the *glide.login.home* system property. If no user is specified in *my_home_navigation_page*, the value in the preference overrides *glide.login.home* for all users.

Procedure

1. In the filter navigator field, enter `sys_properties.list`.
2. Edit the value of the *`glide.login.home`* system property to set an instance-wide Core UI landing page.
   For example, to assign the Dashboards Overview as the landing page, you would enter `$pa_dashboard.do`. To assign a specific dashboard as the landing page, you would enter the portion of the URL from `$pa_dashboard.do` onward.

   Note: When you copy the URL information, be sure to replace HTML entities with their decoded values. For example, replace the entity `%24` with $.



3. Select **Update**.
   You will not see the new landing page until you log out and log back in again.

Result

When users log in, they see the selected landing page instead of the default.

Configure a Next Experience landing page footer

Display useful links in the footer of your Next Experience landing pages. The footer contains two fully configurable link set components.

Before you begin

Role required: admin

About this task

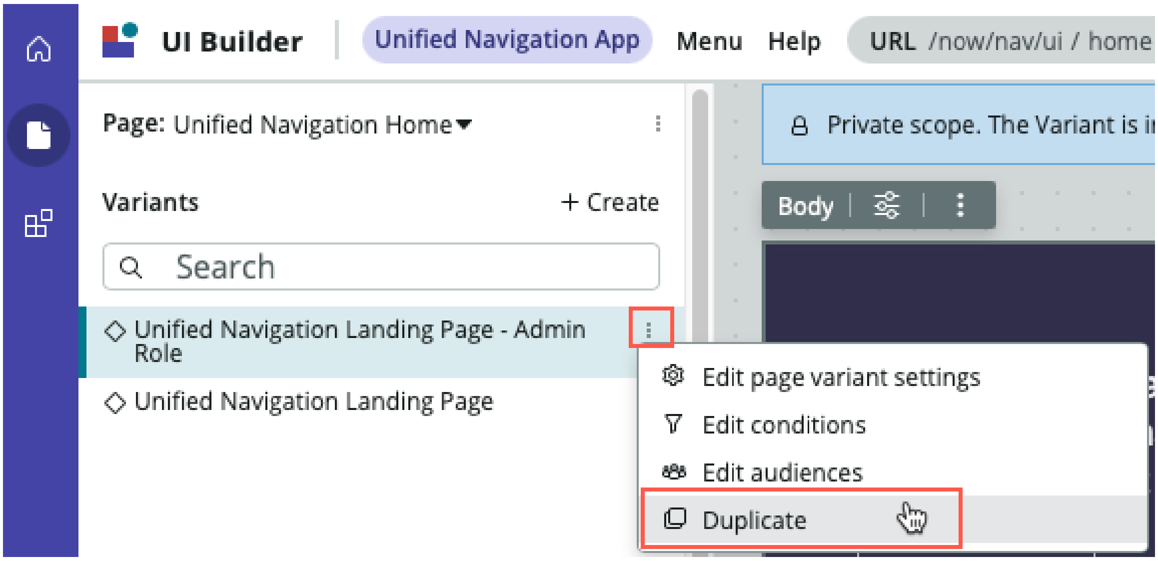
Next Experience landing pages provide the information you need to start working. These landing pages typically present content specific to your role and tasks. Landing pages can include lists, Performance Analytics and Reporting (PAR) information, and other features to access your new and prioritized tasks from one location.

The footer is hidden by default. To configure the footer, you enable it in UI Builder and then edit the link set components.

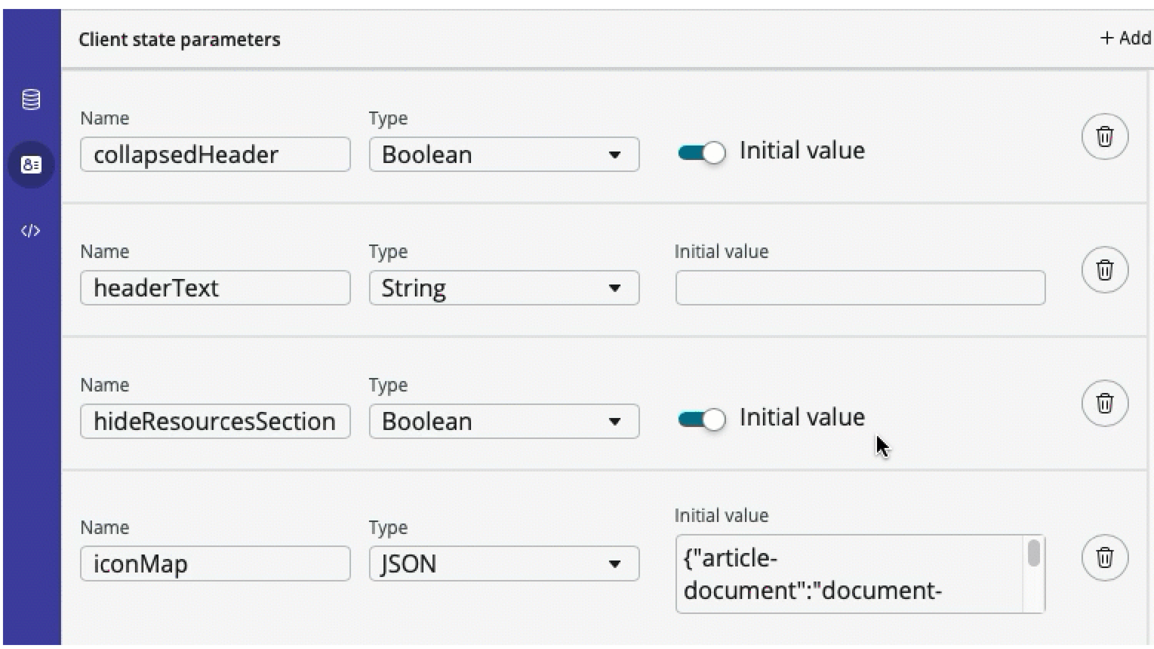
Procedure

1. Navigate to **All** > **Now Experience Framework** > **UI Builder**.
2. Select **Unified Navigation App**.
3. In the Variants section, select the More options icon (⋮) for the Unified Navigation Landing Page - Admin Role and select **Duplicate**.

The main variant of the landing page is read-only. To edit, you work in a copy.



4. In the Unified Navigation Landing Page - Admin Role Copy Content Body outline, select Container 5 and select the Client State Parameters icon ( ).
5. In the Client state parameters section, toggle the **hideResourcesSection** value off.
   This action enables the landing page footer.



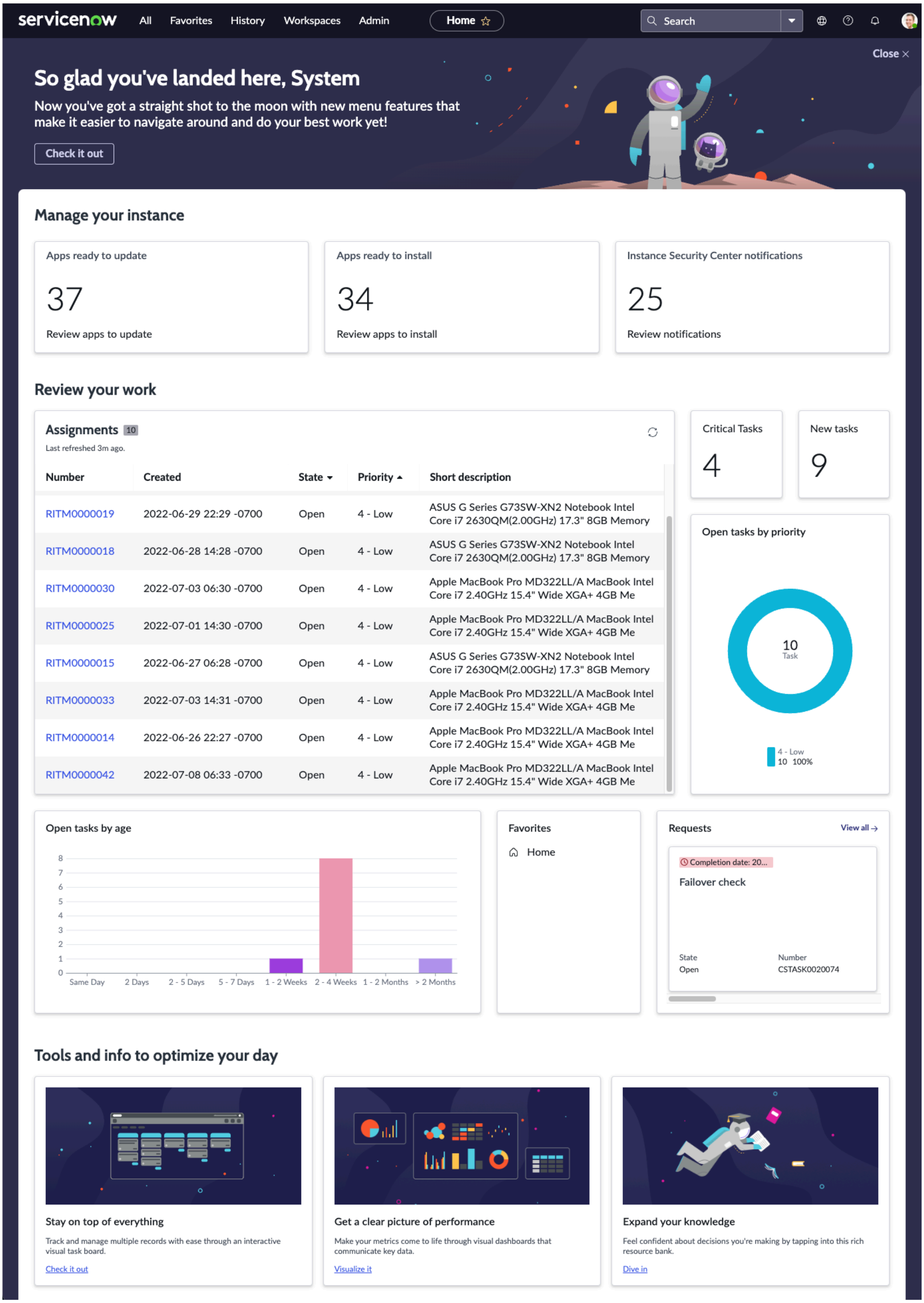
6. Select the **X** to close the Client state parameters section.
   The default footer is visible with two link sets: Frequent visits and Learn more.
7. To configure the links in the footer, select Link set 1 or Link set 2 under Container 5.
8. In the Config section, edit the links.
   For more information, see Link set UIB Setup in the ServiceNow Developer documentation.

Next Experience default admin landing page

Use the default admin landing page to see your admin-specific work at a glance and identify items that need attention including open tasks, security issues, and approvals.

As an admin, a variant of the landing page for admins displays for you. Admin landing pages might include the following items:

- Number of installed apps that have updated versions available
- Number of entitled but not activated or not installed apps
- Real-time security notifications
- Lists and visualizations of your assignments
- More resources to learn about features



New Customers

New customers launching on San Diego or customers that have performed a zBoot on their instance will have the Next Experience UI automatically enabled on their instance. These customers also have the Default landing page that ships with the Next Experience UI automatically enabled.

Existing Customers

Existing customers upgrading from a previous release will not see the default landing page upon activating the Next Experience UI. Existing customers will continue to see their existing start page (Homepage or Dashboard). By utilizing existing start pages, this provides administrators the ability to turn on the Next Experience UI and allow for users to begin using the new user interface, and provides administrators the time to create organization specific landing pages. Existing customers can use the Default Landing Page by modifying the **glide.login.home** system property, though it is recommended to perform testing on the Default Landing Page in a sub-product instance to verify it meets current user needs.

Performing admin user functions in Next Experience

Use admin functions in the Next Experience user menu to elevate roles, impersonate users, and configure a workspace.

Before you begin

Role required: admin

Procedure

1. Navigate to **User Menu**.
2. Select one of these user menu options for admins.

Field	Description
Impersonate user	Option to impersonate other authenticated users for testing purposes and to view impersonation logs. For more information, see Impersonate a user.
Elevate role	Option to elevate to a privileged role to gain access to the features of High Security Settings for the current session. For more information, see Elevated privilege roles. **Note:** Users granted the admin role can't elevate to a privileged role. Only the base system admin can be elevated.
Configure Workspace	Dynamic links to configuration pages to access configurations relevant to lists or forms more easily. These items display in the user menu when a workspace is in focus. ◦ **Configure workspace**: Link to configure the workspace in UI Builder. ◦ **Configure page**: Menu to configure page elements in the classic environment. The items display dynamically to show items that pertain to lists and items that pertain to forms.

Configure custom menus for Unified Navigation

Create custom menus in the Next Experience Unified Navigation that contain just what the users need to increase productivity and efficiency.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **Unified Navigation Menus**.
2. Select **New**.
3. On the form, fill in the fields.

Unified Navigation Menu form

Field	Description
Name	Name of your Unified Navigation Menu.
Menu Active	Menu that is active when checked.
Order	Order that the menu appears in place of other menus.
Application	Scope of the menu. **Global** is the default.
Hidden Roles	Roles that this menu is hidden from.
Visible Roles	Roles that this menu is visible to.

4. Select **Submit**.
5. To configure Unified Navigation configurable menu items, select your menu from the Unified Navigation Menus list.
6. Select **New**. The form displays the **Application** or **Module** field, depending on your selection.
7. On the form, fill in the fields.

Unified Navigation configurable menu items form

Field	Description
Menu	Name of the menu that you are adding the new menu items to.
Type	Type of menu item that you are creating. ◦ Application ◦ Module
Application or Module	**Application** or **Module** that you are adding as a menu item.
Application (scope)	Scope of the menu item. The default is **Global**.
Order	Order that the menu item appears in the menu list.

8. Select **Submit**.
9. Select **Save** or **Update**.
   The new menu is displayed. If it does not appear, ensure that active is marked and then refresh your instance.

Add a workspace to the Unified Navigation Workspaces menu

Configure the Unified Navigation to display a workspace in the Workspaces menu.

Before you begin

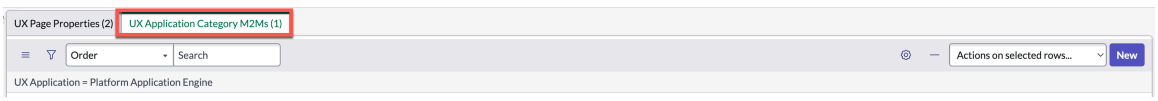
Role required: admin

About this task

The available workspace displays in the Unified Navigation when you have access to at least one workspace. Multiple workspaces display in the Workspaces menu when you have access to more than one workspace.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Experiences**.
2. Select the application that you want to add to the Workspaces menu on the Unified Navigation.
3. In related lists, select the **UX Application Category M2Ms** tab.



4. Select **New** in the UX Application Category M2Ms list.

   Note: The **New** button only displays if you have access to the selected application.

5. Select **Workspace** in the Experience Category column.
6. On the form, fill in the fields.

UX Application Category M2M form

Field	Description
Experience Category	Category of the experience added to the Unified Navigation. Select **Workspace**.
Application	Application that the experience applies to. Global is the default application and applies across the organization.
UX Application	UX application that you want to add to the **Workspaces** menu. Select the Workspace you want to display in the Workspaces menu.
Order	Order in which the Workspace you select is displayed in the Workspaces menu. **Note:** This option is enabled once the `glide.ui.next_experience.workspace_sort.` system property has been created. For more information, see Set the order of your workspaces in the Unified Navigation Workspaces menu.

7. Select **Submit**.
8. Refresh your browser to access the new workspace from the Workspaces menu.

Set the order of your workspaces in the Unified Navigation Workspaces menu

Set the order of your workspaces and control how they appear in the Unified Navigation Workspaces menu.

Before you begin

To enable ordering of your workspaces, you must create a system property *`glide.ui.next_experience.workspace_sorting`* and set the value to **Order**. For more information, see Add a system property.

Role required: admin

Procedure

1. In the filter navigator field, enter `sys_ux_registry_m2m_category_list.do` and press **Enter**.
   The UX Application Category M2Ms table appears. This table is used to store the association between an application and the experience category.
2. Select the Preview record icon for the workspace that you want to order.
3. Select **Open Record** to open the UX Application Category M2M form.
4. In the **Order** field, enter a numerical value.

   Note: The lowest ordered workspace appears first in the Workspaces menu.

5. Select **Update**.

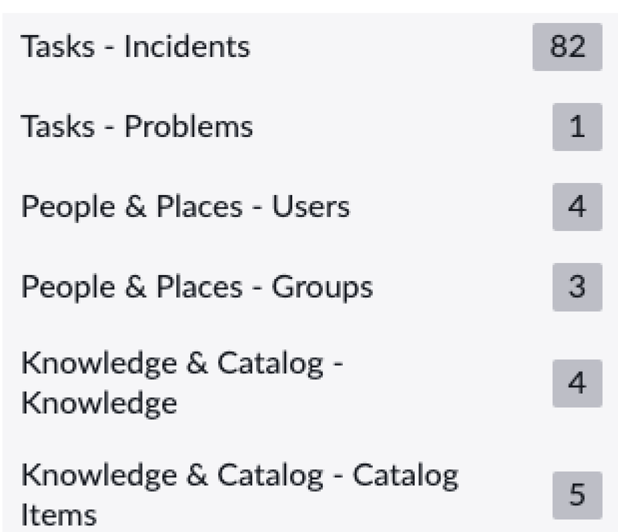
Configuring search in Next Experience

Administrators can customize Next Experience search settings. Add new searchable tables, modify the fields displayed for search results from a table, or add workspace applications to the search context menu for users.

Next Experience search is enabled by default in the Unified Navigation.

Add a searchable table

A search source specifies a table to include in Next Experience search. The search results page displays matching records and their counts on a per-table basis. Users can select a table to filter their search results, displaying only matching records from the selected table.

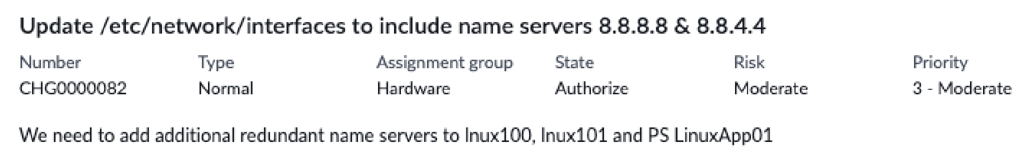


To make a table searchable in Next Experience, add it as a new search source. For details on this procedure, see Add a search source for Next Experience.

For the list of tables searchable by default in the base system, see Default global search sources for Next Experience.

Modify the fields displayed for each search result from a table

The text_search list view for a searchable table determines which fields the system uses to populate the title, field list, and description for each result from that table.

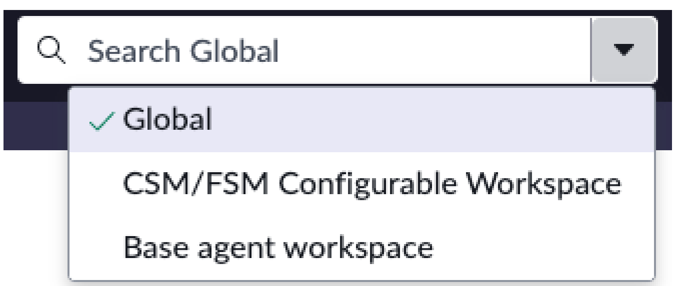


To learn how the system uses fields in the text_search list view to populate search result entries, see Text search views control format of global search results for tables.

For the list of fields included in the base system's text_search list views for the default searchable tables, see Default display fields for global search tables.

Add a workspace application to the search context menu

The search context menu enables users to view and open search results in available workspace applications as well as in global search.



To add a workspace application to the search context menu, see Add a workspace application to the Unified Navigation search context menu.

For details on using the search context menu, see View and open search results using workspace applications in Next Experience Unified Navigation.

For more information on configuring search settings in Next Experience, see Global search finds records from multiple tables.

Create custom notifications in Next Experience

Provide better context and information about users' work by creating custom content for in-product notifications in Next Experience.

Before you begin
Role required: admin

About this task
Create notifications with custom title and message content for your applications and use cases. Next Experience notifications appear as toast banners and in the Notifications menu.

Note: Next Experience notifications aren't supported in the legacy Agent Workspace.

Procedure

1. Navigate to **All** > **System Notification** > **Provider** > **Notifications**.
2. Select **New**.
3. On the form, fill in the fields.

Notifications form

Field	Description
Name	Name of the notification.
Application	Application scope of the notification.
Active	Option to activate the notification. The notification is active by default.
When to send	
Trigger	System action that triggers the notification. You can send the notification after a record is changed or after an event is triggered.
Inserted	Option to send the notification after a record is inserted. This field appears when you select **Record Change** in the **Trigger** field.
Updated	Option to send the notification after a record is updated. This field appears when you select **Record Change** in the **Trigger** field.
Event	Event that triggers the notification. For example, to send a notification after an incident is closed or resolved, you would select the `incident.inactive` event. By default, this event is logged in the system each time a user resolves or closes an incident. **Note:** You can select only an event that shares the same table as the notification. This field appears when you select **Event** in the **Trigger** field.
Table	Table to receive notifications about.
Conditions	Filter to specify the table records that users receive notifications about. For example, to send notifications about top-priority incidents, you would select **Incident [incident]** in the **Table** field and set the conditions to **[Priority] [is] [1 - Critical]**.
Who will receive	
Users	Users who receive the notification.

Field	Description
	Note: Notifications in messaging channels are sent only to users with ServiceNow accounts (sys_user profiles). Consumers and customer contacts are considered as guests and can't receive notifications in messaging channels.
Recipients listed in fields	Record fields that include users who receive the notification. For example, to send the notification to the record assignee, select **Assigned to**. **Note:** This field shows up only if you select a table.
Include the person whose action triggered the notification	Option to include the user who changed the record or triggered the event.
Recipient(s) listed in event parm1	Option to select whether Parm 1 contains a list of comma-separated sys_ids. For more information, see Classic Events.
Recipient(s) listed in event parm2	Option to select if Parm 2 contains a list of comma-separated sys_ids
Table containing recipients from event parm1	Table that is used to resolve the sys_id of the recipient **Note:** This field appears only when you select Event parm 1.
Table containing recipients from event parm1	Table that is used to resolve the sys_id of the recipient **Note:** This field appears only when you select Event parm 2.
Advanced event condition	Option to select when the recipients are from more than two tables. These are dynamic conditions.

4. From the form context menu, select **Save**.
5. Select the **Contents** tab and then select **New Provider Content**.
6. Select **Next Experience** as the content provider.
7. On the form, fill in the fields.

Notification Next Experience Content form

Field	Description
Name	An internal name for the notification content.
Notification	The notification trigger that sends the notification content.
Active	Option for whether the notification is sent when triggered.
Table	Table to receive notifications about.
Route	Next Experience Route
Message Heading	Header text at the top of the message. From the Select variables list, you can select variables to include your message heading.

Field	Description
Message	Secondary text of the message that follows the heading. From the Select variables list, you can select variables to include your message body.

Example

The following example shows the values for a notification with custom content that references the number and short description of an incident.

Field	Value
Name	Incident record update content
Notification	Incident records
Active	true
Message Heading	${number} changed
Message	Short description: ${short_description}

8. Select **Submit**.

Result

When triggered, users configured to receive the notifications see notifications with custom content as banners and in the Notifications menu in the Next Experience Unified Navigation.

The UI Notification Inbox [ui_notification_inbox] table lists all sent notifications and their recipients.

Trouble?

If users receive duplicate notifications, verify that the notification trigger has only one content provider. If the notification has both a Next Experience and Workspace content provider, remove the Workspace content provider from the notification trigger to send only the Next Experience notification with custom content.

Next Experience in-product help

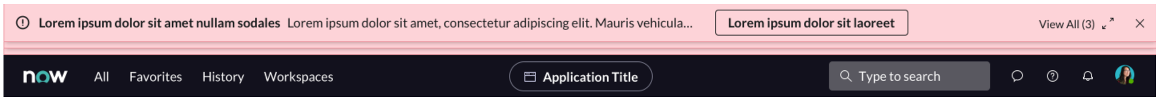
Providing instructions that display in your Next Experience UI can help orient your users to the UI and provide information about their tasks.

In-product help enables you to provide various types of instruction that appear in the UI to help users perform their work. These instructions include information about the UI page the user is looking at, embedded help content based on roles, onboarding users through a guided tour of the UI, and assistance setting up products. You can modify the content that appears in the Unified Navigation onboarding or create your own onboarding. For more information, see Adoption services.

Next Experience banner announcements

Banner announcements enable you to communicate planned maintenance, unplanned outages, or important events like ESPP stock plans or benefits enrollment to those affected or to everyone. You can target specific experiences or all experiences.

Note: Beginning with the San Diego release, configure banner announcements instead of updating the `glide.product.description` system property.



You can configure the following aspects of banner announcements:

- Use colors and icons to communicate the type of announcement and the importance of the banner announcement.
- Provide a link for information or to complete a task.
- Schedule banner announcements for a specific time.

> **Note:** If a user dismisses a banner announcement during a session and the announcement is still active, it will re-appear once the user logs out and back in to a new session.

Configure Next Experience banner announcements

Configure banner announcements to communicate important information to your users while they are in an experience.

Before you begin

Role required: announcement_admin or admin

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Configuration Settings** > **UX Banner Announcements** to create an announcement.
2. Select **New**.
3. On the form, fill in the fields.

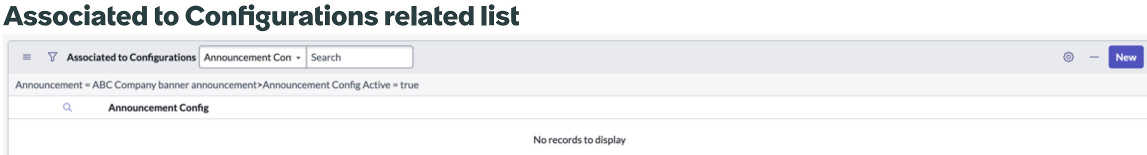
Banner Announcements form

Field	Description
Heading	Unique name for your banner announcement mapping, which will display as the title of the banner announcement. **Note:** The heading character limit is 100 characters.
Summary	Optional additional banner content, which displays below the Heading in the banner announcement. **Note:** The summary character limit is 200 characters.
Start	Date and time the banner announcement will begin displaying in the UI.
End	Date and time the banner announcement will stop displaying in the UI.
Color	Color to show the importance or urgency of the banner announcement.

Field	Description
Add a link	Option to provide a link in the banner announcement. **Note:** The link label character limit is 50 characters. Selecting this option displays the following link configuration fields: ◦ Click behavior: Behavior of the link when selected, either opening in the same window or a new window. ◦ Label: Text displayed with the link. ◦ URL: URL of the link.
Non-dismissible	Option to make the banner non-dismissible by users. Non-dismissible banners cannot be closed.
Non-stackable	Option to make the banner non-stackable. Non-stackable banners are displayed individually in the banner announcement area.
Show for	Scope of the banner announcement display, either for all logged-in users, users with specific roles or groups, or anonymous plus all logged-in users.
Icon	Icon to depict the urgency or category of the banner announcement. For example, a flame icon can show increased urgency and a graduation cap icon can notify of continuing learning opportunities.
Icon tooltip	Text describing the icon.
Content position	Options for the horizontal position of the banner content.

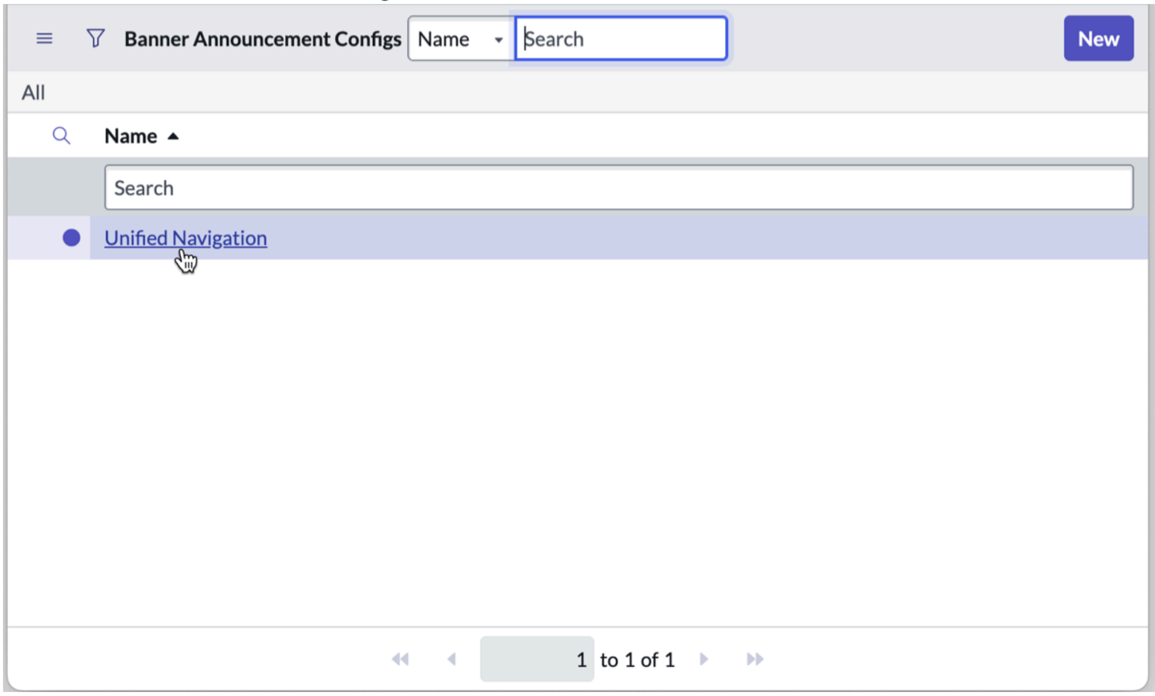
4. Right-click the form header and select **Save**.
   The Associated to Configurations related list displays at the bottom of the form.
5. In the Associated to Configurations related list, select **New**.

Associated to Configurations related list



6. In the Announcement Config field, select the Lookup using list icon .
7. Select **Unified Navigation** from the Banner Announcement Configs list.

Banner Announcement Configs list



8. **Optional:** On the Banner Announcement Mapping form, set the order of the banner announcement mapping.
   The lower the order of the banner announcement mapping, the higher the priority is of the banner announcement mapping.
9. On the Banner Announcement Mapping form, select **Submit**.
10. On the Banner Announcement form, select **Update**.

Exploring Next Experience pickers

Next Experience scope pickers provide easy consistent scope selection across your instance.

The scope selection menu icon ( ) displays in the Unified Navigation for users with roles that provide access to the application, domain, and update set scope pickers.

Any non-Global application scope displays a red circle on the scope selector menu icon ( ).

The instance tools icon ( ) displays the application scope and current update set in a horizontal row beneath the other tool icons in the Unified Navigation. To enable this feature, you must create a system property called `glide.ui.next_experience.instance_tools_disabled` and set it to **False**. When this feature is enabled, the scope selector icon is hidden.

- **Application scope**: Enables application developers to view and select the application where their changes apply. For more information, see Application scope.
- **Domain scope**: Defines what users can access. Only users with access to domain separation see the domain scope picker. For more information, see Domain scope.
- **Update set**: Enables admin users to choose an update set for making and tracking customizations. For more information, see Update set administration.

- **Crypto module selector**: Enables users with more than one cryptographic module to select a module when entering data. This picker displays instead of the encryption context selector when the Key Management Framework is enabled through the `com.glide.kmf.global` system property and the system property `glide_encryption.cle_replatforming_with_kmf sys_prop` is set to **opt_in**. For more information, see Create a cryptographic module.

Keyboard shortcuts for the scope selector menu

Add keyboard shortcuts for scope selector menus to be able to navigate scope selectors using your keyboard.

Keyboard shortcuts for scope selector menus must be configured. They aren't available by default.

Note: Each of the pickers below includes two system properties that the admin must create. The **Value** field of the first one must be set to true. The **Value** field of the second one must be set to the keyboard combo for the picker.

Scope selector menu keyboard shortcuts

Picker	Properties	Default key shortcut
Application	• glide.ui.keyboard.shortcuts.polaris.application_picker.enabled • glide.ui.keyboard.shortcuts.polaris.application_picker.key_combo	ctrl+alt+a
Domain	• glide.ui.keyboard.shortcuts.polaris.domain_separation_picker.enabled • glide.ui.keyboard.shortcuts.polaris.domain_separation_picker.key_combo	ctrl+alt+d
Update set	• glide.ui.keyboard.shortcuts.polaris.update_set_picker.enabled • glide.ui.keyboard.shortcuts.polaris.update_set_picker.key_combo	ctrl+alt+u

Next Experience client-side scripting global variables

Next Experience global variables are used in client scripts to determine whether Next Experience is applied to a page.

NOW.isUsingPolaris

Returns **true** if Next Experience is applied to the current page.

NOW.isPolarisWrapper

Returns **true** if the page is running in the Next Experience Unified Navigation. This global variable exists only in the Unified Navigation.

For more information about the Unified Navigation, see Using the Next Experience Unified Navigation.

Client script:

```
// Reload the current page in the unified navigator if not
 currently in the unified nav
```

```
if (NOW.isUsingPolaris && (!top.NOW ||
 top.NOW.isPolarisWrapper !== "true")) {
    var currentPath = window.location.pathname +
 window.location.search;
    top.window.location.href =
 "/now/nav/ui/classic/params/target/" +
 encodeURIComponent(currentPath)
}
```

Related topics

PolarisUI API - Scoped

Next Experience system properties

List of system properties related to the Next Experience UI.

Next Experience UI system properties

Property	Type	Default value	Description
glide.ui.polarisberg	true | false	true	Disables the Core UI styles for lists and forms in the Next Experience.
glide.ui.polaris.core_ui_exclude_dark_mode	true | false	true	Excludes dark theme in the classic environment.
glide.ui.polaris.dark_themes_enabled	true | false	true	Enables dark theming.
glide.ui.polaris.experience	true | false	true	Enables the Unified Navigation experience on platform.
glide.ui.polaris.global_search	true | false	true	Toggle the Unified Navigation search functionality in the header.
glide.ui.polaris.history.url.param_blocklist	string	["tinyId"]	URL parameters to ignore when removing duplicate URLs from the History menu.
glide.ui.polaris.list_style.enable_highlighted_value_style	true | false	true	Enable the highlighted value style on list cells.

Next Experience UI system properties (continued)

Property	Type	Default value	Description
			When false, a dot displays next to values in lists rather than a highlight color over the value.
glide.ui.polaris.style.hide_empty_list_image	true | false	true	Hide the graphic that appears when a screen with no records is selected. **Note:** This system property applies only to the Core UI.
glide.ui.polaris.menus	true | false	true	Toggle the Unified Navigation menus in the header. **Note:** If false is needed, it's recommended to hide menus from specific roles.
glide.ui.polaris.login.show_illustrations	string	true	Enables the display of illustrative graphics on the default login page.
glide.ui.polaris.login.style.background	RGB colors		Changes the login background color.

Next Experience UI system properties (continued)

Property	Type	Default value	Description
glide.ui.polaris.login.style.background_gradient_begin	RGB colors		Changes the colors of the beginning of the login background gradient.
glide.ui.polaris.login.style.background_gradient_end	RGB colors		Changes the colors of the end of the login background gradient.
glide.ui.polaris.login.style.mountain_primary	RGB colors		Changes the primary colors of the login mountain graphic.
glide.ui.polaris.login.style.mountain_secondary	RGB colors		Changes the secondary colors of the login mountain graphic.
overview_help.visited.navui	string	true	Determines if the pop-up for Onboarding appears when the user logs in to an instance using Next Experience UI for the first time.
glide.ui.polaris.nav_filter_accuracy_score	integer	75	Controls accuracy of the filtering in the Unified Navigation menus. The higher the number, the more accurate the match must be. A value of 100 means an exact match is required.

Measuring the performance of your instance in Next Experience

View the performance-based information, including the UI loading times, for any recently accessed Next Experience page by using the client interaction table.

Key Benefits

- Monitor your instance performance proactively and view this information for up to seven days.
- Identify and investigate performance issues, such as slow UI load times.
- View the server response times.

The following table lists the performance data that you can view in the client interaction table. You can find this table by navigating to **All** > **System Logs** > **Client Interactions**.

Next Experience client interaction table

Header items	Description
Created	Date and time that the record was created.
Total UI Time	Time, in milliseconds, that the page takes to load.
Content Download Time	Time, in milliseconds, that the content takes to get from the server to the client.
UXF Screen Route	Route that is used to load the page for the given experience. For example, if you're accessing the page from a list or form, Classic is displayed. If you're accessing a workspace, the route that is defined in UI Builder is displayed.
Referrer	URL being accessed.
Application	Application that the URL belongs to.
Type	Interaction that is being measured. Type options include: • PAGE_LOAD: Indicates that the interaction was a full page load. • NAVIGATION: Indicates that the interaction was routed within a single page application. • IN-PAGE: Indicates the time that the interaction within the page has taken and is captured for limited interactions.
Interruption	Type of page load interruption and information about the type of interruption. If there was no interruption, the record displays none. The page load interruptions can impact the total UI time metric.
Name	Contextual information for in-page interactions.
Data	Contextual information for in-page interactions.

View the server response time

View the server response times that are associated with your Next Experience instance by using the client interaction table.

Before you begin
Role required: admin

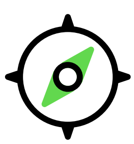
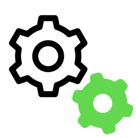
Procedure

1. Navigate to **All** > **System Logs** > **Client Interactions**.
2. Select the personalized list icon ( ) within the Unified Navigation banner frame.
3. Select the Interaction ID from the Available column and move it to the Selected column.
4. Select **OK**.
   The client interaction table reloads to show the changes.
5. Copy the interaction ID for the URL that you want to investigate.
6. From the filter navigator, enter `syslog_transaction.list` in the search field.
7. From the transaction table, select the personalize list icon ( ), within the banner frame.
8. From the Available column, select the Client Interaction ID and move it to the Selected column.
9. Select **OK**.
10. In the Transaction log list, select the Client Interaction ID and paste the interaction ID into the **Search** field.
11. Press **Enter**.
    The server response times for that particular interaction are displayed.

Configurable Workspace UI

The Configurable Workspace UI provides a suite of tools in a single, focused work area to help you answer customer questions and resolve issues.

Get started

Explore	Configure	Administer
		
Learn about Configurable Workspace concepts and features.	Set up your Configurable Workspace environments, tools, and access.	Manage and customize your Configurable Workspace.

Get started (continued)

Work	Reference	
Use your Configurable Workspace to answer customer questions and resolve issues.	Get additional information about the Configurable Workspace.	

Exploring Configurable Workspace

Get an overview of Configurable Workspace so you can understand how to configure and use it for your organization.

Configurable Workspace overview

A workspace provides a suite of tools in a single, focused work area that enables an agent to complete an entire job efficiently.

For example, an agent can receive an incoming case, review its details, communicate with the requester, and close the case within a single interface.

Configurable Workspace is a workspace app shell provided by the ServiceNow AI Platform®.

ServiceNow offers prebuilt Configurable Workspace experiences to target specific users and issues. For a list of workspaces ServiceNow offers, see List of workspaces.

UI Builder and Configurable Workspace

Admins use UI Builder to create a Configurable Workspace experience from scratch or to modify prebuilt workspaces to match their workflows, branding, and data needs.

UI Builder is a WYSIWYG web user interface builder that uses Next Experience Components as the building blocks for Configurable Workspace pages. Each component provides a specific function like showing a list of records or displaying a form.

Parts within a Configurable Workspace

Configurable Workspace experiences are made up of several parts that help agents navigate, manage, and work on records.

Lists

Lists display multiple records in a Configurable Workspace, such as cases, task, or incidents, so that agents can find and work on records quickly.

Forms

Forms enable agents to view, enter, and update details about the record.

Activity stream

The Activity stream helps agents stay informed by displaying a running history of updates and communications within a record.

Compose

The Compose area in a record page enables agents to communicate with customers and other agents through comments, work notes, and emails.

Tabs sidebar

The tabs sidebar is a flexible panel on a record page that provides agents with additional tools and information displayed as tabs like Agent assist and form templates.

Lists

Learn about the components in UI Builder that enable admins to create and customize lists and list pages for a Configurable Workspace.

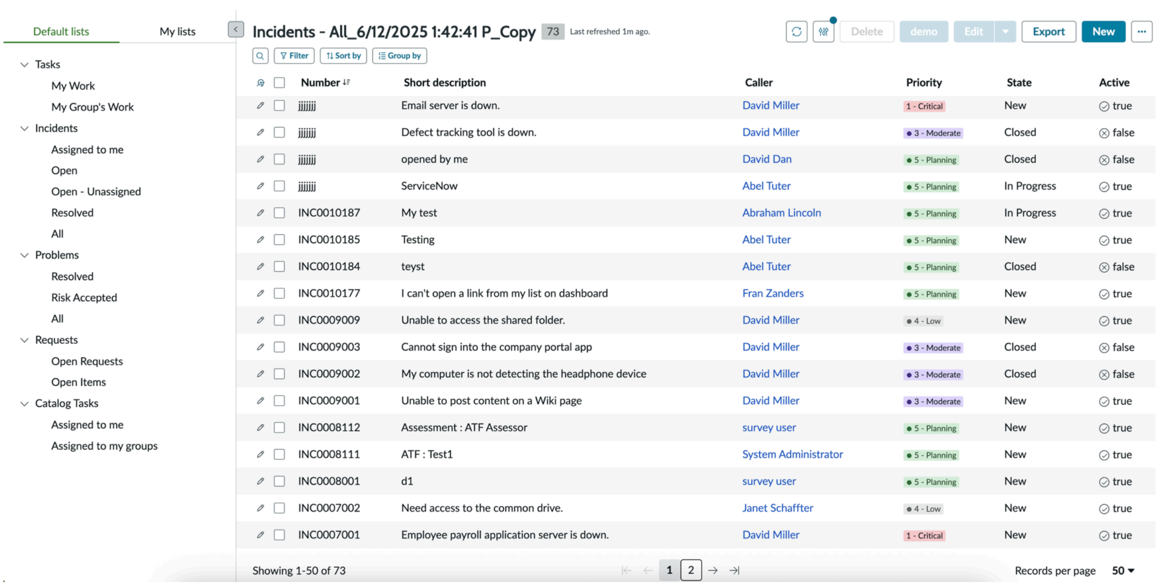
Lists overview

A list is a content page that displays zero or more records from a database table. The list has rows and columns. Each row is a record, and each column is a field from the record.

Lists display multiple records in a Configurable Workspace, such as cases, task, or incidents, so that agents can find and work on records quickly.

List pages in Configurable Workspace

A list page is a workspace page designed to help agents navigate, filter, and manage records. List pages for Configurable Workspace are created with the List page template in UI Builder. The List page template includes the Record List component bundle and List menu component.



Record List component bundle

The Record List component bundle includes the following components.

Record List Header

The Record List Header shows contextual information about the list.

Presentational List

The Presentational List displays the actual list of records from any data source in a tabular format.

The Record List component bundle is configured by admins in UI Builder.

List menu component

The List menu component displays all available and saved lists for the selected source. It's not included in the Record List component bundle itself but exists within a list page.

The List menu component includes the following tabs.

Default lists

The Default lists tab displays all available lists based on the selected source. These lists gives agents quick access to relevant records.

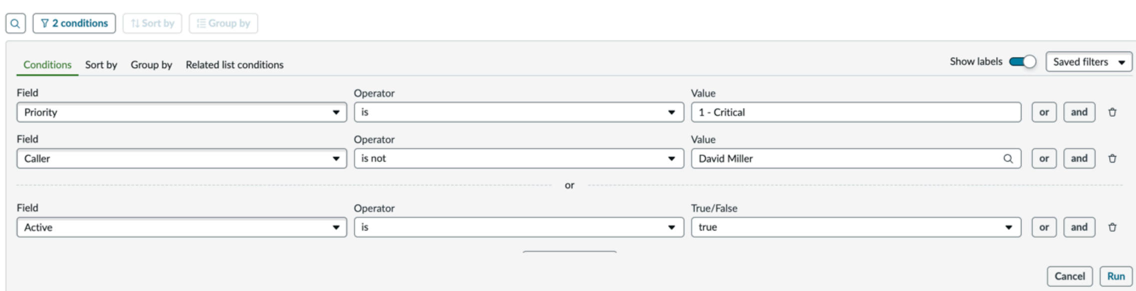
My lists

The My lists tab enables agents to access their saved lists that help streamline repeat workflows and create their own lists from an existing list or by selecting a new source.

The List menu component is configured by admins in UI Builder. For information on List menu component configurations, see List menu UIB Setup.

Predicate Builder

The Predicate Builder component enables agents to set conditions from the list header to filter which records appear in a list.



The Predicate Builder is configured by admins in UI Builder.

Forms

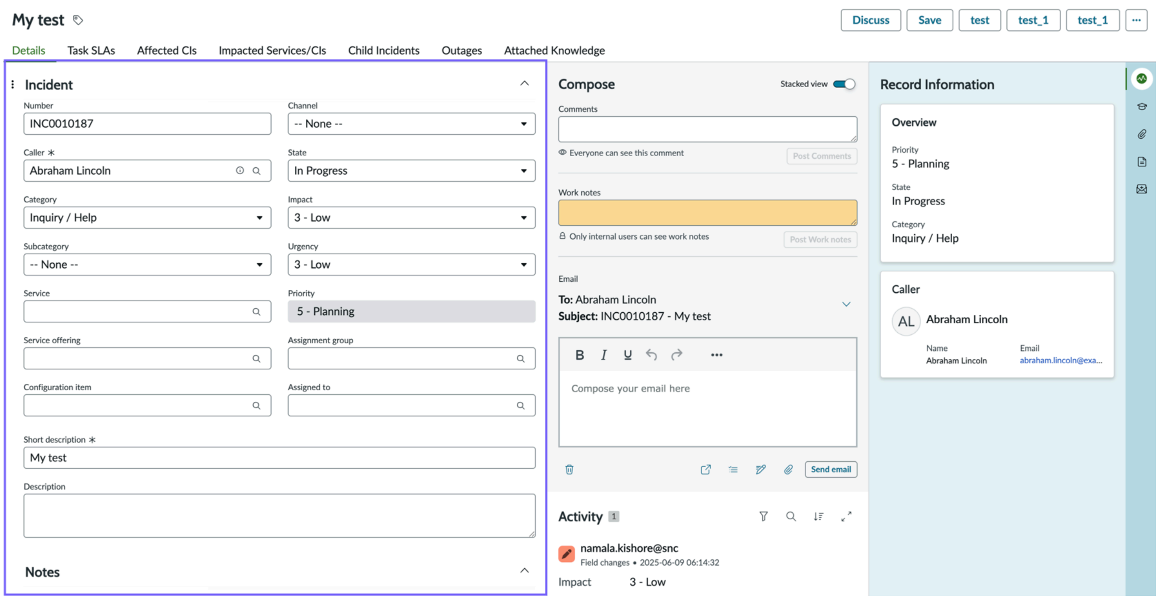
Learn about the components in UI Builder that enable admins to create and customize forms for a Configurable Workspace.

Forms overview

A form is a content page that displays fields and values for a single record from a database table.

Within a Configurable Workspace record, the form enables agents to view, enter, and update details about the record.

For example, an agent can update the short description, priority, assignment group, and status within an incident record form.



Form component bundle

The Form component bundle in UI Builder displays record data and enables interaction with fields. It includes the Form component connected to the Form controller.

The standard record page template in UI Builder uses the Form component bundle alongside other components that create a record page. While the standard record page template offers a useful starting point, admins can customize or build their own record pages as needed.

The Form component bundle is configured and customized by admins in UI Builder. For information on Form component configurations, see Form UIB Setup.

Related lists

While the form displays field-level data for a single record, related lists show records from other tables that are linked to the current record like tasks or associated incidents.

The standard record page template in UI Builder often displays related lists as tabs alongside the form that provides details about a record.

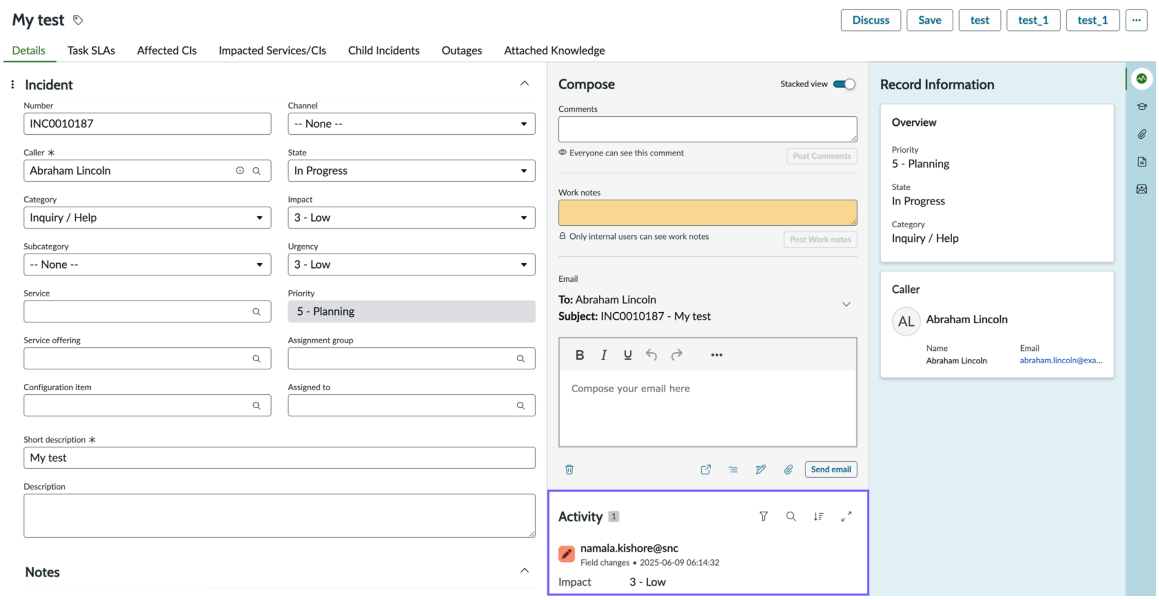
The Record List component bundle enables related lists as a list type and is configured and customized by admins in UI Builder.

Activity stream

Learn about the components in UI Builder that enable admins to create and customize the Activity stream for a Configurable Workspace.

Activity stream overview

The Activity stream helps agents stay informed by displaying a running history of updates and communications within a Configurable Workspace record like field changes, comments, work notes, and emails.



Activity Stream component

The Activity Stream component in UI Builder displays a list of changes made to a record.

The standard record page template in UI Builder uses the Activity Stream component alongside other components that create a record page. While the standard record page template offers a useful starting point, admins can customize or build their own record pages as needed.

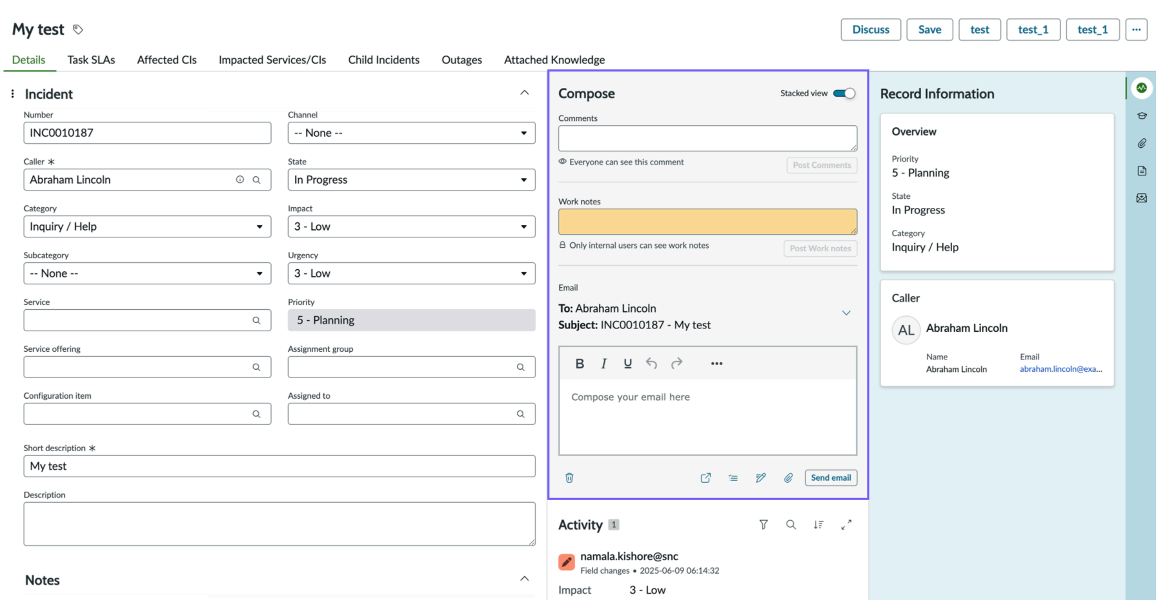
The Activity Stream component is configured and customized by admins in UI Builder. For information on Activity Stream component configurations, see Activity Stream UIB Setup.

Compose

Learn about the components in UI Builder that enable admins to create and customize the Compose section for a Configurable Workspace.

Compose overview

The Compose area in a Configurable Workspace record page enables agents to communicate with customers and other agents through comments, work notes, and emails.



Activity Stream Compose component

The Activity Stream Compose component enables agents to create new journal entries for the Activity stream and is configured and customized by admins in UI Builder. For information on Activity Stream Compose component configurations, see Activity Stream Compose UIB Setup.

Email components for Compose

Email composer

The Email composer component enables agents to draft and send emails from a separate workspace tab using the full email composer.

The Email composer component is configured and customized by admins in UI Builder. For information on Email composer component configurations, see Email composer UIB Setup.

Email composer (mini)

The Email composer (mini) component enables agents to draft and send emails directly from the record page using the mini email composer.

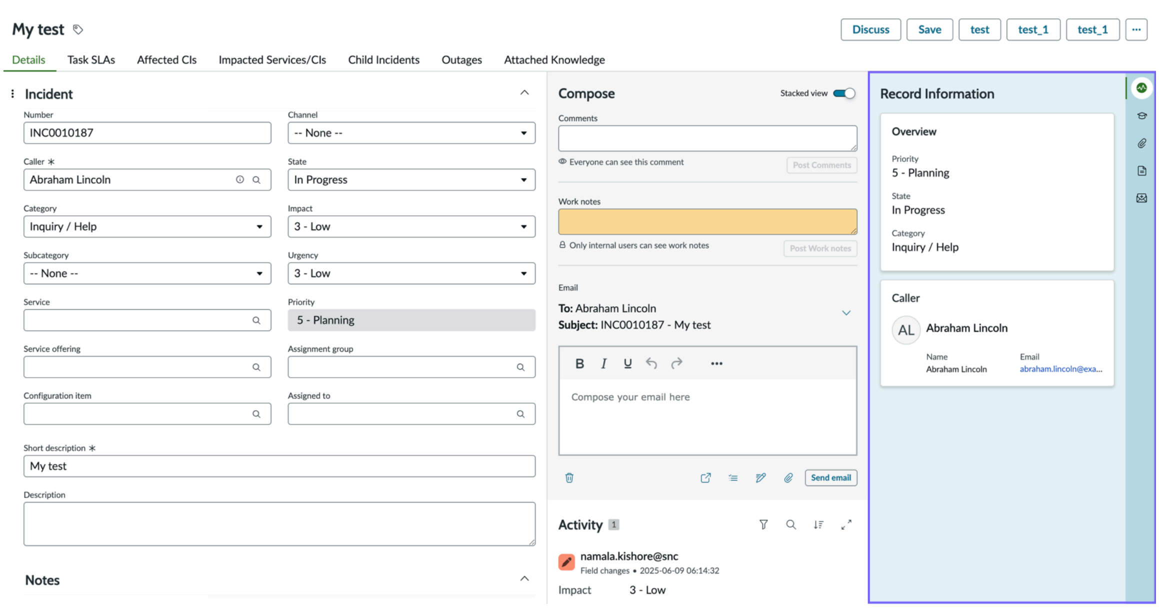
The Email composer (mini) component is configured and customized by admins in UI Builder. For information on Email composer (mini) component configurations, see Email composer (mini) UIB Setup.

Tabs sidebar

Learn about the components in UI Builder that enable admins to create and customize the tabs sidebar for a Configurable Workspace.

Tabs sidebar overview

The tabs sidebar is a flexible panel on a record page that provides agents with additional tools and information displayed as tabs.



Tabs component

The Tabs component displays tabs for the contextual sidebar is configured and customized by admins in UI Builder. For information on Tabs component configurations, see Tabs UIB Setup.

Standard record page tabs

The standard record page template in UI Builder displays some tabs by default. If you're using a prebuilt workspace like CSM Configurable Workspace or Service Operations Workspace, additional tabs may be configured for you based on the needs of that product.

The following components are added as tabs for the standard record page template.

Agent assist
: Agent assist helps an agent resolve issues by providing a list of resources related to an open record's short description.

Attachments
: The Attachments tab enables an agent to add, preview, download, or remove files from the current record.

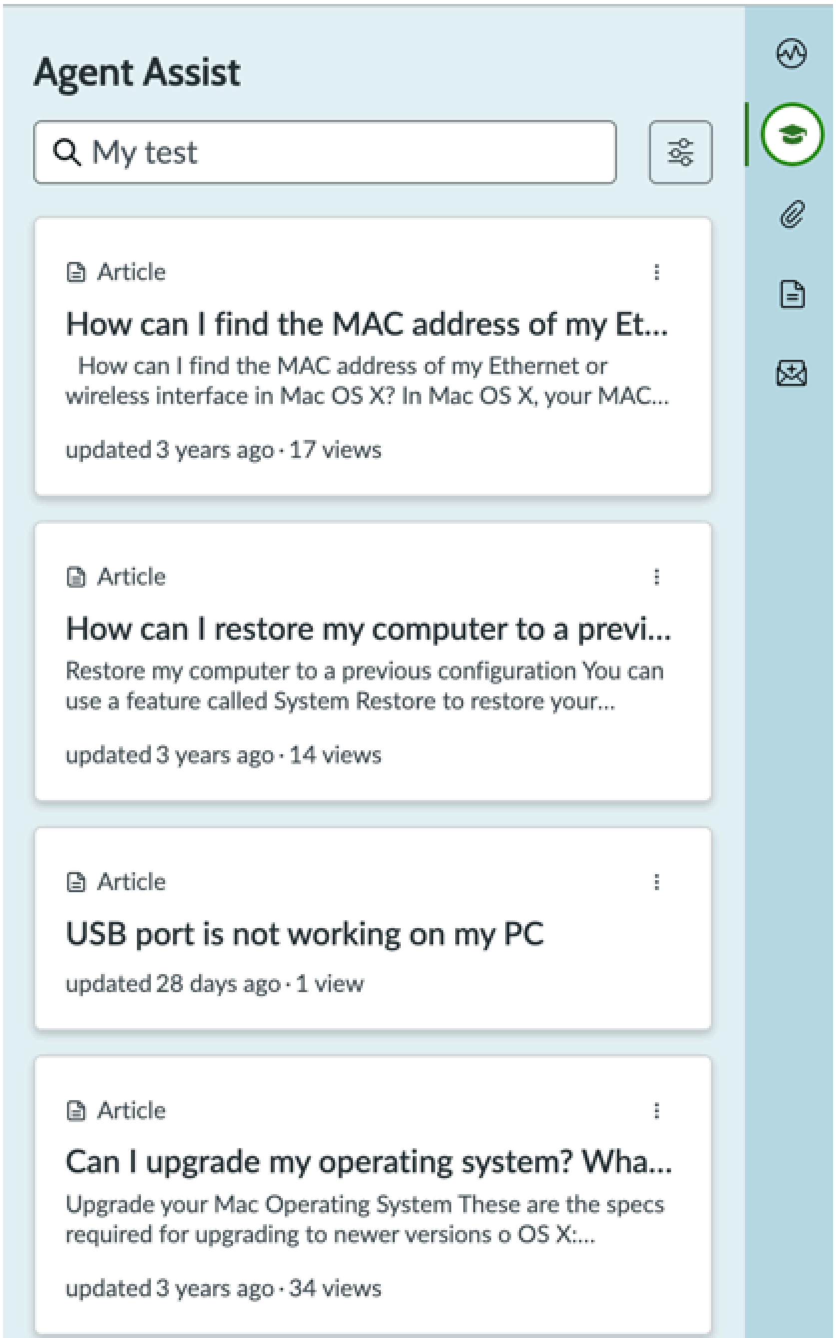
Form templates
: Form templates simplify the process of submitting new records by populating fields automatically.

Agent assist

Learn about the Agent assist component in the tabs sidebar for a Configurable Workspace record page.

Agent assist helps an agent resolve issues by providing a list of resources related to an open record's short description.

It appears as a tab within the tabs sidebar for a standard record page.



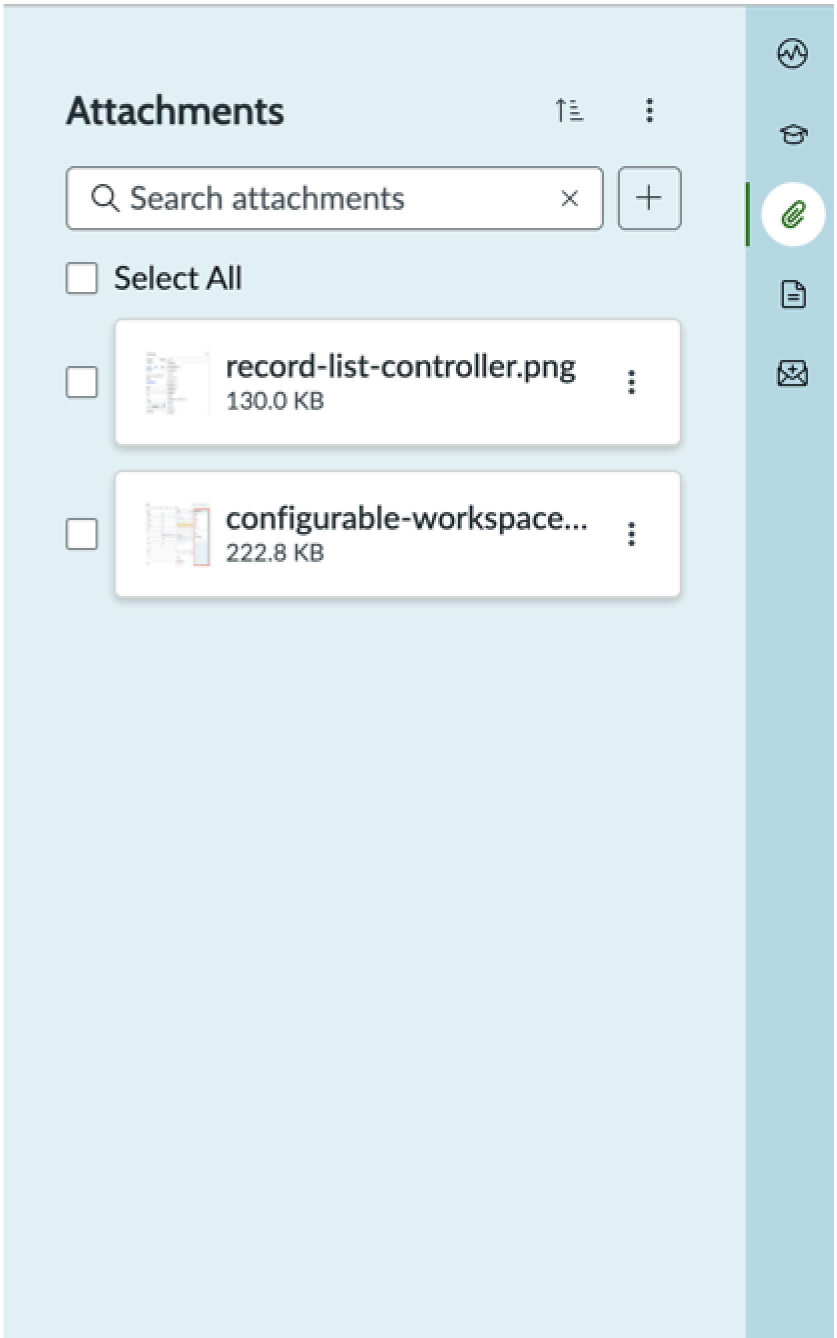
The Agent assist component is configured and customized by admins in UI Builder. For information on Agent assist component configurations, see Agent assist UIB Setup.

Attachments

Learn about the Attachments component in the tabs sidebar for a Configurable Workspace record page.

The Attachments tab enables an agent to add, preview, download, or remove files from the current record.

It appears within the tabs sidebar for a standard record page.



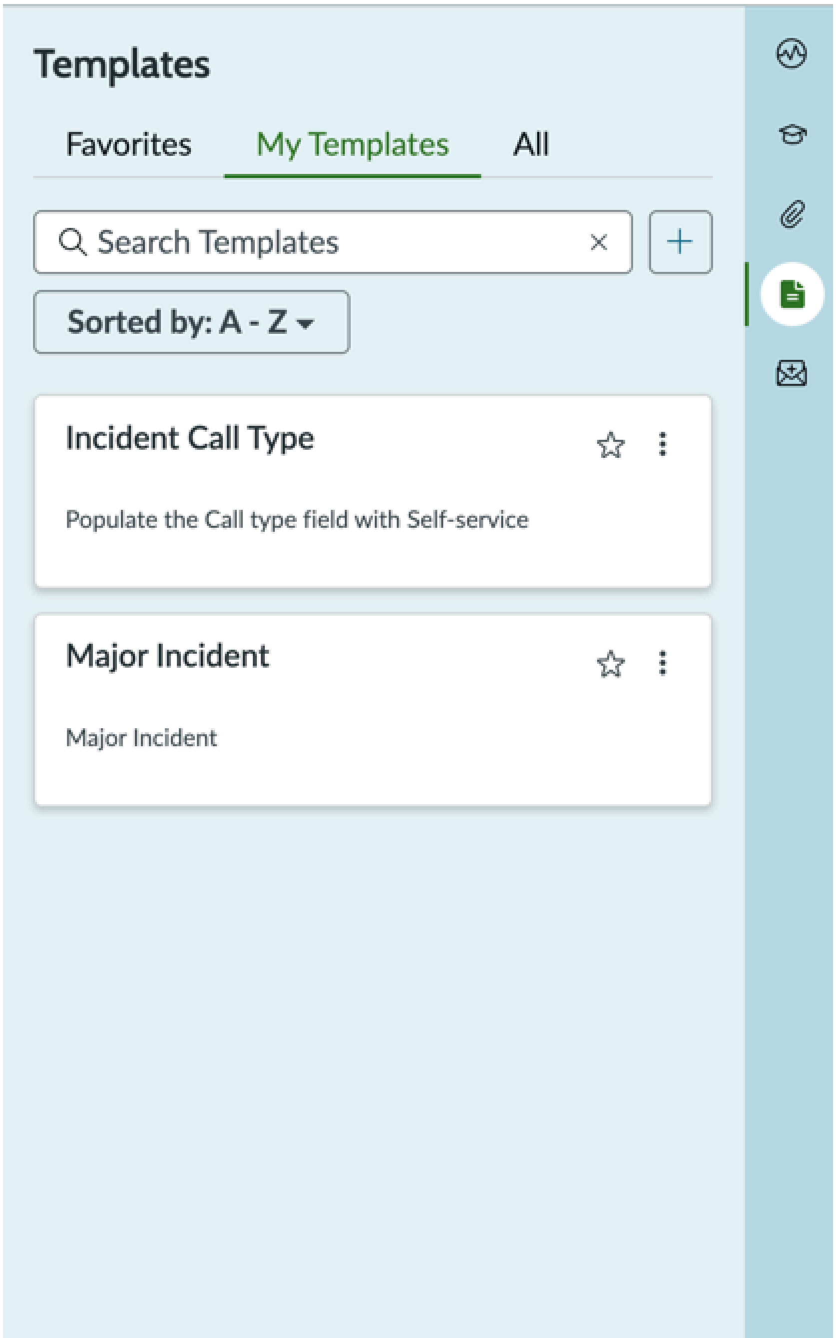
The Attachments component is configured and customized by admins in UI Builder. For information on Attachments component configurations, see Attachments UIB Setup.

Form templates

Learn about the Form Templates component in the tabs sidebar for a Configurable Workspace record page.

Form templates simplify the process of submitting new records by populating fields automatically. Agents can create form templates and update existing form templates to automate data entry on reoccurring records.

It appears as a tab within the tabs sidebar for a standard record page.



The Form Templates component enables agents to create and update form templates. It's configured and customized by admins in UI Builder. For information on Form Templates component configurations, see Form Templates UIB Setup.

Configuring Configurable Workspace

Configure a Configurable Workspace using UI Builder.

Note:

ServiceNow offers prebuilt Configurable Workspace experiences to target specific users and issues like CSM Configurable Workspace.

These prebuilt workspaces can be updated and modified in UI Builder instead of creating an experience from scratch.

For a list of prebuilt workspaces ServiceNow offers, see List of workspaces.

To update an existing Configurable Workspace experience, see Open a Configurable Workspace experience in UI Builder

Create a Configurable Workspace experience

Create a Configurable Workspace experience from scratch using UI Builder and the Workspace App Shell.

Create a Configurable Workspace page

Create a Configurable Workspace page from scratch or with a page template in UI Builder.

UI Builder

Receive additional, detailed documentation on configuring and using UI Builder.

Create a Configurable Workspace experience

Create a Configurable Workspace experience from scratch using UI Builder and the Workspace App Shell.

Before you begin

Role required: ui_builder_admin, admin

Note:

ServiceNow offers prebuilt Configurable Workspace experiences to target specific users and issues like CSM Configurable Workspace.

These prebuilt workspaces can be updated and modified in UI Builder instead of creating an experience from scratch.

For a list of prebuilt workspaces ServiceNow offers, see List of workspaces.

To update an existing Configurable Workspace experience, see Open a Configurable Workspace experience in UI Builder

Procedure

1. Navigate to **All** > **Now Experience Framework** > **UI Builder**.
2. Create an experience by selecting **Create** > **Experience**.
   A modal opens with fields to create an experience.
3. Complete the following fields in the modal.

   Name

   Enter a name for the experience.

   App shell UI

   Select the **Workspace App Shell** from the menu.

   URL path

The URL path is created automatically based on the experience name.

Landing path

The landing path is a prefix used to reach the experience home page. It appears automatically as `home`.

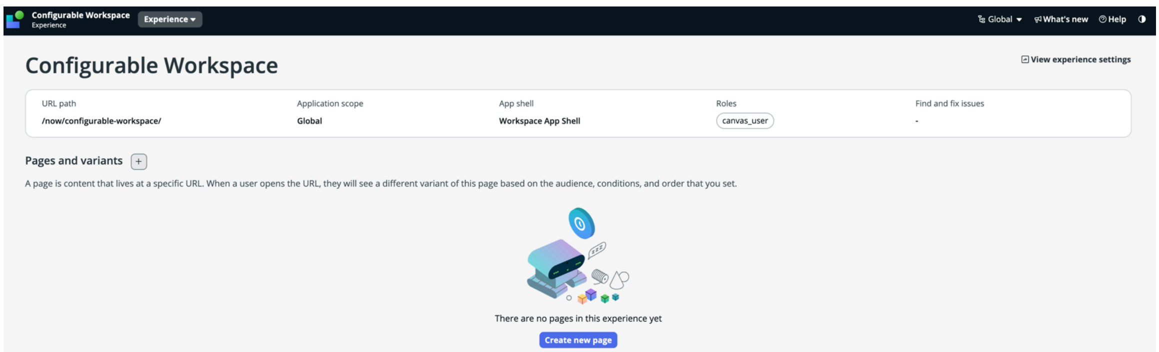
Roles

Define the roles that can access the experience. If you leave this field empty, the experience is open to all logged-in users by default.

4. Select **Create**.
   A modal opens that confirms the experience is created.
5. Select **Open your experience**.

Result

Your Configurable Workspace experience opens in UI Builder.



What to do next

Create a Configurable Workspace page

Create a Configurable Workspace page

Create a Configurable Workspace page from scratch or with a page template in UI Builder.

Before you begin

Role required: ui_builder_admin, admin

Create a Configurable Workspace experience

Procedure

1. Navigate to **All** > **Now Experience Framework** > **UI Builder**.
2. Select **Experiences**, and select your experience from the list.
   Your experience opens in UI Builder.
3. Select **Create a new page**.
4. Select a page template or **Create from scratch instead**.
   Templates enable you to create pages quickly by providing the framework for common Configurable Workspace pages, such as a standard record page or list page.
5. Enter a name and URL path for your page, and select **Continue**.
6. Review the URL parameters, and select **Looks good**.
7. Create the variant for your page by completing the following fields.

A page variant in UI Builder is a variation of a page that exists at the same path and targets different audiences depending on audience criteria.

Name

Enter a name for your variant.

Audiences

Add the roles that you want to provide access to the variant. When the field is empty, everyone with access to the experience can also access the variant.

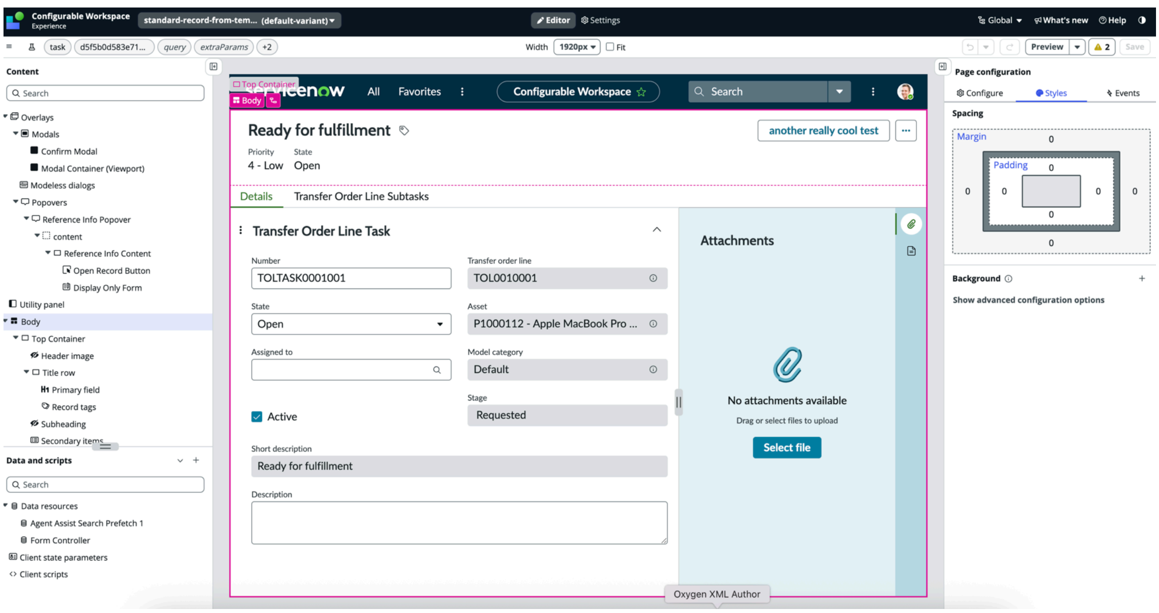
Conditions (optional)

Create a query string to specify when to display the variant.

8. Select **Create**.

Result

Your Configurable Workspace page opens in UI Builder.



Administering Configurable Workspace

Admins can enable additional features and make changes that affect the Configurable Workspace experience for agents.

Open a Configurable Workspace experience in UI Builder

Access your Configurable Workspace experience in UI Builder for editing.

Administering lists for Configurable Workspace

Administer list features that aren't configured in UI Builder with components.

Administering forms for Configurable Workspace

Administer form features that aren't configured in UI Builder with components.

Administering Activity stream for Configurable Workspace

Administer Activity stream features that aren't configured in UI Builder with components.

Administering emails in Configurable Workspace

Administer email features that aren't configured in UI Builder with components.

Customizing Configurable Workspace with declarative actions

Engage with your Configurable Workspace forms, fields, lists, and related list pages by adding custom actions.

Reflow for Configurable Workspace

Reflow enables pages and content to be zoomed up to 400% through your browser settings without loss of content or functionality.

Resize record page modals in Configurable Workspace

Enable resizing for record page modals in your Configurable Workspace

Enable asynchronous record addition for the multi-record associator

Load large record selections in the background when adding them to related lists.

Open a Configurable Workspace experience in UI Builder

Access your Configurable Workspace experience in UI Builder for editing.

Before you begin
Role required: admin, ui_builder_admin

Procedure

1. In the navigation filter, navigate to **All** > **Now Experience Framework** > **UI Builder**.
2. Select **Experiences**.
3. Select your experience.

Result
Your configurable experience opens in UI Builder.

Administering lists for Configurable Workspace

Administer list features that aren't configured in UI Builder with components.

Fetch your list record count asynchronously

Users with large lists created from large tables can use the `glide.ui.fetch.list.record.count.asynchronously` property to continue interacting with their list, while the total record count loads.

Fetch your list record count asynchronously

Users with large lists created from large tables can use the `glide.ui.fetch.list.record.count.asynchronously` property to continue interacting with their list, while the total record count loads.

Before you begin
Role required: admin

Procedure

1. Navigate to **All** > **System Properties** > **All Properties**.
2. Select **New**.
3. On the form, fill in the fields.

System Property form

Field	Description
Name	The name of your system property as `glide.ui.fetch.list.record.count.asynchron`
Description	Type a brief, descriptive phrase describing the function of the property.
Choices	Comma-separated values for a choice list. If you need a different choice list label and value, use an equal sign (=) to separate the label from the value. For example, Blue=0000FF, Red=FF0000, Green=00FF00 displays Blue, Red, and Green in the list, and saves the corresponding hex value in the property value field.
Type	true | false
Value	Set the desired value for property. ◦ **True** to enable this feature. ◦ **False** to disable this feature.
Ignore cache	The system stores system property values in server-side caches to avoid querying the database for configuration settings. When you change a system property value, the system always flushes the cache for the sys_properties table. Use this field to determine whether to flush this property's value from all other server-side caches. The default value of false causes the system to not ignore flushing caches, which results in flushing all server-side caches and retrieving the current property value from the database. Set this field to false when you want to ensure all caches have the current property value. The true value causes the system to ignore flushing some server-side caches, which results in only flushing the cache for the sys_properties table and preserving the prior property value in all other caches. Set this field to true to avoid the performance cost of flushing all caches and retrieving new property values. Typically, you should only set this field to true when you have a system property that changes more frequently than once a month, and the property value is only stored in sys_properties table.
Private	Set this property to true to exclude this property from being imported via update sets. Keeping system properties private prevents settings in one instance from overwriting

Field	Description
	values in another instance. For example, you may not want a system property in a development instance to use the same value as a production instance.
Read roles	Define the roles that have read access to this property.
Write roles	Define the roles that have write access to this property.
Application	The scope of the feature is enabled **Global** by default.

4. Select **Update**.
   The property is now active and the list loads asynchronously.

Administering forms for Configurable Workspace

Administer form features that aren't configured in UI Builder with components.

Set up a form header in Configurable Workspace

You can create a form header for use in Configurable Workspace.

Set up a highlighted value in a form header in Configurable Workspace

You can configure fields that appear as highlighted values in a form header in Configurable Workspace.

Set up script field types in Configurable Workspace

Enable your Configurable Workspace to support script field types.

Configure journal field tile icons and colors in Configurable Workspace

You can configure custom icons and colors in your journal field tiles that appear in your activity stream.

Set up a character counter for journal fields

A character counter displays the number of remaining characters in a journal field.

Set up automatic resizing for fields

Enable multi-line text, HTML, and journal fields to display longer content automatically without requiring agents to scroll.

Set up suggestions for mentions based on record access

Set up @mentions that display suggestions based on recipients with access to view the record.

Display field values as interaction record tab titles

Display field values, such as contact or consumer names, as titles on interaction record tabs in Configurable Workspace.

Set up a form header in Configurable Workspace

You can create a form header for use in Configurable Workspace.

Before you begin

Role required: workspace_admin, ui_builder_admin, admin

About this task

After creating a form header, you must link it to a form header configuration if you want it to appear in Configurable Workspace.

One form header configuration is included with Configurable Workspace. You can use this configuration out of the box without completing any additional configuration steps.

Procedure

1. Create a form header.
   a. Navigate to **Now Experience Framework** > **Configuration Settings** > **UX Form Header**.
   b. Click **New**.
   c. Fill in the fields on the Ribbon Setting form.
   d. Click **Submit**.
2. Add the form header to the form header configuration.
   a. Navigate to **Now Experience Framework** > **Configuration Settings** > **UX Header Configurations**.
   b. Select the header configuration.
   c. In the Workspace Form Headers related list, click **Edit**.

      Note: You may need to configure the form to display the related list.

   d. Move the desired form header from the left column to the right column to add it to the header configuration.
   e. Click **Save**.

Change form header levels

Customize your Workspace in UI Builder by hiding the first section title or changing the level of section headings that appear on forms.

Before you begin

Role required: ui_builder_admin

Procedure

1. Open an existing Workspace page or create a new page in UI Builder.
2. **Optional:** To hide the first section title on a Workspace form:
   a. Select a form on the Workspace page.
   b. Navigate to the Form Controller, and select **Hide first section title**.
3. **Optional:** To change a heading level:
   a. Select a form on the Workspace page.
   b. Select the header that you want to edit on the form, and navigate to the Form Controller.
   c. Select a heading level from the Level menu.

Set up a highlighted value in a form header in Configurable Workspace

You can configure fields that appear as highlighted values in a form header in Configurable Workspace.

Before you begin
Role required: workspace_admin, ui_builder_admin, admin

About this task
After creating a highlighted value, you must link it to a highlighted value configuration if you want it to appear in Configurable Workspace.

Note: You can also use highlighted values from Workspace in Configurable Workspace if you link the value to the highlighted value configuration.

Procedure

1. Create a highlighted value.
   a. Navigate to **All** > **Now Experience Framework** > **Configuration Settings** > **UX Highlighted Values**.
      You can also edit highlighted values by selecting the user menu when the list you want to edit is in focus, and navigating to **Configure Workspace** > **Configure page** > **Highlighted Values.**
   b. Click **New**.
   c. Fill in the fields on the Highlighted Value form and click **Submit**.
   d. In the Highlighted Values list, click the record you created .
   e. In the Highlighted Value Conditions related list, click **New**.
   f. Fill in the fields on the Highlighted Value Condition form.
   g. Select **Submit**.
2. Add the highlighted value to the highlighted value configuration.
   a. Navigate to **Now Experience Framework** > **Configuration Settings** > **UX Highlighted Values Configurations**.
   b. Select the configuration.
   c. In the Highlighted Values related list, click **Edit**.
   d. Move the desired value from the left column to the right column to add it to the selected configuration.
   e. Select **Save**.

Set up script field types in Configurable Workspace

Enable your Configurable Workspace to support script field types.

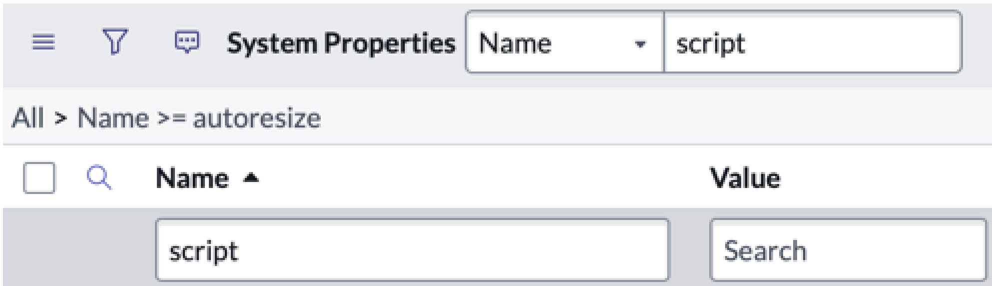
Before you begin
Role required: admin

Procedure

1. In the navigation filter, enter `sys_properties.list`.

   The entire list of properties in the System Properties [sys_properties] table appears.

2. Select **Name** for the search value, and enter `script` into the search bar.

3. Configure the following system properties for the script field.

System property	Configuration
glide.ui.workspace.script.code_editor.enable	Determines whether to show script fields in forms with a code editor component.
glide.ui.workspace.script.code_editor.autoresize_line_limit	Determines the line number after which the scroll bar should appear for the code editor component.

Configure journal field tile icons and colors in Configurable Workspace

You can configure custom icons and colors in your journal field tiles that appear in your activity stream.

Before you begin

Role required: admin

About this task

You may want to configure custom colors and icons to better identify your fields.

Procedure

1. Navigate to **All** > **System Definition** > **Dictionary**.
2. In the search bar, locate the **work_notes** for **task** and select.
3. In the related links, select **New** in the **Attributes** table.
4. Select the search icon and locate one of the following options to configure.
   - Workspace activity stream background
   - Workspace activity stream tile icon
   - Workspace activity stream icon color
5. In the **Value** field, select from the following options.
   - neutral
   - yellow

- magenta
- pink
- orange
- brown
- green
- green-yellow
- blue

6. Click **Submit**.

Set up a character counter for journal fields

A character counter displays the number of remaining characters in a journal field.

Before you begin

Role required: admin

Procedure

1. Navigate to `sys_properties.list`.
2. Add a system property named *`glide.ui.textarea.character_counter`*.

   For more information on adding system property, see Add a system property.
3. Set the Value to **true**.
4. Select **Submit**.

Set up automatic resizing for fields

Enable multi-line text, HTML, and journal fields to display longer content automatically without requiring agents to scroll.

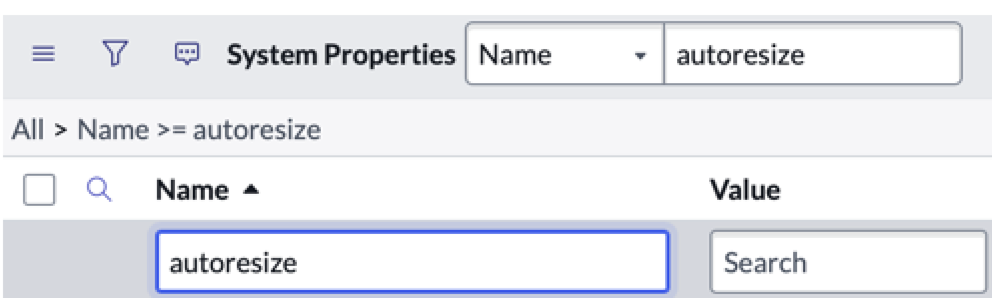
Before you begin

Role required: admin

Procedure

1. In the navigation filter, enter `sys_properties.list`.

   The entire list of properties in the System Properties [sys_properties] table appears.
2. Select **Name** for the search value, and enter `autoresize` into the search bar.

3. Select an autoresize system property to enable autoresize and set a line limit.

Autoresize system properties

Configure autoresize system properties that enable users to automatically adjust the size of multi-line text, HTML, and journal fields.

System property name	Function	Configuration
`glide.ui.textarea.autoresize_line_limit`	Determines the line number after which the scroll bar should appear for the text area component in all text area fields.	Enter a maximum value for text area fields to automatically resize.
`glide.ui.journal.use_html`	Converts all journal fields with a text area subtype to HTML editor fields.	Set the Value field to **true**.
`glide.ui.journal.html.editor.autoresize`	Activates the autoresize plugin in all journal fields with the HTML subtype.	Set the Value field to **true**.
`glide.ui.journal.html.editor.autoresize_line_limit`	Determines the line number after which the scroll bar should appear for the HTML editor component in all journal fields with the HTML subtype.	Effective if `glide.ui.journal.html.editor.aut` is set to true. Enter a maximum value for journal fields to automatically resize.
`glide.ui.html.editor.autoresize_line_limit`	Determines the line number after which the scroll bar should appear for the HTML editor component in all HTML fields.	Effective if autoresize is added to `glide.ui.html.editor.v5.enabled_` Enter a maximum value for HTML fields to automatically resize.
`glide.ui.html.editor.v5.enabled_plugins`	Controls the availability of specific features in the HTML editor with specified plugins.	Add the autoresize plugin.
`glide.activity.compose.textarea.autoresize_line_limit`	Determines the line number after which the scroll bar should appear for the text area component in all Activity stream textarea fields.	Enter a maximum value for text area fields to automatically resize.
`glide.activity.compose.html.autoresize_line_limit`	Determines the line number after which the scroll bar should appear for the HTML editor component in all Activity stream journal fields with the HTML subtype.	Effective if `glide.activity.compose.html.auto` is set to true. Enter a maximum value for journal fields to automatically resize.
`glide.activity.compose.html.autoresize`	Activates the autoresize plugin in all Activity stream journal fields with the HTML subtype.	Set the Value field to **true**.

Set up suggestions for mentions based on record access

Set up @mentions that display suggestions based on recipients with access to view the record.

Before you begin

Role required: admin

About this task

An @mention is any posted update that contains @username anywhere in the body of the message.

When you use @mentions, context-based suggestions display a list of recipients with access to view the record.

Procedure

1. Navigate to `sys_properties.list`.
2. Add a system property named *glide.ui.mentions.check_record_visibility*.

   For more information on adding system property, see Add a system property.
3. Set the Value to **true**.
4. Select **Submit**.

Display field values as interaction record tab titles

Display field values, such as contact or consumer names, as titles on interaction record tabs in Configurable Workspace.

Before you begin

Role required: workspace_admin, ui_builder_admin, admin

About this task

Note: This task applies to Configurable Workspace.

Configure the *sessionTabTitle* property to identify the fields that can be used in interaction record tab titles. Enter fields in this property as a comma separated string.

The system evaluates these fields in the order that they appear in the string. The first field that has a value is used as the interaction record tab title. If none of the fields in the string have values, the system displays the record number as the tab title.

Note: Configured fields must appear on the interaction record.

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Experiences** > **Base agent workspace**.
2. In the UX Page Properties list, click the *sessionTabTitle* property.
3. In the **Value** field, enter the fields to use in interaction record tab titles. Enter the fields as a comma separated string. The default string is *contact,consumer,number*.

   Note: Configured fields must appear on the interaction record.
4. Click **Update**.

Administering Activity stream for Configurable Workspace

Administer Activity stream features that aren't configured in UI Builder with components.

Configure Activity stream

Set up the options of how agents can interact with Activity stream to make their job easier.

Disable the Post button from disappearing in Activity stream

Disable the Post button from disappearing in Activity stream when mandatory fields aren't filled in. The Post button is functional even when mandatory fields aren't filled in.

Display avatars on Activity stream tiles

Configure Activity stream tiles to display avatars instead of icons, or both avatars and icons.

Create tags for the Activity stream

Enable your agents to filter through activities in the Activity stream with custom tags.

Enable the Show more link in the Activity stream

Enable the Show more link in Activity stream to configure the details you want to see in emails displayed in the Activity stream. You can select the email details you want to see, for example sent/received emails.

Create filter sets in the Activity stream

Create filter sets with custom filter settings in the Activity stream.

Restrict access to creating filter sets in the Activity stream

Restrict specified agents from creating filter sets in the Activity stream.

Configure Activity stream

Set up the options of how agents can interact with Activity stream to make their job easier.

Before you begin

Role required: admin

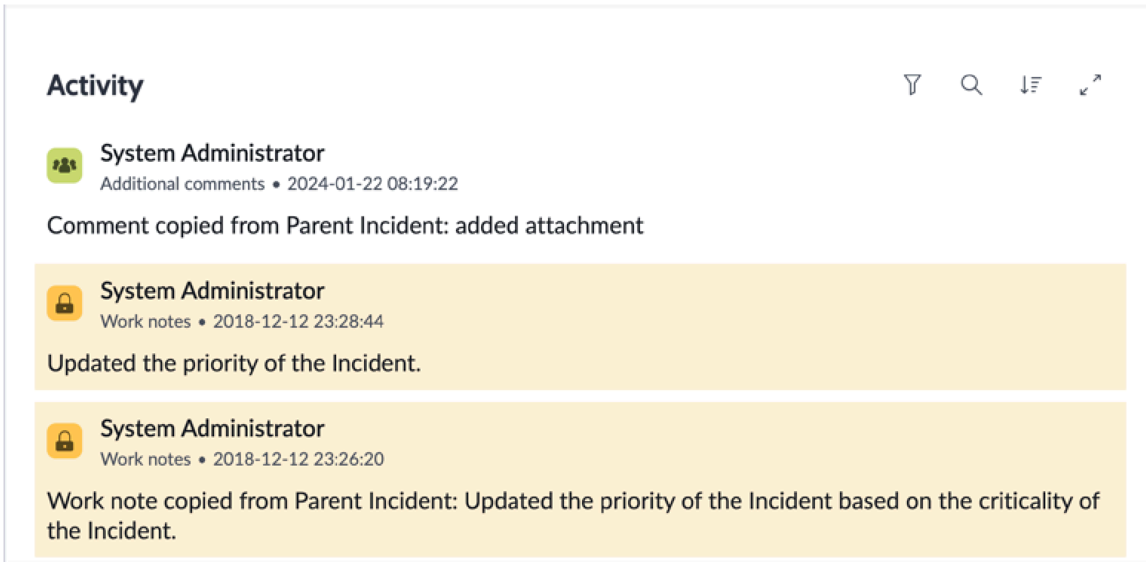
About this task

Note:

- Once you use system properties to enable these options, the sliders in the configuration menu appear.
- Journal entries for a record generated via a script are inserted into the sys_journal_field table and reference the applicable document. If entries don't appear in the Activity stream of the record, set the workflow to false.

Activity stream enables agents to communicate with requesters and make internal notes about the work done on a record. Internal notes are only visible to fellow agents. External comments are visible to agents and requesters.

In Activity stream, agents can embed knowledge articles, import solutions from Agent Assist, and ask requesters for more information.



You can set system properties that give agents the option of using a:

- Rich text editor.

  The rich text editor includes the formatting icons for bold, italics, underlining, font, and so forth, as shown in the following image.

- Single box or separate text boxes to enter internal and external comments.

Procedure

1. In the Filter Navigator, enter *`sys_properties.list`*.
   The list of system properties displays.
2. To give agents the stacked view option (separate boxes for internal and external communications), search for and set the *`glide.ui.activity.journal.stacked`* property to **true** and ensure that no mandatory fields are present in the Activity stream.

   Note: Mandatory fields in the Activity stream prevent the stacked view option from displaying.

3. To give agents the option of using a rich text editor, search for and set the *`glide.ui.journal.use_html`* property to **true** .

Disable the Post button from disappearing in Activity stream

Disable the Post button from disappearing in Activity stream when mandatory fields aren't filled in. The Post button is functional even when mandatory fields aren't filled in.

Before you begin

The **Post** button disappears by default when the Comments or Work Notes fields are made mandatory by a UI Policy on the incident_task table. This task enables you to disable that functionality so that the button is visible and useable even when mandatory fields aren't filled in.

Role required: admin

Procedure

1. Enter `sys_properties.list` in the **Filter navigator**.
2. Select **glide.activity.compose.can_post_mandatory_fields** from the list.
3. In the **Value** field, set the value to **true**.

Display avatars on Activity stream tiles

Configure Activity stream tiles to display avatars instead of icons, or both avatars and icons.

Before you begin

Role required: admin

Procedure

1. Display avatars on Activity stream tiles.
   a. In the Filter navigator, enter `glide.activity.show_tile_icons`.
   b. Select the property and in the value field enter `true`.
   c. Set the property to **true**.
      This property is set to **false** by default.
   d. Select **Update**.
2. Disable icons on Activity stream tiles.
   a. In the Filter navigator, enter `glide.asys`.
   b. Select the property and in the value field enter `false`.
      This property is set to **true** by default. Leaving this field **true** displays both avatars and icons.
   c. Select **Update**.

Create tags for the Activity stream

Enable your agents to filter through activities in the Activity stream with custom tags.

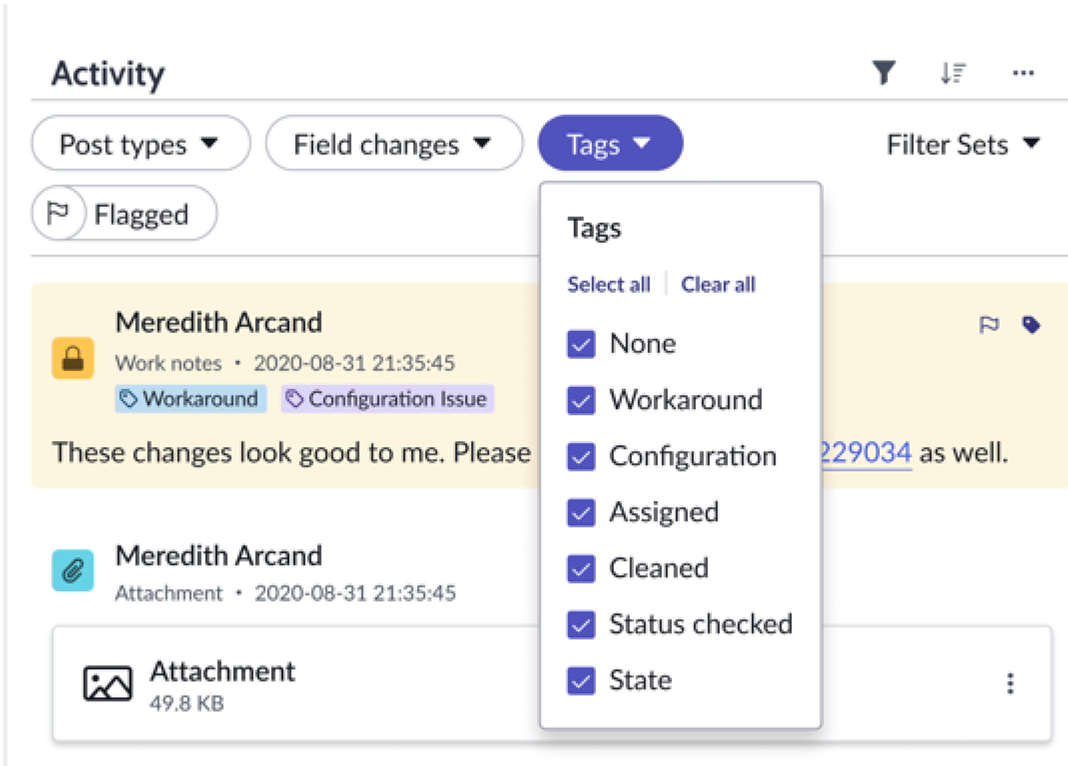
Before you begin

Role required: admin

About this task

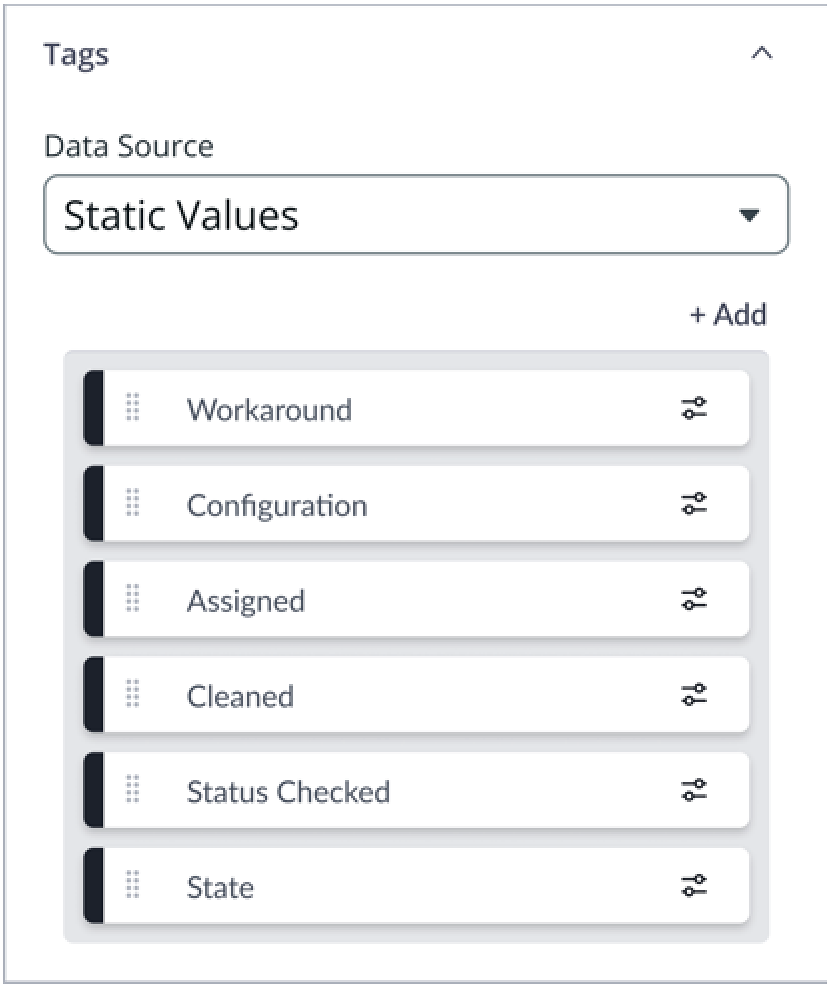
Tags enable you to filter your activities in the Activity stream by dynamic and static states not offered in filter lists.

Important: Tags are not available to agents until you enable and create them.



Procedure

1. Open your workspace experience in UI Builder.
   See Open your Configurable Workspace experience in UI Builder for instructions.
2. Select the record page for your workspace experience.
3. Search for Activity stream in the content panel, and select the Activity Stream element.
4. In the Tags property, select a data source for your tags.
5. Add tags for agents to filter activities by selecting **Add**.
6. Customize the tag in the Add Tag modal.
   a. Enter a label for the tag in the **Label** field.
   b. Select an icon for the tag in **Icon** field.
   c. Select a color for the tag from the **Color** list.
   d. Select a Table for the tag from the **Table** list.
   e. Enter a description for tag in the **Description** field.
   f. Select **Save**.
   All tags you add appear under the Tags property.



7. Edit existing tags by selecting the sliders icon ( ) from the tags list.

8. Change the order displayed to agents by dragging tags with the drag dots icon ( ).

Enable the Show more link in the Activity stream

Enable the Show more link in Activity stream to configure the details you want to see in emails displayed in the Activity stream. You can select the email details you want to see, for example sent/received emails.

Before you begin

Ensure the *`glide.ui.activity.email_roles`* property value is updated with the user's role so they can view the email option.

Role required: admin

About this task

The Show email details link enables you to select or deselect the following details: Assigned to, attachments, configurations items, impact, incident state, opened by, priority, relationship changes, resolution code, resolution notes, sent/received emails, and work notes.

The **Show more** link appears at the bottom of a post in Activity stream.

Procedure

1. Enter `sys_properties.list` in the filter navigator.
2. Select **glide.email.smtp.active** from the list.
3. Set the Value field to `true`.
4. Select **Update**.

What to do next

If you're testing on an OOB instance, set the testing email address in the glide.email.test.user system property.

Create filter sets in the Activity stream

Create filter sets with custom filter settings in the Activity stream.

Before you begin

Role required: workspace_user

Procedure

1. Open a Workspace record in your instance.
2. In the Activity stream, select the filter icon ( ).
3. Select the **Post Types** list, and select the values you want to filter.
4. Select the **Field Changes** list, and select the values you want to filter.
5. Select **Filter sets** > **Create new filter set**.
6. In the *`Create new filter set`* window, enter a name for the filter set.
7. Select **Save**.
   Your new filter set appears in the **Filter sets** list.
8. Edit or delete your filter set by selecting the pencil icon ( ) for the filter set in the **Filter sets** list, and make changes to the filter set.

Restrict access to creating filter sets in the Activity stream

Restrict specified agents from creating filter sets in the Activity stream.

Before you begin

Role required: admin

Procedure

1. In the navigation filter, enter `sys_user.list`.
   The entire list of properties in the System Properties [sys_properties] table appears.
2. Select a user.
3. Within the **Roles** tab, select **Edit**.
4. Add **workspace.activity_stream_restrict_create_filter_set** to the Roles List.
5. Select **Save**.

Result

The restricted user profile can no longer create filter sets in the Activity stream.

Administering emails in Configurable Workspace

Administer email features that aren't configured in UI Builder with components.

Set up email templates in Configurable Workspace

Use email templates to quickly create emails for common issues.

Set up response templates in Configurable Workspace

Enable response templates in journal fields.

Set up email templates in Configurable Workspace

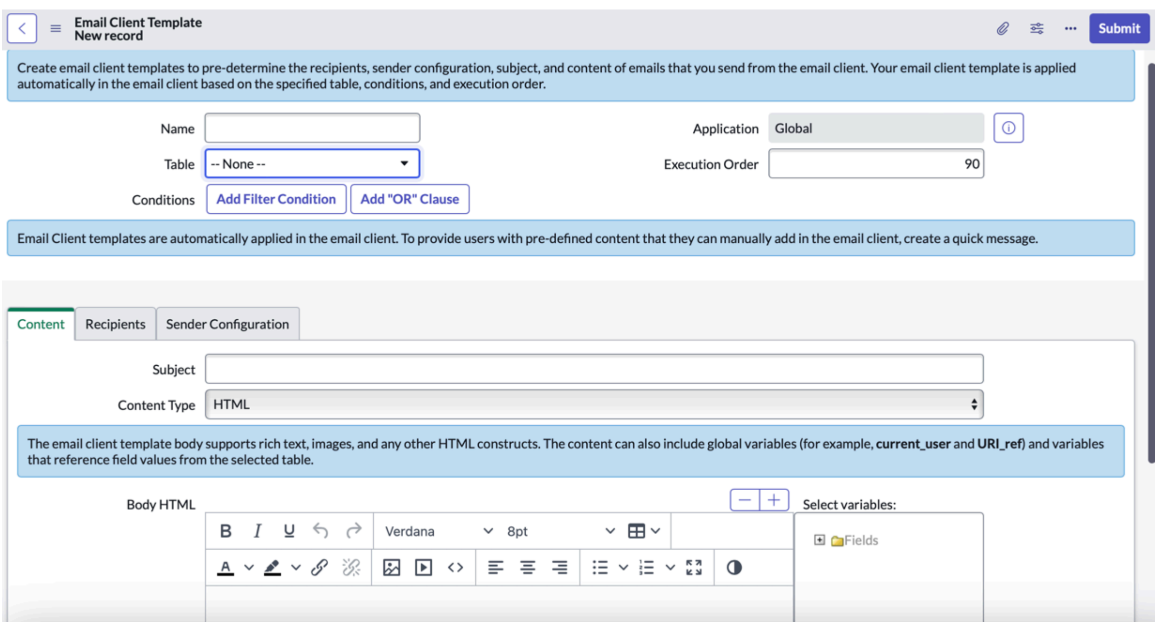
Use email templates to quickly create emails for common issues.

Before you begin

Role required: email_client_admin

Procedure

1. Navigate to **All** > **Email Client** > **Email Client Templates**.
2. Configure a new email template by selecting the **New** button in the Email Client Templates page.
3. Complete the fields with the template settings you want.
4. Select **Submit**.



Set up email templates on the record page

If your workspace does not use the latest version of the standard record page, add the email templates tab manually in UI Builder.

Before you begin

Role required: email_client_admin

If your workspace is built using the standard record page, the email templates tab is available by default and manually adding the email templates tab in UI Builder is not needed.

Procedure

1. Open a record page in UI Builder:

   a. Navigate to **All** > **Now Experience Framework** > **UI Builder**.

   b. Open an experience to work in or create an experience by selecting **+ Create**.
   See Configure how users interact with your applications in UI Builder for more information on creating experiences.

   c. Open or create a record page in the experience.
   For more information on creating a record page in UI Builder, see Learning UI Builder.

2. Add a tab for email templates to the sidebar by selecting **+ Add component** under the Tab sidebar.
3. Add a **Tabs** component.
4. In the Tab Settings panel, add the following settings for each field.

Field name	Configuration
Tab label	Enter `Email Templates`.
Icon	Select **Envelope Plus Outline**.
Hide tab	Enter `IF(@data.record.isEmailClientEnabled,false,true)`.

5. Select **Create**.
6. Configure Agent Assist to apply contextual search:

   a. Navigate to **Tab sidebar** > **Email Templates (Flex)**.

   b. Select **+ Add component**, and select **Agent Assist**.

   c. **Note:** If Agent Assist presets are available, the following fields will auto-fill. These steps are only needed if Agent Assist presets are not available.

   Change the **Table config** property to `Email Templates [global]` in the Agent Assist panel.

   d. Open the **Events** tab, and select **+ Add event handler** under Apply Email Template.

7. **Note:** If Agent Assist presets are available, this field will auto-fill. This step is only needed if Agent Assist presets are not available.

   Select **[Record] Request Email Action**, and configure the following properties within its panel.

Field name	Configuration
Sys ID	Enter `-2`.
Target table	Enter `@payload.params.sysparm_parent_table`.
Target record	Enter `@payload.params.sysparm_parent_sys_id`.

Field name	Configuration
Reply Type	Enter `@data.record.activityStream.composeEmailInfo.replyType`.
Reply ID	Enter `@data.record.activityStream.composeEmailInfo.replyId`.
Should focus email tab	Select to activate.
Template details	Enter `@payload.templateDetails`.

Set up collapsed content in email templates

Collapse content in email templates by hiding it behind an ellipsis.

Before you begin

Role required: email_client_admin

Procedure

1. Navigate to **All** > **Email Client** > **Email Client Templates**.
2. Configure a new email template by selecting the **New** button in the Email Client Templates page.
3. Complete the fields with the template settings you want.
4. In the Body HTML field, add the content you want to display.
5. Collapse additional email content behind an ellipsis.

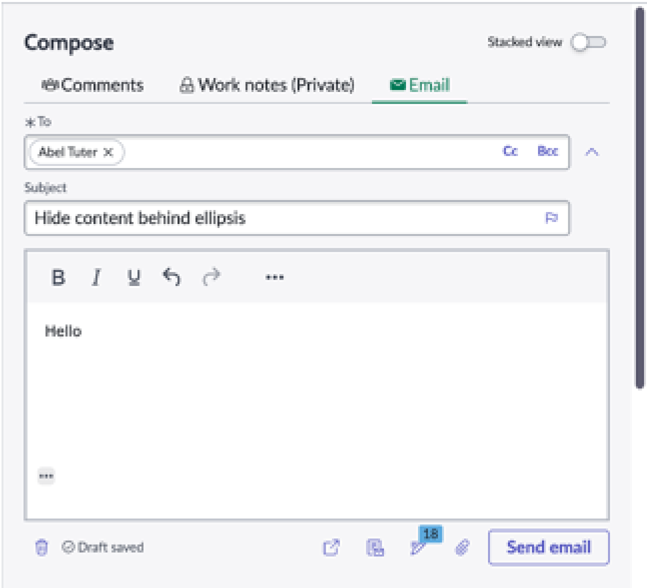
   Note: Since the ellipsis will only display at the end of the email, add collapsed content at the end of the email template body.

   a. In the Body HTML field, enter the opening tag `<div id:collapsible-content>`.
   b. Add all content you want collapsed after the opening tag.
   c. Enter the closing tag `<div id:collapsible-content>`.
6. Select **Submit**.

Result

An email template is created with collapsed content hidden behind an ellipsis.

Note: Once you expand collapsed content by selecting the ellipsis, it's not possible to collapse the content again.



Set up response templates in Configurable Workspace

Enable response templates in journal fields.

Before you begin

Role required: admin

Procedure

1. Navigate to `sys_properties.list`.
2. Select *`glide.ui.enable_response_templates`* from the list or add *`glide.ui.enable_response_templates`* as a system property.
   For instructions on adding a system property, see Add a system property.
3. Disable response templates by setting the Value field to **false**.

   Note: This system property is set to **true** and enabled by default.
4. Select **Submit**.

Customizing Configurable Workspace with declarative actions

Engage with your Configurable Workspace forms, fields, lists, and related list pages by adding custom actions.

Declarative actions enable work to flow on forms and lists throughout your configurable workspace experience. Use actions to add custom functionality that extends pages without taking ownership.

With declarative actions, you form a smoother upgrade experience by creating the necessary records needed in your own application scope instead of customizing a base system UI Builder page.

Declarative actions in the navigation filter

The navigation filter lists the options for declarative actions that you can create to customize your pages:

Option	Description
Create New Action	Create a brand new list, related list, form, field decorator, or attachment action from scratch.
Action Configurations	Action configurations tie groups of actions to your configurable experience.
Form Action Layouts	Multiple form layout items and groups are combined in a single table-based layout for configuration.
Form Action Layout Items	Form action layout items define the look and feel of individual action buttons that appear in the action bar component on the form.
Form Action Layout Groups	Form action layout groups combine multiple actions in the same button on forms by using split buttons or menu buttons.
Form Actions	Form actions define what happens after an action button is selected on forms.
List Actions	List actions define actions that appear within the action bar at the top of lists.
Related List Actions	Related list actions define actions that appear within the action bar at the top of related lists.
List Action Groups	List action groups combine multiple actions in the same button on lists by using split buttons.
Field Decorators	Field decorators define actions that appear within fields as icons. **Note:** Field decorators can only be configured for single-line string fields. Multi-line fields do not support field decorators.
Attachment Actions	Attachment actions define actions that appear within form actions.

Create a form action button

Create a form action button and configure it to appear in a workspace.

Before you begin
Role required: admin

Procedure

1. Navigate to **All** > **Declarative Actions** > **Create new action**.
2. Select **Form**.
   A new Action Assignment record opens.
3. Complete the following fields:

   Action label

   The label for the action.

Action name

Action label populates automatically in all lowercase and with spaces replaced with underscores.

Implemented as

- **Server Script** applies the action to the server or database as JavaScript.
- **UXF Client Action** applies the action as a UI Builder page event.
- **Client Script** applies the action to the web browser as JavaScript.
- **UI interaction** applies the action as reusable logic and UI elements. For configuration instructions, see Trigger a UI interaction from a declarative action.

Table

Table for the action button to appear on.

View

UI view for the action button to appear on.

4. Select the Additional actions icon (≡) and **Save**.
5. From the Layout Items related list, select your action.
   You can also select the **UX Form Layout Item** link in the form message.
   A UX Form Actions Layout Item record opens.
6. Complete the following fields to update the look and feel of the button:

   Icon

   Icon for the action.

   Color

   Colors supported by the button component.
7. Select **Update**.

Result

The form action button appears within the workspace you specified.

What to do next

Configure a button to apply an action in the following ways:

Trigger a UI interaction from a declarative action

Trigger a UI interaction from a declarative action to extend a page without taking ownership.

Configure a form action to open a custom modal

Configure a declarative action to open a custom modal that provides information or interactive elements without navigating away from the current page.

Create a list or related list action

Add a list or related list action to your configurable workspace.

Before you begin

Important: This procedure explains how to add a list or related list action button to your configurable workspace. For instructions on how to configure your action button to open a custom modal, see Configuring an action button to open a custom modal.

Role required: admin

Procedure

1. In the navigation filter, navigate to **All** > **Declarative Actions** > **Create new action**.
2. Select **List** or **Related List** on the pop-up page.
3. Enter an action label and other relevant configuration requirements.
   The action name populates automatically with the action label in all lowercase and with spaces replaced with underscores.
4. Select a value for the **Implemented as** field.
   - Create a server script or client script by selecting **server or client script** in the **Implemented as** field.
   - Create a UXF client action by selecting **UXF client action** in the **Implemented as** field.

     For configuration instructions, see Create a new UXF client action.
5. Select the menu icon (≡) and **Save**.

Create an attachment action

Add an attachment action to your configurable workspace.

Before you begin

Important: This procedure explains how to add an attachment action button to your configurable workspace. For instructions on how to configure your action button to open a custom modal, see Configuring an action button to open a custom modal.

Role required: admin

Procedure

1. Navigate to **All** > **Declarative Actions** > **Create new action** in the navigation filter.
2. Select **Attachment** on the pop-up page.
3. Enter an action label and other relevant configuration requirements.
   The action name populates automatically with the action label in all lowercase and with spaces replaced with underscores.
4. Select a value for the **Implemented as** field.
   - Create a server script or client script by selecting **server or client script** in the **Implemented as** field.
   - Create a UXF client action by selecting **UXF client action** in the **Implemented as** field.

     For configuration instructions, see Create a new UXF client action.
5. Select the menu icon (≡) and **Save**.

Create a field decorator action

Add a field decorator to your configurable workspace.

Before you begin

Important: This procedure explains how to add a field decorator action button to your configurable workspace. For instructions on how to configure your action button to open a custom modal, see Configuring an action button to open a custom modal.

Role required: admin

Note: Field decorators can only be configured for single-line string fields. Multi-line fields do not support field decorators.

Procedure

1. Navigate to **All** > **Declarative Actions** > **Create new action**.
2. Select **Field decorator** on the pop-up page.
3. Enter an action label and other relevant configuration requirements.
   The action name populates automatically with the action label in all lowercase and with spaces replaced with underscores.
4. Select a value for the **Implemented as** field.
   - Create a server script or client script by selecting **server or client script** in the **Implemented as** field.
   - Create a UXF client action by selecting **UXF client action** in the **Implemented as** field.

     For configuration instructions, see Create a new UXF client action.
5. Select the menu icon () and **Save**.

Create a UXF client action for forms

Configure a form action as a UXF client action and add the action to an existing layout.

Before you begin

Complete the following actions:

- Create a form action
- Select **UXF Client Action** for the Implemented as field.

Important: The steps enable you to add a UXF client action button to your configurable workspace. For instructions on configuring your form action button to open a custom modal, see Configure action button to open a custom modal.

Role required: admin

This video shows you how to perform the following procedure.

Procedure

1. In the navigation filter, navigate to **All** > **Declarative Actions** > **Form actions**.
2. Open the action assignment for your form action by selecting the action label.
   The **Implemented as** field should be set to **UXF Client Action**.
3. Select the search icon () in the **Specify client action** field.
4. Select an existing payload definition.
   For instructions on setting up a new payload definition, see Configure action button to open a custom modal.
5. Enter a value in the **Tooltip** field.
6. Select **Advanced View**.
7. Navigate to the **Layout Items** tab and select your form action.
8. In the UX form Actions Layout Item page, select an icon, color for the button, and **Save**.
9. Select **Edit** in the UXF Client Actions list.

10. Add a table to the action by selecting a table from the Collection lists, adding it into the UX Form Action Layouts list, and selecting **Save**.
11. Return to the action assignment page for the form action.
12. Navigate to the Action Configurations tab and select **Edit**.
13. Add an action configuration by selecting a configuration from the Collections list, adding it to the Action Configurations list, and selecting **Save**.

Result

Your form action appears in the list of form action layouts. Your form action button appears within your configurable workspace.

Configuring an action button to open a custom modal

After you add an action button to your configurable workspace, you can configure the button to open a custom modal.

Buttons execute actions in your configurable workspace. Custom modals provide information or interactive elements without navigating away from the current page through pop-up boxes. Integrating custom modals with action buttons creates a seamless and interactive experience, enabling you to perform actions intuitively.

Processes for creating a custom modal

Configuring an action button to open a custom modal involves several processes:

1. Adding the action button to the form:

   Creating an action adds the button to the form without assigning it to do anything when selected. For more information, see Create a form action.

2. Activating Customer Service Management:

   Adding the Customer Service plugin provides demo data and activates related plugins that are not already active. For more information, see Activate Customer Service Management.

3. Opening your record page in UI Builder:

   Accessing your record page in UI Builder enables you to design and configure the page variant with a custom modal. For more information, see Create a page variant.

4. Designing the page variant in UI Builder:

   Using UI Builder to design a page variant passes the modal into the workspace record page. For more information, see Design a page variant in UIB.

5. Configuring the page variant as a modal in UI Builder:

   Using UI Builder to configure the page variant defines the modal to appear in the workspace record page. For more information, see Configure a page variant as a modal in UIB.

6. Creating a UX add-on event mapping:

   Setting up a UX add-on event mapping connects the action button to your custom modal. For more information, see Create a UX add-on event mapping.

7. Defining the payload for a custom modal:

   Configuring the payload sets the action button to open the custom modal in your workspace. For more information, see Define the payload for a custom modal.

Design a page variant in UIB

Configure a UI Builder page variant to pass from a workspace modal into the variant. This step acts as part of the process to configure an action button to open a custom modal.

Before you begin

Complete the following actions:

- Create a form action
- Activate Customer Service Management
- Open your record page in UIB or create a page variant in UIB

Role required: admin

Procedure

1. Open your page variant.
2. Add components to display on the page by selecting **+Add component** under the Body element.
3. Select the added component and select the **Table** field.
4. Switch the setting to **Bind data** and dot-walk to the table prop by entering `@context.props.table`.
5. Select the **Title** field, and switch to **Script** mode.
6. Enter the following script and pass the sysID received through the URL parameter as a JS template variable.

```
function evaluateProperty({ api, helpers }) {
 return `Only ${api.context.props.sysId}`;
}
```

7. Select **Apply** for the script and select **Save**.

Result

The table and sysID variables are configured to be passed from the modal through the URL into the variant.

Configure a page variant as a modal in UIB

Define your page variant to appear as a modal using UI Builder configurations. This steps acts as part of the process to configure an action button to open a custom modal.

Before you begin

Complete the following actions:

- Create a form action
- Activate Customer Service Management
- Open your record page in UIB or create a page variant in UIB
- Design your page variant in UIB

Role required: admin

Procedure

1. Open your page variant.
2. Open the *sys_ux_screen_type* by selecting the menu icon (≡) and navigating to **Developer** > **Open variant collection record**.
3. Select the **UX App Route** tab under Related Lists and select your page variant.
4. Open UI Builder in a new browser tab and open your configurable workspace experience.
5. Find the page that you want your modal to appear by opening the overview of records for the experience and selecting the page.
6. Select the menu icon (≡) and navigate to Open page definition.
7. Select **Copy sys_id**.
8. Return to the browser tab with the *sys_ux_app_route*.
9. Select the **Parent Macroponent** field twice to open a dialog that displays the page identifier, and then select **OK**.
10. Define the variant to appear in a modal by entering `modalContainerViewport` in the **Parent Macroponent Composition Element ID** field.
11. Select **Update**.

Create a UX add-on event mapping

Connect a button to a modal using UX add-on event mapping in order for an action button to open a custom modal.

Before you begin

Complete the following actions:

- Create a form action
- Activate Customer Service Management
- Open your record page in UIB or create a page variant in UIB
- Design your page variant in UIB
- Configure your page variant as a modal in UIB

Role required: admin

Procedure

1. Open the add-on event mapping *<instance-name>.service-now.com/sys_ux_addon_event_mapping_list.do* into your browser.
2. Create a new record by selecting **New**.
3. Enter a name for your map.
4. Select *ui_action_bar* for the Source element ID field.
5. Select the action name for your declarative action for the Source Declarative Action field.
6. Set the macroponent to the workspace record macroponent using the sysID copied from the record's page definition.
   For more information, see Configure a page variant as a modal in UIB.
7. Trigger the event to open a modal by selecting **[Record Page] Open modal** in the Target Event field.

8. Define the fields to send to the modal by pasting the JSON object into the Target Payload Mapping field.

```
{
 "type": "MAP_CONTAINER",
 "container": {
  "route": {
   "type": "EVENT_PAYLOAD_BINDING",
   "binding": {
    "address": ["route"]
   }
  },
  "size": {
   "type": "EVENT_PAYLOAD_BINDING",
   "binding": {
    "address": ["size"]
   }
  },
  "fields": {
   "type": "EVENT_PAYLOAD_BINDING",
   "binding": {
    "address": ["fields"]
   }
  },
  "params": {
   "type": "EVENT_PAYLOAD_BINDING",
   "binding": {
    "address": ["params"]
   }
  }
 }
}
```

9. Select **Submit**.

Define the payload for a custom modal

Set your action button to open a custom modal by defining the payload parameters.

Before you begin

- Create a form action
- Activate Customer Service Management
- Open your record page in UIB or create a page variant in UIB
- Design your page variant in UIB
- Configure your page variant as a modal in UIB
- Create a UX add-on event mapping

Role required: admin

Procedure

1. In the navigation filter, navigate to **All** > **Declarative Actions** > **Form Actions**.
2. Select the form action where you want to add the custom modal.

3. Open the **Specify client action** field by selecting the record preview icon (ⓘ) and **Open Record**.
4. Mark the location of your page by entering the page's action name as the route key of the **Payload** field.
5. Pass variables from the current context by entering the table and sysID values in the **fields** key.

```
{
  "route": "action-name",
  "fields": {
    "table": "{{table}}",
    "sysId": "{{sysId}}"
  }
}
```

6. Select **Update**.
7. Open a record in your configurable workspace.
8. Test your button by selecting it.
   Your button opens the custom modal.

Enable list actions based on dynamic conditions

Configure declarative actions for a list or related list to be enabled if the record satisfies dynamic conditions.

Before you begin

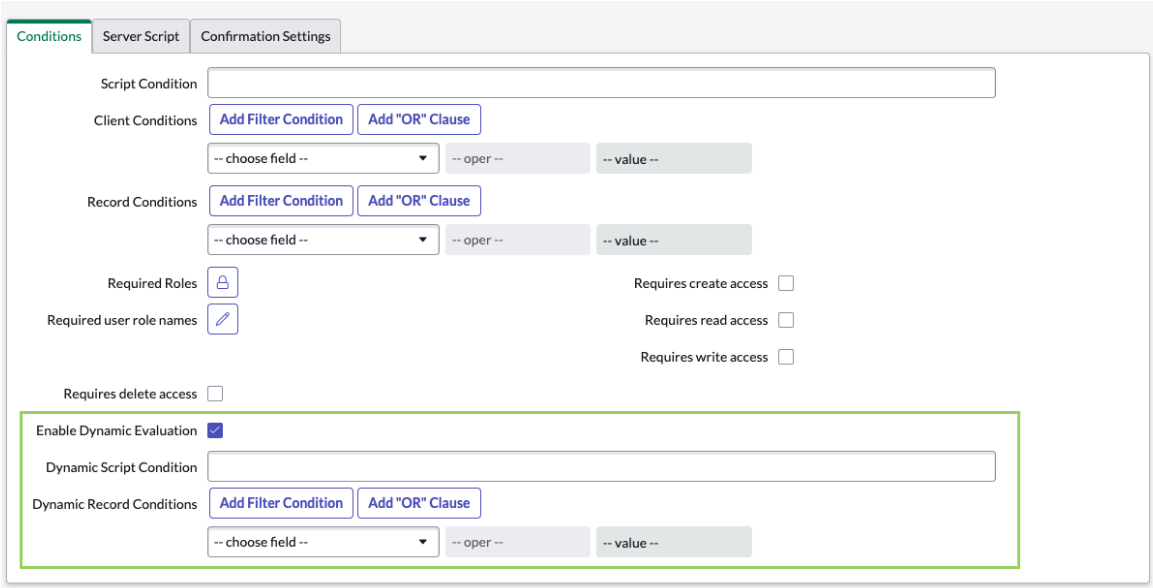
Role required: admin

The system property *`glide.list.actions_conditional_evaluation_enabled`* controls whether the action for a list is enabled. This property is available by default.

Procedure

1. In the navigation filter, enter `List` or `Related List` for the action you want to configure.
2. Enable dynamic evaluation of a list or related list action by enabling **Record Selection Required** and **Experience Restricted** in the Action Assignment record.
3. Define the dynamic evaluation of a list or related list by applying the following configurations to the **Condition** tab within the Action Assignment.

Field	Configuration
Enable Dynamic Evaluation	Set to true to use dynamic evaluation.
Dynamic Script Condition	Write a scripted condition for dynamic evalua tion.
Dynamic Record Conditions	Add conditions for dynamic evaluation if you don't want to write a scripted condition.



Note: You may experience slowness and unresponsiveness if this feature is used in combination with the **Select All**, which selects all records in a list, as conditions must be evaluated for all the selected records.

Hide a global list or form action from a table or view

Use an action exclusion record to exclude a list or form action from a specified table, view, or table within a view.

Before you begin

Role required: admin

About this task

An action exclusion record enables you to hide a global list or form action from a table, view, or table within a view. For example, you can hide a list action from a specific workspace, an Incident table, or an Incident table in a specific workspace.

Procedure

1. Navigate to `sys_workspace_declarative_action_exclusion.do`.
   A new action exclusion record opens.
2. Complete the following fields.

   Action assignment

   Select the action that you want to exclude.

   Table

   Select the table that you want to exclude the action from.

   Exclude this table

   Select the check box to exclude the action from the selected table.

   Exclude all child tables

   Select the check box to exclude the action from all child tables of the selected table.

   View

   Select a view to exclude the action from.

Note:

- To save an action exclusion record, you must select a table or view.
- If you select a table, you must also select **Exclude this table** or **Exclude all child tables** for an exclusion to occur.
- If you select a table but not a view, the action is excluded from the selected table regardless of the view.
- If you select a view but not a table, the action is excluded from the selected view regardless of the table.
- If you select both a table and a view, the action is excluded from the selected table within the selected view.

3. Select **Submit**.

Hide global form actions from a page layout

Exclude global form actions from a page or experience by using action layouts.

Before you begin

Role required: admin

Procedure

1. In the navigation filter, navigate to **All** > **Declarative Actions** > **Form Action Layouts**.
2. Open an existing layout.
   Your scope must match the application of the record.

   Important: Any form action layouts created in Washington DC or later are unified automatically. You will need to associate any new form actions including global form actions manually.

3. Use the related list to control the display of the actions in this layout.
4. Open your record page in UI Builder.
5. Open the data module.
6. Select the record controller or data broker.
7. Select the existing layout from the Action layout property list and select **Save**.
8. View the page at runtime.

Result

The actions match the layout specified. Not all of the actions might be visible in the layout. Only actions that meet the requirements appear.

Declarative actions glossary

Refer to this glossary for definitions to terminology associated with declarative actions.

Action assignment fields

Action assignment field	Description	Action model field appears
Action label	Displays the default label on the button at runtime.	• Attachment • Form

servicenow

Action assignment fields (continued)

Action assignment field	Description	Action model field appears
	Required	• List • Field decorator • Related list
Action name	Populates a unique identifier for the action automatically based on the action label.	• Attachment • Form • List • Field decorator • Related list
Active	Determines whether an action appears. Default: true Required	• Attachment • Form • List • Field decorator • Related list
Application	Associates the action with an application scope. Defaults to your current application scope. Required	• Attachment • Form • List • Field decorator • Related list
Button type	Determines which button variant displays at runtime. Default: Primary	• List • Related List
Client Script	Applicable when the Implemented as field is set to **Client Script**. Executes client-side scripts that join form or list functions.	• Attachment • Form • List • Field decorator • Related list
Decorator applies to	Determines where the decorator should appear. Only three decorators may appear on a single field at one time. Default: Field type	Field decorator

Action assignment fields (continued)

Action assignment field	Description	Action model field appears
	Required	
Description	Describes what the action does for future reference.	• Attachment • Form • List • Field decorator • Related list
Enable for all configurable experiences	Determines if an action should appear in all experiences or only in specified experiences. If true, the action appears in any applicable form regardless of experience. Default: false	Form
Experience restricted	Determines if an action should appear in all experiences or only in specified experiences. If true, the action only appears in specified experiences. Default: false	• List • Related list • Field decorator
Field Name	Applicable when the Decorator applies to field is set to **Specific field**. Determines the specific field that should have the decorator appear. Available options are limited to columns available on the selected table. Required	Field decorator
Field type	Applicable when the Decorator applies to field is set to **Field type**. Determines which field type displays the decorator. Available field types: • Domain ID • List	Field decorator

Action assignment fields (continued)

Action assignment field	Description	Action model field appears
	• Price • Date • Date/Time • Decimal • Document ID • Email • Floating point number • Integer • Password (1-way encrypted) • Phone Number • Phone Number (E164) • Reference • String Field decorators don't support string fields that appear as multiple line text fields at runtime. Required	
Group	Applicable when the Group By field is set to true. Determines which group to add the action to. Required	• List • Related List
Group By	Determines whether to add the action to a group displayed as a split button at runtime. Default: false	• List • Related List
Implemented as	Determines whether the action is a server script, client script, or UXF client action. Required	• Attachment • Form • List • Field decorator • Related list
Order	Sets the display order of the action. An action with an order	• Attachment • Form

Action assignment fields (continued)

Action assignment field	Description	Action model field appears
	lower than other actions will appear closer to the front. Default: 0	• List • Field decorator • Related list
Server Script	Applicable when the Implemented as field is set to **Server Script**. Executes server-side scripts such as creating, deleting, or reassigning a record.	• Attachment • Form • List • Field decorator • Related list
Specify client action	Applicable when the Implemented as field is set to **UXF Client Action**. Determines the payload dispatched when the action is triggered. Required	• Attachment • Form • List • Field decorator • Related list
Table	Determines the table where the action appears. If set to **Global [global]**, the action appears regardless of the table. Required	• Attachment • Form • List • Field decorator • Related list
Tooltip	Displays text when you hover over the action.	• Attachment • Form • Field decorator • Related list
UI interaction	Applicable when the Implemented as field is set to **UI interaction**. Determines the UI interaction to execute when the action is triggered. Required	• Form • List • Related List

Action assignment fields (continued)

Action assignment field	Description	Action model field appears
UXF Client Action	Applicable when the Implemented as field is set to **UXF Client Action**. Executes a page-level event in UI Builder.	• Attachment • Field decorator • Form • List • Related List
View	Determines the view where the action appears. If left empty, the action appears regardless of view.	• Attachment • Form • List • Field decorator • Related list

Condition fields

Condition field	Description	Action model field appears
Client Conditions	Defines the client-side conditions that evaluate whether the action appears.	• Attachment • Field decorator • Form
Dynamic Record Conditions	Applicable when the Enable Dynamic Evaluation field is set to true. Defines record-based conditions based on the table's columns that determine whether the action appears.	• List • Related List
Dynamic Script Conditions	Applicable when the Enable Dynamic Evaluation field is set to true. Defines a client-side JavaScript expression that determines whether the action appears. List actions have access to the current record. Related list actions have access to the parent record.	• List • Related List

Condition fields (continued)

Condition field	Description	Action model field appears
Enable Dynamic Evaluation	Applicable when the Experience Restricted and Record Selection Required fields are set to true. Determines whether dynamic script and record conditions can evaluate whether the action appears.	• List • Related List
Record Conditions	Defines record-based conditions that determine whether the action is returned to the client.	• Attachment • Field decorator • Form
Required user role names	Determines which roles can view the action. Default: snc_internal	• Attachment • Field decorator • Form • List • Related List
Requires create access	Requires you to have create access to view the action. Default: false	• Attachment • Field decorator • Form • List • Related List
Requires delete access	Requires you to have delete access to view the action. Default: false	• Attachment • Field decorator • Form • List • Related List
Requires read access	Requires you to have read access to view the action. Default: true	• Attachment • Field decorator • Form • List • Related List

Condition fields (continued)

Condition field	Description	Action model field appears
Required write access	Requires you to have write access to view the action. Default: false	• Attachment • Field decorator • Form • List • Related List
Script Condition	Defines a server-side script that determines whether the action is returned to the client for rendering. Form actions have access to the current record, script includes, and the GlideRecord API. Related list actions have access to the parent record.	• Attachment • Field decorator • Form • List • Related List
Scripted Client Condition	Defines a client-side JavaScript expression that dynamically determines whether the action appears. Supports dot-walking and string interpolation using `{{variable}}` syntax.	• Form • Field decorator

Related lists

Related list	Description	Action model field appears
Action Configurations	Groups actions in an experience. Must be referenced on the corresponding form or list page to display the actions.	• Attachment • Field decorator • Form • List • Related List
Action Exclusions	Defines the tables and views where the action is hidden.	• Attachment • Field decorator • Form • List • Related List
Action Model Fields	Provides contextual runtime data based on the action model.	• Attachment • Field decorator

Related lists (continued)

Related list	Description	Action model field appears
		• Form • List • Related List
Form Action Layout Item	Determines how the action appears at runtime. Created automatically for any new form actions formatted for Configurable Workspace.	Form
UX Add-on Event Mappings	Applicable when the Implemented as field is set to **UXF Client Action**. Maps an action to a UXF event on a specific page or controller. Can remap the payload to a new structure.	• Attachment • Field decorator • Form • List • Related List

Reflow for Configurable Workspace

Reflow enables pages and content to be zoomed up to 400% through your browser settings without loss of content or functionality.

Important: Configurable Workspace pages must use the latest layout system for reflow to be available. For more information, see Upgrading layouts in UI Builder

Reflow helps users with low vision or who have trouble seeing web content in a browser due to monitor size, device type, poor lighting, or other situations by transforming page layouts into a vertical, stacked view automatically when users increase browser zoom to 400%. Additionally, content can be enlarged without scrolling in two dimensions at a width equivalent to 320 CSS pixels or a height equivalent to 256 CSS pixels.

A width of 320 CSS pixels is equivalent to a starting viewport width of 1280 CSS pixels at 400% zoom. For web content designed to scroll horizontally, a height of 256 CSS pixels is equivalent to a starting viewport height of 1024 CSS pixels at 400% zoom.

Although reflow is available by default, administrators can turn off reflow for instances, experiences, and pages.

Disable reflow for Configurable Workspace

Disable reflow for instances, experiences, or pages.

Before you begin

Role required: admin

Procedure

1. **Optional:** Disable reflow for an instance:

   a. In the navigation filter, enter `sys_properties.list`, and press **Enter**.

      (Optional) The entire list of properties in the System Properties [sys_properties] table appears.

   b. Set the *`glide.ux.autoreflow.disable`* system property to true.

2. **Optional:** Disable reflow for an experience:
   a. Open the **sys_ux_app_config** table.
   b. Select an experience.
   c. Select the **Disable Auto Reflow** check box.
3. **Optional:** Disable reflow for a page within an experience:
   a. Open the **sys_ux_screen** table for the page within the experience.
   b. Select the **Disable Auto Reflow** check box.

Resize all record page modals in Configurable Workspace

Configure the **Enable Resize** property in UI Builder to enable resizing for all record page modals in your Configurable Workspace.

Before you begin

Role required: admin

Procedure

1. Open a record page in UI Builder.

   a. Navigate to **All** > **Now Experience Framework** > **UI Builder**.

   b. Open an experience to work in or create an experience by selecting **+ Create**.
      See Configure how users interact with your applications in UI Builder for more information on creating experiences.

   c. Open or create a record page in the experience.
      For more information on creating a record page in UI Builder, see Learning UI Builder.

2. Enable resizing for a modal.
   a. Select the **Modal Container**.
   b. Select **Enable Resize**.
   c. Enter a minimum resize height and width.
   d. Select **Save**.

   If resizing isn't required for all record page modals, use declarative actions to enable resizing for select modals. For instructions, see Set up resizing for select modals in your Configurable Workspace.

Resize select modals in Configurable Workspace

Use declarative actions to enable resizing for select modals in your Configurable Workspace.

Before you begin

Role required: admin

About this task

If resizing isn't required for all record page modals, use declarative actions to enable resizing for select modals.

Configuration at the declarative action level takes higher precedence than system properties.

Procedure

1. Navigate to **All** > **Declarative Actions** > **Related List Actions**.
2. Open a related list action.
3. From the UX Add-on Event Mapping, select the event mapping for opening a modal.
4. Add the following snippet to the Target Payload Mapping field under `“container”: {`.

```
                                "resizableConfig": {
 "enableResizable": true
},
```

5. Specify the modal's default size by adding the following snippet under your previous addition.

```
"customSize": {
            "height": "590px",
            "width": "1500px"
        },

"size": {
            "type": "JSON_LITERAL",
            "value": "custom"
}
```

6. Select **Update**.

Enable asynchronous record addition for the multi-record associator

Enable large selections of records added to a related list by the multi-record associator to load in the background.

Before you begin

Role required: admin

About this task

When you add a large number of records to a related list, you can focus on other tasks while the record addition loads in the background.

If asynchronous record addition isn't required for all multi-record associator modals, use declarative actions to enable asynchronous record addition for select modals. For instructions, see Set up asynchronous record addition for select modals.

Procedure

1. Navigate to `sys_properties.list`.
2. Add the *`glide.ui.mra.async`* system property.

For more information on adding system property, see Add a system property.

a. Select **New**.

b. Add a system property named *glide.ui.mra.async*.

c. Set the Value to **true**.

d. Select **Submit**.

3. Add the *glide.ui.mra.threshold* system property.

a. Select **New**.

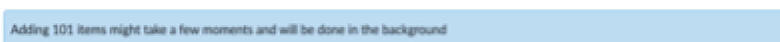
b. Add a system property named *glide.ui.mra.threshold*.

c. Specify how many records can be added before asynchronous record addition occurs. The default is 100 records.

d. Select **Submit**.

Result

When you select any number of records beyond the threshold, a notification informs you that the records will load in the background.



When you add the selected records, the modal closes, and a notification confirms that the records are loading in the background.

After the records are added, a notification informs you that the records were added successfully.

Enable asynchronous record addition for select modals

Use declarative actions to enable asynchronous record addition for select multi-record associator modals.

Before you begin

Role required: admin

About this task

If asynchronous record addition isn't required for all modals, use declarative actions to enable asynchronous record addition for select multi-record associator modals.

Configuration at the declarative action level takes higher precedence than system properties.

Procedure

1. Navigate to **All** > **Declarative Actions** > **Related List Actions**.
2. Open a related list action.
3. Open the record in the Specify client action field.
4. In the Payload field, add the following code snippet before the closing bracket.

```
 "asyncProperties": {
   "enableAsync": true,
   "relatedListLabelName": "Affected CIs",
    "asyncThreshold": 100
    }
```

- `enableAsync`: Set to true to enable asynchronous record addition.
- `asyncThreshold`: The number of records needed to switch to asynchronous record addition. The value should equal to or greater than one. The default value is 100 records.
- `relatedListLabelName`: The display name for the notification related to the asynchronous record addition.

5. Select **Update**.
6. From the UX Add-on Event Mapping for the related list, select a record.
7. Add the following snippet to the Target Payload Mapping field under your selected container.

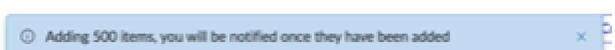
```
                     "asyncProperties": {
                       "binding": {
                                               "address": [
                                           "asyncProperties"
                                        ]
                               },
               "type": "EVENT_PAYLOAD_BINDING"
                       }
```

8. Select **Update**.

Result

When you select any number of records beyond the threshold, a notification informs you that the records will load in the background.

When you add the selected records, the modal closes, and a notification confirms that the records are loading in the background.



After the records are added, a notification informs you that the records were added successfully.

Using Configurable Workspace

Get familiar with your ServiceNow workspace.

A workspace is a suite of tools that provides agents, case managers, help desk professionals, and managers with tools to help answer customer questions and resolve customer problems. ServiceNow provides many workspaces, each is targeted at a specific user. For example, workspaces are designed for tier 1 agents who solve internal or external customer issues.

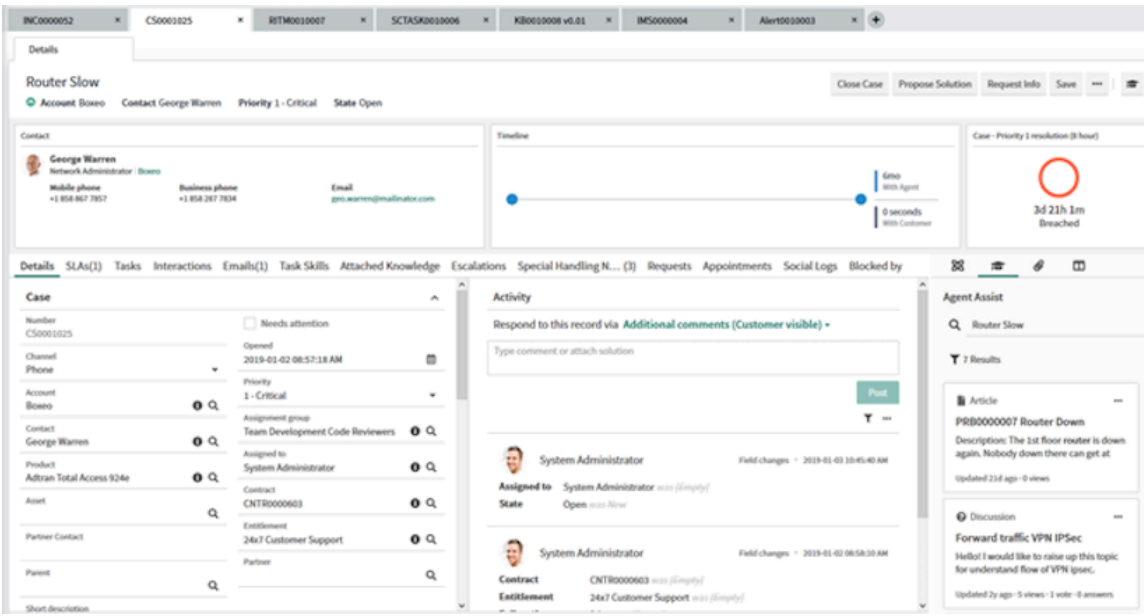
Workspaces include all the tools that agents need to find, research, and resolve issues. ServiceNow provides different workspaces for different issue types. For example, agents using

IT Service Management Workspace (ITSM) track and resolve IT issues. Agents using Customer Service Management Workspace (CSM) resolve customer cases, such as sending a piece of computer hardware to fulfill a customer's request.

Key features

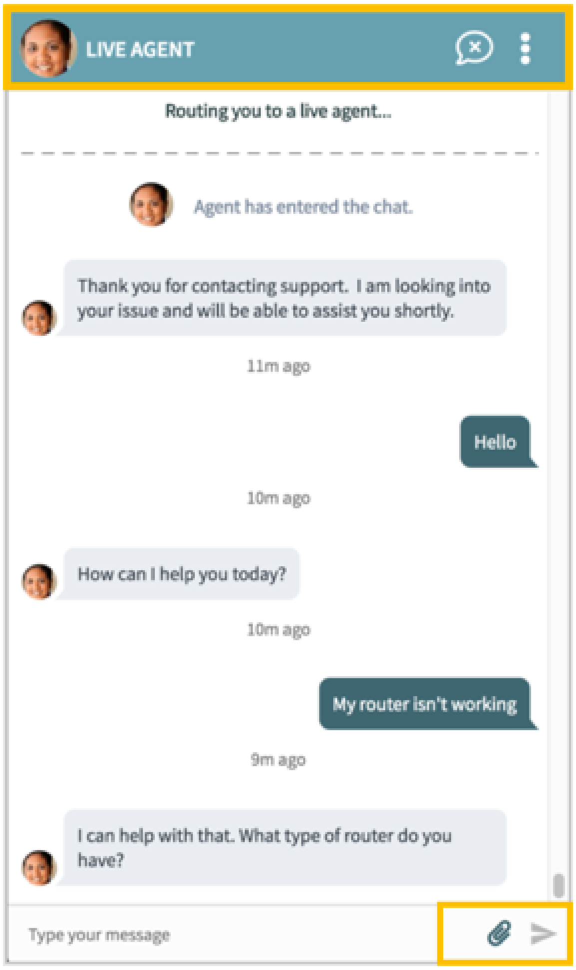
Single-pane view

Agents can see all details that are related to an issue in one place.



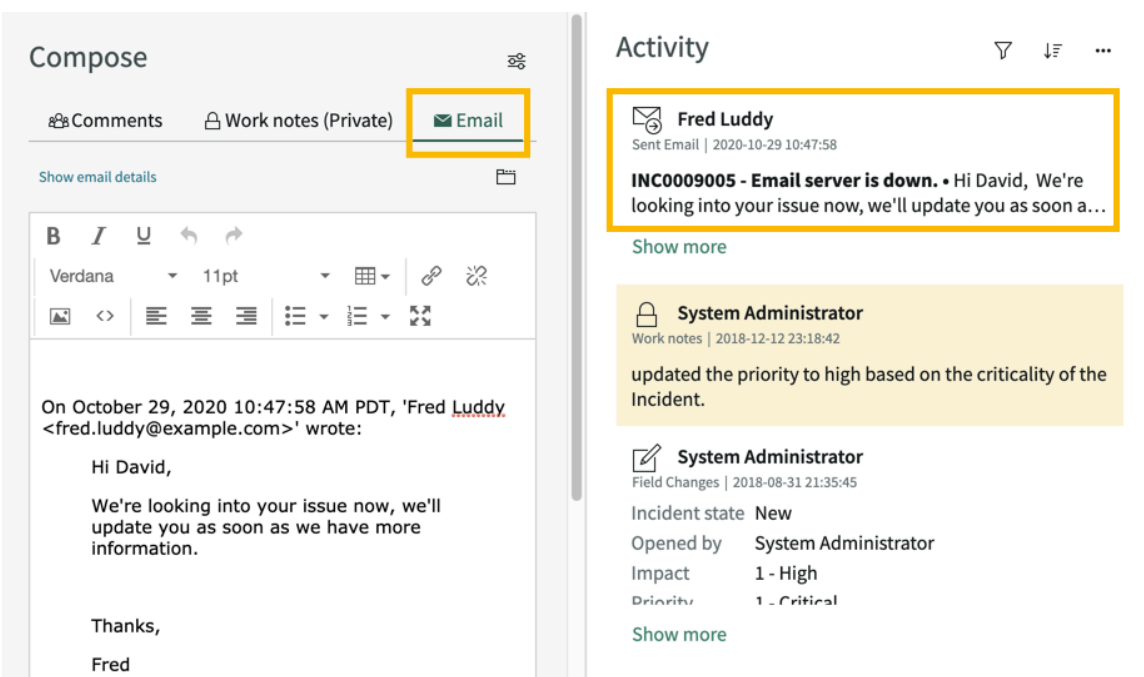
Integrated communication channels

Agents can communicate in real time with customers by Agent Chat or phone in the same interface.



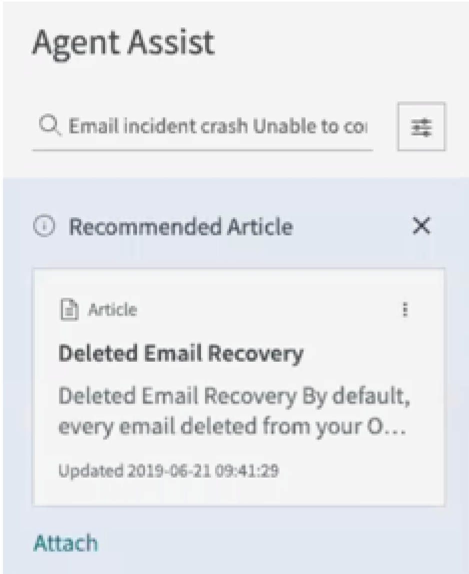
Integrated email client

Agents can read and respond to emails side by side.



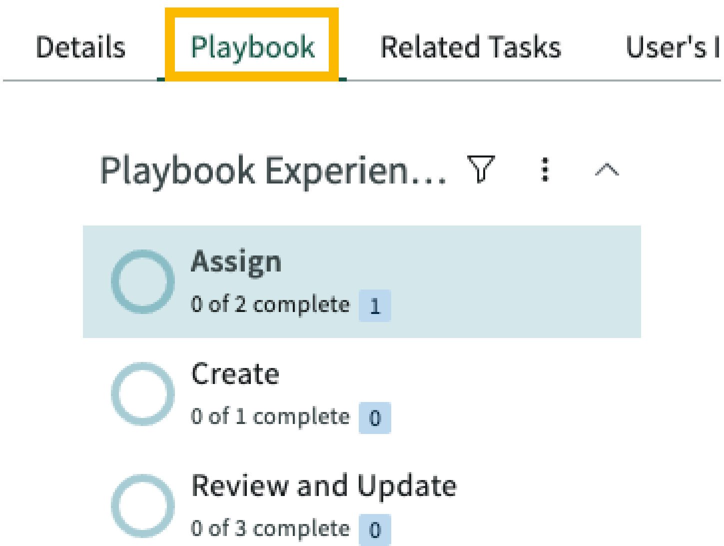
Agent assistance

Agents can close cases and incidents faster with artificial-intelligence-assisted recommendations.



Playbook

Agents can accomplish business process workflows in a simple, task-oriented view.



Dynamic Translation

Support for dynamic translation for string, text area, and wide text is available in Workspace.

Functionality not supported

Guided Tours

Guided Tours is not supported in Workspace.

Starting in your Workspace

Use workspace to find and resolve internal or external requester issues.

The following video shows an example of how to resolve an incident using workspace.

Your general workflow using workspace is:

1. Find an issue to work on.
2. Work on the issue to find a solution.
3. Communicate the resolution to the requester.

Next

Get started using workspace by working through some tutorials.

Learn how to use your Workspace

Use the tutorials to walk through many parts of workspace that you will use on a regular basis.

The following tutorials are included for you to get a sense of how workspace works:

- Work on issues that are already in the database.
- Work on issues that come in through phone calls or chats.

> **Note:** UI may vary between classic Workspace and UIB Workspace, but the functionality of the features is the same.

Once you complete both tutorials, you should have a feeling for what workspace does. The topics after the tutorials provide detailed instructions about how to use all of the functionality in workspace.

Workspace tutorial for agents starting with a record

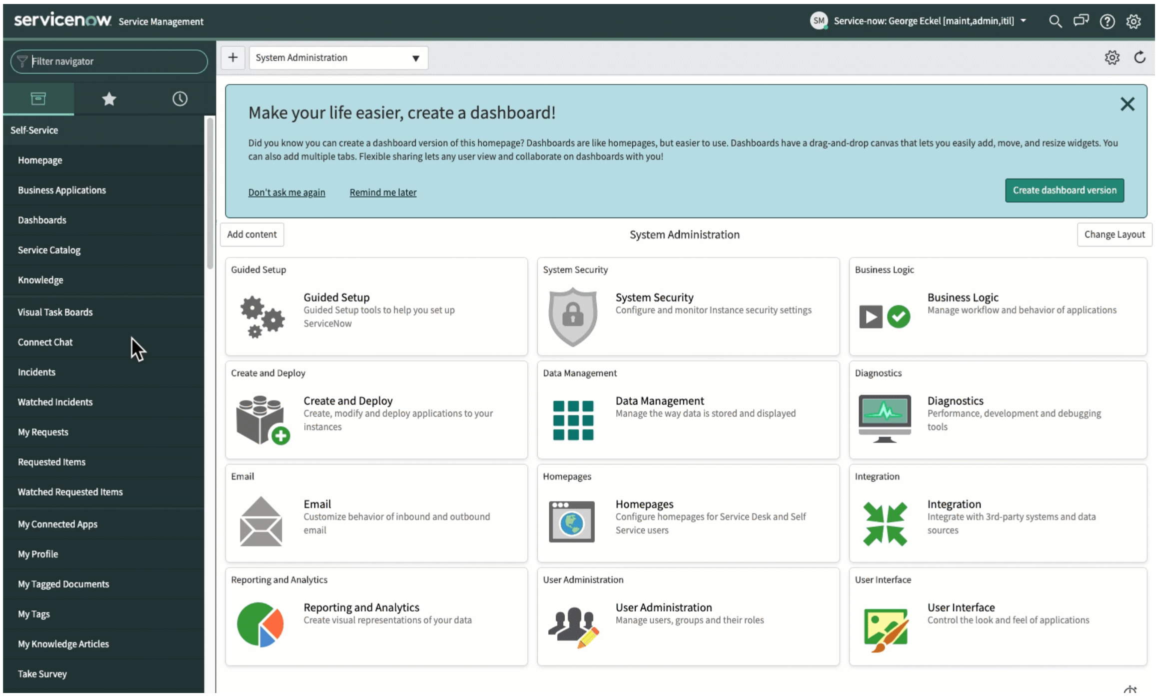
Perform the steps in this tutorial to get an idea how you can use Workspace when you begin with a task already stored in the database.

Before you begin
Role required: agent

About this task
Use Workspace to:

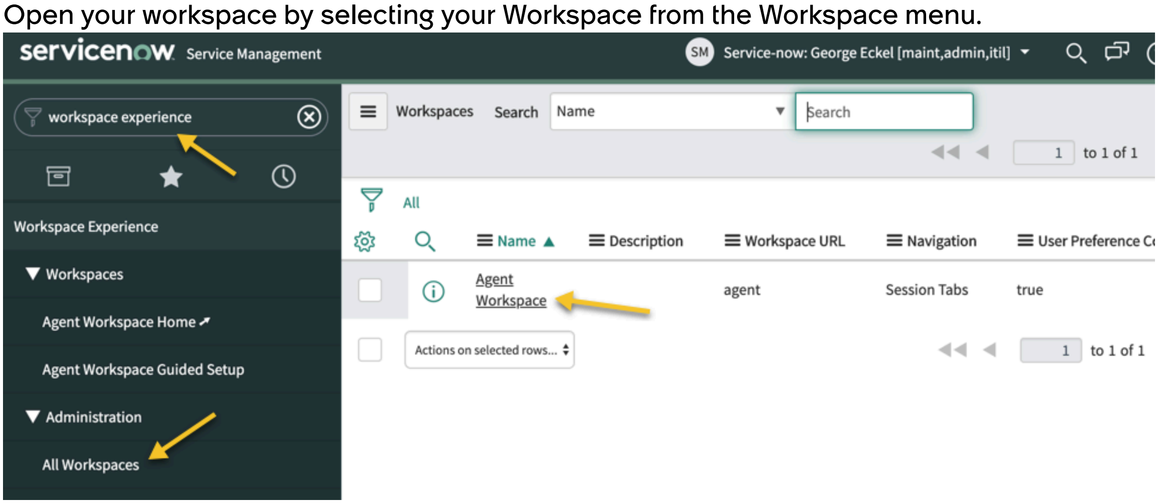
1. Find a task to work on.
2. Do research to resolve the task.
3. Communicate the solution to the requester or enter notes for yourself and other agents that document your progress in finding a solution.

The following graphic provides a quick overview of finding and solving an issue.



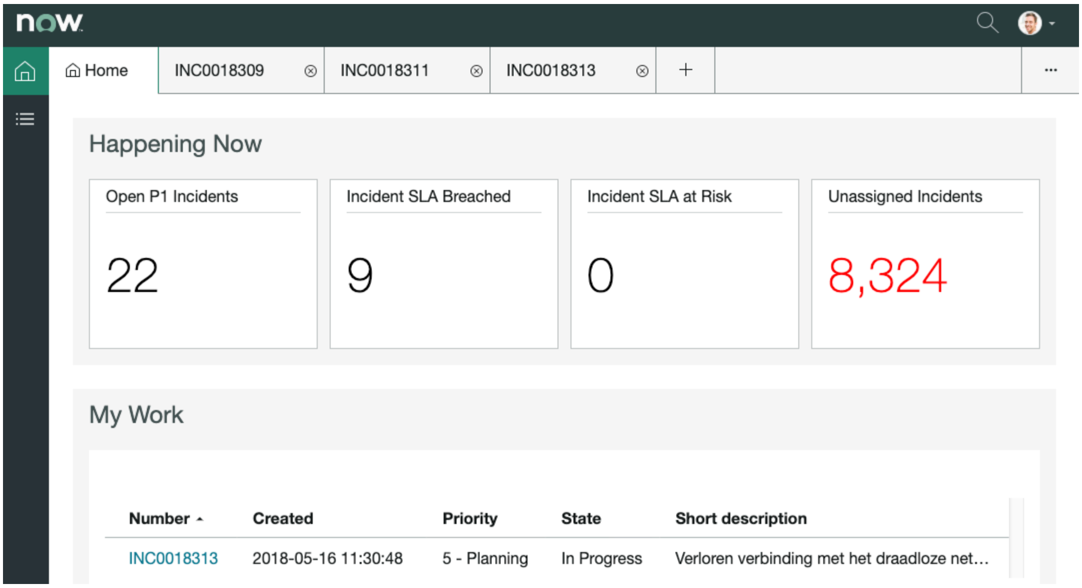
Procedure

1. Open your workspace by selecting your Workspace from the Workspace menu.



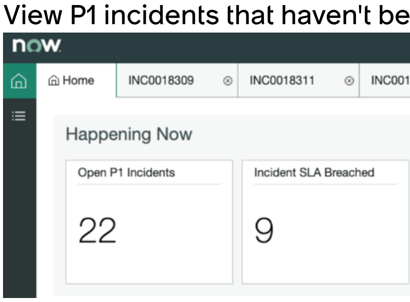
Note: In the previous image, you can see **Agent Workspace Home** in the application modules. You can click that to open Workspace. The following steps are for you if you're using a different workspace.

2. Click the name of your workspace and then under Related Links, click **Open workspace**.
   Your workspace opens.
3. Log in to your workspace.

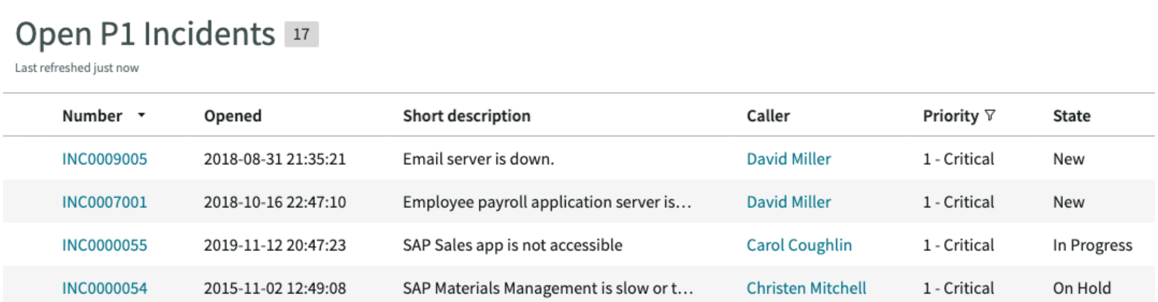


The first thing to do is find out what to work on. You can do that by looking at what's on the landing page, as shown in this image. Or, you can go directly to the list of open issues to solve. Let's see how to do both.

4. View P1 incidents that haven't been solved by clicking **Open P1 Incidents** on the landing page.



A list of P1 incidents open.



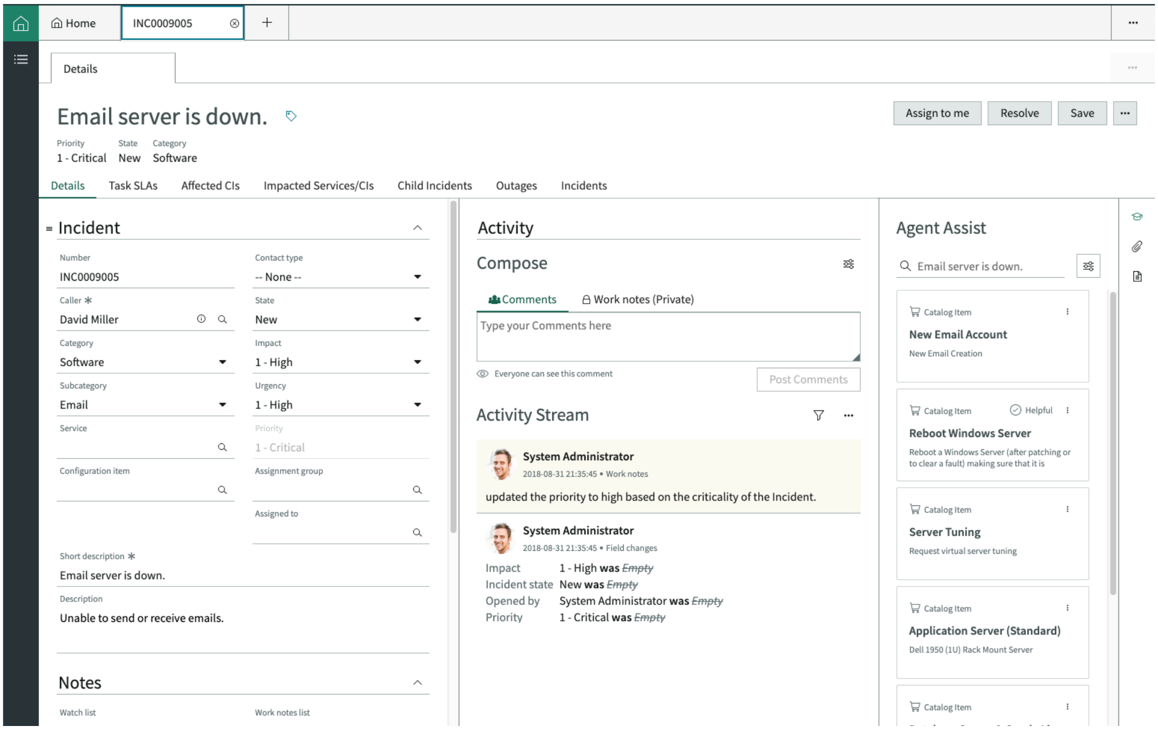
Open P1 Incidents 17

Last refreshed just now

Number	Opened	Short description	Caller	Priority	State
INC0009005	2018-08-31 21:35:21	Email server is down.	David Miller	1 - Critical	New
INC0007001	2018-10-16 22:47:10	Employee payroll application server is...	David Miller	1 - Critical	New
INC0000055	2019-11-12 20:47:23	SAP Sales app is not accessible	Carol Coughlin	1 - Critical	In Progress
INC0000054	2015-11-02 12:49:08	SAP Materials Management is slow or t...	Christen Mitchell	1 - Critical	On Hold

This display is called the List view. It's a list of records, in this case, incident records. Normally, you'd click one of the records to open it. Before you do, let's see how else you can start from a list to find a task to work on.

5. Click the list icon ( ) in the left, edge menu.
   In the Lists tab, you see the groups of records you can open as lists. For example, you could open **All problems** or **All change requests**.
6. In the Lists tab, under **Incidents**, click **Open**.
   A list of open incidents appears. Let's find out what the problem is and solve it.
7. Click an incident.
   The record opens in what is called Record view.

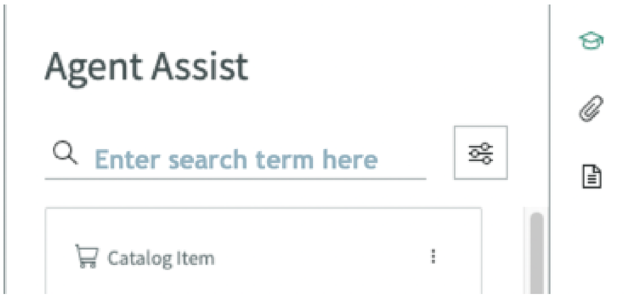


From top to bottom, here's what to notice:

- This record is on a tab labeled INC000905. You can open other incidents without closing this one. How? Click the list icon ( ) and click another incident. You can always jump from record to record by clicking the tabs.
- The form header shows the record's short description, "Email server is down." The form header is like the title of the incident record.
- Underneath that title in the form header is high-level information, including the importance of the task (**Priority**), whether it's been worked on (**State**), and the kind of incident this is (**Category**).
- On the bottom, the **Details** tab shows many details in the record. This section is called the form pane. Notice that you can scroll this section. You can enter information in this section, for example when you get additional information from the requester.

Basically, the **Activity** pane is where you communicate with the requester or make notes to yourself or other agents about your progress in dealing with this incident. On the far side, the Contextual Side panel is where you do your research to find solutions for the task at hand.

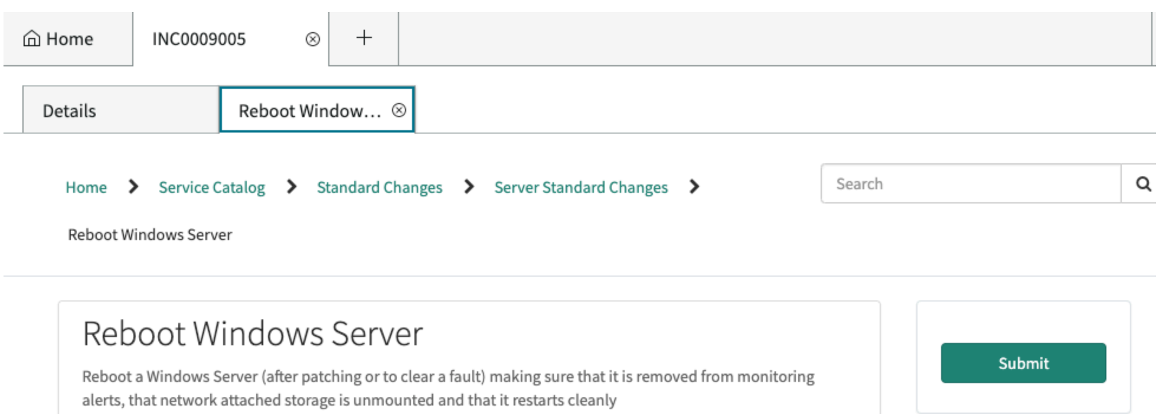
8. Click through the tabs next to the **Details** tab to get information related to the open record, such as the service level agreement (Task SLAs) for this task, continuous integrations (Affected CIs) that might be affected, services impacted by the incident, related incidents, outages, and so on.
   These items that work like tabs are called the Related items menu.
9. Click **Assign to me** to work on this incident.
10. Scroll down the stack of cards in Agent assist to solve this issue.
    The stack of cards is located on the side. If you don't see a card that suggests a solution, you could enter a search term beside the search icon ( ). Notice that workspace automatically entered the value of the Short Description field from the record in the search field and used that to search.



11. Click the card if It looks like the **Reboot Windows Server** card might be the solution that you want.

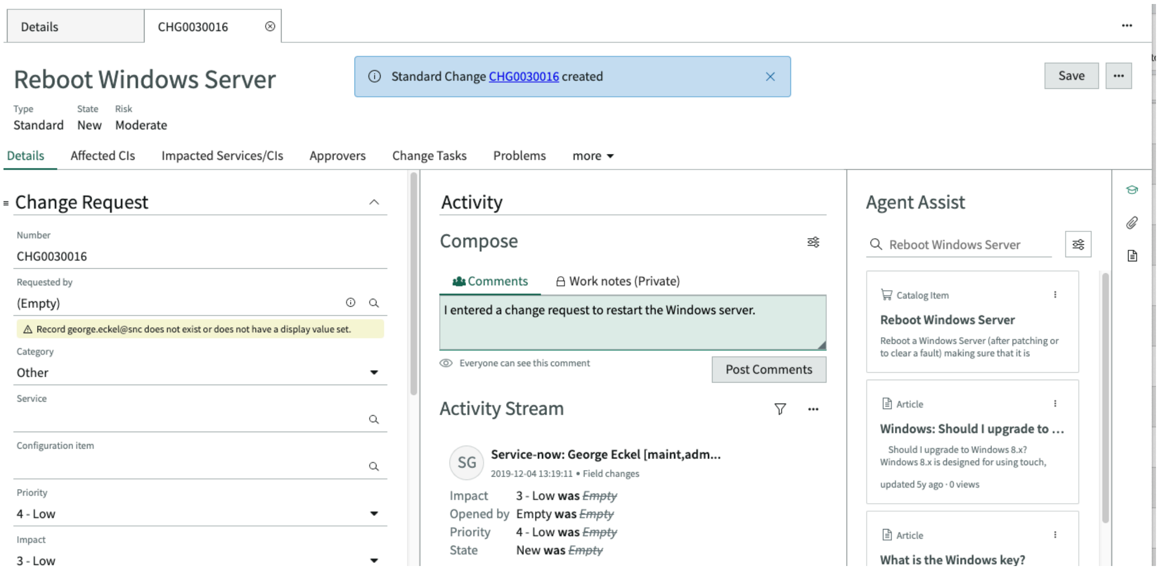
    Agent assist gives you the opportunity to order a reboot.

12. Click **Helpful** to provide guidance to the predictive intelligence software that this was a good solution for this incident.
13. Click **Order** to issue a change request to reboot the Windows server.
    Notice a new tab appears as a child tab of the same incident tab. These child tabs enable you to accomplish multiple tasks on one screen. All of the child tabs relate to the same incident, which is shown on the tab at the top.

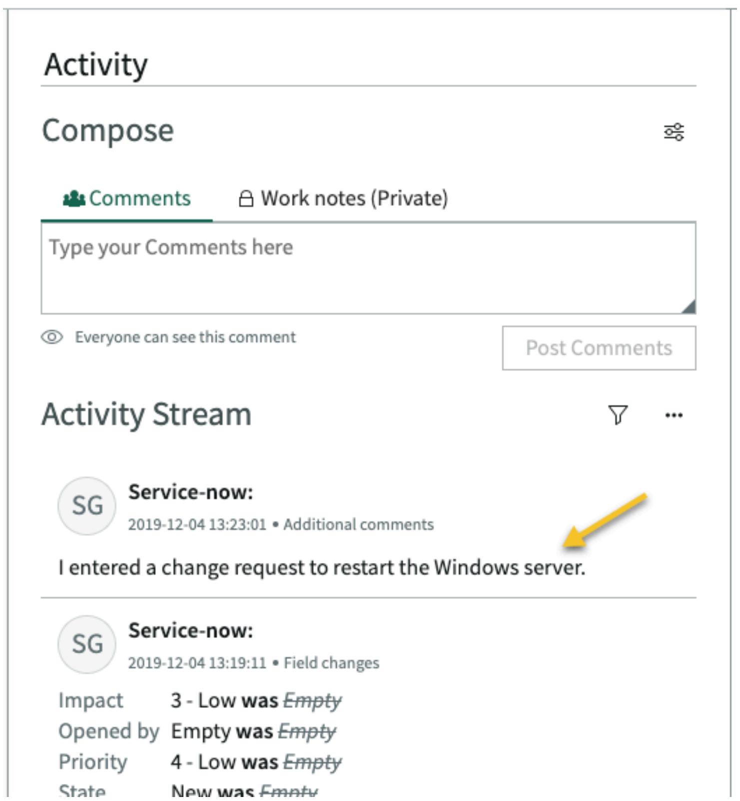


14. If you were really solving this issue, you'd click **Submit** and then click the option to save the change request.
    The system would then create the change request, which someone would then perform.
15. Document what you've done.

    In **Activity**, in the **Compose** field, click **Comments** and enter a note to the requester explaining what you did.



16. Click **Post Comments**.
Workspace sends your comment to the requester and also adds it to the **Activity Stream**, which is the history of communications and actions you've taken.



17. Click **Work notes (Private)**, enter a comment, and click **Post Comments** to save information that's only seen by fellow agents.
You might use this internal commenting feature if you've not completely resolved an issue but want to document what you've done for other agents or yourself when you come back to the issue later.

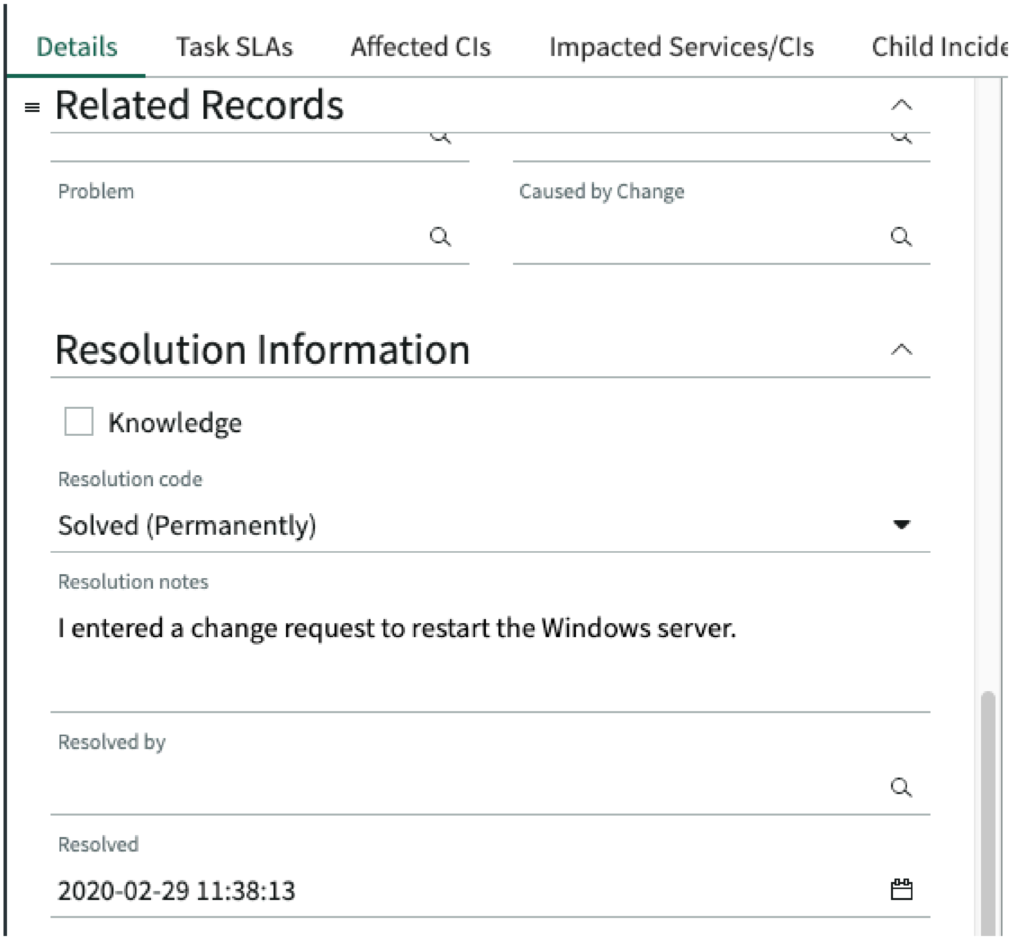
18. In the form pane, scroll to the section, **Resolution Information**, and do the following.

a. In **Resolution code**, click on one of the choices from the menu, for example, **Solved (Permanently)**.

b. In **Resolution notes**, enter a description of your resolution.

c. In **Resolved by**, select your name.

d. In **Resolved**, select the date and time of the resolution.



This information becomes part of the record.

19. If you haven't resolved the issue but want to save your progress, click **Save**.
20. If you've resolve the issue, click **Resolved**.
    The incident no longer appears in the list of open records.

What to do next

You've walked through finding and solving an incident that was in the database. Next, walk through solving an issue that comes in through a phone call or a chat.

Workspace tutorial for agents starting with a chat

Walk through this tutorial to get an idea how you can use workspace when you receive a task by phone or chat.

Before you begin

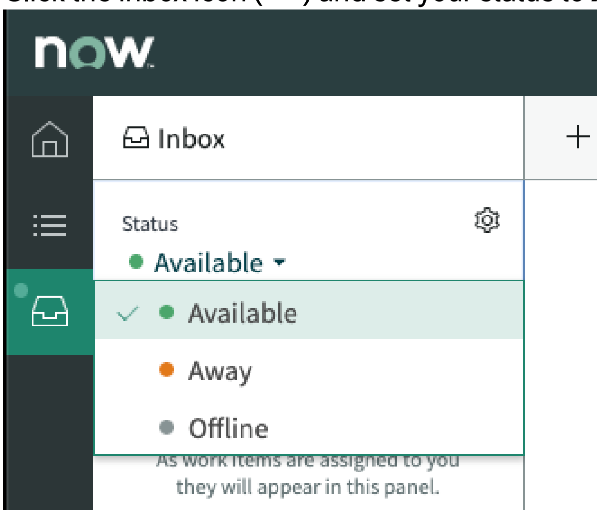
Role required: agent

About this task

This tutorial starts with an agent working on a request that started with a chat. The workflow would be almost identical if the issue started with a phone call.

Procedure

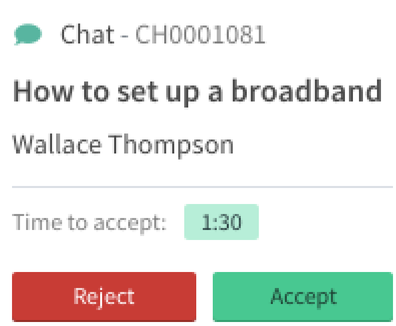
1. Open your workspace by navigating to **Workspace Experience** > **Administration** > **All Workspaces** and clicking the name of your workspace.
2. Click the name of your workspace and then under Related Links, click **Open workspace**.
3. Log into your workspace.
4. Click the inbox icon () and set your status to **Available**.



The green circle at the top left of the icon shows your status is **Available**. A number appears at the top, right of the icon 

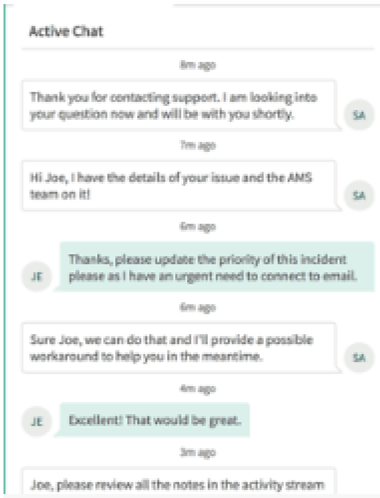
when there are one or more chats available to answer.

5. Click the inbox to open a chat.
You're given the opportunity to accept the chat.

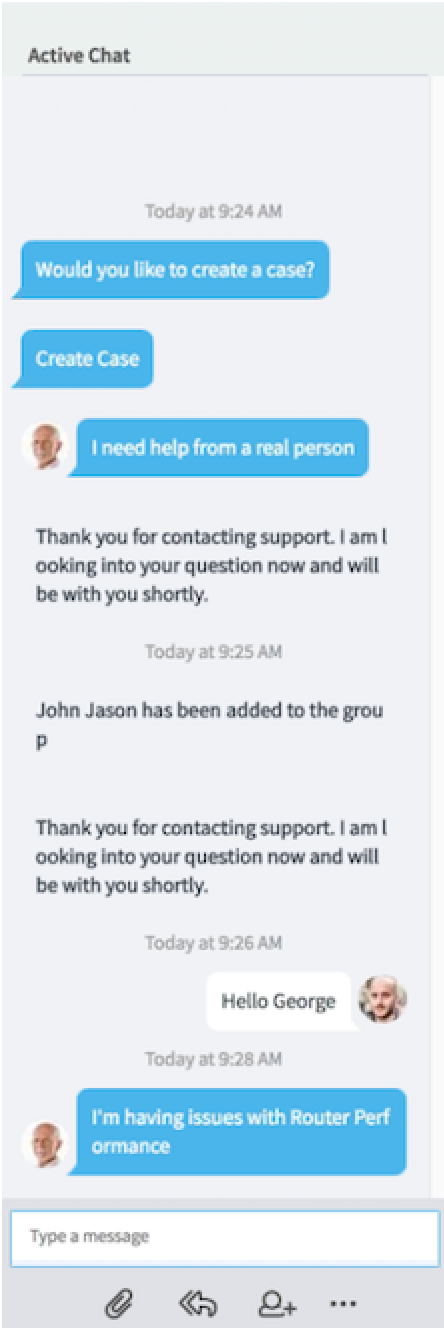


The **Time to accept** counter shows how much time you have to accept the chat. When the counter reaches zero, the chat opportunity disappears from your inbox.

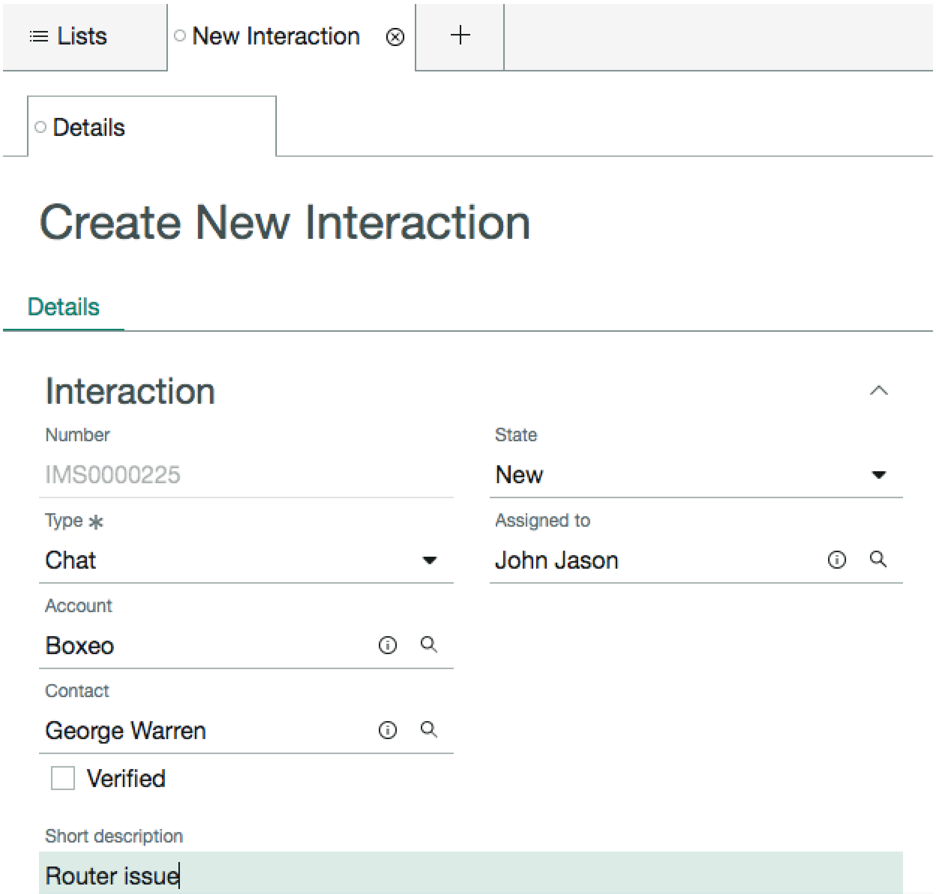
6. Click **Accept**.
The chat pane appears and workspace automatically creates an interaction record, assigns it to you, and enters it in the database.



7. Chat with the requester to find out what the issue is.



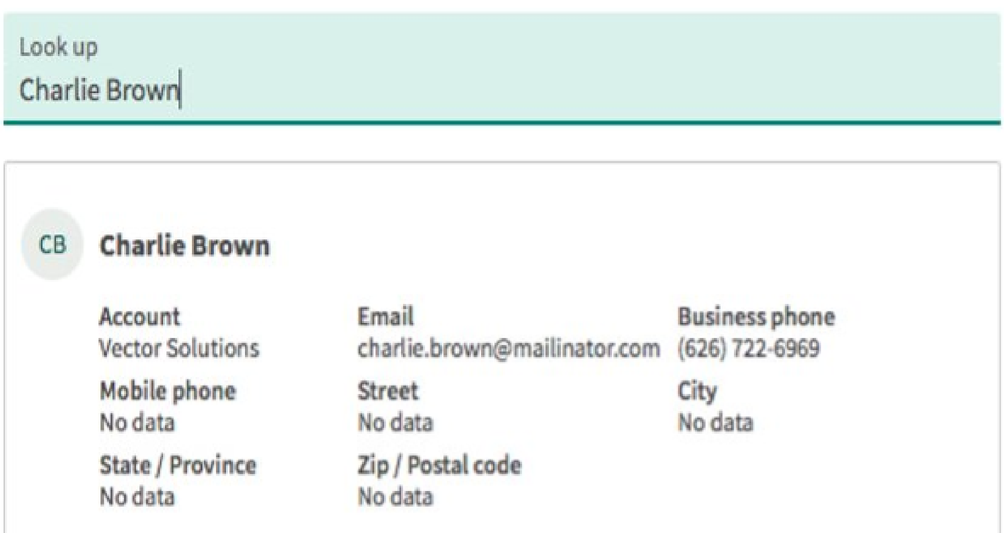
8. Add information about the customer and issue to the interaction record.



9. **Optional:** You can verify the customer's information by clicking the **Verify contact** or **Verify customer** UI action button.

Note: Not all workspaces have these buttons.

A modal appears that displays personal information about the contact or customer. You can ask the requester for this information to confirm their identity.

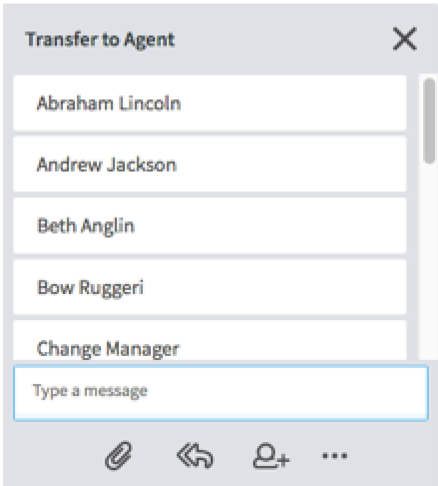


10. **Optional:** You can transfer the chat to another agent who has more experience with the issue.

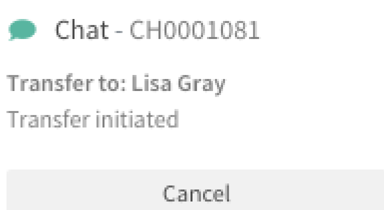
a. From the Action toolbar in the Active chat panel, click the Transfer Agent icon ( ).

b. In the Transfer to Agent window, select the agent to receive the chat and enter a message to that agent.

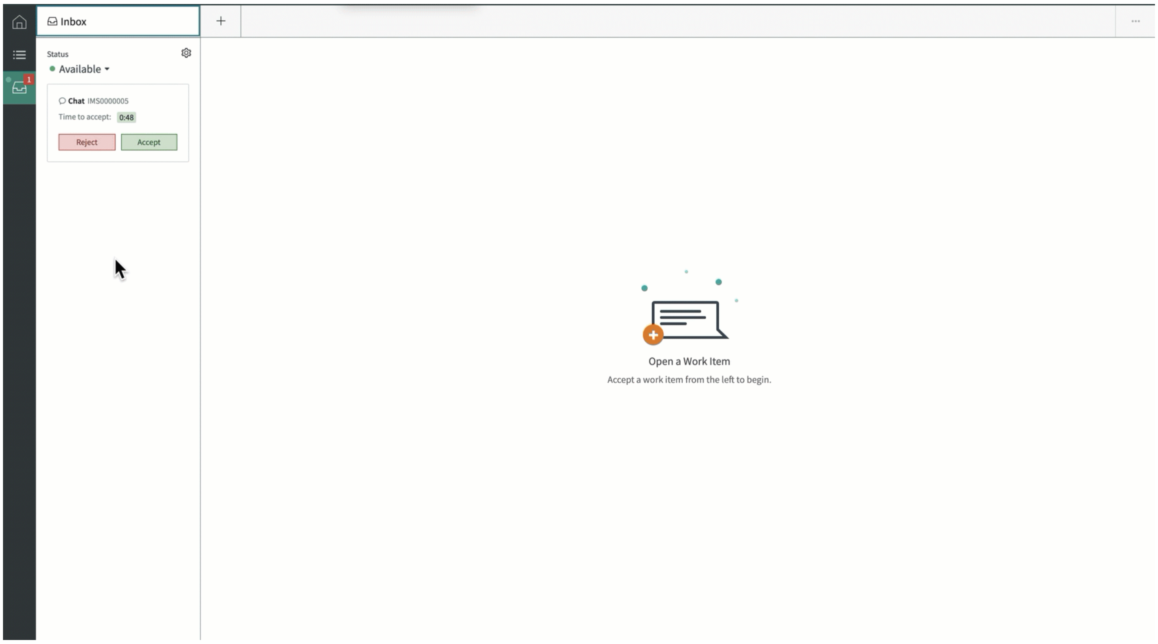
Note: Only the current owner of a chat may transfer the chat to another agent. The transfer button is otherwise disabled.



The transferred chat is listed in the Queues panel for the receiving agent. The receiving agent can accept or decline the transfer request. When the agent accepts the request, you get a confirmation.

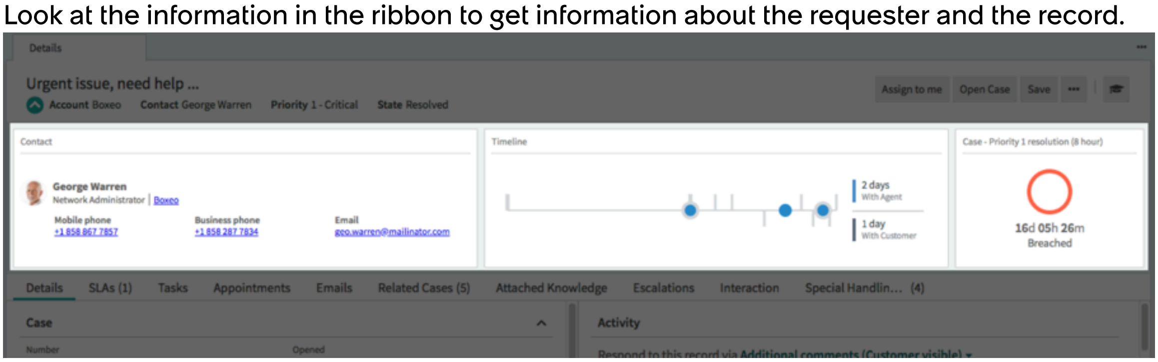


11. After chatting, you might decide to create an incident out of this interaction record. Click **Create incident** to create an incident and transfer the information from the interaction to the incident record.

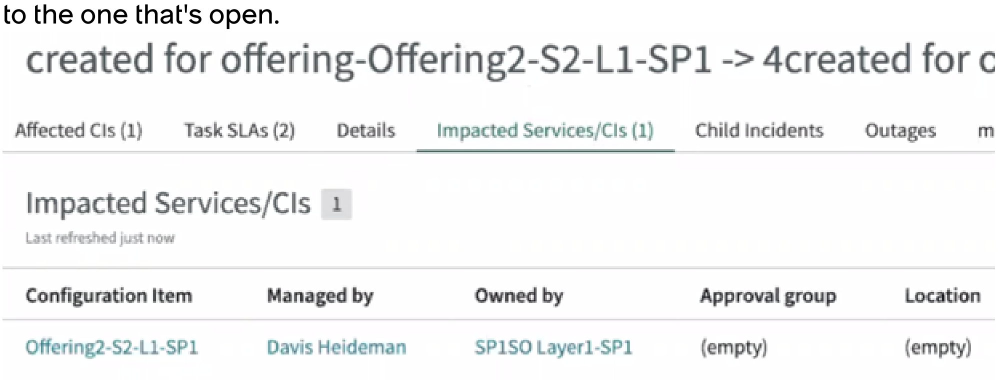


The incident is automatically assigned to you.

12. Click **Save** to save the incident.
13. Look at the information in the ribbon to get information about the requester and the record.



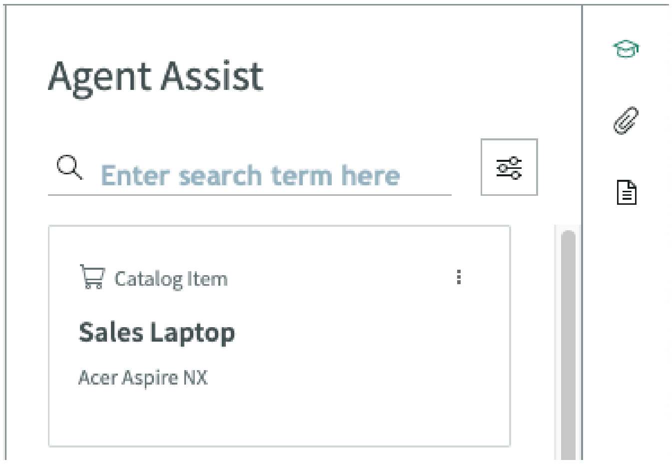
14. Click several of the items in the related items menu to see what other records might be linked to the one that's open.



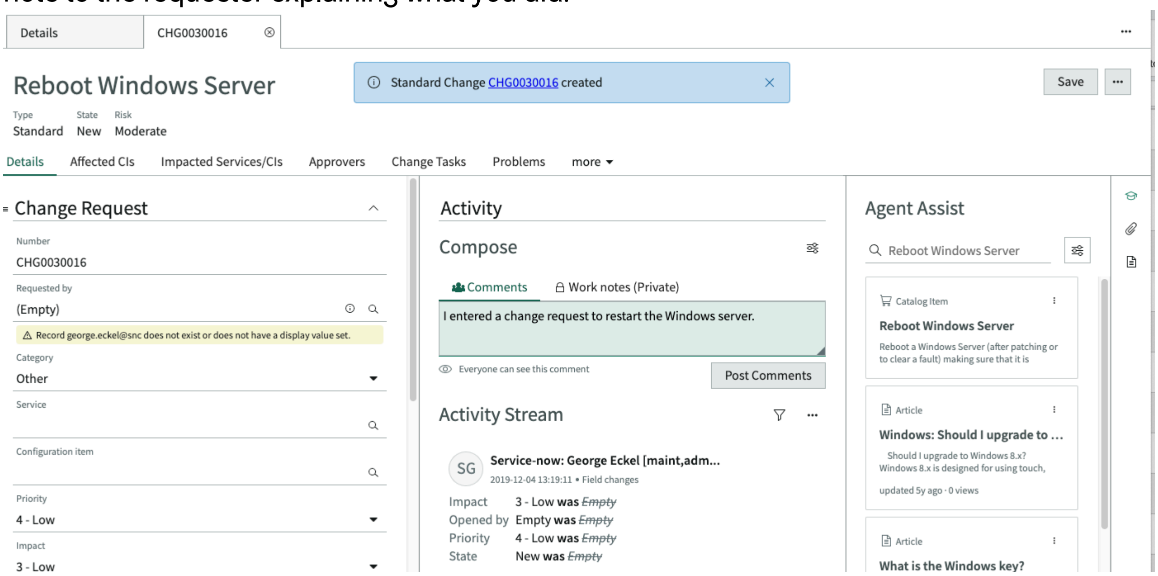
For example, clicking **Outages** shows related system failures, and **Child incidents** shows incidents related to this one.

15. Use Agent assist to research the incident.

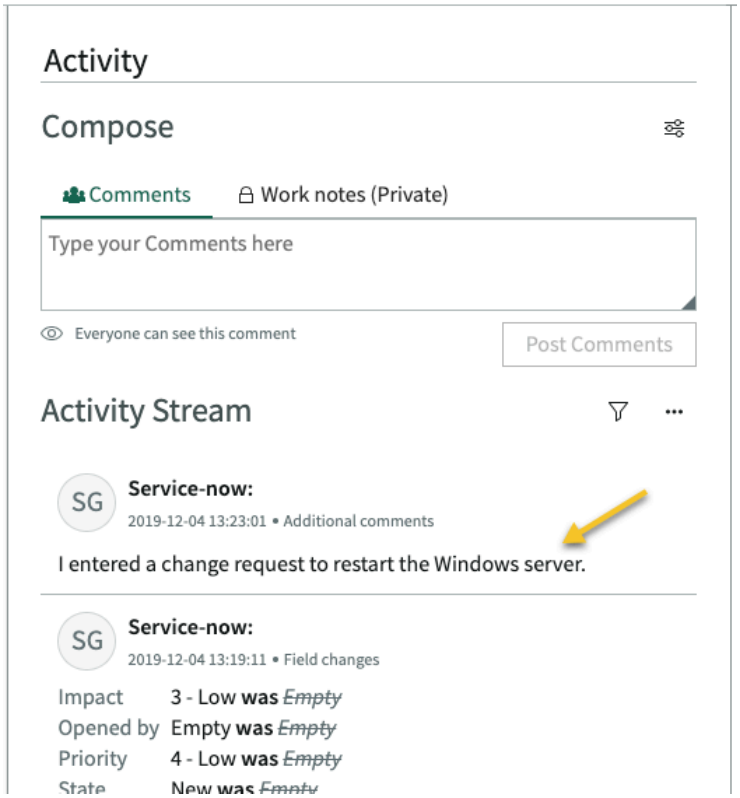
If the suggestions in Agent assist don't provide answers for the incident, enter a search term.



16. Document what you've done. In **Activity**, in the **Compose** field, click **Comments** and enter a note to the requester explaining what you did.



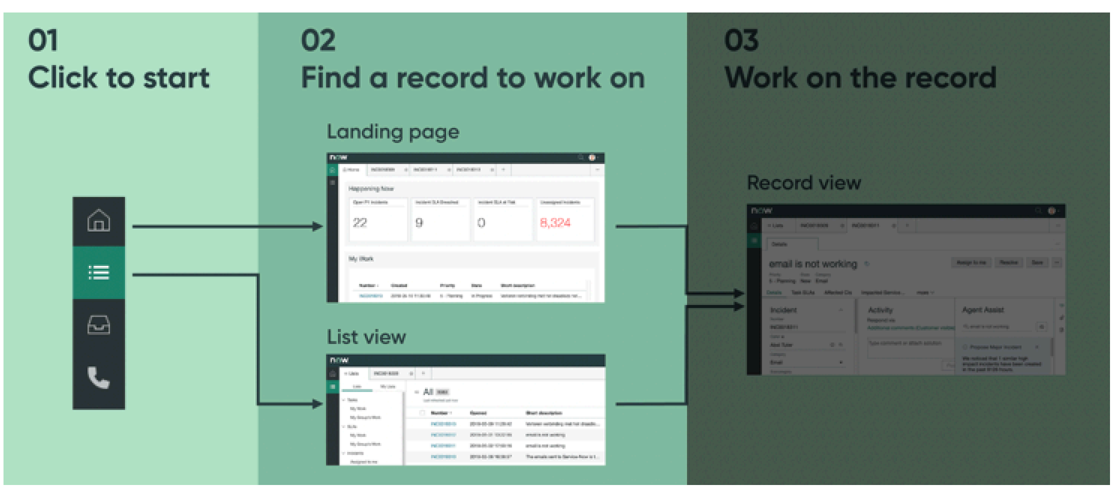
17. Click **Post Comments**.
    Workspace sends your comment to the requester and also adds it to the Activity Stream, which is the history of communications and actions you've taken.



18. Click **Work notes (Private)**, enter a comment, and click **Post Comments** to save information that's only seen by fellow agents. You might use this internal commenting feature if you've not completely resolved an issue but want to document what you've done for other agents or yourself when you come back to the issue later.
19. Click **Save** or **Resolve**, depending on whether or not you've completed your work on this incident.

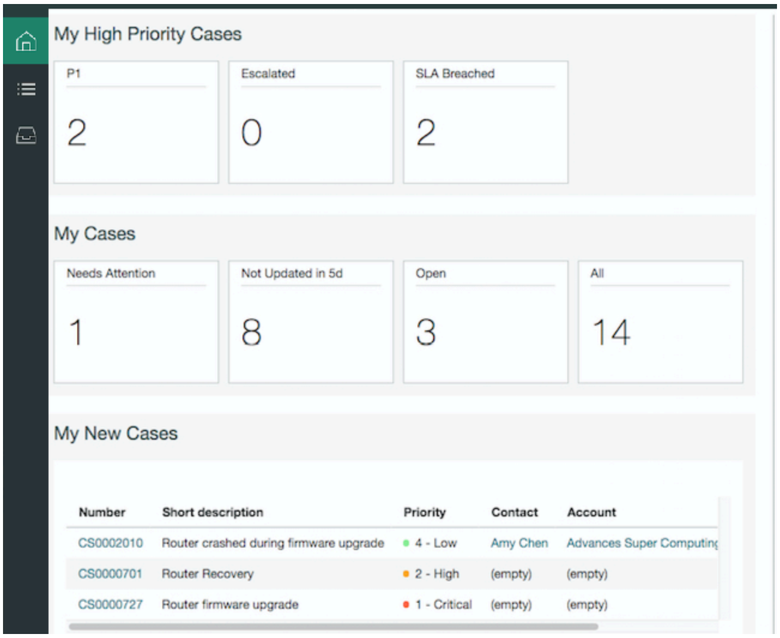
Finding issues to work on in your Workspace

Use workspace to find the issues to work on.



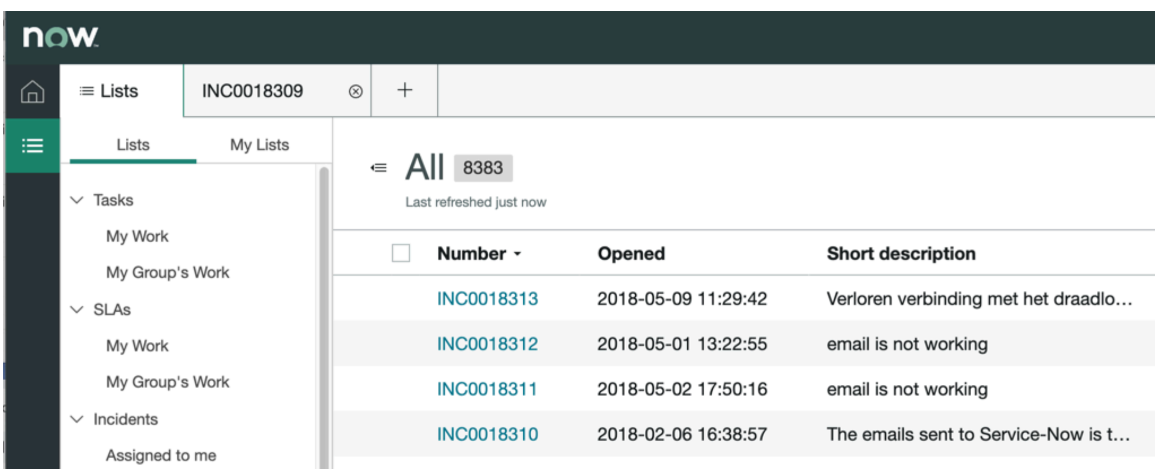
The first step in your workflow is finding issues to solve. You can find issues to work on in the following ways:

- Landing page—Provides a high-level overview of tasks that need to get done.



Clicking a link takes you either to list view or a specific record. You get to the landing page by clicking the home icon ( ). For more information, see Use the landing page to find issues to work on.

- List view—Displays lists of records to work on. Records are grouped by the table they're in, for example, Task, SLA, Incident.



Clicking a link takes you to the record so you can work on it. You get to list view by clicking the list icon (List). For more information about list view, see Use lists to find work to do.

- Chat inbox—Interact in real time with requesters using chat.

  Accepting a chat request automatically creates a record for you to record the work you do to solve the issue. You get to chats by clicking the agent inbox icon (Inbox). For more information about chatting with requesters, see Getting work from chats.

- Phone inbox—Interact in real time with requesters by phone.

Accepting a phone call automatically creates a record for you to record the work you do to solve the issue. You answer and make phone calls by clicking the phone icon ( ). For more information about using phones in workspace, see Get work by phone in workspace.

- Share a record—See a record another agent is working on so you can help.

Next

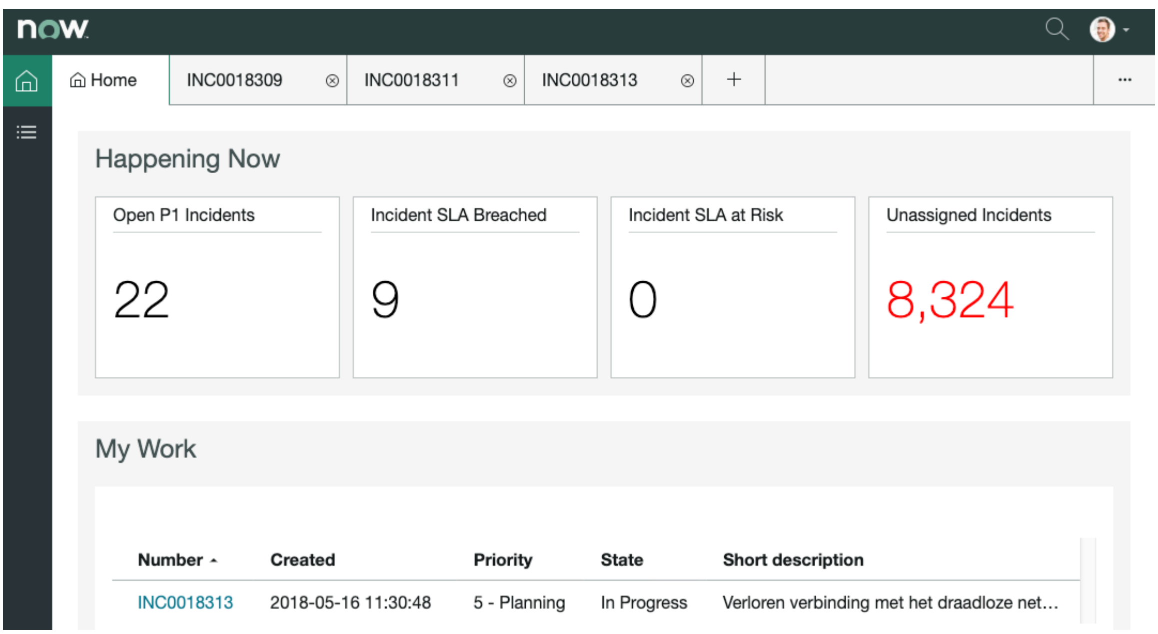
Learn how to use the landing page to find work to do.

Use the landing page to find issues to work on

Use the landing page to get an overall view of work that needs to get done.

Before you begin
Role required: agent

About this task
The landing page is the first page you land on when opening a workspace. It can contain high-level information, such as unassigned, high-priority tasks, or tasks assigned to you. For example, the following landing page shows unassigned, high priority cases, such as open P1 incidents. The page also shows tasks assigned to you under **My Work**.



Landing pages are configurable by your system administrator so yours might look different.

Procedure

1. Navigate to **All** > **Workspace Experience** > **Workspaces** and click your workspace.
   Your landing page opens.
2. Click any of the links on the landing page to select an issue to work on.
   If you click a group of records, such as, open P1 incidents, list view opens and you see a list of P1 incidents that you can choose to work on. If you click the link to a specific record, such as INC0018313, that record opens in record view.

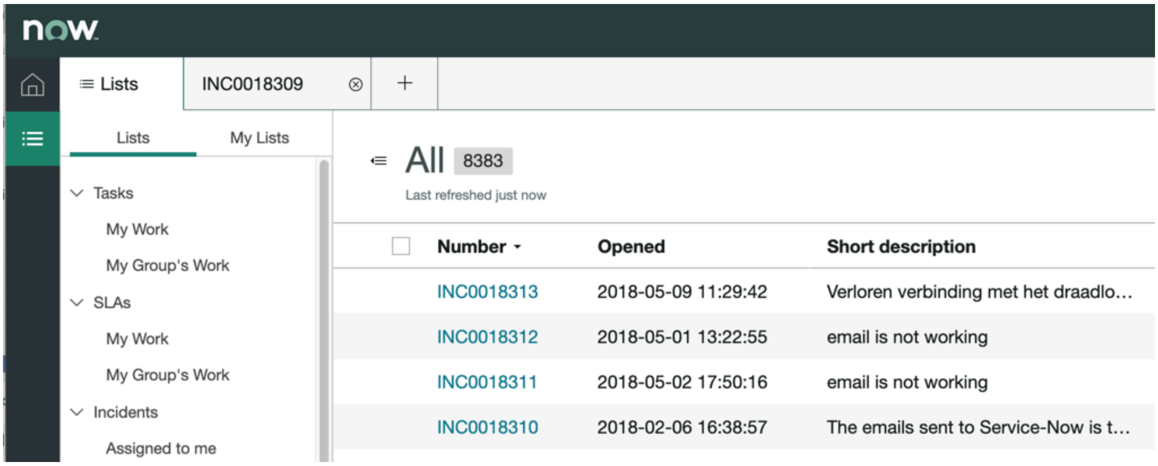
What to do next
Learn how to find work do to in list view. Once you click a record in a list, it opens in record view.

Using lists to find work to do

Use lists in workspace to see high-priority issues and which issues are assigned to you.

To get to list view, click the list icon ().

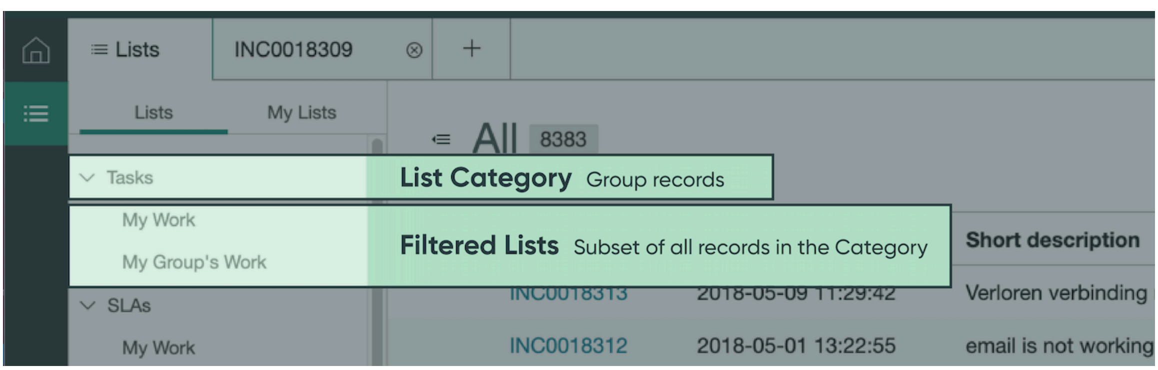
List view



You see two tabs of lists: **Lists** and **My Lists**. The system administrator creates the list categories in **Lists**. You create the list categories in **My Lists**.

List categories

List categories in the previous image are **Tasks**, **SLAs**, and **Incidents**. List categories are not clickable and therefore serve mainly as headings for the list filters beneath them. For example, under the list category, **Tasks**, are the list filters, **My Work** and **My Group's Work**.



Your system administrator sets up the list categories, which typically correspond with the tables in the database. For example, all incidents are stored in the incident table. All interactions are stored in the interaction table. The list categories your system administrator chooses to display in list view correspond to the kinds of issues you work on. If you work on incidents, your system administrator shows incidents in the **Lists** column. If you work on cases, the **Lists** column shows cases.

You can use the up arrowhead icon () to display the list filters under each list category. Clicking the down arrowhead icon () collapses the list categories to make it easier to scroll through the list categories.

You cannot have a list category without list filters.

List filters

List filters are the subsections under list categories. In the previous image, under **Tasks**, you see **My Work** and **My Group's Work**. Each list filter provides a helpful grouping of records typically from one table. For example, **My Cases** enables you to quickly find cases assigned to you. Your system administrator creates the list filters.

Clicking a list filter opens the corresponding list of records in list view. A list filter must belong to a list category in the **Lists** tab.

My Lists

Any lists that you create appear in this section. Lists in this section are only visible to you. For more information about creating your own list categories and list filters, see Create My Lists in workspace.

Next

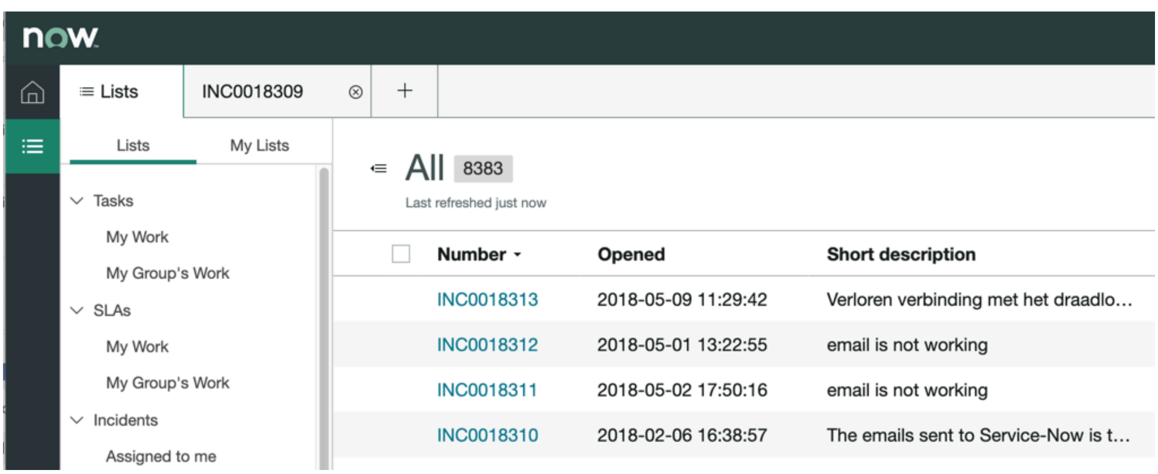
Learn how to work with lists in list view.

Work with lists in workspace

Open a list of records in workspace so you can choose one to work on.

Before you begin
Role required: workspace_user

About this task
List view enables you to see high-level information for all records in a list filter. Normally, clicking a field in a record in a list opens that record. If the field is clickable (a reference, document ID, or URL), clicking it does not open the record, it opens the record or URL that the clickable field points to.



`Last refreshed` indicates how long ago the values in the list were last refreshed. To refresh the values, refresh the page.

Each list has an associated URL. You can bookmark a list to enable quick access to it.

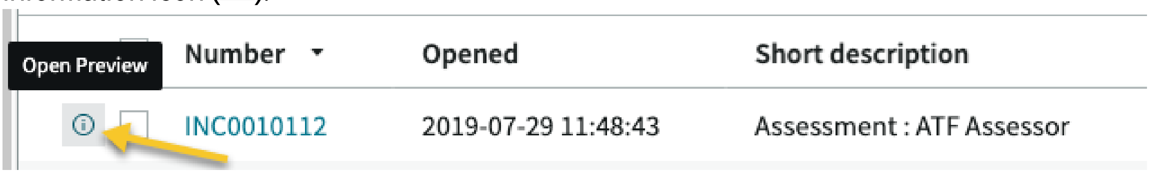
Here's how to open a list to find records you want to work on.

Procedure

1. Click the list icon ( ).
2. Find a list category that contains the records you want to work on, for example, **Tasks**.
3. Click one of the list filters under it.

   For example, under **Tasks**, you might click on a list filter called **My Work**. That would open up a list of task records assigned to you. The list filter title and the number of records in the list appear at the top of the list. In the previous image, the **All** list contains 8383 records.

4. **Optional:** To preview a record before opening it, move your mouse over a record and click the information icon ( ).

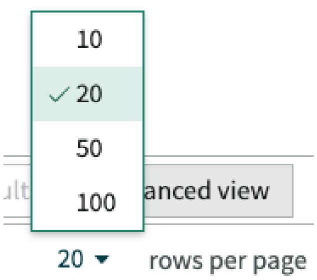
   

   A side panel opens that shows the record.

5. **Optional:** To move to a different page of records, click a page number or one of the arrows to move forward or backwards a page, or to the first or last page of records.

   (Optional) 

6. **Optional:** To change the number of records displayed on a page, click the number beside rows per page and select a number from the menu.

7. Click a record number to open it.
8. **Optional:** To export the records in a list in one of the following formats: CSV, XLSX, JSON, or PDF, click the gear icon and select **Export**.

What to do next

Now that you know how to open a list and the records in it, find out how to edit records in list view.

Edit records in list view

Make updates to a record directly from a list, without leaving the list.

Before you begin

Role required: agent_workspace_user

About this task

You can revise one or more records while in list view. To learn more about a record before editing it, view and revise it in record view.

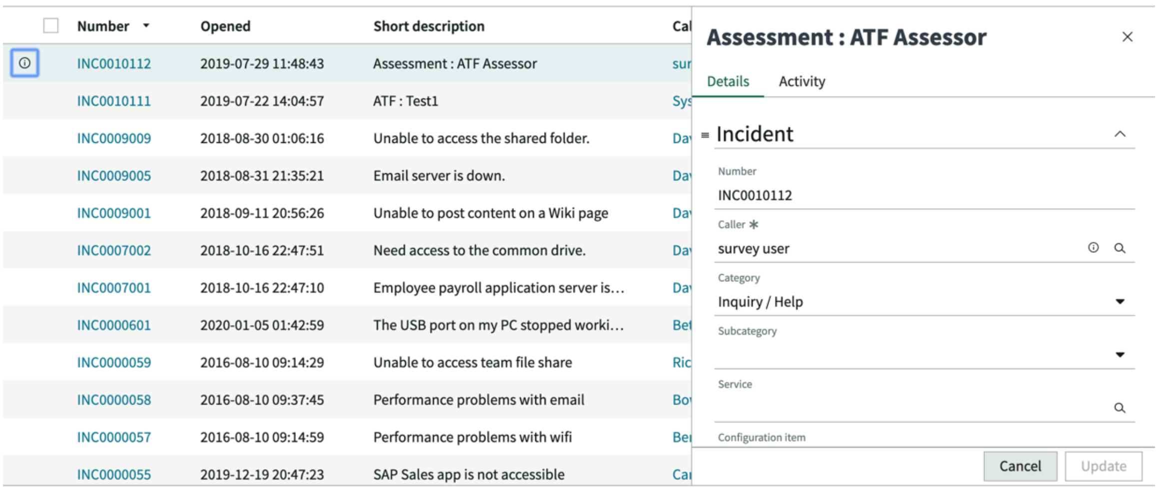
servicenow

Procedure

1. Revise a single record from a list.

   a. Click the Open Preview icon ⓘ.

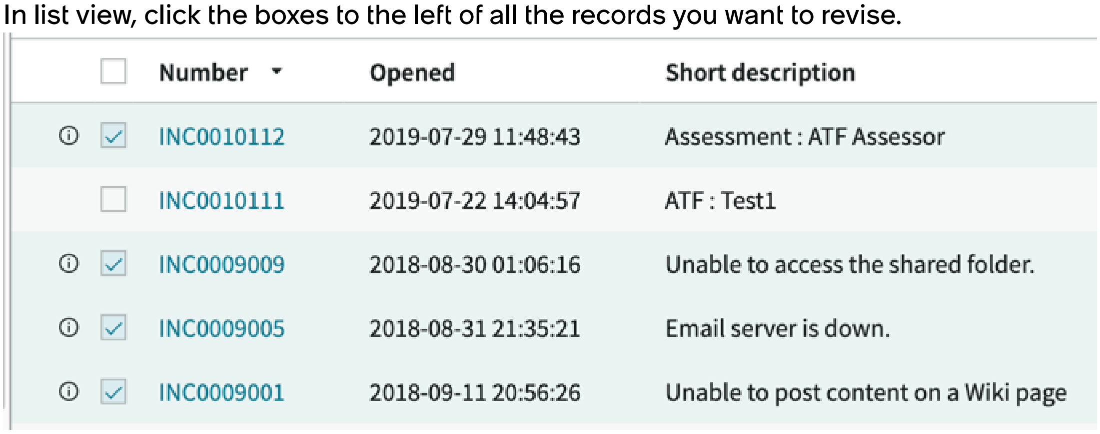
   The record opens.



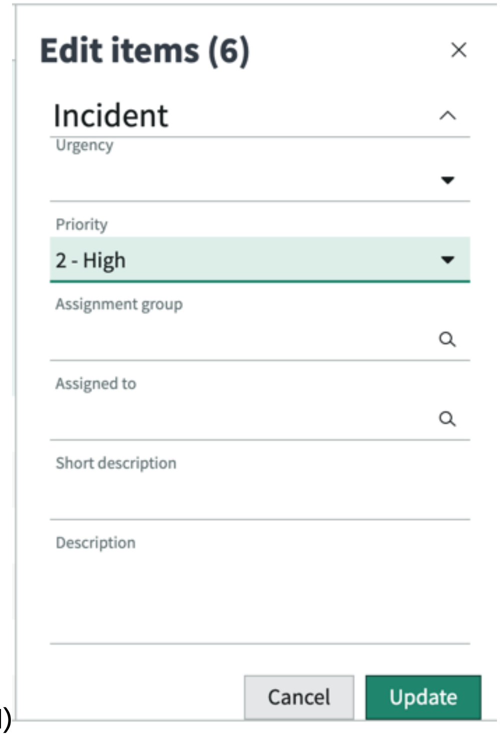
   b. Revise the values in the fields and click **Update**.

2. **Optional:** Revise multiple records at once.

   a. In list view, click the boxes to the left of all the records you want to revise.



   b. Click **Edit**.
   A preview pane opens and shows you the fields you can edit in the selected records.



(Optional)

c. Revise the values in the fields and click **Update**.

What to do next

Now that you know how to edit a record in list view, find out how to sort and filter the records displayed in a list.

Sort records in lists

Sort the records displayed in list view to more easily find the records you want to work on.

Before you begin

Role required: agent_workspace_user

About this task

Filtered lists can contain thousands of records. Sorting them by field values can help you find the records you want to work on. You can sort the entire list based on any of the columns in the list.

Procedure

1. To change the field the records are sorted by, double click a column heading.
   An arrowhead icon (▲) appears to the right of the column heading you clicked and workspace sorts the list of records based on the values in that column. An arrowhead pointed down means the values are sorted from highest to lowest values.

2. **Optional:** To reverse the sorting order, click the arrowhead icon so the arrowhead reverses direction.

What to do next

Instead of sorting records, you might want to Filter records in lists to reduce the number of records displayed in list view.

Filter records in lists

Filter the records to reduce the number of records displayed in list view so you can find the records you want to work on.

Before you begin

Role required: agent_workspace_user

About this task

Filtering removes records from a list so you can view only those records you're interested in working on.

Workspace provides the following ways of filtering records displayed in a list:

- Use the filter icon ( ).
- Filter directly in the list using the column heading.
- Filter directly in the list using the values in the columns.

Procedure

1. To filter out records using the filter icon ( ):

   a. Click the filter icon ( ).

   b. Click **Advanced View**.

   c. Use the condition builder to specify the conditions one or more field values must meet for a record to appear in the list.
   For example, [Active][is][true], and [Urgency][is][1- High].

   d. **Optional:** To add more conditions, click **New condition set** and supply a condition.

   e. **Optional:** Select **Save Filter**, enter a filter name, and choose permissions to determine who can use the filter.
   Retrieve the filter by selecting **Use existing filter** and select the filter.

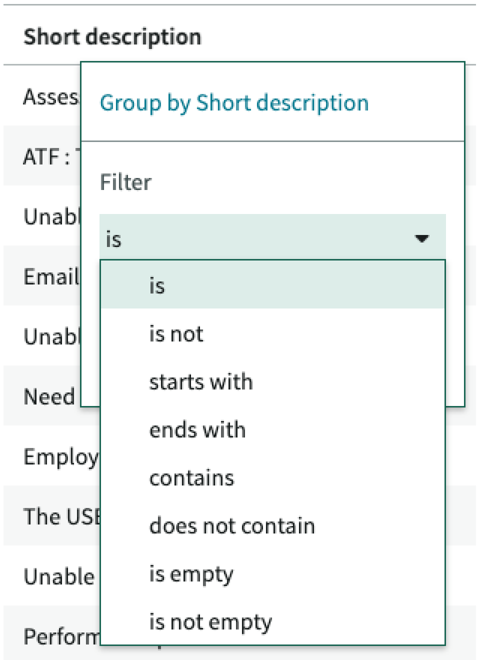
   f. Click **Update**.

   The list filter icon shows the number of conditions that apply to the current list.

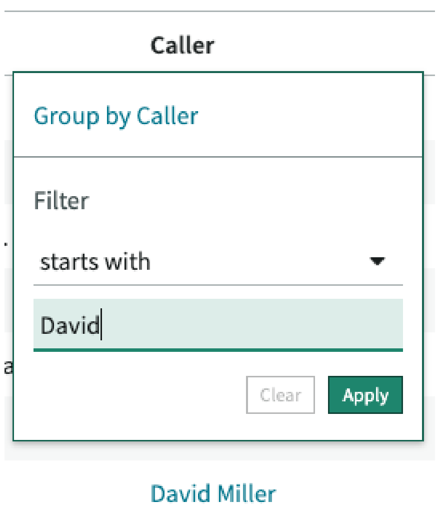
2. Filter records based on field values displayed.
   You can work directly with list columns to filter out records.

   a. Click the **More UI Actions** icon to the right of a column heading.

   b. Click the downward pointing arrowhead icon ( ) and select a filter condition, such as **is not**, **starts with**, or **contains**.

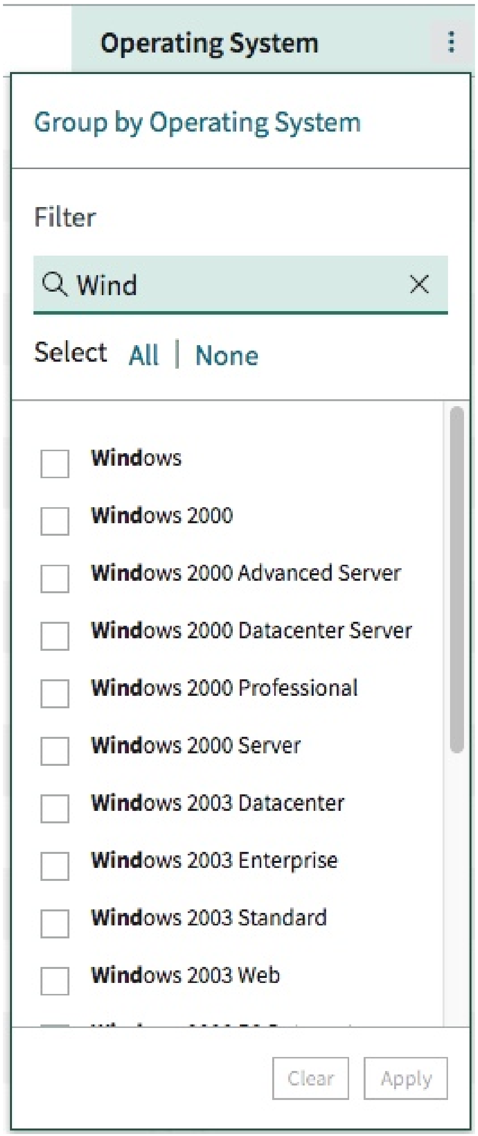


c. Enter the field value to filter the list on the bottom line and click **Apply**.
In the following example, the only records that appear have **Caller** values that start with **David**.



Note: Not all field types support column filtering. You can use the `Advanced Filter` panel and condition builder to create a filter for those field types.

d. If the values come from the sys_choice table, the possible values (choices) appear with boxes beside them.



If there are more than ten fields, workspace displays a **Filter**, as shown here, so you don't have to scroll to find a field value. If there are less than ten choices, there's no entry filter under **Filter**.

You can click **All** to select all of the fields or **None** to uncheck all of the fields. **All** selects all of the field values that meet the filter conditions, not just those shown in the pop up. Likewise, **None** unchecks all of the fields that meet the filter conditions, not just those shown in the pop up. You can combine these functions. For example, you can filter on `Windows` and select **All**, and then filter on `2000` and select **None** and wind up with rows that contain Windows but not Windows 2000.

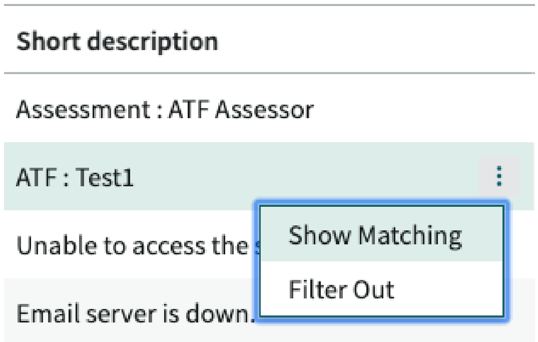
You cannot configure the number of fields (10) that makes the **Filter** entry field appear.

e. **Optional:** To remove the filter and restore all of the records, click the **More UI Actions** icon (⋮) and click **Clear**.

3. Filter out records based on field values.
This feature is similar to the one in the previous step but you can't enter a term to filter the records.

a. Click a field in the record.

b. Click the More UI Actions icon (⋮).



c. To remove all records that don't have the same field value, click **Show Matching**.

d. To remove all records in the list that have the same field value, click **Filter Out**.
By default, a column sorts in an ascending order unless the column data type is a date. Dates sort in a descending order.

What to do next

Instead of filtering records, you might like to group records in list view.

Group records in lists

Group the records displayed in list view to more easily find the records you want to work on.

Before you begin

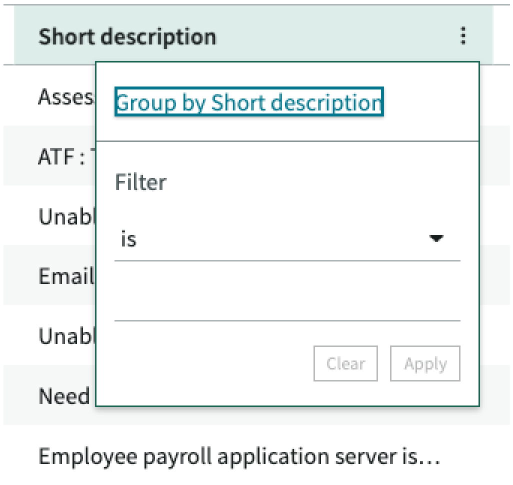
Role required: agent_workspace_user

About this task

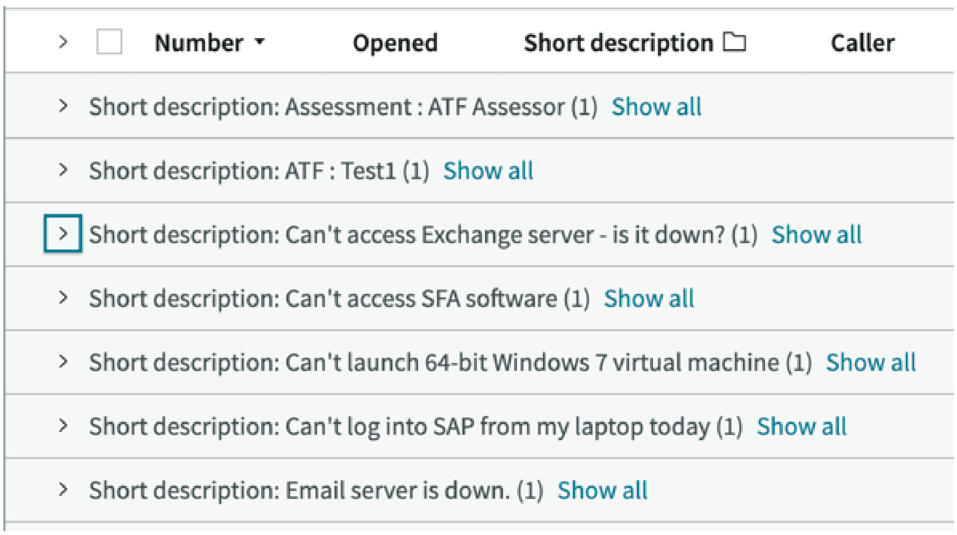
You can group records that have the same values in a column so you can see similar records.

Procedure

1. Move the mouse over a column heading and click the More Options icon (⋮).
2. Click the first option, **Group by <column-heading-name>** where <column-heading-name> is the name of the column you're clicking in.



The records are grouped based on the values in the selected column.



The display shows the number of records in each group.

3. Open a group by clicking its arrowhead icon ( ).
4. **Optional:** To ungroup the records, mouse over the same column heading, click the More Options icon ( ) and click **Ungroup by <column-heading-name>**.

What to do next

Instead of grouping records, you might like to Filter records in lists.

Create My Lists in workspace

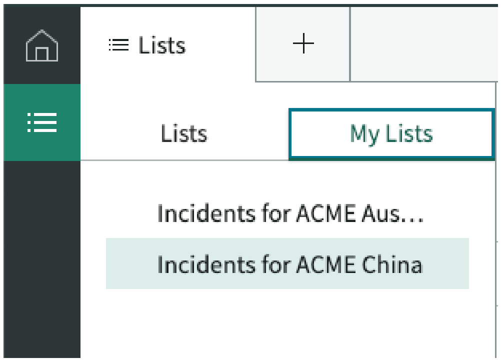
Create your own filtered lists in workspace to monitor your issues, tasks, or problems, under **My Lists**.

Before you begin

Role required: agent_workspace_user

About this task

Create different groupings of records than those provided by your system administrator under the **Lists** tab. For example, you might like to group all records that pertain to incidents associated with a specific company. You can create another version of an existing list, or create an entirely new one. Those lists are only visible to you. To access your lists, select **My Lists**.



As you can see, **My Lists** doesn't have list categories, only list filters.

Procedure

1. Navigate to **All** > **Workspace Experience** > **Workspaces** and select your workspace.
   Your workspace opens.
2. Select **My Lists**.
3. Select **+New list**.
4. On the form, fill in the fields.

New List

Type	Field	Description
Start from existing	List	Existing list that you want to modify. The menu displays all available admin defined lists for selection.
	List Name	Name for your list. By default this field appends `_Copy` to the list selected in the previous menu.
	Select columns	Record fields to include in list view. Columns from the list you selected appear. Add or remove columns to create the list you like as needed.
	Add Filters	Condition builder to create filters that appear in your My Lists tab. By default the conditions applied to the list selected appear.
Create your own	List Name	Name for your list.
	Select Source	Table the records come from.
	Select columns	Record fields to include in list view. Select the columns that display in the list. By default this field populates with columns from a Workspace list view if one exists. If a Workspace list doesn't exist,

Type	Field	Description
		the columns are populated with the Default list view of the table selected.
	Add filters	Condition builder that is applied to the list.

5. Select **Create**.
   The list appears on the **My Lists** tab.
6. **Optional:** To change the order of your lists, select **Reorder**, then drag each list into the order that you want and select **Done**.
7. **Optional:** To modify or delete any of your lists, select the gear icon ( ) and select one of the following:

   Rename

   Enables you to rename a list.

   Personalize Columns

   Enables you to alter the columns that are displayed in the list.

   Save

   Saves the current list and underlying filters.

   Save as

   Saves and renames the current list and underlying filters under `My List`.

   Export

   Export **My List** in a variety of formats.

   Delete

   Removes a list from `My List`.

Edit your Workspace list columns and save the list

Edit which columns appear in your list and how they're ordered, and save the list to My Lists.

Before you begin

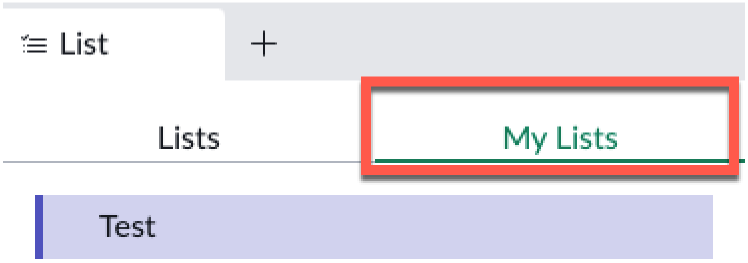
Role required: agent

Note: Column personalization must be enabled for agents.

Procedure

1. In a Workspace list, select the List Actions Icon ( ).
2. Select **Edit columns** from the menu.
3. In the Edit List modal, move the columns over that you want to display from Available columns to Selected Columns.
   The selected columns display from left to right with the first column displaying on the far left.
4. Select the List Actions Icon ( ).
5. Select **Save**.

Your list configuration is now accessible in the **My Lists** tab. You can rename the list or delete the list from the options in the List Actions menu.



Personalize your Workspace list columns by dragging them to the order you want

Drag your list columns to where how you want them.

Before you begin

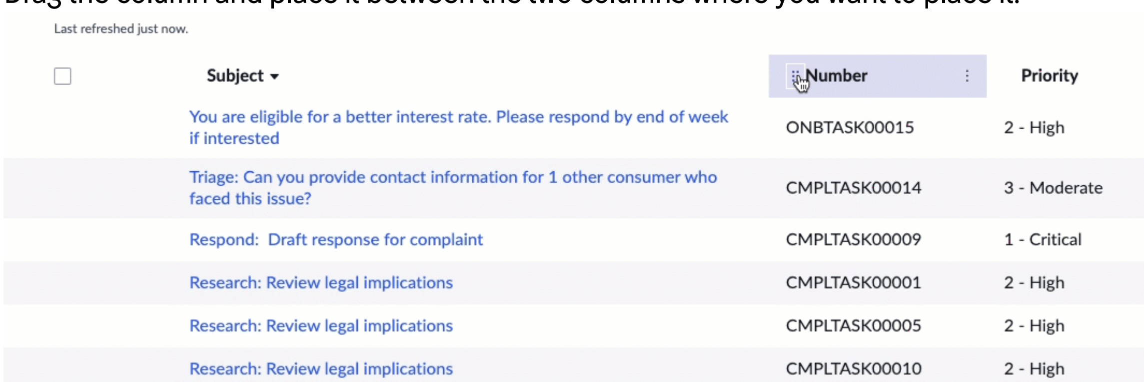
Column personalization must be enabled.
Role required: agent

Procedure

1. Drag a column using your mouse.

   a. In a Workspace list, select and hold the grab icon ( ) in the column header of the column you want to drag.

   b. Drag the column and place it between the two columns where you want to place it.



2. Drag a column using your keyboard.

   a. In a Workspace list, select the column header of the column you want to drag and press **Enter** on your keyboard.

   b. Press **Enter** again on your keyboard to select the grab icon ( ).

   c. Use your arrow keys to move the column to the location you want.

   d. Press **Enter** on your keyboard to place the column.

Inline edit one or multiple cells in a list

Inline edit one or multiple cells from the same column of a list to simultaneously change the value of the selected cells.

Inline editing enables you to change a field in a list instead of opening the record and changing it on the form. Edited cells must be in the same column when editing multiple cells.

- Edited cells must be in the same column when editing multiple cells.
- Edit the following fields inline:
  - Boolean
  - Choice
  - Date
  - Date/time
  - Decimal
  - Duration
  - Float
  - Integer
  - Phone
  - Phone e164
  - Reference
  - String
  - Table name
  - Tags
  - URL

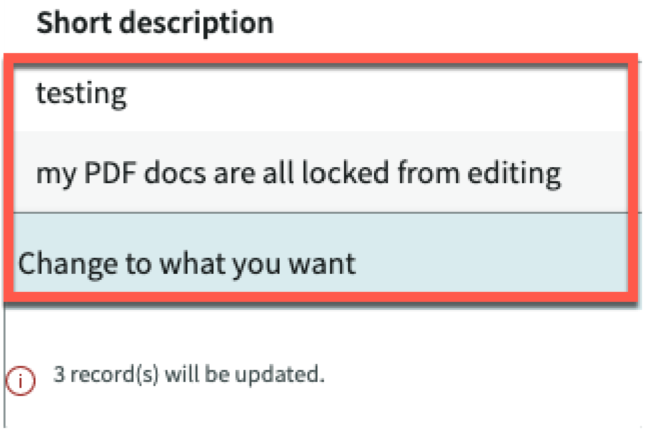
Inline edit using a mouse

Inline edit one or multiple cells from the same column using a mouse.

Before you begin
Role required: none

Procedure

1. Edit a single cell.
   a. Double click a cell.
   b. Enter the value you want and press **Enter**.
   To cancel the inline edit, press **esc** or **Cancel** on the keyboard, or click outside the cell.
2. Select consecutive cells.
   a. Place focus on a cell.
   b. Hold **shift** on the keyboard and select the final cell you want to change.
   c. Double click the cell.
   d. Enter the value you want.
   To cancel the inline edit, press **esc** or **Cancel** on the keyboard, or click outside the cell.
   e. Press **Enter**.



3. Select non-consecutive cells in a column

   a. Place focus on a cell.

   b. Hold down the **command** key (or **windows** key) and select the cells you want to edit. The cells must be in the same column.

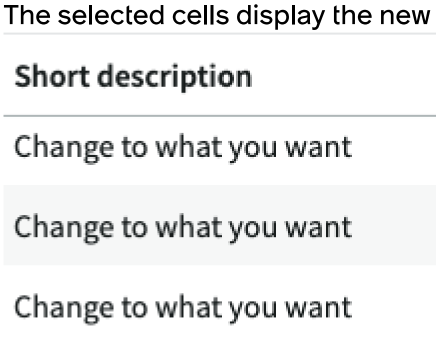
   c. Double click the cell.

   d. Enter the value you want.

   e. Press **enter**.

Result

The selected cells display the new field value.



Inline edit using a keyboard

Inline edit one or multiple cells from the same column using a keyboard.

Before you begin

Role required: none

Procedure

1. Edit a single cell.

   a. With focus on a cell, press **shift** and **Enter** on the keyboard.

   b. Enter the value you want.

To cancel the inline edit, press **esc** or **Cancel** on the keyboard, or click outside the cell.

c. Press **enter**.

2. Select consecutive cells.

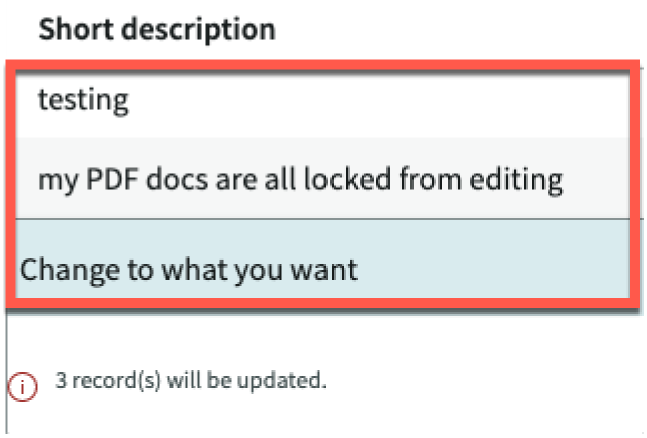
a. With focus on a cell, hold **shift** on the keyboard.

b. Use the arrow keys to select consecutive cells in a column.

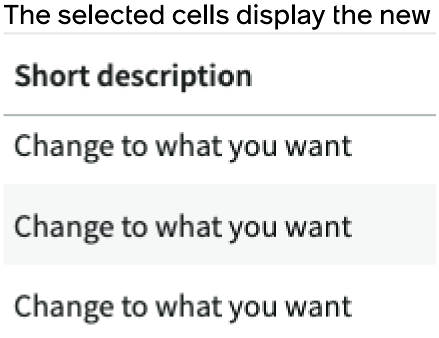
c. Press **shift** and **Enter** on the keyboard.

d. Enter the value you want.
To cancel the inline edit, press **esc** or **Cancel** on the keyboard, or click outside the cell.

e. Press **Enter**.



Result
The selected cells display the new field value.



Get work by phone in Workspace

Use workspace to make inbound and outbound telephone calls if your instance is integrated with your telephony system.

Before you begin
Role required: workspace_user

About this task
You can do the following with the Workspace phone:

- Make an outgoing call
- Receive an incoming call
- Transfer a call to another user within the system
- Place a call on hold or on mute
- Set your availability status

Procedure

1. Do one of the following.

Option	Description
Click the phone icon in the main navigation bar.	Enter the phone number in the **Number** field and click **Call**.
Click the phone icon next to the Contact or Consumer fields on the form.	For your contacts who may have multiple phone numbers: ◦ If only one phone field is populated, a call is placed to that number. ◦ If you see a dialog box that displays more than one number, click the number that you want and then close the dialog box.

2. Click **End** to end the call.

Getting work from chats

Use the agent inbox to manage your incoming work items, such as chats, cases, incidents, and more.

To open the agent inbox, select the Inbox icon in the navigation bar. When you accept a chat, an interaction record is automatically created and captures the work done in that session.

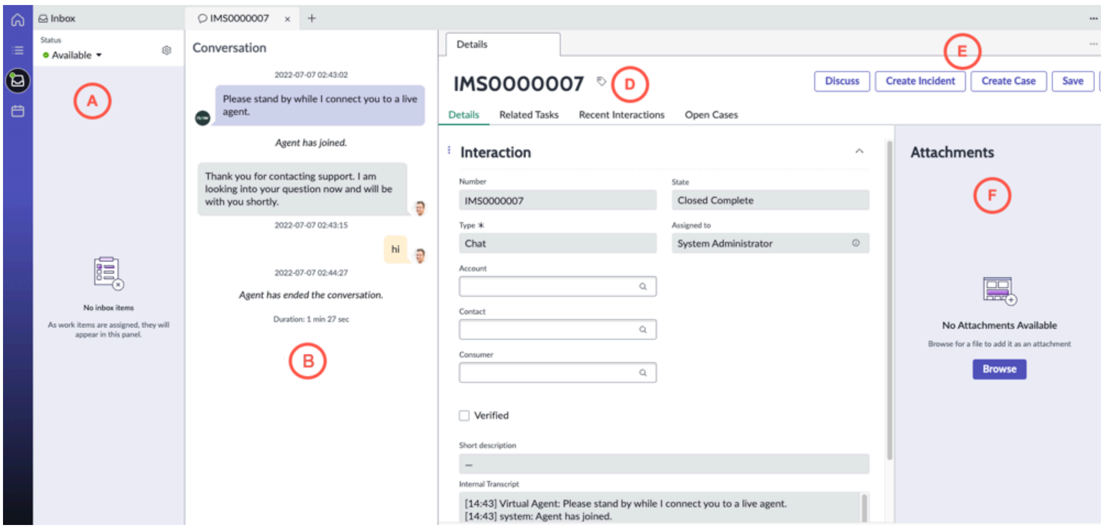
Inbox responsibilities

Agent responsibilities	Description
Monitor your inbox	Use designated service channels to route work items to available agents, such as incoming chat requests, case assignments, and incidents.
Start a chat session	Accept a chat from your inbox. You have a time limit to accept a chat before it reroutes to another agent. The chat associates to an interaction record that captures the conversation and work done during the session. During a chat session, you can: • Add attachments using the Action toolbar. • Transfer the chat to another agent. • Add another agent to the chat.

Inbox responsibilities (continued)

Agent responsibilities	Description
	• Perform other support tasks, such as create an incident or case. • Use workspace tools, such as the ribbon to glance at information or the activity stream to review related work.

Agent inbox features



Feature	Description
(A) Agent inbox	Display the queues that are assigned to you, the number of active chats in each queue, and the average wait time for chats in the queue.
(B) Active chat panel	Display your active chat session. Chat actions appear beneath the chat and allow your agents to attach a file, add an agent, transfer the chat, and more. Depending on your configuration, these may display: • Conversation history: messages from previous conversations appear. Only previous conversations between you and the requester appear. • Cross-channel conversation history: messages from all channels (including Facebook Messenger, LINE, Slack, Twilio SMS, Microsoft Teams, WhatsApp, and Voice) will appear. • Customer sentiments: feelings of the customer (positive, neutral, negative, null (no value assessed)). Customer sentiments let you identify if a user's sentiment is moving from neutral/positive to negative so you can take action to move them back to a more positive sentiment. • Start and end messages that include icons indicating the channel used for the conversation (chat, phone, or messaging): – Chat – Phone – Messaging
(C) Toolbar	Display buttons for available actions:

Feature	Description
	• Quick actions - select to display the quick action menu. • Transfer to queue - select to transfer the conversation to the queue. • Transfer to agent - select to transfer the conversation to an agent. • Attach - select to add an attachment to the conversation. • Dynamic Translation for Agent Chat enabled - displays if DTAC is enabled. • Overflow - select to display any additional actions. **Note:** Not all buttons may be available.
(D) Interaction record	Display the interaction record (IMS). The IMS initiates from a chat or phone call and lists the initial information about the customer and the communication. You can archive this interaction as a log of communication, or you can create an incident or a case that is based on the customer needs.
(E) Buttons	Perform an action by selecting a button: • Create Incident • End Conversation • Save • End Chat • Assign to Me **Note:** Not all buttons may be available.
(F) Attachments panel	Add attachments to the interaction. For example, you can add supporting information to a customer issue. If templates are available, they appear in the template section of this panel.

Ongoing messages

The Ongoing messages tab displays when you have access to at least one presence state which includes a messaging-based service channel.

Select the clock icon to display cards for ongoing messages. If the clock icon has a number in the upper right-hand corner , this number indicates the number of messaging conversations with unread messages. If a card has a green dot, there is a new message for that messaging conversation. The card also displays the interaction number and when the last update was made on the conversation.

Accept a chat session

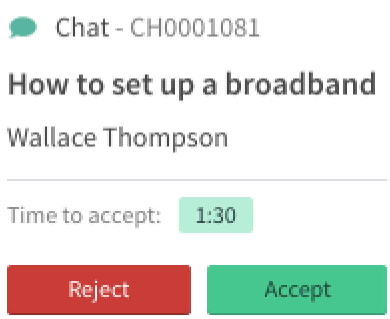
Begin a conversation with a customer by selecting a chat queue in the chat session. You can work on multiple chats in different queues simultaneously.

Before you begin

Role required: workspace_user

Procedure

1. Navigate to **All** > **Workspace Home** > **Inbox**.
2. From your inbox, accept or reject a chat.

   You are automatically connected to the first customer in the chat queue, which is the oldest request in the queue. The Active Chat panel displays a pre-chat message acknowledging the customer chat request. You can review the customer information before you enter a response in the Active Chat panel.

   Note: If your session has long-running transactions, there may be a delay in assigning a work item to you and the inbox cards may display a "delayed transactions" message.

   In the chat workspace, an interaction parent tab with a details child tab open for the session. The details child tab offers more information on the chat request and provides contextual options for performing related operations during the chat session.
3. Use chat tools for managing the chat and contextual options to perform related tasks.

Option	Description
Manage your chat	Do the following actions from the Actions tool bar: ◦ Add an attachment. ◦ Transfer a chat to another queue. ◦ Transfer a chat to another agent.
Perform additional support tasks	Engage in other support work during the chat session by using the contextual options in the **Details** tab. For example, you can: ◦ Update chat information. ◦ Create a new case or incident. From the sub-tab, you can select other contextual options to work on a resolution

Option	Description
	for the case or incident. For example, you might need to escalate the issue. ◦ Choose a related task in the More options (….), such as send email. ◦ Search for relevant information in the knowl edge base.

4. To close the chat session, close the tab or select **Close** in the **Details** tab of the interaction.
   Ending the chat saves the conversation history and closes out the interaction. If you close the chat by closing the tab, you lose all of the conversation history and you cannot save the information in the interaction record. If the wrap up feature is enabled, you can enter details or wrap up codes in the interaction record.

Transfer a chat to another queue

Route a chat to another queue. Any agent who belongs to the associated queue can accept the chat.

Before you begin

Role required: workspace_user

Procedure

1. Navigate to **All** > **Workspace Home** > **Inbox**.
2. On the Action toolbar, select the transfer to queue icon ( ).
3. In the Transfer to Queue panel, select the queue to transfer the chat to.
   When you transfer a chat, the current work item associated with the interaction is marked as closed complete. A new work item is associated with the new queue and the chat is added to the selected queue. When a receiving agent accepts the transfer, that agent sees the conversation and the chat history in the Active Chat panel. When you're transferred from a live agent back to a queue, the logic doesn't check for live agents, and the chat goes to the queue to be picked up by an agent.

Transfer a chat to another agent

Route a chat to another agent in the same service channel. You cannot route a chat to another agent in a different service channel, even if the channels have identical routing conditions.

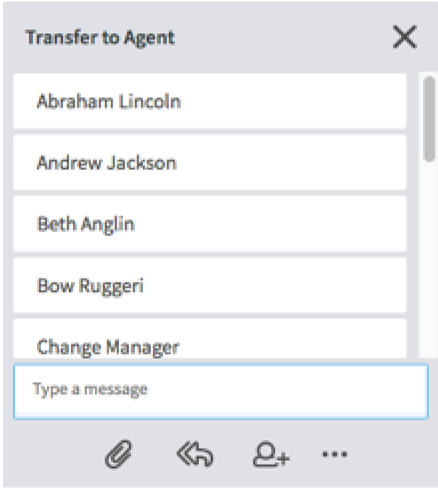
Before you begin

Role required: workspace_user

Procedure

1. From the Action toolbar in the Active chat panel, select the Transfer Agent icon ( ).
2. In the Transfer to Agent window, select the agent to receive the chat.

   Note: Only the current owner of a chat may transfer the chat to another agent. The transfer button is otherwise disabled.



The transferred chat is listed in the Queues panel for the receiving agent. The receiving agent can accept or decline the transfer request.

Add an attachment to a chat

Agents may have documents or image files that provide additional information for a case. These documents and image files can be added as attachments to the conversation for future reference.

Before you begin

Role required: agent_workspace_user

Procedure

1. Use one of these methods to add an attachment:
   - From the Action toolbar, select the attachment icon () then select the file.
   - Drag and drop a file from your local computer to the chat window.
2. If you add an attachment during a chat, the attachment is automatically transferred from the live chat to the interaction.
   If the interaction leads to the creation of a case/incident, then the attachment is automatically transferred to the case/incident.

Change your status in the chat panel

Change your status while you are on a break or offline so no new chats are assigned to you. When you return, you can update your status to let everyone know you are back.

Before you begin

Role required: agent_workspace_user

Procedure

1. Navigate to **All** > **Agent Workspace Home** > **Chat**.
2. In the chat panel, from the status list, select your current status.
   - Available: You are available to receive new chats.
   - Away: You are not available to receive new chats.
   - Offline: You are not available to receive new chats.

What to do next

Adjust your status depending on your availability.

Set up a new chat or work item alert

Set up an audible alert to notify you when a new chat or work item arrives in your Agent Workspace inbox. Only agents who are subscribed to the corresponding service channel can change the settings.

Before you begin

- Install the Agent Chat plugin (com.glide.interaction.awa).
- Enable Desktop Notifications for browser.

Role required: agent

About this task

Note: Notifications play a crucial role in an agent's workflow. However, as browsers continue optimizing resource usage, they may pause or suppress notifications in certain environments or scenarios. To ensure agents receive timely alerts, we recommend thorough testing and adjustments to user settings and behavior. Keep in mind that each browser has its own implementation and restrictions, so what works in one may not work in another.

Procedure

1. In your Agent Workspace inbox, select the settings ( ) icon.
2. To receive desktop notifications for new items in your inbox, turn on **Inbox Desktop Notifications**.
   These notifications are delivered if the Agent Workspace browser tab is open but not currently in focus.
3. To receive audible alerts for new items in your inbox, turn on **Inbox Audio Alerts**.
   These alerts are delivered if the Agent Workspace browser tab open, it doesn't matter whether the tab is in focus or in the background.
4. To receive desktop notifications for new conversations in your inbox, turn on **Conversation Desktop Notifications**.
   These notifications are delivered if the Agent Workspace browser tab is open but not currently in focus.
5. To receive audible alerts for new chats in your inbox, turn on **Conversation Audio Alerts**.
   These notifications are delivered if the Agent Workspace browser tab is open, it doesn't matter whether the tab is in focus or in the background.
6. To receive browser notifications, you must have this set-up:
   a. Chrome as your browser.
   b. Configured to receive Conversation Desktop Notifications.
   c. Workspace browser tab is not in focus.
   d. There is a new message on a conversation assigned to you.

   For additional information, see Setting up Agent Chat.

Monitor chat conversations

Chat supervisors can view ongoing chat conversations and join them to assist agents and requesters in Workspace Agent Chat.

Before you begin

Role required: awa_manager

Procedure

1. Navigate to **All** > **Lists** > **Interactions** > **Active Chat Interactions**.
2. Select an active chat interaction from the list.
3. If Agent Whisper is installed, an agent can ask for help by typing `/help` in the Active Chat window.
   A message is sent only to the chat supervisor, the requester does not see this message.
4. In the Active Chat panel, click **Join**.

   A notification lets the agent and requester know that you've entered the chat. Messages that you submit are visible to the agent and requester.

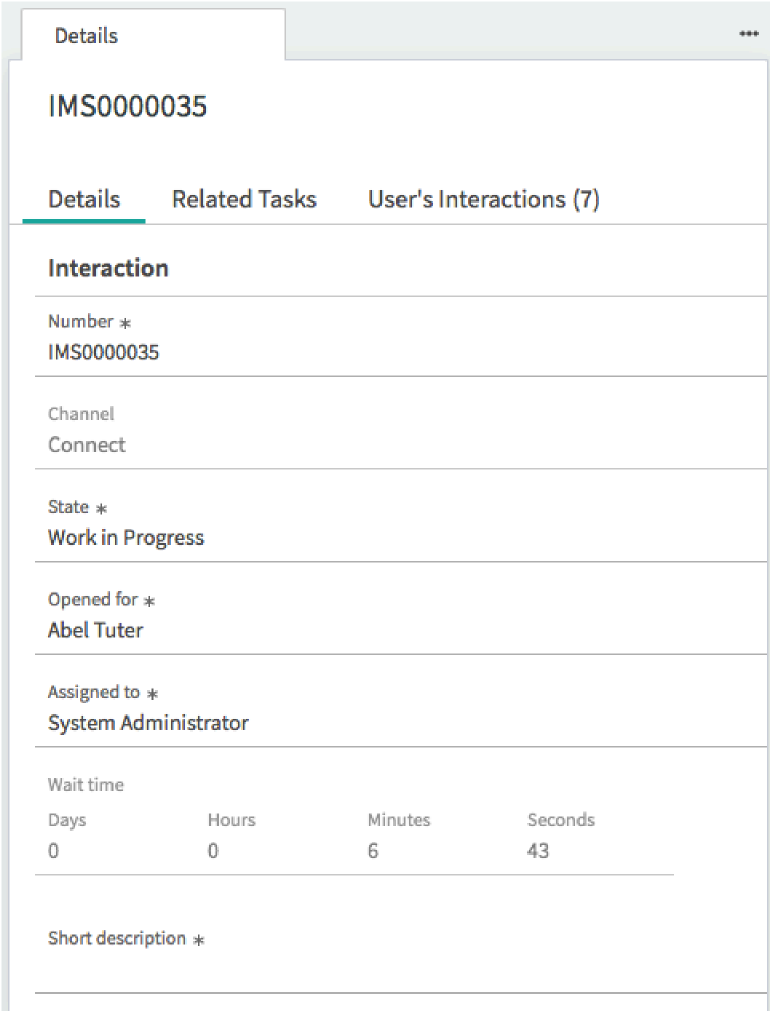
   Note: Your presence is not known until you join a chat.

5. If Agent Whisper is installed, click **Send Private Message** to send a message to the agent.
   The requester does not see this message, only the agent sees the message.

Interaction records in Workspace

Using an interaction record, agents can create or reference customer information from a customer contact. Agents can then decide if the conversation is an incident, case, or request.

An interaction represents a request for assistance made through a chat, phone call, or walk-up. Interactions can be routed to queues for assignment or assigned to agents directly. Support agents can create cases, requests, or incidents from the interaction. Interactions can also be used to capture one-and-done type requests where an agent might not want to create associated tasks.



Feature	Description
Details, Related Tasks, User's Interactions forms	**Details** tab that shows detailed information from the interaction record. **Related Tasks** show tasks related to the interaction in the form pane, for example, a new incident. **User's Interactions** tab shows all interactions related to specific users.
Number	Number is associated to each customer interaction.
Type	Logs the type of channel communication, such as chat, phone, walk-up, or messaging. **Note: Phone** is an available type of channel communication when the OpenFrame plugin (com.sn_openframe) is activated.
State	State of the interaction record: • New • Work in Progress • Closed Complete

Feature	Description
	• Closed Abandoned • On Hold
State reason	Reason for the current state of the interaction record: • Waiting on customer • Waiting internal • null This field appears only for messaging type interactions.
Opened for	Customer who initiates or receives the communication.
Duration	Tracks the amount of time an agent spends working on an interaction.
Assigned to	Agent the interaction record is assigned to.
Wait time	Time it takes to initially respond to the customer.
Short Description	Short description of the interaction. **Note:** The short description field is empty by default, but it cannot be empty when the record is closed, saved, or associated to a related task. Populate the short description and then close, save, or associate the record, or you cannot archive the record.

While you are on an interaction, tasks that are viewed or created under the interaction are automatically logged on the Interaction Related tasks.

Associating user profiles on messaging interactions

When a requester sends a message, the system checks whether the identifier matches an existing channel user profile. Channel user profiles are used to track the identities of conversation participants using an identifier associated with the source of the message. For SMS messages, the identifier is the phone number from which the message was sent.

If there is a matching channel user profile	• A new interaction is started. • Or the message is associated with an ongoing interaction for the matching channel user profile.
If there is no matching channel user profile	• A new channel user profile is created. • A new interaction referencing the new channel user profile is created.

- If the identifier matches a user, it populates the User document field of the channel user profile and the Opened for field of the interaction with a reference to that user.

Create a problem from an interaction

You can create a problem record directly from an Interaction when the customer makes contact regarding an issue and you need to investigate.

Before you begin

- Role required: workspace_user or admin
- Activate the Problem Management Best Practice — com.snc.best_practice.problem plugin
- Select the **Allow Problem creation from Interaction** (`glide.problem.interaction.allow_create`) problem property

Note: The Interaction feature is a more efficient way to create a problem from an interaction than the New Call feature from Service Desk Call (com.snc.service_desk_call) plugin that you might have used previously.

Procedure

1. Navigate to **All** > **Workspace Experience** > **Workspaces** > **Workspace Home**.
2. Click the list icon () and click the Interaction list.
3. Click the interaction record from which you want to create a problem.
4. On the interaction page, click the more actions icon () and select **Create Problem**.
5. On the form, fill in the fields.

Problem form

Field	Description
Number	Auto-generated. Number that identifies the problem record.
First reported by	Task that first identified this problem.
Category and Subcategory	Group to which the problem belongs to such as software or hardware. After selecting the category, select the subcategory, if applicable.
Service	Business service that the problem applies to.
Configuration item	Configuration item (CI) that the problem applies to. The CI class of the selected configuration item identifies the type of problem, for example, hardware, network, or database.
State	State management process. The field value changes as the problem proceeds from one state to another state. The states available are: **New**, **Assess**, **Root Cause Analysis**, **Fix in Progress**, **Resolved**, and **Closed**.

Field	Description
	Note: To access the new state management process, activate the Problem Management Best Practice — Madrid (com.snc.best_practice.problem.madrid) plugin.
Impact	Effect that the problem has on business operations, for example, `Major revenue loss.`
Urgency	Extent to which the problem resolution can bear delay.
Priority	How quickly the service desk should address the problem. The **Priority** field is automatically set to the **Impact** and **Urgency** values.
Assignment group	Group to which the problem is assigned.
Assigned to	Problem coordinator to whom the problem is assigned. If an assignment rule applies, the problem is automatically assigned to the appropriate user or group.
Problem statement	Brief description of the problem. **Note:** Activate the Problem Management Best Practice — Madrid (com.snc.best_practice.problem.madrid) plugin.
Description	Detailed description of the problem.
Notes	
Work notes list	Users who receive notification when work notes are added to the problem.
Work notes	Informative notes about the work performed on the problem.
Analysis Information	
Workaround	Method used to overcome the issue.if no resolution is available yet.
Cause notes	The cause of the problem.
Resolution information	
Resolved	Auto-generated. Date and time when the user resolved the problem.
Resolved by	Auto-generated. The user who resolved the problem.
Fix notes	How the problem was fixed.
Auto-generated information	
Opened	Auto-generated. Date and time when the user opened the problem.
Opened by	Auto-generated. User who opened the problem.
Confirmed	Auto-generated. Date and time when the issue was confirmed as a problem.
Confirmed by	Auto-generated. User who accessed the issue and confirmed that it was a problem.

6. Click **Save**.
   A problem record is created and the record appears in the Related tasks related list on the Interaction form.

Create a standard change from an Interaction

Create a standard change record directly from an Interaction Management to implement a pre-approved, low-risk change without having to go through the Change Management module to implement it.

Before you begin

Role required: workspace_user or admin

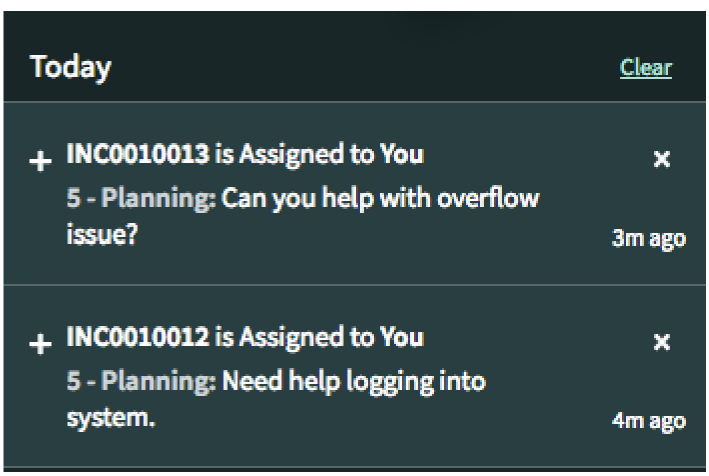
Procedure

1. Navigate to **All** > **Workspace** > **Workspace Home**.
2. Open the interaction record from which you want to create a standard change.
3. On the Interaction form, click the more actions icon and then click **Create Standard Change**.
4. On the New Catalog Item page, select the standard change and click **Submit**.
   A standard change is created and the record appears in the Related tasks related list on the Interaction Management form.

Getting notifications in workspace

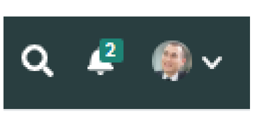
You can receive workspace notifications to get immediate updates about records you're working on without leaving workspace.

Notifications present updates about records you're working on or being assigned to regardless of whether or not the record is open in workspace. For example, a notification might show that you've been assigned in incident.



You can click the notification to open the record.

You can open all of your notifications by clicking on the notifications tray icon ().



The badge number indicates the number of unread notifications.

Workspace deletes notifications after seven days.

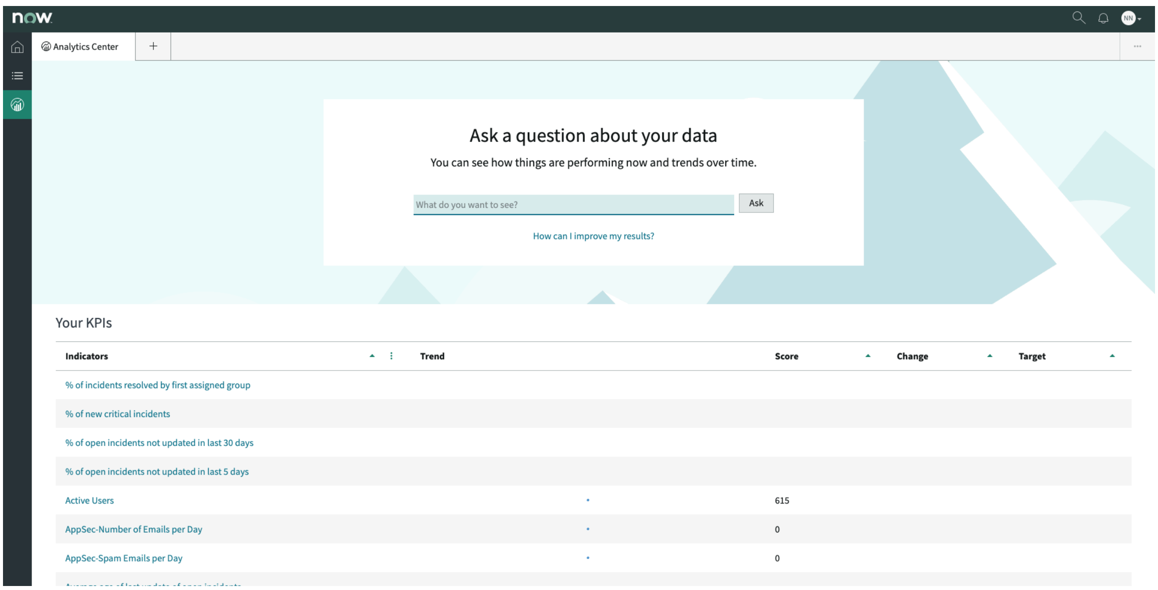
Platform Analytics in your Workspace

Distribute and consume Platform Analytics through data visualizations and dashboards with optional filters. Explore KPIs and receive insights into significant events in the data.

Within the Platform Analytics Workspace, you're able to:

- Ask a natural language question and be shown the relevant analytics in a visualization.
- View any Next Experience dashboard that you own or has been shared with you.
- Create dashboards and data visualizations from your workspace runtime.
- Drill down into your KPIs, applying filters to slice your data and applying aggregations and statistical tools.

For more information, see Performance Analytics and Reporting for Workspace



Working on records in your Workspace

Use Workspace records to and provide information to your customers and process requests.

Callback features

If callback feature is enabled, customers can request a callback instead of waiting for the Agent to become available. Agents get the Callback Interactions routed to them, when they are available. For phone callbacks, auto-dialout will happen upon accepting the work item in the **Inbox**. However, the Agent can also use the phone icon in workspace to call the customer directly if the auto-dial did not succeed. Agents can perform the following actions in the workspace.

Note: Agents can see the customers name on the Inbox callback card.

Callback actions

Field	Description
Reattempt callback	Agents can reattempt a callback by selecting the **More actions** button and then selecting **Re-attempt Callback**. The **Reason** menu

Callback actions (continued)

Field	Description
	displays and agents have the following options to choose from. • Dead Air • VoiceMail • Customer is Busy • Other
Closing callback	If the issue is resolved, Agents can close the callback. If closed, the system does not retry callbacks, and the callback task is closed. Agents can choose from the following options to close a callback. • Resolved • Other When a callback is closed, Agents can see the transcript and a recording of the conversation in the **Conversations** tab. **Note:** The recording is also added to the **Activity** stream and the **Attachment** tab.

Create a record in workspace

Create a record in workspace from the Record tab menu or from a list.

Before you begin

Role required: workspace_user

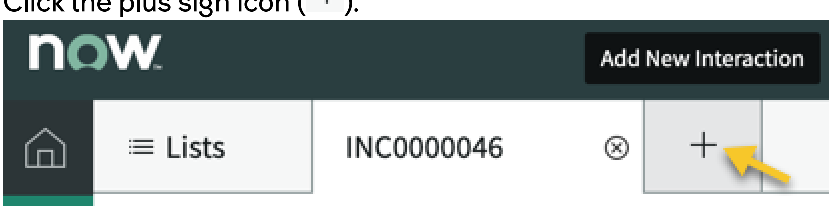
About this task

You might create a record to capture work you're doing. For example, after a phone call, you might create an interaction or incident record. In the record, you capture the information you obtained in the phone call.

The kinds of records you can create is configured by your system administrator. The default is an interaction record. If you place your mouse over the plus sign icon (+), the list of records you can create appears.

Procedure

1. Click the plus sign icon (+).



Notice that the record type appears when you place your mouse over the icon.

If you can only create one type of record, a blank form of the record appears. If your system administrator configured workspace so you can create multiple record types, workspace displays a list of those record types. You then select the type you want to create and that blank record type appears.

Note: If you have access to more than one domain, filling in a caller or company on the record form associates the record with the domain of the caller or company.

2. On the form, fill in the fields and click **Save**.

Working on callback records in your workspace

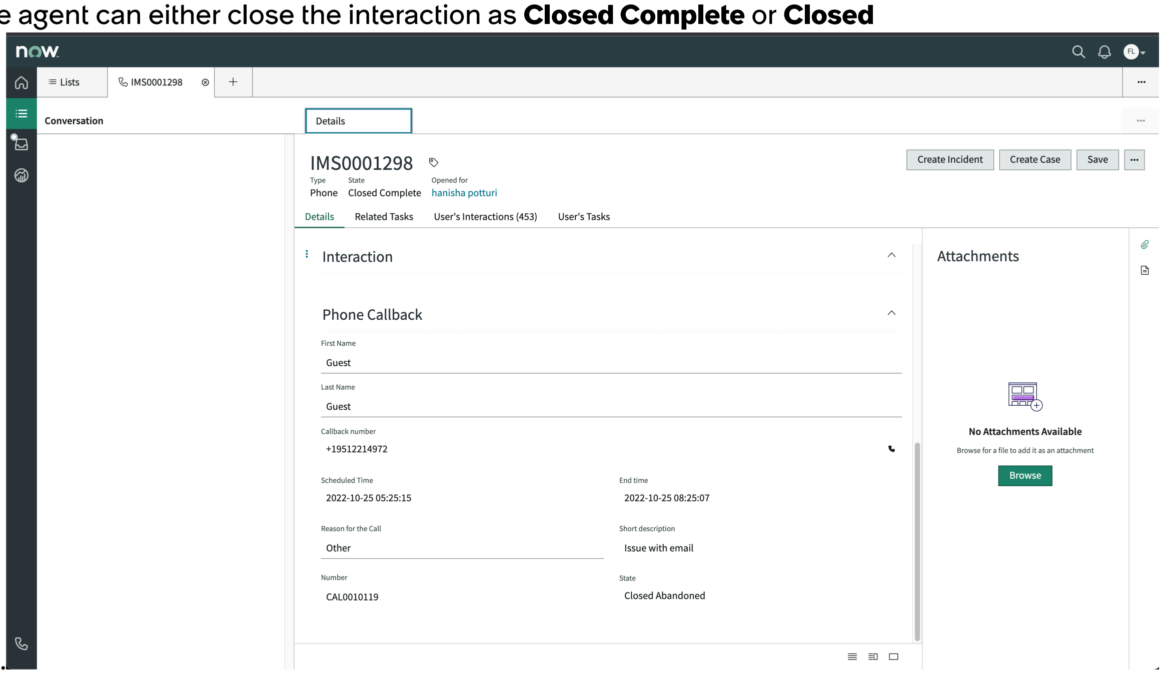
Use Workspace to work on callback records originating from Omnichannel Callback

Overview

Omnichannel Callback is a ServiceNow AI Platform® capability that provides an option for users to opt for a callback instead of waiting in the queue for an available agent. Advanced Work Assignment routes the callback work items to available agents and interaction records are created for each callback work request. The interaction records appear in the Workspace for agents to work on.

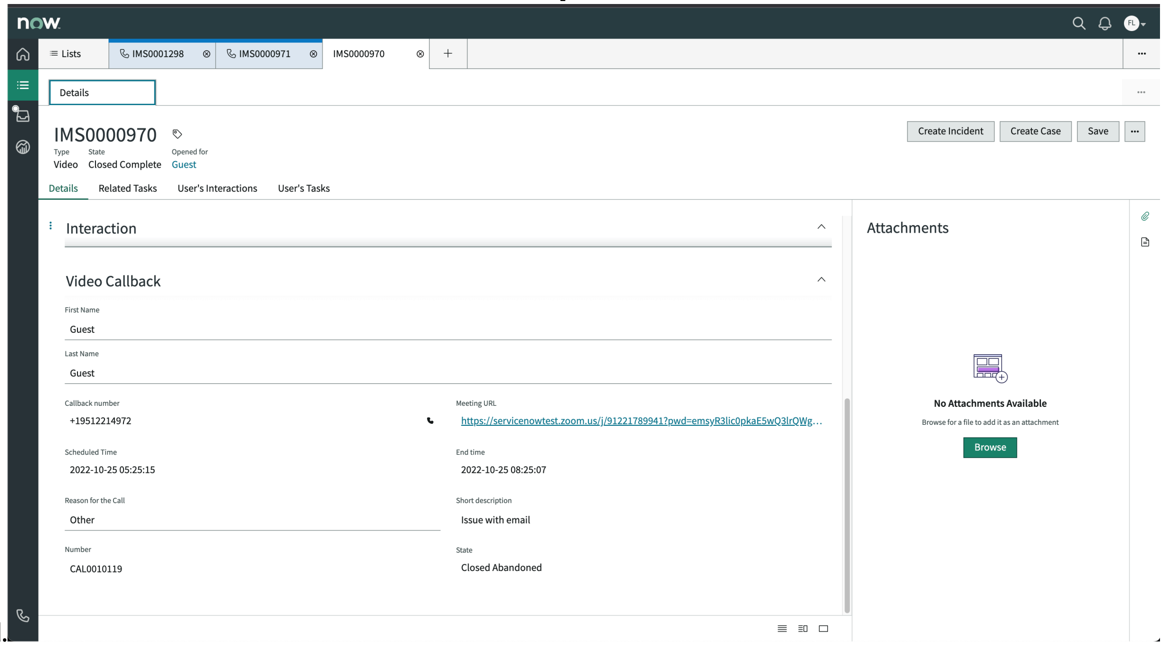
Agents can work on the records for the following callback scenarios.

- Recurring callback: AWA routes a callback work item to an available agent based on the predefined callback attempt interval. The agent then receives a **Callback** work item. When the agent accepts the callback work item, auto-dial initiates a call to the user. Based on the resolution, the agent can either close the interaction or requeue the callback.
- Click to call: The agent can directly call the end user using the phone icon in the interaction record if auto-dial is not enabled or the initial call did not succeed.
- Scheduled voice callback: When a user requests a voice callback at their preferred date and time, an interaction record with callback details is created a minute before the scheduled call time and an agent receives the callback work item. When the agent accepts the callback work item, auto-dial initiates a call to the user. Based on the outcome, the agent can either close the interaction as **Closed Complete** or **Closed**



Abandoned.

- Scheduled video callback: When a user requests a video callback at their preferred date and time, an interaction record with callback details is created which includes a URL to initiate the video call. Based on the outcome, the agent can either close the interaction as **Closed Complete** or **Closed Abandoned**.



Callback actions

Field	Description
Reattempt callback	Agents can reattempt a callback by selecting the **More actions** button and then selecting **Re-attempt Callback**. The **Reason** menu displays and agents have the following options to choose from. • Dead Air • VoiceMail • Customer is Busy • Other
Closing callback	If the issue is resolved, agents can close the callback. If closed, the system does not retry callbacks, and the callback task is closed. Agents can choose from the following options to close a callback. • Resolved • Other When a callback is closed, agents can see the transcript and a recording of the conversation in the **Conversations** tab. **Note:** The recording is also added to the **Activity** stream and the **Attachment** tab.

Dynamic Translation support in your Workspace

Dynamic Translation support in Workspace enables on-demand translation of text in comments and work notes, in the Activity stream, and on forms.

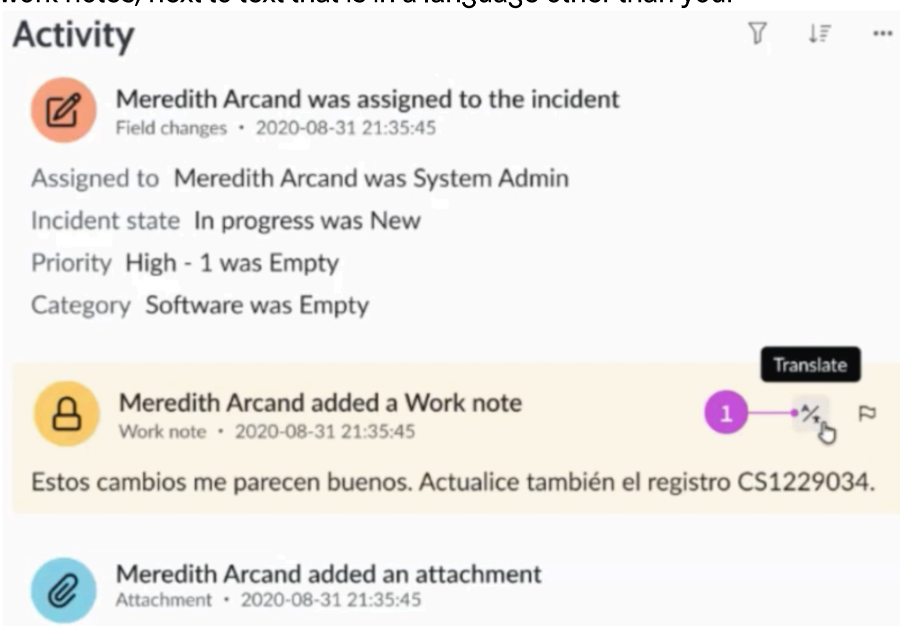
Configuring Dynamic Translation

To enable and configure Dynamic Translation for Activity stream, do the following.

1. Activate the Dynamic Translation (com.glide.dynamic_translation) plugin. For more information see Activate Dynamic Translation.
2. Configure Dynamic Translation for the translation service provider. For more information, see Integration with other translation services.

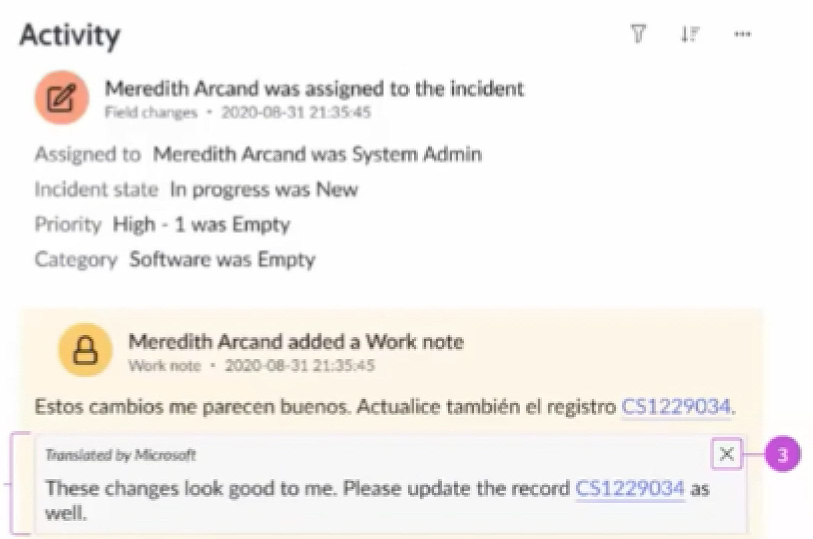
Translation button in the Activity Stream

The **Translate** icon appears in the Activity stream for comments and work notes, next to text that is in a language other than your



own.

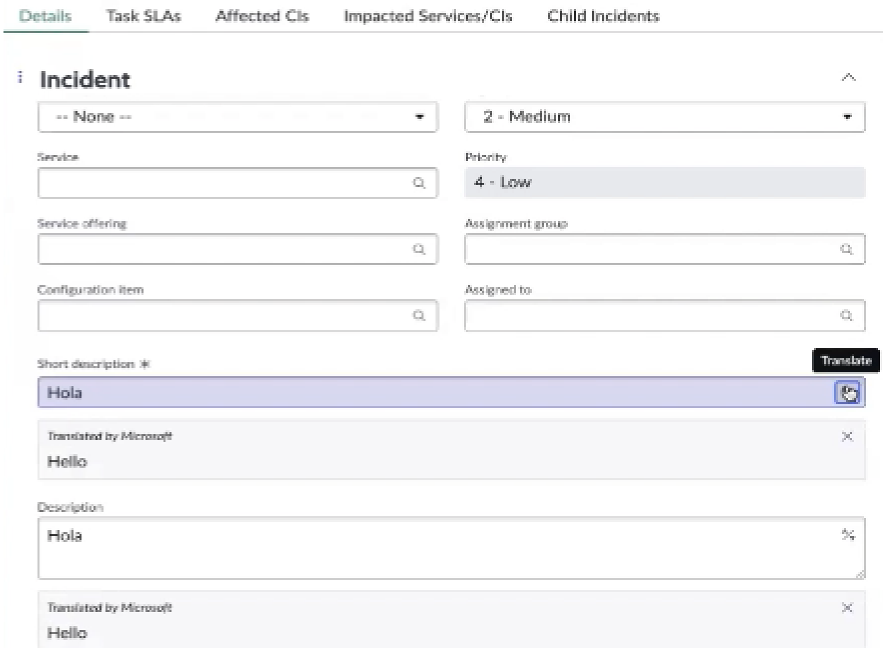
The translation result displays below the original text. If the translation isn't configured properly,



an error message displays.

Translation button on forms

Dynamic Translation can also be configured for forms in Workspace.



To configure Dynamic Translation for form fields, do the following.

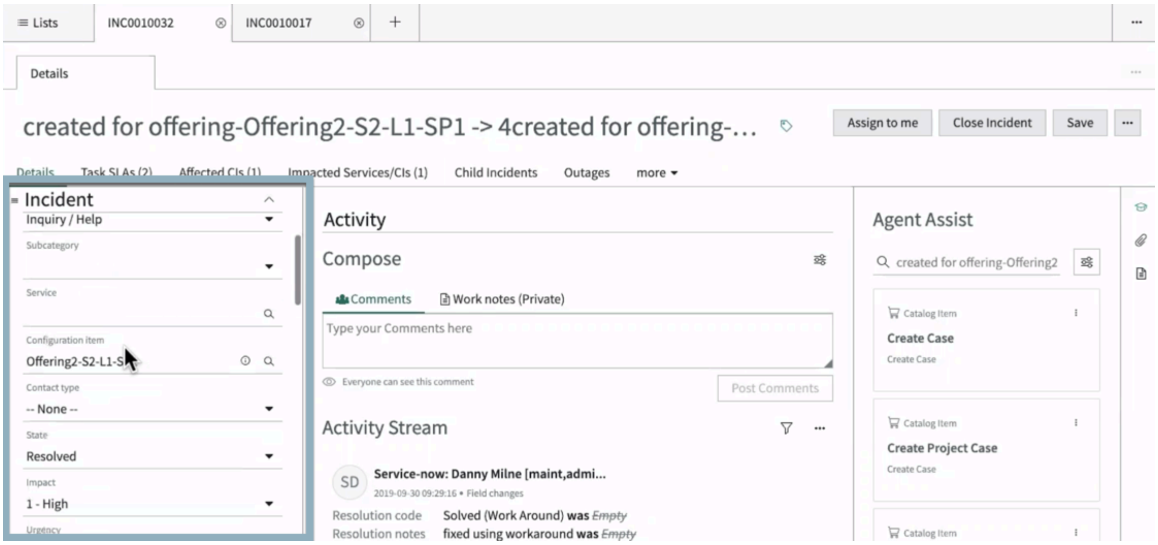
1. Navigate to a record that needs translation enabled.
2. Right-click a form field that needs translation and select **Configure Dictionary**.
3. In the **Attributes** related list, select **New**.
4. On the form, fill in the fields as follows.
   - In the **Attribute** field, search for **Dynamic Translation Enabled**.
   - In the **Value** field, enter `true`.
5. Select **Submit**.

Getting or adding information to a record

Use the form pane to discover detailed information about a record, information related to the open record, and to make entries in the record.

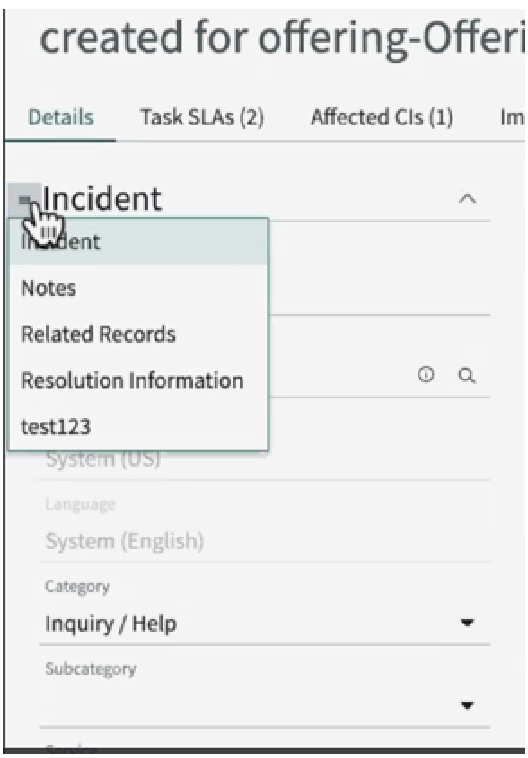
Getting detailed record information

To get detailed record information about a record, click the **Details** tab. The contents, which appear in the form pane, are many of the fields in a record. Your administrator configures which fields you see.



You can vary the width of the form pane by dragging the right side of it.

You can scroll through all the fields or jump to a section in the **Detail** tab. To jump to a section, click the menu icon (☰) to the left of the record type to display the sections in the form pane. Click the section title you want to jump to. For example, in the following image, if you click **Notes**, the record fields scroll up to the **Notes** section.



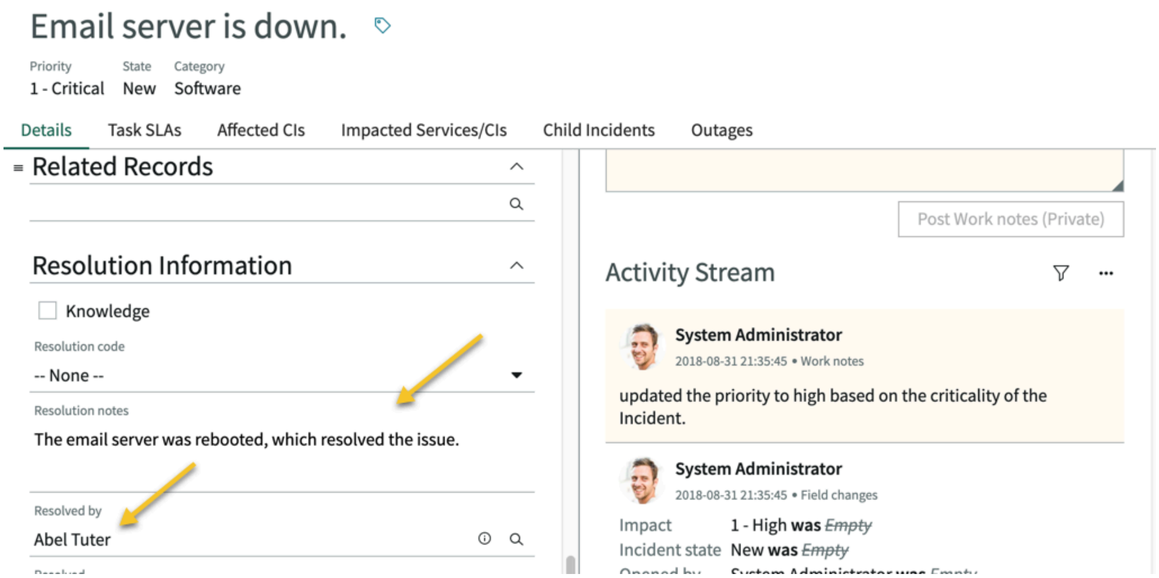
Getting information related to the open record

The Related items menu provides tabs that display information related to the open record.

Click these tabs to understand what this record might be affecting. For example, clicking **Impacted Services** displays the services affected by the incident in the open record. For more information, see Get information related to the open record.

Adding information to a record

When working on a record, you might add or revise some of the fields in the record. You can do that on the **Details** tab. For example, on the **Details** tab, you might change the **Urgency** value of the record to **1 - late**, or, after solving an issue, enter a resolution summary in the **Resolution notes** section. After entering or changing information in the form pane, click **Save**.



Additional record functionality

- Template value field:–-. For more information, see Configure a template value field.
- Field name field type
- Doc ID field type

Updating records using templated information

Select one of the templates to add standard information to open records to save yourself some work.

Before you begin

Role required: workspace_user

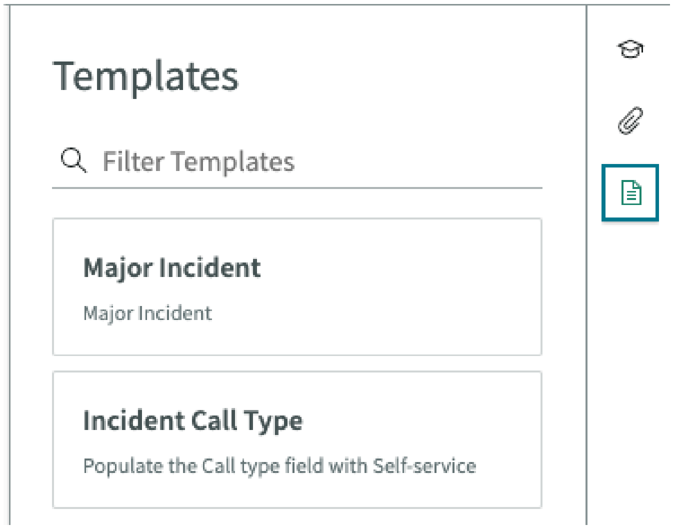
About this task

Templates set field values in the open record to the values specified in the template. For example, the major incident template might set the **Impact** field in the open record to **1 - High**, and the **Urgency** field to **1 - High**. Templates reduce the work you have to do and make actions taken more consistent.

Procedure

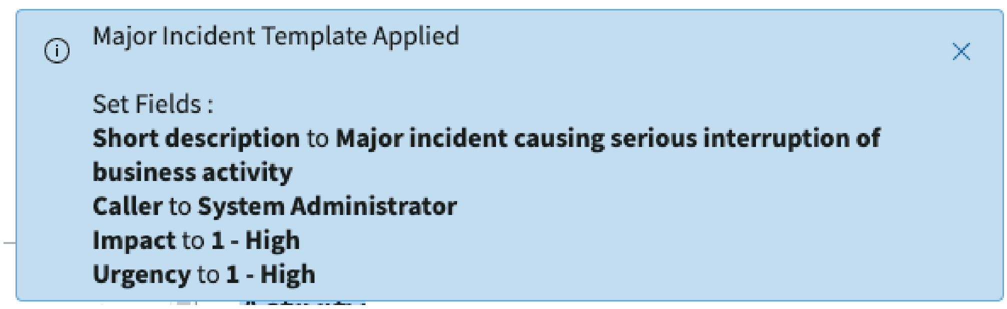
1. In Workspace, open an existing record.
2. In the Contextual side panel, click the template icon ( ).

   The available templates appear.



3. From the list of templates, select a template to apply to the open record.

   Field values included in the template automatically populate the record in the **Details** tab of the form pane. Workspace provides a pop up of the updated fields.



4. **Optional:** To undo the changes that were made in the open record when you selected the template, navigate away from the form without saving.
5. Fill in the remaining fields in the **Details** tab of the Form pane.
6. Click **Save** to save your progress or **Resolve** to mark the issue as resolved.

What to do next

Communicate your progress or the solution with the requester.

Manage custom form templates

Manage custom form templates by creating, editing, and deleting templates.

Before you begin

Create a custom form template that fits the workflow of a customer or activity. Custom form templates enable you to retrieve a form with the fields you want to save time resolving the workflow. They can also be edited to adapt to new demands or similar cases.
Form templates can also be domain aware. For more information about specifying a domain for your form template, see

Role required: agent

About this task

Custom form templates are controlled by group assignments.

Procedure

1. In Workspace, select a record.
2. Select the Template icon ( ) in the contextual side panel.
   Two lists display in the contextual side panel. **All** displays all available templates, and **My Templates** displays your custom form templates.
3. Create a custom form template.
   a. On the Templates pane in the contextual side panel, select the plus icon ( ).
   b. Enter a name for your custom form template.
   c. Select the fields you want for your template and delete the ones you don't want.
   d. Select Save.
4. Select the option icon ( ) to **Edit** or **Delete** a template.
   Templates that are deleted can't be retrieved.

Specify a domain for a form template

Associate a form template with a domain other than global and specify the users and groups the template applies to.

Before you begin

Role required: admin

Procedure

1. In the Filter navigator, enter `sys_template.do`.
2. On the form, fill in the fields.

Template form

Field	Description
Name	Name for your form template.
Table	Table associated with your form template. For example **Incident** or **Case**.
Active	Option to enable or disable the form template.
Application	Application for the form template. The form is **Global** by default.
Domain	Domain you want to associate the record with. ◦ This field only displays if you have access to more than one domain. ◦ Templates are global unless a domain is specified. ◦ Templates spawned from this record retain the domain of the record.
User	The user or role this template is specified for.

Field	Description
Groups	Groups that have access to this form template.
Global	Option to provide the form template globally.

3. Select **Submit**.

Undo a form template

Undo a form template to the state prior to the application of the template.

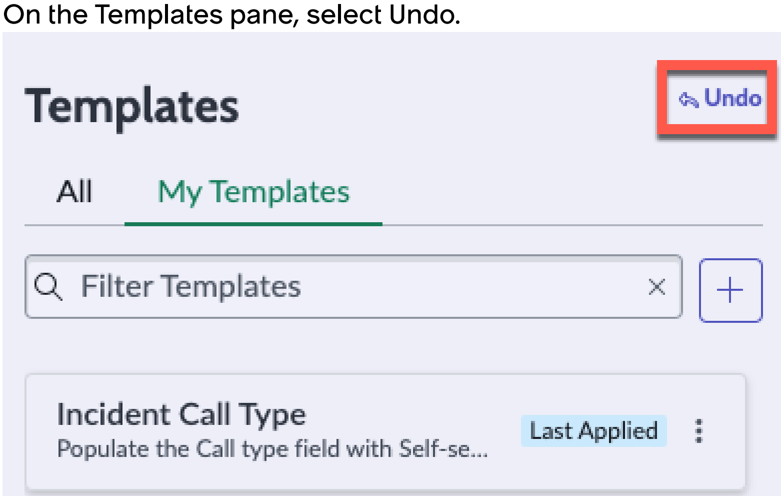
Before you begin

- Only the last form template added is reversed.
- Form field values are reverted back to the state prior to the application of the template.
- Work you've performed isn't changed or deleted by undoing a template.

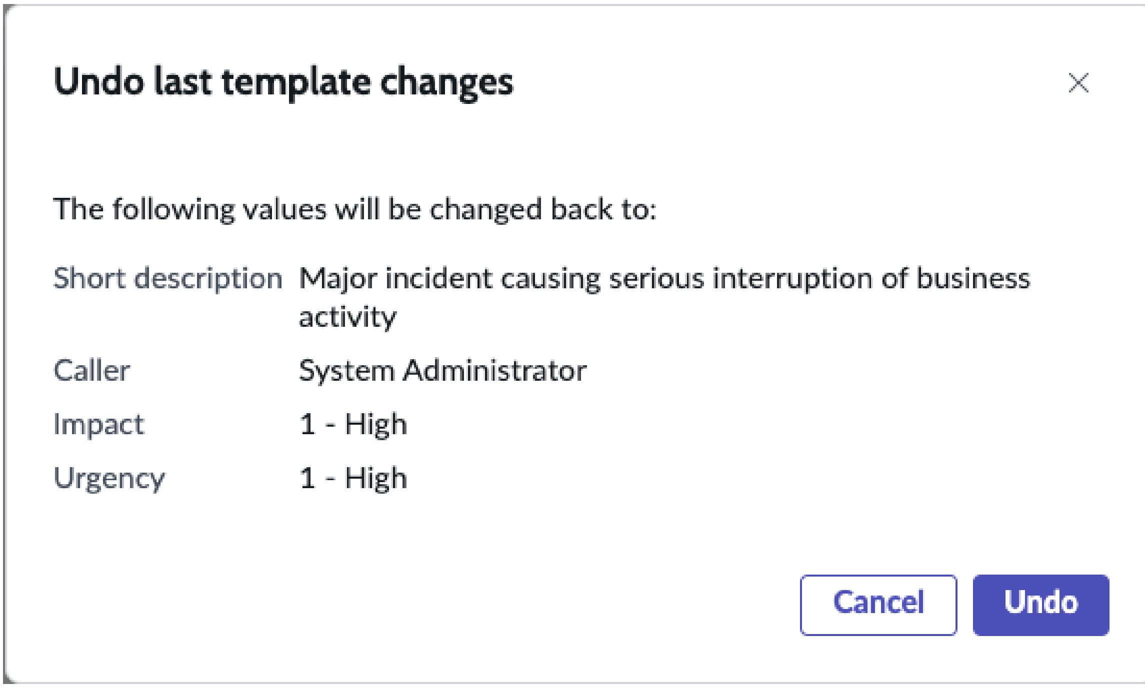
Role required: agent

Procedure

1. Select the Templates icon ( ) in the Contextual Sidepanel.
2. On the Templates pane, select Undo.



A modal appears displaying changes to the form as a result of removing the template.



3. Select **Undo**.

Make form templates available for multiple groups

Specify one or more groups that have access to the form template you created.

Before you begin

Role required: admin

Procedure

1. In the contextual side panel of a record, select the Templates icon ( ).
2. In the Templates pane, select the Create Templates icon ( ).
3. Select the Groups field, and enter the groups you want this form to be available to.

Configure a template value field

Select desired fields to create a form template in the Template section of a form.

Before you begin

Role required: user

About this task

Template value field selections sync with live updates.

Procedure

1. Open a record.
2. In the Template section of the form, select the associated table.
   For example, **Incident**.
3. In the Template field, select a field and a value for your template.

   Note: The table you selected determines which template value fields are available.

4. Select **Save**.

Result

The template value fields are visible on the form in the Template section.

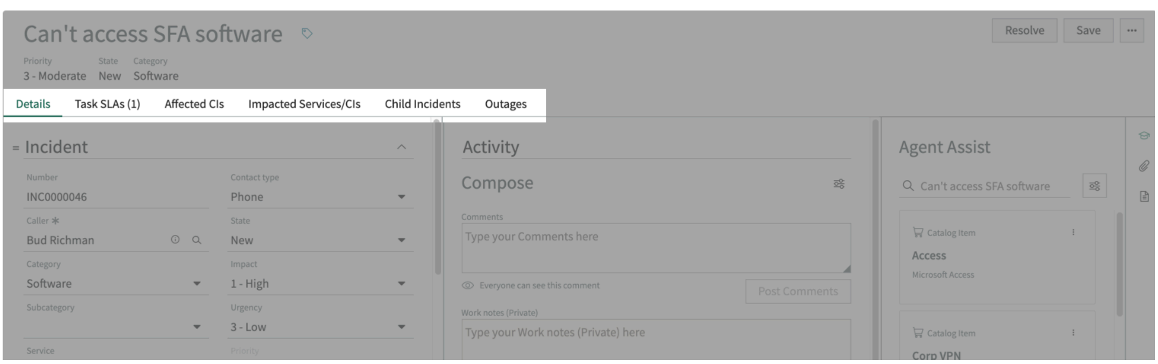
Example:

Selecting field template values.

1. In the Template section of the form, select the **Incident** from the Table field.
2. In the Template field, select **Description** and enter `Test text`. A description is added to the template.
3. Select **Approval** from the Template field. A list displays with approval values.
4. Select **Caller** from the Template field. A list displays to select a caller.
5. Select **Active** from the Template field. The option appears to activate or deactivate the record.
6. Select Save.

Getting information related to the open record

Use related items to gather information about and to enter information into the open record.



The items in the Related items menu behave like tabs. When you click one, the corresponding content appears in the form pane. Workspace underlines the item that's active in the form pane. What items appear in the menu, what order they're in, and which one opens automatically are configurable by your system administrator.

The items contain information related to the record open in the form pane. You click the different items to get contextual information. For example, if the open incident is about a failed service, you might click **Impacted Services/CIs** to see if other services are also down. If the incident is a power outtage, you might click **Outages** to see if there are outages in other locations.

The **Details** item usually displays first by default. It is the only item that contains details of the open record. It also provides text fields that you can edit. For example, when you solve an issue, you should enter the resolution description in the section, **Resolution notes**. Your system administrator determines which fields from a record appear in the form pane.

Your configuration of workspace might include the following related items.

Related items

Item	Description
Details	Detailed information about the open record and text fields for you to enter information. The system administrator specifies the record fields that appear in the form pane. You use this item to read about the open record and to make entries in the record.
Task SLAs	Service level agreements (SLAs) for a task. Expected deadlines for resolving a task of this type.
Affected CIs	Configuration items (CIs) related to an incident. Often, an incident is related to one or more specific configuration items (CIs). If the configuration management database (CMDB) is populated, the CI records hold valuable information to help resolve incidents. You can associate configuration items to an incident to see how the incident affects dependent CIs.
Impacted Services/CIs	Services and configuration items (CIs) affected by this incident.
Child incidents	Child incidents are incidents related to the parent incident, the incident open in record view. All work notes or comments in a parent incident are copied into a child incident. When a parent incident is resolved, the child incidents are resolved.
Outages	Service outages related to the incident open in record view.
User's Calls	The **User's Calls** related list displays historical calls between a requester and Service Desk agents. This feature is available to the users who has the Service Desk Call plugin (com.snc.service_desk_call) already activated. **Note:** The customer name in the **Opened for** field in Interaction is matched with the **Caller** field in Service Desk calls and records are retrieved based on the number of days mentioned in the interaction property **Number of days (integer) for which past user call records are retrieved. The default value is seven (7). A setting of zero (0) disables this feature.** (`glide.new_call.interaction.records_age`).
User's Task	When a requester contacts an agent through chat, phone call, request, or walk-in, the **User's Task** related list shows the agent all of the other tasks (incident, problem, change request, request, and so on) that have been created for the requester. For example, if a requester calls about the status of a request that was made the previous day, the **User's Task** related list shows the request. Workspace includes the other tasks in the **User's Task** related list when the value for the **Opened for** field in the interaction record matches the: • **Caller** field in an incident record • **Opened by** field in a problem record • **Requested by** field in a change record • **Requested for** field in a Service Catalog record

Domain separation for Workspace records

Workspace supports standard domain separation. In a record, you can safely create another record in the correct domain, change the domain that the record associates with, and temporarily expand the domain scope of a record to a domain outside the record session.

Workspace uses Cross-Tenant Intelligence to automatically handle the data, metadata, business logic, and processing context for tenants that have access to additional tenant data. Cross-tenant intelligence enables the following behavior when you create a record.

- Records created from another record inherit the domain of the originating record.
- Records created with a UI action from a record carry over the domain of the originating record.
- Records created from a parent record, for example a related list, carry over the domain of the parent record.

For more information on Cross-Tenant Intelligence in Domain Separation, see What is Domain Separation?.

Toggle domain scope of a record

Expand the domain scope of a record temporarily to a domain outside the record session. The record expands to include related lists and reference field queries. This enables you to create a main record that applies to issues for more than one domain.

Before you begin

You must first have permission to access the domain that you want to toggle.

Role required: domain_expand_scope user role

Procedure

1. Navigate to **All** > **Workspace**.
2. Select a record.
3. Click the overflow UI action icon (•••) in the record and select **Toggle Domain Scope**.
   You can now access related lists and reference field queries.

   Note: Domain scope doesn't toggle when the record is in the global domain or when your domain and the record domain match.
4. Click the overflow UI action icon (•••) in the record and select **Toggle Domain Scope** to return the domain scope to the domain associated with the record.

Create a record in a domain without a parent

Create a new record when the domain of the record is unknown and you have access to multiple domains.

Before you begin

Change a domain by modifying the selection of the caller or company on the form of the record.

Role required: user

Procedure

1. Navigate to **All** > **Workspace** > **New record menu**.
2. On the form, fill in the fields.

   The company or caller selected associates the record with the corresponding domain.

   Note: Data available for auto-population is limited to the domains you have access to.

3. Click **Next**.

Result

The new record includes data and rules specific to the domain.

Group and find records using tags in workspace

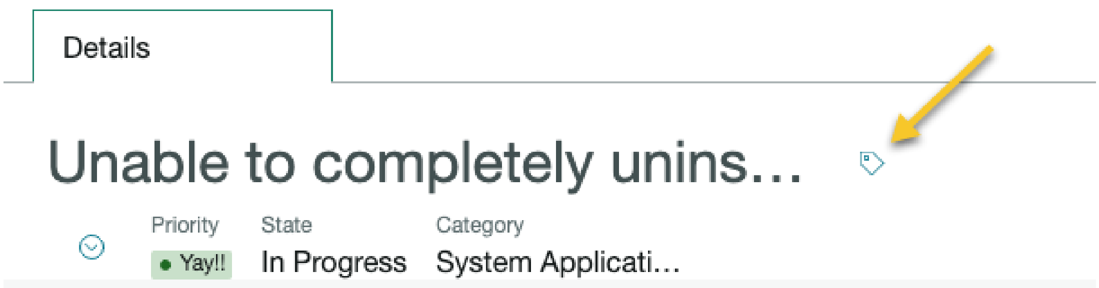
Add tags to records to group and organize them.

Before you begin

Role required: agent

About this task

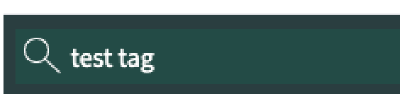
Tags are labels you can add to records. The tag icon ( ) appears next to the primary value in the form header.



Tags enable you to group and organize records. You create the tag name, which should name the reason for the tag. You can make the tags visible to everyone, some people, or just yourself. The visibility setting specifies who can use the tags to search for records.

An unfilled tag icon ( ) means that no tags have been assigned to the record. When tags are assigned and they're visible to you, the tag icon is filled ( ).

After tagging records, you can use the tags to search for records in the global search field or using the filter icon ( ) in List view.



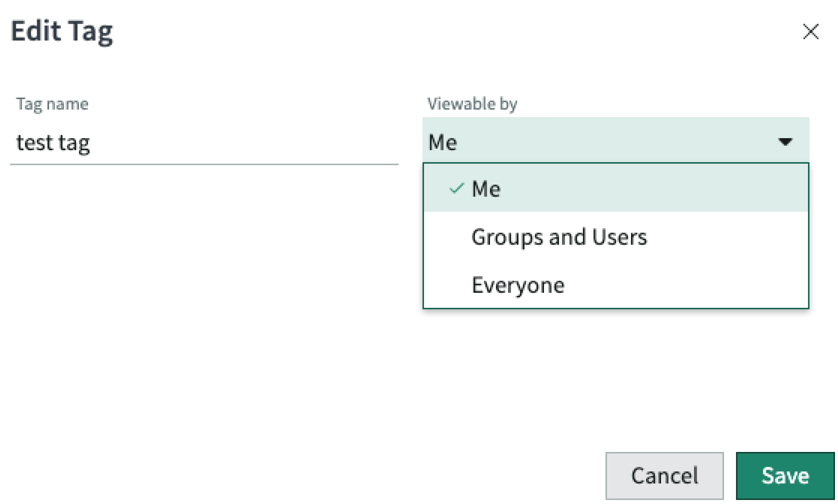
Procedure

1. Navigate to any open record in a workspace.

   For example, click the list icon ( ), click a list filter, such as **Open incidents**, and click a record.

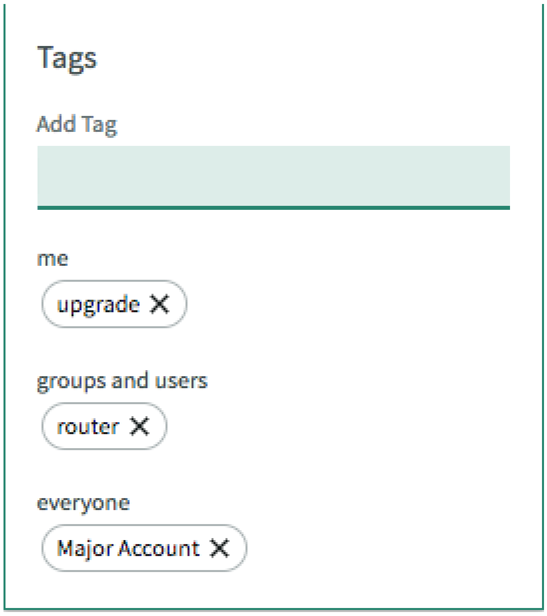
2. Click the Tag icon ( ) next to the primary value in the form header.

3. In **Add Tag**, enter a tag name.
   The tag name should reveal the organization principal of the tag, for example, all records stemming from a particular incident.
4. Click **Enter** to save the tag with the record.
   You can add more tags.
   The tag visibility setting defaults to private, which means the tag is only visible to the person who created the tag. So, only that person can use the tag to search for records labeled with that tag.
5. To change the visibility setting of the tag, click the tag and change the **Viewable by** setting.



Option	Description
Me	Tag is visible only to the person who created the tag. Only that person can use the tag to search for records. This setting is the default.
Groups and Users	Tag is visible to specific groups or users. You can specify the groups and users who can view this tag.
Everyone	Tag is visible to everyone. **Note:** This visibility setting is only avail able to an admin or tags_admin role.

A record can have multiple tags and each can have a different visibility setting.



6. **Optional:** To remove a tag from a record, click a filled tag icon () to open the list of tags, then click the **X** next to the tag you want to remove.
7. **Optional:** Search for your tag using the global search field.

Using the multi-record associator

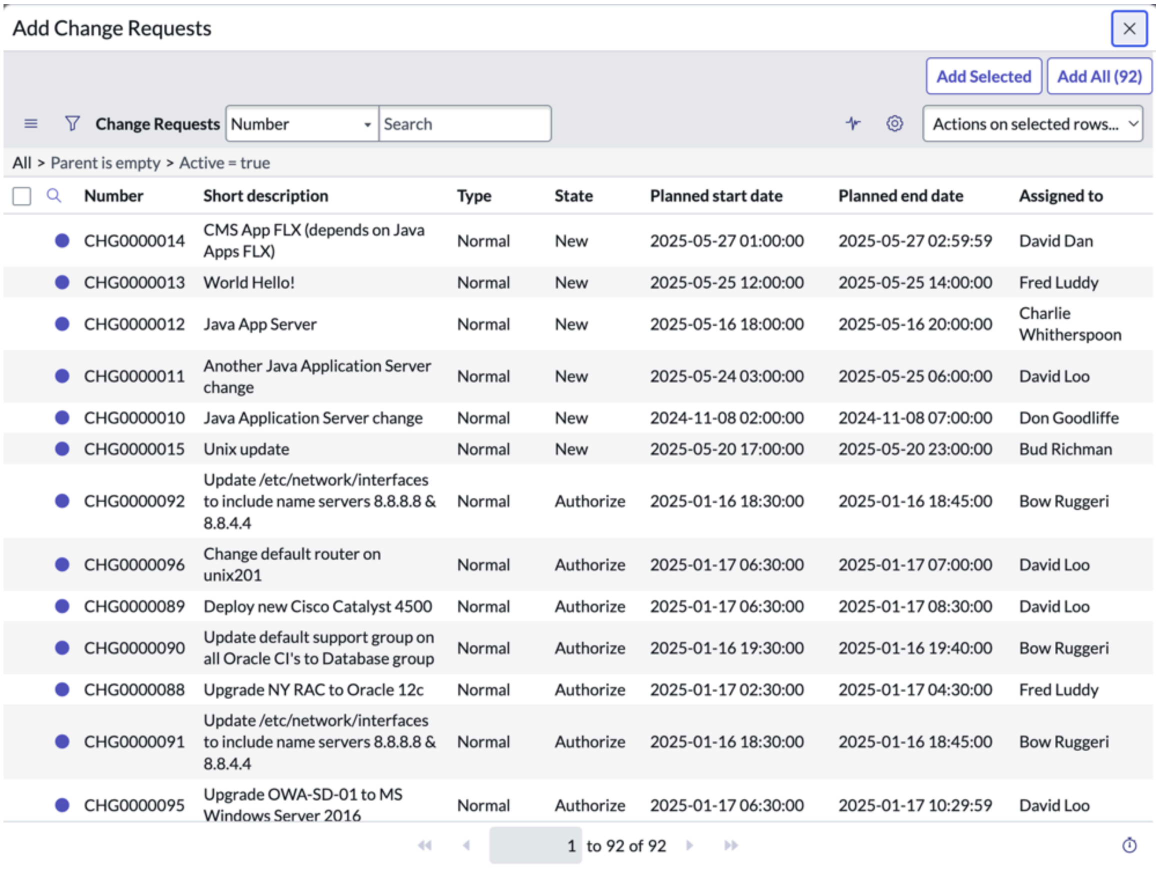
Use the multi-record associator to add records to related lists.

The multi-record associator enables you to view and select records within tables and associate those records to a related list.

The multi-record associator supports one-to-many (o2m) and many-to-many (m2m) tables.

- An o2m table enables a parent record in a table to reference multiple child records.
- An m2m tables enables multiple records in a table to reference multiple records in another table.

For information on adding records to related lists using the multi-record associator, see Add records to related lists.



Add Change Requests

Add Selected | Add All (92)

Change Requests | Number | Search | Actions on selected rows...

All > Parent is empty > Active = true

Number	Short description	Type	State	Planned start date	Planned end date	Assigned to
CHG0000014	CMS App FLX (depends on Java Apps FLX)	Normal	New	2025-05-27 01:00:00	2025-05-27 02:59:59	David Dan
CHG0000013	World Hello!	Normal	New	2025-05-25 12:00:00	2025-05-25 14:00:00	Fred Luddy
CHG0000012	Java App Server	Normal	New	2025-05-16 18:00:00	2025-05-16 20:00:00	Charlie Whitherspoon
CHG0000011	Another Java Application Server change	Normal	New	2025-05-24 03:00:00	2025-05-25 06:00:00	David Loo
CHG0000010	Java Application Server change	Normal	New	2024-11-08 02:00:00	2024-11-08 07:00:00	Don Goodliffe
CHG0000015	Unix update	Normal	New	2025-05-20 17:00:00	2025-05-20 23:00:00	Bud Richman
CHG0000092	Update /etc/network/interfaces to include name servers 8.8.8.8 & 8.8.4.4	Normal	Authorize	2025-01-16 18:30:00	2025-01-16 18:45:00	Bow Ruggeri
CHG0000096	Change default router on unix201	Normal	Authorize	2025-01-17 06:30:00	2025-01-17 07:00:00	David Loo
CHG0000089	Deploy new Cisco Catalyst 4500	Normal	Authorize	2025-01-17 06:30:00	2025-01-17 08:30:00	David Loo
CHG0000090	Update default support group on all Oracle CI's to Database group	Normal	Authorize	2025-01-16 19:30:00	2025-01-16 19:40:00	Bow Ruggeri
CHG0000088	Upgrade NY RAC to Oracle 12c	Normal	Authorize	2025-01-17 02:30:00	2025-01-17 04:30:00	Fred Luddy
CHG0000091	Update /etc/network/interfaces to include name servers 8.8.8.8 & 8.8.4.4	Normal	Authorize	2025-01-16 18:30:00	2025-01-16 18:45:00	Bow Ruggeri
CHG0000095	Upgrade OWA-SD-01 to MS Windows Server 2016	Normal	Authorize	2025-01-17 06:30:00	2025-01-17 10:29:59	David Loo

1 to 92 of 92

Add records to related lists

Provide information related to an incident by adding records to related lists.

Before you begin

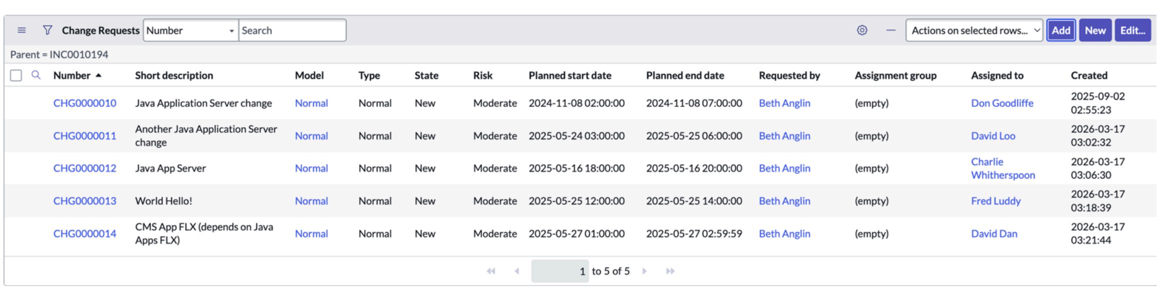
Role required: agent

About this task

If there's an **Add** button on your Related Items menu, you can add records to related lists. Add records to related lists when you find a record that's related to the record that's open.

For example, the open record documents a power outage in one location. When there's a power outage in a second location, you can add that outage's record to the related list for the first record.

Note: Not all workspaces have the **Add** button. It's added by your administrator.



Change Requests | Number | Search | Actions on selected rows... | Add | New | Edit...

Parent = INC0010194

Number	Short description	Model	Type	State	Risk	Planned start date	Planned end date	Requested by	Assignment group	Assigned to	Created
CHG0000010	Java Application Server change	Normal	Normal	New	Moderate	2024-11-08 02:00:00	2024-11-08 07:00:00	Beth Anglin	(empty)	Don Goodliffe	2025-09-02 02:55:23
CHG0000011	Another Java Application Server change	Normal	Normal	New	Moderate	2025-05-24 03:00:00	2025-05-25 06:00:00	Beth Anglin	(empty)	David Loo	2026-03-17 03:02:32
CHG0000012	Java App Server	Normal	Normal	New	Moderate	2025-05-16 18:00:00	2025-05-16 20:00:00	Beth Anglin	(empty)	Charlie Whitherspoon	2026-03-17 03:06:30
CHG0000013	World Hello!	Normal	Normal	New	Moderate	2025-05-25 12:00:00	2025-05-25 14:00:00	Beth Anglin	(empty)	Fred Luddy	2026-03-17 03:18:39
CHG0000014	CMS App FLX (depends on Java Apps FLX)	Normal	Normal	New	Moderate	2025-05-27 01:00:00	2025-05-27 02:59:59	Beth Anglin	(empty)	David Dan	2026-03-17 03:21:44

1 to 5 of 5

Procedure

1. Navigate to **All** > **Incident** > **Open**.
2. Select an incident to open it.

3. Choose a related list within the record and select **Add**.
   The multi-record associator opens as a modal displaying a list of records.
4. In the multi-record associator, select the records that you want to add to the open incident.
   - The record data is read-only.
   - Filter the records in a related list by using the filter ( ) and the condition builder.
   - Select multiple records at once by selecting the check box for each record.
   - Select all records by selecting the check box in the row header.
   - Records selected on one page remain selected as you move to other pages.
   - Choose how many records to view on each page by selecting an option from the **rows per page** menu.
5. Select **Add Selected**.

Result

The records you selected appear in the related list for the incident.

AI field recommendations

Use AI field recommendations for a list of top recommendations or to fill fields automatically in a Workspace form.

AI predicts a field's value based on the data in the form. AI recommendations can appear in the following ways based on the field configuration:

- Recommendations can appear as a list, and you can select a value from the list of top recommendations.
- A top recommendation can auto-fill into the field.

The sparkle icon ( ) marks any field that provides AI recommendations.

Get information on the recommendation's prediction source by pointing your mouse device on the sparkle icon ( ).

Use Screen Summarization

Screen Summarization is a feature that supports visually impaired and low-vision users by providing AI-generated summaries of workspace pages and their sections. The page and section summaries can be read aloud with a screen reader.

Before you begin

Install Screen Summarization by requesting it from the ServiceNow® Store. Visit the ServiceNow® Store to view all the available apps and information about submitting requests to the store.

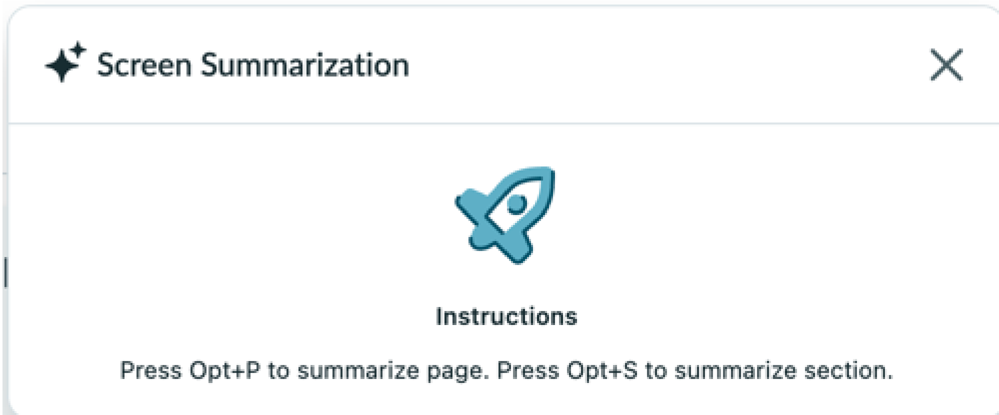
Role required: workspace_user

About this task

https://player.vimeo.com/video/1196046846?h=35a2a2325a&badge=0&autopause=0&player_id=0&app_id=58479

Procedure

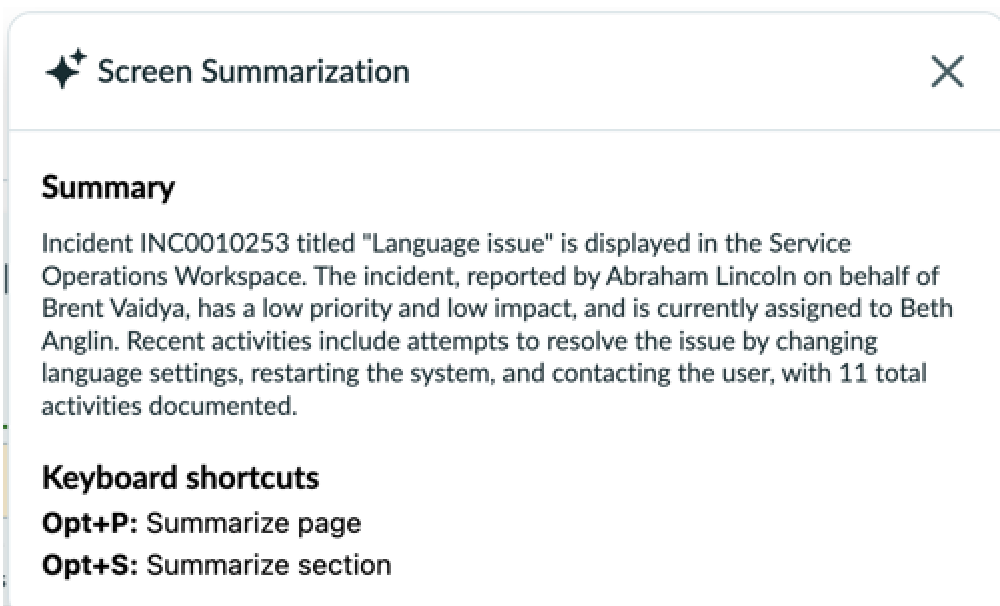
1. Open a workspace page in your instance.
2. Press Command+U (Mac) or Control+U (Windows) to open the Screen summarization modal.
   The Screen Summarization modal opens.



3. Choose between the following actions:
   - Press Option+P (Mac) or Alt+P (Windows) for an AI-generated summary of the entire page.
   - Press Option+S (Mac) or Alt+S (Windows) for an AI-generated summary of the selected section.

Result

The Screen Summarization modal generates a summary and can read it aloud with a screen reader.



Hide journal fields on Workspace forms

Disable journal fields on Workspace forms so that work notes and comments only appear in the Activity Stream.

Before you begin

Hiding journal fields is not supported for new records. New records display journal input fields because Activity Stream doesn't display.

Role required: admin

Procedure

1. Navigate to **All** > **Now Experience Framework** > **Configuration Settings** > **UX View Rules Configurations**.
2. Select the Workspace Experience that contains the record page with the work notes you want to hide.
3. Select a Workspace View Rule from the Workspace View Rules related list.
4. On the View Rule form, select the **Form Settings** tab.
5. In the Form Settings tab, select **Hide Journal Input Fields**.
6. Select **Update**.

Search Activity stream

Search using keywords activity stream to find results in work notes, emails and comments more efficiently.

Before you begin

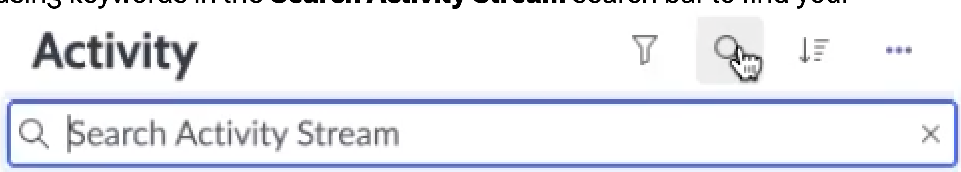
Role required: workspace_user

Procedure

1. Select in Activity stream.

2. **Note:** Keywords will only highlight in work notes, comments and emails. Activity stream entries that do not match the keyword criteria will filter out as you type. Keyword searches for attachments is also available, but will not highlight, attachments will instead be displayed in activity stream.

   Search using keywords in the **Search Activity Stream** search bar to find your



   results.

Filter activities with tags

Use tags to filter through the Activity stream.

Before you begin

Role required: workspace_user

About this task

Tags enable you to filter your activities in the Activity stream by dynamic and static states not offered in filter lists.

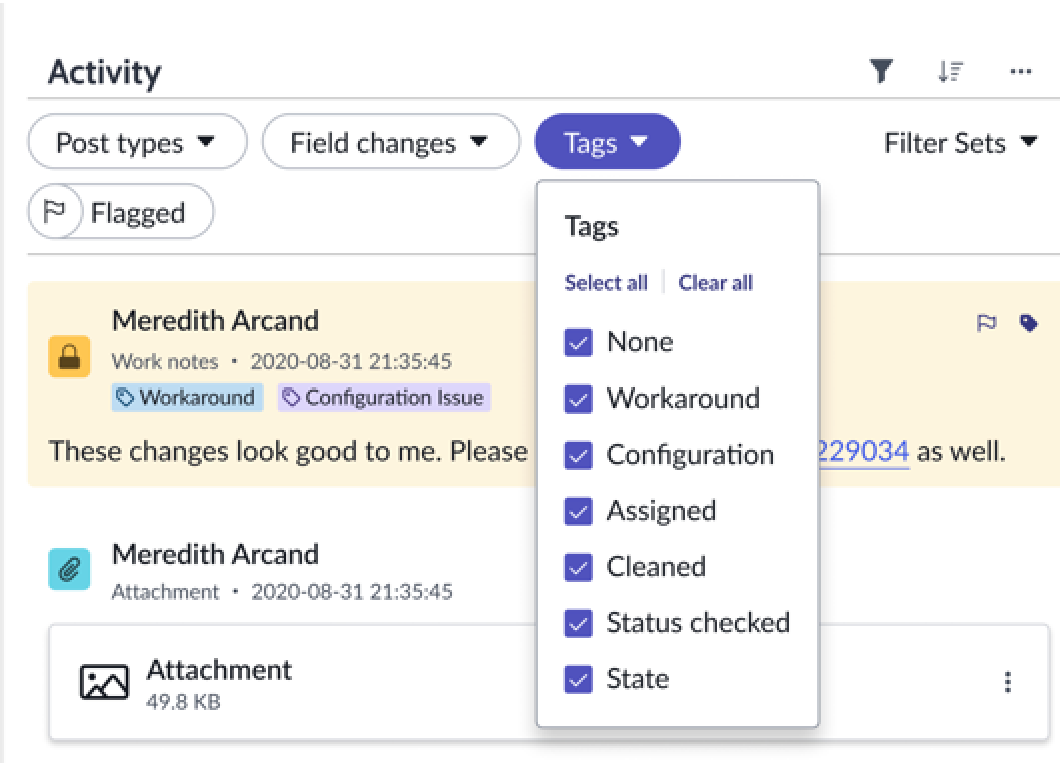
> **Important:** Tags are enabled and created by your system administrator. To enable and add tags for agents as a system administrator, see Create tags for the Activity stream for more information.

Procedure

1. Open a Workspace record in your instance.
2. In the Activity stream, select the filter icon ().
3. Select the **Tags** list, and select tags related to activities you want to view.

Result

Activities with the tags you selected are displayed in the Activity stream.



Expand all Activity stream tiles by default

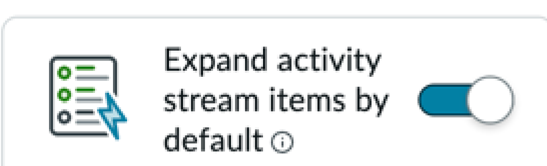
Expand all tiles in the Activity stream across cases and user sessions by default.

Before you begin

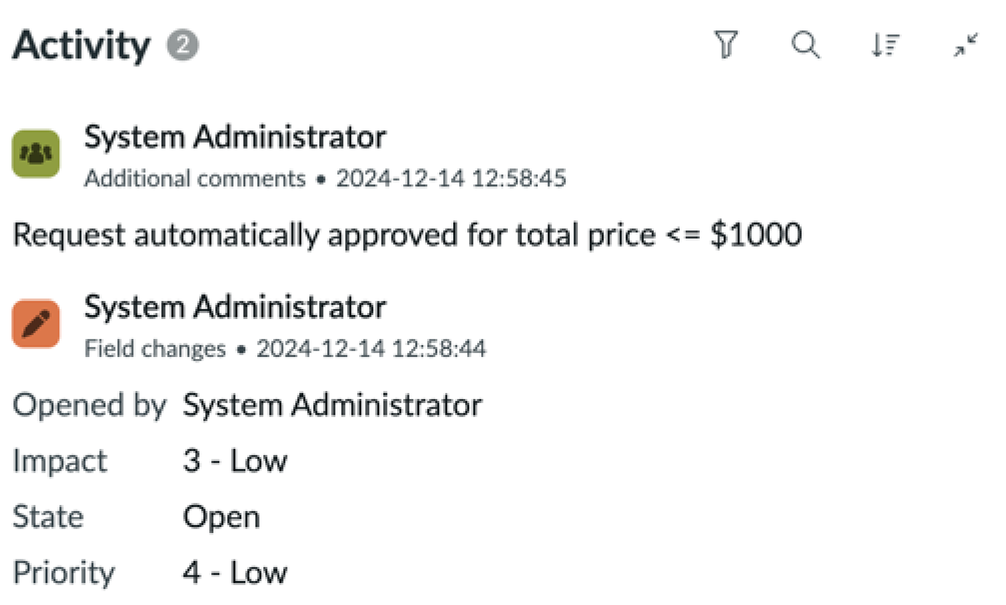
Role required: workspace_user

Procedure

1. Open your workspace.
2. Open the preferences for your workspace by selecting your profile image () and **Preferences** > **Workspace**.
3. Select the toggle for the **Expand activity stream items by default** preference.



Result
All activities in your Activity stream expand by default.



Use AI filter assist

AI filter assist enables you to convert everyday language into an AI-generated encoded query.

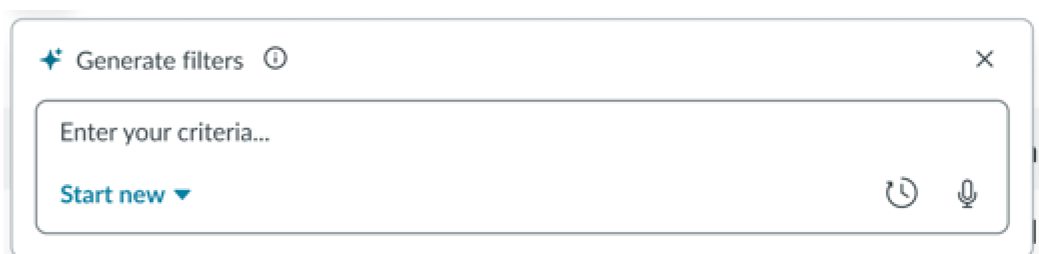
Before you begin

> **Important:** The AI filter assist feature is available with ServiceNow® Pro Plus licensing. Discuss licensing with your ServiceNow® account representative for information specific to your contract.

Role required: workspace_user

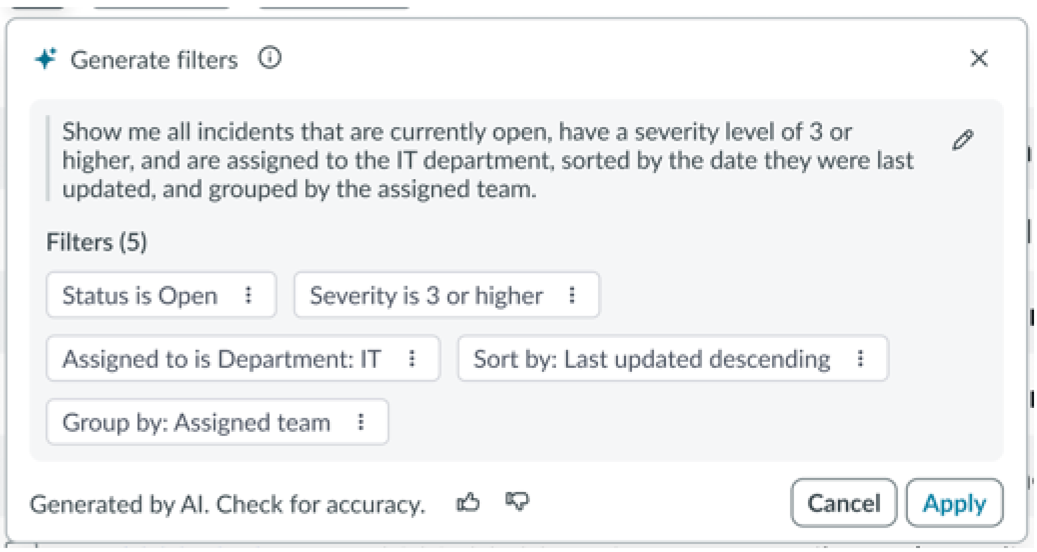
Procedure

1. Open a workspace list in your instance.
2. From the list header, select the filter button ().
   A dialog box opens for generating filters.

3. Select one of the following options from the menu.
   - Select **Add to existing filters** to add additional conditions onto the filter that's currently applied.
   - Select **Edit existing filters** to refine the filter that's currently applied.
   - Select **Start new** to generate a new filter.

4. Create a query with everyday language using one of the following options.
   - Enter a query manually.
   - Select the microphone icon ( ) and speak a query out loud.
5. Select the submit icon ( ) to generate the filters.
   A dialog box opens to display the generated filters.



6. Review the generated filters and select one of the following options.
   - Select the edit icon ( ) to make changes to the generated filters.
   - Select **Apply** to submit the filters.
7. Show the conditions panel by selecting the filter button drop-down arrow (Filter) and **Advanced Filter**.
8. View a list of filters you generated recently by selecting the history icon ( ).

Use condition builder in reference lists

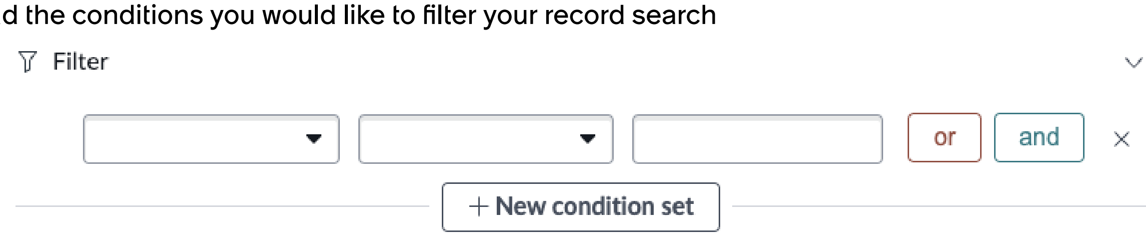
Use condition builder in reference lists to filter results.

Before you begin

Role required: workspace_user

Procedure

1. Select **Search for Record** icon in the record field.
2. Select Filter
3. Add the conditions you would like to filter your record search



by.

4. To add additional conditions, select **+ New condition set**.
5. Select **Run**.

Use more form options

Select more form options to use additional functionality on your Workspace form. You can export a form, reload a form, copy a URL or Sys ID, and show the form XML.

Before you begin

Role required: agent

Procedure

1. Select the menu icon (⋮) on a form.
2. Select the form functionality you want from the **More form options** menu.
   - **Toggle Annotations Off/On**: Select to toggle form annotations.
   - **Reload form**: Select to reload the form.
   - **Export**: Select to export the form to a PDF or XML export type. Orient your PDF export to a portrait or landscape output.
   - **Copy URL**: Select to copy the form URL to the clipboard.
   - **Copy sys_id**: Select to copy the sys_id to the clipboard. This action is only available for admins.
   - **Show XML**: Select to show the document tree of the form. This action is only available for admins.
   - **Personalize form**: Select to personalize your form by adding or removing fields you wish to display.
3. **Note:** Right click actions are only available upon clicking the form header.

   To utilize right click actions in your workspace, right click the form header.

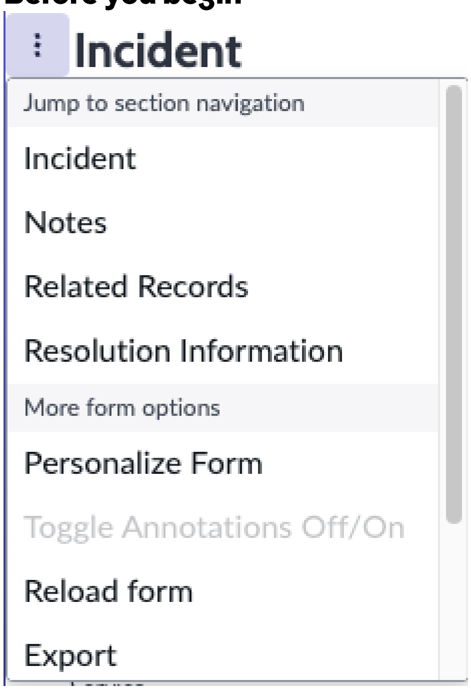
The jump to section navigation and more form options list appears.

4. You can also jump to a section by right clicking the header or using the **More form options** menu.
   - Incident
   - Notes
   - Related Records
   - Resolution Information

Use personalize form

Select personalize form to add or remove fields that appear on your form view according to your preferences.

Before you begin

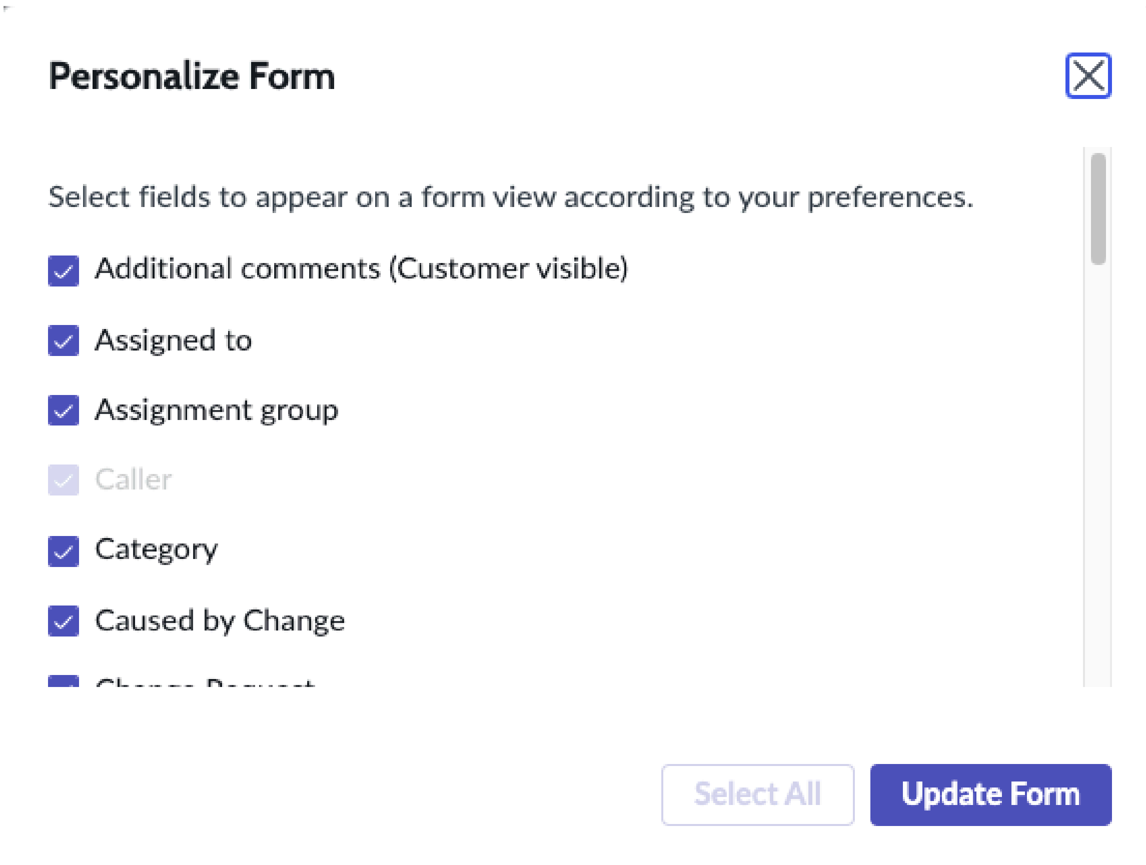


Role required: agent

Procedure

1. **Note:** You can also utilize right click actions, and right click the form header to display **More form options** list.

   Select the menu icon (⋮) on a form.
2. Select **Personalize Form** from the **More form options** list.



3.
4. Select **Update Form** to submit your changes.

Resize modals

Resize modals to view content without scrolling horizontally and vertically.

Before you begin

Role required: workspace_user

Procedure

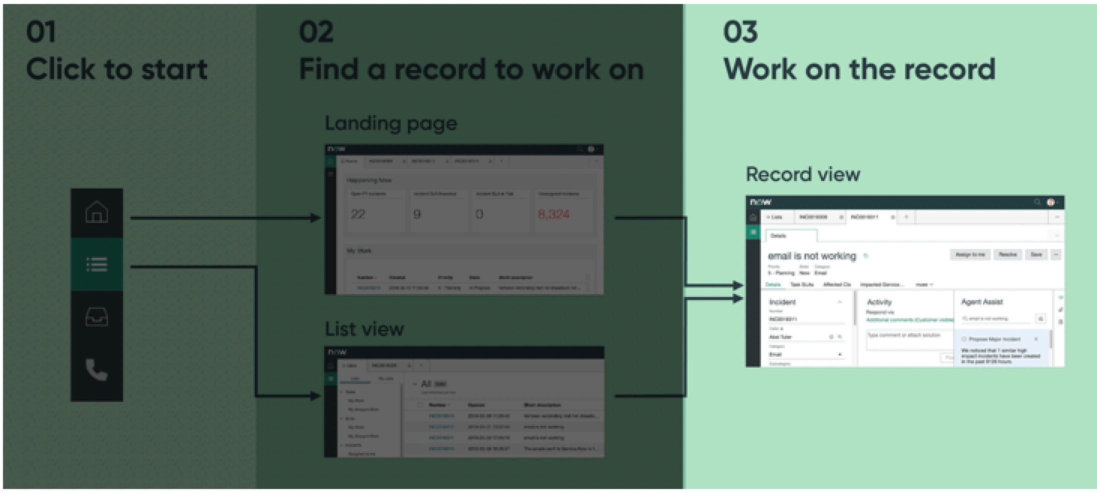
1. Open a record in your instance.
2. Select the search icon ( ) within a field.
3. In the modal, point the mouse over the edges and corners of the modal.

   A double arrow () appears.
4. Use the double arrow to drag the edges and corners of the modal to a custom size.

Responding to issues in an open record in Workspace

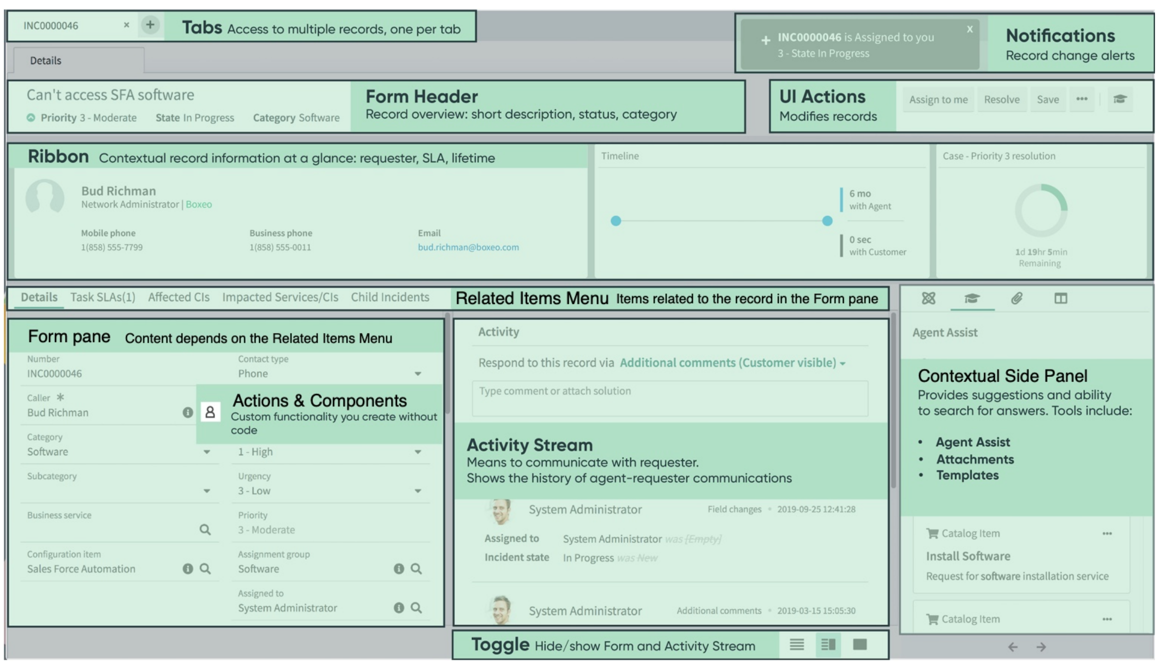
Use the following sections to discover answers to the issues you're dealing with in an open record.

servicenow



Depending on the issue at hand, you might be ordering a hardware component for a requester, issuing a server restart to solve an issue, or creating and assigning an incident record to remedy a software issue.

When you use the landing page or list view to open a record, workspace provides a lot of information about the record. Here's how you might look at the different parts of workspace to understand and resolve an issue.



1. In the Form Header, read the record's short description, priority, status, and issue category.
2. In the Ribbon, read about the requester, how long the issue has been open, and what the SLA is in solving the issue.
3. In the Form pane, on the **Details** tab, scroll through detailed information about the issue.
4. In the Related Items menu, click the tabs to see information related to the open record, such as related incidents. The information appears in the Form pane.
5. In the Contextual side panel, read the search results automatically pulled up by Agent assist that might help solve the issue.

6. In the Activity Stream, read about the history of actions you or other agents have taken in solving this issue.
7. In the Compose section of the Activity Stream pane, write a comment to the requester or make notes to yourself and other agents about your progress in resolving the issue.

Next

Now that you understand how to look through the parts of workspace to get contextual information about an issue, let's see how to find a solution.

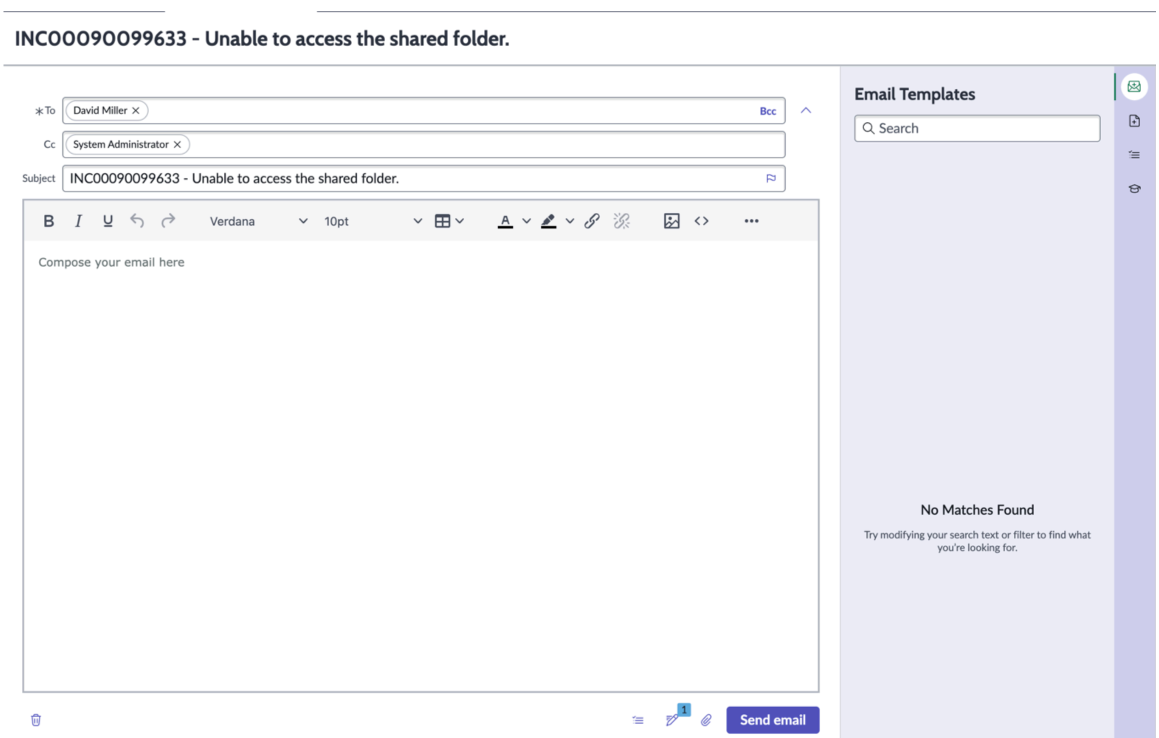
Communicating via email in Workspace

Email requesters and agents while working on issues in Workspace.

With the Workspace email client, you can email callers or fellow agents. There are two versions of the email client you can use.

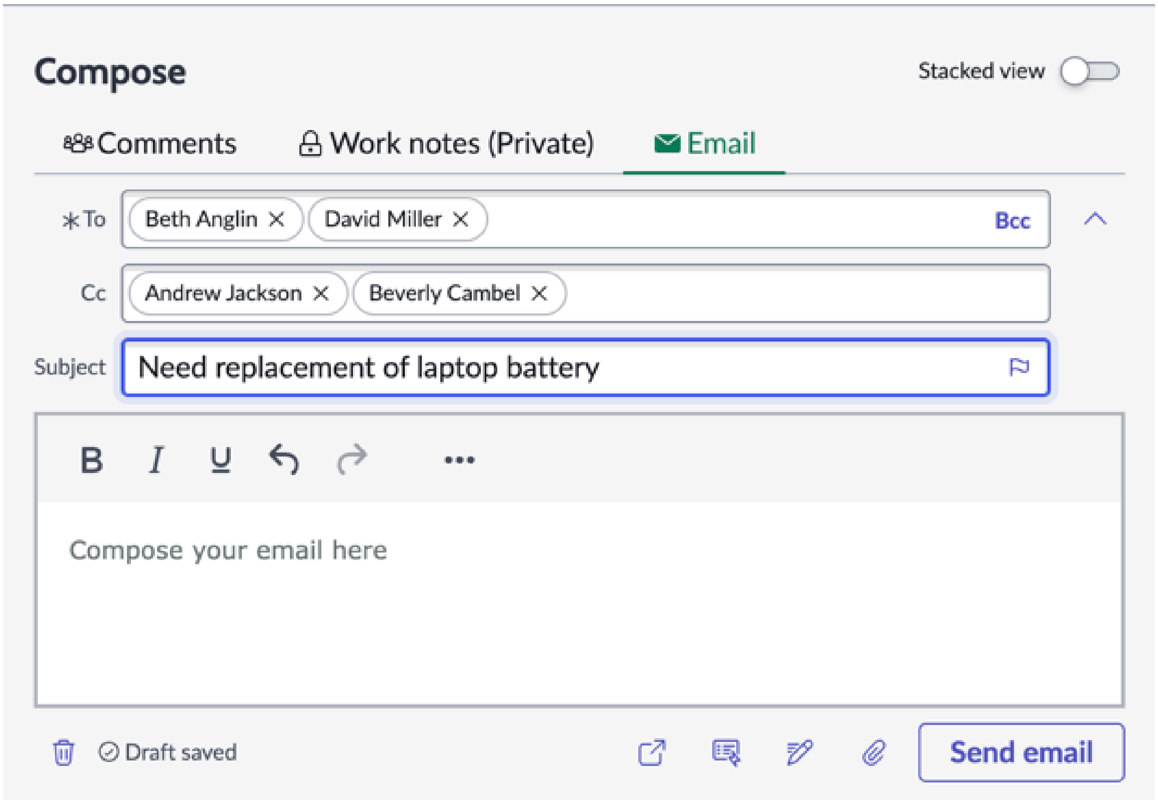
Full email composer

The full email composer enables you to draft and send emails from a separate workspace tab.



Mini email composer

The mini email composer enables you to draft and send emails directly from the record page.



Compose emails from the full email composer

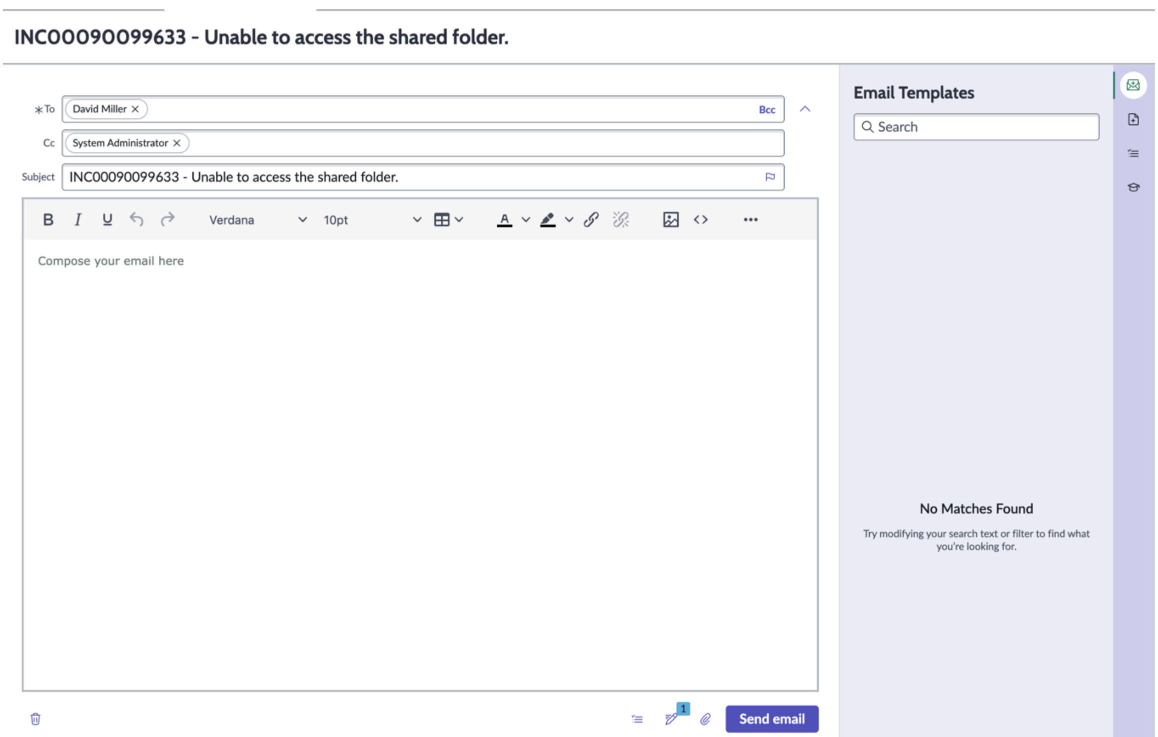
Compose an email to send to requesters and agents within a separate workspace tab.

Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open the full email composer by selecting the More actions icon ( ) from the record view, and then select **Compose Email**.
   An email draft opens in a new workspace tab.



3. If available, complete the **Reply To** or **From** field.

   This field specifies who the recipient can reply to after receiving your email. You may choose to specify an entity apart from yourself. For example, the IT service desk.

4. In the **To** field, add an email recipient.
   You can also add Cc and Bcc recipients by selecting **Cc/Bcc**.
5. In the **Subject** field, enter a subject line.
6. **Optional:** Hide the email header including all recipient fields by selecting the chevron icon ( ).
7. Create the email body.
   You can insert a quick message in the email body. For more information, see Insert a quick message from the full email composer.

   You can attach a file to the email. For more information, see Add a file to an email from the full email composer

8. Select **Send**.
   Drafts save automatically after a set number of seconds. For more information on finding email drafts, see Review email drafts from the full email composer.

Result

You can find the sent email in the Emails list. For more information, see Review emails.

Use email templates in the full email composer

Quickly compose emails for common issues by selecting an email template in the Compose Email page instead of manually drafting an email.

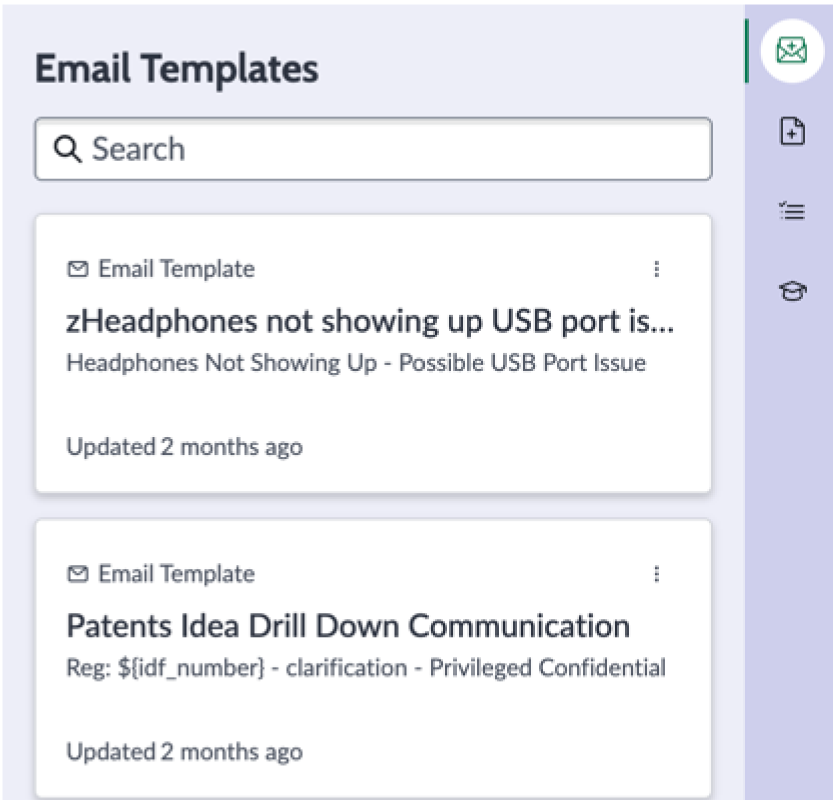
Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open the Compose Email page by selecting the More actions icon ( ) and **Compose Email**.
3. Apply an email template from the Agent Assist panel.

   a. From the Agent Assist panel, select the Email Templates icon ( ).
   A list of response templates opens in the Agent Assist panel.

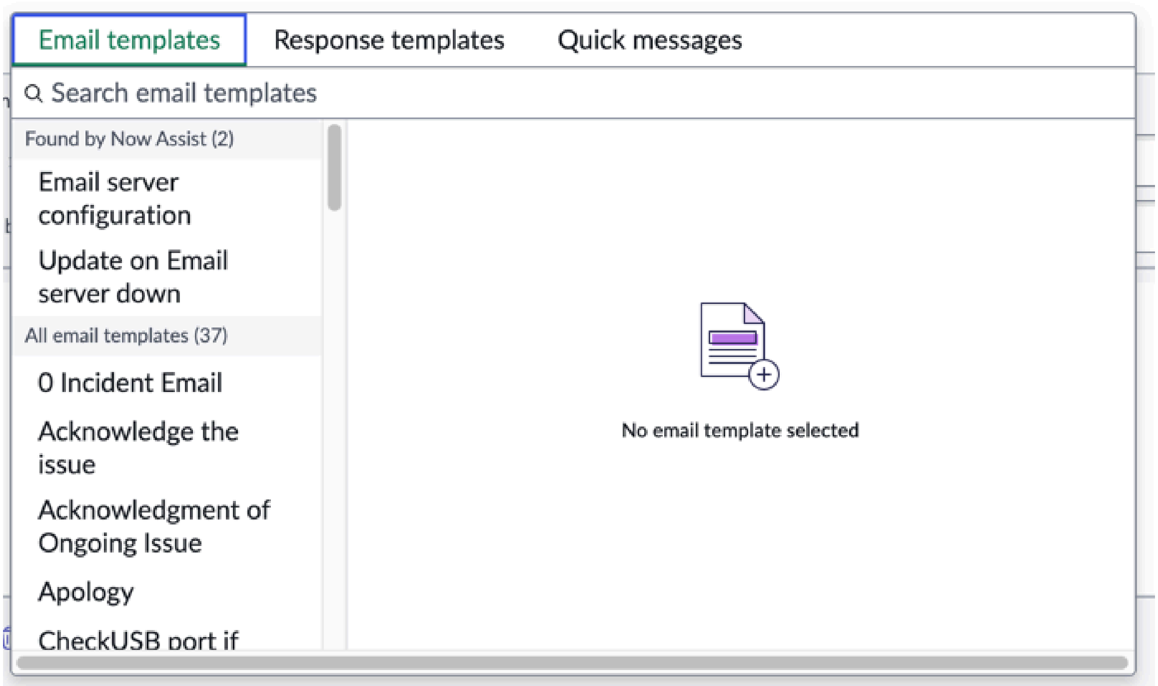
   Note: Find the email template you need by using the search bar in the Email Templates list.

   b. Select an email template from the Email Templates panel.

   c. Select the More actions icon ( ), and select **Apply Template**.

4. Apply an email template from the email footer.

   a. From the email footer, select the Apply templates icon ( ).
   A modal opens with different types of templates.



b. Select the **Email templates** tab.

c. Select an email template from the list.

Note: Find the email template you need by using the search bar in the Email templates tab.

A preview of the selected email template opens.

d. Add the template to your email by selecting **Apply**.

Use response templates in the full email composer

Insert common responses into your emails by using response templates in the Compose Email page instead of manually drafting a response.

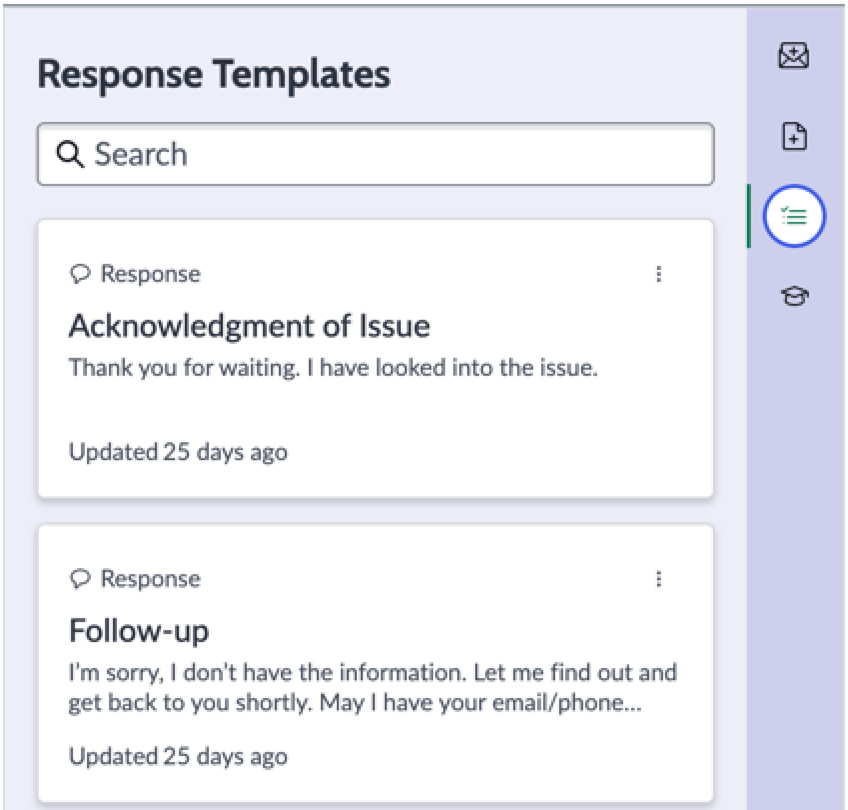
Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open the Compose Email page by selecting the More actions icon ( ) and **Compose Email**.
3. Apply a response template from the Agent Assist panel.

   a. From the Agent Assist panel, select the Response Templates icon ( ).
   A list of response templates opens in the Agent Assist panel.



> **Note:** Find the response template you need by using the search bar in the Response Templates list.

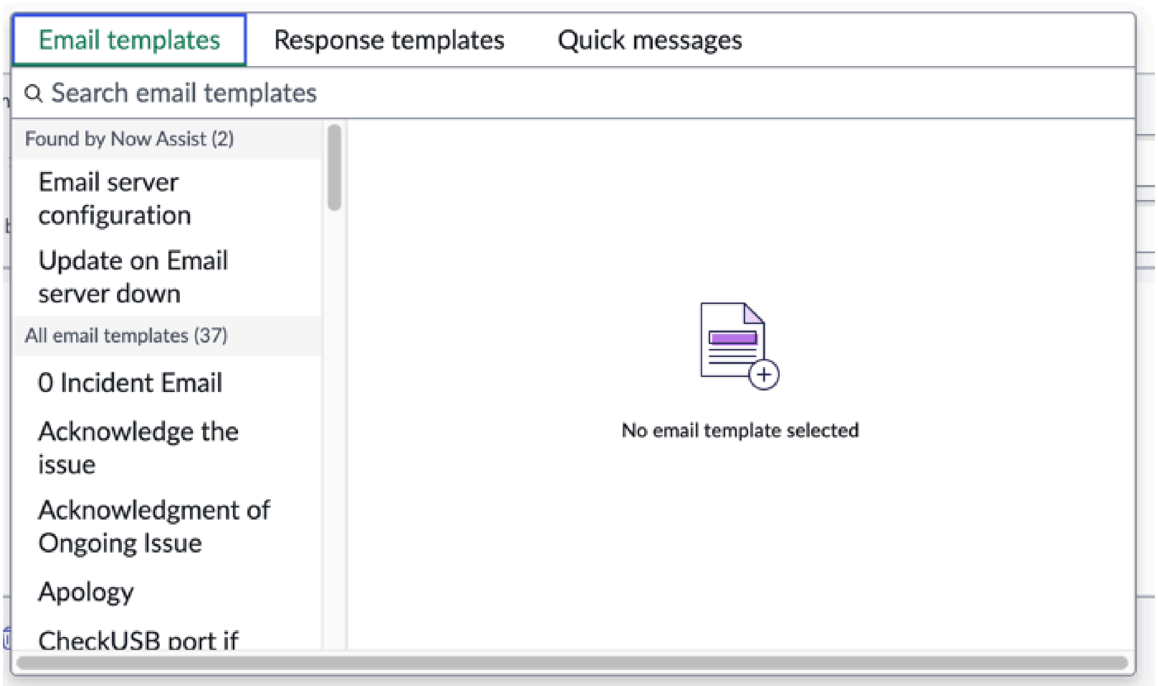
b. Copy a response template without viewing its full contents by selecting the More actions icon (⋮) and selecting **Copy to Clipboard**.

c. Copy a response template after viewing its full contents by selecting a template from the list and selecting **Copy to Clipboard**.

d. Paste the response template into your email.

4. Apply a response template from the email footer.

   a. From the email footer, select the Apply templates icon ( ).
   A modal opens with different types of templates.



b. Select the **Response templates** tab.

c. Select a response template from the list.

> **Note:** Find the response template you need by using the search bar in the Response templates tab.

d. Add the template to your email by selecting **Insert**.

5. Apply a response template with a keyboard shortcut.
   For instructions on applying a response template with a keyboard shortcut, see Add response templates with a keyboard shortcut.

Insert a quick message from the full email composer

Insert predefined content into email messages from the full email composer.

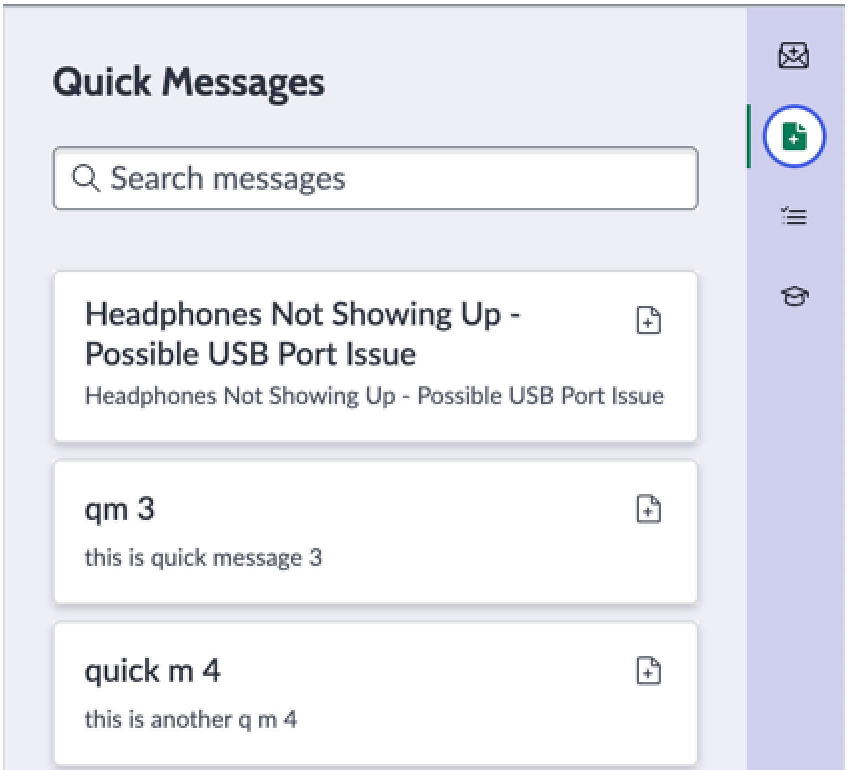
Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open the Compose Email page by selecting the More actions icon ( ) and **Compose Email**.
3. Apply a quick message from the Agent Assist panel.

   a. From the Agent Assist panel, select the Quick Messages icon ( ).
      A list of quick messages opens in the Agent Assist panel.



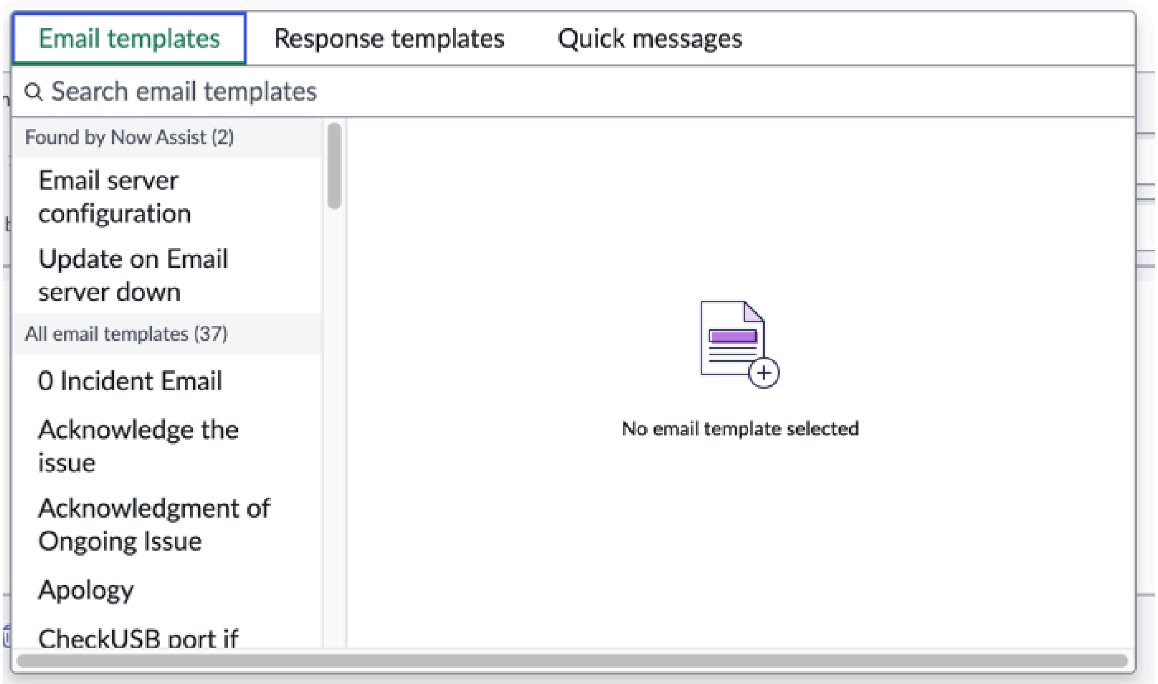
Note: Find the quick messages you need by using the search bar in the Quick Messages list.

b. Add a quick message without viewing its full contents by selecting the Insert icon ( ).

c. Add a quick message after viewing its full contents by selecting a message from the list and selecting **Insert**.

4. Apply a quick message from the email footer.

a. From the email footer, select the Apply templates icon ( ).
A modal opens with different types of templates.



b. Select the **Quick messages** tab.

c. Select a quick message from the list.

> **Note:** Find the quick message you need by using the search bar in the Quick messages tab.

d. Add the template to your email by selecting **Insert**.

Add a file to an email from the full email composer

Send a file from your computer or related record to a requester or agent from the full email composer by attaching it to an email.

Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open the full email composer by selecting the More actions icon ( ) from the record view, and then select **Compose Email**.
3. **Optional:** Attach a file from your computer.

   a. Select the Attach file icon ( ) from email footer.

   b. Select **From computer**.

   c. Select a file from your computer.

You can select multiple files at a time. The system uploads the files simultaneously.

(Optional) Alternatively, you can drag files from your computer onto Workspace. You can't attach a folder.

4. **Optional:** Attach a file from the related record.
   a. Select Attach file icon ( ) from the email footer.
   b. Select **From record**.
   c. On the window, select the files to attach.
   d. Select **Add**.

What to do next

Optionally, you can hide or show attachments in your email drafts by selecting **Hide attachments** when not hidden and **Show attachments** when hidden. You can also perform additional actions by selecting the menu icon ( ) next to each attached file:

- **Download**: Download the file to your computer.
- **Rename**: Rename the attached file. Only the first 100 characters of a file name are displayed.
- **Remove**: Remove the attachment from the email.

Review email drafts from the full email composer

View emails saved for later or create a new email while saving your current draft automatically from the full email composer.

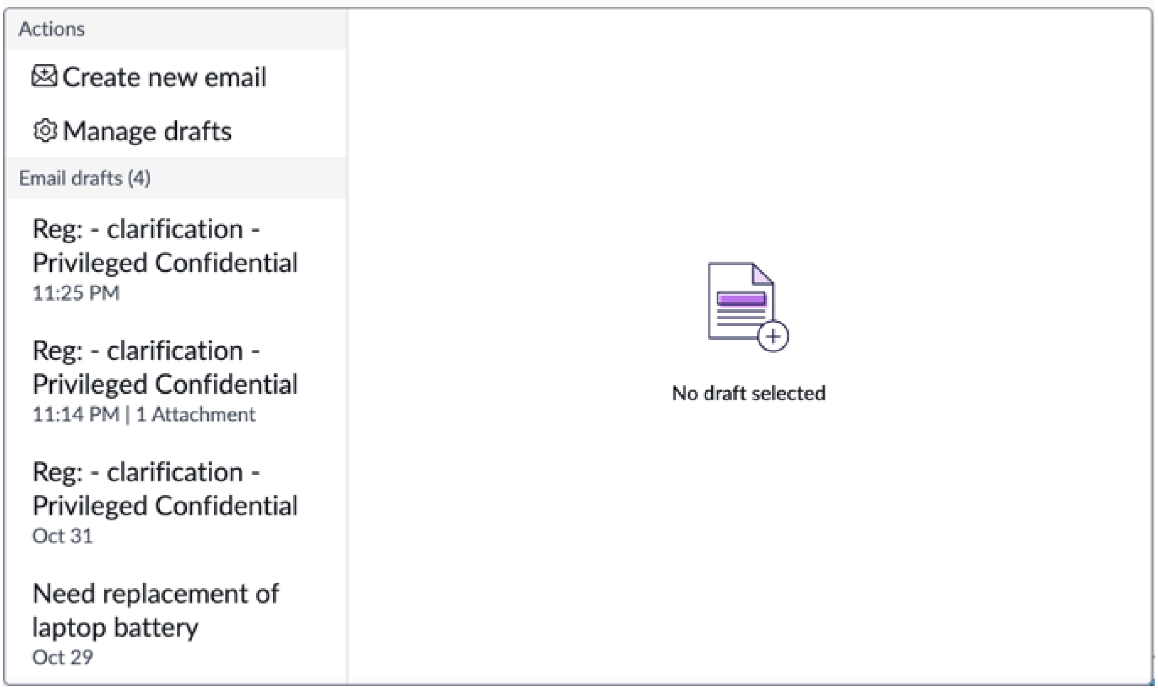
Before you begin

Role required: workspace_user

Procedure

1. Open a Workspace record in your instance.
2. Open the full email composer by selecting the More actions icon ( ) from the record view, and then select **Compose Email**.
3. **Note:** Instead of a button to save email drafts manually, drafts save automatically.

   Access your drafts by selecting the drafts icon ( ) from the email footer.
   A modal opens with a list of actions and email drafts.



4. Select an action or recent draft.
   - View all of your email drafts by selecting **Manage drafts**.
   - Create a new draft while saving your current draft automatically by selecting **Create new email**.
5. Create a new draft while saving your current draft automatically by selecting **Create new email**.
6. Open a draft after previewing it.
   a. Select a draft from the Email drafts list.
   A preview of the draft opens.
   b. Select **Apply**.
7. Open a draft from the Manage drafts modal.
   a. Open the Manage drafts modal by selecting **Manage drafts** from the menu.
   b. Select a draft from the list.
8. Delete multiple drafts from the Manage drafts modal.
   a. Open the Manage drafts modal by selecting **Manage drafts** from the menu.
   b. Select drafts from the list.
   c. Select **Delete**.

Compose emails from the mini email composer

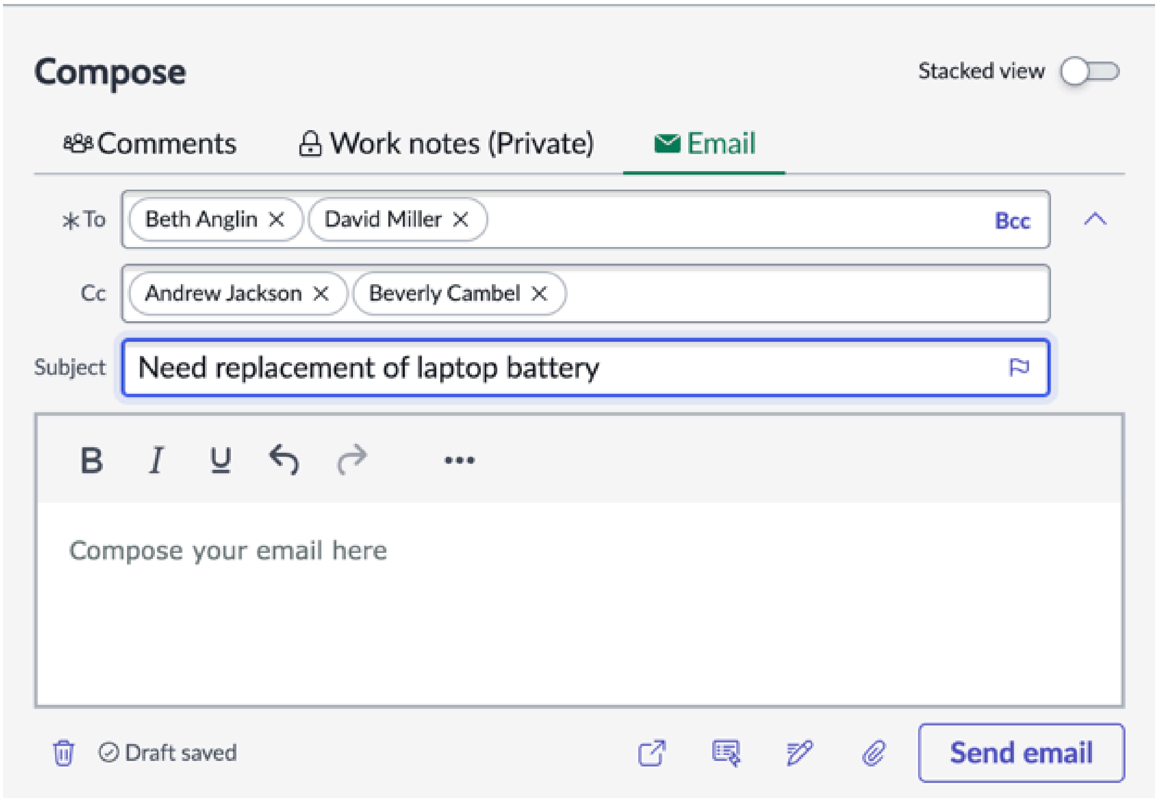
Send emails without leaving the record.

Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Select the **Email** tab in Compose.
   An email draft opens with the same functionality as creating an email from a new workspace tab.



3. If available, complete the **Reply To** or **From** field.

   This field specifies who the recipient can reply to after receiving your email. You may choose to specify an entity apart from yourself. For example, the IT service desk.
4. In the **To** field, add an email recipient.
   You can also add Cc and Bcc recipients by selecting **Cc/Bcc**.
5. In the **Subject** field, enter a subject line.
6. **Optional:** Hide the email header including all recipient fields by selecting the chevron icon (^).
7. Create the email body.
   You can insert an email template into the email body. For more information, see Use email templates in the mini email composer.

   You can attach a file to the email. For more information, see Add a file to an email from the mini email composer.
8. Select **Send**.
   Drafts save automatically after a set number of seconds. For more information on finding email drafts, see Review email drafts from the mini email composer.

Result

You can find the sent email in the Emails list. For more information, see Review emails.

Use email templates in the mini email composer

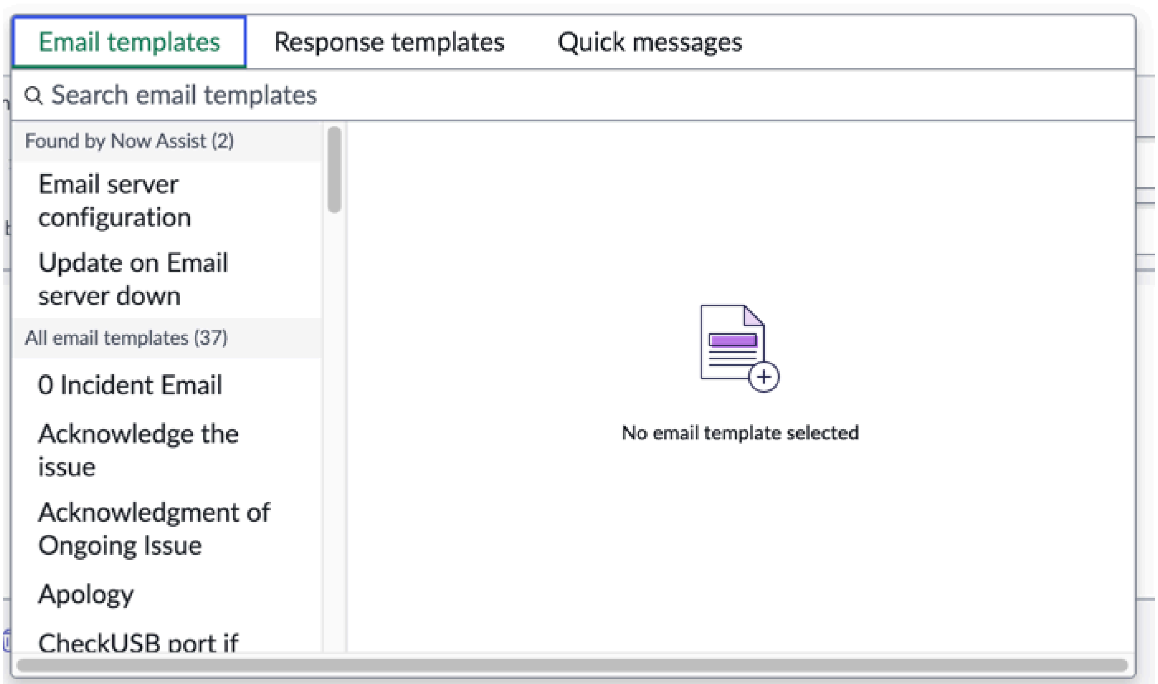
Quickly compose emails for common issues by selecting an email template in the record view instead of manually drafting an email.

Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open the mini email composer by selecting the **Email** tab under the Compose panel.
3. From the email footer, select the Apply templates icon ( ).
   A modal opens with different types of templates.



4. Select the **Email templates** tab.
5. Select an email template from the list.

   Note: Find the email template you need by using the search bar in the Email templates tab.

   A preview of the selected email template opens.
6. Add the template to your email by selecting **Apply**.

Use response templates in the mini email composer

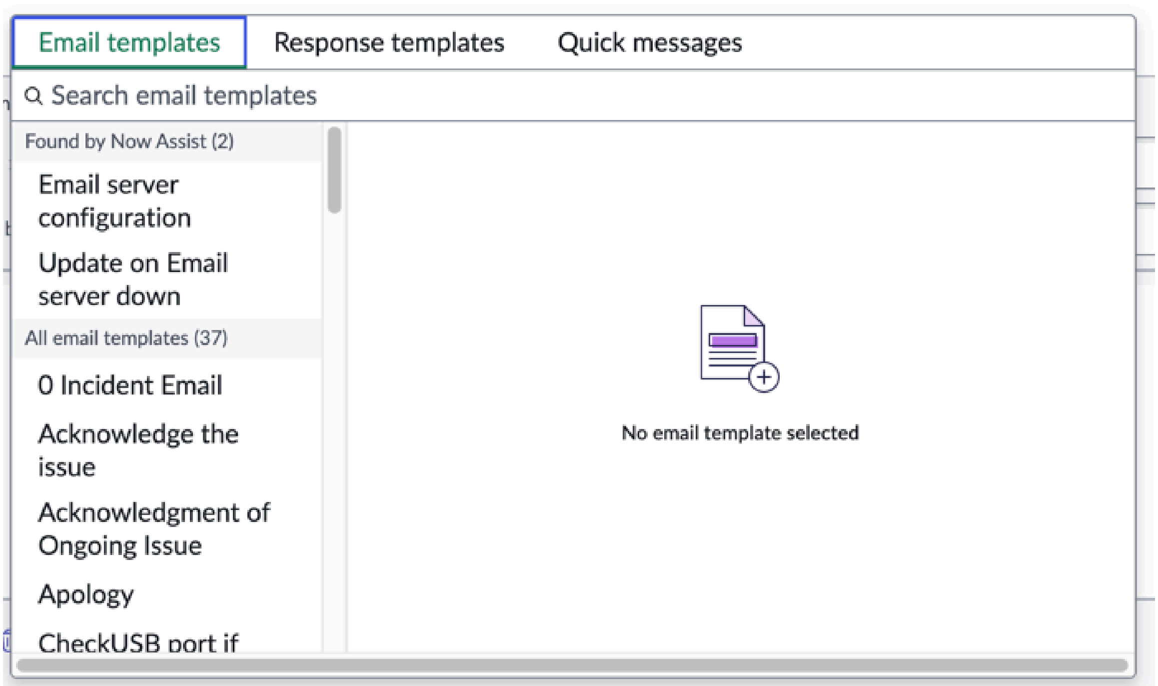
Insert common responses into your emails by using response templates in the mini email composer instead of manually drafting a response.

Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open the mini email composer by selecting the **Email** tab under the Compose panel.
3. From the email footer, select the Apply templates icon ( ).
   A modal opens with different types of templates.



4. Select the **Response templates** tab.
5. Select a response template from the list.

   Note: Find the response template you need by using the search bar in the Response templates tab.

6. Add the template to your email by selecting **Insert**.
7. Apply a response template with a keyboard shortcut.
   For instructions on applying a response template with a keyboard shortcut, see Add response templates with a keyboard shortcut.

Insert a quick message from the mini email composer

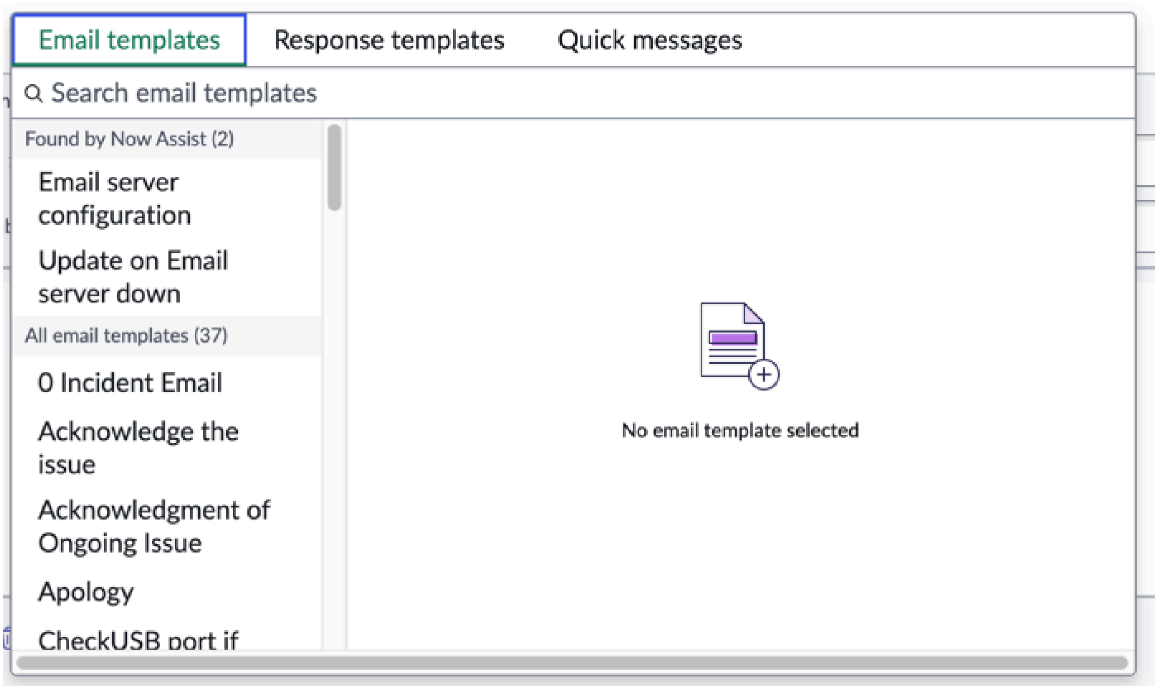
Insert predefined content into email messages from the mini email composer.

Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open the mini email composer by selecting the **Email** tab under the Compose panel.
3. From the email footer, select the Apply templates icon ( ).
   A modal opens with different types of templates.



4. Select the **Quick messages** tab.
5. Select a quick message from the list.

   Note: Find the quick message you need by using the search bar in the Quick messages tab.

6. Add the template to your email by selecting **Insert**.

Add a file to an email from the mini email composer

Send a file from your computer or related record to a requester or agent from the mini email composer by attaching it to an email.

Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open an email draft by selecting the **Email** tab in Compose.
3. **Optional:** Attach a file from your computer.

   a. Select Attach file icon ( ).

   b. Select **From computer**.

   c. Select a file from your computer.
   You can select multiple files at a time. The system uploads the files simultaneously.

   (Optional) Alternatively, you can drag files from your computer onto Workspace. You can't attach a folder.

4. **Optional:** Attach a file from the related record.

   a. Select the Attach file icon ( ) in the record.

   b. Select **From record**.

   c. On the window, select the files to attach.

   d. Select **Add**.

What to do next

Optionally, you can hide or show attachments in your email drafts by selecting **Hide attachments** when not hidden and **Show attachments** when hidden. You can also perform additional actions by selecting the menu icon ( ) next to each attached file:

- **Download**: Download the file to your computer.
- **Rename**: Rename the attached file. Only the first 100 characters of a file name are displayed.
- **Remove**: Remove the attachment from the email.

Review email drafts from the mini email composer

View emails saved for later or create a new email while saving your current draft automatically from the full email composer.

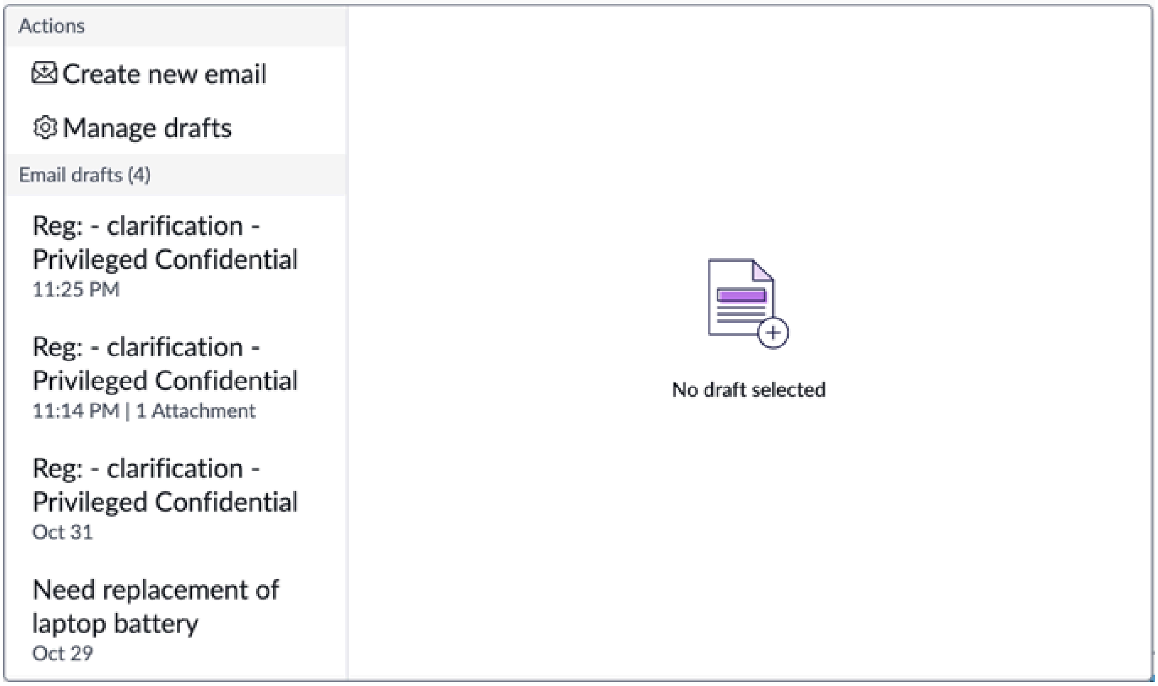
Before you begin

Role required: email_composer

Procedure

1. Open a Workspace record in your instance.
2. Open the mini email composer by selecting the **Email** tab under the Compose panel.
3. **Note:** Instead of a button to save email drafts manually, drafts save automatically.

   Access your drafts by selecting the drafts icon ( ) from the email footer.
   A modal opens with a list of actions and email drafts.



4. Select an action or recent draft.
   - View all of your email drafts by selecting **Manage drafts**.
   - Create a new draft while saving your current draft automatically by selecting **Create new email**.
5. Create a new draft while saving your current draft automatically by selecting **Create new email**.
6. Open a draft after previewing it.

   a. Select a draft from the Email drafts list.
   A preview of the draft opens.

   b. Select **Apply**.

7. Open a draft from the Manage drafts modal.
   a. Open the Manage drafts modal by selecting **Manage drafts** from the menu.
   b. Select a draft from the list.
8. Delete multiple drafts from the Manage drafts modal.
   a. Open the Manage drafts modal by selecting **Manage drafts** from the menu.
   b. Select drafts from the list.
   c. Select **Delete**.

Edit and move email recipients

Edit and move recipients across the To, Cc, and Bcc email fields instead of manually removing and adding individual recipients.

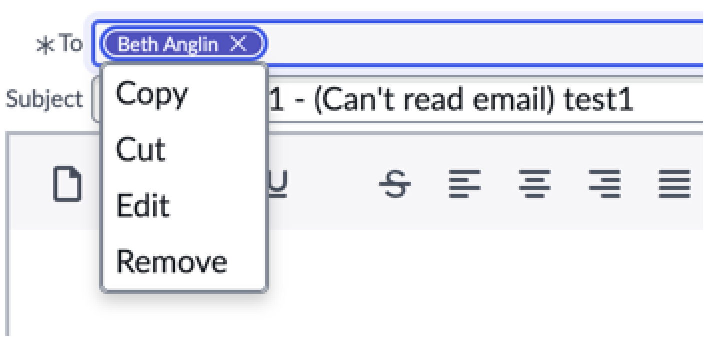
Before you begin
Role required: email_composer

Procedure

1. Open a record.
2. Select the **Email** tab of the Compose panel in the record view, or open the Compose Email page.
3. Add recipients to the desired email fields by copying and pasting email addresses or entering recipients' email addresses manually.
   Email recipients consist of individual pill icons ( ).

   When you enter an invalid email address, an exclamation icon ( ) appears within the email address' pill and the **Send email** button is inactive.

   When you enter a blocked email address, a blocked icon ( ) appears within the email address' pill and the **Send email** button is inactive.
4. Move a recipient to a different field by dragging the pill icon.
5. Right-select a recipient.
   You can edit a recipient's email address by selecting **Edit**, copy and paste recipients with **Copy** and **Cut**, and remove recipients with **Remove**.



6. **Optional:** To select multiple recipients, use keyboard and mouse device shortcuts.
   For reference, see Keyboard and mouse device shortcuts for adding recipients to email fields.

Keyboard and mouse device shortcuts for adding email recipients

Add and remove recipients in the To, Cc, and Bcc email fields by using keyboard and mouse device shortcuts instead of adding individual recipients.

Keyboard shortcuts

- Move across recipients: **Left** or **Right**
- Select multiple recipients: **Shift + Left** or **Shift + Right**
- Select every recipient in a field: **Cmd + A** (Mac) or **Ctrl + A** (Windows)

Mouse device shortcuts

- Select multiple recipients: **Cmd + Click** (Mac) or **Ctrl + Click** (Windows)
- Select custom range of recipients: **Click** first recipient in range and **Shift + Click** last recipient in range

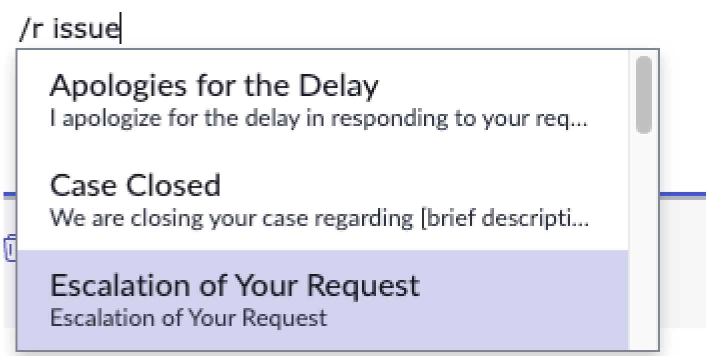
Add response templates with a keyboard shortcut

Use a keyboard shortcut to insert common responses into your emails with response templates.

Before you begin
Role required: email_composer

Procedure

1. Open a record.
2. Open the mini email composer or the full email composer.
   - Open the mini email composer by selecting the **Email** tab under the Compose panel.
   - Open the full email composer by selecting the **More Actions** icon ( ) and **Compose Email**.
3. Enter `/r` into the email body.
   A list of response templates appears.

4. Enter a keyword after `/r` to search for the response template you need.
5. Add a response template to your email by selecting it.

Review emails

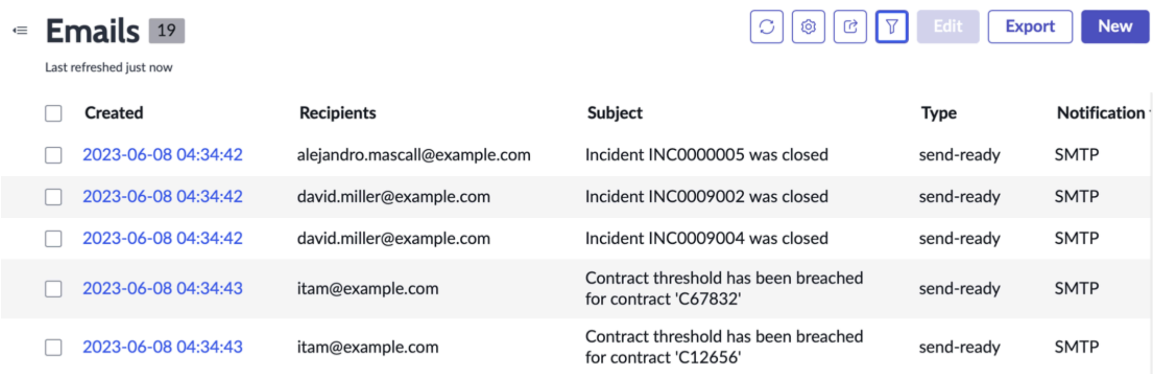
Review emails that you've sent and received.

Before you begin
Create a Workspace list for the Email [sys_email] table. For more information on creating Workspace lists, see Create My Lists in workspace.

Role required: workspace_user

Procedure

1. Open the list view by selecting the list icon ( ).
2. Select **My Lists**, and open your emails list.
3. Find an email by filtering the list or sorting columns.



Emails 19

Last refreshed just now

Edit Export New

Created	Recipients	Subject	Type	Notification
2023-06-08 04:34:42	alejandro.mascall@example.com	Incident INC0000005 was closed	send-ready	SMTP
2023-06-08 04:34:42	david.miller@example.com	Incident INC0009002 was closed	send-ready	SMTP
2023-06-08 04:34:42	david.miller@example.com	Incident INC0009004 was closed	send-ready	SMTP
2023-06-08 04:34:43	itam@example.com	Contract threshold has been breached for contract 'C67832'	send-ready	SMTP
2023-06-08 04:34:43	itam@example.com	Contract threshold has been breached for contract 'C12656'	send-ready	SMTP

For more information on using Workspace lists, see Work with lists in workspace.

4. Open an email to review.

What to do next

You can reply to or forward the email by selecting **Reply**, **Reply All**, or **Forward**.

Note: If you reply, reply all, or forward from the Activity stream, selecting **Compose Email** in the header causes different UI behavior. For more information, see Communicating with requesters and agents using Compose.

Communicating with requesters and agents using Compose

You use Compose to communicate with requesters and to enter comments about the work that you do on issues that only fellow agents can read.

Composing comments

After researching an issue, you might want to get more information from a requester, communicate a solution, or write an internal note to yourself or other agents to record your progress in solving an issue. To do that, you use the **Compose** feature. How you enter comments or work notes depends on the configuration.

- If you use a single text field, you select **Comments** or **Work Notes**, enter your comment in the text field, and select **Post Comments**.

  Use the **Comments** text field to communicate with external requesters. Use the **Work Notes** field to document your progress on an issue. Work notes are not sent to external requesters and are visible only to you and other internal personnel, such as fellow agents who might also work on the issue.

- In stacked view, where there are two text fields, enter text in the appropriate field and select **Post Comments** or **Post Work notes (Private)**.

You can view emails in the Activity Stream. The **Email** tab appears in **Compose** when you reply, reply all, or forward an email from an existing email in the Activity Stream.

If you configured **Compose** to use the rich text editor, you can use the icons at the top of the field to stylize the text. With the rich text editor, you can paste an image directly into the text field.

When you post your comment in **Compose**, the comment moves into the Activity Stream, which preserves the entire communication history. Only emails that are user-generated appear, for example existing emails that you write or reply to.

Other communications

In addition to sending comments to requesters, you can also:

- Use the attachment feature ( ) in the Contextual side panel, for example, to add a knowledge article to a comment.
- Select the links in some of the cards in Agent assist that, for example, add a knowledge article to a comment.

Configuring Compose

You can configure **Compose** to appear as a single text field or two text fields. You configure **Compose** by selecting the configuration icon ( ).

You can also view **Compose** and the Activity Stream side by side to enable you to write work notes and comments while scrolling the activity stream. The Compose UI displays next to the Activity Stream when column space is adjusted to accommodate the side by side UI. You can enable or disable this feature by selecting the configuration icon ( ) and then selecting **Side by side**. This option appears in the UI when column spacing is wide enough to support side by side (700 pixels or more). This feature may not be supported in older versions of Safari.

Writing Knowledge articles to share solutions

To share a solution you've found with the community of workspace users, you can create and publish a knowledge article. The Knowledge Management Service Portal enables users to view knowledge base articles. It is available by default. For more information about creating, editing, and viewing articles, see Knowledge article authoring in Workspace.

Attach a document for a requester

Attach documents to a record to help requesters resolve issues. The attachment icon displays a badge enabling you to see with a quick glance that a document is attached.

Before you begin
Role required: agent_workspace_user

About this task

- There are two ways to attach files to a record.
  1. Browse for the file in the Agent Assist panel.
  2. Drag and drop the file into the record and select browse in the pop-up window.
- Attachments support PDFs and most image files.

Procedure

1. Open a Workspace record in your instance.
2. Open an incident record.
3. In the Agent Assist panel, select the attachment icon ( ).
4. Select a file from your local computer.
5. Select **Upload**.

Result

The file appears in the Activity Pane, and the attachment icon displays a small dot indicating the record has an attachment.

Encrypt an attachment in a record

Secure sensitive files by encrypting the files as they are attached to Core UI and Workspace records.

Before you begin

Role required: agent

About this task

Encrypted attachments enable you to do the following:

- Choose which encryption context is to be used for file encryption when you have access to more than one context.
- View which encryption context is used after the file is attached to a record.

For more information on encryption, see Encryption.

Procedure

1. Log in as a user with at least one encryption context.
2. Navigate to a form that needs an attachment added, such as the Incident or Problem form, and click the attachment icon to open the Attachments dialog box.
3. Select the file to be attached.
   If you have more that one encryption context, you will see an option to select a context to use.
4. Close the Attachments dialog box to upload the file attachment.
   Attached files are listed across the top of the form. A special icon identifies encrypted files. Pointing to the icon shows the name of the encryption context. Note that you can see only encrypted files for which you have the encryption context.

Result

Only users with the same context used to encrypt the attachment can see the attachment in the Activity Formatter. Users without the appropriate context won't see the Activity Formatter entry associated with the encrypted attachment.

Send an article to a requester

Use Agent Assist to send articles to requesters to solve their issues.

Before you begin

Role required: agent_workspace_user

About this task

Agent Assist search results can include links to knowledge articles that you can send to a requester.

Procedure

1. Open a Workspace record in your instance.
2. Open an incident record from the list view.
3. In the Agent Assist panel, search for an article.
4. Select the **menu icon ( )** > **Add link in email**.

Order a catalog item for a requester

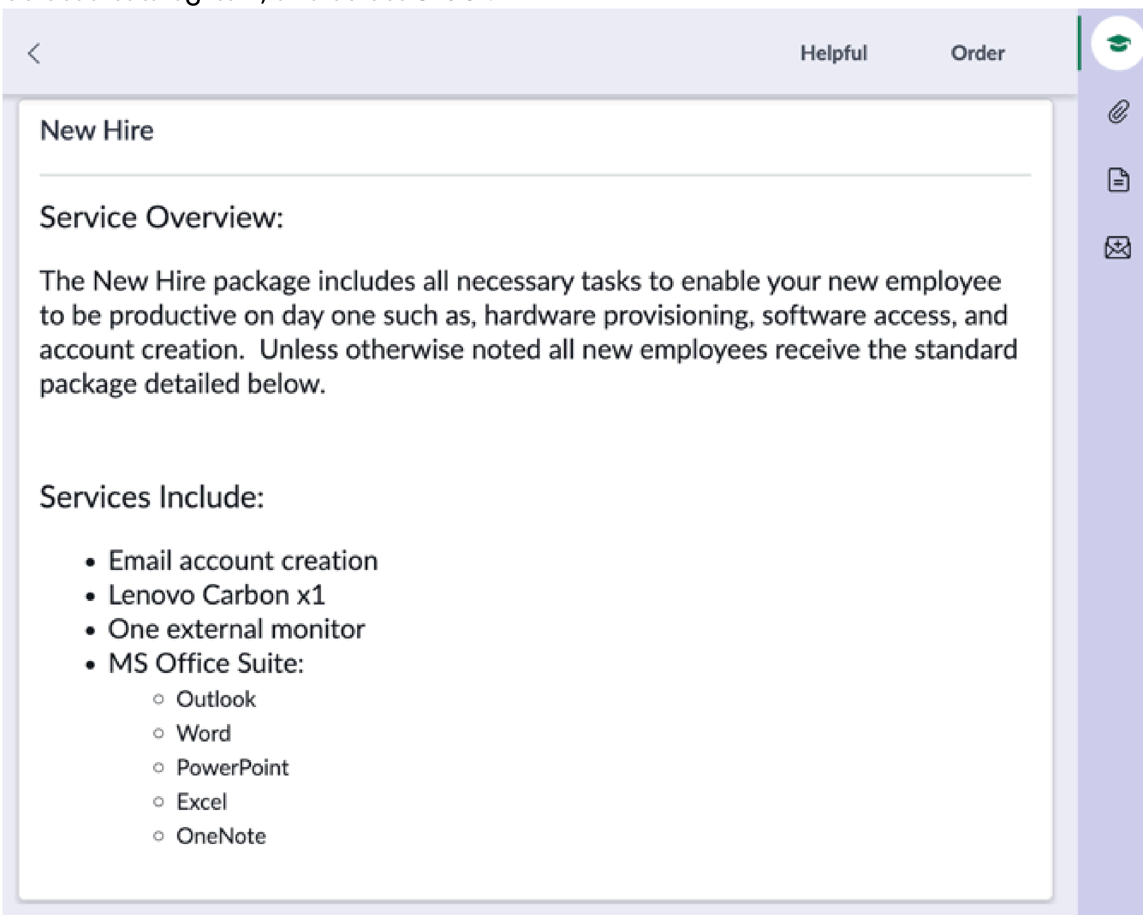
Order a catalog item for a requester from Agent Assist search results.

Before you begin

Role required: agent_workspace_user

Procedure

1. Open a Workspace record in your instance.
2. Open an incident record in list view.
3. In the Agent Assist panel, select the Agent Assist icon ( ).
4. Select a catalog item, and select **Order**.

   The form for the catalog item opens in a new tab.
5. Order the catalog item by completing and submitting the form.

Result

Ordering the catalog item creates a service catalog request.

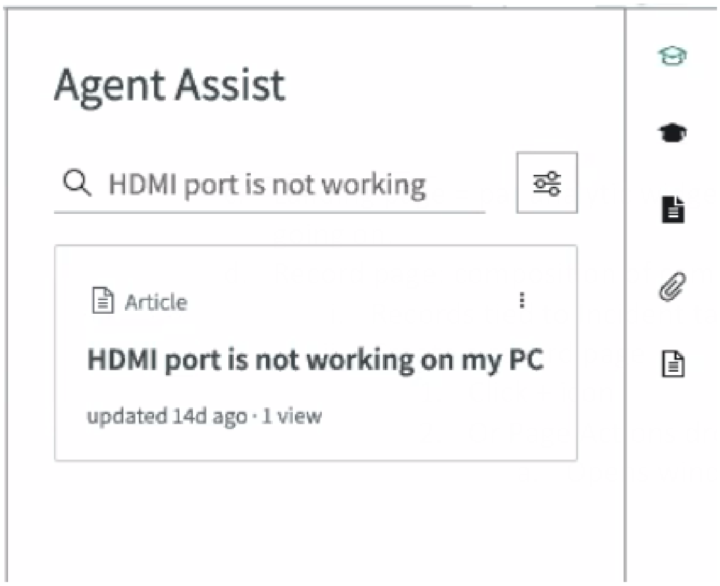
Finding solutions by using Agent assist

Find the information that you need to resolve issues by using the Agent assist search engine.

Agent assist appears in the Contextual side panel by default and when you select the graduation cap icon ( ). It's possible for you to have icons for more than one Agent assist search engines. If so, each one would search a different set of information sources.

When you open a record, Agent assist automatically does a search based on a field in the open record. The field value used for the search term is configurable by your administrator but it's typically the value for the record's short description field.

The following example shows the search results for the short description "HDMI port is not working." The search results return as cards. In the following example, the card returned links to an article with the title "HDMI port is not working on my PC" and that was search was last updated 14 days ago. In the following example, you see two different colored graduation caps, which means that the Agent assist search engines are available.



The default number of search results is 10. If more than 10 results are displayed, that number appears as **10+**.

Agent assist is preconfigured to search the Incident, Problem, Change, Knowledge, and Case tables for solutions. Your administrator can configure Agent assist to search the additional information sources, such as the service catalog.

You can use Agent assist in the following ways to find solutions to the record that you opened:

- Select a card to go to the search result.

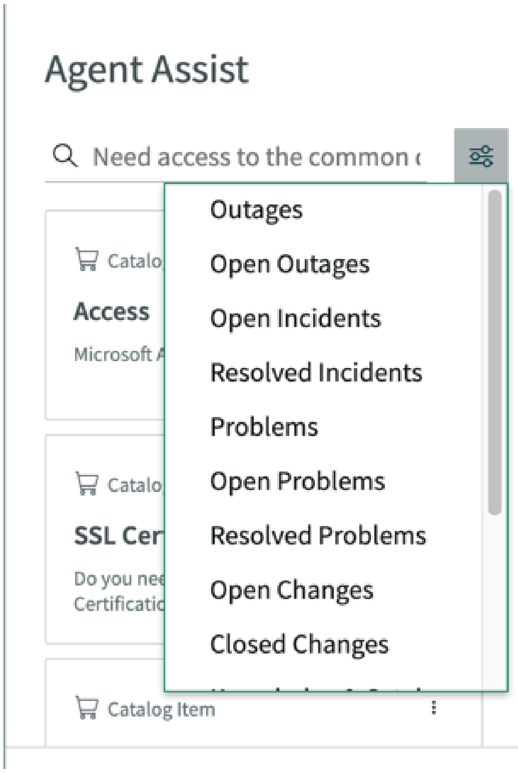
  The search result might provide the answer you need, which you can then send to the requester by using the Compose editor in Activity stream.

- Enter a new search term in the search field next to the search icon ( ) to get different search results.

  If the search results that automatically appear don't show relevant results, enter a new search term to get better search results.

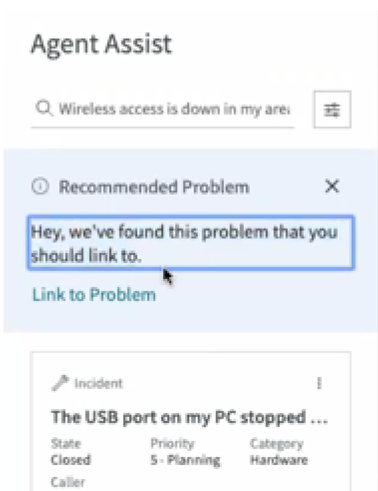
- Filter the search results.

  By default, Agent assist returns the search results from all of its information sources. You may get too many results though. To see the search results from a subset of those information sources, select the configuration icon ( ) and then select an information source.



- Send a solution to the requester by selecting a link in the card.

  The following example shows the **Link to Problem** link, that, when selected, adds the link to a similar problem in the Compose editor that you can then send to the requester. For more information, see Compose editor.



- If the card is an article, select the card and then select the **Attach** link to send the article to the requester.

  For more information, see Send an article to a requester.

- If the card links to an item in the service catalog, select the card to order the item.

  For more information, see Order a catalog item for a requester.

- Select a different Agent assist icon and repeat the search.

If you have more than one Agent assist search engine in the Contextual side panel, each one searches through a different set of information resources. Your administrator configures the icon to click for additional Agent assist search engines.

- If your administrator enables **Search as** on your instance, you can change the search results by changing the field values in the form pane.

  On the **Details** tab, you may be able to replace the value for **Caller**, to change the search results that are based on that value. For example, if you create cases on behalf of a customer or employee, when you enter a customer's identity in the **Caller** field in the form pane returns Agent assist search results, fsuch as 401k information, that match the customer instead of you.

- Place a catalog order by selecting a catalog item that is shown on a card.
- Add a knowledge article to the Compose editor by selecting the **Attach** icon ( ) in Agent assist.

No search term

Your administrator can configure Agent assist to conduct a search without using a search term. The search result is all the records from a particular information source, such as employee records. You then can get the record of a particular employee by entering the employee's name in the search field.

About Playbook Experience

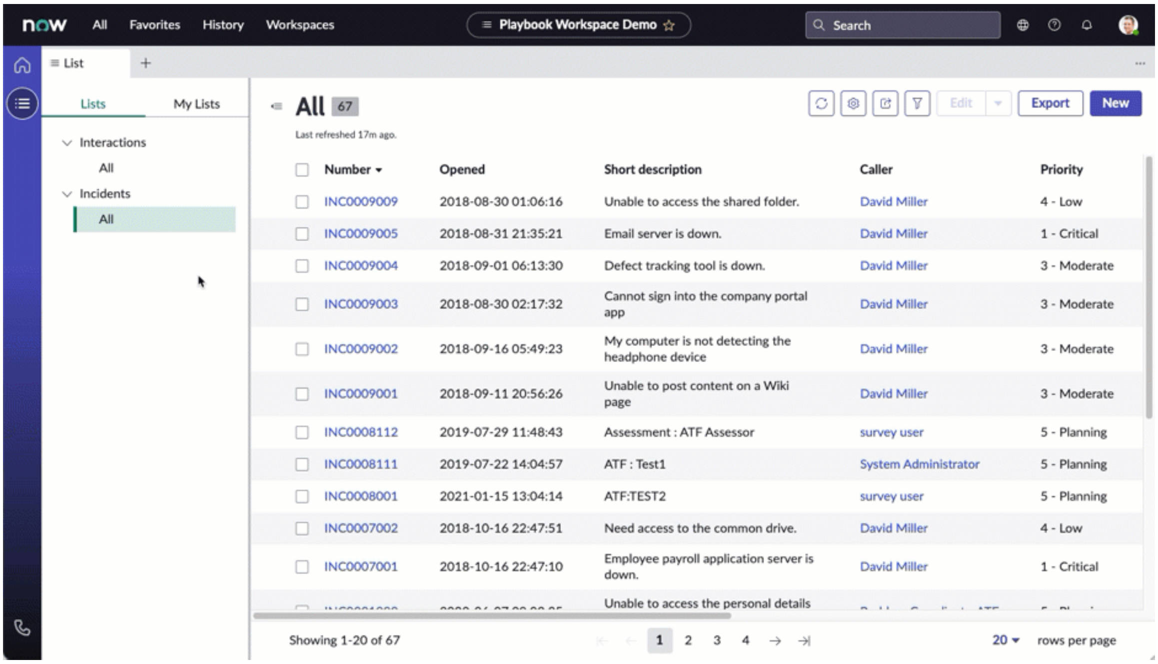
Interact with a business workflow in real time from within Workspace. Agents can use Playbook Experience to update records, upload attachments, and complete tasks across multiple workflow activities.

Playbook Experience overview

Playbooks are built by admins in Workflow Studio, customized by admins in UI Builder and more, and embedded in Workspace, Configurable Workspace, Service Portal and more. The Playbook Experience for fulfillers during runtime provides visibility into cross-business workflows and the actionable tasks used to complete these business workflows.

- Playbooks may appear in the side panel or in the related items of records configured with playbook.
- Activities that you must perform to complete the business workflow are displayed. You're able to see what you've done and what you must do to complete the playbook. You can collapse activities to display relevant activities, and expand them again.
- Activities are typically performed sequentially. You can go back to those activities to complete them later. Complete an activity and go to the next activity, or complete the playbook.

Playbook automatically updates playbook tasks if completed outside of a playbook.

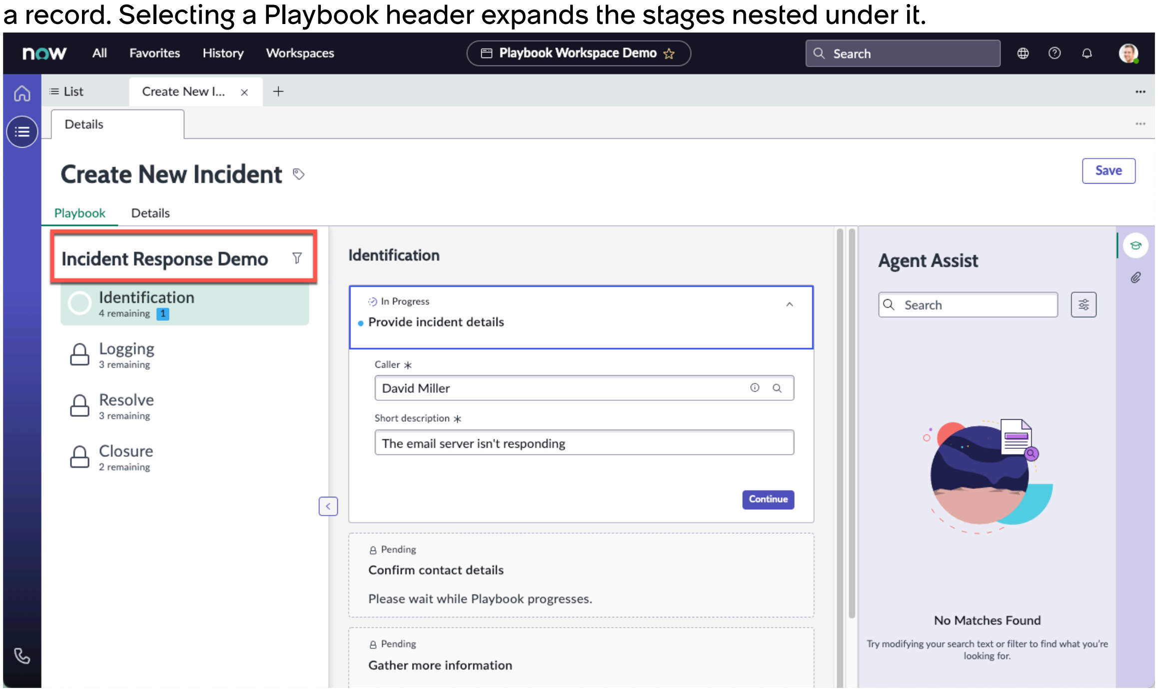


Playbook UI

Playbooks contain helpful UI features.

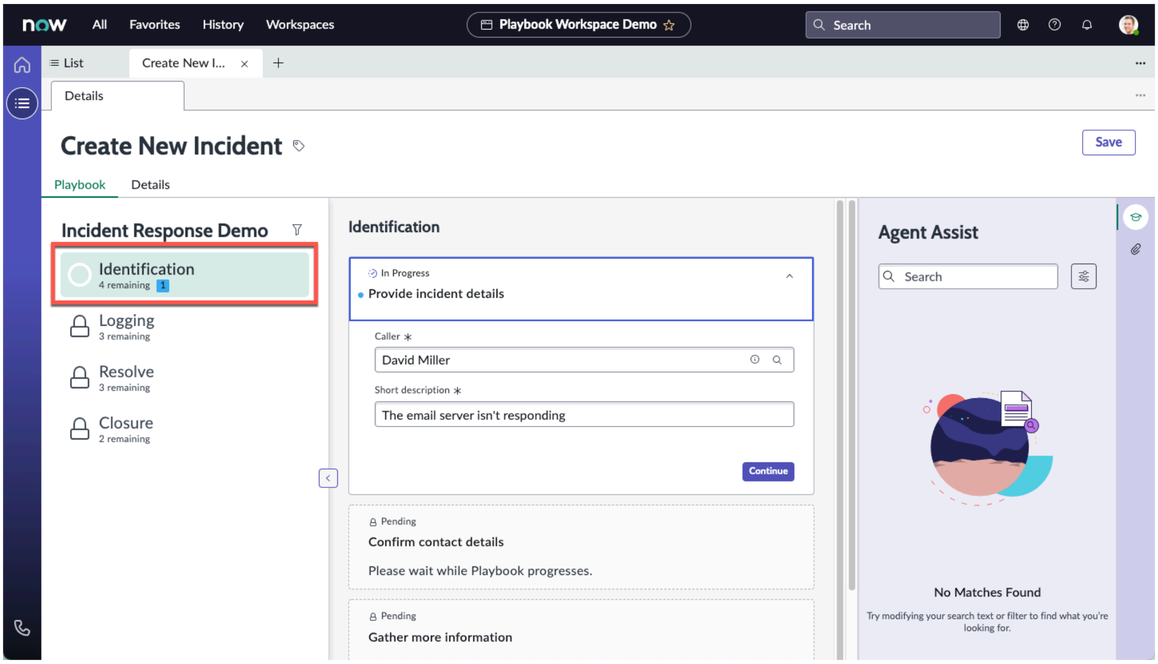
Header

Shows the title of a Playbook. A header exists for each playbook attached to a record. Selecting a Playbook header expands the stages nested under it.

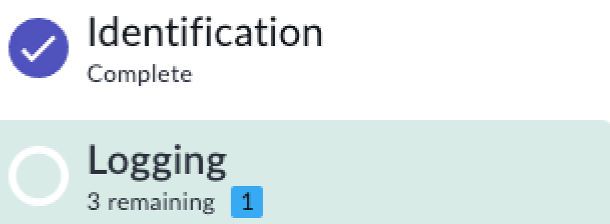


Stages

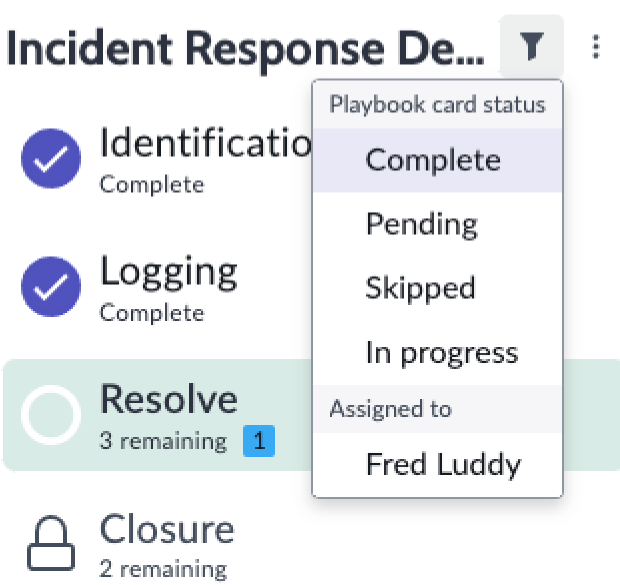
Click a stage title to view its activities. By default, all activity cards are collapsed except for the first card in a stage.



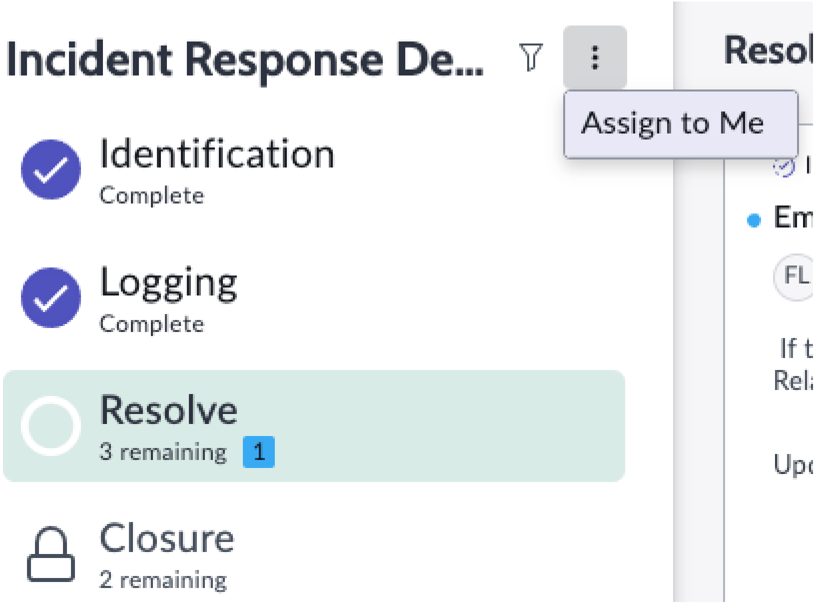
The stage progress updates as activities are completed. A checkmark inside the playbook header indicates that the stage is complete.



Use the stage filter ( ) to filter a playbook.

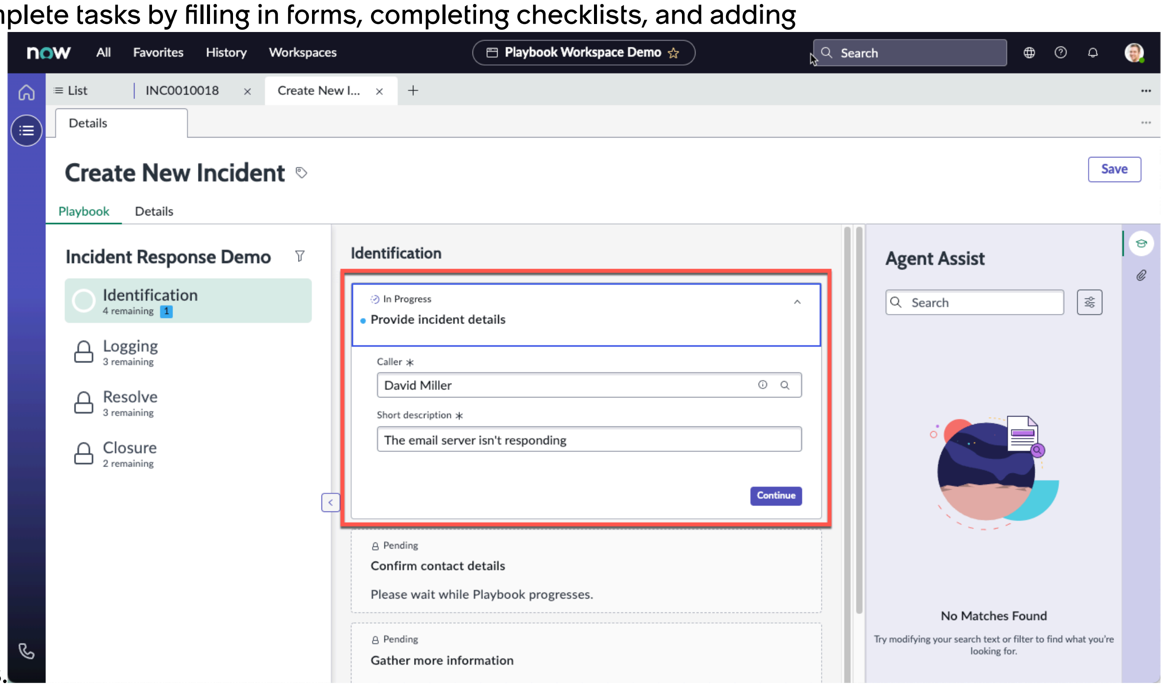


Use the ellipses action menu icon (⋮) to perform select actions at the playbook and stage level.



Activity cards

Playbook activity cards display details about an activity, which may include the status, SLA timer, form data, and attachments. Use playbook activity cards to complete tasks by filling in forms, completing checklists, and adding attachments.



Add a playbook

Add a playbook to a record in agent workspace.

Before you begin

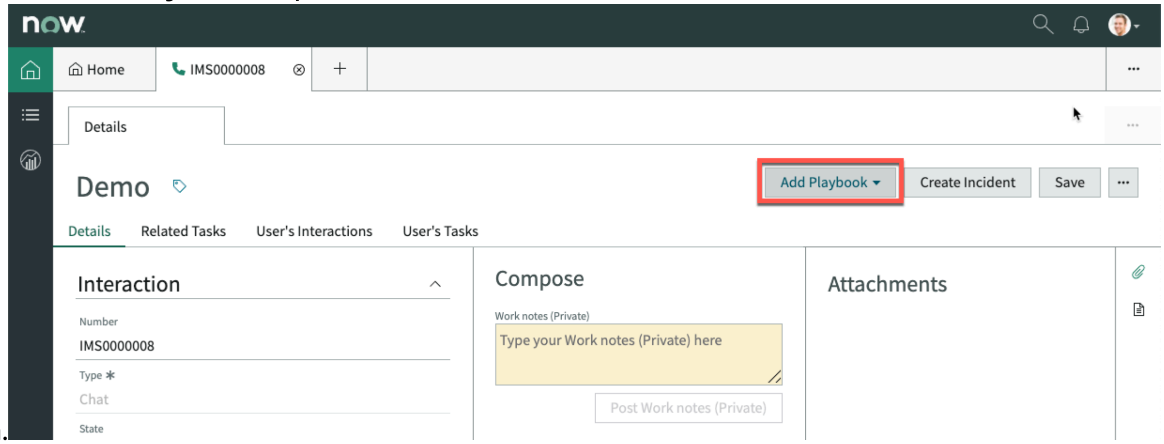
Role required: agent

About this task

A playbook can be added to a record with no playbook or a record with existing playbooks. The example below shows how a playbook can be added to a record using an **Add Playbook** button.

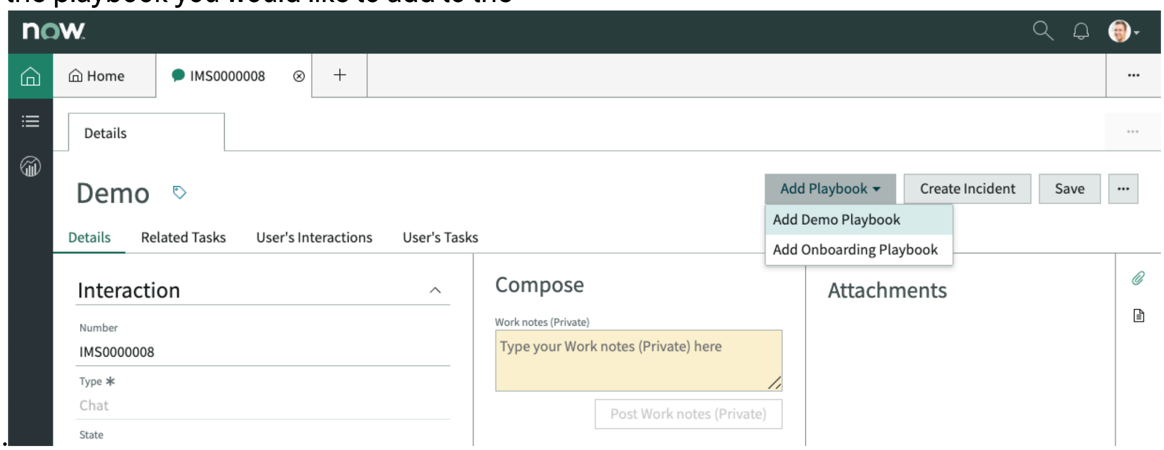
Procedure

1. Open a record.
2. Select the **Add Playbook** drop



down.

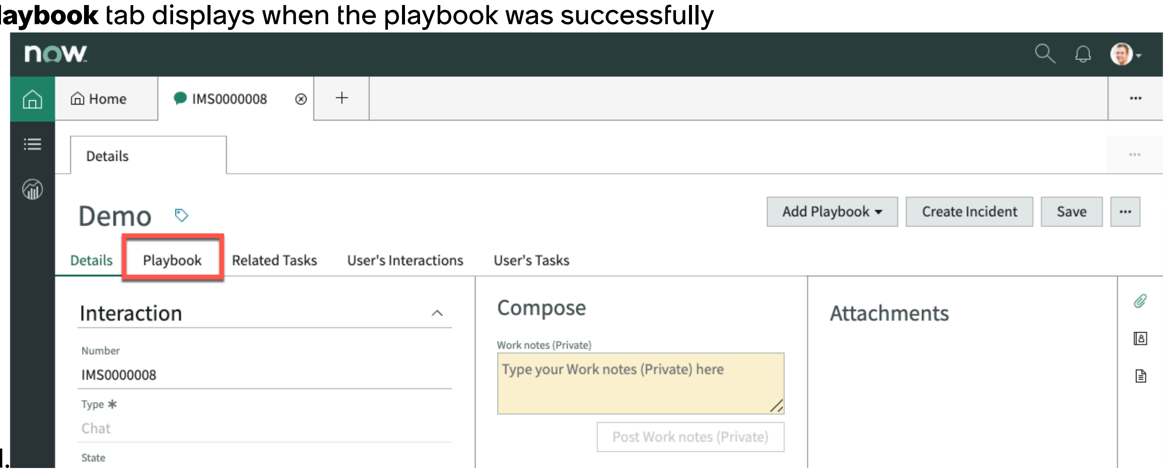
3. Select the playbook you would like to add to the



record.

Result

The **Playbook** tab displays when the playbook was successfully



added.

Add an activity to a playbook

Add pre-selected optional activities to a playbook if available.

Before you begin

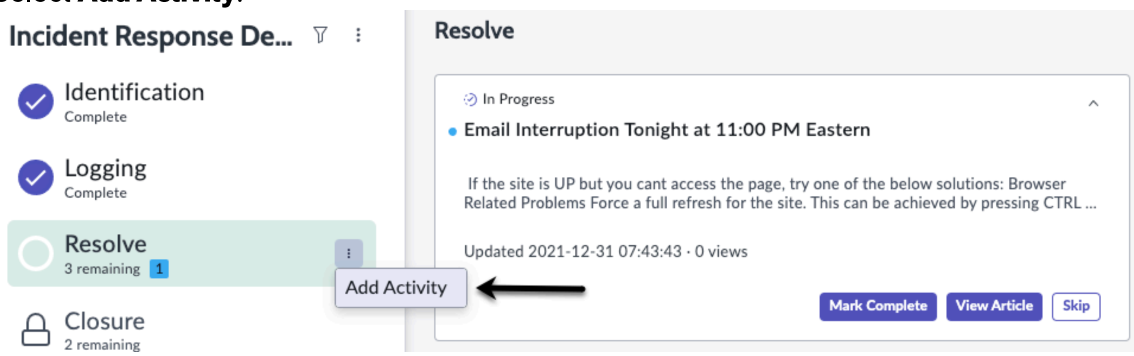
Role required: agent

About this task

Add and complete optional playbook activities in a running playbook. This example shows how an optional activity can be added to a playbook. Playbook admins must pre-configure optional activities. You cannot insert an optional activity as the first activity in a stage or between two finished activities. Some optional activities can be added to any stage while others can only be added to a single stage. If optional activities are not configured for a playbook, no optional activities will be available.

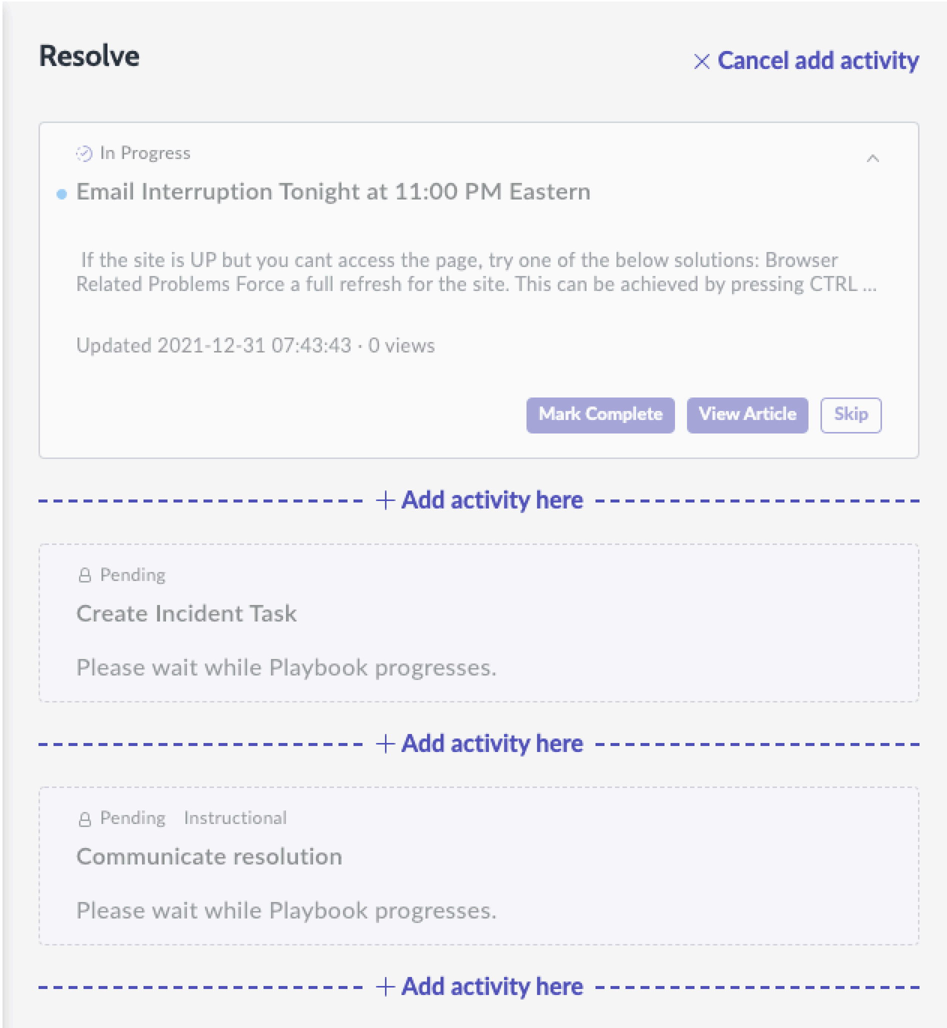
Procedure

1. Open a playbook in workspace.
2. Select the action menu icon (⋮).
3. Select **Add Activity**.

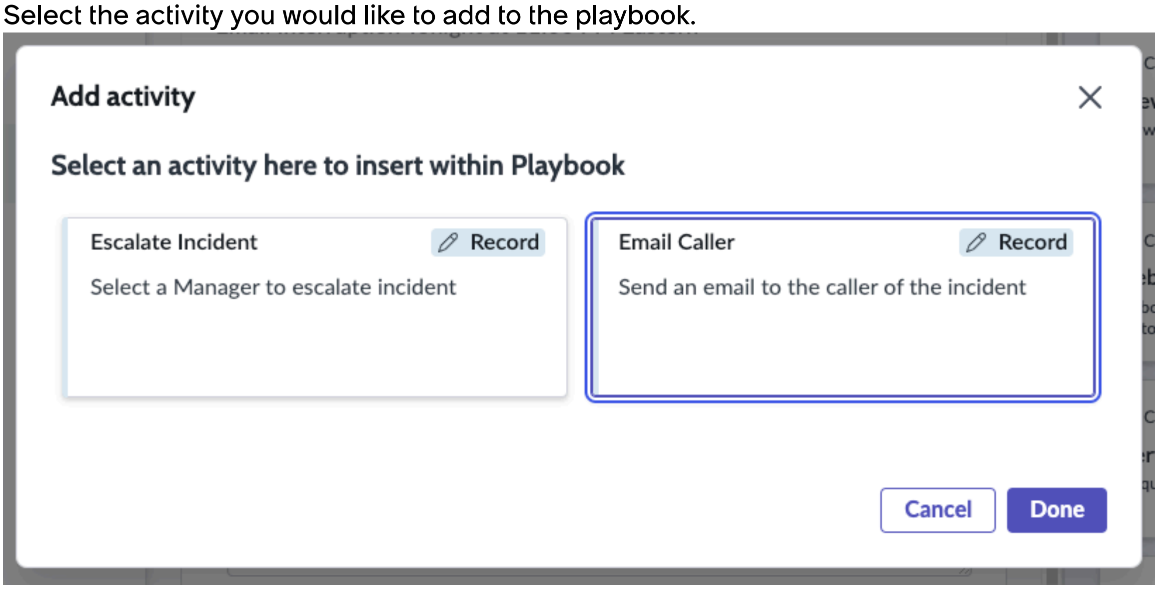


Note: **Add Activity** will not display if no optional activities available in this stage.

4. Select **+ Add activity here** in the location you want to add the activity to the playbook.



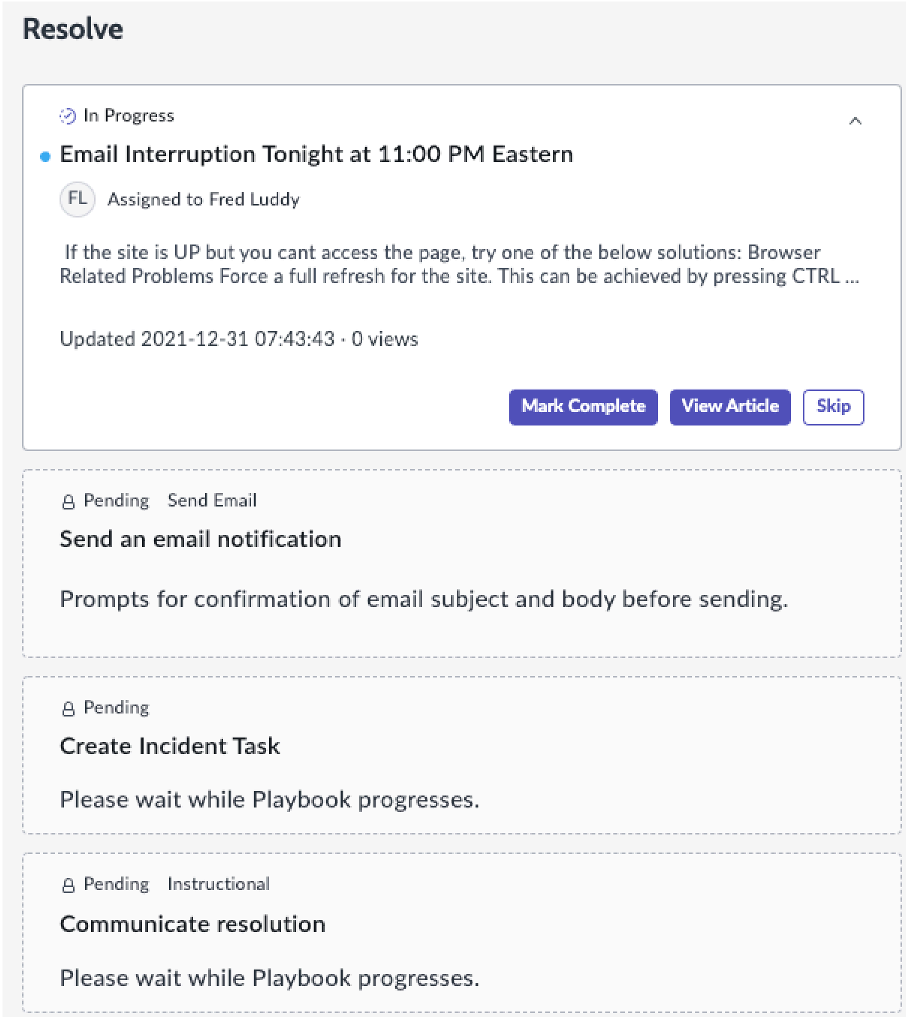
5. Select the activity you would like to add to the playbook.



6. Select **Done**.
   The selected optional activity appears in your playbook.

Result

The selected optional activity appears in your playbook.



Cancel a playbook

Cancel a playbook to stop a business workflow when no longer valid.

Before you begin

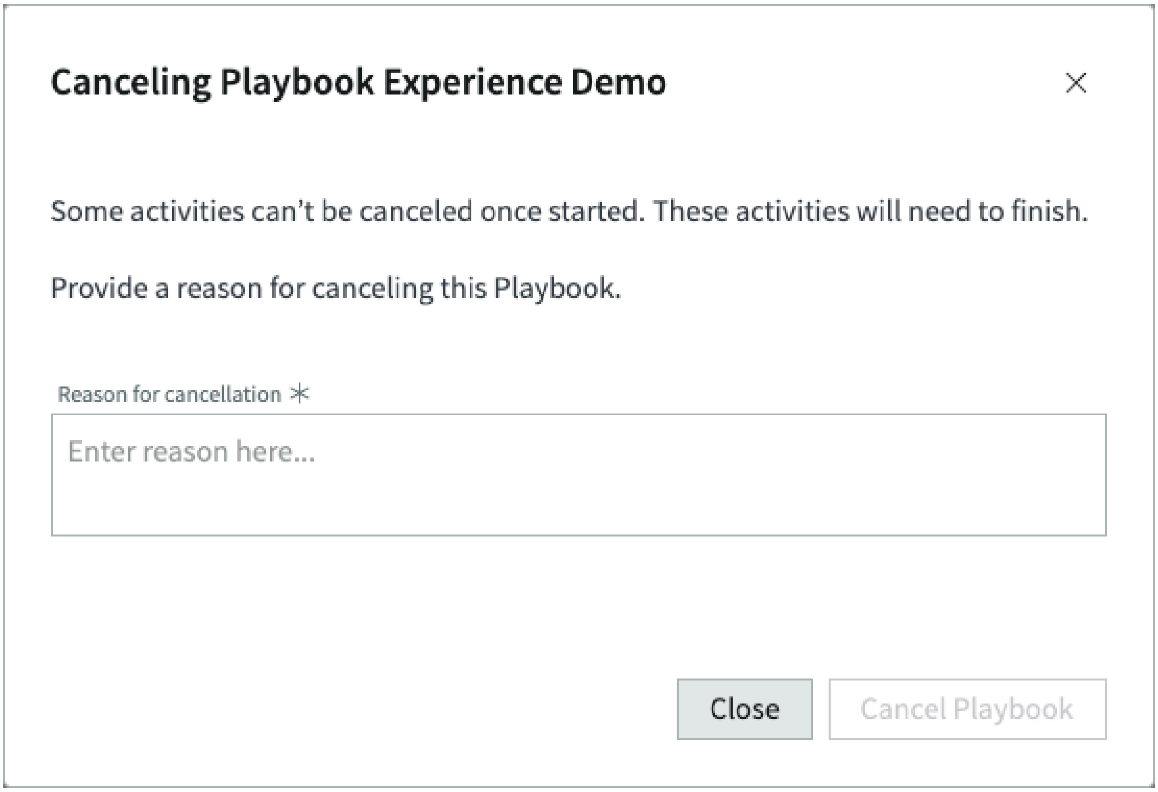
Role required: agent or pd_cancel

If your playbook admin has added a cancel action to your playbook experience, you can typically find the cancel action under the playbook actions menu.

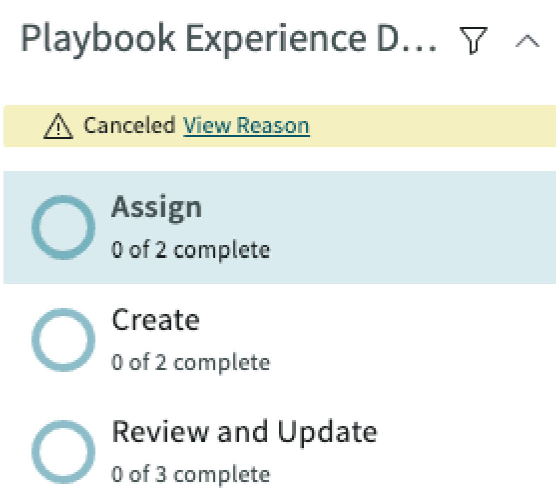
Note: Certain activities within a playbook cannot be canceled once they have started.

Procedure

1. Open a playbook in workspace.
2. Click the ellipses action menu icon (⋮) in the playbook header.
3. Click **Cancel Playbook**.
4. Provide a reason for canceling the playbook.



5. Click **Cancel Playbook**.
   A canceled banner appears below the playbook header confirming that the playbook has been canceled.

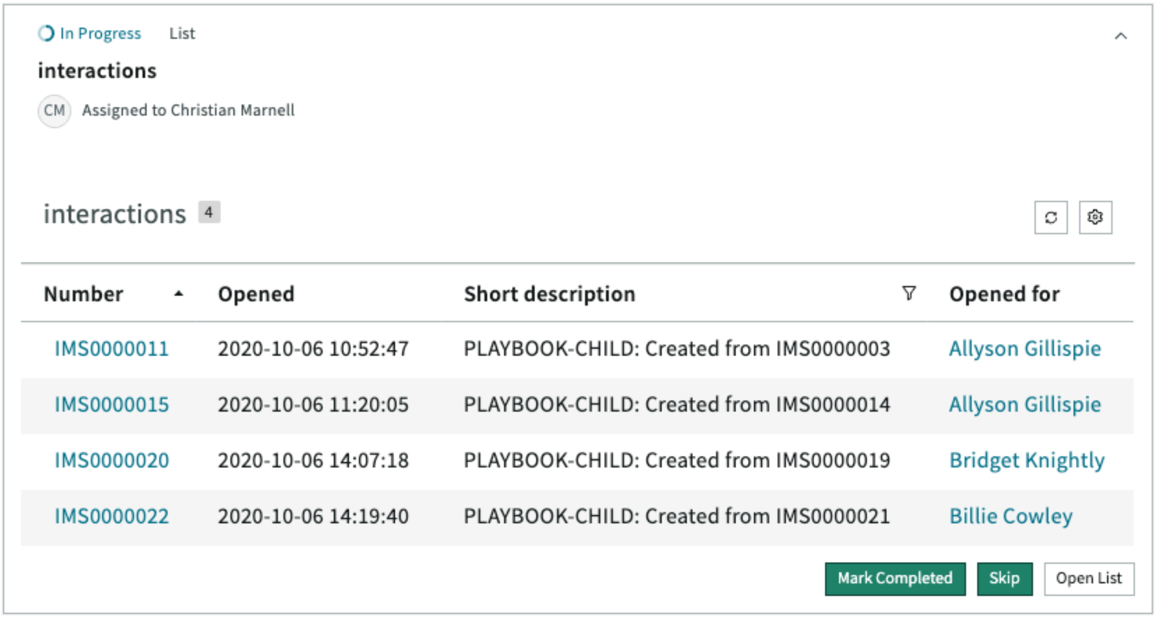


Open full lists within playbook

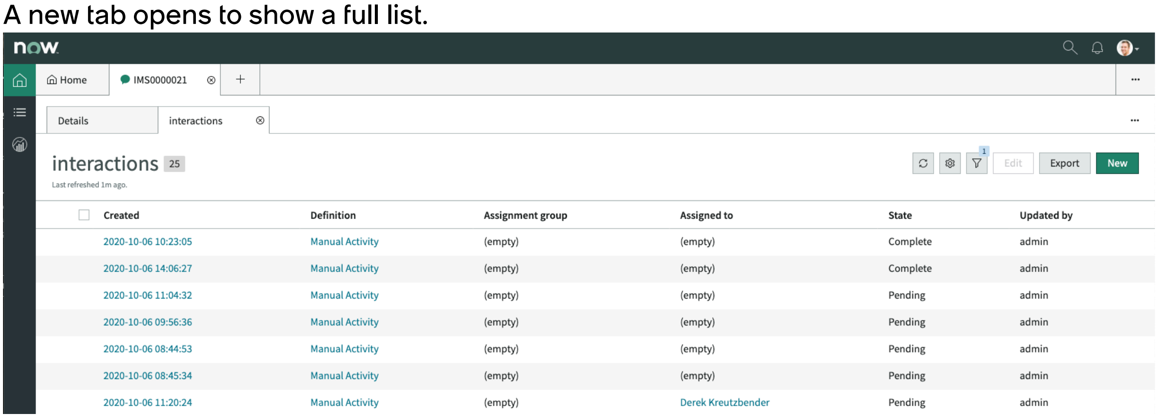
Open a full list within playbook cards to view and update list items.

To open a full list within playbook, click the **Open List** icon ( ).

Card view



A new tab opens to show a full list.



Using activity stream within playbook

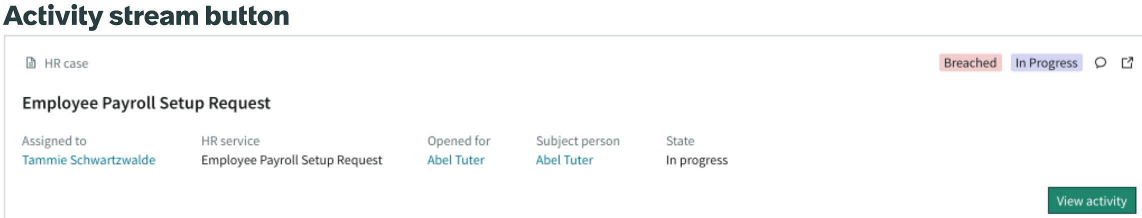
Use activity stream within playbook to add comments or notes, and view communication and task history for the parent or associated record.

Activities may contain a button, icon, or dropdown item to view a record's activity stream.

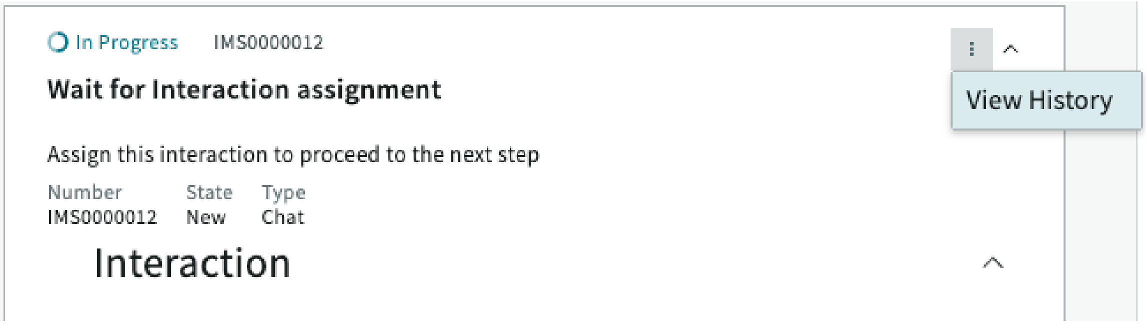
Playbook activity stream examples

To open the activity stream within playbook, click the **View activity** button or select **View History** from the dropdown list.

Activity stream button

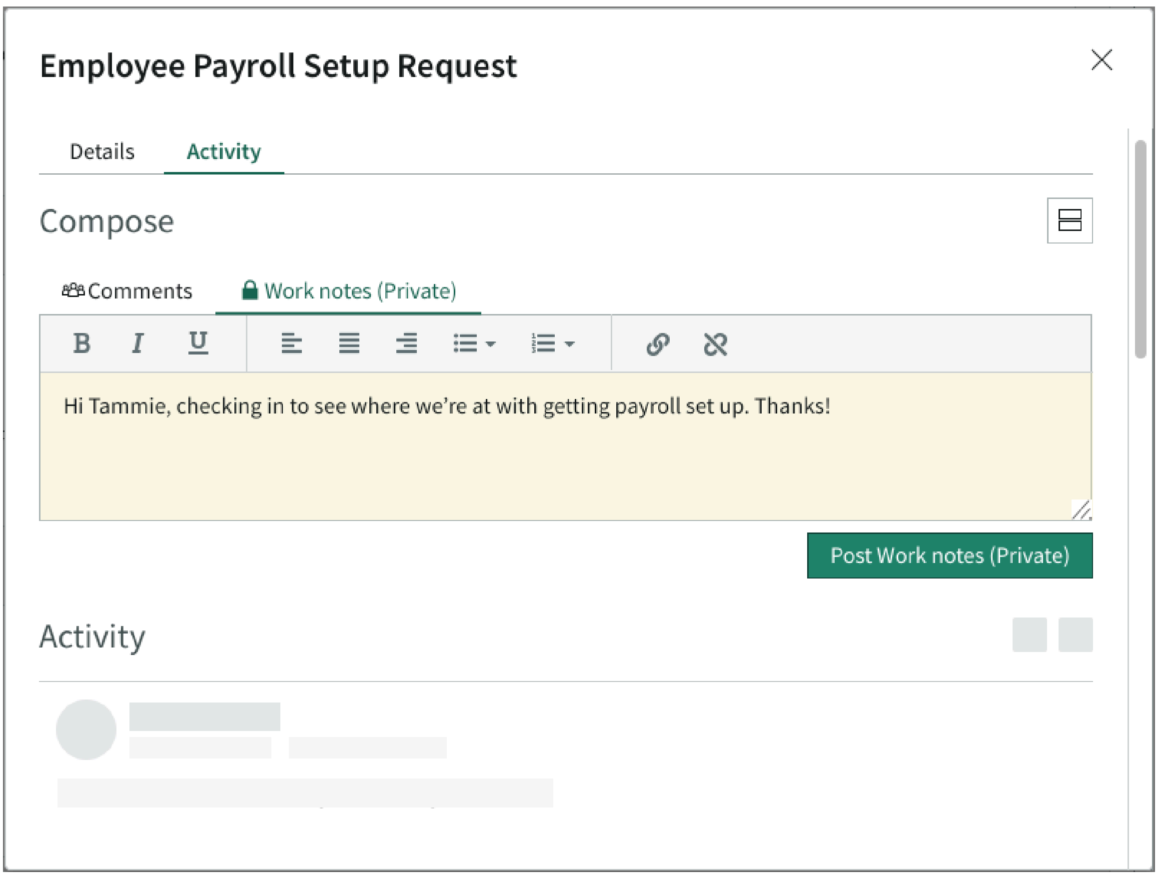


Activity stream dropdown



Activity stream modal

You can see tabs for comments and work notes related to a parent or associated record. You can use the **Compose** text box to post new comments or work notes.



You can view previous activity by scrolling down to the **Activity** section.

Global search in Workspace

Search across all cases, incidents, problems, knowledge articles, community questions, customers, users, and change requests to find answers.

Global search feature

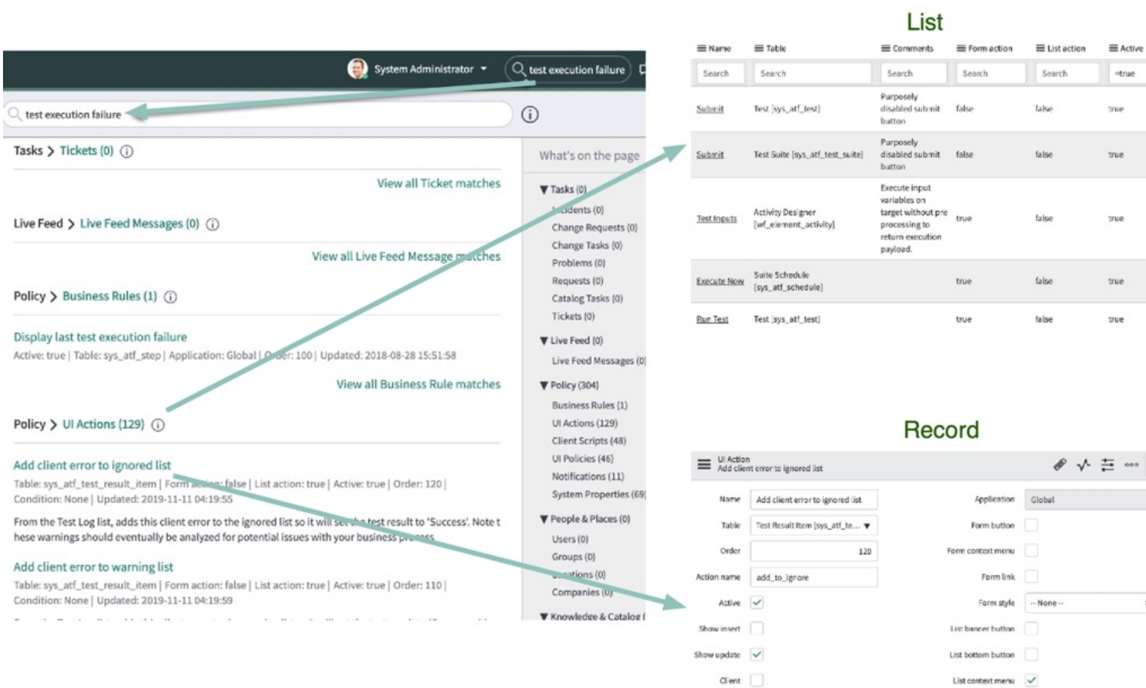
Search results include all the items the search term appears in, for example, in the short description, content, or attached files. By default, global search results can include:

- Cases
- Customers or Users

- ServiceNow Community Questions
- Incidents
- Change Requests
- Problems
- Knowledge Articles

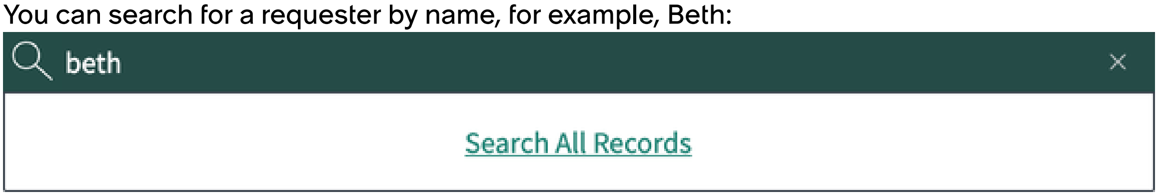
To enter search terms, click the search icon ( ) and enter the search term in the search field.

Search results appear in a separate tab. Links lead to a record or a list of records.



Searching for a customer or user

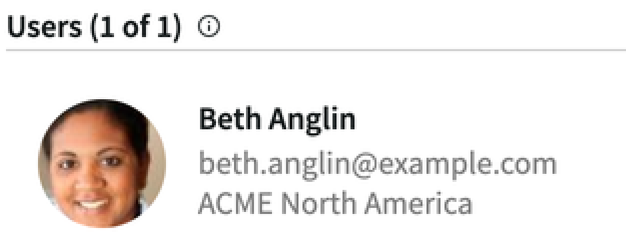
You can search for a requester by name, for example, Beth:



Global search results show the number of search results by category:

Incidents	9
Change Requests	14
Users	1
Groups	1

Clicking **Users** shows the search results for users that have the name Beth:



Searching for a case or incident

You can use case or incident numbers to search for specific cases or incidents. Or, you can search using other values related to the cases or incidents. In the previous example, if you click **Incidents**, Workspace displays all the incidents that have the name Beth in one or more record fields.

Incidents (9 of 9)

Title	Number	Opened	Caller	Priority	State	Category	Assignm…	Assigned to	Updated	Updated by
Unable to connect to email	INC0000…	2016-12-…	Joe Empl…	3 - Moder…	Closed	Inquiry / …	Network	David Loo	2016-12-…	employee
The USB port on my PC stopped working	INC0000…	2020-07-…	Beth Anglin	5 - Planni…	Resolved	Hardware	None	None	2020-07-…	admin
Issue with email	INC0000…	2020-06-…	Joe Empl…	3 - Moder…	In Progress	Inquiry / …	Software	Beth Anglin	2020-07-…	admin
The SAP HR application is not accessible	INC0000…	2020-06-…	Margaret…	1 - Critical	In Progress	Inquiry / …	Software	Beth Anglin	2020-07-…	admin
Can't access Exchange server - is it down?	INC0000…	2020-06-…	Jerrod B…	1 - Critical	In Progress	Hardware	Hardware	Beth Anglin	2020-07-…	admin

Managing teams and schedules in your workspace

Use Workforce Optimization to optimize your workforce and manage your teams efficiently. Coach your teams so that they gain the skills that let you address the demands from your customers. Efficiently schedule your teams to provide better coverage with integrated channel management.

As a manager, you can monitor the demand for agents and skills in your organization to resolve issues. Assess agent skills, identify areas where they need improvement and provide training to enhance their skills set. Track your teams performance, and manage the schedule of all agents in your assignment group—all from a unified location.

As an agent, you can manage your own schedule, access the schedule of your peers and request time off or shift swaps.

Workforce Optimization Overview

Get an overview of how you can set up Workforce Optimization for ITSM in this video.

Get an overview of how managers can monitor the status of incidents and the KPIs for organizational performance in this video.

Channel Management

Monitor your teams in real time and jump in to help when there is a need.

Using this application, you can also:

- Route work to specific groups based on agent skills
- Review real-time performance as the team is actively working on tasks across channels
- Monitor pending work items in a queue

Scheduling

Access your teams' calendar to know which agents are scheduled for coverage and which agents have taken time-off.

Using the application, you can also:

- Assign agents to shifts
- Define break time
- Preview and publish team schedule
- Approve agent time-off or shift-swap requests

Teams

Monitor performance trends for your teams using KPI groups. Create a set of KPIs and apply them to all groups within a team and assess team performance from one location.

Using the application, you can also:

- Identify all the teams you manage as well as the ones you have visibility into
- Analyze KPIs that are crucial for your team
- Drill into agents within each team and monitor their performance
- Access each agent's profile to view details such as their manager, peers, and assignment groups
- Drill down into each agent's skills or recommend them for coaching

Coaching and Skills Assessment

Enhance the quality of work done by your agents using Coaching. Use Predictive Intelligence to recommend skills based on issues the agents have resolved. Create coaching opportunities based on the recommendation and train the agents to acquire those skills.

Using this application, you can also:

- Automate the scoring, grading, and assessment of agent skills
- Use coaching opportunities to create assessments
- Track training assigned to agents based on their assessments
- Analyze skill gap and recommend training

Global Search in Workforce Optimization for ITSM

Important: This feature is available with the Workforce Optimization Content Pack for ITSM (sn_wfo_itsm_cnt) from the ServiceNow Store. To enable this feature, see Workforce Optimization for ITSM Reference.

As an agent or a manager, you can perform a search for users, groups, shifts, schedules, or tasks using the search icon in Workforce Optimization for ITSM to easily find the information you need.

Note: To search shifts and schedules, you must generate the text index for the following tables before you start performing the search for shifts and schedules:

- Schedule [sn_shift_planning_schedule_plan]
- Shift Plan [sn_shift_planning_shift_plan]

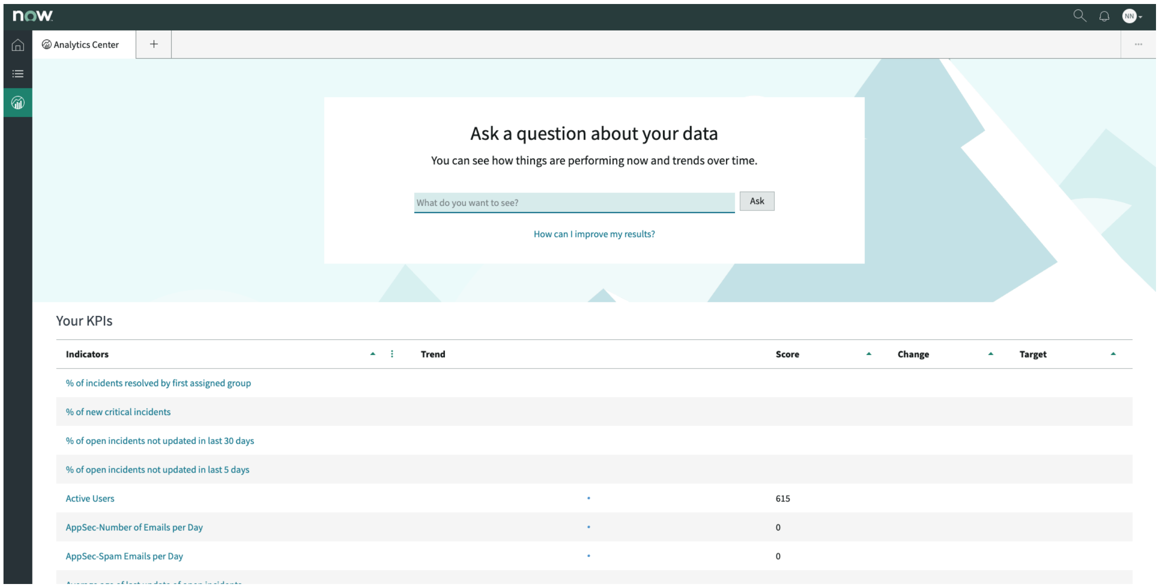
Platform Analytics in your Workspace

Distribute and consume Platform Analytics through data visualizations and dashboards with optional filters. Explore KPIs and receive insights into significant events in the data.

Within the Platform Analytics Workspace, you're able to:

- Ask a natural language question and be shown the relevant analytics in a visualization.
- View any Next Experience dashboard that you own or has been shared with you.
- Create dashboards and data visualizations from your workspace runtime.
- Drill down into your KPIs, applying filters to slice your data and applying aggregations and statistical tools.

For more information, see Performance Analytics and Reporting for Workspace



Configurable Workspace reference

Find additional details and support about creating, customizing, and using your Configurable Workspace.

Get help with Configurable Workspace

To get help with Configurable Workspace, your ServiceNow instance, plugins, permissions, and more, watch a short video to contact the ServiceNow admin who works in your company.

Configurable Workspace glossary

Learn about the terms and concepts used in Configurable Workspace.

Get help with Configurable Workspace

To get help with Configurable Workspace, your ServiceNow instance, plugins, permissions, and more, watch a short video to contact the ServiceNow admin who works in your company.

Get help now from your Now Support administrator

The ServiceNow admin in your company can help you with things like activating plugins, kicking off upgrades, unlocking accounts, updating user permissions, and much more.

https://player.vimeo.com/video/1056112088?h=1a5cd3b245&badge=0&autopause=0&player_id=0&app_id=58479

Helpful resources

Some ServiceNow resources that can provide you with helpful information are:

ServiceNow Community

- Customer Service Management Community
- IT Service Management Community
- Service Operations Workspace Community

Support

List of workspaces

List of all workspaces ServiceNow offers to target specific users and issues.

A workspace is a suite of tools that provides agents, case managers, help desk professionals, and managers with tools to help answer customer questions and resolve customer problems. ServiceNow provides many workspaces, each targeted to a specific user and issue.

List of workspaces

Workspace

Workspace acts as the default workspace available on the ServiceNow AI Platform and provides the foundation for the targeted workspaces ServiceNow offers.

Audit Workspace

Audit workspace is a single-pane view for audit supervisor and auditor to view the overall audit timeline and status, track budget and resources for engagements, trace high priority observations and issues, and monitor ongoing control testing and audit task progress.

Cloud Discovery Workspace

Cloud Discovery Workspace offers a comprehensive solution to manage the cloud operations of your organization.

CMDB Workspace

CMDB Workspace is an efficient, central, and modernized way for you to work. Use CMDB Workspace to search and explore the CMDB, examine health and recent activity, and access various CMDB dashboards and tools to support tasks in your organization.

Compliance Workspace

Compliance Workspace is a unified interface where you can manage all your tasks related to policies, control objectives, controls, issues, and policy exceptions.

Continuous Authorization and Monitoring

Continuous Authorization and Monitoring employs the seven steps defined by the Risk Management Framework (RMF) to allow you to make better-informed decisions about your security posture.

CSM Configurable Workspace

CSM Configurable Workspace is a user interface that provides agents with the tools they need to answer customer questions and resolve customer issues.

Digital Portfolio Management Workspace

Manage and maintain all your solutions (services, service offerings, business applications, and application services) from a single location using the ServiceNow Digital Portfolio Management (DPM) Workspace. DPM pulls in data from across the ServiceNow platform so you see impacts in the context of solutions that you own or care about.

DEX Application & Device Health

DEX Application & Device Health is a centralized workspace, dedicated to monitoring the performance, security, and compliance of the digital workplace.

Enterprise Architecture Workspace

The Enterprise Architecture Workspace is part of the Application Portfolio Management (APM) application. The workspace is a unified interface with multiple views that help you manage your portfolio efficiently. You can use these views to stay up to date with your tasks, insights, tasks that need attention, portfolio health, and dashboards.

Platform Analytics Workspace

Platform Analytics Workspace provides an Analytics Center for managing all Next Experience analytics.

Resource Management Workspace

Resource Management Workspace helps Resource Managers have a centralized view of all work across all resources.

Service Operations Workspace for ITSM

Service Operations Workspace is a configurable workspace that provides a unified experience for multiple IT Service Management and IT Operations Management workflows. Configure your agent experience using the easy-to-navigate interface of Service Operations Workspace for ITSM.

Service Operations Workspace for ITOM

Service Operations Workspace is a configurable workspace that provides a unified experience for multiple IT Operations Management workflows. Configure your experience using the easy-to-navigate interface of Service Operations Workspace.

Vendor Management Workspace

Monitor the performance of your company's vendors and manage all vendor-related information using the Vendor Management Workspace. Assess the performance of your vendors using key performance indicators (KPIs) that you can configure to create vendor metrics.

Workforce Optimization for ITSM

Manage and maintain the productivity of your workforce from a single location using Workforce Optimization for ITSM. Using this application, you can efficiently manage your team's skills and schedules, route work assignments to your team, and monitor their performance.

Configurable Workspace glossary

Learn about the terms and concepts used in Configurable Workspace.

Activity Stream

Component that shows the list of changes made to a record, including journal entries, emails, and attachments.

Activity Stream Compose

Component that enables agents to create new journal entries for the Activity Stream.

Attachments

Component that appears in the contextual sidebar and enables agents to add, preview, download, or remove attachments from a related record.

Agent assist

Component that provides agents with automatic search results with possible solutions relevant to the open record.

Agent chat

Component that provides a way for agents to chat with customers. Agents can send and receive messages, documents, and image files.

Contextual sidebar

A column of content that relates to the main content of the page. For example, you can include the agent assist component to show possible solutions for a case in view. Components are stacked vertically as tabs.

declarative actions

Declarative actions add custom functionality to your workspace forms, fields, lists, and related lists without writing custom scripts or learning APIs. Declarative actions include form actions, list actions, related list actions, and field decorators.

form header

Displays the title of the form and provides several controls.

form record presence

Displays the avatars of users viewing the same record.

full email composer

The Email Composer component associated with a record that enables an agent to compose emails and communicate with customers within a separate workspace tab.

landing page

Page that appears when an agent opens their workspace that provides an overview of new, assigned, and high priority cases in addition to the cases assigned to their groups.

mini email composer

The Email Composer (mini) component that enables agents to compose emails and communicate with customers within the record page instead of a separate workspace tab.

Predicate Builder

Component that enables you to visually assemble condition statements with a series of contextually-generated fields.

Record List

Component bundle that contains the components necessary to display a list of Glide records, including the header, list, and pagination.

ribbon

Ribbons provide contextual information about the record displayed in the form, allowing users to quickly scan relevant information about the record.

Working in Core UI

Learn about the features of the Core UI that predated Next Experience.

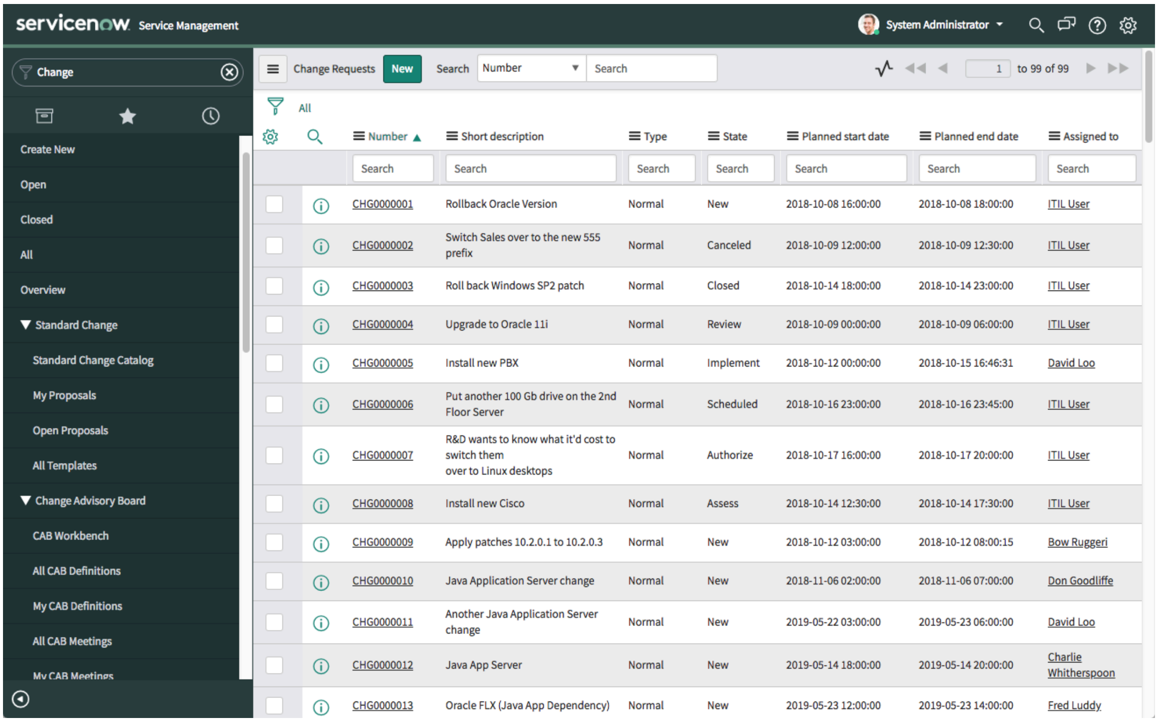
Core UI

The Core UI predates the Next Experience UI.

Watch the video above to learn about the elements of the Core UI.

Notable features include real-time form updates, user presence, a pinned application navigator with tabs for favorites and history, and activity streams.

Core UI



Core UI components

Component	Description
Banner frame	Runs across the top of every page and contains a logo and the following information, controls, and tools. • User menu provides options to access your profile and preferences. Administrators can impersonate users and elevate their security role. • Connect sidebar icon (): Lets you begin or continue conversations. This icon is available if Connect is enabled. • Global text search icon (): Finds records from multiple tables. • Help icon (): Opens the help panel with embedded help, where available. If there is no embedded help, it offers help search options. • Gear icon (): Opens the System settings for the Core UI.
Application navigator	Also called the left-navigation bar. Provides links to all applications and modules. See Core UI application navigator.
Content frame	Displays information such as lists, forms, dashboards, and wizards.
The Edge	The Edge is removed in Core UI. The collapsed view of the Core UI application navigator is similar to the Edge.

Related topics

Configure logo, colors, and system defaults for Core UI

Activate Core UI

Core UI can be activated with the Core UI plugin (com.glide.ui.ui16) if you have the admin role.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the plugin using the filter criteria and search bar.

   You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.

3. Select **Install** to start the installation process.

   Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: `Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.`

   You will see a message after installation is completed. For information about the components installed with a plugin, see Find components installed with an application.

Core UI application navigator

The Core UI application navigator appears at the left of the interface and provides access to all available applications and modules, favorites, and recently viewed items.

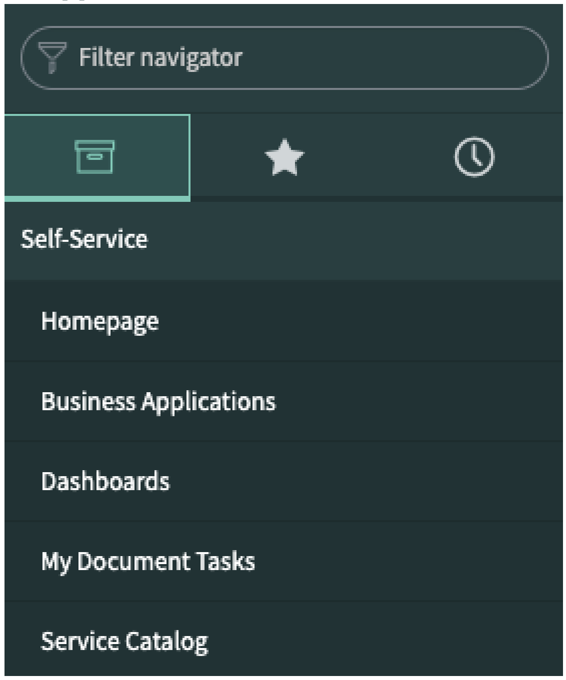
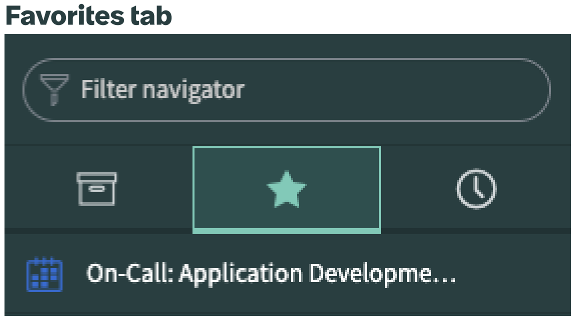
Use the application navigator to quickly find information and services.

The application navigator consists of a navigation filter and the following tabs.

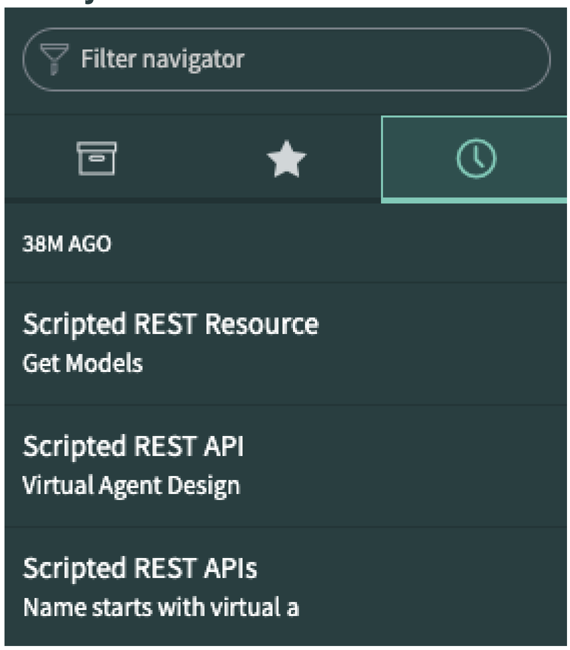
Core UI application navigator tabs

Tab	Description
All applications	Displays all application menus and modules. Each application appears as a section in the application navigator denoted by an application label. The tab lists modules by name under each application label.

Core UI application navigator tabs (continued)

Tab	Description
	All applications tab 
Favorites	Displays items you have added as favorites. **Favorites tab** 
History	Displays items you have recently accessed.

Core UI application navigator tabs (continued)

Tab	Description
	History tab 

Enter text in the navigation filter to show matching applications, modules, and favorites. Matching favorites appear at the top of the results. You can also use the navigation filter to quickly access a specific table. For more information, see Navigate directly to a table.

Use the Core UI navigator

Everyone can collapse and expand the navigator, work with favorites, and view navigation history in Core UI.

Before you begin

Role required: admin

About this task

Complete any of the following tasks to work with the navigator in Core UI.

Collapse or expand information in the Core UI application navigator

You can collapse or expand information in the application navigator to display only what you want to see.

Before you begin

Role required: none

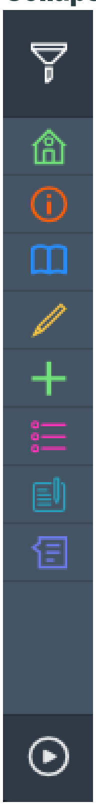
Procedure

Perform one of the following actions.

Option	Description
Collapse or expand an application or applica tion section	Click the application or application section la bel.

Option	Description
Collapse or expand all applications	Double-click the all applications tab icon ().
Collapse or expand the application navigator	Click the arrow icon at the bottom of the ap plication navigator. In the collapsed view, the application navigator displays favorites only. Click the filter icon or the arrow icon in the col lapsed view to expand the application naviga tor.

Collapsed navigator



Add or edit favorites in Core UI

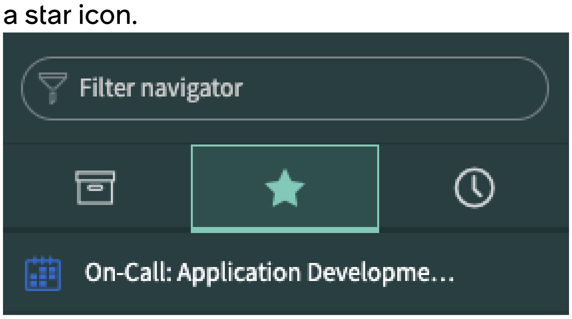
You can add, edit, or delete favorites for frequently accessed items in the application navigator.

Before you begin

Role required: none

About this task

Items you add as favorites appear in the favorites tab of the application navigator, represented by a star icon.



Favorites also appear in the collapsed view of the application navigator as icons.

Procedure

1. Add a favorite in one of the following ways.

Option	Description
Add a module as a favorite	In the application navigator, click the star icon by a module.
Add all the modules under an application as favorites	In the application navigator, click the star icon by an application.
Add a list as a favorite using the list context menu	**a.** Open a list. **b.** Click the list context menu icon ( ) by the list title. **c.** Select **Create Favorite**. **d.** In the flyout, edit the name and icon as needed.
Add a list as a favorite by dragging and drop ping	**a.** Open a list. **b.** Drag a breadcrumb to the **Favorites** tab of the application navigator.
Add a record as a favorite using the form context menu	**a.** Open a record. **b.** Click the form context menu icon ( ) by the form title. **c.** Select **Create Favorite**. **d.** In the flyout, edit the name and icon as needed.
Add a record as a favorite by dragging and dropping	**a.** Open a record. **b.** Drag the record title to the **Favorites** tab of the application navigator.
Add a different type of link as a favorite	Drag a supported link type to the **Favorites** tab of the application navigator. You can drag any of the following links: ○ Breadcrumbs ○ Links in lists ○ Reports **Note:** You may not be able to create bookmarks with other types of links.
Add a knowledge base article as a favorite	**a.** Open a knowledge article. **b.** In the header at the top left, click the star icon.

Option	Description
	c. In the **Create Favorite** dialog box, edit the name and icon as needed. **d.** Click **Done**.

You can add a different favorite for each view of a list or form.
The favorite is added to the **Favorites** tab of the application navigator.

2. To edit or delete a favorite, complete any of the following actions.

Option	Description
Reorder favorites in the list	**a.** At the bottom of the application navigator, click **Edit Favorites**. **b.** Drag a favorite to a new location in the list. **c.** Click **Done** or **Edit Favorites**.
Customize the name or icon for a favorite	**a.** At the bottom of the application navigator, click **Edit Favorites**. **b.** Click a favorite. **c.** Customize the name and icon as needed. **d.** Click **Done** or **Edit Favorites**.
Delete a favorite	**a.** Point to the favorite. **b.** Click the remove favorite icon ( ).

View your navigation history in Core UI

In Core UI, you can view your navigation history in the application navigator.

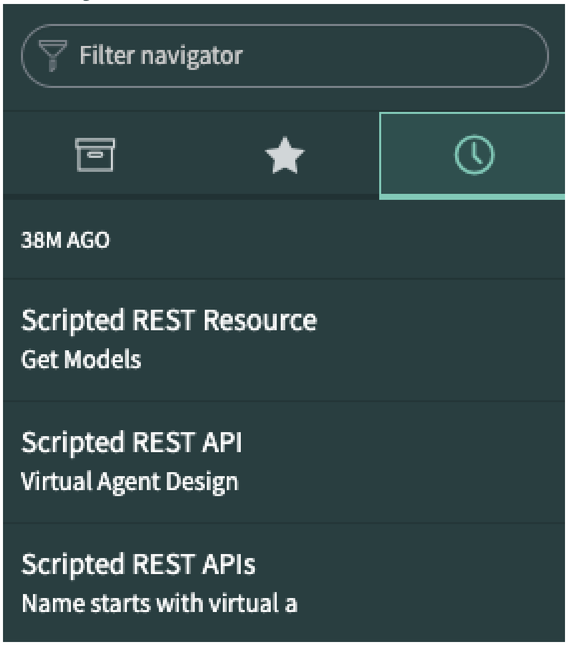
Before you begin

Role required: none

About this task

Items you have accessed recently appear in the history tab of the application navigator, which is represented by a clock icon. Items appear in chronological order from most to least recently accessed.

History tab



History entries are stored in the Navigator History [sys_ui_navigator_history] table. The system creates history entries for many types of content, including lists, records, and dashboards. Some content types are not tracked in the history, such as UI pages and other non-standard interfaces.

Procedure

1. In the application navigator, click the history tab, which is represented by a clock.
2. Click an item to open it.

Configure the number of history entries displayed in the application navigator

A system property sets the maximum number of history entries displayed in the history tab of the application navigator.

Before you begin

Role required: admin

About this task

By default, the application navigator shows 30 history entries. You can configure the *`glide.ui.nav.history_length`* property to change this value.

Procedure

1. Navigate to `sys_properties.list`.
2. Locate the *`glide.ui.nav.history_length`* property.
3. Edit the property **Value**.

System settings for the Core UI

You can define system settings to customize the Core UI for yourself. The gear icon, located within the banner frame, displays the system settings window.

The system settings are organized by tab.

Note: This information is applicable to the Core UI. For information about adjusting system settings with Next Experience enabled, see Next Experience preferences.

System settings

Control	Description
General tab	
Accessibility enabled	More advanced accessibility features are activated when this setting is enabled. The platform is designed to be accessible by default. Enabling this feature makes more accessibility features available.
Accessible tooltips on forms	Displays a help icon next to each field that has a tooltip. This user preference can be enabled only if Accessibility is also enabled.
Data visualization patterns enabled	Adds pattern as well as colors to any color-based graphs or diagrams.
Compact the user interface	The UI is optimized to display more information in the browser window when this setting is enabled.
Compact list date/time	Date and time values appear in a compact format when this setting is enabled. The year isn't shown for date values within the current year, and seconds are not shown for time values. This setting isn't available if the **Date/Time** selection is **Time Ago**.
Keyboard shortcuts enabled	Determines whether a user can access parts of the platform using keyboard shortcuts. For more information on available keyboard shortcuts, see Core UI keyboard shortcuts.
Home	Determines whether the Home module opens **Homepages** or **Dashboards**. **Important:** The functionality found in homepages, arranging information from your instance to tell a story about your data, is found in dashboards on new instances. On upgraded instances with Next Experience enabled, users can view existing homepages if they have a direct URL, but they can't create or edit them. Responsive dashboards and Analytics Center dashboards take over homepage functionality. Use the Homepage deprecation help tool to convert the homepages on your instance to responsive dashboards. For more information, see: • Dashboards in the Analytics Center. • Working with responsive dashboards.
Date/Time	The format in which dates and times appear depends on this setting. Select **Calendar** (for example, 2015-11-13, 15:58:58), **Time Ago** (for example, 11 minutes ago), or **Both**.
Language	Select a language or return to the default language ( ). This setting is available if a language plugin has been activated. For more information, see Activate a language.

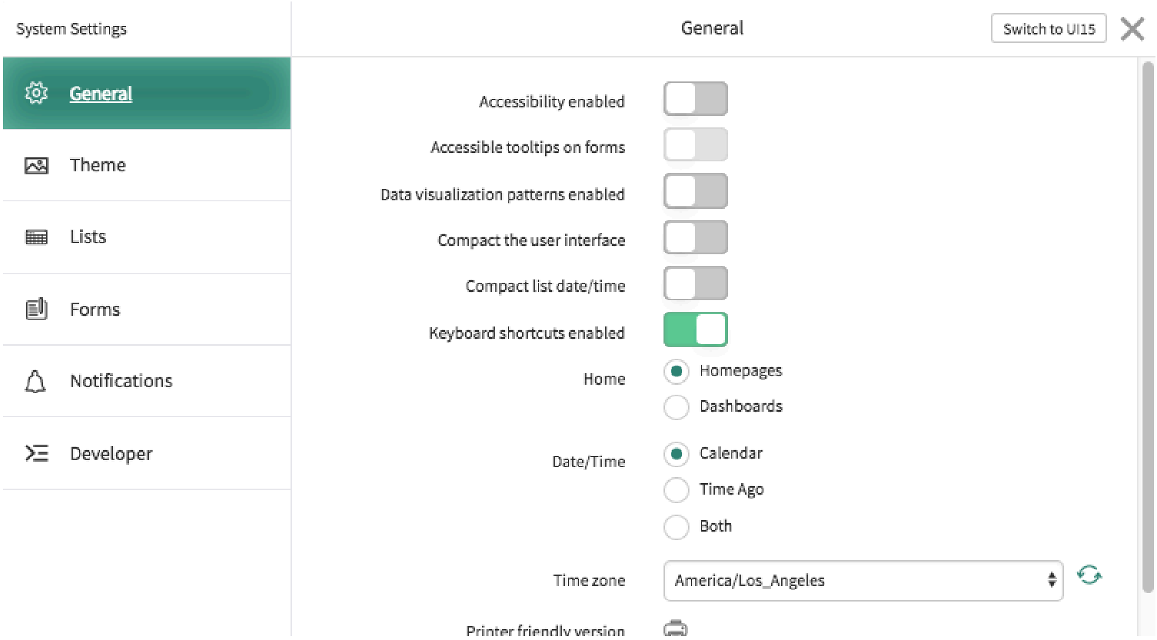
System settings (continued)

Control	Description
Time zone	Select a time zone or return to the default time zone ( ) for the current session. Upon the next login, the time zone setting reverts to the system default, or user profile setting for time zone.
Domain	Specifies the currently selected domain for organizations that are using domain separation. The user must have the domain_admin or admin role to see this setting.
Show domain picker in header	Places a domain picker in the banner frame, next to the user menu, when this setting is enabled.
Printer friendly version ( )	Opens a printer friendly version of the current content frame.
Theme tab	
Theme	Select a theme for the user interface. Select the **System** theme to return to the default theme.
Lists tab	
Wrap longer text in list columns	Long strings wrap in list columns instead of appearing as one long line when this setting is enabled.
Forms tab	
Tabbed forms	Form sections and related lists appear in tabs when this setting is enabled.
Related list loading	Determines when related lists load on forms. For more information, see Configure when a related list loads.
Notifications tab	
Search	Search bar for finding notifications. To find a notification: • Enter the name of the notification you are searching for. When you type the first three characters, the system automatically returns a list of notifications matching the characters entered. • Enter two asterisks to return a list of all notifications in alphabetic order (the notifications are not organized by category).
Allow notifications	Global switch for enabling or disabling all notifications.
Notification channels	List of your channels for receiving notifications. Use this section to:

System settings (continued)

Control	Description
	• Enable or disable a channel by using its toggle switch. If you disable a channel, notifications are not delivered through that channel. • Add channels using the **Create Channel** option. • Modify channel information. Click the channel row or the right arrow (**>**) next to the appropriate channel to edit or delete it.
Notifications by category	List of notification categories that identify and group related notifications. Each category contains the notifications that you can subscribe to. To view the notifications in a given category, click the category row or the right arrow (**>**) next to the appropriate category. You can: • Edit settings for a notification: ◦ Enable or disable channels for the selected notification. ◦ Apply notification conditions, such as schedules and filters, that affect the delivery of the notification. • Create personal notifications, which are subscriptions to specific notifications that matter to you.
Developer tab	
Application	(Administrators only) Provides a link to the application picker, the Applications list ( ), and the currently selected application ( ).
Show application picker in header	Places an application picker in the banner frame, next to the user menu, when this setting is enabled.
Update Set	(Administrators only) Provides a link to the update sets list, the update set picker, and the currently selected update set.
Show update set picker in header	Places the update set picker in the banner frame, next to the user menu, when this setting is enabled.
JavaScript Log and Field Watcher	(Administrators only) Opens the client-side JavaScript debug window.
Automated Test Framework Page Inspector	Places the inspect icon in the banner frame when this setting is enabled. Enables page developers and test designers to identify page components on customized user interfaces available for custom UI testing in the Automated Test Framework.

System Settings window, General tab



Working in the classic environment

In the classic environment, use lists and forms to get your work done.

Note: This content pertains to the classic environment, which refers to working in lists of records and on record forms directly, not in the Configurable Workspace interface. You can work in the classic environment with Next Experience active, or with it inactive, which is referred to as Core UI (formerly known as UI16).

Lists in the classic environment

A list displays a set of records from a table.

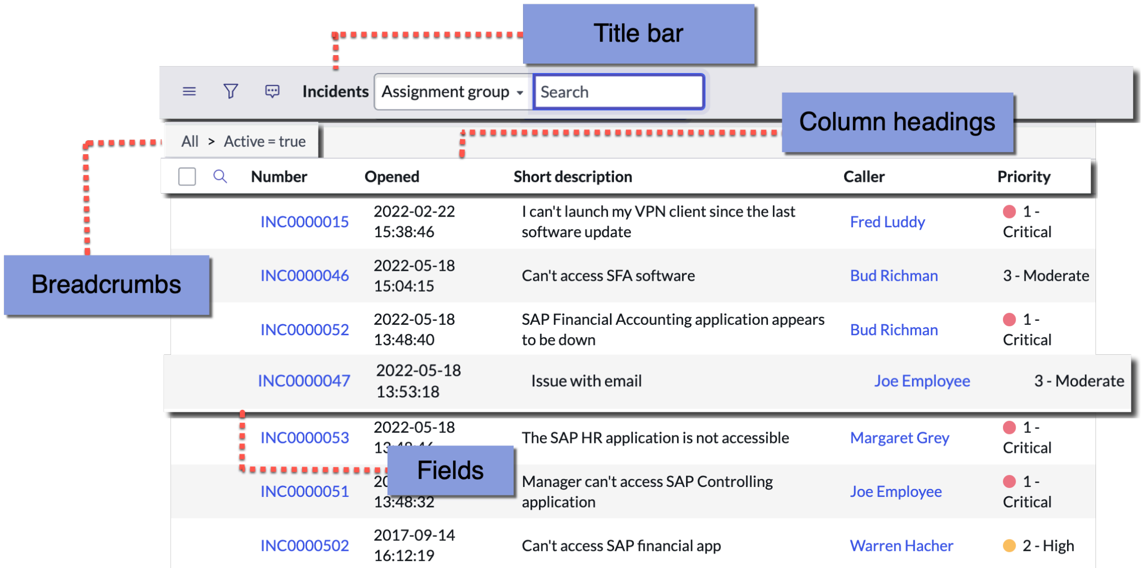
Note: This content pertains to the Classic Environment, which refers to working in lists of records and on record forms directly, not in the Configurable Workspace interface. You can work in the Classic Environment with Next Experience active, or with it inactive, which is referred to as Core UI, (formerly known as UI16).

Users can search, sort, filter, and edit data in lists. Lists may be embedded in forms and may be hierarchical (have sublists).

The list interface consists of a title bar, filters and breadcrumbs, columns of data, and a footer. Each column in a list corresponds to a field on the table.

A Response time indicator ( ) may appear at the bottom right of some lists to indicate the processing time required to display the list.

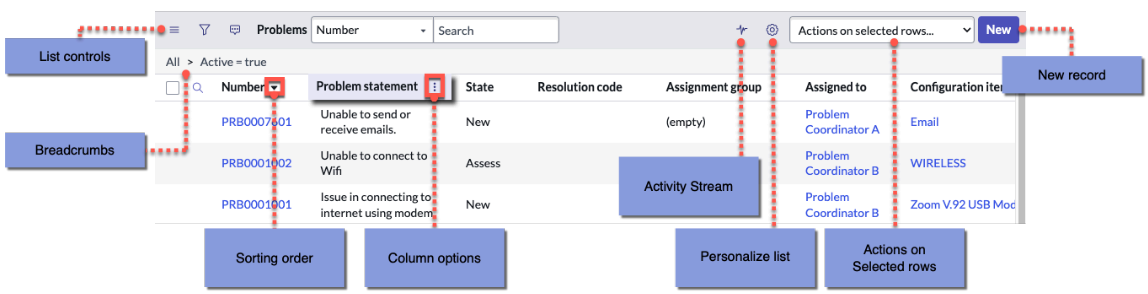
Record list



List features and actions

The list interface consists of a title bar, filters and breadcrumbs, and columns of data. Each of these components provides features and lets you act on the list and the displayed records.

Features, menus, and actions

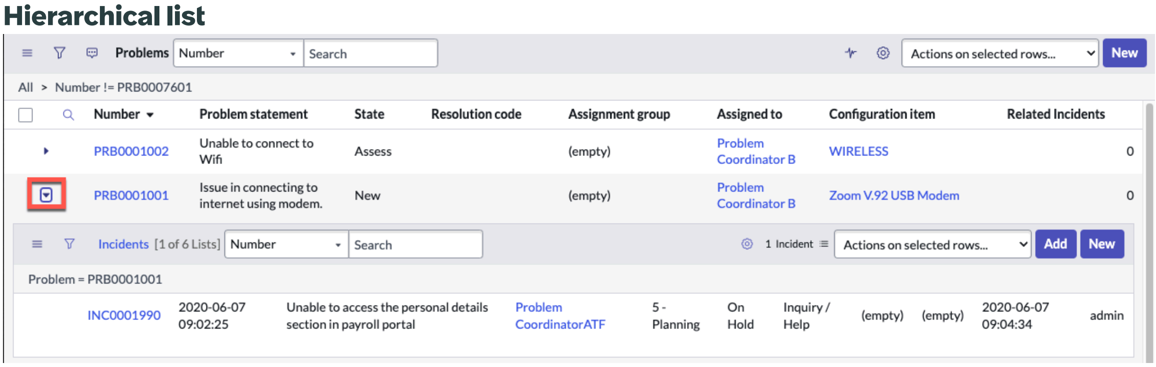


Hierarchical lists

Hierarchical lists allow users to view records from related lists directly without navigating to a form.

Lists can have sublists in a hierarchy that can also be accessed in list view. To expand or collapse the related lists on a record in a hierarchical list, click the arrow (▸) beside the reference icon.

Hierarchical list



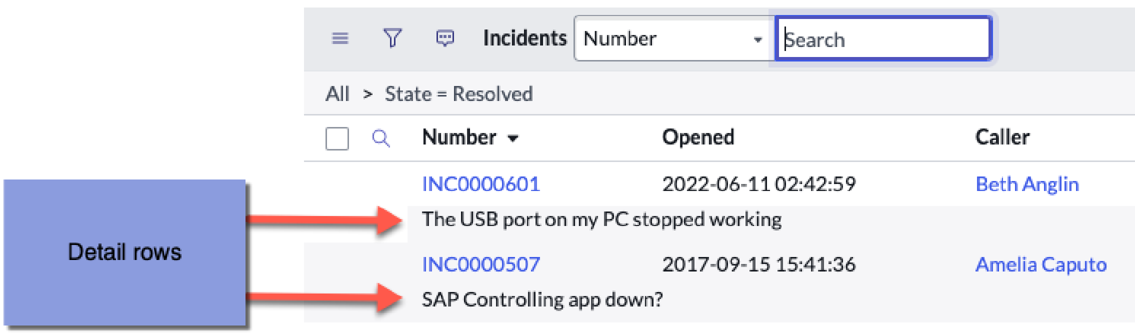
Administrators can enable hierarchical lists for a table. For more information, see Enable a hierarchical list .

Detail rows

Detail rows, when enabled, appear below the field row for each record and display the value of a specified field. For example, the detail row might display the short description for each incident in a list. Detail rows support the same functionality as fields, including links, editing capabilities, and access to the context menu.

Note: When a field is designated as the source for the list detail rows, the system hides the list column for that field.

Detail rows



Administrators can enable detail rows and add them to lists. For more information, see Administer detail rows .

List fields

Fields display data and provide certain functions.

Note: Some of the options displayed in the field context menu depend on the user role and the installed features.

Field functions

Title	Description
Links	Open the associated record in form view. Click the first column field to open the current record. You can also click a link to a related record in other columns to go to that record.
Editing	Changes the information in one or more records. For more information, see Methods for list edits.
Reference icon ( )	Provides a preview of the record. Click the icon to open a preview of the record. To open or edit the record, click the **Open Record** button in the record preview. Pressing shift and pointing to the reference icon only displays the tool tip for the reference icon.
Context menu	Also called a right-click menu, offers several options, including: • Quick filter options, such as **Show Matching** and **Filter Out**. • The option to copy the record URL to the clipboard.

Field functions (continued)

Title	Description
	• The option to copy the sys_id of the record to the clipboard (administrators only). • Quick edit options, such as **Assign to me**, **Approve**, and **Reject**. • The option to edit the record tags, which provide quick access to frequently referenced or urgent information. When a tag is assigned to a record, the record is displayed on the Tagged Documents page. • Options specific to features such as Live Feed and Visual Task Boards.

Configure and use list functions

All users can interact with lists for the tables their role permits them to access. Some list and column header menu options are controlled by permissions grated to the user role.

Before you begin

Role required: admin

About this task

The following procedures describe functions that users can configure or use with lists.

Sort a list

You can quickly find information in a list by sorting the list. The method that the system uses to sort a list depends on the type of record in the sort column.

Before you begin

Role required: none

About this task

Consider the example record: Label=**Requested Item**; Value=**sc_req_item**. Field types other than choice list types are sorted based on the label. The example record label, **Requested Item**, would be sorted with records whose labels start with "r."

A choice list field lets the user select from a pre-defined set of choices. Choice list fields are sorted by the underlying dictionary entry value of the field, not by the label. The example record value, **sc_req_item** would be sorted with records whose values start with "s."

Sorting by value can be useful. For example, choices for the **State** of tasks are ordered **New** > **Work in Progress** > **Closed**. Based on the label, the sort would be **Closed** > **New** > **Work in Progress**.

An arrow next to the column name indicates the current sort order. A downward pointing arrow indicates that the column is sorted in descending order. Only the primary sort order is indicated.

Note: The following sorting rules apply to lists:

- In a translated instance, only translated_text, translated_field, and translated_html type columns support sorting.
- The column label should be created in English first then translated accordingly.
- You cannot sort a list by an array-based field, such as a Glide list.

To sort a list, use one of the following methods:

Procedure

- Click a column name to sort the list in ascending order.
  Click again to sort in reverse order.
- Right-click a column name and select **Sort (a to z)** or **Sort (z to a)** to sort in ascending or descending order, respectively.
- Specify a sort order with a filter.
  Filters provide for sorting by more than one column (for example, by Category and then Subcategory).

Related topics

Choice lists

Integer values for default choice lists

Configure field status indicators

You can enable or disable modern cell coloring for list field status indicators. This setting is available when you personalize a list. This setting is available in your system settings.

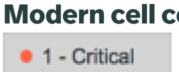
Before you begin

Role required: none

About this task

Field status indicators on lists are displayed with modern cell coloring, as a colored circle on the left side of the field. You can select the style of the field status indicator. You can revert to using a field background color by disabling modern cell coloring.

Modern cell coloring on



Procedure

The process depends on the version.

a. Click the personalize list icon ( ) in the list.

b. Select the **Modern cell coloring** check box to use the style field status indicator.

c. Click **OK**.

For more information, see Creating Personal Lists.

Customize the number of list rows per page

You can customize the number of records, or rows, to display on each page of a list. The default is 20 rows per page.

Before you begin

Role required: none

About this task

When you customize the number of rows, it applies to all lists that you can access.

Procedure

1. Open a list.
2. Right-click the list title and select **Show** > **<Number> rows per page**.
   The list refreshes to display the number of records selected, or, if there are fewer than the number of rows you are displaying, the total number of records. The page control is updated to show your selected number of records ( ).

Switch between list views

A view defines the elements that appear when a user opens a list.

Before you begin

Role required: none

About this task

You can switch between list views to which you have access.

Procedure

1. Open the list.
2. Open the list title menu and select **View** > **(view name)**.
   The page refreshes with in the selected view.

Speed up loading large lists

Remove the calculation of the total number of records in a list to speed up loading lists.

Before you begin

Role required: admin

About this task

Calculating the total number of records to be included in a list filtered from extremely large tables can take a long time.

To improve performance, you can remove that calculation for all or specified views.

Procedure

1. On a list, click the menu icon ( ) and navigate to **Configure** > **List Control**.
2. On the List Control page, select a check box:
   - **Remove pagination count**—Removes pagination calculation from all views.
   - **Remove pagination count for specified views**—Removes pagination calculation from specified views.
3. **Optional:** If you selected **Remove pagination count for specified views**, click the lock icon ( ) and select the views that suppress displaying the number of pages in the list.
4. Verify that the pagination is not calculated for your view by switching to that view.
   On a list, click the menu icon ( ) and navigate to **View** > **<a view>**.

   The pagination calculation should not appear and the fast forward icon ( ) should be grayed out.

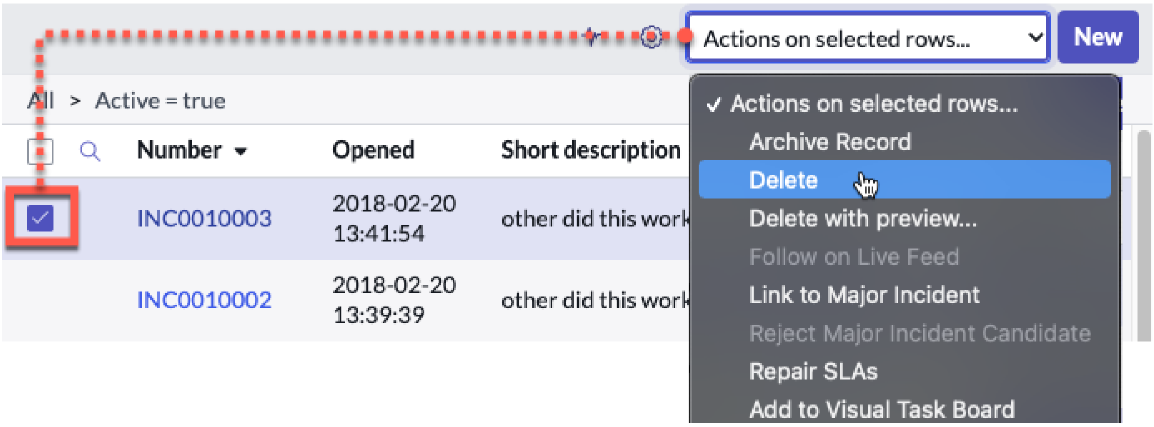
Perform actions on selected items in a list

Action check boxes enable you to perform actions on one or more items in a list.

Before you begin

Role required: admin

About this task



Procedure

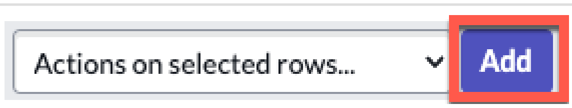
1. Select the check boxes beside the records you want to affect.
   To select all records on the page, select the check box at the top of the list.
2. Apply the desired action.
   - In the column context menu, select **Update Selected** to update all the selected records.
   - In the Action on selected rows menu, select an action such as **Delete** (administrators only), or **Add to Visual Task Board**. The available actions vary depending on the list and which plugins are activated.

Embedded lists

Some lists may be embedded in forms. Use list controls to work with records in an embedded list within a form.

Use these controls to work with an embedded list. For more information, see Edit a form.

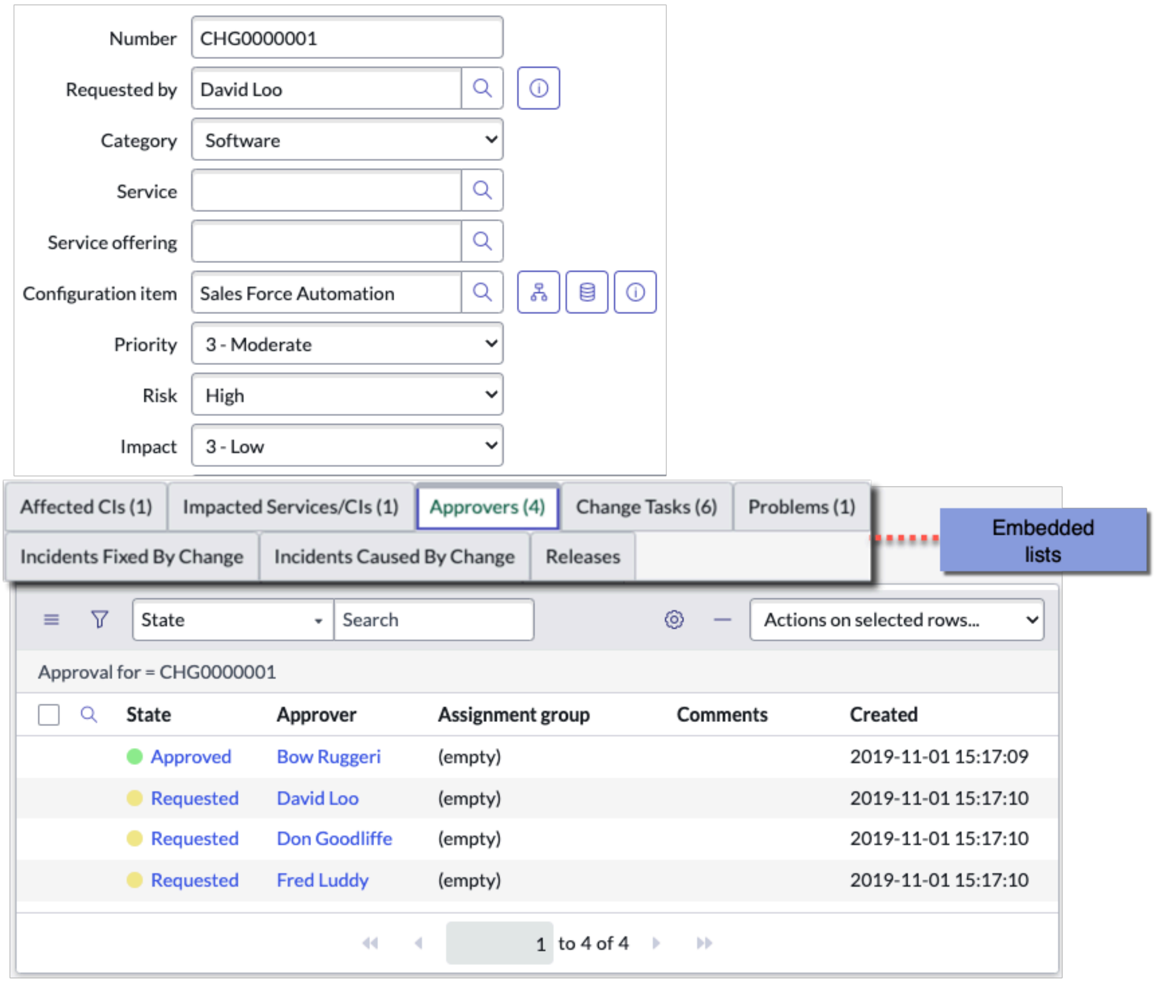
Working with embedded lists

Task	Icon	Action
Expand an embedded list		Click the expand icon in the list header.
Collapse an embedded list		Click the collapse icon in the list header.
Insert a new row		Select **Add** and identify the record you want to add to the embedded list.
Edit a row		Double-click in an empty area of that field. See Use the list editor.
Delete a row		Click the delete icon beside the row. New rows are removed immediately. Existing rows are

Working with embedded lists (continued)

Task	Icon	Action
		designated for deletion when the record is saved. To clear this designation, click the delete icon again.

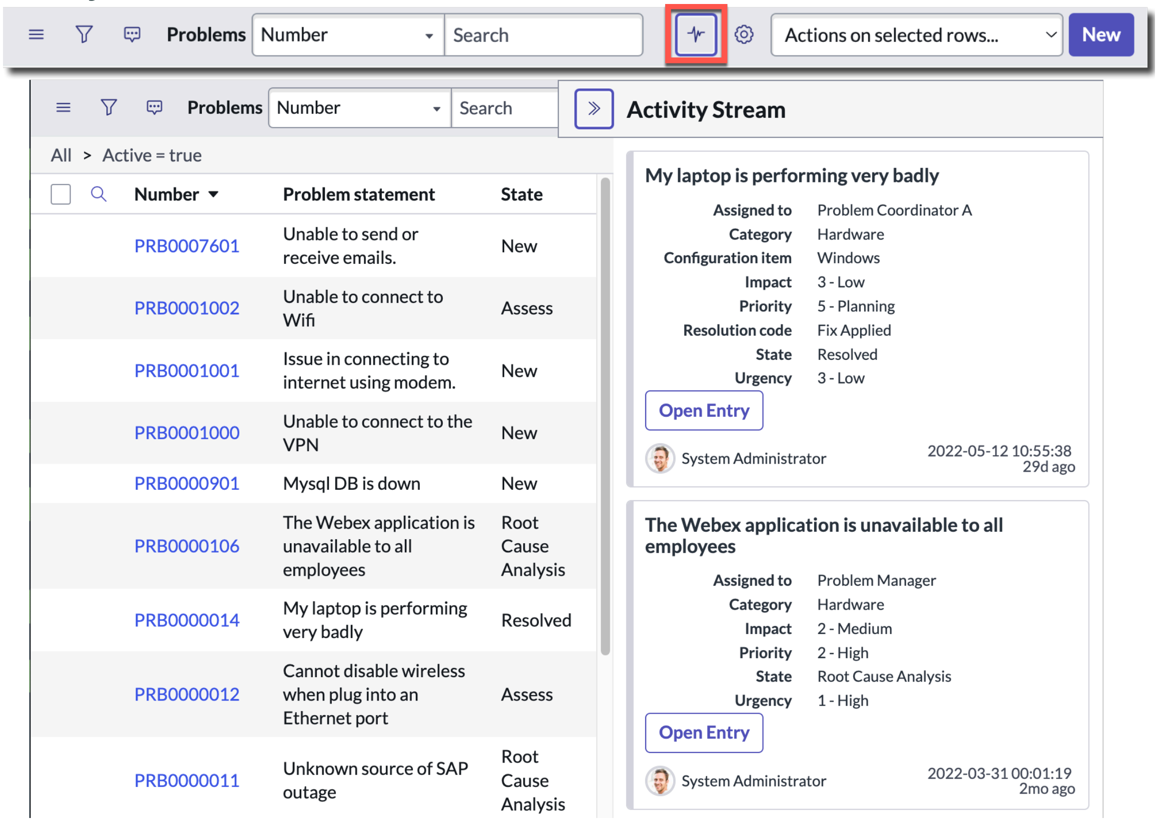
Embedded list



Activity streams in list view

Stream live activity information for all records on the current list.

Activity stream window



To view the activity stream information, click the list activity stream icon ( ) in the list title bar. This icon appears in the title bar for all task tables.

The activity stream information appears in a flyout window, and is the same information that appears in the activity formatter for a record. The short description appears as the title for the entry. Activity stream items on the task table use the task number as the title. The information in the flyout window updates automatically with audit and journal entries. Click the **>>** icon at the top to close the activity stream.

You can add a comment to any item in the activity stream. When you point to the item with your cursor, a **Comment** button appears.

You can click an item to open the activity stream for that record. The record activity stream lets you open the task record, post additional comments or work notes, or preview images. Click the **<** icon at the top to close the record activity screen.

Note: The activity stream window is not the same interface as the activity formatter which appears on forms. Modifications and property settings user to change the behavior on the activity formatter are not applied to the activity stream window.

Search a list

You can search a list to find information quickly. The list title bar includes options for searching the list. Administrators can enable text searches for any list.

Before you begin
Role required: none

About this task
There are two options for searching the list: for a string in a selected field, or for a text string found in any field. These options are labeled **Go to** and **Search**.

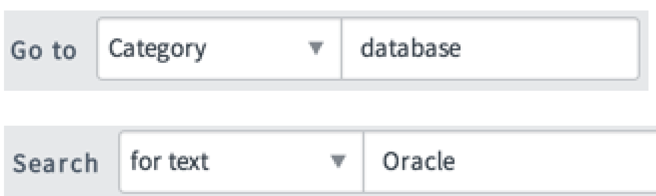
- The **Go to** option sorts the list by the selected field and returns records where the field value is equal to or greater than the search term. For the **Number** field, which is a string type field, it finds the records that have a number ending with the number that you enter. For example, searching a list of incidents by selecting **Number** and entering 4 shows records with numbers like **INC0000004** and **INC0000014**.
- The **Search** option appears when you select **for text**. It returns records that contain the search term in any field in the list table. If you added a related list condition, the search does not include records in the related table.

Each option in a choice list is defined with a column label and a value. For example, the incident **State** field contains several options, such as **New** and **Closed**. These labels are column labels, and each one has an underlying value. For incidents, the default value for **New** is **1** and the default value for **Closed** is **7**. You can search a column for either the column label or the value with the following results.

- Enter the column label to list matching records, for example, all incident records in the **New** state.
- Enter the value to find records that have a state greater than or equal to (=>) the specified value. For example, enter **6** to list incident records in the **Resolved** and **Closed** states.

Procedure

1. Navigate to a list of records.
2. If necessary, personalize the list to add the desired fields.
3. Select a field or select **for text**.



4. Enter the search text.
   Use wildcards to further refine list searches.
5. Press the Enter key to execute the search.

Related topics

Enable text searches

Personal lists

Available list search wildcards

The platform supports several wildcard characters to expand and refine search results.

Available list search wildcards

Wildcard	Description
*search-term %search-term%	Search for values that contain search-term.

Available list search wildcards (continued)

Wildcard	Description
%search-term	Search for values that end with search-term.
search-term%	Search for values that start with search-term.
=search-term	Search for values that equal search-term.
!*search-term	Search for values that don't contain search-term.
!%search-term	Search for values that start end with search-term.
!=search-term	Search for values that don't equal search-term.

Note: Reference fields support a different set of wildcard operators. For details on using wildcards to search reference field auto-complete values, see Auto-complete for reference fields.

Related topics

Search a list

Field types

Configure the default search behavior

The default search behavior in a list is to search for values that are greater than or equal to the value you enter. Administrators can add properties to change the search behavior to use either a contains search or a starts with search by default, instead of a greater than search.

Before you begin

Role required: admin

About this task

If you enter text in the search box without using a wildcard, the search is performed for values greater than or equal to the value you enter. For text data-type-fields, this means that the search first sorts the records on the selected field, then finds the first record that starts with the text and all following records. For numeric data-type-fields, this means that the search finds all records where the number field ends with the entered number.

Note: The system treats some string fields that contain record numbers as numeric fields. Any field named `number` or `u_number` is treated as a numeric field.

Changing the default search behavior to `contains` or `starts with` can cause performance issues as both search options return more results than a greater than search.

Procedure

1. Navigate to the list of system properties by typing `sys_properties.list` into the navigation filter.
2. Add one of the following properties depending on your default search behavior preferences.

Default search behavior property

Name	Description
`glide.ui.goto_use_contains`	Changes the default search behavior for a list to a `contains` search.

Name	Description
	○ Type: true | false ○ Value: true
glide.ui.goto_use_starts_with	Changes the default search behavior for a list to a *starts with* search. ○ Type: true | false ○ Value: true

3. Click **Submit**.

Related topics

Add a property

Configure default search behavior using a dictionary attribute

Change the default search behavior at the field level by adding an attribute to a field using the system dictionary.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Definition** > **Dictionary**.
2. Search for the field in a table that you want to apply the default search attribute to.
3. In the Attributes field, add one of the following attributes.

Note: You may need to switch to the advanced view for the dictionary entry to see the attributes field.

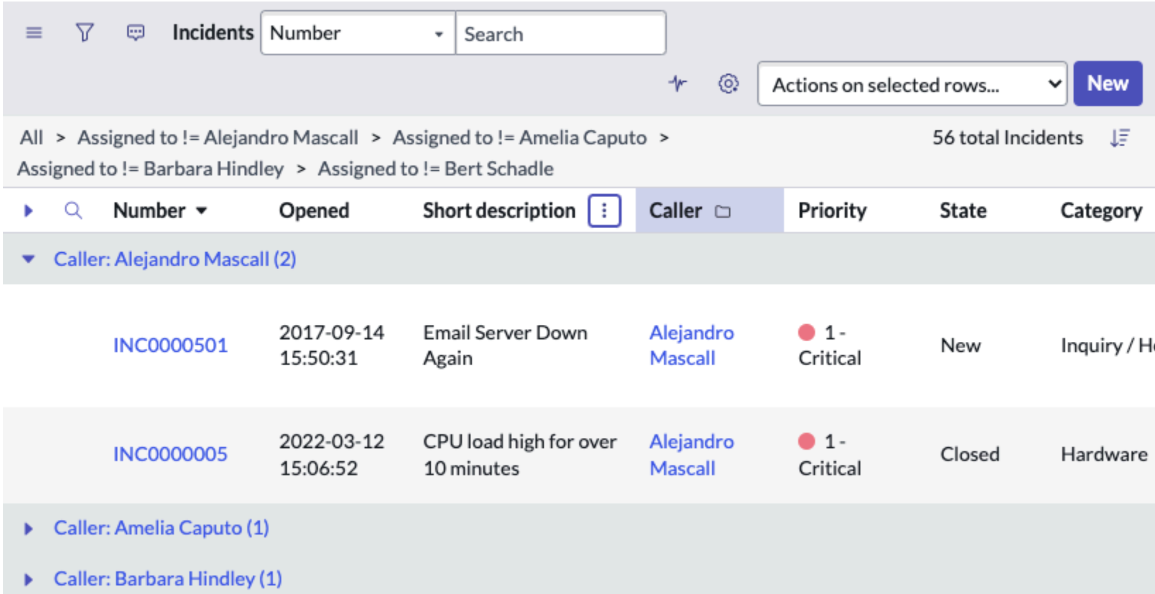
Attribute	Description
goto_use_starts_with=true	Changes the default search behavior to use the *starts with* operator for a specific field. Applying *starts with* to a non-text field returns any data starting with that search, which can cause performance degradation.

Grouped lists

Grouping aggregates a list by a field and displays the record count per group. Grouping can help you find data quickly by organizing and providing a summary of search or filter results.

For example, this picture shows active incidents grouped by caller.

List grouped by caller



- Groups are named for the values of the field selected for grouping. For example, if you group by the assigned user, each group is a user's name.
- The record count for each group appears next to the group name.
- The total number of items in the list (all groups combined) appears near the paging controls in the list. This total displays only when the list is grouped on a field.

Use a grouped list

You can find information by grouping a list by a particular field. After grouping items in a list, several options let you focus on a particular group or set of groups.

Before you begin

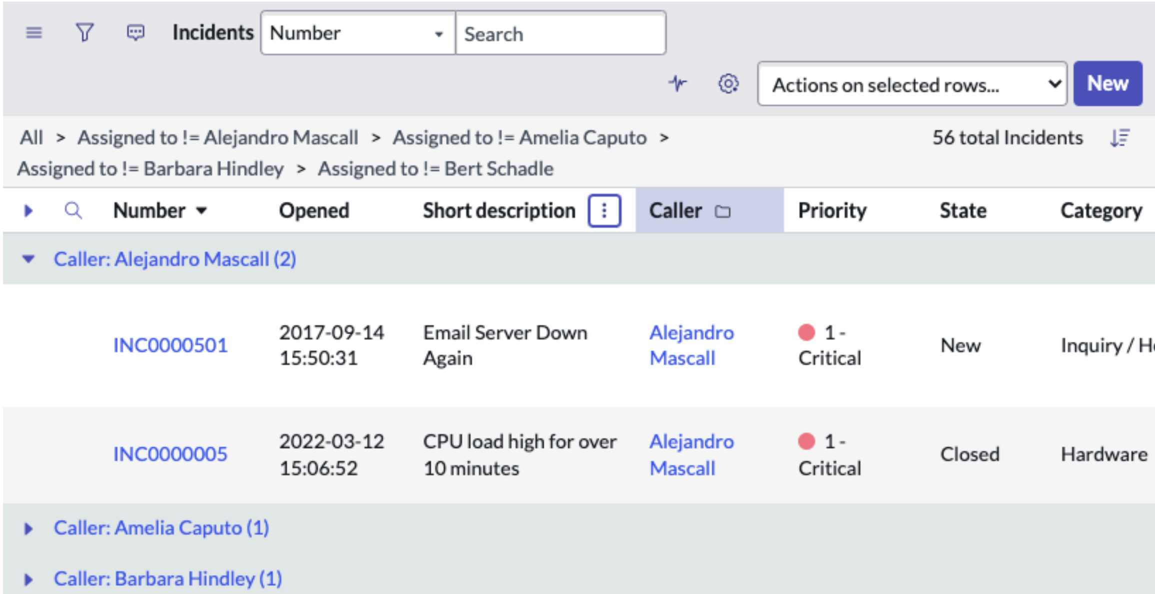
Role required: none

Procedure

1. Use one of the following methods to group and ungroup items in a list.
   - On the title bar, click the context menu and select **Group By**. Select the field by which to group the list. To remove a grouping, select **-- None --**.
   - Right-click the column name and select **Group By**. To remove a grouping, select **Ungroup**.

   For example, this picture shows active incidents grouped by caller.

Group by



2. Use any of the following actions to expand the groups.

Option	Description
To expand or collapse a group	Click the arrow (▸) next to the group name.
To expand or collapse all groups	Click the arrow at the top of the list.
To open the full list for a group	Click the group name.
To see all records for a given group	Open the full list.

Note:

- The maximum number of records shown per group is the number of records per page in list view.
- Grouped lists with a script include in the filter may cause slowness.

The maximum number of records shown per group is the number of records per page in list view.

Filters and breadcrumbs

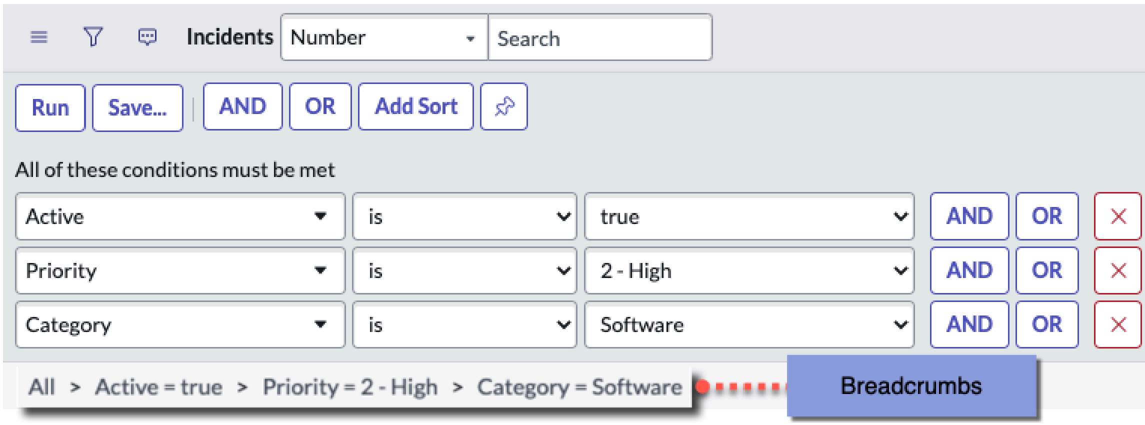
A filter is a set of conditions applied to a table to help you find and work with a subset of the data in that table.

You can apply, modify, create, and save filters. A hierarchical list of conditions at the top of the table — breadcrumbs — indicates the current filter.

Breadcrumbs offer a quick form of filter navigation. They are ordered from left to right. The left condition is the most general, and the right condition is the most specific. Clicking a breadcrumb removes all the conditions to its right. Clicking the condition separator (>) before a condition removes only that condition.

By default, a user with no roles cannot see the breadcrumbs or filter. Administrators can configure the ESS portal to allow unauthenticated users to see breadcrumbs and filters by using a script include. For more information on using script includes to suppress breadcrumbs and filters, see Use script includes to suppress filters and breadcrumbs .

Breadcrumbs, List v2



Examples:

- Clicking **Priority = 2** removes the condition **Category = Software** and returns all active incidents with a priority of 2.
- Clicking the condition separator (>) before **Priority = 2** removes the condition **Priority = 2** and returns all active incidents in the software category.
- Clicking **All** removes all conditions and returns all incidents in the system.

Click a breadcrumb to refresh the list of records and show the latest information for those records.

Note: Clicking the **New** button in a filtered list automatically applies the same filter to the new record. For example, clicking **New** in the Resolved Incidents list opens a record preset with **State** set to **Resolved**. In a list filtered for active, priority 1 incidents, clicking **New** opens a record preset with **Active** selected and **Priority** set to **1 - Critical**.

You can change the preset values on the form as needed. If there is a field you do not want to have populated in this way, you can add the following dictionary attribute to the field: `ignore_filter_on_new=true`.

Additional navigational functions are available when you right-click a breadcrumb.

Breadcrumb right-click options

Option	Description
Open new window	Opens the results list for the breadcrumb in a new tab or window.
Copy URL	Copies the URL to the clipboard for the results list of the breadcrumb. Follow browser instructions if browser security measures restrict this function.
Copy query	Copies the encoded query to the clipboard for the breadcrumb. You can use this query in the URL of an instance or in the reference qualifier field of a dictionary entry. For example, if you are viewing a list of all active incidents with a high or medium impact, right-click the breadcrumb and copy the query **active=true^impact=1^ORimpact=2**. You can append this query to the end of the instance URL as follows:

Breadcrumb right-click options (continued)

Option	Description
	`https://{instance_name}/incident_list.do?sysparm_query=active=true^impact=1^ORimpact=2` This selection is not available for the **All** breadcrumb.

Related topics

Dictionary attributes

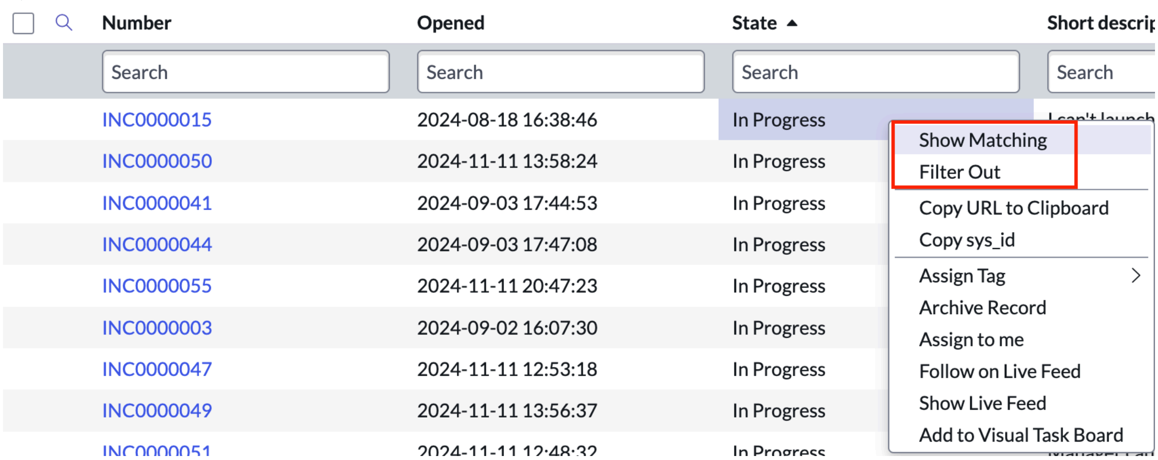
Generate an encoded query string through a filter

Quick filters

To quickly filter a list using a value in a field, right-click in the field and select **Show Matching** or **Filter Out**. For date fields, choose from **Show Before**, **Show After**, and **Filter Out**.

These functions add a condition to the right in the breadcrumb of the current filter.

Quick filter



In this example, right-clicking **In Progress** and selecting **Show Matching** adds the condition **State = In Progress** as the most specific condition of the filter. By contrast, right-clicking **In Progress** and selecting **Filter Out** adds the condition **State != In Progress** as the most specific condition of the filter.

For date and date-time fields, you can also use **Show After** or **Show Before** to define a time-based filter.

Using the quick filter method to filter out a particular value builds the following conditions: [field] [is not] [value] or [field] [is] [empty]. Records that contain empty or null values still display in the filtered list. If you manually create a filter, it does not automatically include the OR condition [field] [is] [empty], so records that have an empty or null value do not display in the filtered list.

Filters

A filter restricts what records appear in a list by providing a set of conditions each record must meet to be included in the list.

A condition consists of the following parts.

- Field: Each field contains data from a particular column in the table. Selecting a reference field enables you to dot-walk to data from other tables.
- Operator: Each field type has its own set of valid operators. The operator determines if a value is needed.
- Value: Each field has its own set of valid values determined by the field type. Reference fields have access to auto-complete, and choice lists provide a list of options.
- Grouping: Each condition line is grouped with either an AND or OR connector. The filter requires all condition lines linked with an AND connector to be met. The filter separately evaluates each condition line linked with an OR connector.

List v3 provides the Related Lists Conditions section that enables you to include a condition based on a related table.

Note: If you open a list for a table you have create permissions for, apply a filter for a field, and click **New** in the list header. The same field is automatically populated with the value you set in the filter on the new record.

Create filters on a list using the condition builder.

Related list conditions in List v3

By default, all lists enables you to filter on the current table data, which includes dot-walking to fields in referenced tables. In v3 lists, another type of condition, Related Lists Conditions, is available in the condition builder. For more information, see Add related list conditions.

Pin a filter in List v2

To make the condition builder appear every time you open the list, click the pin/unpin filter icon ( ). This functionality is not supported in List v3.

Related topics

Dot-walking to data in related tables

Field types

Operators available for filters and queries

Create a filter in List

You can create a filter to restrict what records appear in a list by providing a set of conditions. When you run the filter, only records that meet the specified conditions are listed.

Before you begin
Role required: none

Procedure

1. Open the condition builder by clicking the show/hide filter icon ( ).
   If the icon is disabled and the breadcrumb has a related list condition in it, you must remove the related list condition to open the filter. The condition was created when the List v3 was enabled for this list. List v2 does not support related list conditions. For more information about related list conditions, see Add related list conditions.
2. Select a field from the list.
   The field type determines the available operators and values. For example, the **Active** field can have a value of **true**, **false**, or **empty**, while a text field can have many different values.

Similarly, the **greater than** operator does not apply to the **Active** field, but it does apply to the **Priority** field. For more information, see Condition builder.

3. Select an **operator** from the list.
4. Select or enter a **value**, if appropriate.
5. Add or remove conditions to construct the desired filter by completing one or more of the following steps.

Option	Description
To add a top-level condition	Click **AND** or **OR** on the condition builder tool bar, above the conditions.
To add a dependent condition	Click **AND** or **OR** beside the condition.
To remove a condition	Click **x** beside the condition.

Note: To find all records that do not contain the specified value, create a filter with two conditions: **[field] [is not] [value]** or **[field] [is] [empty]**.

6. To specify the sort order of the results, click **Add Sort** and then select a field to sort by and a sort order.
7. **Optional:** Click **Save** to keep the filter for future use.
   For more information, see Save and use filters in a list view.
8. Click **Run** to apply the filter.

Related topics

Dot-walking to data in related tables

Field types

Operators available for filters and queries

Add related list conditions

Related list conditions allow you to include a relationship with another table in the filter. Related list conditions are supported in both List v3 and the Report interface.

Before you begin

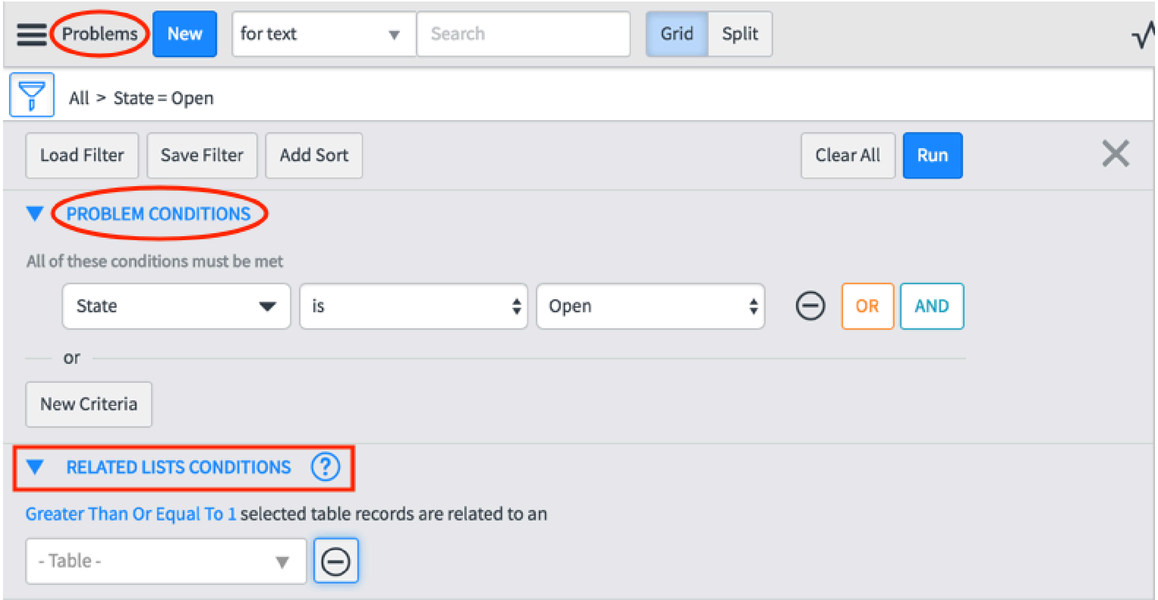
Role required: none

About this task

You can optionally include conditions on the related table. For example, you can filter active problems with one or more related incidents that are in the **Canceled** state. Another example is to filter incidents with a breached service level agreement (SLA).

The List v3 filter contains two sections, one for the current table conditions and one for related lists conditions. You can include only one related table in the query, however, you can add multiple conditions for that table.

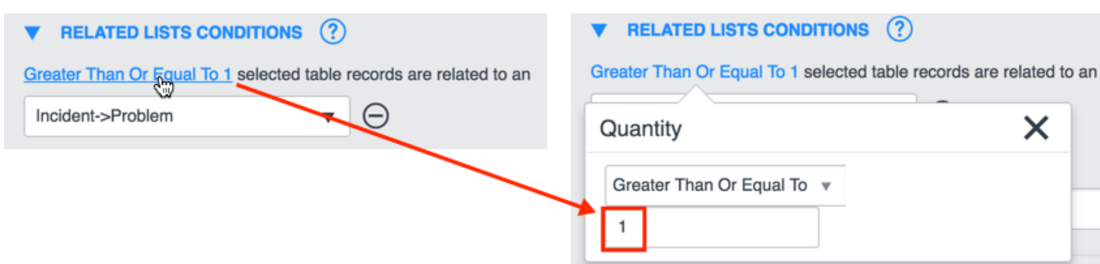
Problem filter for open problems



The steps below use the example of open problems with some number of related incidents. You can perform these steps for any list view that supports List v3.

Procedure

1. For this example, navigate to **Problems** > **Open**.
2. Open the list filter and select the conditions for the current (Problem) table.
   The **[State] [is] [Open]** condition is already added.
3. Select **RELATED LISTS CONDITIONS** to expand the section.
4. From the list, select the table relationship to include in the query.
   For this example, select **Incident>Problem**. You can select any table that you have access to view.
5. To select a quantifier, select **Greater Than Or Equal To 1**.
   The Quantity popover opens.



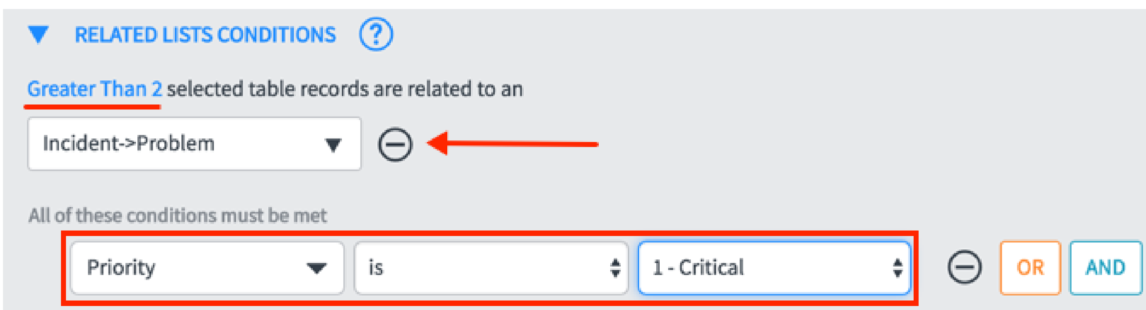
6. Select a quantity, enter number of records in the related table that must match, and then select **X** to close the popover.
   The default number is **1**. Following are descriptions and examples of each quantifier for this example.
   - **Greater Than Or Equal To**: Returns problem records where the number of related incidents is greater than or equal to the number you enter. A value of **5** includes problems with five or more related incidents. Problem records with 4 or fewer incidents are not returned.
   - **Greater Than**: Returns problem records that have more than this number of related incidents.

- **Less Than Or Equal To**: Returns problem records that have the number or fewer than the specified number of related incidents. A value of **1** includes problem records with one or no related incidents.
- **Less Than**: Returns problem records with fewer than the number of related incidents. A value of **1** returns problems with no related incidents.
- **Equal To**: Returns problems with this number of related incidents. A value of **5** includes problem records with exactly five related incidents.
- **None**: Returns problems that do not match the specified table relationship. A selection of **None** returns problems with no related incidents.
- **Between**: Returns problems with any number of related incidents that is between the two numbers you enter. **Between** values of **5** and **10** include problem records with 5, 6, 7, 8, 9, or 10 related incidents.

Note: You cannot customize the available filter options, which are hard-coded.

7. **Optional:** Enter one or more conditions for the related table.
   Select **New Criteria** to add another condition.

   Example
   The following image shows the example of filtering for problem records with more than two related incidents that are critical priority.

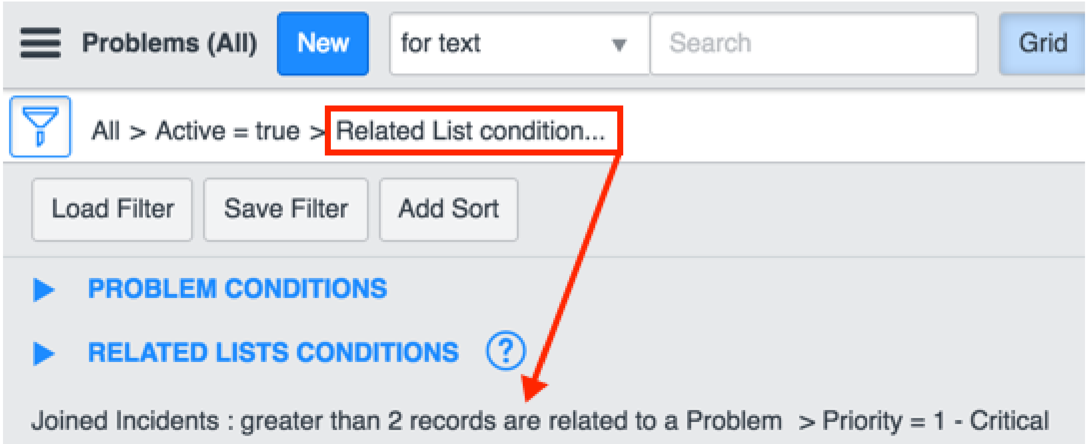


Note: You cannot perform a keyword search in a related table condition.

8. Select **Run** to execute the filter query.

Result
The breadcrumb displays **Related List condition...**. Open the filter to view the related list query statement.

List breadcrumb and the related list condition query statement



Note: If List v3 is disabled for a list with a related list condition query in the default filter, the filter edit function is disabled. Remove the related list condition to enable list filter editing.

OR conditions

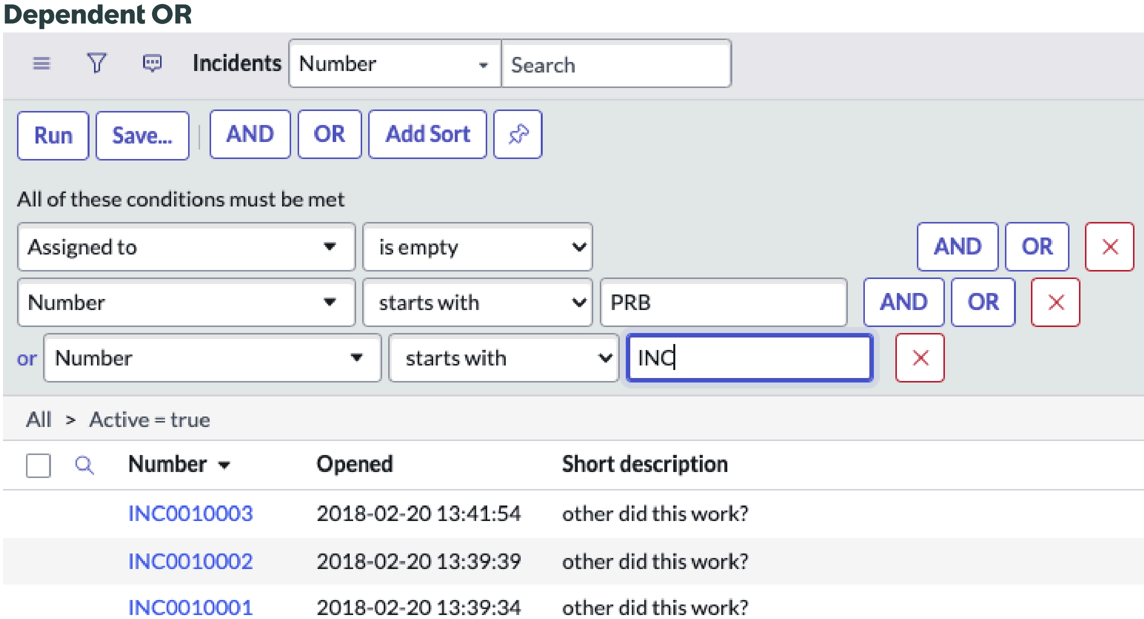
The condition builder uses two different types of OR conditions: top-level and dependent.

Using a dependent OR condition, you can specify alternative criteria to a single operation. Dependent OR conditions work in the manner A and (B or C). When you have an OR condition in the query, the magnifying glass is no longer available. The conditions you put in the quick search headers are ANDed together. Having an OR makes it ambiguous as to where the new condition should go, for example before the OR, or after the OR.

For example, to return a list of all unassigned problem and incident records from the Task table, create a filter with a dependent OR on the **Number** field.

[Assigned to] [is] [empty] AND **[Number] [begins with] [PRB]** OR **[Number] [begins with] [INC]**.

Dependent OR

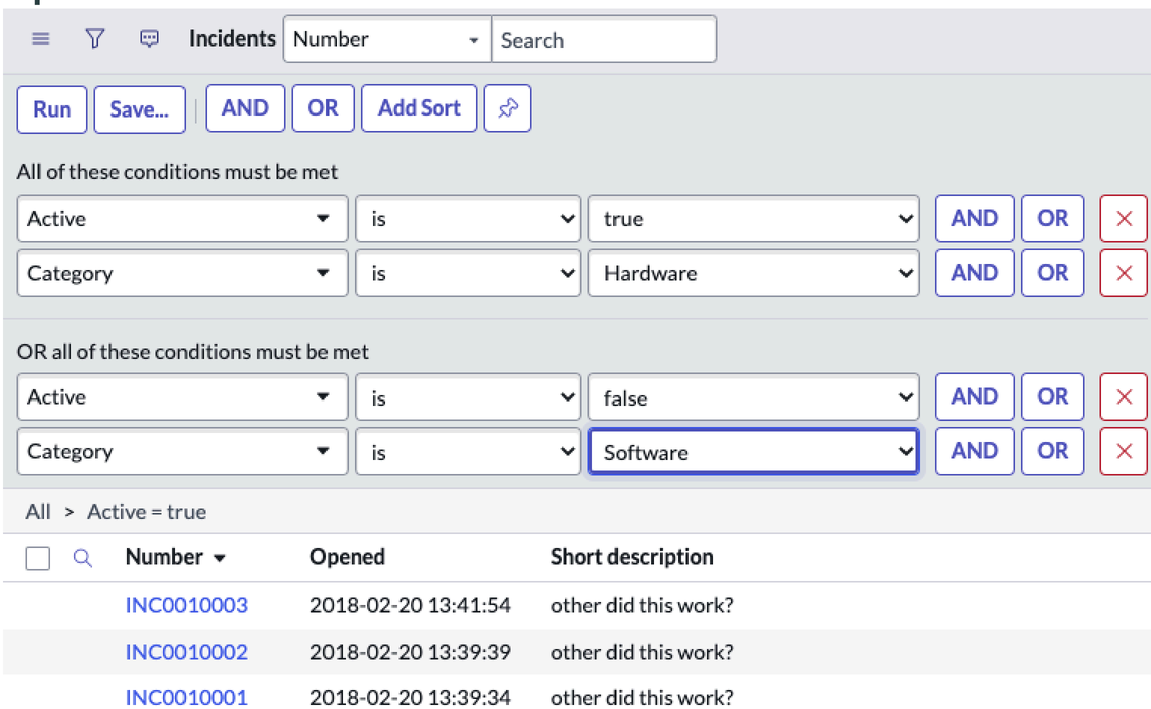


A top-level OR condition allows you to display the results of multiple filter criteria in a single list. Top level OR conditions work in the manner (A and B) or (C and D).

For example, to return a single list of all active incidents with a category of hardware, and all inactive incidents with a category of software, create two condition sets separated by a top-level OR condition.

- **[Active] [is] [true]** AND **[Category] [is] [Hardware]**
- Top level OR condition
- **[Active] [is] [false]** AND **[Category] [is] [Software]**

Top level OR



Top-level and dependent OR conditions can be used together. Filters using both types of OR conditions work in the manner (A or B) or (C or D). By mixing AND conditions with top-level and dependent OR conditions, you can create very specific filters.

Filter on multiple string values

For a string field, you can create a filter that searches for multiple values by creating a comma-delimited list.

Before you begin

Role required: admin

About this task

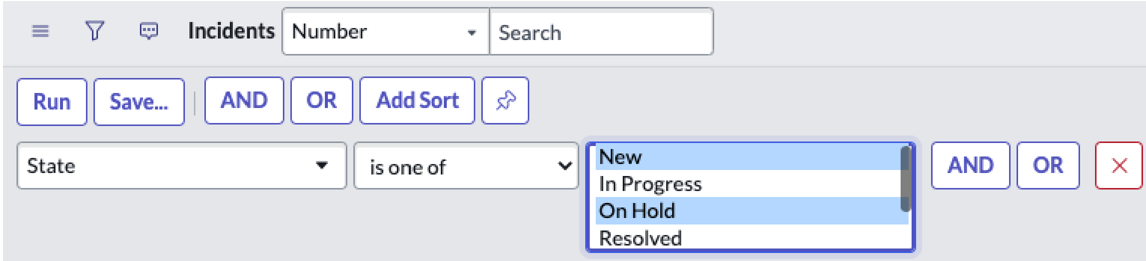
This feature enables administrators to copy and paste search criteria from a Microsoft Excel spreadsheet into a filter, for example.

Note: Do not use the **[is one of]** operator on fields that contain commas, as the query does not return the expected set of records. Instead, create a filter using multiple **[or]** statements.

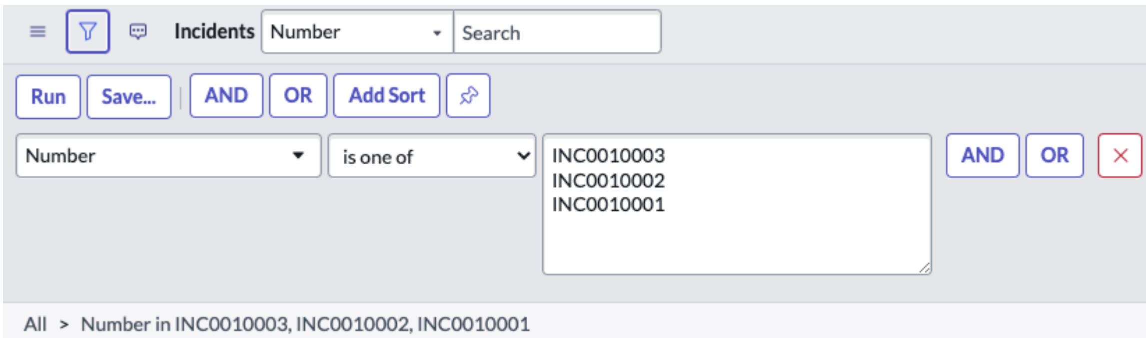
Procedure

1. Create the filter with the **[is one of]** or **[is not one of]** operator.
   Depending on the selected field, a choice list or a text box appears.
2. Select one or more of the options by using multiple selection key commands.

The choice list remains visible.

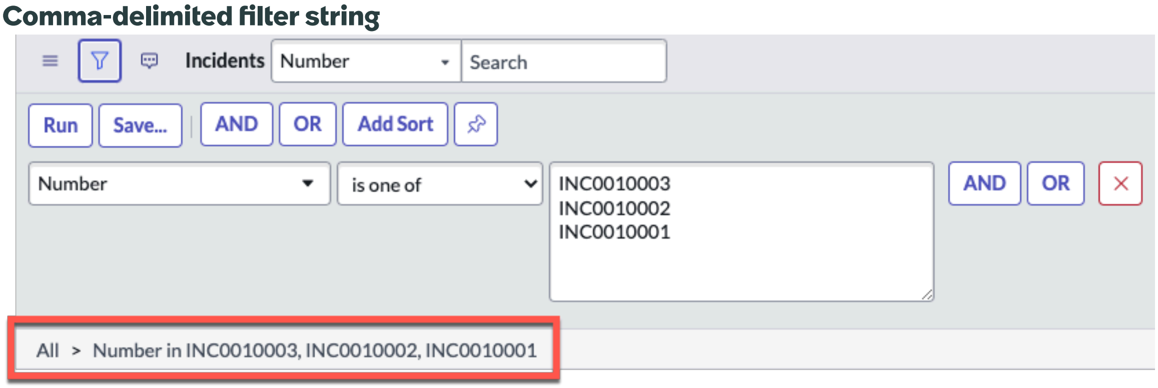


Alternatively, for text or number fields, type your search options. Separate the options by commas or put each option on a separate line, and do not enclose the selections in brackets.



3. Click **Run** to filter the list.
   The filter conditions appear as a comma-delimited string at the top of the results list.

Comma-delimited filter string



Dynamic operators

The dynamic operator, **is (dynamic)**, lists predefined dynamic filter options where the condition value is computed from a value in a reference field.

The following dynamic filter options are available by default.

Note: Administrators can create new dynamic filter options.

Default dynamic filter options

Target table of reference field	Option label	Description
User [sys_user]	Me	The reference field contains the current user.

Default dynamic filter options (continued)

Target table of reference field	Option label	Description
	One of My Assignments	The reference field contains the current user or someone for whom the current user is a delegate for assignments.
	One of My Approvals	The reference field contains the current user or someone for whom the current user is a delegate for approvals.
	Users With Roles	The reference field contains users that have any role.
Group [sys_user_group]	One of My Groups	The reference field contains a group to which the current user belongs.

The following table contains examples and descriptions of dynamic filter conditions.

Example of using the dynamic operator

Field	Operator	Dynamic filter option	Description
Caller	is (dynamic)	Me	Computes the value of Caller based on the current user viewing the list.
Assignment group	is (dynamic)	One of My Groups	Computes the value of Assignment group based on the current user viewing the list.

Save and use filters in a list view

Depending on your access rights, you may save filters for everyone, a user group, or yourself. You can apply saved filters and edit or delete them.

Before you begin

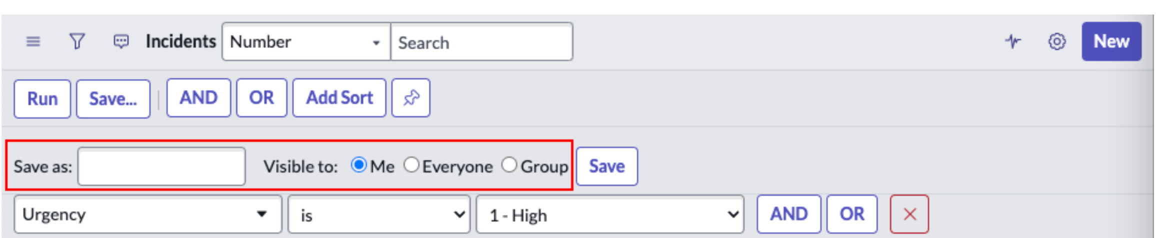
Role required: varies depending on action. See procedure.

Note: A new Create ACL allows all users to save filters by default. This ACL overrides any custom ACLs in place if administrators are restricting filter access. The new ACL gives all users access to the User field by default, and access to the Group field only if users have the filter_group role and are in the currently selected group.

Procedure

1. Navigate to a list and create or modify a filter as described in Create a filter in List.
2. Select **Save...**.

   Additional options for saving the filter display.



3. Enter a name for the filter in the **Save as:** field.
4. Select one of the following visibility options.

Option	Description
Me	Creates a personal filter, which only you can access. If you don’t have Write access to the User field, this option isn't available. See your administrator for more information.
Everyone	Creates a global filter, which all users can ac cess. This option is available to users with the filter_global role.
Group	Creates a group filter, which only members of the user group you select can access. This option is available to users with the filter_group role. If you don’t have Write access to the Group field, this option isn’t available. See your administrator for more information.

5. Select **Save**.
6. **Optional:** To use your saved filter, return to the list, select the List control menu (≡), and select your filter from the Filters submenu.
7. **Optional:** To edit or delete your personal filters, return to the list, select the List control menu (≡), and select **Edit personal filters** from the Filters menu.
   a. Review the Filters list and select the title of the filter to edit.

      If no results display, select the Show/hide filter icon ( ) and remove any applied filters.
   b. Update the filter title or add or remove conditions.
   c. **Optional:** To delete the filter, select **Delete** and confirm deletion.
   d. If you edited the filter, select **Update**.

Filter admin functions

Administrators can work with filters in the Filters table [sys_filter], including creating, editing, and deleting filters.

Administrators can also create scripted filters that cannot be created in the condition builder. Scripted filters required a knowledge of JavaScript. Scripted filters can be used to create additional dynamic filter options.

Create and edit filters

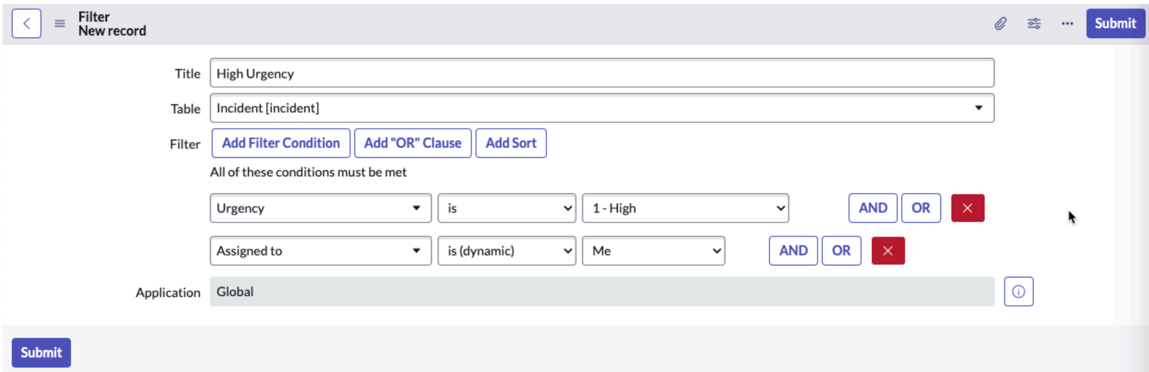
Set up and edit an admin-configured filter.

Before you begin
Role required: admin

Note: The following procedure is intended for administrators. Users with other role types should instead refer to Save and use filters in a list view.

Procedure

1. Navigate to **All** > **System Definition** > **Filters**.
2. To create a filter, select **New** and complete the following steps on the Filter record.
   a. Enter a **Title** and select the **Table**.
   b. Add filter conditions.
   c. Select **Submit**.



3. To edit a saved filter, select the filter from the Filters list to edit and complete the following steps on the Filter record.
   a. Modify the **Filter** conditions as necessary.
   b. Select **Update**.

Related topics

Create a filter in List

Delete filters

You can delete any saved filter, including global, group, or personal filters.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Definition** > **Filters**.
2. **Optional:** To see who created the filter and when, personalize the list to add the **created_by** and **created** fields to the list.
3. **Optional:** To see who has access to the filter, configure the list to add the **user**, **group**, or **domain** fields.
   Filters that are not assigned to a user or group are global.
4. Select the filter to delete.
5. Click **Delete** and confirm the deletion.

Related topics

Personal lists

Configure the list layout

Create scripted filters

The condition builder alone cannot create some filters, such as displaying a record set that depends on an unrelated table. If you know JavaScript, you can create JavaScript functions for use in advanced filters.

Before you begin

Role required: admin

Procedure

1. Create a new script include.
   a. Navigate to **All** > **System Definition** > **Script Includes**.
   b. Click **New**.
   c. Fill out the form, and then select **Submit**.
2. Open the script include and, in the **Script** field, create a JavaScript function that returns an array of `sys_ids`.
   - Ensure that the function uses the same name as the script include.
   - Ensure that the script include is **Active** and **Client callable**.
3. Call the JavaScript function from the condition builder.
   For more information, see GlideRecord queries and Script includes.

   Note: Grouped lists with a script include in the filter may cause slowness.

Example:
A company provides intensive care for a group of customers. To track these services, the service manager needs a high-level journal and links to all incidents that the customers raise.
The company creates an application, Intensive Care, and a table, [u_intensive_care]. While the table contains a reference field for the customer name, there is no direct link to the user table. Thus, the manager cannot set up an incident list filter using the condition builder for customers who are under intensive care.

The solution is to write a JavaScript function that uses a GlideRecord query to build an array of user sys_ids in the [u_intensive_care] table, as shown in the sample code below. Call the function from the condition builder in the Incident table (**[Caller] [is] [javascript:myFunction()]**).

```
function myFunction(){
    var arrUsers = [];
    var gr = new GlideRecord('u_intensive_care');
    gr.query();
    while(gr.next()){
        arrUsers.push(gr.u_customer.toString());
    }
    return arrUsers;
}
```

Create a dynamic filter option

Dynamic filter options enhance filtering by allowing users to run existing script includes or JavaScript against a reference field within condition builders and dynamic reference qualifiers.

Before you begin

Role required: admin

About this task

This task describes how to create a new dynamic filter option and an associated script include.

Dynamic filter options "objectize" script includes/JavaScript, enabling them to be reused in multiple condition builders and dynamic Reference qualifiers. This type of filter enables you to modify a script once and have the changes automatically take effect everywhere the dynamic filter option is used.

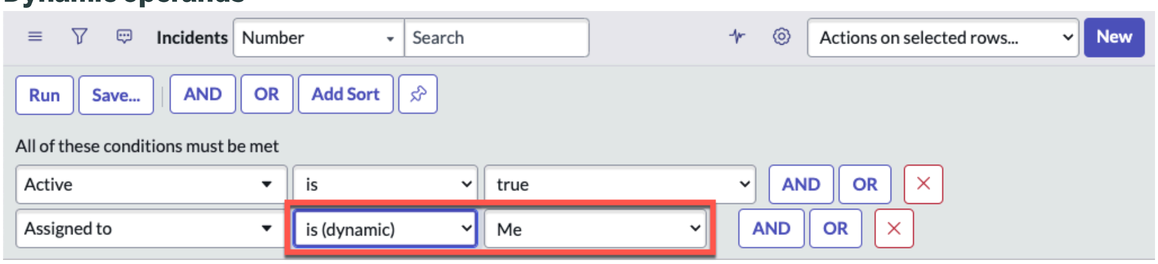
When defining a dynamic filter, you can:

- use an existing **is (dynamic)** dynamic filter option (condition builder only)
- use an existing dynamic filter option (OOB or custom)
- create a new dynamic filter option and script include/JavaScript

All condition builder dynamic filters use the **is (dynamic)** operator and call a dynamic filter option. In the following example, the pre-existing dynamic filter option **Me** is being used. For a list of available pre-existing condition builder dynamic filter options, see Dynamic operators.

Note: Dynamic filters are supported in scoped applications, but they are not supported in UI policy conditions.

Dynamic operands



Procedure

1. Create a scripted filter as a client-callable script include or business rule.
2. Navigate to **System Definition** > **Dynamic Filter Options**.
3. Select **New**.
4. Complete the form.

Dynamic filter options

Field	Description
Label	Enter a descriptive name for the dynamic filter option.
Script	Enter the name of the function you created, JavaScript (no script include needed), or the complete script include/business rule call, such as `new GlobalCanvasUtil().refQualPaTabs()`.
Field type	Select **Reference**.
Referenced table	Select the table to which this dynamic filter option applies.
Order	Enter a number to designate the placement of this dynamic filter option in the filter option choice list.
Roles	Select the role a user must have to see this option.
Active	Enable or disable the option.

Field	Description
Reference script	Optional. Select the client-callable script include or business rule you created for the scripted filter. If the **Script** field contains JavaScript, an encoded query, or the entire script include/business rule reference, this field can be empty.
Available for filter	Select this option to display the dynamic filter option as a filter breadcrumb.
Available for default	Select this option to allow dynamic filter option to be a default in a dictionary entry.
Available for ref qual	Select this option to allow dynamic filter option to be selected as a dynamic reference qualifier.

Note: Dynamic filters using Table API GET methods in scripts only work when using the same user configured in the basic authentication profile. To allow multiple users access to the dynamic filters, use global JavaScript APIs such as GlideRecord and GlideQuery APIs instead.

5. Select **Submit**.

Encoded query strings

An encoded query string represents a complex filter on a list of records.

Use encoded query strings to include a filter as part of a URL parameter, such as the Navigate to a record or module using a URL, or as a reference qualifier to restrict the data that is selectable for a reference field.

To construct an encoded query string, generate a list query and then copy it from the list filter. This is the preferred method because the alternative is to create the string manually.

In order to create an encoded query string manually, you need to know the relevant table and field names and operators.

Encoded query string examples

Title	Example
Referring to Boolean or string values	To create a query string on Boolean fields, use this syntax: field=true or field=false. For example, to return only active records in a table, use: `active=true` To create a query string with a field that has a specific string value, use this syntax: field=value. For example, to return incident records where the category is network, use: `category=network`
Referring to reference fields	To create a query string that refers to a reference field in another table, use this syntax: field_in_referenced_table=value. For example, to return users with the itil role in the **Assigned to** reference field on the Incident form, use: `Assigned_to.roles=itil`

Encoded query string examples (continued)

Title	Example
Referring to choice list values	To create a query string that refers to a choice list option, use the value of the choice list, not the label, with this syntax: choice list field=value. For example, to return configuration items (CIs) with the status **Installed**, which has a value of 1 in the choice list, use: `install_status=1` See Values to associate with choice labels for scripting to find the options for the values.
Using multiple conditions	To use two conditions joined by an AND operator, use the carat ^ symbol in this syntax: field1=value1^field2=value2. For example, to return all active users with the "itil" role, use: `active=true^roles=itil` To use two conditions joined by an OR operator, use the carat symbol with OR with this syntax: field1=value1^ORfield1=value2. For example, to return all users with either the "itil" or "admin" roles, use: `roles=itil^ORroles=admin` To use condition by the LIKE operator, use the syntax:fieldLIKEsubstring. For example, to return all users with roles containing the string "it", use: `rolesLIKEit` To use condition by an IN operator, use the syntax: fieldINvalue1,value2,value3. For example, to return all users with roles that are either "itil", "admin", or "user", use: `rolesINitil,admin,user` To add multiple conditions where one condition is a JavaScript function, use this syntax: javascript:'field=value^' + function(). The function must return a string that can be concatenated with the first string to produce a valid query string. For example, to return all active users and meet the conditions of the getGroupQualifier() function, use: `javascript:'active=true^' + getGroupQualifier()`
Listing values in order	To sort data by a specific field, use the ORDERBY condition with the following syntax: field1=value^ORDERBYfield2. For example, to return the days of the week in order from the Day of the Week [sys_cal_unit] table, use: `unit_name=day^ORDERBYvalue` In the Day of the Week table, unit_name is the field that specifies day, week, or month, and value is a numerical value for each day from 1 (Monday) to 7 (Sunday). The query string returns a list of the days of the week in order from the lowest value, which represents Monday, to the largest value, which represents Sunday.

Encoded query string examples (continued)

Title	Example
	Note: Reference qualifiers do not support the ORDERBY condition. In reference qualifiers, you can sort the reference lookup list by using standard list controls. To specify the order of an auto-complete list for a reference field, use the ref_ac_order_by dictionary attribute.
Including a related list query	At the end of the query statement, enclose the related list information with ^RLQUERY and ^ENDRLQUERY and the quantity. For example, in a query on the Problem table that includes problems with at least one related incident, use: `^RLQUERYincident.problem_id,>=1^ENDRLQUERY` You can also specify conditions on the related table. For example, to include the condition that at least one of the related incidents is critical priority, use: `^RLQUERYincident.problem_id,>=1,priority=1^ENDRLQUERY` **Note:** Related list queries must be enabled in **System Properties List v3**. Select the **Allow related list query conditions to be added through the filter** check box to enable it. You can build a related list query for a list that uses List v2, however, the filter conditions cannot be modified until you removed the related list condition in the breadcrumb.
Including a search term query	To include a search term in a query, use the 123TEXTQUERY321 reserved variable. For example, to return results with the 'email' search term, use this encoded query string. `123TEXTQUERY321=email`
Including a text index group query	To include a text index group in a query, use the 123TEXTINDEXGROUP321 reserved variable. For example, to return results within the portal_index_group text index group in the Text Index Groups [ts_index_group] table, use this encoded query string. `123TEXTINDEXGROUP321=portal_index_group`

Generate an encoded query string through a filter

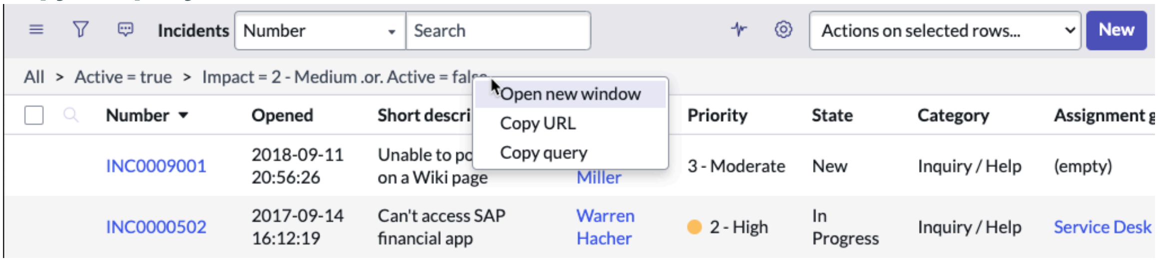
You can generate an encoded query string through a filter on any list and paste the string into a URL query or a reference qualifier.

Before you begin
Role required: none

Procedure

1. Open a list of records.
2. Construct the filter.
3. Click **Run**.
4. Right-click the end of the filter breadcrumb and select **Copy query** from the context menu.

Copy the query from the breadcrumb



If you are in split mode in List v3, right-click the blue filter text in the left pane.

5. Copy the query to your system clipboard.
6. Use the query string to Navigate to a record or module using a URL or an Reference qualifiers. When you use the CONTAINS operator on a list filter, the system translates the filter to a LIKE query. For example, if you filter for active records with numbers that contain 123, the URL is `https://InstanceName.service-now.com/incident_list.do?sysparm_query=active%3Dtrue%5EGOTOnumberLIKE123`.

Related topics

Reference qualifiers

Navigate to a record or module using a URL

Methods for list edits

Users can edit data in lists using various methods.

Quick edit functions

To edit a record in a list using quick edit functions, right-click a field and select the appropriate function.

Assign to me

For records that use assignments, places the name of the logged-in user into the **Assigned to** field.

Approve

For records that use approvals, changes the approval state of the record to **Approved**.

Reject

For records that use approvals, changes the approval state of the record to **Rejected**.

Assign tag

For records you want to track based on a user-defined label, lets you select an existing tag or add a tag.

List editor

The list editor lets you edit field values in a list without opening a form. Administrators can configure the list editor. By default, list editing is disabled for some tables. Fields of certain types cannot be edited from lists.

Multiple record edits

You can edit more than one record at the same time using the list editor or an editing form.

Use the list editor

The list editor enables you to edit field values directly from a list without navigating to a form.

https://player.vimeo.com/video/995178051?badge=0&autopause=0&player_id=0&app_id=58479

Before you begin
Role required: none

About this task
The list editor lets you edit field values in a list without opening a form. Administrators can configure the list editor. By default, list editing is disabled for some tables. Fields of certain types cannot be edited from lists.

Before the list editor opens, access rights to edit the field are verified. If this process takes longer than expected, a loading indicator appears. If the field has a dependency relationship (for example, Category and Subcategory), then a composite editor opens to enable editing of all dependent fields. You must have permissions to edit all dependent fields to use the list editor.

Procedure

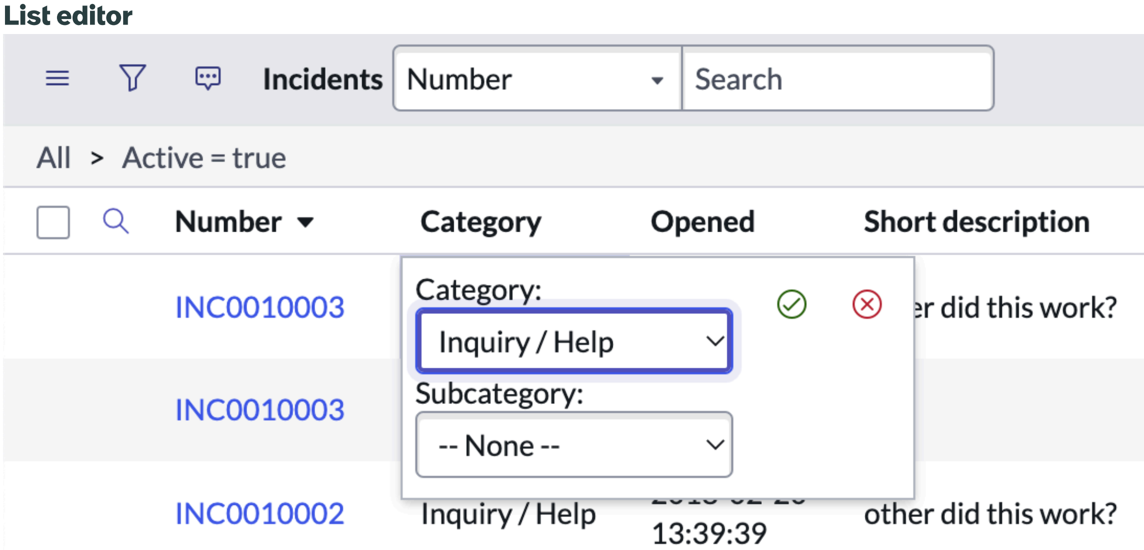
1. Double-click in an empty area of the field.
   The appropriate editor for the field type opens.

   Note: You can enable single-click editing from the list personalization interface. You can also use keyboard navigation to access the list editor.

2. Enter the appropriate values.
   To clear a list field configuration, refresh your browser session by reloading the page, and the original list field configuration returns.
3. Save the records by performing the appropriate action for your list version.

   Select the save icon (). Select the cancel icon () or press the Escape key to retain the original value.

   List editor

4. To use keyboard navigation, press the Tab key until the first field in the list is selected, and then select the field to edit in one of the following ways.
   - Move right: Tab or the Right Arrow key.
   - Move left: Shift + Tab or the Left Arrow key.
   - Move down: the Down Arrow key.
   - Move up: the Up Arrow key.

   To select multiple fields in the same column, hold Shift and press the Down Arrow or the Up Arrow key.
5. Press the Enter key to open the list editor.
6. Enter a new value.
   To add another line in a multi-line text field, press Shift + Enter.
7. Save or cancel your changes in one of the following ways:
   - Press the Enter key. The new value is saved and the field below the edited field becomes selected.
   - Press the Tab key. If the list is configured to save immediately, the new value is saved. If the list is configured to save data by rows, an indicator appears beside the value and the list editor opens for the next field. The row is saved only when you navigate away from the row or select the check mark icon beside the row.
   - Press Ctrl + Enter keys. If the list is configured to save immediately, the new value is saved. If the list is configured to save data by rows, an indicator appears beside the value and the current field remains selected.
   - Press the Esc key. The list editor closes without saving changes and the field remains selected.

   Note: Certain browsers use different key combinations to edit certain field values. For example, to edit a list using Chrome, press the Spacebar.

Edit multiple records in a list using the list editor

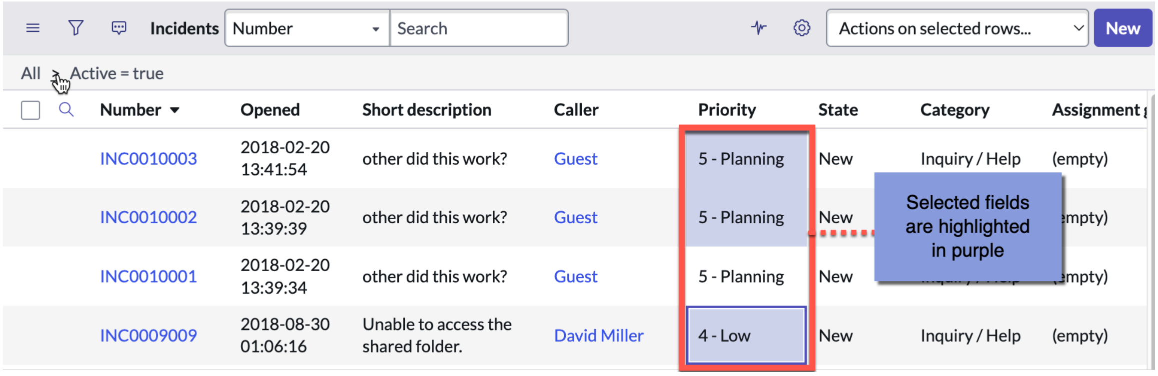
You can edit multiple records at the same time using the list editor. If you want to update a single field on multiple records to have the same value, the list editor is the quickest method.

Before you begin
Role required: none

Procedure

1. Select the records that you want to edit by performing one of the following actions.
   - To select multiple consecutive fields, hold Shift and drag in the desired fields, or select a cell and then press Shift + Up Arrow or Shift + Down Arrow.
   - To select multiple non-consecutive fields, hold Ctrl and click on each desired field individually (On Mac, use Cmd and select instead).
2. Open the list editor by double-clicking (or clicking, depending on setup) in an empty area of the field.
   The number of selected rows that you're editing is indicated. If any rows can't be edited due to security constraints, that is indicated.

Selected fields are highlighted in blue



3. Enter the appropriate values and select **Save**.

Edit multiple records in a list using an editing form

You can edit multiple records at the same time using an editing form. If you want to edit multiple fields or fields that don't appear in the list view, use an editing form.

Before you begin

Role required: list_updater

Depending on your ACL settings, some of these options might not be available even with the right role. For example, if the list is task.list and users try to select multiple incident records from that task list, the form uses the task form and not the incident form so ACLs on task are enforced instead. Since users would not have access to tasks specifically, the form wouldn't show any fields.

Procedure

1. Perform one of the following actions.

Option	Description
Update selected records	**a.** Select the check box by each row that you want to edit. **b.** Select and hold (or right-click) any column header and select **Update Selected**.
Update all records in the list	**a.** Filter the list so it contains only the rows you want to edit. **b.** Select and hold (or right-click) any column header and select **Update All**.

2. Enter appropriate values in any of the fields and select **Update** to save your changes in all selected records.

Personal lists

You can create personal lists to customize which columns appear and the order in which they appear. Personal lists modify a specific list view according to your individual preferences.

Personal list customizations don't affect what other users see in their lists. Administrators can manage the personal lists function.

Related topics

View management

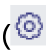
Personalize a list

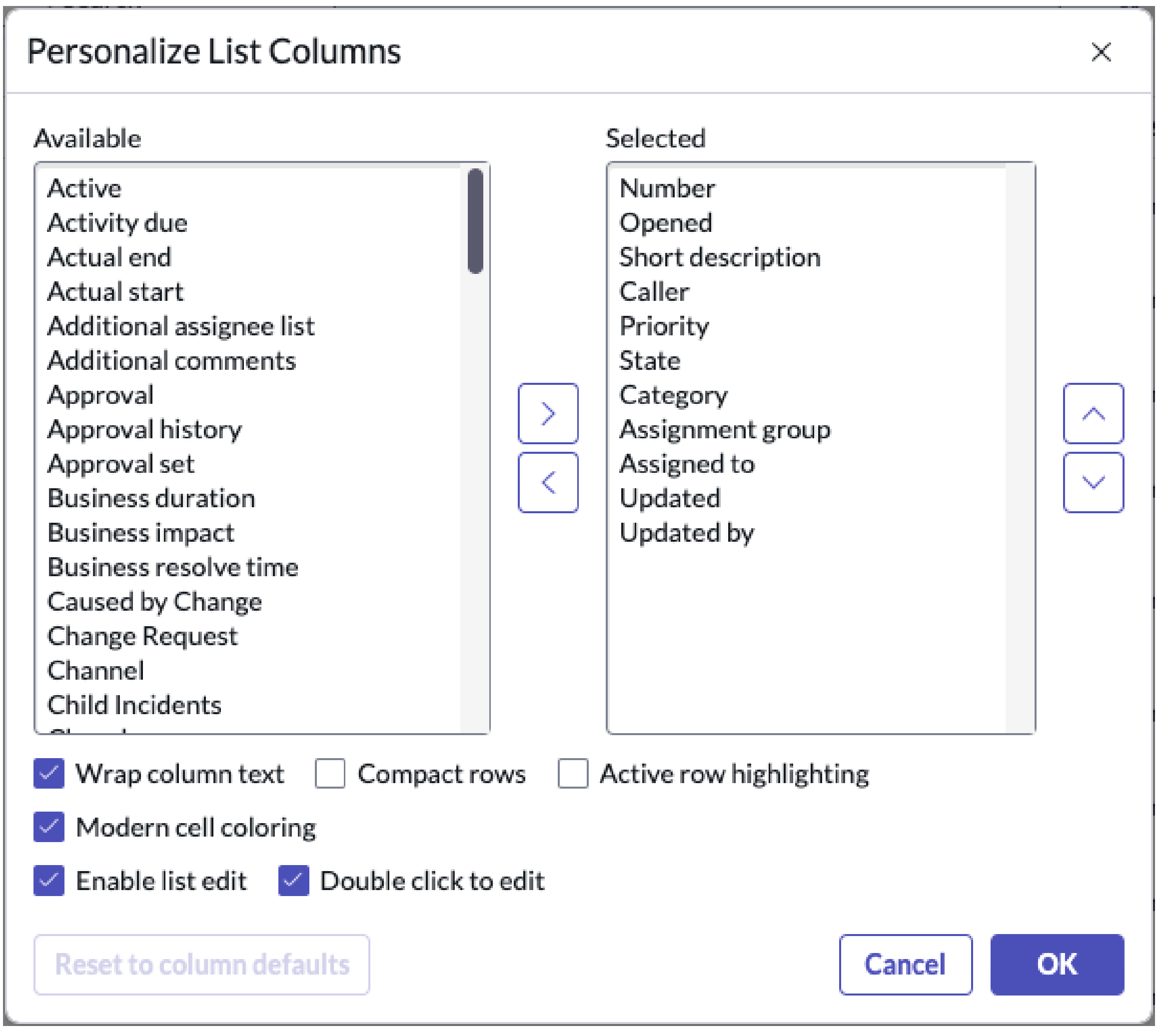
You can personalize a specific list view based on your individual preferences.

Before you begin

Role required: personalize_list or admin

Procedure

1. Open the list.
2. Select the personalize list icon () in the right corner.
3. Select the columns and the desired order.



Note:

- Values in the first column appear as links. If the first column isn't a reference field, the link opens the record from the list, as expected. If the first column is a reference field, the link opens the record from the referenced table. This behavior can be confusing. For this reason, avoid using a reference field as the first column.
- If an inactive field is removed from an admin-configured default view, any personal lists will reset to follow the default view, thus removing the inactive field from the personal list.

4. Select display options.

Note: These options apply to all lists, not just the view you're personalizing.

Option	Description
Display long text on more than one line	Select the **Wrap column text** check box. Clear the check box to display text on one line. In Core UI, this option is also available in the **Lists** section of the system settings.
Condense the vertical space between rows	Select the **Compact rows** check box. Clear the check box to use standard row spacing.
Highlight list rows as the cursor passes over them	Select the **Active row highlighting** check box. Clear the check box to restore the static, alter nate row highlighting.
Use updated field status indicators	Select the **Modern cell coloring** check box. In Core UI, this option is also available in the **Lists** section of the system settings.

5. Select list editing options (requires you to configure the list editor).

Note: These options apply to all lists, not just the view you're personalizing.

Option	Description
Allow the list editor to open for the list	Select the **Enable list edit** check box. Clear the check box to prevent the list editor from opening for the list.
Open the list editor with a double-click	Select the **Double click to edit** check box. Clear the check box to open the list editor us ing a single select.

6. Select **OK**.
   The list reloads to show the changes.

What to do next

To reset a list to the default layout, select the personalize list icon and select the **Reset to column defaults** button.

Related topics

Configure items on forms or in lists using a list collector

Reference field type

List editor administration

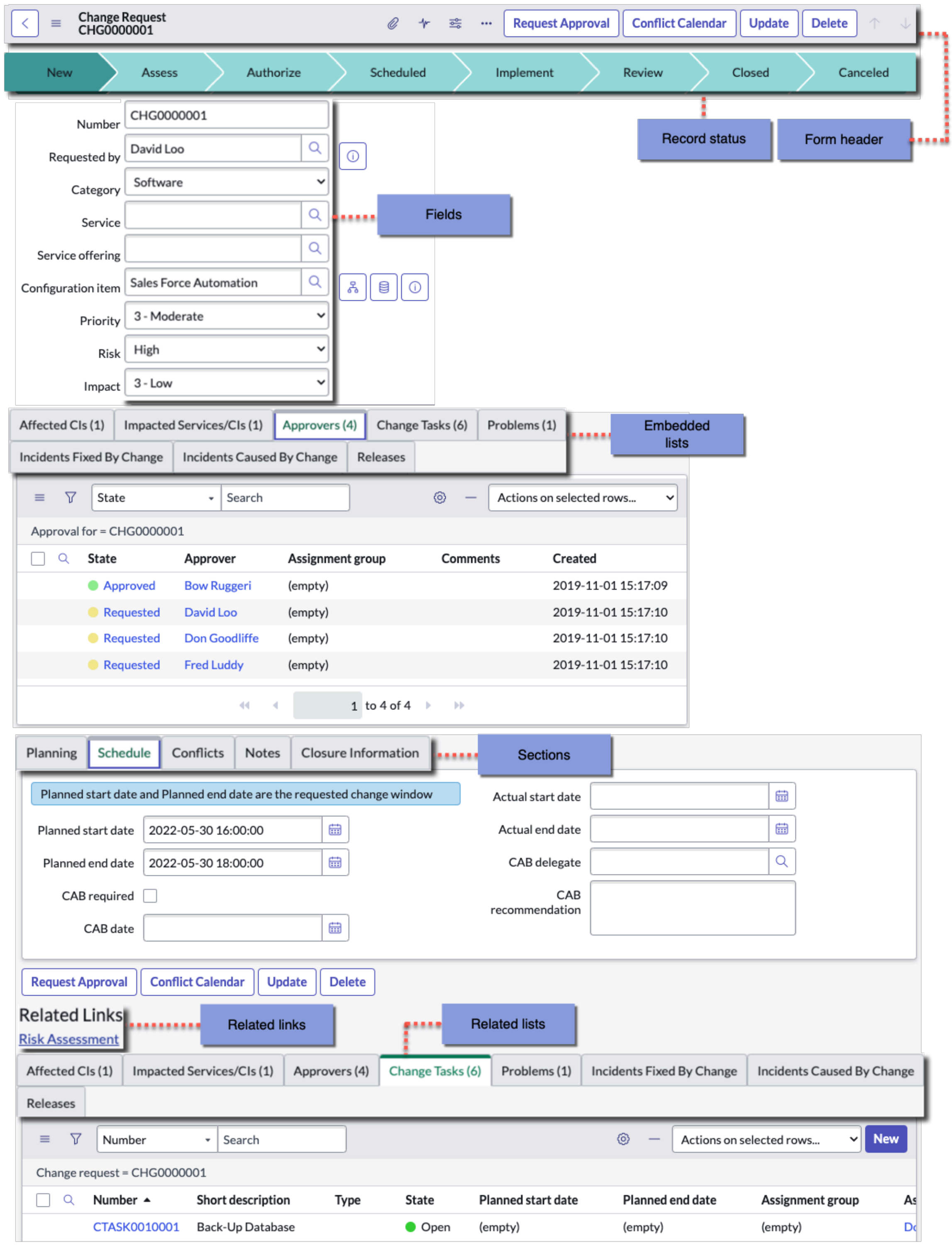
Forms in the classic environment

A form displays information from one record in a data table.

Note: This content pertains to the classic environment, which refers to working in lists of records and on record forms directly, not in the Configurable Workspace interface. You can work in the classic environment with Next Experience active, or with it inactive, which is referred to as Core UI (formerly known as UI16).

The specific information on a form depends on the type of record displayed. Users can view and edit records in forms. Administrators can configure what appears on forms.

Form elements



Form element descriptions

Form element	Function
Form header	Provides navigation tools and actions related to the record.
Fields	Stores specific data about the record.

Form element descriptions (continued)

Form element	Function
Sections	Groups related information on the form. To enable or turn off form tabs, select the gear icon in the banner frame ( ) and toggle the **Tabbed forms** option. Users can select icons to collapse ( ) or expand ( ) form sections when tabbed forms are turned off. When you collapse or expand a form section, your selection is saved as a user preference. The next time you access a record that uses the same form, the same sections are collapsed or expanded.
Related links	Provides access to additional functions based on record type and system setup. Administrators can add related links to forms using UI actions.
Related lists	Displays records in other tables that have relationships to the current record.
Embedded lists	Users can edit related lists without navigating away from the form. Changes are saved when the form is saved.
Response time indicator	Appears at the bottom of some forms to indicate the processing time required to display the form.

Related topics

UI actions

Form headers for UI versions

Core UI and UI15 each have a different form header that offers different navigation icons.

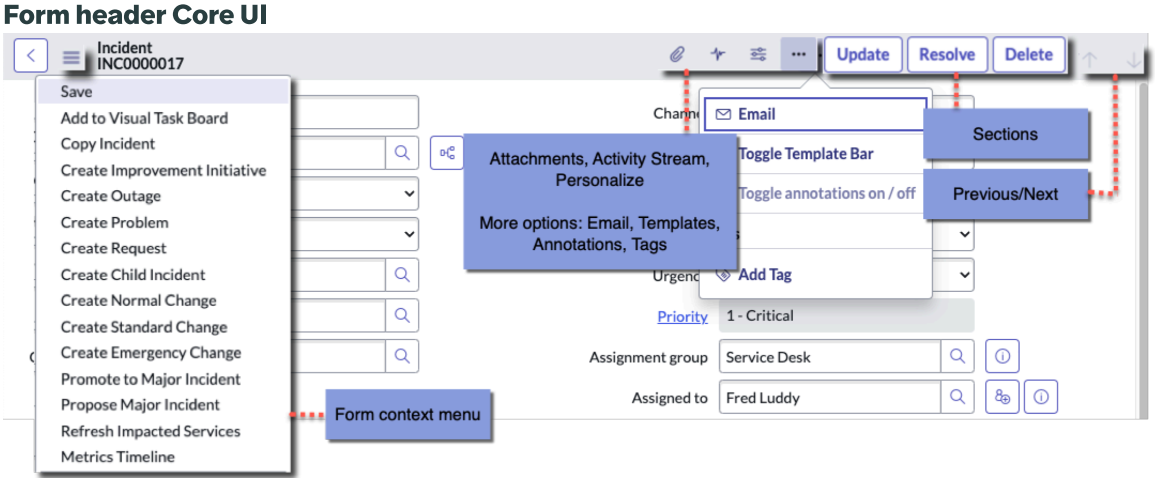
Learn about form header navigation by selecting the form header topic that corresponds to the UI version your organization uses.

Core UI form header

The form header displays the title of the form (table) and provides several controls.

The Core UI form header includes the following controls.

Form header Core UI



Core UI form header controls

Control	Icon	Description
Back		Navigates to the previously viewed page without saving changes.
Form context menu		Appears when a user clicks the menu icon beside the form title or right-clicks the form header. This menu is also called a right-click menu.
Attachments		Allows users to view and add attachments to the record. For more information, see Add and manage attachments.
Show activity stream		Moves focus to the journal entry section of the form. If the journal fields are not on the form, the activity stream opens in a fly-out window.
Personalize form		Opens the form personalization menu. For more information, see Personalize a form.
More options		
Email		Opens an email window.
Template bar		Opens a bar at the bottom of the form and lists available templates.
Annotations		Displays on-form annotations. For more information, see Administering form annotations.
Tags		Displays the option to create custom tags and categorize documents. For more information, see Tags.
Remaining controls		
Submit or Update		Saves changes and returns to the previously viewed page.
Related actions		Provides standard actions in the form header for some tables, such as Close Incident or Resolve Incident in incident.
Delete		Deletes the record from the list.
Previous and Next		Opens the previous and next record on the list from which the record was accessed.

Form context menu

The form context menu provides controls based on the table and user access rights. Administrators can customize some of the options available on a context menu using UI actions.

Access the form context menu by clicking an icon beside the form title or by right-clicking the form header ( ).

The form context menu includes the following options.

Note: Some of the options displayed on the form context menu depend on the user role, installed applications, and version of the UI.

Form context menu options

Option	Description
Save	Saves changes without leaving the form view.
Related actions	Provides standard actions in the form context menu for some tables, such as **Add to Visual Task Board** or **Create Change** in incident.
Insert	Saves the data as a new record and returns to the previously viewed page.
Insert and Stay	Saves and displays the new record. For more information about inserting records, see Edit a form.
Configure	Provides administrative functions, such as configuring forms.
Export	Exports data to PDF. Administrators can also export to XML. For more information, see Export data.
View	Changes fields to a predefined layout. Switching views submits the form, which saves all changes. Administrators can customize views.
Create Favorite	(Core UI only) Adds the current record to your favorites list, represented by a star icon on the tab.
Copy URL	Copies to the clipboard the URL for the form view of the record. Follow browser instructions if browser security measures restrict this function.
Copy sys_id	Administrators only. Copies to the clipboard the sys_id of the record. Follow browser instructions if browser security measures restrict this function.
Show XML	Administrators only. Displays record data in XML format.
History	Administrators only. Displays audit history for the record, which must be enabled for the table. For more information, see Enable auditing for a table.
Reload Form	Reloads information from the database to refresh the form view.

Related topics

UI actions

Form fields

A field represents an individual item of data on a record.

Users can view and modify field data on a form. For more detailed information, see Field administration.

Field status indicators

Indicators are used on some fields to denote a special field type.

A field status indicator is a colored asterisk that may appear to the left of mandatory fields. Field status indicators change colors to represent different states of mandatory fields.

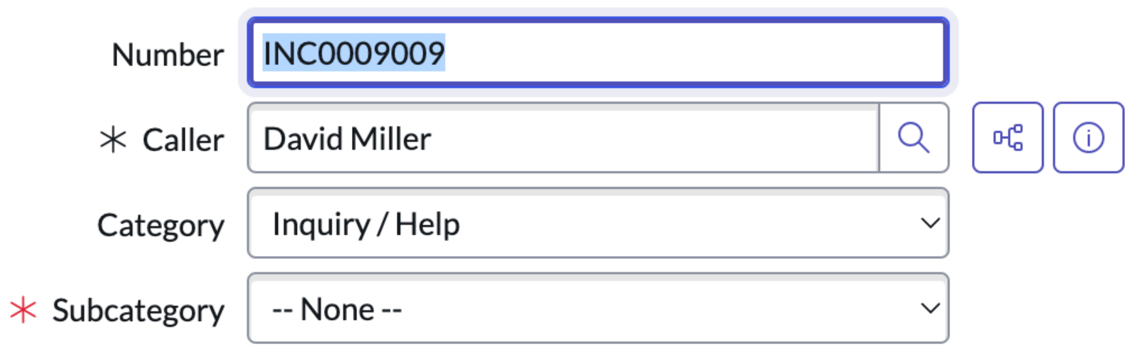
Field status indicators

Indicator	Description
Unpopulated	Required field is empty. The user must enter a value to save the form. Default color is red.

Field status indicators (continued)

Indicator	Description
Populated — saved Populated — unsaved	Required field contains a value that was saved or must be saved. Default color is gray.

Core UI field status indicators



Related topics

Define field styles

Navigate to a record or module using a URL

Users can navigate to a record or module directly by using a URL. This topic explains the URL schema by which the system renders pages.

Before you begin

Role required: admin

About this task

Note: The `sysparm_query` page parameter behaves differently for a list versus a form.

- List: Returns records that match the query conditions.
- Form (with sys_id=-1 specified): Applies the values to the new record.

Procedure

1. To access the unique, secure web address for each instance, enter the default format: `https://<instancename>.service-now.com`.

   Note: To display a custom base URL in email notifications, set the *`glide.email.override.url`* property. For more information, see Advanced email properties.

2. For other URL displays, enter one of the following schemas:

Action	Schema
To display the page in the	`nav_to.do?uri=`

Action	Schema
standard interface, with the banner frame on top and the application navigator on the left	
To open a form, list, UI page, or other page	`<page name>.do?`
To view a list	`<table name>_list.do`
To open a record in form view	`<sys_id>`
To create a new record	`sys_id` is -1.
To specify a query, view, redirection page, and more.	`<page parameters>` Parameters include the following examples: ◦ `sysparm_view=ess`: Specifies a view (ess). ◦ `sysparm_query=number=INC00040`: Specifies a query (number is INC00040). ◦ `sysparm_query=priority=2^active=true`: Specifies a complex query with two terms (priority is 2 and active is true). ◦ `sysparm_query=priority=2^active=true^EQ^GROUPBYcategory`: Groups query results (by category). ◦ `sysparm_order=number`: Specifies the field by which to sort (number). ◦ `sysparm_order_direction=desc`: Specifies a sort order (descending). ◦ `sysparm_force_row_count=5`: Limits the maximum number of results (5 records). ◦ `sysparm_result_view=viewname`: Specifies the view for search results.
To specify a file format. (CSV, XML, PDF, or UNL (Unload))	`%26CSV`
To separate page parameters	&

Action	Schema
To build multiple term queries or specify multiple field values	^(carat)

Related topics

Page navigation by URL

Enable tiny URL support

The default URLs by which the system renders pages may exceed the character limit of some browsers, resulting in an error message. You can enable tiny URL support, which generates shortened internal URLs, to help prevent this error.

Before you begin

Role required: admin

About this task

The Tiny URL Support plugin is activated and enabled automatically. Confirm that this plugin is enabled if you receive a failure to open page error during routine operations in the ServiceNow AI Platform.

Note: The system doesn't convert all URLs to tiny URLs. Only some URLs the system generates as redirects are converted. For example, the URL that the browser generates when a user opens a record isn't converted to a tiny URL.

Procedure

1. Navigate to **All** > **System Properties** > **System**.
2. Select the **Use tiny URLs when a redirect URL becomes too large. This ensures that URLs that are too large for IE (greater than 2083) are not used. Instead, they are converted to a tiny URL to work around the IE issue.** (`glide.use_tiny_urls` property).
3. **Optional:** Update the value in the **Minimum length of a redirect URL that is turned into a tiny URL (default=1024)** (`glide.tiny_url_min_length` property), if desired.
4. Select **Save**.

Examples of navigating by URL

A list of example URLs that demonstrate ways to open pages in the ServiceNow application.

Open a form with preset values

Schema: `https://<baseURL>/nav_to.do?uri=<table name>.do?sys_id=-1&sysparm_query=<field=value>`

Description	Example
Opens a new Incident	`https://<instance name>.service-now.com/nav_to.do?uri=incident.do?sys_id=-1&sysparm_query=priority=1^incident_state=3`

Description	Example
form in the standard interface with a priority of **1** and an incident state of **Awaiting Problem**.	
You can also use JavaScript to access GlideSystem methods. The following example creates the same type of incident as above, and also populates the caller ID with the current user ID.	`https://<instance name>.service-now.com/nav_to.do?uri=incident.do?sys_id=-1&sysparm_query=priority=1^incident_state=3^caller_id=java`

Open an existing record with preset values

Schema: `https://<baseURL>/nav_to.do?uri=<table name>.do?sys_id=<sys_id>`

Description	Example
Opens the incident record with the sys_id `966c9a414f5593001f6eac118110c75c`	`https://<instance name>.service-now.com/incident.do?sys_id=966c9a414f5593001f6eac118110c75c`
Opens the incident record with the number `INC0010001`	`https://<instance name>.service-now.com/incident.do?sysparm_query=number=INC0010001`

View a list of incidents

Schemas for the following examples:

- `https://<baseURL>/nav_to.do?uri=<table name>_list.do`
- `https://<baseURL>/<table name>_list.do`

Description	Example
Opens a list of all incidents with (example 1) the navigation frame.	https://<instance name>.service-now.com/nav_to.do?uri=incident_list.do
Opens a list of all incidents without the navigation frame.	https://<instance name>.service-now.com/incident_list.do

View a list of attachments

Schema: https://<baseURL>/nav_to.do?uri=<table name>_list.do

Description	Example
Opens the Attachments table in list view.	https://<instance name>.service-now.com/sys_attachment_list.do

View a filtered list

Schema: https://<baseURL>/nav_to.do?uri=<table name>_list.do?sysparm_query=<field=value>

Description	Example
Returns a list of active incidents with high escalation in the standard interface.	https://<instance name>.service-now.com/nav_to.do?uri=incident_list.do?sysparm_query=active=true^escalation=2

Return a file

Schema: https://<baseURL>/nav_to.do?uri=<table name>_list.do?sysparm_<sysparmTypeOrField=value>&CSV

Description	Example
Returns a comma-separated value file of records in the Incident table that meet the query conditions.	https://<instance name>.service-now.com/nav_to.do?uri=incident_list.do?sysparm_query=active=false&CSV

Configure the activity filter

The activity formatter contains a filter that lets users select which of the available fields to show in the activity list.

Before you begin
Role required: none

About this task
All fields on the activity list display in alphabetical order by default. You can change the order that fields appear on the form by using the **Configure available fields** option in the activity formatter.

Use the activity filter

Use the activity filter to show or hide fields that you want to display activity.

Before you begin
Role required: admin

About this task
The activity formatter contains a filter that enables you select which of the available fields to show in the activity list.

All fields on the activity list display in alphabetical order by default. You can change the order that fields appear on the form by using the **Configure available fields** option in the activity formatter.

Procedure

1. Open the filter by clicking the activity filter icon ( ) in the **Activity** header.
2. Select the fields for which you want to display activity.
   Fields are added or removed dynamically as the selection is made.
3. Click the activity filter icon again to close the filter.

Embedded lists or Related lists

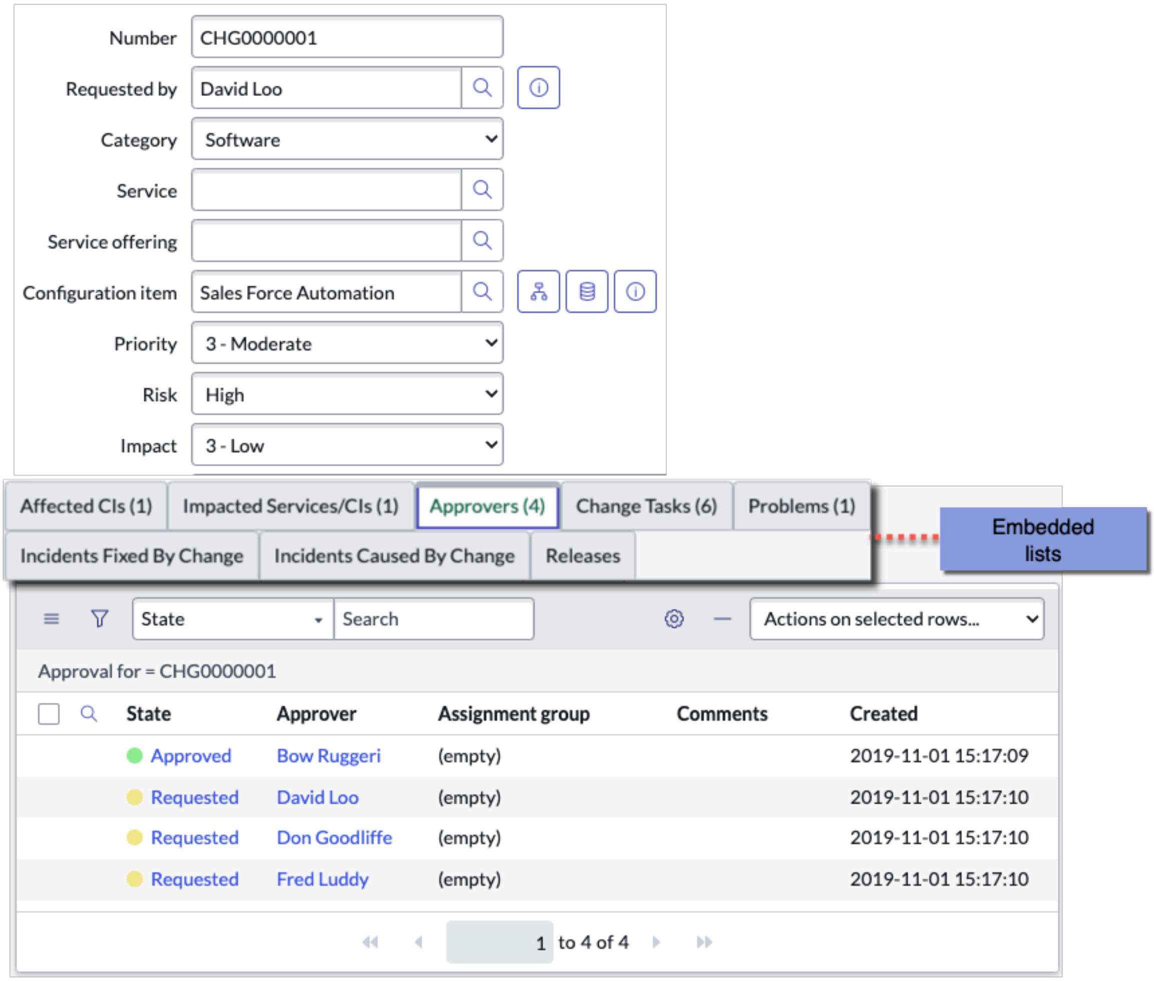
Some forms may show related lists as embedded. Changes to embedded lists are saved when the form is saved.

Use these controls to work with an embedded list. For more information, see Edit a form.

Working with embedded lists

Task	Icon	Action
Expand an embedded list		Click the expand icon in the list header.
Collapse an embedded list		Click the collapse icon in the list header.
Insert a new row		Select **Add** and identify the record you want to add to the embedded list.
Edit a row		Double-click in an empty area of that field. See Use the list editor.
Delete a row		Click the delete icon beside the row. New rows are removed immediately. Existing rows are designated for deletion when the record is saved. To clear this designation, click the delete icon again.

Embedded list



Related lists

Related lists appear on forms and show records in tables that have relationships to the current record.

Users can view and modify information in related lists like any other list. Administrators can configure related lists to appear on forms and in hierarchical lists by configuring a form. Related lists do not have a size limit.

Note:

Creating a record using a related list applies the list filter to the record and auto-populates the related field. This behavior applies to reference, string, Boolean, and menu fields when the criteria in the filter is set to **is** or **=**.

Related topics

Configure form layout

Lists in the classic environment

Select or create records in a related list

When a form contains a related list, such as the **Incidents** related list in the problem form, you can select existing records or add new ones in the related list.

Before you begin

Role required: none

Procedure

1. Open the record to work with records in a related list, such as a problem record.
2. Locate the related list, for example, **Incidents**.
3. To select existing records, complete the following steps.
    a. Click **Edit**.
    b. Using the slushbucket, select the records to associate with the current record.
    When you select a record, information about it appears below the **Collection** list to help you identify the record to select.
    c. Click **Save**.
4. To create a new related record, complete the following steps.
    a. Click **New**.
    A new form for the related table opens, for example, the incident form.
    b. Complete the form and click **Submit**.
    The new record is added to the related table and to the related list of the record.

Configure when a related list loads

If there are many related lists on a form or many records in the related lists, the form may load slowly. You can improve form response times by configuring related lists to load manually, on demand, or automatically, after the rest of the form loads.

Before you begin

Role required: none

About this task

Procedure

1. Navigate to **User Menu** > **Preferences** > **Display**.
2. Select one of the following options from the **Loads related lists in classic forms** menu.

Option	Description
With the Form	Related lists load when you open the form, which is the default setting. When selected, it sets the value of the glide.ui.related_list_timing user preference to `default`.
After Form Loads	Related lists load after the rest of the form loads. When selected, it sets the value of the glide.ui.related_list_timing user preference to `deferred`.
On-demand	Related lists load on demand. When this option is selected, a **Load Related Lists** button

Option	Description
	appears at the bottom of each form that con tains related lists. Select the button to load re lated lists. When selected, it sets the value of the glide.ui .related_list_timing user preference to `ondemand`.

3. Close the display preferences menu.

Create a default filter for a related list

Create a default filter for the records that load when your related list displays.

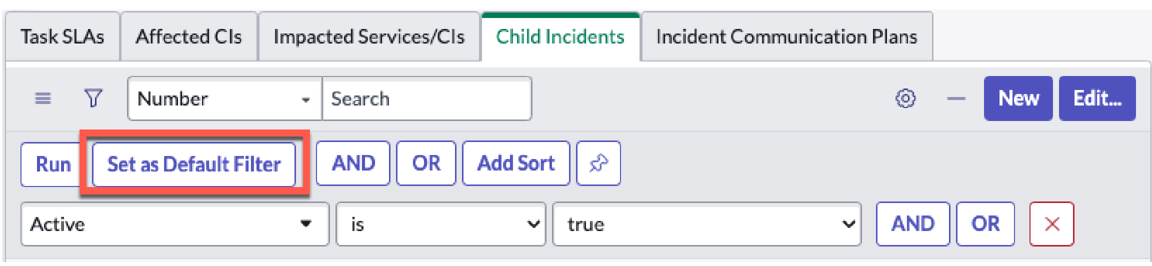
Before you begin
Role required: admin

About this task

Note: This functionality is not supported in List v3 related lists.

Procedure

1. Navigate to the related list (example, **Incidents** on a problem record).
2. Create the desired filter using the condition builder (example, **[Active] [is] [true]**).



3. Click **Set as Default Filter**.

Configure the edit option

You can configure the edit option that allows users to add records to related lists in forms.

Before you begin
Role required: admin

About this task
The **Edit** button is available for related lists that represent many-to-many and one-to-many relationships. Defined related lists may not have an **Edit** button, as related records are added to these lists automatically based on the relationship between the records.

Procedure

1. Navigate to the related list, such as the **Incidents** related list on a problem record.
2. Perform the appropriate action for the list version.

Version	Action
List v2	Right-click any column heading and select **Configure** > **List Control**.
List v3	Open the list title menu and select **List Con trol**.

3. Perform one of the following actions.

Option	Description
Show the Edit option	Clear the **Omit edit button** check box.
Hide the Edit option	Select the **Omit edit button** check box.
Show the Edit option if the check box is cleared and the button does not appear.	Click **Enable Edit**.

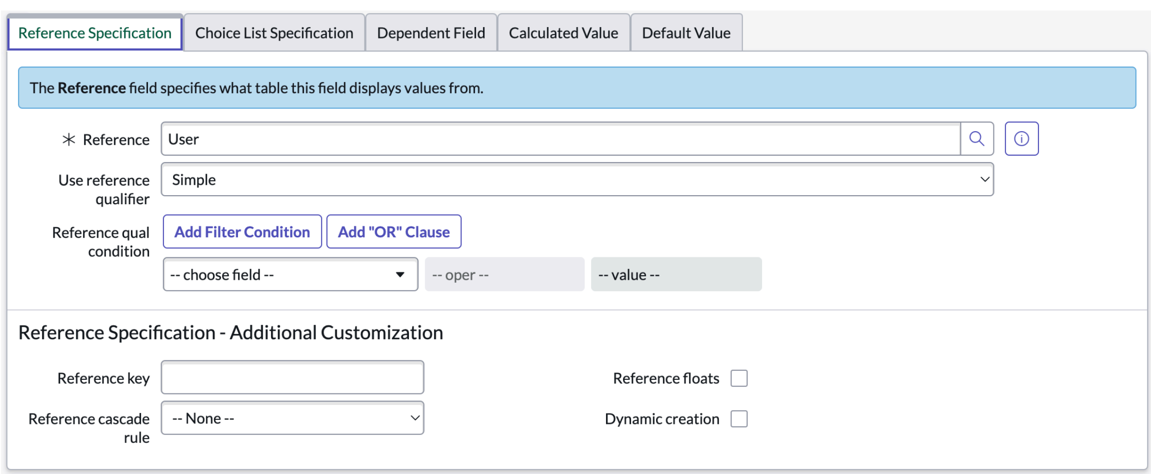
4. If the list represents a one-to-many relationship (example, incidents can be associated with only one problem, but problems can be associated with many incidents), complete the following steps.

a. Open a record in the target table (example, Incident).

b. Right-click the header and select **Configure** > **Dictionary**.

c. Open the dictionary entry for the reference field (example, **Problem ID** on **Incident**).

d. In the Reference Specification section, select the **Reference floats** check box.



5. Click **Update**.

Create defined related lists

You can add default related lists to the form for all users to see when viewing records.

Before you begin
Role required: admin

About this task

For example, you may include a list of related incidents at the bottom of a problem record, or a list of members at the bottom of a group record. This functionality depends on reference fields or many-to-many table relationships. If two tables are related via the system dictionary, one can appear as a related list on the other.

Defined related lists allow relationships between arbitrary tables to be expressed as a related list. Any two tables that can have a logical relationship can appear as a parent/child pair via a related list. The following are some examples.

- On an incident record, show all incidents opened by the same caller.
- On a user record, show the last 20 transactions that user has made.
- On an incident record, show all problems opened on the reported CI.

These relationships are beyond the relationships normally defined in the system dictionary through reference fields and many-to-many relationships.

Every related list requires a relationship record. Before creating a relationship, verify that there is not an existing relationship record that already provides the needed information. Use the following steps to create a relationship record.

Procedure

1. Click **System Definition** > **Relationships**.
2. Click **New**.
3. Specify the relationship record fields.

Relationship record fields

Field	Description
Name	Type the name of the related list. The form configuration page displays this name in the list of available lists.
Advanced	Select this check box to use JavaScript in place of the **Applies to table** and **Queries from table** fields.
Applies to table	Select the table on which the related list appears. For example, to add a related list to the user form, select the User [sys_user] table. This field is hidden in Advanced relationship records.
Queries from table	Select the table from which this related list retrieves data. For example, to add related task records to the related list, select the Task [task] table. This field is hidden in Advanced relationship records.
Apply to	Type a script that sets the `answer` variable to **true** when a user opens a form on the desired table. This field is only visible with the **Advanced** check box selected.
Query from	Type a script that sets the `answer` variable to the name of the table from which the related list retrieves data. This field is only visible with the **Advanced** check box selected.

Field	Description
Query with	Specify the records to include by typing a script. For example: `current.addQuery('opened_by', parent.sys_id);` ◦ The `current` object specifies the current record on which the script is triggered. ◦ The `addQuery` method adds a filter that returns records meeting a specified condition. ◦ The `opened_by` variable is the field name you're querying in the table from **Queries from table**. ◦ The `parent.sys_id` variable refers to the **Applies to table** and the ID of the record being displayed.
Insert Callback	Type a script to run after a successful insert action. This field is only visible with the **Advanced** check box selected.

4. Click **Submit**.

Add incidents by same caller related list

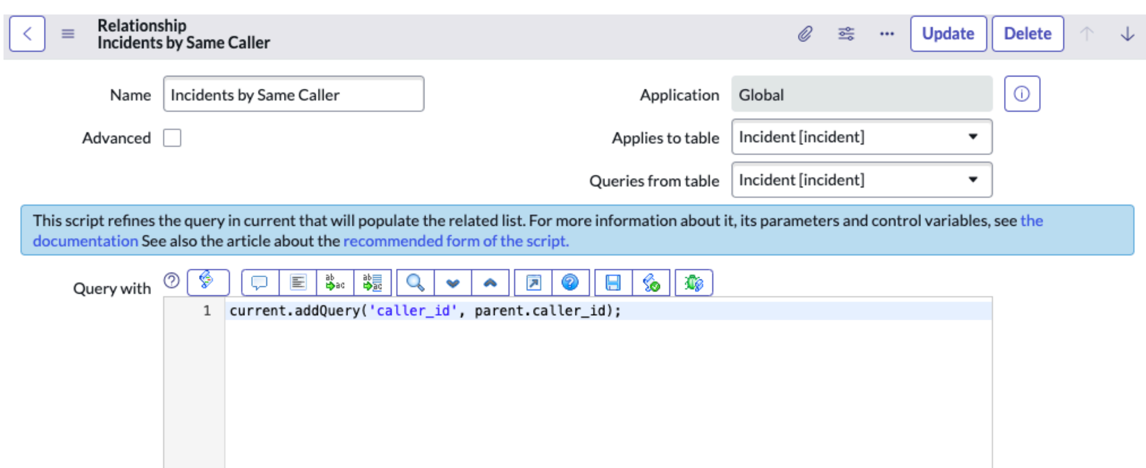
This example adds the existing relationship, Incidents by Same Caller, to incident forms.

Before you begin

Role required: admin

About this task

- **Applies to table**: This list appears as an available related list when viewing an incident record.
- **Queries from table**: This list displays a list of incidents.
- **Query with**: This script selects records where the **caller_id** matches the **caller_id** of the parent record (the incident you are viewing).

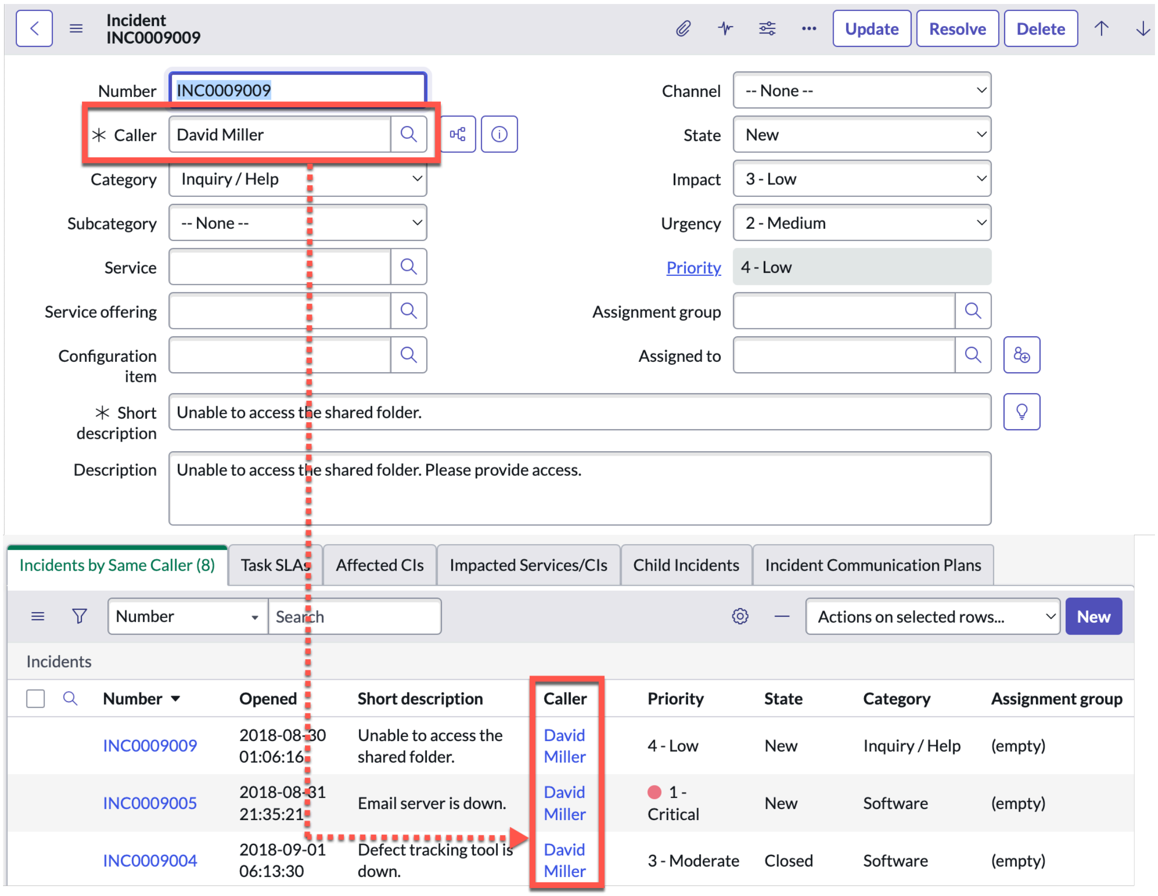


Procedure

1. Open an incident.
2. Right-click the header and select **Configure** > **Related Lists**.

The name of the existing relationships appears in your list of available lists.

3. Move the **Incidents by Same Caller** list to the **Selected** list.
4. Click **Save**.



What to do next

Notes and limitations:

- Creating a record using a related list applies the list filter to the record and auto-populates the related field. This behavior applies to reference, string, Boolean, and menu fields when the criteria in the filter is set to **is** or **=**.
- For example, if you click the **New** button on one of these new relationships, the system attempts to ensure that the new record matches the list conditions. For example, clicking **New** on the example list results in an incident where the **caller_id** is pre-populated with **Bud Richman**.
- When scripting your condition, **current** is the record to which you want to add queries while **parent** is the main record being displayed.
- These relationships do not refresh until you update a form. In the example, if you changed the caller from **Bud Richman** to **Fred Luddy**, the list at the bottom of the screen still displays the incidents belonging to Bud Richman until you save the incident.
- You are not limited to a single query condition. It is, for example, possible to have a related list of all incidents opened by the same caller in the last week, or all **open** incidents opened by the same caller.
- The **current** and **parent** objects cannot be used with the **Queries from** field. Instead, the **gs** object is available for GlideSystem calls.
- The **Edit** button is not available on defined relationships, as the relationship is scripted.

Additional use case: You can enable a similar relationship for the Request table to display **Requests by the Same Caller** using **Requested For** on the Request table.

Related topics

GlideSystem

Add transactions by user related list

This example adds a relationship, Last 20 transactions, to the user form.

Before you begin

Role required: admin

About this task

The new relationship creates a list of task records opened by the current user.

Procedure

1. Navigate to **All** > **System Definition** > **Relationships**.
2. Click **New**.
3. Create a relationship with the following values.

Option	Description
Name	Last 20 transactions
Applies to table	User [sys_user]
Queries from table	Task [task]
Queries with	`current.addQuery('opened_by', parent.sys_id);`

4. Click **Submit**.
5. Navigate to **User Administration** > **Users**.
6. Select any user.

   Example

   For example, select David Loo.
7. Configure the related lists for the user form and add the related list **Last 20 transactions**.
8. Navigate to **User Administration** > **Users**.
9. Select any user.

   Example

   For example, select David Loo.
10. The **Last 20 transactions** related list displays all task records opened by the current user.

What to do next

Notes and limitations:

- This query returns all task records opened by the user. The related list defaults to displaying 20 task records per page.
- The parent variable refers to the **Applies to table**. In this case, it applies to the User [sys_user] table.
- Querying against a record sys_id is a common query method for relationships.

Related topics

Add a related list to a form

Add fields to selections in a related list

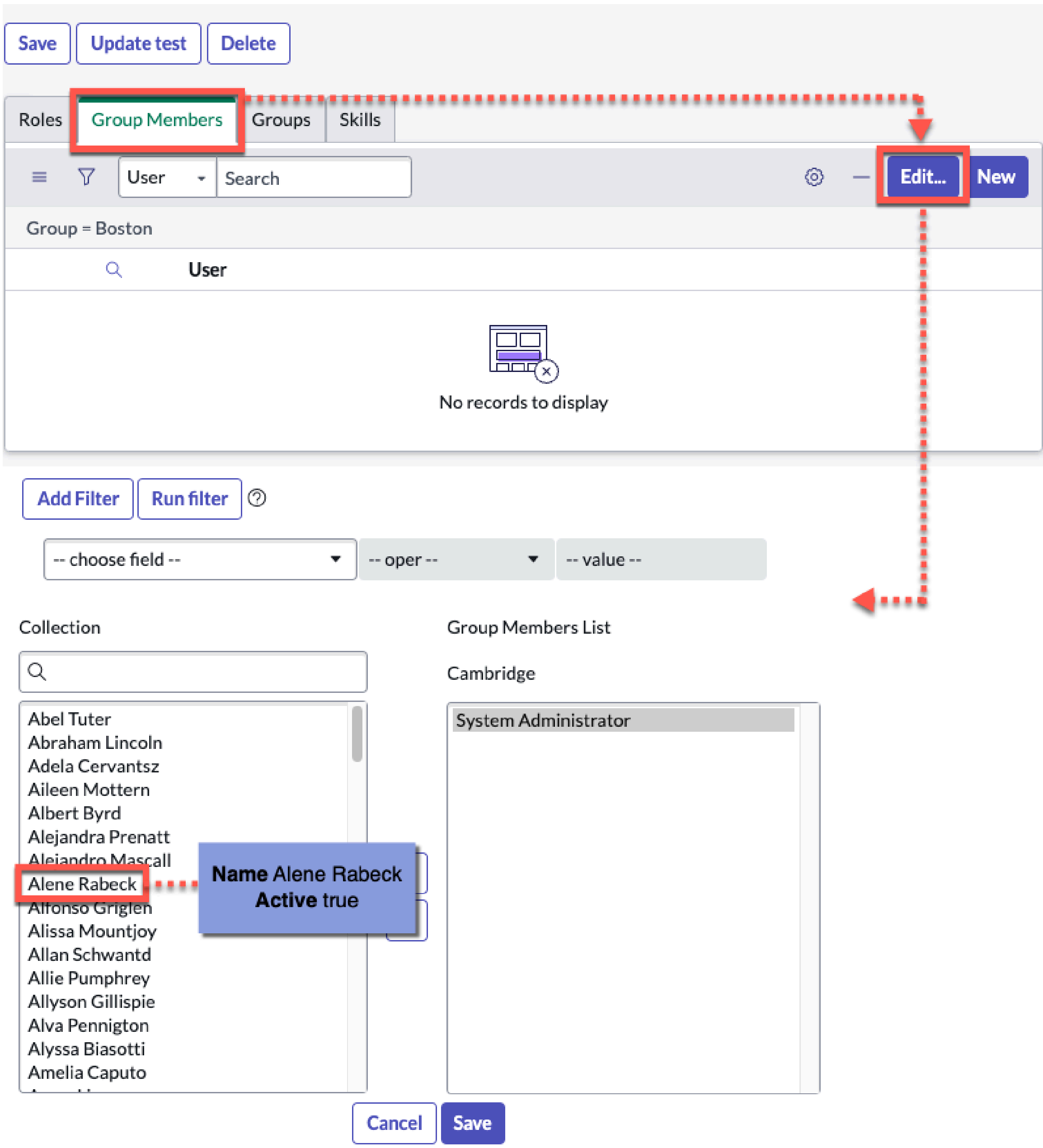
When you click **Edit** in a related list and select an item, information about the item appears below the list. You can expand the fields that appear for the item to provide more information.

Before you begin

Role required: admin

About this task

Fields listed for selected record



To add fields to selections in a related list, record the exact field name, or element, not the label name. This example demonstrates adding fields to the **Groups** related list [sys_user_group].

Procedure

1. Navigate to **All** > **System UI** > **Views**.
2. Select **sys_ref_list**.
3. To add fields from the Group table, in the **Lists** related list, select **sys_user_group**.
4. In the **List Elements** related list, click **New**.
5. Enter the field name and its relative position when it appears in the description.
   Fields appear from top to bottom, lowest to highest number.
6. Click **Submit**.

Create a default filter for list selector records

You can set a default filter to restrict which related records users can select when editing a reference field. Default filters are simple to set up but lack a dynamic filtering element, which prevents the end user from changing the default filter.

Before you begin

Role required: personalize_list

About this task

A filter is used to restrict the records that are listed in the slushbucket that displays when a user clicks **Edit** in a related list.

Procedure

1. Right-click any column heading and select **Configure** > **List Control**.
2. Configure the List Control form to add the **Edit default filter** field, if necessary.
3. In the **Edit default filter** field, use the condition builder to create a default filter.
4. Select **Update**.
   When users click the **Edit** button in the related list, the list of records they can select is filtered according to the default filter.

Related topics

Configure reference qualifiers

Condition builder

Edit a form

You can edit a record in the form view. You can also insert a record, apply a template, and cancel changes to the record.

Before you begin

Role required: none

Procedure

1. Navigate to the form.
   If another user is looking at the same record, you see their avatar with a green dot in the form header. If more than one user is viewing the record, the avatar is a number, and you can point your cursor to it to see the names.
2. Enter appropriate data.
   Depending on system setup, the data entered in a form can affect other options on the form or change its appearance. For example, if you select a status of **Closed** for an incident, a required **Close Notes** field may appear. Administrators can create custom form effects in various ways, including UI policies and client scripts.
3. Save the record using one of these methods:
   - Click **Submit** or **Update** to save changes and return to the previously viewed page.
   - Right-click the form header and select **Save** to save changes without leaving form view.

   On Core UI forms, fields update dynamically and display a field update icon to indicate changes made by other users. You can point to the field update icon to see which user made the update. This dynamic indication helps to prevent users from accidentally overwriting each other's work.

Note: If you entered a different value from the value saved by the other user, the system does not update the field automatically. Change your value manually to match value entered by the other user. Otherwise, you overwrite the change when you save the record.

Insert a record

Insert provides a method for creating multiple similar items, such as email notifications, users, groups, or business rules.

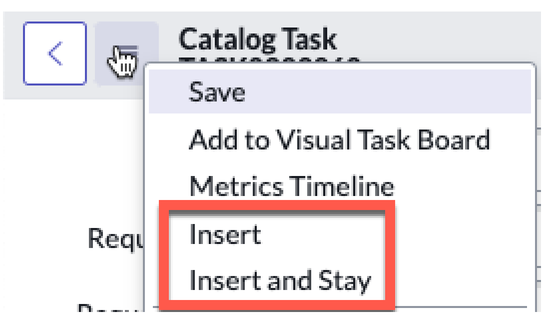
Before you begin
Role required: none

About this task
Administrators can enable the **Insert** function for task records. For more information, see Allow insert options on task records.

Procedure

1. Open a similar item.
2. Edit the item and give it a new **Name**.
3. Right-click the form header and select one of the following options.

Option	Description
Insert	Saves the item as a new record and returns to the previously viewed page.
Insert and Stay	Saves and views the new record.



Apply a template in a form

Your organization may use templates to help with frequently requested tasks. A template contains prepopulated fields that default when the template is selected.

Before you begin
Role required: none

Procedure

1. Navigate to the form.
2. Do the appropriate action for your version of the UI.

   a. Click the more options icon (⋯) in the form header.
   b. Select **Toggle Template Bar**.
3. Select the template to apply.
   If there is a conflict between the selected template and the form, a conflict message appears with a link to view the details of the conflict. For example, if a field that does not appear on the form is populated in the template, the conflict message details identify the missing field and the value is not set. If you have a conflict message, review the details and notify your administrator if necessary.
   Specific fields are populated with values from the template.
4. Complete the form.
   You can change any value that was populated from the template.
5. Click **Submit** to create the record.

Related topics

Toggle the template bar

Cancel changes to a form

Cancel changes to a form by navigating away from the form without saving.

Before you begin

Role required: none

Procedure

1. Navigate away from the form view without saving the record.
2. If a message appears, click **Leave this Page** to confirm cancellation.

> **Note:** Administrators can disable the confirmation message by setting the `glide.ui.dirty_form_support` property to false.

Personalize a form

When the form personalization feature is activated, users can personalize fields to appear on a specific form view according to individual preferences. Form personalization is available in Core UI.

Before you begin

Role required: itil, personalize_form, or admin

About this task

Personal form customizations do not affect what other users see on their forms.

In contrast to configuring a form, personalizing a form does not enable users to perform the following actions:

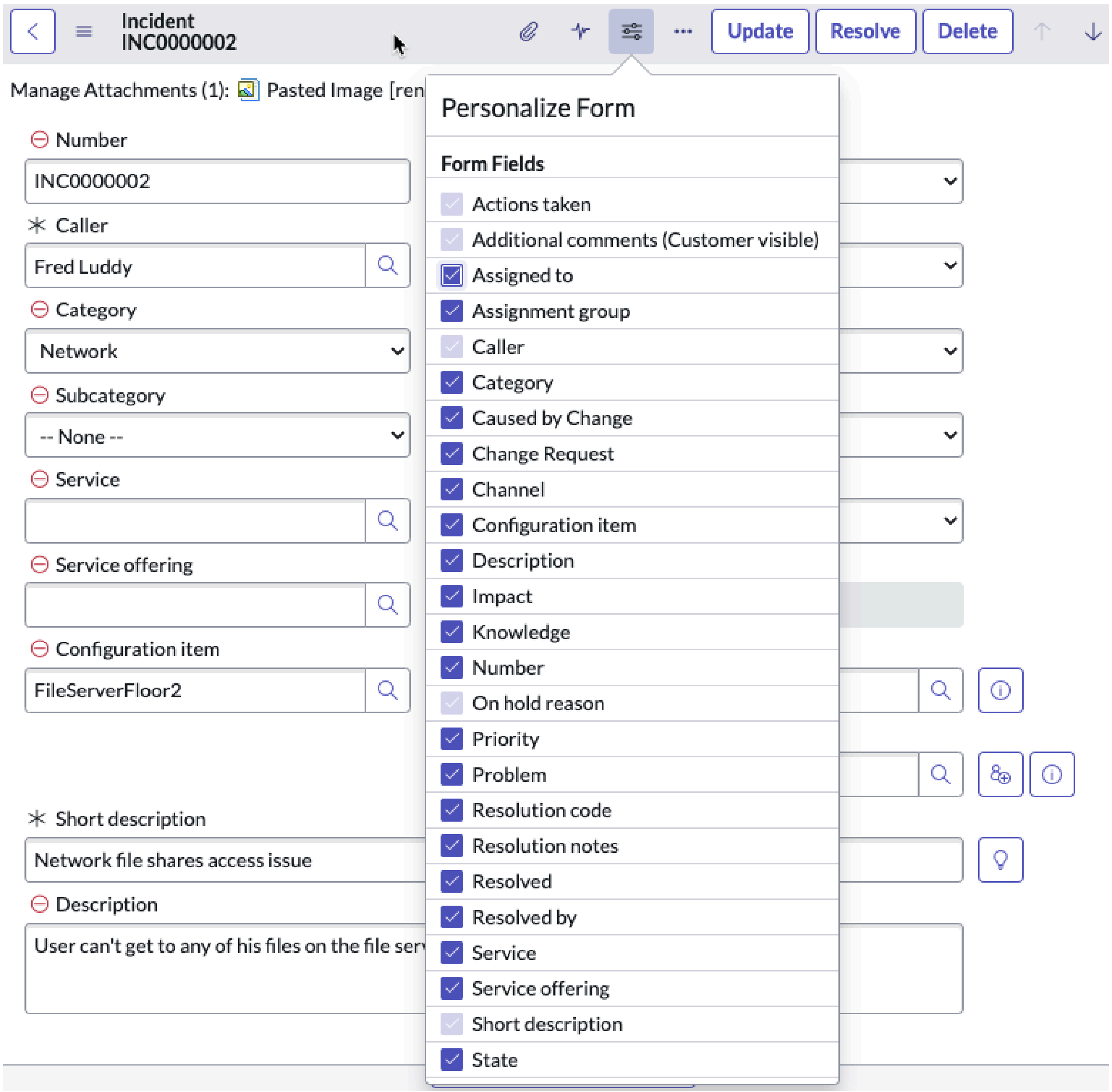
- Change the order of fields on the form.
- Add fields that are not configured to appear on the form.
- Hide mandatory fields.

> **Note:** Personalizing a form in this way modifies the form for you only. To make changes to a form that are visible to all users, you must configure the form.

Procedure

1. Open any record.
2. In the form header, click the personalize form icon.
   The Personalize Form menu appears and hide field icons appear on the form.

   Personalize the form

   A cleared gray check box indicates fields that you previously hid.

   Note: Only the fields that the form is configured to display are available in the Personalize Form menu. To add fields to the form, you must configure the form layout.

3. Clear a check box or click the hide field icon ( ) by a field.
   Some check boxes are gray and selected. These check boxes indicate fields that cannot be hidden because they are required or are already hidden by UI policies or client scripts.
4. Click outside the Personalize Form menu to save your changes.
   If you navigate away from the form, the next time you personalize the form you must reset your customizations to show fields that you have hidden.
5. To restore the default form view, personalize the form and click **Reset**.

Related topics

Administering form personalization

Add and manage attachments

You can upload a file as an attachment to an incident, a knowledge article, a change request, or to another type of record.

Before you begin

Role required: admin

About this task

Administrators can configure attachments and how they work in the system. For more information, see Administering attachments.

The default maximum size limit for an attachment file that can be added to a record on the ServiceNow AI Platform is 1024MB for a new out-of-box instance. If the field is left blank the default limit (currently set at 1GB) will be used as the maximum attachment file size.

Note: Do not use the **Upload File** module in the **System Definition** application. It is not compatible with multi-node instances.

Procedure

1. Navigate to the record.
   For example, an incident record.
2. Click the attachments icon ().
3. Click **Choose Files** or **Browse**, depending on your browser, and navigate to a file.
4. **Optional:** Upload multiple files in one of the following ways.
   - Select multiple files at the same time in the file browser. Internet Explorer does not support this feature.
   - Add each file on a separate line by clicking **Add Another Attachment**, and then clicking **Choose Files** on the next line. Repeat until all desired files are selected. This feature is available in all supported browsers.
5. Click **Attach**.
   Attached files appear in the **Current file attachments** list and at the top of the form. There are several common error messages that a user might receive in certain cases when attempting to upload an attachment to a record on a ServiceNow instance. Common examples of these errors are as follows.
   - When attempting to add an attachment to a specific record, the user may receive an error that the file contains a prohibited file extension.
   - When attempting to upload an attachment to a record the user receives a message a file type is not permitted or MIME type not matching with the actual file name.
   - When attempting to add an attachment to a record on an instance, the user receives a file size error.
6. **Optional:** To correct these errors, navigate to **System Properties > Security**.

   a. For a disallowed file type error, attempt to save the file in a different format.
      The .zip file extension is often included as an allowed file extension and a file can be compressed and then attached.

b. For a file type not permitted or mime type error, locate **This property must be set to activate MIME type checking for uploads (All version Eureka and up). Enables (true) or disables (false) mime type validation for file attachments. File extensions configured via glide.attachment.extensions will be checked for MIME type during upload.** and activate the property by checking **Yes**.

Note: The default setting for this property on an out-of-box instance is No (unchecked).

c. For a file size error, see Manage attachments.

7. Close the pop-up window to return to the form.

What to do next

Limit the users who can view attachments by applying ACL rules. For more information on ACL rules, see Access control list rules.

Manage attachments

View, rename, and remove the attachments on a record and adjust the maximum allowable size of attachments.

Before you begin

Role required: admin

Procedure

1. Navigate to the record (example, an incident record), the existing attachment are visible at the top.
2. Select the attachments icon ( ) or the **Manage Attachments** link if files are already attached. The number of attachments for a record is listed on the **Manage Attachments** link.
3. To add attachments, complete the following steps.
   a. Select **Choose Files**.
   b. Select the file to attach and select **Open**.
4. To rename an attachment, complete the following steps.
   a. Select **[rename]** beside the file name at the top of the form.
   b. Edit the file name, move your mouse device anywhere on the screen, and press your mouse device once to save the changes.

   Note: To cancel rename and return to the main screen, press the Esc key or the **X**.
5. To remove attachments, select the **Manage Attachments** link and complete the following steps.
   a. Select the attachments icon ( ).
   b. Select the check boxes next to the attachments.
   c. Select **Remove**.

The attachment disappears and the pop-up window remains open.

Note: After a record has been closed, you can't delete the attachments for that record.

6. Close the pop-up window to return to the form.
7. To adjust the maximum allowable size of an attachment to a record, complete the following steps.

   a. Navigate to **System Properties > Security**.

   b. Locate **Maximum file attachment size in megabytes:** and enter the file size.

   Note: The default maximum size limit for an attachment file that can be added to a record on the ServiceNow AI Platform is 1024 MB for a new base system instance. If the field is left empty, the default limit (currently set at 1 GB) is the maximum attachment file size.

   c. Select **Save**.

Attach files with drag-and-drop

You can drag files from your local computer into your browser window to attach them to the current record.

Before you begin

Role required: admin

About this task

This functionality is supported in Firefox 3.6 or later and Chrome. Support will be added for other web browsers as they implement the HTML5 specification.

Procedure

1. Navigate to the record.
2. On your computer, browse to the files to attach.
3. Select the files in the file browser, and then drag them over the form.
4. Release the mouse button to begin the upload.

   When the upload is complete, the file name is added to the attachments header. Upload speed depends on the file size and the speed of your network connection.

   Warning: Do not navigate away from the record while an upload is in progress. The upload must be completed for the file to be attached.

Configure the Next Experience email client for the Core UI

Access email features from the Next Experience in the Core UI.

Before you begin

Role required: admin

About this task

The `glide.ui.load_seismic_email_client` system property provides access to the latest email client features from the Next Experience in the Core UI.

Note: You may need to rewrite on-load business rules related to the email client table. For example, if any business rules affect UI, you must rewrite those business rules and tag them to the *sys_email_draft* table.

There's two places you can access the Next Experience email client from the Core UI.

- Access the email client from the More Actions menu (…).
- Access the email client from an Activity stream email card by selecting **Reply**, **Reply All**, or **Forward**.

The Next Experience email client provides these features in the Core UI.

- Draft management and automatic draft saving
- Email templates, response templates, and quick messages
- Now Assist features

These Core UI email client features aren't available after enabling the Next Experience email client.

- Downloading or removing multiple attachments at once
- Sending S/MIME and SMS
- Customized email components

Procedure

1. Navigate to `sys_properties.list`.
2. Add a system property named *glide.ui.load_seismic_email_client*.

   For more information on adding system property, see Add a system property.
3. Set the Value field to **true**.
4. Select **Submit**.

Document Viewer

Document Viewer enables you to view documents directly in the ServiceNow AI Platform rather than having to download them.

Document Viewer supports viewing various file types in the platform including a UTF-8 character encoded PDF file. The maximum document file size is 50 MB. To use Document Viewer, enable it at instance level and for the tables for which you want to use it.

Note: Document Viewer also supports FedRAMP instances.

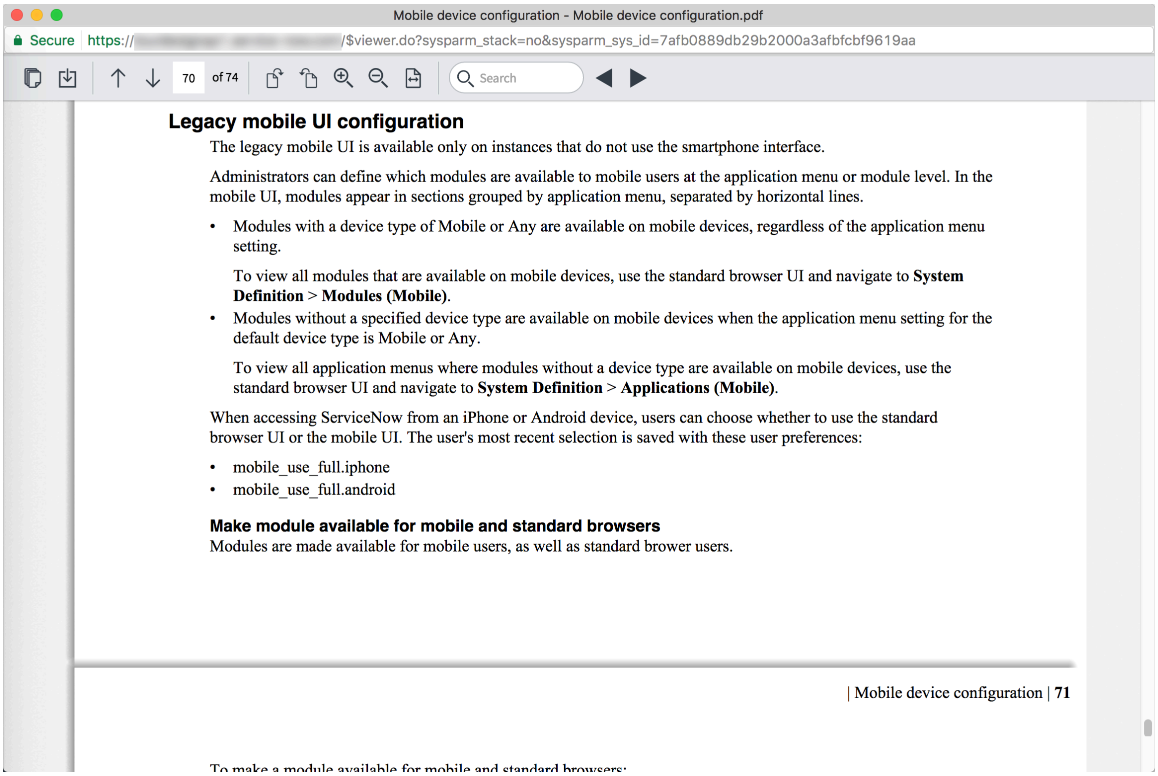
You can view the following file types:

- MS Word (.doc) and (.docx)
- MS PowerPoint (.ppt) and (pptx)
- MS Excel (.xls) and (.xlsx)
- PDF
- PNG
- JPEG

Note: The rotate option doesn't work for images.

Other document types, for example, .zip or .exe files, are automatically downloaded without requiring Document Viewer. Document viewer converts word documents and spreadsheets to pdf first in order to view them. This might take some time to render the file the first time.

PDF view in Document Viewer



Legacy mobile UI configuration

The legacy mobile UI is available only on instances that do not use the smartphone interface.

Administrators can define which modules are available to mobile users at the application menu or module level. In the mobile UI, modules appear in sections grouped by application menu, separated by horizontal lines.

- Modules with a device type of Mobile or Any are available on mobile devices, regardless of the application menu setting.

  To view all modules that are available on mobile devices, use the standard browser UI and navigate to **System Definition** > **Modules (Mobile)**.
- Modules without a specified device type are available on mobile devices when the application menu setting for the default device type is Mobile or Any.

  To view all application menus where modules without a device type are available on mobile devices, use the standard browser UI and navigate to **System Definition** > **Applications (Mobile)**.

When accessing ServiceNow from an iPhone or Android device, users can choose whether to use the standard browser UI or the mobile UI. The user's most recent selection is saved with these user preferences:

- mobile_use_full.iphone
- mobile_use_full.android

Make module available for mobile and standard browsers

Modules are made available for mobile users, as well as standard brower users.

| Mobile device configuration | **71**

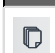
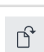
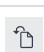
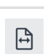
To make a module available for mobile and standard browsers:

Note:

You can only download PDF attachments with in the document.

The following table describes the icons used in Document Viewer.

Icons in Document Viewer

Icon	Description
	Toggle the sidebar to see a preview of all the pages in the document.
	Download the attachment.
	Page up or down using the arrow buttons. You can also scroll or use your keyboard arrow keys.
	Rotate the page to the right.
	Rotate the page to the left.
	Zoom in or out of the document.
	Increase the page to the full width of Document Viewer.

Icons in Document Viewer (continued)

Icon	Description
	Search for keywords in the document. Use the arrows to toggle to the next search result.

Related topics

View attachments with Document Viewer

Enable Document Viewer

Enable Document Viewer

Enable Document Viewer to view documents directly rather than download them to view them in their native applications.

Before you begin

Role required: admin

About this task

Document Viewer is enabled by default. Activate it at the instance level and then enable it at the table level for the tables where you want to use it. Ensure that the system property **com.snc.documentviewer.enable_document_viewer** is set to true or create it if it does not already exist. To de-activate Document Viewer, create the system property **com.snc.documentviewer.enable_document_viewer** manually and set it to false.

Procedure

1. Activate Document Viewer at the instance level
   a. Navigate to **All** > **System Definition** > **All Available Applications** > **All**.
   b. Enter `ServiceNow Document Viewer` or `com.snc.documentviewer` in the Search field.
   c. Select **Install**.
2. Activate Document Viewer for the tables where you want to use it.
   a. Navigate to **System Definition** > **Dictionary**.
   b. Search for the table, open the record with the type field **Collection**.
   c. Enter `Use Document Viewer` in the **Attribute** field.
   d. Enter `true` in the **Value** field.
   Document Viewer is enabled at the table level. Repeat this procedure for each table for which you want to enable Document Viewer.

Related topics

Disable Document Viewer

Document Viewer plugins

With Document Viewer, you can view documents directly in the ServiceNow Platform rather than having to download them. Two new plugins enhance the experience and provide more options for document viewing. You can collaborate with other people, copy, delete, restore, and view version history directly in a ServiceNow instance.

Overview

In previous ServiceNow releases, not all documents could be shared and used for team collaboration. With new plugins for the Platform Document Viewer, now you can:

- Collaborate (edit, share) with Microsoft OneDrive and copy documents to your ServiceNow instance.
- Upload a policy document authored in your ServiceNow instance as a Microsoft 365 document in Microsoft 365 SharePoint.
- Attach shared links to a record. Clicking the link opens the document in Microsoft 365 SharePoint.
-
    - The link can be shared with a co-worker, who can view and edit the document in real time.
    - The current version is also viewable in the ServiceNow instance.
- Use collaboration tools such as Microsoft 365 for review and co-authoring documents.

Plugins

To use this feature, install the following plugins:

- Microsoft OneDrive Spoke
- Microsoft OneDrive document service Spoke
- Microsoft Azure AD Spoke for Integration Hub
- Multi Provider Document Service Framework

See List of plugins (Rome) for a complete list of ServiceNow plugins.

After installation, you can use the base system subflows or customize them. Configure the subflows in the Document actions table. Once configured, they can be invoked as UI actions from List views or can be invoked through Script Include APIs.

Microsoft OneDrive integration plugin

Collaborate in Microsoft OneDrive and perform copy, delete, restore, and version actions on documents directly in a ServiceNow instance. This integration is bi-directional (performs in both directions): Changes are reflected in both Microsoft OneDrive and in the instance.

Microsoft Azure AD Spoke for IntegrationHub

The Microsoft Azure AD Spoke for Integration Hub provides actions that a Process Analyst can use when designing flows. The actions allow them to automate the management of users, security groups, and office groups. User management includes applying licenses that result in user provisioning into Office 365.

Multi Provider Document Service Framework plugin (glide plugin)

Plugin contains the data model needed to integrate with third-party document service providers.

Note: To activate a plugin:

1. Navigate to **System Definition** > **Plugin**.
2. Enter the plugin name in the Search field.
3. Select **install**.

Tables

mp_provider_details

- Provider Details Name
- Provider Name
- Attributes

mp_document_version

- Version
- Document
- Version Modified By
- Version Last Modified

mp_document_activity

- Document Name
- Document sys_id
- Document Version sys_id
- Document Action
- Provider Detail
- Notes

mp_documents

- Document name
- Provider Details
- Attachment
- URL
- Description

mp_document_action

- document_action_name
- provider_detail
- subflow
- provider_permission

mp_permission_configuration

- Entity_type
- Entity_id
- Attributes
- Provider_group_id
- Provider_group_name
- permission

mp_provider_permission

- permission
- provider
- Attributes
- description

mp_collaborator

- collaborator_attributes
- collaborator_email
- collaborator_id
- collaborator_name
- Provider_detail
- user

Related topics

Document Viewer

View attachments with Document Viewer

View documents within the platform using Document Viewer rather than having to download them to your own file system.

Before you begin

Make sure that Document Viewer is enabled for the table containing the record. For more information, see Enable Document Viewer.

Role required: none

About this task

Document Viewer supports inline viewing of certain document types within the platform.

Procedure

1. Navigate to a record (incident, form, list, and so on) with an attachment.
2. Click View next to the file attachment name.

   Document Viewer displays the document.

   If the document does not display, Document Viewer does not support inline viewing in your situation and a message instructs you to download the document. The possible reasons are:

   - The document uploaded is platform encrypted or edge encrypted.
   - The file size exceeds the maximum allowed value of 50 MB.
   - The document is password-protected but it is not a PDF file.

   Click **Download Document** to view the document in the relevant external application.

Related topics

Enable Document Viewer

Disable Document Viewer

Disable Document Viewer at the instance level to disable it or at table level to disable it for specific tables within the instance.

Before you begin

Ensure the Add a system property (com.snc.documentviewer.enable_document_viewer) exists in your instance.

Role required: admin

Procedure

Disable Document Viewer at the instance level or for specific tables.

Option	Description
Disable Document Viewer at the instance level	**a.** Search for `sys_properties.list` in the navigation filter. **b.** Set the system property *`com.snc.documentviewer.enable_document_vie`* value to **false**. **c.** Click **Update**.
Disable Document Viewer at the table level	**a.** Navigate to **System Definition**→ **Dictionary**. **b.** Open the table and click **New** under the **Attributes** tab. **c.** Search for `Use Document Viewer` in the **Attribute** field. **d.** Enter `false` in the **Value** field. **e.** Click **Submit**.

Related topics

Enable Document Viewer

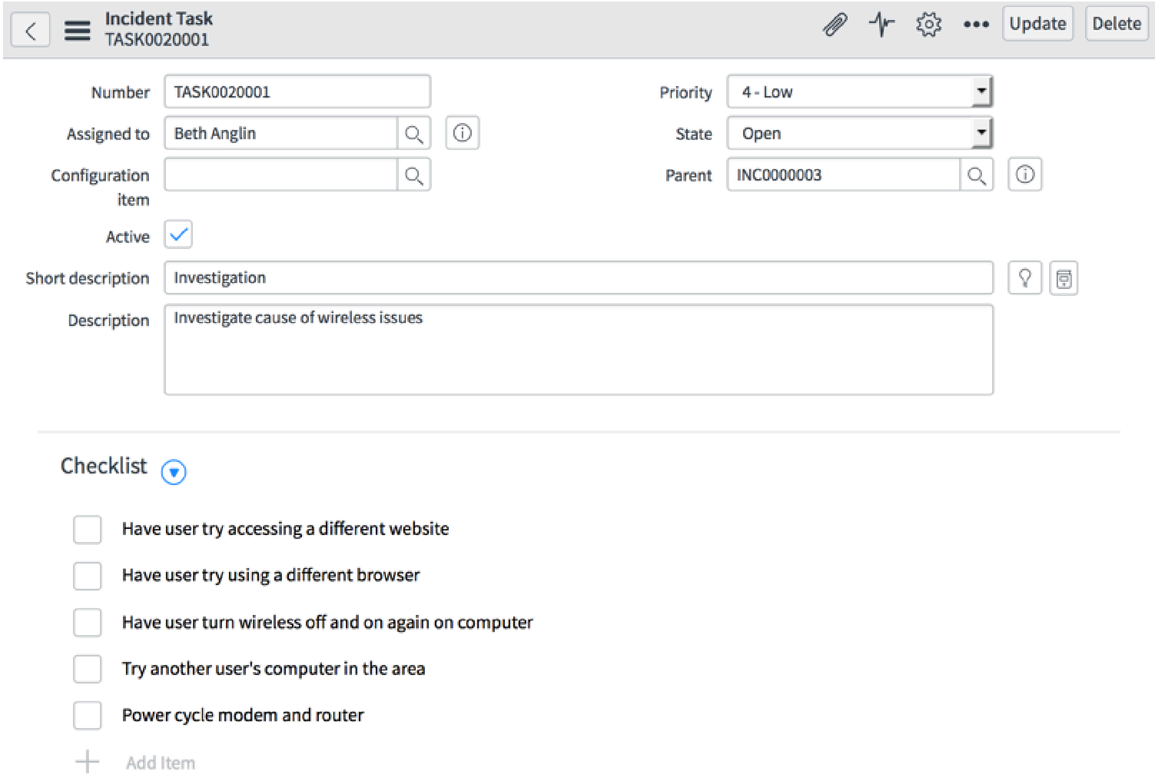
Checklists

Checklists provide a simple way to track the progress of tasks without creating additional records. Checklists can be added to the form view of any table that extends Task [task].

For example, if a support agent is assigned an incident task to investigate a wireless issue, a checklist can be used to document the individual steps taken.

Checklists are added to records after they are submitted. You cannot add a checklist as you create a record.

Sample checklist



Enabling checklists in forms

To enable checklists, navigate to the form and add the **Checklist** formatter. For instructions, see Add a formatter.

Using checklists

You can add, remove, or rearrange checklist items. You can also save a checklist as a template for future use on other records. Any user can create or edit a checklist and check off completed items.

Activate checklists

Checklists are active by default on new instances. For instances upgrading from a previous version, the Checklist plugin must be activated.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the Checklist plugin using the filter criteria and search bar.

   You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.

3. Select **Install** to start the installation process.

Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: `Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.`

You will see a message after installation is completed. For information about the components installed with a plugin, see Find components installed with an application.

Create a checklist

You can create a unique checklist for each task record. You can quickly create a checklist from a previously created template.

Before you begin

The Checklist formatter must be added to the form by a user with the personalize_form role.

Role required: for the write role, read role, and delete role, the logged in user must be sys_created_by.

Note: If the Explicit roles plugin is installed, the sn_internal role is required by the Customer Service Management and the Vendor Risk Management plugins (and possibly others.) The Explicit roles plugin automatically creates the sn_internal role and assigns it to all users.

About this task

A template saves time by creating checklist items automatically. You can add, edit, or remove checklist items without impacting the template. You can use any checklist template, even if it was created on a different table.

Procedure

1. Navigate to a record that does not already contain a checklist.
2. Click the down arrow beside the **Checklist** formatter.
3. Complete one of the following steps.

Option	Description
To create a new checklist	Select **Create new**.
To create a checklist by using a template	Under **Create from template**, select a tem plate. The checklist items in the template ap pear. Use any of the following steps to man age items in the checklist.

4. Click **Add Item**.
5. Enter text for the checklist item.
6. Press the Enter key to add the checklist item.
7. Create as many additional checklist items as desired.
8. **Optional:** Click the minus (-) icon to delete a checklist item.
9. **Optional:** Click the drag icon ( ) and drag a checklist item to a different position in the list.
10. **Optional:** Save the checklist as a template for easy reuse.

a. Click the down arrow beside the **Checklist** formatter.

b. Select **Save as Template**.
A dialog box appears.

c. Enter a descriptive template name to identify the checklist.
When a user creates a checklist from a template, all templates are listed in alphabetical order and there is no way to filter which templates appear. To provide a better user experience, consider implementing a naming system for checklist templates. For example, include the name of the table or another identifier to clarify how the checklist should be used.

d. From the User Group list, select a group to limit the checklist template to.
Only members of the selected group and the user who created the checklist can use the checklist as a template. Leaving this field blank prevents anyone but the template creator from using the checklist template.

e. Click **Save**.

11. Save the form.

Delete checklist or a template

You can remove a checklist from a record, and delete checklist templates you no longer need.

Before you begin

Role required: for the write role, read role, and delete role, the logged in user must be sys_created_by.

Note: If the Explicit roles plugin is installed, the sn_internal role is required by the Customer Service Management and the Vendor Risk Management plugins (and possibly others.) The Explicit roles plugin automatically creates the sn_internal role and assigns it to all users.

About this task

Deleting a checklist template has no effect on checklists created from that template.

Procedure

1. To delete a checklist, navigate to the record that contains the checklist.
2. Click the down arrow beside the **Checklist** formatter.
3. Select **Remove Checklist**.
   A confirmation dialog box appears.
4. Click **Delete**.
5. Complete the following steps to delete a checklist template.
   a. In the navigation filter, enter `checklist_template.list`.
   b. Select the check box by the checklist template you want to delete.
   c. In the actions choice list, select **Delete**, found at the bottom of the page.
   d. In the confirmation dialog box, click **Delete**.

Common UI elements

This page lists common UI elements for the standard user interface.

Log in to an instance

Each ServiceNow instance has a unique, secure web address. The base URL for each instance has the default format: `https://<instancename>.service-now.com`.

Before you begin
Role required: none

About this task
Users log in to the instance from a web browser. Administrators can associate a custom URL, such as support.myurl.com, that resolves to point to instancename.service-now.com.

Note: ServiceNow does not support any other methodologies to associate a custom or vanity URL. If you have a custom or vanity URL associated with an instance prior to the Madrid release, contact Support.

Procedure

1. Enter the base URL in any web browser.
    - If your system uses external authentication, you are automatically logged in. For example, you may log in to company services when you log in to your computer.
    - If your system does not use external authentication, the Welcome page appears.
2. Enter your user name and password.
3. **Optional:** Select the **Remember Me** check box to remain logged in until you manually log out. The administrator can enable or disable this option. For more information, see Change settings for the Remember me check box and cookie.
4. Press the Enter key or click **Login**.

Navigate directly to a table

You can use commands in the navigation filter to navigate directly to the list, form, or configuration view of a table.

Before you begin
Role required: none

About this task
Commands work only for tables you are permitted to access.

Note: The table name must match the name in the dictionary entry for the table.

Procedure

1. In the navigation filter of the application navigator, enter one of the following commands.

Command	Behavior
<table name>.list	Opens the list view of the table in the same window or tab.
<table name>.form or <table name>.do	Opens the form view of the table in the same window or tab.

Command	Behavior
<table name>.config	Opens the configuration view [personalize_all.do] of the table in the same window or tab.
<table name>.filter	Opens an empty list view of the table in the same window or tab, so that you can apply filters without loading the list. This is helpful for large lists that take a long time to load.

For example, enter `change_request.form` to open a new change request.

Note: You can also enter any of the commands above in uppercase to open the list or form in a new window or tab. For example, enter `change_request.FORM` to open a new change request in a new window or tab.

2. In Core UI, press the Enter key.

Tree picker

The tree picker is a special reference lookup that you can add as an attribute to a form. Add the tree picker to the classic environment or to workspaces.

The tree picker is a special reference lookup for the following items.

- Configuration Items (CIs) for a field that depends on another CI field.
- Reference elements for any hierarchical table. A hierarchical table is any table that has a parent field pointing back at itself.
- Values for a user reference that depends on the group.

Related topics

Reference lookup

Add the tree picker attribute

A limit of 1000 has been placed on the number of nodes returned to the tree picker. This limit is configurable with the *`glide.ui.group_heirarchy.max_nodes`* property.

Before you begin

Role required: personalize_dictionary

About this task

Note: The tree display hierarchy does not appear in reference fields when using mobile applications.

Procedure

1. Open the Dictionary attributes for the field.
2. Add `tree_picker=true` to the **Attributes** field.
   If there are multiple attributes, use a comma to separate them without any spaces between.

   Example

Dot-walking to data in related tables

Dot-walking provides access to fields on related tables from a form, list, or script.

If the current table contains a reference to another table, any field on the referenced table can be accessed using dot-walking.

Dot-walking references a field by building a chain of field names separated by dots (periods). For instance, `incident.assigned_to.company` references the company of the user assigned to an incident. The recommended limit for chain length is three levels.

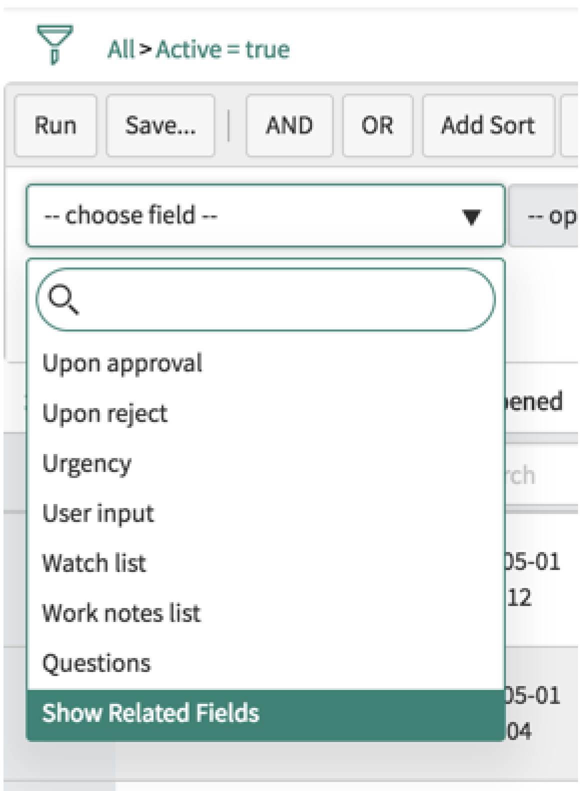
Dot-walking examples

Access fields on a related table from a form, list, or script by dot-walking. This topic includes examples of the different ways that you can dot-walk.

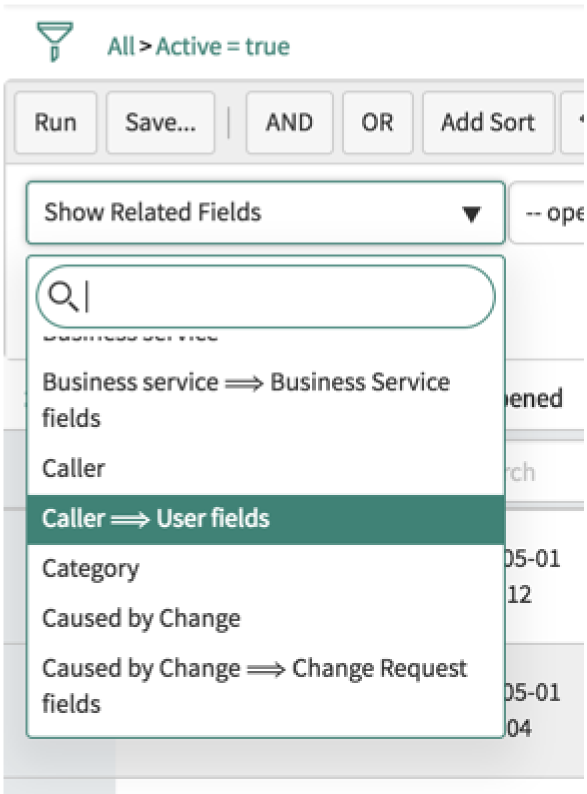
List fields

You can dot-walk to related fields in a list, such as the field list in a filter. This example demonstrates how to filter the Incident [incident] table by the company of the caller who registered the incident.

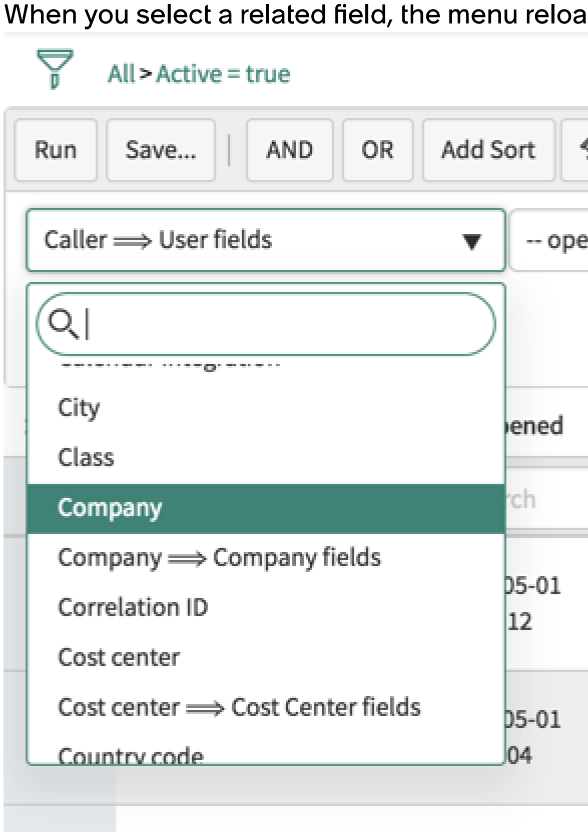
When you open the list of fields that you want to filter, you see the list of available Incident table fields. The reference fields are followed by the related fields. For example, **Caller** is followed by **Caller** > **User fields**, which means that **Caller** is a reference field, and the related fields are user fields on the **Caller** record. If the related fields are not present in the list, you would select **Show Related Fields** at the bottom of the list.



When you select **Show Related Fields**, the menu reloads to display related fields.

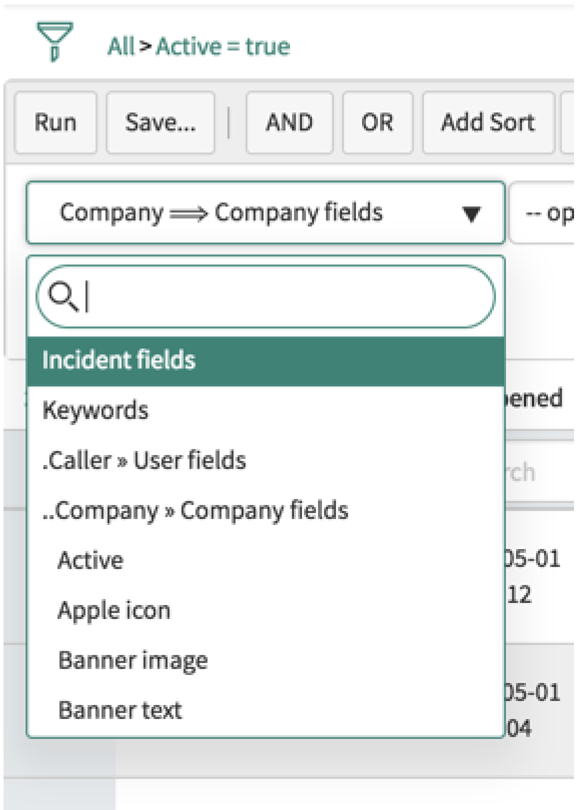


When you select a related field, the menu reloads with the fields of the related table.



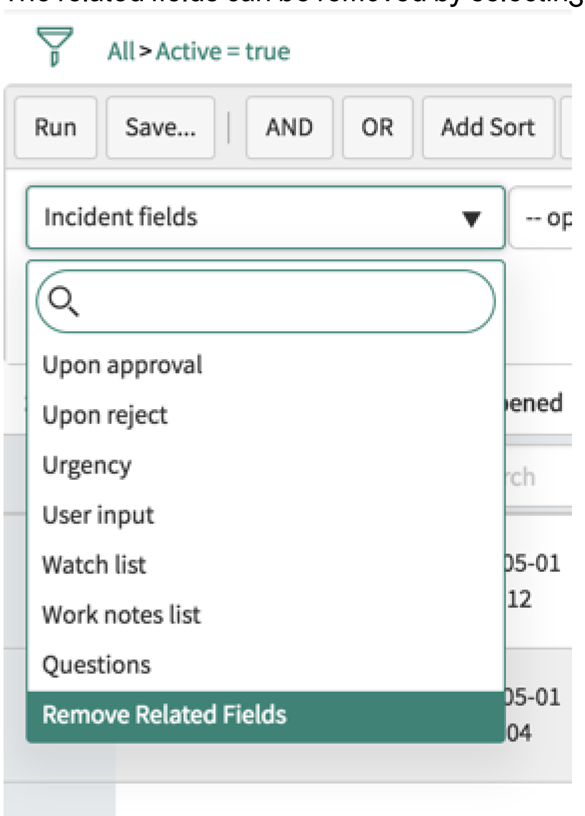
When you select **Company** under **Caller → User fields**, the field then becomes **Caller.Company**.

The following example shows where you are in the dot-walk. Each selected reference is stored at the top of the fields menu, and the number of dots preceding the field label indicate how many dots from the initial record the user has reached.



The example shows that the user is at **Incident.Caller.Company**. You can return to higher levels in the hierarchy by selecting fields located at the top of the menu. For instance, selecting **Incident fields** returns to the list of incident fields.

The related fields can be removed by selecting **Remove Related Fields** at the bottom of the list.

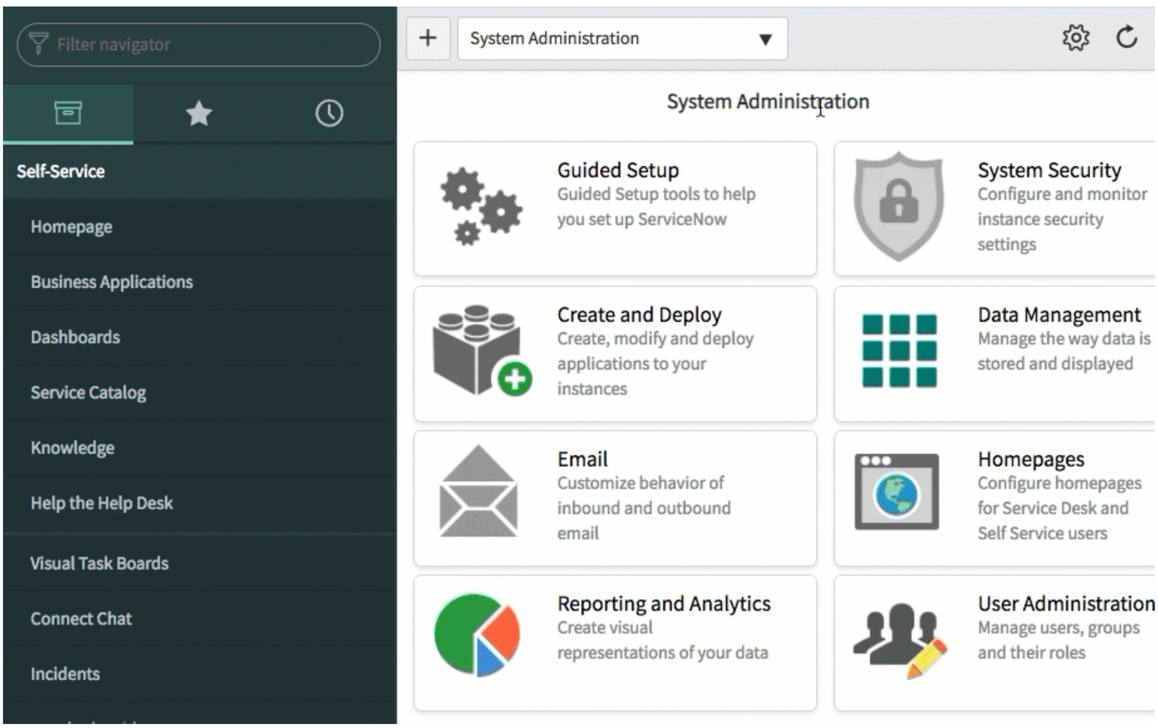


Condition builders

You can make a detailed query on a table by dot-walking in the condition builder.

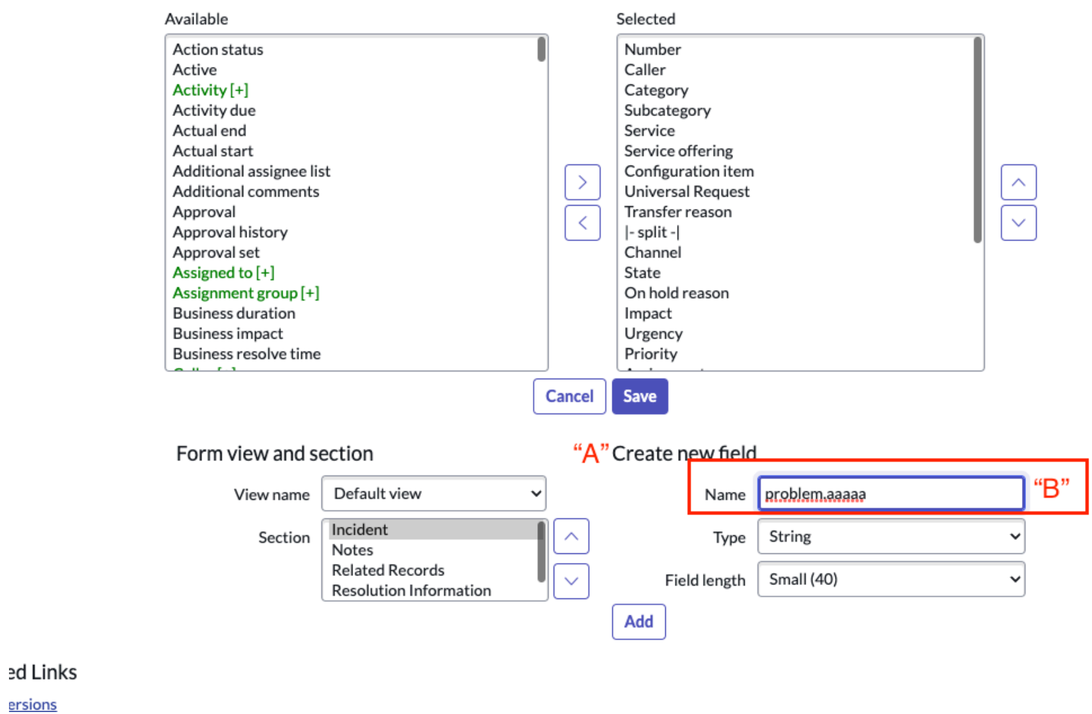
To dot-walk in a condition builder, first select **Show Related Fields** on the fields menu. This action allows you to add fields from related tables to your query.

The following GIF shows how you would dot-walk fields in a condition builder to find all Incident records assigned to one specific user, Beth Anglin. In the example, the user navigates to **Incident** > **Open** and then opens the condition builder. In the fields menu, the user first selects **Show Related Fields** and then opens the fields menu again to select **Assigned to → User fields**. The user opens the fields menu again to select **Last name**. The user builds the following condition: [Last name] [is] [Anglin]. After the user selects **Run**, the Incident list displays only the records assigned to Beth Anglin.



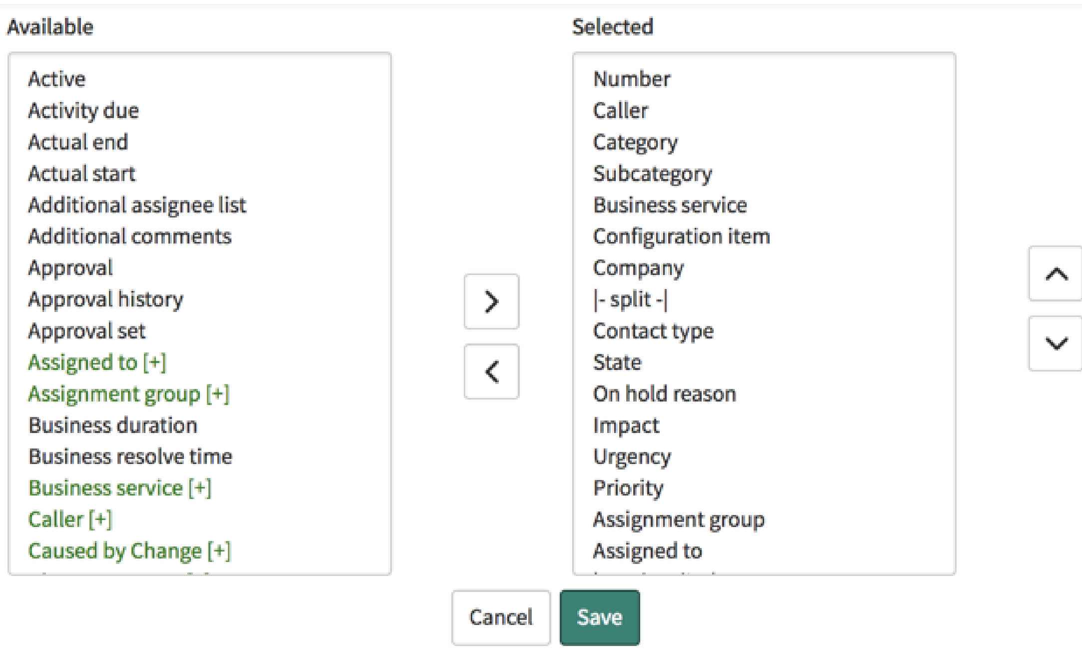
List collectors

Note: Adding new fields via dot-walking by filling out the Create new field section ("A" in example) in the Name field ("B" in example) is not supported. Adding unauthorized fields and adding fields against recommendations via dot-walking may result in unexpected behaviors in the platform.

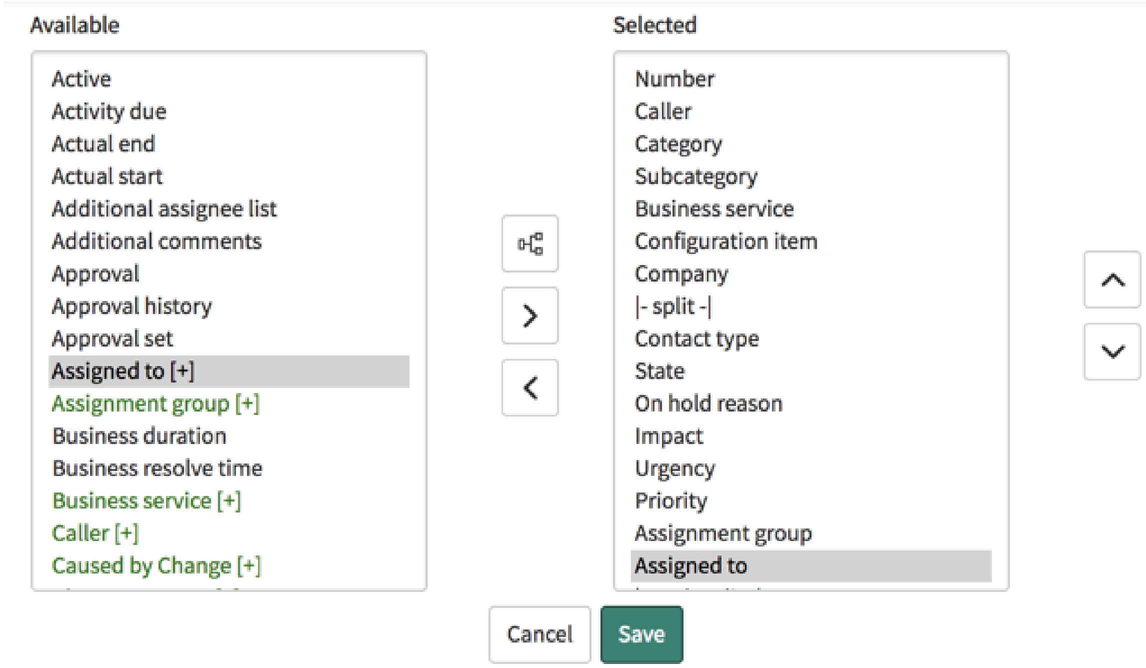


When selecting a list of fields from a list collector (for example, when you are configuring a form), you can dot-walk to fields from other forms.

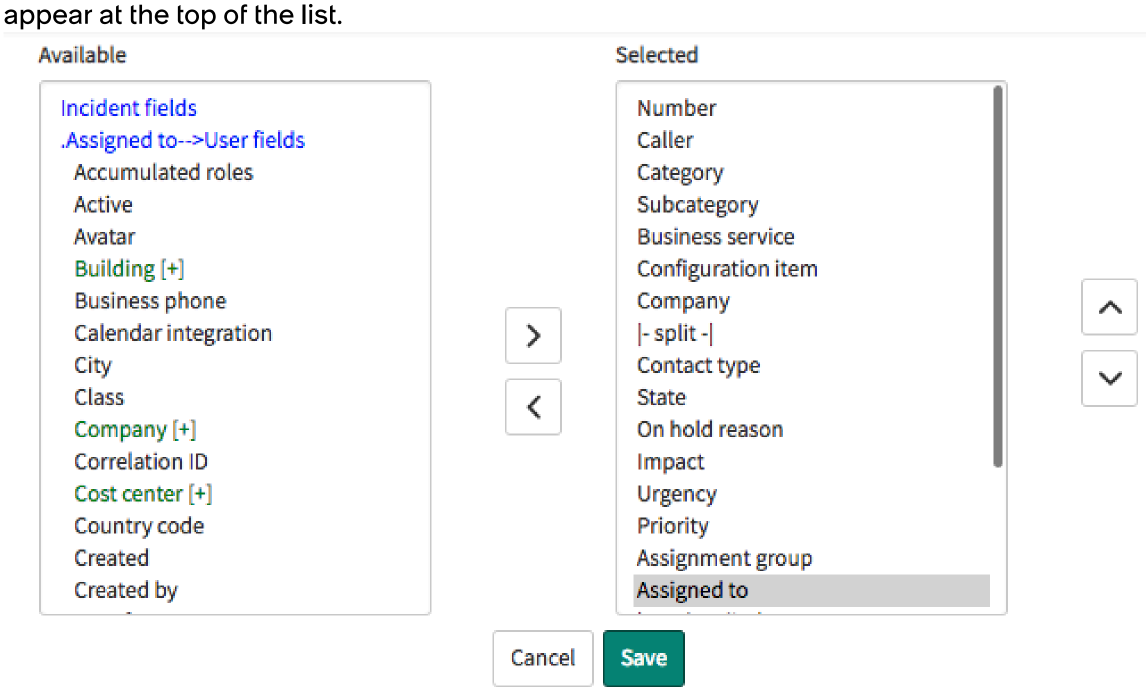
To see which fields are reference fields and can be dot-walked, look for green fields with a plus symbol.



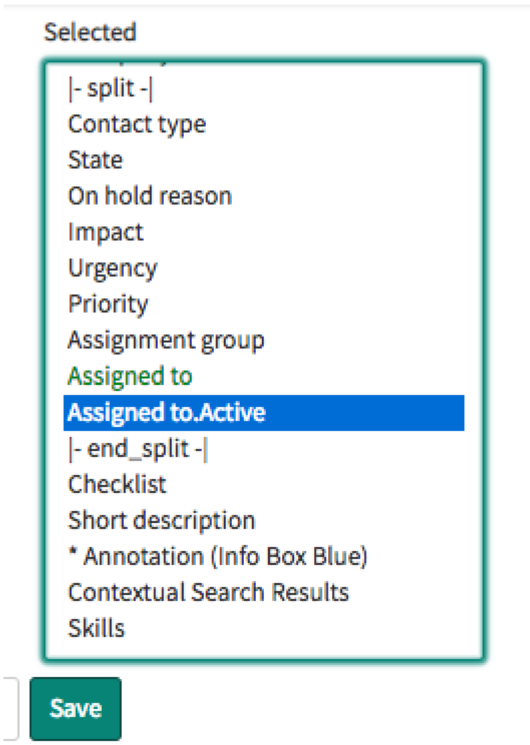
Once a reference field is highlighted, the expand icon ( ) appears above the add icon.



Selecting the expand icon opens the list of fields from the related list in the **Available** pane. The following example shows that the **Assigned to** fields were selected. The previous lists of fields appear at the top of the list.



Once the field is added to the **Selected** pane, it appears with its full dot-walked syntax. The following example, shows that **Assigned to.Active** has been selected.



Scripts

You can dot-walk within a script by invoking the dot-walk syntax. This functionality requires a knowledge of JavaScript.

For scripts that run on the server side, such as business rules, it is necessary to add `current.`

The following script, for example, is a scripted approval rule that requests an approval from the manager of the user who opened the ticket.

```
try{
  current.opened_by.manager;
}
catch(err){}
```

For scripts that run on the client side, such as client scripts, `current` is not necessary. For instance, the following Highlight VIP Caller script runs on the client side.

```
function onChange(control, oldValue, newValue, isLoading){
  //wait until there is a valid record in the field
  if(newValue){
    //get the caller object so we can access fields
    var caller = g_form. getReference('caller_id');
    var callerLabel =
 document.getElementById('label.incident.caller_id');
    var callerField =
 document.getElementById('sys_display.incident.caller_id');

  //check for VIP status
  if(caller.vip == 'true') {
    //change the caller label to red background
    //style object is CSSStyleDeclaration, style names are not
 standard css names
  if(callerLabel)
```

```
 document.getElementById('label.incident.caller_id').style.backg
roundColor = 'red';

  //change the caller's name field to red text
  if(callerField)

 document.getElementById('sys_display.incident.caller_id').style
.color = 'red';
  }
    else { //not a VIP, remove temporary styles if(callerLabel)

 document.getElementById('label.incident.caller_id').style.backg
roundColor = '';

    if(callerField)

 document.getElementById('sys_display.incident.caller_id').style
.color = '';
    }
  }
}
```

Variables

Often, you can add variables into templates, notifications, or other forms where a value is being called from the form.

For example, *${assigned_to}* is the variable for the **Assigned to** field.

As shown in the example, you can dot-walk to fields on the original record of any reference field. It is possible to dot-walk to any field on the assigned_to record, for example, *${assigned_to.manager}*.

When you dot-walk, you can have a longer chain if you need it, as in this example: *${assigned_to.department.manager.mobile_phone}*.

Sometimes, you can select this variable from a tree picker.

Tree pickers

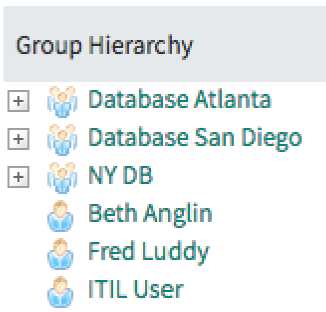
The tree picker interface has an expandable, hierarchical view that you can use to look up the following items:

- Configuration Items (CIs) that are subordinate to another, higher-level CI.
- Members of a certain group. For example, you would use a tree picker to look up a user in the Service Desk group.
- Reference elements for any hierarchical table. A hierarchical table is any table that has a parent field pointing back at itself. The Group [sys_user_group] table, for example, would be considered a hierarchical table because certain groups are children of parent groups.

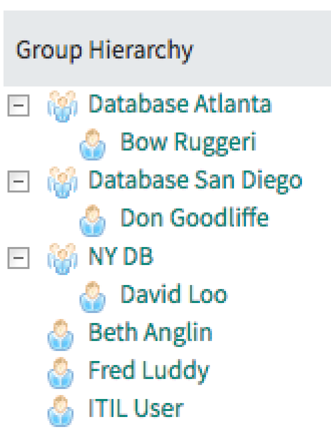
The following example shows how you would use a tree picker to assign an Incident record to a user in the Database group.

You would first navigate to any Incident record and then enter `Database` in the **Assignment group** field.

In this example, the Database group is a parent group with multiple child groups under it. When you select the search icon ( ) next to the **Assigned to** field, a window displays reference fields in the Database group.



Reference fields have the expand icon (+) next to their name. Clicking the **+** expands a list of the fields on that referenced field. In this example, expanding the **Database Atlanta** or **Database San Diego** fields opens a list of user records within each child group.



You would select any one of the user records to add it as a value in the **Assigned to** field.

Note: You can configure the tree picker to pick up to 1,000 nodes when you configure the *`glide.ui.group_heirarchy.max_nodes`* property. To set the property, open the Dictionary attributes for the field, and add `tree_picker=true` to the **Attributes** field. If there are multiple attributes, use a comma to separate them without any spaces between.

Configure items on forms or in lists using a list collector

Use a list collector to add, remove, or move items in a form or list. List collectors allow you to select multiple items from a list of available items and to remove items from a list of selected items. Some list collectors provide filter and search controls for available items, such as adding items to related lists.

Before you begin

Role required: admin

About this task

Use list collectors to personalize lists, add items to related lists, and Service Catalog list collector variables. Some list collectors allow users to customize the order of selections, such as when you are configuring a form or list.

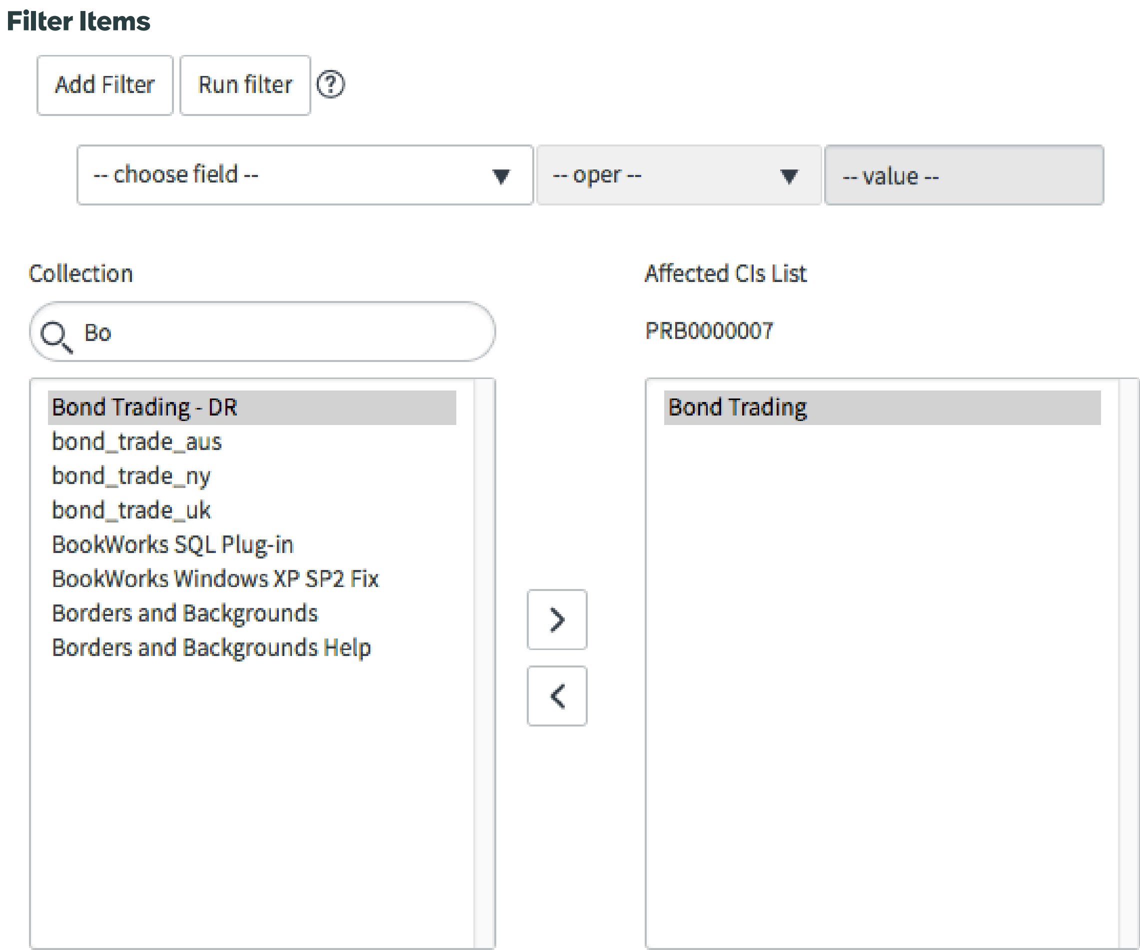
The list collector interface has two columns: the available items on the left and the selected items on the right.

Information fields for the highlighted available item appear beneath some list collectors. The information fields are the same as the reference lookup for a reference field on a form. To modify which fields appear, configure the reference lookup list.

Procedure

- To add items to the selection, double-click an available item on the left or select an item and click the add icon (**>**).
  The new item is added at the bottom of the selected items column on the right.
- To remove items from the selection, double-click the item on the right, or select the item and click the remove icon (**<**).
- To select multiple consecutive items, hold the Shift key and click the first and last item.
- To select multiple non-consecutive items, hold the Ctrl key (Command key on Mac) and click the desired items.
- To accessibly select multiple items, tab to each item and press the spacebar to select each item.
  Use the arrow key or tab to the **Add** button to move items from one list to another.
- To filter available items, create conditions using the condition builder and click **Run filter**.
- To search available items, enter text in the **Search** field.

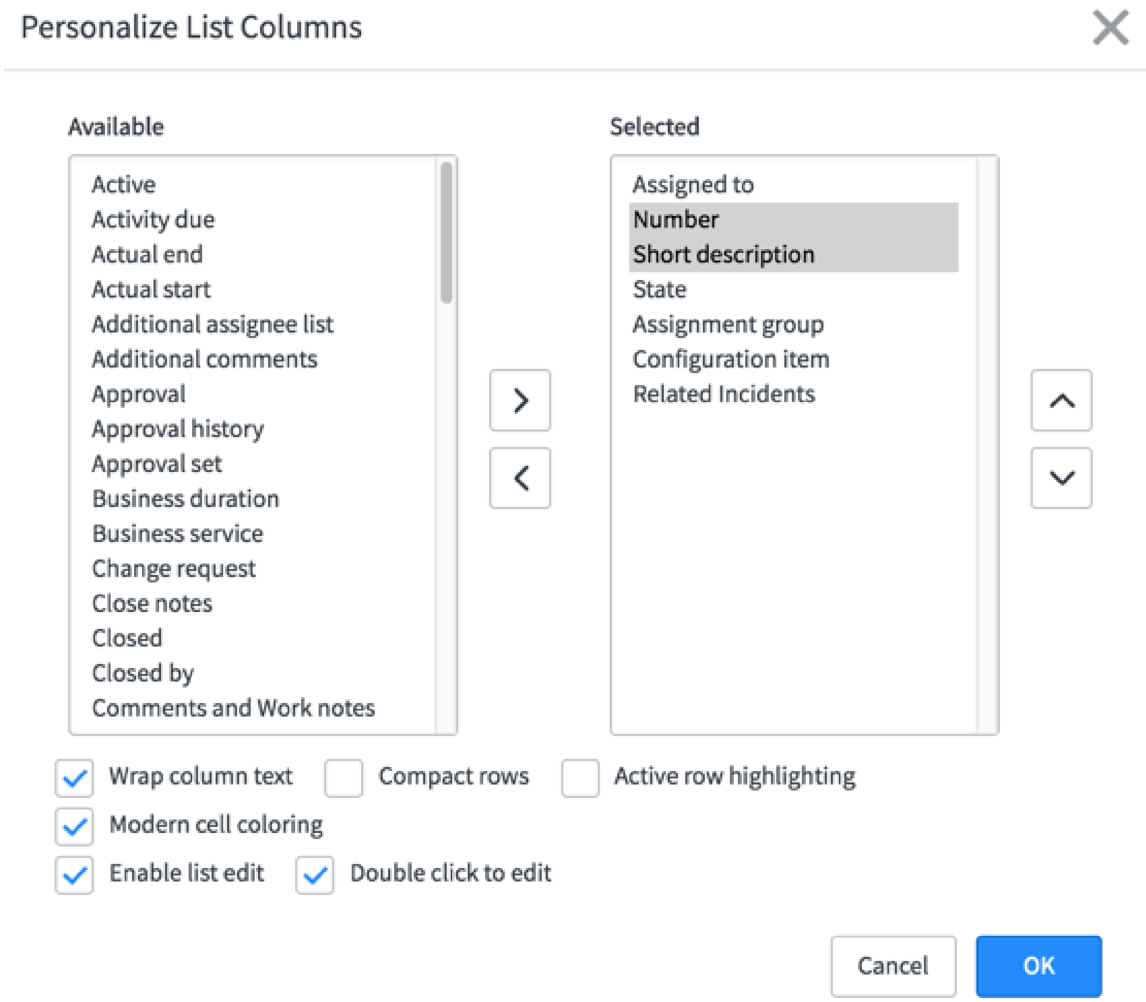
  The list of available items is filtered as you type.



- To move items one position, select the items and click the up or down icon.
- To move an item multiple positions, select consecutive items above or below the item then click the up or down icon. In this example, to move **Assigned to** to the top of the selections order, complete the following steps.

1. Hold the Shift key and click **Short description** then **Number**.
2. Click the down icon.

Arrange items



Related topics

Personal lists

Set the number of list collector items visible in the available column

You can modify the *glide.xmlhttp.excessive* property to change the number of items that appear in the **Available** column of the list collector.

Before you begin

Role required: admin

Procedure

1. Add the property to the System Properties [sys_properties] table.
2. Change the **Type** to **Integer**.
3. Enter a number in the **Value** field.

⚠ **Warning:** The default value is 100. Selecting a number significantly higher than 100 can lead to performance issues on your instance as the data is loaded into the list collector.

4. Save the property.

Related topics

Add a property

Activity streams

An activity stream is a list of entries in records and conversations, such as journal fields, comments, and work notes that display in task records and Sidebar conversations. Activity streams are available Core UI.

The three types of activity streams are as follows:

List activity stream

Streams live activity information for all records on the current list. For more information, see Activity streams in list view. You can click an item to open the record activity stream without opening the record.

Record activity stream

Appears in forms that are configured with the activity formatter . You can customize the activities to include in this type of stream.

When you follow a record to view it in the Connect Chat interface, the conversation contains the same information as the record activity stream. Comments that are entered in the Connect Chat window update the record activity stream.

Visual Task Board

Streams live activity information for all task cards in the current task board. You can click an item in the activity stream to open the task card and view the activity stream of the record.

Attachments and images

You can add and preview attachments and images in the activity stream by doing the following actions:

- Paste an image into a journal field and enter the inline text.
- Click an attachment to preview it. Use the download option to download the attachment locally.
- Use antivirus scanning to protect against virus infections that can be introduced by file attachments. After being uploaded, the system automatically scans all files for viruses. If a file is infected, you can't view or download the file.

@ Mentions

Get someone's attention on a record by mentioning them with the @ character in an activity stream.

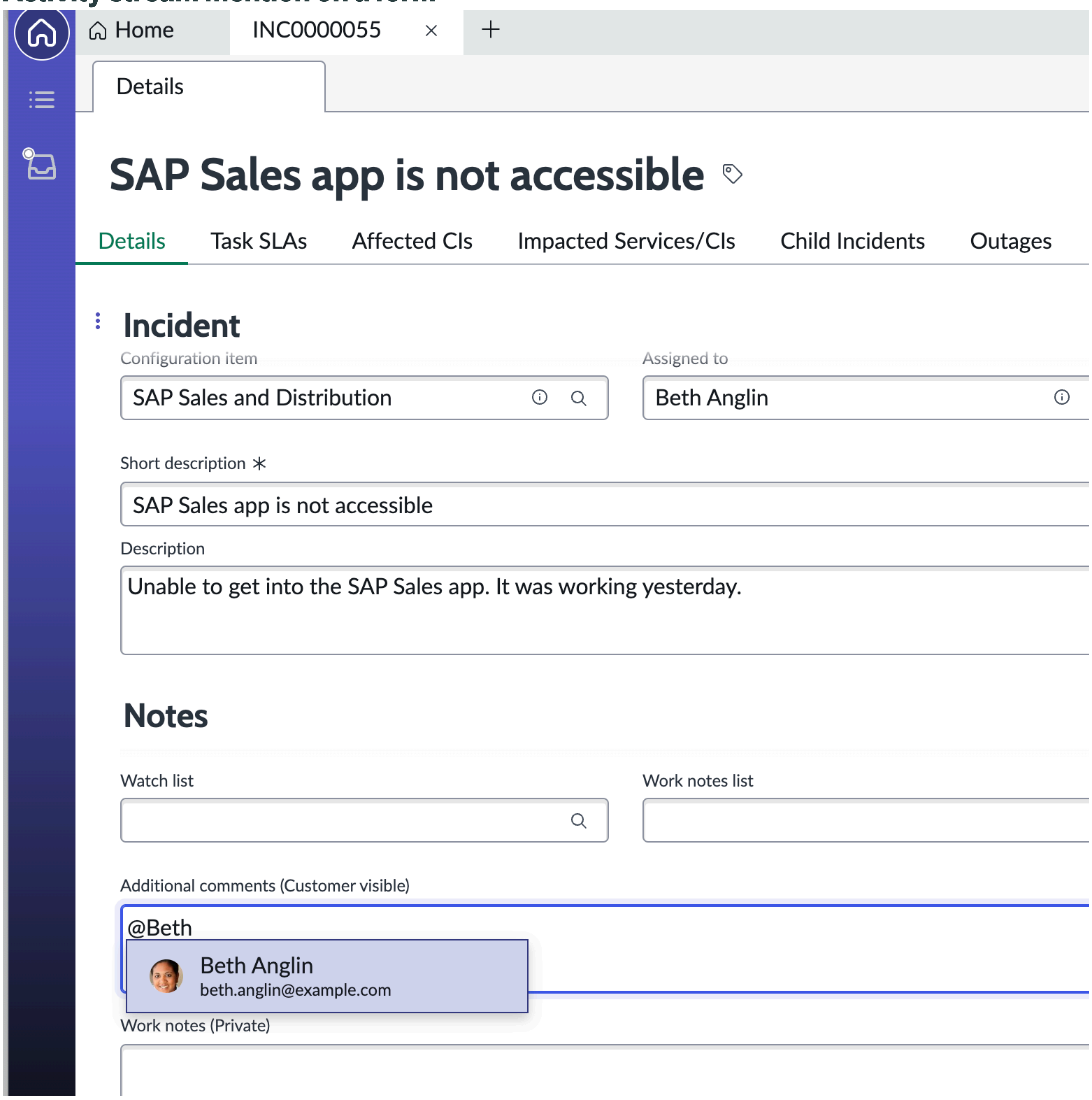
Note: Emails sent for @Mention run against the live_notification table and are not added to the journal field of the parent table.

Any user can use activity stream mentions in the following places:

- On a form, in the activity formatter (Core UI only).
- In a list, in the activity stream for a record.
- On a Visual Task Board card, in the card details.
- In a Connect record conversation.

To mention someone, enter the @ character in a supported activity stream. Next, select a user from the suggestion list to select any user in the instance. You can see which users have access to the record and, if presence is enabled, who is online. Enter any other text and post to the activity stream. The following example shows an #Mention on a form.

Activity stream mention on a form



By default, you receive an email notification when someone mentions you. You can disable this behavior by unsubscribing from the Activity Stream @Mention Email notification on your notification preferences.

If Connect is enabled, you can receive additional notifications, depending on whether you follow the record in Connect. When someone mentions you in a record that you do not follow in Connect, you receive whichever Connect notifications you enabled globally, as well as the Activity Stream @Mention Email notification. If you do follow the record in Connect, you only receive notifications according to your notification preferences for the record conversation. In this case, you do not receive the Activity Stream @Mention Email notification.

Note: The system creates a record on the notification [live_notification] table each time a user is mentioned. The record stores the information required to generate notifications.

You can filter out emails in the activity stream, for example, auto-generated and correspondence emails, by selecting the . Select **Post types** to check or clear the boxes of the types of emails and posts that display in your activity stream.

Note: The activity stream displays either a user's first and last name or their user name/user id, depending on the system property *glide.ui.activity.displayname*. It is possible that old entries in the activity stream will display a different user name/user id for the same user, if the value has changed. For more information, see KB1706641.

Create a condition statement using the condition builder

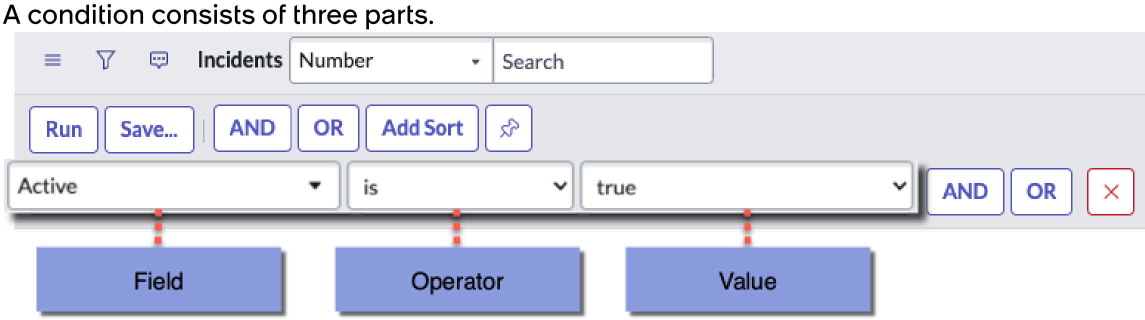
A condition builder constructs a condition statement with a series of contextually generated fields. Condition builders are used in many operations, such as creating filters, administering surveys, and administering access control.

Before you begin

Role required: admin

About this task

A condition consists of three parts.



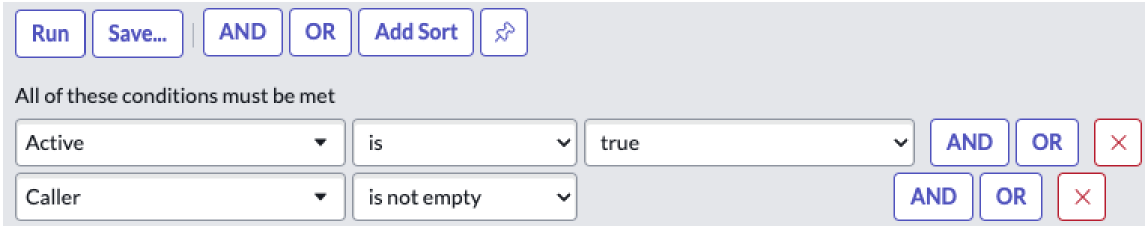
Part	Description
Field	A choice list based on the table and user access rights. The choice list can include fields on related tables by dot-walking.
Operator	A choice list based on the field type. For example, in the Incident [incident] table, the greater than operator does not apply to the **Active** field but it does apply to the **Priority** field.
Value	A text entry field or a choice list, depending on field type. For example, in the Incident [incident] table, the **Active** field offers a choice list with the values **true**, **false**, and **empty**, while the **Short Description** field offers a text entry field.

Procedure

1. To add a dependent condition, select **AND** or **OR** next to the condition.
2. To add a top-level condition, select **AND** or **OR** on the condition builder toolbar above the conditions.

3. To remove a condition, select the delete icon (X) next to the condition.

Example AND condition in List v2 filter



Condition builder

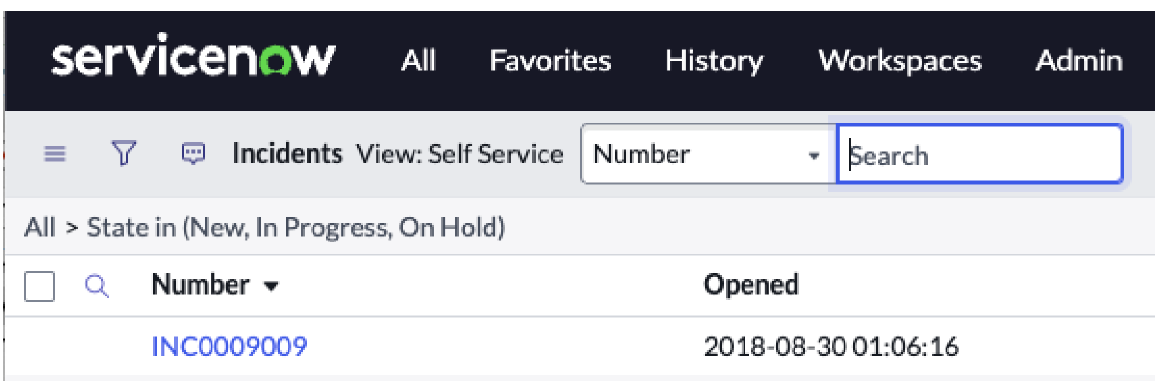
A condition builder constructs a condition statement with a series of contextually generated fields. Condition builders are used in many operations, such as creating filters, administering surveys, and administering access control.

Condition builder format

A condition consists of three parts:

- Field: a choice list based on the table and user access rights. The choice list can include fields on related tables by dot-walking.
- Operator: a choice list based on the field type. For example, in the Incident [incident] table, the greater than operator does not apply to the **Active** field but it does apply to the **Priority** field.
- Value: a text entry field or a choice list, depending on field type. For example, in the Incident [incident] table, the **Active** field offers a choice list with the values **true**, **false**, and **empty**, while the **Short Description** field offers a text entry field.

The conditions display above lists in Core UI as a breadcrumb, summarizing what you have selected.



Note: The condition builder breadcrumb in Core UI list view can be truncated depending on the values of two system properties:

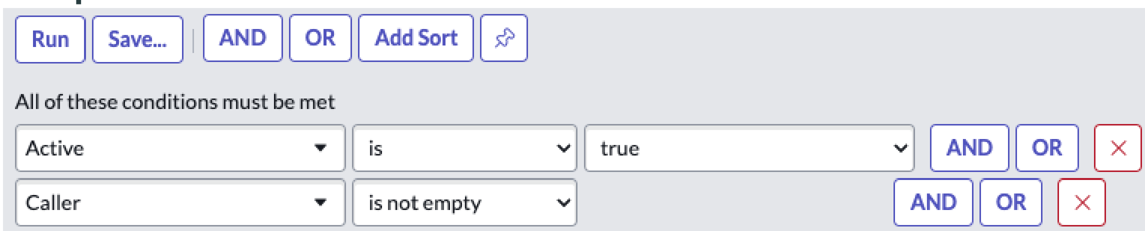
- *`glide.ui.breadcrumb_max_entries`*: specifies the maximum number of items displayed in the breadcrumb, with a default of 10.
- *`glide.ui.export.choice_list_max_characters`*: specifies the maximum number of characters displayed for a choice list within the breadcrumb, with a default of 80.

For more information, see KB1962280.

Condition builder actions

You can add a dependent condition by clicking **AND** or **OR** next to the condition. You can add a top-level condition by clicking **AND** or **OR** on the condition builder toolbar above the conditions. You can remove a condition by clicking the delete icon (X) next to the condition.

Example AND condition in filter



For an example of a scripted filter see the KB article Creating dynamic JavaScript filters in reports.

Related topics

OR conditions

Filters

Dot-walking to data in related tables

Filtering on empty fields

Most filter operations do not return empty fields in their result set. You can create a filter that displays records with an empty field value in addition to records that match the initial filter conditions.

About this task

For example, when viewing all records that are assigned to the Hardware group, to include records with an empty **Assignment group** field, complete the following steps.

Procedure

1. Create the filter condition **[Assignment group] [is] [Hardware]**.

   Note: This condition does not return those records where the **Assignment group** field is empty.

2. Click **OR** next to the original filter condition.
3. Create another filter condition of **[Assignment group] [is empty]**.
4. Run the filter.

Values for date/time fields

When you filter on fields of type date/time, such as the **Created** field on any task record, several time-related options are available, such as **Today**, **This week**, **Last 3 months**, and so on.

For example, at 12:00 on June 1, a user in New York filters a list of incidents using the **Created on Today** condition. The resulting list shows all incidents created during the last twelve hours: between midnight (00:00:00) and the user's current time, noon (12:00:00), on June 1. A filter for **This week** returns incidents created between the previous Monday at midnight to the current day and time.

A filter for **Last 3 months** returns incidents between midnight on the first of the month three full months ago and the current day and time. For example, if you choose the **Last 3 months** filter on April 15, the results show records created since January 1 up until April 15. A filter for **Last 12 months** returns results from January to January.

A filter for **Last week** returns incidents from midnight on Sunday the week previous ending the following Sunday at midnight. It does not include up to the present day. For example, if you choose the **Last week** filter on Thursday August 17, the results show records created Sunday August 6 up until Sunday August 13.

For the **at or before** and **at or after** filters, use midnight as a start or end point. For example, if you filter a list of incidents created **[at or after] [Yesterday]**, the resulting list shows all incidents created at midnight yesterday or later. If it is Thursday, August 7, and you filter a list of incidents created **[at or before] [Last week]**, the resulting list shows all incidents created at and before midnight on Sunday August 3, which is the end of last week.

Related topics

Date and Date/Time fields

Operators and values available for date and time fields

You can filter date and time fields using the operators and values listed here.

Operators available for date/time fields

Operator	Definition	Example
after	Returns records after the specified time period.	A filter run **[after] [Next Month]** on April 18, 2018 will return records from June 1 and later.
at or after	Returns records during and after the specified time period.	A filter run **[at or after] [Next Month]** on April 18, 2018 will return records from May 1 and later.
at or before	Returns records during and before the specified time period.	A filter run **[at or before] [Next Month]** on April 18, 2018 will return records from May 31 and earlier.
before	Returns records before the specified time period.	A filter run **[before] [Next Month]** on April 18, 2018 will return records from before May 1.
between	Returns records between to specified dates.	A filter run **[between]** April 18, 2018 (00:00:00) and April 19, 2018 (23:59:59) will return records on or between the two dates.
is anything	Returns all records, including records with empty values in the specified field.	A list of incident records filtered on **[Created] [is anything]** returns all incidents.
is different	Returns records within a different time frame from another field.	A list of incident records filtered on **[Created] [is different] [year] from [Closed]** returns records where the values in the **[Created]** and **[Closed]** field are in different years.
is empty	Returns records where the specified field has no value.	A list of incident records filtered on Closed **[is empty]** returns records where the Closed field has no value.
is less than	Returns records where a field is within specified time frame when compared to another field.	A list of incident records filtered on **[Closed] [is less than] [2] [hours] [after] [Created]** will return results where the **[Closed]** value is less than 2 hours after the **[Created]** value.

Operators available for date/time fields (continued)

Operator	Definition	Example
is more than	Returns records where a field is beyond the specified time frame when compared to another field.	A list of incident records filtered on **[Closed] [is more than] [2] [hours] [after] [Created]** will return results where the **[Closed]** value is more than 2 hours after the **[Created]**value.
is not empty	Returns records where the specified field has a value.	A list of incident records filtered on **[Closed] [is not empty]** returns results where the Closed field has a value.
is same	Returns records where the two fields share a specified time frame.	A list of incidents filtered on **[Created] [is same] [hour] as [Closed]** returns records where the record **[Created]** and **[Closed]** fields are within the same hour.
not on	Returns records that do not match the specified value.	A filter of **[not on] [Today]** returns records that do not match the current date.
on	Returns records on the specified value.	A filter run **[on] [Today]** on April 18, 2018 will return records from April 18.
relative	Returns records with a specified time frame before or after the current time.	A filter run on **[Created] [relative] [before] [5] [minutes] [ago]** run at 12:00:00 returns records from before 11:55:00 of the same date.
trend	Returns records on, after and/or before a specified hour of the day, day of the week, week of the year, month, quarter, or year.	A filter of **[Created] [trend] [Monday]** returns records where the **[Created]** date falls on a Monday.

Values available for date/time fields

Value	Definition	Example
Current hour/ minute	Returns records matching the current hour or minute	A filter run **[on] [Current hour]** on April 18 (12:02:00), would return records from April 18 (12:00:00) to April 18 (12:59:59)
Last **n** minutes/ hours/days/ weeks/months/ quarters/years	Returns records within the previous selected time period, starting with the beginning of that time frame.	A filter run **[on] [Last 3 months]** on April 18, would return records from January 1 up until April 18. **Note:** Years returns results from January to January.
Next **n** weeks/ months/ quarters/years	Returns records within the next selected time period, including records with values up to the end of that time frame.	A filter run **[on] [Next year]** on April 18, 2018 will return any records with a date in 2019, including dates in 2019 after April 18.
One year ago	Returns records from the current time, one year ago to the end of the current month	A filter run **[on] [One year ago]** on April 18, 2018 (12:00:00) will return records from April 18, 2017 (12:00:00) to April 30 (23:59:59)

Values available for date/time fields (continued)

Value	Definition	Example
This week/ month/quarter/ year	Returns records with the current selected time period.	A filter run **[on] [This week]** on April 18, 2018 will return records from April 15 (00:00:00) to April 21 (23:59:59)
Today	Returns records between midnight of the current day and midnight of the next day	A filter run **[on] [Today]** on April 18, 2018 will return records from April 18 (00:00:00) to April 18 (23:59:59)
Tomorrow	Returns records between midnight (00:00:00) and the current time.	A filter run **[on] [Tomorrow]** on April 18, 2018 will return records from April 19 (00:00:00) to April 19 (23:59:59)
Yesterday	Returns records between midnight of the previous day and midnight of the current day.	A filter run **[on] [Yesterday]** on April 18, 2018 will return records from April 17 (00:00:00) to April 17 (23:59:59)

Comparing field values

Field comparison allows users to evaluate equality between fields on the same table or on related tables by using operators in the condition builder.

Also, you can compare date type fields to determine whether the values are within a certain range of each other. For example, you can compare the planned start date of a task to the actual start date. You can use field comparisons in a list view and to generate reports.

The primary function of field comparison is evaluating whether two fields on a record or related record have identical values. For example, you can create a filter to display all incidents whose **Caller** field references the same user record as the **Closed by** field.

Available operators

Field comparison provides several filter operators for comparing field values.

- **[is same]** if two field values are the same, evaluates to true.
- **[is different]** if two field values are not the same, evaluates to true.
- **[is less than]** if two date values are within a user-defined range of each other, evaluates to true.
- **[is more than]** if two date values are not within a user-defined range of each other, evaluates to true.

Comparing choice list values

Field comparison compares the dictionary **Value** field of a choice list, not the **Label** value. For example, a high priority incident has a priority value of **1**, not **1 - High**. To find the **Value** of a choice, right-click the field label and select **Configure Dictionary**. The **Choices** related list shows the **Value** for each choice.

Comparing empty fields

By default, most filter operations do not return empty fields in their result set. To include records with empty fields in a result set, add a filter condition for the left operand with an operator of **[is empty]**. For more information, see Filtering on empty fields.

Using operators and operands

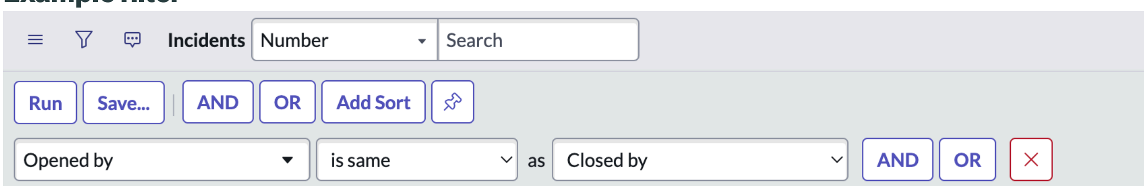
When comparing fields, the two fields being compared are called the left operand and right operand. The type of field selected in the left operand, and the operator selected, determine which right operands are available. When using the **[is same]** or **[is different]** operators, the right operand choices include only fields of the same field type, such as **String** or **Integer**, as the left operand.

For example, a filter on the Task [task] table with a left operand of **[Opened by]** and an operator of **[is same]**, only allows you to choose user reference fields, such as the **[Closed by]** field, in the right operand.

The **[is more than]** and **[is less than]** operators are only available with date type fields.

This example filter returns records where the user who opened the record also closed the record.

Example filter



Comparable fields

Field comparison supports the comparison of several fields. The fields that are comparable include the following types:

- String, choice, integer, and boolean fields: Return true if both values match.
- Reference fields: Return true if both reference fields refer to the same record.
- Date and time fields: Can match date values based on hour, day, week, month, quarter, or year. Also, you can evaluate whether two dates fall within a certain range of each other.

Note: Field comparison does not support journal, keyword, script, duration, list, or HTML fields.

Comparing dates

Date comparison allows you to evaluate equality between two components of the date, such as the hour of the day or the date within a month. Also, you can evaluate if two dates fall within a certain range of each other.

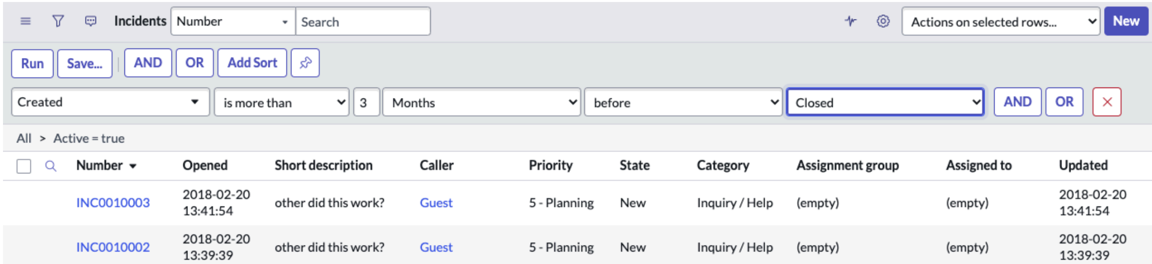
Date comparisons are based on the active user's time zone. For example, as a user in the PST time zone, a filter of **[Created] [is same] [Day] as [Closed]** evaluates true for an incident created at 6 AM PST and closed at 3:00 PM PST as both times are within the same day. However, a user in the GMT time zone would not see this same incident record in response to the example filter; in GMT those times do not fall on the same date.

You can Evaluate equality between date values and you can evaluate unequal dates within a range.

Evaluate unequal dates within a range

You can compare unequal date field values by evaluating whether two dates fall within a certain range of each other. For example, you can create a filter of **[Created on] [is more than] [3] [Months] [before] Closed]** to display all records that were created at least three months before they were closed. The numerical value specified, such as the value **3** in the example, must be an integer of no more than two digits. For evaluations of differences larger than 99 units, select a less granular unit of time, such as **Months** instead of **Days**.

Unequal dates field comparison



Choice field date comparison choices

Choice field	Date Comparison Choices
Operator	is more than, is less than
Unit of time	Hours, Days, Weeks, Months, Quarters, Years
Relative position of dates	before, after, before or after

Evaluate equality between date values

Date comparison evaluates a match for one of several date increments.

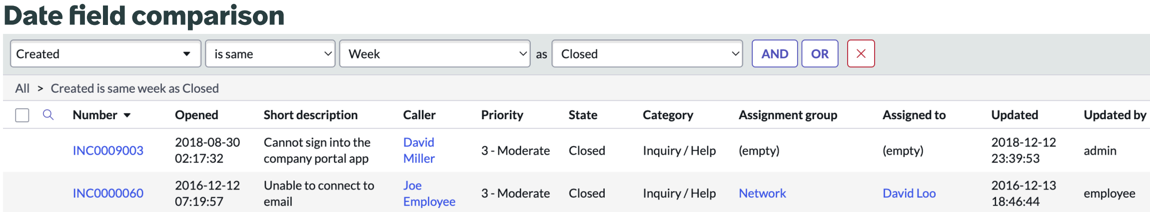
Before you begin

Role required: none

About this task

You can specify granularity to the hour, day, week, month, quarter, or year. For example, the filter **[Created on] [is same] [Week] as [Closed]** returns records that were closed in the same week that they were opened. When you run this type of filter, be sure to specify the year in an additional filter condition of **[Created] [is same] [Year] as [Closed]** to eliminate records that were created a year before they were closed.

Date field comparison



Procedure

1. In the condition builder, create a new condition.
2. Select a date field from the left operand choice list.
3. Select **[is same]** or **[is different]** from the operator choice list.
   An additional choice list appears.
4. Select the granularity from the date range choice list.

Date range descriptions

Date Range	Description
Hour	Filters on the hour of the day.
Day	Filters on the day of the month, not the date. For example, a Day value of the 1 of August matches with a Day value of the 1 of September.
Week	Filters on the week of the year. ServiceNow defines a week as Sunday through Saturday for the purposes of Field Comparison.
Month	Filters on the month of the year. For example, any date within December returns the 12 month of the year.
Quarter	Filters on the quarter of the year.
Year	Filters on the year.

5. Select a different date field from the right operand choice list.
6. Click **Run**.

Operators available for filters and queries

The system provides a set of operators for use with filters, condition builders, and encoded queries. The data type of a field determines what operators are available for it.

Operators available for condition builders

Operators available for condition builders

Operator label	Example condition	Equivalent query operator	Example query	Example output
AND	[Active][is][True] [AND][Caller][is not empty]	^	active=true^CallerISNOTEMPTY	All records that have both of the following: • **Active** field is **True** • **Caller** field has any value
OR condition	[Short description] [is empty][OR] [Description][is empty]	^OR	short_descriptionISEMPTY^ORdescriptionISEMPTY	All records that have at least one of the following: • **Short description** field has no value • **Description** field has no value

Operators available for condition builders (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
OR filter	All these conditions must be met [Short description][is empty] OR all these conditions must be met [Description][is not empty]	^NQ new query	short_descriptionISEMPTY^NQdescriptionISNOTEMP	All records that have at least one of the following: • **Short description** field has no value • **Description** field has no value

Operators available for string fields

Operators available for string fields

Operator label	Example condition	Equivalent query operator	Example query	Example output
starts with	[Short description][starts with][SAP]	STARTSWITH	short_descriptionSTARTSWITHSAP	All records in which the characters "SAP" appear at the beginning of the value for the **Short description** field.
ends with	[Short description][ends with][outage]	• % • ENDSWITH	short_descriptionENDSWITHoutage	All records in which the string "outage" appears at the end of the value for the **Short description** field.
contains	[Short description][contains][SAP]	• * • LIKE	short_descriptionLIKESAP	All records in which the characters "SAP" appear anywhere in the value for the **Short description** field.
does not contain	[Short description][does not contain][SAP]	• !* • NOT LIKE	short_descriptionNOT LIKESAP	All records in which the characters "SAP" do not appear anywhere

Operators available for string fields (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
				in the value for the **Short description** field.
is	[Short description][is][Network storage unavailable]	=	short_description=Network storage unavailable	All records in which the **Short description** says nothing else but "Network storage is unavailable."
is not	[Short description][is not][Network storage unavailable]	!=	short_description!=Network storage unavailable	All records in which the value for the **Short description** field says anything but "Network storage is unavailable."
is empty	[Short description][is empty]	ISEMPTY	short_descriptionISEMPTY	All records in which there is no value in the **Short description** field.
is not empty	[Short description][is not empty]	ISNOTEMPTY	short_descriptionISNOTEMPTY	All records in which there is any value in the **Short description** field.
is anything	[Short description][is anything]	ANYTHING	short_descriptionANYTHING	All records in which the **Short description** field is one of the following: • any value • empty • NULL
is empty string	[Short description][is empty string]	EMPTYSTRING	short_descriptionEMPTYSTRING	All records in which there is no value in the **Short description** field.
less than or is	[Short description][less than or is][s]	<=	short_descriptionlt;	All records in which the string in the **Short description** field is one of the following:

Operators available for string fields (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
				• the first letter is any letter between "a" and "s" • the exact value is "s"
greater than or is	[Short description] [greater than or is][s]	>=	short_description>=s	All records in which the string in the **Short description** field is one of the following: • the first letter is any letter between "s" and "z" • the exact value is "s"
between	[Short description] [between][q] and [t]	BETWEEN	short_descriptionBETWEENq@t	All records in which the first letter in the **Short description** field is "q," "r," "s," or "t."
is same	[Short description] [is same] as [Description]	SAMEAS	short_descriptionSAMEASdescription	All records in which there exist matching values for the **Short description** and **Description** fields.
is different	[Short description][is different] from [Description]	NSAMEAS	short_descriptionNSAMEASdescription	All records in which there exist differing values for the **Short description** and **Description** fields.

Operators available for reference fields

Operators available for reference fields

Operator label	Example condition	Equivalent query operator	Example query	Example output
is	[Caller][is][Don Goodliffe]	=	caller_id=9ee1b13dc6112271007f9d0efdb69cd0	All records in which the **Caller** is no one else but Don Goodliffe.
is not	[Caller][is not][Don Goodliffe]	!=	caller_id!=9ee1b13dc6112271007f9d0efdb69cd0	All records in which the **Caller** field is populated by any user record but Don Goodliffe.
is empty	[Caller][is empty]	ISEMPTY	caller_idISEMPTY	All records in which the **Caller** field has no value.
is not empty	[Caller][is not empty]	ISNOTEMPTY	caller_idISNOTEMPTY	All records in which there is any value in the **Caller** field.
starts with	[Caller][starts with][Don]	STARTSWITH	caller_idSTARTSWITHDon	All records in which the name in the **Caller** field begins with "Don."
ends with	[Caller][ends with][liffe]	• % • ENDSWITH	caller_idENDSWITHliffe	All records in which the name in the **Caller** field has the letters "liffe" at the end.
contains	[Caller][contains][on]	• * • LIKE	caller_idLIKEon	All records in which the characters "on" appear anywhere in the name for the **Caller** field.
does not contain	[Caller][does not contain][on]	• !* • NOT LIKE	caller_idNOT LIKEon	All records in which the characters "on" do not appear anywhere in the name for the **Caller** field.
is anything	[Caller][is anything]	ANYTHING	caller_idANYTHING	All records in which the **Caller** field is one of the following:

Operators available for reference fields (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
				• any value • empty • NULL
is same	[Caller][is same] as [Assigned to]	SAMEAS	caller_idSAMEASassigned_to	All records in which the same user record is referenced in the **Caller** and **Assigned to** fields.
is different	[Caller][is different] from [Assigned to]	NSAMEAS	caller_idNSAMEASassigned_to	All records in which the user records in the **Caller** and **Assigned to** fields do no match.
is empty string	[Caller][is empty string]	EMPTYSTRING	caller_idEMPTYSTRING	All records in which the **Caller** field has no value.
is (dynamic)	[Caller][is (dynamic)][Me]	DYNAMIC	caller_idDYNAMIC90d1921e5f510100a9ad2572f2b47	All records in which your user record populates the **Caller** field.

Note: Not all operators are available for all reference types. Depending on the reference you select, you may see a shorter list of operators.

Operators available for choice fields containing strings

Operators available for choice fields containing strings

Operator label	Example condition	Equivalent query operator	Example query	Example output
is	[Subcategory][is] [Email]	=	subcategory=email	All records in which the **Subcategory** is nothing else but **Email**.
is not	[Subcategory][is not][Email]	!=	subcategory!=email	All records in which the **Subcategory** field is populated

Operators available for choice fields containing strings (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
				by any value except **Email**.
is one of	[Subcategory] [is one of][DB2, MS SQL Server, Oraclel]	IN	subcategoryINdb2,sql server,oracle	All records in which the **Subcategory** field is populated by one of the following values: • DB2 • MS SQL Server • Oraclel
is not one of	[Subcategory][is not one of][DB2, MS SQL Server, Oraclel]	NOT IN	subcategoryNOT INdb2,sql server,oracle	All records in which the **Subcategory** field is populated by anything except the following values: • DB2 • MS SQL Server • Oraclel
contains	[Subcategory] [contains][Em]	LIKE	subcategoryLIKEem	All records in which the characters "Em" appear anywhere in the value for the **Subcategory** field.
starts with	[Subcategory] [starts with][Em]	STARTSWITH	subcategorySTARTSWITHem	All records in which the characters "Em" appear at the beginning of the value for the **Subcategory** field.
ends with	[Subcategory] [ends with][il]	• % • ENDSWITH	subcategoryENDSWITHil	All records in which the characters "il" appear at the end of the value for the **Subcategory** field.

Operators available for choice fields containing strings (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
does not contain	[Subcategory] [does not contain][Em]	NOT LIKE	subcategoryNOT LIKEem	All records in which the characters "Em" do not appear anywhere in the value for the **Subcategory** field.
is anything	[Subcategory][is anything]	ANYTHING	subcategoryANYTHING	All records in which the **Subcategory** field is one of the following: • any value • empty • NULL
is same	[Subcategory] [is same] as [Category]	SAMEAS	subcategorySAMEAScategory	All records in which there exist matching values for the **Subcategory** and **Category** fields.
is different	[Subcategory][is different] from [Category]	NSAMEAS	subcategoryNSAMEAScategory	All records in which there exist differing values for the **Subcategory** and **Category** fields.

Operators available for choice fields containing integers

Operators available for choice fields containing integers

Operator label	Example condition	Equivalent query operator	Example query	Example output
is	[Impact][is][1 - High]	=	impact=1	All records in which the value in the **Impact** field is nothing else but **1 - High**.
is not	[Impact][is not][1 - High]	!=	impact!=1	All records in which the value in the **Impact** field is anything but **1 - High**.

Operators available for choice fields containing integers (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
is one of	[Impact][is one of][1 - High, 2 - Medium]	IN	impactIN1,2	All records in which the **Impact** field is populated by one of the following values: • **1 - High** • **2 - Medium**
is not one of	[Impact][is not one of][1 - High, 2 - Medium]	NOT IN	impactNOT IN1,2	All records in which the **Impact** field is populated by anything except the following values: • **1 - High** • **2 - Medium**
is empty	[Impact][is empty]	EMPTY	impactISEMPTY	All records in which the **Impact** field has no value.
is not empty	[Impact][is not empty]	NOTEMPTY	impactISNOTEMPTY	All records in which the **Impact** field has any value.
less than	[Impact][less than][2 - Medium]	<	impact<2	All records in which the **Impact** field has a value of **1 - High**.
greater than	[Impact][greater than][2 - Medium]	>	impact>2	All records in which the **Impact** field has a value of **3 - Low**
less than or is	[Impact][less than or is][2 - Medium]	<=	impact<=2	All records in which the **Impact** field has a value of **1 - High** or **2 - Medium**.
greater than or is	[Impact][greater than or is][2 - Medium]	>=	impact>=2	All records in which the **Impact** field has a value of **2 - Medium** or **3 - Low**.

Operators available for choice fields containing integers (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
between	[Impact] [between][1 - High] and [3 - Low]	BETWEEN	impactBETWEEN1@2	All records in which the **Impact** field has one of the following values: • **1 - High** • **2 - Medium** • **3 - Low** .
is anything	[Impact][is anything]	ANYTHING	impactANYTHING	All records in which the **Impact** field is one of the following: • any value • empty • NULL
is same	[Impact][is same] as [Urgency]	SAMEAS	impactSAMEASurgency	All records in which there exist matching values for the **Impact** and **Urgency** fields.
is different	[Impact][is different] from [Urgency]	NSAMEAS	impactNSAMEASurgency	All records in which there exist differing values for the **Impact** and **Urgency** fields.

Note: The operators 'less than or is' and 'greater than or is' are not supported for integer fields in the condition builder. Use a scripted condition instead.

Operators available for date-time fields

Operators available for date-time fields

Operator label	Example condition	Equivalent query operator	Example query	Example output
on	[SLA due][on] [Today]	ONToday	sla_dueONToday@javascript:gs.daysAgoStart(0)@java	All records in which the value for the **SLA due** field matches the date for today.

Operators available for date-time fields (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
not on	[SLA due][not on] [Today]	NOTONToday	sla_dueNOTONToday@javascript:gs.daysAgoStart(0)@	All records in which the value for the **SLA due** field is any other date but today.
before	[SLA due][before] [Today]	<	sla_due<javascript:gs.daysAgoStart(0)	All records in which the value for the **SLA due** field is any date previous to today.
at or before	[SLA due][at or before][Today]	<=	sla_due<=javascript:gs.daysAgoEnd(0)	All records in which the value for the **SLA due** field is one of the following: • any date previous to today • today
after	[SLA due][after] [Today]	>	sla_due>javascript:gs.daysAgoEnd(0)	All records in which the value for the **SLA due** field is any date after today.
at or after	[SLA due][at or after][Today]	>=	sla_due>=javascript:gs.daysAgoStart(0)	All records in which the date value for the **SLA due** field is one of the following: • today • any date after today
between	[SLA due] [between] [Yesterday] and [Today]	BETWEEN	sla_dueBETWEENjavascript:gs.daysAgoStart(1)@javas	All records in which the value for the **SLA due** field is either yesterday's or today's date.
trend (on or after)	[SLA due][trend] [on or after] [Monday]	DATEPART	sla_dueDATEPARTMonday@javascript:gs.datePart('da	All records in which the date in the **SLA due** field is on any day of the week except a Sunday.

Operators available for date-time fields (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
trend (on or before)	[SLA due][trend][on or before][Monday]	DATEPART	sla_dueDATEPARTMonday@javascript:gs.datePart('da	All records in which the date in the **SLA due** field is on either a Sunday or a Monday.
trend (after)	[SLA due][trend][after][Monday]	DATEPART	sla_dueDATEPARTMonday@javascript:gs.datePart('da	All records in which the date in the **SLA due** field is on any day of the week except a Sunday or a Monday.
trend (before)	[SLA due][trend][before][Monday]	DATEPART	sla_dueDATEPARTMonday@javascript:gs.datePart('da	All records in which the date in the **SLA due** field is on a Sunday.
trend (on)	[SLA due][trend][on][Monday]	DATEPART	sla_dueDATEPARTMonday@javascript:gs.datePart('da	All records in which the date in the **SLA due** field is on a Monday.
relative (after)	[SLA due][relative][after][1][Hours][ago]	RELATIVEGT	sla_dueRELATIVEGT@hour@ago@1	All records in which the time on the **SLA due** field is no more than an hour before the time that you entered the query.
relative (before)	[SLA due][relative][before][1][Hours][ago]	RELATIVELT	sla_dueRELATIVELT@hour@ago@1	All records in which the time on the **SLA due** field is less than an hour before the time that you entered the query.
is empty	[SLA due][is empty]	ISEMPTY	sla_dueISEMPTY	All records in which the **SLA due** field has no value.
is not empty	[SLA due][is not empty]	ISNOTEMPTY	sla_dueISNOTEMPTY	All records in which the **SLA due** is populated by any value.
is anything	[SLA due][is anything]	ANYTHING	sla_dueANYTHING	All records in which the **SLA**

Operators available for date-time fields (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
				due field is one of the following: • any value • empty • NULL
is same	[SLA due][is same] as [Activity due]	SAMEAS	sla_dueSAMEASactivity_due@day	All records in which there are matching values for the **SLA due** and **Activity due** fields.
is different	[SLA due][is different] from [Activity due]	NSAMEAS	sla_dueNSAMEASactivity_due@day	All records in which there are differing values for the **SLA due** and **Activity due** fields.
is more than	[SLA due][is more than][1][Days][before][Activity due]	MORETHAN	sla_dueMORETHANactivity_due@day@before@1	All records in which the date value for the **SLA due** field is two or more days previous to the date in the **Activity due** field.
is less than	[SLA due][is less than][3][Days][before][Activity due]	LESSTHAN	sla_dueLESSTHANactivity_due@day@before@3	All records in which the date value for the **SLA due** field is no more than three days prior to the date in the **Activity due** field.

Operators available for numeric fields

Operators available for numeric fields

Operator label	Example condition	Equivalent query operator	Example query	Example output
is	[Reassignment count][is][0]	=	reassignment_count=0	All records in which the **Reassignment count** is nothing else but **0**.

Operators available for numeric fields (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
is not	[Reassignment count][is not][0]	!=	reassignment_count!=0	All records in which the value for the **Reassignment count** is any number but **0**.
is empty	[Reassignment count][is empty]	EMPTY	reassignment_countISEMPTY	All records in which there is no value in the **Reassignment count** field.
is not empty	[Reassignment count][is not empty]	NOTEMPTY	reassignment_countISNOTEMPTY	All records in which there is any number in the **Reassignment count** field.
less than	[Reassignment count][less than][2]	<	reassignment_count<2	All records in which the value in the **Reassignment count** field is any number less than (but not equal to) **2**.
greater than	[Reassignment count][greater than][2]	>	reassignment_count>2	All records in which the value in the **Reassignment count** field is any number greater than (but not equal to) **2**.
less than or is	[Reassignment count][less than or is][2]	<=	reassignment_count<=2	All records in which the value in the **Reassignment count** field is one of the following: • a number less than 2 • 2
greater than or is	[Reassignment count][greater than or is][2]	>=	reassignment_count>=2	All records in which the value in the **Reassignment**

Operators available for numeric fields (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
				count field is one of the following: • 2 • a number greater than 2
between	[Reassignment count][between] [1] and [3]	BETWEEN	reassignment_countBETWEEN1@3	All records in which the number in the **Reassignment count** is either 1, 2, or 3.
is anything	[Reassignment count][is anything]	ANYTHING	reassignment_countANYTHING	All records in which the **Reassignment count** field is one of the following: • any value • empty • NULL
is same	[Reassignment count][is same] as [Reopen count]	SAMEAS	reassignment_countSAMEASreopen_count	All records in which there are matching numbers for the **Reassignment count** and **Reopen count** fields.
is different	[Reassignment count][is different] from [Reopen count]	NSAMEAS	reassignment_countNSAMEASreopen_count	All records in which there are differing values between the **Reassignment count** and **Reopen count** fields.
greater than field	[Reassignment count][greater than field] [Reopen count]	GT_FIELD	reassignment_countGT_FIELDreopen_count	All records in which the number in the **Reassignment count** field is greater than (but not equal to) the number in the

Operators available for numeric fields (continued)

Operator label	Example condition	Equivalent query operator	Example query	Example output
				Reopen count field.
less than field	[Reassignment count][less than field][Reopen count]	LT_FIELD	reassignment_countLT_FIELDreopen_count	All records in which the number in the **Reassignment count** field is less than (but not equal to) the number in the **Reopen count** field.
greater than or is field	[Reassignment count][greater than or is field][Reopen count]	GT_OR_EQUALS_FIELD	reassignment_countGT_OR_EQUALS_FIELDreopen_c	All records in which the number in the **Reassignment count** field is one of the following: • greater than the number in the **Reopen count** field • equal to the number in the **Reopen count** field
less than or is field	[Reassignment count][less than or is field][Reopen count]	LT_OR_EQUALS_FIELD	reassignment_countLT_OR_EQUALS_FIELDreopen_co	All records in which the number in the **Reassignment count** field is one of the following: • less than the number in the **Reopen count** field • equal to the number in the **Reopen count** field

Operators available for Boolean fields

Operators available for Boolean fields

Operator label	Example condition	Equivalent query operator	Example query	Example output
is	[Active][is][true]	=	active=true	All records in which the **Active** field is **True**.
is not	[Active][is not][true]	!=	active!=true	All records in which the **Active** field is **False**, empty, or NULL.
is empty	[Active][is empty]	ISEMPTY	activeISEMPTY	All records in which there is no value in the **Active** field.
is not empty	[Active][is not empty]	ISNOTEMPTY	activeISNOTEMPTY	All records in which the **Active** field is either **True** or **False**.
is anything	[Active][is anything]	ANYTHING	activeANYTHING	All records in which the **Active** field is one of the following: • True • False • empty • NULL
is same	[Active][is same] as [Made SLA]	SAMEAS	activeSAMEASmade_sla	All records in which there are matching values for the **Active** and **Made SLA** fields.
is different	[Active][is different] from [Made SLA]	NSAMEAS	activeNSAMEASmade_sla	All records in which there are differing values for the **Active** and **Made SLA** fields.

Operators available for email notifications

Operators available for email notifications

Operator label	Example condition	Equivalent query operator	Example query	Example output
changes	[State][changes]	VALCHANGES	stateVALCHANGES	All records in which the **State** field is updated.
changes from	[State][changes from][Awaiting User Info]	CHANGESFROM	stateCHANGESFROM4	All records in which the **State** field is updated to another value after previously being **Awaiting User Info** (4).
changes to	[State][changes to][Awaiting User Info]	CHANGESTO	stateCHANGESTO4	All records in which the **State** field is updated to **Awaiting User Info** (4) after previously being any other value.

Operators available for tags

Operators available for tags

Operator label	Example condition	Equivalent query operator	Example query	Example output
have	[Tag][have][Most Active]	=	sys_tags.6c361e1247133100f47563dbb9a7135=6c36	All records that have the **Tag** in the value field.
does not have	[Tag][does not have][Most Active]	DOESNOTHAVE	sys_tags.6c361e1247133100f47563dbb9a7135DOESI	Any records that has a **Tag** except for the tag mentioned in the value field.
excluding	[Tag][excluding][Most Active]	EXCLUDING	sys_tags.6c361e1247133100f47563dbb9a7135EXCLU	All records with and without the **Tag** except for the tag mentioned in the value field.

Enable or disable an application menu or module

You can enable (show) or disable (hide) an application menu or module in the application navigator.

Before you begin

Role required: admin

Note: Application menu items that are marked Read only, have a Protection Policy, or are within a Private scope cannot be updated.

Procedure

1. Navigate to **All** > **System Definition** > **Application Menus**.
2. If you are enabling an application menu, click **All** in the breadcrumbs to display both active and inactive application menus (remove the default filter condition).
3. Click the desired title.
   The application menu record opens and the **Modules** related list shows the modules that appear in the application navigator.
4. Enable or disable the application menu and modules as desired.

Option	Description
Enable or disable a specific module in the application	a. Double-click the **Active** field beside the module name in the **Modules** related list. b. Set **Active** to **true** (show) or **false** (hide).
Enable or disable multiple modules at the same time	a. Select the check boxes next to the module names. b. Select **Change active state** from the **Ac tions** choice list.
Enable or disable the entire application menu (for example, Incident or Service Cata log)	Select or clear the **Active** check box.
Restrict the application menu to specific roles	Use the **Roles** field.

5. Click **Update**.
   When you change application menus or modules, the application navigator automatically refreshes to display the changes.

Tags

Tags are text labels that you can associate with items like records and pages. Tags enable you to group and organize the items. Tags can be visible to any user (global), visible only to specific groups or users (shared), or visible to a single user (private).

Tags are stored in the Tag [label] table. To view tags in a list, navigate to **System Definition** > **Tags** or **Self-Service** > **My Tags**.

Tag sharing levels

The tag sharing level enables other users to use the tag. The **Viewable by** property setting for a tag controls the sharing level.

Sharing level	Description
Me	**Private** tag, visible only to the owner.
Groups and Users	**Shared** tag, visible to the owner and specific groups or users.

Sharing level	Description
Everyone	**Global** tag, visible to everyone. This option is available to users with the admin or tags_admin role.

Tag name conflicts

Conflicts can occur if multiple tags have the same name.

- If a private tag and a shared or global tag have the same name, the system appends **[private]** to the name of the private tag. For example, **Sample tag [private]**.
- There cannot be multiple shared or global tags with the same name. If a user attempts to create a shared or global tag with a name that is already in use, an error message appears and the system prevents the tag from being saved.

Administering tags

If you have an administrator role, you can configure and manage all tags, even tags created by other users. You can also configure notifications, auto-assignment, and Zing indexing for tags.

You must have the tags_admin role for these administrative tasks.

Create a tag from the Tags list

You can create a tag directly from the Tags list.

Before you begin

Role required: tags_admin

Procedure

1. Navigate to **All** > **System Definition** > **Tags** or **Self-Service** > **My Tags**.
2. Click **New**.
3. Enter a name for the tag in the **Name** field.
4. **Optional:** Modify tag settings.

Field	Description
Owner	Specifies the owner of the tag. Users are allowed to change the ownership of the tag to someone else.
Type	Specifies the type of tag. ◦ **Standard:** is controlled by users who have access to the tag. These users can add or remove records from the tag. ◦ **Most Active:** displays the most frequently accessed modules and is automatically maintained by the system. There is no maximum duration a module can remain as most active. ◦ **Most Recent:** displays the most recently accessed modules and is automatically maintained by the system. ◦ **Most Active Record:** displays the most frequently viewed records and is automatically maintained by the system. There is no maximum duration a record can remain as most active. ◦ **Most Recent Record:** displays the most recently viewed records and is automatically maintained by the system.

Field	Description
	Only tags of the **Standard** or **Most Recent Record** types appear on the Tagged Documents page.
Viewable by	Specifies the sharing level. By default tags are visible only to the user (**Me**), but you can share tags with **Groups and Users**. Users with the tags_admin role are the only users who can create global tags shared with **Everyone**.
Active	Specifies whether the tag is enabled or disabled.

Edit tags from the Tags module

From the Tags module, you can edit all tags.

Before you begin

Role required: tags_admin

About this task

Note: Tag names are case-insensitive and must not include punctuation.

Procedure

1. Navigate to **All** > **System Definition** > **Tags**.
2. Open a tag.
3. Make the necessary changes.
4. Click **Update**.

Configure tags to assign automatically

Configure the system to automatically assign a tag to records that match conditions defined in the tag record.

Before you begin

Role required: tags_admin, however for users with the tags_admin role to be able to create conditions for labels, you need to create the following ACLs. Creating ACLs requires the security_admin elevated role. Include tags_admin as a required role for each ACL. For more information on creating an ACL, see Create an ACL rule.

ACLs required for the tags_admin role

Name	Operation
label_table	read
label_table	write
label_table	create
label_auto	read
label_auto	write
label_auto	create
(Optional) label_table	delete
(Optional) label_auto	delete

About this task

Use automatically assigned tags to group high urgency incidents, overdue incidents, canceled changes, or any other set of records. The system automatically assigns the tag to records that match the criteria and removes the tag from records that no longer match the criteria.

Note: Tags can't be automatically assigned to a record when its condition includes a dot-walked field.

Procedure

1. Navigate to **All** > **System Definition** > **Tags**.
2. Open the tag that you want to assign automatically.
3. Configure the form to add the **Conditions for Labels** embedded list.
4. Create a row in the **Conditions for Labels** list.
5. Click the reference icon in the **Table** column.
   The Label Table list opens in a pop-up window.
6. Click **New**.
7. Enter a **Name**, select a **Table**, and add conditions for the automatic assignment of the tag.
8. Click **Submit**.
9. Click the check mark icon to save the new row.
10. Click **Update**.

Related topics

Configuring the form layout

Configure notifications for tagged records

You can enable the system to send a notification when a record with a certain tag is updated.

Before you begin

Role required: tags_admin

Procedure

1. Navigate to **All** > **System Definition** > **Tags**.
2. Open a tag.
3. In the **Label Entries** related list, open the record for which you want notifications.
4. Select the **Notify onchange** check box to be notified any time the record is modified.
5. Use the **Notify when** condition builder to specify the conditions that must be true to trigger the notification.
6. Select a business rule in the **Notify script** field.
7. Save the record.

Configure Zing tag indexing for text search

Zing text indexing is available for tags on records.

Before you begin

Text indexing must be enabled for the table that you want to index tags for. For instructions for this procedure, see Configure a table for indexing and searching.

Role required: admin

About this task

By default, the Zing text indexing and search engine does not index tag text for search. You can enable text indexing of tags on a table-by-table basis. Private tags are never indexed.

When you enable text indexing for a table's tags, Zing stores search data for the tags in its text index for that table. This increases the text index's size. The exact increase depends on the number of indexable tags present in records on the table.

Procedure

1. Navigate to **All** > **System Definition** > **Dictionary** and edit the dictionary entry for the table you want to enable tag indexing for.
   The dictionary entry for a table is the record with the table's name as its **Table** field value, an empty **Column name** field, and a **Type** value of `Collection`.
2. In the Attributes related list, select **New**.
3. Select the Lookup using list icon ( ) to see all available attributes.
4. Select the **Text Index Tags** attribute (*`text_index_tags`*).
5. For the attribute value, enter one of the following options.

Option	Description
everyone_only	Only tags shared with everyone are indexed.
all_shared	All shared tags (**Everyone**, **Groups and Users**) are indexed.

6. Select **Submit**.
7. In the Dictionary Entry form's Related Links section, select **Generate Text Index** to reindex the table.

What to do next

After you turn on text indexing for tags on a table, records on the table are reindexed when any of the following actions occurs.

- When you add or remove tags.
- When you modify a tag, as long as fewer than 100 records are affected. If there are more records, you must manually reindex.
- When you manually reindex an entire table (required after initial tag indexing setup).

Assigning tags

You can assign tags to records from the form or list view. You can also add tags to a homepage. Tags enable you to group and organize the items.

The list view provides multiple ways of assigning tags. You can assign tags with inline field editing, the action menu, the context menu, or the edit tags icon.

Note: Tag names are case-insensitive and must not include punctuation.

Assign a tag from the list view using inline field editing

You can assign one or more tags to a record directly from the list view.

Before you begin
Role required: none

Procedure

1. Navigate to a list.
2. Personalize the list to display the **Tags** column.
3. Click in to the **Add Tag** field.
4. To assign an existing tag, begin typing the tag name and select the tag from the list.
5. To create a tag, enter a new tag name.

Result
The tag is added to the record.

Assign a tag from a list using the action menu

You can assign one or more tags to a record using the action menu in a list.

Before you begin
Role required: none

Procedure

1. Navigate to a list.
2. Select the check box beside one or more records.
3. Select **Actions on selected rows**.
4. Scroll to the **Assign tag** listing.
5. To assign an existing tag, select the tag listed.
6. To create a tag, select **New**, enter the tag name, select the sharing level, and then select **Save**.

Result
The tag is added to the record.

Assign a tag from the list context menu

You can assign one or more tags from the list context menu.

Before you begin
Role required: none

Procedure

1. Navigate to a list.
2. Select and hold (or right-click) a record.
3. To assign an existing tag, select **Assign Tag** > **[Tag Name]**.
4. To create a tag, complete the following steps.
   a. Select **Assign Tag** > **New Tag**.
   a. Enter a new tag name and select the appropriate sharing level.
   a. Select **Save**.

Assign a tag from a form

You can assign one or more tags to a record using the More options menu in the form header.

Before you begin

Role required: none

Procedure

1. Navigate to a form.
2. Select the more options icon (⋯) in the form header.
3. Select **Add Tag**.
4. Click in to the **Add Tag** field.
5. Perform one of the following actions.

Option	Description
Assign an existing tag	Begin typing the tag name and select the tag.
Create a tag	Enter a new tag name.

The tag is added to the record.

Editing tags

You can edit tags that you created from the list and form views, the **My Tags** module, and the Tagged Documents page. You can also merge tags from the **My Tags** module.

Note: Tag names are case-insensitive and must not include punctuation.

Edit tags from the list view

In the list view, you can edit tags that you created.

Before you begin

Personalize the list to display the **Tags** column.

Role required: none

About this task

Procedure

1. Navigate to a list that contains records you have previously tagged.
2. Click the edit tag audience icon ( ) beside the tag name.
   The Tag Details dialog box opens.
3. Edit the **Name** field as necessary.
4. Select an option for the **Viewable by** field to set the sharing level.
5. Click **Save**.
   All records associated with the tag are updated to reflect the change.

Edit tags from the form view

From the form view, you can edit tags that you created.

Before you begin
Role required: none

Procedure

1. Navigate to a record you have tagged.
2. Perform the appropriate action for your version of the UI.
3. Select the more options icon (...) in the form header.
4. Select the edit tag audience icon () beside the tag name.
5. In the Tag Details dialog box, edit the **Name** field as necessary.
6. Edit the **Viewable by** field to set the sharing level.
7. Select **Save**.
   All records associated with the tag are updated to reflect the change.

Edit tags from the My Tags module

From the My Tags module, you can edit the tags you have created.

Before you begin
Role required: none

About this task

Note: Tag names are case-insensitive and must not include punctuation.

Procedure

1. Navigate to **All** > **Self-Service** > **My Tags**.
2. Open a tag.
3. Make the necessary changes.
4. Select **Update**.
   All records associated with the tag are updated to reflect the change.

Edit tags from the Tagged Documents page

You can edit tags from the Tagged Documents page.

Before you begin
Role required: none

Procedure

1. Navigate to **All** > **Self-Service** > **My Tagged Documents**.
2. Select **Edit Tags**.
   A list of tags you have created appears.
3. Open a tag.
4. Make the necessary changes.
5. Select **Update**.
   All records associated with the tag are updated to reflect the change.

Merge tags

You can merge one or more tags with another tag. For example, when you merge Tag A with Tag B, Tag A is deleted and all associated records are reassigned to Tag B.

Before you begin

Role required: A user with the admin or tags_admin role can merge any tag into any other tag. All other users can merge tags they created into tags that are visible to them.

Procedure

1. Navigate to **All** > **Self-Service** > **My Tags**.
2. Select the check box for each tag you want to merge with another tag.
3. Select **Actions on selected rows** > **Merge Tags**.
4. Enter the tag to merge other tags with.
5. Select **OK**.

Using tags

Use tags to filter records and view tagged documents. Remove a tag when it is no longer useful.

Note: Conditions that use the **Tags** field are not supported in reports or data visualizations based on database views.

Filter records by tag

You can filter records on a table by tags you have access to.

Before you begin

Role required: none

Procedure

Filter records by tag in any of the following ways.

Option	Description
Filter from the form view	Select the more options icon (), and then se lect the tag in the menu that opens. A new tab or window opens and displays a list of records that contain the tag.
Filter from the list view using the Tags col umn	With the **Tags** column visible, select the tag name. Selecting two or more tags filters the tags together with the AND operator and shows records containing all the selected tags.
Filter from the list view using the list filter	Select the show/hide filter icon ( ), select **Tags** from the field list and enter the tag name.

View tagged documents

The Tagged Documents page displays recently viewed documents or user-tagged documents in the content frame.

Before you begin

Role required: none

About this task

An administrator can configure the fields that appear on the tagged document cards by configuring the mobile view of the task, for example, the mobile view of the Incident form. If there isn't a mobile view available for the page, the record reverts to the default view. For more information, see Create and delete views.

Procedure

1. Navigate to **All** > **Self-Service** > **My Tagged Documents**.
2. **Optional:** Select **Show Global Tags** to display global tags.
3. Perform one of the following actions.

Option	Description
Display most recently viewed documents	Select **Most Recent** in the sidebar.
Display documents associated with a tag	Select the tag name in the sidebar.
Remove a tag from a record	Select the **x** in the corner of the document preview.
Open the form for a tagged document	Select the title of the document preview.

Remove a tag from a record

There are many ways to remove a tag from a record.

Before you begin

Role required: none

Note: Anyone with access granted to a tag can add or remove the tag from a record.

Procedure

Perform any of the following actions.

Option	Description
Remove a tag from a record in the list view using the Tags column	Confirm that the **Tags** column is visible and select the remove tag icon (**x**) beside the tag name.
Remove a tag from one or more records in the list view using the action menu	Select the check box for one or more records, then select **Actions on selected rows** > **Remove Tag:** > **[Tag name]**.
Remove a tag from a record in the form view	Select the more options icon (⋯) in the form header, then select the remove tag icon (**x**).
Remove a tag from a record in the Tagged Documents page	Select the removed tag icon (**x**) in the corner of the document preview.

If a tag is automatically applied to a record based on specific conditions, the tag is automatically removed when those conditions no longer apply. For more information, see Administering tags.

User presence

User presence is a Core UI feature that lets you see who is online when you are working in an instance.

Your avatar appears in the form header next to your name, and in multiple other places such as in activity streams, Visual Task Boards, live feeds, and Connect conversations. A dot on the avatar of the user represents online status.

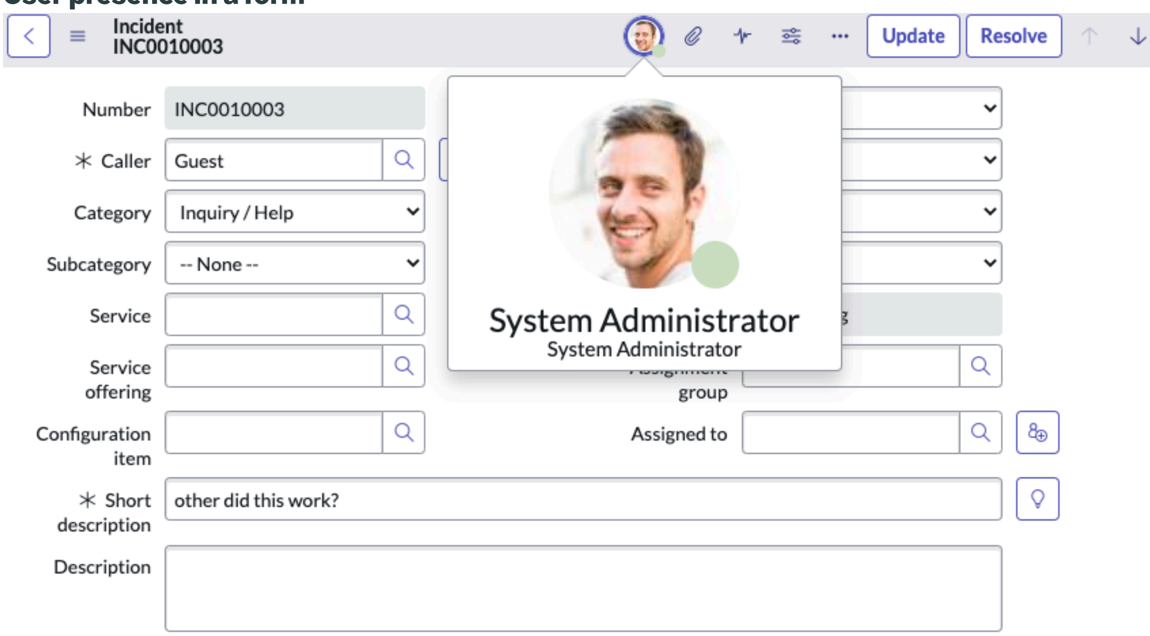
- Green dot if the user is logged in.
- No dot if the user is not logged in.
- Orange dot if the user recently logged out.

Users can add an avatar image to their live feed profile. If no image is uploaded to the live feed profile, the avatar is the user's initials.

Note: Live Feed does not use images uploaded to User (sys_user) records.

When you are viewing a record in a form, such as an incident, you can see if other users are viewing the same record.

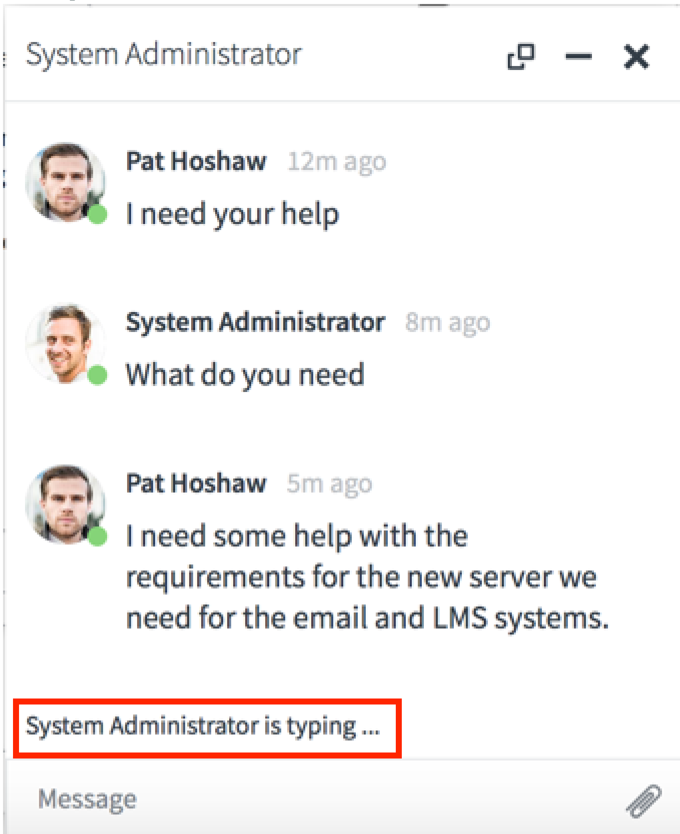
User presence in a form



If multiple users are viewing the record, the avatar is represented by the number of users. Point your cursor to the number to see the names and avatars of the users.

When you are in a Connect conversation or entering comments in an activity stream, you can see information about the activity of the other participant, for example if they are viewing or typing.

User presence in a conversation



An administrator can disable user presence globally.

Disable user presence

You can disable user presence globally by enabling a system property.

Before you begin

Role required: admin

About this task

Enabling the property turns off all user presence features.

Procedure

1. Navigate to `sys_properties.list`.
2. Locate the property named **glide.ui.presence.disabled**.
3. Set the **Value** to **true**.

Disable live form features

User presence includes several new live form features for Core UI. You can show or hide these features using the *`glide.ui16.live_forms.enabled`* property.

Before you begin

Role required: admin

About this task

The *`glide.ui16.live_forms.enabled`* property is included automatically with Core UI (UI16) as part of the *`com.glide.ui.form_presence`* plugin. It controls the following form features:

- Live form updates
- Form presence
- Activity formatter appearance
- Attachments displaying in the activity stream

Procedure

1. Enter `sys_properties.list` in the Navigation filter.
2. In the system properties list, search for the *`glide.ui16.live_forms.enabled`* property.
3. In the Value field, type `false`.

Configure time intervals for user presence

User presence shows that users are viewing a record sometimes after they have already left. The system only checks for user presence every two minutes by default. You can allow the system to check more frequently by configuring some system properties.

Before you begin

Role required: admin

About this task

These properties control how often the system checks for updates or caches user presence.

- glide.ui.presence.cache_seconds
- glide.ui.presence.time_back_minutes

You can configure each property to check more or less frequently. Checking more frequently might slow performance.

Procedure

1. Navigate to the system properties list by typing `sys_properties.list` in the navigation filter.
2. Search for each of the properties to make sure they do not already exist in the list.
3. Click **New**.
4. To control how often the system checks for updates, configure the following property.

   Time back property

Field	Description
Name	glide.ui.presence.time_back_minutes
Type	integer
Value	How often in minutes you want the system to check for user presence. The default number is 2.

5. To control how often the system caches logged in user information, configure the following property.

Cache property

Field	Description
Name	glide.ui.presence.cache_seconds
Type	integer
Value	How often in seconds, the system caches the user presence information. The default number is 5.

6. Click **Submit**.

Browser support

Browser support varies for each version of the user interface (UI). Some features have additional browser requirements, which are noted in the appropriate documentation.

Note: Starting with the Washington release, Internet Explorer and Internet Explorer mode in Edge are no longer supported.

Browser support for each UI version

Browser	Next Experience	Workspace	Core UI	Service Portal
Chrome	Latest public release of the browser, and the two previous releases	Latest public release of the browser, and the two previous releases	Latest public release of the browser, and the two previous releases	Latest public release of the browser, and the two previous releases
Firefox and Firefox ESR	Latest public release of Firefox and Firefox ESR, and the two previous releases	Latest public release of Firefox and Firefox ESR, and the two previous releases	Latest public release of Firefox and Firefox ESR, and the two previous releases	Latest public release of Firefox and Firefox ESR, and the two previous releases
Internet Explorer	Not supported	Not supported	Not supported	Not supported
Microsoft Edge Chromium	Latest public release of the browser, and the two previous releases	Latest public release of the browser, and the two previous releases	Latest public release of the browser, and the two previous releases	Latest public release of the browser, and the two previous releases
Safari	Safari 17.5 and up	Safari 17.5 and up	Safari 17.5 and up	Safari 17.5 and up
Tablet Mobile	Not supported	Not supported	Supported	Latest version of iOS and Safari Latest version of Android and Chrome
Phone Mobile*	Not supported	Not supported	Not supported	Latest version of iOS and Safari

Browser support for each UI version (continued)

Browser	Next Experience	Workspace	Core UI	Service Portal
				Latest version of Android and Chrome

*Mobile phone browsers do not support the desktop version of the UI. Instead, mobile browsers use the mobile UI.

Firefox

The iOS version of Firefox does not support ServiceNow Community or other Service Portal pages.

Core UI keyboard shortcuts

You can use keyboard shortcuts to quickly perform common actions in the user interface.

Keyboard shortcuts are key combinations that include access keys, or keys like **Control** or **Command** that modify the action of other keys when pressed in combination. Press access keys in conjunction with other alphanumeric or navigation keys to perform the keyboard shortcut.

Access keys depend on the browser and operating system you are using. Available keyboard shortcuts are based on the UI version. The most common access key combinations are listed in the table. If the key combinations do not work, you may need to use a different access key depending on your browser and operating system.

For information about using keyword shortcuts in Next Experience, see Next Experience keyboard shortcuts.

Core UI keyboard shortcuts

Action	Windows keyboard shortcut	Mac keyboard shortcut
Activate global search field	Alt+Ctrl+G	Control+Option+G
Toggle application navigator	Alt+ Ctrl+C	Control+Option+C
Activate navigation filter field	Alt+Ctrl+F	Control+Option+F
Impersonate user	Alt+Ctrl+I	Control+Option+I
Navigate to the main content on the page	Alt+Ctrl+P	Control+Option+P

Enable keyboard shortcuts

You can enable or disable keyboard shortcuts from the system settings menu.

Before you begin
Role required: none

For a list of available keyboard shortcuts, see Core UI keyboard shortcuts.

Procedure

1. Select the gear icon () in the banner frame to open the System Settings window.
2. In the General tab, select or clear the **Keyboard shortcuts enabled** option.
3. Close the system settings window.

Disable keyboard shortcuts globally

Keyboard shortcuts are enabled by default. You can disable all keyboard shortcuts globally or disable certain shortcuts using different user preferences.

Before you begin

Role required: admin

For a list of available keyboard shortcuts, see Core UI keyboard shortcuts.

Procedure

1. To disable all keyboard shortcuts globally for all users, navigate to **All** > **User Administration** > **User preferences**.
   a. Search for the `glide.ui.keyboard.shortcuts.enabled` user preference.
   b. Make sure the System check box is selected.
   c. Change the value to `false`.
   d. Select **Update**.
2. To disable a specific keyboard shortcut for all users, navigate to the list of user preferences and search for user preferences ending in `enabled`.
   For example, `glide.ui.keyboard.shortcuts.<shortcut_name>.enabled`.
   a. Make sure the System check box is selected.
   b. Change the value to `false`.
   c. Select **Update**.

Configure keys for keyboard shortcuts

Determine which shortcut key pairings users can use to access elements in an instance.

Before you begin

Role required: admin

For a list of available keyboard shortcuts, see Core UI keyboard shortcuts.

Procedure

1. Navigate to **All** > **User Administration** > **User Preferences**.
2. Search for the user preference you want to change the key combination for.
   You can change any of the following options:

Keyboard shortcuts

Shortcut property	Description
glide.ui.keyboard.shortcuts.global_search.key_combo	Enables keyboard shortcut to activate global search

Shortcut property	Description
glide.ui.keyboard.shortcuts.impersonator.key_combo	Sets keyboard shortcut for impersonating a user
glide.ui.keyboard.shortcuts.main_frame.key_combo	Enables keyboard shortcut to jump to start of main content
glide.ui.keyboard.shortcuts.navigator_filter.key_combo	Enables keyboard shortcut to activate navigation filter
glide.ui.keyboard.shortcuts.navigator_toggle.key_combo	Enables keyboard shortcut to expand or collapse navigator

3. In the Value field, change the value to one of the following combinations:
Include two access keys such as Control, Command, Alt, or Option as the start keys to any of the following keys. For example, ctrl+alt+p.

```
0, 1, 2, 3, 4, 5, 6, 7, 8, 9, a, b, c, d, e,
f, g, h, i, j, k, l, m, n, o, p, q, r, s, t,
u, v, w, x, y, z, num0, num1, num2, num3, num4, num5, num6,
 num7,
num8, num9, f1, f2, f3, f4, f5, f6, f7, f8, f9, f10, f11, f12,
 num,
 semicolon, equal, equalsign, comma, dash, period, slash,
 forwardslash,
graveaccent, openbracket, backslash, closebracket, singlequote,
 space, spacebar
```

4. Select **Update**.

User interface configuration

Change appearance, navigation menus, CSS, and utilize cutting edge interface tools.

Response time indicator

A response time indicator may appear at the bottom right of forms and in the list view for List v2.

This indicator provides the processing time, including the total time and the time for each step, for a completed transaction. In List v3, the administrator can add the glide.ui.list_v3.client.timings.roles to allow specified roles to see the response time.

The following example shows the response time for retrieving a filtered v2 list in a demo instance.

Response time in v2 lists

The response time text is:

```
Response time(ms): 985, Network: 22, server: 849, browser: 114
```

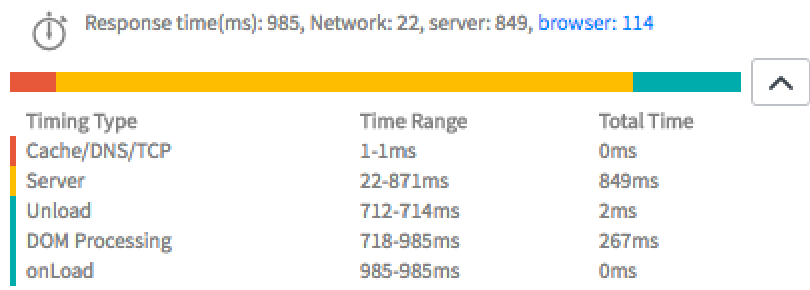
In this example, the transaction took the following amount of processing time.

- 985 milliseconds total time
- 22 milliseconds moving data across the network

- 849 milliseconds on the server
- 114 milliseconds in the browser, rendering the HTML and parsing and executing JavaScript

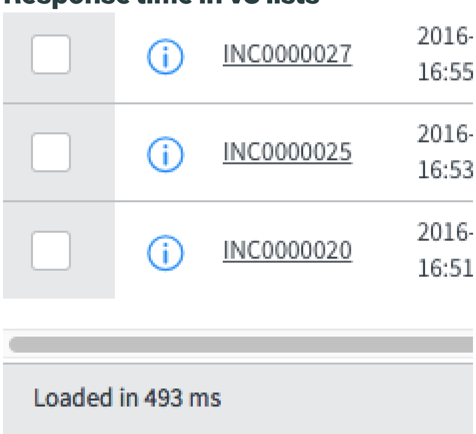
Use the expand option to see more details for the response time indicator.

Response time indicator expanded



In List v3, the response time appears on the lower left for users whose role is specified in the system property.

Response time in v3 lists



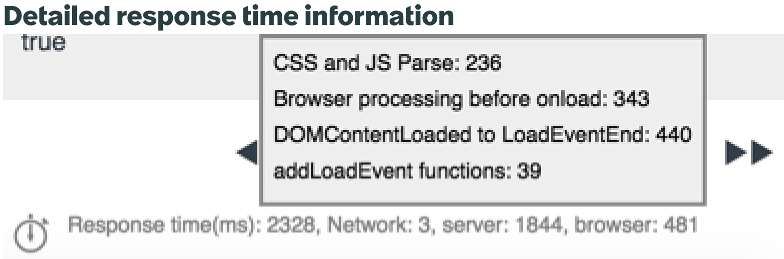
Response time appears on most pages. However, it does not appear for simple operations, such as paging through a set of records or changing the sort order of a list, or for the first transaction in a session.

To hide the response time in List v2 or forms, click the clock icon. Click the clock icon again to show the response time.

Point to the clock to view a tooltip with the response time.

To view a detailed breakdown of the browser processing time on forms, click **browser**.

Detailed response time information



Administrators can disable the response time by setting the *glide.ui.response_time* property to **false**.

Navigation stack

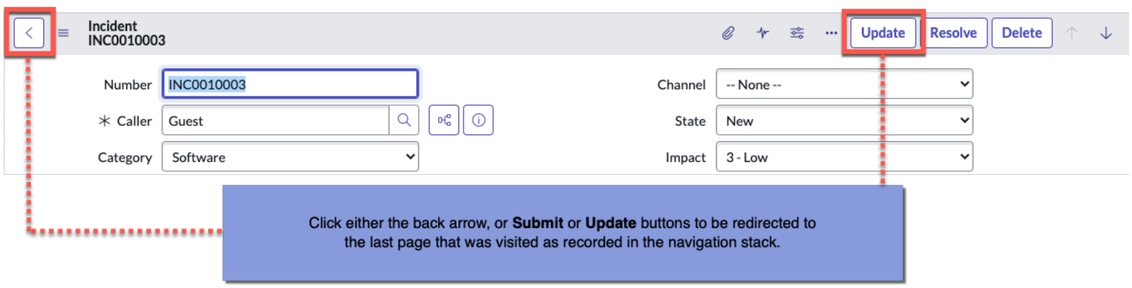
The navigation stack is the portion of the ServiceNow suite of applications that determines where a user is redirected after the update of a record.

An administrator can cause page references to be manually inserted into the navigation stack when a link in the **Navigation Page** is clicked. This is done by modifying a module definition to include an argument of `sysparm_stack` with a string value equal to the URL reference to the page to be inserted into the stack. The administrator can also override the redirection determined by the stack by creating a business rule or editing an existing one to include `gs.setRedirect("http://redirect_page.com")`.

Operating parameters of the navigation stack

The navigation stack can be thought of a user's navigation history in the instance. It is updated every time a user views a new page. The navigation stack is referenced when users press the page back button. It is also referenced when a user submits or updates a record, at which point users are redirected to their last page in the navigation stack.

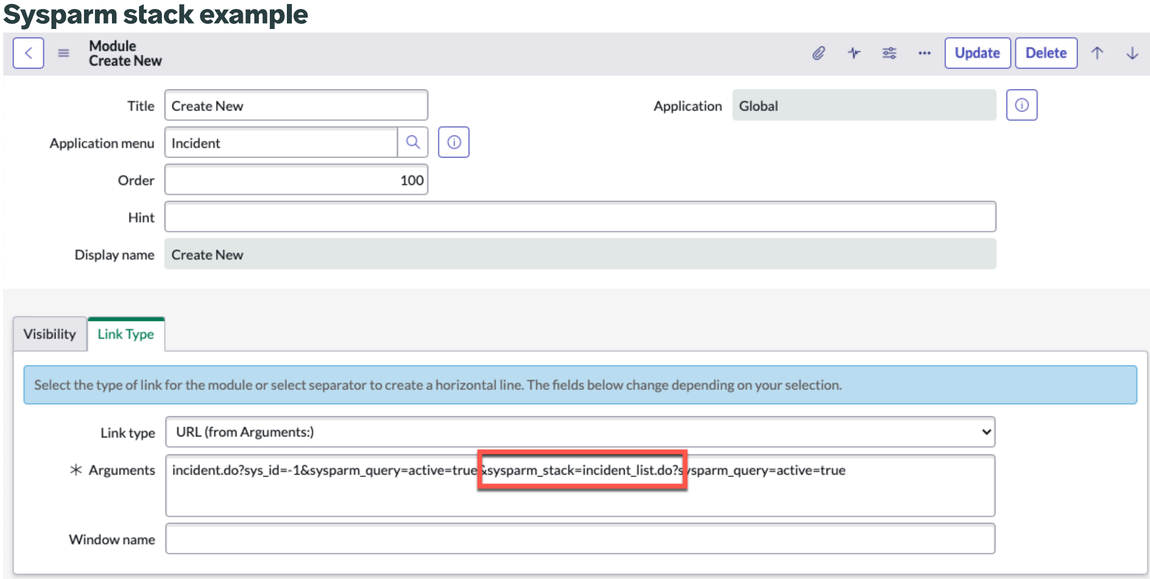
Back and Submit or Update



Inserting pages to the navigation stack

The administrator can insert page references manually into the navigation stack when a link in the navigation page is clicked. The module definition is modified to include an argument of *`sysparm_stack`* with a string value equal to the URL reference to the page to insert into the stack. The following image shows the system definition for the **Incident** > **Create New** module. By passing an argument of *`"sysparm_stack=incident_list.do"`*, the list view of incidents (incident_list.do) is added to the stack. After submitting an incident, the user is directed to this page.

Sysparm stack example



Overriding the redirection behaviors of the navigation stack with onEvent business rules

The redirection behaviors that occur as a result of navigation stack behaviors can be overridden using onEvent business rules. This override is performed by using the function `gs.setRedirect`. Doing so overrides the redirection as determined by the navigation stack, when the specified event occurs. The function `gs.setRedirect` takes a string argument that is a URL for the page that the user is redirected to. This URL can be external, for example: `gs.setRedirect('http://www.google.com')`.

Navigation action cancellation

The Request Manager allows users to cancel any navigation action they select from the application navigator by clicking another application navigator link. System properties work with settings for the table to allow navigation action cancellation.

This allows users to cancel slow loading transactions without having to wait for the previous transaction to complete.

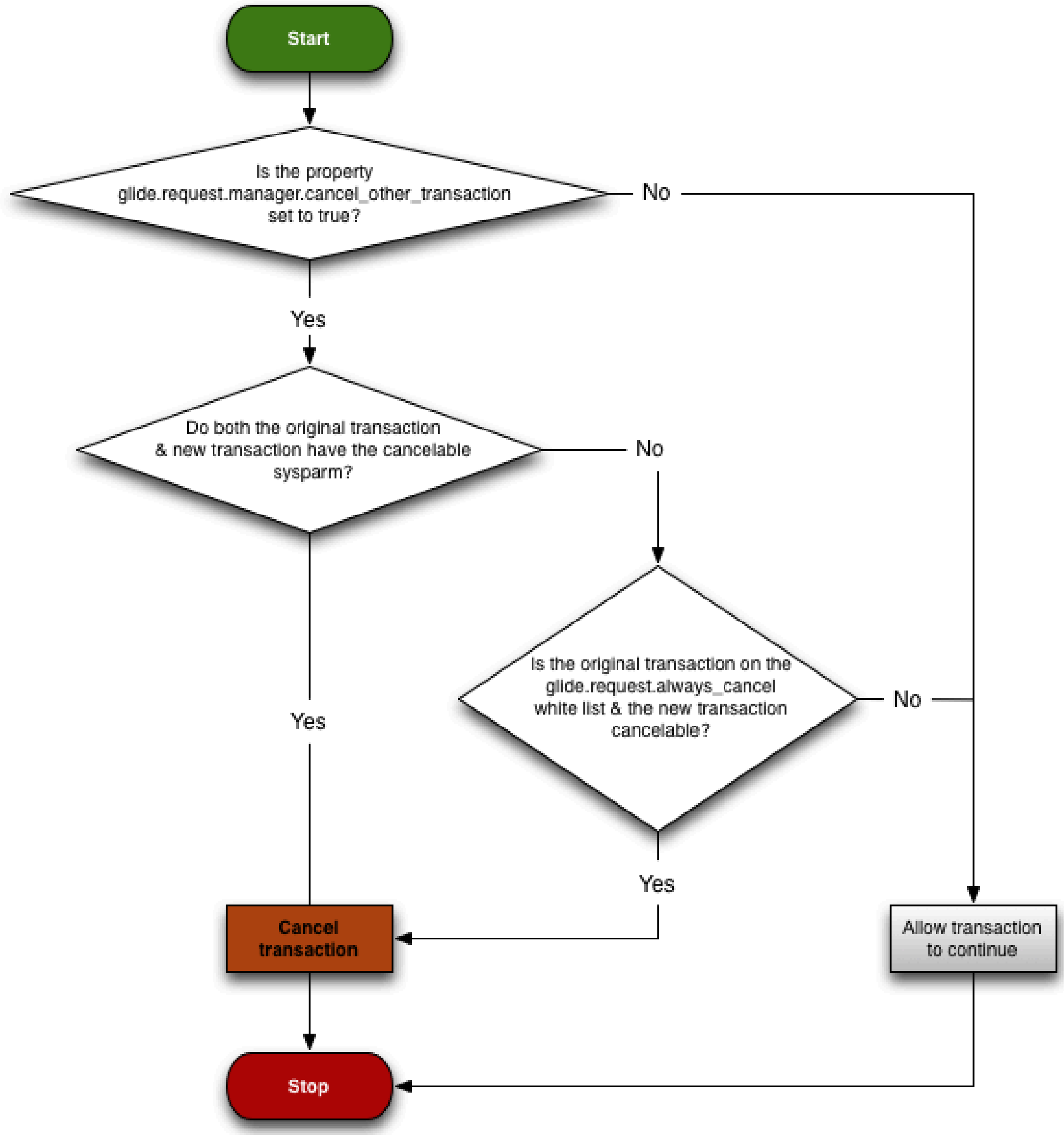
One of the following conditions must be true for the Request Manager to cancel a transaction.

- Both the original transaction and new transaction are cancelable (both transactions have the setting `sysparm_cancelable=true`).
- The original transaction is a member of the always cancelable allow list (the module is listed in the `glide.request_manager.always_cancel` system property) and the new transaction is cancelable (has the setting `sysparm_cancelable=true`).
- Both the original and new transaction produce an auto-completer query in a reference field.

Cancellation workflow

The Request Manager uses the following workflow to determine whether to cancel a transaction.

Cancel navigation actions



Navigation cancellation system properties

Property	Description
glide.request_manager.cancel_other_transaction	Enables or disables automatic cancellation behaviors. When true, users can cancel one navigation action with another navigation action. **Type:** true | false **Default value:** true **Location:** sys_properties table

Navigation cancellation system properties (continued)

Property	Description
glide.request_manager.always_cancel	A comma-separated list of URIs that users can always cancel by clicking another navigation action. Typically items on this list are modules that provide read-only data such as dashboards, reports, or knowledge articles. **Type:** string **Default value:** home,sys_report_template **Location:** sys_properties table
glide.request_manager.cancel_reference_completer	Cancels a user query in a reference field when the user enters more information. For example, if the user starts an AJAX search in the Problem number field by entering **PRB** and then enters **PRB000**, the second query cancels the first query. **Type:** true | false **Default value:** true **Location:** sys_properties table

Use cases

There are three use cases where administrators can control user cancellation actions.

1. A user clicks a module, such as the homepage (`home.do`), and while waiting for the module to load decides to navigate to another module, such as the list of open incidents (`incident_list.do`). The system property *glide.request_manager.cancel_other_transaction* controls this use case.
2. A user clicks a module that displays read-only data, such as a report (`sys_report_template.do?sysparm=sysid`), and while waiting for the module to load decides to navigate to another module, such as the list of open incidents (`incident_list.do`). The system properties *glide.request_manager.cancel_other_transaction* and *glide.request_manager.always_cancel* control this use case.

3. A user starts typing a query in a reference field, such as entering PRB in the related Problem field and while waiting for the auto-completer to display results, decides to enter more information, such as PRB000. The system properties *glide.request_manager.cancel_other_transaction* and *glide.request_manager.cancel_reference_completer* control this use case.

Add sites to the always cancel list

You can add UI pages or other links to the always cancel list so that users can cancel actions on these pages by navigating to another module or link.

Before you begin

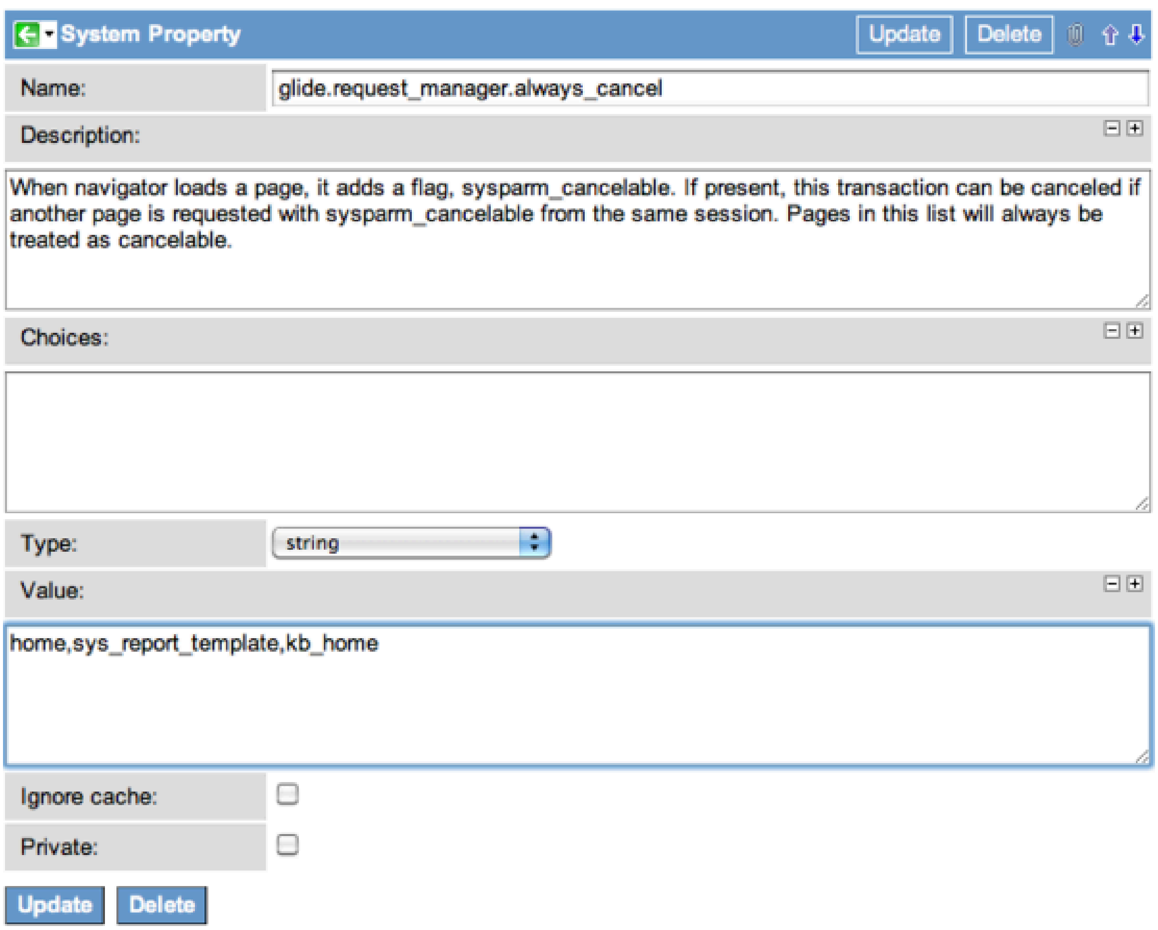
Role required: admin

About this task

User actions can always cancel items on the list. You should only add items to the list that provide read-only data to the user, such as a dashboard or a report.

Procedure

1. Enter `sys_properties.list` in the navigation filter and press the Enter key.
2. In the **Go to** field, select **Name**, enter `glide.request_manager.always_cancel`, and click **Go**.
3. Click the property name to open it.
4. In the **Value** field, add a comma-separated list of URIs you want to allow users to cancel.



5. Click **Update**.

Prevent users from canceling module transactions

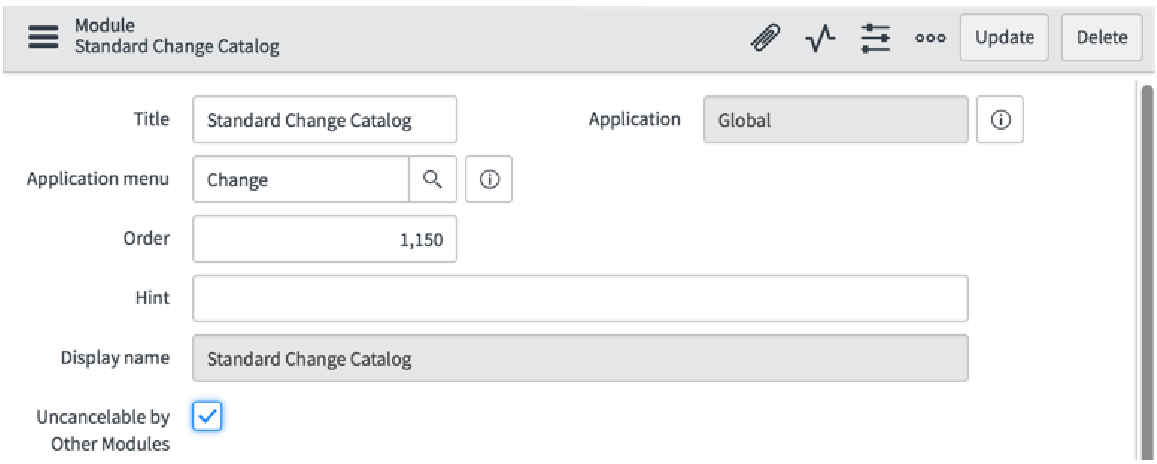
You can explicitly prevent users from canceling the activity of a module by updating the module definition.

Before you begin

Role required: admin

Procedure

1. Point to the application menu you want to add the module to and click the edit application (pencil) icon.
2. In the **Modules** related list, click the module you want to prevent users from canceling.
3. Configuring the form layout layout and add the field **Uncancelable by Other Modules** .
4. Select the check box for **Uncancelable by Other Modules**.



5. Click **Update**.

Context-sensitive help

By default, the help link available in the product opens the welcome page of the help system, allowing you to enter search criteria for the information you want to find. With context-sensitive help, you can set a base URL for an external help system. The context-sensitive system properties define the base URLs for the default and custom help systems.

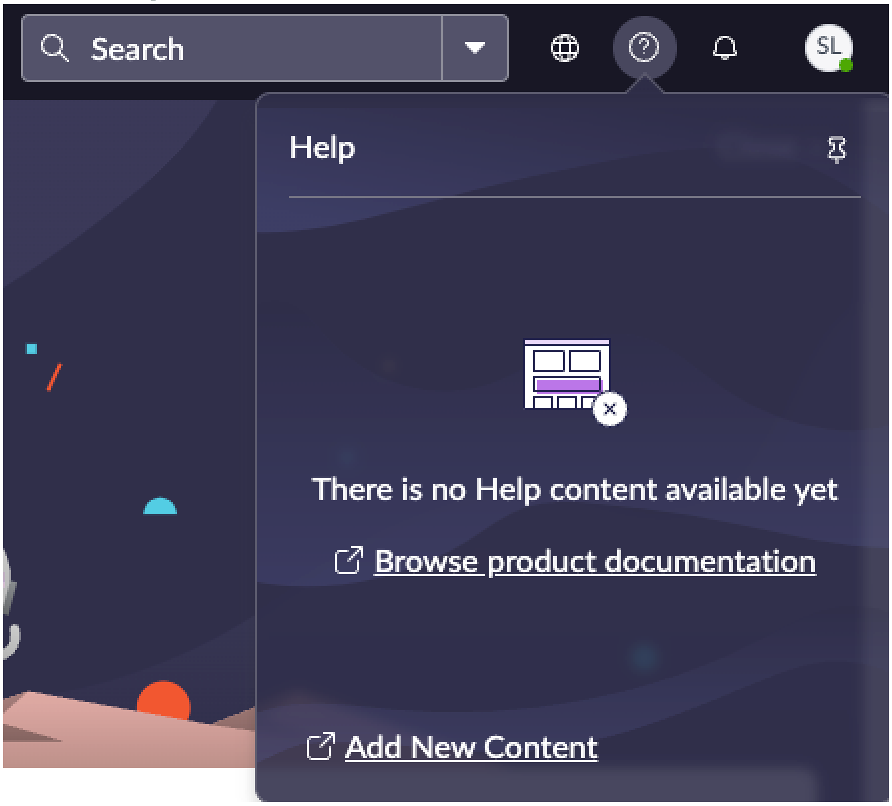
The ServiceNow system provides several preconfigured help contexts connected to this link that display the exact information you need for the current list, form, or record. You can define your own help topics and configure them to appear when you click the help icon in a ServiceNow record.

Users click the help icon to open the default help pages provided in the base system. For any page that does not have context-sensitive help defined, the instance displays the help system welcome page. Users can use the search feature or the index to find the correct help topic. The location of the help icon depends on the user interface version you are using.

Core UI

Click the help icon in the right corner of the header bar and select **Search Product Documentation** from the menu.

Context help access in Core UI

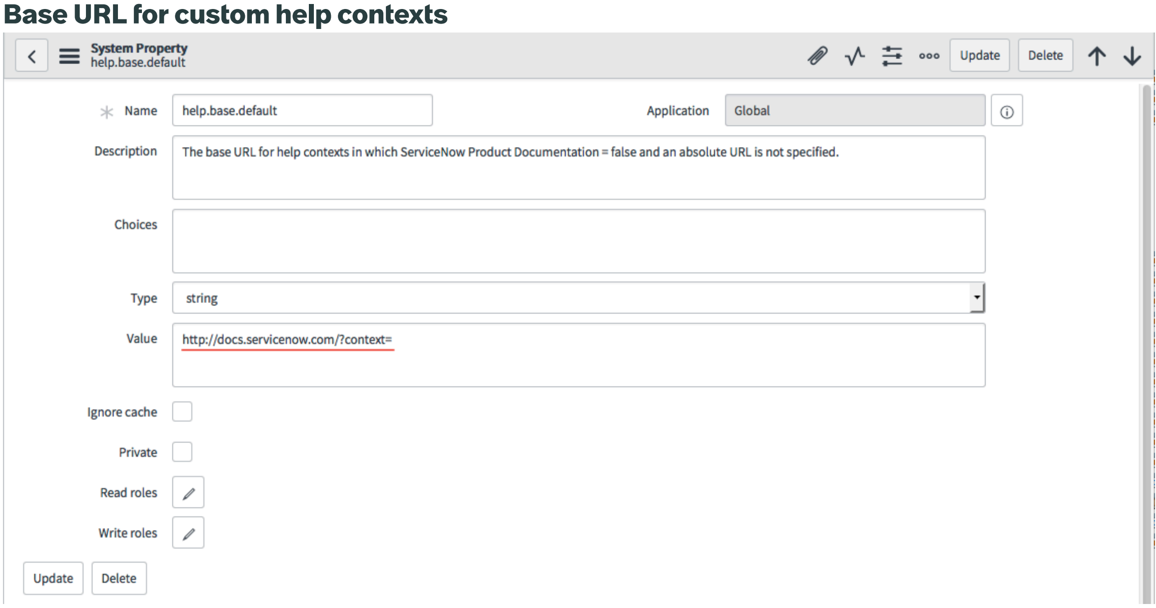


Alternatively, administrators can create custom context-sensitive help to suit the needs of their organizations. Create a help context that links the help icon to a topic describing a list, form, or specific record. You may initially want to set a base URL to direct to a help system other than the default ServiceNow help system.

Set base URLs

To create numerous help contexts that direct to a single server other than the ServiceNow help system, enter the base URL in the *help.base.default* property.

Base URL for custom help contexts



On the Help Context form, when the **ServiceNow Product Documentation** check box is cleared and you enter a value in the **URL or page name** field that does not contain the string `://`, that value is appended to the base URL defined by *`help.base.default`* property.

Note: When the **ServiceNow Product Documentation** check box is cleared and the **URL or page name** field contains an absolute URL (distinguished by the string `://` in the value), the value in the *`help.base.default`* property is ignored. This allows you to create help contexts that link to several different servers.

Context-sensitive help properties

To access the context-sensitive help properties, navigate to **sys_properties.list** and filter by **Name**. You can edit a property value from the list or by opening the property record.

Property Name	Description	Default Value
glide.help.default.page	The default URL the help icon directs to when no help context is specified. This is the base URL of the ServiceNow help system and opens to the welcome page. Do not change this value.	http://servicenow.com/docs/
help.base.default	The base URL for custom help contexts in which the **ServiceNow Product Documentation** check box is cleared, and an absolute URL is not specified. When the base URL is set, the system creates the address of a help conext record by appending the target page or file name to the base URL. Custom help contexts using this base URL overwrite the help provided by default in your instance for the same table. For details, see set base URLs.	http://servicenow.com/docs/?context=
help.base.servicenow	The base URL for help contexts in which the **ServiceNow Wiki** check box is selected. This is the base URL for the help provided in your instance by default. Do not change this value. For details, see Create a new help context.	http://servicenow.com/docs/?context=

Create a new help context

You can create new help contexts to supplement or replace the default help contexts. For example, if your organization has heavily customized a form, you might create a new help context for that form. The customized help context could link to more relevant information, such as a company knowledge base article.

Before you begin

Role required: none

Procedure

1. Navigate to **All** > **System UI** > **Help Contexts**.
2. Click **New**.
3. Complete the Help Context form from the fields in the table.

Help context form

Field	Description
Type	Select **Form**, **List**, or **Record**. If you select **Record**, the **Table name** field is replaced by the **Document** field.
Table name	Select the table for which the help context is being defined. If the **Type** is **Record**, this field is replaced by the **Document** field. **Note:** The list shows only tables and database views that are in the same scope as the help context.
Document	Click the reference lookup icon ( ) to open the document selection dialog box (pictured). Select the table and document (record) for this help context.  This field is only visible if you have selected **Record** as the **Type**.
Language	Select the language of the help page to which you are linking. The choices available depend on which I18n Translation plugins you have activated. For more information, see Activate a language. This field allows you to create multiple help contexts for the same form, list, or record, each directing to a help page in a different language. For example, you might have two help contexts for Form X: one for English and the other for Spanish. If a user whose language is set to Spanish clicks the help icon while viewing Form X, the help page defined in the Spanish help context opens.
Active	Select this check box to have the system use the help context. This check box is selected by default for new help contexts.
ServiceNow Product Documentation	Indicates if this help was created by a customer or was provided by ServiceNow. Clear this check box to create custom help for your organization. Do not attempt to modify existing help topics provided by ServiceNow for your own use. The system is configured to use your custom records rather than the default help contexts, even when they are created on the same table.
URL or page name	Identifies the topic to display when a user clicks the help icon while viewing a form, list, or record.

Field	Description
	You can enter the complete URL of the help page or just the target file name if you set a base URL in the `help.base.default` system property.

Note: If you reconfigure the fields on the form, you see the available fields **Plugin ID** and **System Property Base URL**. Do not use these fields. They are for internal use only.

4. Click **Submit**.

Related topics

Context-sensitive help

Help context types and prioritization

You can create a help context with the type **Form**, **List**, or **Record**, and link it to a particular table in your ServiceNow instance. If you have multiple help contexts, prioritization determines which help contexts apply to what a user views.

Help context types

When a user clicks the help icon, the system analyzes the relevant help contexts to determine which help page to display.

- Record-level help applies to only one specific record, not the list or form for that table.

  For example, if a **Record** type help context exists for the **Validate Number** record in the Business Rule table, the help icon only directs to the page specified when a user views that record.

- List-level help applies to the list for a table. If no form-level help is defined, list-level help also applies to the form for the same table.

  For example, if a **List** type but not a **Form** type help context exists for the Business Rule table, the help icon directs to the page specified by the **List** type help context when a user views any list or record (if record-level help is not defined for it) in the Business Rule table.

- Form-level help applies to the form for a table. If no list-level help is defined, the form-level help also applies to the list for the same table.

  For example, if a **Form** type but not a **List** type help context exists for the Business Rule table, the help icon directs to the page specified by the **Form** type help context when you view any record (if record-level help is not defined for it) or list in the Business Rule table.

- If both list- and form-level help are defined for a table, the appropriate help is displayed for the list and the form.

  For example, if a **List** type and a **Form** type help context exist for the Business Rule table, the help icon directs to the page specified by the **List** type help context when a user views the Business Rules list. The help icon directs to the page specified by the **Form** type help context when a user views any record (if record-level help is not defined for it) in the Business Rule table.

Important: If you create a help context for a base table list or record, the help system opens that target topic for any list or record in a table that extends the base table if no other help context is created in that extended table.

Help context prioritization

When there are several matching help context records, the following rules determine which help context is used, in descending order of priority.

1. A customer-created help context is used instead of a default help context provided in the instance for the same table.
2. A help context that matches the user's language setting is used instead of a help context in the default language of the instance. See the **Language** field on the Help Context form.
3. A help context for a closer table in an extended table hierarchy is used instead of a help context for a further table.

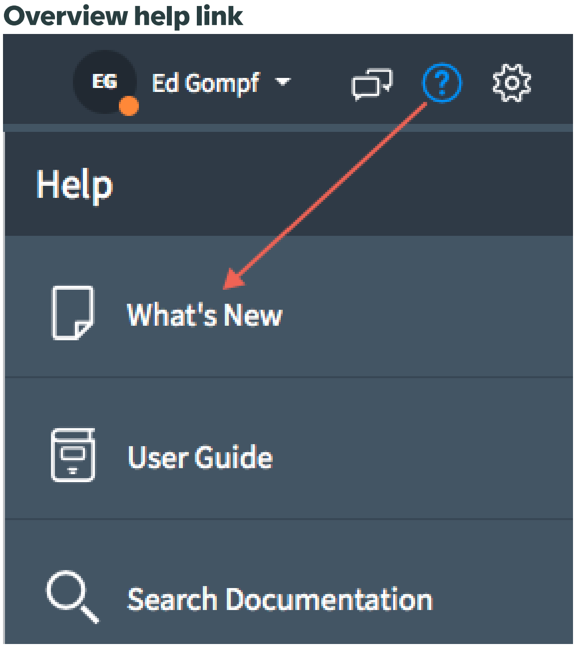
   Consider the case of the Linux Server [cmdb_ci_linux_server] table, which has the following parentage: cmdbi_ci > cmdb_ci_hardware > cmdb_ci_computer > cmdb_ci_server > cmdb_ci_linux_server. If help contexts exist for both the cmdb_ci_server table and the cmdb_ci table, the help icon directs to the page specified by the cmdb_ci_server help context when you view a record in the cmdb_ci_linux_server table.

Overview help pages

The overview help feature included with the base system displays slides with introductory information on new features offered in the ServiceNow® platform. An administrator can hide the option from the help menu.

To learn about the latest features in your version, click the **What's New** link in the Core UI help sidebar.

Overview help link

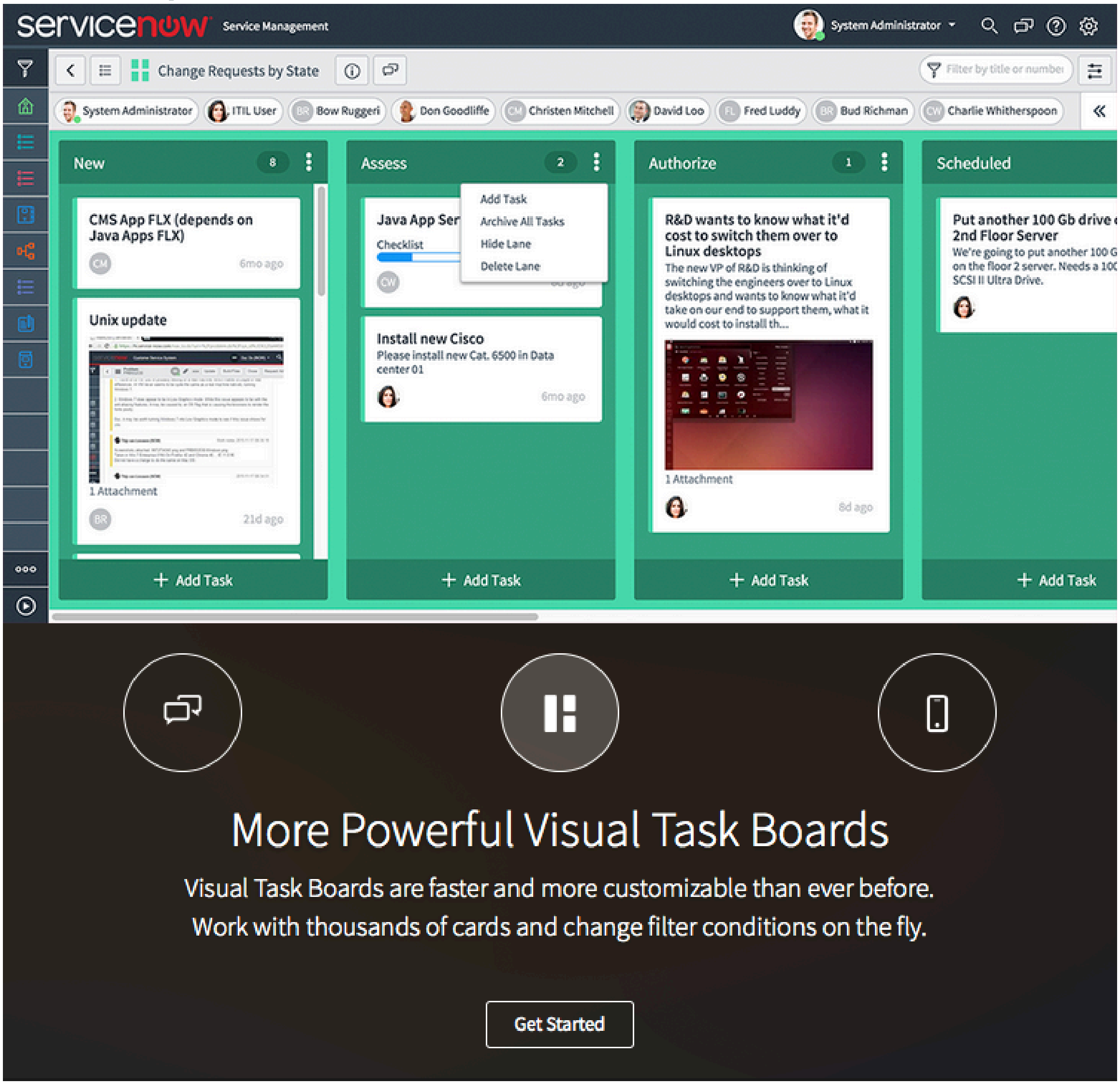


The Overview Help Page [sys_ui_overview_help] table contains the records for each panel that appears, including images, icons, descriptions, and condition statements that control display. By default, the instance displays panels describing notable features of the current release, but users can modify this page to display panels for customized features in their own instance and then define who can see these panels.

Users scroll through the panels by clicking the buttons provided or by clicking the directional arrows at the bottom of the page, depending on how the page was configured.

Note: Administrators can edit the default help page to modify, add, or delete existing panels from this page to match the features in your system.

Overview help slide

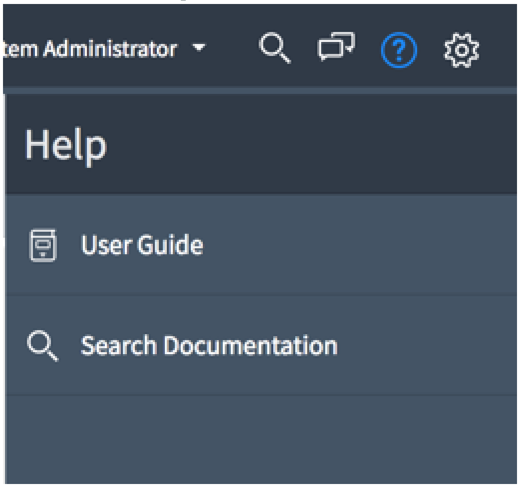


Hide the What's New option

Administrators can hide the What's New option using a system property.

To find the property, type `sys_properties.list` in the application navigator. Find the *`glide.product.show_what_is_new`* property and change the value to **false**.

What's New option hidden



Create custom overview help

You can edit existing overview help pages to display your own custom panels to selected users.

Before you begin

Role required: admin

Procedure

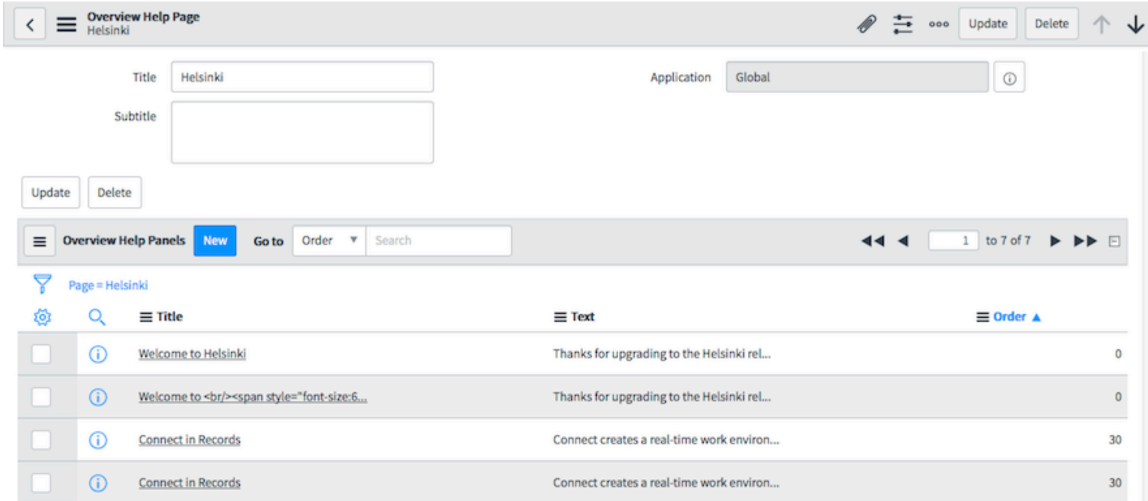
1. Navigate to **All** > **System UI** > **Overview Help** and edit the help page for your version.
2. Modify the Overview Help Page form using the fields in the table.

   Overview help page fields

Field	Description
Title	Unique title of this page.
Subtitle	General introduction for the subject of this page. This content appears as the description of the first panel that users see.
Application	Scope of this help page. All overview help pages are created in the global scope, so that they are visible from anywhere in the system. This field is read-only.

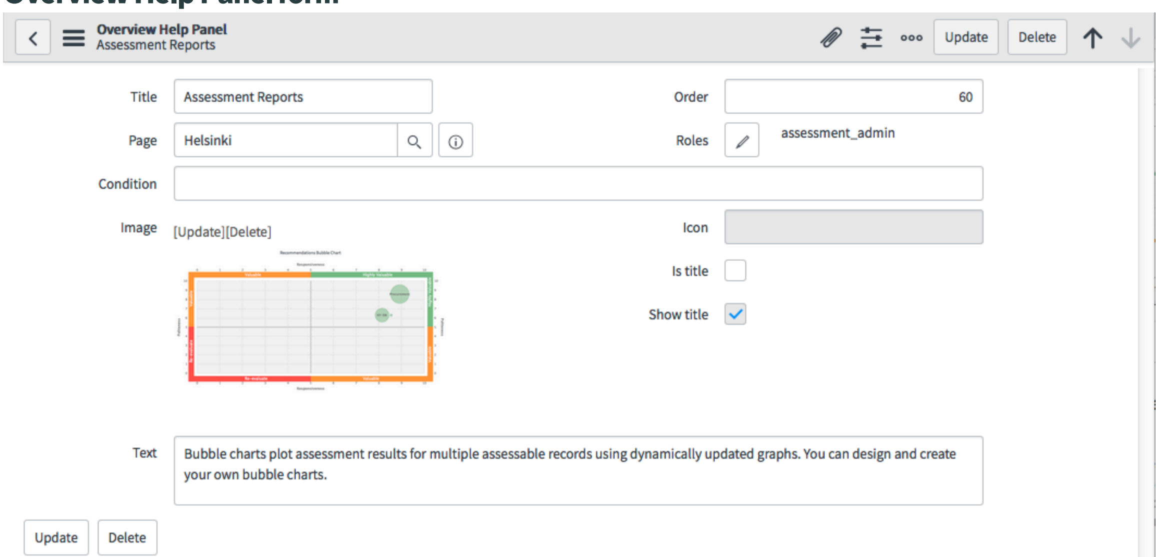
3. Save the page.

Overview Help Page form



4. Click **New** in the **Overview Help Panel** related list and complete the form using the fields in the table.

Overview Help Panel form



5. Click **Submit**.

Overview help panel fields

Field	Description
Title	Unique name for this panel. This name is the title of the panel shown to users.
Page	Names the overview page to which this panel is connected.
Order	Controls the sequence of the panels in the page. When using icon buttons, the button for the lowest order number appears on the left, and the button for the highest order number appears on the right. When icon buttons are

Field	Description
	disabled, the lowest order number panel begins the scrolling sequence.
Roles	Names all the user roles that are entitled to see this panel.
Condition	Defines the conditions under which this panel is viewable. For example, you can configure this panel to display only when a specific plugin is activated.
Image	Background image to use when this panel is displayed. Supported image formats are: ◦ .jpg ◦ .png ◦ .bmp ◦ .gif ◦ .jpeg ◦ .ico ◦ .svg
Icon	Icon used as the access button for this panel from the page. This field is read-only. You cannot specify an icon for your custom panels.
Is title	Controls the display of the title on the initial slide. The field is not used for panels.
Show title	Controls the display of the title on the initial slide. This field is read-only and is not available for panels.
Text	Text describing what is shown in the image for this panel. This content appears below the panel title.

Example of adding a panel to an existing overview help page

This example adds panels to the existing overview help page that display only for users with specific roles and when a specific plugin is activated.

Before you begin

Role required: admin

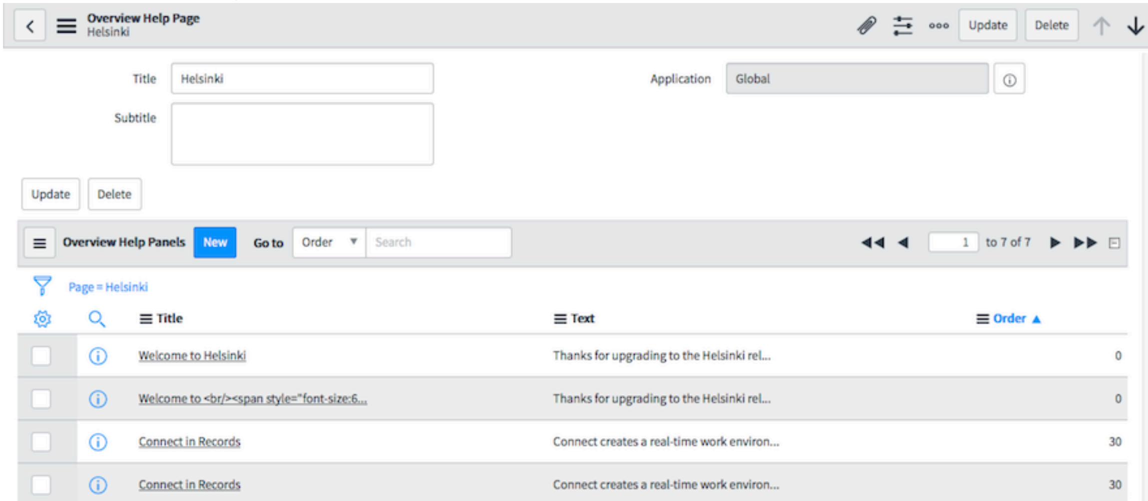
About this task

You can create a panel that displays a screenshot of auditing gauges to users with the sn_audit.manager role, when the GRC: Audit Management plugin is activated. Create another panel visible only to users with the activity_admin role that displays a view of the **Custom** tab in the Workflow Editor. Add the panels to the overview help page for the current version. Use the condition on a panel to specify the plugin and a slushbucket to select the roles required for access.

Procedure

1. Navigate to **All** > **System UI** > **Overview Help**.
2. Open the help page for the current version.

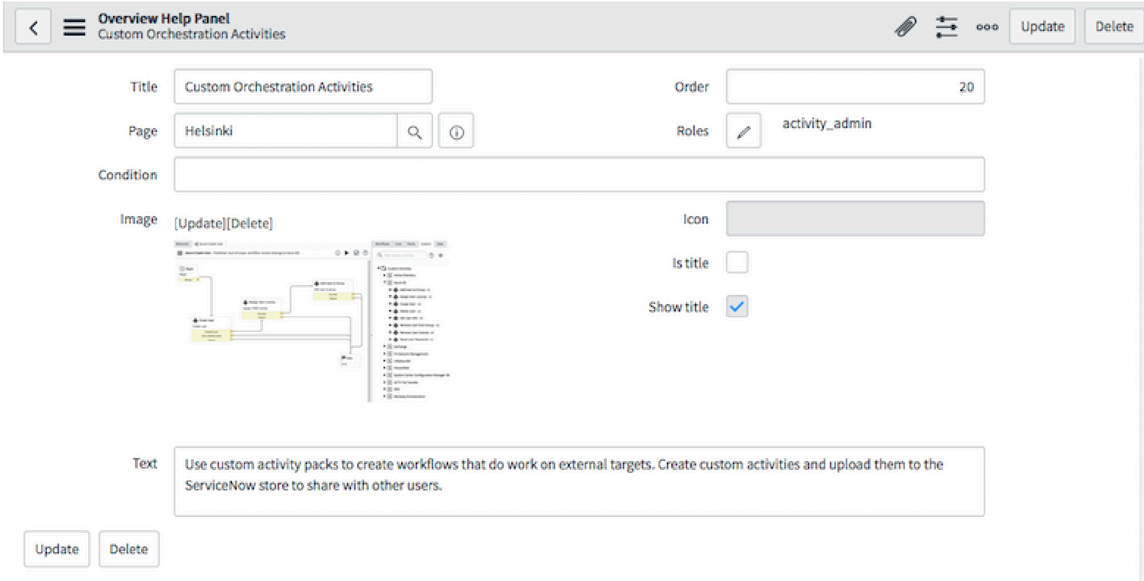
Overview help page record



3. In the **Overview Help Panels** related list, click **New**.
4. Create a panel with these values:
   - **Title**: **Custom Orchestration Activities**. The title is the label that appears on the panel when it is displayed to the user.
   - **Order**: **20**. This order number is the lowest for any of the panels in this page, and means that this button appears on the left side of the page.
   - **Roles**: **activity_admin**. Only users with this role are able to see this panel.
   - **Image**: This is a view of the Workflow Editor and the **Custom** tab that best introduces the feature to users.
   - **Text**: Enter a description of the feature, emphasizing the highlights in this version. In this example, the text describes the ability to create activities and share them in the ServiceNow store.

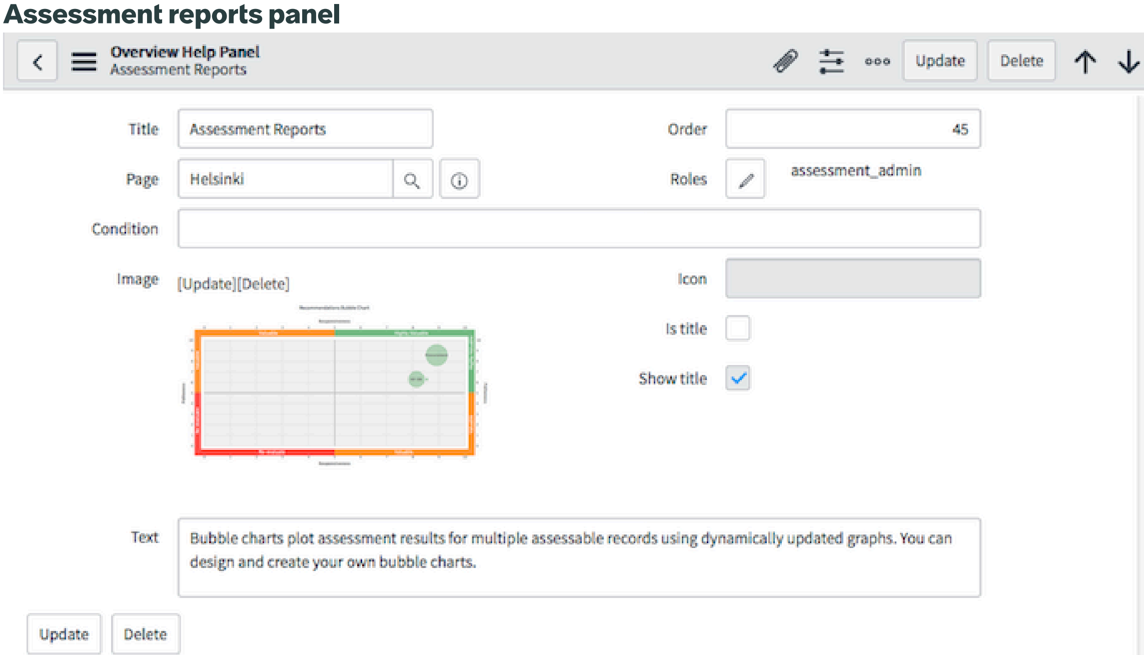
Note: Buttons for custom panels do not have icons on them.

Workflow editor panel



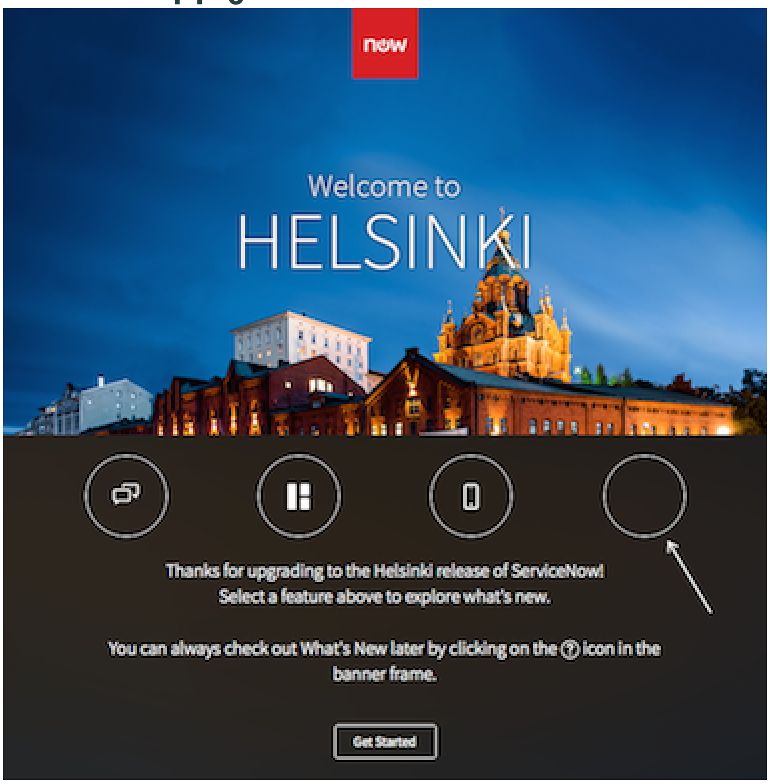
5. Save the record.
6. Create another panel with these values:
   - **Title**: **Assessment Reports.** The title is the label that appears on the panel when it is displayed to the user.
   - **Order**: **60**. This order number is the highest for any of the panels in this page, and means that this button appears on the right side of the page.
   - **Roles**: **assessment_admin**. Only users with this role are able to see this panel.
   - **Image**: This is an example of a bubble chart that you want the assessment administrators to see.
   - **Text**: Enter a description of the chart to display to the users, emphasizing the advantages of this type of chart.

Assessment reports panel



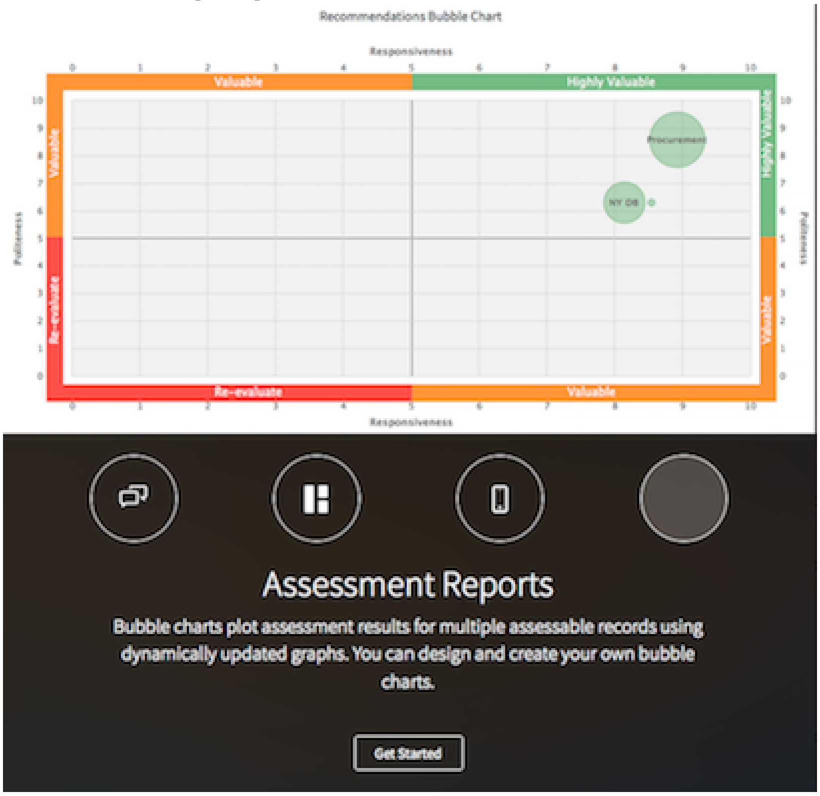
7. Save the record.
8. Log in as a user with the assessment_admin role.
9. Click the help icon in the form header, and then click **What's New** in the help sidebar.
   The overview help page for the current version appears, with the control button for the auditing dashboard displayed for the user in the order configured.

Overview help page for the assessment administrator



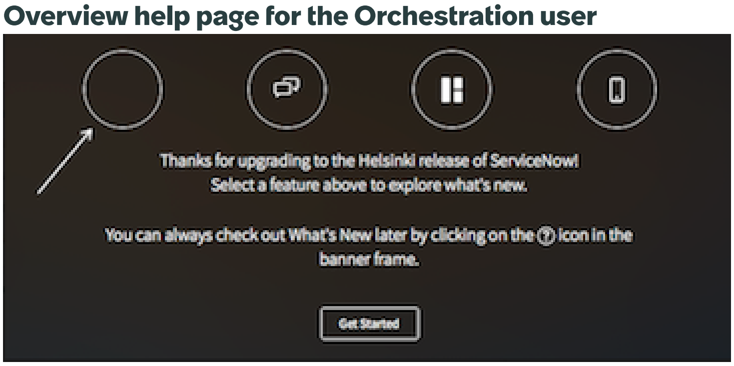
10. Click the button to display the assessment report panel.
    The image you selected for your custom panel appears with the title and description you defined.

Assessment report panel



11. Log out and log in again as a user with the activity_admin role.
12. Click the help icon in the form header, and then click **What's New** in the help sidebar. The overview help page for the current version appears, with the control button for the Workflow Editor tabs displayed for the user in the order configured.

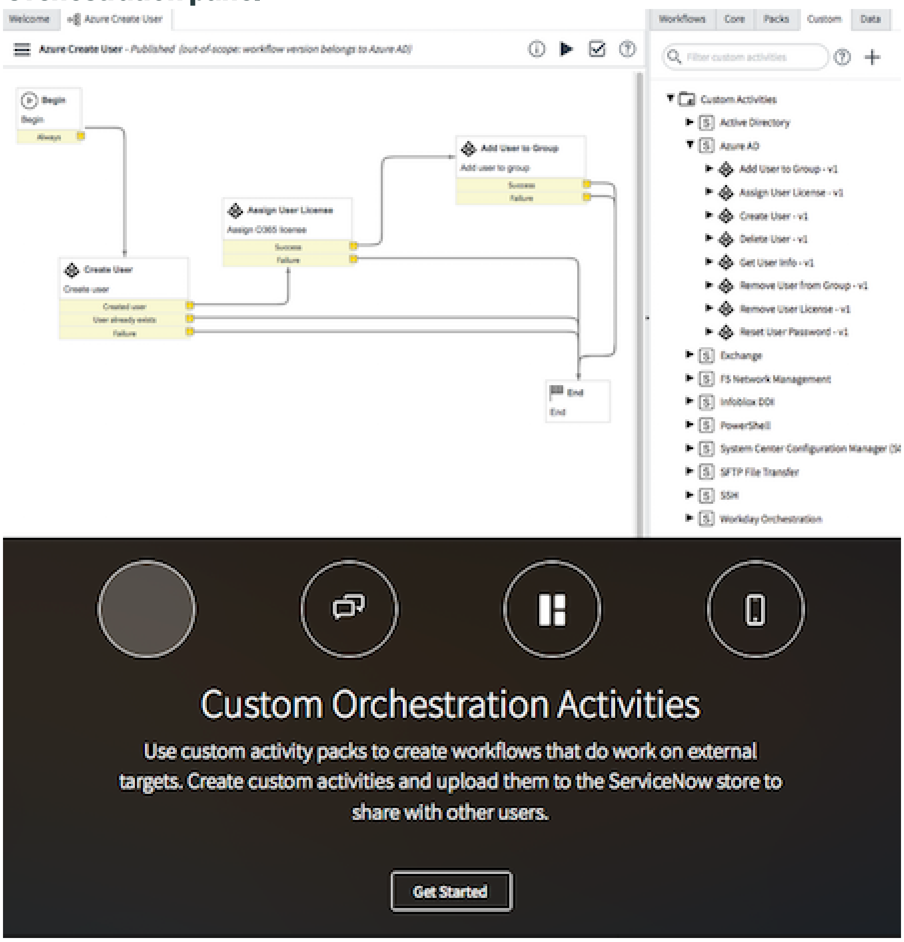
Overview help page for the Orchestration user



13. Click the button to display the Orchestration activities panel.

The image you selected for your custom panel appears with the title and description you defined.

Orchestration panel



System user guide

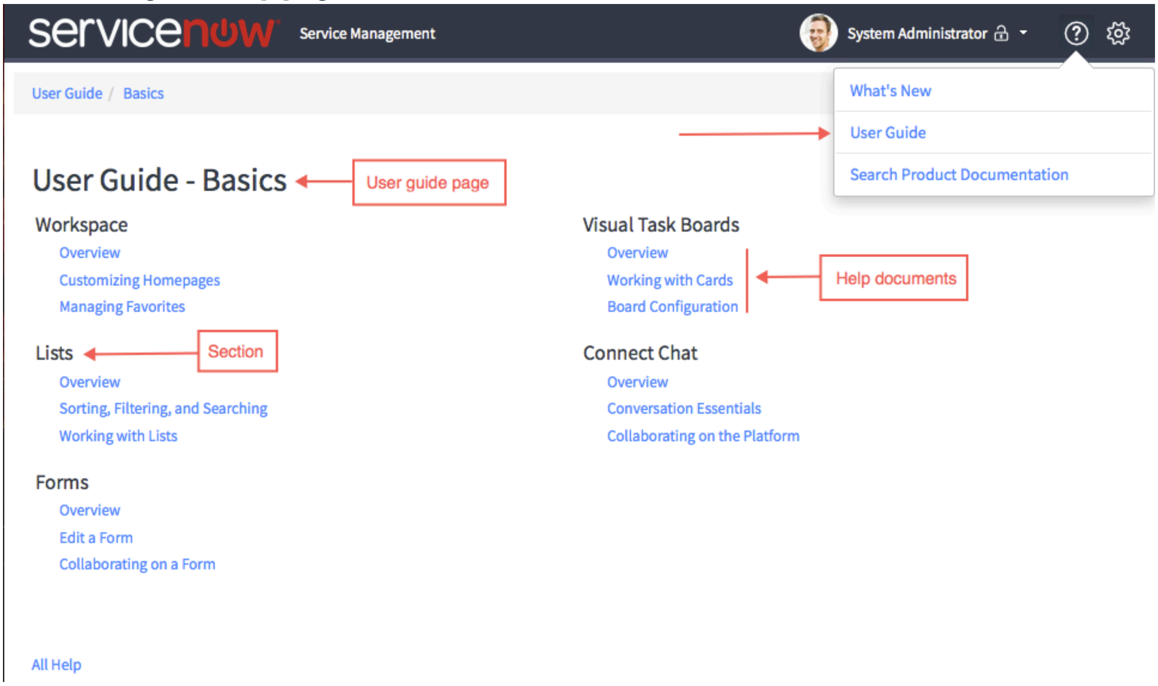
The system user guide enables you to create end user help documentation that is specific to the policies and procedures of your organization. A default help page is provided in the base system that displays Core UI help documents for system navigation and other basic operations.

The user guide provides the tools for designing help portal pages containing feature-specific help documents. You can create custom help pages and deploy them in various ways using controls in the system. User guide documents are grouped in relevant sections on a help page, using a two-column format. You can display the sections and the documents within them in any order. You can display a section on more than one help page. The user guide is supported in Core UI .

A default help page is provided in the base system that displays help documents for system navigation and other basic operations. This page is accessible from the help icon in the header bar for Core UI users. To make this page available to users of other supported UI versions, you must create a programmatic entry point.

Note: The default help page can be used as a template for your own help content. To personalize pages, sections, or documents in the User Guide, simply edit the ServiceNow® records to suit your needs. Remember that any records you customize are not updated when you upgrade your instance to a new version. Review any changes on a development system first and then decide whether to accept the updated content into your customized User Guide.

Basic user guide help page



Create user guide help

User guide help documents are grouped in appropriate sections on the page and listed in a configurable order. Add your sections to a help page.

Before you begin

Create all your help documents from within the section record. This allows you to refine their titles, adjust their placement, and decide if they are appropriate for the section.

Role required: admin

Procedure

1. Create a page.

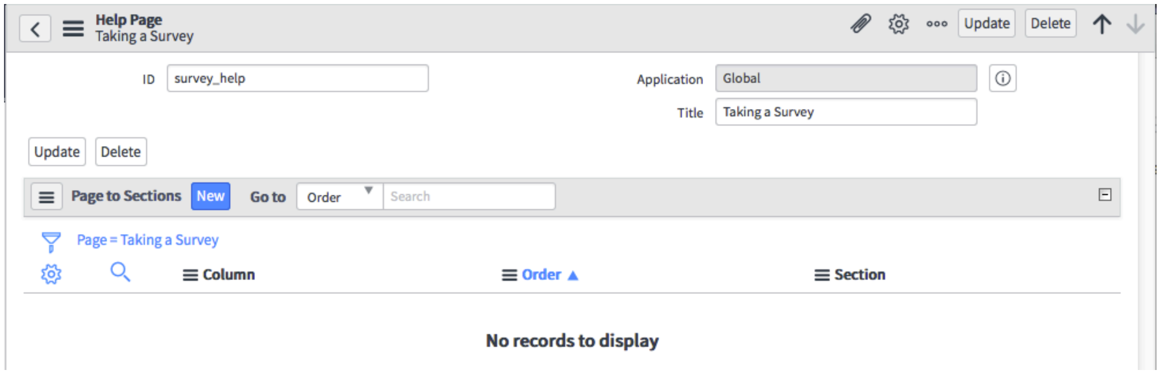
   a. Navigate to **System User Guide** > **Administration** > **Help Pages** and click **New**.

   b. Complete the form.

   #### Help page field definitions

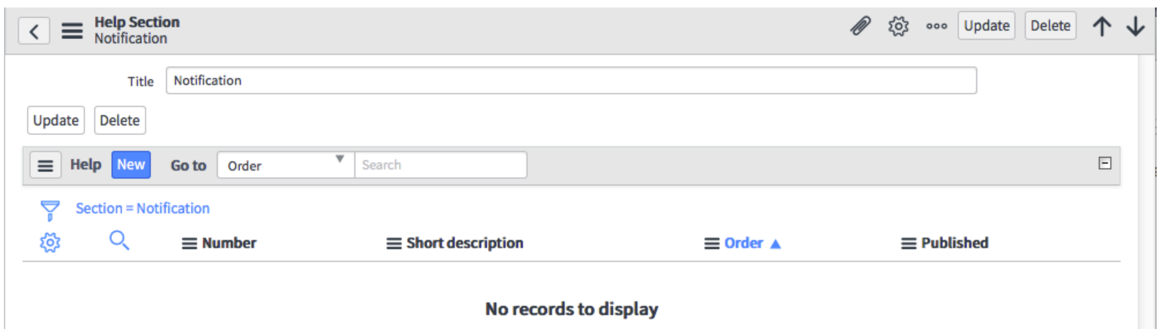
Field	Description
ID	Page identification used by the system to create a help URL.
Application	Application scope for this help page. This field is read-only and defaults to the **Global** scope.
Title	Display title for this page.

c. Click **Submit**.



2. Create help page sections and associate them with the page.

a. Navigate to **System User Guide** > **Administration** > **Help Page Sections** and click **New**.



b. Give your section a unique and concise title, and then click **Submit**.
The view returns to the list of sections.

c. Create additional sections for your help page.

d. Navigate to **System User Guide** > **Administration** > **Help Pages** and open your new page.

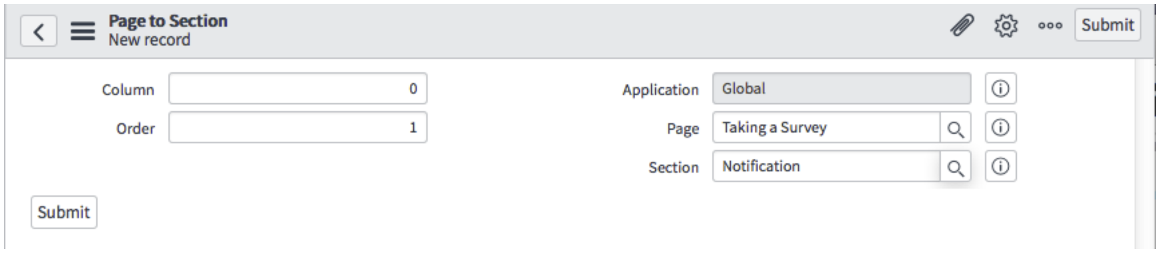
e. In the **Page to Sections** related list, click **New**.

f. Complete the form.

Page to Section field definitions

Field	Description
Column	Column location on the page for this section. The first column is designated as **0** and the second column is designated as **1**. There must be at least one entry for column **0** for the sections to display.
Order	Order in which the sections display in the columns on the page. If no order number is defined, the system lists the sections in alphabetical order.
Application	Application scope for this record. This field is read-only and defaults to the **Global** scope.

Field	Description
Page	Help page on which this section appears. You can use the lookup field to change the page on which a section appears.
Section	Name of the section to display on the selected page.



g. Click **Submit**.

h. **Optional:** Add sections to the help page as needed.

3. Create one or more documents.

a. Navigate to **System User Guide** > **Administration** > **Help Page Sections**.

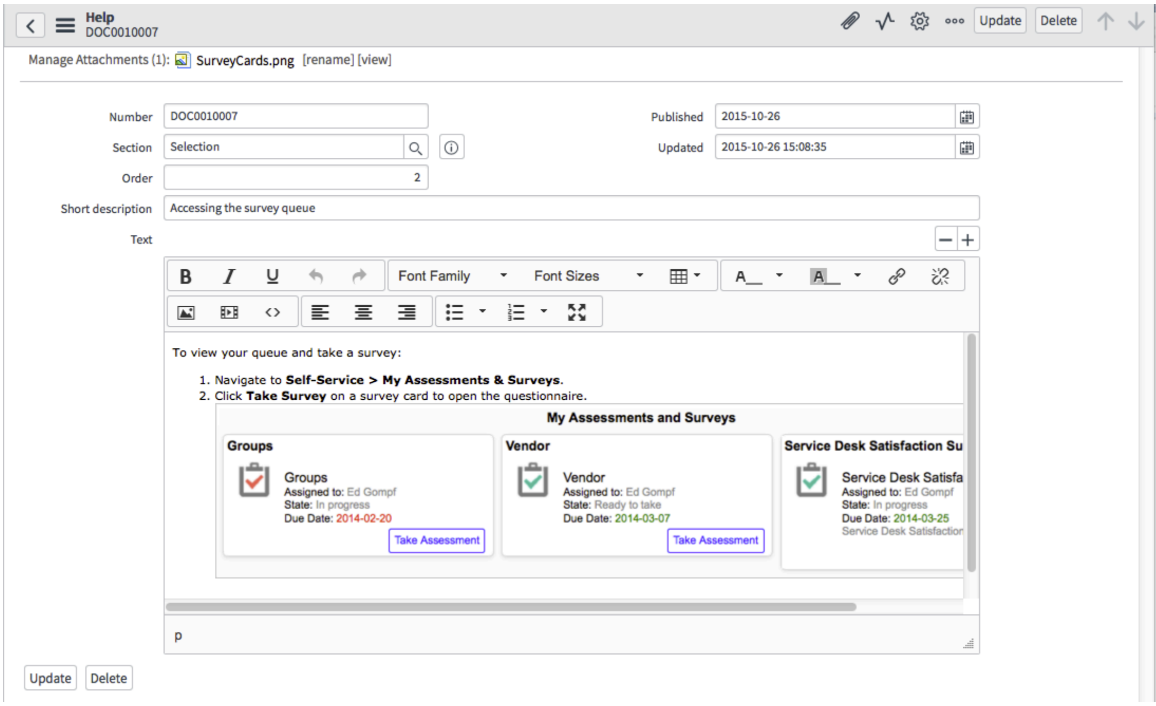
b. Open a section record you created.

c. In the **Help** related list, click **New** to create a help document for that section.

d. Complete the form.

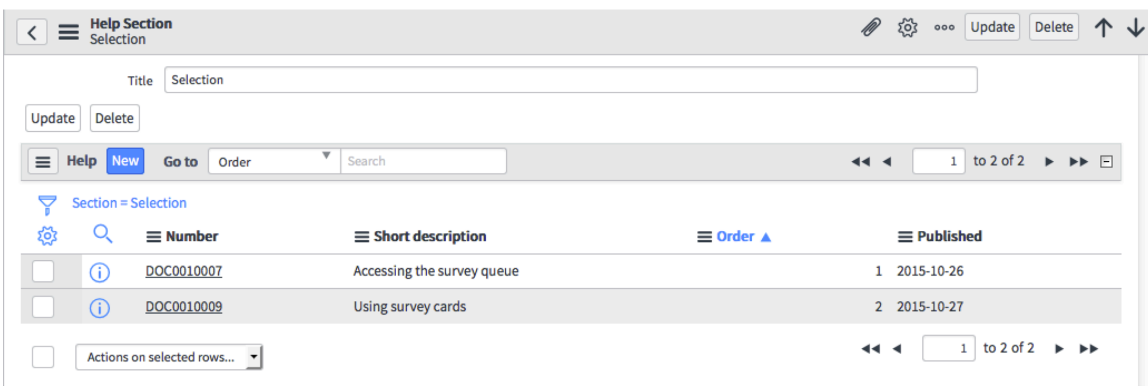
Help document field definitions

Field	Description
Number	Document number generated automatically by the system.
Section	Section in which this document appears.
Order	Listing order for this document in the selected section.
Published	Date this document was created.
Updated	Date this document was last updated.
Short description	Brief description of the content of this document. This description is used as the title for the document on the help page.
Text	Document content, including graphics and tables. You can format your entry, create bulleted or numbered lists, and attach images.



e. Click **Submit**.

f. Repeat the process to create the necessary help documents for that section.



User guide help URLs

You can create entry points in your instance for help generated with the system user guide by providing the correct address parameters in the target URL.

Help pages generated with the user guide can be displayed to end users from configurable entry points in the system, including UI actions. To create these entry points, you must express a target URL using these parameters:

URL entry points for displaying user help

Parameter	Provides
$h.do	Processor that renders the banner frame at the top of the page.
$sys_product_help.do	Displays a page containing links to all the help in the user guide. This includes the basic

URL entry points for displaying user help (continued)

Parameter	Provides
	help system and any custom help pages you have created. An example URL would be `https://myinstance.service-now.com/$sys_product_help.do`.
$h.do?sysparm_id=basics	Displays the basic help page included with the system. To create a target for a custom user guide, replace *`id=basic`* with the ID for your custom page, such as *`id=surveys`*. An example of this would be `https://myinstance.service-now.com/$h.do?sysparm_id=surveys`.
$h.do?sysparm_doc=<document number>	Displays help for a specific document. This URL displays the help document in the basic page that provides instructions for using ServiceNow forms: `https://myinstance.service-now.com/$h.do?sysparm_doc=DOC0010005`.

Manage audio files

You can upload and store `.mp3` or `.ogg` audio files. Once uploaded, you can reference audio files using HTML.

Before you begin

Role required: image_admin

About this task

The Database Storage for Audio Files (com.glide.db_audio) feature must be activated to store audio files. The plugin is activated by default on new instances. For upgraded instances, you can activate the plugin if you have the admin role. For more information on activating a plugin, see Activate a plugin.

Procedure

1. Navigate to **All** > **System UI** > **Audio Files**.
2. Click **New**.
3. Enter a **Name** for the audio file, including the file extension.
4. Add the **Audio** file.
5. Save the record.
6. **Optional:** Complete the following steps to reference audio files using HTML.

   a. Use the `<audio>` HTML tag and set the *`src`* attribute to the name of the file as set by the **Name** field of the Audio record.

   b. Use the *`controls`* attribute to display the audio controls.

      Example

      Use the following HTML.

```
<audio src="Beep.mp3" title="Beep" control="control"/>
```

Storing images in the database

Administrators and users with the image_admin or content_admin role can upload and store images in the database. These images are saved in the Images [db_image] table. Uploading an image to the database allows it to be referenced from HTML fields by appending the name of the image to the URL of the instance.

Note: The db_image table is a public table that does not have any security restrictions. Unauthenticated users have full access to images uploaded to the db_image table.

Images vs attachments

If you want to access an image from a record, or if you want to prevent users from appending the image name to the URL of the instance, upload it as an attachment instead. When you upload an image as an attachment, the image is saved in the Attachments [sys_attachment] table. See Administer attachments and Add and manage attachments for more information.

Acceptable image file types

Upload image files with the following extensions:

- .gif
- .jpg
- .png
- .bmp

Note: The system does not support uploading zip files that contain .bmp images.

If you upload an image that may not be supported in Internet Explorer browsers, a warning message appears.

The system does not support uploading images in the .ico format through this interface. Microsoft Internet Explorer requires the .ico format for favorite icons. To upload an .ico image, attach the .ico image to a record instead of using the standard image upload interface.

To understand how to insert an image into a form record, see the Insert an image into your article, incident, or other form record blog post in the ServiceNow Community.

Update an existing image

You can change an existing image to an updated version.

Before you begin

Role required: image_admin or content_admin

Procedure

1. Navigate to **All** > **System UI** > **Images**.
2. In the Images list, click the name of the image to be replaced.
3. In the **Image** field, click the **[Update]** link.
4. Click **Browse** and navigate to the desired image file.
5. Click **Open**, and then click **OK**.

The new file is uploaded into the instance database, replacing the previous file. It is used in all locations that reference the file name.

Note: If the new image does not appear as expected, clear the browser cache.

Upload one or more images

You can upload one image or multiple images at one time.

Before you begin

Role required: image_admin or content_admin

Procedure

1. To upload one image at a time, complete the following steps:

   a. Navigate to **System UI** > **Images** to see the list of images stored in the database.

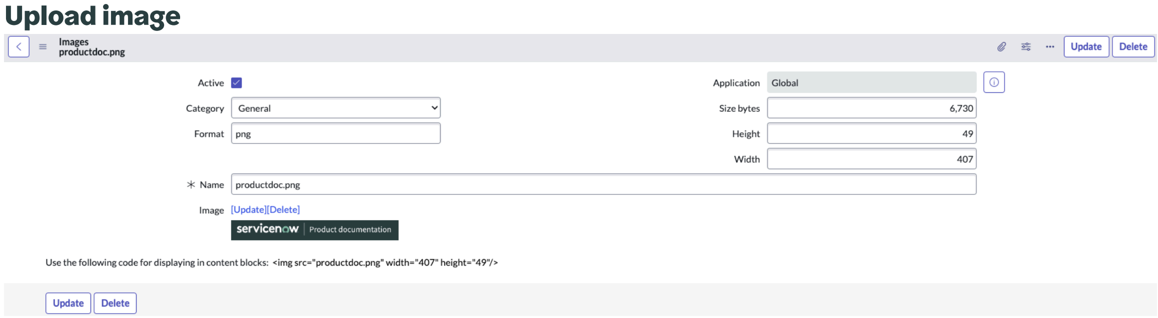
   b. Click **New** to add a new image.

   c. Complete the form.

   Images form

Field	Input
Name	Enter the file name by which to reference the image in HTML.
Active	Select the check box to allow the image to be referenced in HTML.
Category	Select a category in which to organize the image file.
Image	Select **Click to add...** to upload an image. If an image is already uploaded, click **[Update]** to upload a new version of the image or **[Delete]** to remove the image.
Format, **Size bytes**, **Height**, and **Width**	View current image metadata. This information is automatically populated when the image is uploaded.

   Upload image



2. To upload multiple images at once, complete the following steps:

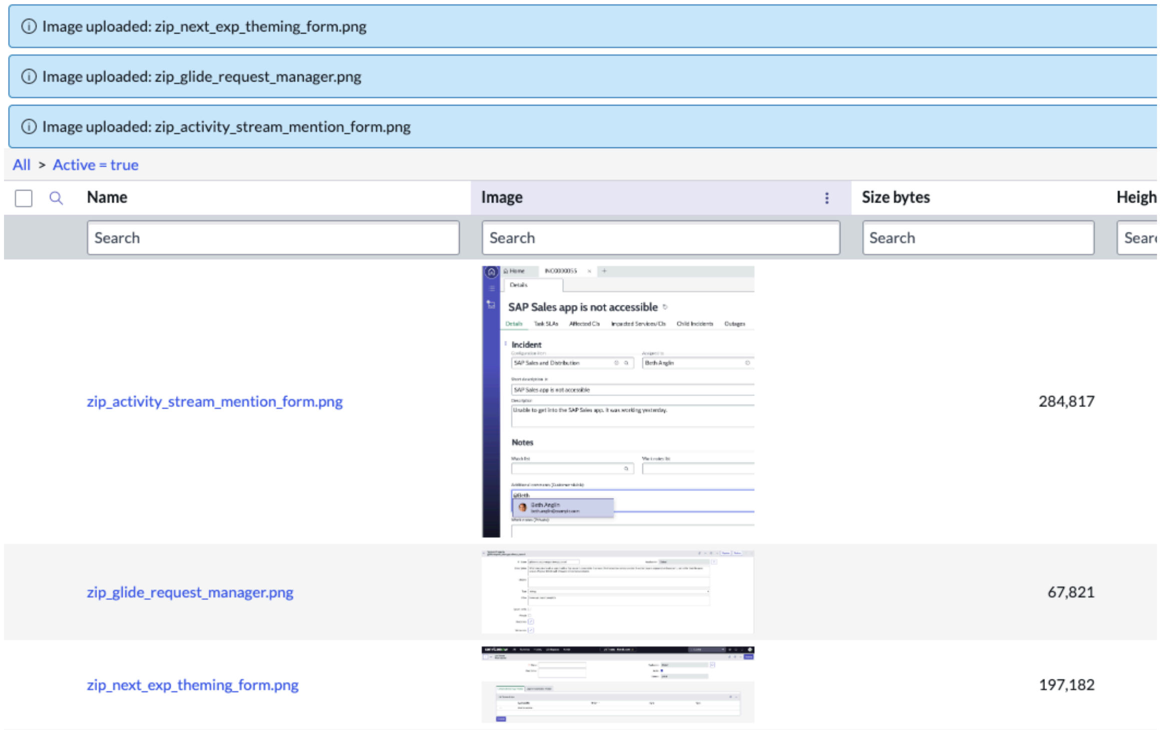
   a. Create a .zip file that contains only acceptable image file types.

   Note: The system does not support uploading zip files that contain .bmp images.

   b. Navigate to **System UI** > **Image Zip Upload**.

c. Click **Choose File** then select the file.

d. Click **Upload**.



A message indicates that the files are uploaded to the database, and the images list is sorted by updated date in descending order (the uploaded images appear first).

Note:

- If the .zip file contains a folder structure, the resulting image names are the path name with underscores in place of the slashes. For example, if the .zip contains `myimages/image1.gif` then the resulting image is named `myimages_image1.gif`.
- Image names cannot exceed 100 characters in length, including folder structure. Files with excessively long names are rejected.
- Uploads are logged in the system. View system logs to see whether files are uploaded or rejected.

Related topics

System log

Restrict file extensions

Use the glide.ui.strict_content_types to restrict the image file extensions that appear in the UI.

Before you begin

Role required: admin

Procedure

1. Enter `sys_properties.list` in the Navigation filter.
2. Verify that the property does not exist by searching for the property name.

3. Click **New**.
4. Complete the system property using the following table.

File extension system properties

Field	Description
Name	glide.ui.strict_content_types
Type	string
Value	Comma-separated list of acceptable image file names. Use any of the following file types: ico,gif,png,jpg,jpeg,bmp,js,css,htm,html,ogg,mp3,eot,woff,woff2

Note: Any files that use a file extension that is not included in the list of values appear broken in the UI.

User preferences

Users can configure many UI features, such as the number of rows per page in a list or whether the response time displays at the bottom of a list or form. Administrators can modify or delete these preferences as needed.

User customizations are stored as records in the **User preferences** [sys_user_preference] table, and are updated each time the user changes the setting. The UI displays according to each user's preferences.

For example, the response time may appear at the bottom of lists and forms by default. If a user hides the response time, a user preference record is created for them showing that the response time indicator as hidden. During the user's future sessions, the response time indicator is hidden. If the user later decides to display the response time, the user preference record is updated appropriately, and future sessions open with the response time indicator visible.

For more information about the preferences available to users, see User preference settings and Next Experience preferences.

Viewing and troubleshooting user preferences

Navigate to **User Administration** > **User Preferences** for a list of user preference records. Select a preference name to display that preference in the form view. If troubleshooting for a user, search for their user name to find all of their customizations, and then select a preference name to view.

Note: Up to 10,000 user preferences can exist for each user. Exceeding this limit causes system degradation and UI performance issues.

User preference fields

Field	Description
Name	The name of the feature or functionality.
Description	An optional short description of the feature or functionality.
System	Shows whether this record indicates the system-wide default (**TRUE**), or not (**FALSE**).

User preference fields (continued)

Field	Description
Type	Shows the data type of entry accepted for the Value. For example, you can select **string** or **integer**.
User	Shows the name of the user for whom the setting is customized. If **User** is empty, the record is for a system-wide default.
Value	The current setting for this record. Compare this value to the **User** field and **System** field to determine whether the value shown is a system-wide default or a specific user's preference.

You can identify user preference records for system-wide values, also called the default or global values, by the following values:

- **System=TRUE**
- **User=blank**

Whenever a user customizes a feature, a separate user preference record is created with the following values:

- **System=FALSE**
- **User=<username>**

As a result, the same customizable UI feature may have multiple user preference records.

Note: For some features, the system-wide record doesn't appear in the **User preferences** module until a user customizes it, causing a new record to be added to the **User preferences**.

If a user encounters an unexplained behavior in the user interface, you can check their user preferences by searching the **User preferences** list for their user name. Then, delete or update the user preference record that affects the behavior in question.

Note: When an administrator manually changes a user's preference value through this module, the user's next session uses the administrator's setting. However, the user can customize the features again through the UI, which updates their user preference record. If the administrator deletes the user preference record for a particular user, that user's next session uses the system-wide value for that feature. When the user later customizes the feature, the system creates a user preference record for the user.

Global user preferences

Create system-wide or global user preferences to set a default preference for your users. To make a preference the default, create a preference, check the **System** check box, and leave the **User** field empty.

Important: You should never have more than one preference with the same name set as a global user preference.

User preferences and update sets

User preference records for system-wide values, also called the default or global values, are stored in update sets. Any changes are implemented when you import the update set and affect all users who have not customized the feature. User preference records for specific users aren't stored in update sets, so user customizations are retained when you import an update set. For more information, see System update sets.

User preference settings

User preferences primarily track the way individual users interact with various features so that new sessions activate the user's last settings. For example, user preferences track whether the user activates the tabbed or scrolling interface for multi-section forms. Other user preference records enable users with the admin role to adjust certain feature settings.

View settings

To view the user preference settings, navigate to **User Administration** > **User Preferences**.

User preference list

This table describes user preference records in the base system.

User preference record	Description
User Only	User action sets and updates the value. Manual changes through the User Preference record don't affect the user experience.
Admin Only	The administrator can change the value through the User Preference record to modify the user experience.
Admin or User	User action sets and updates the value, but the administrator can change the user experience by manually updating the User Preference record.
System Only	The system sets and updates the value. Administrators should not modify these records.

This table provides the default value and a description for each preference. The Updated By column indicates how the preference is set.

User preferences

Preference	Category	Updated by	Details
<table>.db.order	List Sort	Admin or User	For the identified table, indicates is used to sort the records in a lis updates automatically each time changes the sort order for the tal **Type**: **String** **Default value**: User selection or t column if the user doesn't select **Number** column is empty, the **Na** to sort the records.
<table>.db.order.direction	List Sort	Admin or User	For the identified table, indicates the list shows records in ascendi descending (DESC) order by the <table>.db.order. This record is u the user changes the sort directi

User preferences (continued)

Preference	Category	Updated by	Details
			Type: **String** **Default value**: **None**
bsm_map.default_ci	BSM	User Only	Contains the sys_id of the last co item the user viewed in the busin management (BSM) map. This re automatically each time the user configuration item in the BSM ma **Type**: **String** **Default value**: **None**
ci_manage_relationships_filter_hint.cmdb_ci	CMDB	Admin Only	Constrains what appears in the **A** when defining a relationship for a item. The value is in the format of query string. **Type**: **String** **Default value**: locationANYTHING^operational_
ci_manage_relationships_filter_hint.sys_user	CMDB	Admin Only	Constrains what appears in the **A** **User** list when defining a relation configuration item. The value is i encoded query string. **Type**: **String** **Default value**:**active=true**
ci_manage_relationships_filter_hint.sys_user_group	CMDB	Admin Only	Constrains what appears in the **A** **Groups** list when defining a relat configuration item. The value is i encoded query string. **Type**: **String** **Default value**: **active=true**
collapse.<related table>.<related field>	Forms	User Only	Indicates that a related list is coll same related list is collapsed wh next session begins. This record automatically whenever the user collapses the same related list. **True** = collapse the identified rel **False** = expand the identified rel **Type**: **String**

User preferences (continued)

Preference	Category	Updated by	Details
			Default value: **None**
collapse.section.<sys_id>	Forms	User Only	Indicates the sys_id of a form sec collapsed. The same form sectio when the user's next session beg record updates automatically wh expands or collapses the same s same form. **True** = collapse the identified sec **False** (or blank) = expand the ide **Type**: **True/False** **Default value**: **False or blank**
glide.debugger.log_messages_limit	UI	Admin or User	Specifies the maximum number c be displayed in the script debugg UI.
glide.debugger.console.cached_stmt_limit	UI	Admin or User	Specifies the maximum number c to be cached in the browser for S Console.
glide.debugger.log.transaction.count	UI	Admin or User	Specifies the maximum number c displayed in the script debugger
glide.ui11.use	UI11	Admin or User	Indicates whether UI11 is active fo is no longer available.
glide.ui.navpage_state	Menus	System Only	**DO NOT MODIFY.**Indicates the u configuration. **Type**: **String** **Default value**: **None**
glide.ui.javascript_editor	UI	Admin or User	Indicates whether the JavaScript formatting controls are enabled c the user. The JavaScript editor ic formatting controls are available where the Syntax Editor plugin is record updates automatically wh the icon to enable or disable scri more information, see JavaScript **True** = enable script editor. **False** = disable script editor. **Type**: **True/False**

User preferences (continued)

Preference	Category	Updated by	Details
			Default value: **True** (if syntax edi active)
glide.ui.response_ time	UI	Admin or User	Determines whether the respons information is expanded or collap bottom of a list or form. This reco automatically whenever the user response time indicator icon a v2 list or form. **True** = expand the response time **False** = collapse the response tir **Type**: **String** **False**: **False**
homepage	Homepages	Admin or User	Indicates which dashboard appe user first logs in to the instance c homepage icon (). The value ir sys_id of the selected dashboarc **Type**: **String** **Default value**: **None**
knowledge.search.sort.field	List Sort	Admin or User	Determines the sort order for res searching the knowledge base. T updates each time the user selec **Sort by** option in the search resu Available options are: Number of Relevancy (relevancy), and Last I (sys_updated_on). **Type**: **String** **Default value**: **Views**
list_edit_double	Lists	Admin or User	Indicates what action opens the v2. This record updates automati user personalizes any v2 list and **Double click to edit** setting. For r see List editor administration . does not apply to v3 lists. Single- is not supported in List v3. **True** = open the list editor when t clicks a field in a v2 list. **False** = open the list editor when clicks a field in a v2 list.

User preferences (continued)

Preference	Category	Updated by	Details
			Type: **True/False** **Default value**: **True**
list_edit_enable	Lists	Admin or User	Indicates whether the list editor i editing fields directly in a list. Thi automatically when the user pers list (gear icon () above the firs list) and changes the **Enable list** preference doesn't apply to v3 lis **True** = enable use of the list edit **False** = disable use of the list edi **Type**: **True/False** **Default value**: **True**
live_message.feed.last_display	Live	Admin or User	Stores the last feed the user view (sysparm_feed_type=myfeed) or (sysparm_feed_type=company_ updates automatically each time a different feed. **Type**: **String** **Default value**: **sysparm_feed_type=company_**
live_tag.feed.order	Live	Admin or User	Tracks the user's choice of sortin This record updates automaticall selects a different **Tag Option** in options are **Order by Created**(sy and **Order by Last Activity** (last_ **Type**: **String** **Default value**: **None** (defaults to
menu.<identifier>.expanded	Menus	User Only	Indicates the sys_id of a section application navigator menu that i (expanded) for the user. The sam open when the user's next sessio record updates automatically ea expands or collapses the same s application navigator. **Type**: **String** **Default value**: **None**
mobile_rowcount	Mobile	Admin or User	Indicates the number of rows dis list on a mobile device. This reco

User preferences (continued)

Preference	Category	Updated by	Details
			automatically each time the user different number of rows per pag mobile screen. **Type**: **Integer** **Default value**: **20**
mobile_use_full.android	Mobile	Admin or User	Indicates which user interface ap the user's Android mobile device updates automatically each time the gear icon ( ) above the mo to display the full desktop interfa cell phone icon in the welcome b mobile interface. **True** = display the full desktop in Android mobile devices. **False** = display the mobile interfa mobile devices. **Type**: **True/False** **Default value**: **False**
mobile_use_full.iphone	Mobile	Admin or User	Indicates which user interface ap user's iPhone mobile device. This automatically each time the user icon ( ) above the mobile home the full desktop interface or clicks icon in the welcome bar to displa interface. **True** = display the full desktop in iPhone mobile device. **False** = display the mobile user in iPhone mobile device. **Type**: **True/False** **Default value**: **False**
module	Menus	User Only	Records the sys_id of the last mo accessed. **Type**: **String** **Default value**: **sys_id**

User preferences (continued)

Preference	Category	Updated by	Details
owned_by_indicator.form	Update Sets	Admin Only	Shows or hides the update indica headers when customer updates being tracked by update sets. **True** = show the customer updat **False** = hide the customer updat **Type**: **True/False** **Default value**: **False**
recent.impersonations	Administration	User Only	**DO NOT MODIFY.** Shows who th most recently impersonated. For information, see Impersonate a u **Type**: **String** **Default value**: **None**
report.expanded	Reporting	Admin or User	Works with the UI property **List o separated) that can expand the** to determine whether the report when viewing a report. For users whose role permits the the report header, the **report.exp** preference indicates whether rep the header expanded or collapse the report header reveals the rep which is used to modify the repo user preference record updates each time the user expands or co report header. If the user's role d permission to view the report hea header is never accessible, regar user preference setting. **True** = expand the report header a report. **False** = collapse the report head displaying a report. **Type**: **String** **Default value**: **True**
rowcount	Lists	User Only	Indicates the maximum number o display on a single page in a list. determines the maximum numbe display in a list report on a dashb updates automatically when a us different number.

User preferences (continued)

Preference	Category	Updated by	Details
			Type: **Integer** **Default value**: **20**
sys_update_set	Update Sets	User Only	**DO NOT MODIFY.** Indicates the currently active. This value updat when a user selects a different u **Type**: **GUID** **Default value**: sys_id of default u
tabbed.forms	Forms	User Only	Indicates whether forms that con two sections use a tabbed interfa list of sections. This setting appli It's not set on a form-by-form bas updates automatically when a us Toggle Tabs icon in the banner b information, see Configure the fo **True** = display multi-section form **False** or blank = display multi-se scrolling list of sections. **Type**: **True/False** **Default value**: **False**
table.compact	Lists	User Only	Indicates whether lists appear wi blank space above and below ea setting applies to all lists. It's not by-list basis. This record updates when a user personalizes any lis the **Compact rows** option. **True** = reduce the blank space a each row in a list to show more ro screen at one time. **False** = add blank space above a row in a list to improve readability **Type**: **True/False** **Default value**: **False**
table.wrap	Lists	User Only	Indicates whether long text in a li onto multiple lines or truncated. T applies to all lists. This setting is by-list basis. This record updates when a user changes the **Wrap c** option in the List v2 personalizati

servicenow

User preferences (continued)

Preference	Category	Updated by	Details
			the **Wrap longer text in list colun** Core UI system settings. **True** = wrap long text in a list. All list view, but each row may occup space. **False** = don't wrap the long text ir truncated in list view, but each ro vertical space. Full text can be se **Type**: **True/False** **Default value**: **True**
ts.match	Text Search	Admin or User	Indicates whether the task recorc returned by a global text search i search text exactly matches a tas record updates automatically wh the **Search tips and preferences** search results page and changes **record if searching for exact nur** more information, see Global tex records from multiple tables. **True** = return the task record. A li full search results. **False** = return full search results, search term matches a task num **Type**: **True/False** **Default value**: **True**
ts.remember.expanded	Text Search	Admin or User	Indicates whether to remember w groups were expanded and colla the previous search. The search available depend on the user's a selections. This record updates a when the user clicks the **Search** **preferences** link on the search re changes the **Use remembered e** **preferences** setting. **True** = remember the expand/co and use it for subsequent search **False** = do not remember the exp setting. Expand all groups for sub searches. **Type**: **String**

User preferences (continued)

Preference	Category	Updated by	Details
			Default value: **True**
ts.show_empty_groups	Text Search	Admin or User	Indicates whether global text sea include groups with no matches. groups available depend on the u rights. This record updates auton the user clicks the **Search tips ar** link on the search results page ar **Show groups with no search ma** **True** = include empty groups whe global text search results. **False** = hide empty groups when global text search results. **Type**: **String** **Default value**: **True**
ts.show_negative_result_info	Text Search	Admin or User	Indicates whether group headers text search results page should i that had no matches. The search depend on the user's access righ updates automatically when the u **Search tips and preferences** link results page and changes the **In header, list tables with no searc** setting. **True** = show tables that returned the group header. **False** = hide tables that returned the group header. **Type**: **String** **Default value**: **True**
ts.show_search_groups	Text Search	Admin or User	Indicates whether the global text page includes check boxes that l indicate which groups to search a search groups available depend access rights and settings. This r automatically when the user click **tips and preferences** link on the page and changes the**Show sele** **groups** setting. **True** = show the check boxes for disabling individual search group

User preferences (continued)

Preference	Category	Updated by	Details
			False = hide the check boxes for disabling individual search group **Type**: **String** **Default value**: **True**
user.can.logout	Security	Admin Only	Indicates whether users see a **Lo** If this is False, users are automat out when their session times out. information, see Remove the logo user preference does not apply t **True** = show the **Logout** button, w manual logout. **False** = hide the **Logout** button, w manual logout. **Type**: **True/False** **Default value**: **True**
use.concourse	Core UI	Admin Only	Indicates whether users see UI15 (UI16). The Core UI plugin [com.gl be enabled for users to see Core **True** = show Core UI by default **False**= show legacy UI15 by defa **Type**: **String** **Default value**: **True**

Turn off the Next Experience welcome screen after upgrading your instance

You can turn off the Next Experience welcome splash screen that appears in the Core UI after upgrading your instance by creating a user preference.

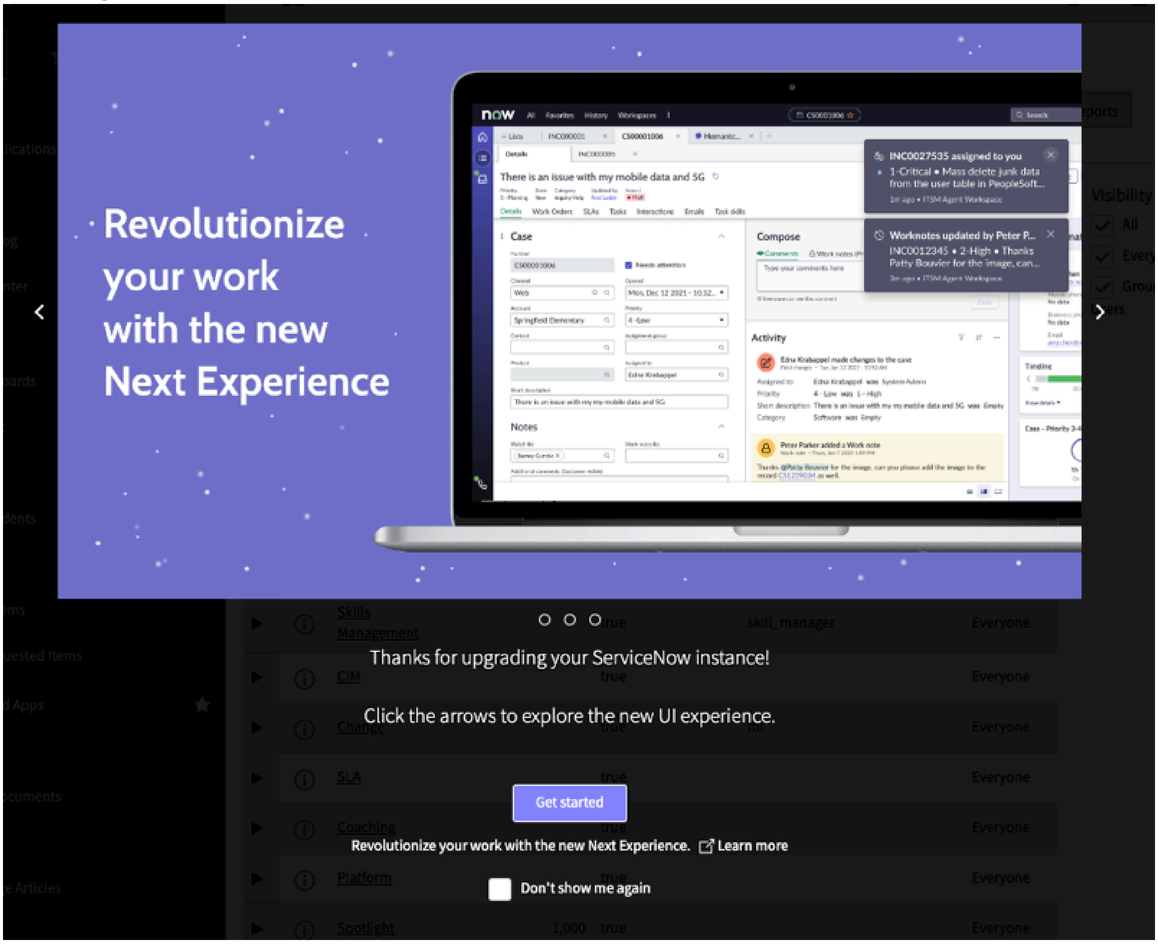
Before you begin

Role required: admin

About this task

A Next Experience welcome splash screen appears in the Core UI when you upgrade your instance but haven't turned on the Next Experience UI on the instance.

Next Experience welcome screen



This welcome splash screen appears for admins only. It informs you about the Next Experience UI so you can enable it. After the welcome splash screen has notified you about the Next Experience UI, you can use the following steps to turn off the splash screen.

Procedure

1. Navigate to **All** > **User Administration** > **User Preferences**.
2. Click **New**.
3. Enter the following values.

Option	Description
Description	A description of the user preference. For example, `Remove the welcome splash screen.`
User	The user that the splash screen is turned off for. To turn off the splash screen for all users, leave this field empty. To turn off the splash screen for specific users, user the search icon ( ) to find the user and select them in the search results.

Option	Description
Name	User preference name. To turn off the wel come splash screen, enter the following name: `overview_help.visited.NextExpe rience`
Value	Enter `true` to enable this user preference, which turns off the welcome splash screen.
Type	Select **string**.
System	Select this check box to apply this user prefer ence system wide.

4. Click **Submit**.
   The welcome splash screen is marked as **Visited**. When the welcome splash screen is marked as **Visited**, the screen is turned off on your instance for specified users or all users depending on how you configured the **User** option.

   Note: In the User Preferences table, verify that there is only one user preference record where the **System** field and **Value** field is set to `true`.

Configure available keyboard shortcuts

Administrators can configure which keyboard shortcuts are available to users.

Before you begin

Role required: admin

About this task

For a list of available keyboard shortcuts, see Core UI keyboard shortcuts.
You can enable or disable keyboard shortcuts universally by searching for the *glide.ui.keyboard.shorcuts.enabled* user preference. Then select the System checkbox and set the value to False.

You can also use the user preferences to determine which keyboard shortcuts are available to users and what the key combinations are.

Procedure

1. Navigate to **All** > **User Administration** > **User Preferences**.
2. From the search bar, select **Name**.
3. Type `*keyboard` to do a contains search for all user preferences containing keyboard in the name.
4. To allow users to use keyboard shortcuts while typing in a field, set the value for the *glide.ui.keyboard.shortcuts.allow_in_input_fields* user preference to true.
5. Disable any of the following keyboard shortcuts by changing the value to False.

Keyboard shortcuts

User preference	Description	Keyboard shortcut
glide.ui.keyboard.shortcuts.main_frame	Move keyboard focus to the main content on the page.	ctrl+alt+p
glide.ui.keyboard.shortcuts.global_search	Move keyboard focus to the global search bar in the banner frame.	
glide.ui.keyboard.shortcuts.impersonator	Open the impersonator window.	
glide.ui.keyboard.shortcuts.navigator_filter	Move keyboard focus to the filter in the application navigator.	
glide.ui.keyboard.shortcuts.navigator_toggle	Toggle the application navigator open or closed.	

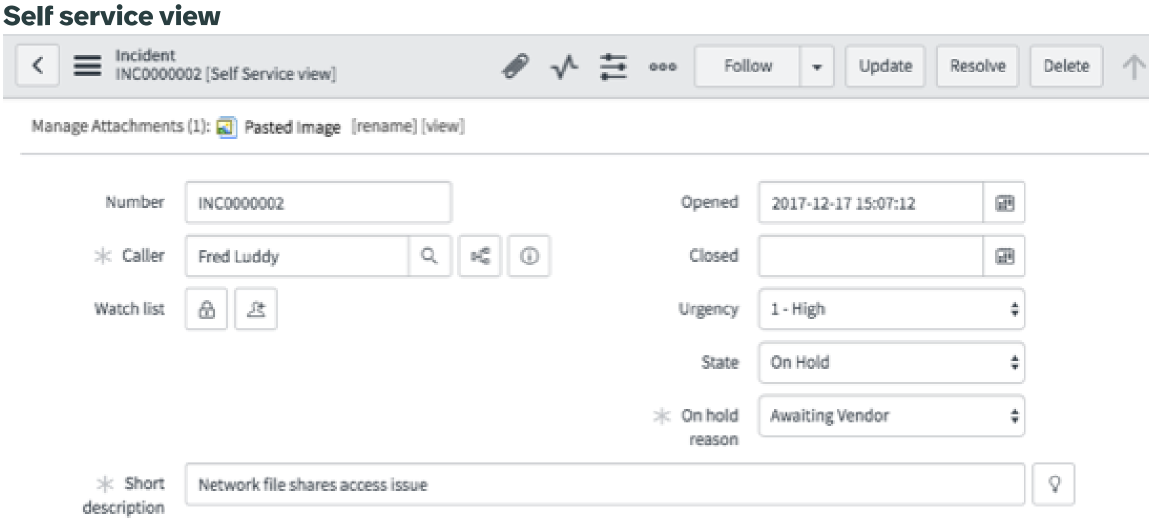
6. Use the value for any user preference that ends with key_combo to change the key combination for that particular keyboard shortcut.

View management

A view defines the elements that appear when a user opens a form or a list, and you can switch the view from the default for lists and forms.

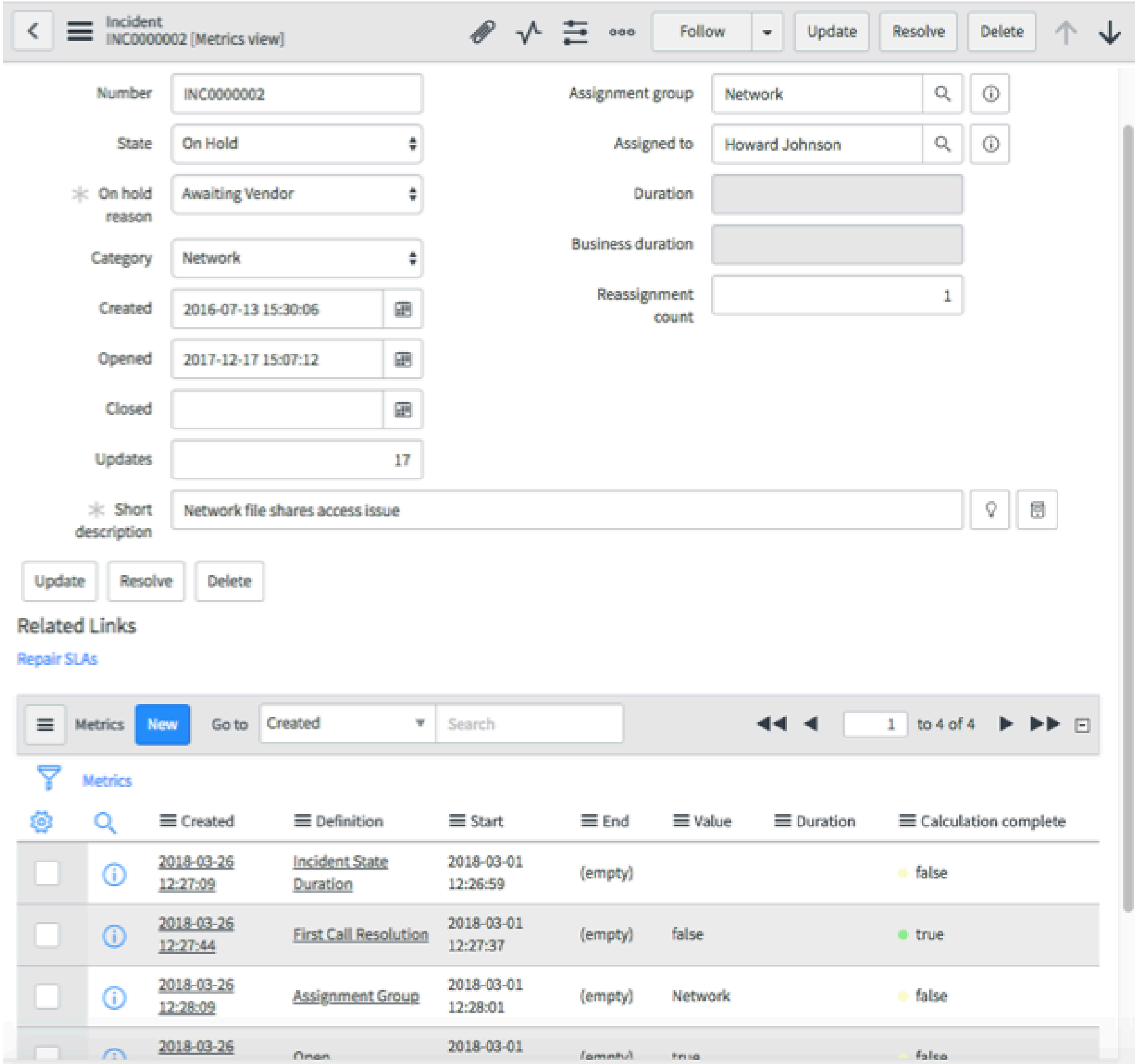
When the system displays a form or list it usually displays only a subset of the fields belonging to the underlying table. For example, this is the Incident form in the **Self-Service View**:

Self service view



This is the Incident form in the **Metrics View**:

Metrics view



Administrators and users with the personalize role have permission to perform the key tasks related to views:

- create views for any list and form
- determine which view is visible by default
- delete views they have created
- create and modify view rules determining which views are available depending on the values of the fields of the underlying table
- create rules that determine which views pertain to specific user roles

Users with the admin or view_changer roles can change views.

Views included with the base system

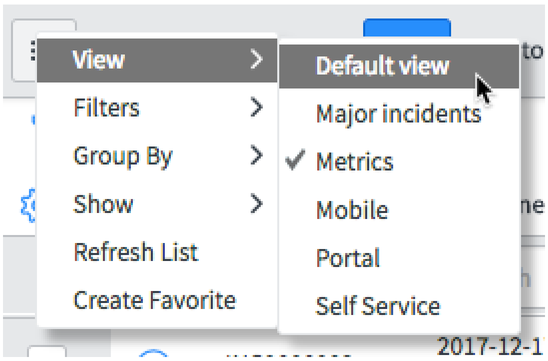
Several views are included with the base system, including the Default view and Advanced view.

Warning: Do not delete any of the base system views.

Switching views

To switch between list views, click the list context menu at the top left corner of the list, and then select **Views** > **[Desired View]**.

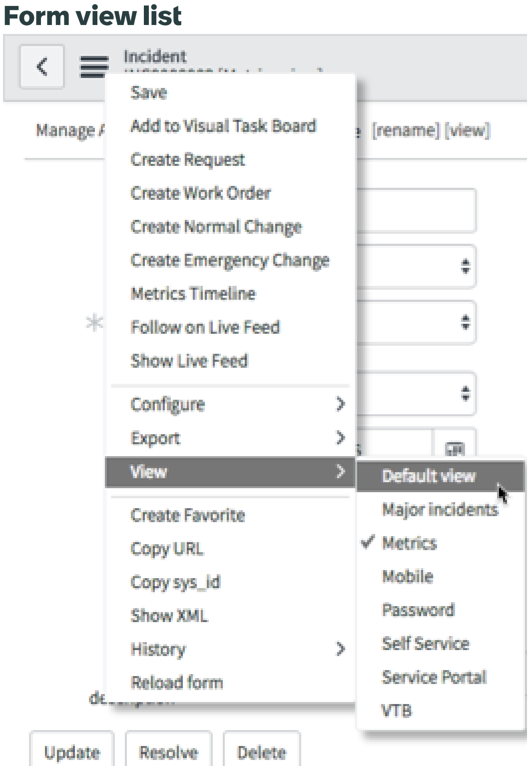
List view list



To switch between the list view in list v3, click the context menu, then select **Change view** > **[Desired View]**.

To switch between form views, click the context menu at the left side of the form header, and then select **Views** > **[Desired View]**:

Form view list



Switching views submits the form, which saves all changes and triggers any `onSubmit` client scripts that apply. You cannot switch form views on a new form that has not been saved yet.

When a user switches views, the selected view is saved as a user preference so the user sees the same view by default when the form opens. When a user has a view saved as a user preference and then opens a URL to a record that specifies another view, the form displays in the view saved in the user preference, not the URL. For example, if a user selects the Mobile view on an Incident record and then tries to open the following link, which specifies the visual task board view, the form still opens in the Mobile view: `https://{instance}/nav_to.do?uri=incident.do?sys_id={sys_ID}sysparm_view=vtb`

The sysparm_view parameter specifies the view to be used for a list or a form, and can be overwritten by a user's stored preference for a view. You can override this behavior by setting the *`sysparm_view_forced`* parameter to **true**.

Create and delete views

Administrators can create views and delete any views they have created. You can create or delete views from either the list view or the form view.

Before you begin

Role required: admin

Procedure

1. Navigate to the application or module you want to create or delete the view for.
2. If you are creating a view for a list, perform the appropriate action for your list version.

Version	Action
List v2	Right-click the header and select **Configure** > **List Layout**.
List v3	Open the context menu and select **List Lay out**.

3. If you are creating a view for a form, open a record, then right-click the header and select **Configure** > **Form Layout**.
4. Under the List View section, select the view on which you want to base your new view. The fields visible for that view appear in the **Selected** list.
5. From the choice list, select **New**. The Create New View form appears.
6. Enter the descriptive name of the view. View names should be unique and cannot use special characters or spaces, only the characters **A-Z**, **a-z**, **0-9** and **_**.
7. Select **OK**. The fields in the **Available** column are the same as the first view you based the new view on.
8. Select the fields to appear in this view by adding or removing the fields from the **Selected** column, or you can adjust the order they appear on the form by moving the fields up or down. If you are creating a view for a form, you can select a form section and configure the fields for that section. You can also create views in the same manner when you configure a related list.
9. To delete a view, navigate to **System UI** > **Views**.
10. Select the view to delete.
11. Select **Delete** on the form header.

> **Warning:** In the views list, you may see multiple entries formatted as `rpt-temp<sys_id><user>`. The instance creates these views to store the current state of reports. Avoid deleting these records, as it may impact the state of active reports.
>
> Do not delete the base system views.

Create a view rule

When a user switches views, the selected view is saved as a user preference so the user sees the same view by default when the form opens. With a view rule, you can override this functionality to force a specified view to be used.

Before you begin

Role required: admin

About this task

View rules do not always apply if there are existing user preference entries on the instance. Delete the user preference entry and clear the system cache to make sure the respective view rule applies. You can clear the system cache by appending `cache.do` to the instance URL. For example, `instance_name.service-now.com/cache.do`.

> **Important:** Clearing the system cache can affect overall performance, and degrade system response times. Do not run cache flushes during business hours, and do not trigger cache flushes automatically.

Procedure

1. Navigate to **All** > **System UI** > **View Rules**.
2. Click **New**.
3. Complete the form, using the fields in the table.

View rule form

Field	Input value
Name	Specify an identifying name for the rule.
Active	Select this option to apply the view rule according to the conditions you specified. If unchecked, the view rule is not be applied.
Advanced	Select this option to specify a code-based condition instead of using the condition builder. Selecting this option displays the **Script** field and hides the **Match conditions**, **Conditions**, and **View** fields.
Match Conditions	Select whether **Any** or **All** of the conditions need to be met. The system hides this field when you create an advanced View Rule.
Conditions	Use the condition builder to determine when the view is applied. The system hides this field when you create an advanced View Rule.
Application	Displays the application to which the View Rule record belongs.
Table	Select the table on which this view rule will be applied. The list shows only tables and database views that are in the same scope as the view rule
Device type	Select which interface this view rule applies to.
View	Enter the name of the View you are creating a rule for. The system hides this field when you create an advanced View Rule. This field is case-sensitive and must match exactly the view name.
Script	Enter a script to determine when to display a particular view. The system only displays this field when you create an advanced View Rule.

4. Click **Submit**.

Control when the system displays a view

Administrators can create rules that determine the conditions for when the system should display a form or list in a specified view. Administrators can also restrict views by user role.

Before you begin
Role required: admin

Procedure

1. Navigate to **All** > **System UI** > **View Rules**.
2. Click **New**.
3. Complete the form.

View rule form

Field	Input value
Name	Specify an identifying name for the rule. This field is case-sensitive and must match exactly the view name.
Active	Select this option to apply the view rule according to the conditions you specified. If unchecked, the view rule is not be applied.
Advanced	Select this option to specify a code-based condition instead of using the condition builder. Selecting this option displays the **Script** field and hides the **Match conditions**, **Conditions**, and **View** fields.
Match Conditions	Select whether **Any** or **All** of the conditions must be met. The system hides this field when you create an advanced View Rule.
Conditions	Use the condition builder to determine when the view is applied. The system hides this field when you create an advanced View Rule.
Application	Displays the application to which the View Rule record belongs.
Table	Select the table on which this view rule is applied. The list shows only tables and database views that are in the same scope as the view rule
Device type	Select which interface this view rule applies to.
View	Enter the name of the View you are creating a rule for. The system hides this field when you create an advanced View Rule.
Script	Enter a script to determine when to display a particular view. The system only displays this field when you create an advanced View Rule.

4. Click **Submit**.

Restrict view by role

You can use a script to control the form view used by different roles.

> **Warning:** The customization described here was developed for use in specific instances, and is not supported by Now Support. This method is provided as-is and should be tested thoroughly before implementation. Post all questions and comments regarding this customization to our community forum.

Name: `Restrict View by Role`

Type: **System UI** > **View Rules**

Table: `Any`

Description: Generally the view used on a form is controlled by either specifying the *`sysparm_view`* parameter in the url or module properties, or by inheriting the view from the previous form or list. Sometimes this does not apply, such as when opening a referenced field form from a record producer. In this case, you may want to control the view of the form based on roles. This script assumes there is a view called *`ess`* available to the current table.

Parameters:

- *`view`* - A string containing the name of the current view.
- *`is_list`* - A Boolean value indicating whether this is a list view.

Script:

```
(function overrideView(view, is_list) {
//Force non-itil users to use the ess view
if (gs.hasRole("itil"))
{return;}
if (view.startsWith("ess"))
{return;}
// do not change view if it starts with sys_ (e.g. sys_ref_list)
if (view.startsWith("sys_"))
{return;}
answer = "ess"; // set the new view to answer
})(view, is_list);
```

Navigation handler

A navigation handler is a scripted view rule and runs each time data from the specified table is requested in the form view.

Create a navigation handler

The Navigation Handler [sys_navigator] table contains the navigation handlers on your instance. Access this table by entering `sys_navigator.list` in the filter navigator. Navigation handler records contain a **Table** field to specify which table the navigation handler applies to, and a **Script** field containing the scripted view rule.

The following script comes from navigation handler included with the HR plugin. The script forces records from the table in the **Table** field to use ESS view for users with no roles, and default view for all other users.

```
var now_GR = new GlideRecord(hr.TABLE_CASE);
if (gr.get(g_uri.get('sys_id'))) {
     if (!gs.getUser().hasRoles())
          g_uri.set('sysparm_view', 'ess');
     else
          g_uri.set('sysparm_view', '');
}


answer =  g_uri.toString('hr_case.do');
```

Run navigation handlers before or after view rules

Use the *glide.ui.view_rule.check_after_nav_handler* system property to control the order in which view rules and navigation handlers are applied. Set the property value to **True** to process view rules after navigation handlers. If the system property does not exist in your instance, the navigation handler always takes precedence.

The system property only overrides the navigation handler if the navigation handler scripted function does not return an answer. In the example script above, the property has no effect. This is because this navigation handler always returns an answer due to the `answer` line being outside of the `if` statement.

To force the navigation handler script in the preceding example to honor view rules, take the following steps:

1. Create the *glide.ui.view_rule.check_after_nav_handler* system property.
2. Set the value of the property to `true`.
3. Update the navigation handler script to only return an `answer` when the view must be changed or forced.

This example is a modified version of the previous script. In this case, the `answer` line only occurs when the user has no roles. If the user has roles, `answer` is never reached, and view rules on the same table, if any, are applied.

```
var now_GR = new GlideRecord(hr.TABLE_CASE);
if (gr.get(g_url.get('sys_id'))) {
     if (!gs.getUser().hasRoles()) {
          g_url.set('sysparm_view'),'ess');
          answer = g_url.toString('hr_case.do');
     }
}
```

Welcome pages

The welcome page contains instructions and any important information you would like to convey to your customers each time they log in to use the system.

The base system login page content is customizable by the administrator of the system.

Note: This information is only relevant for instances using Core UI instead of the Next Experience. For information about similar options available for Next Experience, see Configure login theming in Next Experience.

Welcome page sections

Welcome pages can contain different sections, including:

- **Welcome:** General information
- **Using:**Some tips and tricks for using the system
- **Login:** Login information
- **Demonstration:** Information about logging in to a base system demo system
- **More Information:** A link to the ServiceNow documentation

View, create, and configure the welcome page sections by navigating to **System UI** > **Welcome Page Content**. You can edit any item by clicking its short description. Sections that are not needed can be removed.

Welcome page section fields

Field	Description
Short Description	A description of the section.
Active	Mark the section active to display it on the welcome page. Inactive sections are not visible.
Display order	A number representing the order in which sections are displayed. Lower numbered sections are displayed above higher numbered sections.
Application	The application to which the section belongs.
Language	The section appears when the logged in users language matches this value. If no user is logged in, the guest user's language preference is used.
Condition	The section appears on the welcome page when the script in this field evaluates to true.
Published	The published date of the section.
Text	The content of the section.

Create company-specific welcome page content

You can create company-specific welcome page content.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System UI** > **Welcome Page Content**.
2. To create a new section, click **New**.
3. Enter the following in the **Condition** field, where Company is the name of the company whose users see this section.

   Example

   ```
   gs.getUser().getCompanyRecord().name.toString() == "Company"
   ```

4. Complete the form.
5. Click **Submit**.

Enabling accessibility features

You can configure accessibility features globally or for specific users. Users can also individually enable user preferences for themselves to meet their specific accessibility needs.

The platform includes features that support Web Content Accessibility Guidelines (WCAG) 2.0 AA and WCAG 2.1 AA (for some products) to make the interface more accessible to all users. These features improve the user experience when accessing the instance with screen readers and keyboard navigation.

Accessibility features are not enabled by default because some features are user specific. Administrators have the flexibility to enable features globally or for individual users.

All of these options can be configured globally or for specific users.

- Enable the accessibility option.
- Enable the high contrast theme.
- Use skip links.
- Turn off first field focus

Enable accessibility mode

Enable accessibility mode on your instance.

Before you begin

Role required: none

About this task

Administrators can enable accessibility mode for specific users by navigating to **User Administration** > **User Preferences** and searching for the `glide.ui.accessibility` user preference. For more information on configuring user preferences, see User preferences.

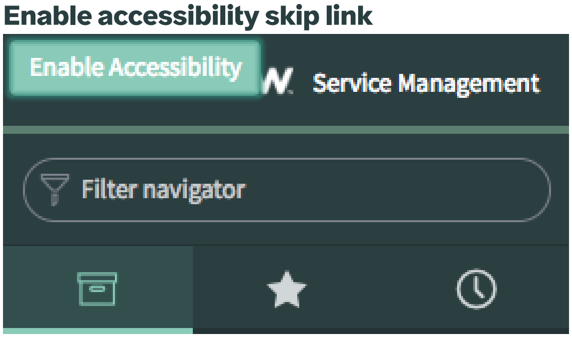
Procedure

1. Navigate to **User Administration** > **User Preferences**.
2. Click the gear icon ( ) in the banner frame to open the System Settings window.
3. From the General tab, select the **Accessibility enabled** option.
   Accessible tooltips on forms is enabled automatically the first time you enable accessibility mode.

What to do next

Alternatively, enable accessibility mode using the Enable Accessibility skip link. For more information on skip links, see Use skip links.

Enable accessibility skip link



Related topics

User preferences

Enable the high contrast theme

In Core UI, administrators can enable the Contrast UI theme for users who need a greater contrast in color.

Before you begin

Role required: admin

About this task

Individual users can enable the contrast theme for themselves by navigating to the Theme tab of the system settings menu. From the Theme tab, select the **Contrast UI** theme.

Procedure

1. Navigate to **All** > **User Administration** > **User preferences**.
2. Click **New** then configure the following fields.

User preferences fields

Field	Description
Name	glide.css.theme.ui16
System	Make sure that the check box is cleared.
User	Name of the user you want to enable the contrast UI theme for. Add a user preference for each user you want to enable the theme for.
Type	string
Value	The sys_id of the contrast UI theme. You can find the sys_id by navigating to **System UI** > **Themes**. Then right-click **Contrast UI** and click **Copy sys_id**.

3. Click **Submit**.
   The user may have to sign out and sign back in for the theme to take effect.

Turn off first field focus

When a form loads, the system automatically sends focus to the first field on the form. For accessibility reasons, you can disable this option so that focus starts on the first element on the top of the page.

Before you begin

Role required: admin

About this task

Sending focus to the first field on a form is useful to most users however, it presents challenges for users with certain disabilities. For example, a user using the system with a screen reader may not realize there is additional content above the field that receives focus.

Procedure

1. Navigate to **All** > **System Properties** > **UI Properties**.
2. Locate the *`On form load, focus on first writable element. (glide.ui.focus_first_element)`* property.
3. Clear the checkbox to turn off first field focus.

   Note: If your instance has list v3 enabled, instead navigate to **All** > **User Administration** > **User Preferences** instead and update the `glide.ui.accessibility.focus_first_field` property to false.

Enable the accessible form tooltips feature

The accessible tooltips user preference adds a tooltip icon that users can tab to, to view a tooltip for a field.

Before you begin

Role required: admin

About this task

Some fields on forms have associated tooltips that contain additional information. By default, these tooltips are accessible by pointing to the field label or mandatory indicator asterisk. However, a user who relies on keyboard navigation cannot point to the field to access the tooltip. The accessible form tooltip feature solves this problem by adding a keyboard-accessible icon next to each field that has a tooltip. Tabbing or pointing to the icon shows the tooltip. Administrators can enable accessible form tooltips for specific users by navigating to **User Administration** > **User Preferences** and searching for the `glide.ui.accessibility.accessible.tooltips` user preference. For more information on configuring user preferences, see User preferences.

Accessibility must be enabled for the accessible form tooltips user preference to work.

Procedure

1. Click the gear icon () in the banner frame to open the System Settings window.
2. From the General tab, select the **Accessibility enabled** option.
   The Accessible tooltips on forms option is enabled automatically the first time you enable accessibility mode.
3. **Optional:** Clear the **Accessible tooltips on forms** option to disable the accessible tooltips.
   If you disable accessibility mode and re-enable it, Accessible tooltips on forms will remain disabled.

Related topics

User preferences

Configure a Windows 64-bit host to use 32-bit NVDA with Java applications

The NVDA Assistive Technology screen reader is a 32-bit application that, when the Java Access bridge has been enabled, reads aloud Java applications built to support accessibility. If you encounter a problem using NVDA to access Java applications on a 64-bit Windows host, you must configure the Java Access bridge.

Before you begin

Role required: local or domain administrator on the host Windows machine

About this task

The following example assumes:

- The 32-bit and 64-bit Oracle Java jdk versions 8u171 are being installed in the default location.
- A Windows command prompt with administrative privileges is used to execute command line utilities.
- Executable statements are prefixed with the `PROMPT>` string.

Note:

- This configuration was used on a Windows 7 VM host to test the NVDA and JAWS screen readers.
- This example refers to Java version 8u171. If you are using a later version of Java, substitute that version.

Procedure

1. On the Oracle Java SE downloads page, download the Oracle Java jdk for 32-bit and 64-bit Windows environments.
    - 32-bit: `jdk-8u171-windows-i586.exe`
    - 64-bit: `jdk-8u171-windows-x64.exe`

    To access and download the files listed in the above example, go to the Oracle Java SE jdk download page.
2. Install the 64-bit version of the Oracle Java jdk in the default location.

    ```
    PROMPT> jdk-8u171-windows-x64.exe
    ```

    Verify that the installation process installed the following:
    - Java 64-bit jdk in the `C:\Program Files\Java\jdk1.8.0_171` directory.
    - `WindowsAccessBridge-64.dll` in the `C:\Windows\System32` directory.
3. Enable the Java Access bridge for 64-bit applications using the 64-bit jabswitch application located in the 64-bit Java jdk bin directory.

    ```
    PROMPT> cd "C:\Program Files\Java\jdk1.8.0_171\bin"
    PROMPT> jabswitch -enable
    ```
4. Copy the `WindowsAccessBridge-64.dll` located in the `C:\Windows\System32` directory to the 32-bit `C:\Windows\SysWOW64` directory.

    ```
    PROMPT> cd C:\Windows\System32
    PROMPT> copy WindowsAccessBridge-64.dll C:\Windows\SysWOW64
    ```

    Verify that the copied `WindowsAccessBridge-64.dll` exists in the 32-bit `C:\Windows\SysWOW64` directory.
5. Install the 32-bit version of the Oracle Java jdk in the default location.

    ```
    PROMPT> jdk-8u171-windows-i586.exe
    ```

    Verify that the installation process installed the following:
    - Java 32-bit jdk in the `C:\Program Files (x86)\Java\jdk1.8.0_171` directory.
    - `WindowsAccessBridge-32.dll` in the `C:\Windows\SysWOW64` directory.
6. Enable the Java Access bridge for 32-bit applications using the 32-bit jabswitch application located in the 32-bit Java jdk bin directory.

    ```
    PROMPT> cd "C:\Program Files (x86)\Java\jdk1.8.0_171\bin"
    PROMPT> jabswitch -enable
    ```
7. Restart the NVDA Assistive Technology software through the task bar or the NVDA menu.
    - Select the NVDA shortcut pinned to the task bar, pinned to the start menu, or located on the desktop.
    - Navigate to the **Start** > **All Programs** > **NVDA** > **NVDA** menu selection.
8. On an administrative command prompt terminal, launch the Edge Encryption Interactive Installer.

    ```
    PROMPT> java -jar <edge encryption interactive file name>.jar
    ```

Using accessibility features

Accessibility features include keyboard navigation, color and style settings, using a screen reader, and search methods.

Keyboard accessibility

The ServiceNow AI Platform is designed to be as accessible as possible without user modification or setting changes. Users can tab through the platform UI without enabling accessibility. However, without accessibility enabled, tabbing goes from input to input and skips other items on a form, such as reference icons.

Tab-through provides the following options:

- Use skip links to shift focus to different parts of the page without tabbing through every element.
- On edit pages such as forms, the keyboard focus starts at the first editable field on the page.
- If the `glide.ui.focus_first_element` user preference is enabled, page focus starts at the first input field at the top of the page content section. In a table, this field is usually the search option. In a form, the field is the first input field in the form. For more information about disabling initial field focus to improve accessibility, see Turn off first field focus.
- Use tab-through and arrow keys to move items around in a slushbucket.
- When focused on tabs, use right/left arrow keys to switch tabs.
- Arrows keys work within menus to navigate between entries.
- On tab-through for a list, the option to enable the **Edit table data inline** appears, so you can use the list editor, rather than opening the form.
    - When inline edit mode is enabled, screen focus shifts to the first cell in the table.
    - Press the Escape key while a cell is selected to exit inline edit mode. Focus remains on the cell.
    - Press the spacebar to open the context menu for the selected item.
    - Use the arrow keys (in addition to tabbing) to move around the list in inline edit mode.
- Properties pages, such as **System Properties** > **UI Properties**, include an icon with the property name. Screen readers read the property name when the icon is in focus.
- Fields on a form include a tooltip icon. Screen readers read the tooltip when the icon is in focus.
- In the application navigator when accessibility is enabled, tabbing moves you through each element for every module, including the **Edit application/module** and **Add to favorites** icons. Use the arrow keys to move through the application navigator without focusing on these additional elements.
- If accessibility mode is enabled, a help icon appears with the HTML field. The help icon indicates how to access and escape the HTML field toolbar.

Use skip links

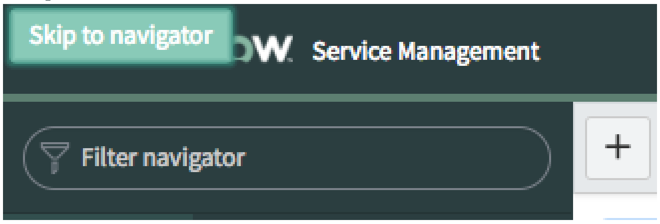
Skip links allow users to quickly navigate to the main content on a page, list, or form, bypassing icons, banner text, navigation links, and other elements. Skip links are not visible until you tab to them.

Before you begin
Role required: none

About this task

The user interface includes skip links to the navigation menu, and the main content pane. If accessibility is not enabled, users can also use skip links to activate accessibility.

Skip link



- **Enable Accessibility**: Enables accessibility. This skip link only appears if the user has not yet enabled accessibility. Pressing enter prompts you to reload the page with accessibility mode enabled.
- **Skip to navigator**: Skips to the navigation filter in the application navigator.
- **Skip to main content**: Skips to the main content page.
- **Edit table data inline**: Skips to the first field in a table. When the field is selected, press Enter to edit the field. Press the spacebar to open the field context menu. Press the Escape key to exit inline edit mode.

Skip links are usually the first item in the tab order for a page or frame.

Procedure

- Use the Tab and Shift+Tab keys to move forward and back through the skip links and other selectable fields.
- When a skip link receives focus, press Enter to select the link.

Color and style accessibility

There are several color and style changes that make the platform more accessible.

Enable the Contrast UI theme

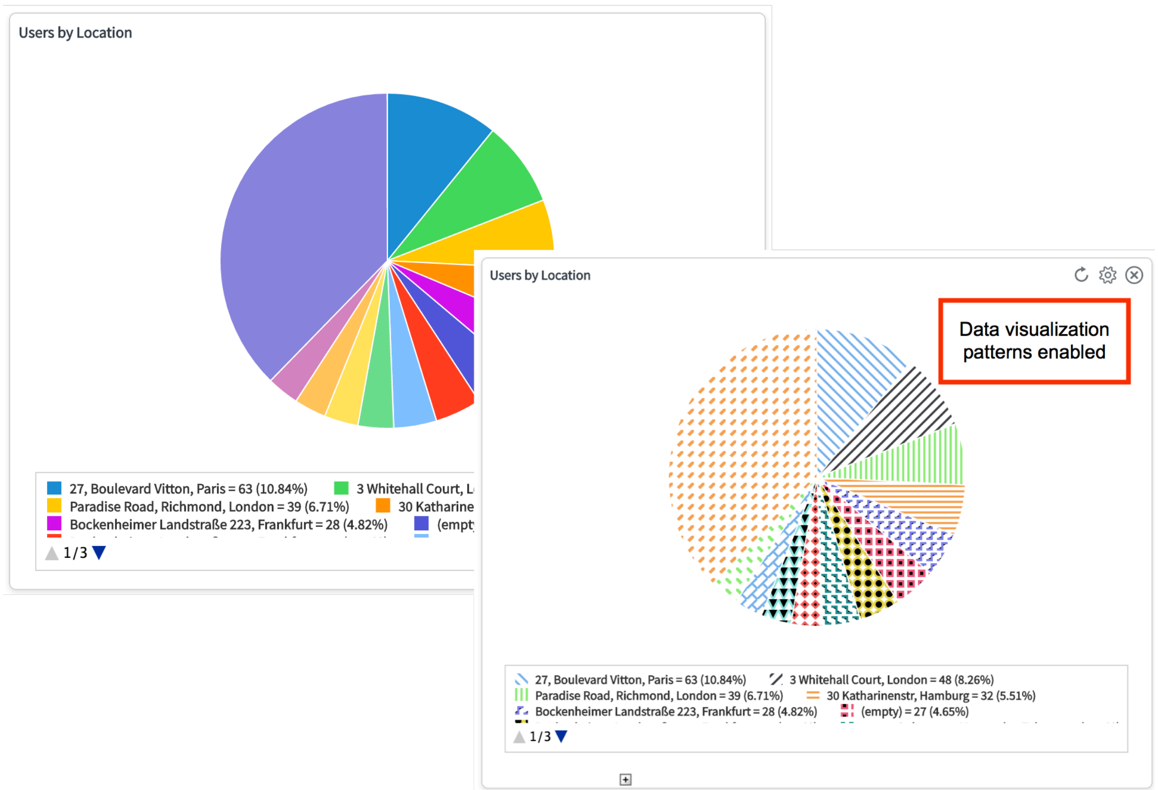
In the system settings, on the themes tab, select the Contrast UI theme. The Contrast UI theme provides a higher contrast range of colors for the platform UI.

In Service Portal, you can apply the Stock — High Contrast theme to a portal for a higher contrast color range. Portal users can enable a contrast theme using the **Accessibility** option in the User Profile widget.

Patterned charts and graphs

View charts and graphs that rely heavily on color with patterns in addition to colors. Navigate to **System settings** > **General**, then select **Data visualization patterns enabled**.

Accessibility enabled graph



Screen reader accessibility

Screen elements in the platform have enhancements that make them accessible to screen readers.

Use NVDA, JAWS, or VoiceOver for non-visual access to the platform.

Skip links allow you to tab straight to the main content instead of tabbing through all the other elements on the page.

When a page reloads or search results display, screen readers inform the user.

Important images and field indicators (for example, status indicators for avatars in list v3) have alternative text for screen readers to read.

To reduce confusion when tabbing through modules, the edit application/edit module and add to favorites icons are accessible to screen readers by tabbing. To skip the **Edit application/module** and **Add to favorites** icons, use the up and down arrows on the keyboard.

In Service Portal, users can add alternative text to containers in their own portal for screen readers to read.

Elements such as links or button are listed as such for screen reader awareness.

Properties pages, such as **System Properties** > **UI Properties**, include an icon with the property name. Screen readers read the property name when the icon is in focus.

Forms include accessible tooltips that screen readers read when the tooltip is in focus.

Accessibility search methods

There are several ways to search for information in the user interface.

- When a list opens, focus starts in the search field. Press the Tab key or the shift+tab keys to navigate away from the search, or start typing while focus is in the search field.
- List views include a **Go to** search field in the list title bar. Using the * wildcard character in the search text allows you to perform a **contains** search rather than a **starts with** search. This type of query may take longer to run but can save keystrokes. You can also use several other wildcards with list searches.
- The navigation filter in the application navigator filters the applications and modules that appear in the navigator based on the entered text. Tab through or use skip links to navigate directly to the navigation filter. To open a module, click the module name, or press the Down Arrow to highlight the module name, and then press Enter.

See Available search options for more information about these search methods.

View card details in a Visual Task Board

With accessibility mode enabled, tab through cards in a task board. Use the card details button to view task card details.

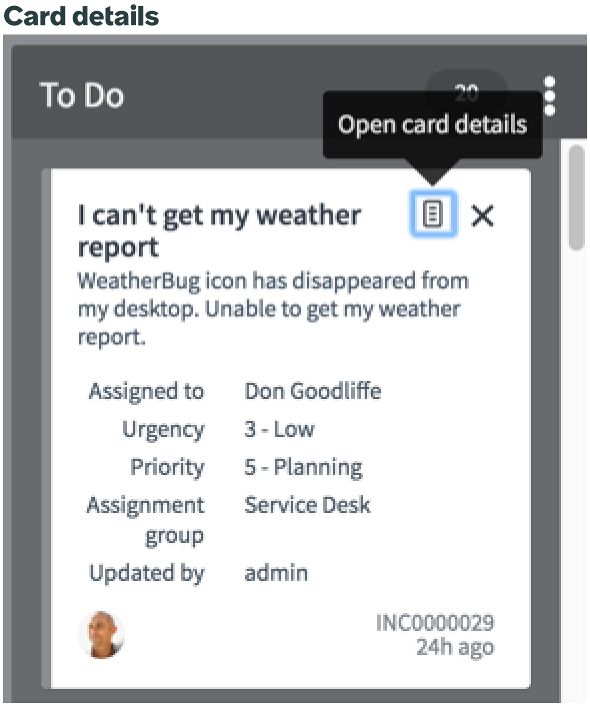
Before you begin

Enable accessibility from the General tab of the system settings menu.
Role required: none

Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Open an existing task board.
3. Press the Tab key to navigate through the board to get to a task card.
4. Press the Tab key to navigate through the card until the Open Card Details button appears.

Card details



5. Press **Enter** to open the card.
6. To exit the card, press **Escape**.

Map pages

Map pages display ServiceNow data graphically on a Google map page based on location data that you provide.

You can create as many map pages as required to define the types of data to display, the links to show, and the appearance of the map. After creating the map pages, you can create modules to display the map pages.

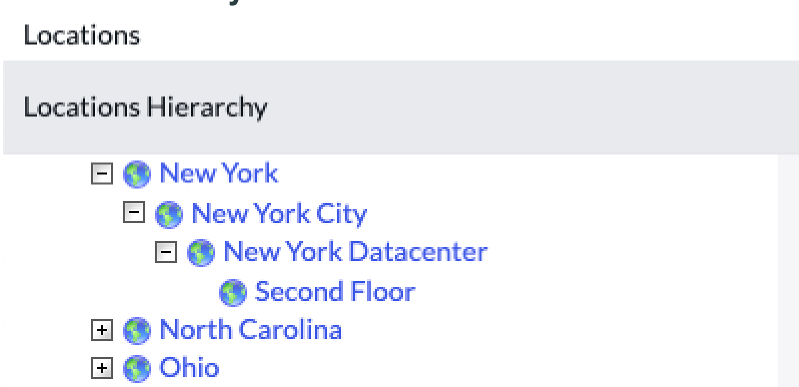
Note: Map pages are subject to the non-production access limitations. See Set up Google Maps API for details.

Map locations

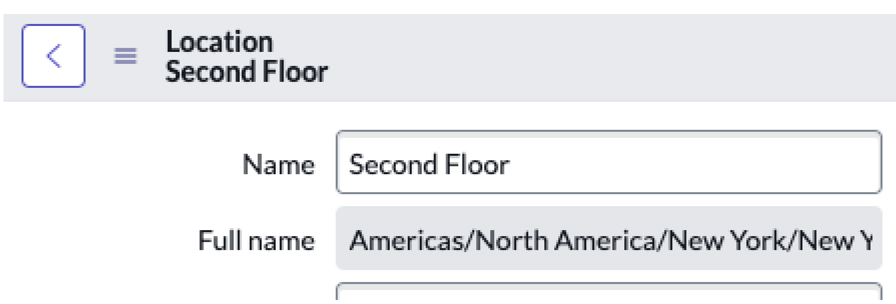
Locations are used by various applications to locate users, facilities, or configuration items (CI) and are stored in the Location [cmn_location] table. You can configure different levels of location in a parent-child hierarchy. For example, an email server might be associated with a location of Second Floor, whereas the email business service might be associated with New York City.

Each level of this hierarchy contains a separate location record, with the next higher level specified as a parent. In this example each location is selectable as a hierarchy from reference fields:

Location hierarchy



The location is also used to generate a full identifier in the **Full name** field, which is available by configuring the form. For more information, see Show or hide fields on a form.



How locations are defined

To create a location, navigate to **User Administration** > **Locations** and select **New**.

Define a location

Field	Description
Name	The name of the location. This name is the display value that the system uses when referencing this location on a form.
Street	The street address of the location.
City	The city of the location.
State / Province	State or province of the location.
Zip / Postal Code	The zip or postal code of the location.
Country	The country of the location.
Contact	Name of a user who is the contact for this location.
Phone	The phone number for the location.
Fax phone	The fax number for the location.
Parent	Name of the parent location for this location. Location hierarchies are described above.
Latitude	The latitude of the location. The *get_lat_long* business rule automatically populates this field and the **Longitude** field described below when the form contains enough information, such as an address or city name and a postal code. Deactivate this business rule to avoid the system overwriting any values entered manually into these fields.
Longitude	The longitude of the location.
Fields that can be added by configuring the form:	
Company	A reference field to the **Company** `[core_company]` table.
Full name	A read-only, calculated field that assembles the parent hierarchy of the location into a full name.
Stock room	A boolean field that identifies whether the location is being used as a stock room.
Time zone	The time zone of the location. By default, the location uses the system time zone.

Latitude and longitude

When a **Company** or **Location** record is created, or has one of its address fields changed `[street, city, state, zip or country]`, the **get_lat_long** business rule is triggered. This business rule uses the **GoogleMapsHelper** script include to create `sys_geocoding_request` records.

The scheduled job **Process Geocoding Request** must be enabled to process `sys_geocoding_request` records. **Process Geocoding Request** uses the Google Map service to populate the latitude and longitude fields of the changed or created **Company** and **Location** records.

After the latitude and longitude are populated, Map Pages can be defined that display locations in an interactive map.

Note: Latitude and longitude are expressed as a floating point data type. Previous releases expressed this information as a string. During an upgrade, the system converts the data where possible.

Set up Google Maps API

You enable the geolocation feature using the appropriate entries from a Google Maps API for Business license, or a Google Maps JavaScript API Key.

Before you begin

Role required: admin

About this task

You can generate maps using basic JavaScript, and they are flexible enough to display even the most complicated of queries. These maps use standard Google Maps API for Business or Google Maps JavaScript API Key mapping features, including various link types to records in your instance. Use of this feature requires installation of the Google Maps plugin.

Map page

Important: Starting May 2026, Google is deprecating the use of Client ID for authenticating requests to Google Maps. From this date onward, API keys will be the only supported authentication method. If your application continues to use client-id (for example, via the *`google.maps.method property`*), Google Maps requests will fail. For more information, see Client ID Migration Guide.

Update your configuration to authenticate using an API key only (that is, set *`google.maps.method`* to `key`). Refer to the descriptions of *`google.maps.key`* and *`google.maps.key.geocoding`* properties for more information on API key–based authentication.

Procedure

1. Google Maps APIs for Business licenses are no longer available from Google, so, depending on whether have an existing license, use one of the following procedures.

   Note: You are required to use your own Google Maps JavaScript API Key from Google and not use any ServiceNow AI Platform® generated key.

Existing Google Maps API for Business license available?	Tasks
Existing license available	**a.** In the **System Properties** > **Google Maps** property form: ▪ In the **google.maps.client** field,enter the Client ID for your organization. This ID is from Google and starts with `gme-`, such as `gme-mycompanyname`. ▪ In the **google.maps.client.key** field, enter the private key for Google Maps API for Business. An example of an encoded key is `vNIXEOxscrmjlyV-12Nj_BvUPaw=`. The ServiceNow AI Platform® requires this key to retrieve accurate driving time estimates from Google for some Geolocation features. ▪ Fill out the remaining values on the form. **b.** Configure your maps using the property definitions from the table. **Important:** The Google Maps Client ID–based configuration is being deprecated. Client ID authentication will not be supported starting May 2026, and configurations relying on it will no longer work.
No license available	**a.** Obtain a Google Maps JavaScript API Key from Google. **b.** In the **System Properties** > **Google Maps** property form, enter the API key into the **google.maps.key** field. Geolocation in the ServiceNow AI Platform® uses the API Key, which Google Maps also uses for Geolocation and map view billings. **c.** Fill out the remaining values on the form. **d.** Configure your maps using the property definitions from the table.

To learn more about Google Maps API for Business, and Google Maps JavaScript API Key, see https://developers.google.com/maps/gmp-get-started.

2. After you complete and save the configuration, create Map pages, or use the default pages included with the plugin.
   Map pages define what data appears on the map, and the appearance of the links. For a tutorial on how to view all of the markers that link to your records, see the Display Map Markers on Google Maps blog post on the ServiceNow Community.

Property	Description
google.maps.method	Defines which method of authentication should be used for Google Maps. ◦ Type: string ◦ Default value: key ◦ Location: **System Properties** > **Google Maps**
google.maps.auto_close	If true, automatically closes a map information window before opening a new one. ◦ Type: true/false ◦ Default value: true ◦ Location: **System Properties** > **Google Maps**
google.maps.client	Client ID for Google Maps API for Business. ◦ Type: string ◦ Default value: gme-servicenow ◦ Location: **System Properties** > **Google Maps**
google.maps.client.key	Private key for Google Maps API for Business. This key activates the geolocation feature, which locates users in the system precisely, using data from their mobile devices. ◦ Type: string ◦ Default value: empty ◦ Location: **System Properties** > **Google Maps**
google.maps.version	Version number of the current installation of Google Maps API for Business. ◦ Type: string ◦ Default value: current version number ◦ Location: **System Properties** > **Google Maps**
google.maps.key	Google Maps API for Business or Google Maps JavaScript API Key that ties to the URL of the server. This key authorizes development use of Google Maps API. ◦ Type: string ◦ Default value: empty ◦ Location: **System Properties** > **Google Maps**
google.maps.key.geocoding	Google Maps API for business or Google Maps JavaScript API key that ties to the URL of the server. This key is used for making geocoding requests. ◦ Type: string ◦ Default value: empty ◦ Location: **System Properties** > **Google Maps**
google.maps.latitude	Starting latitude of the map. This value determines the starting position displayed in Google Maps.

Property	Description
	○ Type: string ○ Default value: 36.008522 ○ Location: **System Properties** > **Google Maps**
google.maps.longitude	Starting longitude of the map. This value determines the starting position displayed in Google Maps pages. ○ Type: string ○ Default value: -95.221764 ○ Location: **System Properties** > **Google Maps**
google.maps.max_items	Maximum number of items to display on the map. ○ Type: integer ○ Default value: 500 ○ Location: **System Properties** > **Google Maps**
google.maps.table	Table used by the map. The table needs the following fields: name, longitude, latitude. ○ Type: string ○ Default value: cmn_location ○ Location: **System Properties** > **Google Maps**
google.maps.zoom	Starting zoom level of the map (1 is the lowest) ○ Type: string ○ Default value: 4 ○ Location: **System Properties** > **Google Maps**

3. Perform these configurations:

a. Navigate to **System Properties** > **All**.

b. Set values for these system properties:

System property	Description
google.maps.refresh.latlong.duration	Number of days after which the location details are updated. **Note:** The maximum value is 30.
google.maps.refresh.latlong.record_count_per_table	Maximum number of records in a table that can be processed using the scheduled job in one refresh.

c. Specify the tables that store the location details in the Map Coordinates Refresh Configuration [cmn_coordinate_refresh_config] table.

d. If there are no fields to track when the coordinates are last retrieved in your tables:

i. Create the **coordinates_retrieved_on** field of the type **Date/Time** in your tables.

ii. Ensure that the value of the field that tracks time when the coordinates are last retrieved, is populated correctly in the Map Coordinates Refresh Configuration [cmn_coordinate_refresh_config] table. Refer to the sample fix script `Update coordinates updated on field` to update values in the **coordinates_retrieved_on** field.

e. Navigate to **System Definition** > **Scheduled Jobs**.

f. Open the record, **Refresh Latitude Longitude info of Records**.

g. Select the **Active** check box.

h. Specify the frequency at which the location details should be refreshed by providing frequency details in **Run** and **Repeat Interval**.

Note: Ensure that you refresh the location details at least once every 30 days.

4. **Optional:** To access Google Maps from the ServiceNow instance based on your region, perform these configurations.

a. Navigate to **User Administration** > **Users**.

b. Select and assign the relevant **Country Code** for the required user.

Note: If the required **Country Code** isn't available, add the dictionary entry. Ensure that you use the ISO 3166-1 country codes. For example, the country code of Morocco is `MA`.

c. Navigate to **System Properties** > **Google Maps**.

d. Select the **Yes** check box for **Enable this property only when you want to alter the Google map's behavior based on a region. The region is populated from the current User's 'Country code' field value in sys_user record. The Country code value on the sys_user record should be consistent with the expectations from the Google Map's region code. Most Unicode region identifiers are identical to ISO 3166-1 codes, with some notable exceptions. Check the codes properly before making any changes.**

e. Click **Save**.

Create a map page

Your ServiceNow instance provides several default map pages. You can also create custom map pages with the script examples described in this page.

Before you begin

Role required: admin

About this task

The default map page record displays critical incidents on a Google map page.

Procedure

1. Navigate to **All** > **System Map Page** > **Map Pages**.
2. Click **New**.
3. Complete the form using the fields in the table.

Field	Description
Name	Enter a unique name to identify the map.
Center map on	Enter the location for centering the map using the decimal form of latitude and longitude. For example, to center the map on the statue of liberty, enter `40.689865, -74.045235`.
Initial zoom	Set the zoom level of the map on opening.
Refresh on zoom	Enable or disable to refresh map on zoom.
Use advanced configuration	Select to configure a map with lists and forms. The script hides and M2M forms display to configure your map. **Note:** Advanced configuration does not support mobile.
Application	Select an application scope for the map.
Controls size	Select whether the Google navigation icons on the map should be large or small.
Type	Select a map background style: **Satellite**, **Hybrid**, **Normal**, or **Terrain**.
Type selection	Select which type of Google icons to display on the map: **Buttons** or **Menu**.
Map overview	Enable or disable a wide view map window for navigation.
Show device location	Enable or disable to show device locations.
Script	Create a script to define the type of data to display on this map. For more information, see Scripting for map pages.

4. Save the record.

Create a map page module

You can create a new application module for desktop or smartphone users to display a Google map page.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Definition** > **Modules** and click **New**.
2. Select the appropriate application for the module.
   For example, if you are planning to display critical incidents, add a module to the Incident application menu.

3. Point to the application menu you want to add the module to and click the edit application (pencil) icon.
4. Select the **Link Type** tab and select the type of link you want for the module.
   For example, you can create a module that opens a map page directly, or one that links through a URL.
5. Complete the form, as appropriate.

Field	Description
Title	Enter a name for the module in the application navigator.
Order	Enter a number to define the sequence this condition should be evaluated if more than one matching condition exists. The order is evaluated from the lowest value to the highest value.
Application menu	Select the application menu where you want this module to appear. By default, this field displays the application menu that you opened to create the module.
Hint	Enter a brief description to display when a user points to the module name in the application navigator.
Active	Select the check box to activate this module. Only active modules appear in the application menu.
Image	Select an icon to display with this module in the application navigator. If this field is blank, a default icon is used.
Link type	Select the desired link type from the list. This selection changes the available fields in the form.
Map page	Select the pre-configured map page to use for this module. For example, **Critical Incidents**.
Roles	Select the roles that are permitted to access this module. If this field is blank, all roles can access the module.
Arguments	Define the URL for this module in the format `map_page.do?sysparm_name=<map page name>`. This field is available when the **Link type** is **URL (from Arguments)**. **Note:** If the map page title has a space in it, replace the space with `%20` for the correct syntax. For example, a map page called Critical Incidents becomes `Critical%20Incidents%20` in a URL.

6. Click **Submit**.

Create an advanced Map Page

Use advanced configuration to set up Map Pages without scripting.

Before you begin

Role required: admin

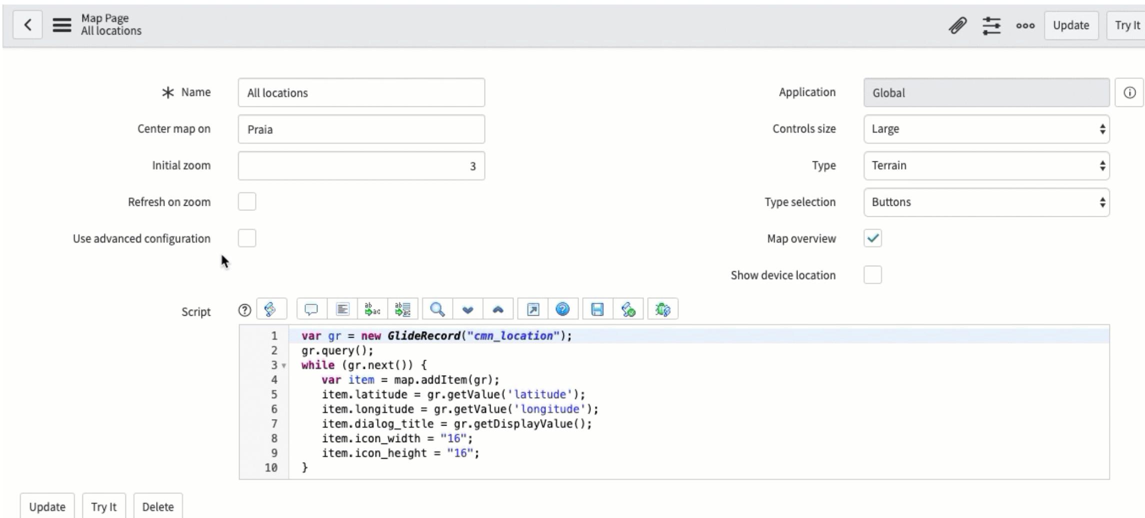
About this task

When clicked, lists and forms display for codeless user experience, facilitating upgrades to future releases. Advanced Map Pages do not support mobile. To display Map Pages on mobile devices, use the classic Map Page or the mobile map applet in the Now® Mobile app instead.

Procedure

1. Navigate to **All** > **System Map Page** > **Map Pages**.
2. Click **New**.
3. On the Map Page form, select the **Use advanced configuration** check box.
   The script hides and an M2M record appears.

   Note: Double-click the record to use the M2M record.



4. In the **Name** field, enter a unique name for your Map Page.
5. Click the menu icon (⋮) and select **Save**.
   Related links appear at the bottom of the form.

What to do next

Click the **Create Map Data Item** related link, and complete the form.

Configure map data items

Add map data items to render data on your Map Page using the Classic Environment.

Before you begin

Role required: admin

About this task

Create a container for your map data items first, then configure and select the data items for your Map Page.

Procedure

1. Navigate to **All** > **System Map Page** > **Map Data Items**.
2. Click **New**.
3. On the form, fill in the fields.

Map Data Item form

Field	Description
Name	Name for the map data item.

Field	Description
Table	Table for the condition. For example, select the Choice [sys_choice] table.
Condition type	Condition using declarative or scripted conditions.
Conditions	Declarative conditions for your map data item.
Application	Optional application scope for the map marker, if other than Global.

4. Click **Submit**.

Example: Map Data Item form

Select the options in the table to successfully create a map data item. Use this configuration with the examples in Add a map filter and Configure a map filter data mapping to successfully create a map filter.

Field	Description
Name	Enter `Incident state`.
Table	Select Choice [sys_choice].
Condition type	Select **Declarative**.
Conditions	Input the following into the fields: `Element is state` and `Table is task`.
Application	Skip this field.

What to do next

Create map markers for your map.

Create a map marker

Add a map marker icon and define the click behavior to differentiate between data on your Map Page using the Classic Environmentlis.

Before you begin

Set up a map data item before you accomplish this task.

Role required: admin

Procedure

1. Navigate to **All** > **System Map Page** > **Map Coordinate Definitions**.
2. Click **New**.
3. On the form, fill in the fields.

Map Coordinate Definition form

Field	Description
Name	Name for your map coordinate definition.

Field	Description
Type	Type of map coordinate definition. Select **Field**, which uses the Classic Environment (lists and forms), or **Script**.
Table	Table for the condition. For example, incident [incident].
Latitude field	Latitude field to define map coordinates. Select**Location**, then **Latitude**.
Longitude field	Longitude field to define map coordinates. Select **Location**, then **Longitude**.
Application	Optional application scope for your map coordinate definition, if other than Global.

4. Click **Submit**.
5. Navigate to **System Map Page** > **Map Markers**.
6. Click **New**.
7. On the form, fill in the fields.

Map Page Marker form

Field	Description
Name	Name for your map marker.
Data item	Data item for your map marker. Select the map data item that you previously configured.
Coordinate definition	Coordinate definitions for your map marker. Select the map coordinate definition that you previously configured.
Map Marker Icons	M2M map marker icons record. Set up map marker icons, or create new ones. **Note:** Complete all the steps to set up map marker icons.
Map Marker Click Actions	M2M map marker click actions record. Select map marker click actions, or create new ones. **Note:** Complete all the steps to set up map marker click actions.
Application	Optional application scope for your map marker, if other than Global.

8. Click the menu icon (⋮) and select **Save**.

What to do next

Set up map marker icons and map marker click actions to finish configuring map markers.

Set up map marker icons

Select a relative or absolute URL for a map marker icon to display a data item on the Map Page, and determine the map marker priority on the Map Page.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Map Page** > **Map Marker Icons**.
2. Click **New**.
3. On the form, fill in the fields.

   Map Marker Icon form

Field	Description
Name	Name for your map marker icon.
Level	Marker priority on your Map Page. When multiple markers share coordinates, the lowest level marker is displayed on your Map Page.
Application	Optional application scope for you map marker icon, if other than Global.
Single icon URL	Icon for a single data item from a map coordinate on your Map Page. Select a relative or absolute link.
Co-located icon URL	Icon for multiple data items from a map coordinate on your Map Page. Select a relative or absolute link.
Scripted condition	Optional scripting for map markers.

4. Click **Submit**.
5. Navigate to **System Map Page** > **Map Markers**.
6. Select your map page marker.
7. In the **Map Marker Icons** field, double-click the record and click the search icon ( ).
8. Select your map marker icon, then click the check mark icon ( ).
9. Click the menu icon ( ) and select **Save**.

What to do next

Continue to the next task to define map marker click actions.

Define map marker click actions

Define the click actions for your Map Page marker. Click actions enable you to define what happens when you click a map marker on your Map Page.

Before you begin

Role required: admin

About this task

Select a dialog box that displays form details, or script your own click actions.

Procedure

1. Navigate to **All** > **System Map Page** > **Map Marker Click Actions**.
2. Click **New**.
3. On the form, fill in the fields.

Map Marker Click Action form

Field	Description
Name	Name for the map marker click action.
Action type	Action type for the click action. Select **Display dialog form** or **Script**.
Title	Title for the map marker click action. The title is displayed on the dialog form on your Map Page.
Application	Optional application scope for your map marker click action, if other than Global.
Form View	Form view used for the dialog box UI on your Map Page.

4. Click **Submit**.
5. Navigate to **System Map Page** > **Map Markers**.
6. Select your Map Page marker.
7. In the **Map Marker Click Actions** field, double-click the record and click the search icon ( ).
8. Select your map marker click action, then click the check mark icon ( ).
9. Click the menu icon ( ) and select **Save**.

What to do next

Continue to the next task to complete your map marker setup.

Select map markers

Choose a Map Page where you want to apply your map marker.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Map Page** > **Map Pages**.
2. Select your Map Page.
3. In the **Map Page Markers** field, double-click the record and click the search icon ( ).
4. Select your map marker, then click the check mark icon ( ).
5. Click the menu icon ( ) and select **Save**.

What to do next

You've set up a map marker. Click **Try it** on the Map Pages form to ensure that your map marker is set up correctly. After that, create a map filter to show the map markers that you want to see on your Map Page.

Note: If data is not available, map markers don't show.

Add a map filter

Add a map filter to display filtered map markers. This filter enables you to see only the map markers for the data that you want.

Before you begin

A map data item should be configured before accomplishing this task. The example map data item can work with the example map filter tables below to successfully set up a map filter.

Role required: admin

About this task

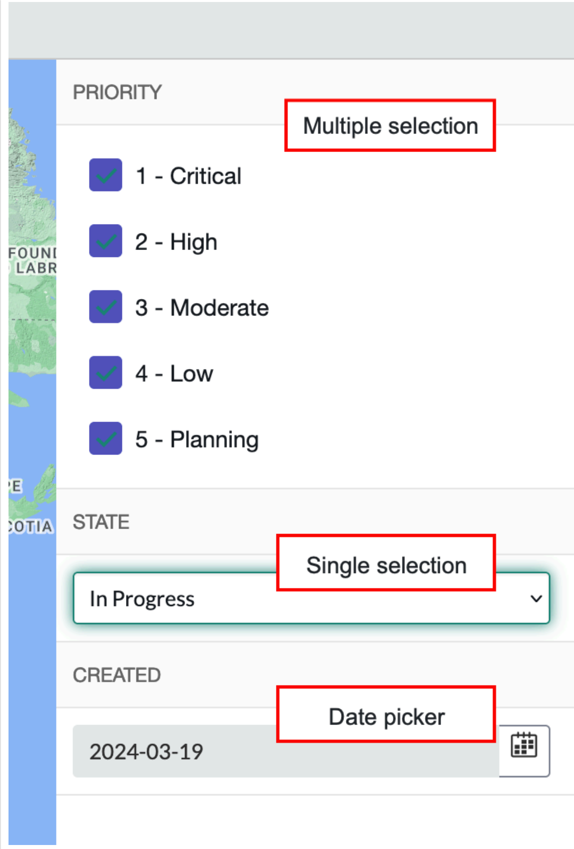
Map filters can be configured using lists and forms, or scripting. Create a container for your map filters first, configure filter items, and then choose a Map Page for your filter.

Procedure

1. Navigate to **All** > **System Map Page** > **Map Filters**.
2. Click **New**.
3. In the **Name** field, enter a name for the map filter.
4. In the **Application** field, define the application scope, if other than Global.
5. Click the menu icon (⋮) and select **Save**.
6. In the **Map filter item** field, double-click the record and click the search icon ( ).
7. To create a Map Page filter item, click **New**.
8. On the form, fill in the fields.

Map Page Filter Item form

Field	Description
Name	Name for your Map Page filter item.
Label	Title for your Map Page filter item that's displayed in the map filter in your Map Page.
UI Type	UI type for your Map Page filter item. This determines how your filter displays on the map page. Select **Single selection**, **Multiple selection**, or **Date picker**. When you select **Date picker**, the data item fields hide and the default value script appears.

Field	Description
	
Data type	Data type for your Map Page filter item. Select **Data item** or **Scripted** for the data type. A data item enables you to configure or select data items using lists and forms.
Application	Application scope for your Map Page filter item, if other than Global. **Note:** This field is optional.
Data item	Data item for your Map Page filter item. Select the data item that you previously configured.
Data item table	Data item table for your Map Page filter item. **Note:** This field is automatically populated when a data item is selected.
Data item value field	Data item value field for your Map Page filter item. Choose how data is used in a table.
Default value script	Scripting field for your Map Page filter item.

9. Click **Submit**.

10. When you return to the Map Page Filter form, click the check mark icon ().

The name of the Map Page filter item that you created is displayed in the field.

11. Click the menu icon (⋮) and select **Save**.

Example: Map Page Filter Item form

Select the options in the table to successfully create your Map Page filter item. This setup works with the map data item example.

Field	Description
Name	Enter `Incident`.
Label	Enter `Incident`.
UI Type	Select **Single selection**.
Data type	Select the **data item**.
Application	Skip this field.
Data item	Select **Incident state**. **Note:** This data item is the map data item you created in the map data item example.
Data item table	Skip this field. **Note:** This field is automatically populated when a data item is selected.
Data item value field	Select **Value**.
Default value script	Skip this field.

What to do next

Continue to the next task to configure a map filter data mapping.

Configure a map filter data mapping

Choose a Map Page for your map filter, and determine how it functions on the Map Page.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Map Page** > **Map Filters**.
2. Select your map filter.
3. On the Map Page Filter record, select your map filter item.
4. On the Map Page Filter Item record, locate the Map Filter Data Mappings related list and select **New**.
5. On the form, fill in the fields.

Map Filter Data Mapping form

Field	Description
Map page	Map Page where your map filter is applied.
Data item	Data item for your map filter data mapping. Select the data item that you previously configured.
Application	Optional application scope for your map filter data mapping.
Filter item	Filter item for your map filter data mapping. Select the filter item that you previously configured. **Note:** This field is automatically populated with the filter item.
Table	Table for your map filter data mapping. **Note:** This field is automatically populated when a data item is selected.
Field	Data is retrieved from this field in the table that you selected.

6. Select **Submit**.

Example: Map Filter Data Mapping form

Select the options in the table to create your map filter data mapping. This setup works with the map data item example.

Field	Description
Map page	Select the Map Page that you created.
Data item	Select **Incident** state. **Note:** This data item is the map data item that you created in the map data item example.
Application	Skip this field.
Filter item	Skip this field. **Note:** This field is automatically populated when a data item is selected.
Table	Skip this field.

Field	Description
	Note: This field is automatically populated with the Choice [sys_choice] selection.
Field	Select **Value**.

What to do next

Continue to the next task to select your map filter, and complete the map filter setup.

Select map filters

Select your map filter to complete the Map Page filter setup. This setup applies the map filter to your Map Page.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Map Page** > **Map Pages**.
2. Select the Map Page that you want to apply your map filter to.
3. Select the **Use advanced configuration** check box.
4. In the **Filter** field, click the search icon ( ) and select the map filter that you created.
5. Click the menu icon ( ) and select **Save**.

What to do next

You've set up your map filter. Continue to the next task to see that you have successfully created it.

Check your map filter

Check to see that your map filter was successfully created in your Map Page.

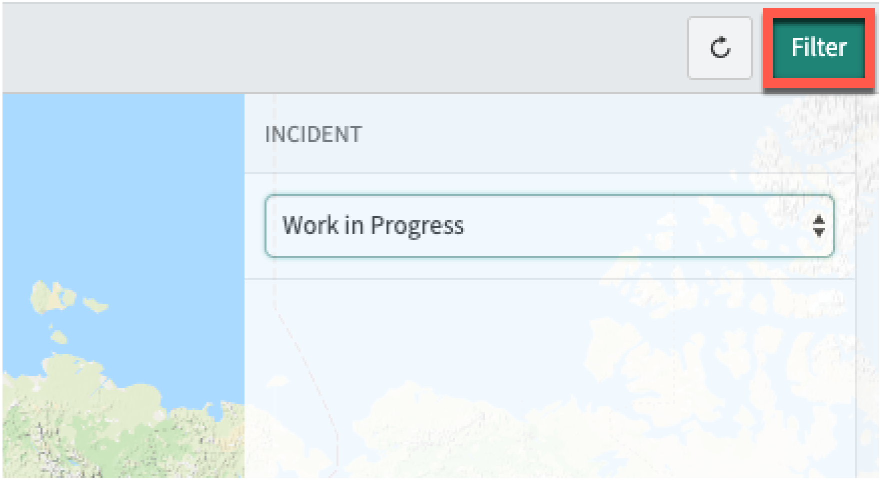
Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Map Page** > **Map Pages**.
2. Select your Map Page.
3. Click **Try It**.
4. In your Map Page, click **Filter**.

Your map filter appears.



Set map application scope

Enable map application scope to specify which application can modify your Map Page configuration.

Before you begin

Role required: admin

Procedure

1. In the banner, click the gear icon ().
2. From the System Settings list, select **Developer**.
3. From the Application list, select the application.
4. Toggle **Show application picker in header**.
   An application picker appears in the header, enabling you to choose applications.

Create a smartphone map page module

You can create a custom smartphone module that links directly to a map page.

Before you begin

Role required: admin

Procedure

1. Obtain the sys_id of the map page.
   The sys_id is required when you create the module.
2. Navigate to **System Mobile UI** > **Navigator Apps**.
3. Open the application menu where you want the new module to appear.
4. In the **Modules** related list, click **New**.
5. Complete the form, as appropriate.

Field	Description
Name	Enter a name for the module.

Field	Description
Order	Enter a number to specify the order of the module within the application menu. For example, an entry of `100` would place this module before one with an **Order** entry of `200`.
Application menu	Select the application menu where you want this module to appear. By default, this field displays the application menu that you opened to create the module.
Table	Do not select a table.
Updated	Displays the date and time when the module record is updated.
Roles	Select the roles that are permitted to access this module. If this field is blank, all roles can access the module.
Active	Select the check box to activate this module. Only active modules appear in the application menu.
Filter	Do not add a filter condition.
Path	Enter `map/` followed by the sys_id of the map page. For example: `map/c86c5feac0a80a6600706f0102968196`

6. Click **Submit**.

Scripting for map pages

The Script field on the Map Page form allows the use of attributes or custom code to define map characteristics, such as marker appearance, display information, and more.

Scripting map item attributes

The following attributes are available.

Note: To create an item on the map, use the *`map.addItem(glideRecord)`* method. Pass a valid GlideRecord to *`addItem()`*.

Attribute	Description
name	Name used for identification.
latitude	If you define an address, latitude is not necessary.
longitude	If you define an address, longitude is not necessary.
icon	URL of the icon to display for the marker. If a custom icon is not specified, the default Google marker is used.
icon_width	Width of the icon. The default is 32.
icon_height	Height of the icon. The default is 32.
table_name	Table whose records display when the marker icon is clicked. Used with the *`sys_id`* attribute.
sys_id	Sys_id of the record that displays when the marker icon is clicked. Used with the *`table_name`* attribute.
view	View of the form displayed in the dialog box when the marker icon is clicked.
html	Arbitrary HTML code for the pop-up window. If used, this value overrides the dialog box.

Attribute	Description
marker_label	Optional marker icon label text.
label_offset_left	Optional attribute that is used with *marker_label* to define the horizontal position of the marker label. The default is 0.
label_offset_top	Optional attribute that is used with *marker_label* to define the vertical position of the marker label. The default is 0.

Scripting custom map page behavior for smartphone

If you plan to access the map page from a smartphone, you may want to set custom smartphone interface behavior using the *isMobile* variable. You can use the *isMobile* variable to set custom behavior for the smartphone view of the map. For example, you might set different values for the *icon_width* and *icon_height* attributes when *isMobile* is true.

Basic map page script

This script displays all active, critical incident locations.

```
//setup new GlideRecord query on the incident table
var now_GR = new GlideRecord("incident");
//add condition for priority 1
gr.addQuery('priority', '1');
//add condition for active incidents
gr.addActiveQuery();
//execute the query
gr.query();

//loop through the list of incidents returned by the query
while (gr.next()) {

 //create a new map item to display - linked to the current
 incident record
 var item = map.addItem(now_GR);
 //add the latitude value from the incident's location
 item.latitude = gr.location.latitude;
 //add the longitude value from the incident's location
 item.longitude = gr.location.longitude;
 //link to the icon image
 item.icon =
 "http://maps.google.com/mapfiles/kml/pal3/icon51.png";
 //set the icon size
 item.icon_width = "16";
 item.icon_height = "16";
}
```

isMobile map page script

This script displays all active, critical incident locations with custom settings for smartphone users.

```
//setup new GlideRecord query on the incident table
var now_GR = new GlideRecord("incident");
//add condition for priority 1
gr.addQuery('priority', '1');
//add condition for active incidents
gr.addActiveQuery();
```

```
//execute the query
gr.query();

//loop through the list of incidents returned by the query
while (gr.next()) {

 //create a new map item to display - linked to the current
 incident record
 var item = map.addItem(now_GR);
 //add the latitude value from the incident's location
 item.latitude = gr.location.latitude;
 //add the longitude value from the incident's location
 item.longitude = gr.location.longitude;
 //link to the icon image
 item.icon =
 "http://maps.google.com/mapfiles/kml/pal3/icon51.png";

 //set the icon size (use smaller icons for smartphone users)
 if (isMobile) {
   item.icon_width = "12";
   item.icon_height = "12";
 }
 else {
   item.icon_width = "16";
   item.icon_height = "16";
 }
}
```

Advanced map page script

This script displays the number of open incidents by location. It varies the size of the icon based on the number of open incidents for the location. Using the html parameter, it also displays the location name and number of incidents, as well as a link to the list of related incidents.

```
//get the instances url so we can link back to it
var uri = gs.getProperty("glide.servlet.uri");
//create an aggregate query on the incident table
var count = new GlideAggregate('incident');
//set condition for active incidents
count.addQuery('active', 'true');
//set aggregate field to location to get count by location
count.addAggregate('COUNT', 'location');
//execute the query
count.query();

//loop through the results
while (count.next()) {

 //get the current record's location
 var loc = count.location;
 //get the count of incidents for this location
 var locCount = count.getAggregate('COUNT', 'location');
 //only display location is there are active incidents
 if (locCount > 0) {
 //create new new map item for this location
 var item = map.addItem(count);
 //set lat/long from the location record
 item.latitude = loc.latitude;
```

```
item.longitude = loc.longitude;
//build the link to the list of incidents for the location
var link = 'href=' + uri +
'incident_list.do?sysparm_query=active%3Dtrue^location%3D' +
loc;
//build the html value to be displayed when you click the map
icon
item.html='<a ' + link + '>' + loc.getDisplayValue() + ' (' +
locCount + ')</a>';
//link to the icon image
item.icon =
"http://maps.google.com/mapfiles/kml/pal3/icon51.png";
//set the size of the icon based on the number of active
incidents
if (locCount < 5) {
item.icon_width = "12";
item.icon_height = "12";
}
else if (locCount < 15) {
item.icon_width = "16";
item.icon_height = "16";
}
else {
item.icon_width = "32";
item.icon_height = "32";
}
}
}
```

Map page marker label script

Marker labels allow you to add dynamic text to markers. This example displays the active incident count at each location.

Map marker labels


```
//get the instances url so we can link back to it
var uri = gs.getProperty("glide.servlet.uri");
//create an aggregate query on the incident table
var count = new GlideAggregate('incident');
//set condition for active incidents
count.addQuery('active', 'true');
//set aggregate field to location to get count by location
count.addAggregate('COUNT', 'location');
//execute the query
count.query();
```

```
//loop through the results
while (count.next()) {

 //get the current record's location
 var loc = count.location;
 //get the count of incidents for this location
 var locCount = count.getAggregate('COUNT', 'location');
 //only display location is there are active incidents
 if (locCount > 0) {
 //create new new map item for this location
 var item = map.addItem(count);
 //set lat/long from the location record
 item.latitude = loc.latitude;
 item.longitude = loc.longitude;

 //create a marker label with the count
 item.marker_label = locCount;
 //define label offset for proper position
 item.label_offset_left = -4;
 item.label_offset_top = -20;

 //option to define table and record for label hyperlink
 //setting table and sys_id will override the use of html
 parameter
 //item.table = 'cmn_location';
 //item.sys_id = loc;

 //build the link to the list of incidents for the location
 var link = 'href=' + uri +
 'incident_list.do?sysparm_query=active%3Dtrue^location%3D' +
 loc;
 //build the html value to be displayed when you click the map
 icon
 item.html='<a ' + link + '>' + loc.getDisplayValue() + ' (' +
 locCount + ')</a>';

 //link to the icon image
 item.icon = "images/red_marker.png";
 //set the size of the icon based on the number of active
 incidents
 item.icon_width = 24;
 item.icon_height = 24;

 }
}
```

Customizing instance appearance

An administrator can change global CSS or system properties to alter the look and feel of the default instance interface. Functionality is not affected.

For example, organizations often use multiple instances to separate development, testing, and production activities. To help users avoid accidentally changing the wrong instance, administrators can configure each with a visually distinct theme. Several approaches are available for defining an instance theme.

CSS Properties

Navigate to **System Properties** > **CSS**.

The following properties are available through CSS Properties.

Note: Colors are specified using predefined color names, RGB decimals, or RGB hexadecimals.

- Banner text color
- Banner and list caption background color
- Font used in forms and lists (this is a global font setting)
- Button styles (background color, border color, border width, text color)
- Field status indicator colors (including the indicators for Changed, Mandatory Populated, Mandatory Unpopulated, and Read-only)
- List cell vertical alignment
- Navigator menu styles (text font size, background color, text color)
- Header font name and size
- List and form caption color override
- Global text search background color (both for catalog results and knowledge base results)

UI properties

Navigate to **System Properties** > **UI Properties**.

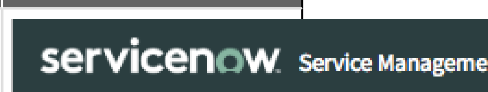
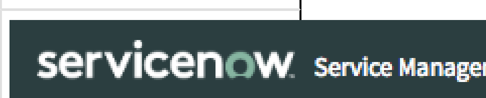
The following properties are available through UI Properties.

- Icons used in the activity formatter
- Background colors for Additional Comments and Work Notes
- Button placement on forms
- Icons used in the Task Activity formatter
- Background colors for Incident Additional Comments and Work Notes

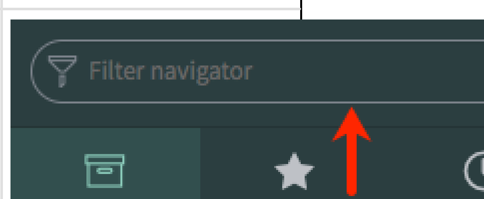
CSS class support

In Core UI (UI16), CSS properties and how they affect the platform UI change depending on the release.

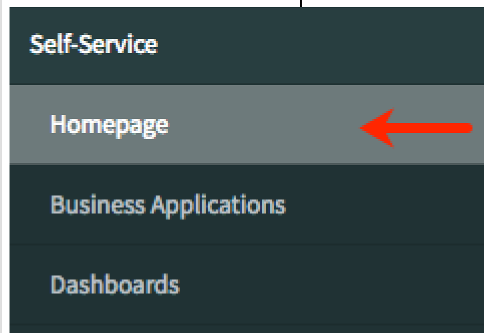
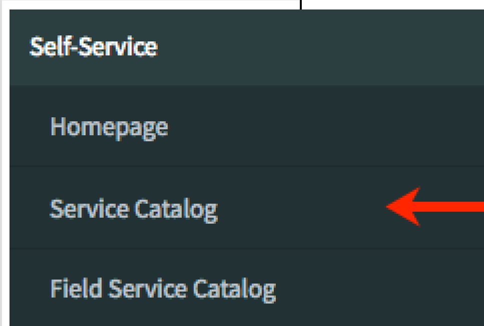
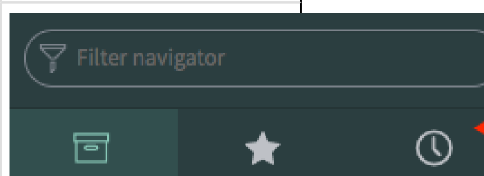
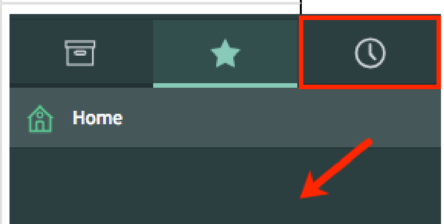
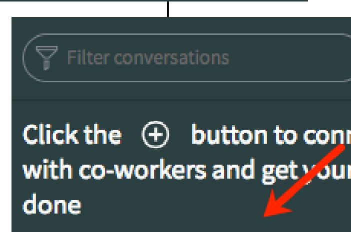
CSS class support for Yokohama

CSS class	Description	How to configure	Affected area
$navpage-header-bg	Header background color	Navigate to **System Properties** > **Basic Configuration UI16** > **Header background color**	
$navpage-header-color	Color for header text and the global search icon	Navigate to **System Properties** > **Basic**	

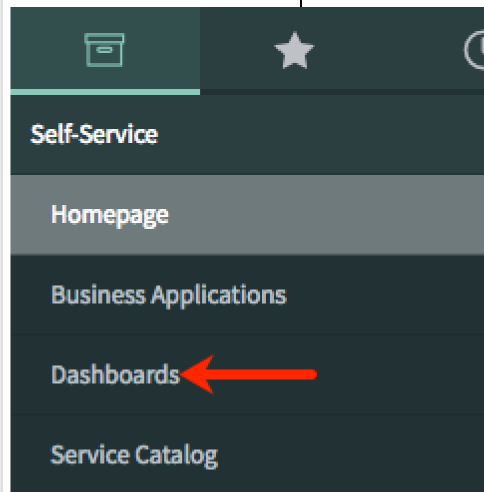
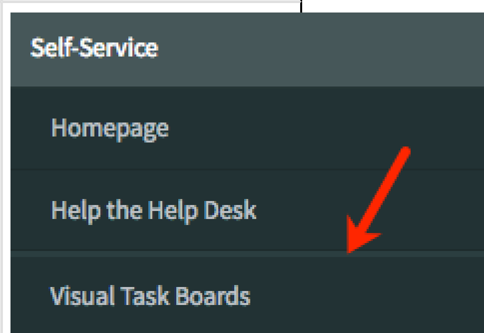
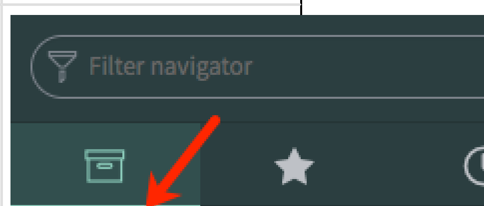
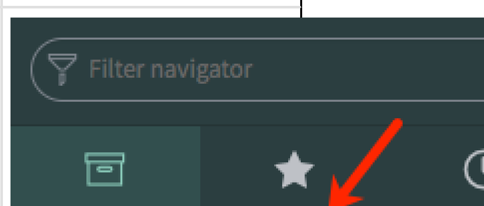
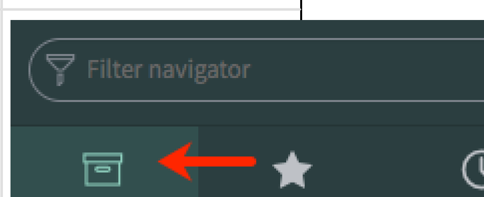
CSS class support for Yokohama (continued)

CSS class	Description	How to configure	Affected area
		Configuration UI16 > **Banner text color**	
$navpage-header-button-color	Color for logged in user name text, and the global search Connect, Help, and settings icons	Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.	
$navpage-header-divider-color	Header divider color	Navigate to **System Properties** > **Basic Configuration UI16** > **Header divider stripe color**	
$navpage-button-color	Color for the following icons in the sidebars • Expand/collapse • Create a conversation (in the Connect sidebar) • Open Connect workspace	Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.	
$navpage-button-color-hover	Color for the following icons when a user points to the control: • Global search • Help • Settings • Clear text icon in the navigation filter	Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.	
$search-text-color	Color of the search text, both in the navigation filter and the global search fields	Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.	
$navpage-nav-border	Border color for the navigation filter and the conversation filter	Navigate to **System Properties** > **Basic Configuration UI16** > **Border color for UI16**	

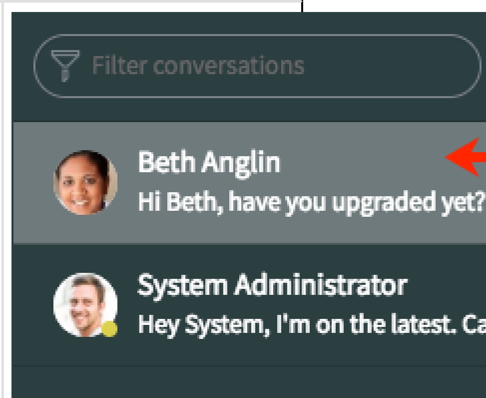
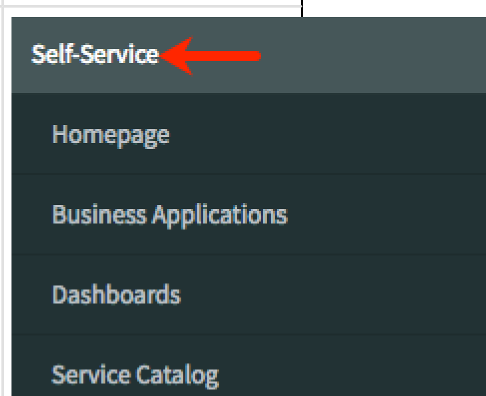
CSS class support for Yokohama (continued)

CSS class	Description	How to configure	Affected area
$nav-highlight-main	Highlights the module after the user has clicked it. In the Connect workspace, highlights the selected conversation.	Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.	
$subnav-background-color	Background for expanded navigation items	Navigate to **System Properties** > **Basic Configuration UI16** > **Navigation background expanded items**	
$navpage-nav-bg	Header and footer for navigator and sidebars.	Navigate to **System Properties** > **Basic Configuration UI16** > **Navigation header/ footer**	
$navpage-nav-bg-sub	Background for navigator and sidebars	Navigate to **System Properties** > **Basic Configuration UI16** > **Background for navigators and sidebars**	

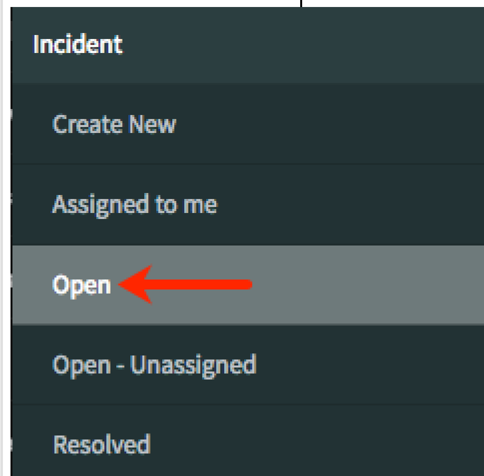
CSS class support for Yokohama (continued)

CSS class	Description	How to configure	Affected area
$navpage-nav-color-sub	Text color for modules in the main navigation	Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.	
$navpage-nav-mod-text-hover	Text color when hovering over items in the main navigation	Not supported	Not supported
$nav-hr-color	Navigator separator color	Navigate to **System Properties** > **Basic Configuration UI16** > **Navigation separator color**	
$nav-highlight-bar-active	Line under the active tab in the application navigator. This color is also used as part of the theme preview on the Themes tab under system settings.	Navigate to **System Properties** > **Basic Configuration UI16** > **Navigation selected tab divider bar color**	
$nav-highlight-bar-inactive	Line under the inactive tabs in the application navigator	Navigate to **System Properties** > **Basic Configuration UI16** > **Navigation unselected tab divider bar color**	
$navpage-nav-selected-bg	Navigation selected tab background color	Navigate to **System Properties** > **Basic Configuration UI16** > **Navigation selected tab background color**	

CSS class support for Yokohama (continued)

CSS class	Description	How to configure	Affected area
$navpage-nav-selected-color	Currently selected Navigation tab icon color	Navigate to **System Properties** > **Basic Configuration UI16** > **Currently selected Navigation tab color for UI16**	
$navpage-nav-unselected-color	Unselected navigation tab icon and favorite icons color	Navigate to **System Properties** > **Basic Configuration UI16** > **Unselected navigation tab icon and favorite icons color**	
$connect-latest-message	Color of the currently selected message in Connect	Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.	
$nav-timeago-header-color	Timestamp header backgrounds in History tab	Not supported	Not supported
$navpage-nav-app-text	Core content text color for items such as applications and the empty state text for the Connect sidebar.	Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.	

CSS class support for Yokohama (continued)

CSS class	Description	How to configure	Affected area
$navpage-nav-app-text-hover	Text color for a selected module	Add the CSS property to the CSS field of a theme. For more information, see Create or customize a theme.	

Configure logo, colors, and system defaults for Core UI

You can use the Basic Configuration Core UI module to brand your instance with your company logo and colors and set basic system defaults. This place is the best starting point if you are setting up your instance for the first time or if you have recently enabled Core UI.

Before you begin

Gather the following:

- Obtain the company banner image to use in the header. The image can be high resolution, but when it displays it's scaled based on the aspect ratio. It scales to a maximum of 20 px high.
- Get the brand color hex or RGB numbers of your company, typically from your marketing department. Use them to decide how to configure the UI background colors.

Role required: admin

About this task

Each color selection option provides a color picker to select a color. The text box beside the color picker lets you enter the value of the color as any of the following CSS formats:

- Name: predefined color names, such as red, green, or blue
- RGB decimal: RGB (102, 153, 204)
- RGB hex: #223344

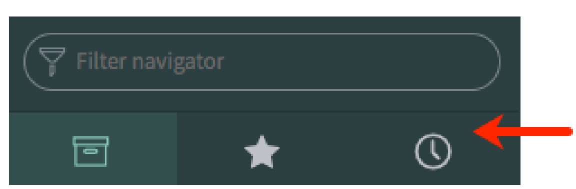
Refer to HTML Color Names (W3CSchools) for information about HTML color names.

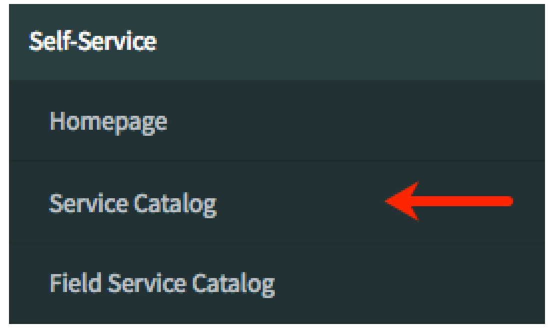
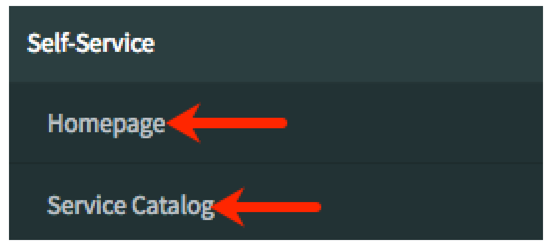
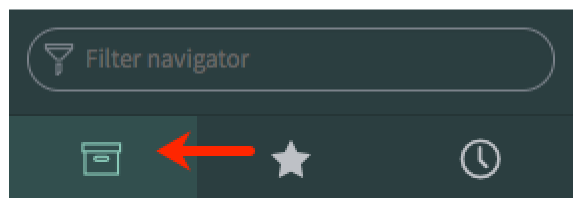
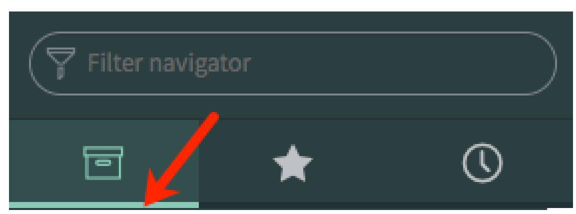
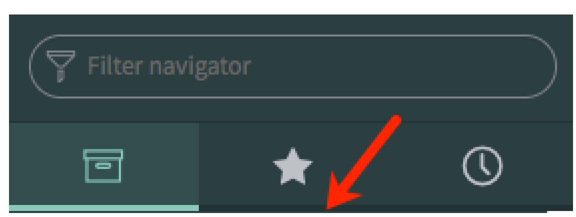
Note: This information is applicable to Core UI. For theming information for Next Experience, see Working with themes in Next Experience.

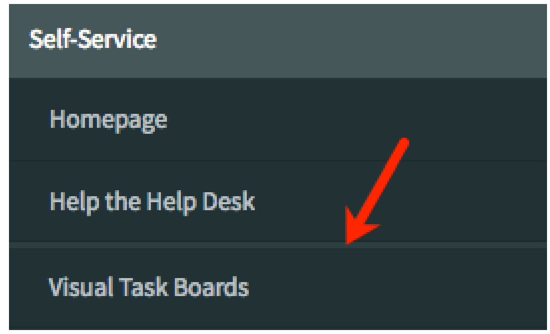
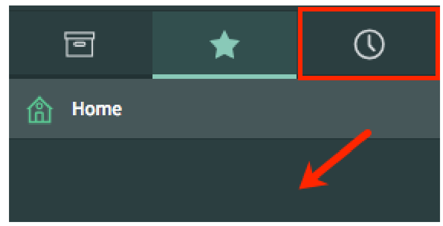
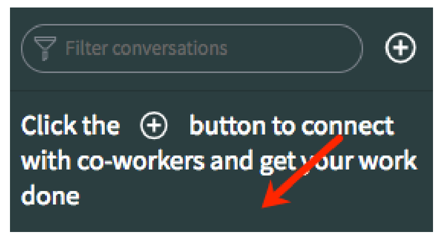
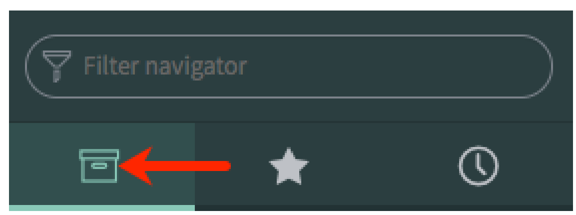
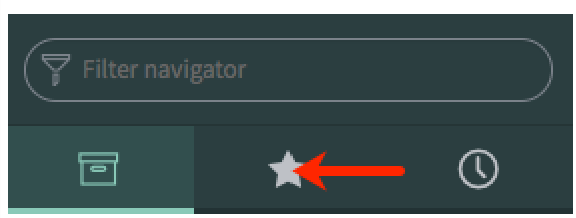
Procedure

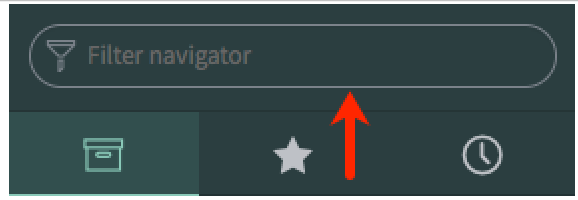
1. Navigate to **All** > **System Properties** > **Basic Configuration UI16**.
2. Complete the configuration by changing any of the following settings:

Basic system configuration properties

Label	Property	Description
Page header caption	glide.product.description	Change the text that appears next to your logo.
Browser tab title	glide.product.name	Change the text that appears on the browser tab.
System timezone for all users unless overridden in the user's record	glide.sys.default.tz	Select the time zone in the list. Select **Configure available time zones** to select the time zones that your users can select from in user preferences
Banner image for Core UI	glide.product.image.light	Select **+** next to the image and upload your logo.
Date format Time format	glide.sys.date_format glide.sys.time_format	Select the date and time format from the choice lists.
Header background color	css.$navpage-header-bg	Select or enter the color.  This color is also used as part of the theme preview on the Themes tab under system settings.
Banner text color	css.$navpage-header-color	Select or enter the color.  This color is also used as part of the theme preview on the Themes tab under system settings.
Header divider stripe color	css.$navpage-header-divider-color	Select or enter the color. 
Navigation header/ footer	css.$navpage-nav-bg	Select or enter the color. 

Label	Property	Description
Navigation background expanded items	css.$subnav-background-color	Select or enter the color. 
Module text color for the Core UI application navigator	css.$navpage-nav-color-sub	Select or enter the color. 
Navigation selected tab background color	css.$navpage-nav-selected-bg	Select or enter the color. 
Navigation selected tab divider bar color	css.$nav-highlight-bar-active	 This color is also used as part of the theme preview on the Themes tab under system settings.
Navigation unselected tab divider bar color	css.$nav-highlight-bar-inactive	
Navigation separator color	css.$nav-hr-color	Select or enter the color.

Label	Property	Description
		
Background for navigator and sidebars	css.$navpage-nav-bg-sub	Select or enter the color.  
Currently selected Navigation tab icon color for Core UI	css.$navpage-nav-selected-color	Select or enter the color. 
Unselected navigation tab icon and favorite icons color	css.$navpage-nav-unselected-color	Select or enter the color. 
Border color for Core UI	css.$navpage-nav-border	Select or enter the color. Also affects the border of the **Filter conversations** search box in the Connect Chat sidebar.

Label	Property	Description
		
Selected base theme	glide.ui.base_theme.selected_theme	Switches the main content (everything other than the application navigator and the header) between the La Joll and Cobalt themes.

For most of the settings, as you make changes, the page refreshes with a preview of the change. Only you see these changes. Some settings require you to log out and log back in again to see the change.

3. Select **Save** at the top or bottom of the page.

Result

After you save the configuration changes, all users who select the **System** theme in their UI personalization options see the new configuration colors.

La Jolla and cobalt theme comparison

The La Jolla theme is the new brand theme for ServiceNow. When you upgrade to Madrid, your theme is automatically upgraded to the La Jolla theme. Any customizations you have made to the system theme will not be upgraded. Use the styles in the list below to upgrade or revert any styles to the new or old theme.

Make changes to any of these styles by navigating to **System Properties** > **Basic Configuration UI16**.

La Jolla and Cobalt theme styles

Property	La Jolla style	Cobalt style
Header background color css.$navpage-header-bg	#ffffff	#303a46
Header divider stripe color css.$navpage-header-divider-color	#5a7f71	#455464
Navigation header/footer css.$navpage-nav-bg	#293e40	#303A46
Navigation background expanded items css.$subnav-background-color	#213234	#303a46
Module text color for UI16 css.$navpage-nav-color-sub	#bec1c6	#bec1c6

La Jolla and Cobalt theme styles (continued)

Property	La Jolla style	Cobalt style
Navigation selected tab background color css.$navpage-nav-selected-bg	#2f4fe	#4b545f
Navigation selected tab divider bar color css.$nav-highlight-bar-active	#82c9b8	#278efc
Navigation unselected tab divider bar color css.$nav-highlight-bar-inactive	#213234	#81878e
Navigation separator color css.$nav-hr-color	#293e40	#303a46
Background for navigator and sidebars css.$navpage-nav-bg-sub	#293e40	#455464
Currently selected Navigation tab icon color for UI16 css.$navpage-nav-selected-color	#82c9b8	#ffffff
Unselected navigation tab icon and favorite icons color css.$navpage-nav-unselected-color	#bec1c6	#bec1c6
Border color for UI16 css.$navpage-nav-border	#7a828a	#ddd
Selected Base Theme glide.ui.base_theme.selected_theme	La Jolla SysID: c92c1ee153002300dda1ddeeff7b125a	Cobalt SysID: 6f3c5ae153002300dda1ddeeff7b124a

Select a theme in Core UI

You can switch between different themes for the user interface.

Before you begin

Role required: admin

About this task

Themes are user-specific. Each user can select a different theme and the selection is stored as a user preference.

This topic applies to the Core UI. For information about selecting a theme with Next Experience, see Select a theme in Next Experience.

Procedure

1. Select the gear icon () in the banner frame to access the System Settings window.
2. Select the **Theme** tab, and then select the theme.

Customize menu categories

Use menu categories to apply CSS styles to application labels.

Before you begin

Menu categories are deprecated in Core UI.

Role required: admin

Procedure

1. Navigate to **All** > **System Definition** > **Menu Categories**.
2. Fill in the fields on the form, as appropriate.

	Description
Administration	Applications in this category have a light blue background. Style: border-color: #a7cded; background-color: #e3f3ff;
Custom Applications	Applications in this category have a light gray background. border: 1px solid #96bcdc; background-color: #FBFBFB;
Label	Applications in this category have a blue background. border-color: blue; background-color: rgb(102, 153, 204); color: white
Maint	Applications in this category have a blue background. Style: border-color: blue; background-color: rgb(102, 153, 204); color: white
SocialIT	Applications in this category have a blue background. border-color: blue; background-color: rgb(102, 153, 204); color: white

3. **Optional:** To add an application to a category, add it in the related list of applications at the bottom of the category record, or specify the category on the application record.

Change survey question header colors

The Classic Environment uses a header color from the base color, which allows theming from CSS properties.

About this task

One notable exception is the survey, which has its own CSS. It is possible to change the CSS by adding a property.

Procedure

1. Enter `sys_properties.form` into the navigation filter and press the Enter key.
   A new Property form displays.
2. Name the new property `css.list.row.survey.background.color`.
3. Enter the hexadecimal value of the desired color into the **Value** field.
4. Click **Submit**.
   The survey should now use the desired color.

CSS theme support

Themes give the user interface a specific look and feel by using different color combinations.

System administrators can create themes or customize the existing themes for an instance. To see existing themes, navigate to **System UI** > **Themes**.

Activating CSS theme support

There are different plugins that activate CSS themes support.

Activate the following plugins to use themes, based on the version of the UI you use.

Core UI: CSS Theme support See Activate a plugin.

Create or customize a theme

You can create themes or customize existing themes.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System UI** > **Themes**.
2. Choose from the following options.
   - To create a new theme, click **New**.
   - To customize an existing theme, click the theme name.
3. Enter a name for the theme in the **Name** field.
4. Add any of the default CSS styles in the **CSS** field.
   Sometimes the default style is not the only style definition for an object. In such cases, you can use the CSS important rule format to override any other style definitions with the default definition. For example, this definition overrides the text color in the main navigation: `$navpage-nav-color-sub: #fff !important`.
5. Select the **Active** check box.
6. Select one of the following from the **Device** choice list to identify the user interface version for the theme.

Option	Description
Browser	Identifies a Legacy UI11 theme.

Option	Description
Doctype	Identifies a Legacy UI15 theme.
Concourse	Identifies a Core UI theme.

7. Click **Submit**.

What to do next
Refresh the page to see the new theme in the theme picker. The theme picker displays only themes that are compatible with the current version of the UI.

Default CSS styles

You can use CSS styles to control the appearance of elements in a theme.

Your version of the UI determines which CSS styles you can use.

Default CSS styles for Core UI (UI16)

```
$search-text-color: #ffffff
$navpage-header-bg: #293e40
$navpage-header-color: #ffffff
$navpage-header-divider-color: #5A7F71
$navpage-header-button-color: #ffffff
$nav-highlight-main: #576667
$subnav-background-color: #213234
$navpage-nav-bg: #293e40
$navpage-nav-bg-sub: #293e40
$navpage-nav-color-sub: #d1d6d8
$nav-hr-color: #192628

$nav-highlight-bar-active: #82c9b8
$nav-highlight-bar-inactive: #213234
$navpage-nav-selected-bg: #2f4f4e
$navpage-nav-selected-color: #82c9b8
$navpage-nav-unselected-color: #d1d6d8

$connect-latest-message: #B8E0D7
$navpage-nav-app-text: #ffffff
$navpage-nav-border: #7a828a
$navpage-button-color: #ffffff
$navpage-button-color-hover: #82C9B8
```

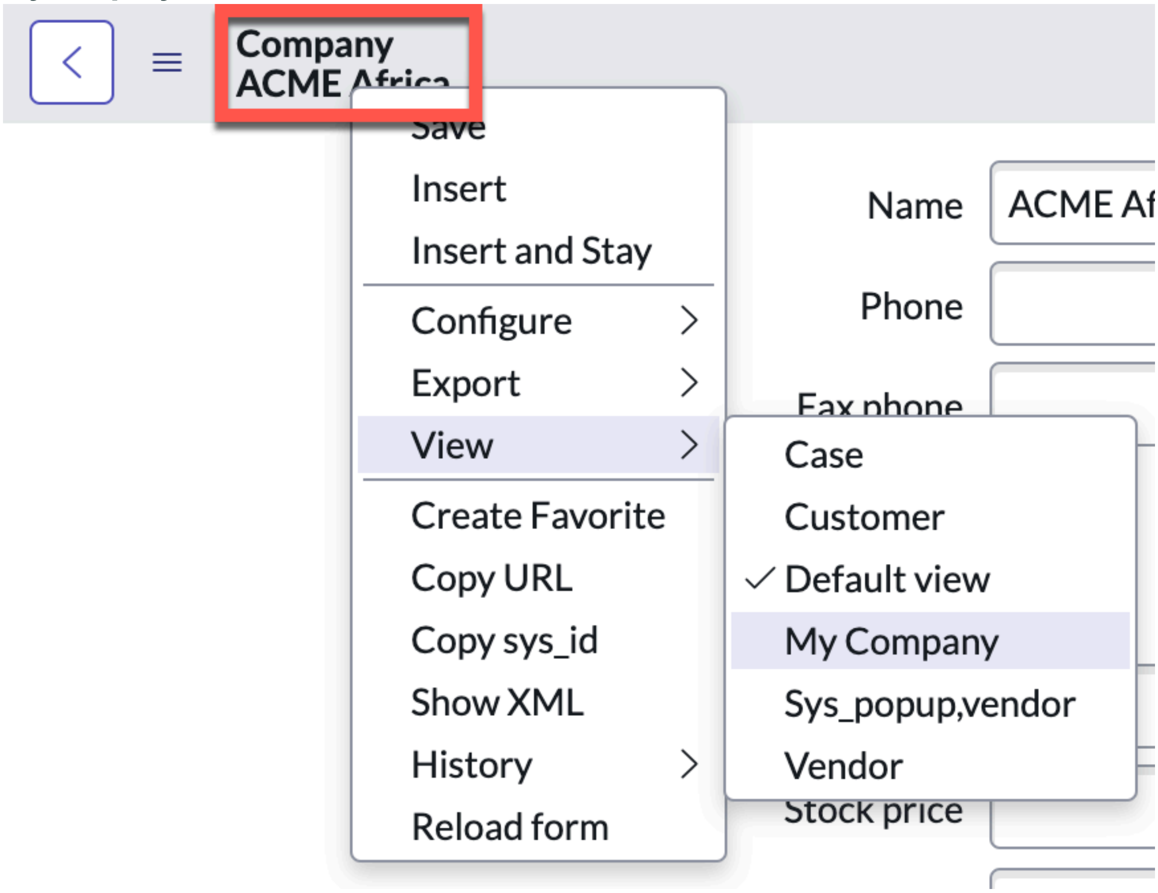
Create a company profile

To customize the ServiceNow instance for your company, you can enter information such as contact phone numbers, street address, and additional notes. You can also customize the company logo and banner text your end users see at the top of each page.

Before you begin
Role required: admin

About this task
Much of the company information that you enter is reference information that administrators can view. All users see the company logo and banner text. To see all company information, verify that you are in the **My Company** view.

My Company view selection



Procedure

1. Navigate to **All** > **System Properties** > **My Company**.
2. To change the banner text, update the **Banner text** field.
3. Select the **Primary** check box to indicate if this company is the primary company.
   If needed, configure the form to add the **Primary** check box. Designate only one company in your system as the primary company.
4. To upload your company logo, select **Click to add** or **Update** beside **UI16 Banner Image**.
   If you leave the banner image blank in Core UI (UI16), the system uses the image used in **System Properties** > **Basic Configuration** > **Banner image** [glide.product.image] as the default.
5. Click **Choose file** and select the file, and then click **OK**.
   To use an image URL instead of a file on your hard drive, enter the URL in the file upload window.
6. Complete the form with remaining company information.
7. Click **Update**.

Banner logo link

Properties are available to control the URL and target frame used when clicking the banner logo.

- *glide.banner.image.url*: URL used when clicking the banner image
- *glide.banner.image.url_target*: Target frame used when clicking the banner image

- **gsft_main** for the main frame
- **_top**to replace the current browser window
- **_blank** for a new window/tab

Customize the banner logo in Core UI

Use the `glide.product.image` and `glide.product.description` properties to change the banner logo and description in Core UI.

Before you begin
Role required: admin

About this task
To update the banner image in the **System Properties** > **System** page, you must first upload the image.

Note: Setting a banner image in the company profile overrides the image selected in **System Properties** > **System**.

Procedure

1. To upload the image, complete the following steps.
   a. Navigate to **System UI** > **Images** and click **New**.
   b. Enter a **Name** for your image.
      Valid names must end in `.gif`, `.png`, `.jpg`, or `.bmp`.
   c. Click the **Click to add** link in the **Image** field, and select and upload the image.
   d. Click **Update**.
2. To set the uploaded image to the banner image, complete the following steps.
   a. Navigate to **System Properties** > **System**.
   b. In the **Banner image** field, enter the file name of the uploaded image.
   c. Click **Save**.

   Note: The system limits banner images to 50px.

Customize the favicon

Use the `glide.product.icon` property to change the icon that appears in bookmarks and the browser address bar.

Before you begin
Before you can update the favicon, you must upload the image into the database.
Role required: admin

Procedure

1. To upload the image, complete the following steps.

   a. Navigate to **System UI** > **Images** and click **New**.

   b. Enter a **Name** for your image.
   Valid names must end in `.gif`, `.png`, `.jpg`, `.ico`, or `.bmp`.

   c. Click the **Click to add** link in the **Image** field, then select and upload the image.

   d. Click **Update**.

2. To set the uploaded image to the favicon, complete the following steps.
   a. Navigate to **System Properties** > **System**.
   b. In the **Icon image displayed in the bookmarks and browser address bar** field, enter the file name of the uploaded image.
   c. Click **Save**.

Result

The favicon appears in the bookmarks and browser address bar for the platform or the Content Management System (CMS). For more information on how to change the favicon for Service Portal, see Create a portal.

Examples of how to modify the banner

There are various ways that you can modify the banner on your instances.

Note: From the San Diego release on, configure banner announcements instead of updating *`glide.product.description`*. For more information, see Configure Next Experience banner announcements.

Label multiple instances differently

- On all instances, leave *`glide.product.description`* <blank>
- On PROD instance, set *`glide.product.name`* to <My Company>
- On DEV instance, set *`glide.product.name`* to <My Company - DEV>

Control the window title

Since the window title is composed of *`glide.product.name`* and *`glide.product.description`*, the following gives you complete control over the banner and the window title.

- *`glide.product.name`* set to <Window Title that you want>
- *`glide.product.name.style`* set to <display: none>
- *`glide.product.description`* set to <blank>

The company record **Banner Image** and **Banner Text** are used to set the banner image and text since the company banner text is not used in the window title.

Use HTML in the banner text

- *glide.product.name* set to <My Company>
- *glide.product.name.style* set to <display: none>
- *glide.product.description* set to <Some text Click here>

Position banner text over the banner image

- *glide.product.name* set to <My Company>
- *glide.product.name.style* set to <display: none>
- *glide.product.image* set to <your company logo.gif>
- *glide.product.description* set to <Some text for the description>
- *glide.product.description.style* set to <position:absolute; top:5px; left:100px> (position values may vary based on specified needs)

Apply a background image to the banner

Often corporate guidelines require more in-depth branding of the ServiceNow interface. Using the tiling technique, you can modify your logo image to have a transparent background, so that you can apply another image to the banner beneath the logo.

Upload an image to the image manager and then create a new property named *css.banner.background.image*, so that you can call the image. The value should look like this.

css.banner.background.image value url('./images/MasterBG.jpgx')

Write CSS rules that apply this change

```
/** BACKGROUND - These properties allow you use to
 add a background tile to the header of the instance
 ***************************/
TD.bannerLeft,TD.bannerCenter,TD.bannerRight,
 TR#banner_row{background-color: ${banner.background.color};
background-image: ${banner.background.image};
background-position: ${banner.background.position};
background-repeat: ${banner.background.repeat};}
```

Note: The banner image and banner text associated with the primary company or specific companies may be used instead of the *glide.product.image* and *glide.product.description* properties to get the same effect.

Modify the banner

The banner is displayed at the top of the page and is rendered using certain system properties.

Note: From the San Diego release on, configure banner announcements instead of updating *glide.product.description*, which is not used when Next Experience is enabled.

For more information, see Configure Next Experience banner announcements.

- *glide.product.image*
- <div>*glide.product.name*</div>
- <div>*glide.product.description*</div>

The DIV that contains the *glide.product.name* property is only shown if the property contains a value, otherwise, it is not used when rendering the banner. Also, the property *glide.banner.image.title* controls the tooltip that appears when the cursor is over the banner.

Note: The My Company record overrides the properties.

Banner

Window title

These properties are used to set the window title as follows:

glide.product.name glide.product.description

If *glide.product.name* is blank, then the ServiceNow name is used as the product name for the window title.

My Company

The banner text and banner image defined for the Company that a user is assigned to may be used to override the *glide.product.image* and *glide.product.description*. The banner text, if specified, is used instead of the *glide.product.description* property. The banner image, if specified, is used instead of the *glide.product.image* property.

Add help to a field label on a form

You can create field-level help in forms by placing help icons in individual fields and converting the field labels to links to external or internal URLs.

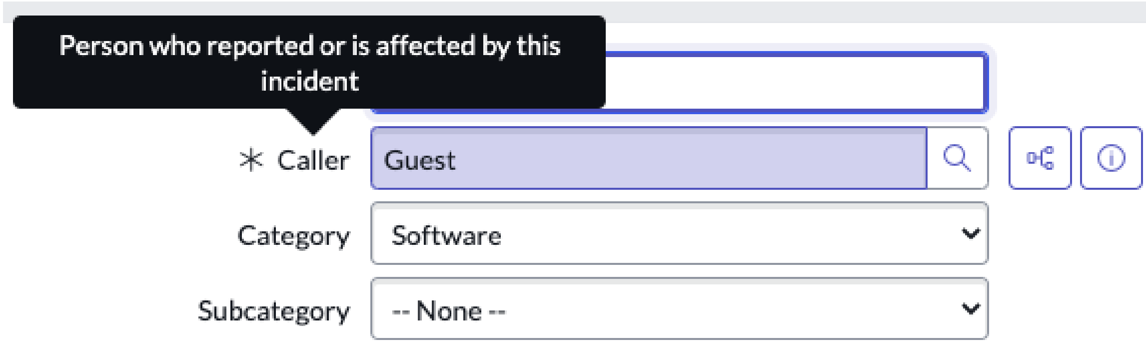
Before you begin

Role required: personalize_dictionary

About this task

You can link to any type of file, document, or wiki, and open it in a separate browser window. The following is an example of a form with field label help enabled.

Field label help enabled



Procedure

1. Open the form.
2. Right-click the label for the field and select **Configure Label**.
3. Complete the form.

Field	Input value
Hint	Type text to use as a tooltip that appears when a user places the cursor on the field label.
URL	Enter the URL of the target file to open when the field label or icon is clicked. This can be a complete URL to a file outside the instance, or a relative URL to a target on the instance. **Note:** Links aren't supported in Workspace.
URL target	Not used. The help file opens in a new tab regardless of the **URL target** value.

4. Click **Update**.

Content Management System

The Content Management System (CMS) is a ServiceNow application that enables users to create a custom interface for the ServiceNow platform and ServiceNow applications.

Important: Use Service Portal for new development instead of CMS. Service Portal is an alternative to CMS with a refined user experience, and is active by default in the base system. For more information, see Service Portal and Content Management and Service Portal.

A CMS typically requires a systems administrator or a web developer to set up and add features. Non-technical users can use the CMS application as a tool for website maintenance. You also want to consider the timing of the addition of content management, and the maturity level of ServiceNow data. For more information, see CMS Planning.

Following are several CMS project ideas:

- Design a company-wide service catalog that offers a collection of services.
- Present a customized UI for a knowledge base.
- Create customized login pages, search pages, views of lists, tables, charts, or graphs.

- Design a complete website.
- Integrate ServiceNow with other company applications.
- Build a tailored self-service portal for end users that is in compliance with a corporate style guide.

Example CMS sites

There are two common interface approaches within the ServiceNow community:

- An image and text-based interface similar to Amazon.com
- A search-based interface similar to Google

Both approaches have been used successfully. The approach you select depends on the needs of the people using the data and how easy it is to train them. While the two design philosophies are different, both approaches share the common goal of UI simplicity.

Content Management design

Before building a website in the CMS, it is important to have a good understanding of what to build and who the audience is.

A high volume of content can heavily influence the look and feel of the site and the site hierarchy. When deciding the content, design for ease of maintenance for the people who take care of the system. This level of planning can be time-consuming, but is important.

Review website design prerequisites to help you set expectations, scope deliverables, and define reasonable time lines. Consider both the planning and execution of site design, to understand how sites are built, and to provide a working overview of the CMS.

Timing is important when considering the addition of content management. Successful deployments of the content management system usually take place after phase 1 processes (for example, Incident, Problem, Change, Catalog, and Knowledge) are in place. This is especially true if the team has limited website design experience. Waiting until phase 2 of deployment gives administrators time to work in ServiceNow and to understand how the organization uses the system and what business needs it meets.

Also consider the maturity level of data in the ServiceNow system. Depending on the ITIL processes used, content management is only useful and effective once the data within ServiceNow is established. Ensure that hierarchies, tasks, and workflows are well-defined. For example, before creating a catalog interface, confirm that the service catalog has been in place for some time, has been used, and contains data. The same is true for a knowledge management interface, particularly when high ratings or view counts define article placement on the page.

Content organization

Before you begin to build the CMS website, list all the content that you want to include and take the time to organize it.

A site created in CMS relies on two different types of content.

- CMS site information, such as site pages, images, and menus
- System information, such as knowledge base articles and catalog items

CMS content

Begin by listing all the content you want to host on the CMS pages. Examples include help pages, My Requests, My Approvals, and specific catalog items. Think about current solutions that you can implement immediately, and note ideas for future implementation phases.

Within CMS, you group pages to define the top-down menu structure. You establish a home or starting page, and other pages in the site reference the home page in the **Parent Page** reference field.

There are several ways to group, such as by audience or the purpose of the website. After listing the content to host, group it logically and identify a common name for each group, as shown in the following examples.

IT environment groups

Content built for	Common name
End user	End User Page
IT professional	IT Professional Page

General groups

Purpose of site	Common name
Reports	Reporting Page
Help and knowledge	Knowledge page

System content

Organize the content so the interface is easy to navigate and understandable to the user. Determine the organization based on the data that you are leveraging, both in the CMS (using sites, parent pages, pages, and navigational menus) and throughout the rest of the system. For example, within the catalog you have "category," and in the knowledge base you have "category" and "subcategory." You can use these hierarchies with filtered lists for good search results.

Organizing CMS content logically is important for long-term maintenance of the site, however, the data typically comes from other ServiceNow applications. Communicate with the administrators for these applications, such as the knowledge base, service catalog, and business service portfolio. Work with them to offer the application data appropriately through the CMS pages you create. For example, the team that created the ServiceNow corporate website in CMS began by evaluating the naming conventions used in the corporate knowledge base.

Branding elements

Branding refers to the logo, name, colors, and symbols that identify an organization. It imposes consistency in design and use of terms. Your marketing department defines branding elements and can provide them to you as you plan your CMS pages. Consider how to incorporate the following branding elements.

- Logos
- Color palette
- Tag line

- Trademarked elements
- Graphics

Site design

During planning, consider providing a core set of features with a standard appearance throughout the site. The following web design elements are often used to create a consistent look.

- Page templates
- Navigation schemes
- Header
- Breadcrumbs
- Footer
- Forms

ServiceNow features

Analyze and organize the following ServiceNow features in your instance if you plan on using any of them with CMS pages.

- Account settings
- Email
- Workflow approvals
- Filters

Team member identification

Identify the team members who assist you with website design, branding, and development.

Engage team members for each listed function before you begin to build pages for the CMS website. Each function can be performed by the same or different people.

- Gather corporate style design guidelines.
- Define the written terminology and content for the site.
- Gather and define the site flow.
- Manage the CMS project as the webmaster. The CMS webmaster is responsible for executing the design and making the site work. The following skills are required:
  - Basic ServiceNow administration skills
  - HTML
  - CSS
  - Graphic design
  - Web design

After you identify the project team members, establish who is responsible to complete the tasks involved in building the CMS website.

- Determine who owns each page.
- Set a page update schedule so owners do not overwrite each other.
- Formalize content management processes, including content review and page updates.

Data preparation

It is important that there is enough data in the ServiceNow instance before you begin to build the CMS website.

Ensure that the necessary data and content are available in the instance by taking the following actions.

- Review the ITIL processes that you intend to implement in the CMS. Ensure that the data in the instance is a mature representation of the applications being used, for example, service catalog, knowledge management, and incident management.
- Review the defined hierarchies, such as the categories and subcategories for the knowledge base or service catalog. You use these categories to design the entry page into the application.

Corporate style guide

When you build a CMS website, you design the look and feel based on guidelines in the corporate style guide.

A corporate style guide provides detailed information for designing any corporate interface, including corporate websites.

Corporate design team

Many organizations have a web development team that designed the corporate website. Contact this team and involve the designers early in the planning, as they provide help and give their approval to the interface you design. Without approval, there is the risk of having to redesign the entire site because it does not adhere to the organizational guidelines.

Corporate style guide

A corporate style guide takes the guesswork out of designing the CMS website. The example style guide shown is defined down to the pixel. Creating a site with the style guide makes it easy to create clean CSS and HTML. Without the style guide, building the site can take a great deal of time.

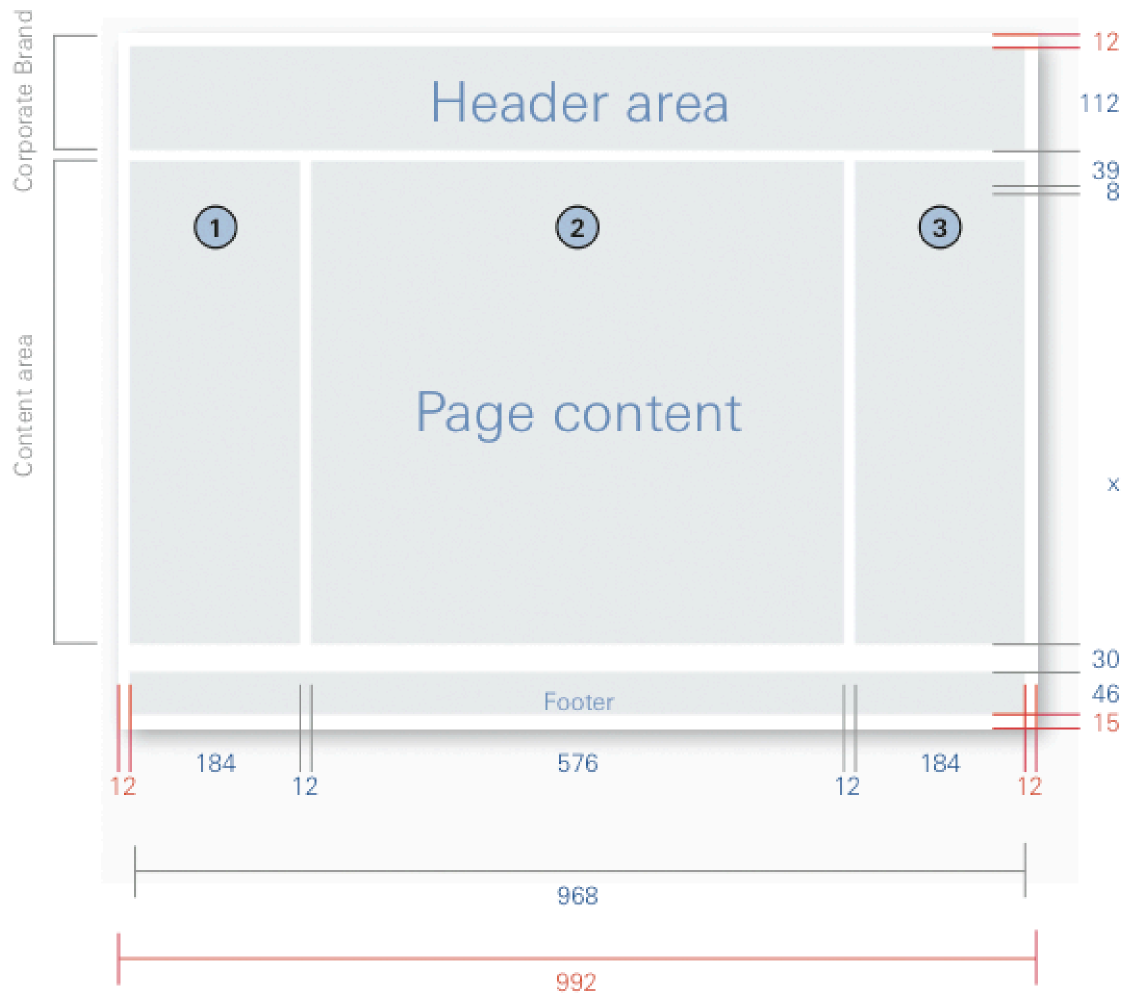
Design considerations

Some modifications to the base design for forms may be necessary. The content area of any CMS design should be no smaller than 860px, or service catalog forms are clipped. The sample style guide entry specifies the content area to be 576px, which clips service catalog forms.

Example style guide entry

Columns and topics:

1. Navigation (levels 2–4)
2. Main content
3. Info snippets



Prototypes and rapid web design

Many user interface designers use prototypes and rapid web design techniques to visualize the final product before it is developed.

Design revisions are the most time consuming and expensive phase of site design. When the team analyzes and then uses prototypes to create pages, revisions to the published pages are minimal.

Develop the prototype and print it. Review the design with the appropriate team members and annotate the prototype, and annotate what to update on each page.

Define the following elements within the prototype.

- The site map for the entire site.
- A detailed prototype of every intended page, including elements such as links, link destinations, content, page names, and page descriptions.

Content Management navigation

After you design the hierarchical structure of the site, begin planning site navigation.

Consider the following as you plan site navigation.

- Placing navigation elements on every page.
- Locating navigation elements in the same place on every page.
- Using either text or images for navigation.
- Providing visitors with an easy way to understand where they are in the site, for example, with breadcrumbs or a specific color scheme.
- Adding a site map, which is a one-page, hyperlinked, hierarchical outline of the site.
- Providing a link to the home page from every site page, as visitors often enter the site on a page other than the home page.
- Designing navigation to help visitors find information quickly with as few clicks as possible.

In the CMS, navigation menus define your site navigation. Build menus as navigational blocks to create navigation paths. The menu chosen for the task depends on the size and complexity of your site. Available menu options include the following items.

- List menus
- Two types of tab menus
- Vertical, clickable list, usually placed on the left side
- Horizontal blocks
- Vertical blocks
- Super menu (a menu of menus)

System content management

Most of the content in a CMS site is managed in different locations throughout the system.

For example, if you are building a knowledge website, the pages and blocks exist in CMS, but the knowledge articles are authored and managed in the Knowledge application. The same is true for any other type of content you plan to leverage. It is important to take time to understand the table structure of data to become acquainted with content.

Links to content are typically static, however, take time to look at the document tree and review how field values are formatted for use within the CMS. To understand the information provided below, right-click within forms in the platform and select **Show XML** to view the document tree for the referenced table. To see the table values for each field, right-click the form label and choose **Show - (field name)** or **Configure Dictionary** for reference.

Look at several internet news sites for ideas on how to format dynamic list data and also the full article detail. Research blog sites, shopping sites, and any other site you find easy to use, as layout and usability design can be time-consuming. If you find a site that inspires you, emulate it in your design.

- This New York Times example has two separate list formats.
- The CNN example has several list formats on the page.
- Several different list formats are used on the ServiceNow website.

Knowledge articles - kb_knowledge table

When you right-click and select **Show XML** on any form within the system, the document tree for the referenced database table becomes reference-able. Review the following selected subset of the document tree so you can acquaint yourself with the content readily available to your site design.

```
<kb_knowledge>
  <active>true </active>
  <author display_value= "First Last Name" >Use this field value
 if author name is important </author>
  <short_description>Use this field value as the link to the
 full article detail </short_description>
  <description>Provide this field value as a 1-2 sentence
 summary of the article </description>
  <number>Unique ID can be leveraged in a number of different
 ways </number>
  <published>Published time stamp of the article  </published>
  <rating>This field value provides a 1 to 5 star rating similar
 to iTunes </rating>
  <sys_updated_on>Add to supplement article published timestamp
 </sys_updated_on>
  <sys_view_count>8 </sys_view_count>
  <topic>Useful field value in creating hierarchical breadcrumbs
 </topic>
  <category>Also useful in organizing articles hierarchically
 </category>
  <use_count>Use this similar to Facebook's "like" feedback,
 answer to the question was this useful </use_count>
</ kb_knowledge>
```

```
<?xml version= "1.0" encoding= "utf-8" ?>
<j:jelly trim = "false" xmlns:j = "jelly:core" xmlns:g = "glide"
 xmlns:j2 = "null" xmlns:g2 = "null" >

<div class = "cms_knowledge_list customer_success" >
 <g:for_each_record file = "${current}" max =
 "${jvar_max_entries}" ><br /><table cellspacing = "0"
 cellpadding = "0" border = "0" class = "background_transparent"
 >
  <tr><td class = "cms_knowledge_list_image" >
  <j:if test = "${current.u_logo.getDisplayValue() != ''}" >
   <div class = "knowledge_article_logo" >
     <a href =
 "knowledge.do?sysparm_document_key=kb_knowledge,${current.sys_i
d}" >
       <img src = "${current.u_logo.getDisplayValue()}" alt =
 "${current.text}" width = "110px" />
     </a>
   </div>
  </j:if>
  </td>
```

```
  <td width = "100%" >
  <a href =
 "knowledge.do?sysparm_document_key=kb_knowledge,${current.sys_i
d}" target = "_top" >
    <span class = "cms_knowledge_list_link"
 >${current.short_description}</span>
  </a>
  <p class = "kb_description" > "${current.description}"
  <!--${SP}-${SP}<span
 class="cms_knowledge_list_author">${current.author.first_name}$
{SP}${current.author.last_name}</span>-->
  </p>
  </td></tr><tr>
  <td width = "100%" colspan = "2" class = "kb_learn_more" >
  <p class = "kb_learn_more" >
    <a href =
 "knowledge.do?sysparm_document_key=kb_knowledge,${current.sys_i
d}" >Learn More</a>
  </p></td></tr></table>

</g:for_each_record></div>

</j:jelly>
```

Domain separation and the Content Management System

Domain separation is supported in the Content Management System. Domain separation enables you to separate data, processes, and administrative tasks into logical groupings called domains. You can control several aspects of this separation, including which users can see and access data.

Support level: No support

- The domain field may exist on data tables but there is no business logic to manage the data.
- This level is not considered domain-separated.

For more information on support levels, see Application support for domain separation.

Related topics

Domain separation for service providers

Configure Content Management sites

Planning a CMS site involves obtaining resources, communicating with others about design, and gathering content.

Before you begin

Role required: content_admin or admin

About this task

The following steps are a high-level overview of how to set up a site.

Procedure

1. Plan and design your content.
2. Create a site.

The site is the container that holds all the content. To simplify your process, you can copy an existing site and edit its components. For more information on creating a site, see Create a site. For more information on copying a site, see Copy a site.

3. Add pages to the site.
   Pages contain blocks of information for the site. For more information, see Create a content page.
4. Create content blocks to customize the layout, headers, menu navigation, lists, and static and dynamic content.
   Content blocks are chunks of actual HTML that make up the content page. There are various content block types available to help with your customization. For more information, see Content blocks.
5. Add style to your site using themes, style sheets, and frames.
   Neither content sites or content pages reference style sheets directly. Configure them using the Themes or Style Sheets options. For more information, see Style in Content Management.
6. Test the site.
   After you create or modify a site, test the site to ensure that content displays properly and all links work correctly. For more information, see Test the site.

Related topics

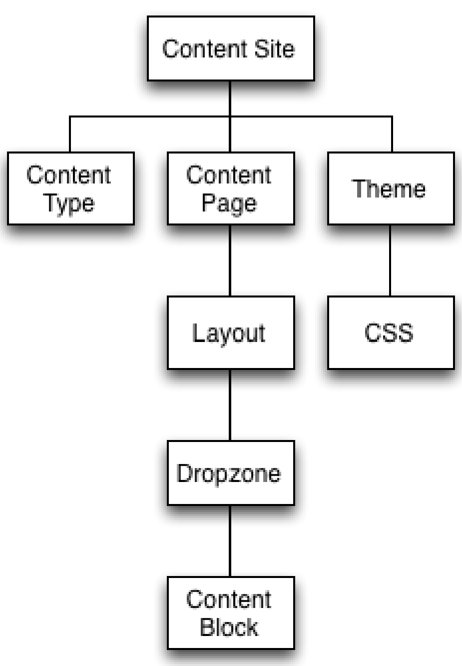
Content Management design

Content sites

A content site is a group of related content pages that have the same basic theme, layout, and URL suffix.

Content sites are made up of a series of basic building blocks. The Employee Self-Service site is an out-of-box sample site that is included in the CMS activation. It provides existing, working examples or each CMS component, which you can use like a template to build your own site.

Site components



Create a site

Configure a site by either creating a new site with CMS or by editing a copy of either the ESS Portal or the Service Management Portal.

Before you begin

Role required: content_admin or admin

About this task

If you are creating a catalog site in CMS, see Using the content management system with the service catalog.

Procedure

1. Navigate to **All** > **Content Management** > **Sites**.
2. Click **New**.
3. Complete the form.
   Since you have not yet created pages, you cannot select the Home, Search, Login, and Gauge target pages. Add them to the site record after you create them.

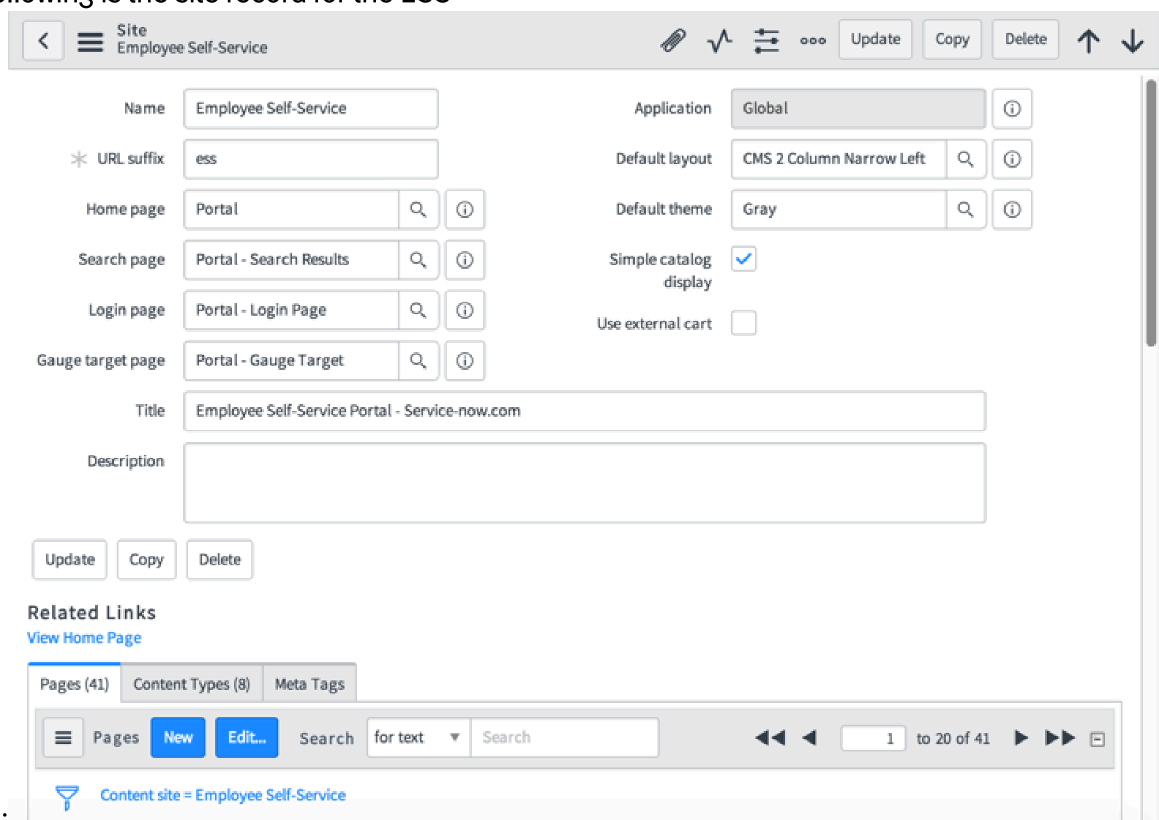
Site fields

Field	Description
Name	A unique name for the site.
URL suffix	The URL suffix that identifies the site. The URL suffix is case-sensitive, the suffix you enter impacts the CMS site URL used to launch the site. It is incorporated into the URL as follows: `http://<instance name>.service-now.com/url_suffix/page.do` **Note:** Do not use `portal` and `cms` in the URL suffix. They are reserved terms and return a **Page not found** if you use them.
Home page	The page to display when the user does not specify a page name in their URL: `http://<instance name>.service-now.com/url_suffix/`
Search page	The page that displays search results when a user searches from any page within the site.
Login page	The page to use for logging in to the site. If specified, users must log in to access the pages on the site. If left blank, no login is required to access the pages within the site.
Gauge target page	The page that displays gauge content. When the user clicks a gauge on the new site, the gauge target page opens to show the gauge content. The gauge target page replaces the CMS page in the current tab.
Title	A title for the site. The title can be the same as or different from the **Name**.
Description	A full description of the site.
Default layout	The layout for pages to use by default. Any page in the site that has a blank **Layout** field uses the layout selected in this field.
Default theme	The theme for pages to use by default. Any page in the site that has a blank **Theme** field uses the theme selected in this field.

Field	Description
Simple catalog display	Selecting this option simplifies catalog pages in the site by hiding the search bar, breadcrumbs, and the results per page choice list. It also prevents you from adding attachments from record producers to your CMS site.
Use external cart	Option to omit the default cart when rendering catalog pages within a site that contains catalog pages. Provide a catalog cart block somewhere on the site to allow users to make catalog requests. **Note:** If you use an external cart, the no cart check box on a service catalog item has no effect. The external cart appears for all items.

4. Click **Submit**.

Example:
The following is the site record for the ESS Portal:



Related topics

Copy a site

Copy a site

To create a new site quickly, you can copy an existing site.

Before you begin

Role required: content_admin or admin

About this task

The site copy option creates a complete standalone copy of the site and all its resources. If you are copying a site to create a second site, use this option after the first site is complete, tested, and production ready. This consideration is important because the blocks, CSS, and pages are duplicated to support the new site. There are various reasons why site copying is useful, such as site versioning, branding, or creating a backup.

Images are not included when you use the Copy Site option. They are stored separately in the sys_attachments table.

To copy just a few pages without duplicating all the resources (CSS, blocks, menus), use the page copy option. Page copy duplicates the page but not the resources used in the page. For more information, see Copy a page.

Procedure

1. Navigate to **All** > **Content Management** > **Sites** > **[Site Name]**.
2. On the Site form, click **Copy**.
3. In the dialog box that opens, type a name for the new site.
   This name is a prefix for all the site elements that are duplicated. Do not use **Portal** or **CMS** in the site name.

   A progress bar shows the copy process. When the process is complete, the Site form shows information for the new site.

Related topics

Create a site

Content Management security

There are several methods for securing CMS sites and pages. Site security is set in the Login page field on the site record. You can control if a page is public or private through the URL.

Every content page has its own URL that users can access outside of the platform. Depending on how the Login page or roles are defined, the URL may or may not be public.

- If the content page has no defined **Read** role or there is no defined Login page, any internet user can navigate to the URL and view the content page.
- If there is a defined **Read** role, then anyone who goes to the URL is asked to log in before they can view the site.
- If there is a defined Login page on the site record, all pages in the site are private.

Content Management URLs

The format for Content Management URLs is as follows.

```
<path to the instance> + /<site suffix> + /<page suffix> + .do
```

The <site suffix> is defined by the **URL Suffix** field on the site form. The <page suffix> is defined by the **URL Suffix** field in the page form. The URL suffix is case-sensitive.

For example, the page **Austere - Site Entry** has a site **URL Suffix** of **austere** and a page **URL Suffix** of **entry**. The constructed URL looks like the following URL.

```
<instance name>.service-now.com/austere/entry.do
```

If the site **URL Suffix** field is left blank, the <site suffix> is **cms**, as shown in this example:

```
instance.service-now.com/cms/page.do
```

If the page **URL Suffix** is left blank, the name of the page is used as shown in this example:

`instance.service-now.com/austere/Page Name.do`

Special characters in the name of the page have to be escaped.

Login pages instead of login rules

You set a login page on the site record to allow users to log in or out directly through the content site.

Login rules were used in earlier versions to dictate what users saw after logging in, based on their roles or permissions. Login rules still work, but their use is deprecated.

Configure CMS sites to use single sign-on (SSO)

To configure CMS to use SSO, make the view_content page private.

Before you begin

Role required: content_admin or admin

About this task

Because public pages do not require login, and CMS sites are public by default, CMS pages do not use SSO. Use the following procedure to turn off public-facing content pages and enable SSO.

Procedure

1. Navigate to Public Pages [sys_public.list].
2. For the view_content page, set **Active** to **false**.

Content pages in CMS

Content pages are the core of the Content Management System. A content page is a web page that displays blocks of content.

Pages are built from content blocks and organized into sites. Pages display as regular webpages that are rendered in HTML. Constructing a content page requires a basic knowledge of HTML. Content pages are formed by arranging content blocks in predefined layouts. They can be used to present login pages, search pages, or ServiceNow content.

Create a content page

Pages are built from content blocks and organized into sites.

Before you begin

Role required: content_admin or admin

Procedure

1. Navigate to **All** > **Content Management** > **Sites**.
2. Open the site to add the page.
3. In the **Pages** related list, click **New**.
4. Complete the form.

Page form fields

Field	Description
Name	A unique name for the page.

Field	Description
	Prefix each page name with the name of the site followed by a dash and the page function. For example, **ESS - Catalog Detail** and **ESS - Search Results** are page names within the **ESS** site.
URL suffix	The URL suffix that identifies the page. It is incorporated into the URL as follows: `http://instance name.service-now.com/site/url_suffix.do`
Parent page	The existing page that is the parent of the current page. Parent pages keep sections sortable on the site list of pages and are used to create breadcrumbs dynamically. Use CSS to define menus that give the Parent page context within the user interface.
Layout	The layout to use for the page. Layouts define dropzones where content blocks can be added to the page. If this field is left blank, the page inherits the default layout of the site. If the site does not have a default layout, there is a single dropzone for the entire page.
Content theme	The theme to use for the page. Themes bundle CSS style sheets that are applied to all content within the page. If this field is left blank, the page inherits the default theme of the site. Use the default theme unless the page requires a different set of CSS style sheets from the other pages in the site.
Frame buster	Select the check box to remove any restrictions placed by frames that contain the page. This way you avoid frame-within-frame issues that sometimes occur with improper linking.
Content site	The site associated with the content page. If you created the page from the related list in the site, the value defaults. The content site provides the <site_suffix> in the page URL, as follows: `http://<instance name>.service-now.com/site_suffix/page_suffix.do`
Read roles	Users with the selected roles can view the page. Click the lock icon to select roles.
Model document	A document ID of a record to display by default.
Page status	The status for the page, such as **Draft** or **Published**.
Created by	The user who created the page. If your role has higher privileges than your user name and you enter your user name, the field defaults to the role. For example, if you are logged in as an Admin and you type your name, which has lower privileges, this field displays **Admin**.
Title	The title for the page. The title displays on the browser tab when the page is accessed.

Field	Description
Description	Type a description of the page that displays for users when they access the page.

5. Click **Submit**.

Add content to a page

After you define the page settings, set the content of the page by adding content blocks. Setting content blocks is similar to how you add content to homepages.

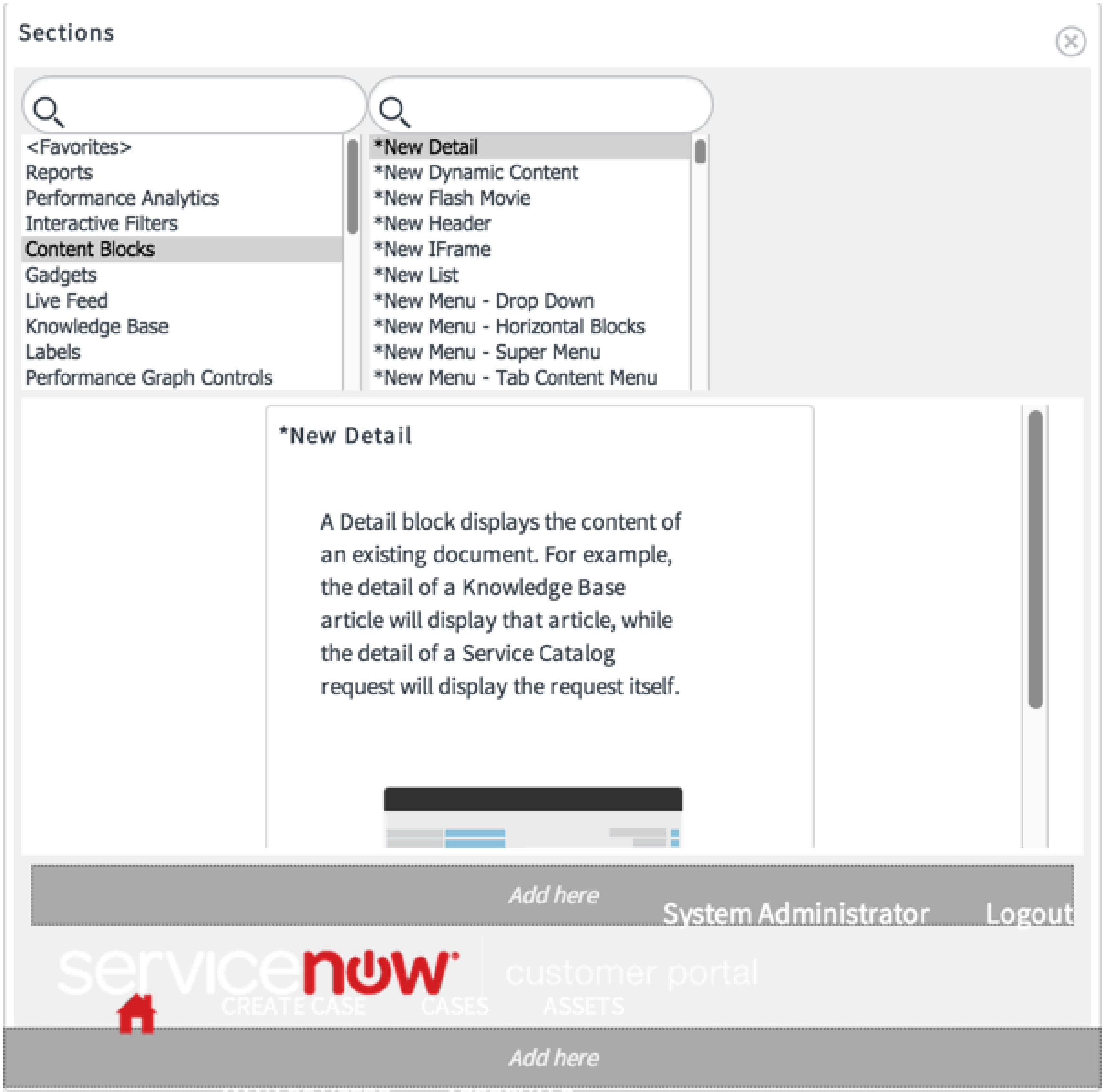
Before you begin
Role required: content_admin or admin

Note: Do not add any type of report, such as a calendar, to iFrames. For more information on adding a report directly onto a page without using iFrames, see Embedding reports in Jelly.

Procedure

1. On the Page form, under **Related Links** click **Edit Page**.
2. Click **Add Content**.
3. Select a content block from the picker.
4. Select the dropzone where the content goes.

Create content blocks by adding one of the content blocks named ***New [block type]** to the page.



Related topics

Content blocks

Copy a page

Copying pages is an efficient way to avoid duplicating the same work and to create pages quickly from a guiding base template.

Before you begin

Role required: content_admin or admin

Procedure

1. Navigate to **All** > **Content Management** > **Sites** and select the site.
2. Select the page to copy.
3. Click **Copy**.
4. Rename the page.

Note: Do not use **service_catalog**to rename a page. It is already a valid page in the system.

5. Edit the page fields.
6. Click **Update**.

Assign a page to a site

If you have created multiple sites, you can add pages from one site to another site.

Before you begin

Role required: content_admin or admin

Procedure

1. Navigate to **All** > **Content Management** > **Sites**.
2. Select a site.
3. In the **Pages** related list, click **Edit**.
4. Select other pages to include in the site.
5. Click **Save**.
6. **Update** the site.

Add a page to an application

Homepages and content pages are not added automatically to update sets and applications. They must be manually added.

Before you begin

Role required: content_admin or admin

Procedure

1. Navigate to **All** > **Content Management** > **Pages**.
2. Right-click a content page record.
3. Select **Unload Portal Page**.

   The page is added to the current application and to the current update set.

Configure a private UI page for CMS links

With single sign-on (SSO) in place, you can generate email links that take users directly to tickets and applications through the CMS interface.

Before you begin

Role required: content_admin or admin

About this task

You accomplish this procedure by creating a private UI page to redirect CMS links. Because the page is not public, it requires authentication and redirects to SSO appropriately.

Procedure

1. Check that your CMS site is private by completing the following steps.
   a. Navigate to **Content Management** > **Sites** > **[Your Site]**
   b. Verify that the **Login page** field has a page listed.
2. Create a new UI page by completing the following steps.
   a. Navigate to **System UI** > **UI Pages**.
   b. Click **New**.
   c. Enter a **Name**, for example, **redirector**.
   d. Enter the following Adobe Jelly code into the **HTML** field.

```
<?xml version="1.0" encoding="utf-8"?><j:jelly trim="true"
 xmlns:j="jelly:core" xmlns:g="glide" xmlns:j2="null"
 xmlns:g2="null"><script type="script/javascript">
  window.location.href="${sysparm_uri}";</script></j:jelly>
```

The CMS now supports email links with following format:

```
http://<path to instance>/<UI page>.do?uri=/<CMS suffix>/
<record type>.do%26sys_id=<record ID>
```

For example:

```
http://<instance name>.service-now.com/
redirector.do?sysparm_uri=/ess/incident.do
%26sys_id=46e3e949a9fe19810069b824ba2c761a
```

Note: If you are using SAML 2.0 update 1 for SSO, use the UI page **saml_redirector** instead of creating a new UI page. For example, an email link to a SAML 2.0 redirector page would use the URL format: `http://<instance name>.service-now.com/` **saml_redirector.do** `?sysparm_uri=/ess/incident.do %26sys_id=46e3e949a9fe19810069b824ba2c761a`.

Content Management templates

Templates are content pages that are reused to provide a consistent look and feel.

Templates are useful when creating CMS sites for the following reasons.

Create new pages rapidly without risk by copying pages	Using a template to create new pages saves time because you do not have to keep repeating the same steps.
Provide a restore point for pages within the system	Have a working template available if something goes wrong in one of the blocks or in the theme CSS. It is often easier to start over from the template instead of trying to undo complex changes.

(continued)

Provide a functional reference for editors on the site project	Having the template as a reference ensures that pages continue to conform to the style guide.

Page templates

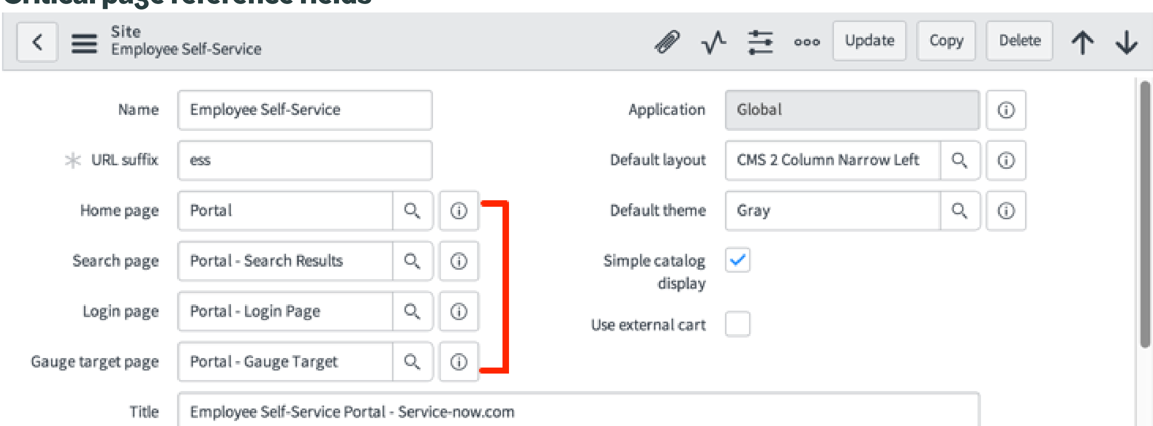
Every page that is part of the site needs a template.

Critical page reference fields

When you build a new site, there are four page reference fields on the site record that are critical. Understanding these pages and how they are used helps you define page templates and site defaults.

- Home page: landing page for the site. A home page is mandatory.
- Search page: page that displays search results when a user searches from any page within the site. A search page is mandatory for your site to have a Search Results block.
- Login page: a standalone login page, which is useful to force authentication for the entire CMS site.
- Gauge target page: page used to display the drill-through content from a gauge. When the user clicks a gauge, the gauge target page opens showing the drill-through content for that gauge.

Critical page reference fields



Detail pages

Depending on the data or tables that you plan to use, you may need detail pages. These detail pages use one of the content types in the following list.

- Knowledge detail page: displays a full knowledge article detail (mandatory for a knowledge site).
- Incident page: detail page for an incident record.
- Catalog page: detail page for all items, content items, order guides, and record producers.

Templates for creating sections

There are two page templates you can use when creating sections:

- Parent page: keeps sections within large sites organized and sortable on the site list of pages. Parent pages are also used to create breadcrumbs dynamically.
- Detail page: differs from the parent page in that the content area displays a full article or detail instead of a selection of related content. Detail pages must have a Current Document block.

These pages are mandatory if you plan on accessing system data. For example, if you plan on showing the service catalog in your CMS, you need the following items.

- A service catalog content type that references the [sc_cat_item table].
- A detail page that provides the full view of the item.

New templates

If the base system sample site pages are not suitable, you can create a template from scratch. Create a page and then use it as a template. For more information, see Create a Content Page.

When you save a new template, include the word "template" in the page name.

Configure a base template

An easy way to create a base template is to copy the existing ESS sample site and customize it to suit your own needs. You can also configure a base template from scratch.

Before you begin
Role required: content_admin or admin

About this task
Follow these steps to create a single base page and generate all important components within the site.

Procedure

1. Design a layout.
   Regardless of the interface, a site can be distilled into a few simple layouts.
2. Create a theme.
   The theme defines the structure of the layouts in CSS and the base styles, such as fonts and colors. For more information, see Design themes.
3. Build the common blocks.
   Pages are composed of content blocks. Most content blocks are reused on multiple pages. For the base template, create basic blocks such as a header, side navigation, and some basic content for the main content area of the page. More detailed content can be added later, but define content for reuse on many of the site pages here. For more information, see Content blocks.
4. Build a site entry page.
   Use the common content blocks you just created to design the first page that users see when they enter the site. For more information, see Create a content page.
5. Build a detail page.
   Design the detail pages to determine how pages such as knowledge articles, catalog items, and search results are displayed. You can build a detail page by copying the site entry page and adding additional content blocks. For more information, see Copy a page.
6. Assign the pages created to the new site.
   Create the site and apply the layout and theme to the site defaults. Then, navigate to the **All Pages** list and specify the base template site in the **Site** column for each of the base template pages. For more information, see Create a site.

Customize a copy of a page template

One good source for templates is the base system sample site. It is easy to copy pages and restyle them into new page templates to meet different business requirements.

Before you begin

Role required: content_admin or admin

The Employee Self-Service portal is provided as a working example and design template in the following procedure.

Procedure

1. Navigate to **All** > **Content Management** > **Sites** > **Employee Self-Service**.
2. Select a page.
   For example, to copy the ESS sample site homepage, select Portal.
3. Click **Copy**.
4. Rename the page.
5. Right-click in the header and select **Save**.
6. Under **Related Links**, click **Edit Page**.
7. Point your cursor to the content block to change and click the edit icon that appears on the right.
   For example, change the menus, alter the layout, or add a different logo.
8. Click **Update**.
9. Use the page in other sites you created by assigning pages to a site.

Content types

Content types provide site-specific control of how system data defined by templates is rendered.

In the site, one page displays a list of knowledge articles, and another page displays catalog items or incidents or a combination of the two. Different themes can be used for types of content and each theme can provide different user interaction. Content types define the pages that display content from a table. Each content type corresponds to a table.

Every type of document that the CMS displays has an associated content type. Changing the content type requires knowledge of Apache Jelly scripting. However, the common content types (such as service catalog or knowledge base) come in the base system. Content types can be associated with particular sites. This association allows different sites to use different detail pages for the same content type.

Content types define three features of associated documents.

- What does a link to one of these documents look like? For example, if a list of these documents is displayed on a page, how does each entry appear?
- What does a detailed view of one of these documents look like?
- What detail page is used to display the document? This decision is important and is often an area of confusion for new CMS users.

The document content type determines the page that a list of documents points to, the list itself does not determine the page. The content from a link is displayed in a detail content block on a page. The content type determines in which detail block on a page the document content is displayed.

For example, the list block **Catalog Top 5** displays the top five items in the Service Catalog table [sc_cat_item]. Because the table is [sc_cat_item], the content type **sc_cat_item** controls how the **Catalog Top 5** list is displayed. Clicking any item in the list displays the Service Catalog Detail page with the item displayed on it according to the detail template script. These content types are applied:

- in search results to link to the correct page.
- in the Current Document block to display the current record.
- in links on lists and other places that link to record types.

Several content types are available by default for tables such as Catalog Item [sc_cat_item], Gauge [sys_gauge], and Page [content_page].

Content type defaults that are set for CMS can be overridden for individual sites. Use the **Content Types** related list on the site record to customize content types.

Note: To learn more about the properties that affect use of content types, see the following topics in Instance Security Hardening Settings:

- Performance monitoring IP restriction (instance security hardening)
- Downloadable file types (instance security hardening)

Configure a content type

Users with the content_admin role can create a content type.

Before you begin

Role required: content_admin or admin

Procedure

1. Navigate to **All** > **Content Management** > **Content Types**.
2. Click **New**.
3. Complete the Content Type form.

Content Type form

Field	Input Value
Type	Select the table whose content will be rendered in Content Management.
Content site	Select the site that will use this content type.
Media type	Enter one of the following media types to use with this content type. ◦ `m`: Smartphone interface only (not for CMS use) ◦ `tablet`: Tablet interface only (not for CMS use)
Default detail page	Select which page loads after a user clicks a link.
Gauge page	Select which page is the drill-through target for any gauge. If you display a gauge on a CMS page, then clicking the links loads the page specified here.

Field	Input Value
Summary Template	Write an XML script that determines how the list is displayed in the list block, if the link is displayed in a list block.
Detail Template	Write an XML script that determines how to display the associated information after a user clicks the link.

CMS gauge support

Gauges are a graphical way to display information from an instance.

A gauge might, for example, show a bar chart breaking down all open incidents by category. Gauges are fully supported within the CMS system. This means:

1. You can put a gauge on a CMS page
2. You can control what will happen when a user clicks on a cell within that gauge

Put a gauge on a CMS page

You have control over the gauges on a CMS page.

Before you begin

Role required: content_admin or admin

Procedure

1. Bring up the CMS page in edit mode.
2. Click **Add Content**.
3. Select the gauge you want to add.
4. Place the gauge on the page in the desired location.

Related topics

CMS gauge support

Control what happens on a click

Control what happens on a click

Since a CMS system uses multiple pages you have to tell the system which page to use to display drill through content.

In the normal (non CMS) system, when you click a bar in a bar chart or a wedge on a pie chart, you drill through and your current screen is replaced with a list of records meeting the chart's criteria. For example, if you have a gauge of **Incidents by Category** and you click the bar labeled **Hardware** you drill through to a list of all incidents with a category=hardware.

Within the CMS system, there is a similar drill through mechanism at work, but you must manually specify which page to display.

There are two different models of the drill through, use an in-place target frame to receive the content, or use another page to display the content.

Using an In-Place Target

An in-place target is a named iframe on the same CMS page as the gauge. When the gauge is clicked, the drill-through content appears within that iframe rather than changing out the CMS page. The gauge (and the rest of the page other than the target) remain in place and active.

Using a Gauge Target Page

A gauge target page is a separate CMS page that is used to display the drill-through content from a gauge. When a gauge is clicked, the current CMS page is replaced with the gauge target page and the drill-through content is rendered within that second page.

- **Gauge Target Page**

  To set a site default, select **Gauge Target Page**, on the site configuration page. This page is used as the drill-through target for any gauges in the system that do not have a more specific gauge page specified in their content type.

- **Gauge Page**

  To set a content-type specific page, you can specify a **Gauge Page**, on a content type page. Any gauges for this type of content then use that page for any drill through.

  Note: The gauge target on a particular content type overrides the default, site level, gauge target.

- **Gauge Target block**

  A gauge target page is a normal CMS page, with one special requirement. Somewhere on that page, there must be a **Gauge Target block**. This market block tells the system where to output the drill through data.

Related topics

CMS gauge support

Put a gauge on a CMS page

View content types

The following is an example of where you might use Content Types.

Before you begin

This example uses the out-of-box Employee Self-Service (ESS) site as an example.
Role required: content_admin or admin

About this task

Use any out-of-box instance of a CMS site.

Procedure

1. Launch an out-of-box CMS site `https://<instance name>.service-now.com/ess`.
2. Under Get Help, click **Issue Status**.
   The Issue Status, or incident_status CMS page contains two content blocks: Common Answer and Current Issues. These content blocks both use Content Types to render results.
3. From `https://<instance name>.service-now.com`, navigate to **Blocks** > **Lists** > **Portal - Common Answers**.
   This block matches the Common Answers section of the Issue Status page. The Table field describes the Content Type associated with Common Answers.
4. Use the link to view existing Content Types.
5. Click the Content Type to view the XML that determines how the list and record are rendered in CMS.

The Default Detail Page field indicates a CMS page that displays a record selected from a List of Content block.

6. Click the Information icon next to the Default Detail Page, to go to that page.
7. From the Default Detail Page, under Related Links, click **Edit Page**.
   The Detail Block contains a content type formatter. When editing or viewing the page, it is looking for a URL to be passed to determine the record to display, which is why it says "Detail record could not be located".
8. Click the pencil icon to edit and view the Detailed Content block.
   The Type drop down list has "Show the page's current document" selected, which indicates that the document_id must be passed to this block from the CMS pages, then it can display the record based on the content type listed in the document_id.
9. From the Common Answers block, on the Self Service page, select a record.
   The page opens with a URL similar to: `https://<intance name>.service-now.com/ess/knowledge.do?sysparm_document_key=kb_knowledge,02255450d731310013ab49547e61038e`

   The table `sysparm_document_key=kb_knowledge` and sys_id `02255450d731310013ab49547e61038e` determine the record. The associated content type, kb_knowledge, renders the content on the Default Detail Page, Portal - Knowledge Detail / url_suffix=knowledge.

Content blocks

A block is a defined piece of content within the system that can be reused.

A content page is constructed by arranging customized blocks of content on a page. Content blocks are an important part of a CMS site. Existing content such as reports, gauges, and record lists are automatically available as content blocks and more can be created within the CMS.

After defining content blocks, use them on any content page by adding them to drop zones. For more information, see Add content to a page.

Create content blocks after sites and pages have been designed.

Related topics

- View CMS block tags
- Configure a header block
- Configure a static HTML block
- Format an image as a static HTML block
- Configure dynamic blocks
- Catalog cart block
- Integrate Live Feed with CMS
- Configure Flash movie blocks
- Configure a detailed content block
- Configure iFrames

Configure a content block

To configure a content block, define it in the appropriate form.

Before you begin

Role required: content_admin or admin

Procedure

1. Perform one of the following actions to create a content block.
   - Navigate to **Content Management** > **Blocks** > **[Block type]** > **New**. The form for creating the selected block type opens.
   - Navigate to **Content Management** > **Blocks** > **All** and select the type of content to create from the list.
   - Edit a content page and add a stub block of the desired content block type. Click the link in the stub block.
2. Complete the content block form and save it.
3. Add the content block to any content page.

Related topics

Configure a header block

Configure a static HTML block

Format an image as a static HTML block

Configure dynamic blocks

Catalog cart block

Integrate Live Feed with CMS

Configure Flash movie blocks

Configure a detailed content block

Configure iFrames

View CMS block tags

View CMS block tags, which are used for advanced block creation and site flexibility.

Before you begin

Role required: content_admin or admin

About this task

It is constructed as `<g:content_block> {{Jelly_Tags|Jelly]]` and can be used in either of the following ways.

- To display a block inside a block
- To display a block inside a layout

The tag appears in the format, <g:content_block type="<type>" id="<sys_id>"/>.

An example of the block tag is included in the ESS Portal sample site.

Procedure

1. Navigate to **All** > **Content Management** > **Design** > **Frames**.
2. Click **cms_admin_home_frame**.
3. View the code.

```
<style>

DIV.cms_administration_home {
```

```
 background: url(gray_${current_page.getURLSuffix()}.pngx)
 no-repeat right top;
}

</style>


<div class="cms_administration_home">
   ${body}
<br/>
<!-- Would you like to pivot off of parent page instead?  try
 this snippet
   <j:if
 test="${current_page.getParentPage().getURLSuffix()=='administ
ration'}">
      <g:content_block type="content_block_menu"
 id="7afc342def002000914304167b2256ac"/>
   </j:if>
     The defaults use the page URL suffix to define sub menus
-->
   <j:if
 test="${current_page.getURLSuffix()=='administration'}">
      <g:content_block type="content_block_menu"
 id="7afc342def002000914304167b2256ac"/>
   </j:if>
   <j:if
 test="${current_page.getURLSuffix()=='community_inspired'}">
      <g:requires name="ess.portal.globals.jsdbx" />
      <g:content_block type="content_block_menu"
 id="ccd4b8c7efb70000914304167b22566e"/>
   </j:if>
<br/>
</div>
```

4. To see what the page looks like, navigate to the ESS Portal administration page. For example, `http://instance name.service-now.com/ess/administration.do`.

Related topics

Content blocks

Configure a header block

Configure a static HTML block

Format an image as a static HTML block

Configure dynamic blocks

Catalog cart block

Integrate Live Feed with CMS

Configure Flash movie blocks

Configure a detailed content block

Configure iFrames

Types of content blocks

Content blocks, which make up content pages, are reusable pieces of content defined within the system.

Each content block can be used for a different type of content.

Related topics

Format an image as a static HTML block

Catalog cart block

Integrate Live Feed with CMS

Configure a header block

A header block is a visual element placed at the top of pages. It provides a place for branding and other important site-wide functionality.

Before you begin

Role required: content_admin or admin

About this task

Some of the options that are available in headers include, global search, text size toggle, menus for navigational purposes, and the user name with logout link.

Procedure

1. Navigate to **All** > **Content Management** > **Blocks** > **Headers**.
2. Click **New**.
3. Complete the form.

Header form

Field	Description
Name	Type a unique name for the header block.
Background	Select a background for the header logo and menus. ◦ **None** - No background is rendered. ◦ **Gradient/Image** - Specify an image or gradient image to serve as the background. ◦ **Colored Bars** - Specify colors for three different sections of the header, top, middle, and bottom.
Image	If **Background** is **Gradient/Image**, upload an image for the header block background. For gradients, upload a gradient image.
Top bar color	If **Background** is **Colored Bars**, enter a CSS color or color name to use as the background for the top menu.
Middle bar color	If **Background** is **Colored Bars**, enter a CSS color or color name to use as the background for the logo and text.
Bottom bar color	If **Background** is **Colored Bars**, enter a CSS color or color name to use as the background for the bottom menu.
Logo	Select a logo image. The image is also a link to the main page.
Active	Select this check box to make the block available for use.

Field	Description
Text	Type the text to display beside the logo.
Conditional	Select the check box and type any scripted conditions to apply in the **Condition** script field that appears.
Category	Select a category to provide organization for the header block. The category also determines the detail page in which header block links open. Detail pages often display information in different ways.
Top Menu	Select a navigational menu block to use as a menu above the logo.
Bottom Menu	Select a navigational menu block to use as a menu below the logo.
Height	Specify the height for the header.
Search	Select this check box to add a search element in the header.
Font sizer	Select this check box to include text sizing controls in the header.
Login	Select this check box to include a login link in the header. If the user is logged in, this element displays the user name and a logout link. If you specify a login page on the site record, it is important to include a login link so users can enter their username and password.
Chat Queue	Select the chat queue that users access by clicking the **Help Desk Chat** button in the header. Clear the field to remove the button. This field appears only if the Chat plugin is active.

Related topics

Configure a content block

Create a navigation menu block

Navigation menu blocks enable you to create a menu of links to different content pages.

Before you begin

Role required: content_admin or admin

About this task

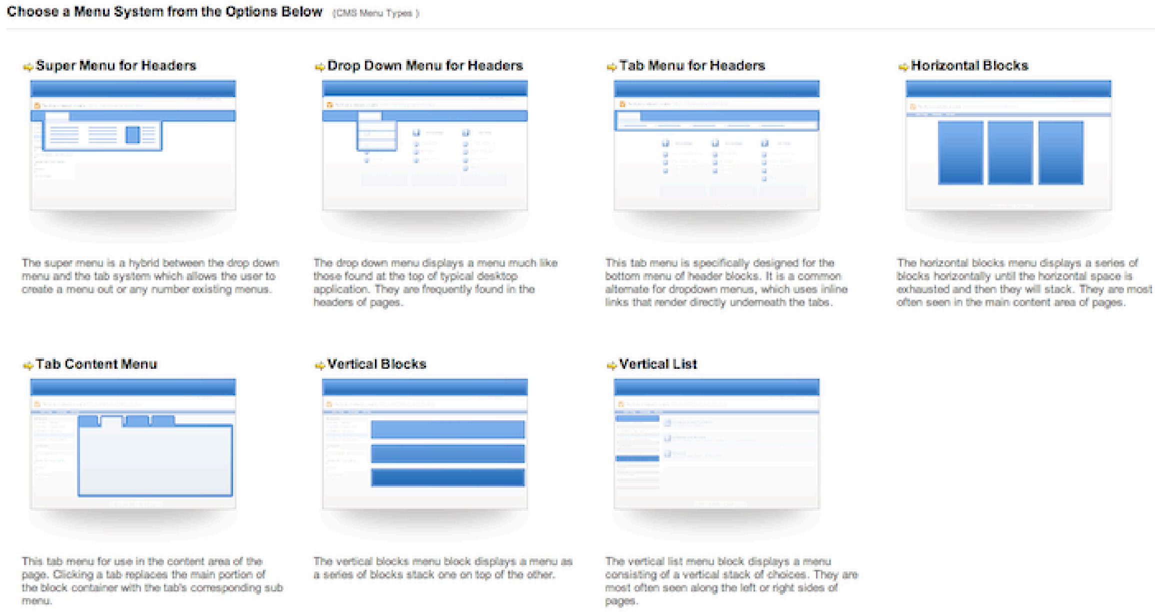
The following three objects define navigation menus.

- Menu block: The menu block defines the entire menu block and how it displays.
- Menu section: The menu sections define groups of links displayed within the block.
- Menu item: The menu items define the links within each menu section.

Procedure

1. Navigate to **All** > **Content Management** > **Navigation Menus**.
2. Click **New**.
   A gallery of available navigation menu blocks displays.

CMS menu options



3. Select the desired menu block style.
4. Complete the Navigation Menu form to define the block.

Navigation Menu form

Field	Description
Name	Enter a unique name for the block.
Type	Select the type of navigation menu, which determines how the links are displayed.
Frame	Select a border style for the navigation menu block.
Conditional	Select this check box to enable the use of scripted conditions. If selected, the **Condition** and **Logged On** fields appear.
Logged on	Select this check box to display the navigation menu block only if the user is logged on. This field appears only if **Conditional** is selected.
Condition	Enter a script to define the conditions for the navigation menu block. This field appears only if **Conditional** is selected.
Active	Select this check box to make the block available for use.
Category	Select a category to provide organization for the navigation menu block. The category also determines the detail page in which menu links open.

Related topics

Menu style customization

Configure menu sections

Menu sections define groups of links displayed within the navigation menu block.

Before you begin

Role required: content_admin or admin

Procedure

1. Navigate to **All** > **Content Management** > **Blocks** > **Navigation Menus** and select a block.
2. In the *Menu Sections* related list, click **New**.
3. Complete the Menu Section form.

Menu Section form

Field	Description
Name	Enter a unique name for the menu section.
Content block menu	Select the navigation menu on which this menu section appears.
Redirect to	Select what appears when a user clicks the menu section name and icon.
URL	Click the lock icon to open the edit field, then enter the URL to display when a user clicks the menu section title and icon. This field is available only if **Redirect to** is set to **The specified URL**.
Detail page	Select the content page to open when a user clicks the menu section title or icon. This field is available only if **Redirect To** is set to **A content page**.
Left image DB Right image DB	Select the image database where your site images are stored.
Left image Right image	Select icons to appear on the left and on the right of the name.
Second level text	Enter a description to appear beside the menu section title.
Active	Select this check box to make the menu section available for use.
Order	Enter a number to indicate where this section appears on the menu relative to other menu sections.
Logged on	Select this check box to display the menu section only if the user is logged on.
Roles	Click the lock to open a list, then select the roles that can access this menu section if you restrict access by role.
Category	Select the category in which the menu section belongs.
Open In	Select the behavior of clicked links.
iFrame	Enter the name of the iFrame where the link opens when a user clicks the menu section title and icon. Make sure that there is an iFrame on the page where the link opens. This field is available only if **Open In** is set to **Named iFrame**.

Field	Description
Header	Enter header information for the menu section.
Footer	Enter footer information for the menu section.

4. Click **Submit**.

Related topics

Menu types

Menu style customization

Configure menu items

Menu items are the links that appear within each menu section.

Before you begin

Role required: content_admin or admin

About this task

Not all navigation menu sections require menu items. Use menu items to link users to other pages or additional information. These steps use the ESS sample portal site as an example.

Procedure

1. Navigate to **All** > **Content Management** > **Blocks** > **Navigation Menus** and select a navigation menu.

   Example
   For example, select the **Documentation Menu**.
2. From the **Menu Sections** related list, select a menu section.

   Example
   For example, select **Getting Started**.
3. From the **Menu Items** related list, click **New**.
4. Complete the form.

   Menu Item form

Field	Description
Name	Type a unique name for the menu item.
Menu section	Select the menu section in which this item appears.
Redirect to	Select what appears when the menu item name and icon are clicked.
URL	Click the lock icon to open the edit field, then enter the URL to open when the menu item title and icon are clicked. This field is available only if **Redirect to** is set to **The specified URL**.
Detail page	Select the content page to open when the name or icon is clicked. This field is available only if **Redirect To** is set to **A content page**.
Image	Select an icon to appear with the name.
Active	Select this check box to make the menu item available for use.

Field	Description
Order	Enter a number to indicate where this item appears on the menu relative to other menu items.
Logged on	Select this check box to display the menu item only if the user is logged on.
Roles	Click the lock to open a list, then select the roles that can access this menu item to restrict access by role.
Category	Select the category in which the menu item belongs.
Open in	Select the behavior of clicked links.
iFrame	Type the name of the iFrame where the link opens when a user clicks the menu item name and icon. Make sure that there is an iFrame on the page. This field is available only if **Open In** is set to **Named iFrame**.

5. Click **Submit**.

Related topics

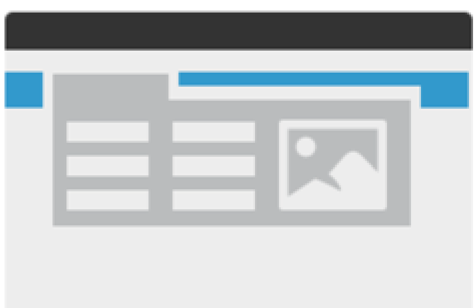
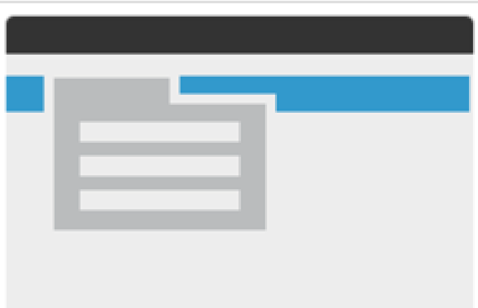
Menu types

Menu style customization

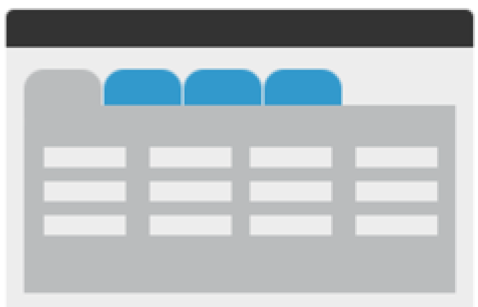
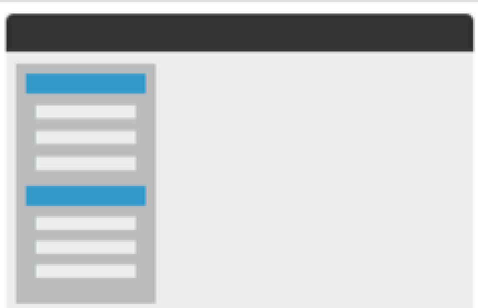
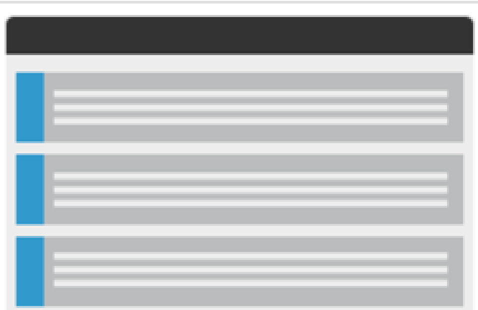
Menu types

By changing the **Type** field on the navigation menu block, you can format the same menu in different ways.

Menu types

Type	Image	Description
Super Menu for Headers		The super menu is a hybrid between the drop-down menu and the tabbed system. The user can use a super menu to create a menu from any number of menus.
Drop-Down Menu for Headers		The drop-down menu renders the menu sections as drop-down list. Use the mouse to point to the menu name and view the menu items.

Menu types (continued)

Type	Image	Description
Tab Menu for Headers		The tab menu renders the menu sections as tabs. Use the mouse to click the tab and view the menu items.
Horizontal Blocks		The horizontal blocks menu renders the menu sections as block headings with menu items as links within the blocks. The blocks are arranged horizontally.
Tab Content Block		The tab content block (horizontal) menu renders the menu sections as tabs with menu items as links within the block.
Vertical List		The vertical list menu renders the menu sections as headings with menu items as links below them.
Vertical Blocks		The vertical blocks menu renders the menu sections as block headings with menu items as links within the block. The blocks are arranged vertically.

Menu style customization

You can customize menu styles in the style sheets your site uses.

Navigate to **Content Management** > **Design** > **Style Sheets** to customize style sheets.

Supplementary page navigation menu example code

In the following example, look at the CSS class selectors and rules. Also, review how the block containers (div.cms_menu_section_blocks) are defined based on the outer container (TD.layout_content_submenu_column). The outer container is actually a part of the site layout.

This concept is clearer if you compare the styles to the styles used in the super menu further down in the example. This example shows that there is no need to make a completely new menu system. You can use CSS to change the look and feel of existing menus.

```
/****************************************************************
****************************************************************
**************************
   SUB MENU VARIATIONS FOR HORIZONTAL MENUS - Section Blocks
 Menu (cms_menu_section_blocks UI Macro)
****************************************************************
****************************************************************
*************************/
TD.layout_content_submenu_column DIV.cms_menu_section_blocks {
    width: 156px;
    height: auto;
    float: left;
    position: relative;
    border-style: solid;
    margin: 0px 0px 0px 0px;
    border: 0px solid #e0e0e0;
    padding: 0px;
    background: none;
    padding: 24px 12px 0px 12px;
}

TD.layout_content_submenu_column DIV.sub_menu_section {
    width: 156px;
    height: 20px;
    float: left;
    border-style: solid;
    border: 0px solid #e0e0e0;
    padding: 0px;
    background: none;
    padding: 0px 12px 0px 12px;
}

SPAN.cms_sub_menu_list_link, TD.submenu_cell A   {
    color: #FFF;
}

TD.layout_content_submenu_column IMG.menu_bullet{
 display: none;
}
```

```
TD.cms_menu_section_blocks_title h2,
 TD.cms_menu_section_blocks_title h2 a,
 TD.cms_menu_tab_blocks_text h2 {
    margin:0;
    padding: 0px;
    font-size: 11px;
    text-transform: uppercase;
    color: #42C4DD;
    font-weight: normal;
    white-space: nowrap;
}

TD.layout_content_submenu_column a.cms_menu_block_item {
    margin:0;
    padding: 0px;
    font-size:11px;
    color:#FFF;
}

TR.layout_content_submenu_row TD.layout_content_submenu_column{
 background: transparent url(sub_menu_background.gifx) repeat-y
 center top !important;
}
```

Super menu sections example code

The following menu is a simple float grid. The defaults are written first. Then, below the "SUPER MENU VARIATIONS..." comment, the defaults are overwritten by adding a containing div with a unique class. In the code that renders the header for the base system, the bottom menu resides in a table cell with the class of `cms_header_bottom_menu` (refer to the TD.cms_header_bottom_menu CSS selector).

```
/***************************************************************
****************************************************************
**************************
   SUB MENU VARIATIONS FOR HORIZONTAL MENUS - Section Blocks
 Menu (cms_menu_section_blocks UI Macro)
****************************************************************
****************************************************************
*************************/

TD.layout_content_submenu_column DIV.cms_menu_section_blocks {
    width: 156px;
    height: auto;
    float: left;
    position: relative;
    border-style: solid;
    margin: 0px 0px 0px 0px;
    border: 0px solid #e0e0e0;
    padding: 0px;
    background: none;
    padding: 24px 12px 0px 12px;
}

TD.layout_content_submenu_column DIV.sub_menu_section {
    width: 156px;
    height: 20px;
```

```
    float: left;
    border-style: solid;
    border: 0px solid #e0e0e0;
    padding: 0px;
    background: none;
    padding: 0px 12px 0px 12px;
}

SPAN.cms_sub_menu_list_link, TD.submenu_cell A   {
    color: #FFF;
}

TD.layout_content_submenu_column IMG.menu_bullet{
 display: none;
}

TD.cms_menu_section_blocks_title h2,
 TD.cms_menu_section_blocks_title h2 a,
 TD.cms_menu_tab_blocks_text h2 {
    margin:0;
    padding: 0px;
    font-size: 11px;
    text-transform: uppercase;
    color: #42C4DD;
    font-weight: normal;
    white-space: nowrap;
}

TD.layout_content_submenu_column a.cms_menu_block_item {
    margin:0;
    padding: 0px;
    font-size:11px;
    color:#FFF;
}

TR.layout_content_submenu_row TD.layout_content_submenu_column{
 background: transparent url(sub_menu_background.gifx) repeat-y
 center top !important;
}


4.2 2. Super Menu Sections Example Code

This menu is essentially a simple float grid. The defaults
 are written first. Then, below the "SUPER MENU VARIATIONS..."
 comment, the defaults are overwritten by adding a containing
 div with a unique class. In the code that renders the header
 for the base system, the bottom menu resides in a table
 cell with the class of "cms_header_bottom_menu" (note the
 TD.cms_header_bottom_menu CSS selector).

/****************************************************************
****************************
   Section Blocks Menu (cms_menu_section_blocks UI Macro)
****************************************************************
***************************/
div.cms_menu_section_blocks {
```

```
    width: 260px;
    height: 260px;
    float: left;
    border-style: solid;
    margin: 0px 0px 12px 12px;
    border: 1px solid #e0e0e0;
    padding: 10px;
    background: url(blue/portal_horizontal_bkg.pngx) repeat-x
 center bottom;
}

p.cms_menu_separator {
    border-top:1px dotted #ccc;
    margin-top: 6px;
    margin-bottom: 6px;
}

td.cms_menu_section_blocks_title h2,
 td.cms_menu_section_blocks_title h2 a,
 td.cms_menu_tab_blocks_text h2 {
    margin:0;
    padding: 0px;
    font-size: larger;
    font-weight: normal;
    color:#444;
}

a.cms_menu_block_item {
    margin:0;
    padding: 0px;
    color:#999;
    font-size: inherit;
}

/****************************************************************
****************************
   SUPER MENU VARIATIONS FOR HORIZONTAL MENUS - Section Blocks
 Menu (cms_menu_section_blocks UI Macro)
****************************************************************
***************************/
TD.cms_header_bottom_menu .cms_menu_super_menu_bar { /*style the
 super menu drop down bar */
   z-index: 199;
   float: left;
   background: none;
   margin-left: 44px;
}

TD.cms_header_bottom_menu div.cms_menu_section_blocks {
    width: 200px;
    float: left;
    border: 0px;
    margin: 0px 0px 12px 0px;
    padding: 0px;
    background: none;
}
```

servicenow

```
TD.cms_header_bottom_menu p.cms_menu_separator {
    border-top:0px dotted #ccc;
    margin-top: 0px;
    margin-bottom: 0px;
}

TD.cms_header_bottom_menu  .cms_menu_super_menu_bar_item {
  /*style an item on the super menu drop down bar*/
   z-index: 200;
   float: left;
   padding-left: 12px;
   padding-right: 12px;
   padding-bottom: 8px;
   padding-top: 4px;
   cursor: pointer;
   cursor: hand;
   font-weight: bold;
   color: #000;
   border-left: 1px solid #FFF;
   border-top: 1px solid #FFF;
}

TD.cms_header_bottom_menu
  .cms_menu_super_menu_bar_item_selected {  /*style a selected
 item on the super menu drop down bar*/
   z-index: 200;
   float: left;
   padding-left: 12px;
   padding-right: 12px;
   padding-bottom: 8px;
   padding-top: 4px;
   cursor: pointer;
   cursor: hand;
   background: #fff url(super_menu_bkg.gifx) no-repeat left top;
   font-weight: bold;
   border-right: 0px solid #CCC;
   border-bottom: 0px solid #CCC;
   border-left: 1px solid #DDD;
   border-top: 1px solid #EEE;

}

TD.cms_header_bottom_menu  .cms_menu_super_menu_content { /*
 style super menu content block */
   position: absolute;
   z-index: 999;
   height:260px;
   display: none;
   padding: 18px;
   background: #dedfe0 url(super_menu_bkg.gifx) no-repeat left
 top;
   border-right: 1px solid #CCC;
   border-bottom: 1px solid #CCC;
   border-left: 1px solid #DDD;
   box-shadow: 5px 5px 6px #666;
   -webkit-box-shadow: 5px 5px 6px #666;
   -moz-box-shadow: 5px 5px 6px #666;
```

```
   filter:
 progid:DXImageTransform.Microsoft.dropShadow(color=#666,
 offX=5, offY=5, positive=true);
}

TABLE.super_menu_video_table {
    background: #787878 url("grey_background.pngx") repeat-y
 scroll center top;
 width: 184px;
}
```

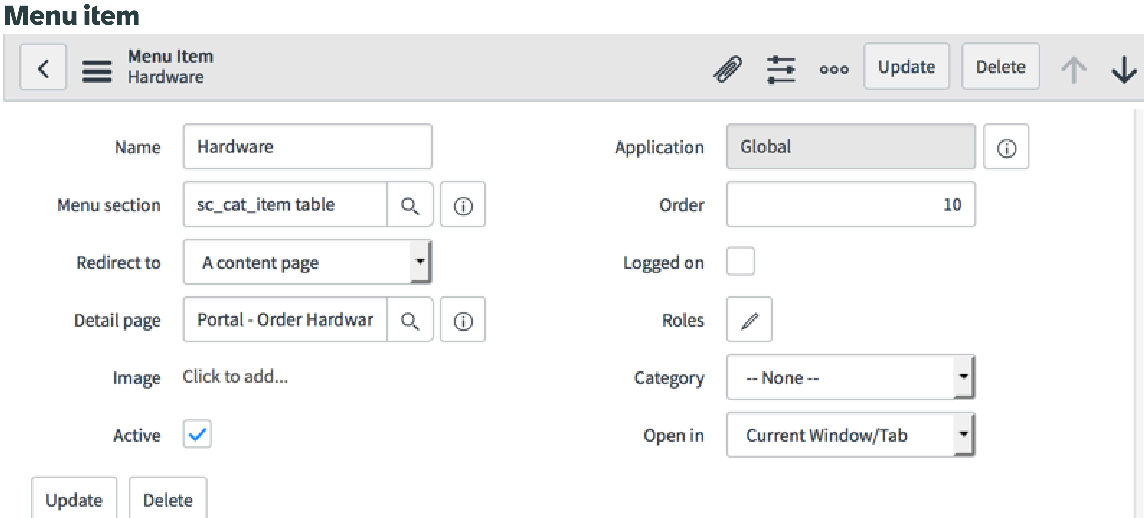
Example menu items and content links

The method for choosing a link target (current window, iFrame, or new window) and referencing the item linked (page, attachment, or URL) are similar. Review examples of how to link within these elements.

- A content page reference helps you select the desired page. For example, the value `home.do` links to the site homepage.
- An attachment reference allows you to reference a single file attached to the menu item or section record. If there is more than one attachment, only the first attachment is referenced. The link is then generated automatically and displays a **Browser File Save** prompt.
- The specified URL reference allows you to link to a full URL string in your instance or from another system. For example, `com.glideapp.servicecatalog_cat_item_view.do?sysparm_id=66c313e7c0a8016b008ebe1a8e3d97f5&sysparm_nameofstack=b654d15bef9` links to the **Ask a Question** record producer. Use this reference to link to a page in an existing intranet system.

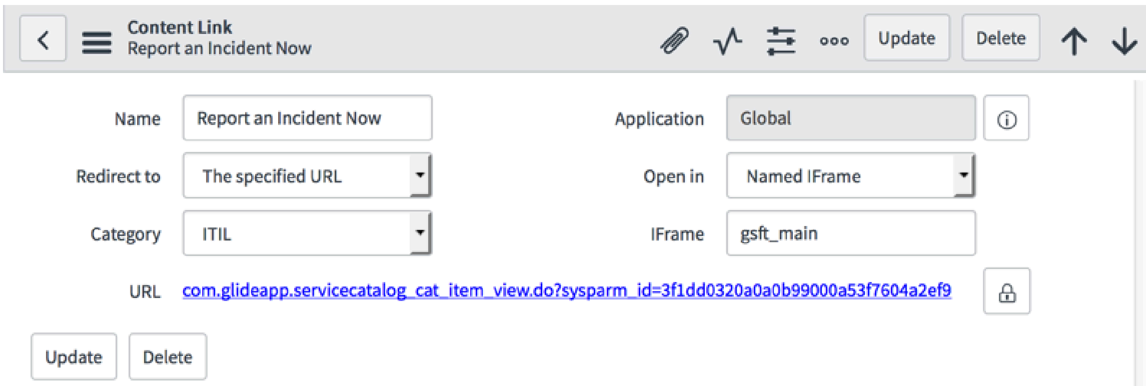
Menu items can be seen as featured links from each section. There are many choices in URL definitions and link options. Links within the ESS Portal open content pages within the site. In turn, each page has an iFrame or set of blocks that houses the corresponding data. This method is useful for rapid prototyping, but consider where to create dynamic detail pages and use the available linking options.

Menu item



Menu items are similar to content links except they are called by the list block, not as part of a navigation menu block. Menu items and content links function the same as far as how they are defined and the options available for linking to items. Content links are meant to be called through a list block that calls the Content Link [content_link] table. Content links do not have the **Logged in** field or the **Roles** option used to control the UI experience for various roles.

Content link



Related topics

View links between system elements and URLs

View menu and list examples

Menu sections define groups of links and how the links behave.

Before you begin

Role required: content_admin or admin

About this task

For example, link behavior determines which page opens when the link is clicked and how it opens, such as in a new page or a new frame. Use the following procedure to view a sample menu section.

Procedure

1. Navigate to **All** > **Content Management** > **Blocks** > **Navigation Menus**.
2. Click **Portal - Block Menu**.
3. In **Menu Sections** related list, click **Order Things**.
4. Click the reference icon next to **Detail Page** to open the page.
5. In **Related Links**, click **Edit Page**.
   By default, the link goes to the Order Things page with the Portal - Order Splash Menu (Vertical Block Menu) in the page content area.

   In most default CMS menus, the menu section has the menu title with secondary text, a separation line, and the links you define as menu items. Although the design is versatile and flows well between pages, there could be questions about linking and scalability to large catalogs. This practice may only be useful for a small catalog with limited items.
6. To view an example of dynamic content, follow these steps to look at the request catalog list/ grid view on the ESS Portal.

   a. Add `/ess/manage.do` to your instance URL.
      For example, `https://<instance name>.service-now.com/ess/manage.do`.

   b. In the **Code Example Demos** section, click **Request Catalog List / Grid View**.

   c. Browse the catalog items.

Configure dynamic blocks

Use dynamic blocks to use scripting or to pull information from the system. Dynamic blocks are where most of your content resides.

Before you begin

Role required: content_admin or admin

About this task

A good use of dynamic blocks is job postings. Store the postings in knowledge articles and display the postings with a dynamic block.

Several dynamic blocks are predefined, including the following items.

- **New Content**: Each of the new content blocks allows for creating blocks while editing content pages.
- **Clean Login**: The default login page requesting user name and password, which includes a "Remember Me" check box. After the user logs in, this block triggers login rules.
- **Login**: An area that allows a logged out user to log in and a logged in user to log out. This block is especially useful on publicly available content pages.
- **Search**: The global text search field. Currently, global text search is the only form of search that can be included in a content page.
- **Search Results**: An area for displaying global text search results.

For information about Apache Jelly, see Jelly tags.

Note: Dynamic Content Blocks in Content Management System are not automatically escaped. These blocks must implement their own content escaping (e.g., to protect against potential Cross Site Scripting attacks). For more information, see Jelly escaping types.

Procedure

1. Navigate to **All** > **Content Management** > **Dynamic**.
2. Click **New**.
3. Complete the Dynamic Content form.

Dynamic Content form

Field	Description
Name	Type a unique name for the dynamic content block.
Category	Select a category to provide organization for the dynamic block. The category also determines the detail page in which dynamic block links open.
Frame	Select a border styling for the dynamic block. For more information, see Format a frame.
Active	Select this check box to make the block available for use.
Conditional	Enter any scripted conditions to be applied. If selected, adds a *Condition* script field to the form.
Two phase	Select this check box to allow two phase Extensions to Jelly syntax.
Dynamic content	Enter the XML script field that determines the behavior of the dynamic block.

Related topics

- Content blocks
- Configure a content block
- View CMS block tags
- Customize the list block
- Format an image as a static HTML block

Catalog cart block

The catalog cart block is a dynamic block provided in the base system.

This block provides the same cart that is available within the service catalog. If the site definition has the **Use external cart** option selected, include this block in the site so users can interact with their catalog cart.

Catalog cart block is available when the *glide.sc.use_cart_layouts* property is set to false.

Related topics

- Content blocks
- Configure a content block
- Types of content blocks

Customize the list block

List blocks are content blocks that dynamically generate a list of links to records within the instance. When a user clicks a link in a list block, the associated information is displayed in a detail page determined by its content type.

Before you begin

Role required: content_admin or admin

About this task

Make the list using a simple query on any table or by scripting a more advanced query. Lists are powerful and flexible. Here are some places that allow you to have complete control over the list display.

List control

Option	Description
Frames	Frames provide a method to create decorative containers for content blocks and other elements within the site. When frames are used with the **Type** field, the designer has complete control over list placement.
List Type	The List Definitions module defines the type of lists available for content pages. On the List Block form, select a list definition in the **Type** field.
List Filtering	Provides every field in the referenced table for more granular results.
Max Entries	Limits the results from a table to fit the design of the block.
Order and	Allows sorting by any field in the referenced table, in either ascending or descending order.

List control (continued)

Option	Description
Order Direction	

You can also use list blocks to create a list of links to information outside your instance. Create the external links as records on the Content Link [content_link] table, and then follow the steps in this procedure.

Procedure

1. Navigate to **All** > **Content Management** > **Lists**.
2. Click **New**.
3. Complete form.

List Block fields

Field	Description
Name	Enter a unique name for the list content block. It is used to identify the record in the instance and is not displayed on the content page. Use the **Title** field for that purpose.
Category	Select a category to provide organization for the list content block.
Type	Select a list definition UI macro to format the list of links. For more information, see Configure list definitions.
Frame	Select a border style for the list block. For more information, see Create a frame UI macro.
Advanced	Select this check box to enable generating a list from a script, rather than from a simple filtered query.
Query	Filters the results using a condition builder.
Active	Select this check box to make the block available for use.
Title	Enter the name to display at the top of the list block when it appears in a content page.
Maximum entries	Set the maximum number of entries to display in this list block.
Table	Select a table to query for the list items. The table determines which detail page displays when a user clicks a link in the list block. For more information, see Configure a content type **Note:** The list shows only tables and database views that are in the same scope as the list block.
Conditional	Select this check box to enable the use of scripted conditions. If selected, a **Condition** script field appears. Other fields that appear include the **Logged On** and **Omit if empty** check boxes.

4. Click **Submit**.

Configure list definitions

List definitions, similar to content management frames, are decorative containers that control the look and feel of lists.

Before you begin

Role required: content_admin or admin

About this task

Specifically, list definitions are UI macros that use Apache Jelly script to define how a list is rendered inside a list block. Site design often requires multiple list styles within the layout. Lists are often the primary form of navigation within a site, so it is important to have control over their formatting.

Configuring list definitions requires a knowledge of Apache Jelly.

Procedure

1. Navigate to **All** > **Content Management** > **Configuration** > **List Definitions** > ..
2. Click **New**.
3. Complete the List Definition form.

Related topics

Content Management and the Apache Jelly engine

Configure a static HTML block

Use static blocks for text that does not change. For example, use a static block for a site footer with only the company or organization name. A static HTML block allows any HTML code to be run within a page.

Before you begin

Role required: content_admin or admin

About this task

Anyone who edits their own HTML, Jelly, or Javascript may find the HTML editor in the static block limited. The HTML editor can also add tags or formats that advanced coders find unnecessary. For more advanced options, use dynamic blocks.

Procedure

1. Navigate to **All** > **Content Management** > **Blocks** > **Static HTML**.
2. Click **New**.
3. Complete the Static Content form.

Static content form

Field	Input value
Name	Type a unique name for the static HTML content block.
Category	Select a category to provide organization for the static HTML block. The category also determines the detail page in which static HTML block links open. Detail pages often display information in different ways.
Frame	Select a border styling for the static HTML block. For more information, see Format a frame.

Field	Input value
Active	Select this check box to make the block available for use.
Conditional	Enter any scripted conditions to be applied. If selected, adds a **Condition** script field and **Logged on** check box to the form.
Static Content	Enter HTML code that determines the behavior of the static HTML block.

4. Click **Submit**.

Related topics

Content blocks

Configure a content block

View CMS block tags

Format an image as a static HTML block

An easy way to add an image to a CMS page is to use a static HTML block. After the block is created, you can reuse it throughout the site.

Before you begin

Role required: content_admin or admin

Procedure

1. Navigate to **All** > **Content Management** > **Design** > **Images**.
2. Click **New**.
3. Select a **Category** to help organize the images.
4. Type the file name of the image, including the extension (such as .png).
5. Upload the file by selecting **Click to add** and browsing for the image.
6. Click **OK**.
7. Click **Update**.
8. Navigate to **Content Management** > **Blocks** > **Static HTML** and click **New**.
9. Paste the following code into the HTML block, substituting the image name as uploaded in the previous step.
   The "x" at the end of the filename is required for image caching.

   ```
   <img src="<image_name>.gifx"/>
   ```

   Now the image is a static HTML block and you can add it to any content page. Use standard HTML code to alter the image in the content block.

Related topics

Content blocks

Configure a content block

Configure a header block

Configure Flash movie blocks

Use a Flash movie block to embed any Flash movie (.swf file) as an attachment or by referencing a URL in a content page.

Before you begin

Role required: content_admin or admin

About this task

To add streaming video or Flash video (.flv), for example, to a knowledge article, see Embed videos in HTML fields .

Procedure

1. Navigate to **All** > **Content Management** > **Specialty Content** > **Flash Movies**.
2. Click **New**.
3. Complete the Flash Movie form.

Flash Movie form

Field	Input value
Name	Type a unique name for the Flash movie block.
Source	Specify where the Flash movie is found. ◦ **Attachment**: If this choice is selected, upload the Flash movie to this record. ◦ **Link to External Object**: If this choice is selected, a **URL** field appears. Specify the Flash movie URL and ensure that the Flash movie is publicly accessible.
Height	Enter the height of the Flash movie in pixels.
Width	Enter the width of the Flash movie in pixels.

4. Click **Submit**.

Related topics

Add and manage attachments

Content blocks

Configure a content block

Configure content links

Use content links to create navigational links to information outside your instance. Content links are the predecessors to navigation menus.

Before you begin

Role required: content_admin or admin

About this task

After the content link is configured, it must be defined in a list block. List blocks use content links to reference information outside of your CMS.

Procedure

1. Navigate to **All** > **Content Management** > **Specialty Content** > **Content Links**.
2. Click **New**.
3. On the form, fill in the fields.

Content Link form

Field	Description
Name	Type a unique name for the content link
Redirect to	Select the location of the external link
Category	Select a category to provide organization for the list content block.
URL	Click the lock icon to open the edit field, then enter the site URL to open when the link is clicked. This field is available only if **Redirect to** is set to **The specified URL**.
Open in	Select the behavior of the clicked link.
Detail page	Select the page where the link opens when it is clicked. This field is available only if **Redirect to** is set to **A content page**.
iFrame	Enter the name of the iFrame where the link opens when it is clicked. Make sure that there is an iFrame on the page where the link opens. This field is available only if **Open In** is set to **Named iFrame**.

4. Click **Submit**.
5. From **Content Management** > **Blocks** > **Lists**, create a list block that references the content links by selecting **Content Link** in the table field.
6. Create a query to determine which external links display on the page.
   For example, the query `Category is Search` displays any external links that have a category defined as **Search**.
7. Click **Update**.

Configure iFrames

An iFrame embeds a URL on a page within a frame. It can embed external pages or render ServiceNow content.

Before you begin

Role required: content_admin or admin

About this task

Configure an iFrame with forms you create in the instance and link to the page in which the iFrame resides.

Note: Do not add any type of report, such as a calendar, to iFrames. For more information on adding a report directly onto a page without using iFrames, see Embedding reports in Jelly.

Note: To deliver ServiceNow content from a web page, see Service Portal instead.

Note: To learn more about this property, see X-Frame-Options: SAMEORIGIN (instance security hardening) in the Instance Security Hardening Settings.

Procedure

1. Navigate to **All** > **Content Management** > **Specialty Content** > **iFrames**.
2. Click **New**.
3. Complete the iFrame form fields.

iFrame form fields

Field	Input value
Name	Type a unique name for the iFrame block.
Frame name	Type a name for the frame on the page. When you use iFrames to present ServiceNow content such as forms or lists, the frame name must be `gsft_main`. This name allows links within the iFrame to open within the iFrame.
URL	Enter the URL to display in the iFrame. If you use the iFrame to display ServiceNow content, start with the page name and do not include the base instance part of the URL. For example, to show the list of requested items, the URL is: `sc_req_item_list.do` Queries can be applied to the URL. For instance, to display a list of open requested items, the URL is: `sc_req_item_list.do?sysparm_query=active=true` For more information, see Navigate to a record or module using a URL.
Sizing	Select an option for iFrame block size. **Note:** The **Expand to fit content** choice only works with ServiceNow content. If *Fixed Size* is selected, height and width fields are displayed for you to enter the size in pixels.

Note: Some browsers suppress iFrames because they use an X-Frame-Options header value of SAMEORIGIN. The X–Frame-Options header was introduced in Internet Explorer 8 RC1, to help detect and prevent frame-based redressing. The SAMEORIGIN value causes the browser to render a blank page instead of the target page of the <frame> or <iframe> when the frame target is not on the same origin as the page itself. Support for this header has been implemented in Safari 4.0, Chrome 4.1.249.1042, and Firefox 3.6.9 and above.

Related topics

Content blocks

Configure a content block

Integrate Live Feed with CMS

You can provide access to Live Feed from pages built in the Content Management System (CMS). For example, allow an end user to access your company feed via the ESS portal.

Before you begin

Role required: content_admin or admin

About this task

The ESS Portal template includes the **Portal - Live page** and **Live Feed** dynamic block (requires the Live Feed plugin). To provide access to Live Feed from CMS pages, add the Live Feed dynamic block to a CMS page or include the **Portal - Live page** in a site.

Procedure

1. Navigate to **All** > **Content Management** > **Specialty Content** > **iFrames**.
2. Click **New**.
3. Complete the iFrame block form with the following values.

iFrame values

Field	Input value
Name	Type a unique name: `Live Frame`
Frame name	Type a frame name: `live_frame`
URL	Enter `https://instance name/live_feed.do?sysparm_doctype=true` . Replace instance name with your instance URL, for example, `<myinstance>.service-now.com`.
Sizing	Select **Fixed Size** and enter height and width pixel dimensions according to the page on which you plan to display the feed. For example, enter a width of 1024 and height of 768.

4. Click **Submit**.
5. Complete the steps in Add the block to a page.

Related topics

Content blocks

Configure a content block

iFrame methods

The following examples show how system records are pulled into an iFrame that is placed on a content page.

For system lists or forms, use the frame name **gsft_main** so that links work properly.

- **Order Hardware** is an example of linking to a catalog category.
  - URL: `com.glideapp.servicecatalog_category_view.do?sysparm_parent=d258b953c611227a0146101fb1be7c31&sysparm_view=`
  - Frame name: **gsft_main**
- **My Approvals List** is an example of linking to a list with a view filter and a JavaScript that reference the authenticated user.
  - URL: `sysapproval_approver_list.do?sysparm_query=approver=javascript:getMyApprovals()&sysparm_view=ess`
  - Frame name: **gsft_main**
- **Service Catalog Home Page (system)** references the system catalog page within the Service Catalog application. If you are satisfied with the way the catalog looks, this method is an easy way to bring the page into a CMS design.

- URL: `catalog_home.do?sysparm_view=catalog_default`
- Frame name: **gsft_main**

- **Problem Management Overview** references a homepage. `../` makes the URL string relative to system homepages. Without it, the URL string resolves to the default CMS homepage reference in the site.
  - URL: `../home.do?sysparm_view=problem_overview`
  - Frame name: **gsft_main**

Configure a detailed content block

A detailed content block displays the content of an existing document, such as an incident, knowledge article, or service management request. The document type determines the page that a list of documents points to.

Before you begin

Role required: content_admin or admin

About this task

The block works with content types in the **Default detail page** field. For more information, see Configure a content type.

If you plan to use a script to find a document, configure the form to add the **Script** field if it is not displayed.

Procedure

1. Navigate to **All** > **Content Management** > **Configuration** > **Page Detail Settings**.
2. Click **New**.
3. Complete the Detailed Content form.

Detailed Content form

Field	Description
Name	Type a unique name for the Detailed Content block.
Category	Select a category to provide organization for the detailed content block. If the block **Type** is **Show the page's current document**, the category displays content from any link of the same type.
Frame	Select a border styling for the detailed content block. For more information, see Format a frame.
Model Document	Select the document to display by default.
Active	Select this check box to make the block available for use.
Type	Select the behavior for the block. ◦ **Show a Specific Document**: Displays the **Model Document**. ◦ **Show the page's current document**: Displays the currently selected document. ◦ **Use a script to find a document**: Uses the **Script** field to select a particular document.

Field	Description
Conditional	Select the check box and enter any scripted conditions to be applied. Selecting this check box adds a **Condition** script field and **Logged on** check box to the form.
Script	Enter a script to find an appropriate document if the **Type** is set to **Use a script to find a document**. Set the **Return** to the GlideRecord of the desired document.

4. Click **Submit**.

Related topics

Content blocks

Configure a content block

Content Management and the Apache Jelly engine

Apache Jelly is a Java-based and XML-based scripting and processing engine for turning XML into executable code.

The Apache Jelly engine closely resembles XML and should be comfortable for developers familiar with JavaScript, XML, XHTML, or HTML. In the ServiceNow instance, the Apache Jelly engine renders items such as forms, lists, and UI Pages. Apache Jelly code renders well within a dynamic content block, but can have issues when used in static blocks. You can use Jelly tags, calls, and statements, but HTML acts just like XHTML.

```
<?xml version= "1.0" encoding= "utf-8" ?>
<j:jelly trim = "false" xmlns:j = "jelly:core" xmlns:g = "glide"
 xmlns:j2 = "null" xmlns:g2 = "null" >

 <j:if test = "${current_page.getName()=='Solutions'}" >
 <h1 class = "page_name" > <b> <a href =
 "solutions.do?" title = "${gs.getMessage('Solutions')}"
 >${gs.getMessage('Solutions')}</a> </b> </h1>
 <p class = "page_description" >
       ${current_page.getDescription()}
 </p> <br />
 </j:if>
 <j:if test = "${current_page.getName()=='IT 3.0'}" >
    <h1 class = "page_name" > <b> <a href =
 "solutions.do?" title = "${gs.getMessage('Solutions')}"
 >${gs.getMessage('Solutions')}</a> </b> |
 ${current_page.getName()}</h1>
    <p class = "page_description" >
       ${current_page.getDescription()}
  </p> <br />
  </j:if>
  </j:jelly>
```

Ensure that all tags are closed. If the tag is not a naturally closing tag, then place a forward slash before the end bracket. For example, a `<BR />` or an `<IMG src="cms.png" />`.

If you are unfamiliar with Jelly scripting, review these topics:

- Jelly tags
- Extensions to Jelly syntax
- Jelly escaping types

Include the following tag with all Apache Jelly scripts.

```
<j:jelly trim= "false" xmlns:j= "jelly:core" xmlns:g= "glide"
 xmlns:j2= "null" xmlns:g2= "null" >
```

The tag looks complex, but keep the following information in mind.

- Apache Jelly script uses multiple namespaces.
- There are two types of prefixes in tags: j and g. The j prefix is used for tags that are natively part of Apache Jelly. The g prefix is used for tags that the ServiceNow platform created and is using for platform purposes.

The j2 and g2 prefixes are just like j and g, except that they are processed in a second phase. The Apache Jelly script parser runs through each j and g tag respectively. For example:

```
<j:jelly trim="false" xmlns:j="jelly:core" xmlns:g="glide"
 xmlns:j2="null" xmlns:g2="null">
 <j:set var="jvar_phase1" value="Hello" />
 <j2:set var="jvar_phase2" value="World" />
 ${jvar_phase1} $[jvar_phase2]
</j:jelly>
```

In phase 1, the parser runs through all the j and g tags. It then caches the result. Before it runs the second phase, it takes the j and g namespaces and moves the namespaces to the second phase. It looks something like the following code.

```
<j:jelly trim="false" xmlns:j="jelly:core" xmlns:g="glide"
 xmlns:j2="jelly:core" xmlns:g2="glide">
 <j2:set var="jvar_phase2" value="World" />
 Hello $[jvar_phase2]
</j:jelly>
```

For subsequent calls of this script, only phase 2 is parsed.

Note: If you plan to use phase 2 Jelly tags (g2 and j2) on the Content Type [content_type] or Dynamic Content [content_block_programmatic] tables, select the **Two phase** option on the content form.

Another example is to create a report of all open incidents assigned to each group. For this purpose, you could use a report and save time, but it is a good example for learning Jelly. Start with the Jelly tag:

```
<j:jelly trim= "false" xmlns:j= "jelly:core" xmlns:g= "glide"
 xmlns:j2= "null" xmlns:g2= "null" >
</j:jelly>
```

First, you need a list of open incidents. Use a `g2:evaluate` tag. The evaluate tag runs the script. Anything inside the tag is parsed like a business rule, so, for example, you can call global business rules, script includes, and gliderecord.

```
<j:jelly trim="false" xmlns:j="jelly:core" xmlns:g="glide"
 xmlns:j2="null" xmlns:g2="null">
 <g:evaluate var="jvar_groups" object="true">
  var now_GR = new GlideRecord("sys_user_group");
  gr.orderBy('name');
  gr.query();
  gr;
 </g:evaluate>
</j:jelly>
```

This script is in phase 1 because frequent changes to incident assignment groups are not expected. Also notice the `var` attribute on the evaluate tag. This attribute specifies what variable is set from this block. At the end of the script, there is a `gr` on a line by itself. That last line is what sets the variable.

You can omit the `jvar_groups` variable, but then all the variables in the evaluate tag become Apache Jelly variables. The `object=true` specifies that the variable is not a primitive data type. If `object=true` is omitted, the script would break because `jvar_groups` would only be able to hold items like integers and strings.

After the evaluate tag, loop through these groups and find the incidents for each one.

```
<j:jelly trim="false" xmlns:j="jelly:core" xmlns:g="glide"
 xmlns:j2="null" xmlns:g2="null">
 <g:evaluate var="jvar_groups" object="true">
  var now_GR = new GlideRecord("sys_user_group");
  gr.orderBy('name');
  gr.query();
  gr;
 </g:evaluate>
 <table>
  <tr>
   <th>Name</th>
   <th>Incidents</th>
  </tr>
  <j:while test="${jvar_groups.next()}">
   <tr>
    <td>${HTML:jvar_groups.getValue('name')}</td>
    <td></td>
   </tr>
  </j:while>
 </table>
</j:jelly>
```

You can include normal XML in the Apache Jelly script at any time. Since there is no namespace, the Apache Jelly script does not try to parse the XML tags. Notice the `j:while` loop. It is a normal while loop and can iterate through a GlideRecord object. Also notice that you output a value with `${HTML:jvar_groups.getValue('name')}`. Here are the important elements:

- The outer brackets, `${}`, specify the output of the variable and the phase in which the variable is output: `${}` means first phase, `$[]` means second phase.
- HTML before the expression is for escaping the output. The expression `jvar_groups.getValue('name')` is being escaped for HTML. For other types of escaping, there are JS (Javascript), NS (No Script), and some other options.

To select only one record and not iterate through many records, the code looks like the following example:

```
<j:jelly trim="false" xmlns:j="jelly:core" xmlns:g="glide"
 xmlns:j2="null" xmlns:g2="null">
 <g:evaluate var="jvar_groups" object="true">
  var now_GR = new GlideRecord("sys_user_group");
  gr.orderBy('name');
  gr.query();
  gr;
 </g:evaluate>
 <j:if test="${jvar_groups.next()}">
  We found ${HTML:jvar_groups.getValue('name')}
 </j:if>
</j:jelly>
```

Content management and Jelly code examples

Code examples

Header Example Code

This dynamic content block needs to be active and have the "Two Phase" option clicked. The g:requires tag is including the UI script defined in the system whose name is "servicenow.website.globals". The file extension in the call is .jsdbx and is used only in the call to the UI script, not in the name of the script in the system. For JSDBX, the file being called is a JavaScript(.js) defined within the database (db) that needs to be cached (x).

```
<?xml version= "1.0" encoding= "utf-8" ?><j:jelly trim
 = "false" xmlns:j = "jelly:core" xmlns:g = "glide"
 xmlns:j2 = "null" xmlns:g2 = "null" >

    <g:requires name =
 "servicenow.website.globals.jsdbx" />

</j:jelly>
```

Page Title and Description Example Code

This dynamic content block needs to be active. There are two actions within this code snippet. First is a forward-looking string container that allows site translation, the ${gs.getMessage('Your Text')} string call). The second action pulls in the page title and description, ${current_page.getName()} and ${current_page.getDescription()}.

```
<?xml version= "1.0" encoding= "utf-8" ?><j:jelly trim
 = "false" xmlns:j = "jelly:core" xmlns:g = "glide"
 xmlns:j2 = "null" xmlns:g2 = "null" >

 <j:if test = "${current_page.getName()=='Solutions'}"
 ><h1 class = "page_name" > <b>
 <a href = "solutions.do?" title
 = "${gs.getMessage('Solutions')}"
 >${gs.getMessage('Solutions')}</a> </b> </h1><p class
 = "page_description" >
       ${current_page.getDescription()}
```

```
 </p> <br /></j:if><j:if test =
"${current_page.getName()=='IT 3.0'}" ><h1 class
= "page_name" > <b> <a href = "solutions.do?"
title = "${gs.getMessage('Solutions')}"
>${gs.getMessage('Solutions')}</a> </b> |
${current_page.getName()}</h1><p class =
"page_description" >
      ${current_page.getDescription()}
 </p> <br /></j:if></j:jelly>
```

List Block Pulling From Knowledge Articles Example Code

This code example contains one of the best tricks in the CMS. Using the type field with draws from a number of defined list definitions to make slight, or very dramatic changes, to list display. Because the UI is open to configuration and innovation, this is a good opportunity to use design skills. Anyone who can use HTML and CSS knows that a basic list can be turned into a float grid or be made inline. The combinations are limited only by what the designer can dream up and code.

In the code example, there is a custom logo field (u_logo) added to the Knowledge form. The custom field displays customer logos, partner logos, and award images on the awards page. There are a number of different sections that use this list definition so efficient reuse is taking place.

- div class="cms_knowledge_list customer_success" - Begin by creating an outer container with a unique class name that can be used as a basis for CSS style selectors and rules. From the outer container, many of the child elements can be accessed for theming.
- <g:for_each_record file="${current}" max="${jvar_max_entries}"> - Loop for list creation that calls the selected table record and the entries set on the list form.
- <a href="knowledge.do?sysparm_document_key=kb_knowledge, ${current.sys_id}"> - Defines linking to the article detail in the knowledge base. For further reference, look at content types within the site definition and you will see some similarities. The knowledge.do? portion of the URL points to the knowledge detail page which (as mentioned above) is mandatory if you plan to call the knowledge base in your CMS site. The rest of the URL represents the syntax for calling a knowledge article by its sys_id. Each and every item housed within the system has a unique sys_id.
- <ttt>${SP}-${SP}${current.author.first_name}${SP}${current.author.last_name}</tt> - This example is commented out and not used, but it is still interesting in that it has a jelly call ${SP} and it pulls the knowledge article's author by first and last name.

```
<?xml version= "1.0" encoding= "utf-8" ?><j:jelly trim
 = "false" xmlns:j = "jelly:core" xmlns:g = "glide"
 xmlns:j2 = "null" xmlns:g2 = "null" >

<div class = "cms_knowledge_list customer_success"
 ><g:for_each_record file = "${current}" max =
 "${jvar_max_entries}" ><br /><table cellspacing
 = "0" cellpadding = "0" border = "0" class
 = "background_transparent" ><tr><td class
 = "cms_knowledge_list_image" ><j:if test =
 "${current.u_logo.getDisplayValue() != ''}"
 ><div class = "knowledge_article_logo" ><a href =
```

```
 "knowledge.do?sysparm_document_key=kb_knowledge,${curr
ent.sys_id}" > <img src =
 "${current.u_logo.getDisplayValue()}" alt =
 "${current.text}" width = "110px" /> </a></div></j:if>

   </td><td width = "100%" ><a href =
 "knowledge.do?sysparm_document_key=kb_knowledge,${curr
ent.sys_id}" target = "_top" ><span
 class = "cms_knowledge_list_link"
 >${current.short_description}</span></a><p class =
 "kb_description" >
     "${current.description}"
     <!--${SP}-${SP}<span
 class="cms_knowledge_list_author">${current.author.fir
st_name}${SP}${current.author.last_name}</span>--></p
></td></tr><tr><td width = "100%" colspan = "2" class =
 "kb_learn_more" ><p class = "kb_learn_more" ><a href =
 "knowledge.do?sysparm_document_key=kb_knowledge,${curr
ent.sys_id}" >Learn More</a></p></td></tr></table>

</g:for_each_record></div>

</j:jelly>
```

Related topics

Content Management and the Apache Jelly engine

Style in Content Management

Content pages can be styled with CSS, just like any HTML website.

Three elements control CSS styles:

- Style Sheets are records containing CSS declarations.
- Themes are groups of style sheets that can be invoked together.
- Frames are UI macros that define the outer border of individual content blocks as they appear on a content page. Frames work by calling on particular definitions in the style sheets.

Related topics

Define a frame in a style sheet

Create a frame UI macro

Style sheets

Styles sheets are standard Cascading Style Sheets (CSS) that define the look and feel of all elements within the interface.

Cascading Style Sheets (CSS) can either be internal (stored in the database) or external (hosted on the server), based on organizational needs. To define an internal style sheet, use standard CSS in the style field. Using external CSS allows the Content Management System to use the same CSS as a corporate website or other online resource.

Use an external style sheet by defining a URL that points to the .cssx file. If you upload a .cssx file to the platform, you can reference the .cssx file using a URL.

Content pages do not reference style sheets directly. To invoke a style sheet, you assign the style sheet to a Theme using the related list on the Theme form.

Related topics

[Customize a design theme]

Design themes

Design themes are the convergence of structure and styling, making them a critical tool for creating a powerful user interface.

For a successful project, review the corporate style guide and communicate with the corporate website art team. If the organization has an art or design department that maintains branding, include them in this process.

A theme is a collection of one or more style sheets (CSS files) that define a consistent look for a set of pages. In most environments, many pages share a few themes. Use multiple themes within a site to create stylistic differentiators between site areas. You can also use a single theme to create one unified look and feel for the site.

Related topics

Define a frame in a style sheet

Create a frame UI macro

Customize a design theme

A theme is a collection of one or more style sheets (CSS files) that define a consistent look for a set of pages.

Before you begin

Role required: content_admin or admin

About this task

Themes can be invoked in any of the following ways.

- Directly by content pages.
- As the default theme of a content site.
- On the configuration page as a global default.

Procedure

1. Navigate to **All** > **Content Management** > **Design** > **Themes**.
2. Click **New**.
3. Type a name for the theme and mark it as Active.
4. Right-click the form header and click **Save**
   The **Style Sheet** related list appears.
5. Use the **Style Sheet** related list to add style sheets to the theme.

Doctypes

The view_content html page template on which all CMS is based defaults to `doctype=html`.

The code looks like the following HTML source code.

```
<!DOCTYPE HTML>
```

If your CMS site does not render properly, remove the doctype from the page by setting the following property: *`glide.html.doctype.pages`* = chat_desktop,live_feed,live_feed_small,navigator,navpage11,image_browse

The following is the default for this property: *glide.html.doctype.pages* = chat_desktop,live_feed,live_feed_small,navigator,navpage11,image_browse,view_content

Setting this doctype offers these benefits for building new sites:

- Incorporating common practice: Use a practice that is becoming widely adopted across the Internet and can prevent certain browsers from running in quirks mode.
- Cleaner CSS and markup: Write more standards-based CSS and markup to promote code sharing.
- A step towards browser compatibility: Find solutions that work across browsers and avoid browser-specific workarounds.

Format a frame

Frames provide a way to manage decorative containers for content blocks and any other elements within the site. For example, one frame can be a container, made of div or span tags, that is styled with rounded corners.

Before you begin

Role required: content_admin or admin

About this task

Individual content blocks use a frame UI macro to define the frames. When viewing a content block form, the **Frame** field offers a choice between the different frame UI macros. The frame UI macro does not, however, have the definition for the frame within its Jelly script. Instead, it references a particular frame as defined in a style sheet.

Configuring a new frame is a two-step process.

Procedure

1. Define the frame in a style sheet.
2. Create the frame UI macro to invoke the frame definition.

Define a frame in a style sheet

Add style definitions for any custom frame UI macro you create.

Before you begin

Role required: content_admin or admin

About this task

Each frame has its own class name.

Procedure

1. Navigate to **All** > **Content Management** > **Design** > **Style Sheets**.
2. Select a style sheet to contain the frame definition.
   Base system themes use a separate **Frames** style sheet.
3. Add the following code, substituting the desired frame name and style:

   ```
   div.FRAMENAME{border:STYLE;}
   ```

4. Click **Update**.

Create a frame UI macro

Copy an existing frame UI macro to display content in a custom frame.

Before you begin

Role required: content_admin or admin

About this task

Create a custom frame UI macro if you want to control the style of the frame with your own style sheet definitions.

Procedure

1. Navigate to **All** > **Content Management** > **Design** > **Frames** and select one of the existing frame UI macros.
2. Change the name to match the FRAMENAME you used in the style sheet.
3. Right-click the header bar and select **Insert and Stay**.
4. Update the frame name in the XML field as shown:

   ```
   <div class="FRAMENAME">
   ```

5. Click **Submit**.

What to do next

- In any content block form, select the UI macro.
- Define the frame in a style sheet.

Related topics

Content blocks

Content Management meta tags

Meta tags are special tags in web pages that contain information about the page but are not rendered with the page. You can define custom meta tags for content pages.

Meta tags are not noticeable to a page visitor unless the visitor looks at the page source code. Web search engines read meta tags as they "crawl" the web, identifying and organizing content. Modern website designers often use meta tags to embed "hints" to search engines about how to index or otherwise crawl the site.

Structurally, a meta tag consists of a tag and a name/content pair and looks similar to the following code.

```
<meta name="generator" content="MediaWiki 1.16wmf4" />
```

The Content Management System allows you to define both site level and page level tags.

Configure a page level meta tag

A page level tag is a meta tag defined on a specific page and included on only that page.

Before you begin

Role required: content_admin or admin

About this task

If an individual page has a specific tag with the same name as the site, the page tag takes precedence.

Procedure

1. Navigate to **All** > **Content Management** > **Pages**.
2. Open the page.
3. If not already included, add the **Meta Tags** related list to the form.
4. In the **Meta Tags** related list, click **New**.
5. Type a **Name** and **Content** for the tag.
6. Click **Submit**.

Configure a site level meta tag

A site level tag is a meta tag is defined on a site and included on every page within that site.

Before you begin

Role required: content_admin or admin

About this task

If an individual page has a specific tag with the same name as the site tag, the page tag takes precedence.

Procedure

1. Navigate to **All** > **Content Management** > **Sites**.
2. Open the site.
3. If not already included, add the **Meta Tags** related list to the form.
4. In the **Meta Tags** related list, click **New**.
5. Enter a **Name** and **Content** for the tag.
6. Click **Submit**.

Configure DIV-based layouts

After you create your site, you can change the site layout with DIV tags.

Before you begin

Role required: content_admin or admin

About this task

Many web page layouts use tables for a consistent look and feel. Tables are effective for numbers and statistics, but can be limiting for designing other types of information. DIV tags are flexible block-element tags. To use DIV tags for layouts, give the tag an ID and assign attributes using CSS.

Changing to CSS and DIV tags help in the following ways:

- simplify code
- reduce the amount of code
- increase page load speed
- separate content from presentation
- help pages adapt to different device resolutions
- make pages easier for search engines to crawl
- make code more compliant with evolving web page design standards

A theme named **Administration Theme - Charcoal** is included as an example of CSS-driven, DIV-based layouts. To view the **Administration Theme - Charcoal** DIV-based layout, complete the following steps.

Procedure

1. Navigate to **All** > **Content Management** > **Design** > **Layouts**.
2. Click **Admin 1 Column**
3. Review the code.

Content meta tag hierarchy

Page and site level meta tags are included in a content meta tag hierarchy.

Site and page level tags

CMS supports page level and site level tags. The system behavior is to show the sum of all page level and site level tags. For example, if you have two tags on the site and one tag on the page, all with different names, you see three tags on the page. Two are from the site and one is from the page. If both the site and the page have a tag of the same name, only the page tag is used.

Note: The Content Management System does not support some commonly used meta tags. For example, you cannot use the X-UA-Compatible meta tag, which allows you to specify which version of Internet Explorer a site should be rendered in.

Example: all tags have unique names

```
 Site Level
Name          Content
breakfast     eggs
lunch         sandwich

Page Level
Name          Content
dinner        steak

Output
Name          Content
breakfast     eggs
lunch         sandwich
dinner        steak
```

Example: page level tag overrides site level tag

```
Site Level
Name          Content
breakfast     eggs
lunch         sandwich

Page Level
Name          Content
lunch         tacos <--- overrides site level
dinner        steak

Output
Name          Content
breakfast     eggs
```

```
lunch         tacos
dinner        steak
```

Content Management integration points

Integration points use content blocks in CMS to link different applications together using static and dynamic methods.

By using integration points, users can connect to different systems from a single page. The power of the CMS is that it can display any data within the ServiceNow platform. The ESS portal, for example, connects users to a service catalog, a knowledge base, and a help and incident reporting site. Each section contains a set of links to additional content. List blocks offer the easiest way to display data dynamically. Content types define how lists link to the detailed data they reference.

Generating lists from the ServiceNow platform is straightforward, especially if you use filtering. When the CMS was first introduced, lists were the only method available to create navigational systems for sites. Content types define system record links using specific templates to define the list and the details.

- Summary template: defines the list
- Detail template: defines the detail as it is rendered in a page.

The templates work together to pass data attributes or Unique record identifier (sys_id) (sysid) into a single detail page that manages the data. Any attribute variations use the URL sent to the page.

Understanding how content types work can mean the difference between a site with 20 pages versus a site with 200 pages. There is a time for both types of data calls. Depending on the task, there are appropriate times to use static content and times for dynamic methods.

View links between system elements and URLs

You can view the links between your system elements and their URLs to render more specific content within your site.

Before you begin

Role required: content_admin or admin

About this task

See the Navigate to a record or module using a URL page for an overview of URL syntax in the ServiceNow platform.

The Incidents list offers a quick example of viewing a form within its own tab. This viewing method illustrates how to append the URL string to render more specific content within your site.

Procedure

1. Navigate to**Incident** > **All**.
2. Right-click in a blank area within the content frame and select **Open Frame in New Window** or **Open Frame in New Tab**.
   The URL returned looks similar to this example.

   ```
   <instance_name>/incident_list.do?
   sysparm_userpref_module=b55b4ab0c0a80009007a9c0f03fb4da9
   ```

   The URL is comprised of the following elements.

- `incident_list.do?` is the call to the list with no parameters passed into it. Explore context menu options and list filtering variations to see how the URL string is appended with each action.
- `incident_list.do?sysparm_query=&sysparm_view=ess` is an example of how the view is passed in the URL string.
- `incident_list.do?sysparm_query=GROUPBYactive&sysparm_view=` is how the URL looks when the **group by** option is chosen from the context menu.
- `incident_list.do?sysparm_query=category%3Dsoftware` is the result of applying a **category is software** filter to the list.

Explore all the options available within the right-click menu. Click through to the Incident form itself (incident.do) to see what the URL string does when parameters are passed into it.

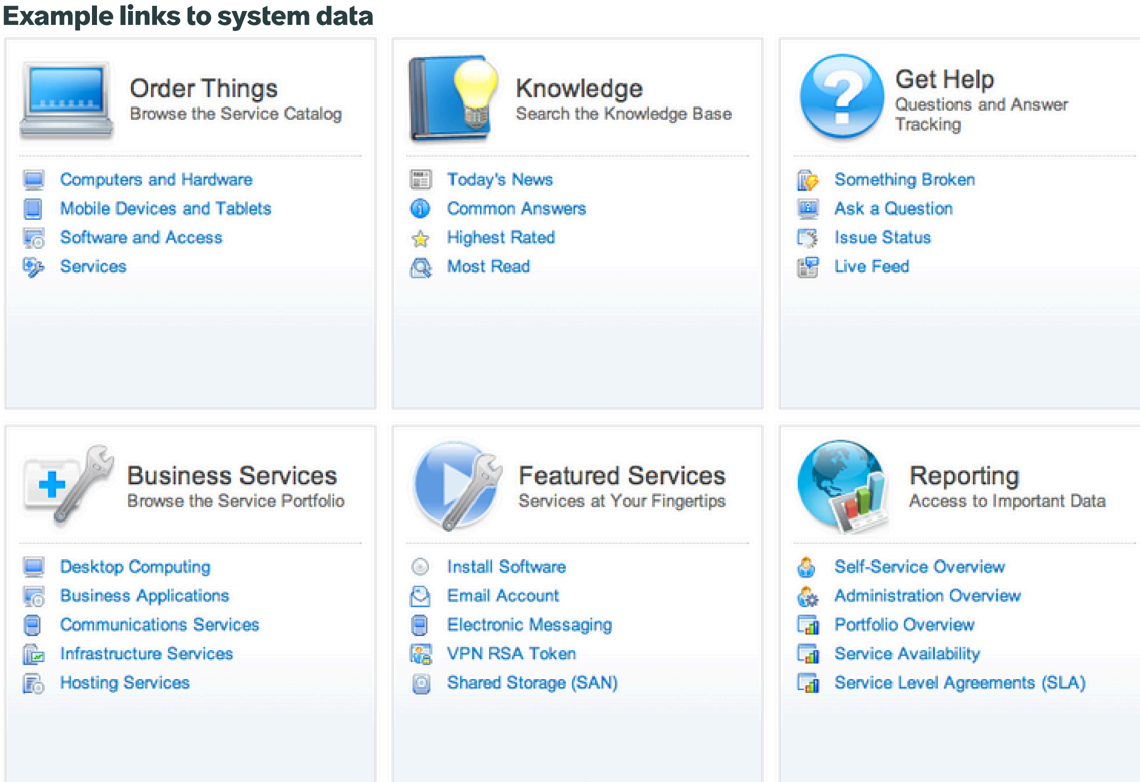
Element link examples

View examples that show how to create a site pointing to various system data in several different data tables.

The following examples illustrate setting up access to the following system data.

- Knowledge: building a versatile front end for a knowledge base, from overview page to variations on the list definitions used in the site.
- Catalog: ideas for a business-to-consumer shopping experience that pulls various items and forms from your service catalog.
- Service Portfolio: using the business service portfolio to contain all defined services offered by your organization.
- Featured reports: methods for linking to the most important reports.

Example links to system data



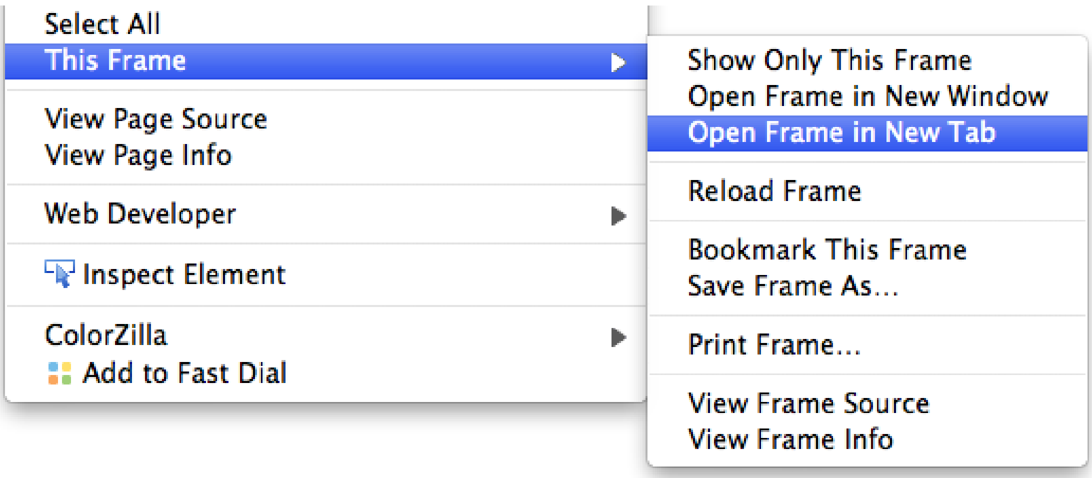
Page source view

Use the tools available in your browser to view the frame source page and understand what URL address bars pass between system frame sets.

The Firefox browser, for example, has the developer tools option. This option provides an easy way to view records that render within the main content frame (`gsft_main`) of the ServiceNow platform. Also, Firefox quickly builds menus and links to records within the system.

This Firefox functionality is useful when stepping through the menu items section.

Frame view

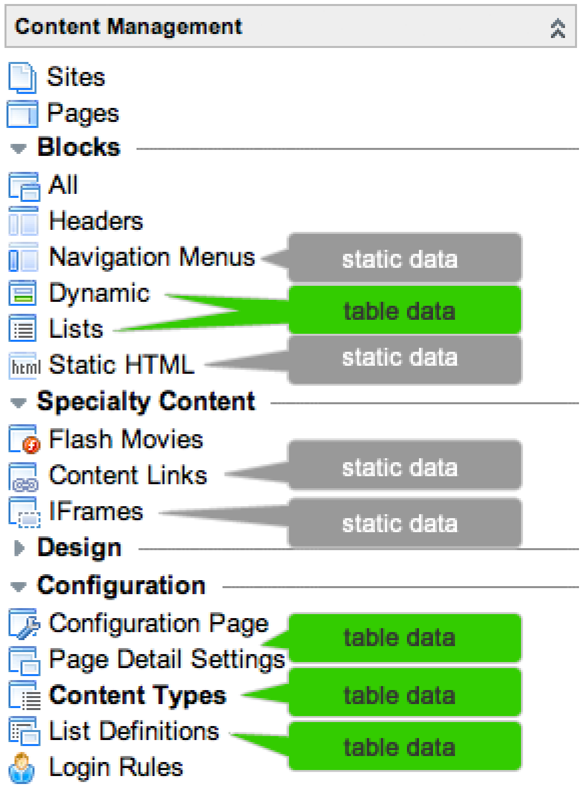


Static methods

Static methods in the CMS application were created for ease of use.

Form-based menu management and WYSYWIG code editing can be useful to both advanced and entry-level users. The technical ability of subject matter experts (SMEs) managing the language of your site can vary considerably. Letting SMEs write the content and having a technical resource manage the linking expedites menu and link creation within the system.

Static and dynamic methods



Navigation Menu Links

Use base system templates to group similar links for placement on the page. Though the terminology is different (menu sections and menu items), this type of linking behaves the same way as content links. For more information on creating a navigation menu block, see Create a navigation menu block.

Static HTML Details

Content blocks that are useful for areas administered by developers unfamiliar with HTML or markup. Anyone familiar with markup can use dynamic blocks because they are extendable. For more information on static HTML, see Using Content Blocks.

Content Links

The predecessors to navigation menus from when the CMS was first introduced. Use content links to make navigational links by defining several content links under the same category. Then, call the links as a list referencing the Content Link [content_link] table.

iFrame Details

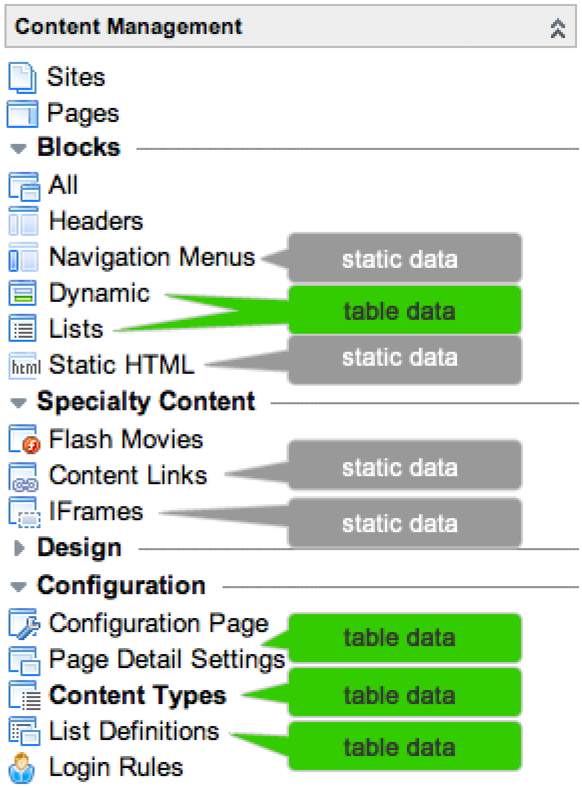
Used both dynamically and statically throughout the system. Using them is an easy way to bring any form or list into your CMS pages. For more information on iFrame methods, see Using Content Blocks.

Dynamic methods

While static methods are a powerful navigational tool, you have more control over data rendering using the dynamic methods.

Reference common code in the system to make long-term maintenance of the site easier. Coding skills are useful when implementing dynamic methods.

Static and dynamic methods



Dynamic Blocks

These blocks are where the majority of your work resides. For more information, see Configure dynamic blocks.

Frames

Frames are meant to be decorative wrappers around any block in the system. They are mentioned with dynamic blocks because frames are essentially UI macros with the category of **Frame**. Frames apply the `${body}` variable to a block and define where the block is inserted when rendered on the page.

Lists

Lists generate links to records based on the filtering rules you define. Lists can be sorted for presentation by any field in the corresponding record. Lists help supplement navigation and pull data from outside the CMS. For more information, see Customize the list block.

Content Types

Content types provide site-specific control of how system data defined as templates is rendered. The rendering of lists is considered first (summary templates). The next consideration is the detail template, which allows control over the record rendering.

List Definitions

List definitions enable you to extend the summary template defaults defined on the site level. Used with frames, list definitions render the same data differently based on the placement on the page or site. For more information, see Configure list definitions.

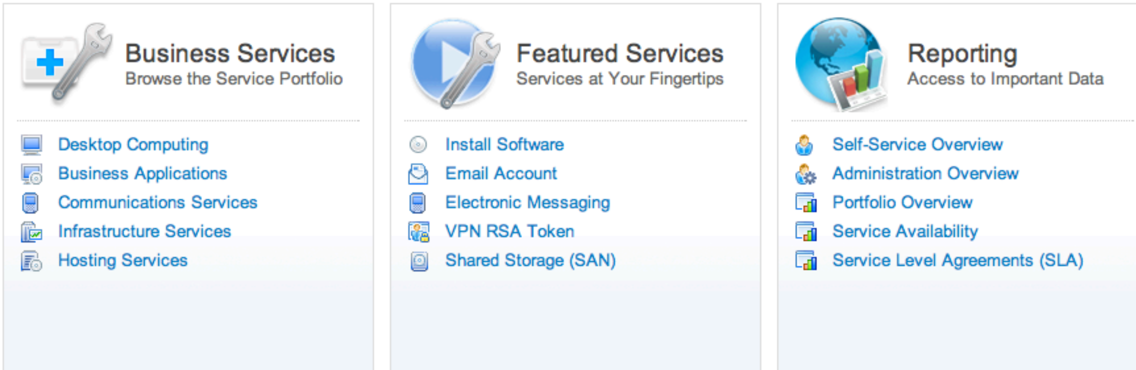
Detailed Content

Detailed content in page detail settings) are blocks that display the content of an existing document as a block on a content page. For more information, see Configure a detailed content block.

Example integration points

Each element on the page links to a specific URL point.

Integration points



Business Services links to a content page (CMS page referenced: Business Service Portfolio, URL: (`business_service_category.do`) that pulls the system service catalog homepage into a frame within the content area. Each link within this section uses the browse by category page, where you pass in the name of the category to return results.

- Target page iFrame URL: `catalog_home.do?sysparm_nameofstack=aabdae07ef221000914304167b22567d&sysparm_view=business&`
- Target page frame name: `gsft_main`
  - **Desktop Computing** URL: `category_browse.do?category=Desktop Computing`
  - **Business Applications** URL: `category_browse.do?category=Business Applications`
  - **Communications Services** URL: `category_browse.do?category=Communications Services`
  - **Infrastructure Services** URL: `category_browse.do?category=Infrastructure Services`
  - **Hosting Services** URL: `category_browse.do?category=Hosting Services`

Featured Services links to a content page which pulls a small subset of services into an iFrame.

- iFrame URL: `com.glideapp.servicecatalog_category_view.do?sysparm_parent=d67c446ec0a80165000335aa37eafbc1&sysparm_view=`
- Frame name: `gsft_main`
  - **Install Software** URL: `catalog.do?uri=com.glideapp.servicecatalog_cat_item_view.do?sysparm_id=10d69689c611227600ffeba41c664824`
  - **Email Account** URL: `catalog.do?uri=com.glideapp.servicecatalog_cat_item_view.do?sysparm_id=d67a86b6c0a80165009386c752cd4a09`
  - **Electronic Messaging** URL: `catalog.do?uri=com.glideapp.servicecatalog_cat_item_view.do?sysparm_id=533798810a0a0b2600f1a03593e19058`

- **VPN RSA Token** URL: `catalog.do?uri=com.glideapp.servicecatalog_cat_item_view.do?sysparm_id=d67b099ac0a80165019d0c276b772502`
- **Shared Storage (SAN)** URL: `catalog.do?uri=com.glideapp.servicecatalog_cat_item_view.do?sysparm_id=cedd458a0a0a0b8300c3b1e32e7a3ac2`

Reporting links to a content page that pulls the reports page into an iFrame. All links within this menu leverage homepages in the system, which creates an issue with the home.do URL. Notice in the following links that ../ is used to create a relative URL outside of the CMS site home.do definition. Without this path, the site homepage would render within the iFrame.

- iFrame URL: `report_home.do`
- Frame name: `gsft_main`
  - **Cost Management Overview** URL: `../home.do?sysparm_userpref_homepage=fa81ae91c0a805c64c0942ab2e4b852b`
  - **Administration Overview** URL: `../home.do?sysparm_userpref_homepage=8b7b11f6c611228901ff3fcfbdb3cc8f`
  - **Portfolio Overview** URL: `catalog_home.do?sysparm_view=business`
  - **Service Availability** URL: `../home.do?sysparm_userpref_homepage=8ee772000a0a0bad00c38eb7e68b93d0`
  - **Service Level Agreements (SLA)** URL: `../home.do?sysparm_userpref_homepage=757e86a30a0006d4010a6851639498d1`

Content Management testing

Test your site to ensure that all pages display correctly, links go to the specified address, and images are not broken. It is important to test the site as you build it. Do not wait until just before launch to begin testing.

Also, test templates as you create them so any issues are resolved before creating other content based on the templates. Recruit as many people as possible to help you test.

Here are some general site testing guidelines:

- Test on the browsers and platforms your site visitors use
- Test on various monitors (for example, LCD and CRT)
- View pages using different screen resolutions
- View pages using different color settings
- Test all navigation and links
- Test items that can be downloaded (for example, PDF files)
- Test the search functionality
- Test site security
- If necessary, test for accessibility (for guidelines, see the W3C Website Accessibility Initiative)

Global search in Content Management

When you add global search to a CMS site, two different search result blocks can display, depending on the user role: global or no global.

Roles are defined at **System Properties** > **Global Text Search**.

- Search Results (Global): For users with permission to use the global search within the normal frame set. The normal frame set is defined as the default, non-CMS user interface with the set of frames.
- Search Results (No Global): For users without permission to use the global search. Searches only the knowledge base and the catalog.

The header search bar and the Search dynamic block in the base system both automatically handle the permissions and direct the user to the appropriate search results. In the base system, the search result blocks are deployed on the same Search Results content page.

In order for the global search to work properly, it is important to ensure that the DEFAULT directs users to a working content page. If not, the results from the global search link back to the frame set, not to pages within the CMS site.

Note: The global search is similar to the normal frame set user interface and ties to the same roles (Set global text search properties).

Search Results (Global)

Before you use the **Search Results (Global)** dynamic block, define Configure content types to control the behavior a search result is clicked. If no content type is defined for a table, selecting a link on that table renders the results according to the **DEFAULT** content type. It is good practice to point the **DEFAULT** content type to a page with a normal "Current Document" detailed block. Set the content type detail (**Detail Template** field) to have just an iFrame.

The **Search Results (No Global)** dynamic block does not require any additional configuration.

CMS translation

You can translate CMS sites by activating internationalization plugins and manually translating custom interface strings.

Two tables support the translation of a CMS site into other languages.

- Translated Name / Field [sys_translated]: Stores strings that are shared or commonly used within a site. These include menu section names, menu item names, site breadcrumb names, link names, and footer menu links. Internationalization plugins typically provide translations for these strings. SeeSystem Localization.
- Translated Text [sys_translated_text]: Stores unique string translations which you create when you manually translate interface elements. See Export and edit translation records.

View a translated CMS site

Activate an internationalization plugin, which provides a quick way to see translated strings for CMS menus, breadcrumbs, and links. For a full translation, you must translate the instance manually.

Before you begin

Role required: content_admin or admin

About this task

This example explains how to view a translated site in Japanese.

Procedure

1. Navigate to **All** > **System Definition** > **Plugins**.
2. In the **Go to** filter, select **Name**, enter `I18N`, and then press the Enter key.
3. Activate both the **I18N - Japanese Translations** and the **I18N: Knowledge Management Internationalization Plugin v2** plugins.
4. Refresh the browser.
5. In the **Language** picker in System Settings, select **Japanese**.
6. Browse the site to see the translated language strings.
7. Navigate to the ESS Portal at `http://Instance Name.service-now.com/ess/`.
8. Browse the site to see the translated language strings in the ESS Portal.

Related topics

Language internationalization support

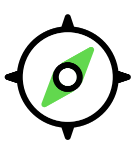
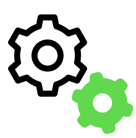
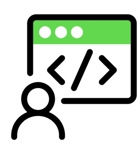
Service Portal

Service Portal allows you to build a mobile-friendly self-service portal experience for your employees or customers. Service Portal is a ServiceNow AI Platform feature that is active by default and interacts with parts of the platform so users can access platform features through portals.

https://player.vimeo.com/video/1088513009?h=944a2d483d&badge=0&autopause=0&player_id=0&app_id=58479

Both beginner and expert developers and can configure portals using Service Portal. Less technical users can make basic configuration changes to the UI using Branding Editor and other components of Service Portal. More advanced users can edit and extend portals, pages, and widgets. Expert users can use the Widget Editor tool to write scripts to power a portal, and even create rich web applications on the ServiceNow AI Platform.

Get started

Explore	Configure	Develop widgets
		
Learn about how administrators, developers, and end users use portals built with Service Portal.	Plan and configure your portal.	Develop custom widgets using AngularJS, Bootstrap, and the ServiceNow API.

Improve SEO	Analyze	Reference
Make public portal pages more findable by improving how external search engines index and rank pages.	Get insights to optimize your portal.	Get details about properties, SCSS variables, and more.

Troubleshoot and get help

- To learn more about what's new and what's changed in Yokohama, see the Service Portal release notes.
- Ask or answer questions in the ServiceNow AI Platform community forum
- Search the Known Error Portal for known error articles
- Contact Customer Service and Support

Exploring Service Portal

Whether you're adapting a base system portal or developing a custom portal, learn more about the available features that help you provide a self-service portal that drives productivity and satisfaction for your employees or customers.

Benefits

Benefit	Feature	Role
Quickly create a self-service portal with an engaging, mobile-friendly user experience using an easy-to-use, modular UI.	• Service Portal Designer • Branding and styles • Widgets	Developer
Empower users with self-service, deflect issues, and drive user productivity and satisfaction by providing simple and immediate access to resources.	• Service catalogs • Knowledge bases • Agent Chat	Administrator
Connect users to what they're looking for in a powerful, consumer-grade search experience.	AI Search	Administrator
Improve how external search engines index and rank public portal pages to make them more findable.	Search engine optimization	Administrator

Benefit	Feature	Role
Monitor metrics and interactions to understand a portal's user experience better and identify how to improve it.	User Experience Analytics	Administrator
Control who accesses your portal and what they can see.	Security	Administrator

Understanding Service Portal

Service Portal provides a modular user interface framework for quick and easy building of application portals and dashboards for the platform. It helps developers and non-technical administrators create attractive and engaging user experiences that drive employee adoption of critical enterprise applications.

How to use Service Portal

Service Portal is an application included in the platform UI, however it includes a visual layer for you to do most of your configuration. In the application navigator, navigate to **Service Portal** > **Service Portal Configuration** to view the configuration page.

The Service Portal configuration page provides a unique, intuitive way of viewing all the pieces of your portal and how they interact with one another. The configuration page allows you to take advantage of a real-time preview, while configuring portal settings. Use each of the tiles on the configuration homepage to assemble the different components of your portal.

If you prefer the platform layout for configuring Service Portal, you still have the option of creating your portal components within the platform UI. The two options are not separate. Everything you create in the Service Portal configuration page also appears in a table in the platform UI.

Who can use Service Portal

Several different kinds of users can configure a portal.

- Limited coding: Service Portal was designed so that even users with limited coding ability or knowledge of the platform UI could set up a portal.
- ServiceNow Experts: Users with an understanding of the ServiceNow platform can create portals, set up URL redirects, and view all the components of the portal in a table. Most portal configuration takes place in the Service Portal configuration page, but in specific circumstances, Service Portal administrators may need to do additional configuration directly within the platform.
- Developers: Advanced customizations and new widget creation are tasks for a developer or someone who understands AngularJS and Twitter bootstrap.

In all cases, the user configuring a portal must have the **admin** or **sp_admin** role.

Basic concepts

You should have a basic understanding of all the following components that make up a portal:

- Themes: Themes define the look and feel of the whole portal, but can be overridden by other style configurations.
- Pages: Pages control where and how you store portal content. Pages do not have a defined relationship to portal records, they simply exist.

- Widgets: Components in Service Portal are called widgets. You can use HTML templates, CSS, client scripts, server scripts, and any JavaScript dependencies to define what a widget does. From an AngularJS standpoint, widgets are essentially a superset of an Angular directive.
- Most of the data in Service Portal is managed in different locations throughout the system.

  For example, if you are building a knowledge portal, the data exists in Service Portal, but the knowledge articles are authored and managed in the Knowledge application. The same is true for any other type of content you plan to leverage. Take time to understand which tables contain and control the data you are working with in Service Portal.

Before you begin

Take the following into consideration before configuring Service Portal:

- Who are you building your site for and why?
- What information do you want to include in your site?
- What do you want the mobile experience to be for users?
- Which platform applications do you plan to use in your portal?

  You can use parts of the platform, such as knowledge articles and catalog items, as the content for your portal.

  For example, if you are building a knowledge portal, the content displays in Service Portal, but the knowledge articles are authored and managed in the Knowledge application. The same is true for any other type of content you plan to leverage. It is important to take time to understand the table structure of data to become acquainted with content.
- How customized is your service catalog? Catalog client scripts and UI policies only work in Service Portal if they use the mobile GlideForm API, so you may need to make some changes.

Additional resources

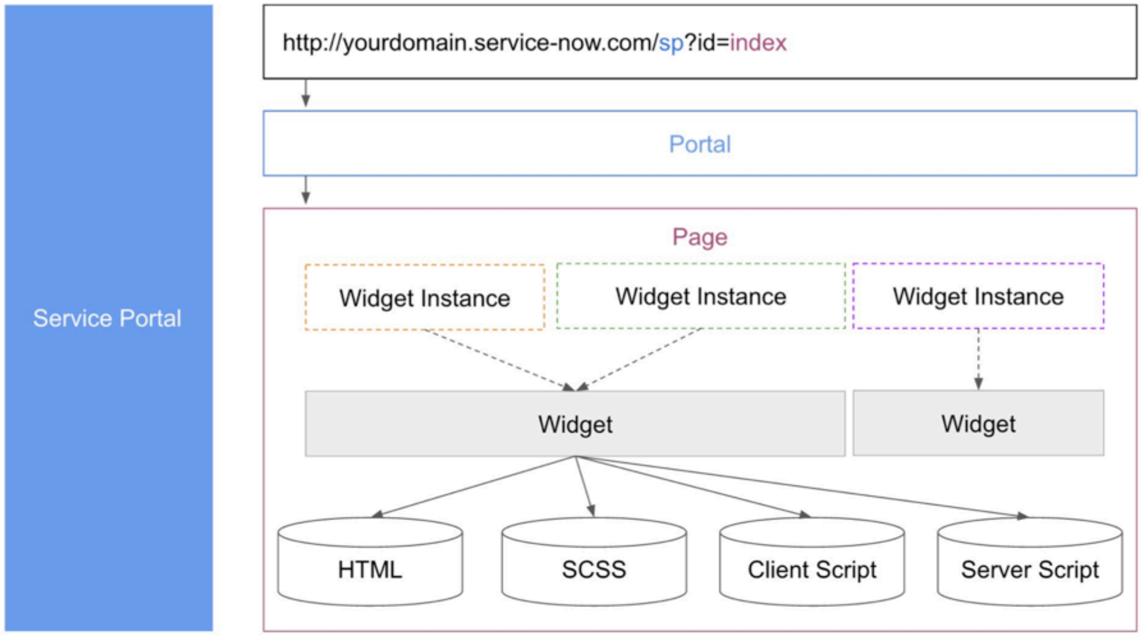
Service Portal is built using several well known technologies. Use the following websites as resources to help you understand and configure your portal:

- Twitter Bootstrap
- CSS 3 Flexbox
- AngularJS

Service Portal core concepts

Service Portal contains two parts: a framework and a portal. The framework is composed of a set of APIs, Angular services, directives, and tools that help to build portals. The portal is a group of pages linked by page IDs.

Service Portal overview diagram



After you enter a URL, the framework uses the suffix and picks the appropriate portal to determine the theme and configurations. Then it loads the configured default portal homepage unless the URL has a specified ID.

Each widget added to a page becomes its own instance. A widget instance is basically the application of a widget in a page. Because widgets are reusable and can appear on different pages to do different things, the manifestation of a widget on a page is referred to as a Widget Instance. The page loads with content represented by widgets.

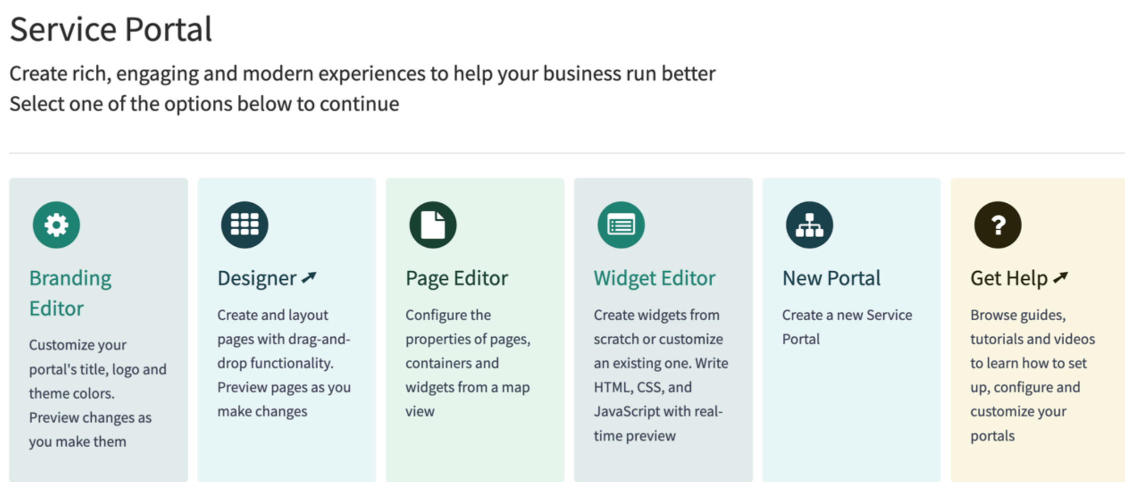
Widget instances get their logic from the base widget template, client scripts, server scripts, and depending on the widget, CSS.

Service Portal configuration page

Most Service Portal configuration is accessible through the Service Portal configuration page landing page.

In your instance, access the Service Portal configuration page by navigating to **Service Portal** > **Service Portal configuration**. The Service Portal configuration page opens in a new tab in your browser.

Service Portal configuration page



You can also access the configuration page by appending your URL with sp_config. For example, `https://<instance name>.service-now.com/sp_config`.

Use each option on the Service Portal config page to set up the different parts of your portal.

Page navigation in Service Portal by URL

You can navigate to a portal or a page in Service Portal using a URL.

Service Portal URLs have the following structure:

```
https://<instance>/<portal suffix>/<guest
 language>/<keywords>?id=<page id>&lang=<language>&<page
 parameters>
```

Element	Description
instance	Unique, secure web address for each instance. The default format is `https://<instance name>.service-now.com`.
portal suffix	Suffix established for the portal. For example, `/sp`.
guest language	The language ID of the portal language. For example, `es` for Spanish. The page returns in the language specified if the language is active and the user accessing the page is a guest user.
keywords	Human readable keywords that improve search engine optimization (SEO) and click-through rates for public pages. Human readable URLs also help users understand what to expect on a page for public and non-public pages. For example, `https://<instance>/kb/en/faq/what-is-a-cookie?id=kb_article_view&sysparm_article=KB0000007`. For more information, see Add human readable keywords to page URLs.
id	The ID of the page to navigate to within the portal frame. For example, `?id=index`.
language	The language ID of the portal language. For example, `lang=es` for Spanish. The page returns in the language requested if the language

Element	Description
	is active and the user accessing the page is a guest user or an authenticated user without a language preference set.
page parameters	Additional parameters are required by some pages to load dynamic content by looking up a record (table, sys_id). Find the `$sp.getParameter` calls in a widget server script to see the parameters that a widget uses. For more detail on this method, see GlideSPScriptable - Scoped. If you don't include these additional parameters when required, you might get a `You are either not authorized or record is not valid` error message.

For example, the URL for a public knowledge base page in Spanish in Service Portal could be `https://<instance>/sp/es/faq/what-is-a-cookie?id=kb_article&sys_id=KB0000007`.

Note: If you use article versioning with the Knowledge Management - Service Portal (com.snc.knowledge_serviceportal) plugin, you must add the article version number to the URL to open a knowledge article in the base system or knowledge portals. For example, instead of accessing an article using the URL `https://<instance>/sp?id=kb_article&sys_id=KB0000005`, you must include the article version number: `https://<instance>/sp?id=kb_article&sys_id=KB0000005%20V1.0`. To learn more, see Article versioning.

Referencing a page ID

Widgets and widget instance options reference Service Portal pages using the page ID. For example, a link to the sc_home page within a widget HTML template might appear as follows:

```
<div><a href="?id=sc_home">${Order something...}</a></div>
```

Content Management and Service Portal

Service Portal is a compelling alternative to the Content Management System (CMS) with a refined user experience. It does not duplicate CMS or platform UI functionality. Users who have sophisticated experiences delivered through CMS may need to invest time into transitioning to Service Portal, especially if the CMS implementation includes complex and customized Service Catalog forms.

Service Portal compatibility with existing CMS sites

ServiceNow continues to support CMS in current and upcoming releases. If you have existing CMS sites and activate Service Portal on your instance, your CMS sites will continue to work, as CMS and Service Portal are separate applications.

Differences between Service Portal and CMS

Service Portal is an alternative to CMS based on more modern technologies. Major differences include:

Underlying technology

CMS uses Jelly, which is not a widely used technology. Service Portal instead uses AngularJS, server-side JavaScript, HTML, and CSS. Any scripts that use Jelly do not work in Service Portal. Building widgets in Service Portal requires knowledge of AngularJS.

Visual layer

CMS uses iFrames which can be difficult to work with, limited in terms of styling, and susceptible to upgrade issues. Alternatively, Service Portal is a self-contained application that accesses data from other tables on the platform. This enables fine-tuned control over style and responsive design.

Mobile first

Unlike CMS, Service Portal is optimized for a mobile environment. For this reason, the following apply to the Service Portal environment:

- Any scripts used in Service Portal can only use APIs supported in a mobile environment. For example, some APIs used in your Service Catalog client scripts may not be supported. For a list of supported APIs, see Service Portal and client scripts.
- Service Portal forms support a maximum of two-columns. As a result, any highly customized Service Catalog forms, such as catalog items and record producers that use containers and variable sets, must be simplified to work in a two-column layout.

If transitioning to Service Portal, review the following resource: Mobile client GlideForm (g form) scripting and migration.

To understand how core CMS components are configured in Service Portal, refer to the following table.

CMS and Service Portal components

CMS component	Service Portal equivalent
Content site	Portal
Content page	Page
Content types	Content types link a table to a content page. In Service Portal, content types are no longer required. Record data is queried and displayed using base system widgets. You can add widgets to any number of Service Portal pages. Learn more: Using portal widgets.
Layout and dropzones	In Service Portal, pages are made up of containers, rows, and columns. Learn more: Pages.
Content block	A content block is a reusable piece of content. In Service Portal, content blocks are replaced by widgets. Learn more: Using portal widgets.

CMS and Service Portal components (continued)

CMS component	Service Portal equivalent
Service Catalog	Service Catalog pages are rendered using the SC Catalog Item widget in Service Portal. For this reason, Service Catalog forms such as catalog items and record producers are shared between your CMS implementation and Service Portal. If you have a highly customized Service Catalog, you may need to invest time in simplifying your Service Catalog items and client scripts so that they render as expected in Service Portal. Learn more: Service Catalog forms in Service Portal.
Theme	Theme
CSS	CSS

CMS and Service Catalog customizations

Service Portal comes with base system widgets to address common use cases and to display record data. Even though there is no direct migration path from CMS to Service Portal, there may be some items, such as catalog items or knowledge articles, that render as expected in Service Portal without any effort.

However, because Service Portal is supported in a mobile environment, you may need to modify any customized forms and scripts. This approach ensures that the items display well on a mobile device and present a better user experience. Before transitioning to Service Portal, you may need to:

- Refactor client scripts used in your CMS/Service Catalog to use supported mobile APIs and global objects. For a list of supported APIs, see Service Portal and client scripts.
- Build widgets to replace UI Macros and other unsupported scripts. If using a UI Macro in a catalog item form and referencing values on the form, you can use the following workaround instead: Replace a Service Catalog form script with a widget.
- Simplify any complex forms used in your Service Catalog to fit the Service Portal two-column form layout.
- Consider which release supports the required functionality. You may want to upgrade your instance before transitioning to ensure that you have the required base system features.

CMS to Service Portal transition

Your CMS may include complex forms and customizations that do not render as expected in Service Portal. Use this guide to understand how best to modify your CMS and Service Catalog implementation for Service Portal adoption, and to understand how a conversion may affect your users.

If you are considering transitioning from CMS to Service Portal, make sure that you understand the impact of moving to a mobile environment. Review the Mobile client GlideForm (g form) scripting and migration.

Note: For information about redirecting CMS users to Service Portal, see the How to automatically redirect users who navigate to any CMS pages to Service Portal [KB0722455] article in the Now Support Knowledge Base.

Support level and transition actions

CMS component	Service Portal support	Possible transition actions
Data lookups	The client-side component of a data lookup is not supported in Service Portal. However, the data lookup is applied in the platform when a record is submitted or updated in Service Portal.	While data lookups are not applied in the Service Portal, the record updates as expected in the platform UI when submitted or updated in the Service Portal. If your CMS is used by requesters only, this limitation may not affect your implementation.
Content blocks	Because Content blocks use Jelly, they are not supported in Service Portal .	In the Service Portal, content blocks are replaced by widgets. Widgets are highly customizable components that can query record data, display and update records, and gather user input. Base system widgets generally cover most use cases. Just as you add content blocks to a page in your CMS, you can add widgets to a page using the Service Portal Designer.
UI Macros	Because UI Macros use Jelly, they are not supported in Service Portal.	• In Service Portal, you can use widgets instead of UI Macros. Base system widgets generally cover most use cases, but for custom solutions, you can develop new widgets using AngularJS. • If your implementation includes UI Macros in Service Catalog forms that reference other fields or variables in the form, you can embed the widget inside a Service Catalog variable. Learn more: Replace a Service Catalog form script with a widget.
UI actions	All server-side UI actions are supported in Service Portal, although `setRedirectURL()` operations are ignored because Service Portal forms handle redirection in a different way than the platform. The form widget ignores all UI actions marked as Client.	• Refactor any UI actions to remove `setRedirectURL()` operations. • Check that UI actions are not marked as client.

<table>
<tr><th>CMS component</th><th>Service Portal support</th><th>Possible transition actions</th></tr>
<tr><td>Catalog client scripts</td><td>Only UI Type options Mobile / Service Portal and All are supported. UI type Desktop is not supported in Service Portal. For a list of supported APIs, see Service Portal and client scripts.

Note: Synchronous JavaScript calls are not supported in Service Portal and must be replaced by asynchronous calls. For example, the <code>getXMLWait()</code> method of the GlideAjax class is not supported in Service Portal. Instead, use one of the following supported asynchronous methods:
<code>getXML(Function callback)</code>
<code>getXMLAnswer(Function callback)</code>
For additional information on GlideAjax, refer to GlideAjax.

To understand the impact of updating your CMS to work in a mobile environment, review Mobile client GlideForm (g form) scripting and migration.</td><td>Update your scripts to remove any unsupported client APIs.
Check that the script UI Type is set to Mobile / Service Portal or All.</td></tr>
<tr><td>UI policies</td><td>Scripted UI policies can only use APIs supported in Service Portal. For a list of supported APIs, see Service Portal and client scripts.</td><td>Update your scripts to remove any unsupported client APIs.</td></tr>
<tr><td>Service Catalog variables</td><td>Service Catalog variables are supported in Service Portal with the following exceptions:
UI Macros and UI pages variable types are not supported.
Validation Scripts for variables are not supported. Supported validation types include:</td><td>If embedding a widget in a catalog item form, you can use the UI Macro variable type. Learn more: Replace a Service Catalog form script with a widget.
If using variable with annotations, make sure to test your catalog items in Service Portal to ensure that help text displays as expected.</td></tr>
</table>

CMS component	Service Portal support	Possible transition actions
	◦ The **Mandatory** field on the variable form. ◦ Read-only variables. ◦ All fields in the **Availability** tab of the variable form. • Default variable size is not supported. • Expanding and collapsing help text is not supported. Rather, the **Help text** and **Instructions** fields defined in the Annotations tab on the variable form are always expanded. The **Help tag** does not display. • The List Collector variable displays as a choice list instead of a slushbucket in the Service Portal.	
Order guides	Order Guides in Service Portal use the Order Guide widget.	Large order guides can cause performance issues in the Service Portal. If you have large order guides, you can: • Break them into multiple order guides. • Simplify variables used in the order guides. • As a temporary solution, you can render the Service Catalog item using an iFrame. See Service Catalog forms in Service Portal.
Record producers	Record producers are used in Service Portal with the following differences: • The sort order for catalog items in record producers is not honored. • Date values do not honor time zone when the record producer submits a record.	Make sure to test all record producers used in Service Portal to make sure that they behave as expected.
Login scenarios and redirects	In CMS, you used the CMSEntryPage script include to define login scenarios. Instead, Service Portal uses the SPEntryPage script include and related system properties to define login scenarios. Redirects are not supported in Service Portal.	In Service Portal, define login behavior by modifying the SPEntryPage script include and setting system properties. For more information, see Single sign-on, logins, and URL redirects.

CMS component	Service Portal support	Possible transition actions
Service Catalog forms	Service Catalog forms such as catalog items and record producers are rendered within widgets in a two-column layout. Complex forms may not display as expected. • Only the top-level container settings are honored. If there are other containers within the top-level container, they are rendered as a single column. If there are container splits or nested containers within these additional containers, they are rendered as a single column. A top-level container is not a child of any other container. • There can be a maximum of two columns in Service Portal. If your implementation includes forms with more than two columns, the fields are reorganized into two-columns in Service Portal. • Variable sets are treated as containers. All previously listed rules apply to variable sets as well as any containers within them. • Default variable size is not supported in Service Portal.	• Simplify any complex forms in your Service Catalog. • As a temporary solution, you can render the Service Catalog item using an iFrame. See Service Catalog forms in Service Portal.
Shopping cart	The Service Portal includes a base system Shopping Cart widget.	Use the Shopping Cart widget.

Supported features in Service Portal

Service Portal is an alternative presentation layer for the platform. As such, not all features of the platform are extended to Service Portal. Consider your full application and the abilities of Service Portal before making considerable investments.

Not currently supported

Domain separation at Levels 1-3. However, Service Portal does include support for domain separation at the **Data only** level. For more information, see Application support for domain separation and Domain separation and Service Portal.

No plans to support

- @ Mentions
- Click-through/pop-ups
- Embedded HTML outside of HTML fields

- Embedded lists
- UI macros
- Formatters
- UI actions marked as **Client**
- Nested container Catalog variables
- Survey wizards
- OpenFrame

Service Catalog forms in Service Portal

Service Catalog forms are rendered within Service Portal widgets in a two-column layout. Complex forms may not display as expected.

Recommendations when creating Service Catalog forms

Use the following recommendations as a guide to building scalable forms that can be used in both applications:

- Keep forms simple. Because forms with multiple containers, variable sets, and client scripts do not always display as expected in Service Portal, keep forms short to eliminate conversion and debugging issues.
- Think in mobile. Any support for Catalog Client Scripts or Catalog UI Policies is the same as in mobile. Review the following resource: Mobile client GlideForm (g form) scripting and migration.

Form rendering in Service Portal

Containers and variable sets within Service Catalog forms are translated into a two-column layout when implemented in Service Portal. Service Catalog forms are rendered in Service Portal using the following rules:

- Only the top-level container settings are honored. If there are other containers within the top-level container, they are rendered as a single column. If there are container splits or nested containers within these additional containers, they are rendered as a single column. A top-level container is not a child of any other container.
- There can be a maximum of two columns in Service Portal. If your implementation includes forms with more than two columns, the fields are reorganized into two-columns in Service Portal.
- Variable sets are treated as containers. All previously listed rules apply to variable sets as well as any containers within them.
- Default variable size is not supported in Service Portal.

For other forms in the platform, the view determines how the form displays in Service Portal. For base system tables, the form opens in the Service Portal using the **Service Portal** Table form views.

Example layout conversions

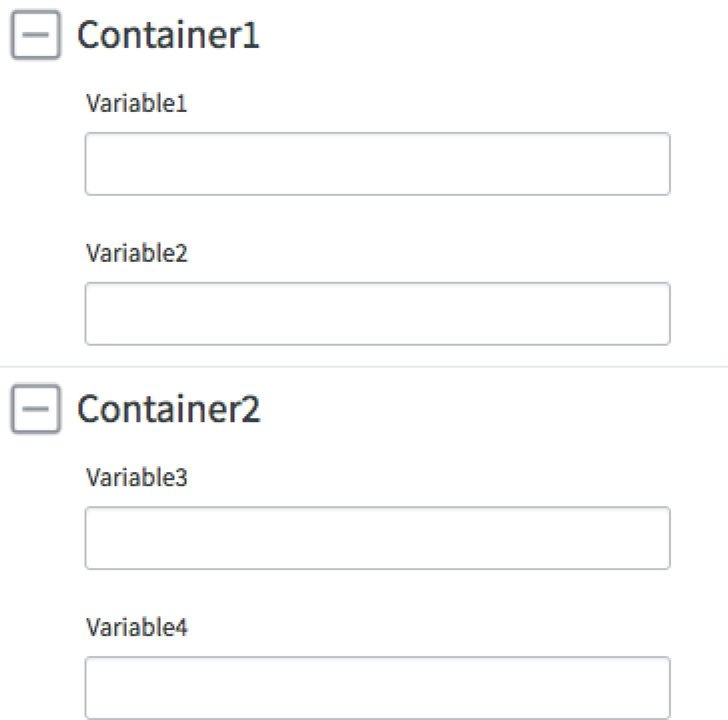
The following examples demonstrate how Service Catalog forms display in Service Portal.

Single-column form

A Service Catalog form with:

- Two containers.
- A single-column layout.

Service Catalog form



In Service Portal, the single-column layout renders as expected.

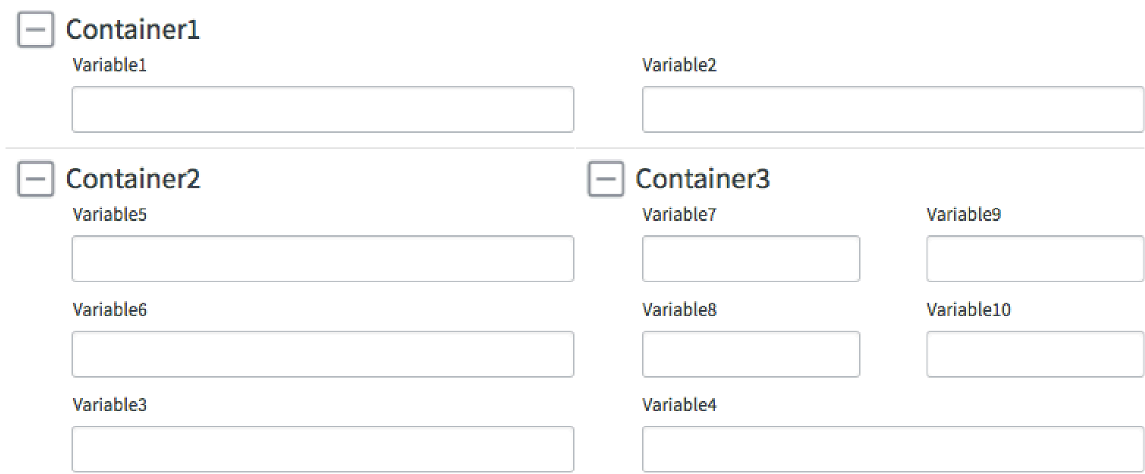
Service Portal result

Two-column layout with subcontainers

A Service Catalog form with:

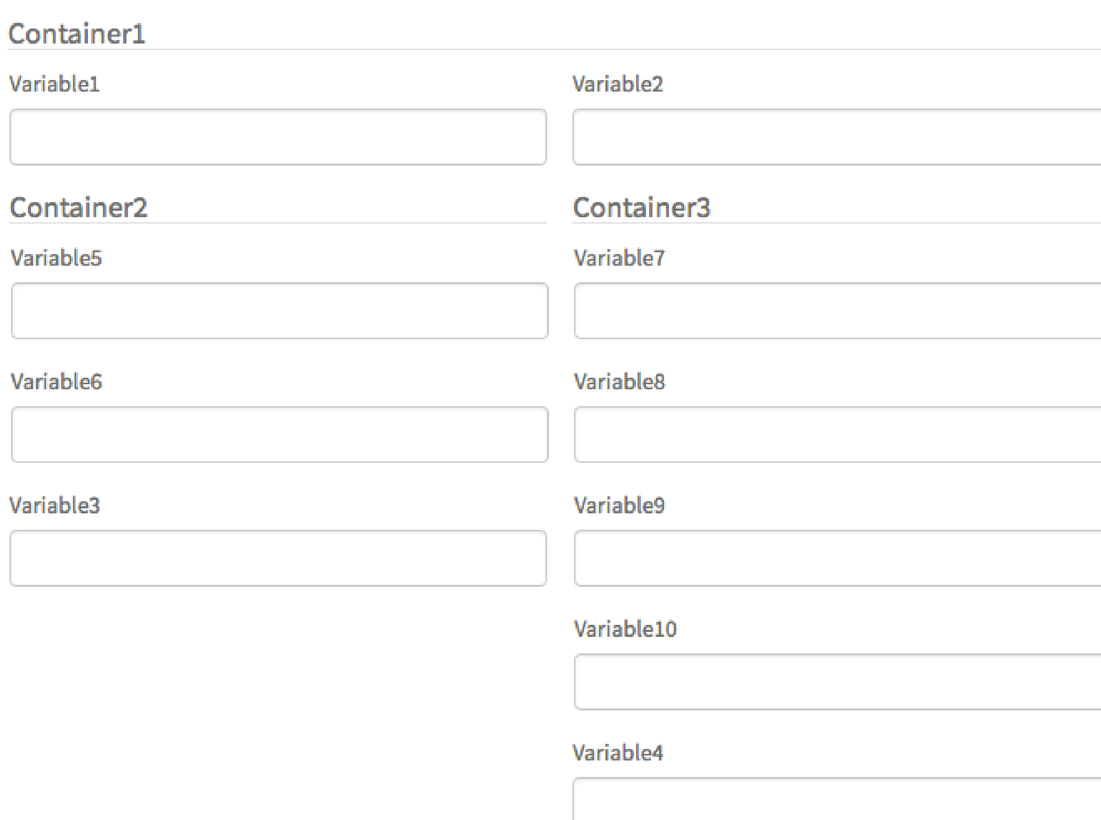
- A container with a two-column layout.
- A subcontainer with a single-column layout.
- A subcontainer with a two-column layout.

Service Catalog form



In Service Portal, the two-column layout setting of the subcontainer is ignored. The subcontainer renders as a single column.

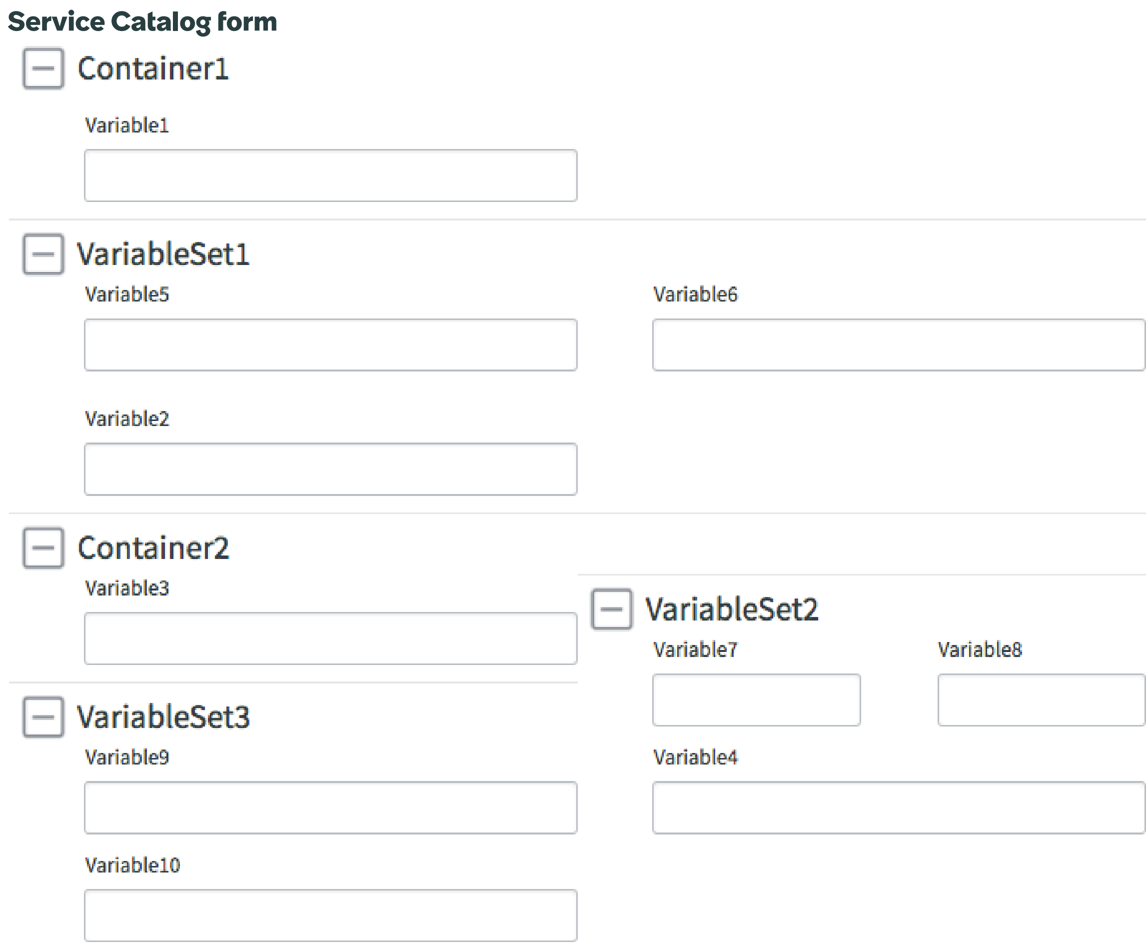
Service Portal result



Two-column layout with variable sets and subcontainers

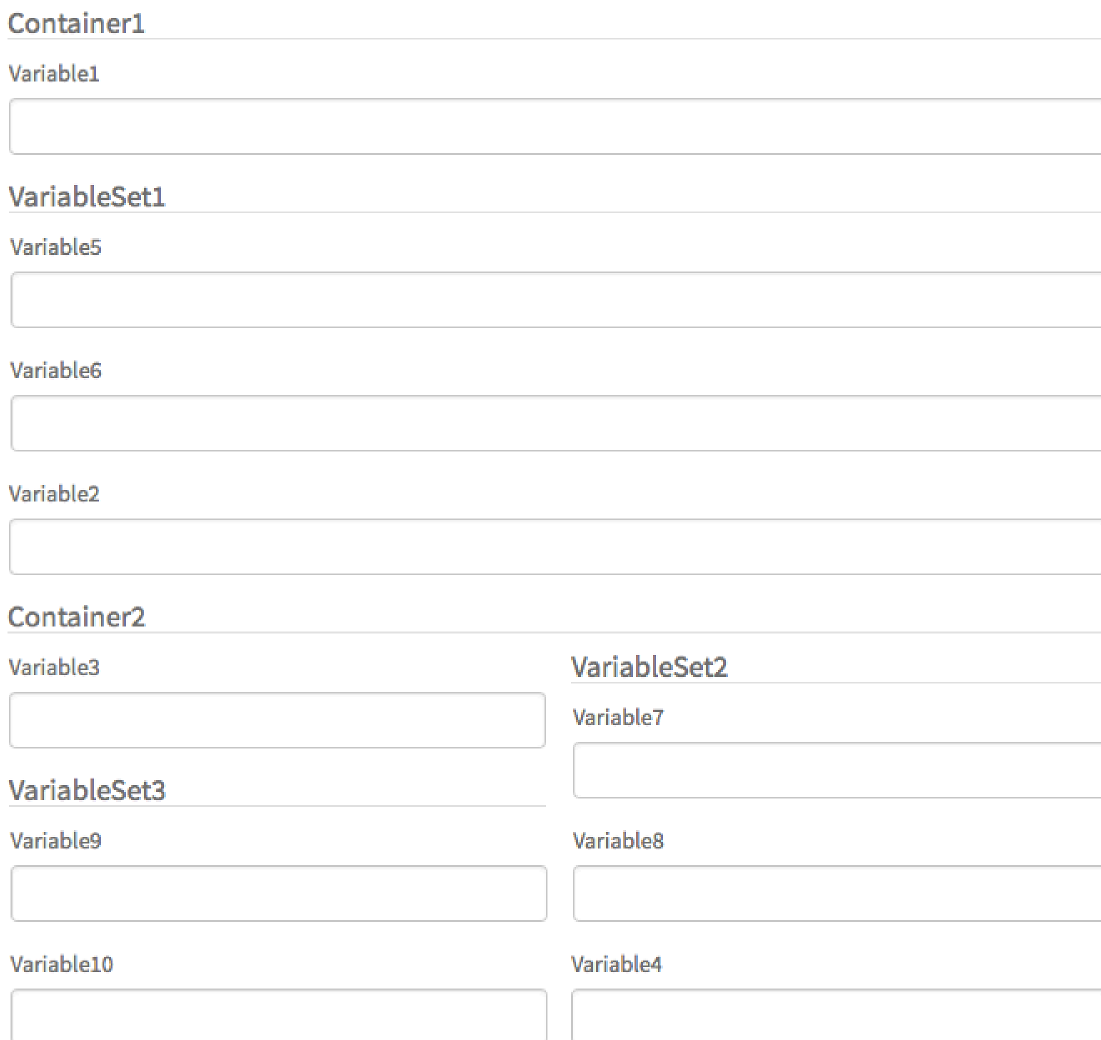
A Service Catalog form with:

- Containers with single-column and two-column layouts.
- Variable sets with a two-column layout within containers.



In Service Portal, the two-column layout settings of the variable sets are ignored when inside a container column.

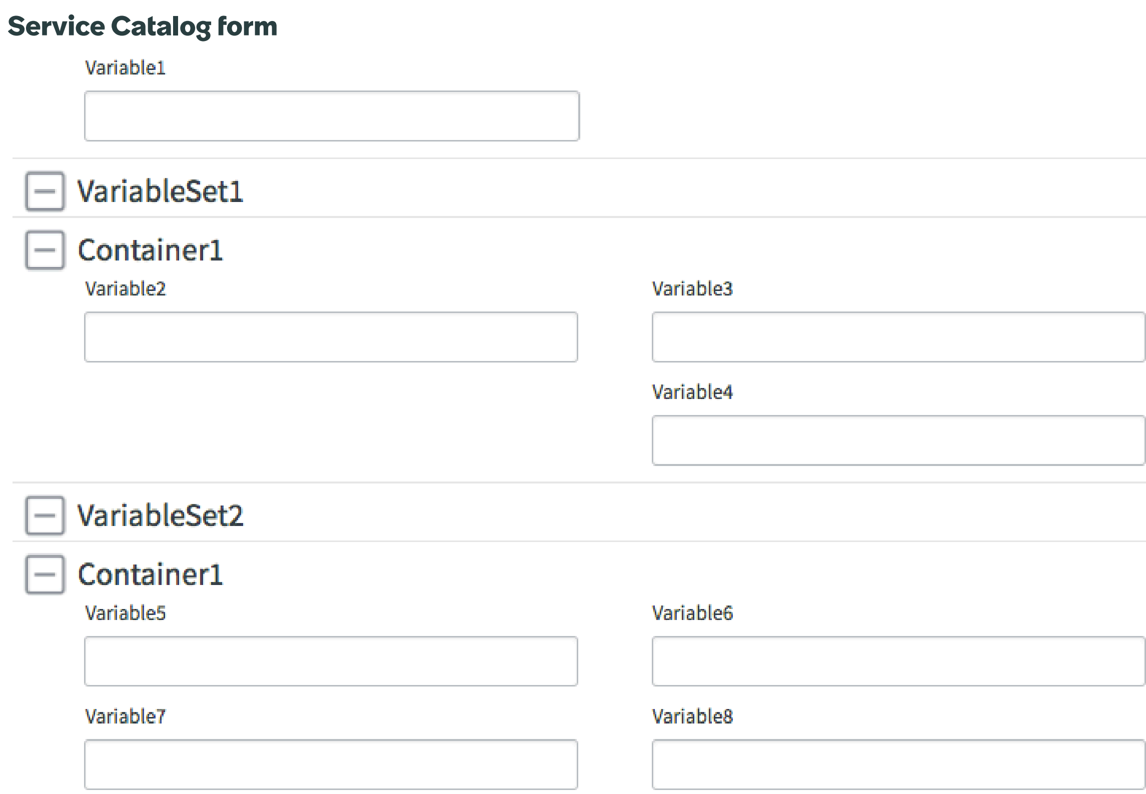
Service Portal result



Containers within variable sets

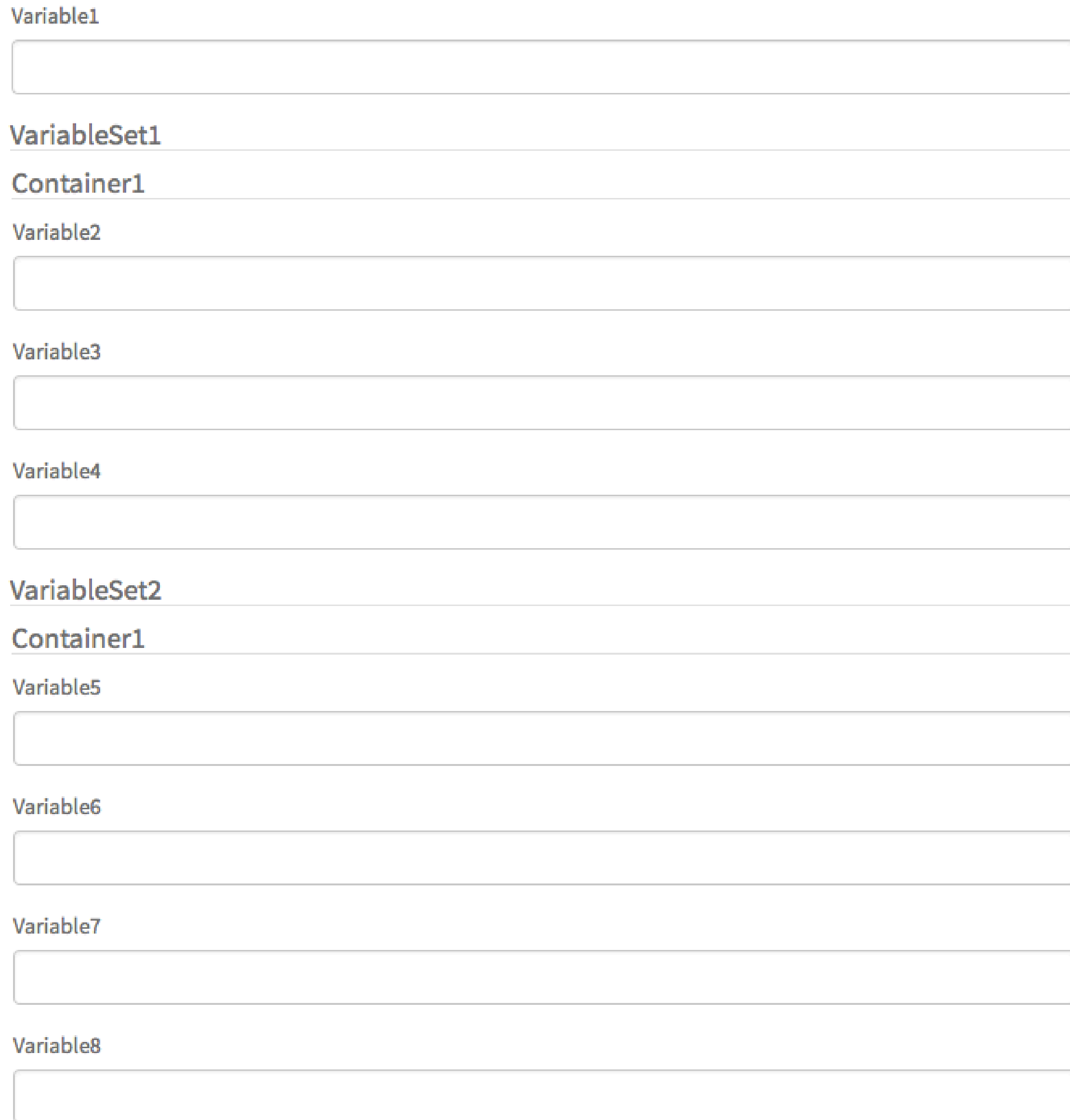
A Service Catalog form with:

- Variable sets with single-column layouts.
- A container with a single-column layout with a container split within a single-column variable set.
- A container with a two-column layout within a single-column variable set.



In Service Portal, the container split and two-column container settings are ignored when inside a single-column variable set.

Service Portal result

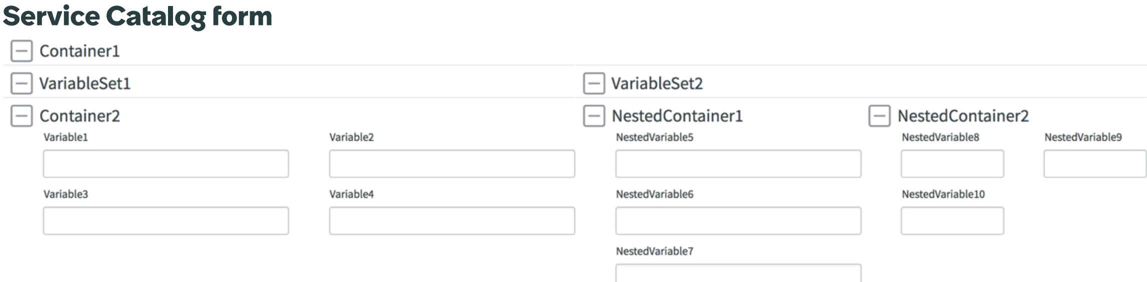


Nested containers

A Service Catalog form with:

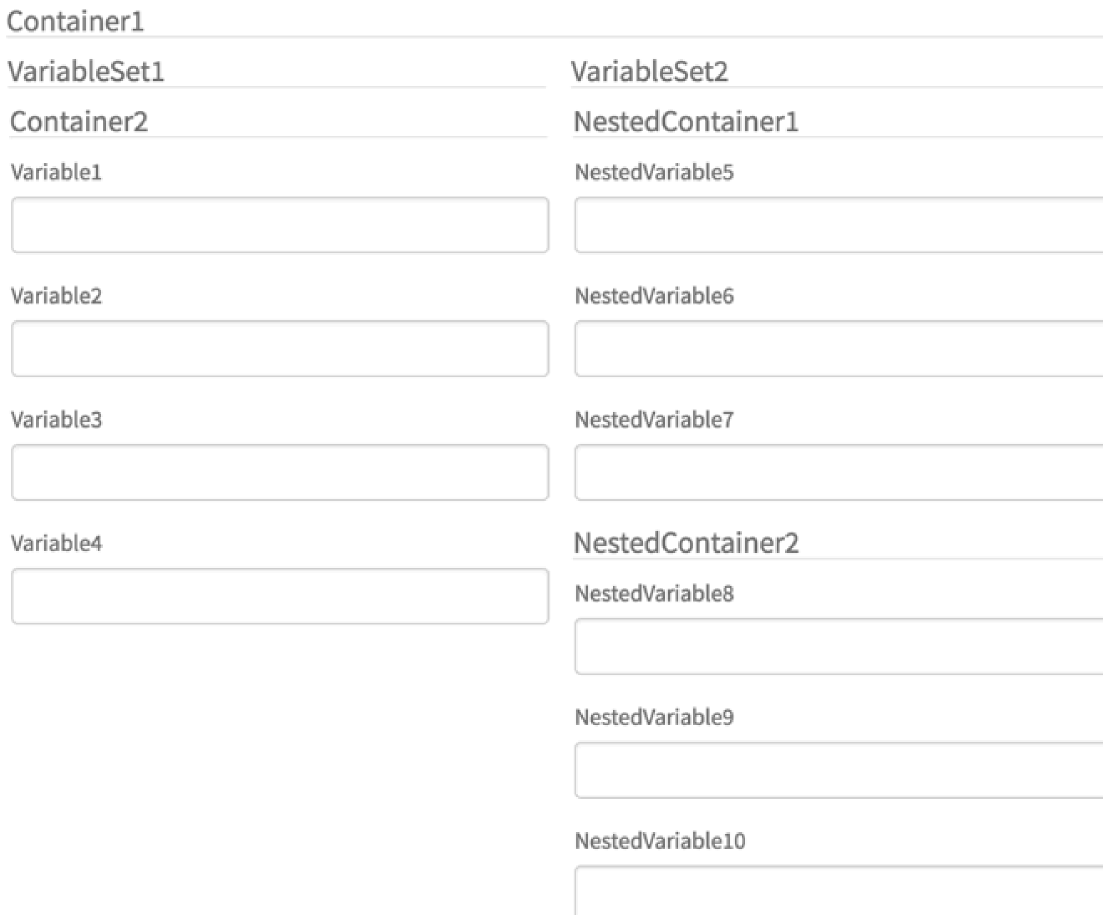
- Containers that contain variable sets.
- Variable sets that contain nested containers.

Service Catalog form



In Service Portal, nested container formatting is ignored and displays as a single-column.

Service Portal result



Render a complex form in Service Portal using an iFrame

Because complex forms do not display as expected in Service Portal, you can render catalog items, record producers, and order guides in Service Portal using an iFrame. This workaround is a temporary solution to enable your Service Portal to function as expected while you simplify any complex Service Catalog forms.

When rendering items in an iFrame in Service Portal, the following limitations apply:

- On catalog items and record producers, the attachment icon is not visible. As a result, users cannot attach any files during the submission. As a workaround, you can add the attachment button to your form.
- Click-through for the hover-over icon is not available.
- Forms are not optimized for a mobile environment.

For more information, see the Service Catalog on Service Portal post in the ServiceNow Community.

Note: Be sure to make changes in a test environment before updating your production instance.

Service Portal and client scripts

You can use client scripts and catalog client scripts in the Service Portal if the UI Type is set to **Mobile / Service Portal** or **All**. Client scripts and catalog client scripts are used with the Form widget and SC Catalog Item widget, as opposed to a widget client controller.

Before flagging a script as **Mobile/Service Portal** or **All**, make sure that you are only using the mobile APIs. Setting a client script to **Mobile** does not ensure that it will work, it simply flags that the script should be attempted by the mobile app or the Service Portal. Many of your existing client scripts can be set to **All** as long as the API calls are supported by the mobile client scripting environment.

The topics in this section require advanced coding knowledge and an understanding of Service Portal APIs.

Checking desktop vs mobile runtime

You might want to mark a client script compatible with both desktop and mobile, but include behavior that depends on the runtime. You can use this script:

```
if (window === null)
  // Write your mobile compatible code here
else
  // Write your desktop compatible code here
```

Unsupported client scripting globals

The following globals and APIs are unavailable in client scripts and catalog client scripts used in the Service Portal:

- $
- $$
- $j
- angular
- control
- document
- jQuery
- window

Note: Widget client controllers are full Angular controllers and are not subject to the unsupported client script globals listed here. Use jQuery and Angular as needed.

Embedded widgets & g_form

When using the Service Catalog variable type **Macro** and **Macro with Label**, you can pick a widget to embed in a catalog item form. Within the client controller for the embedded widget you can access the field object and catalog item g_form instance using:

- `$scope.page.field`
- `$scope.page.g_form()`

Example: Client scripts used with Service Portal

The `g_list` global helps you set the filter of a Glide list element or a list collector variable. Use this API in place of the g_filter API on desktop client scripts.

```
function onLoad() {
  var myListCollector = g_list.get("my_list_collector");
  myListCollector.reset();

 myListCollector.setQuery("active=true^category=8c7b22230b402200
b0b02c6317673a62");
  myListCollector.addItem('3a700d39af5f4fc0aab978df90f4c692',
 'Power Supply');
  myListCollector.addItem('1cb93419a3a248318da8f814140b42f6',
 'Backpack');
}
```

`g_service_catalog` is only available in Service Portal service catalog item scripts. Use this API to know if your catalog item script is run as part of an order guide or on its own.

```
function onLoad() {
  if (window) // if CMS, don't run this
   return;

   // g_service_catalog api for Service Portal and Mobile
   var isOrderGuide = g_service_catalog.isOrderGuide();
   g_form.setValue("is_order_guide", isOrderGuide ? "Yes!" :
 "Nope :(");
}
```

Supported client script types and APIs

Some client scripts are not supported in Service Portal. Others must have a UI type set to **All** or **Mobile / Service Portal**. If using a client script in the Service Portal, only client-side APIs supported in a mobile environment can be used.

Client script support in Service Portal

Client script	Description
Catalog client scripts	Service Portal requires that the **UI Type** field be set to **All** or **Mobile / Service Portal**. Client Scripts marked as **Desktop** rely on legacy APIs that are not supported in Service Portal. Before flagging a script as Mobile / Service Portal or All, make sure you are only using supported client-side APIs.
Validation scripts	Service Portal requires that the **UI Type** field be set to **All** or **Mobile / Service Portal**. Client Scripts marked as **Desktop** rely on legacy APIs that are not supported in Service Portal. Before flagging a script as Mobile / Service Portal or All, make sure you are only using supported client-side APIs. Validate user input in a specific field type using a validation script. In new instances, Service Portal includes XML, Script, Script (Plain), Email, and Version validation scripts by default. If upgrading from a previous release, the Mobile and Service Portal version is not active by default. You must activate the Mobile and

Client script	Description
	Service Portal version of the validation script to validate user input in the Service Portal. See Activate Service Portal validation scripts. **Note:** To call a UI script within a Validation script, use the g_ui_scripts global object. For more information, see GlideUIScripts. Verify that the UI script has the **Global** field set to false and **UI Type** set to Mobile / Service Portal or All.
UI scripts	Service Portal requires that the **UI Type** field be set to **All** or **Mobile / Service Portal**. Client Scripts marked as **Desktop** rely on legacy APIs that are not supported in Service Portal. Before flagging a script as Mobile / Service Portal or All, make sure you are only using supported client-side APIs.
UI Actions	All server-side UI actions are supported in Service Portal, although setRedirectURL() operations are ignored because Service Portal forms handle redirection in a different way than the platform. The form widget ignores any UI Actions marked as **Client**.
UI Policies	Supported, although you should use only declarative UI Policies. Avoid scripting unless the outcome cannot be achieved through the condition builder.
UI Macros	Not supported as UI macros use Jelly.
Formatters	Not supported as formatters use Jelly.

Supported client-side APIs

Supported client scripting APIs for use in onLoad, onChange, and onSubmit client scripts.

For detailed class and method information, see the Client API reference.

Class	Available methods
g_form	• addDecoration(fieldName, icon, title) • addErrorMessage(message) • addInfoMessage(message) • addOption(fieldName, value, label, index) • clearOptions(fieldName) • getActionName() • getBooleanValue(fieldName) • getDecimalValue(fieldName) • getEncodedRecord() • getFieldNames() • getIntValue(fieldName) • getLabel(fieldName) • getReference(fieldName, callback)

Class	Available methods
	• getRelatedListNames() • getSectionNames() • getSysId() • getTableName() • getValue(fieldName) • hasField(fieldName) • hideAllFieldMsgs(type: "info | error") • hideErrorBox(fieldName) • hideFieldMsg(fieldName, clearAll) • hideRelatedList(listTableName) • hideRelatedLists() • isMandatory(fieldName) • isNewRecord() • isReadOnly(fieldName) • isVisible(fieldName) • removeDecoration(fieldName, icon, title) • removeOption(fieldName, value) • save() • serialize(onlyDirtyFields) • setFieldPlaceholder(fieldName, placeholder) • setLabel(fieldName, label) • setMandatory(fieldName, isMandatory) • setReadOnly(fieldName, isReadOnly) • setSectionDisplay(sectionName, isVisible) • setValue(fieldName, value, displayValue) • setVisible(fieldName, isVisible) • showErrorBox(fieldName, message, scrollForm) • showFieldMsg(fieldName, message, type: "info | error", scrollForm) • showRelatedList(relatedTableName) • showRelatedLists() • submit(submitActionName) **Note:** Using the `variables.var_name` notation with the g_form API is not supported in Service Portal. g_form as a global object cannot be used in a widget client controller or in a UI script.
g_list	• get(fieldName) • addItem(value, displayValue)

Class	Available methods
	• removeItem(value) • reset() • setQuery(queryString) • setDefaultOperator(operator) • getDefaultOperator()
g_service_catalog	isOrderGuide()
GlideAjax	• addParam (name, value) • getParam (name) • getXML(callback) • getXMLAnswer(callback) • getJSON(callback) • setErrorCallback(errorCallback) • getURL() • getParams() • execute() • successCalback(data, status, xhr) • errorCallback(xhr) • setScope(scope) **Note:** • Because the mobile platform does not allow synchronous GlideAjax calls, the getXMLWait() method in a GlideAjax call does not work in the Service Portal. Instead, use one of the asynchronous calls such as getXML(Function callback) or getXMLAnswer(Function callback). • GlideAjax cannot be used in a widget client controller.
GlideRecord	• addQuery(encodedQuery) • addQuery(fieldName, operator, value) • getEncodedQuery() • get(id) • getTableName() • hasNext() • insert(callback) • gotoTop() • next() • loadRow(rowObj) • getValue(fieldName)

Class	Available methods
	• setValue(fieldName, value) • isDotWalkField(fieldName) • addOrderBy(fieldName) • setDisplayFields(fieldNames) • query(callback) • setRows(rowsArray) • setTableName(tableName) • setLimit(maxInt) • getLimit()
i18NV3	getMessage(String messageKey, Function callback)

Antivirus Scanning in Service Portal

View the health status of file attachments in Service Portal. Antivirus Scanning scans files in the Attachments [sys_attachments] table by default. When viewed from a Service Portal page, attachments may not be available for download depending on their health status.

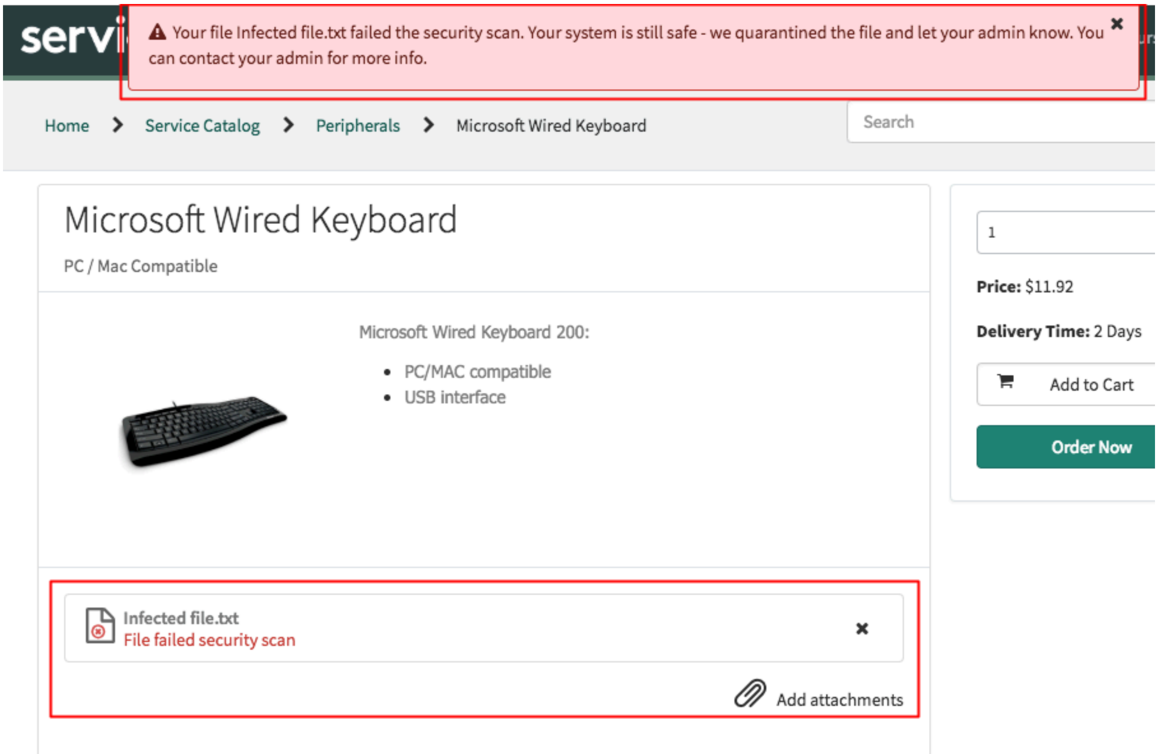
Note: Antivirus Scanning is a ServiceNow AI Platform feature. For more information, see Antivirus Scanning.

Scanning scenarios

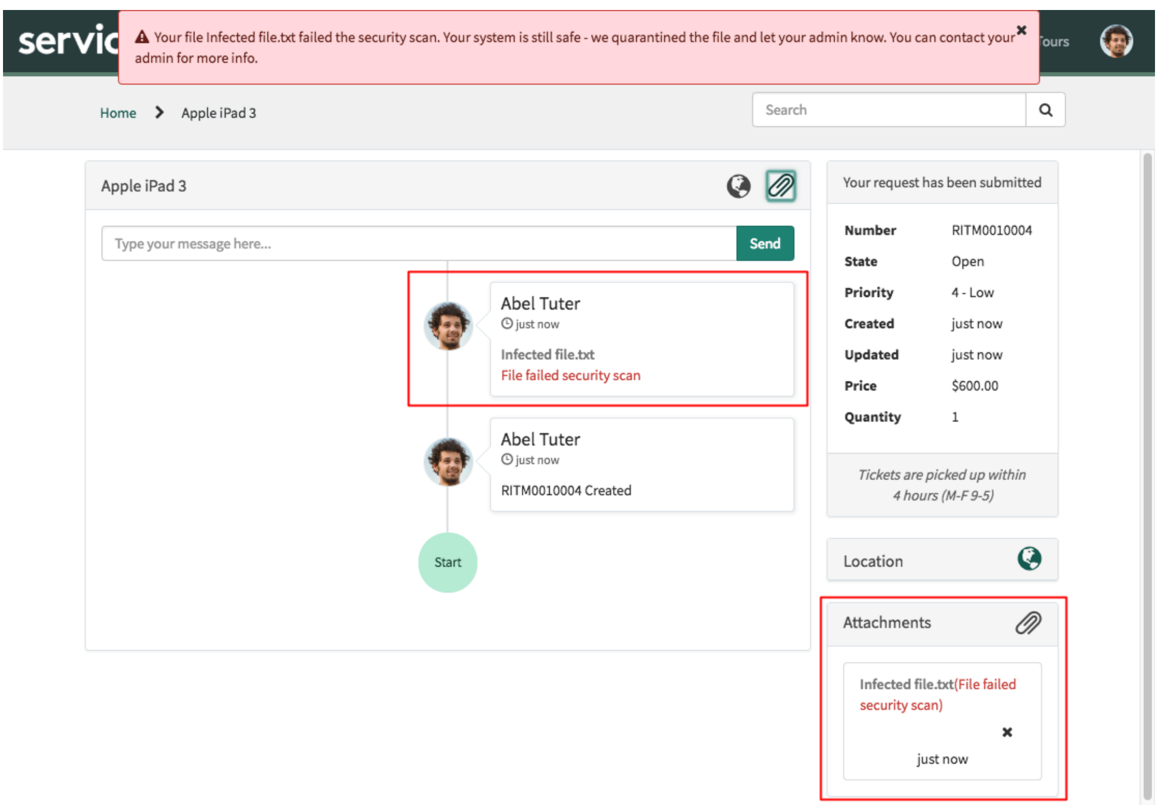
Review these scanning scenarios to understand how Antivirus Scanning interacts with attachments in Service Portal.

Upload a file

1. A user uploads an infected file to a record in Service Portal.
2. The system scans the file, moves it to quarantine, and displays a message. The file is unavailable for download.



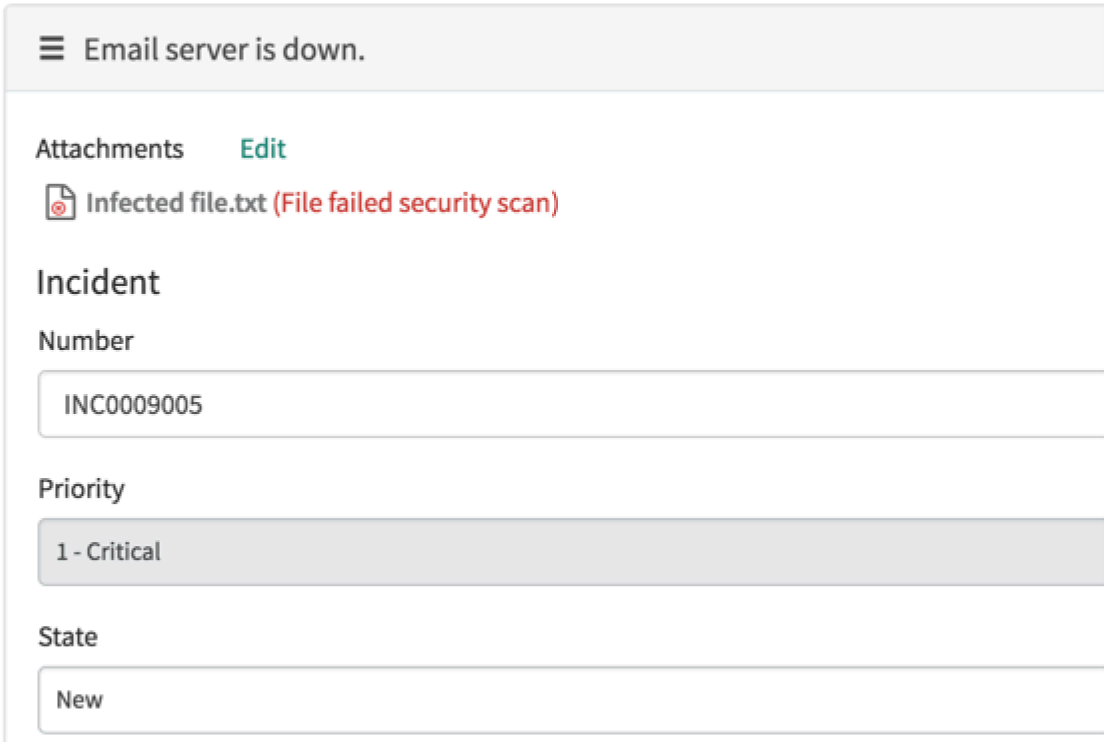
If viewing the record in the Ticket Form page, the thumbnail does not display.



3. The system sends an email notification to the user and the antivirus administrator.

Download a file

1. A user opens a record with an attachment in Service Portal.
2. The system scans the file and moves it to quarantine. The file is unavailable for download. If viewing the record in the Ticket Form page, the thumbnail does not display.
3. The system sends an email notification to the user and the antivirus administrator.



View a file

1. A user opens a record with an infected attachment.
2. The file is unavailable for download. If viewing the record in the Ticket Form page, the thumbnail does not display.

Configuring Service Portal

Plan and set up a self-service portal for your employees or customers.

Configuration overview

The following list is a high-level overview of the workflow to get started configuring a portal. However, there may be use cases where performing these steps in a different order is preferred.

1. Upgrade Service Portal

   If you upgraded from a previous release, you might need to perform additional tasks to take advantage of new or updated functionality in Service Portal.

2. Create a new portal or update a base system portal

   A portal is the engine that houses all the references to content for your site. The portal record defines the URL extension for a site, as well as things like the knowledge base, catalog, and homepage. You can also use the portal record to define the header menu and the portal branding. You can create a new portal or update an existing base system portal to suit your needs.

3. Configure portal branding

   With the Branding Editor, you can configure the styles and theme of your portal in a view with real-time updates. You can see how your portal appears to users with the click of a button. More advanced users still have the option of creating CSS style sheets for the portal theme. However, they won't take advantage of the real-time update that the Branding Editor provides. Changes made in the Branding Editor or to specific components of the portal (such as a widget or a page container) override any customizations made to the theme. If you need more customization than what the Branding Editor can provide, see Create a portal theme.

4. Create new pages or update base system pages and configure widgets

   Pages are the centerpiece of the end-user experience. Page definitions not only control the layout of the content, they craft the experience for the user. Pages also help define mobile responsiveness, which is a key component in the user experience. Use any existing base system pages as an example for your own creation or create new pages from scratch.

   Widgets are what define the content of your pages. You can use the base system widgets provided with Service Portal to get started configuring pages.

5. Configure search in a portal

   Search data displays within a widget on the search page. To make data searchable from a portal, create a search source that fetches data from a single table within your instance, from multiple tables, or from an external site. Enable AI Search to take advantage of intelligent query features and quickly find the answers they need.

6. Manage access to a portal

   Manage who can access your portal by making pages public, configuring user logins and single sign-on, limiting page access by role, or enabling multi-factor authentication. You can also use advanced user criteria for access to pages, widgets, and more.

Example: Common portal configurations

Refer to this video for examples of common configurations for portals.

Upgrading Service Portal

After upgrading a ServiceNow instance from a previous release, you might need to perform additional tasks to take advantage of new or updated functionality in Service Portal.

Refer to the topics in this section for information about changes to implement to use the latest functionality in Service Portal.

Activate the Knowledge Article View page on upgrade

If upgrading from a previous release, take advantage of the latest article view features by activating the **Knowledge Article View** page route map. New capabilities include article versioning and using links and images in article feedback. This map is active by default in new instances and applies to all portals in the system.

Before you begin
Role required: admin

About this task

The **Knowledge Article View** page route map routes the **kb_article** page to the **kb_article_view** page. By default, users with the public role cannot access the **kb_article_view** page. However, your administrator can modify this behavior. For more information, see Enable external or public users to view knowledge articles from the Knowledge Management Service Portal.

After activating the **Knowledge Article View** page route map, you can:

- Comment on a knowledge article
- Create an article version by importing a Word document
- Create a version of a knowledge article from a managed document

Procedure

1. Navigate to **All** > **Service Portal** > **Page Route Maps**.
2. Open the **Knowledge Article View** record.
3. Select **Active**.
4. Click **Update**.

Result

Your end users view knowledge articles in the Service Portal using the **kb_article_view** page.

Activate Service Portal validation scripts

Validate user input in a specific field type using a validation script. In new instances, Service Portal includes XML, Script, Script (Plain), Email, and Version validation scripts by default. If upgrading from a previous release, the Mobile and Service Portal version is not active by default. You must activate the Mobile and Service Portal version of the validation script to validate user input in the Service Portal.

Before you begin

Role required: admin

About this task

Service Portal requires that the **UI Type** field be set to **All** or **Mobile / Service Portal**. Client Scripts marked as **Desktop** rely on legacy APIs that are not supported in Service Portal. Before flagging a script as Mobile / Service Portal or All, make sure you are only using supported client-side APIs. See Supported client script types and APIs.

Note: To change the UI Type from **Mobile / Service Portal** to **All**, delete the Desktop version from your instance to avoid activating conflicting scripts. Before deleting the Desktop version, make a backup in case you need to revert any changes.

Procedure

1. Navigate to **All** > **System Definition** > **Validation Scripts**.
2. Open the Mobile / Service Portal version of the validation script you would like to use in the Service Portal.
3. Click the **Active** flag to activate the validation script.
4. **Optional:** Set the UI Type to **All** to use the validation script in desktop, mobile, and Service Portal environments.
   To avoid activating conflicting validation scripts, you must first delete the Desktop version of the script.

a. Navigate to the desktop version of the validation script you would like to replace. Desktop versions have the **UI Type** field set to **Desktop**.

b. Open the record.

c. Right-click the header menu and select **Export** > **XML (This Record)** to create a backup of the record.

d. Once the export completes, click **Delete** and confirm the selection.

e. Navigate back to the validation script set to **Active** in earlier steps and change the **UI Type** to **All**.

Result

User input into the designated field type in the Service Portal and Mobile environments is validated for correct formatting. For example, if you activated the Email validation script for use in the Service Portal, invalid user input into an Email field generates an error and prevents the browser from submitting the form.

Note: On a desktop browser, the field is validated when you submit the record. On a mobile browser, the field is validated when you navigate away from the field.

Create a portal

Create a portal for users to browse company resources, discover articles, and get help.

Before you begin

Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Portals**, then click **New**.
2. On the form, fill in the fields.

Property	Description
Title	Name to define your portal. In the browser header and for bookmarks, the title appears as `<Page Title> - <Portal Title>`.
URL suffix	Value that appears appended to an instance URL when you access a portal. For example, if you use `sp`, the instance URL for that portal would be `<instance name>.service-now.com/sp`. Ensure that this value is unique and is not the same as any other portal. **Note:** Avoid using reserved words in your URL to prevent errors when navigating to your portal page. Avoid words such as `portal` and `cms`. Also avoid any JavaScript protected terms.
Homepage	Page that users see first after they sign in.
KB home page	Custom home page that users see when they go to a knowledge base.
Login page	Custom page to authenticate users.

Property	Description
Logo	Logo that appears in the page header. You can also configure the logo in the Branding Editor.
Icon	Icon that appears in the address bar for your portal. Each portal that you create can have a different icon.
Default	Portal to use as your main portal.
Application	Application scope of the portal. This field is uneditable and **Global** by default.
404 page	Default page that your users see whenever a page cannot load properly. You can also define a default 404 page using the *glide.service_portal.default_404_page* system property.
Catalog home page	Custom page to represent the Service Catalog.
Catalog category home page	Page to display catalog categories in the portal.
Main menu	Reference to the menu in the Instances with Menu [sp_instance_menu] table that appears in the header.
Theme	Refers to a theme in the Themes [sp_theme] table that defines the style and branding for the portal. The theme is the lowest level of style configuration. Any changes made in the Branding Editor or to specific portal components (such as widget or container CSS) override those styles.
Inactive	Turn off access to a portal that you no longer want users to visit and optionally redirect them to another portal. For more information, see Deactivate a portal.
Quick start config	Schema that defines configuration items in the Branding Editor. In JSON format, you can define the fields and records used to generate your branding options. `[ {` `"tagline" : { "table" : "sp_instance", "sys_id" : "34fe3d96cb20020000f8d856634c9cf4", "field" : "title" },` `"hero_background" : { "table" : "sp_container", "sys_id" : "be98a8d2cb20020000f8d856634c9c63", "field" : "background_image" }` `} ]`
CSS variables	Portal-specific Sass variables. You can overwrite existing theme variables here. **Note:** Use the CSS variables field to define CSS variables only. Use CSS Includes to define CSS rules. As of the Madrid release, Sass and LESS can be used within CSS Includes.

Property	Description
Hide portal name	Option to hide the portal name in the page title.
Support right-to-left languages	Option to mirror the direction of the portal when the session language is a right-to-left language, such as Hebrew. Selecting this option automatically generates the necessary CSS but you can also provide your own CSS for right-to-left languages that overrides the auto-generated CSS. To provide your own CSS for right-to-left languages, see Create a portal theme. For more information about support for right-to-left languages, see Styling for right-to-left languages in portals.
Enable favorites	Option to enable the My favorites functionality in the portal. ◦ Displays the favorite icon ( ) for all catalog items and KB articles in the portal. ◦ Displays the **My Favorites** menu item in the portal header. This menu item displays a list of all catalog items or KB articles that are bookmarked for quick reference. **Note:** ▪ Only searchable catalog items or KB articles that are selected as favorites are displayed in this list. ▪ This is applicable only for Service Portal. For other portals, you can clone the **My Favorites** menu item. You may need to configure the form to add this check box.
AI Search	
Enable AIS	Option to enable AI Search in your portal. For more information, see AI Search in Service Portal.
Search Application	Defines the search experience settings for your portal, such as the search engine, search results limit, and suggestions limit. For more information on defining a search application configuration, see Defining search application configurations.
Search Results Configuration	Defines how search results are displayed in the portal. For more information on defining a search results configuration, see Define a composite dataset.

3. Save the form.
4. In the Knowledge Bases related list, select **Edit** and then select which knowledge bases appear for the knowledge base page.
   For example, if you select **IT** and **Instance Security Center**, only the article categories defined for these knowledge bases appear in the KB categories widget.
5. In the **Catalogs** related list, click **Edit** to select one or more catalogs listed in the sc_catalog table to use in the portal.

Assign a homepage to a portal

Edit your portal record to specify any page as your homepage.

Before you begin

Role required: sp_admin or admin

About this task

When a portal is referenced by the URL suffix, it lands on a homepage. This homepage is often labeled `index` in website language. The homepage is probably the most important page of your portal as it houses the major information and actions that your users see.

You can use any portal page as the portal homepage. Navigate to **All** > **Service Portal** > **Pages** to see the Pages [sp_page] table. To view or create pages in the Service Portal Designer, see Create and edit a page using the Service Portal Designer.

Procedure

1. Navigate to **All** > **Service Portal** > **Portals**.
2. Select the portal.
3. In the **Homepage** field, select the page you want for your portal homepage and select **Update**.

Assign a default error page

Create a default 404 error page for your portal using a system property.

You can assign an error page to a portal using the portal form. If you do not assign an error page using that form, the system uses the default 404 page containing the breakout game widget. Use the default 404 page property [*glide.service_portal.default_404_page*] to configure the default error page.

Create a page before adding it as the default error page.

1. Navigate to **Service Portal** > **Properties**.
2. In the **Default 404 page for Service Portals**, type the page ID found in the ID field of the page form.

Configure a portal header menu

Define the look and behavior of the portal header menu and assign menu items to appear in the header. The header menu is one of the primary navigation controls for Service Portal users.

Before you begin

Role required: admin

About this task

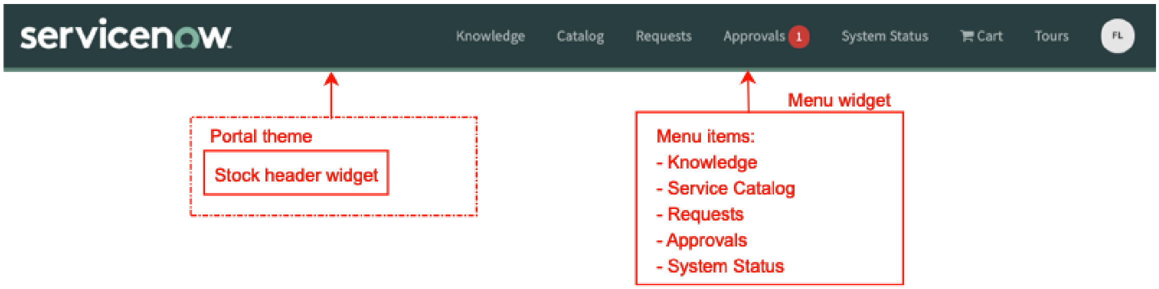
Configuring a portal header with a menu involves several steps.

Procedure

1. Create a header and add it to a theme.
   Until you add a theme with a header to a portal, the header menu does not display.
2. Create a main menu with menu items and assign it to the portal.
   The main menu record is where you assign which navigation options appear in the header. For example, you can add a menu item that links to another page within your portal, such as the service catalog.

Result

The main menu and header form a header menu when associated with a theme and a portal.



Add a header or footer to a portal

Use the theme to add a header or footer to your portal.

Before you begin

Role required: (admin or none)

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration**.
2. Select **Portal Tables** > **Themes** and then select the theme you want to add the header or footer to.
3. In the header or footer field, select the header or footer you want to use for your portal.
   If you are just getting started, you can reuse the base system Stock Header or Sample Footer widgets.
4. **Optional:** Select **Fixed Header** or **Fixed Footer** to lock the header or footer in one place so when users scroll up or down they remain in the same location on the page.
5. To configure the appearance of the header, in the Service Portal configuration page, open the Branding Editor.
6. Under the **Theme Colors** tab, use the color selectors in the Navbar section to control the colors in the header.

Create a portal header menu

Create a menu with menu items to display in the header of a portal.

Before you begin

Role required: (admin or none)

Procedure

1. From the Service Portal configuration page (**Service Portal** > **Service Portal Configuration**), navigate to **Portal Tables** > **Instance with Menu** and select **New**.
2. Complete the fields in the menu form.

Menu fields

Field	Description
Title	Name of the header menu. You need to know this when you associate the menu with your portal.
Additional options, JSON format	Advanced configuration options. For example, use this field to enable the shopping cart in the header menu with the following code: `{` ` "enable_cart": {`

Field	Description
	`` "displayValue": "true", "value": true } } ```
Application	The record scope. The header menu record and the source table must have the same application scope.
Widget	The widget that the header menu is based on. Select a menu-type widget from the list. For example, the header menu widget that is included as a base system widget.

3. Save the form, and then select **Menu Items** from the related lists.
4. Select **New** and complete the menu item form.

Menu item fields

Field	Description
Label	Name that appears for the item in the menu
Parent menu	This field should already contain the name of the menu you are adding items to. You can change the value as needed to other menus
Parent menu item	Use this field to nest menu items within other menu items
Order	Value that determines where the item appears in the menu in relation to other menu items
Type	The kind of page the item links to. Form fields vary depending on the option that you select from this list. Choose from: ◦ Page: Link to another page in the Service Portal. ◦ URL: Link to an external website. To have the URL open on a new browser tab or window, enter `_blank` in the **URL target** field. ◦ Service Catalog: Link to the Service Catalog. ◦ Catalog Category: Link to a specific catalog category within the Service Catalog. ◦ Catalog Item: Link to a specific catalog item. ◦ Knowledge Base: Link to the knowledge base that you previously configured as the portal's default knowledge base. ◦ KB Topic: Link to a KB topic page. ◦ KB Article: Link to a KB article by number. ◦ KB Category: Link to a specific KB category within the knowledge base. ◦ Filtered List: Set conditions to determine which page to link to. ◦ Scripted List: Enter a script to determine which page to link to.
Page	Name of the portal page the item links to. This option is available if you select **Page** as the menu item type.
Condition	Determines what conditions are required for menu items to show in the header. For example, the condition `gs.hasRole("sp_admin")` restricts access to

Field	Description
	menu items to users with the sp_admin role. Hide a menu item by setting this value to **false**. For more information on what conditions to use in the **Condition** field, see Create a UI Action .
Glyph	Icon that appears beside the menu item

5. Select **Submit**.
6. After you create a menu and menu items, add the menu to a portal.
   a. Navigate to **Service Portal** > **Portals**, then open the portal you want to add a menu to.
   b. From the **Main menu** field, select the reference lookup icon, then select the appropriate menu by name.
   c. Select **Save**.

What to do next

Associate the menu you created with a portal, then create a header with a theme for your menu.

Enable a language selector in portal headers

Allow all users to select their language preferences by enabling the language selector in your portal header.

Before you begin

Active the languages your portal users need and configure a portal header menu. For more information, see Activate a language and Configure a portal header menu.

Role required: admin

About this task

For all portals except the Knowledge (/kb), Customer Support (/csm), and Customer Service (/csp) portals, the language selector is included but turned off by default. To display the language selector in the portal header for other portals, you must enable it according to this procedure.

In portal headers, the language selector displays the current language selection of the user and a menu of languages that the user can choose from. If region grouping is enabled, languages are displayed according to the configured region groups. For more information about grouping languages, see Create regions for language selection in portals .

Procedure

1. Navigate to **All**, and then enter `sys_properties.list` in the navigation filter.
2. Open the *`glide.sp.portals.language_selector_enabled`* property.
3. In the **Value** field, enter the sys_ID of the portal to display the language selector widget.
4. Select **Update**.

Result

The language selector displays in the header menu for both authenticated and unauthenticated users.

Configure a catalog in Service Portal

Associate a portal with multiple catalogs. By default, Service Portal is associated with Service Catalog.

Before you begin

Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Portals**.
2. Click the **Service Portal** record.
3. To associate a portal with a catalog, perform the following steps.
   a. In the **Catalogs** related list, click **Edit**.
   b. Select one or more catalogs to add to the portal.
      The categories and catalog items associated with the selected catalogs are displayed in Service Portal.

      Note:
      - If no catalogs are selected, all active catalogs accessible to the requester are available in Service Portal.
      - Irrespective of the catalogs associated with the portal, items are searched for only in the catalogs configured in the search source in AI Search. For information on configuring AI-based catalog search experience, see Configure AI-based catalog search experience.
4. **Optional:** To edit the label for a catalog, perform the following steps.
   a. For the **Main menu** field, click **Open Record**.
   b. From the **Menu Items** section, Click the **Catalog** record.
   c. In the **Label** field, specify the label for the catalog.
      The catalog label is displayed in the main menu of Service Portal.
5. Click **Update**.

Related topics

Service Catalog in Service Portal

Access Management Automation

Automate access management request fulfillment using the Service Catalog or Service Portal. The catalog items and flows support requests in Okta, Microsoft Entra ID (formerly Microsoft Entra ID), and Microsoft Active Directory.

Request apps on the Store

Visit the ServiceNow Store website to view all the available apps and for information about submitting requests to the store. For cumulative release notes information for all released apps, see the ServiceNow Store version history release notes.

Application version

Access Management Automation v2.1.0 is the latest version.

Catalog Items and flows

The Access Management Automation application provides catalog items and flows to automate tasks. When a catalog item is submitted, the related flow is triggered and the task is performed. Available catalog items include:

Service	Catalog Item	Description
Microsoft Active Directory	Create Active Directory Group	Creates a group in Microsoft Active Directory with the provided details.
	Create Active Directory User	Creates a user in Microsoft Active Directory.
	Remove Active Directory User from Groups	Removes the specified user from the groups in the Microsoft Active Directory.
	Enable Active Directory User	Enables the specified user in the Microsoft Active Directory.
	Disable Active Directory User	Disables the specified user in the Microsoft Active Directory.
	Add Active Directory User to Groups	Adds the specified user to groups in the Microsoft Active Directory.
	Unlock Active Directory User	Unlocks the specified user in the Microsoft Active Directory.
Microsoft Entra ID (formerly Microsoft Entra ID)	Delete Microsoft Entra ID User	Deletes the specified user from Microsoft Entra ID.
	Add Microsoft Entra ID User to Groups	Adds the specified user to groups in the Microsoft Entra ID.
	Create Microsoft Entra ID Security Group	Creates a security group in Microsoft Entra ID.
	Remove Owner From Microsoft Entra ID Group	Removes an owner from the specified Microsoft Entra ID group.
	Create Microsoft Entra ID O365 Group	Creates an Office 365 group in the Microsoft Entra ID.
	Disable Microsoft Entra ID User	Disables the specified user in the Microsoft Entra ID.
	Enable Microsoft Entra ID User	Enables the specified user in the Microsoft Entra ID.
	Remove Microsoft Entra ID User from Groups	Removes the specified user from groups in the Microsoft Entra ID.
	Add Owner to Microsoft Entra ID Group	Adds an owner to the Microsoft Entra ID group.

Service	Catalog Item	Description
	Create Microsoft Entra ID User	Creates a user in Microsoft Entra ID.
Okta	Reset Okta User Factors	Resets factors of the specified Okta user.
	Add Okta User to Okta Groups	Adds the specified user to groups at Okta.
	Unlock Okta User	Unlocks the specified user at Okta.
	Unsuspend Okta User	Unsuspends the specified user at Okta.
	Create Group at Okta	Creates a group in Okta.
	Create User at Okta	Creates a user at Okta.
	Suspend Okta User	Cancels the specified user at Okta.
	Remove Okta User from Okta Groups	Removes the specified user from groups in Okta.
	Activate Okta User	Activates the specified user at Okta.

Subflows

The Access Management Automation application provides subflows to automate tasks. The available subflows include:

Subflow	Description
Create Incident	Creates an incident if automation fails.
Create Event	Creates an event if automation fails.
Dynamic Flow Template	Template to use the Create Event and Create Incident subflows.
Fetch Approvers and Assignee	Retrieves the details of approvers, assignees, and assignment groups for the requested item, catalog task, and incident from the decision tables.

Actions

The Access Management Automation application provides actions to automate tasks. The available subflows include:

Action	Description
Convert Mask to password2	Converts a mask field to a password2 field.
Convert String to Array.Strings	Converts a string of comma-separated values to an array of strings.

Decision tables

The Access Management Automation application uses decision tables to save the approver and assignee information. The decision tables include:

Decision table	Description
Access Mgmt. Catalog Task Group Assignment Policy	Used to choose the groups to assign the fulfillment catalog task to, if the automation fails.
Access Mgmt. Catalog Task User Assignment Policy	Used to choose the users to assign the fulfillment catalog task to, if automation fails.
Access Mgmt. Failed Automation Flow Policy	Used to choose the subflow that should execute if automation fails.
Access Mgmt. Incident Group Assignment Policy	If the subflow that executes when automation fails is Create Incident, this decision table is used to choose the groups to assign the incident to.
Access Mgmt. Incident User Assignment Policy	If the subflow that executes when automation fails is Create Incident, this decision table is used to choose the users to assign the incident to.
Access Mgmt. Requested Item Group Approval Policy	Used to choose the groups assigned as approver for the catalog requests.
Access Mgmt. Requested Item User Approval Policy	Used to choose the users assigned as approver for the catalog requests.

User roles

The Access Management Automation application provides the sn_acc_mgmt_sc.access_mgmt_user role. Users with this role can view access management automation catalog items.

Note: User must have the sn_acc_mgmt_sc.access_mgmt_user, ITIL, and Catalog Admin roles to create and submit catalog items.

Set up Access Management Automation

Set up the Access Management Automation application by configuring the Service Portal page to use the default catalog items.

Before you begin

- This application requires an Integration Hub or Automation Engine subscription. For more information, see Legal schedules - Integration Hub overview.
- Activate and configure one of the required spokes.
  - Okta spoke
  - Microsoft Entra ID spoke (formerly Microsoft Entra ID spoke)
  - Microsoft Active Directory spoke

  Note: Configure only the required spokes. For example, if you want to manage access in Okta, configure the Okta spoke.

- Activate the Access Management Automation app
- Role required: admin

Procedure

1. Configure the decision tables to perform these tasks:
   - Assign users, groups, or both to approve requested items.
   - Assign users, groups, or both to take action on catalog tasks and incidents.
   - Trigger subflow(s) if the automation fails.

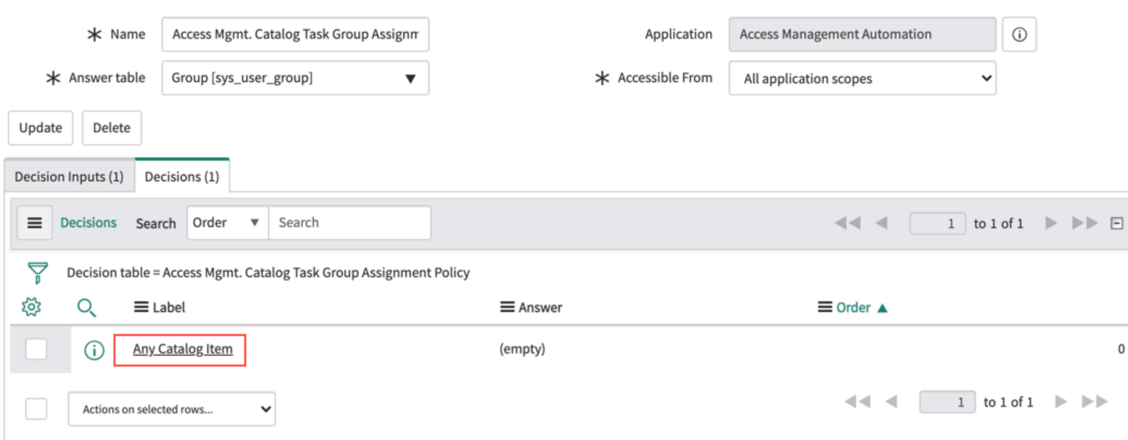
   The flows in this application use decision tables to enable admins to configure approvers, assignments, and subflow routing without modifying any of the flows in Workflow Studio. In each decision table by default, you can modify the decision record to select an option (group, user, or subflow) that applies to all catalog items in the application. If you want to have different assignments, approvers, or subflows per catalog item, you can add new decisions for each catalog item within the decision tables.

   a. Navigate to **System Definition** > **Decision Tables**.

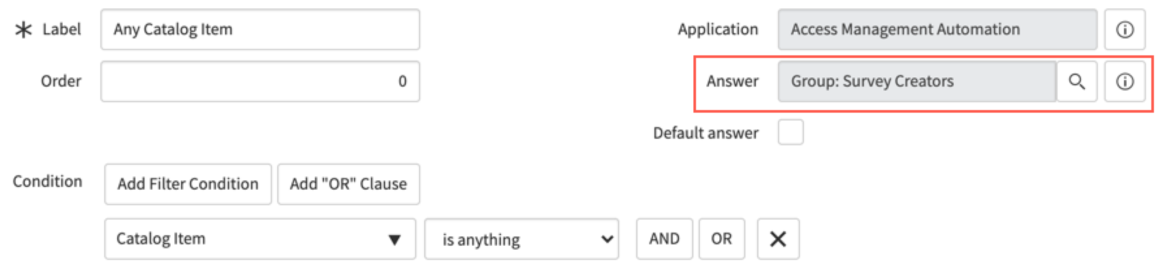
   b. Open the required Access Management Automation decision table record.
   These steps should be repeated for each decision table.

   c. Click the **Decisions** tab.

   d. Click the decision record.



   e. Select the required group, user, or subflow in **Answer**, depending on what the decision table is used for.



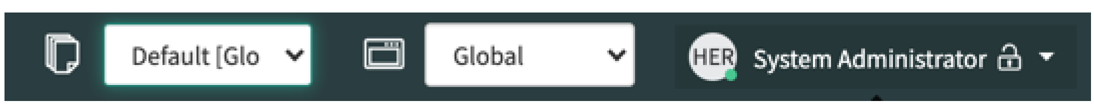
Note: Configure these seven decision tables and assign **Answer** as per your requirements.

- Access Mgmt. Catalog Task Group Assignment Policy
- Access Mgmt. Catalog Task User Assignment Policy
- Access Mgmt. Failed Automation Flow Policy
- Access Mgmt. Incident Group Assignment Policy
- Access Mgmt. Incident User Assignment Policy
- Access Mgmt. Requested Item Group Approval Policy
- Access Mgmt. Requested Item User Approval Policy

If select the Create Incident subflow in the Access Mgmt. Failed Automation Flow Policy decision table, you should configure the incident assignment decision tables. If you choose the Create Event subflow, you can ignore the incident assignment decision tables.

2. Configure the Service Portal page.

Note: Ensure that you select **Default [Global]** and **Global** for current update set and application.



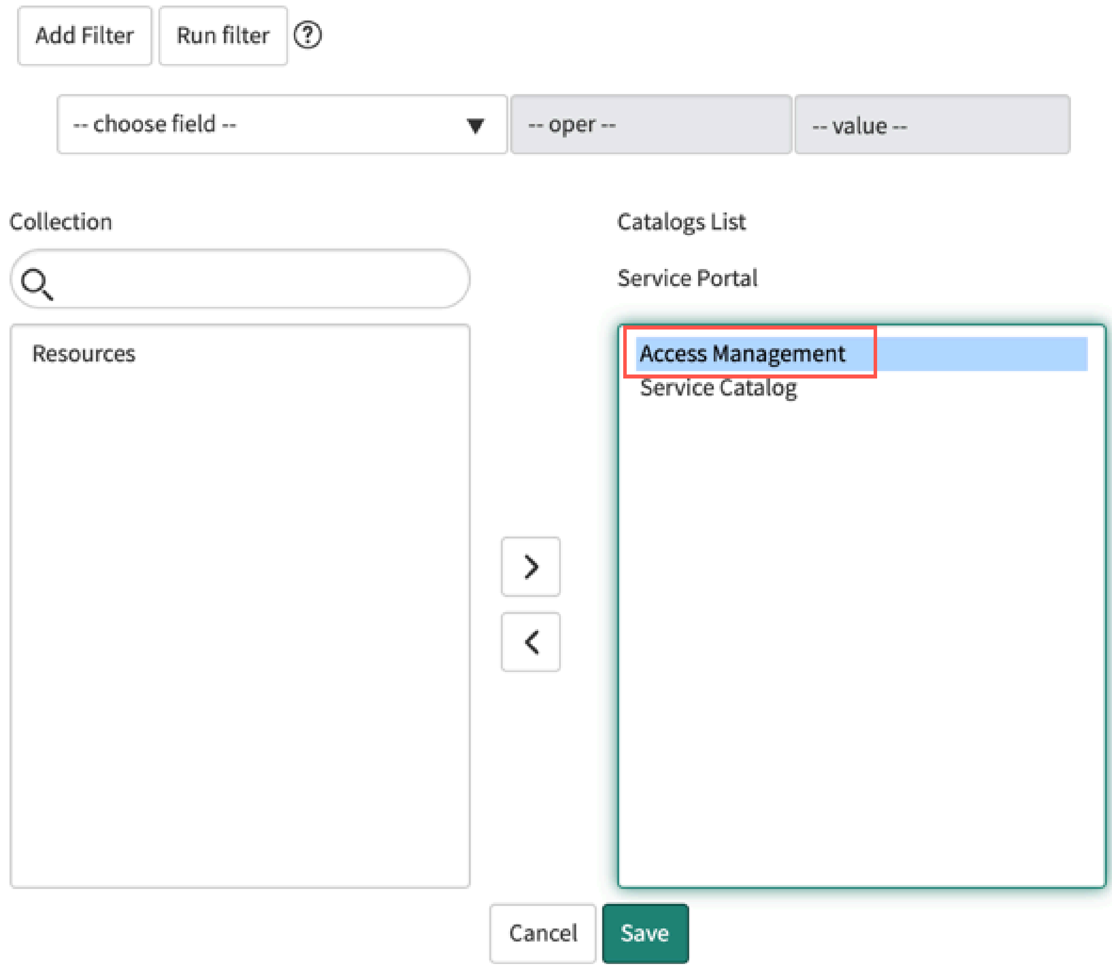
a. Navigate to **Service Portal** > **Portals**.

b. Open the **Service Portal** record.

c. Click the **Catalogs** tab.

d. Click **Edit**.

e. Add **Access Management** to the **Service Portal** list.



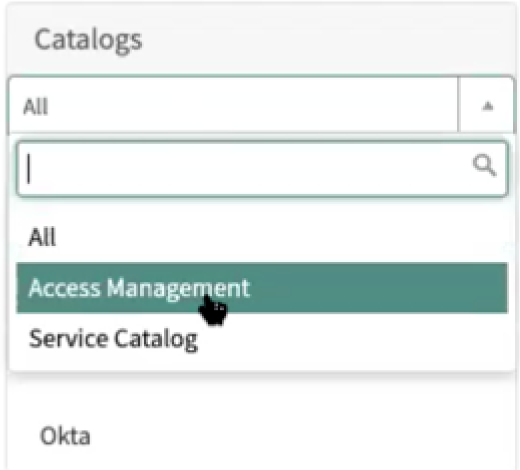
f. Click **Save**.

What to do next

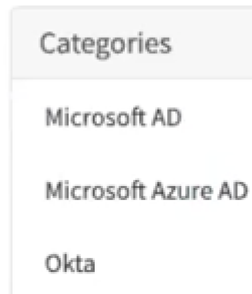
- To view the catalog items, navigate to **Service Catalog** > **Catalog Definitions** > **Maintain Catalogs** and click **Access Management**.
- To request a catalog item:

  Note: User must have the sn_acc_mgmt_sc.access_mgmt_user, ITIL, and Catalog Admin roles to create and submit catalog items.

  1. Navigate to the Service Portal.
  2. Click the **Catalog** tab.
  3. Click **Browse by Categories**.



4. Select **Access Management**.



5. Select the required service from the displayed categories.
6. Select the required action and submit the catalog item. When the request is approved, the associated flow is triggered and the required user can provide the approval. Activities are logged in the catalog item.

- If you are using the application to manage access in Okta, ensure that the user has the Okta admin role to retrieve data in the Okta groups module. Also, the user must have the Okta admin role to submit request using the catalog item.
- For information about customizing the widget and macro, see the KB article, Access Management Automation - Widget & Macro Customisations.

Cloud Deployment Automation

Automates the deployment and provisioning of the AWS CloudFormation services using Service Catalog or Service Portal.

Request apps on Store

Visit the ServiceNow Store website to view all the available apps and for information about submitting requests to the store. For cumulative release notes information for all released apps, see the ServiceNow Store version history release notes.

Spoke dependencies

You must activate and set up the AWS CloudFormation spoke to use this application.

Catalog items and flows

The Cloud Deployment Automation provides catalog items and flows to automate tasks. When a catalog item is submitted, the associated flow is triggered and the task is performed. To customize a flow, create a copy of it in a new application scope. Available catalog items and flows include:

Catalog Item or Flow	Description
Create Stack	Creates a stack in AWS CloudFormation account.
Create and Execute Change Set	Creates and executes a change set in AWS CloudFormation account.
Create Stack Set	Creates a stack set in AWS CloudFormation account.
Delete Stack	Deletes a stack in AWS CloudFormation account.
Delete Stack Set	Deletes a stack set in AWS CloudFormation account.
Update Stack Set	Updates a stack set in AWS CloudFormation account.

Subflows

The Cloud Deployment Automation provides subflows to demonstrate automating tasks. To customize a subflow, create a copy of it in a new application scope. Available subflows include:

Subflow	Description
Create Event	Creates an event if automation fails.
Create Incident	Creates an incident if automation fails.
Dynamic Flow Template	Subflow template to create event and incident.
Fetch Approvers and Assignees	Retrieves details of approvers (groups and users), assignee, and assignment group for the requested item, catalog task, and incident from the decision tables.
Get Stack Set Operation Result Status Reason	Retrieves the AWS CloudFormation stack set operation result status reason.
Get Stack Set Operation Status	Retrieves the operation status of the AWS CloudFormation stack set.
Get Stack Status	Retrieves the status of the AWS CloudFormation stack.

Actions

The Cloud Deployment Automation provides an action, Change Array.Object Internal Names to change an array of objects to another array of objects based upon the key value pair.

Decision tables

The Cloud Deployment Automation application uses decision tables to save the required information. The decision tables include:

Decision table	Description
CDA Requested Item User Approval Policy	Policy used to assign a requested item to the relevant user for approval.
CDA Requested Item Group Approval Policy	Policy used to assign a requested item to the relevant group for approval.

Decision table	Description
CDA Incident User Assignment Policy	Policy used to assign an incident to the relevant user.
CDA Incident Group Assignment Policy	Policy used to assign an incident to the relevant group.
CDA Failed Automation Flow Policy	Policy used to choose between creating an incident or an event when an automation failure occurs.
CDA Catalog Task User Assignment Policy	Policy used to assign a catalog task to the relevant user.
CDA Catalog Task Group Assignment Policy	Policy used to assign a catalog task to the relevant group.

User roles

The Cloud Deployment Automation application provides the sn_cloud_dpmt_atmn.cloud_deployment_automation_user role. Users with this role can view cloud deployment automation catalog items.

Note: User must have the sn_cloud_dpmt_atmn.cloud_deployment_automation_user_mgmt_user, ITIL, and Catalog Admin roles to create and submit catalog items.

System properties

The Cloud Deployment Automation application provides system properties that you can configure as per your requirement.

System property	Description
sn_cloud_dpmt_atmn.exclude_aws_regions	List of additional regions that should be excluded from those mentioned in the CloudDeploymentAutomationUtils script include.
sn_cloud_dpmt_atmn.include_aws_regions	List of additional regions that should be included to those mentioned in CloudDeploymentAutomationUtils script include.
sn_cloud_dpmt_atmn.flow_loop_limit	Number of hours that flows should run in loop before they exit.

Navigate to **System Properties** > **All Properties** to configure the values of these properties.

Set up Cloud Deployment Automation

Set up the Cloud Deployment Automation application by configuring the Service Portal page to use the default catalog items.

Before you begin

- Request Integration Hub subscription. For more information, see Legal schedules - IntegrationHub overview.
- Activate and configure the AWS CloudFormation spoke.

- Activate the Cloud Deployment Automation app
- Role required: admin

Procedure

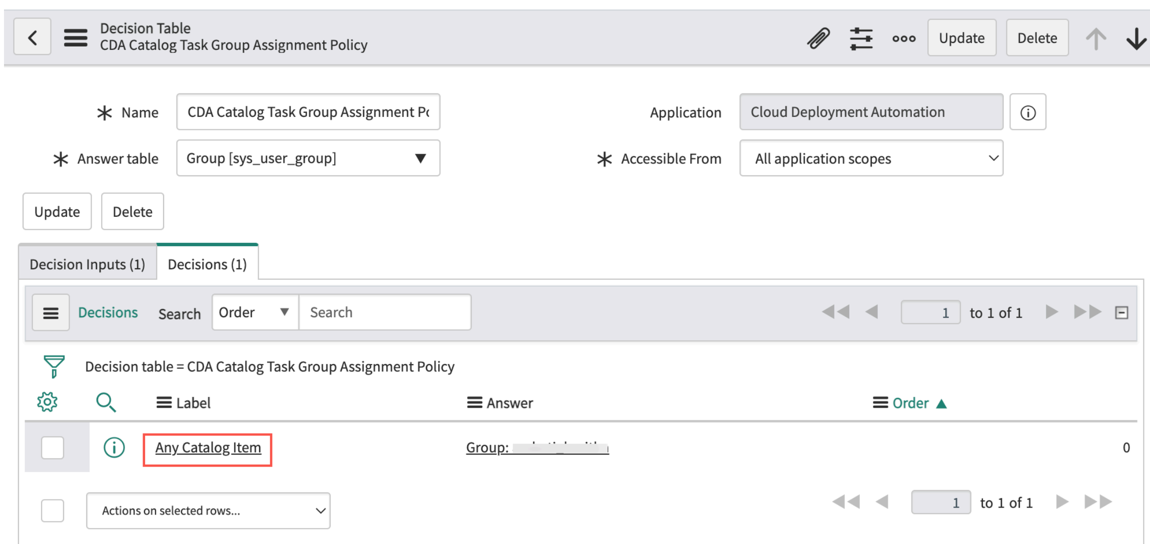
1. Configure the decision tables to perform the required tasks.
   The flows in this application use decision tables to enable admins to configure approvers, assignments, and subflow routing without modifying any of the flows in Workflow Studio. In each decision table by default, you can modify the decision record to select an option (group, user, or subflow) that applies to all catalog items in the application. If you want to have different assignments, approvers, or subflows per catalog item, you can add new decisions for each catalog item within the decision tables.

   a. Navigate to **System Definition** > **Decision Tables**.

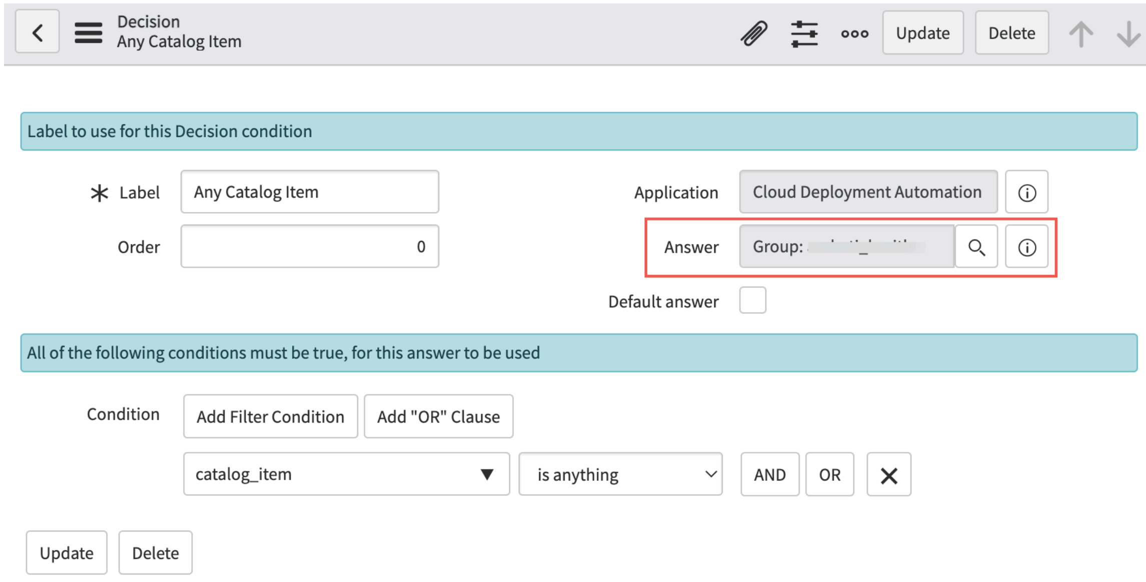
   b. Open the required Cloud Deployment Automation decision table record.
      These steps should be repeated for each decision table.

   c. Click the **Decisions** tab.

   d. Click the decision record.



   e. Select the required group, user, or subflow in **Answer**, depending on what the decision table is used for.

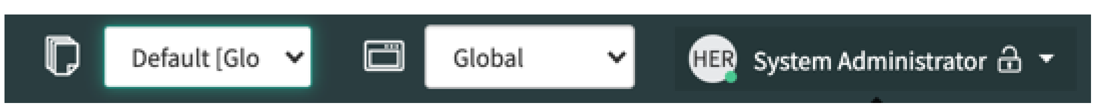


Note: Configure these seven decision tables and assign **Answer** as per your requirements.

- CDA Catalog Task Group Assignment Policy
- CDA Catalog Task User Assignment Policy
- CDA Failed Automation Flow Policy
- CDA Incident Group Assignment Policy
- CDA Incident User Assignment Policy
- CDA Requested Item Group Approval Policy
- CDA Requested Item User Approval Policy

2. Configure the Service Portal page.

Note: Ensure that you select **Default [Global]** and **Global** for current update set and application.



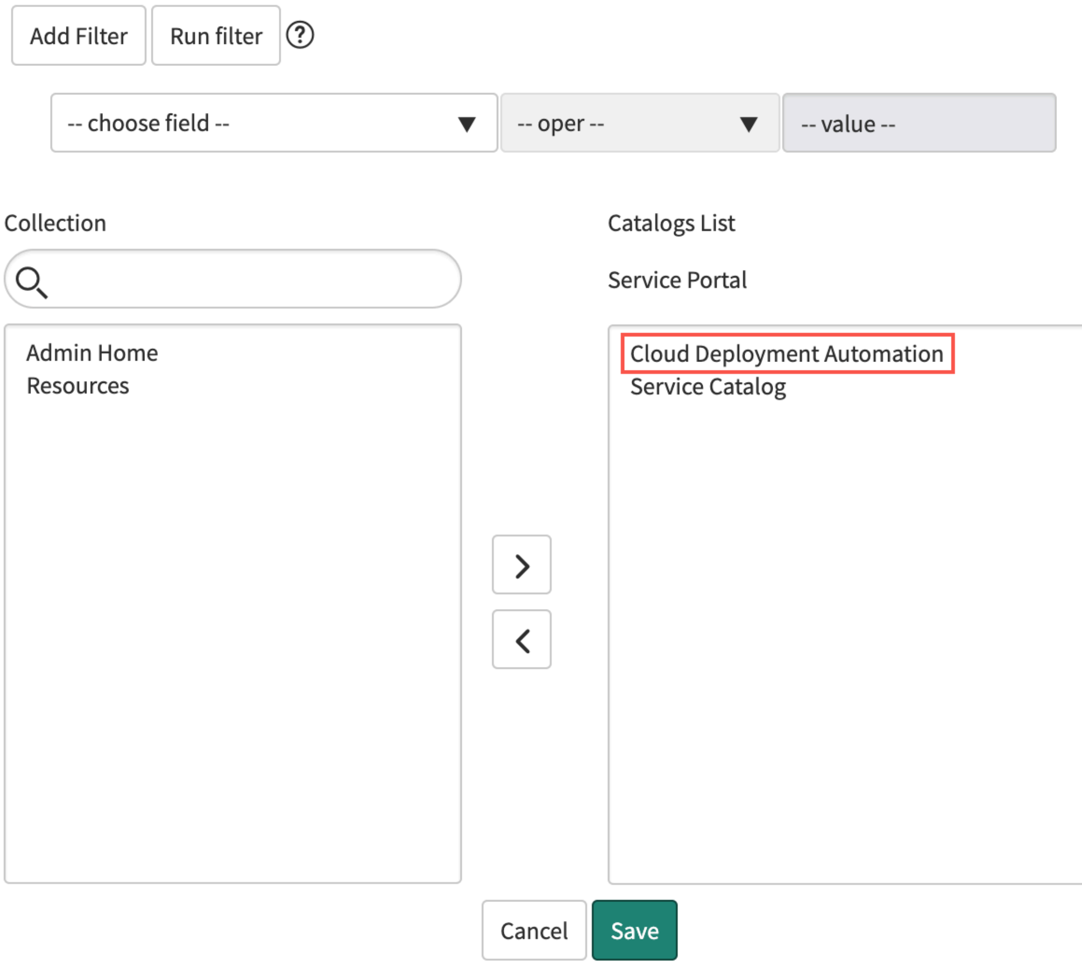
a. Navigate to **Service Portal** > **Portals**.

b. Open the **Service Portal** record.

c. Click the **Catalogs** tab.

d. Click **Edit**.

e. Add **Cloud Deployment Automation** to the **Service Portal** list.



f. Click **Save**.

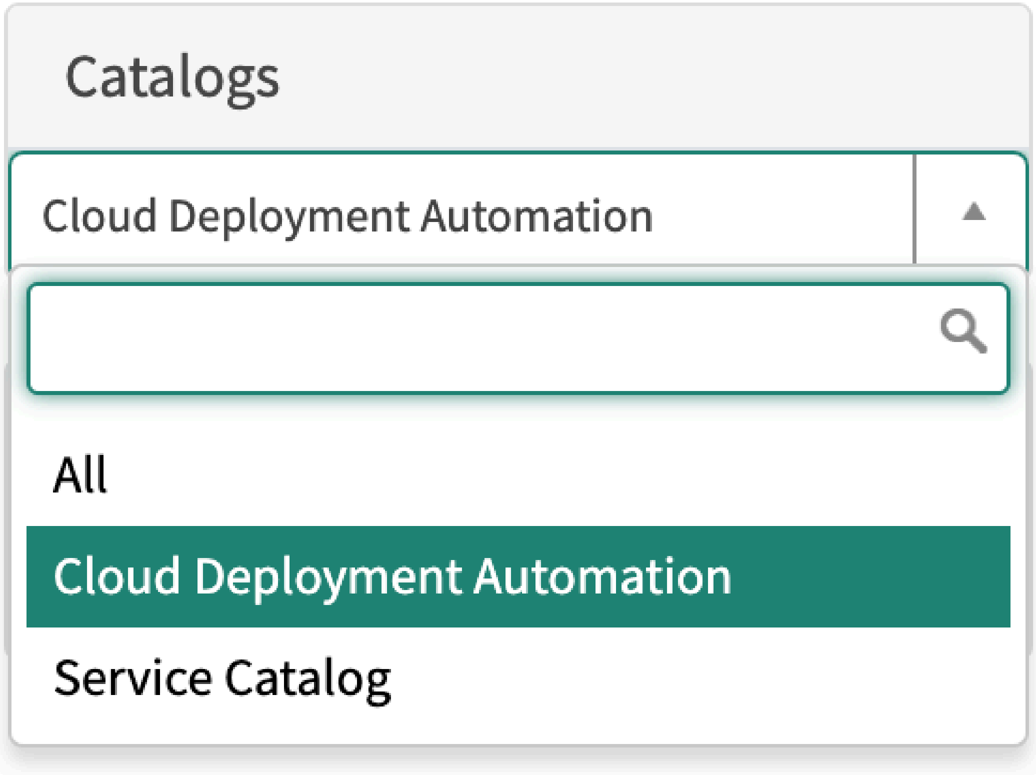
What to do next

- To view the catalog items, navigate to **Service Catalog** > **Catalog Definitions** > **Maintain Catalogs** and click **Cloud Deployment Automation**.
- To request a catalog item:

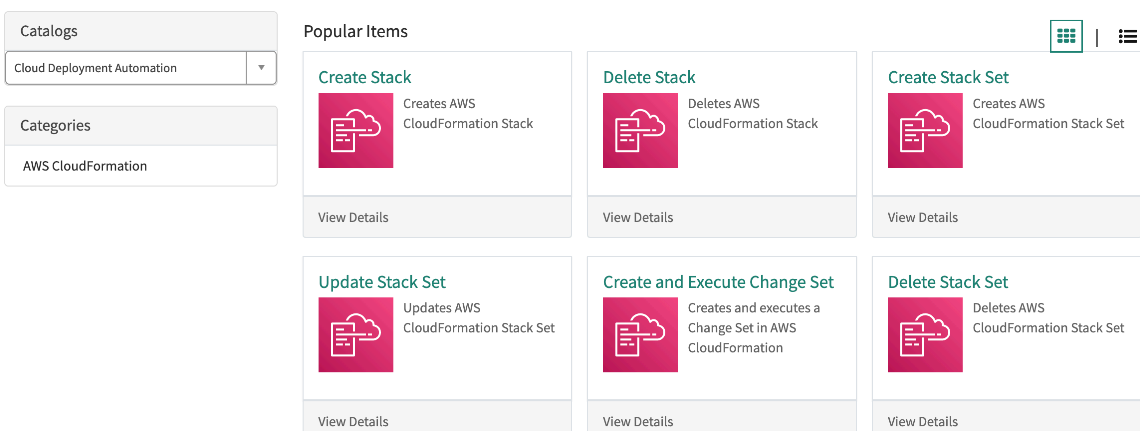
  Note: User must have the sn_acc_mgmt_sc.access_mgmt_user, ITIL, and Catalog Admin roles to create and submit catalog items.

  1. Navigate to the Service Portal.
  2. Click the **Catalog** tab.
  3. Click **Browse by Categories**.

4. Select **Cloud Deployment Automation**.



5. Select the required action and submit the catalog item. When the request is approved, the associated flow is triggered and the required user can provide the approval. Activities are logged in the catalog item.



Associate a portal with a knowledge base

You can associate a portal with any knowledge base. Multiple knowledge bases can be associated with a portal.

Before you begin

Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Portals**.
2. In the **Knowledge Bases** related list, select **Edit**.

Tip: If you don't see the **Edit** option, confirm that you have the correct application scope selected in the application picker.

3. Select one or more knowledge bases to add to the portal.
   The knowledge bases are displayed in Service Portal page listed in the **KB Home page** for the portal. If no knowledge bases are selected, all knowledge bases are available in the portal.
4. Select **Update**.

Related topics

Configure the Knowledge Management Service Portal

Configure Agent Chat in a portal

Your end users can initiate and maintain an Agent Chat conversation in any portal page. Write a script to pass portal-specific data to Agent Chat. For example, pass the name of your knowledge base to a Virtual Agent conversation.

Before you begin

Role required: admin

- Activate the Glide Virtual Agent (com.glide.cs.chatbot) or the Agent Chat (com.glide.interaction.awa) plugin. You can activate the Glide Virtual Agent plugin only if you have a subscription.

Note: For information about using Now Assist in Virtual Agent in portals, see Configuring assistants overview.

Procedure

1. Navigate to **All** > **Service Portal** > **Agent Chat**.
   The Service Portal Agent Chat Configurations [sp_agent_chat_config] table opens.
2. Select **New**.
3. Complete the form.

Field	Description
Active	Select to make the configuration active.
Name	Enter a unique name for the configuration record.
Portals	Select the portals in which you would like to use the specified chat configuration. If no portal is selected, the configuration applies to all portals in the system.
Application	Read-only application scope for the record.
Public	Select to make Agent Chat available to users before they log in.
Roles	Select the roles a user must have to use Agent Chat. If you don't select a role, Agent Chat is available to all users regardless of their role.
Order	Enter a number indicating the order that the configurations should run. Only one configuration applies per portal. If there are multiple

Field	Description
	configurations on a portal, the system runs the first configuration found from lowest to highest.
Server script	Write a script that passes page and widget data to an Agent Chat conversation when a user initiates the conversation. For example, pass a field to the chat conversation to enable Agent Chat to access the value. Data passed in this script is available to every page in the portal associated with this record. This script has access to the GlideSPScriptable API. **Note:** The portal suffix, page ID, and language are automatically available to Agent Chat and do not require a custom script. Sys ID and table are automatically available to Agent Chat when they are present in the URL. This example returns an object containing the list of catalogs associated with the portal to the current conversation. `(function ($sp) {` `   return {` `      catalogs: $sp.getValue('catalogs')` `   };` `})($sp);` When Agent Chat opens in an `iframe` HTML element, the list of catalogs is included in the `iframe` URL. Parameters from this field override any conflicting page data passed to Agent Chat.

4. Select **Submit**.

Result

Users can initiate and maintain an Agent Chat conversation from any page in the selected portal.

Customize the Agent Chat button

You can change the color and images that are used in the Agent Chat button in your portal.

Before you begin

If you plan to replace one or both of the images that are used in the Agent Chat button, upload the images to your instance. For more information on uploading an image, see Storing images in the database.

Role required: sp_admin or admin

About this task

You can configure the following elements of the Agent Chat button:

- The image to indicate that the chat window is open
- The image to indicate that the chat window is closed
- The button background color

These elements are determined in the portal theme. To customize the Agent Chat button, update the relevant SCSS variables in the portal theme record. For more information, see Set up your bot's branding.

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Note: If you change the web client Virtual Agent button icon while the system property [sys_property] table value *`com.glide.cs.advanced-chat.popover`* is set to `true`, set the web client Virtual Agent chat button to the same size as the original button icon, otherwise the icon is displayed oversize.

Procedure

1. Navigate to **All** > **Service Portal** > **Themes**.
2. Open a theme record.
3. In the **CSS variables** field, add the following variables:

Variable	Description
`$sp-agent-chat-btn-close`	Image to indicate that the chat window is closed. Use an image URL that contains: ○ Your instance address ○ The name of the Image [db_image] record to reference For example, to reference the `tack-icon.png` image in the database, enter the following: `$sp-agent-chat-btn-close: url("https://<instance-name>.service-now.com/tack-icon.png");`  To use the default image, remove the variable.
`$sp-agent-chat-btn-open`	Image to indicate that the chat window is open. Use an image URL that contains: ○ Your instance address ○ The name of the Image [db_image] record to reference For example, to reference the `book-icon.png` image in the database, enter the following: `$sp-agent-chat-btn-open: url("https://<instance-name>.service-now.com/book-icon.png");`  To use the default image, remove the variable.
`$sp-agent-chat-bg`	Button background color. Use a Hex code to set the color. For example, to use red, enter the following: `$sp-agent-chat-bg: #ff0000;`

Variable	Description
	 To use the default background color, remove the variable.

4. Click **Update**.

Migrate from the Virtual Agent Service Portal widget

If you are upgrading from a previous release, your portal implementation may include the Virtual Agent Service Portal widget. Migrate widget options to the Agent Chat in Service Portal configuration and remove all instances of the widget to enable your users to initiate and maintain an Agent Chat conversation in any portal page.

Before you begin

Role required: (admin or none)

Procedure

1. Record instance options and delete instances of the Virtual Agent Service Portal widget.
   a. Locate each instance of the Virtual Agent Service Portal widget and open the instance options.
   b. Record the values.
   c. Delete the widget instance.
2. If your widget instance included a color instance option, add the color variable to the portal theme record.
   a. Navigate to **Service Portal** > **Themes**.
   b. Open the theme record for the portal.
   c. In the **CSS variables** field, add the `$sp-agent-chat-bg` variable and set the value to the desired color.

      Example

      ```
      $sp-agent-chat-bg: #ff0000
      ```
3. If your widget instance options included URL parameters, add them to the Service Portal Agent Chat Configurations form **Server script** field.

   Note: The portal suffix, page ID, and language are automatically available to Agent Chat and do not require a custom script. Sys ID and table are automatically available to Agent Chat when they are present in the URL.

a. Navigate to the record in the Service Portal Agent Chat Configurations [sp_agent_chat_config] table for the desired portal.

b. In the **Server script** field, write a custom script to pass the parameters to Agent Chat.

Example

This example returns the value of the chat_queue field to the current conversation.

```
(function ($sp) {
 return {
  chat_queue: $sp.getValue('chat_queue')
 };
})($sp);
```

Result

Widget instances are removed from individual portal pages. Instead, the portal applies the Service Portal Agent Chat Configurations record to every portal page.

Pass page data to Agent Chat

Use the *spContextManager* class in a widget client script to pass dynamic page data to Agent Chat. For example, pass the number of approvals in the Approvals widget to Agent Chat when a user initiates a conversation from the Service Portal homepage.

Before you begin

Role required: admin

Examine the widget to understand how data is passed to the widget client script. To make data available to Agent Chat, you must pass it to the *spContextManager* service. You can then access the data in a Virtual Agent topic using the `vaContext` object. For more information about using context variables in Virtual Agent scripts, see Virtual Agent scripts.

Procedure

1. Open the widget in the widget editor.
2. Update the widget client script.
   a. Inject the *spContextManager* service into the widget client script function.
   b. Pass variables to Agent Chat using the *spContextManager* API.

   This example passes `approval_count` to Agent Chat. When a user initiates a conversation from the Service Portal homepage, the system appends `&sysparm_approval_count=5` to the Agent Chat `iframe` URL.

```
function ($scope, spContextManager) {

   spContextManager.addContext('agent-chat', {
      'approval_count': 5
   });
};
```

   Keys passed to this API are unique per page. For example, if the `'agent-chat'` key is already initialized by another widget on the page through the *addContext()* method, you must use the *updateContextForKey()* method to update the key's data. . For more information about the *spContextManager* class, see spContextManager.
3. Click **Save.**

4. Use Service Portal data in a Virtual Agent topic.

   a. Navigate to **Virtual Agent** > **Designer** and open the topic in which you would like to use Service Portal data.

   b. Click **Edit Topic Flow**.

   c. Configure the topic as needed.
   In a script field, use the `vaContext` object to access the context variable passed from the Service Portal.

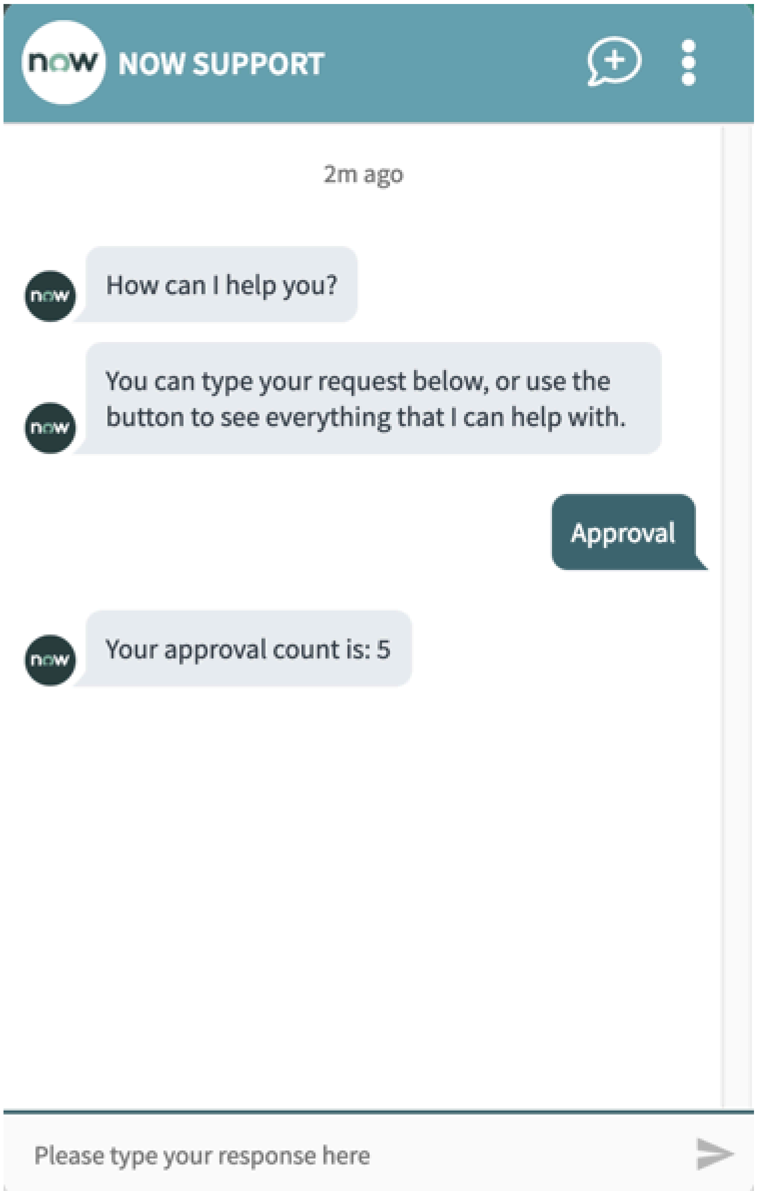
   For more information about creating a Virtual Agent topic, see Create a Virtual Agent topic.

   Example
   For example, this script accesses the value of the `approval_count` variable in the Approvals widget.

```
(function execute() {
    return "Your approval count is: " +
 vaContext.approval_count;
})()
```

   d. Save and publish the topic.

Result
Agent Chat can access the variables when an end user initiates a conversation from the Service Portal page.



Remove Live Chat link from the header menu

If your portal includes a Live Chat link in the header menu, you can remove it by updating the widget's option schema.

Before you begin

Role required: admin

About this task

Adding the **Chat Queue** field to a portal record adds the Live Chat link to the portal's header menu. If you integrate your portal with Agent Chat, the Live Chat link is no longer needed.

Procedure

1. In the Service Portal configuration page, navigate to **Portal Tables** > **Instance with Menu**.
2. Open the record for your portal's header menu.
   For example, open **SP Header Menu** if using the base system portal.
3. In the **Additional options, JSON format** field, add the following JSON key-value pair.

```
"enable_live_chat": {
    "displayValue": "false",
    "value": false
}
```

The final JSON looks like this.

```
{
    "enable_cart": {
        "displayValue": "true",
        "value": true
    },
     "enable_wishlist": {
       "displayValue": "true",
         "value": true
     },
    "enable_live_chat": {
      "displayValue": "false",
        "value": false
    }
}
```

4. Click **Update**.

Result

When you navigate to the portal, **Live Chat** does not appear in the header menu.

Defining portal styles

Pages are made up of containers, columns, rows, widgets, and widget instances. You can configure the CSS of each component, or use the CSS defined in theme and branding as global definitions for the portal. If you do not define CSS in theme or branding, Bootstrap defaults are used.

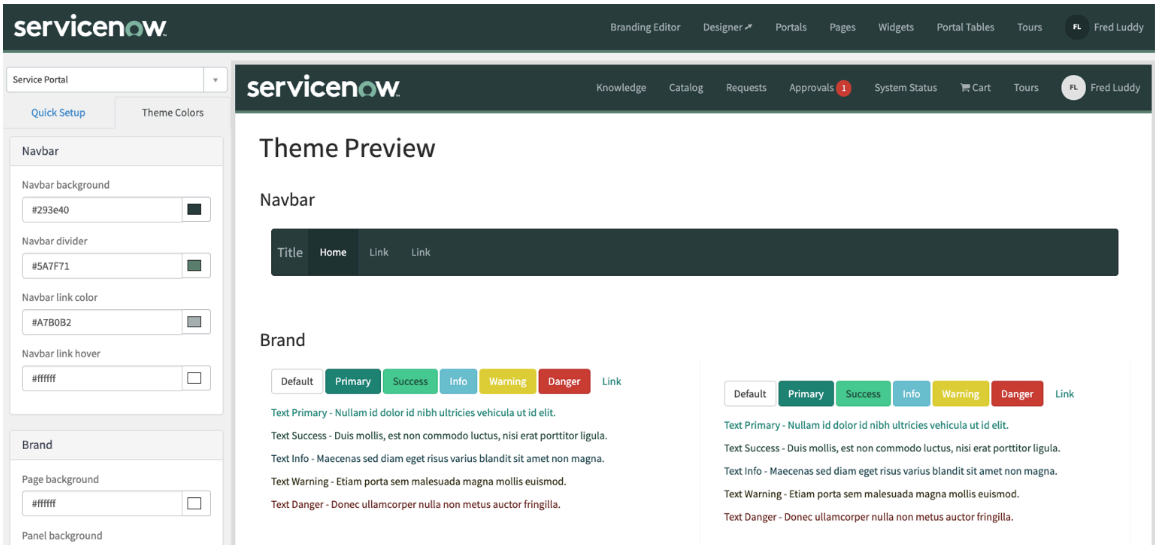
You can define CSS in your portal at multiple levels.

Bootstrap defaults

If no other CSS is defined, all elements use Bootstrap version 3.3.6 defaults. You can use Bootstrap CSS Helper Classes with any Service Portal field that accepts CSS as a value. To show or hide Service Portal containers, use Bootstrap CSS Responsive Utilities Helper Classes such as `visible-lg` or `hidden-md`.

Branding editor theme colors/Portal CSS

CSS defined in the Branding Editor Theme Colors tab. Changes made to the theme colors in the Branding Editor appear in the CSS variables field in the portal table [sp_portal]. Customizing the theme colors overwrites the Bootstrap defaults.



Theme CSS

CSS defined in the CSS variables field in the Themes table [sp_theme]. Use the Theme CSS as much as possible to allow for more flexible evolution of your portal in the future.

Using a theme overwrites the Portal CSS/Branding Editor theme colors.

Page CSS

CSS defined in the Page Specific CSS field in the Pages table [sp_page].

Page-specific CSS overwrites the theme CSS.

CSS classes

You can define CSS classes elements on the page within each respective record.

Widget CSS

CSS defined in the CSS field in the Widgets table [sp_widget].

Widget CSS overwrites container, column, and row CSS.

Widget instance CSS

CSS defined in the CSS field in the Instance table [sp_instance].

Widget instance CSS overwrites all other CSS definitions.

Note: In some cases, default styles for accessibility might overwrite the CSS defined for a portal.

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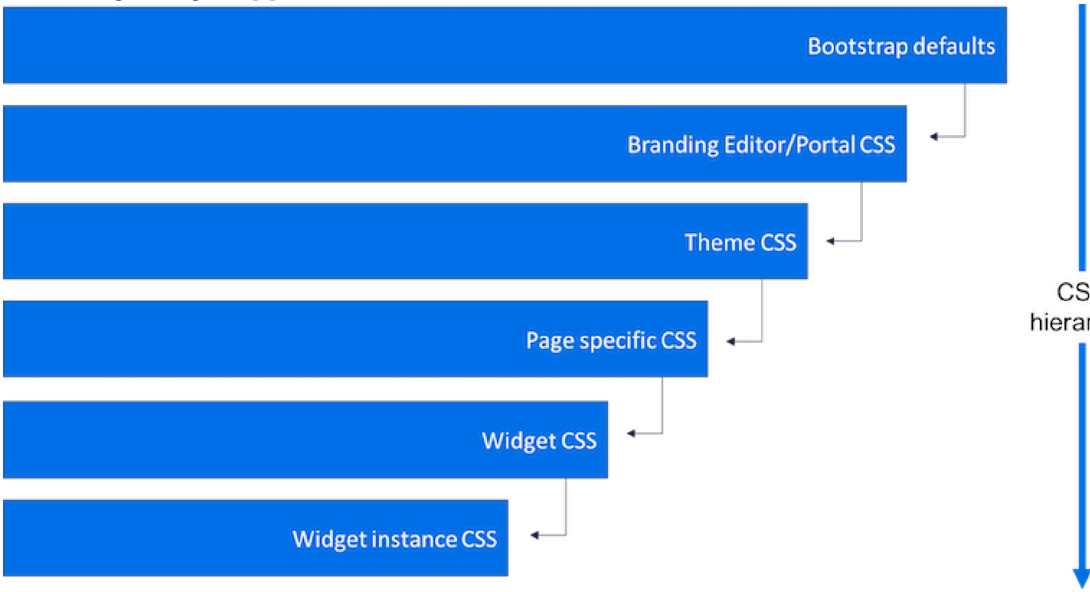
Hierarchy of style application in the Service Portal



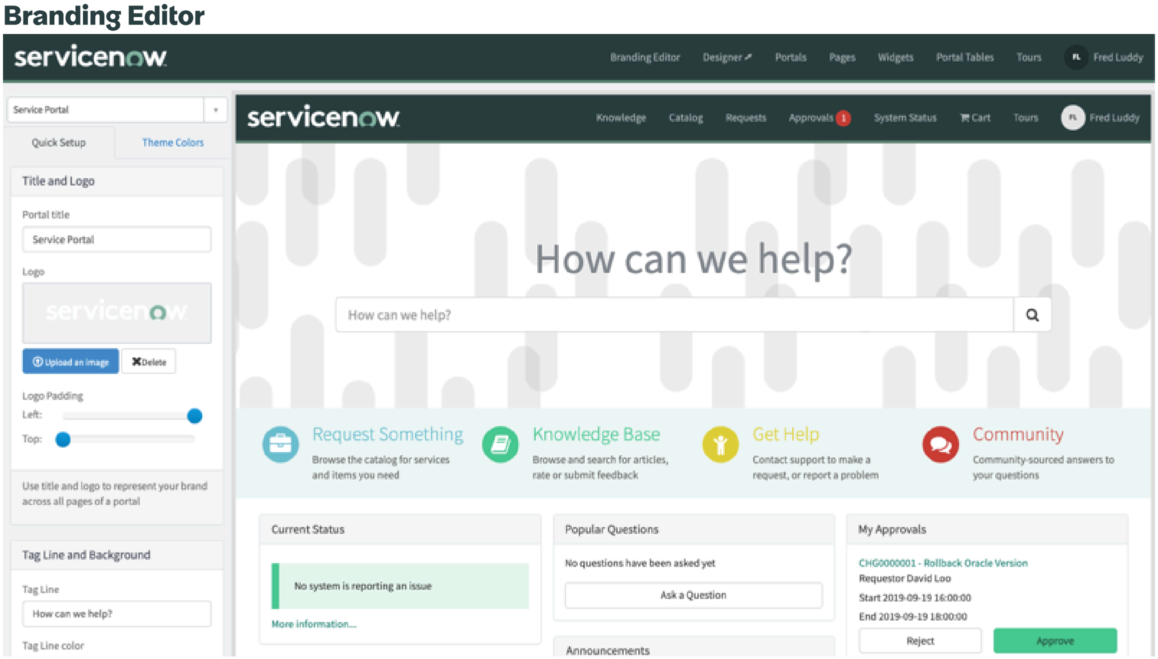
Configure portal branding

Use Branding Editor to give your portal its own look and feel.

To access the Branding Editor, navigate to **Service Portal** > **Service Portal Configuration**, then click **Branding Editor**.

Select the portal you want to customize the theme for from the portal list. Then use the options on the Quick Setup and Theme Colors tabs to customize your portal.

Branding Editor



Quick Setup tab options

Field	Description
Portal Title	The name of your portal. Changing the name of the portal in the Branding Editor also changes the title on the portal form field in the platform UI.
Logo	The logo that appears in the header for your portal. This image is scaled to a maximum height of 46 px and a maximum width of 200 px.
Logo padding	Where you want the logo to sit in location to the edge of the header. This information is stored in the CSS variables section on the portal form.
Tag line & background	Fields defined by the JSON schema in the **Quick start config** field on the portal record in the platform UI. The sample Service Portal adds **Tag Line** and **Background** to the Branding Editor using the following schema: `[{` ` "tagline": {` `  "table" : "sp_instance",` `  "sys_id" : "34fe3d96cb20020000f8d856634c9cf4",` `  "field" : "title"` ` },` ` "hero_background": {` `  "table" : "sp_container",` `  "sys_id" : "be98a8d2cb20020000f8d856634c9c63",` `  "field" : "background_image"` ` }` `}]`
Tag line	Introduce your users to a portal page with a tag line. This text is stored in an instance of the homepage search widget.
Tag line color	Select a color for the tag line.
Homepage background color	Add a color for your background. You can type in a color name, hex color, decimal (RGB), or select from the color palate.
Background image	Upload an image to appear in the background of your homepage. This image is stored in the container for the widget on your homepage.

For any colors on the theme tab, you can use the standard color name, hex code, decimal (RGB) code, or select the color from the color palate. All the color definitions are stored in the CSS variables field of the portal form. The theme preview updates in real time as you make changes.

Theme colors tab

Field	Description
Navbar	Use the fields in this section to customize the colors for the header menu.
Brand	Use the fields in this section to customize the page colors. For example, the page background or the widget background.
Text	Use the fields in this section to customize the color of the text on a page.

Changes made to the theme colors in the Branding Editor appear in the CSS variables field of the portal form in the platform UI.

Activate La Jolla theme branding

Activate the Service Portal La Jolla Brand to apply ServiceNow branding, which includes WCAG-AA compliance for contrast. This plugin is active by default on new instances, but admins must activate the plugin on instances upgraded from earlier versions.

Before you begin

Role required: admin

About this task

The **Service Portal La Jolla Brand Update** activates these related plugins if they are not already active.

Plugins for Service Portal La Jolla Brand Update

Plugin	Description
Service Portal La Jolla Brand [com.glide.service-portal.themes.la-jolla]	This plugin updates your /sp and /sp_config portals with the ServiceNow La Jolla branding. If the portal record has not been modified, the logo, favicon, login page background image, hero banner, theme, and widget instance options are updated.

Note: If you have modified the **/sp** or **sp_config** portal pages before installing the plugin, you may not see all elements of the La Jolla branding. All branding images are located in the **db_image** table for manual updates to your custom portals.

To purchase a subscription, contact your ServiceNow account manager. After purchasing the subscription, activate the plugin within the production instance.

You can evaluate the feature on a sub-production instance without charge by requesting it from the HI Customer Service System.

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the plugin using the filter criteria and search bar.

   You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.

3. Select **Install** to start the installation process.

   Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: `Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.`

   You will see a message after installation is completed. For information about the components installed with a plugin, see Find components installed with an application.

Related topics

List of plugins (Yokohama)

Create a portal theme

If you need more customization than Branding Editor can provide, you can create your own custom theme.

Only users with an understanding of CSS should create custom themes.

1. Navigate to **Service Portal** > **Themes**, then select **New**.
2. Complete the form fields and then from the form context menu, select **Save**.

Theme form fields

Field	Description
Name	Name of your theme. Use this name to associate the theme with your portal. This name is not visible to users, you should know it to apply the correct theme to a portal.
Turn off SCSS compilation	Turns off compiling SCSS and sends the plain CSS file directly to the client.
Application	The record scope. The header menu record and the source table must have the same application scope.
Header	List of headers and footers from the sp_header_footer table that you can associate with a portal theme. Headers and footers are widgets and can be configured the same way.
Footer	List of headers and footers from the sp_header_footer table that you can associate with a portal theme.
Fixed header	Locks the header at the top of the page so that when a user scrolls the header remains on the screen.
Fixed footer	Locks the footer at the bottom of the page so that when a user scrolls the footer remains on the screen.
CSS variables	CSS custom properties that you can use to change the color and styles in a portal. For example, the stock theme uses some of the following variables: `$sp-logo-margin-x:   15px !default;` `$sp-tagline-color:  $text-color !default;` `$navbar-inverse-bg:  #3a3f51 !default;` **Note:** Use the CSS variables field to define CSS variables only. Use CSS Includes to define CSS rules. As of the Madrid release, Sass and LESS can be used within CSS Includes.

3. To add a style sheet to the theme, in the **CSS Include** related list, select **New**.
4. Complete the style sheet form fields and select **Submit**.

Style sheet form fields

Field	Description
Name	Name of the CSS Include. Remember this name to associate the CSS Include with the theme.

Field	Description
Application	The record scope. The header menu record and the source table must have the same application scope.
Source	Select one of the following options: ○ **Style Sheet**: Add an internal style sheet that has been uploaded to the CSS table [sp_css]. For example, ng-sortable.min.css. Internal style sheets use standard CSS in the CSS field. ○ **URL**: Link to an external style sheet. Use external style sheets to use the same CSS as a corporate website or other online resource.
Style sheet	An internal style sheet to associate with the theme.
CSS file URL	A URL to an external style sheet to associate with the theme.
Lazy Load	(Optional) Option to load the CSS Include asynchronously to improve page load time. This option should be set to the same value for all CSS Includes of a theme. Enabling asynchronous loading for only some CSS Includes associated with a theme isn't recommended. **Note:** Enabling **Lazy Load** isn't recommended for portals with flashing of unstyled content. The CSS Includes with **Lazy Load** enabled are listed in the **Lazy load CSS includes** related list in the theme record.
RTL CSS file URL	(Optional) A URL to an external style sheet for mirroring the direction of a portal when the session language is a right-to-left language, such as Hebrew. For information about support for right-to-left languages, see Styling for right-to-left languages in portals.

5. To add a JavaScript include to the theme, in the **JS Include** related list, select **New**.
6. Complete the JS Include form fields and select **Submit**.

JS Include form fields

Field	Description
Display name	Name of the JS Include. Remember this name to associate the JS Include with the theme.
Application	The record scope. The header menu record and the source table must have the same application scope.
Source	Select one of the following options: ○ **UI Script**: Add an internal UI script that has been uploaded to the UI script table [sys_ui_script]. UI scripts allow you to create client-side JavaScript and reuse it in multiple locations. For more information on UI scripts, see UI scripts. ○ **URL**: Link to an external JavaScript file. Use external URLs to use the same JavaScript as a corporate website or other online resource.

Field	Description
UI Script or JS file URL	Associate an internal UI script or JavaScript file URL, depending on which option you select in the Source field.
Updated	Date and time that the JS Include was last updated
Package	The Service Portal package that the JS include is associated with. For example, Service Portal Configuration Pages. This field is populated by default.

Enable text resize in your portal

Enable text resize to increase the size of your text up to 200% through your browser settings.

Before you begin

- If you upgraded to a Rome instance from a prior release, the property is created for you. The property default is set to **False** for Service Portal and Mobile Employee Service Portal (MESP). Follow the steps in this task to manually set the property to **True**.
- If you have a new portal or a zBoot instance, the property is set to True by default. There are no actions you need to take.
- If you haven't upgraded to a Rome instance, the property is created, but is set to **False** by default.

Role required: admin

Procedure

1. Enter `sys_properties.list` in the Filter navigator.
2. Select *glide.service_portal.resize_text.{your portal_url_suffix}.enable_rem_conversion* from the list.
   For example, *glide.service_portal.resize_text.sp.enable_rem_conversion*.
3. On the form, set the Value field to **true**.
4. Select **Update**.

Override the HTML base CSS font size in your portal

Set the HTML base CSS font size in your portal.

Before you begin

Role required: admin

Procedure

1. Enter `sys_properties.list` in the Filter navigator.
2. Select *glide.service_portal.resize_text.{portal_url_suffix}.base_font*.
   For example, *glide.service_portal.resize_text.mesp.base_font*.
3. On the form, set the Value field to the font size you want.
4. Select **Update**.

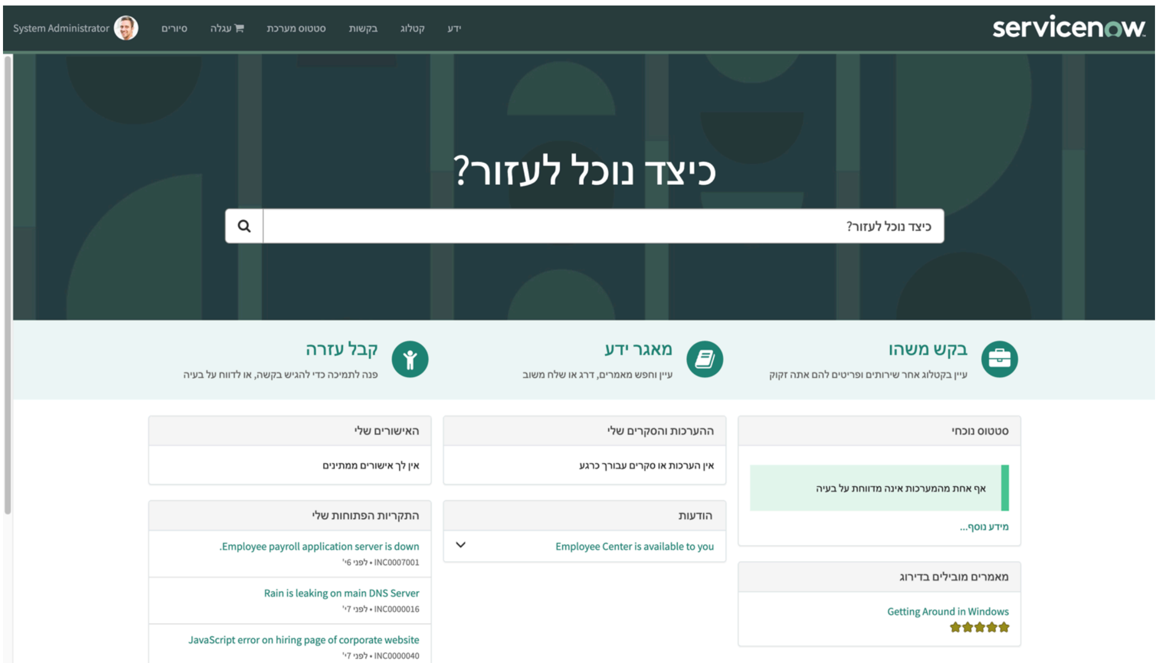
> **Note:** If an issue arises with resize text for custom pages coming from styling from custom CSS includes, convert those CSS values from pixels to REMs.

Styling for right-to-left languages in portals

Localizing a portal for right-to-left languages requires CSS that mirrors the direction of portal pages.

Service Portal can generate the CSS required to mirror the user interface direction of the portal when the session language is a right-to-left language. The entire hierarchy of existing infrastructure for styling left-to-right languages—the theme, page, widget, and widget instance SCSS—is converted to CSS for right-to-left languages. All directional properties supported by RTLCSS are converted. However, plain CSS files included in any of the theme or widget dependency records, internal CSS, and inline CSS aren't automatically converted.

Service Portal direction mirrored for Hebrew



You can also provide your own CSS for right-to-left languages to override the automatically generated CSS if you use an external CSS library and you can control the conversion of CSS for right-to-left languages using a variety of methods.

Note: Base system portals besides Service Portal (/sp) and custom portals might need additional CSS customization to mirror the direction of a portal for right-to-left languages completely.

To track how many users view a portal in a right-to-left language, see the PortalPageLoad event in Usage Insights for Service Portal. For more information about available events, see Service Portal events.

Mirror the portal direction for right-to-left languages

Mirror the direction of a portal's user interface for right-to-left languages by enabling the necessary CSS.

Before you begin

Active a right-to-left language, such as Hebrew. For more information, see Activate a language.

Role required: sp_admin or admin

Procedure

1. Navigate to **All** > **Service Portal** > **Portals**.
2. Select a portal.
3. Select the **Support right-to-left languages** option.
4. Select **Update**.
   CSS that mirrors the direction of a portal's user interface for right-to-left languages is generated.
5. **Optional:** If you use an external CSS library for your portal theme, provide your own CSS that mirrors the direction of a portal's user interface to override the automatically generated CSS.
   a. Navigate to **All** > **Service Portal** > **Themes**.
   b. Select the theme for the portal.
   c. In the **CSS Includes** related list, select the CSS Include that links to an external CSS library URL.
      If you need to create a new CSS Include, see Create a portal theme.
   d. In the **RTL CSS file URL** field, enter the URL to an external style sheet for mirroring the direction of a portal for right-to-left languages.
   e. Select **Update**.

Result

When the session language is a right-to-left language, the direction of the portal user interface is mirrored to display from right to left.

Trouble?

If any content in your portal isn't automatically mirrored for right-to-left languages, see CSS for right-to-left languages in portals for information about how to resolve these issues.

CSS for right-to-left languages in portals

You can control the generation of CSS for right-to-left languages using a variety of methods.

Base system portals besides Service Portal (/sp) and custom portals might need additional CSS customization to mirror the direction of a portal for right-to-left languages completely.

Custom widgets might need some manual conversion for right-to-left languages.

- For inline styles in a widget's HTML template, move these styles to the widget's CSS so they'll be automatically converted.
- For internal styles in a widget's HTML template, you can use the `[dir="rtl"]` attribute selector or `.rtl` class selector to provide CSS that is specific to right-to-left languages.
- To include CSS that is specific to right-to-left languages, you can call the *`isRTLEnabled()`* method in the GlideSPScriptable - Scoped class in a widget's server script or use the *`g_portal_isrtl`* global flag in the widget's client script.

Also, in the theme, page, widget, or widget instance CSS, you can add right-to-left directives to CSS properties only using a Sass interpolation string (`#{""}`).

CSS directives for right-to-left languages

Right-to-left CSS directive	Description
`/*rtl:ignore*/`	Ignores the property when converting portal CSS for right-to-left languages.
`/*rtl:prepend:10px*/`	Adds a value to the beginning of the property value for right-to-left languages. This example prepends `10px`.
`/*rtl:append:3rem*/`	Adds a value to the end of the property value for right-to-left languages. This example appends `3rem`.
`/*rtl:replace:30px*/` or `/*rtl:30px*/`	Replaces the property value with the specified value for right-to-left languages. This example replaces the property value with `30px`.
`/*rtl:insert:25px*/`	Inserts the specified value in place of the directive for right-to-left languages. This example inserts `25px`.

Example: Ignore the transform property in the converted right-to-left CSS

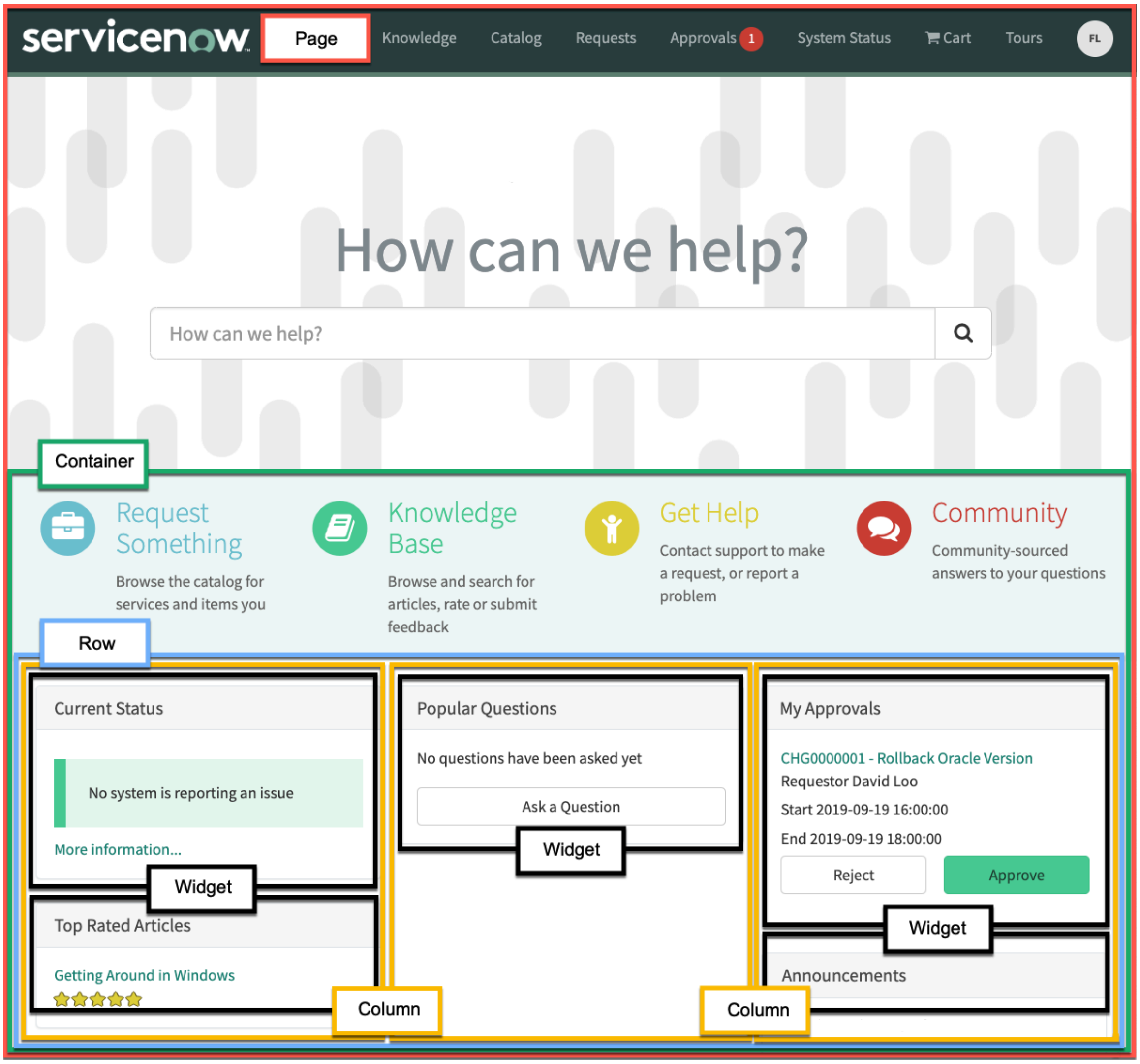
```
.fl {
transform: rotate(45deg) translateY(5px) #{"/*rtl:ignore*/"};
}
```

Creating portal pages

Use pages to organize content, ensure responsive mobile optimization, and design meaningful portal user experiences for your customers. A page houses containers and rows, which then contain widgets. By manipulating the layout of the page, and the widgets within it, you can construct your desired user experience.

- Pages are referenced using the page ID.
- Pages can be referenced in more than one portal.
- Use base system pages as templates.

Page layout

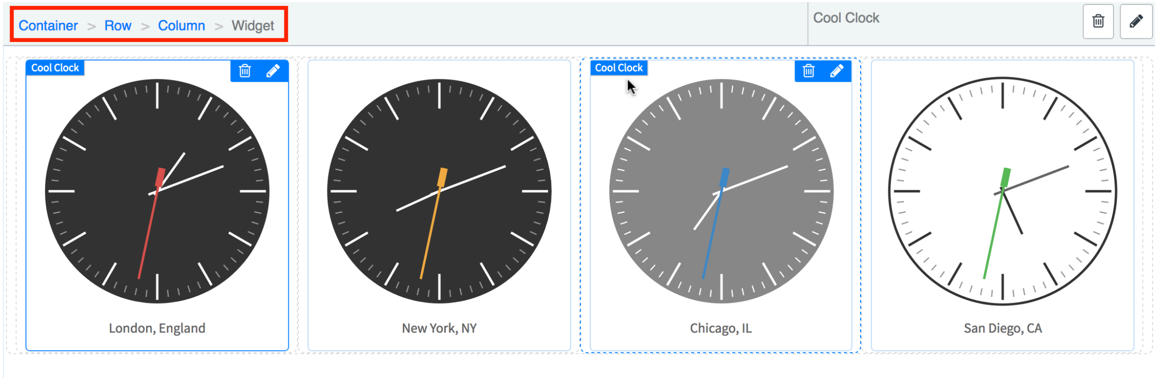


Containers

Containers are markup artifacts that are put on a page to contain the layouts that house the widgets.

You can view containers and how they make up a page in the Service Portal Designer (**Service Portal** > **Service Portal Configuration** > **Designer**). Open a page in the Service Portal Designer, then click anything on the page. In the top left corner, breadcrumbs appear to show you which element on the page you have selected. Use the breadcrumbs to select a container, then click the edit icon ( ).

Service Portal Designer breadcrumbs



You can also edit a container by navigating to the Page Editor and selecting the container node in the tree view. In this view, you can:

- Change the layout of widgets on a page.
- Determine the number of columns on a page.
- Determine whether to scale with changes to the browser window.
- Add a background color to a portion of a page.
- Add an background image to a portion of a page.
- View the current layout of the widgets within the page.

Create and edit a page using the Service Portal Designer

Create or edit a page and use layouts to organize the columns that house the widgets.

Before you begin

Role required: sp_admin or admin

About this task

These steps are intended for users with little to no coding experience. The Service Portal Designer includes several layers of customization from simply adding widgets in a particular configuration on a page, to adding CSS classes.

Procedure

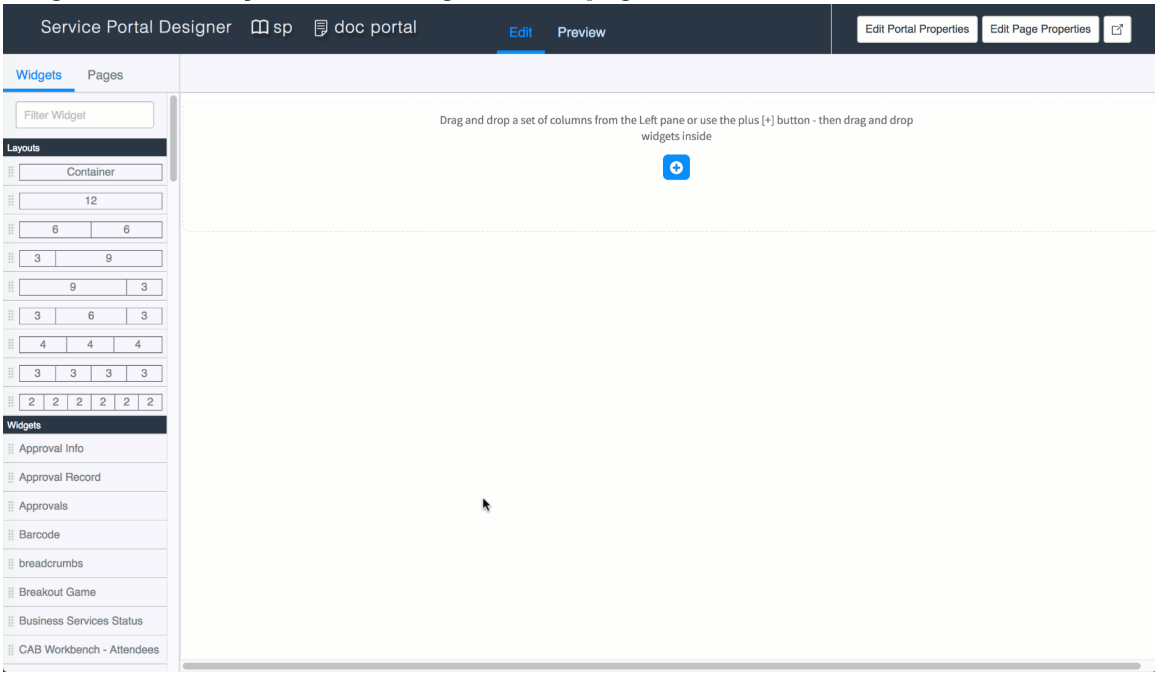
1. Navigate to **All** > **Service Portal** > **Service Portal Configuration**.
2. Select **Designer**.
3. Switch to the portal you want to design pages for by selecting the portal name in the header.

4. From the Service Portal Designer, select a page to customize or select **Add a new page**.
5. Under Layouts, select **Container** and drag it onto the page.
6. Drag one of the other layouts and drop it in the container.
   This layout defines the structure of your page and the space available to drop widgets. The structure of the layout aligns with the Bootstrap grid template and always adds up to 12.
7. Use the filter to search for a widget, then drag the widget to the layout.

servicenow

Example

Drag containers, layouts, then widgets onto a page



For widgets that do not contain any information by default, you must configure the options for their widget instances before they will appear on a portal page. For more information about configuring widget instance options, see Configure widget instances.

8. **Optional:** Edit page properties.

   a. Select **Edit Page Properties**.
   The page record from the Pages table [sp_page] opens.

   b. Edit the form.

Page fields

Field	Description
Title	Internal name of the page. Use the title to search for a page in the Service Portal Designer.
ID	A unique ID for the page. The ID is what you use to assign a page to a portal. It also determines the URL for the page, for example `https://instance name.service-now.com/doc_portal/?id=doc_page`, where doc_page is the page ID.
Application	The application scope.
Public	Enables the page to be accessed without the need for authentication. If **Public** is selected, all users can view the page no matter the roles listed.
Draft	Mark a page as draft to limit user ability to view the page while you're still creating it. Only users with the admin role can view a page in draft, all other users see a 404 page.
Roles	Limit user access to a page by role.

Field	Description
Short description	Describes the portal page. This field isn't public facing.
Page Specific CSS	Unless a page has Page Specific CSS, the page inherits CSS from the Theme and Branding. If you need a page to look different, the Page Specific CSS overrides the inheritance from the Theme and Branding.
Dynamic page title	(Optional) Create variables to generate descriptive titles depending on the content loaded into a page. For more information, see Add dynamic titles to a page.
Clone Page	Enables you to make a copy of a page that can be modified. If you clone a base system page, a new widget instance is created for each widget on the page.
Use SEO script	(Optional) Option to enable a script include that adds SEO tags for canonical URLs and hreflang tags. For more information, see Enable SEO for localized versions of a portal page.
SEO script	(Optional) Script include to apply to the page. By default, the system uses the SPSEOHeaderTags script include, which includes the default implementation for the canonical URL and hreflang tags for Service Portal Analytics pages.
Human readable URL structure	(Optional) Add human readable keywords to the page URL to improve search engine optimization (SEO) and click-through rates for public pages. Human readable URLs also help users understand what to expect on a page for public and non-public pages. For example, `https://<instance>/kb/en/faq/what-is-a-cookie?id=kb_article_view&sysparm_article=KB0000007`. For more information, see Add human readable keywords to page URLs.

9. **Optional:** Edit container properties.

   a. Select within the container you would like to edit, or select **Container** in the breadcrumbs.

   b. Select the edit icon [ ].
      The container record from the Containers table [sp_container] opens.

   c. Edit the form.

Container fields

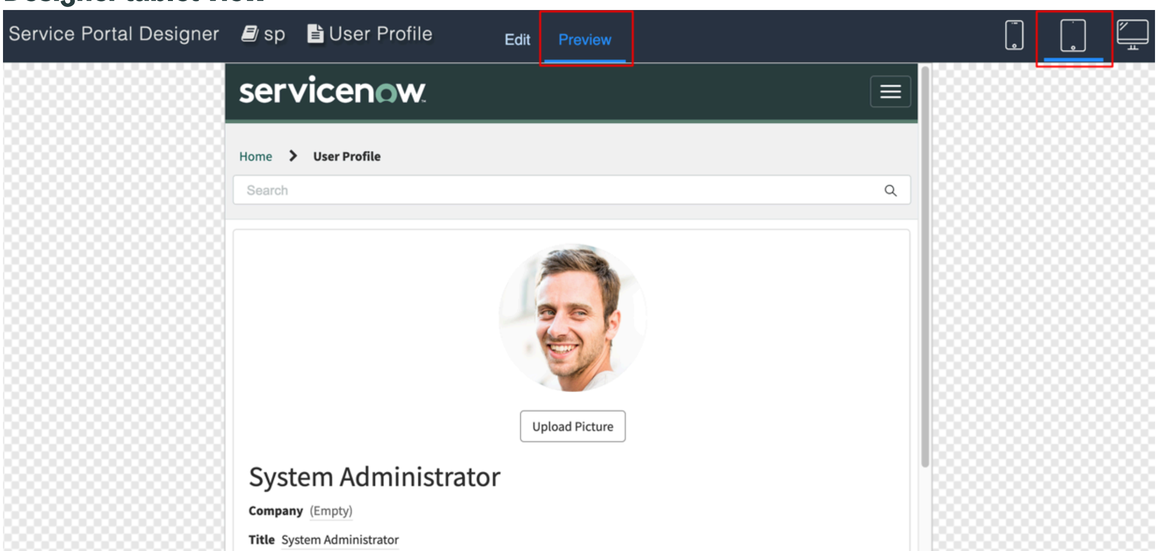
Field	Description
Name	Internal name of the container.

Field	Description
Order	The order in which the containers appear on a page. To set a container to appear above all other containers, give the container the lowest number in the **Order** field.
Page	The page that includes the container.
Screen reader title	The title used by a screen reader.
Semantic tag	The semantic HTML tag that includes the container. Options include: - None: All content on the page between the header and footer is included in the `<main>` tag. - Main: The `<main>` tag includes only the container and its contents. The `<main>` tag is a semantic HTML element that contains the main content of the page. It should be applied to content that is unique to the page and should be configured for only one element on the page. **Note:** The `<main>` tag can be applied to a container, row, or column. For more information, see Configure the main tag on a page.
Application	The application scope.
Width	Width of the container. Options include: - Fixed - Fluid
Parent class	Parent CSS class for the container.
CSS class	The CSS classes for the container. Overwrites page-specific CSS.
Background color	The background color of the container.
Background image	Background image for the container.
Background style	The display style of a background image. Options include: - Default - Cover - Contain - Repeating
Bootstrap alternative	Selecting this field removes the standard Bootstrap grid classes and disables the Bootstrap grid system in the container. If selected, the following aren't applied: - The **Width** field in the container record. - Standard Bootstrap class in the row record within the container. - The **Size - xs**, **Size - sm**, **Size - md**, and **Size - lg** fields in column records within the container.

Field	Description
	Only select this field if you plan to provide custom CSS classes and CSS for the container, row, and column records.
Move to header	If selected, the container sticks to the header and doesn't scroll. Use this option to create a subheader.

10. **Optional:** To switch to a different page, select the **Pages** tab in the left pane, then select the next page you want to configure.
11. **Optional:** Use the Preview button in the header to view your page as you design it. You can also use **Preview** to view your page in mobile or tablet mode through the controls presented in the header.

Designer tablet view



Add a subheader to a page

Select a container record to serve as a page subheader. A subheader sticks to the page header and does not scroll.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration**.
2. Select **Designer**.
3. Select a page.
4. Switch to the portal you want to design pages for by selecting the portal name in the header.

5. Select the container that you would like to use as a subheader, or select the container using the breadcrumbs.

6. Select the edit icon ( ).
7. Select **Move to header**.

Result
As a subheader, the container sticks to the header and does not scroll.

Include font icons on a page

Include font icons on a page so that all the widgets on the page have access to the font-icon set.

Before you begin
Role required: sp_admin or admin

Procedure

1. Navigate to **All** > **Service Portal** > **Pages** and click the page you want to add font icons to.
2. Attach the font-icon file to the page record.
3. In the Page Specific CSS field for the page, add the CSS for the font-icon definition.
   Use the sys_id of the attachment as the `src` in the CSS. For example:

   Example

```
/* fallback */
@font-face {
  font-family: 'Material Icons';
  font-style: normal;
  font-weight: 400;
  src: url('/828b8ca8b7033010897725cbde11a9f7.iix')
 format('woff2');
}

.material-icons {
  font-family: 'Material Icons';
  font-weight: normal;
  font-style: normal;
  font-size: 24px;  /* Preferred icon size */
  display: inline-block;
  line-height: 1;
  text-transform: none;
  letter-spacing: normal;
  word-wrap: normal;
  white-space: nowrap;
  direction: ltr;

  /* Support for all WebKit browsers. */
  -webkit-font-smoothing: antialiased;
  /* Support for Safari and Chrome. */
  text-rendering: optimizeLegibility;

  /* Support for Firefox. */
  -moz-osx-font-smoothing: grayscale;

  /* Support for IE. */
  font-feature-settings: 'liga';
}
```

Result

You can select an icon from the icon set for any widget on this page. For example, in the HTML widget you can use the **Source Code** option to use an icon. For example:

```
<p style="text-align: center;"><em class="material-
icons">flight_land</em></p>
```

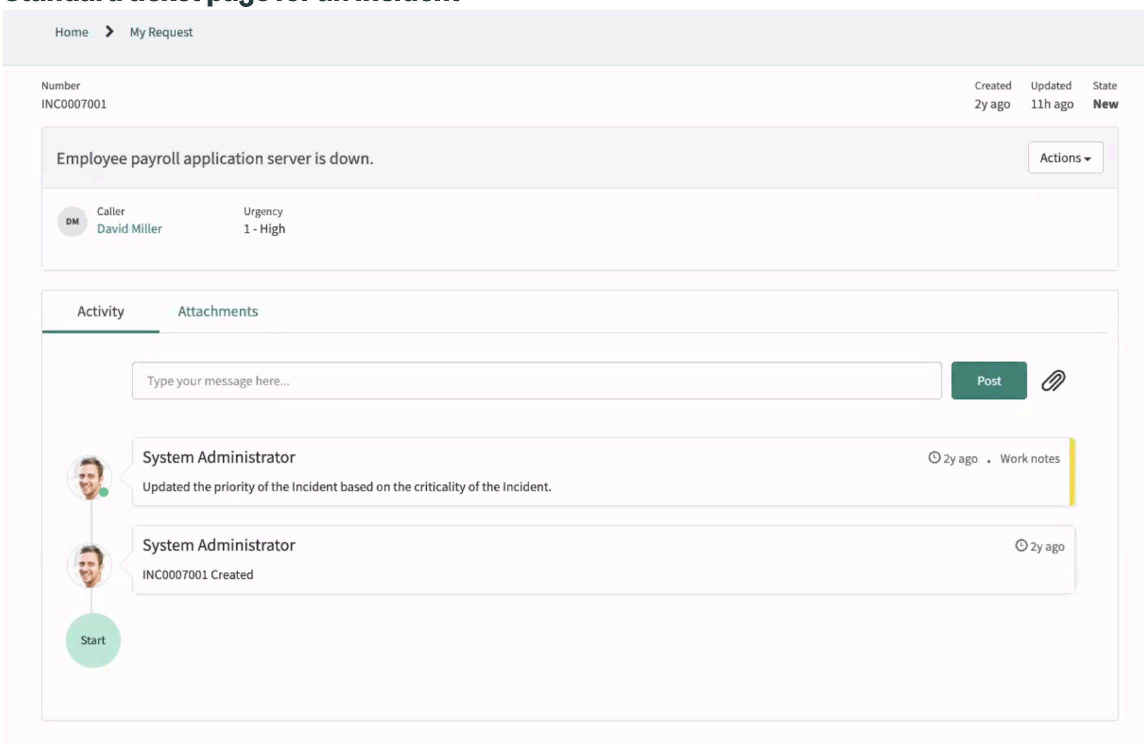
Standard ticket page

Configure individual request types to display the request-specific information, while still having a consistent layout that is similar to other request types. This configuration ensures a consistent experience when viewing submitted requests.

For new instances, the standard ticket page is available by default. For upgraded instances, you need to activate the Standard Ticket Route page route map. For information about activating this page route map, see Activate the page route map for the standard ticket page.

The information displayed in each section of a standard ticket page depends on the individual request type. If a configurable section has no specified values or if a user does not have access to the information, it is not visible.

Standard ticket page for an incident



Header section

By default, this section displays the following information for a submitted request:

- Identification number
- Created and updated dates
- State. Instead of the **State** field, you can also configure any other field that represents the state of the ticket.

Info section

If configured, this section displays the following regions for a submitted request:

- Ticket description region with the short description, and optionally the description.

  Note: You can map the **Description** field to any other field on the record.

- Fields region where the associated fields are configured. A configured field is not visible when it has no value or when a user does not have access to the field.

  Note: A field of the Workflow type is not supported for any table. Only for the Requested Item [sc_req_item] table, the Workflow type field is supported, for example, the **Stage** field. This field is displayed at the last irrespective of the field position in the configuration.

- Actions region

Tabs section

If configured, this section displays the following types of tabs for a submitted request:

- Activity
- Attachments
- Variable editor
- Variable summarizer
- Associated Requests. Displays all associated requests (visible in the **My Requests** widget in Service Portal) for which the current ticket is the parent. It is applicable in any of the following scenarios:
  - If the current ticket is a universal request, then all requests associated (through the **Parent** field on the task table) with child tickets of the universal request are displayed.
  - If the current ticket is not a universal request, then all requests associated (through the **Parent** field on the task table) with the current ticket are displayed.

  For information on defining filters for the My Requests widget, see Define filters for My Requests.
- Custom tab

By default, the **Activity** and **Attachments** tabs are available.

Configurations for a cross-scope application

For each request type of a cross-scope application, the following configurations are required:

- Restricted caller access privileges for the following standard ticket page widgets so that these widgets can access the application tables. For information about these privileges, see Application access settings.
  - Widget: Standard Ticket Header
  - Widget: Standard Ticket Attachments
  - Widget: Standard Ticket Tab
- Restricted caller access privileges for the **Description** field in the application. This field is displayed on the standard ticket page header.
- Page route map to route all the requests of that application to the standard ticket page

Domain separation for a standard ticket page

Tab configurations are not domain-separated.

Ticket configurations are process domain-separated. For any request type record, when a user opens the standard ticket page, it checks for ticket configurations in the following order irrespective of the user's domain:

1. In the record's domain
   a. Ticket configurations for the record table
   b. Ticket configurations for the parent table of the record table
2. In the record domain's parent hierarchy
   a. Ticket configurations for the record table
   b. Ticket configurations for the parent table of the record table

Note: For a table, only one active configuration is allowed per domain.

Related topics

Standard ticket page for a requested item

Incident standard ticket page

Configure the standard ticket page

Give Service Portal users a consistent way to view their submitted requests. You can configure the standard ticket page for different request types.

Before you begin

Role required: admin or sp_admin

About this task

You can add a standard ticket configuration only for a task-extended table.

Widgets containing **Date/Time** values display the date and time only in the **Time Ago** (for example, 11 minutes ago) format, and user preferences for such widgets are not considered. For example, the **Created date** and the **Updated date** values are always displayed in the **Time Ago** format.

Procedure

1. Navigate to **All** > **Standard Ticket** > **Standard Ticket Configuration**.
2. Click **New**.
3. On the form, fill in the fields.

Ticket Configuration form

Field	Description
Table	Task-extended table for which you want to configure the standard ticket page.
Active	Option to specify if the ticket configuration is active.
Application	Application associated with the ticket configuration.
State field	Any field of the task-extended table. By default, this field is mapped to the **State** field of the task-extended table. You have to configure the form to add this field.

Field	Description
	Note: You cannot add fields for any of the following information: ◦ Number ◦ Short description ◦ Created date ◦ Updated date ◦ Watch list ◦ Any user input such as comments and work notes
Info Region	
Show 'Description'	Scenario when the request description should be displayed. Possible options are: ◦ None ◦ Always ◦ When no variables **Note:** When displayed, you can expand and collapse the description.
Advanced	Option to specify that a widget should be displayed in the info region.
Info widget	Widget that should be displayed in the info region. This field appears only when the **Advanced** check box is selected.
Info widget parameters	Name value pair to specify the widget parameters. This field appears only when the **Advanced** check box is selected.
Info fields	Fields that should be displayed in the info region. This field disappears when you select the **Advanced** check box. **Note:** ◦ You cannot add fields for any of the following information: ▪ Number ▪ Short description ▪ Created date ▪ Updated date ▪ Watch list ▪ State ▪ Any user input such as comments and work notes ◦ A field of the Workflow type is not supported for any table. Only for the Requested Item [sc_req_item] table, the Workflow type field is supported, for example, the **Stage** field. This field is displayed at the last irrespective of the field position in the configuration.
Action Region	
Action widget	Widget to specify the actions available in the Action region.

Field	Description
Action widget parameters	Name value pair of action widget parameters.

4. Right-click the header menu and click **Save**.
5. From the Tab Configurations related list, click **New**.

   Note:
   - By default, the Activity and Attachments type tab configurations are available for all standard configurations. Other default tab configurations may vary based on the task-extended table. For example, for the sc_req_item configuration, the Variable Editor (Read-Only) type is also available.
   - You cannot duplicate any tab type other than Custom.
   - You can configure a maximum of six tabs.
   - You can add either Variable Editor (Read-Only) or the Variable Summarizer tab type.
6. On the form, fill in the fields.

Tab Configuration form

Field	Description
Type	Tab type based on which a widget is displayed. Possible options are: ◦ Activity ◦ Associated Requests ◦ Attachments ◦ Custom ◦ Variable Editor (Read-Only) ◦ Variable Summarizer
Tab name	Name of the tab.
Application	Application associated with the ticket configuration.
Order	Order in which the tab should be displayed in the tabs section. The tab with the least order is the tab selected on the page load.
Advanced	Option to enable adding a script for the tab visibility. By default, this check box is cleared.
Visible(Script)	Script for the tab visibility. ◦ If the script returns true, the tab is visible on the standard ticket page. ◦ If the script returns false, the tab is not visible on the standard ticket page. **Note:** This field appears only when the **Advanced** check box is selected.
Visible	Conditions for the tab visibility. This is not displayed if the **Advanced** check box is selected.

Field	Description
Widget	Widget that should be displayed in the tabs section. This field appears only when **Custom** is selected from **Type**.
Widget parameters	Comma-separated list of tab widget parameters. This field appears only when **Custom** is selected from **Type**.

7. Click **Submit**.
8. On the Ticket Configuration form, click **Update**.

Enable instance options for the Activity tab

Format the work notes and add @mentions in the Activity tab on a standard ticket page.

Before you begin

Role required: sp_admin or admin
You should add the **Activity** tab in the standard ticket configuration of a request type. For information on configuring tabs, see Configure the standard ticket page.

Procedure

1. Navigate to the request in Service Portal.
2. Press Control and right-click anywhere in the **Activity** tab.
3. Click **Instance Options**.
4. Configure settings for the **Activity** tab.

Activity tab instance options

Instance option	Description
Enable Rich Text Editor	Option to enable formatting the work notes. **Note:** For the Ticket Form for Case (csm_ticket) page, the **Activity** tab options must be configured from the Activity tab configuration record of the sn_customerservice_case page. **a.** Navigate to **All** > **Standard Ticket Configuration**. **b.** Select the **sn_customerservice_case** record. **c.** In Tab Configurations, select the **Activity** tab configuration record. **d.** Edit the **rich_text_editor** widget parameter field.
Enable @ Mentions (works only when Rich Text Editor is enabled)	Option to enable mentioning the relevant people in work notes. **Note:** This option is applicable only when the **Enable Rich Text Editor** instance option is selected.

5. Click **Save**.

Activate the page route map for the standard ticket page

If you have upgraded your instance, redirect the ticket page to standard_ticket page in Service Portal and view requests on the standard ticket page.

Before you begin

Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Page Route Maps**.
2. Select **Standard Ticket Route**.
3. Select the **Active** check box.
4. Click **Update**.

Related topics

Define filters for My Requests

Redirect a reference to a page ID

Redirect all references from Service Portal widgets to route to a new page with a single record to avoid manually replacing the hard-coded page ID in widgets.

Before you begin

Role required: sp_admin

About this task

Multiple widgets in Service Portal can link to a single page using a hard-coded page ID. This process allows you to replace page references in widgets without locating and replacing all references to the page ID by cloning and updating each widget.

To redirect all references to a page, create a record in the Page Route Map [sp_page_route_map] table. This table enables you to redirect a reference to a page without cloning base system widgets.

Creating a record in the Page Route Map table only redirects references to a page. It doesn't redirect navigation to a page ID within a URL.

Note: You don't need to create a page route map to redirect users to a 404 page. To specify the 404 page for your portal, update the **404 page** field in the Portal [sp_portal] record.

Procedure

1. Navigate to **All** > **Service Portal** > **Page Route Maps**.
2. Select **New**.
3. On the form, fill in the fields.

Field	Description
Short Description	Optional short description to describe the redirect.
Service Portal(s)	Portals that apply the redirect. If you don't select a portal, the redirect applies to all portals in the instance.
Route from	Original page you're redirecting from.

Field	Description
Route to	Page you're redirecting to.
Active	Whether the Page Route Map record is active. The redirect only applies when the record is active.
Roles	Roles to which the page route map applies. Users that don't have any of the roles specified in this field aren't redirected to the new page. If no roles are specified, the page route map is applicable to all users.
Order	Priority of the Page Route Map record. If more than one active record has the same value in the **Route from** field, the record with the lowest order applies. The system evaluates records from lowest to highest. If multiple records have a matching order, the system honors the oldest record.

4. Select **Update**.

Result

All references to the page listed in the **Route from** field redirect to the page in the **Route to** field.

Attaching files to records from portal pages

Attachments can be added to records from portal pages by navigating the file system, pasting files from the clipboard, or dragging and dropping files.

By default, several base system widgets accept attachments from portal users using one or more of these methods. To modify how portal users can add attachments, you can clone and edit widgets to customize the file attachment experience as described in the following procedures.

To track how portal users attach files to records from pages in your portal, see the SP File Attach event in Usage Insights for Service Portal. For more information about available events, see Service Portal events.

Add attachments by pasting or dropping files

Allow portal users to attach files by pasting or dropping files in the Add attachments dialog box.

Before you begin

By default, the Form, Ticket Attachments, Ticket Conversations, and SC Catalog Item base system widgets support adding attachments by pasting or dropping files in the Add attachments dialog box rather than only by navigating the file system.

To configure this functionality for other widgets, you can clone or create a widget that supports adding attachments with the `sp-attachment-button` directive. For more information about cloning widgets, see Clone a widget.

> **Note:** Base system widgets are read-only so you can benefit from future updates. To make changes, you can clone base system widgets. However, cloned widgets are considered custom and don't benefit from future updates to the widgets they were cloned from.

Role required: sp_admin or admin

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration**.
2. Select **Widget Editor**.

3. In the Edit an existing widget menu, select the widget you cloned.
4. In the **HTML Template** of the widget, locate the `sp-attachment-button` element.
5. Configure attributes for the `sp-attachment-button` element.
   - `modal`: Enables copy-paste and drag-and-drop support when set it to `true`.

     To turn off copy-paste and drag-and-drop support, set it to `false`.
   - `supported-extensions`: Displays a list of supported file extensions for attachments at the bottom of the Add Attachments dialog box.

     To list the supported file extensions specified by the *`glide.attachment.extensions`* system property, set it to `{{::data.supportedAttachmentExtensions}}`.

Example

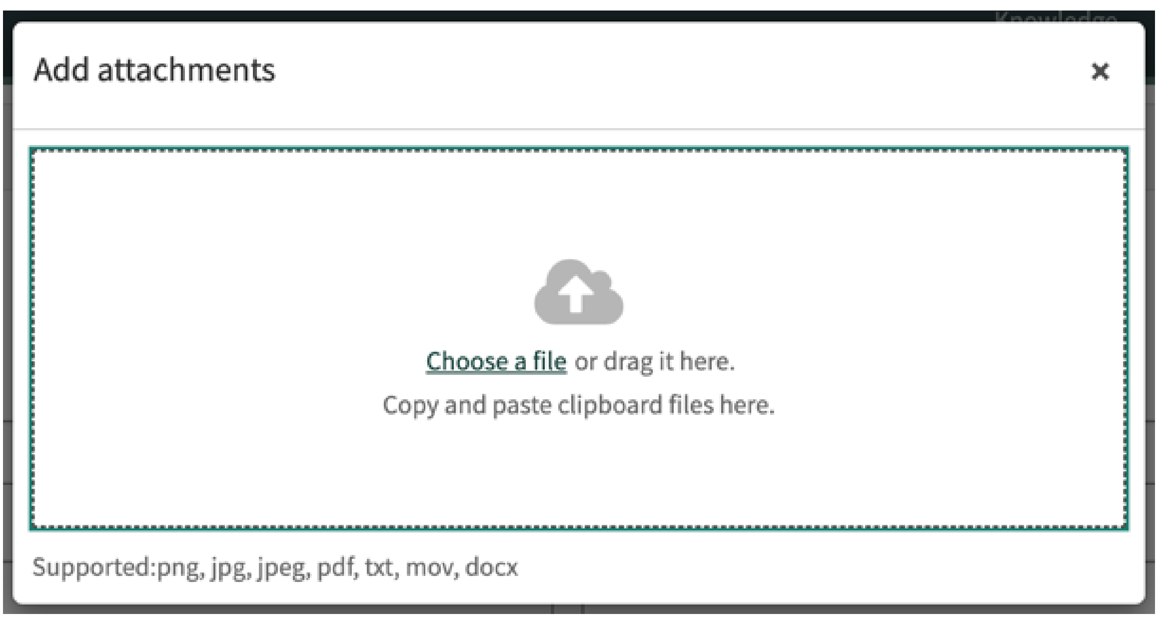
```
<sp-attachment-button  modal="true"  supported-extensions="{{::data.supportedAttachmentExtensions}}"></sp-attachment-button>
```

6. Select **Save**.

Result

On a page with the widget, you can paste or drop files over the Add attachment dialog box to attach them to the record, as shown in the following example.

Note: This functionality isn't supported for mobile experiences. Pasting attachments isn't supported in Firefox.



Add a drag-and-drop zone for attaching files

Allow portal users to drop attachments in a dedicated zone of a page to quickly attach files to a record.

Before you begin

To configure a drag-and-drop attachments zone on a page, you must clone or create a widget that supports adding attachments by calling `attachmentHandler` set to an instance of `nowAttachmentHandler` in its client script. For an example of a widget like this, see the Form widget. For more information about cloning widgets, see Clone a widget.

Note: Base system widgets are read-only so you can benefit from future updates. To make changes, you can clone base system widgets. However, cloned widgets are considered custom and don't benefit from future updates to the widgets they were cloned from.

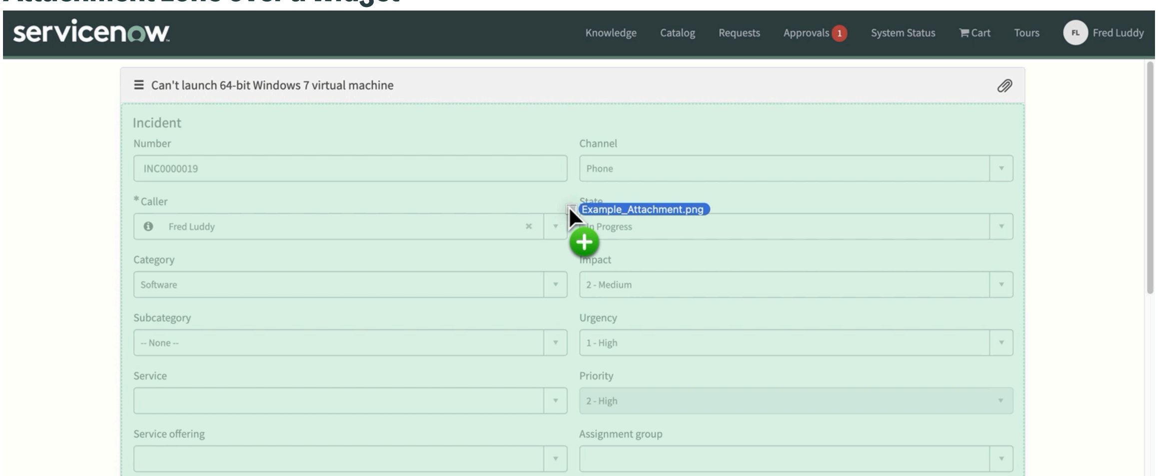
Role required: sp_admin or admin

About this task

By default, portal users can add attachments on many base system pages by selecting the Add attachments icon (📎) to open the Add attachments dialog box. With a drag-and-drop attachments zone, portal users can add attachments with fewer clicks. For example, you could drop attachments over an area of a catalog request or a form.

In this example, the zone is an area over the body of a form widget. The zone is only visible when moving a file over it.

Attachment zone over a widget



Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration**.
2. Select **Widget Editor**.
3. In the Edit an existing widget menu, select the widget you cloned to add the attachment zone to.
4. In the **HTML Template** of the widget, add the `sp-attachment-picker attachment-handler="attachmentHandler"` directive as an attribute of a `<div>` or `<section>` element.
   The zone can include the entire widget or only part of it.

   Example

   ```
   <div sp-attachment-picker attachment-handler="attachmentHandler">
   ```

5. **Optional:** Configure attributes for the `sp-attachment-picker` directive.
   - `disable-picker-overlay="true"`: Turns off showing an overlay over the attachment zone when you drag a file over it. By default, the overlay is enabled.
   - `onFilePick`: Implements custom logic by triggering an event when any file is picked. Set the value to a function that takes in the references of all the selected files as an array as the first parameter. For example, `on-file-pick="attachFiles($files)"`. Examples of custom logic that could be implemented include previewing the files, custom validations, or custom upload logic. If this attribute is configured, the `attachment-handler="attachmentHandler"` attribute isn't needed and can be removed.

6. **Optional:** Hide the attachment zone on mobile devices.

   a. Add the `ng-if="isDesktopBrowser"` directive to the `sp-attachment-picker` directive.

   Example

```
<div sp-attachment-picker attachment-handler="attachmentHandler" ng-
if="isDesktopBrowser">
```

   b. In the **Client Script** of the widget, add the following script.

   Example

```
$scope.isNative = cabrillo.isNative();
$scope.isMobileBrowser = spUtil.isMobile()
 && !$scope.isNative;
$scope.isDesktopBrowser = !$scope.isNative
 && !$scope.isMobileBrowser;
```

7. Select **Save**.

Result

On a page with the widget, you can drag one or more selected files over the attachment zone and drop them to attach them to the record.

Add an attachments section to a widget

Allow portal users to paste, drop, or navigate to files in a section of a widget to quickly attach files to a record.

Before you begin

To configure an attachments section in a widget, you must clone or create a widget that supports adding attachments by calling `attachmentHandler` set to an instance of `nowAttachmentHandler` in its client script. For an example of a widget like this, see the Form widget. For more information about cloning widgets, see Clone a widget.

> **Note:** Base system widgets are read-only so you can benefit from future updates. To make changes, you can clone base system widgets. However, cloned widgets are considered custom and don't benefit from future updates to the widgets they were cloned from.

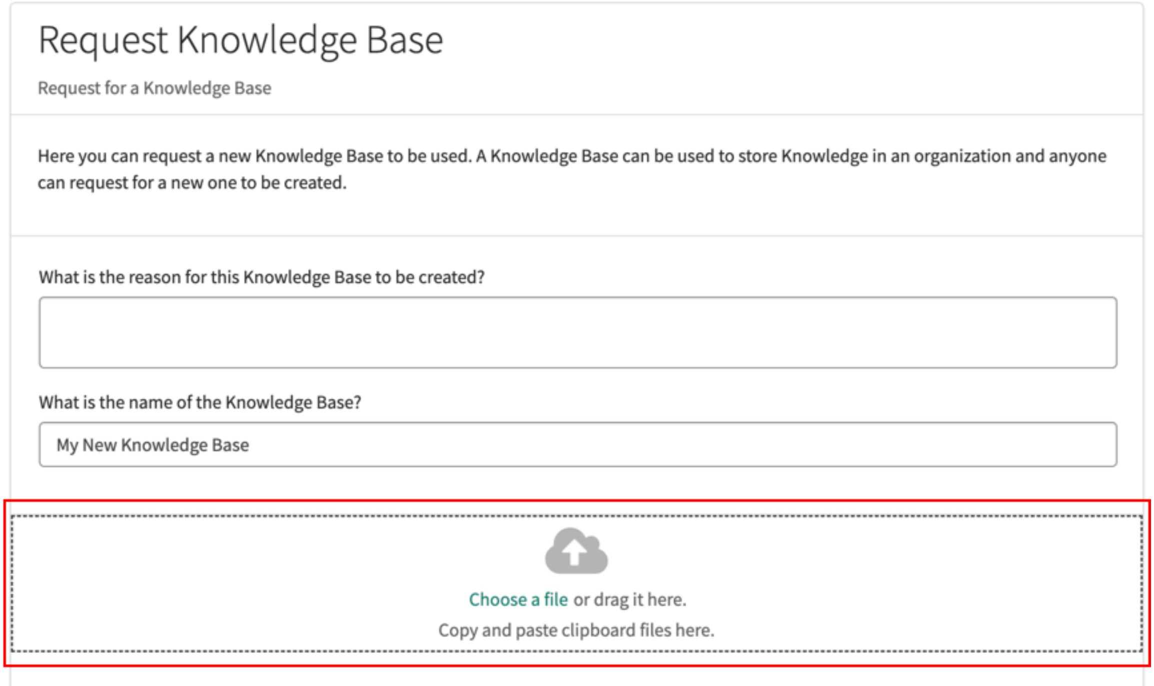
Role required: sp_admin or admin

About this task

By default, portal users can add attachments on many base system pages by selecting the Add attachments icon () to open the Add attachments dialog box. With an attachments section, portal users can add attachments with fewer clicks.

In this example, the attachments section is added to the bottom of a catalog item widget.

Attachment section in a widget



Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration**.
2. Select **Widget Editor**.
3. In the Edit an existing widget menu, select the widget you cloned to add the attachment section to.
4. In the **HTML Template** of the widget, add the `sp-attachment-picker` directive as an element where you want the attachments section to appear.

   Example

   ```
   <sp-attachment-picker  attachment-handler="attachmentHandler"></sp-attachment-picker>
   ```

5. **Optional:** Configure attributes for the `sp-attachment-picker` directive.
   - `disable-picker-overlay="true"`: Turns off showing an overlay over the attachment section when you drag a file over it. By default, the overlay is enabled.
   - `onFilePick`: Implements custom logic by triggering an event when any file is picked. Set the value to a function that takes in the references of all the selected files as an array as the first parameter. For example, `on-file-pick="attachFiles($files)"`. Examples of custom logic that could be implemented include previewing the files, custom validations, or custom upload logic.
6. **Optional:** Hide the attachment section on mobile devices.

   a. Add the `ng-if="isDesktopBrowser"` directive to the `sp-attachment-picker` directive.

      Example

      ```
      <sp-attachment-picker  attachment-handler="attachmentHandler"  ng-if="isDesktopBrowser"></sp-attachment-picker>
      ```

b. In the **Client Script** of the widget, add the following script.

Example

```
$scope.isNative = cabrillo.isNative();
$scope.isMobileBrowser = spUtil.isMobile()
 && !$scope.isNative;
$scope.isDesktopBrowser = !$scope.isNative
 && !$scope.isMobileBrowser;
```

7. Select **Save**.

Result

On a page with the widget, you can paste or drop one or more selected files over the attachment section to attach them to the record.

Note: Pasting attachments isn't supported on Firefox.

Using portal widgets

Widgets are what define the content of your portal pages. You can use the base system widgets provided with Service Portal, clone and modify widgets, or develop custom widgets to fit your own needs.

https://player.vimeo.com/video/1085023120?h=bd4199fd16&badge=0&autopause=0&player_id=0&app_id=58479

When you create or update a page in the Service Portal Designer, you easily add widgets by searching in the widget filter and dragging a widget onto the page. You can also access all widget records from the platform at **All** > **Service Portal** > **Widgets**.

Base system widgets

You can use the base system widgets included with Service Portal to get started configuring portal pages. Base system widgets are read-only so you can benefit from future updates. However, for each instance of a base system widget that you add to a page, you can configure the instance options available for that widget.

For a list of base system widgets and information about their instance options, see the Widget library.

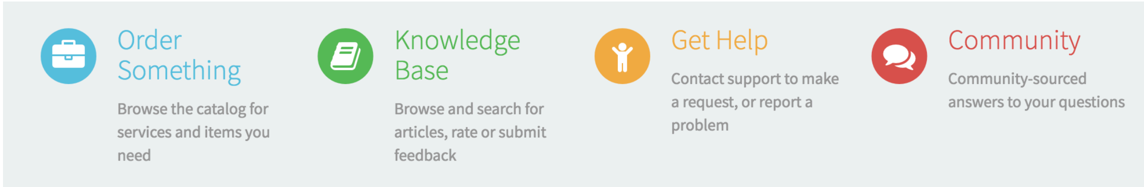
Widget instances

When you add a widget to a page using the Service Portal Designer, it creates a widget instance. A widget instance is a reference to a widget that contains a location, properties, and CSS specific to that instance. Adding the same widget multiple times to the same page creates multiple instances.

All widget instances point to a widget. If you edit that widget, all of its widget instances receive that change as well. You can also make changes specific to a widget instance, and only that widget instance is affected.

For example, the following image includes four instances of the base system Icon Link widget with different configurations specific to each instance.

Icon link widgets



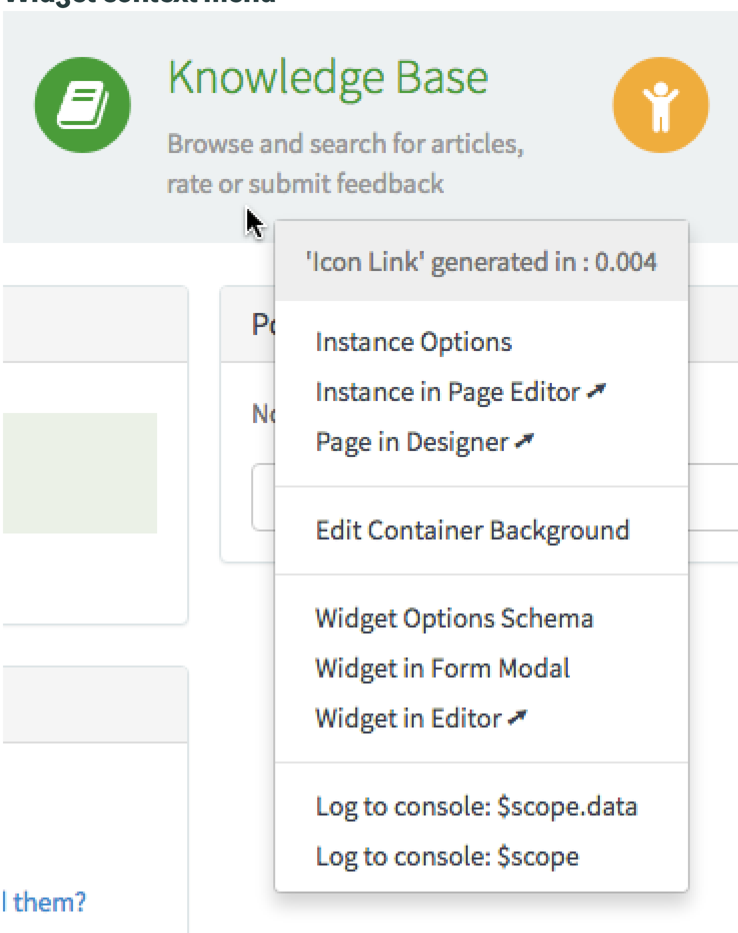
Note: For widgets that do not contain any information by default, you must configure the options for their widget instances before they will appear on a portal page.

Widget context menu

From any rendered Service Portal page, you can CTRL+right-click a widget to see more configuration options in a context menu.

For example, navigate to **Service Portal** > **Service Portal Home** to open a sample portal page. CTRL+right-click Knowledge Base on that page.

Widget context menu



Note: You must have the admin or sp_admin role to see the widget context menu. When you impersonate a user without one of those roles, you can still see the menu. However, a regular user signed in without those roles can't see the menu.

Widget context menu options

Option	Description
Widget performance	How long it takes for a widget to load
Instance options	Specify an instance of a widget. Widgets instance options vary depending on the widget that you select. For example, the instance options for the cool clock widget include different time zones for each instance, so you can have the same clock four times on a page, but with all different time zones.
Instance in Page Editor	Opens that instance of the widget in the Page Editor
Page Designer	Opens the widget in the Service Portal Designer, which lets you add containers, columns, and widgets. You can add styling from the Service Portal Designer to the widget or to the page the widget lives on.
Show Widget Customizations	Shows customization levels of widgets on the page so that you can diagnose page issues. For more information, see Widget diagnostics.
Edit Container Background	Edit the layout in which the widget is located.
Widget Options Schema	Define the options that you can select for an instance of a widget. For more information on configuring your own instance options, see Widget option schema.
Widget in Form Modal	Opens the widget form in a pop-up window so you can make quick changes to the widget.
Widget in Editor	Opens the widget in the Widget Editor. You can use the Widget Editor to configure HTML templates, CSS, client scripts, service scripts, and demo data for the widget.
Log to console: $scope.data	The $scope.data object passes data from the server to the client-side controller. Instead of adding console.log messages or alerts into the controller code, you can log the $scope.data object to the browser console and view the data there.
Log to console: $scope	Similar to the $scope.data object, except it logs everything in $scope to the console.

Custom widgets

Base system widgets are read-only so you can benefit from future updates. To make changes, you can clone base system widgets. However, cloned widgets are considered custom and don't benefit from future updates to the widgets they were cloned from. You can also create widgets from scratch. To learn more about cloning or creating widgets, see Developing custom widgets.

Configure widget instances

Create unique instances of widgets by configuring the options for each instance.

Before you begin

Create or edit a portal page and add widgets to it. You can also configure the existing widget instances on a base system page. For more information, see Create and edit a page using the Service Portal Designer.

Role required: sp_admin or admin

About this task

You can have several instances of the same widget on a page, and each instance of the widget you configure remains unique. For example, each instance of the Cool Clock widget on a page could use a different time zone.

Each time you add a widget to a page it creates a record on the Widget Instances [sp_instance] table with the following information:

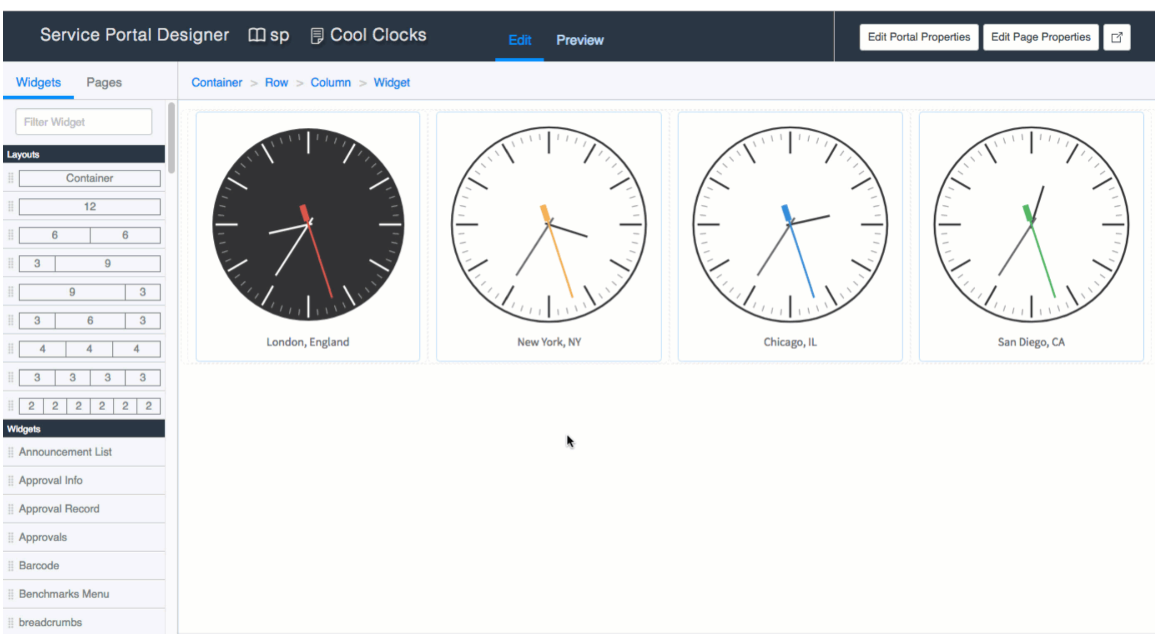
- A reference to the widget
- A reference to the column of the page where the widget is located
- The configuration for a widget in the form of pre-defined form fields and an **Additional Options** field in JSON format

Note: For widgets that do not contain any information by default, you must configure the options for their widget instances before they will appear on a portal page.

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration**.
2. Select **Designer**.
3. Select the page with the widget instance(s) you want to configure.
4. In the Service Portal Designer, move to a widget instance and select the Edit icon ( ).
5. In the instance options window, fill in the fields to configure the widget instance. Instance options vary depending on which widget you select.
6. Select **Save**.

Example: Configure widget instance options



What to do next

Advanced users can define what options are available for a widget. For more information, see Widget option schema.

Widget library

You can use base system widgets as-is in your Service Portal or clone them to suit your own business needs.

Note: Base system widgets are read-only so you can benefit from future updates. To make changes, you can clone base system widgets. However, cloned widgets are considered custom and don't benefit from future updates to the widgets they were cloned from. To learn more about cloning or creating widgets, see Developing custom widgets.

Due to the ever-changing number of widgets that exist at any given time in Service Portal, this widget library is not a definitive list. You can find more widget descriptions as they become available. To view and configure the instance options for a widget, see Configure widget instances.

Example widgets

- Announcements widget
- Approvals widget
- Approval Info widget
- Approval Record widget
- Breadcrumbs widget
- Breakout Game widget
- Calculator widget
- Carousel widget
- Cool Clock widget
- Documents widget
- Header menu widget
- Hello World widgets
- HTML widget
- Icon Link widget
- Icon menu list widget
- Language Switch widget
- Link button widget
- Login widget
- My Requests widget
- Organization Chart widget
- Sample Footer widget
- Ticket Attachments widget
- Ticket Conversations widget
- Ticket Fields widget
- Ticket Location widget
- User Profile widget

Service Catalog widgets

- Catalog Content widget
- Catalog Homepage Search widget
- Recent & Popular Items widget
- Request Fields widget
- Requested Items widget
- Requests and Approvals widget
- SC Catalog Item widget
- SC Categories widget
- SC Category Page widget
- SC Order Guide widget
- SC Popular Items widget
- SC Save Bundles widget
- SC Saved Carts widget
- SC Scroll to top widget
- SC Shopping Cart widget
- SP Variable Editor widget
- SC Wish List Cart widget

Knowledge Management widgets

- KB also in Category widget
- KB Article Comments widget
- KB Article Page widget
- KB Categories widget
- KB Category Page widget
- KB Knowledge Bases widget
- KB Most Viewed widget
- KB News widget
- KB Search widget
- KB Top Rated widget
- KB View widget
- KB View 2 widget
- Knowledge Breadcrumbs widget

Service Status widgets

- Business Service Status widget
- Current Status widget
- Planned Maintenance widget

- Service History widget
- Service Status widget
- Service Status Legend widget
- Service Status Subscription widget

Service Portal configuration widgets

- Service Portal Config Overview widget
- Portal config widget
- SP Page Map widget
- SP Portal Map widget
- Theme Preview widget
- Widget Edit Panel widget

List and form widgets

- Simple List widget
- Data table from instance definition widget
- Data Table from URL definition widget
- Form widget

Search widgets

- AI Search Assist widget
- Contextual Search widget
- Faceted Search widget
- Homepage Search widget
- Typeahead Search widget
- Legacy: Search Page widget

Example widgets

All widgets in Service Portal can be used as example code for how scripts are used in a widget. However, several base system widgets have been included expressly for this purpose.

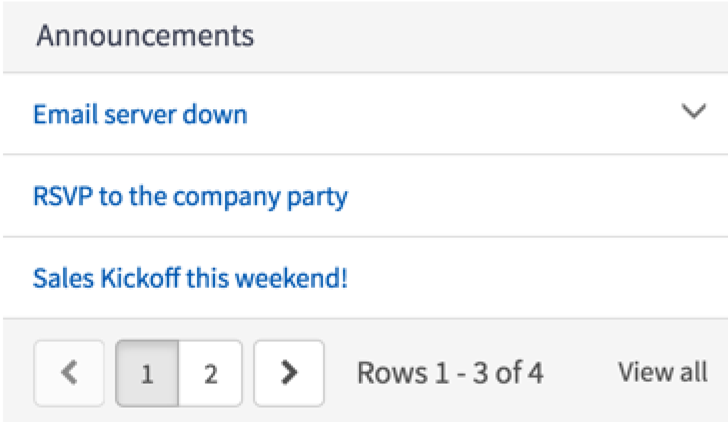
Use the example widgets to see how to use HTML, CSS, or client and server scripts in Service Portal. You can also clone and extend each widget to suit your needs.

Announcements widget

Users can view all active announcements. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

This widget lists the active announcements for a portal from the Announcement [announcement] table. To see the list of active announcements, navigate to **All** > **Service Portal** > **Announcements**. For information about creating announcements, see Create an announcement.

Announcements widget



Instance options

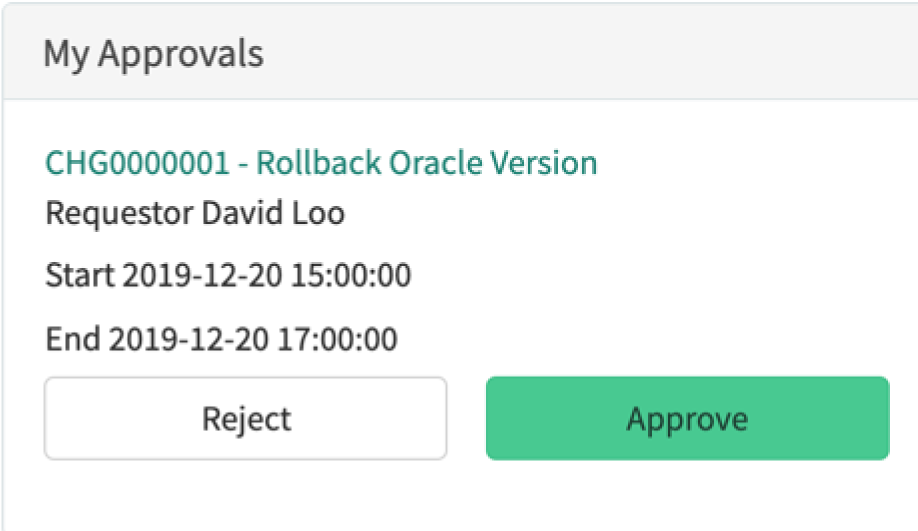
Field	Description
Type	Select the type of announcements to display. Announcement types can be selected in the announcement record. Choices include: • Banner • Widget If a type is not defined, the widget instance displays all active announcements.
Title	Widget header title.
Glyph	Glyph displayed to the left of the title.
Use Display Style	If selected, each announcement displays according to the style defined in the announcement record. Before selecting this option, consider how the widget will display if multiple announcements in the widget use different styles.
Paginate	Paginates multiple announcements.
Max Records	Number of announcements displayed per page.
View All Page	Click target for **View all** link. The **View all** link only displays when: • There are more announcements than can be displayed on a single page. The **Max Records** field defines the number of records displayed per page. • A view all page is defined.
Who Can View Instances | Who Cannot View Instances	Control who can and cannot view a widget instance with user criteria. Only visible if user criteria for the Service Portal is activated.

Approvals widget

Users can approve or reject items directly within Service Portal. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Using the widget

The Approvals widget displays data from the Approvals [sysapproval_approver] table. If the user has been assigned to approve a request, the approval record is displayed in the widget.



You can enable e-signature for the approvals widget to require reauthentication for your users. For more information on enabling e-signature, see Enable e-signature for Service Portal.

Instance options

Use the instance options to change the appearance of the approvals widget.

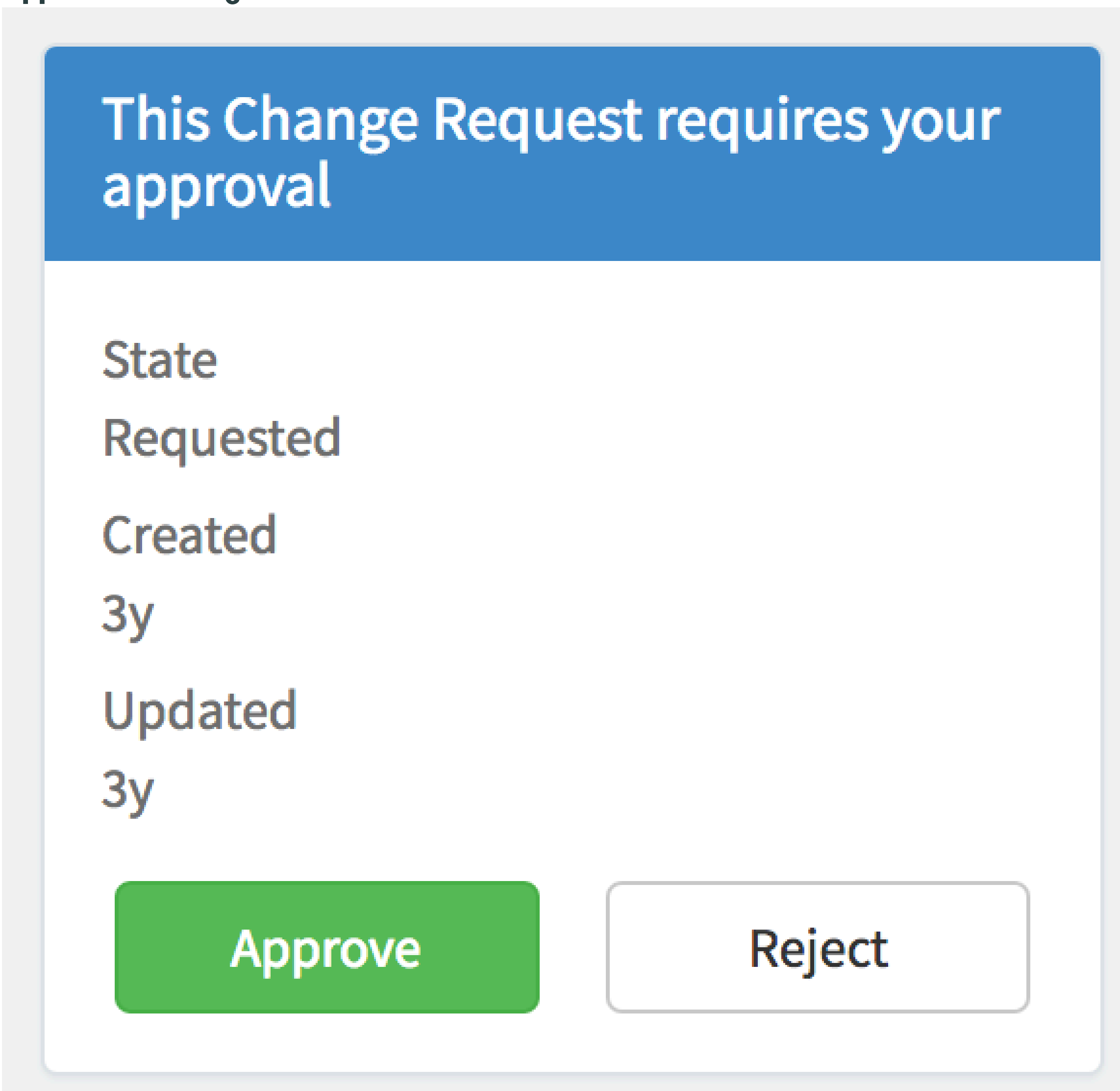
Approvals widget instance options

Field	Description
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Glyph	Add an icon to display beside the widget name.
Buttons stacked side by side	If this check box is selected, the Approve and Reject buttons appear horizontally beside each other. If this check box is cleared, the Approve and Reject buttons appear stacked vertically.
Max number of elements shown in the list	Limit the number of approvals users see on a page. The default number is 10. Only enter numbers greater than 0.
Who can view instances/who cannot view instances	Control who can or can't view a widget instance with user criteria. User criteria must be enabled for this option to appear.
Comments mandatory for rejection	Require approvers to provide comments when rejecting an approval. The comments are added to the Approval record. By default, providing comments is optional.

Approval Info widget

The Approval Info widget works in tandem with the Approval widget to display details about the approval request. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Approval Info widget



Instance options

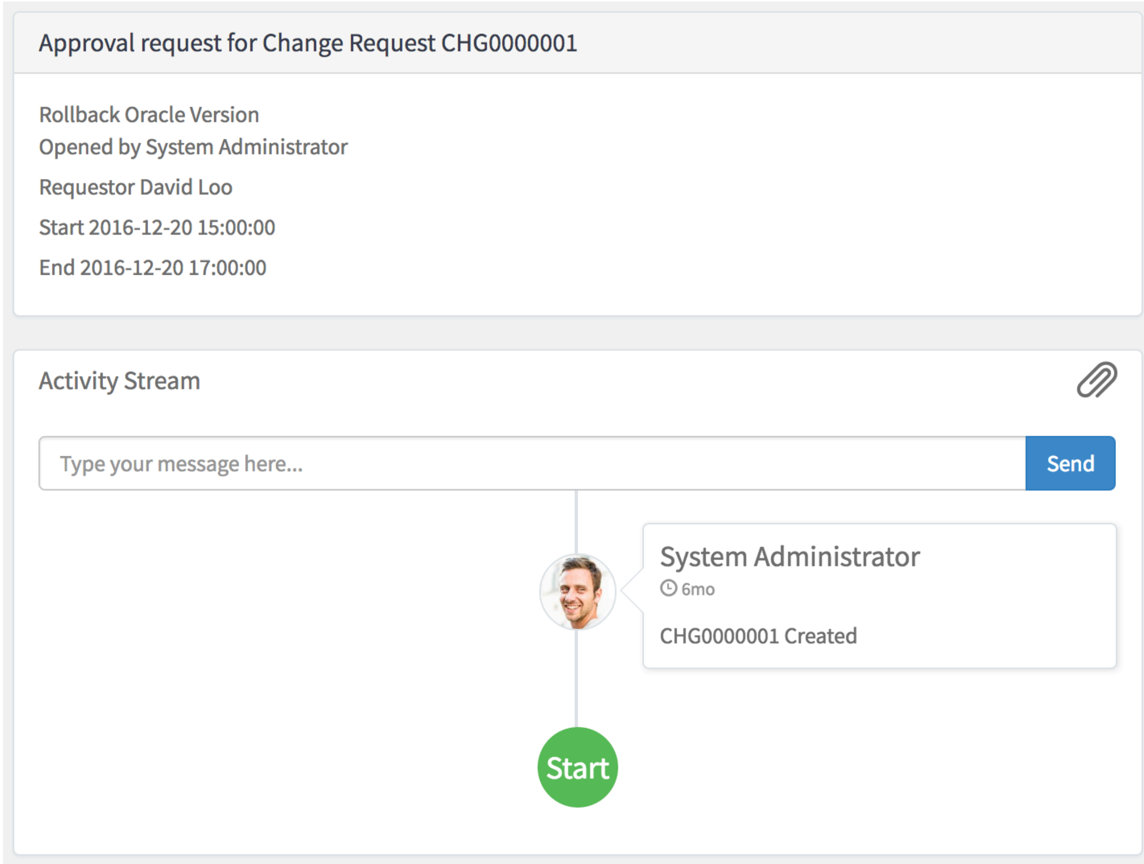
Approval info widget instance options

Field	Description
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.

Approval Record widget

The Approval Record widget shows the full record for an approval including the activity stream. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Approval Record widget



Instance options

The approval record widget does not include instance options.

Breadcrumbs widget

The breadcrumbs widget allows users to easily navigate around a portal. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Using the widget

The breadcrumbs widget displays information based on where a page is located in a portal. For example, if you navigate to the Knowledge Base from the home page, then the breadcrumb reads as **Home** > **Knowledge Base**. Each subsequent page that you open expands the breadcrumb.

Click a page name on the breadcrumbs widget to navigate to that page. For example, to return to the home page, click **Home**.

You can customize this widget to change the breadcrumb path. For more information, see KB0719179.

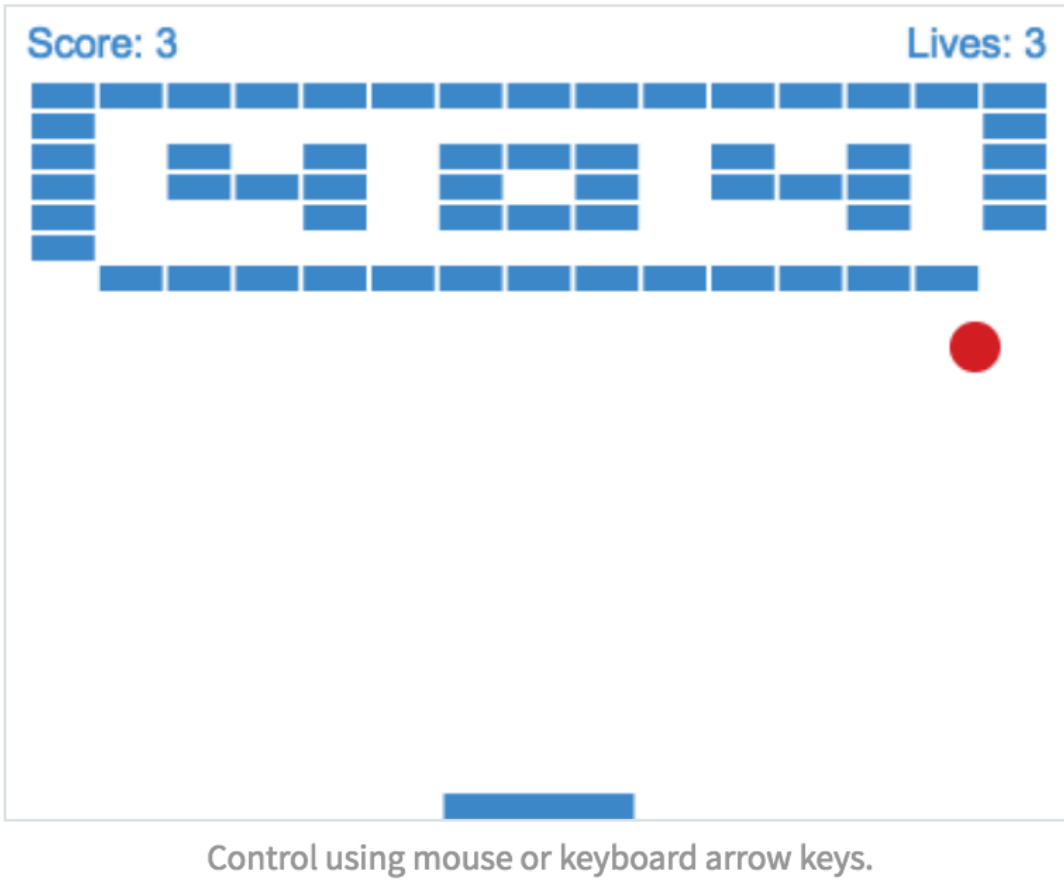
Instance options

The breadcrumbs widget does not have instance options.

Breakout Game widget

Add a fun, interactive 404 page to pages that do not exist using the Breakout Game widget. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Breakout Game widget



Instance options

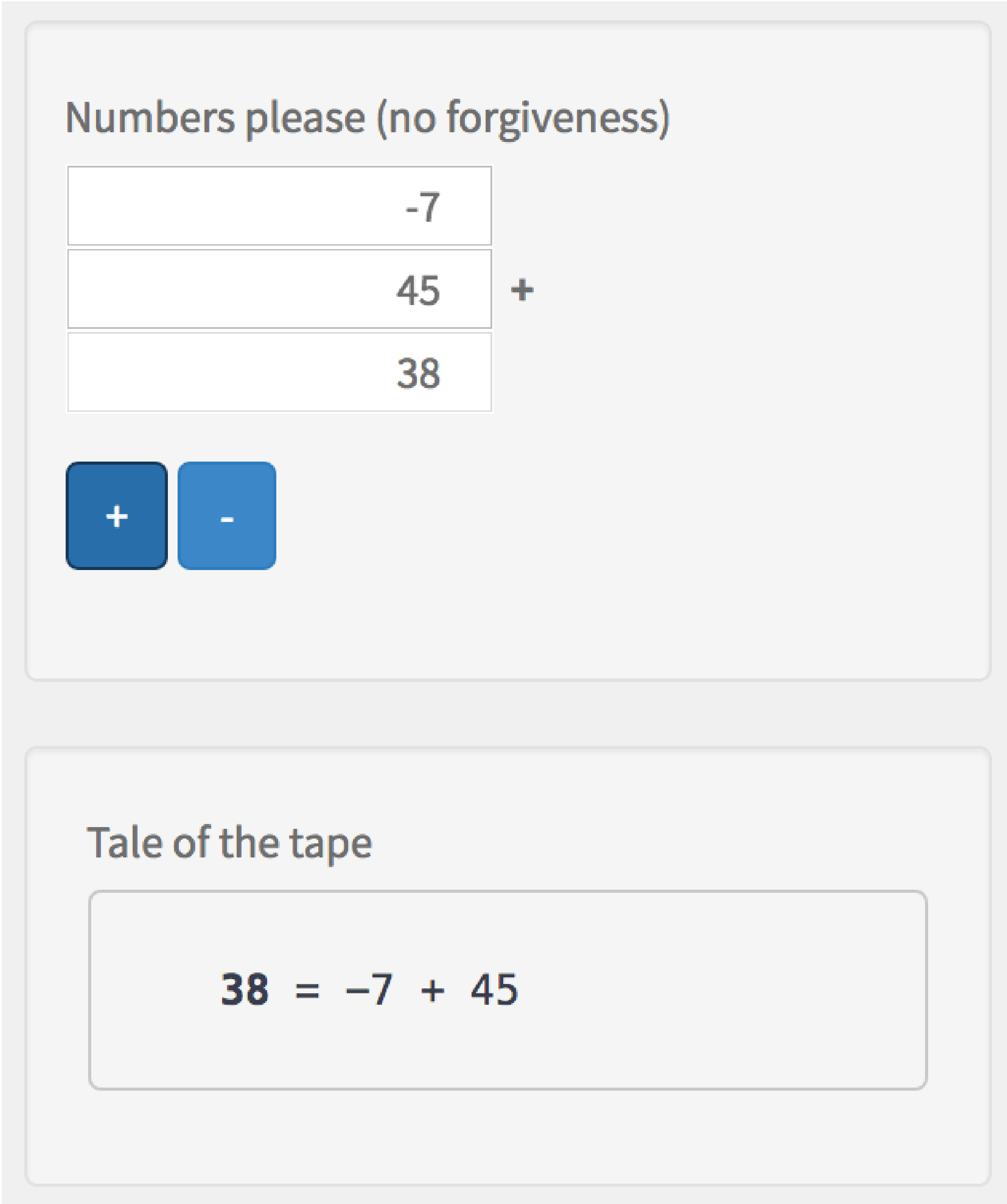
The Breakout Game does not have instance option. You can use it as an example of how to use the Link Function as part of an Angular Directive.

Calculator widget

The calculator widget does simple calculations. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Use the calculator widget as an example of how to pass data between the client and server.

Calculator widget



Instance options

The calculator widget does not include instance options.

Carousel widget

Showcase specific items in your catalog using a scrolling list of images in the carousel widget. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Use the carousel widget to showcase items on your portal page. For example, display items available in a service catalog at the top of the service catalog page.

Carousel widget

Note: For Employee Center Pro, use Content Experiences widget to showcase actionable communications content on your employee portal. .

Add slides to the carousel widget

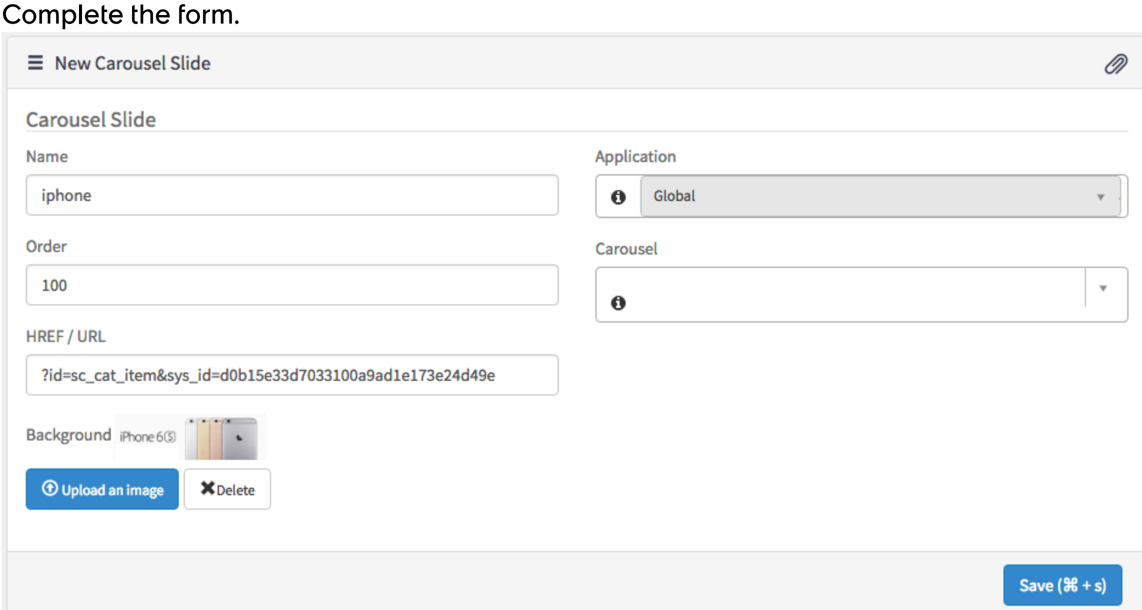
Use the related lists for an instance of the carousel widget to add images for the carousel widget to scroll through.

Before you begin

Role required: Admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Widgets**.
2. Open the **Carousel** widget record.
3. From the carousel form, on the **Instances** related list, under instances, open a carousel instance.
4. From the instance of carousel form, click **New** on the **Carousel Slides** related list.
5. Complete the form.



Field	Description
Name	Name of the carousel slide. Use the name to differentiate the slide from other slide records.
Order	Where the slide appears in the list of slides

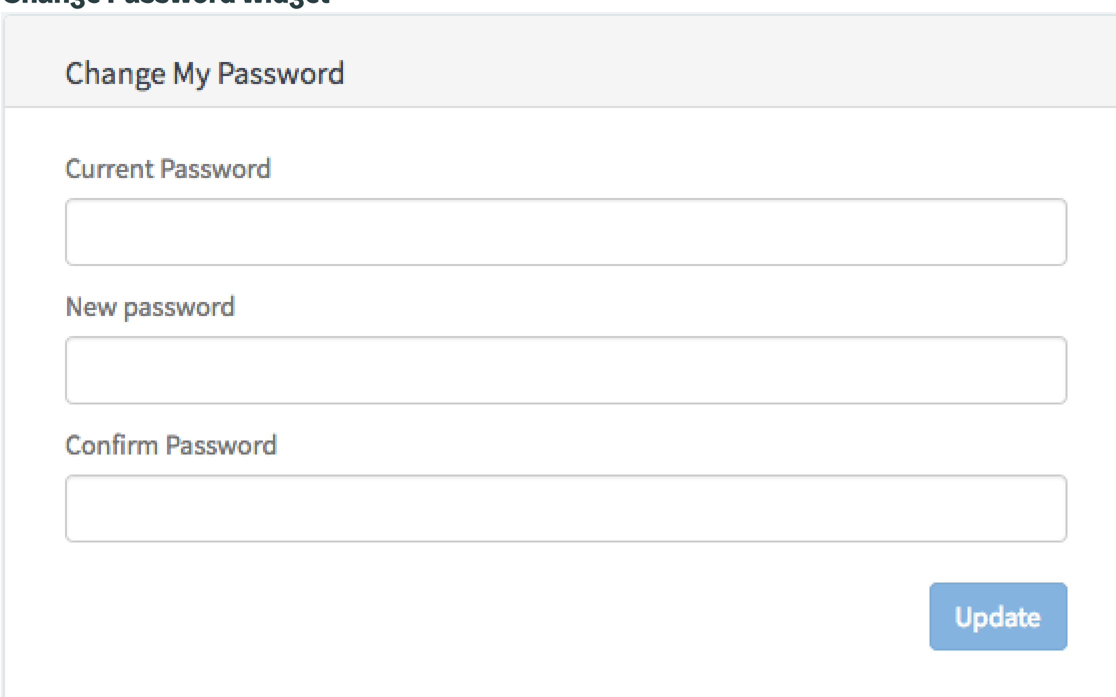
Field	Description
HREF/URL	Link to the item in the slide. For example, for a slide with a catalog item, link to page for the catalog item using the HREF `?id=<page name>&sys_id=<sys_id for item>`. For more information on linking to a page within a portal, see Page navigation in Service Portal by URL. You can also link to other sites using the URL.
Background	Upload an image for the slides. Carousel images should be 1022x300 pixels.
Application	Automatically populated with the name of the application the portal falls under.
Carousel	Name of the instance of the carousel widget you are adding the slide to. This field is not automatically populated and you cannot select an instance of the carousel widget if it does not have a name.

Repeat this step for as many slides as you want to appear in the carousel widget.

Change Password widget

Users can change their passwords using the Change Password widget.

Change Password widget



Note: Updated credentials are stored in the User [sys_user] record in the local instance.

Instance Options

The Change Password widget does not have instance options.

Cool Clock widget

Show different times around the world using the Cool Clock widget. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Cool clocks demonstrates how to use instance options in a widgets. The time zone is loaded using an instance option. If you do not select a time zone, the widget uses a default time zone.

Cool Clock widget

Instance options

Cool clock widget instance options

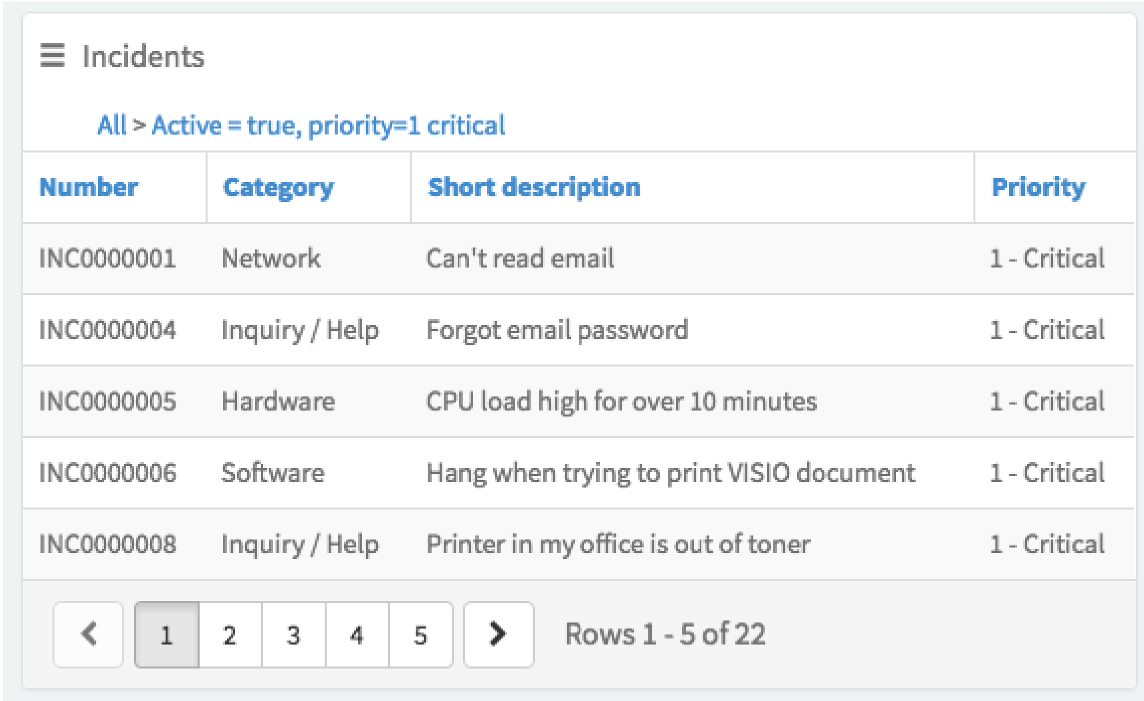
Field	Description
Title	Name of the clock, for example New York, NY. The name appears below the clock so it helps to use a name related to the time zone.
Timezone	The location from which the time is displayed. Use the local full name, for example, **America/ New York**, instead of the abbreviated time zone. Using the full name allows time zones to stay consistent with daylight savings time. The default value is **America/Los Angeles**
Second hand color	Color of the second hand using the hex code, RGB, or color name. The default value is **red**.

Data table from instance definition widget

Display a filtered list on your portal using the data table from instance definition widget. From the widget's context menu, portal users can export the filtered list. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

After you add the data table from instance definition widget to a page, use the instance options to configure the appearance of the table.

Data table from instance definition widget



☰ Incidents

All > Active = true, priority=1 critical

Number	Category	Short description	Priority
INC0000001	Network	Can't read email	1 - Critical
INC0000004	Inquiry / Help	Forgot email password	1 - Critical
INC0000005	Hardware	CPU load high for over 10 minutes	1 - Critical
INC0000006	Software	Hang when trying to print VISIO document	1 - Critical
INC0000008	Inquiry / Help	Printer in my office is out of toner	1 - Critical

< 1 2 3 4 5 > Rows 1 - 5 of 22

Note: If you want this widget to be accessed by guest users, you must select the **Public** option in the widget record for both this widget and the Data Table widget.

Instance options

Data table instance options

Field	Description
Table	The table that the widget displays records from.
Filter	Text field from the condition builder that you can use to limit the items returned in the table. To create a filter, use the context menu to open the widget instance in the platform. Then use the condition builder to create a filter.
Fields	Columns to display in the table.
Maximum entries	Limits the number of items displayed in the table. If there are more entries than allowed in the table, users can scroll to the next page.
Order by	The table field used to order items.
Order direction	The direction to order items: ascending or descending.
Title	The title of the widget. If you leave this field empty the name of the table displays as the widget name.
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Glyph	Icon that displays beside the widget title.
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.

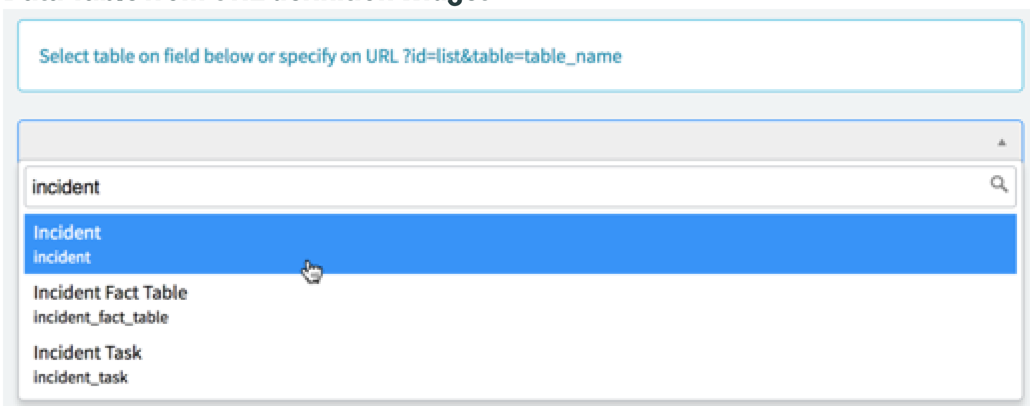
Data table instance options (continued)

Field	Description
Link to this page	Direct users to a specific page when they click a record. By default, clicking an entry in the table opens that entry in a form.

Data Table from URL definition widget

The Data Table from URL definition widget displays the table you select from the list. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Data Table from URL definition widget



Note: If you want this widget to be accessed by guest users, you must select the **Public** option in the widget record for both this widget and the Data Table widget.

Instance options

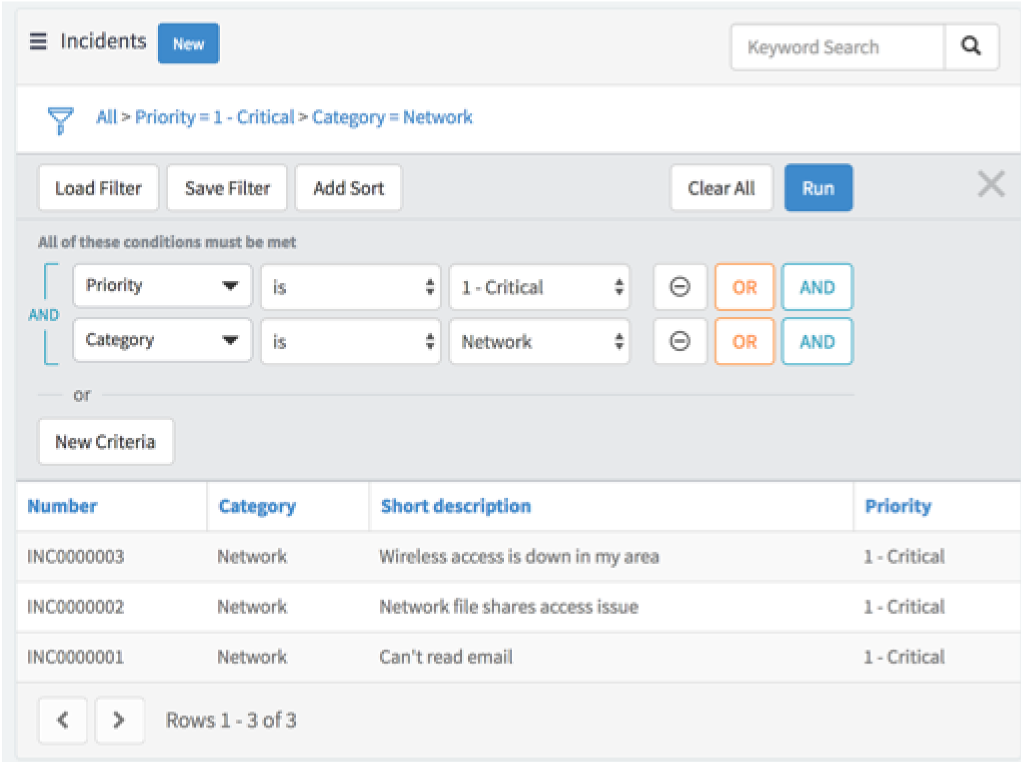
Complete the instance options to define the table.

Field	Description
Title	The title of the widget. Select the **Use Instance Title** check box to use this title instead of the name of the table.
Glyph	Icon that displays beside the widget title
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Link to this page	Direct users to a specific page when the click a record. By default, clicking an entry in the table opens that entry in a form.
Fields	Columns to display in the table. For example, short description or priority.
Use Instance Title	Select to use the title in the Title field instead of the table title
Enable Filter	Select this check box to allow users to create their own filter for the table

Note: Data Table from URL Definition widget instances do not support **Maximum entries**.

If **Enable filter** is enabled in the instance options, users can add custom conditions to filter the results.

Data Table URL with condition builder



For more information on using the condition builder, see Create a filter in List.

Note: The condition builder is only available in the desktop view.

Documents widget

You can add, edit, or delete documents associated with records based on user permissions through the Documents widget. You can use this widget in your portal or clone and customize it.

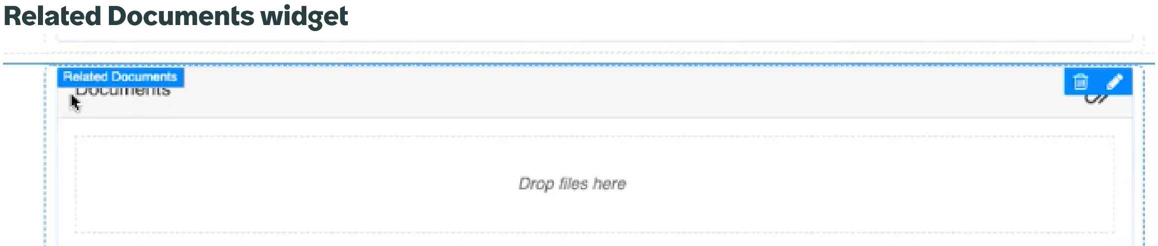
Note: The Documents widget is available with the Multi Provider Document Services Framework plugin (com.snc.multiprovider_documents). For more information, see Multi Provider Document Services Framework.

Add, edit, and delete documents related to a record with the Documents widget. You can drag and drop multiple files at a time, including editing and adding new versions. The default version shown is the latest version.

The maximum document size is 100 MB and concurrent uploads should be less than 10 MB.

Note: External users don't have permission to share documents, review or approve documents, or access records in the platform.

Related Documents widget



Configure the Related Documents widget

Configure the Related Documents widget for records.

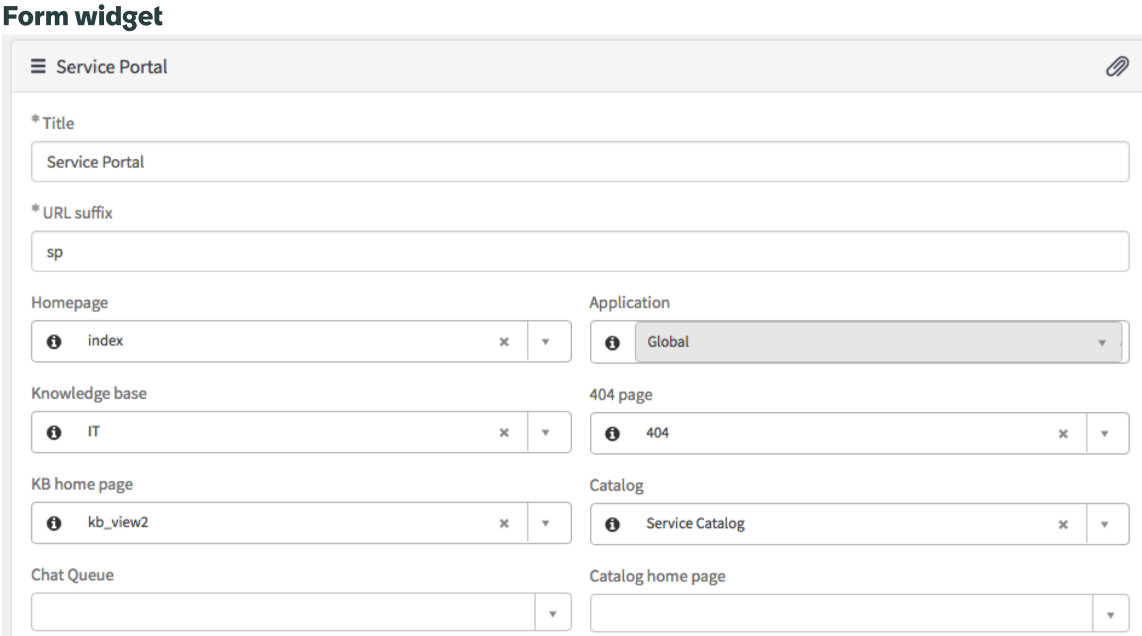
Related Documents widget

Fields	Description
Record ID	Sys_id of the record for which the documents are listed.
Record table	Table name of reference record.
Title	Title of the related document widget. The default title is Documents.
Popup before upload	Select this option to provide a dialog box to enter document details and description for a single file. **Note:** This option doesn't appear if multiple files are selected.
Metadata form view	The configured form view to be opened when **Edit Document** is selected or while uploading a single file. By default, the **dw** form view is selected. This form contains only **Name** and **Description** fields.

Form widget

The form widget is a platform form within the Service Portal UI with a few differences. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Form widget



URL Parameters

The form widget accepts the following parameters within the URL. Add these parameters to the page URL to display a specified record with the form widget.

Form widget URL parameters

Parameter	Description
sys_id or **sl_sys_id**	Sys_id for the record to be displayed.
table, **sl_table**, or **t**	Table for the record to be displayed. The form widget validates access to the table by checking for the necessary cross-scope privileges when fetching data from the table. To turn off validating cross-scope privileges, you can set the *`glide.service_portal.enforce_cross_scope_check_in_form`* system property to false. For more information, see Service Portal properties.
view or **v**	View used to display the record.

In the following example, the URL would display an incident with a sys_id of 1c741bd70b2322007518478d83673af3 in the portal view:

```
https://example.service-now.com/sp?
id=form&table=incident&sys_id=1c741bd70b2322007518478d83673af3&view=portal
```

Note: Timer fields, such as Time Worked, don't display correctly in Service Portal. For more information and a workaround, see the Timer fields do not display the correct data in Service Portal [KB0752404] article in the Now Support Knowledge Base.

Scripting

Not all client scripts are supported in the Service Portal. To understand how client scripts interact with forms in the Service Portal, see Service Portal and client scripts and Supported client script types and APIs.

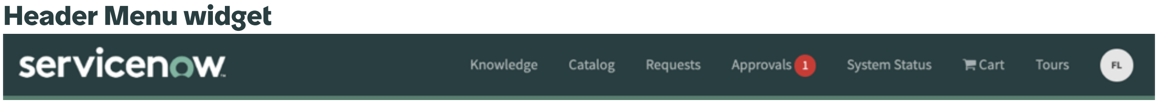
Header menu widget

The Header Menu widget controls which options appear in the page header. You can use this base system widget as-is in your portal.

Unlike other widgets in Service Portal, the header menu widget is not something you drag onto a page. Instead you configure the header menu by associating the header menu with a portal. For more information on configuring a header menu, see Configure a portal header menu.

Note: Cloning this widget is not supported. For more information, see the Header widget with sp_ng_template templates cannot be cloned easily [KB0697352] article in the Now Support Knowledge Base

Header Menu widget



Instance options

The header menu widget does not include instance options.

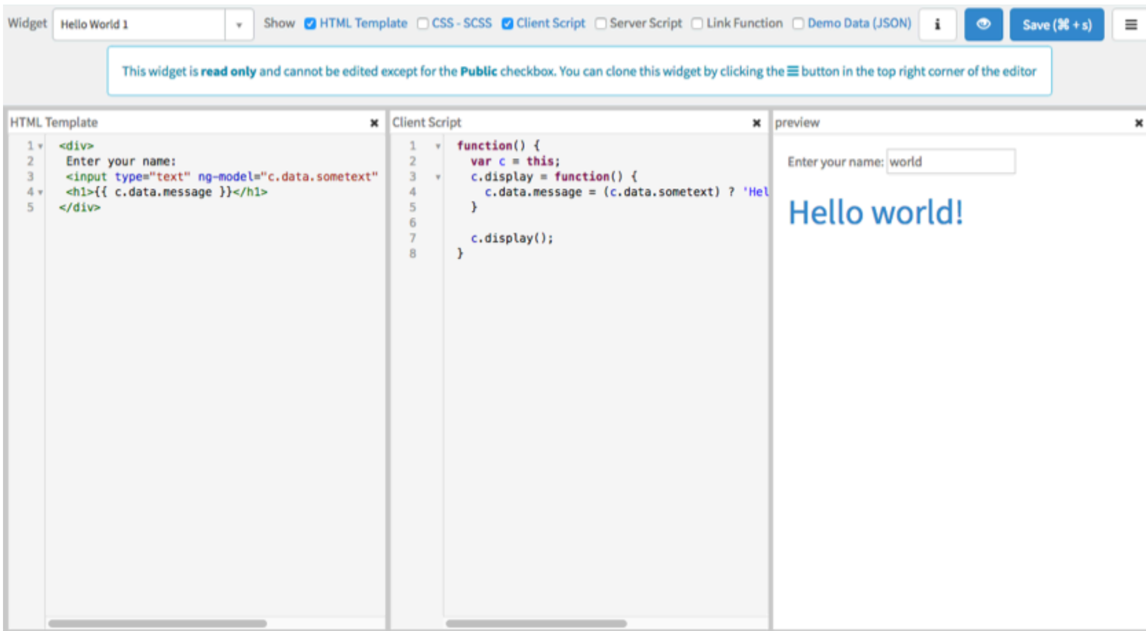
Hello World widgets

The Hello World widgets are included with Service Portal as examples of how to use and create widgets. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

All three Hello World widgets display the same way. The real difference between them is in their underlying code base. Each version of the widget uses a different method of using the server and client script.

To view the Hello World widgets, navigate to **Service Portal** > **Service Portal Configuration** then click **Widget Editor**. In the Widget Editor, click **Check out the Hello World Example**.

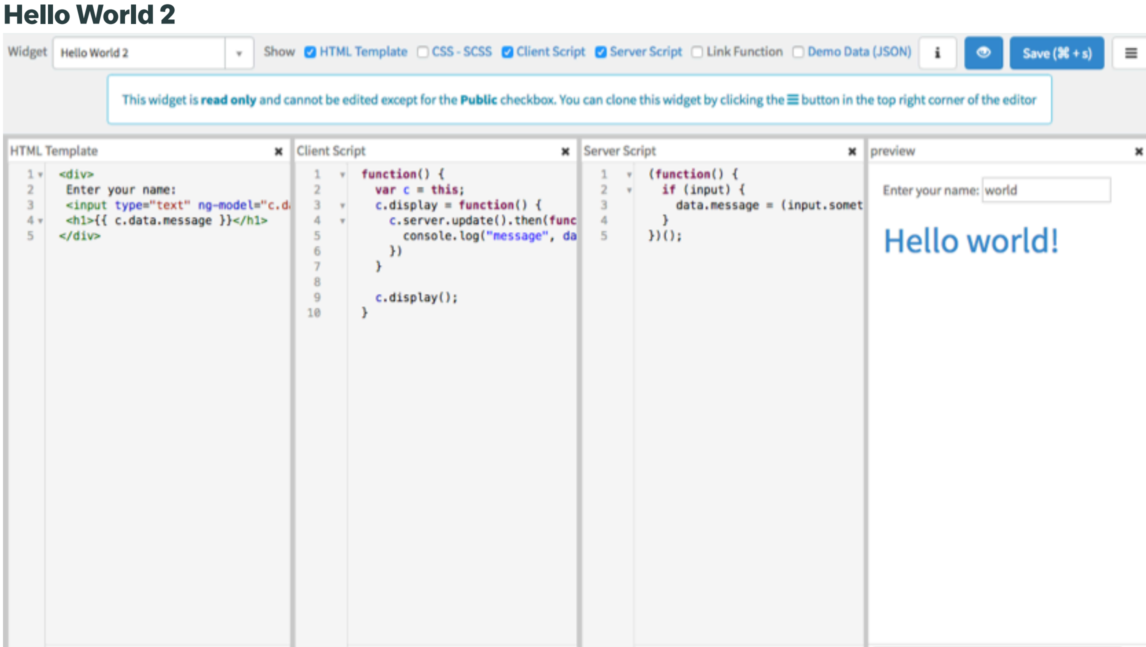
Hello World 1



Hello world 1 displays how the HTML template and the client script communicate. For more information on using the client script in Service Portal, see Developing custom widgets.

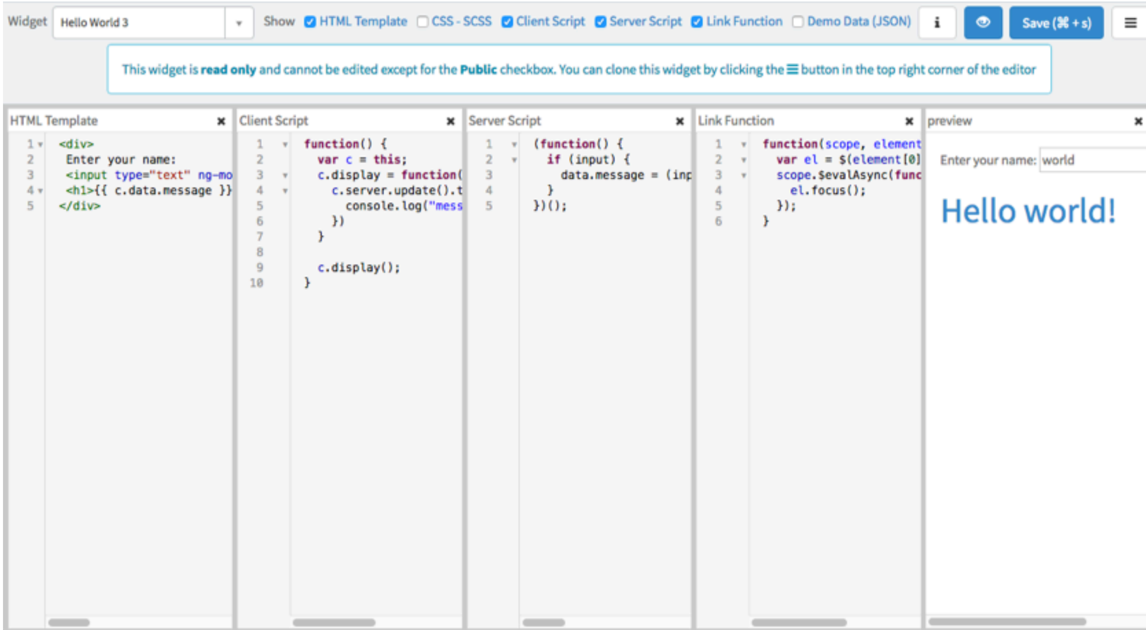
Use the widget list to switch to Hello World 2 or 3.

Hello World 2



Hello World 2 includes an example of how the server script can be used as well.

Hello World 3



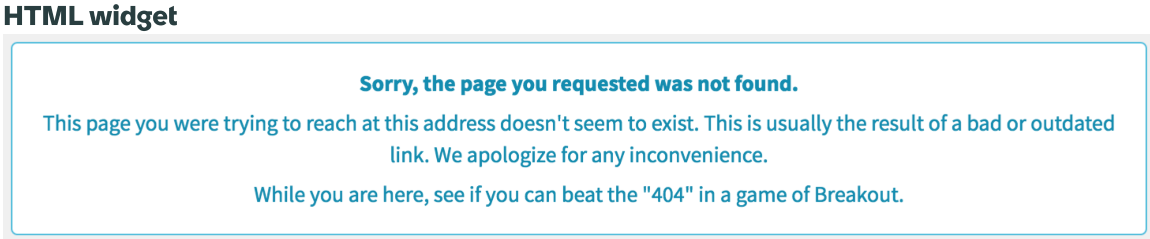
For more information on Service Portal APIs, see the GlideSPSriptable API.

HTML widget

Use the HTML widget to directly inject HTML, text, lists, or content in general into a page. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Because the HTML widget can contain content of any kind, any example may just appear as regular text. For example, the HTML widget appears as a box of text on the 404 page.

HTML widget



Instance options

HTML widget instance options

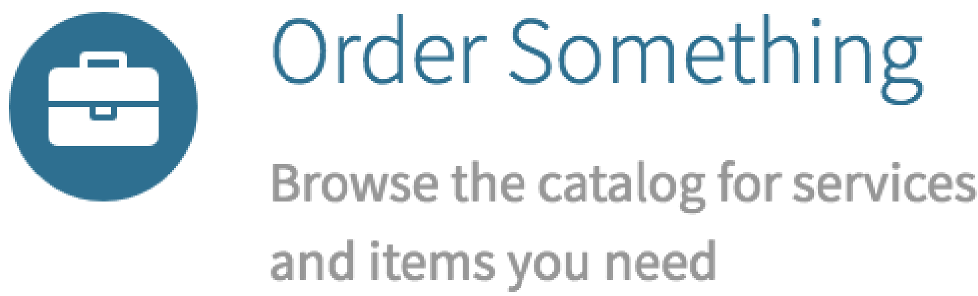
Field	Description
Title	Name for the HTML text. Users do not see this information.
HTML	Text box for the HTML. Use the toolbar like most word processing tool bars. For more information on using the toolbar, see Formatting icons for the HTML field editors .

Icon Link widget

Link to any other item. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Configure Icon Link widgets to link to a specific URL, page within the portal, or a specific category in the knowledge base or the service catalog.

Icon Link widget



Instance options

Instance options fields

Field	Description
Title	Name of the icon link. Choose something that defines what the widget is linking to.
Glyph	Icon for the widget.
Bootstrap class name	Use concurrently with page or theme level CSS.
Type	Defines what the widget links to. The fields that appear on the form vary depending on which option you select. Choose from: • Page: Another page in the Service Portal • URL: Link to an external website. • Catalog category: Link to a specific catalog category within the service catalog. • Catalog item: Link to a specific catalog item. • KB topic: Link to a KB topic page. • KB article: Link to a KB article by number. • KB category: Link to a specific KB category within the knowledge base.
Page	Page within the portal that you want to link to. This field varies depending on the **Type** you choose.
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.

Instance options fields (continued)

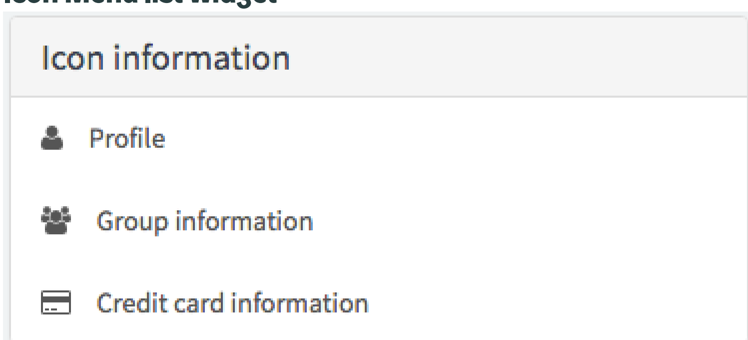
Field	Description
Template	The appearance of the link icon widget. Choose from: • Top icon • Circle icon • Color box

Icon menu list widget

A simple list with a glyph icon next to each link. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Configure the icon information using the Menu Items related list.

Icon Menu list widget



1. From the instance options for the icon menu list widget, under Related Lists, click **Menu Items**.
2. Click **New**.
3. Use the fields on the New Menu Items form to configure the icons for the icon menu list widget.

Icon menu list widget instance options

Field	Description
Label	Name or description of the icon
Parent Menu	The name of the menu that the icon appears in. This automatically populates with the name of the icon menu list widget that you created but you have the option to switch it to another menu.
Order	The order in which the icons appear in the icon menu list widget.
Parent menu Item	Nest menu items within a parent menu.
Page	The page within Service Portal that the icon links to. Select **Page** from the Type list to enable this option.
Type	Select the type of link you want the icon to have. You can link to pages within Service Portal, external URLs, KB articles, Service Catalog, or lists. Different fields will appear on the form depending on the option you select from the list.

Icon menu list widget instance options (continued)

Field	Description
Condition	Determines what conditions are required for menu items to show in the header. For more information on what conditions to use in the **Condition** field, see Create a UI Action Create a UI action.
Glyph	Icon that you want to display in the icon menu list widget.

Language Switch widget

Add the Language Switch widget to a landing or homepage to allow your users to change the language of the page. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Language Switch widget

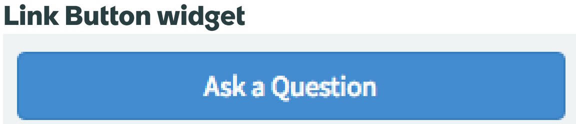
Instance options

The Language Switch widget does not include any instance options.

Link button widget

The Link Button widget is a button you can nest in any other widget that links to another destination. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Link Button widget



Instance options

Instance option fields

Field	Description
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if

Instance option fields (continued)

Field	Description
	you want the instance to have a specific color, select the option from the list.
Link for button	Page that the button links to. Use ?id=<page_name> to link to another page in the portal.
Contents of button	The button text.

Login widget

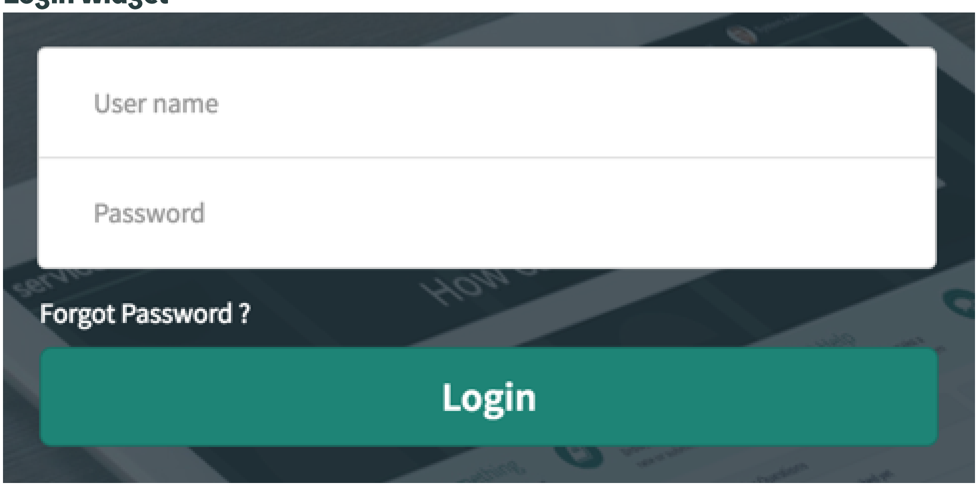
The login widget controls user access to your site. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Using the widget

Users log in to a portal by entering their credentials in the login widget.

The widget uses credentials from the User [sys_user] record. In the **User name** field, the user enters the **User ID** from their user record. In the **Password** field, the user enters the password from their user record.

Login widget



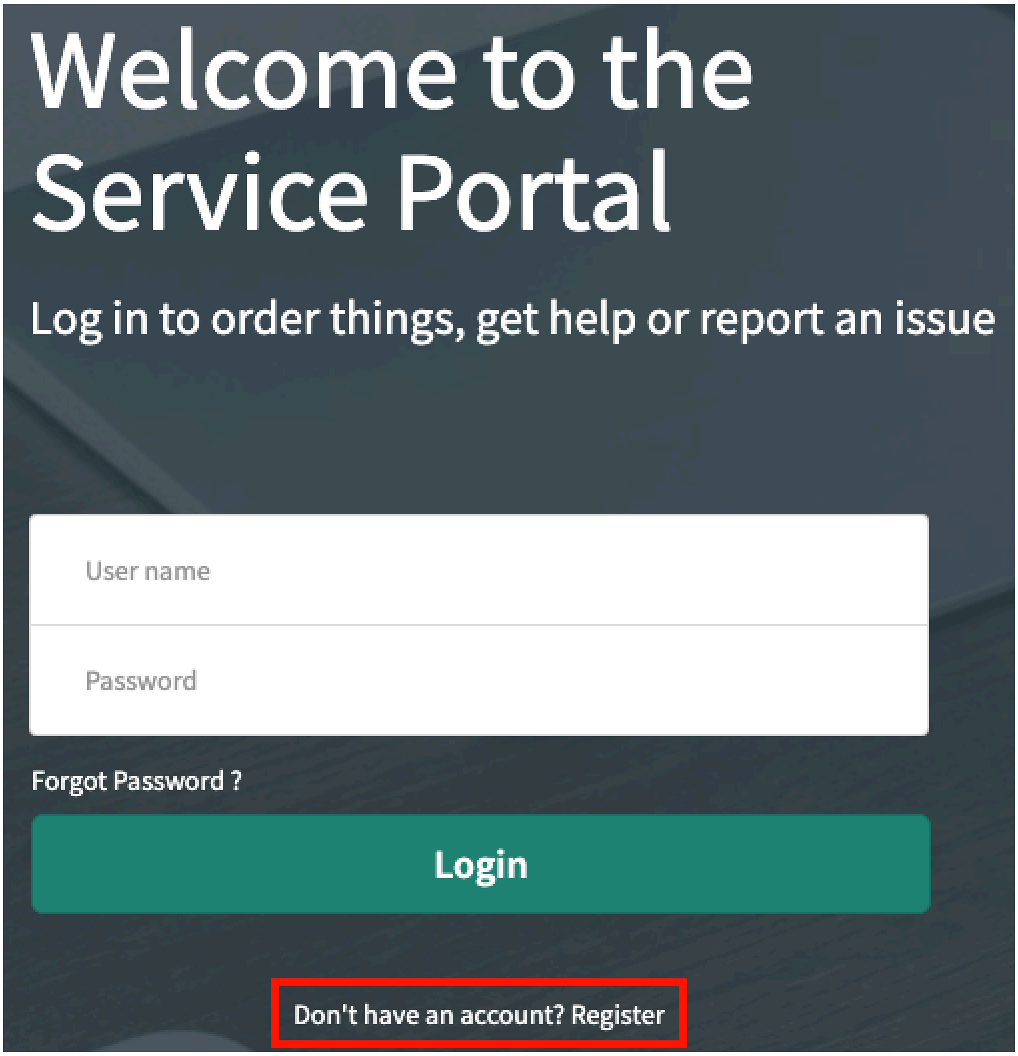
The login widget by default includes a **Forgot Password?** link that enables users to reset their password using the Password Reset application. For more information about Password Reset configuration, see Password Reset.

Note: When the user selects **Forgot Password?**, the system redirects the user to the page value specified in the `glide.security.password_reset.uri` system property.

If you don't want to include the **Forgot Password?** link, set the `glide.security.forgot_password.display.link` system property to false.

External user self-registration

External user self-registration enables a large group of users to register to a ServiceNow app without the help of an administrator. Users register to the app via a link at the bottom of the login widget screen that says ""Don't have an account? Register".

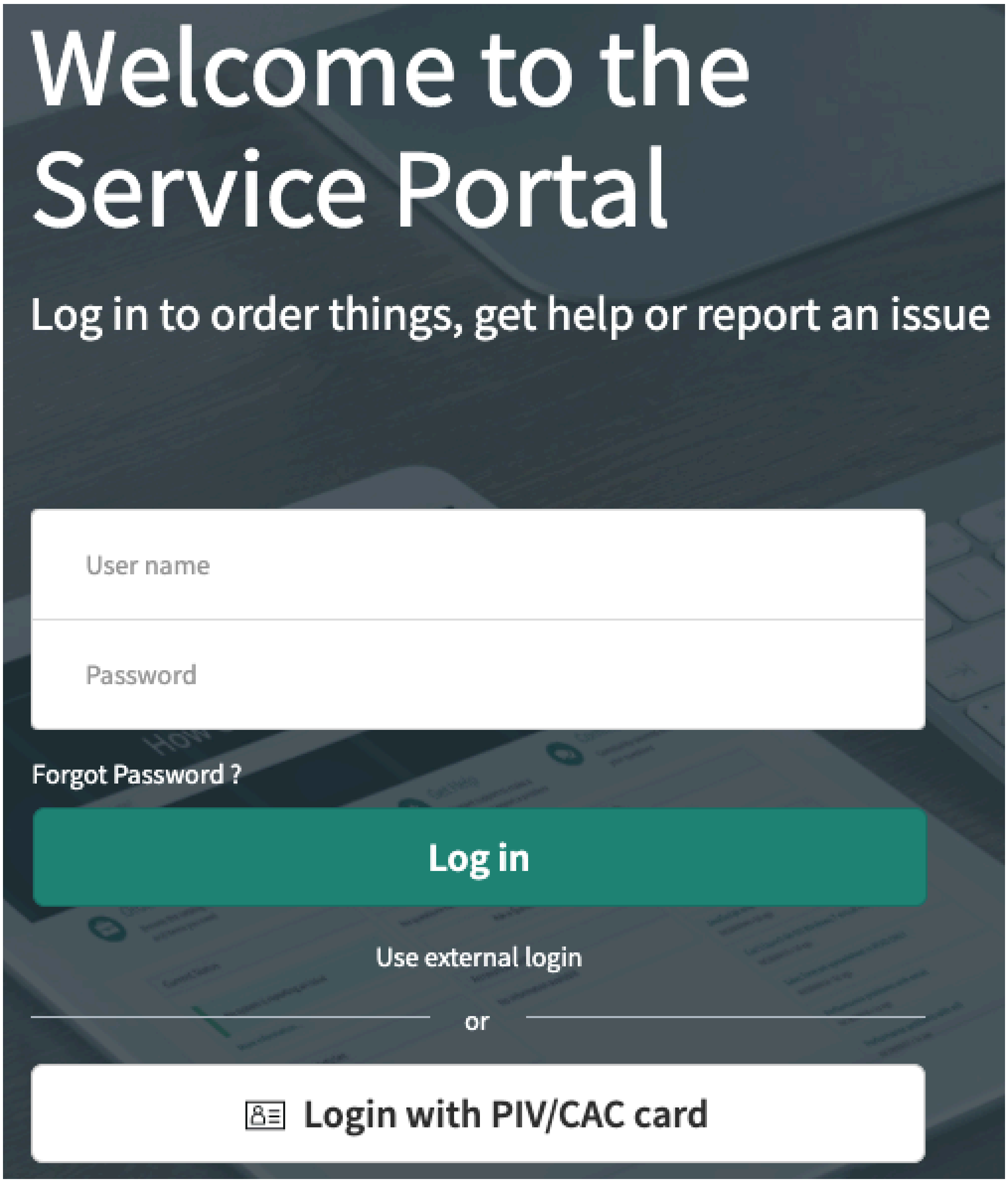


For more information on external user self-registration, see Enable external users to self-register to your ServiceNow instance.

PIV/CAC authentication

With certificate-based authentication activated in your instance, users can register their Personal Identity Verification (PIV) or Common Access Card (CAC) card for Service Portal login.

After self-registering their PIV/CAC card, a user can log in by inserting their card into a card reader and then selecting **Login with PIV/CAC card** on the login widget.



Before a user can register their PIV/CAC card, an administrator must activate certificate-based authentication and then set up PIV/CAC authentication. For more information on this setup process, see Personal Identity Verification (PIV) card or Common Access Card (CAC) based authentication.

For more information on how a user self-registers their PIV/CAC card, see Register your PIV/CAC card for Service Portal login.

Instance options

Use the instance options to configure the login widget for a portal page.

Field	Description
Show panel	Show or hide the panel that appears behind the login widget. The panel helps the widget stand out from the page background rather than blending in.

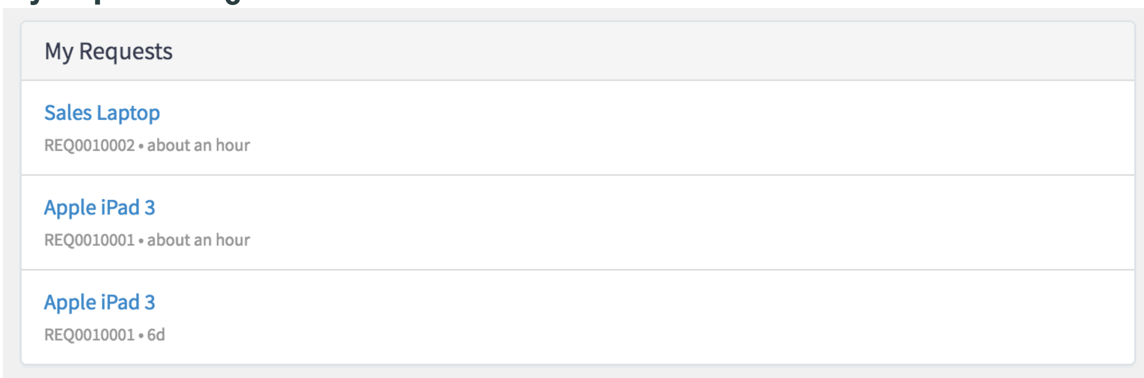
Field	Description
Use Advanced View	Changes the widget layout. Adds the **Forgot Password?** link to the left of the **Login** button and adds field names for **User name** and **Password** instead of hint text.

My Requests widget

The My Requests widget stores all of your open requests in one place. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The list is updated in real time so you can see your requests getting processed. The widget pulls open request information from the sc_request table.

My Requests widget



Search requests by entering a complete word or record number in the search bar.

Instance options

Instance options fields

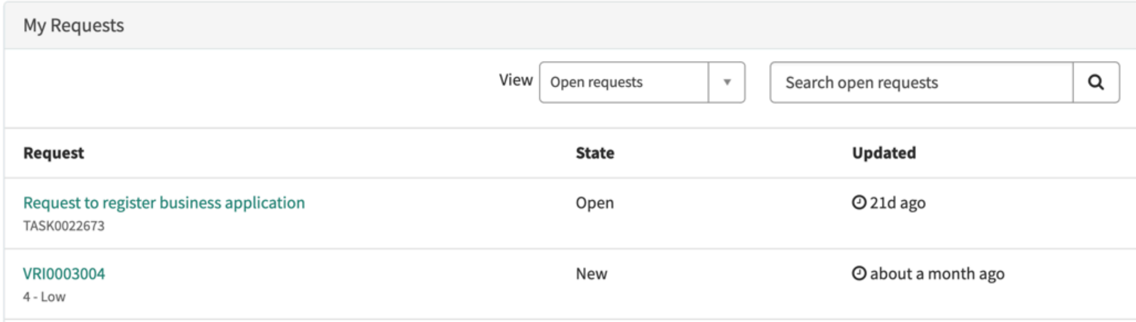
Field	Description
Title	Name of the widget. The name you enter here appears in the header for the widget.
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Maximum entires	The maximum number of entries allowed to appear in the widget.

My Requests widget

Use the My Requests widget (my-requests-v2) to enable requesters to view open or closed requests in Service Portal.

Requests, incidents, and tasks are displayed in a single view that is based on the filter conditions and display settings in the My Request Filter module. For information about defining filters for this module, see Define filters for My Requests.

My Requests widget



Search requests by entering a complete word or record number in the search bar.

Instance options

Use the widget instance options to customize the settings for the My Requests widget. To customize the settings for this widget, press the Ctrl key, click on the widget, and select **Instance Options**.

Instance options for the My Requests widget

Field	Description
Presentation	
Title	Title of the widget.
Behavior	
Show View	If selected, displays the **View** list. Using this list you can filter for closed or open requests. If deselected, only open requests are displayed.
Items per page	Number of records displayed per page.

Enable the My Requests menu for an upgrade scenario

Enable the My Requests menu that uses the My Requests (my-requests-v2) widget for an upgrade scenario.

Before you begin

Role required: admin

About this task

The My Requests menu that is based on the My Requests (my-requests-v2) widget is available by default for zBoot users. For more information about this widget, refer to My Requests widget.

Procedure

1. Navigate to **All** > **Service Portal** > **Portals**.
2. Select a portal.
3. Next to the **Main menu** field, click **Preview this record** and open the record.
4. In the Menu items related list, perform the following steps.
   a. For the **Requests** menu item of the **Page** type, set **Active** as **true**.
   b. For the **Requests** menu item of the **Scripted List** type, set **Active** as **false**.

5. Navigate to **Service Portal** > **Page Route Maps**.
6. For the **My Request** page route map, set **Active** as **true**.
7. Click **Update**.

Organization Chart widget

The Organization Chart widget shows employees in a tree structure relative to their manager. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Using the widget

In the text input field, enter or select a user to see their manager and subordinates. The widget uses information from the User [sys_user] record to display the organization hierarchy relative to the selected user.

Click a card to open the profile page for that user. To reconfigure the card link, change the **URL** or **Page** in the widget instance options.

You can drag individual cards to rearrange the chart.

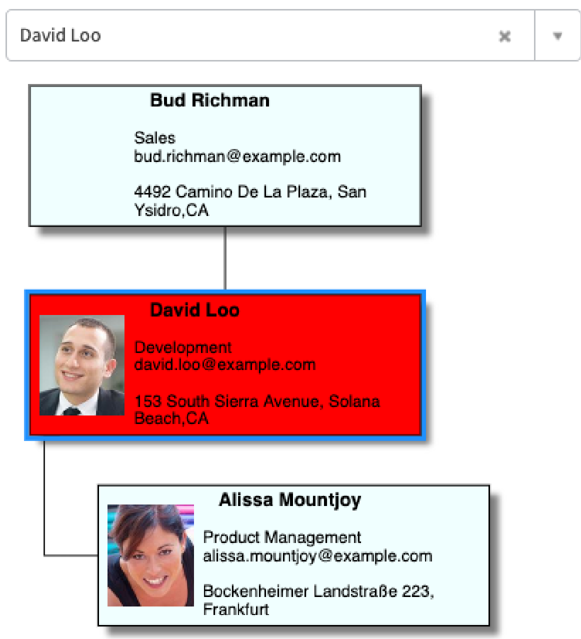
You can zoom in or out of the chart view by clicking the magnifying glass icons or by scrolling.

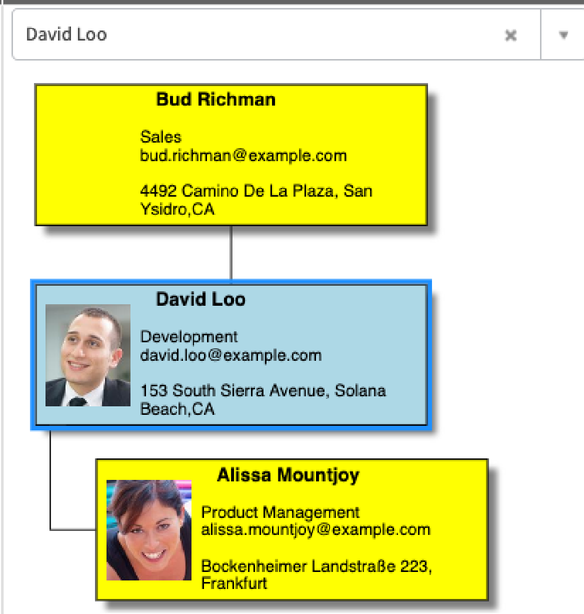
Instance options

Use the instance options to configure the Organization Chart widget for a portal page.

Note: There are no valid values for several instance options. By default, you can set only the following instance options:

- User Background Color
- Node Background Color
- URL
- Page

Field	Description
Data	
Card Fields	Fields from the user record that appear on each card. By default, each card displays the name, title, department, email, phone, and location of each user. There are no valid values that you can enter in this field.
Presentation	
User Background Color	Color of the user card. Use color names or Hex codes. For example, you can enter `red` or `#ff0000`.  The user background color is **lightblue** by default.
Node Background Color	Color of cards that extend from the user card. Use color names or Hex codes. For example, you can enter `yellow` or `#ffff00`.

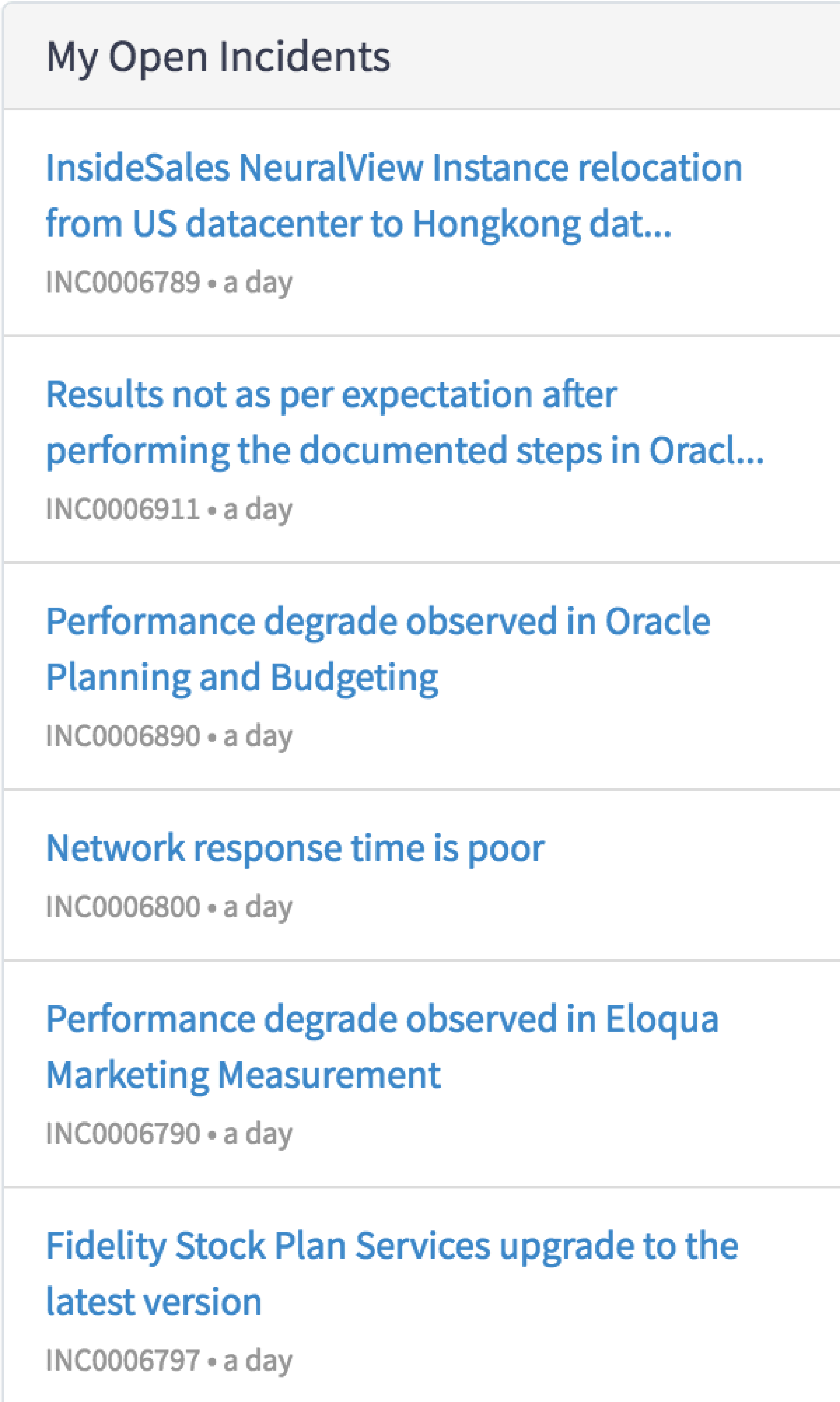
Field	Description
	 The node background color is **azure** by default.
Table Layout	Size and margin of the content in each card. There are no valid values that you can enter in this field.
Row Layout	Alignment of the text in the card. The text is left-aligned by default. There are no valid values that you can enter in this field.
Line	Color of the lines that connect cards. The lines are black by default. There are no valid values that you can enter in this field.
Tree Layout	Size, spacing, and alignment of the chart. There are no valid values that you can enter in this field.
Picture Layout	Size of image space in each card. By default, the image space is 55x65 pixels. The user image is shrunk or stretched to fit the space. There are no valid values that you can enter in this field.
Behavior	
URL	Web address of the page that opens when you click a card. Use the part of the portal URL that references the page ID. For example, to navigate to the Service Catalog, enter `?id=sc_category`. If left blank, clicking the card opens the page that is specified in the **Page** field. If the **Page** field is also blank, clicking the card opens the user profile page by default.

Field	Description
Page	Portal page that opens when you click a card. Use the page ID. If left blank, clicking the card opens the web address in the **URL** field. If the **URL** field is also blank, clicking the card opens the user profile page by default. **Note:** The **URL** field overwrites the **Page** field. To specify a page rather than a URL, leave the **URL** field blank.

Simple List widget

The Simple List widget can be used to display any list in the system within Service Portal. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Simple List widget



Instance options

Instance options fields

Field	Description
Table	The platform table that the simple list is formed from.
Filter	Conditions that are applied to the list. To edit the filter, in the widget instance options context menu, select **Open in platform**. Use the Table & Filter tab to apply conditions to the simple list. For more information, see Create a filter in List.
Display field	Main field that displays as the "title" of the list item.
Secondary fields	Fields from the list item that display in addition to the main display field.
List page	The page that opens when a user selects **View all** in the widget footer. Select a page that correlates with the items that display in the list.
Enforce field-level Read ACLs on Filter query terms (may alter the query for unprivileged users)	Enforce read ACL rules for fields included in filter conditions applied to the list. **Note:** When the *glide.service_portal.enable_acls_for_enc* system property is set to true, read ACLs are enforced for Simple List filter conditions always.
Link to this page	Portal page to link to from a list item.
Show even when empty	Widgets are designed to hide on a page when no results meet the criteria. Select this option to make the simple list widget display on a page even when empty.
View	The view option for when a list item links to a form. The **Link to this page** field must be set to a form page for this option to work.
Disable record watcher	Turn off automatically updating the list based on changes to the filtered records.
Glyph	Icon that displays next to the widget name in the header
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Bootstrap size	Size of the widget

Instance options fields (continued)

Field	Description
Maximum entries	Maximum allowed number of entries that appear in the list at one time.
List body height	Actual length of the widget in pixels or EMs. A long list with a small body height includes a scroll bar option.
Image field	Displays an image in the list. Select a field type that includes an image. For example, Photo.
Rounded images	Makes any images selected in the Image field round in the list.
Hide footer	Show or hide the widget footer

Sample Footer widget

The Sample Footer widget is an example of a footer you can use in your portal. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Unlike other widgets in Service Portal, you add a footer to your portal by configuring it in the Theme form. For more information on adding a footer to a portal, see Add a header or footer to a portal.

Sample Footer widget

Instance options

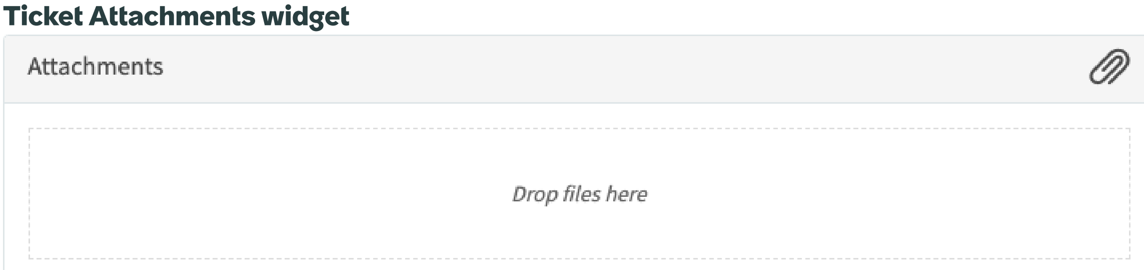
The Sample footer widget does not include instance options.

Ticket Attachments widget

Use the attachment widget to attach items to tickets. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Attachments should be less than 24MB. You can drag files into the Attachments widget to add them to a record.

Ticket Attachments widget



Instance options

Ticket attachments widget instance options

Field	Description
Record ID	The ID number of the record for the attachment.
Record table	Limit the records users can add an attachment to by adding a table to the attachment widget. Users can then only add attachments if they are in a record for that table.

Ticket Conversations widget

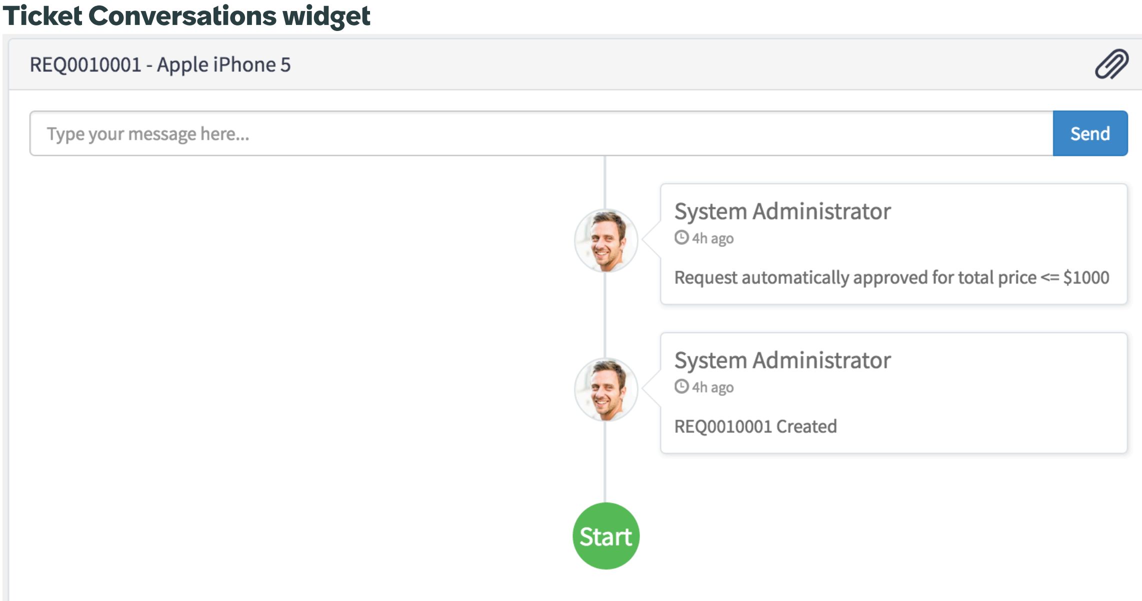
Record of ticket items. Users can use this widget to communicate back and forth with the fulfiller and the receiver. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The Ticket Conversations widget displays journal entries from the activity formatter of the target record. Journal entries are presented in chronological order, with the oldest entries appearing at the bottom of the widget. Entries made by the user that created the record appear on the right side of the center divider. Entries made by other users appear to the left.

The Ticket Conversations widget is intended only for tables that extend task.

Limit the number of journal entries that appears in the ticket conversation widget using the `glide.service_portal.stream_entry_limit` system property. The default number is 100 on a base instance or 500 if the property is not in the System Property [sys_properties] table. Change the number by navigating to **Service Portal** > **Properties**, and enter the new number in the **Maximum number of stream entries displayed in Service Portal** field.

Ticket Conversations widget



Instance options

Instance options fields

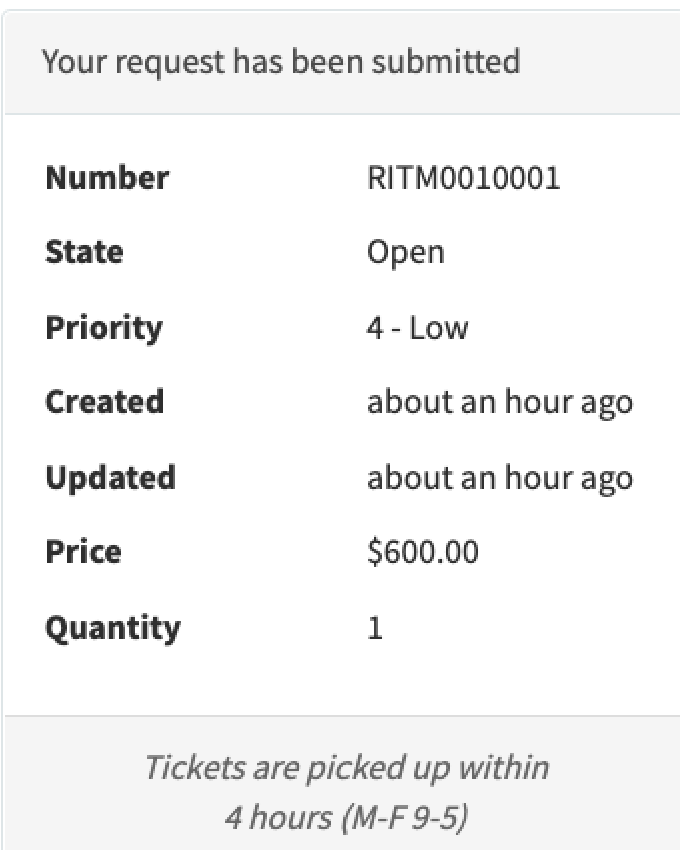
Field	Description
Use dynamic placeholder	Use a placeholder for journal fields. The default value is false.
No readable journal field message	The message that displays when there are no readable journal fields. Forms that have added journal fields may not display in the Ticket Conversation widget.
Enter key behavior	The action to perform when pressing the Enter key. The default is to submit the entry. The **System Property** option is based on the value of the *glide.service_portal.comment.enter_adds_new* system property.

Ticket Fields widget

The Ticket Fields widget displays information about a request that a user has made. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

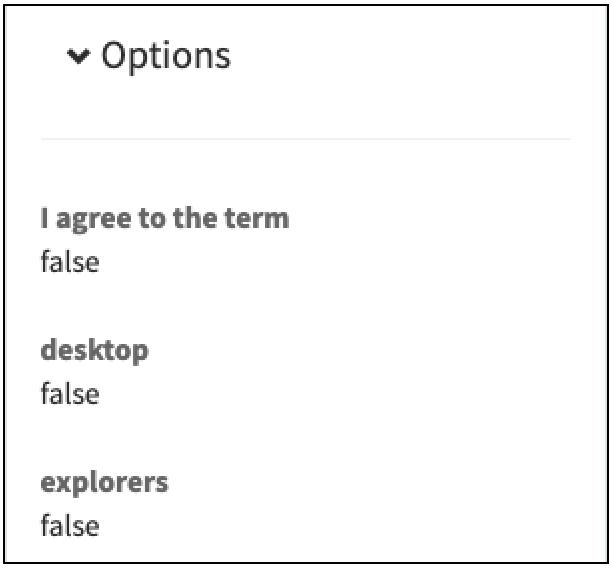
Using the widget

After a user submits a request, they can track their request on a ticket page in Service Portal. The user can consult the Ticket Fields widget to review the details of their request and check its resolution status.



Fields for the Ticket Fields widget are defined by the HTML template and the server.

If a user entered variables when submitting the request, they can view those variables in the Options section.



Note: The values that appear in the Options section are not field values from the ticket. They are Service Catalog variables that are associated with the ticket. For more information, see Service catalog variables.

Instance options

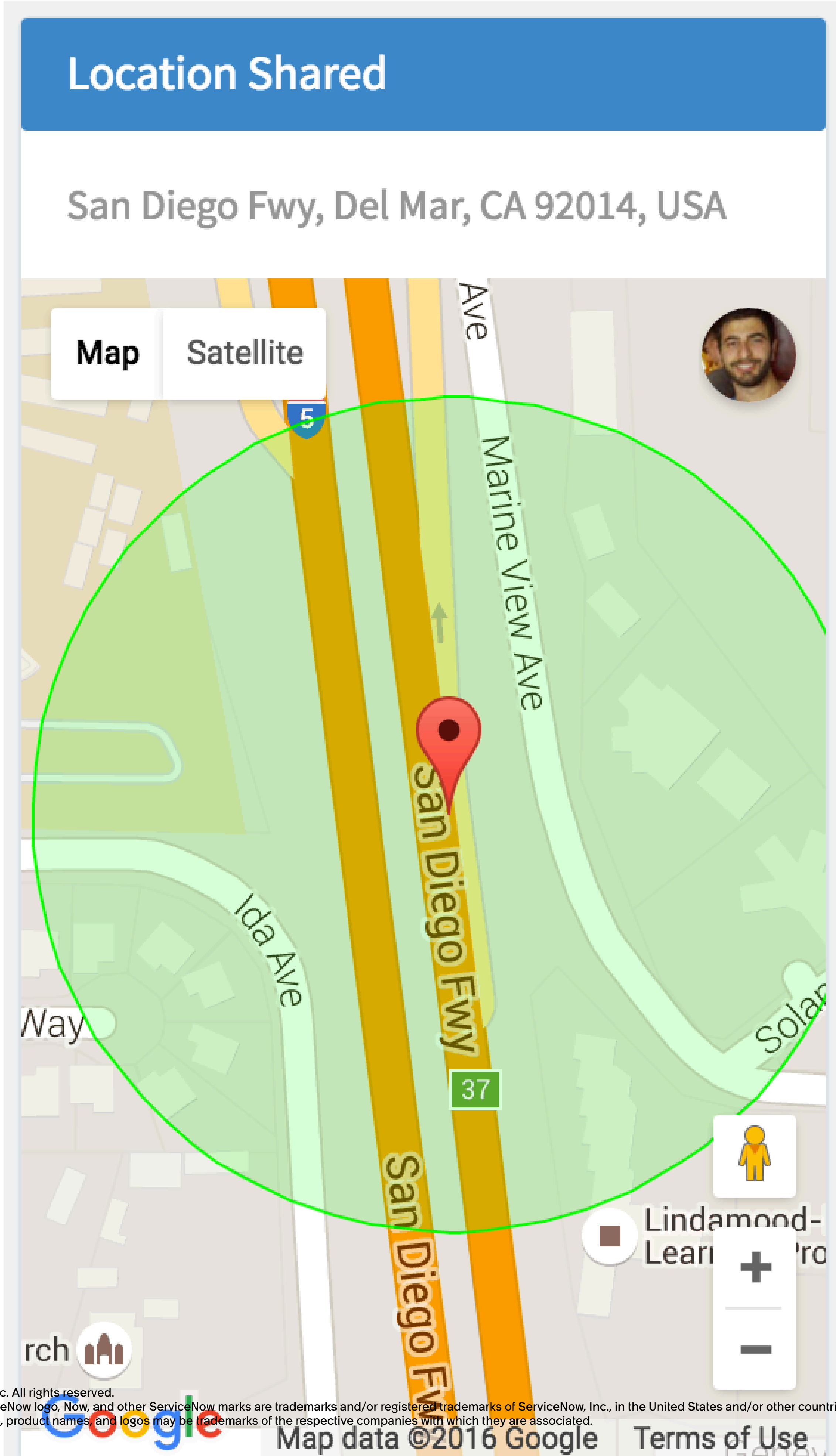
Use the instance options to configure the Ticket Fields widget for a portal page.

Field	Description
Pickup message	Text to communicate the expected resolution time of the ticket. This text is displayed below the ticket fields. The default is `${Tickets are picked up within   4 hours (M-F 9-5)}`. Ensure that any changes you make are within the curly braces.

Ticket Location widget

Share your location in a ticket. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Ticket Location widget



Instance options

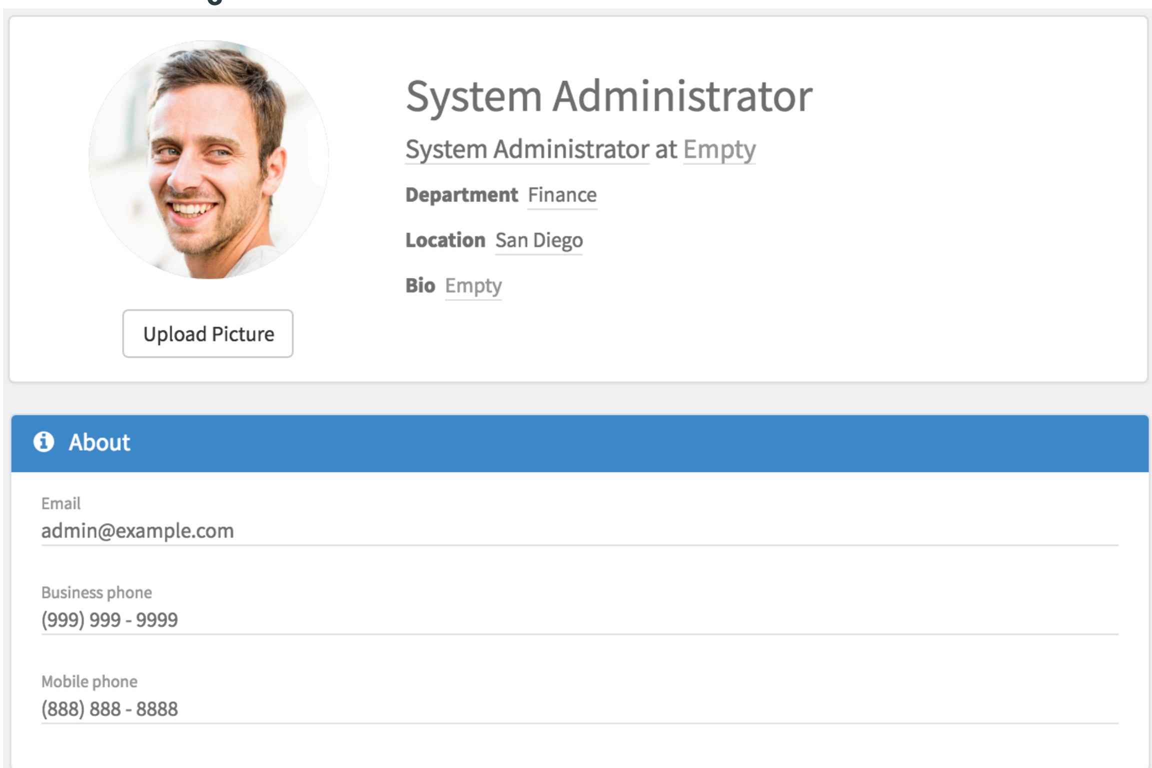
The Ticket Location widget does not include any instance options.

User Profile widget

Display user profile information. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Users can use the User Preferences section to enable accessibility in a portal.

User Profile widget



Instance options

Instance options fields

Field	Description
Show current user	Displays the logged-in user within the team members list in this widget when viewing a team member's user profile. The team members list is based on the organization chart.

Search widgets

Several search widgets are provided with Service Portal.

You can configure search in Service Portal using any of the search widgets.

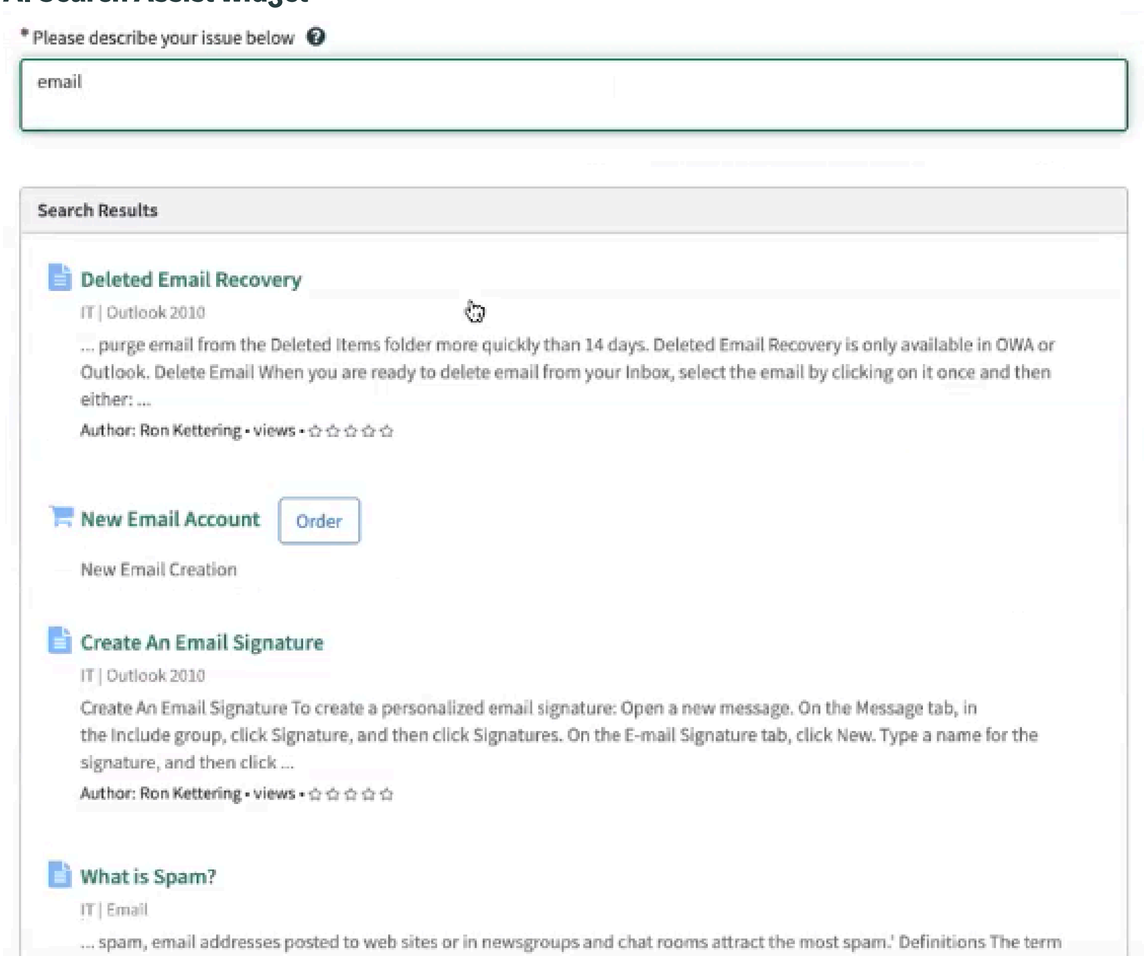
AI Search Assist widget

Improve incident deflection for Service Portal users by displaying the most relevant search results within a record producer.

Using the widget

The widget is included in the **Create Incident** record producer form to display items based on keywords entered in the description. These items can be knowledge articles or Service Catalog items. These search results appear as the user types the information.

AI Search Assist widget



Instance options

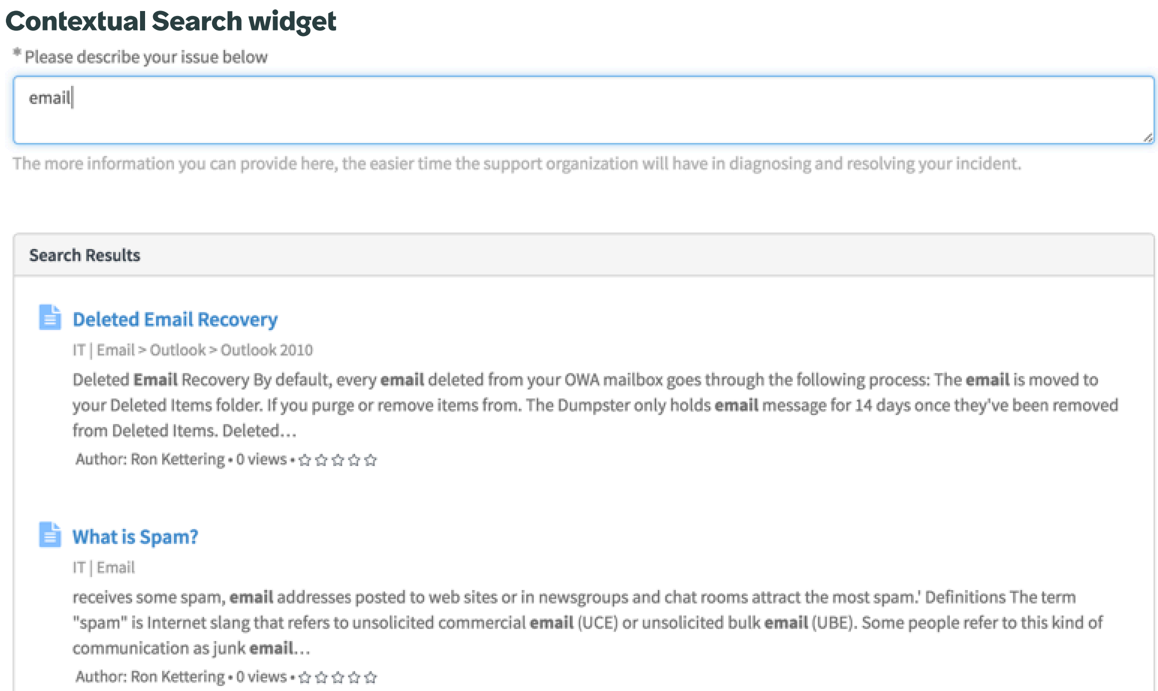
The AI Search Assist widget doesn't include instance options.

Contextual Search widget

Contextual Search is an embedded widget that can be added to a record producer and used with the SC Catalog Item widget. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

By default, the widget is included in the **Create Incident** record producer form to display items based on keywords entered in the description. These items can be knowledge articles or Service Catalog items. These search results appear as the user types the information.

To use this widget with other record producers, see Define contextual search for the record producer.



Related topics

Contextual search

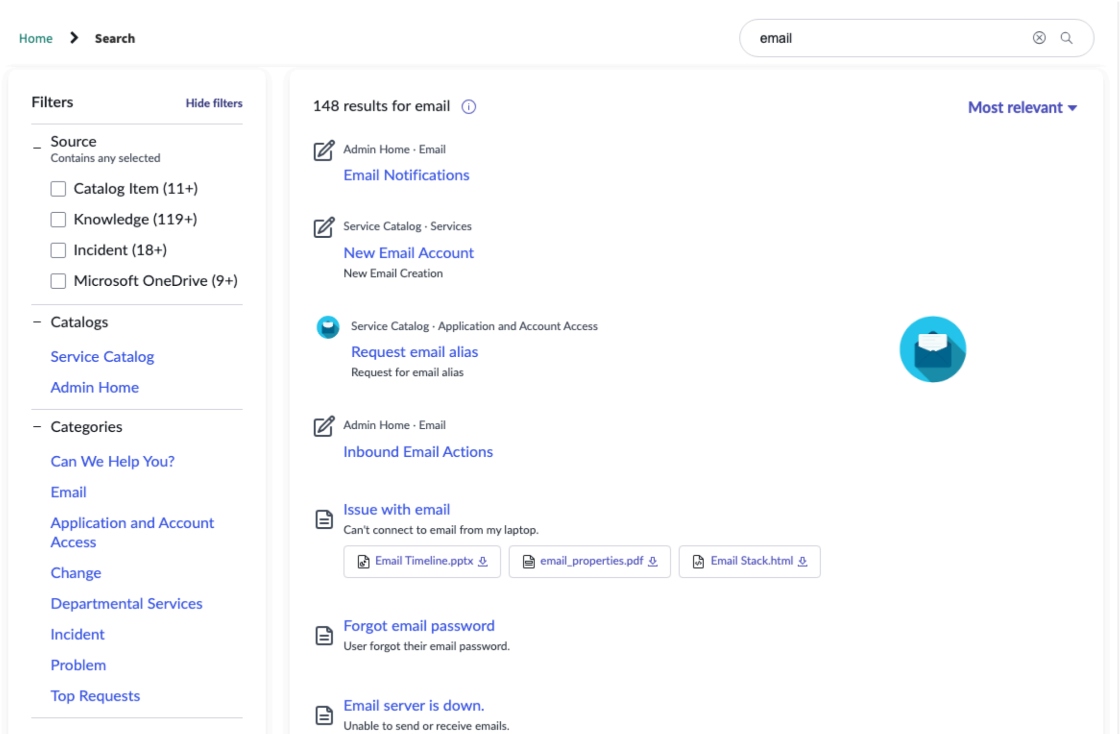
Faceted Search widget

The Faceted Search widget displays search results and search facets defined for a search source. The Faceted Search widget enables end users to filter search results for a more meaningful result set.

Using the widget

You can use facet filters to refine your search in Service Portal. For example, you can view only knowledge article search results by selecting the **Knowledge** source facet bucket. Or, to filter search results by certain knowledge categories, you can select one or more facets.

Faceted Search widget



The available facets are dynamic, showing only field values that are included in your current search results. As you select facets, the search narrows and the number of available facets decreases. You can broaden your search by clearing an individual facet selection.

To see which facets you've selected, view the pills in the Filters panel. If you select a different source facet bucket, your other selected facets are carried over and applied to your modified search.

You can initiate a new search by entering a new search term in the typeahead search box. After you enter the new search term, the system clears your facet filter selections from the previous search. You can refine your new search by selecting new facet filters.

For more information on configuring the available facets, see Create a facet in an AI Search application configuration.

Instance options

Use the instance options to configure the Faceted Search widget for a portal page.

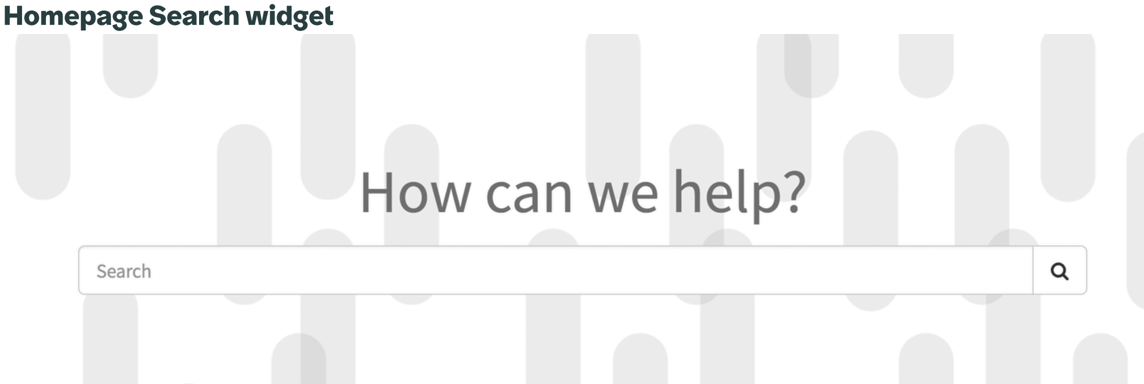
Field	Description
Presentation	
Facet List Title	Display title for the facet component.
Typeahead Search - Title	Default text in the typeahead search component.
Typeahead Search - Color	Whether the glyph in the typeahead component is filled in.
Typeahead Search - Glyph	Icon that appears in the search field beside the widget. The search icon is the default. To use a different icon, type the name of the icon

Field	Description
	in the field, for example `search-plus`. For a list of icons to choose from, open the instance options for the Icon Link widget.
Typeahead Search - Size	Determines the font size and height of the widget. Choose from xs, sm, md, and lg.
Show Typeahead Search Box	Option to show or hide the search box on the portal page.
Behavior	
Max results for All search	Maximum number of results that display for all search sources when viewed together.
Max results for single search source	Maximum number of results that display for a single search source.
Show Did You Mean	Displays suggestions when a search produces no results.
Typeahead Search - Limit	Number of typeahead search results displayed. The default is 15.
AI Search	
Placeholder	Text that appears in the search box before the user enters anything. By default, the placeholder text is `Search`. **Note:** This instance option applies only if AI Search is enabled in your portal. For more information on enabling AI Search for Service Portal, see Enable and configure AI Search in Service Portal.

Homepage Search widget

Add a search bar to your home page. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Homepage Search widget



Instance options

Use the instance options to configure the Homepage Search widget for a portal page.

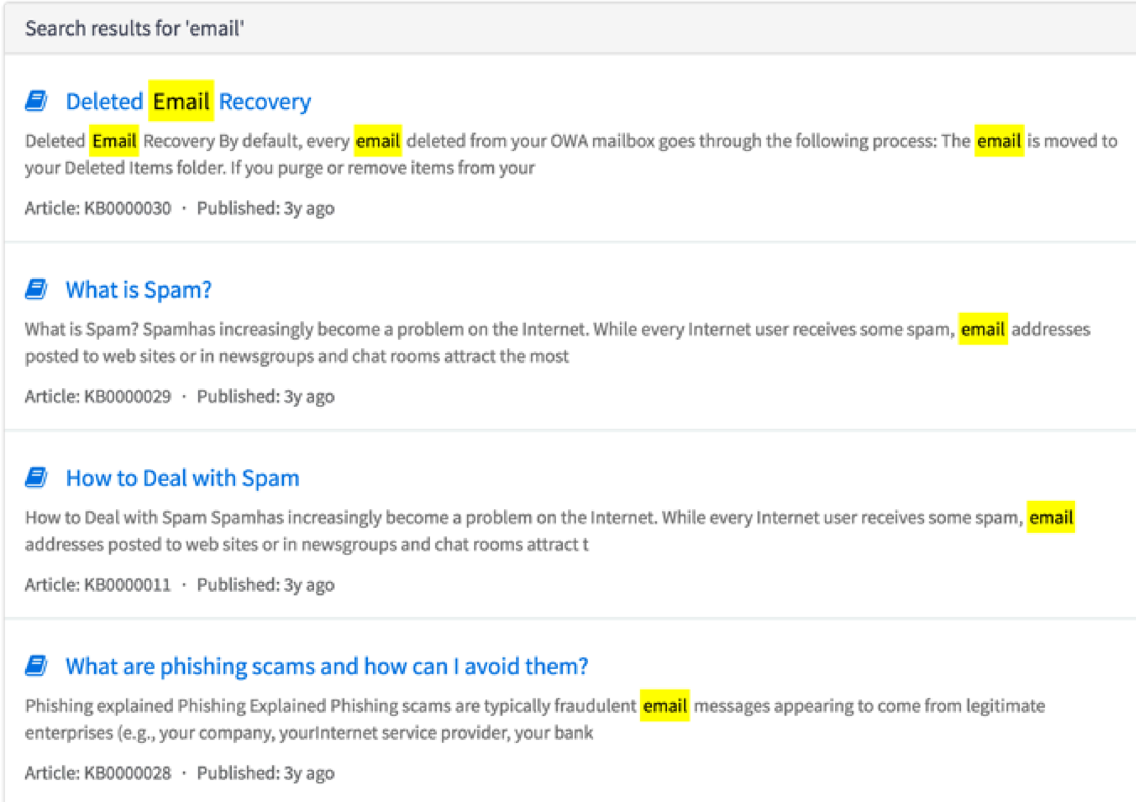
Note: The AI Search instance options apply only if AI Search is enabled in your portal. For more information on enabling AI Search for Service Portal, see Enable and configure AI Search in Service Portal.

Field	Description
Presentation	
Title	Name that appears above the search bar. For example "How can we help?"
Short description	A subtitle that appears below the title.
Typeahead search	Controls the appearance of the search bar. Use a comma separated list inside curly braces to add style details to the search bar, for example {title: 'Search', color: 'blue', size: 'lg'}. For more information on which style options you can add, see the instance options for the Typeahead Search widget.
AI Search	
Search Application	Defines search experience settings for the widget, such as the search engine, search results limit, and suggestions limit. By default, the widget uses the same search application configuration as the portal, but you can override this configuration at the widget level. For more information on defining a search application configuration, see Defining search application configurations.
Search Results Configuration	Defines how search results are displayed after using the widget. By default, the widget uses the same search results configuration as the portal, but you can override this configuration at the widget level. For more information on defining a search results configuration, see Define a composite dataset.
Disable All Suggestions	Option to disable search suggestions.
Placeholder	Text that appears in the search box before the user enters anything. By default, the placeholder text is `How can we help?`.
AI Search Source Filter	Content that portal users can search on, including tables in your instance or external data sources. For more information, see Defining search sources.

Legacy: Search Page widget

The Search Page widget displays search results. The Faceted Search widget replaces the Search Page widget. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Search Page widget



Search Page instance options

Search page instance options

Field	Description
Show score	When selected, shows search results relative to ranking.
Max results for All search	The maximum number of results that show for all search groups when viewed together.
Max results for single search group	The maximum number of results that show for a single search group when you view that specific search group.

Search page instance options (continued)

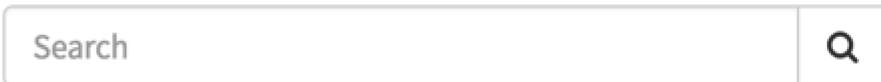
Field	Description
Show Did You Mean	Displays suggestions when a search produces no results.

For more information on configuring search, see Configuring search in a portal.

Typeahead Search widget

Predictive search feature that shows words as users type. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Typeahead Search widget



Instance options

Use the instance options to configure the Typeahead Search widget for a portal page.

Note: The AI Search instance options apply only if AI Search is enabled in your portal. For more information on enabling AI Search for Service Portal, see Enable and configure AI Search in Service Portal.

Field	Description
Presentation	
Title	The name or words that appear in the search field before a user starts typing. For example, `search` or `what are you looking for`
Color	Whether the search button beside the search field is filled in or not
glyph	The icon that appears in the search field beside the widget. The search icon is the default. To use a different icon, type the name of the icon in the field, for example `search-plus`. For a list of icons to choose from, open the instance options for the Icon Link widget.
Size	Determines the font size and height of the widget. Choose from xs, sm, md, and lg.
Behavior	
Limit	If search suggestions is enabled, enter the number of suggestion entries you want to display. If search suggestions is disabled, enter the number of typeahead entries you want to display. The default is 15. See Enable and disable search suggestions.
Contextual Search Sources	Limit the results available in the typeahead search by only configuring specific search sources. For example, users searching in the Service Catalog only see results for the Service Catalog when that search sources is configure. For more information on contextual search, see Configure Search Sources available on a page
AI Search	

Field	Description
Search Application	Defines search experience settings for the widget, such as the search engine, search results limit, and suggestions limit. By default, the widget uses the same search application configuration as the portal, but you can override this configuration at the widget level. For more information on defining a search application configuration, see Defining search application configurations.
Search Results Configuration	Defines how search results are displayed after using the widget. By default, the widget uses the same search results configuration as the portal, but you can override this configuration at the widget level. For more information on defining a search results configuration, see Define a composite dataset.
Disable All Suggestions	Option to disable search suggestions.
Placeholder	Text that appears in the search box before the user enters anything. By default, the placeholder text is `Search`.
AI Search Source Filter	Content that portal users can search on, including tables in your instance or external data sources. For more information, see Defining search sources.

Knowledge Management widgets

Use Knowledge Management widgets to build a knowledge base for your portal.

Knowledge Management widgets are included as part of the Service Portal - knowledge base plugin [com.glide.service-portal.knowledge-base], which is activated automatically with the Service Portal for Enterprise Service Management [com.glide.service-portal.esm] plugin.

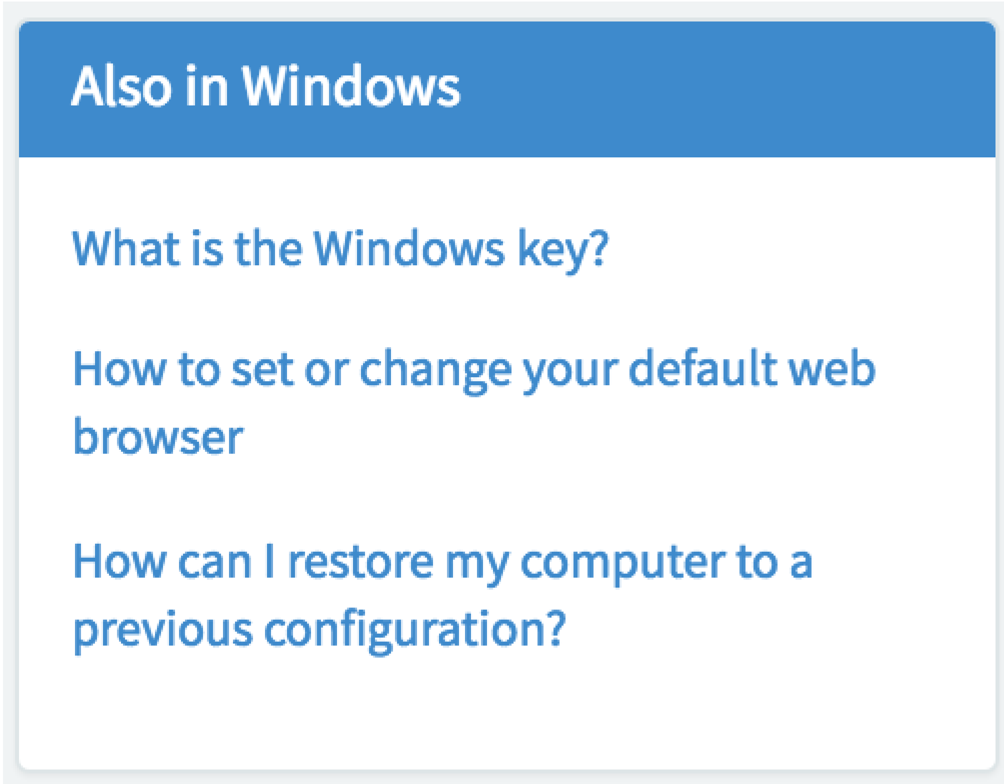
For more information on knowledge management, see Knowledge Management.

KB also in Category widget

List of articles also included within a particular category. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The information that appears in the KB also in Category widget is determined by the knowledge article child categories. For more information, see Define a knowledge article category.

KB also in Category widget



Instance options

KB also in Category instance options

Instance Options

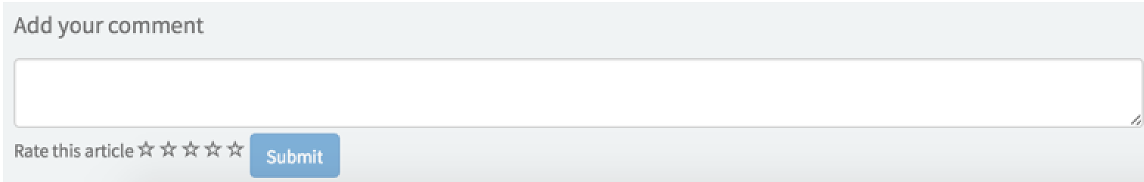
Field	Description
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.

KB Article Comments widget

Rating and comment option for knowledge base articles. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

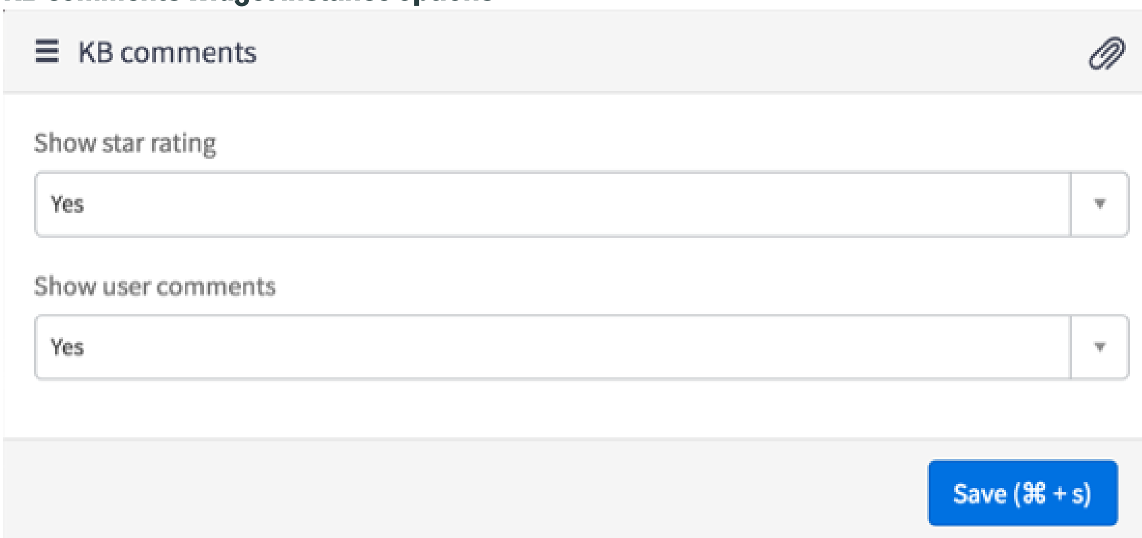
Ratings on articles in the KB Article Comments widget determine the article popularity in the KB top rated widget.

KB Article Comments widget



Instance Options

KB comments widget instance options



Instance options fields

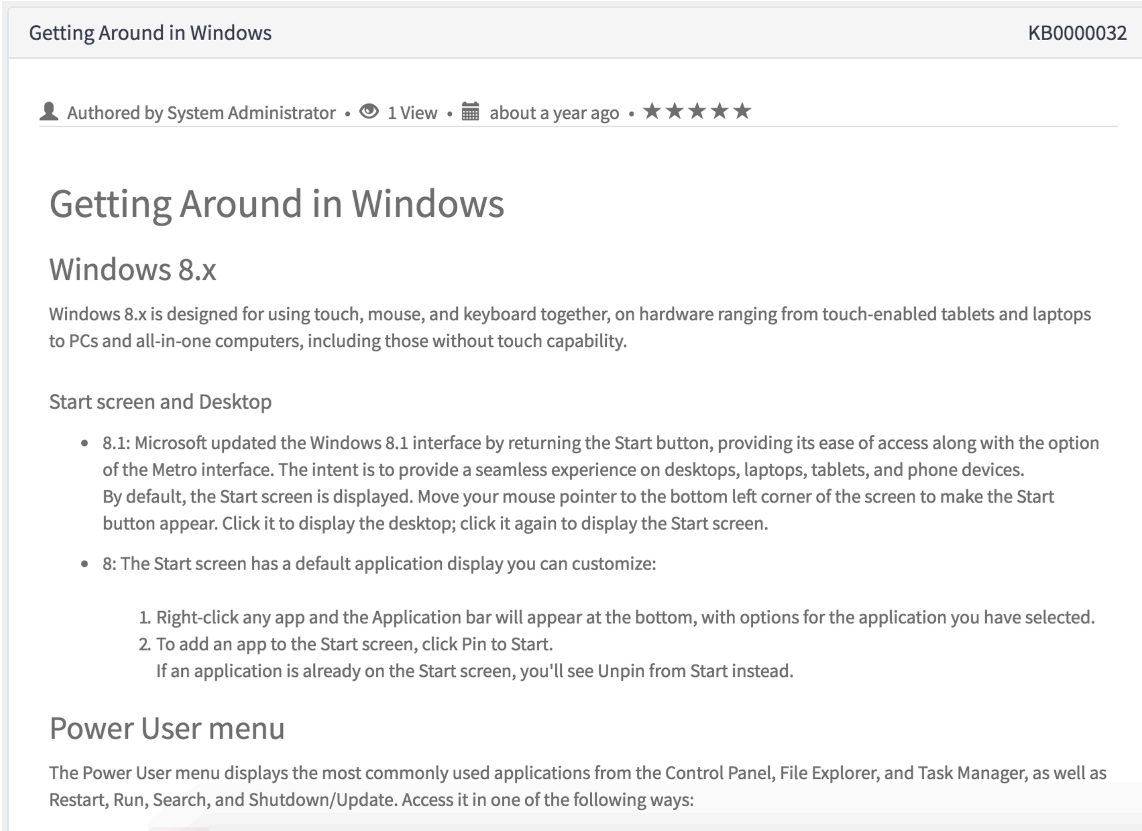
Field	Description
Show star rating	Select the option to show a star rating on the KB article comments widget. Selecting the **Use system properties** option shows the star rating option based on the *glide.knowman.show_star_rating* system property.
Show user comments	Select the option to show the comment box on the KB article comments widget. Selecting the **Use system properties** option shows the comment box based on the *glide.knowman.show_user_feedback* system property.

KB Article Page widget

Use the Article page widget to view Knowledge Base articles within Service Portal. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

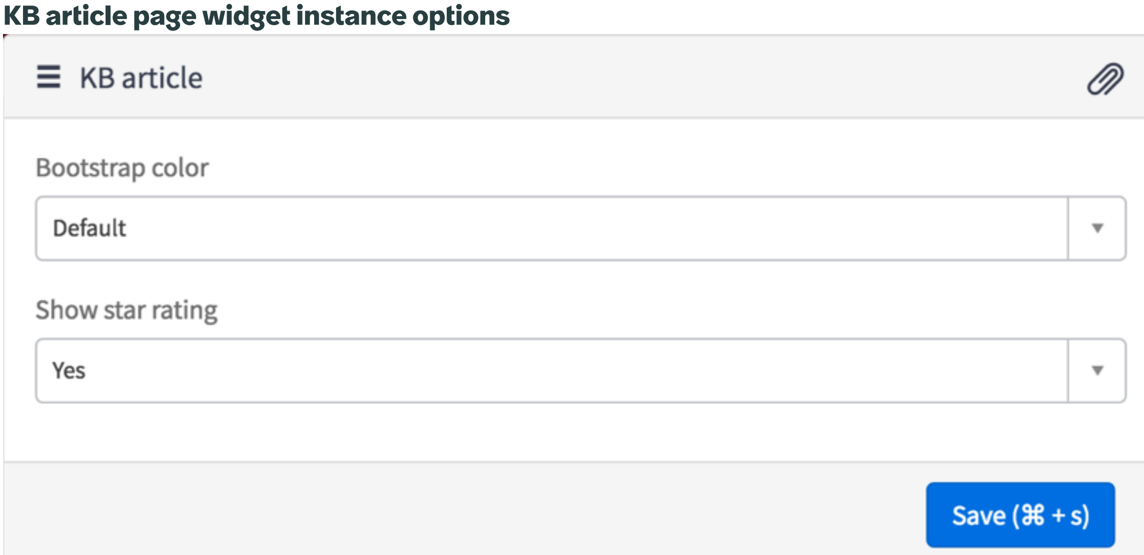
Any specialized font or formatting added in the text field for the knowledge article within the platform, appears the same way in the portal.

KB Article Page widget



Instance Options

KB article page widget instance options



Instance options

Field	Description
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.

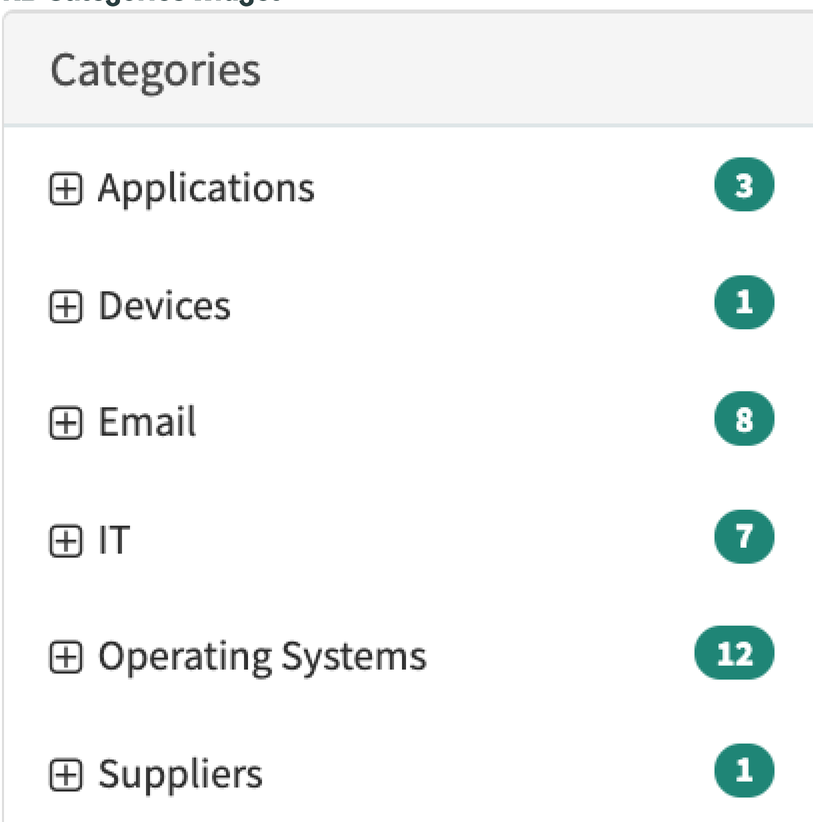
Instance options (continued)

Field	Description
Show star rating	Displays the star rating on the article page widget. If you select **Use system properties**, the appearance of the star rating is defined by the `glide.knowman.show_star_rating` system property.

KB Categories widget

Lists the categories for your Knowledge Base. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

KB Categories widget



Categories are determined by the list of Knowledge Categories provided for the Knowledge Base. To view a list of categories for a knowledge base, in the platform navigate to **Knowledge** > **Administration** > **Knowledge bases** then select the name of the knowledge base, for example IT. Categories for the knowledge base appear in the related lists. For more information on defining categories for a knowledge base, see Define a knowledge article category.

Note: If the **Max article limit to allow category counts** field is set to 500 counts and the knowledge base contains more than 500 articles the KB categories widget displays all of the categories in the knowledge base.

The knowledge base that a portal uses is determined in the portal form. If your portal uses multiple knowledge bases, you can use the KB Knowledge Bases widget to filter the content of the KB Categories widget.

For more information on associating your portal with a knowledge base, see Associate a portal with a knowledge base.

Note: In the widget Instance Options, if the **Max number of articles evaluated per category to determine visibility** value is set to 1 or higher the user must have access to at least one article in the category for the category to be displayed.

Instance options

The KB categories widget does not include instance options.

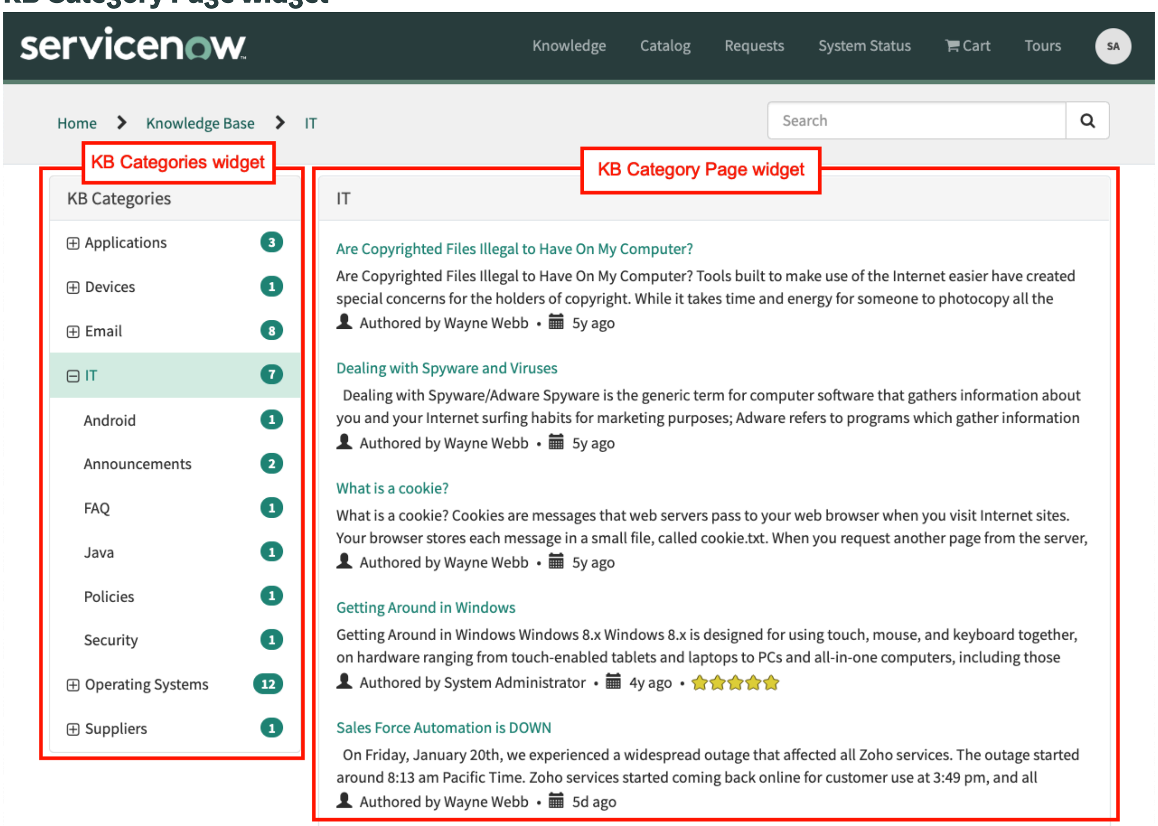
KB Category Page widget

Articles and article preview within a particular category. Categories are specified within the Knowledge Base module. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The KB Category Page widget works together with the KB Categories widget. When you select a category in the KB Categories widget, the KB Category page widget lists articles within that category.

To have the KB Categories and KB Category Page widgets work in tandem, add the two widgets to the same page.

KB Category Page widget



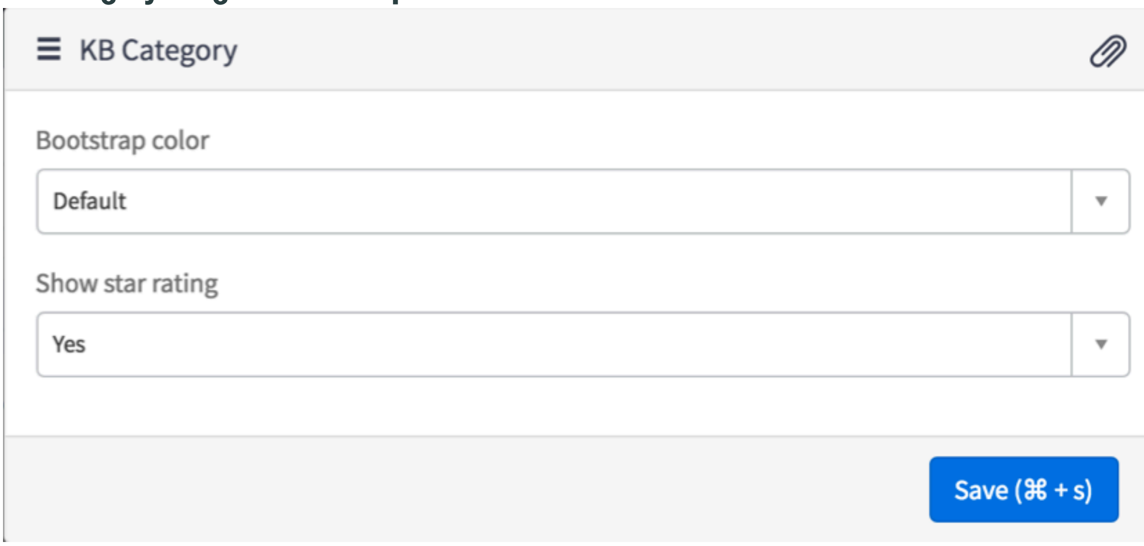
If you add the KB Category Page widget to a page without adding the KB Categories widget, the KB Category Page widget displays an uncategorized list of all articles within the knowledge base.

Categories are determined by the list of Knowledge Categories provided for the Knowledge Base. To view a list of categories for a knowledge base, in the platform navigate to **Knowledge** > **Administration** > **Knowledge bases**, then select the name of the knowledge base, for example IT. Categories for the knowledge base appear in the related lists. If a category does not have any associated articles, it does not appear in the portal. For more information on defining categories for a knowledge base, see Define a knowledge article category.

The knowledge base that a portal uses is determined in the portal form. For more information on associating your portal with a knowledge base, see Associate a portal with a knowledge base.

Instance options

KB category widget instance options



Instance options fields

Field	Description
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Show star rating	Displays the star rating on the category page. If you select **Use system properties**, the appearance of the star rating is defined by the `glide.knowman.show_star_rating` system property.

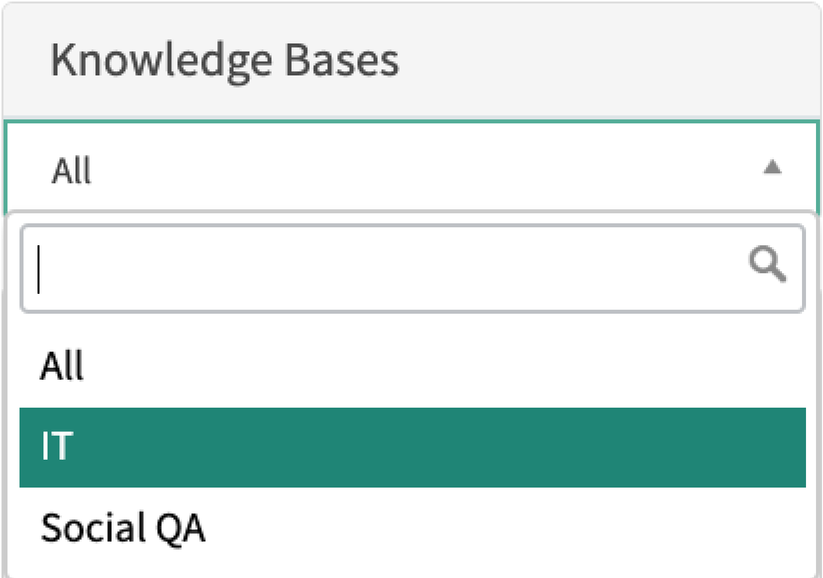
KB Knowledge Bases widget

Give users the option to select which knowledge base to browse on your portal. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Using the widget

If you associate your portal with multiple knowledge bases, the KB Knowledge Bases widget provides users with a menu to select a knowledge base. After a user selects a knowledge base, other KB widgets on the page filter their content accordingly.

For example, if a user selects to browse only the IT knowledge base, then the KB Categories widget shows only the categories within the IT knowledge base.



If you associate your portal with only one knowledge base, then the KB Knowledge Bases widget remains hidden on the page.

For more information on associating your portal with knowledge bases, see Associate a portal with a knowledge base.

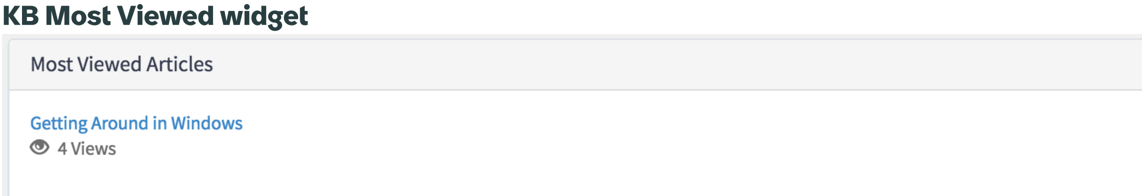
Instance options

The KB Knowledge Bases widget doesn't include instance options.

KB Most Viewed widget

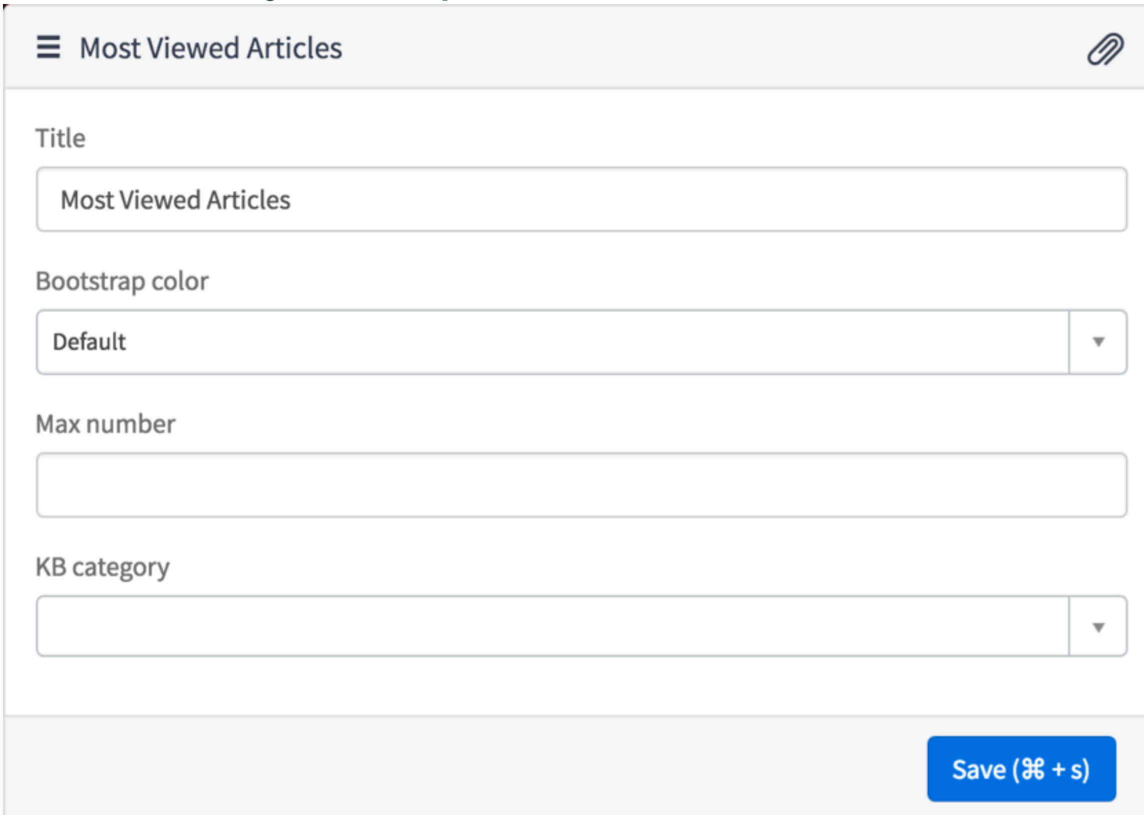
List of most viewed knowledge base articles. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

KB Most Viewed widget



Instance options

KB most viewed widget instance options



Instance options fields

Field	Description
Title	The name that appears in the widget header
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Max number	The maximum number of most viewed articles listed
KB category	KB category for the most viewed articles. The list is generated by the kb_category table.

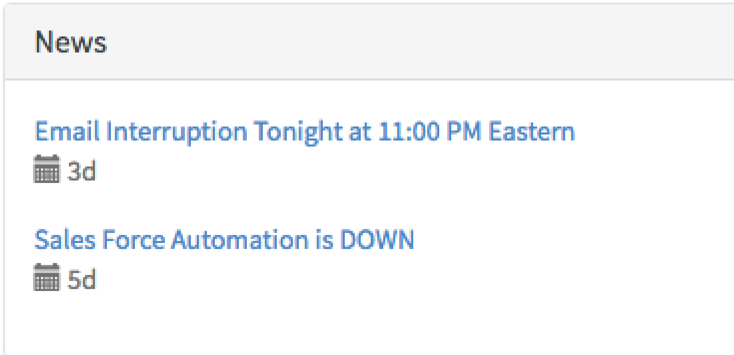
KB News widget

The KB News widget displays information from the Knowledge Base. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

You can configure the KB News widget to display specific information by selecting a category from the KB category list.

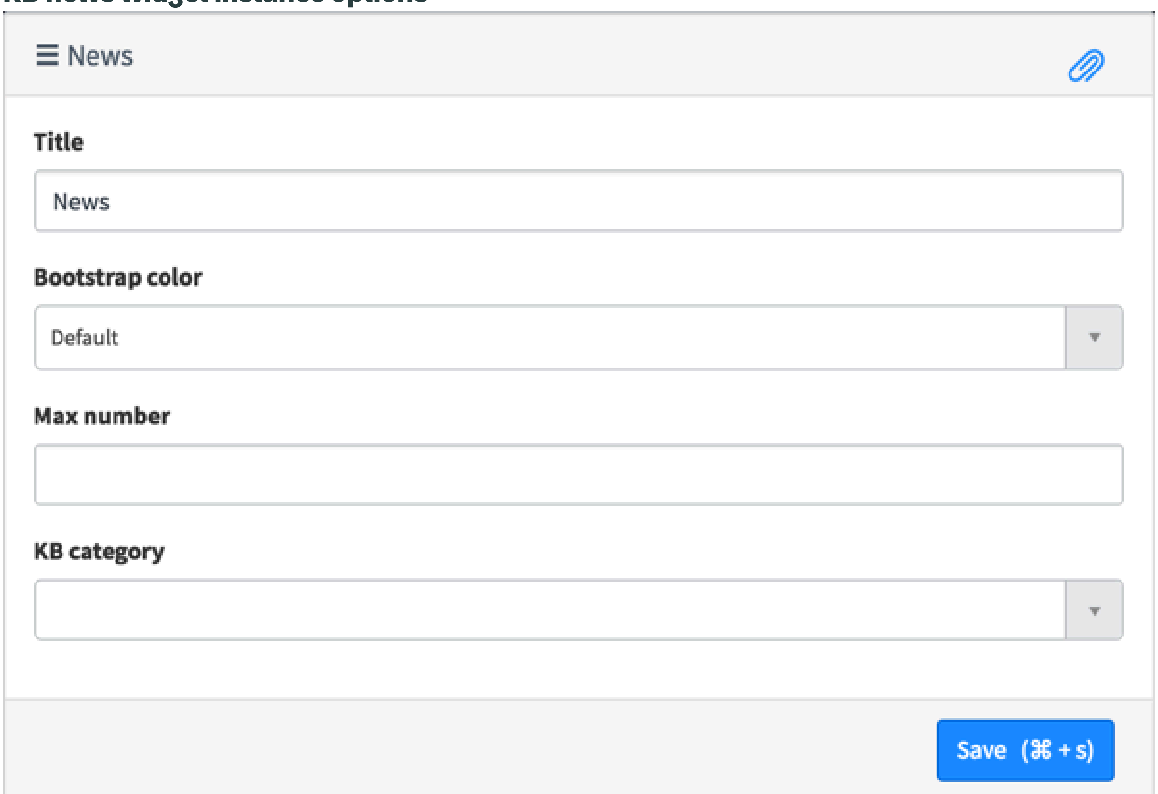
Note: The KB News widget only displays the knowledge base articles a user has access to based on ACL rules.

KB News widget



Instance options

KB news widget instance options



Instance option fields

Field	Description
Title	Name of the widget that appears in the widget header
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Max number	The maximum number of news articles appearing in the widget. The default number is 5.

Instance option fields (continued)

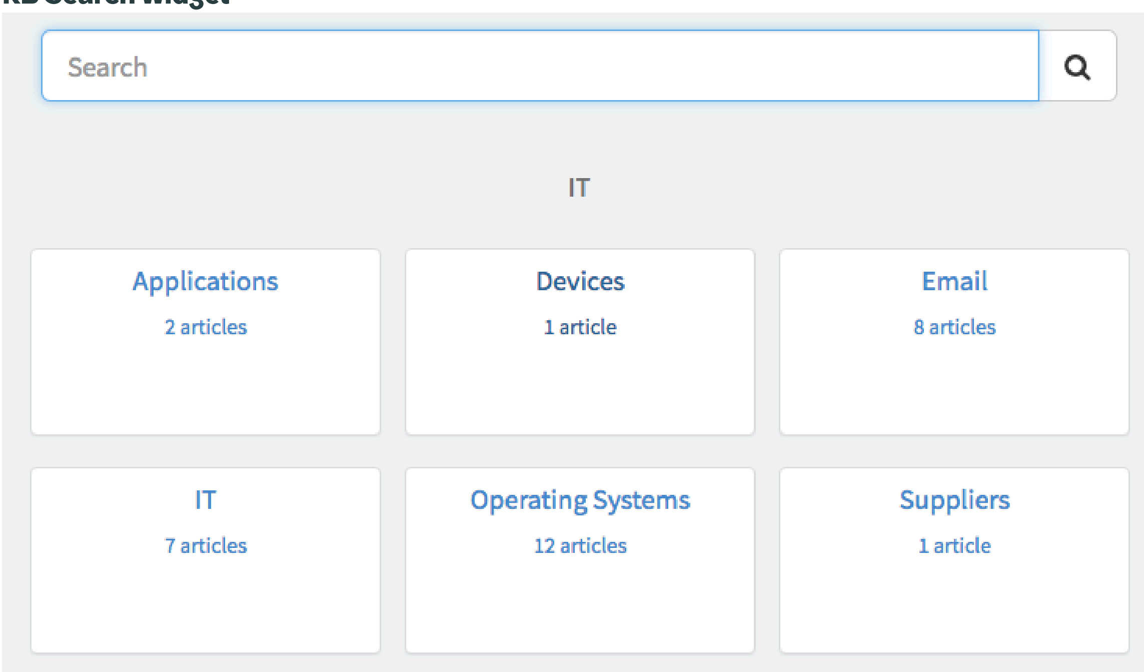
Field	Description
	Note: If a user does not have access to articles based on ACL rules, the widget can display fewer articles than the maximum number.
KB category	The knowledge base category determined by the kb_category table. Only published articles display. For a news widget, select something like **Announcements** to show upcoming events.

KB Search widget

The KB Search widget is a search widget that is specifically confined to the knowledge base. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

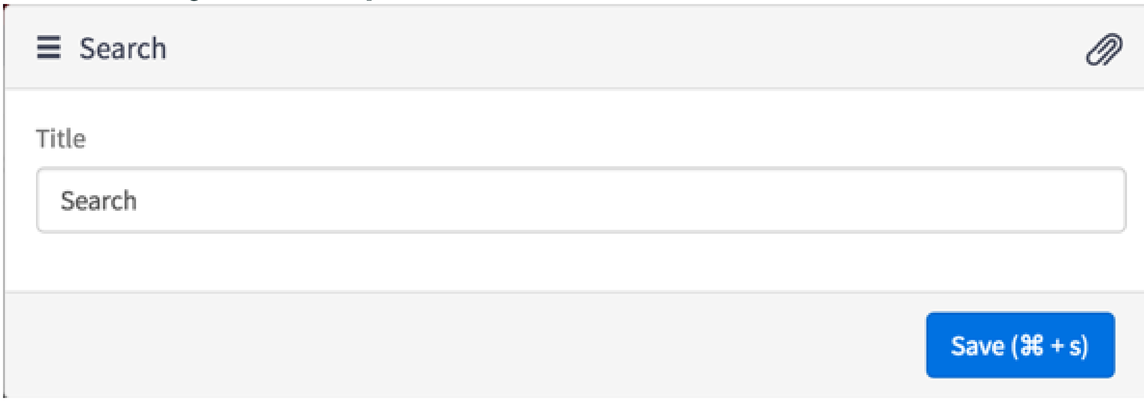
The typeahead search widget is embedded in the KB search widget.

KB Search widget



Instance options

KB search widget instance options



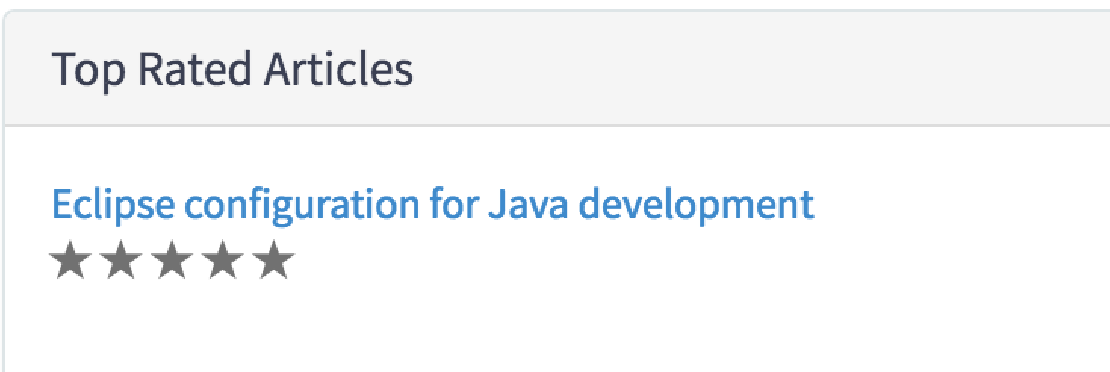
Instance option fields

Field	Description
Title	Name of the widget. This field is non-public facing.

KB Top Rated widget

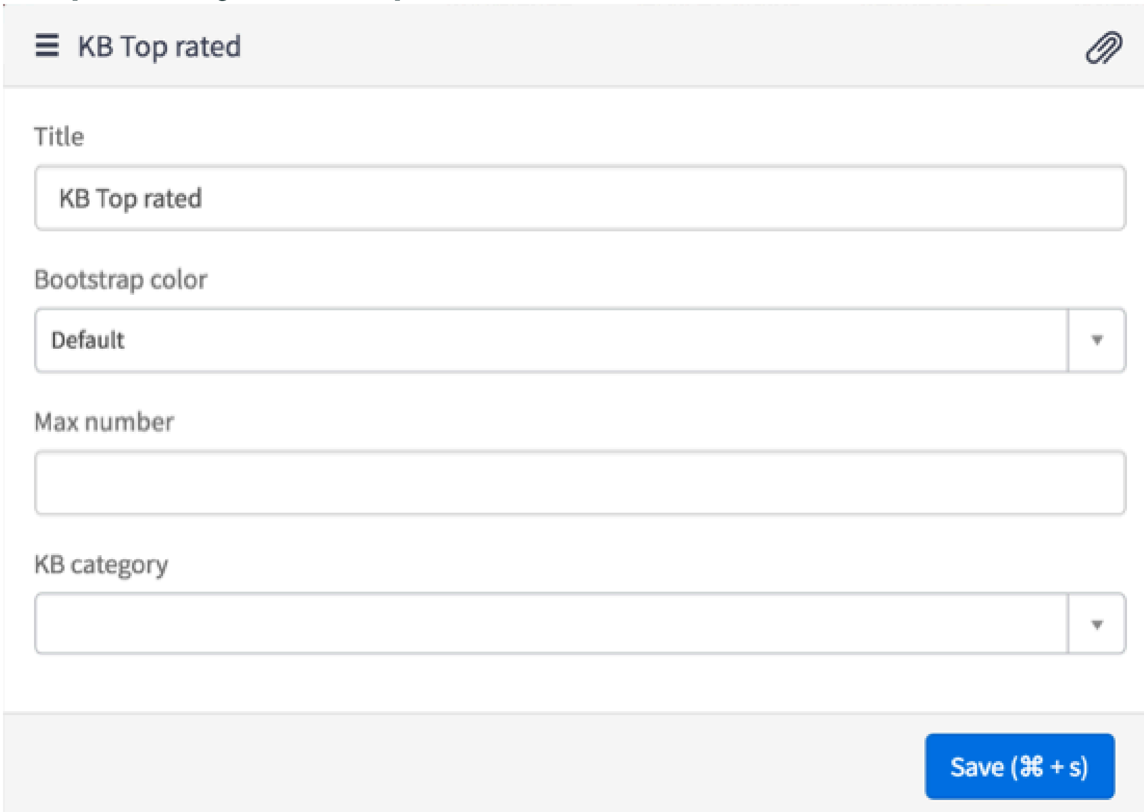
Lists Knowledge Base articles with the highest rating. Ratings are determined by user feedback. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

KB Top Rated widget



Instance options

KB top rated widget instance options



Instance options fields

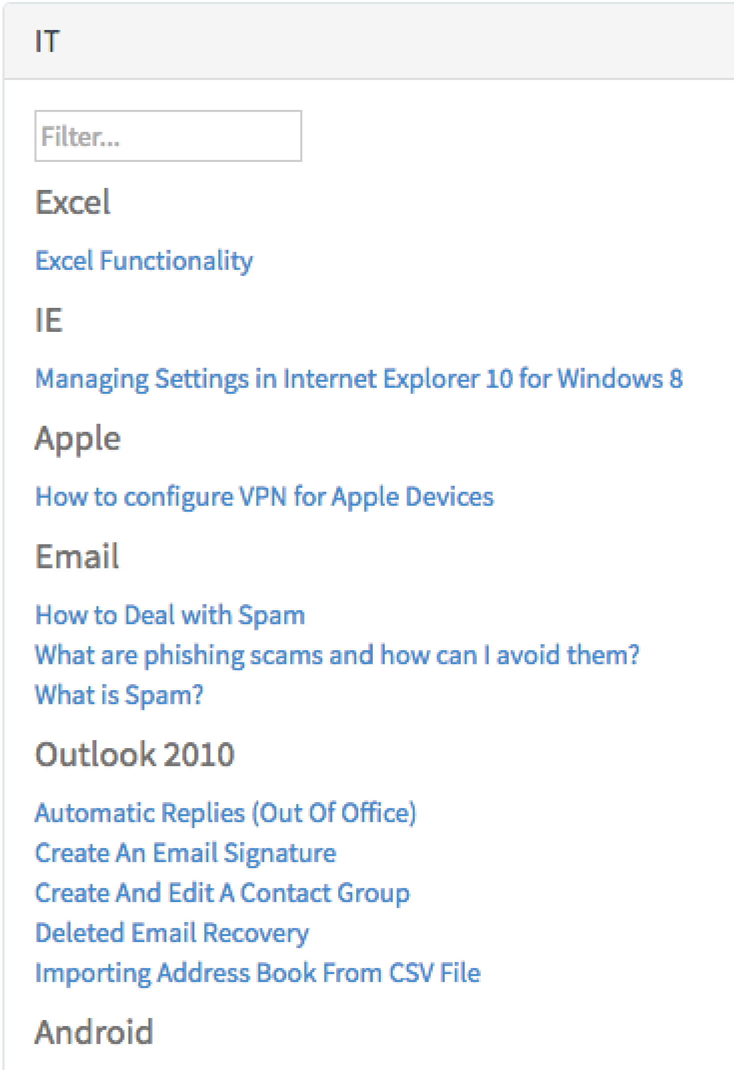
Field	Description
Title	The name that appears in the widget header
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Max number	The maximum number of most viewed articles listed
KB category	KB category for the top rated articles. The list is generated by the kb_category table.

KB View widget

The KB View widget is an example of how to structure a knowledge base page. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Use the search filter to find a specific topic or article.

KB View widget



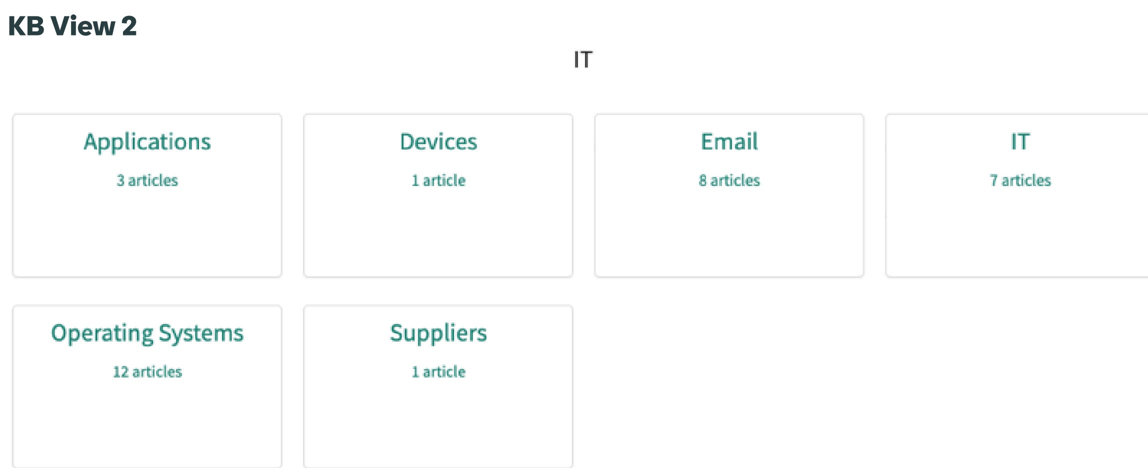
Instance options

The KB view widget does not have any included instance options.

KB View 2 widget

The KB View 2 provides an alternative structure to the KB View widget to show a different example of how to display knowledge articles. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The KB View 2 widget displays each knowledge category as a card. Click a card to access the articles within that category.



Categories are determined by the list of Knowledge Categories provided for the Knowledge Base. To view a list of categories for a knowledge base, in the platform navigate to **Knowledge** > **Administration** > **Knowledge bases**, then select the name of the knowledge base, for example IT. Categories for the knowledge base appear in the related lists. If a category does not have any associated articles, it does not appear in the portal. For more information on defining categories for a knowledge base, see Define a knowledge article category.

The knowledge base that a portal uses is determined in the portal form. For more information on associating your portal with a knowledge base, see Associate a portal with a knowledge base.

Instance options

The KB View 2 widget does not have any included instance options.

Knowledge Breadcrumbs widget

Help users navigate a knowledge base by adding the Knowledge Breadcrumbs widget. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Using the widget

The knowledge breadcrumbs widget displays information based on where an article is located in a knowledge base. For example, if you open an article on "How to Deal with Spam," the breadcrumbs show that the article is located in the Email category of the IT knowledge base.

You can broaden your search of the knowledge case by selecting the titles in the breadcrumbs. For example, to see all articles in the Email category, you would select **Email**. To see all articles in the knowledge base, you would select **IT (Knowledge Base)**.

The widget also includes a search box so that you can search for an article by name.

Instance options

Use the instance options to configure the Knowledge Breadcrumbs widget for a portal page.

Note: The AI Search instance options apply only if AI Search is enabled in your portal. For more information on enabling AI Search for Service Portal, see Enable and configure AI Search in Service Portal.

Field	Description
Behavior	
Show Search Box	Option to include a search box for users to search the knowledge base.
AI Search	
Search Application	Defines search experience settings for the widget, such as the search engine, search results limit, and suggestions limit. By default, the widget uses the same search application configuration as the portal, but you can override this configuration at the widget level. For more information on defining a search application configuration, see Defining search application configurations.
Search Results Configuration	Defines how search results are displayed after using the widget. By default, the widget uses the same search results configuration as the portal, but you can override this configuration at the widget level. For more information on defining a search results configuration, see Define a composite dataset.
Disable All Suggestions	Option to disable search suggestions.
Placeholder	Text that appears in the search box before the user enters anything.
AI Search Source Filter	Content that portal users can search on, including tables in your instance or external data sources. For more information, see Defining search sources.

Service Catalog widgets

Use the Service Catalog widgets to build a catalog for your portal.

Most service catalog widgets are part of the Service Portal Service Catalog [com.glide.service-portal.service-catalog] plugin that is activated automatically with the Service Portal for Enterprise Service Management (com.glide.service-portal.esm) plugin.

The Service Portal - Service Catalog v2 plugin (com.glideapp.servicecatalog.portal) provides an enhanced Service Catalog experience. This plugin is active by default and enables the following widgets:

- Catalog Homepage Search (ID: cat-homepage-search)
- SC Scroll to top (ID: sc-scroll-to-top)
- Requests and Approvals (ID: sc_request_and_approvals)
- Recent & Popular Items (ID: sc-recent-popular)

Most of the configuration for the Service Catalog widgets takes place in the Service Catalog application of the platform. For more information on Service Catalog, see Service Catalog.

Related topics

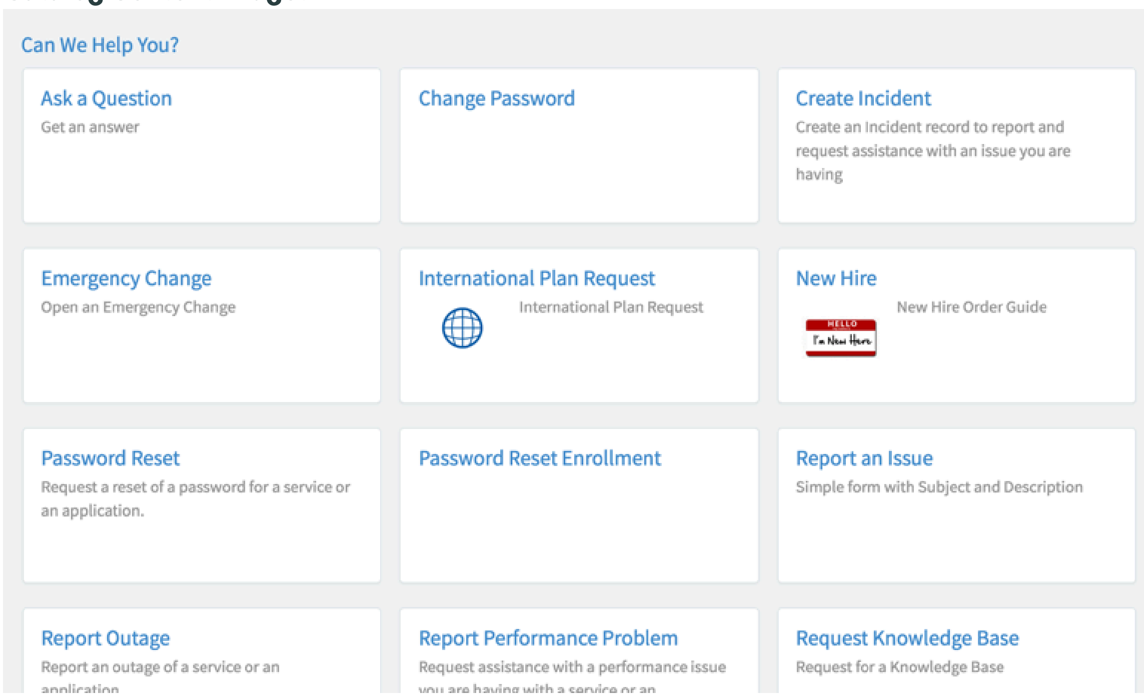
Service Catalog in Service Portal

Catalog Content widget

The Catalog Content widget is part of the Service Catalog and includes a tiled list of all the content items available in the catalog. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The items that appear on the page are grouped by category alphabetically. Catalog items and categories are defined in the Service Catalog application in the platform. For more information on creating catalog items to appear in the catalog, see Create a catalog item.

Catalog Content widget



Instance Options

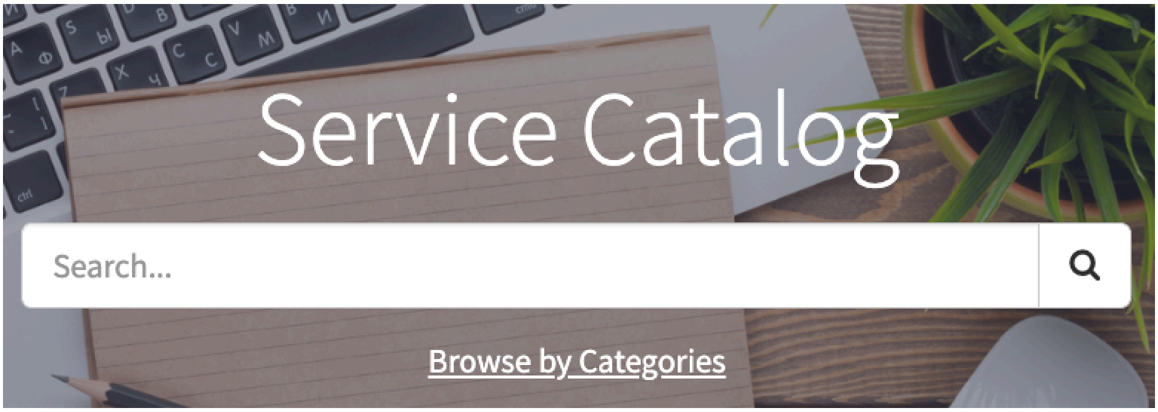
The Catalog Content widget does not include instance options.

Catalog Homepage Search widget

Give your users the option to search the Service Catalog as soon as they log in. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Using the widget

Add the Catalog Homepage Search widget on your Service Catalog landing page. When users navigate to the Service Catalog, they can use the Catalog Homepage Search widget to find what they are looking for.



Users can enter a keyword in the search bar. The Catalog Homepage Search widget uses a predictive search feature that shows words as users type.

Alternatively, to navigate to a list of Service Catalog categories, users can select **Browse by Categories**.

Instance options

Use the instance options to configure the Catalog Homepage Search widget for a portal page.

Note: The AI Search instance options apply only if AI Search is enabled in your portal. For more information on enabling AI Search for Service Portal, see Enable and configure AI Search in Service Portal.

Field	Description
Presentation	
Title	Title to appear above the search bar.
Short description	Text to appear under the title.
AI Search	
Search Application	Defines search experience settings for the widget, such as the search engine, search results limit, and suggestions limit. By default, the widget uses the same search application configuration as the portal, but you can override this configuration at the widget level. For more information on defining a search application configuration, see Defining search application configurations.
Search Results Configuration	Defines how search results are displayed after using the widget. By default, the widget uses the same search results configuration as the portal, but you can override this configuration at the widget level. For more information on defining a search results configuration, see Define a composite dataset.
Disable All Suggestions	Option to disable search suggestions.

Field	Description
Placeholder	Text that appears in the search box before the user enters anything. By default, the placeholder text is `How can we help?`.
AI Search Source Filter	Content that portal users can search on, including tables in your instance or external data sources. For more information, see Defining search sources.
Other Options	
Typeahead Search	Configuration of the search bar. You configure the search bar by using the instance options for the Typeahead Search widget. Use the syntax `{field1:'value1',field2:'value2'}`. For example, to configure the title, color, and size of the search bar, enter the following: `{title:'Search...',color:'default',size:'lg'}`.

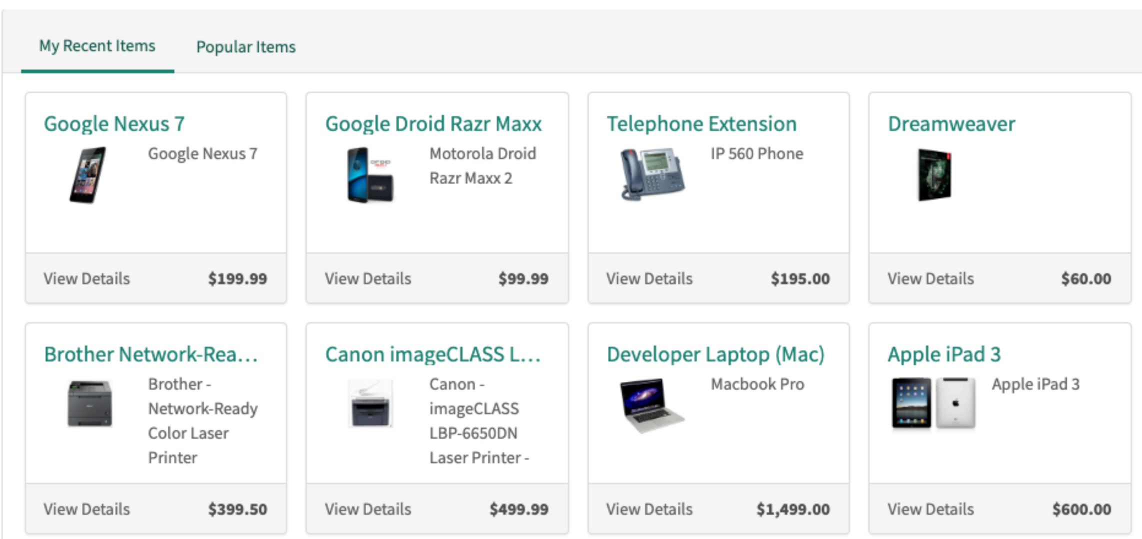
Recent & Popular Items widget

Allow a user to browse recent and popular catalog items. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

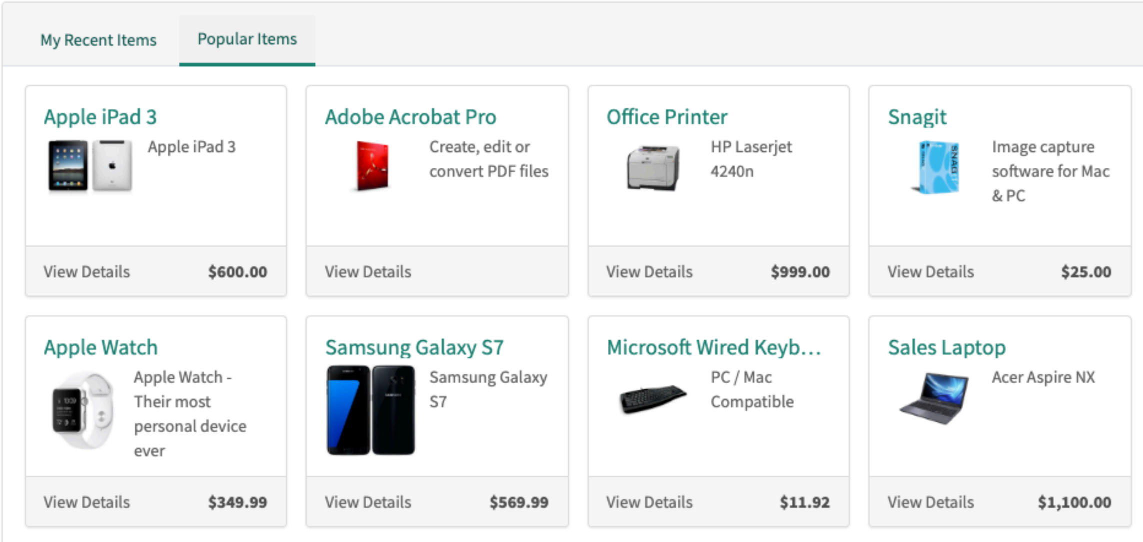
Using the widget

The Recent & Popular Items widget includes two tabs: **My Recent Items** and **Popular Items**.

A user opens the My Recent Items tab to see catalog items that they recently viewed or requested.



A user opens the Popular Items tab to see catalog items that have been widely requested by other users.



Each item card displays basic information about the catalog item, such as the item name, image, and price.

To navigate to the item listing, the user selects **View Details**.

Instance options

Use the instance options to configure the Recent & Popular Items widget for a portal page.

Field	Description
Data	
Popular Items used in	Time span over which users have requested the popular items. You select one of the following options: • **-- None --**: Display popular catalog items with no time span specified. This is the default option. • **Last 3 Months**: Display the most requested catalog items in the past three months. • **Last 6 Months**: Display the most requested catalog items in the past six months. • **Last 12 Months**: Display the most requested catalog items in the past year. • **Life time (Has performance implications)**: Display the most requested catalog items of all time. Selecting this option may decrease system performance.
Presentation	
Number of Items	Maximum number of catalog items to display in each tab. The value is 8 by default.
Behavior	
My Recent Items By	Criteria to qualify which catalog items are displayed in the My Recent Items tab. You can select one of the following options:

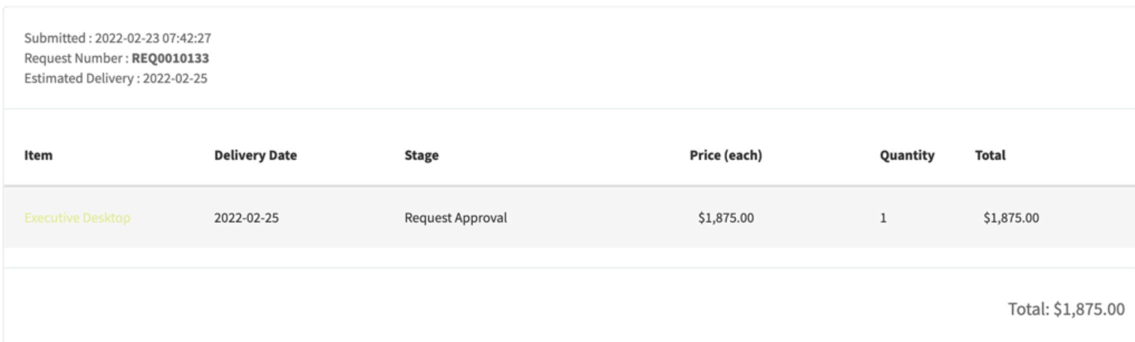
Field	Description
	• **-- None --**: Display recent items with no criteria specified. This is the default option. • **View**: Display the catalog items that the user viewed most recently. • **Request**: Display the catalog items that the user requested most recently.

Request Fields widget

The Request Fields widget displays information about any request a user has made. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Fields for the Request Fields widget are defined by the HTML template and the server.

Request Fields widget



Instance options

Request fields widget instance options

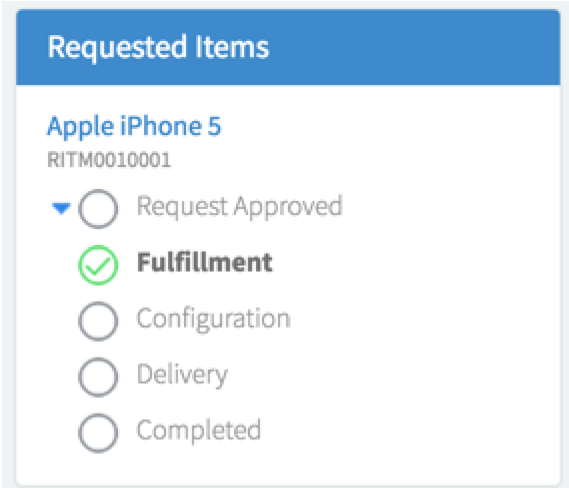
Field	Description
Pickup message	Information that appears at the bottom of the widget. Make sure any changes you make are within the curly braces. The default is `${Requests are picked up within   4 hours (M-F 9-5)}`

Requested Items widget

Describes at what stage of the order a requested item is. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

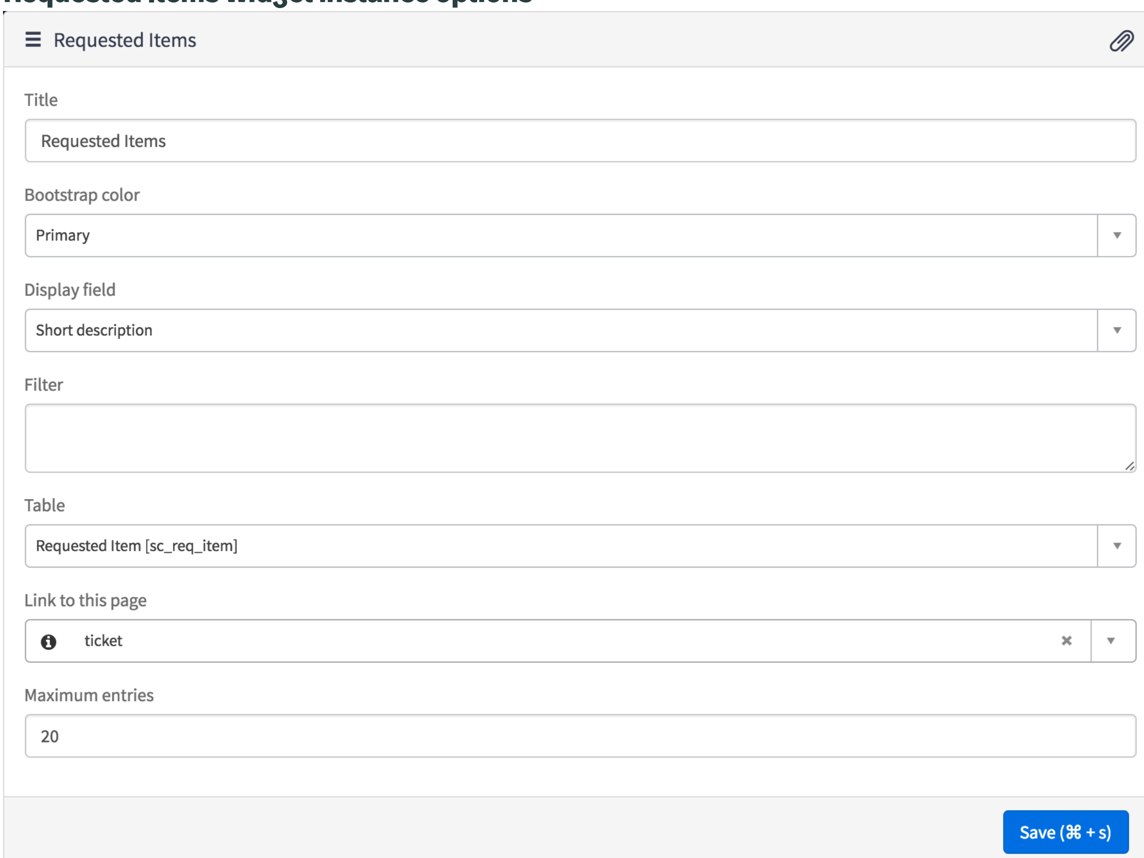
You can define different workflows for items directly within the Service Catalog module. For more information on Service Catalog workflows, see Service Catalog request fulfillment.

Requested Items widget



Instance options

Requested Items widget instance options



Requested Items instance options fields

Field	Description
Title	Name of the widget. The title appears in the header of the widget.
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if

Requested Items instance options fields (continued)

Field	Description
	you want the instance to have a specific color, select the option from the list.
Display field	Determine what information displays as the title for each requested item. Short description is the default.
Filter	Limit what appears in the list using a filter. You can add a filter by opening the Requested Items record in the platform (From the context menu, click **Open in platform**) and using the condition builder.
Table	Table that displays the item when the user clicks an entry
Link to this page	Page that opens when the user clicks an item
Maximum entries	Max number of entries that appear in the list of requested items

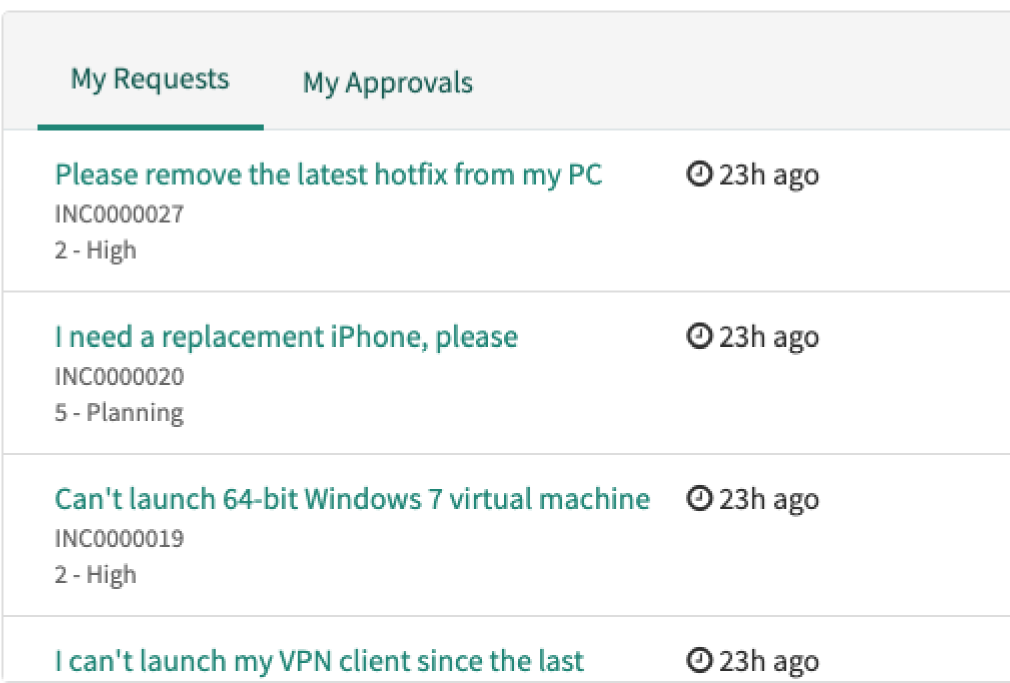
Requests and Approvals widget

Allow a user to refer to their open requests and approvals in the Service Catalog. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

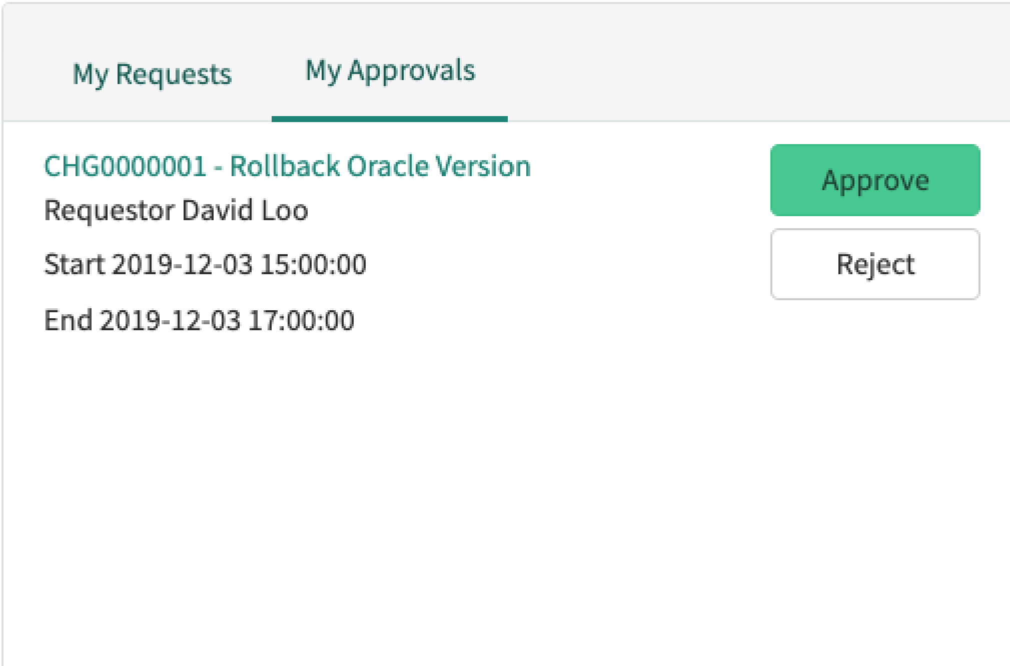
Using the widget

The Requests and Approvals widgets includes two tabs: **My Requests** and **My Approvals**.

A user opens the My Requests tab to see data from the Task [task] table. If the user has opened any task record, such as an incident or a change request, the record is displayed in the widget.



A user opens the My Approvals tab to see data from the Approvals [sysapproval_approver] table. If the user has been assigned to approve a request, the approval record is displayed in the widget.



If the user doesn't have any open requests or approvals, the widget remains hidden on the page.

Instance options

The Requests and Approvals widget doesn't include instance options.

SC Catalog Item widget

Use this widget (widget-sc-cat-item-v2) to view the information about a catalog item and order the item. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Configure catalog items using the Service Catalog in the platform UI by navigating to **Service Catalog** > **Catalog Definitions** > **Maintain Items**.

Catalog variables determine what information your users are allowed to select from, for example, color, size, or price. For more information on defining the variables for a catalog item, see Create a service catalog variable.

Instance options

Use the widget instance options to customize the settings for the SC Catalog Item widget. To customize the settings for this widget, press the Ctrl key, click on the widget, and select **Instance Options**.

Instance options for the SC Catalog Item widget

Field	Description
Presentation	
Bootstrap color	Color of the widget based on the selections made in the Branding Editor.

Instance options for the SC Catalog Item widget (continued)

Field	Description
Other Options	
Show Add Cart Button	Displays the **Add to Cart** button in the Order Item widget.
Show field validation messages	Displays the **Required information** section with mandatory fields whose values are not specified.
Show Add/Update Wish List buttons	Displays the **Add to Wish List** or the **Update Wish List** buttons in the Order Item widget.
Order Item Section on Top	Displays the Order Item widget to the right of the catalog item form. Else, the Order Item widget is displayed below the catalog item form.
Enable Show More/Less for Item description on Mobile	Enables the **Show more** or **Show less** options for the catalog item description in the mobile view. By default, the **Show more** option is available. • Click **Show more** to display the entire description. • Click **Show less** to display only 150 characters of the description.

Note: For a record producer, you can edit the label of the **Submit** button by using the widget instance options.

For example, if you want to change the label to **Request**, press Ctrl+click on the catalog item widget, select **Instance in Page Editor**, and specify the following parameters in the **Additional options, JSON format** field.

```
"record_producer_label":{
   "value" : "Request"
  }
```

Related topics

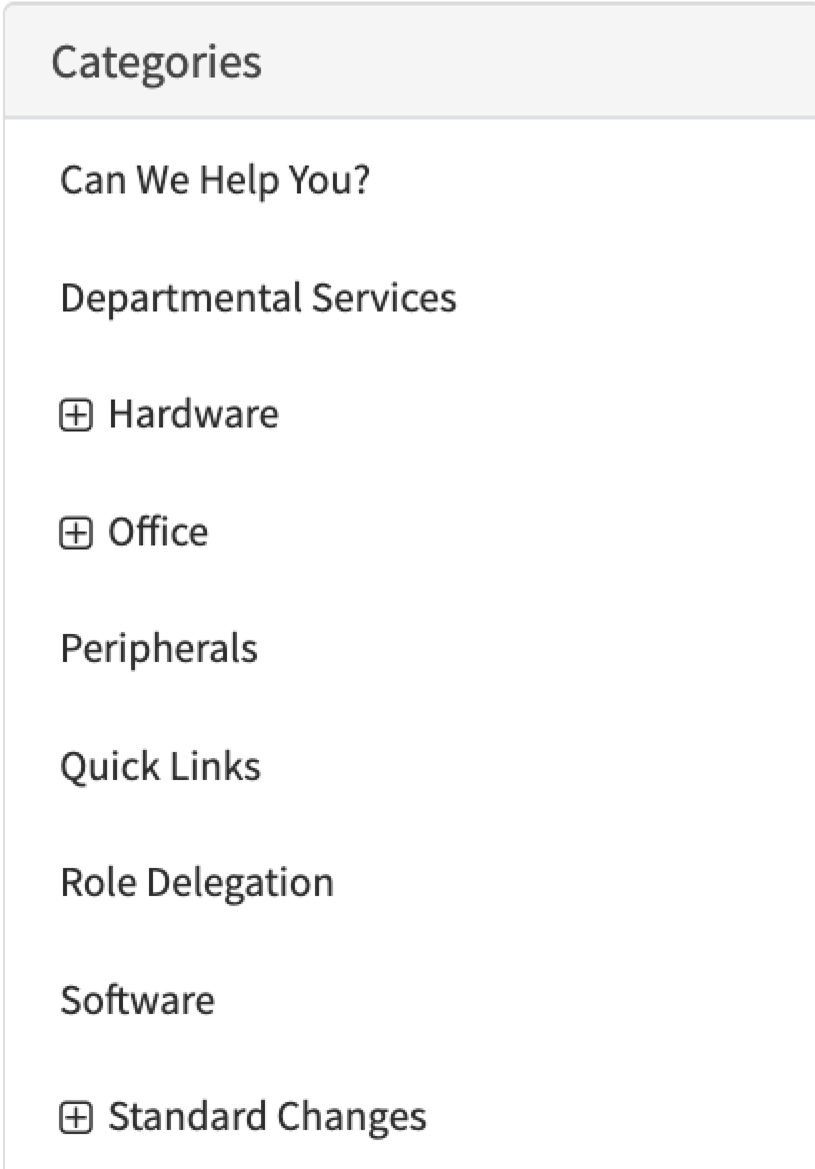
Request a catalog item from Service Portal

SC Categories widget

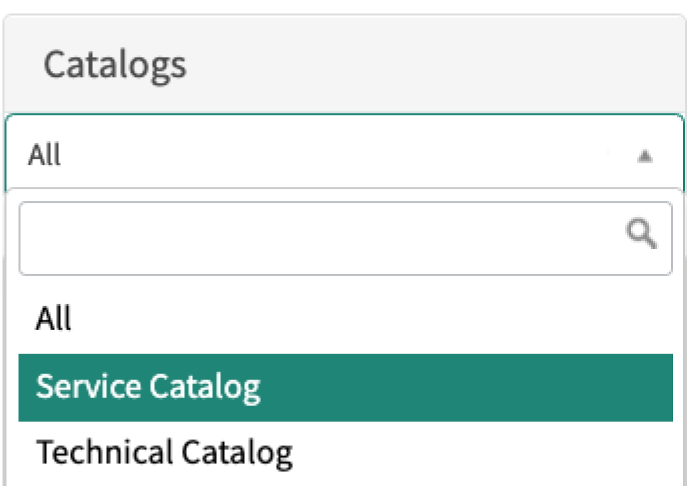
The SC Categories widget displays Service Catalog categories. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The system renders the categories available in this widget from the Categories table in Service Catalog [sc_category].

SC Categories widget



If you associate your portal with multiple catalogs, then the SC Categories widget also includes a menu to select which catalog to browse.



For more information on associating your portal with catalogs, see Configure a catalog in Service Portal.

Instance options

Categories widget instance options fields

Field	Description
Data	
Page	Defines what page opens when a user clicks a category. By default, this option redirects to the page for the selected category.
Number of categories to load	Specifies the number of categories displayed in the **Categories** pane. By default, ten categories are displayed. If there are additional categories, the **Show All** option is available.
Presentation	
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Category Layout	Select a flat or nested layout. A flat layout shows all of the available categories. A nested layout shows only the parent categories. Use a nested layout if you have a large number of categories to prevent an unnecessarily long list. Click ⊞ that appears next to a category with nested topics to expand the sub-categories. The widget only supports three levels of nesting. After level four, categories appear in the flat view.
Behavior	
Hide at XS	Hides the categories option on small screens, for example, on smart phones. The default is set to false.
Omit badges	Show or hide the number of items included in each category.
Check canView per item	Verifies with each item that the user has the right roles to view the catalog item.

Note: If a category contains more than 200 items, update the following instance options on this widget for better performance:

- Category Layout: Flat
- Omit badges: True
- Check canView per item: False

Related topics

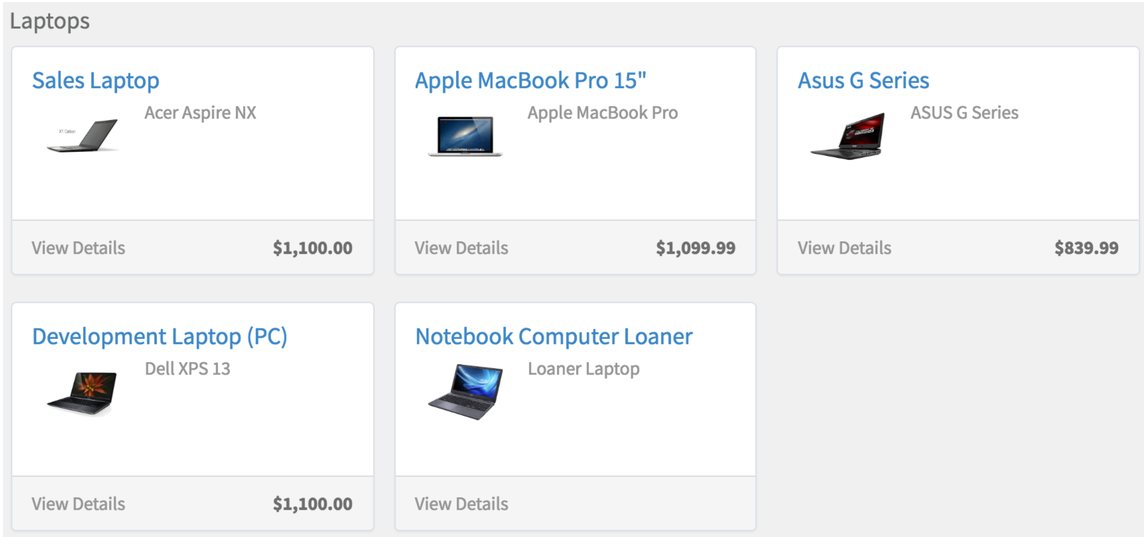
Access Service Catalog categories in Service Portal

SC Category Page widget

Lists the catalog items available within a certain category. Categories are determined within the Service Catalog module. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Note: Catalog items are sorted in ascending order by their **Order** value. If catalog items have the same order, they are sorted by the **Name** field.

SC Category Page widget



Instance options

Category page widget instance options fields

Field	Description
Click event name	The name of the event that is emitted when a user clicks a catalog item. You can override the default behavior when clicking on a catalog item by providing a different event name. This would be in a situation where you embedded the category page in another widget. The default value is `$sp.cat_item_list.click`.
Number of items to display per page	Number of items to display in the category page. **Note:** When defining the number of items to be displayed, consider the item data such as images and long descriptions. A large number may slow down the page performance.
Show items from Child Categories	Displays items in the child categories along with those in the parent category. **Note:** If the **Category Layout** instance options is set to `Flat` in the SC Categories widget, then set this instance option to `False`.

SC Order Guide widget

Use this widget (widget-sc-order-guide-v2) to request an order guide, that is, a single service catalog request for several catalog items with a specific purpose. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Configure order guides using the Service Catalog in the platform UI by navigating to **Service Catalog** > **Catalog Definitions** > **Order Guides**.

The order guide form comprises the following sections:

Describe Needs

This section displays the following that are associated with the order guide:

- Image
- Description
- Variables

Choose Options

This section displays a list of catalog items included in the order guide based on the information provided in the **Describe Needs** section and the rule base configured for the order guide. Each catalog item is displayed with its name and description on an accordion.

Each accordion displays:

- **Options**, if a catalog item has fields that need user inputs.

  Note: If the fields are mandatory, a red asterisk is displayed beside **Options**.

- A toggle to include the catalog item in the order guide request. You can make it mandatory to include all items in the order guide request by not displaying the toggle. You can make it optional to include items in the order guide request by displaying the toggle. To display the toggle for each catalog item of the order guide, select the **Show Include Toggle (Service Portal)** check box while configuring the order guide. For more information, see Create an order guide .

  Note: When an item is excluded from the order guide request, the item is not editable and the corresponding mandatory field restrictions are ignored.

Summary

This section provides a summary of the order guide that you can review before requesting the order guide.

Instance options

Use the widget instance options to customize the settings for the SC Order Guide widget. To customize the settings for this widget, press the Ctrl key, click on the widget, and select **Instance Options**.

Instance options for the SC Order Guide widget

Field	Description
Presentation	

Instance options for the SC Order Guide widget (continued)

Field	Description
Title	Name of the order guide.
Bootstrap Color	Color of the widget based on the selections made in the Branding Editor.
Enable Show More/Less for Item description on Mobile	Enables the **Show more** or **Show less** options for the description of the order guide or the associated catalog items in the mobile view. By default, the **Show more** option is available. • Click **Show more** to display the entire description. • Click **Show less** to display only 150 characters of the description. **Note:** This instance option is applicable for the description of the order guide in the **Describe Needs** section, and the description of the associated catalog items in the **Choose Options** section.
Compact Mode	Displays the widget in the compact mode when configured for smaller real estates (less than 6*6).
Hide Delivery Time	Hides the delivery time for each catalog item in the accordion. It is not applicable for the order guide summary page and the delivery time is never displayed on the summary page.
Behavior	
Show Add to Cart	Option to display the **Add to Cart** button on the order guide summary page.

Related topics

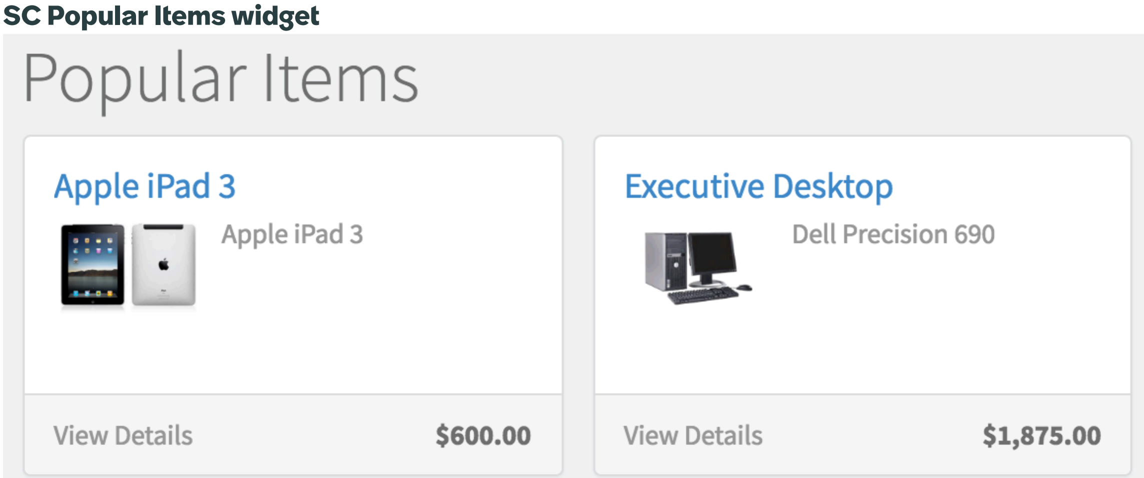
[Request an order guide from Service Portal](#)

[Configure order guide widgets](#)

SC Popular Items widget

List of Service Catalog items that users purchase often. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

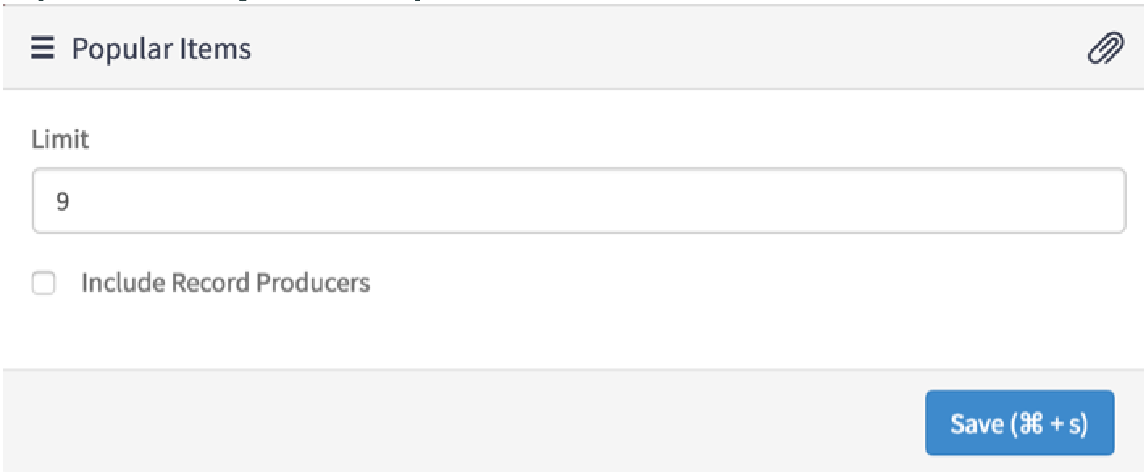
SC Popular Items widget



You can view order guides in the Service Catalog Popular Items widget as a standalone request instead of items ordered as part of the guide.

Instance Options

Popular Items widget instance options



Popular Item widget instance option fields

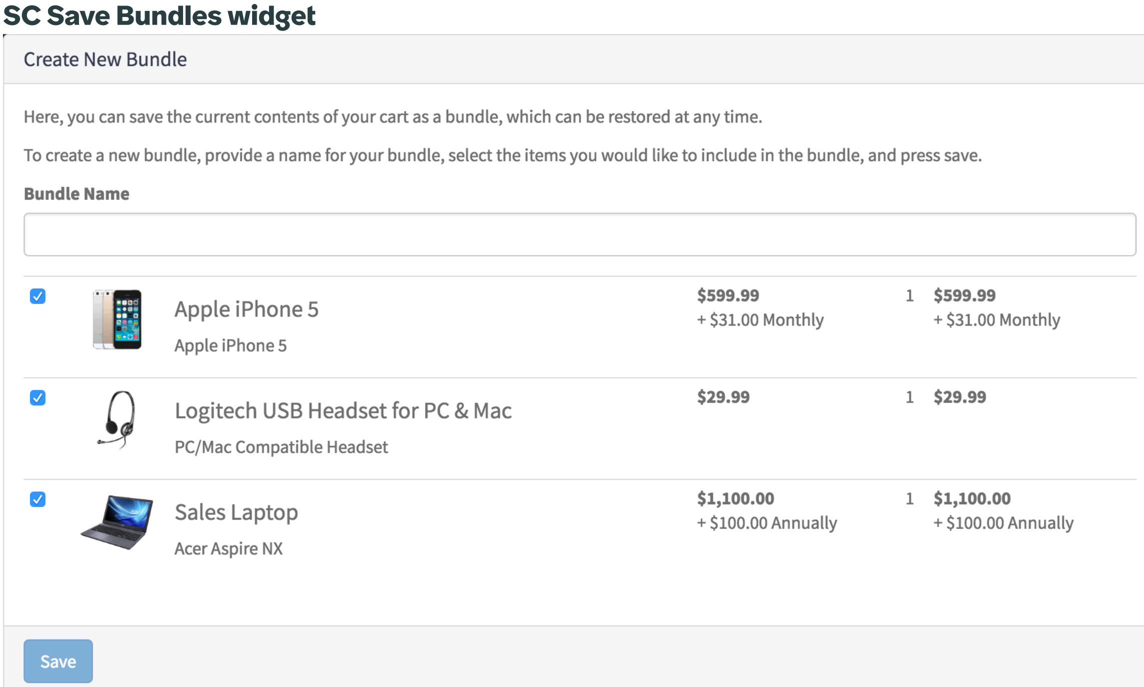
Field	Description
Limit	Maximum number of popular items shown. The default number is 9.
Include Record Producers	Includes requests made through record producers.

SC Save Bundles widget

The Save Bundles widget allows you to save specific catalog items together for reuse. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The Save Bundles widget is embedded within the SC Shopping Cart widget.

SC Save Bundles widget



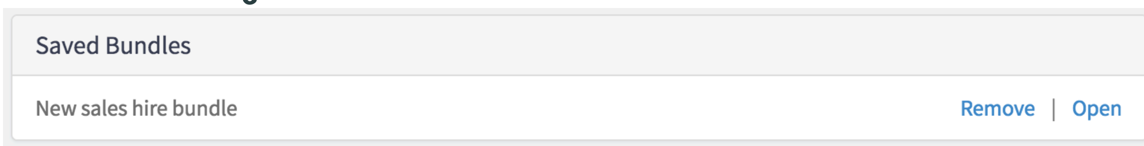
Instance Options

The Save Bundles widget does not have any included instance options.

SC Saved Carts widget

The Saved Carts widget shows previously created and saved bundles from the Service Catalog. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

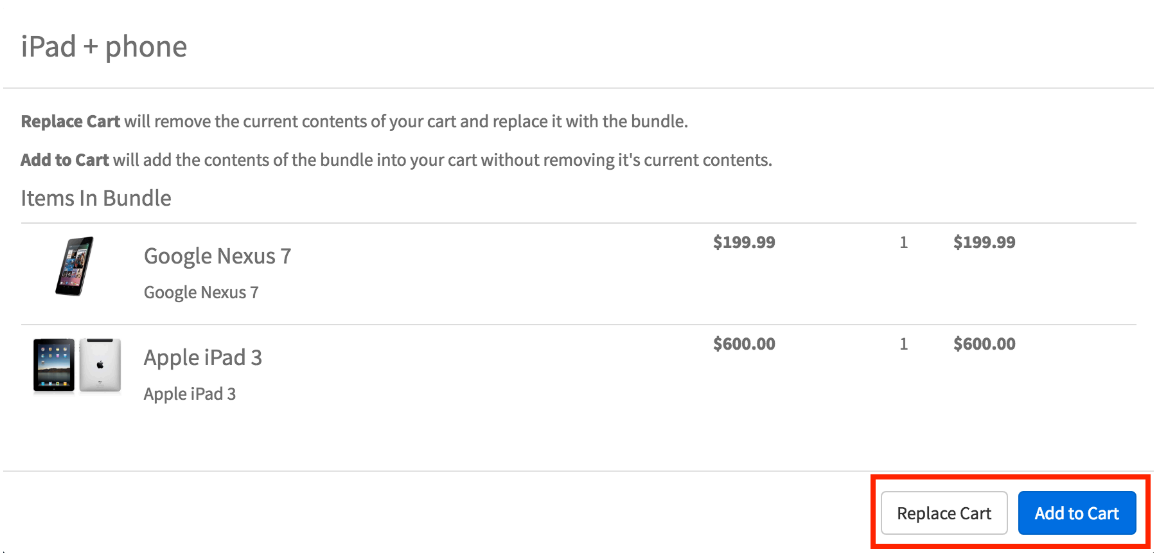
SC Saved Cart widget



When you add an existing cart bundle to a shopping cart, you have two options. You can:

- Replace the items in the shopping cart with the items in the bundle.
- Add the bundle in addition to the rest of the items in the cart.

Add bundle items to a cart



Instance Options

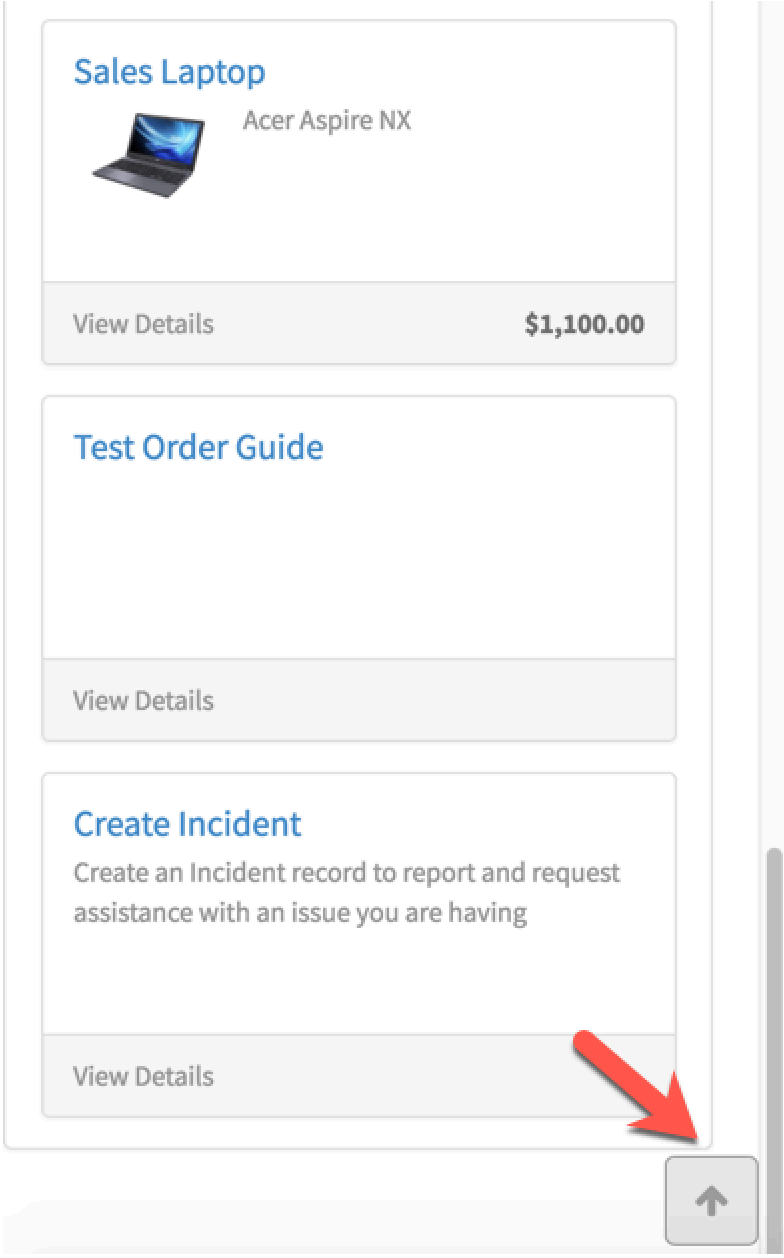
The Saved Carts widget does not have any included instance options.

SC Scroll to top widget

In the Service Portal mobile view, the SC Scroll to top widget (sc_scroll_to_top) lets you scroll to the top of the screen after you scroll down. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

This widget is displayed when you start to scroll upwards after reaching a specific screen height.

SC Scroll to top widget



Instance options

Use the widget instance options to customize the settings for the SC Scroll to top widget. To customize the settings for this widget, press the Ctrl key, click on the widget, and select **Instance Options**.

Instance options for the SC Scroll to top widget

Height from top (px)	Screen height where the widget is displayed when you start to scroll upwards.

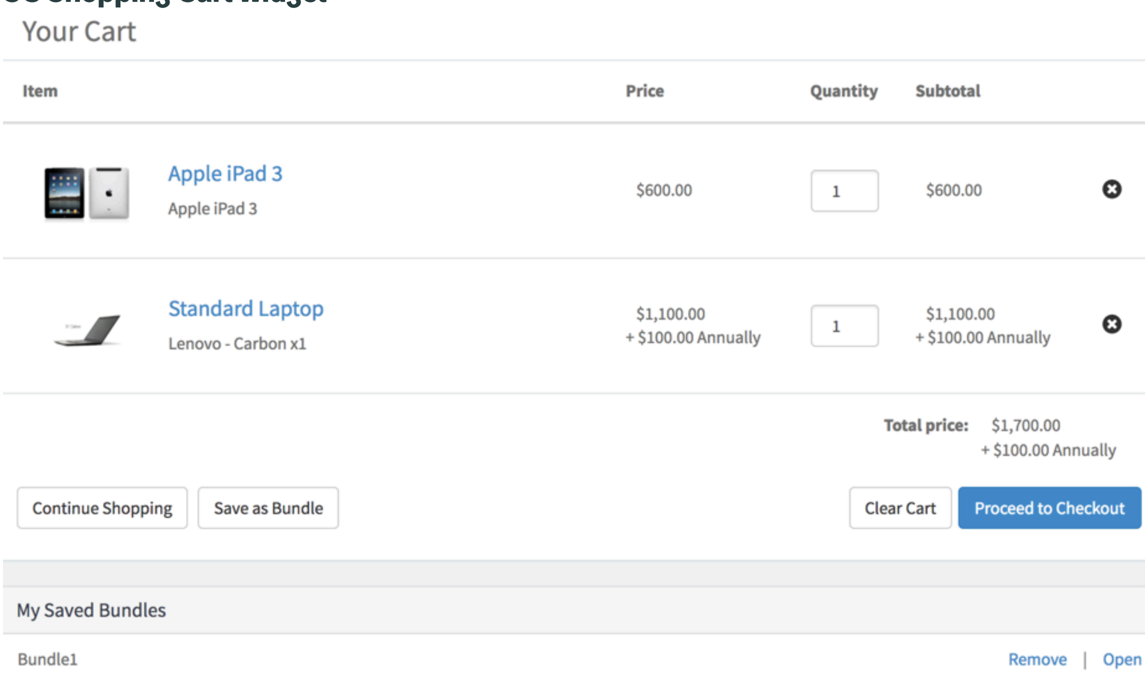
SC Shopping Cart widget

The SC Shopping Cart widget (sc-shopping-cart-v2), used with Service Catalog, stores all your orders at one place. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Use the shopping cart widget to:

- Control the quantity of items in the cart.
- Add items to a cart. This information is stored in the sc_cart table.
- Define who the items are being requested for.
- Save specific items together as a bundle, which can be reloaded later. You can replace the cart items with the saved bundles, or add the bundles to the cart items.
- Remove all items from your cart.

SC Shopping Cart widget



Instance options

Use the widget instance options to customize the settings for the SC Shopping Cart widget. To customize the settings for this widget, press the Ctrl key, click on the widget, and select **Instance Options**.

Instance options for the SC Shopping Cart widget

Field	Description
Presentation	
Bootstrap color	Color scheme for the widget. The default colors are defined by the portal theme, but if you want the instance to have a specific color, select the option from the list.
Behavior	
Cart Template	Enter the name of a ng-template you want to use to provide a different template for the shopping cart. By default, two ng-templates are provided: `small_shopping_cart_v2.html` and `large_shopping_cart_v2.html`.
Auto update cart	Automatically updates the cart across all sessions.

Related topics

Add a catalog item to the shopping cart

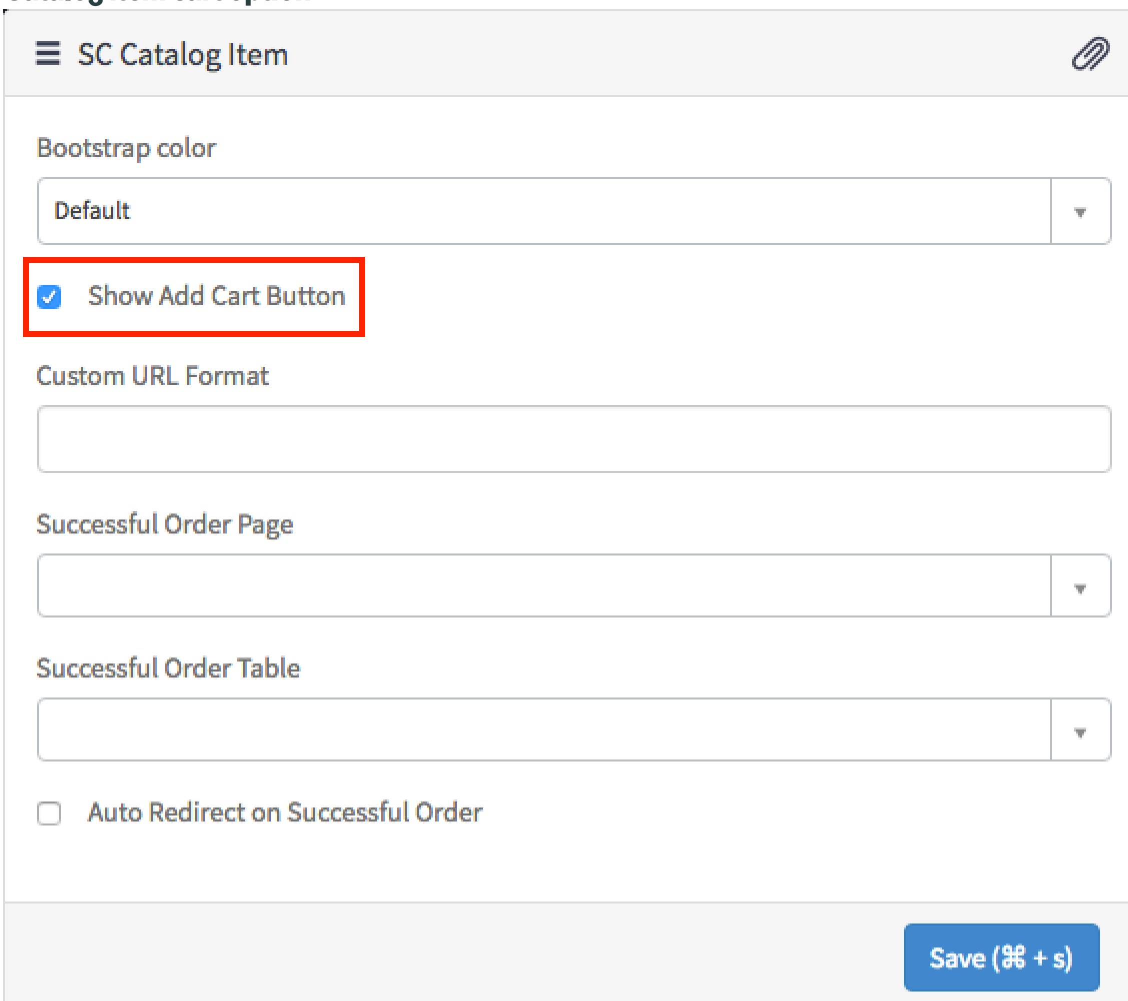
Enable the Shopping Cart widget

The shopping cart widget is enabled automatically for instances upgrading to Istanbul, however, there are several ways to manually enable or disable the widget.

To enable the shopping cart for a catalog item:

1. Navigate to a catalog item on the Service Catalog page in Service Portal.
2. CTRL+right-click a catalog item widget to open the widget instance options.
3. Select or clear the **Show Add Cart Button** option to enable or disable the shopping cart for that particular catalog item.

Catalog item cart option



To enable the shopping cart in the portal header:

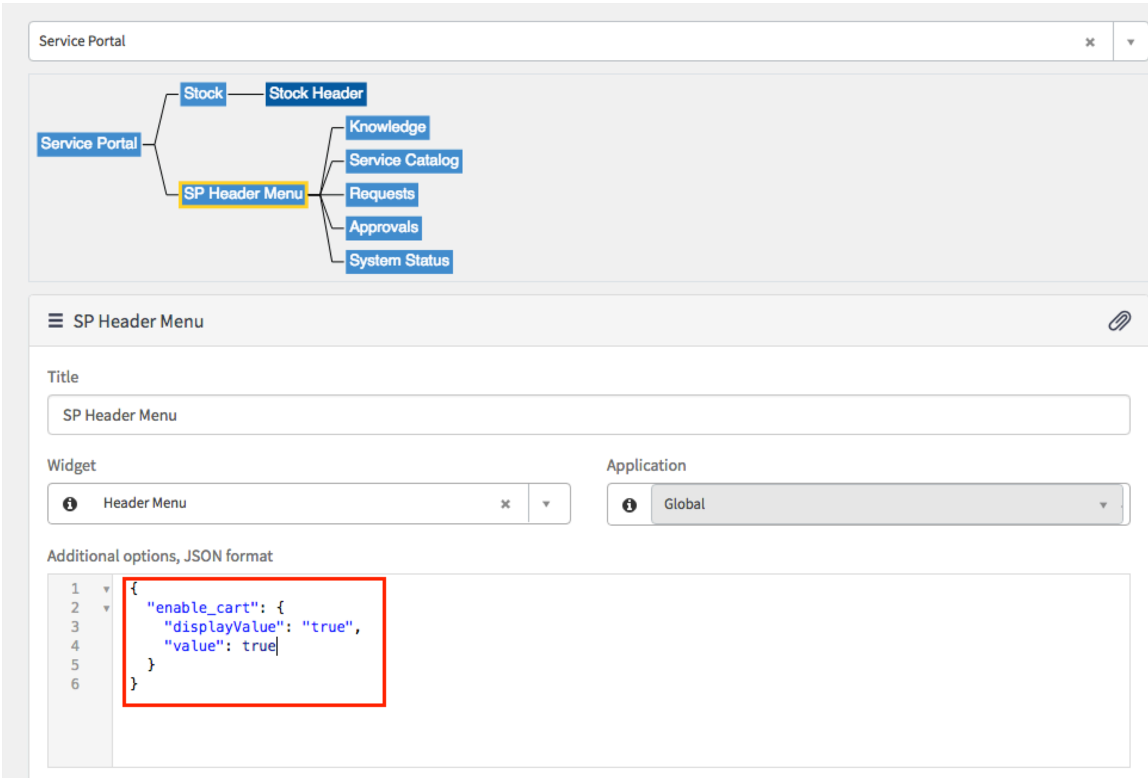
1. From the Service Portal configuration page, select the Portal editor.
2. Select the SP Header Menu in the portal hierarchy.
3. In the **Additional options** section, make sure the enable cart value is set to **true**.

```
{
 "enable_cart": {
  "displayValue": "true",
```

```
    "value": true
  }
}
```

Set the value to **false** to hide the shopping cart.

Shopping cart in the header menu



Enable automatic updates to the shopping cart

Automatically update the shopping cart across all sessions when users make changes from multiple tabs and platforms.

Before you begin

Role required: admin or sp_admin

Procedure

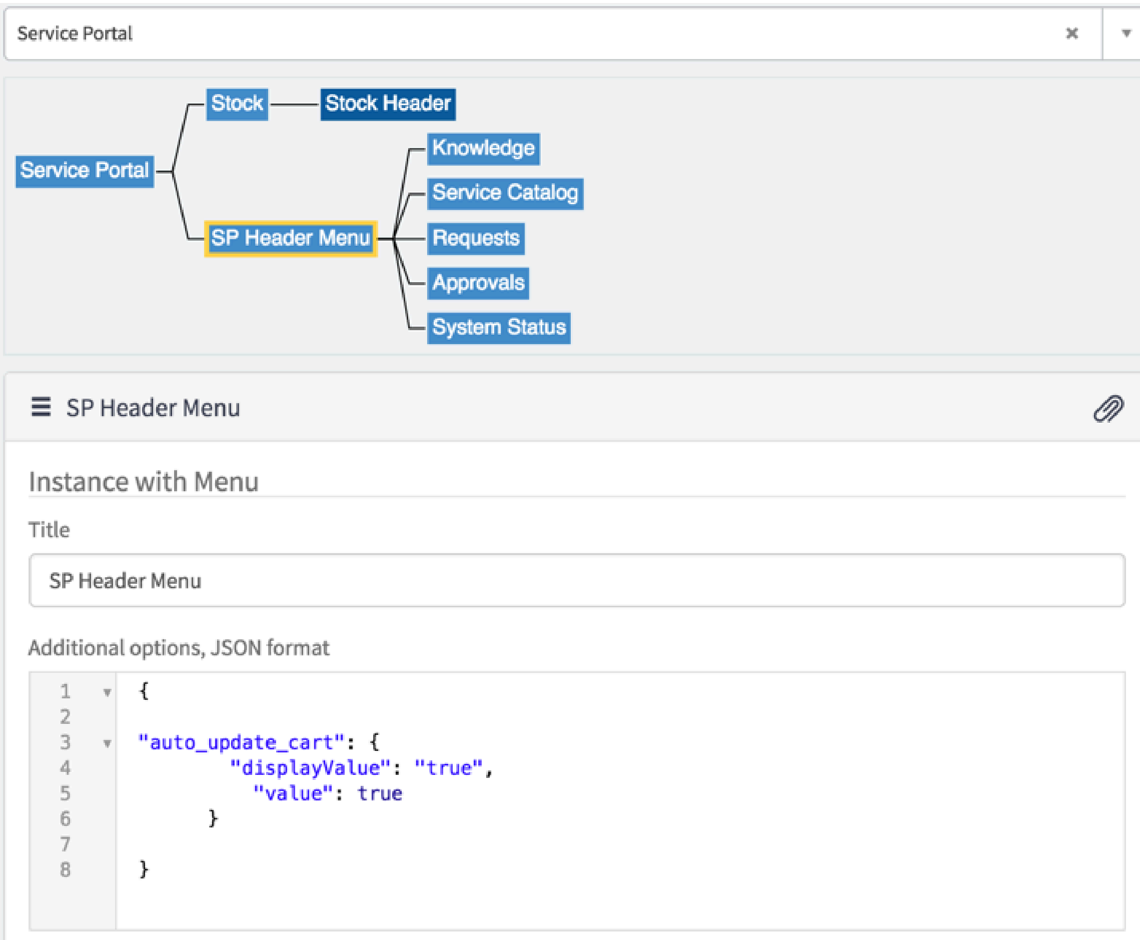
1. Navigate to **All** > **Service Portal** > **Service Portal Home**.
   The Service Portal homepage is displayed.
2. In the banner, click **Cart**.
3. Press and hold the Ctrl key, click the wish list widget, and select **Instance Options**.
4. Select the **Auto update cart** check box and click **Save**.
5. Perform these steps only for upgrade customers.
   a. Navigate to **Service Portal** > **Service Portal Configuration**.
   b. In the banner, click **Portals**.
   c. In the list, ensure that **Service Portal** is selected.

d. In the portal hierarchy chart, select **SP Header Menu**.

e. In the **Additional options, JSON format** field, set the `auto_update_cart` value as **true**.

```
"auto_update_cart": {
        "displayValue": "true",
          "value": true}
```

Automatic updates to the shopping cart



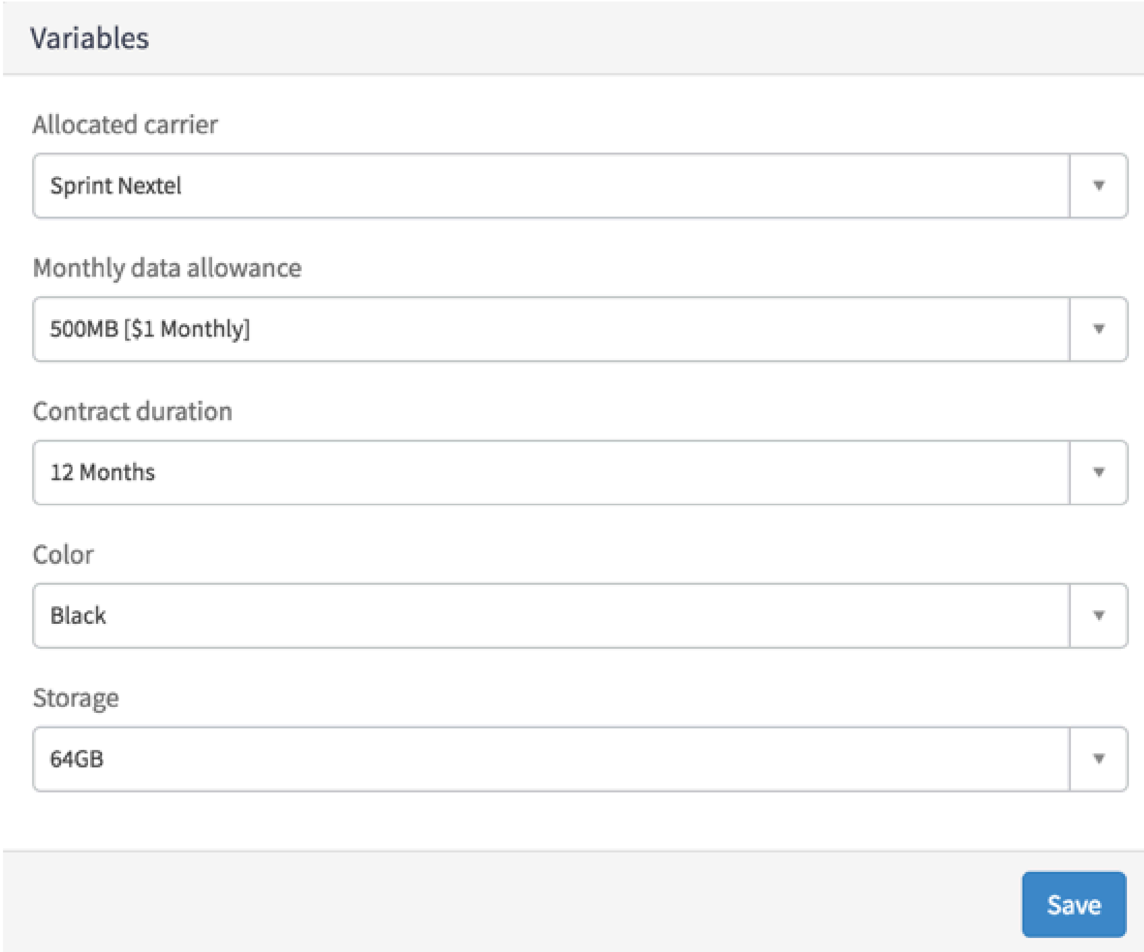
SP Variable Editor widget

The Variable Editor widget allows you to change the specifications you chose for an item in the Service Catalog. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

You can embed the variable editor widget in the shopping cart widget, to allow users to edit and make changes to their cart items. The options included in the widget are determined by the specific catalog item and the variables that have been configured for it.

For more information on the service catalog variables that are available in Service Portal, see service catalog variable types.

Variable Editor widget



Instance Options

The Variable Editor widget is embedded as part of the shopping cart widget, therefore no instance options are included.

SC Wish List Cart widget

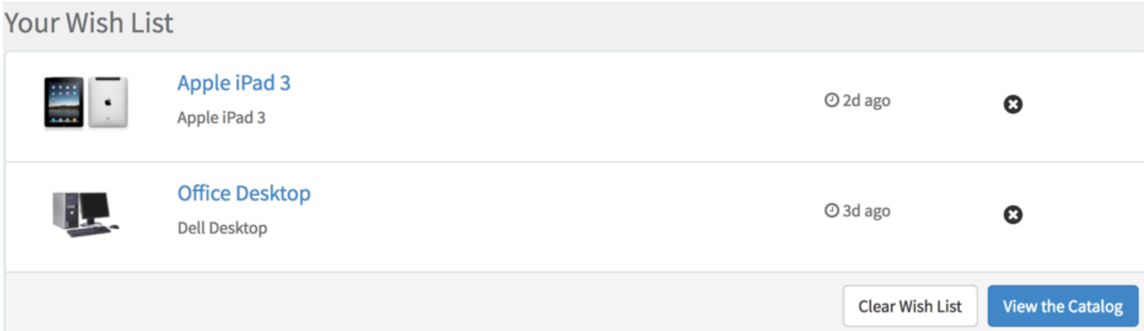
Use this widget to add catalog items or record producers to the wish list so that you can review them. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

If the wish list is enabled for Service Catalog, SC Wish List Cart widget (sc_wishlist_cart) is available in Service Portal. Once enabled, the following options are available:

- The **Wish List** menu option on the main navigation bar.
- The **Add to Wish List** button in the Ordering widget for catalog items and record producers.
- A wish list details page that displays all items in the **Wish List**.

From the wish list details page, you can view or delete catalog items, clear the wish list, or navigate to the Service Catalog landing page.

SC Wish List Cart widget



Instance options

Use the widget instance options to customize the settings for the SC Wish List Cart widget. To customize the settings for this widget, press the Ctrl key, click on the widget, and select **Instance Options**.

Instance options for the SC Wish List Cart widget

Field	Description
Auto update wish list	Automatically updates the wish list across all sessions.

Related topics

Add an item to the wish list in Service Portal

Enable the SC Wish List Cart widget in Service Portal

Add catalog items or record producers to the wish list after you enable the wish list.

Before you begin

Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Catalog** > **Maintain Catalogs**.
2. From the Catalogs list, select **Service Catalog**.
3. On the catalog form, select the **Enable Wish List** check box and click **Update**.
   The **Wish List** menu option is displayed in the Service Portal banner.

   Note: The **Use the sc_layout driven cart macros (default true)** (`glide.sc.use_cart_layouts`) property must be set to true to enable the wish list.

4. To enable the **Wish List** menu option in the Service Portal banner, perform these additional steps only for upgrade customers.

   a. Navigate to **Service Portal** > **Service Portal Configuration**.

   b. In the banner, click **Portals**.

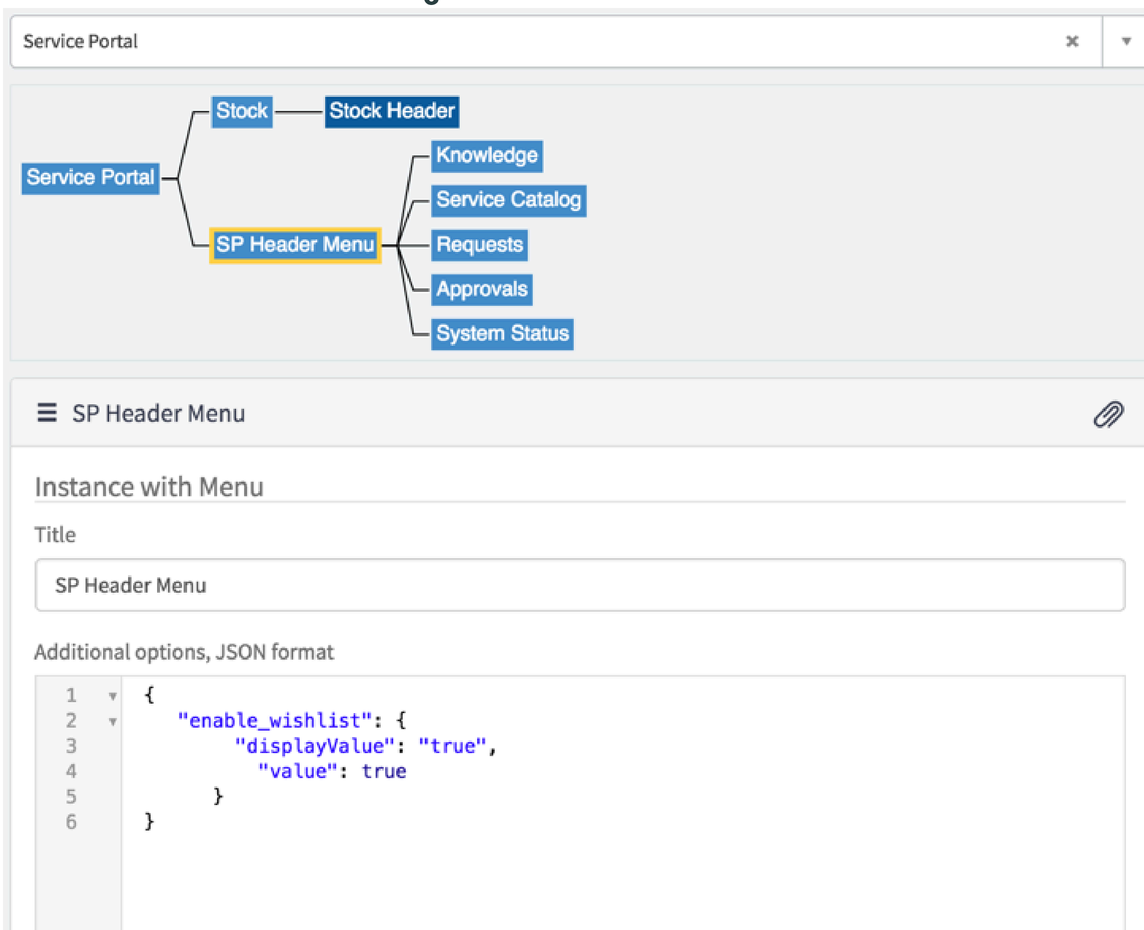
   c. In the list, ensure that **Service Portal** is selected.

   d. In the portal hierarchy chart, select **SP Header Menu**.

e. In the **Additional options, JSON format** field, set the `enable_wishlist` value as **true**.

```
"enable_wishlist": {
        "displayValue": "true",
          "value": true}
```

Enable the SC Wish List Cart widget



5. Enable the Add to Wish List icon ( ) in the Ordering widget of a catalog item or record producer:

   a. Navigate to **Service Portal** > **Service Portal Home** > **Order Something**.
      The Service Portal homepage is displayed.

   b. Click one of the available catalog items.

   c. Press and hold the Ctrl key, click a catalog item widget, and select **Instance Options**.

   d. Select the **Show Add/Update Wish List buttons** check box and click **Save**.

Enable automatic updates to the wish list

Update the wish list automatically with user-specific changes from multiple tabs and platforms.

Before you begin

Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Home**.
   The Service Portal homepage is displayed.
2. Access the wish list.
3. Press and hold the Ctrl key, click the wish list widget, and select **Instance Options**.
4. Select the **Auto update wish list** check box and click **Save**.
5. Perform these additional steps only for upgrade customers.

   a. Navigate to **Service Portal** > **Service Portal Configuration**.

   b. In the banner, select **Portals**.

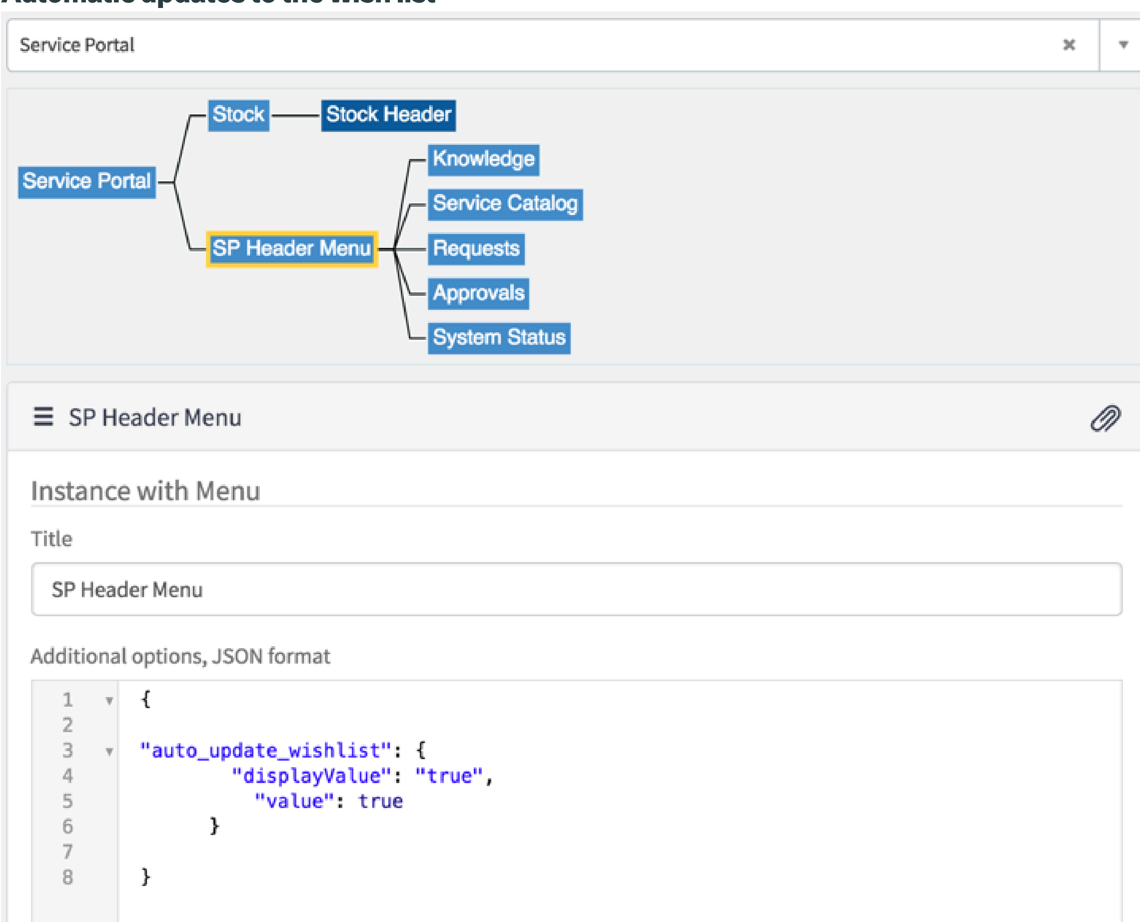
   c. In the list, ensure that **Service Portal** is selected.

   d. In the portal hierarchy chart, select **SP Header Menu**.

   e. In the **Additional options, JSON format** field, set the `auto_update_wishlist` value as **true**.

```
"auto_update_wishlist": {
        "displayValue": "true",
          "value": true}
```

Automatic updates to the wish list



Service Portal configuration page widgets

Service Portal uses widgets for configuration. When you configure a page or a widget for a portal in the Service Portal Configuration page, you actually use Service Portal widgets to do so.

Service Portal configuration widgets are internal only and cannot be extended.

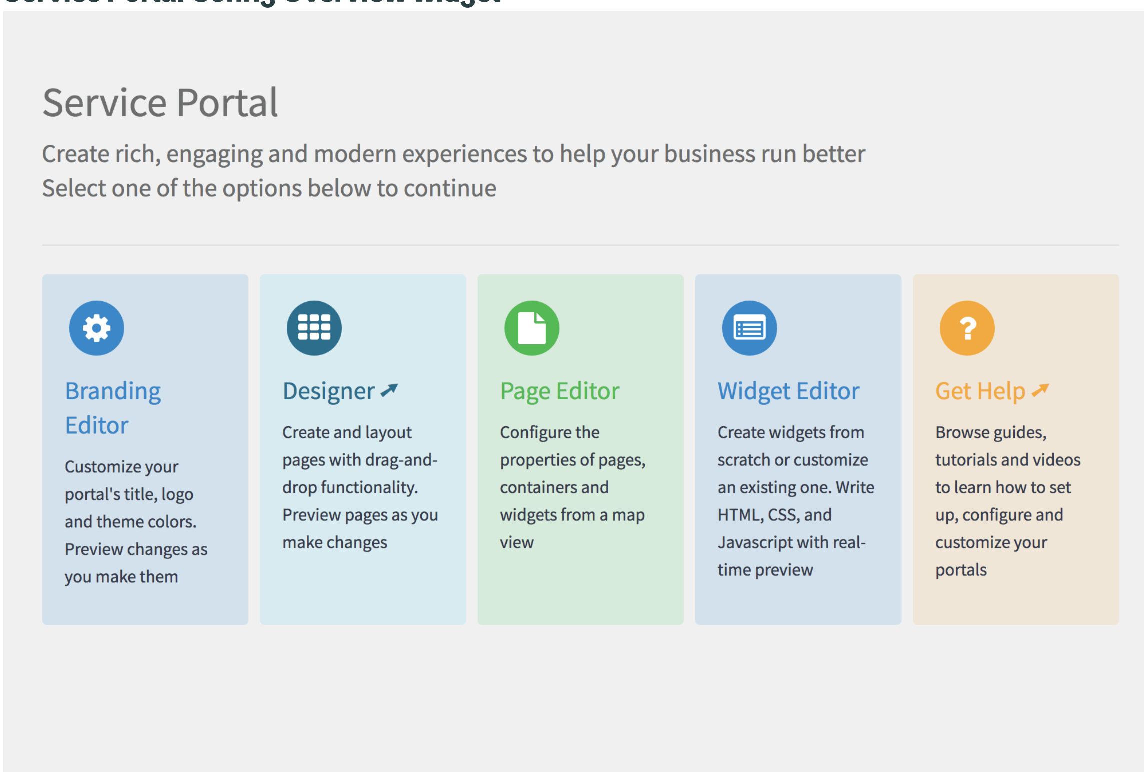
Configuration page widgets are included as part of the Service Portal Configuration Pages plugin [com.glide.service-portal.config], which is activated automatically when you activate the Service Portal for Enterprise Service Management plugin [com.glide.service-portal.esm].

Navigate to **Service Portal** > **Service Portal Configuration** to view these widgets in action.

Service Portal Config Overview widget

The Service Portal Config Overview widget is the widget that appears on the sp_config homepage. Use this widget to navigate Service Portal Configuration. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

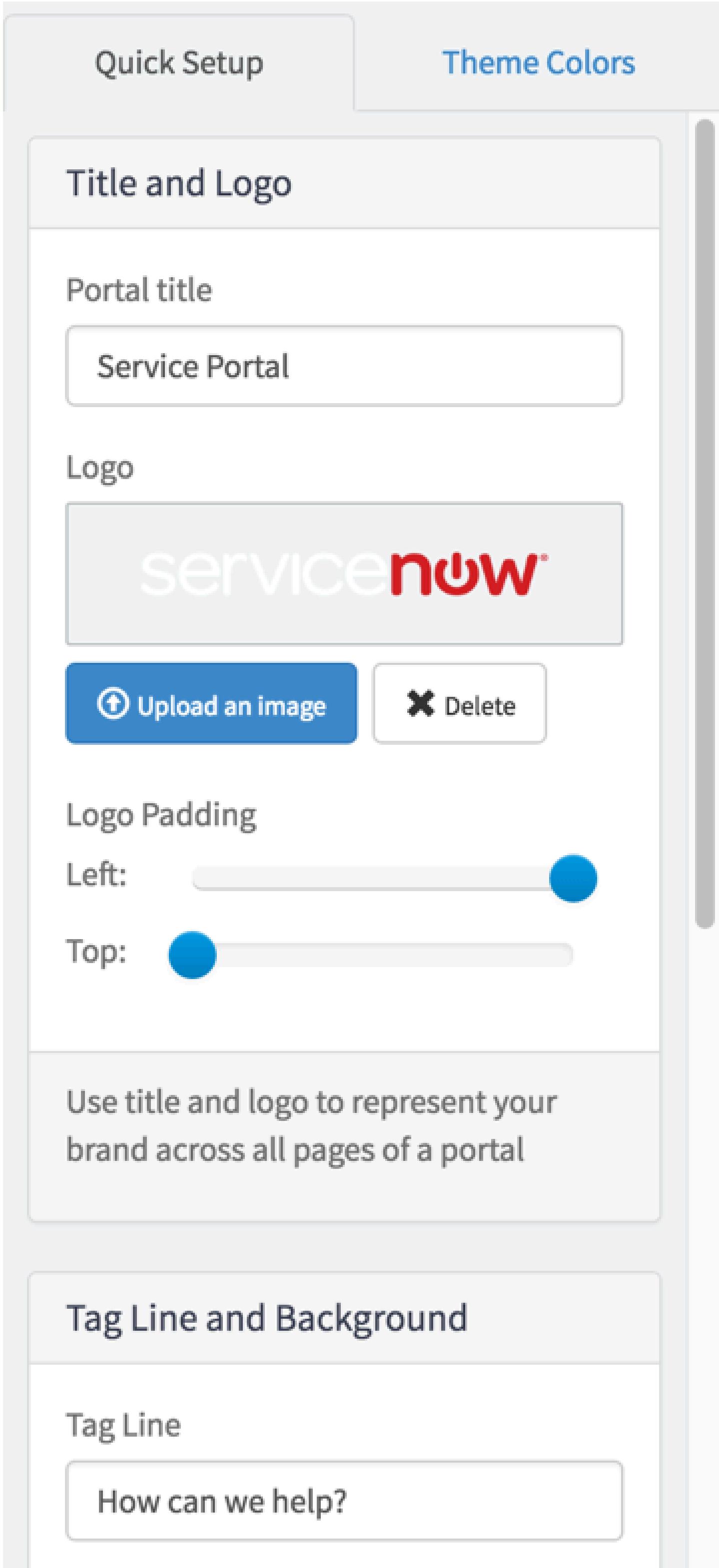
Service Portal Config Overview widget



Portal config widget

The Portal Config widget is the left panel of the Branding Editor, which you use to configure themes for your portal. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

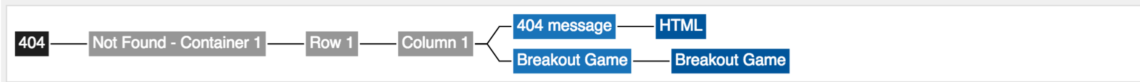
Portal Config widget



SP Page Map widget

The Page Map widget works in the Page Editor to display any Service Portal page in a tree structure. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

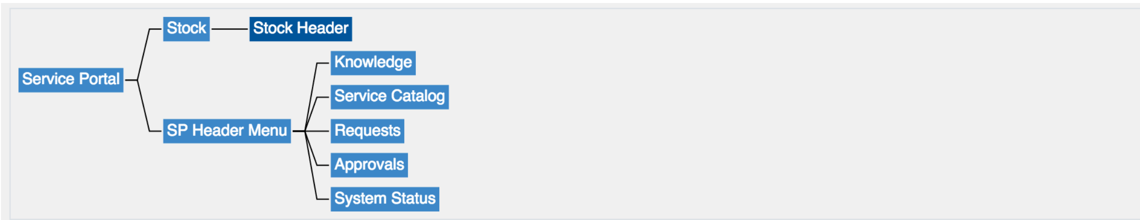
SP Page Map widget



SP Portal Map widget

The Portal Map widget displays your portal in a tree structure.

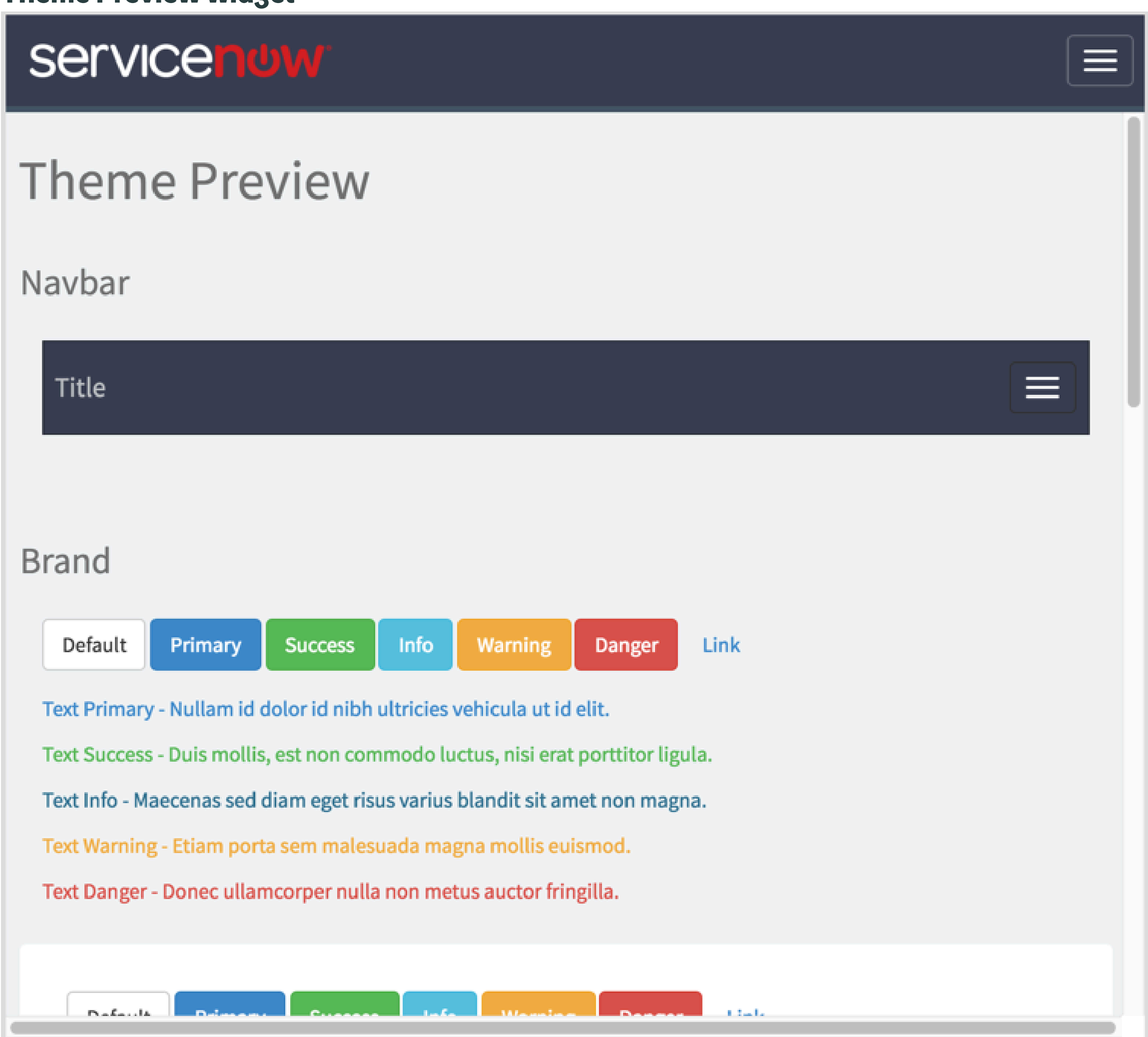
SP Portal Map widget



Theme Preview widget

The Theme Preview widget appears in the Branding Editor and allows you to see any theme changes you make to your portal. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Theme Preview widget



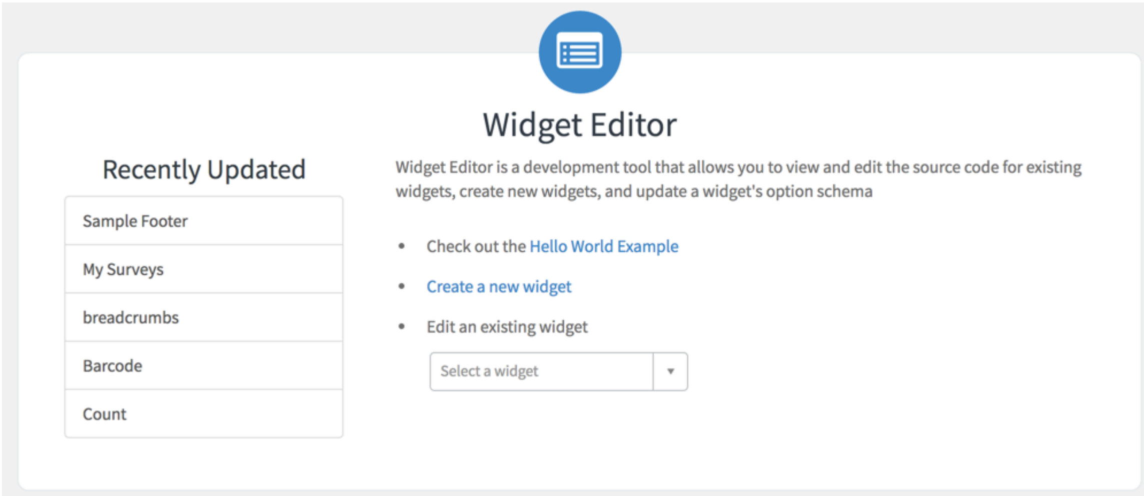
servicenow

Widget Edit Panel widget

The Widget Edit Panel appears on the main page of the Widget Editor in Service Portal Configuration (**All** > **Service Portal** > **Service Portal Configuration** > **Widget Editor**). You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Use the Widget Edit Panel to view widgets that have recently been updated, create a widget, or view an existing widget.

Widget Edit panel



Service Portal service status widgets

Use the service status widgets to display current, planned, and historical outages for business services to your end users.

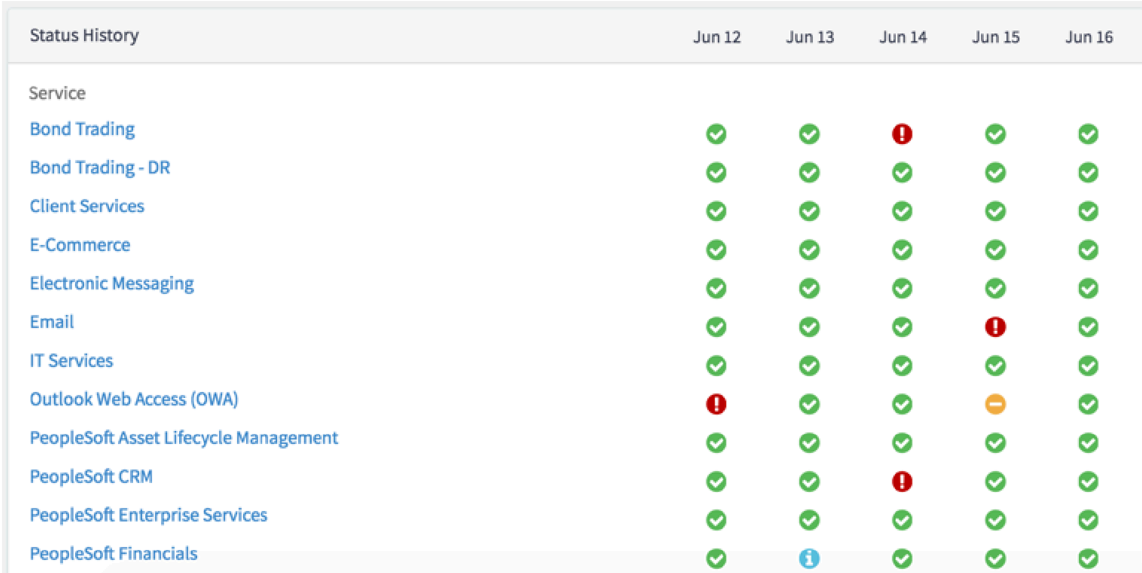
The service catalog widgets are part of the Service Portal Service Status [com.glide.service-portal.service-status] plugin, which is activated automatically with the Service Portal for Enterprise Service Management [com.glide.service-portal.esm] plugin.

Business Service Status widget

View how services are running on your system. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

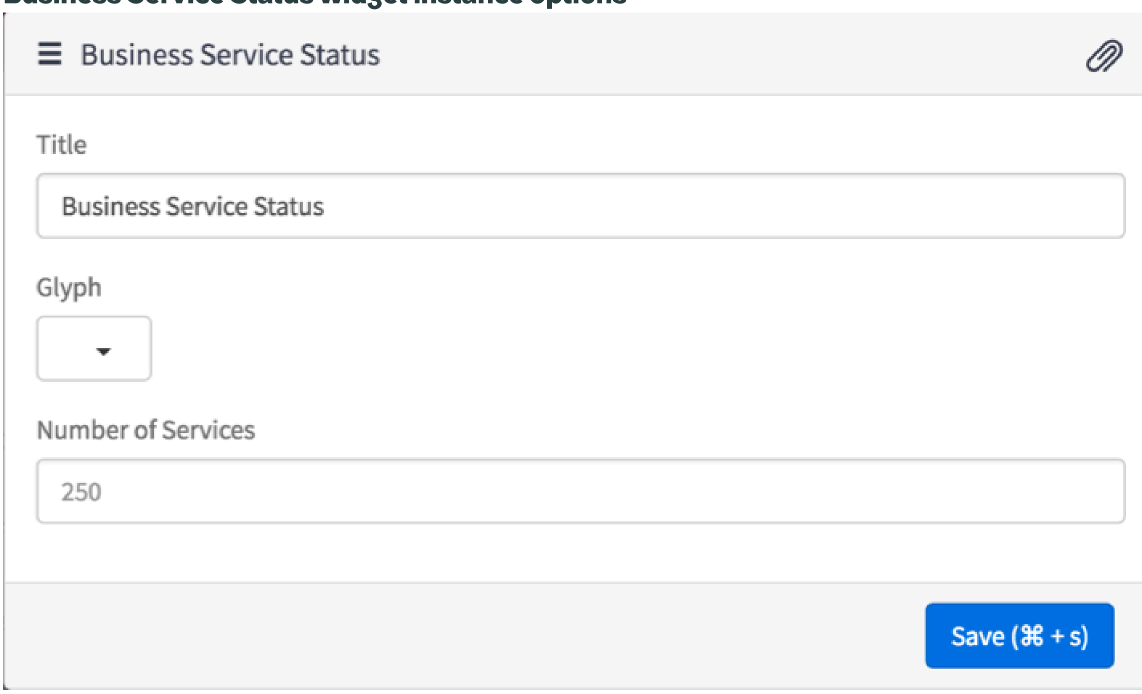
The Business Service Status widget pulls information from the cmdb_ci_service table. You can change where the data comes from in a cloned version of the widget by adjusting the settings in the widget server script.

Business Service Status widget



Instance options

Business Service Status widget instance options



Instance option fields

Field	Description
Title	Name of the widget. This only appears in the header for the widget instance options, it is not user-facing. To change the title for the list of services, clone and edit the widget HTML.
Glyph	Icon for the widget. This is not user-facing.
Number of Services	The number of services displayed in the widget. The default number is 250.

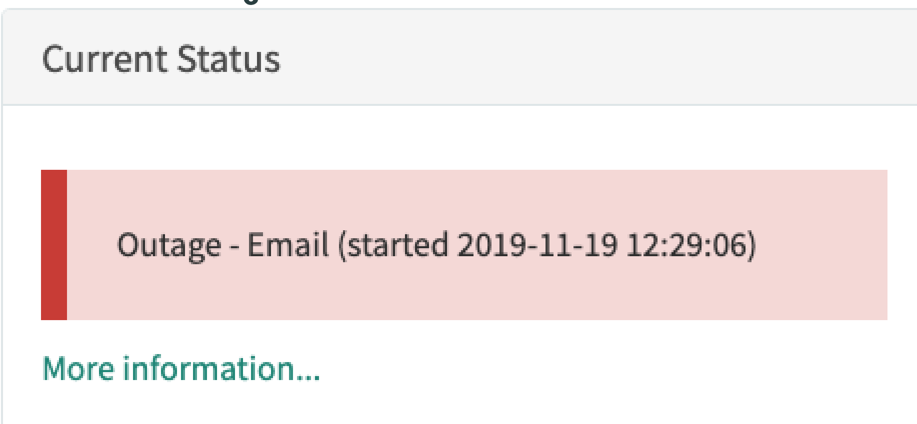
Current Status widget

The Current Status widget displays any issues reported in the system. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The Current Status widget checks the Outages [cmdb_ci_outage] table to see if the system is experiencing any outages.

Service owners and service desk managers report planned or unplanned outages by creating outage records. Each outage record includes **Begin** and **End** fields to indicate the duration of the outage. If the **End** time is later or empty, then the outage is still ongoing. The Current Status widget displays all ongoing outages.

Current Status widget



The Current Status displays outages only for services, which are tracked in the Services [cmdb_ci_service] table.

Instance options

Use the instance options to configure the Current Status widget for a portal page.

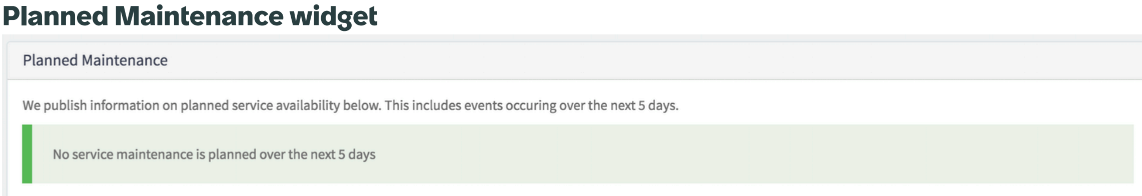
Field	Description
Show outage details	Option to display details from the Outage [cmdb_ci_outage] record.
Standalone	Option to remove explanatory information. This option also adds a link to more information.

Planned Maintenance widget

Describes any planned system maintenance. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The widget gathers information from the cmdb_ci_outage table. Any planned maintenance within the following five days appears in the Planned Maintenance widget.

Planned Maintenance widget



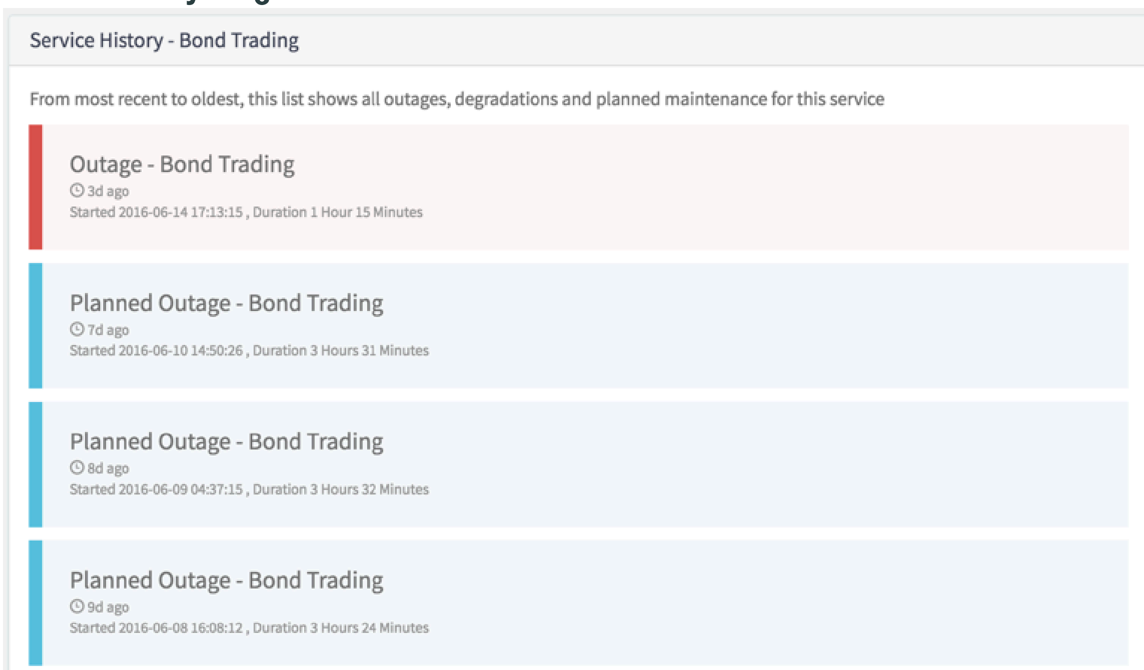
Instance options

The Planned Maintenance widget does not have any included instance options.

Service History widget

Displays the history of specific service's status. For example, if the Bond Trading widget has a history of planned outages or degradations, the widget displays those with a varied color scheme to differentiate the outage type. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Service History widget



Instance options

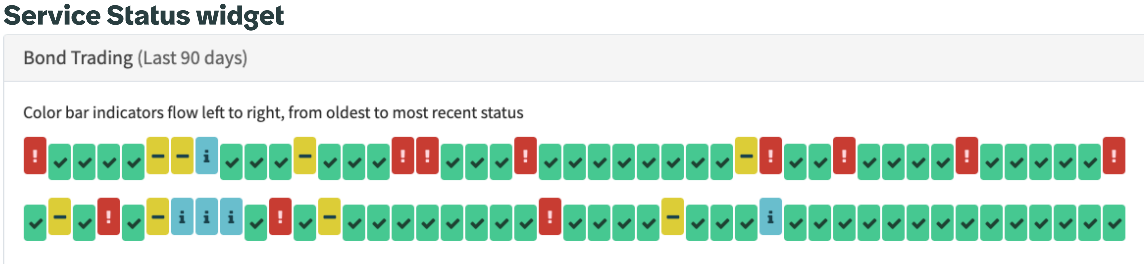
The Service History widget does not include any instance options.

Service Status widget

The Service Status widget provides a visual representation of service availability over the past three months. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

The Service Status widget displays the history of service availability for one service from the Services [cmdb_ci_service] table. The widget uses the page URL to determine which service to represent.

Service Status widget



Each pill represents one day. Each color correlates with a type of service availability. To include additional details when you hover over a pill, such as the task number or short description, you must clone the widget and edit the server script.

Color	Service availability
Green	No issues
Blue	Planned maintenance
Yellow	Service degradation
Red	Outage

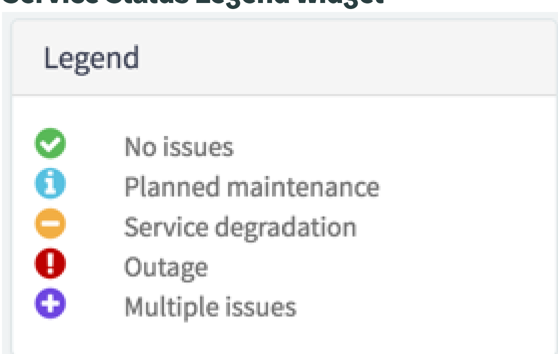
Instance options

The Service Status widget does not have any included instance options.

Service Status Legend widget

Use concurrently with the Status History widget to show what the icons in the Status History widget mean. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Service Status Legend widget



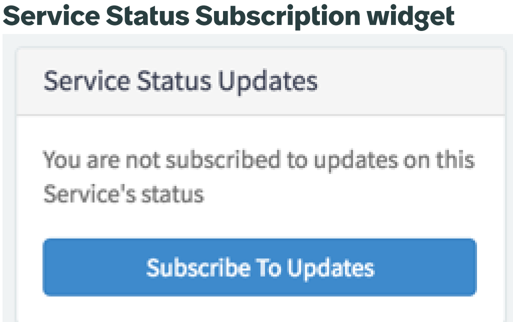
Instance options

The Service Status Legend widget does not have any included instance options.

Service Status Subscription widget

Used in conjunction with the service status widget. Users subscribe to receive updates about the service status. You can use this base system widget as-is in your portal or clone it to suit your own business needs.

Service Status Subscription widget



Instance options

The Service Status Subscription widget does not have any included instance options.

Configuring search in a portal

Service Portal displays search results data within a widget on the search page. To make data searchable from Service Portal, you can fetch data from a single table within your ServiceNow instance, from multiple ServiceNow tables, or from an external site.

Search engines

AI Search

AI Search provides a modern consumer-grade search engine that is faster and more assistive than the legacy Zing search engine. Portal users can find answers more quickly and easily with features like auto-complete search queries, natural language support, and typo handling. AI Search is only supported in Service Portal, Employee Center (ESC), Consumer Service Portal, and Customer Service Portal. Custom portals must be built off a baseline of one of these portals to have the AI Search capability.

Zing

Zing is the legacy text indexing and search engine originally used by Service Portal. Some portals still use this search engine by default.

Search analytics and suggestions

Generate relevant search suggestions for your users and monitor search analytics to understand what your users are searching for and whether they're finding what they need. Search Suggestions is a ServiceNow AI Platform feature. For more information, see Search Suggestions.

Generate suggestions from custom widgets

By default, the Search Events [sys_search_event] and Search Source Events [sys_search_source_event] tables collect search data from base system search widgets. To generate search analytics from custom Service Portal search widgets, use the GlideSPSearchAnalytics API. For more information, see GlideSPSearchAnalytics.

Performance recommendations

To avoid performance degradation and to ensure a fast search experience for end users, follow these recommendations.

- Limit search sources when possible to perform only the necessary query. For example, if a search only needs to return active incidents, add a condition to the search source set to **[Active] [is] [true]**. A search that queries only active incidents is faster than a search that queries all records in the incident table.
- Create facet items and mapped queries with no more than 30 filter items. To verify, test each search source with a variety of keywords as a user with low permissions.

Note: Service Portal search results display as text only. HTML tags, images, and formatting do not display in search results.

AI Search in Service Portal

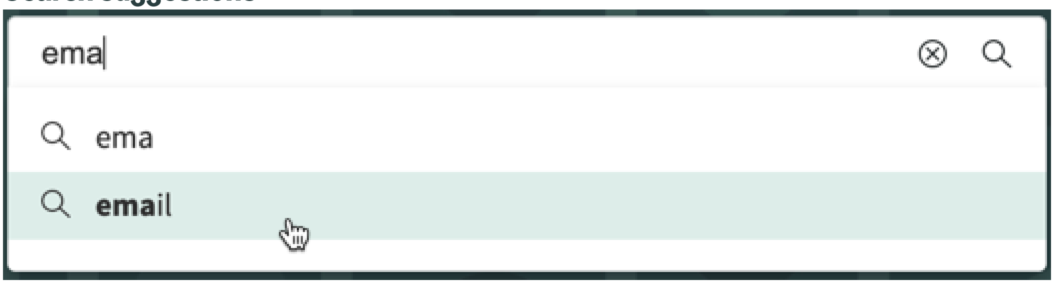
Configure the ServiceNow AI Search application for Service Portal so that portal users can take advantage of intelligent query features and quickly find the answers they need.

AI Search features

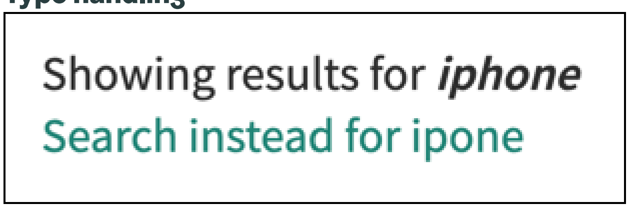
Powerful and flexible search

Unlike the legacy Zing search that was used in previous releases, AI Search is faster and more assistive. Portal users can find answers more quickly and easily with features like auto-complete search queries, natural language support, and typo handling.

Search suggestions



Typo handling

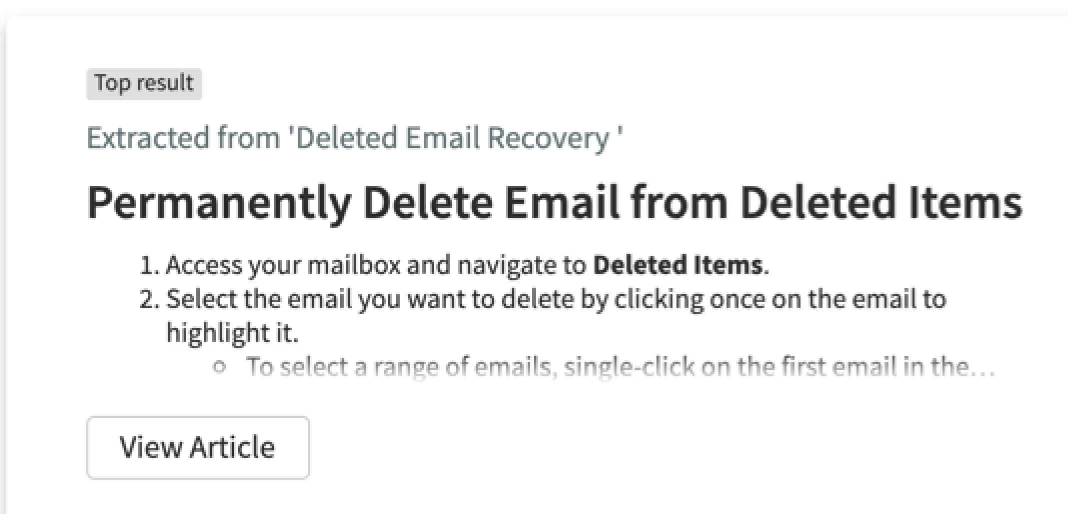


Relevant and actionable search results

With AI Search enabled in Service Portal, the portal search engine captures information about the user — such as their role, location, department, assets, and search history — and returns search results that are relevant and personalized.

AI Search also includes genius results that enable users to take action directly from the search results list.

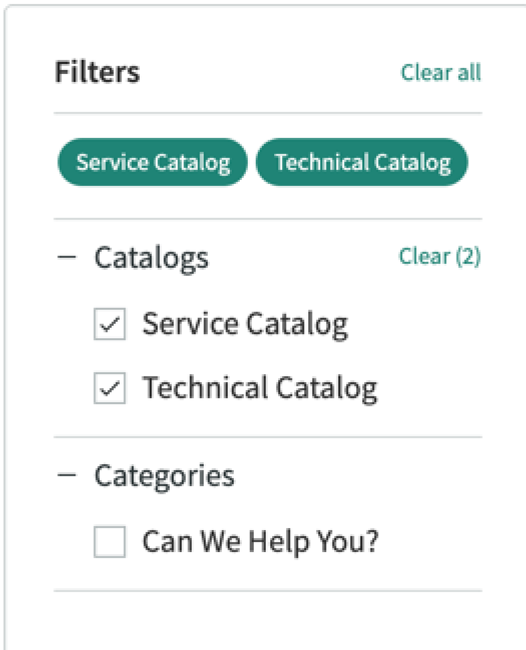
Genius result



Intelligent search refinement

Portal users can refine their search results using dynamic and static filters. For example, if a user searches `Mac`, they can use facets to filter search results by hardware or user profiles.

Search facets



Tab filters

For more information on using facets and tabs, see Faceted Search widget.

For more information on AI Search features, see Exploring AI Search.

Activation information

AI Search is a ServiceNow AI Platform feature that is active by default.

AI Search is enabled in Service Portal for all new and zBoot customers by default.

If you are upgrading to Yokohama as an existing customer, AI Search is disabled in Service Portal by default. You can enable it by updating the portal record. For more information, see Enable and configure AI Search in Service Portal.

Note: Search widgets that you cloned or customized before a system upgrade may not be compatible with AI Search. You can resolve this issue by running a fix script that reclassifies search widget instances. For more information, see Reclassify cloned or customized search widgets.

Configuring AI Search for Service Portal

Configure AI Search in Service Portal by defining the following:

Search application configuration

Defines search experience settings, such as the search engine, search results limit, and suggestions limit. For more information on defining a search application configuration, see Defining search application configurations.

Search results configuration

Defines how search results are displayed. For more information on defining a search results configuration, see Define a composite dataset.

You can change the search application configuration or search results configuration that your portal uses by updating the portal record. For more information, see Enable and configure AI Search in Service Portal.

To use a different search application or search results configuration for a specific search widget, update the widget instance options. AI Search is used in the following widgets:

- Homepage Search widget
- Typeahead Search widget
- Faceted Search widget
- Catalog Homepage Search widget
- Knowledge Breadcrumbs widget

To configure the search results payload to navigate to and display the appropriate portal page for a selected data source, define an AI Search results action. For more information, see Define an AI Search Results Action.

You can configure the action buttons in genius results by defining an Entity View Action Mapping (EVAM) action. For more information, see Define an EVAM action.

You can customize the look and feel of the AI Search experience in Service Portal by updating the relevant CSS variables. For more information on these variables, see Theming for AI Search in Service Portal.

Browser support

With AI Search enabled in Service Portal, users must log in with a modern browser such as Google Chrome, Mozilla Firefox, Microsoft Edge (Chromium), or Apple Safari.

Enable and configure AI Search in Service Portal

Enable and define the AI Search experience in your portal.

Before you begin

AI Search is only supported in Service Portal, Employee Center (ESC), Consumer Service Portal, Business Portal and Customer Service Portal. Custom portals must be built off a baseline of one of these portals to have the AI Search capability. The *glide.service_portal.enable_ais_portal.allow_list* property contains a list of supported baseline portals.

Role required: sp_admin or admin

About this task

AI Search is enabled in Service Portal for all new and zBoot customers by default.

If you are upgrading to Yokohama as an existing customer, AI Search is disabled in Service Portal by default. You can enable it by updating the portal record.

If you leave AI Search disabled, the portal uses the legacy search experience.

Procedure

1. Navigate to **Service Portal** > **Portals** and open a portal record.
2. On the form, select **Enable AI Search**.
3. In the **Search Application** field, select the search application configuration to use for the portal.

   A search application configuration defines search experience settings, such as the search engine, search results limit, and suggestions limit. A search application configuration is selected by default, but you can select a different configuration if needed.

   For more information on defining a search application configuration, see Defining search application configurations.
4. In the **Search Results Configuration** field, select the search results configuration to enable for the portal.

   A search results configuration defines how search results are displayed. A search results configuration is selected by default, but you can select a different configuration if needed.

   For more information on defining a search results configuration, see Create an EVAM definition.
5. Select **Update**.

Result

AI Search is enabled throughout the portal. Employees or customers can use AI Search the next time they log in.

The Search Sources related list is hidden from the portal record. You now define search sources in the AI Search application. For more information, see Defining search sources.

To use AI Search for knowledge articles, you can keep the default **Knowledge Bases** search source or select a custom one.

> **Note:** If you're experiencing issues using AI Search for knowledge articles, check that the associated search profile is linked to a knowledge bases search source. For more information, see Link a search source to a search profile.

What to do next

Search widgets that you cloned or customized before a system upgrade may not be compatible with AI Search. You can resolve this issue by running a fix script that reclassifies search widget instances. For more information, see Reclassify cloned or customized search widgets.

Reclassify cloned or customized search widgets

Search widgets that you cloned or customized before a system upgrade may not be compatible with AI Search. You can resolve this issue by running a fix script that reclassifies search widget instances.

Before you begin

1. Enable and configure AI Search in Service Portal
2. Run the Portal Analyzer to identify all cloned or customized search widgets. For more information, see Get a list of widgets per page.
3. For each cloned or customized search widget, copy the sys_id value of each widget instance that is associated with the widget.

4. For each cloned or customized search widget, ensure that the widget and its corresponding widget instances have the latest AI Search code from the base system search widget.

> **Warning:** Run the fix script only after you've updated all cloned or customized search widgets. If you run the fix script without first updating the widget code, the widgets won't be able to uptake the AI Search code later.

Role required: admin

About this task

If you're unable to use AI Search in Service Portal, you may need to reclassify your cloned or customized search widgets. You can run the **Reclassifying Search widgets** fix script, which reclassifies widget instances to the *sp_instance_ais* class.

Procedure

1. Navigate to **All** > **System Definition** > **Fix Scripts**.
2. On the list, find and open the record named **Reclassifying Search widgets**.
3. On the form, update the script to define which widget instances to reclassify.
   Paste the sys_id value of each search widget instance in the array. For example, you would enter the sys_id values as follows:
   ```
   var instances = ["sys_id_1", "sys_id_2"];
   ```
4. Save the form.
5. Select **Run Fix Script**.

Define an AI Search Results Action

Configure which portal page opens when a result is selected from the list of search results.

Before you begin

Role required: sp_admin or admin

About this task

This configuration is required for UXF Client Action buttons in genius results or search results cards.

> **Note:** If the action is being implemented as a server script, the script is executed by the search widget. Notification messages defined in the server script are displayed.

Procedure

1. Navigate to **All** > **Service Portal** > **AI Search** > **Search Results Action** and select **New**.
2. On the form, fill in the fields.

Field	Description
Short description	A unique description of the search results action.
Service Portal(s)	Portals in which the search results action appears. If left blank, the search results action appears in all active portals.
AI Search Source	Content that portal users can search on, including tables in your instance or external data sources. For more information, see Defining search sources.

Field	Description
Action name	Name of the action assignment. Only navigation actions are supported for selecting a search result in portals.
Application	Application scope of the search results action.
Active	Option to activate the search results action.
Order	Priority that the search results action takes over other actions with the same configuration. To give higher priority to an action, enter a lower number. If two actions have the same order, then the oldest action takes priority.
Portal page	Page on that opens when a result from the search source is selected from the list of search results.
Payload query parameters	Query parameters to apply to the URL. ◦ In the first drop-down, select the payload fields that correspond to the selected **Action name**. **Note:** You can find the payload fields by opening the record referenced in the **Action name** field. Then, in the Action Assignment record, open the record referenced in the **Specify client action** field. The **Payload** field in the Action Payload Definition record specifies the fields used. ◦ In the next field, enter the query parameter to use in the URL.
Additional query parameters	Custom query parameters to use in addition to the payload query parameters. For example, to add `view=sp` as a query parameter, you would enter `view` and `sp` in the **Name** and **Value** fields, respectively.

3. Select **Submit**.

Create a CSS include to override theming for AI Search in Service Portal

Override theming for AI Search in Service Portal to match your company branding.

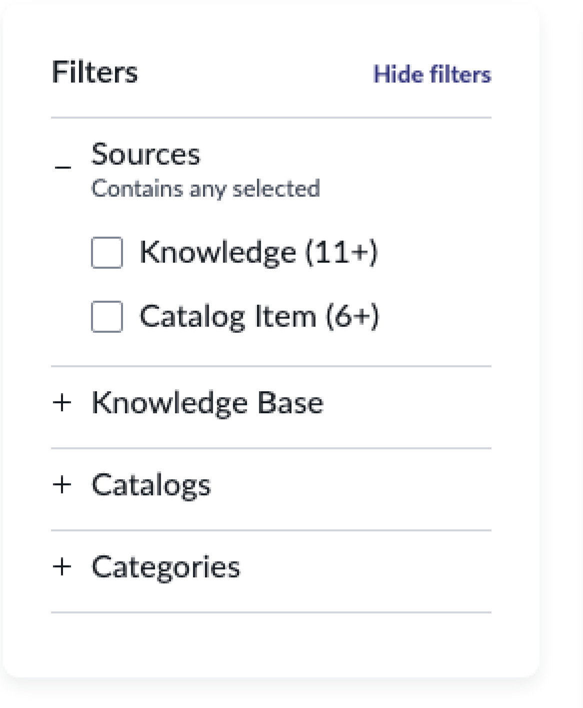
Before you begin

Role required: sp_admin or admin

About this task

As an example of styling features of AI Search in Service Portal, this procedure removes the borders around the search filters. You can style several other features using additional CSS variables. For more information about these variables, see Theming for AI Search in Service Portal.

Search filters: Remove the line borders around search filters.



Procedure

1. Create a style sheet record.

   a. Enter `sp_css.do` in the Filter navigator.

   b. On the form, fill in the fields.

   Style Sheet form

Field	Description
Name	Unique name for your style sheet. For example, sp_ais.css.
CSS	Field for your CSS code. Enter this code and then customize the variables. To remove the border for the search filters panel, paste this code and customize as desired. `sn-search-facets {` `  --now-color--divider-tertiary: 0px !important;` `}`
Application	Application this style sheet applies to. Global means the style sheet applies to all applications.

   c. Select **Submit**.

2. Create a CSS include record.

   a. Enter `sp_css_include.do` in the filter navigator.

   b. On the form, fill in the fields.

CSS Include form

Field	Description
Name	Unique name for your CSS include record.
Source	Source for your CSS include. Select **Style Sheet**.
Style sheet	The style sheet you want to incorporate with this CSS include form. Select the style sheet you created in step 1.
Application	Application this CSS include record applies to. Global means the CSS include applies to all applications.
Lazy Load	Option to load the CSS Include asynchronously to improve page load time. This option should be set to the same value for all CSS Includes of a theme. Enabling asynchronous loading for only some CSS Includes associated with a theme isn't recommended. **Note:** Enabling **Lazy Load** isn't recommended for portals with flashing of unstyled content. The CSS Includes with **Lazy Load** enabled are listed in the **Lazy load CSS includes** related list in the theme record.

3. Input your CSS override into the style sheets form and override the theme that's applied to your UI.

   a. Enter `m2m_sp_theme_css_include` in the filter navigator.

   b. On the form, fill in the fields.

Style Sheets form

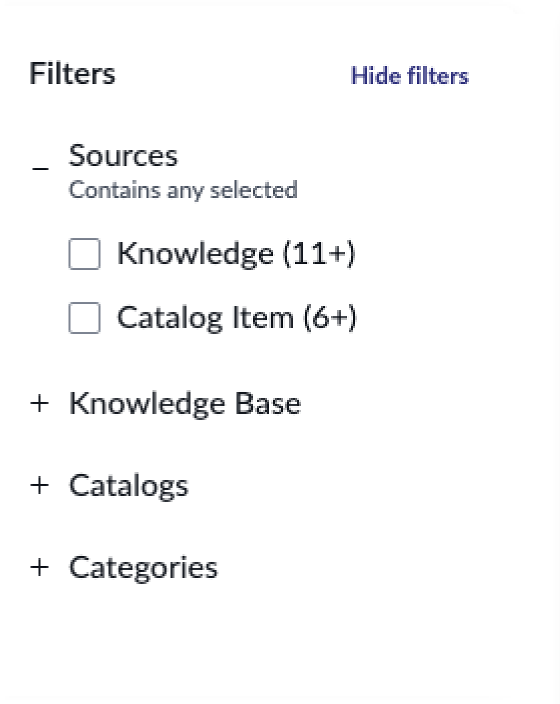
Field	Description
Order	An integer that prioritizes the incorporation of this style sheet against other style sheets. The lower the number, the higher in the list. The typical practice is to make these numbers hundreds, for example, 100, 200,

Field	Description
	300, and 400, so you can put new icons between existing ones in the future.
CSS Include	CSS include that includes the overrides you created in previous steps.
Application	Application this style sheet applies to. Global means the style sheet applies to all applications.
Theme	Theme that's applied to your UI that you want to override.

c. Select **Submit**.

Result

The borders around the search filters are



removed.

Theming for AI Search in Service Portal

You can customize the look and feel of the AI Search experience in Service Portal by updating the relevant CSS variables.

The following CSS variables control the look and feel of the AI Search features in Service Portal. For more information about AI Search features, see Using AI Search.

You can edit these variables in the **CSS variables** field of a Theme [sp_theme] record. You can also configure these variables with a CSS Include associated with a portal's theme. For more information, see the following topics:

- Create a portal theme
- Create a CSS include to override theming for AI Search in Service Portal

Variable	Default value	Description
$now-sp-font-family-sans-serif	`"SourceSansPro", Helvetica, Arial, sans-serif`	Font family for all texts.
$now-sp-color--text-primary	`$gray-dark`	#Color of#unselected tabs, Genius result button text, hit text color, result icons, and #search bar drop down list item text and icon color.
$now-sp-text-link--primary--color	`$gray-dark`	The color of the title text in search results.
$now-sp-display-type--tertiary--color	`$gray-dark`	The color of the text snippet in search results.
$now-sp-color--neutral-12	`$gray-dark`	#Expanded icon color (chevron) of the facets in mobile view.
$now-sp-global-border-radius	`4px`	#Rounded search results corners affecting the content pane and not search result cards. This variable also affects Genius results, buttons on Genius results, and search bar icon hover background highlights. This variable doesn't affect facets.
$now-sp-color--focus-ring	`$brand-primary`	Tabs focus color.
$now-sp-tabs--selected--color	`$brand-primary`	Text color of selected tab. Doesn't include on hover.
$now-sp-tabs--color--hover	`$brand-primary`	Text color of all tabs when hovered.
$now-sp-tabs--border-color	`$sp-b-border-color`	Tabs underline color.
$now-sp-tabs--selected--background-color	`$brand-primary`	Selected tab underline color.
$now-sp-heading--title-primary--color	`$gray-dark`	Color Filters label.
$now-sp-checkbox-label--color	`$gray-dark`	Filter item (checkbox label) color.
$now-sp-button--primary--bare--color	`$link-color`	**Clear All** and **Clear** link color in facets filter.
$now-sp-button--primary--bare--color--active	`$link-color`	**Clear All** and **Clear** link color in facets filter on click.

Variable	Default value	Description
$now-sp-button--primary--bare--color--hover	`$link-hover-color`	#**Clear All** and **Clear** link color in facets filter on hover.
$now-sp-pill--selected--background-color	`$brand-primary`	Selected filter pill background.
$now-sp-pill--selected--border-color	`$brand-primary`	#Selected filter pill border color.
$now-sp-button--secondary--background-color	`$btn-default-bg`	Genius result button background.
$now-sp-button--secondary--color	`$btn-default-color`	#Genius result button text color.
$now-sp-button--secondary--border-color	`$btn-default-border`	Genius result button border color.
$now-sp-button--secondary--background-color--hover	`darken($btn-default-bg, 10%)`	Genius result button background color on hover.
$now-sp-button--secondary--color--hover	`$btn-default-color`	#Genius result button text color on hover.
$now-sp-button--secondary--border-color--hover	`darken($btn-default-border, 12%)`	#Genius result button border on hover.
$now-sp-button--secondary--background-color--active	`darken($btn-default-bg, 10%)`	Genius result button background on click.
$now-sp-button--secondary--color--active	`$btn-default-color`	Genius result button text color on click.
$now-sp-button--secondary--border-color--active	`darken($btn-default-border, 12%)`	Genius result button border color on click.
$now-sp-highlighted-value--tertiary--color	`$gray-dark`	Genius result Top Result tag text color.
$now-sp-button--border-radius	`$now-sp-global-border-radius`	Differentiates the radius for button and search bat buttons.
$now-sp-container--border-radius	`$now-sp-global-border-radius`	Border radius for search result cards, genius result cards, and the search results container.

Variable	Default value	Description
		Doesn't affect the border between individual results.
$now-sp-button--primary-negative--background-color	`$btn-primary-bg`	#Genius button background color in the EVAM action confirmation modal.
$now-sp-button--primary-negative--border-color	`$btn-primary-border`	Genius button border color in the EVAM action confirmation modal.
$now-sp-button--primary-negative--background-color--hover	`darken($btn-primary-bg, 10%)`	Genius button background color on hover in the EVAM action confirmation modal.
$now-sp-button--primary-negative--border-color--hover	`darken($btn-primary-border, 12%)`	Genius button border color on hover inside the confirmation.
$now-sp-button--primary-negative--background-color--active	`darken($btn-primary-bg, 10%)`	#Genius button background color on click inside the confirmation modal.
$now-sp-button--primary-negative--border-color--active	`darken($btn-primary-border, 12%)`	Genius button border color on click inside the confirmation modal.
$now-sp-button--primary--background-color	`$btn-primary-bg`	Selected filter (pill) background color.
$now-sp-button--primary--border-color	`$btn-primary-border`	Selected filter (pill) border color
$now-sp-button--primary--color	`$btn-primary-color`	Selected filter (pill) color.
$now-sp-button--primary--background-color--hover	`darken($btn-primary-bg, 10%)`	#Selected filter (pill) background color on hover.
$now-sp-button--primary--border-color--hover	`darken($btn-primary-border, 12%)`	Selected filter (pill) border color on hover.
$now-sp-button--primary--background-color--active	`darken($btn-primary-bg, 10%)`	Selected filter (pill) background color on click.
$now-sp-button--primary--border-color--active	`darken($btn-primary-border, 12%)`	Selected filter (pill) border color on click.
$now-sp-rem-factor	`5`	The same variable as *--classicsponlydonotuse--rem-multipy*.

Variable	Default value	Description
		Note: It's not suggested to use this variable.
$sp-search-result-title-highlight--background-color	None	Text background color for title highlights in search results. **Note:** For this theme setting to take effect, you must add the static value `removeHitHighlighting` with value `"false"` for the `sn-search-result-evam-card` component in the relevant EVAM view template, as shown in this example: `{ "component": "sn-search-result-evam-card", "staticValues": { "removeHitHighlighting": { "translatable": true, "key": "false" } }, }` To learn about configuring settings in EVAM view templates, see Define an EVAM view template.

Zing search in Service Portal

Service Portal search supports the ServiceNow Zing text indexing and search engine. Zing allows you to index and search record data by table and is created entirely with ServiceNow code and implemented within the relational model.

To make data searchable from Service Portal, you create search sources that fetch data from a single table within your ServiceNow instance, from multiple ServiceNow tables, or from an external site.

Search sources

A search source is a record that describes the behavior and source of searchable data. A search source defines:

- Where to retrieve search data from.
- Whether search suggestions can populate the search field based on user input.
- How a search entry displays in the search result page.

Search sources have simple and advanced configurations.

Simple

Define a table within your ServiceNow instance as a source of searchable data. To learn more, see Define a search source.

When you create a simple search source, Service Portal uses the search engine settings configured on your instance. To learn more, see Zing text indexing and search engine.

Advanced

Define a data fetch script to return data. A data fetch script executes on the server and returns a result array to the search widget. This method is more complex, but offers complete power over how a search executes. You are not limited to querying single tables within ServiceNow and can define a script that fetches data from multiple tables, or from anywhere on the web. To learn more, review the Tutorial: set up an external knowledge base search source.

Note: Search facets may not behave as expected if integrated into an advanced search source that queries data from a non- ServiceNow site.

Text index groups

A text index group defines how users see search results. For example, combine search results from several sources, or set the weight of certain fields. Text index groups are a ServiceNow AI Platform feature. To learn more, see Configure multiple tables for indexing and searching.

Associate a portal with a text index group to create common search rules and to combine search results from all search sources in the group. If you have a custom search source or portal, consider whether you want to use the base system **portal_index_group** text index group, or create your own text index group. The base system text index group includes the Catalog items and Knowledge tables. When a user searches for an item in Service Portal, they see combined results from these tables. To add an index group to a portal, see Add a text index group to a portal.

Note: Text index groups do not support external search sources.

Search suggestions and typeahead search

Search suggestions replaces typeahead search in Service Portal. Update the `glide.service_portal.search_as_you_type_behavior` system property to change this behavior. For more information, see Enable and disable search suggestions. Service Portal search widgets automatically use whichever feature you enable.

Search facets

Enable your end users to filter search results for a more meaningful result set. Facets can return results based on:

- Fields in a table such as **Active** or **Author**.
- Query conditions such as **[Updated][After][Last week]**.

Note: Only set search facets for indexed fields. Fields that are not indexed may take longer to return results and are not optimized for a fast search experience. Learn more: Configure a table for indexing and searching.

Search facets render in the Faceted Search widget on the sp_search page. In new instances, search facets are enabled by default. If upgrading from a previous release, enable search facets by activating a record in the Page Route Maps [sp_page_route_map] table. See Enable search facets.

Simple

Enable end users to refine search results for a simple search source. You can create facets for a table search source that return results based on field values or query conditions. See Add facets to a simple search source.

Advanced

Define facets for advanced search sources using the **Facet generation script** on the search source record. Use facet APIs to create facets and assign ServiceNow facet items or mapped queries to the facet.

API	Use
SPScriptedFacetService - Scoped	Creates a single or multi choice facet.
SPScriptedFacet - Scoped	Defines facet items, filters, or mapped queries for the facet.

Define a search source

Configure a basic search source to query data from an instance table, or configure an advanced data fetch script to query data across multiple tables and data sources, or to pull data from anywhere on the web.

Before you begin

Role required: admin

Procedure

1. In the platform UI, navigate to **Service Portal** > **Portals** and select the portal you want to add search sources to.
2. From the **Search Sources** related list, click **New** to add a search source.
3. Define the fields on the **Search Source** form.

Search Source form

Field	Description
Name	The display value for the search category.
ID	The record ID. The value should be unique, and should not include any spaces or special characters.
Application	The scope of the search source.
Roles	If the Service Portal User Criteria Support plugin is not enabled, define user roles to access this search source.
Search page template	The HTML template that displays the search results. If defining a basic search source, you do not need to change the default template. For an example of a modified template, see Tutorial: set up an external knowledge base search source.

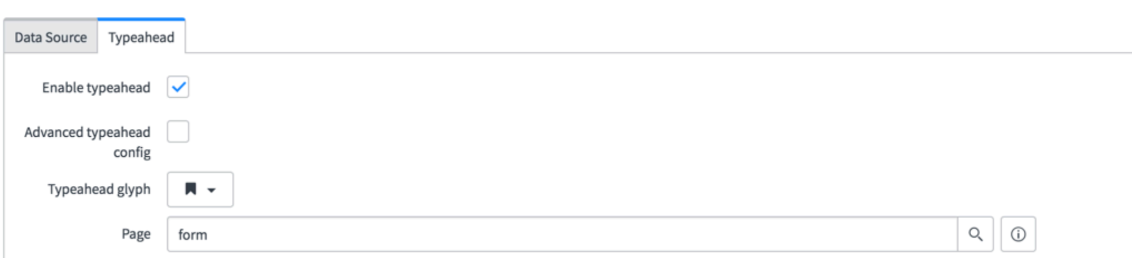
4. Complete the fields on the **Data Source** tab.

Field	Description
Is scripted source	Adds an advanced data fetch script. If configuring an instance table as the data source, do not check this option.
Data fetch script	Script defining the endpoint and API calls to fetch data. This field is only visible when **Is scripted source** is selected. For an example of a data fetch script, see Tutorial: set up an external knowledge base search source. **Note:** If defining a facet generation script, inject the facets object into the data fetch script and update the script to generate data for each facet item. For an example, see the Knowledge Base and Service Catalog search sources. Search facets may not behave as expected if integrated into an advanced search source that queries data from a non-ServiceNow site.
Facet generation script	Script defining search facets for a scripted search source. Enable your end users to filter search results for a more meaningful result set. This field is only visible when **Is scripted source** is selected. **Note:** If defining a facet generation script, inject the facets object into the data fetch script and update the script to generate data for each facet item. For an example, see the Knowledge Base and Service Catalog search sources. Search facets may not behave as expected if integrated into an advanced search source that queries data from a non-ServiceNow site.

Field	Description
Table	Select a table from the list that you want to draw your results from. You can select any table in the platform. For example, User [sys_user] or Knowledge [kb_knowledge]. **Note:** Only indexed tables return search results. Learn more: Configure a table for indexing and searching.
Conditions	Filters results based on defined conditions. For example, Active is True.
Primary display field	Select which field you want to display on the search results page. For example, Name.
Display fields	Select additional fields to display on the search results page. For example, User ID, Email, and City.
Paginate results	Paginates search results. True by default. If **Is scripted source** is selected, the value updates to false. To enable pagination for a scripted search source, see Paginate search source results. Define the maximum number of results per query for the search source in the Search Page widget or Faceted Search widget instance options.

5. Configure **Typeahead** settings to allow search results to populate the search field based on user input.

Field	Description
Enable typeahead	Allows typeahead functionality. If you do not want to integrate typeahead into your search source, clear the check box.
Advanced typeahead config	Optionally add an advanced typeahead script to configure the way search results display. For more information, see Create an advanced typeahead template.
Typeahead glyph	Adds an icon beside each typeahead result.
Page	Defines a service portal page to display the selected result. For example, if **form** is configured, a selected typeahead result opens in a form.



6. Click **Submit**.

What to do next

To enable end users to refine search results, Add facets to a simple search source.

Paginate search source results

Limit the number of results that a search source displays at one time to improve performance. End users can load more results as needed.

Before you begin

Role required: admin or sp_admin

About this task

If adding pagination to a simple search source, set **Paginate results** on the search source record to true. However, if adding pagination to an advanced search source, you must also modify the data fetch script to handle multiple pages of results. When a user loads more search results, the search source re-executes the data fetch script.

Note: If paginating a search source with advanced facets, do not modify the facet generation script to load facets based on the results from each page. Facets should enable end users to filter results from an entire result set, rather than page-specific results.

Procedure

1. In the platform UI, navigate to **Service Portal** > **Search Sources**.
2. Open a search source to add pagination to.
3. From the **Data Source** tab, set **Paginate results** to true.
   Enabling this field adds a **Load more results** button to the search results page. This flag automatically enables pagination for simple search sources.
4. **Optional:** If the search source is advanced, modify the data fetch script to handle multiple search result pages.
   Update the data fetch script using one of the following GlideRecord APIs, depending on the scope of the search source.

Scope	Method
Global	setLocation() in GlideRecord - Global
Scoped application	chooseWindow() in GlideRecord - Scoped

The following is an example data fetch script for a global search source that queries the incident table and paginates results.

```
// queryLocation is a special value injected into the script,
// which holds the query_location property of the last item
// in the previously fetched result set
(function(query, queryLocation, count) {
 var results = [];
 var now_GR = new GlideRecord("incident");
 gr.addQuery("123TEXTQUERY321", query);
 gr.query();
 // Here, we are utilizing queryLocation to implement
 pagination.
 // In practice, there are many other ways to use the
 // query_location value of the last item in the previous
 // result set to implement pagination. Your implementation
 // will vary by use case.
```

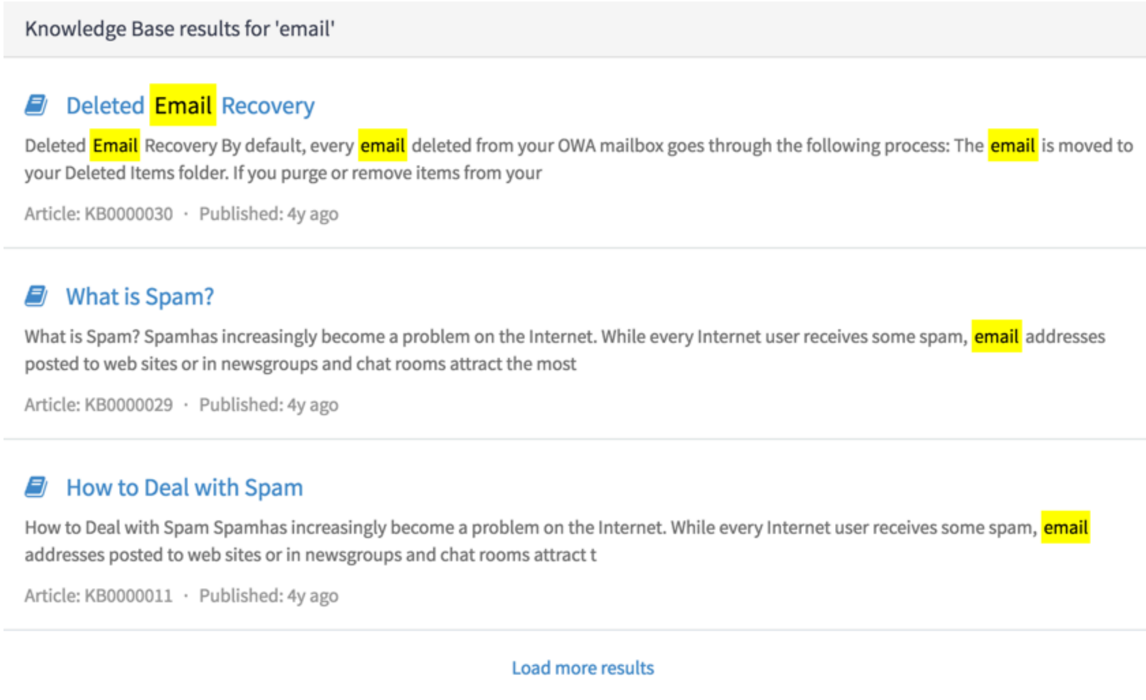
```
 gr.setLocation(queryLocation - 1);

 var resultCount = 0;
 while(gr.next() && resultCount < count + 1) {
  results.push({
   label: gr.getDisplayValue(),
   short_description: gr.getValue("short_description"),
   // Here, we are populating the query_location
   // property of each result item. This is how the
   // framework knows what value to pass into the
   // next fetched search result script execution
   query_location: gr.getLocation(),
   primary: gr.getDisplayValue(),
   state: gr.getDisplayValue("state")
  });
  resultCount++;
 }

 if (results.length == 0)
  return results;

 if(results.length > count) {
  results.pop();
 } else {
  // In order to indicate that a result in the result
  // set is the final result (that there are
  // no more results to be fetched), add this property
  // to the final element in your result set.
  results[results.length - 1].isLastResult = true;
 }
 return results;
})(query, queryLocation, count, facets);
```

For an additional example, see the Knowledge Base search source.

5. Define the maximum number of results per query for the search source in the Search Page widget or Faceted Search widget instance options.

Result

The search page only returns the defined number of results at one time. When a user selects **Load more results**, the search source re-executes the query or data fetch script.



Create an advanced typeahead template

Configure the way typeahead results display with an advanced template.

Before you begin

Note: Search suggestions replaces typeahead search in Service Portal. Update the *glide.service_portal.search_as_you_type_behavior* system property to change this behavior. For more information, see Enable and disable search suggestions. Service Portal search widgets automatically use whichever feature you enable.

Role required: admin

Procedure

1. Complete the required fields in Define a search source.
2. In the **Typeahead** tab of the **Search Source** record, select the **Advanced typeahead config** check box.
3. In the **Typeahead template** field, add an HTML template.

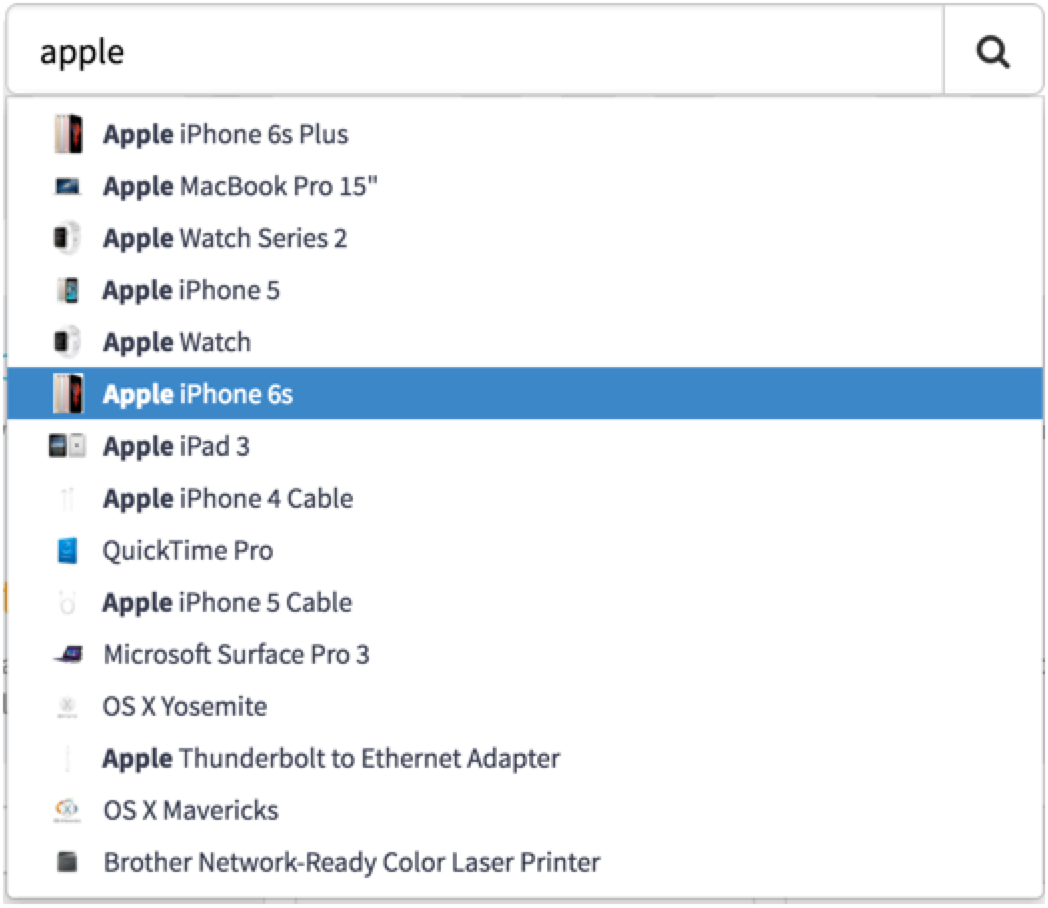
   Example

   This example uses AngularJS bindings to display service catalog images in the typeahead results.

```
<i class="ta-img" ng-if="match.model.type=='sc'"
 style="background-image:url('{{match.model.picture}}')"></i>
<i class="ta-img" ng-if="match.model.type=='sc_guide'"
 style="background-image:url('{{match.model.picture}}')"></i>
<i class="ta-icon fa fa-file-text-o"
 ng-if="match.model.type=='sc_content' &&
 match.model.content_type == 'kb'"></i>
<strong ng-if="match.model.type=='sc_content' &&
 match.model.content_type == 'external'">↗</strong>
<span ng-bind-html="match.label |
 uibTypeaheadHighlight:query"></span>
```

4. Click **Update**.

Typeahead results display beside the image defined in the service catalog record.



Tutorial: set up an external knowledge base search source

Define an advanced search source to return data from any source on the Internet. To understand the power of search sources, follow this tutorial to set up an external knowledge base search source.

Before you begin

Role required: none

To create an advanced search source, you need authenticated access to an external website via a REST API and basic knowledge of AngularJS.

About this task

In this integration, you will:

- Create a data fetch script that uses the ServiceNow Table API to query a knowledge base from another ServiceNow instance.
- Decode the JSON response and define the fields that the search widget expects.
- Update the search sources HTML template to open the search result in the external site.

Procedure

1. In the platform UI, navigate to **Service Portal** > **Portals** and select the portal you want to add the search source to.
2. From the **Search Sources** related list, click **New**.
3. Create a name and ID for the search source.
   The ID should be unique, and should not include any spaces or special characters.
4. On the **Data Source** tab, select the **Is scripted source** check box.
5. Add content to the data fetch script field.

   a. Define the search function to be executed by the instance.

      Example

      This example uses a Recordless RESTMessageV2 example, but you can modify this example to use a pre-configured Outbound REST web service if needed, or create a more secure authentication profile.

```
(function(query) {
var results = [];
/* Calculate your results here. */
var url=
 "https://myInstance.service-now.com/api/now/table/kb_knowled
ge?sysparm_query=GOTO123TEXTQUERY321%3D" + encodeURI(query) +
 "&sysparm_fields=sys_id%2Cnumber%2Cshort_description%2Ccateg
ory%2Ctext";
    var ws = new sn_ws.RESTMessageV2();
        ws.setBasicAuth("search_user", "search");
        ws.setHttpMethod("get");
        ws.setEndpoint(url);

        var jsonOutput = ws.execute();

return results;
})(query);
```

      Note: In the preceding example, `ws.setBasicAuth` requires a username and password for the remote instance. For more detail, see RESTMessageV2 - Scoped, Global .

   b. Add an if statement to the data fetch script to decode the JSON object being returned, iterate over each result, and set expected fields.

      Example

      The final data fetch script:

```
(function(query) {
var results = [];
/* Calculate your results here. */
var url=
 "https://<my-instance>.service-now.com/api/now/table/kb_know
ledge?sysparm_query=GOTO123TEXTQUERY321%3D" +
encodeURI(query) +
 "&sysparm_fields=sys_id%2Cnumber%2Cshort_description%2Ccateg
ory%2Ctext";
```

```
var ws = new sn_ws.RESTMessageV2();
    ws.setBasicAuth("search_user", "search");
    ws.setHttpMethod("get");
    ws.setEndpoint(url);

    var jsonOutput = ws.execute();
    if (jsonOutput) {
        var response = new
 JSON().decode(jsonOutput.getBody());
        results = response.result;
        results.forEach(function(result) {
            result.url =
 "https://myInstance.service-now.com/kb_view.do?sysparm_artic
le=" + result.number;
            result.target = "_blank";
            result.primary = result.short_description;
        });
    }

    if (jsonOutput.haveError()){
        gs.addErrorMessage(jsonOutput.getErrorMessage());
    }

return results;
})(query);
```

In this example, the following fields are set on the result object:

- **url**: If linking to an external site rather than opening the record in your ServiceNow instance, this defines where the link leads to.
- **target**: The target for the link. Set the target to `_blank` to open results in a new tab, otherwise leave it blank.
- **primary**: The primary field displayed in the search results.

6. Update the search page template to open the search results in the external site.

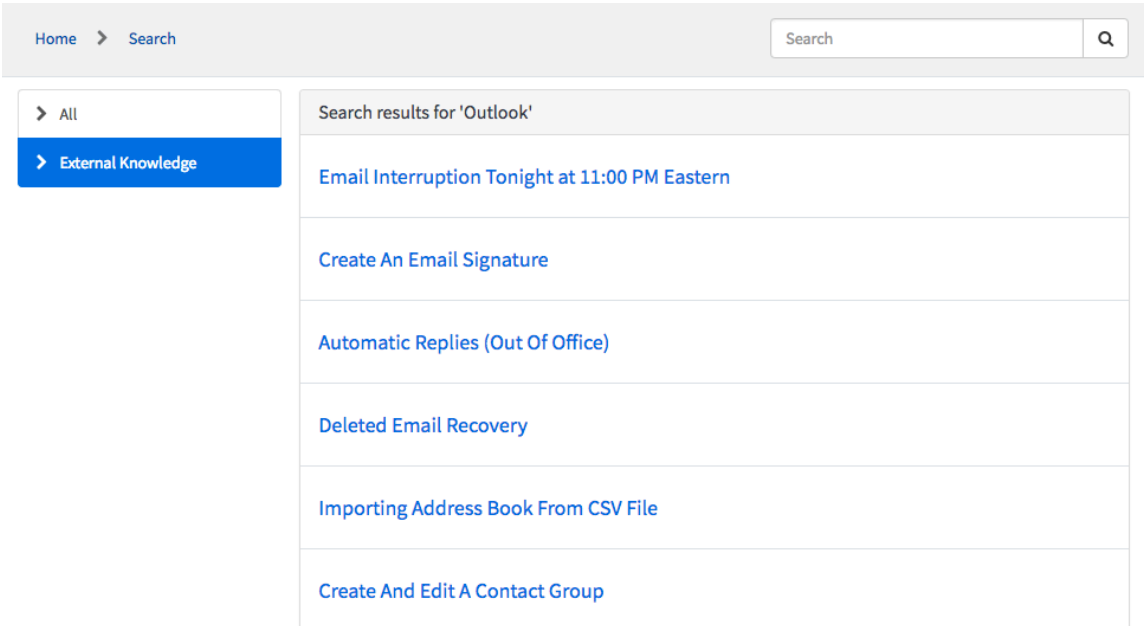
Example

```
<div>
 <a
 href="https://
myInstance.service-now.com/kb_view.do?sysparm_article={{item.nu
mber}}" target="_blank" class="h4 text-primary m-b-sm block">
    <span ng-bind-html="highlight(item.primary,
 data.q)"></span>
  </a>
  <span class="text-muted" ng-repeat="f in item.fields |
 limitTo: 4">
    <span class="m-l-xs m-r-xs" ng-if="!$first"> &middot;
 </span>
    {{f.label}}: <span ng-bind-html="highlight(f.display_value,
 data.q)"></span>
  </span>
</div>
```

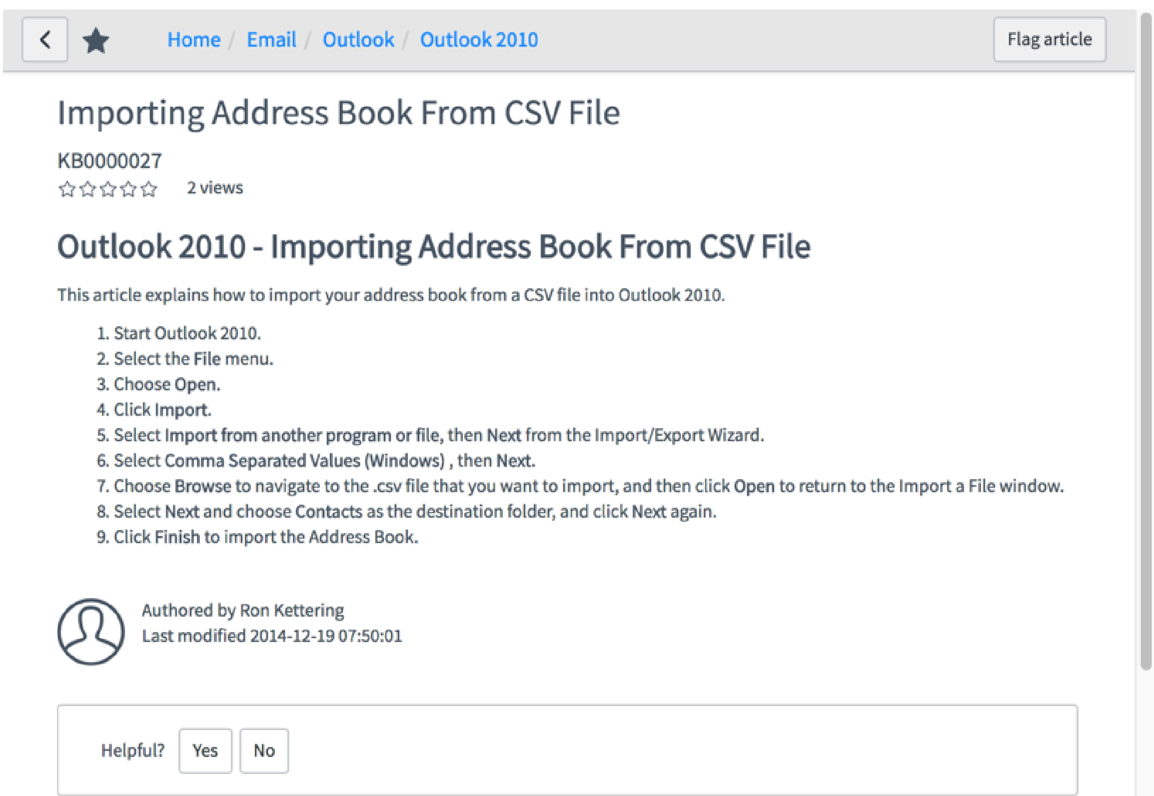
7. Click **Update**.

Result

Test the external search in your portal. Results display under the name field value defined in step three.



Each search result opens in the external site defined in the search page template.



Example: set up a GitHub search source

Set up an advanced search source that queries data from an external website.

Before you begin

Role required: none

To create an advanced search source, you need authenticated access to an external website via a REST API and basic knowledge of AngularJS.

Procedure

1. In the platform UI, navigate to **Service Portal** > **Portals** and select the portal you want to add search sources to.
2. From the Search Sources related list, click **New**.
3. Create a name and ID for the search source.
   The ID should be unique, and should not include any spaces or special characters.
4. On the **Data Source** tab, select the **Is scripted source** check box.
5. Add content to the data fetch script field.

   Example

   To set up a GitHub integration:

```
(function(query) {
    var results = [];
    /* Calculate your results here. */
    var url = "https://api.github.com/search/repositories?q=" +
 encodeURI(query);
    var ws = new GlideHTTPRequest(url);
    ws.setBasicAuth("YOUR_USERNAME_HERE",
 "YOUR_PASSWORD_HERE");
    var jsonOutput = ws.get();
    if (jsonOutput) {
        var response = new JSON().decode(jsonOutput.getBody());
        results = response.items;
        results.forEach(function(result) {
            result.url = result.svn_url;
            result.target = "_blank";
            result.primary = result.full_name;
        });
    }

    return results;
})(query);
```

   Note: In the preceding example, `ws.setBasicAuth` requires a username and password for the external resource. For more detail, see GlideHTTPRequest - Global.

6. Use the Search page template to customize the way the search results display.

   Example

```
<div>
  <div class="pull-right">
    <strong>{{item.language}}</strong>
    <a ng-href="{{item.svn_url}}/stargazers"
 target="_blank" class="m-l-sm"><span class="fa fa-star
 m-r-xs"></span>{{item.stargazers_count}}</a>
```

```
    <a ng-href="{{item.svn_url}}/network" target="_blank"
 class="m-l-sm"><span class="fa fa-code-fork
 m-r-xs"></span>{{item.forks}}</a>
  </div>
  <a ng-href="{{item.svn_url}}" target="_blank" class="h4
 text-primary m-b-sm block">
    <span ng-bind-html="highlight(item.full_name,
 data.q)"></span>
  </a>
  <p>{{item.description}}</p>
  <p>Updated <sn-time-ago
 timestamp="item.updated_at"></sn-time-ago> ago</p>
</div>
```

Enable search facets

In new instances, search facets are enabled by default. If upgrading from a previous release, enable search facets by activating a record in the Page Route Maps [sp_page_route_map] table.

Before you begin

Role required: admin or sp_admin

About this task

Search facets render in the Faceted Search widget on the sp_search page. To enable search facets after upgrade, activate the page route map record to route your search results to render in the sp_search page.

Procedure

1. Navigate to **All** > **Service Portal** > **Page Route Maps**.
2. Locate the Search record in the list.
   This record redirects users from the search page to the sp_search page when viewing search results in Service Portal. The sp_search page includes the Faceted Search widget, which supports search facets in both desktop and mobile environments.
3. Set the **Active** field to true.

Result

When using search in Service Portal, results render in the sp_search page. Add facets to the search source to enable end users to filter search results. To learn more about facets, see Add facets to a simple search source.

Add facets to a simple search source

Enable end users to refine search results for a simple search source. You can create facets for a table search source that return results based on field values or query conditions.

Before you begin

Role required: admin or sp_admin

In new instances, search facets are enabled by default. If upgrading from a previous release, enable search facets by activating a record in the Page Route Maps [sp_page_route_map] table. See Enable search facets. Create facet items and mapped queries with no more than 30 filter items. To verify, test each search source with a variety of keywords as a user with low permissions.

Note: Only set search facets for indexed fields. Fields that are not indexed may take longer to return results and are not optimized for a fast search experience. Learn more: Configure a table for indexing and searching.

Procedure

1. Navigate to **All** > **Service Portal** > **Search Sources**.
2. Open or create a simple search source.
   Simple search sources do not use a data fetch script. Rather, they define a table as the source of searchable data. To learn more about search sources, see Configuring search in a portal.
3. Select the **Facets** related list.
4. Click **New**.
   The Facet form displays.
5. Complete the fields.

Field	Description
Name	Display name of the facet header.
Application	Application scope of the search source. This value is read-only.
Selection type	Type of user selection allowed: ◦ **Single**: Only one filter value can be selected at a time. For example, if a facet is created for the **Assigned to** field, the end user can select **Fred Luddy** or **Beth Anglin**, but not both at the same time. Before filtering for a new value, the user must first clear the current value. ◦ **Multiple**: Multiple filter values can be selected at the same time. For example, if a facet is created for the **Assigned to** field, the end user can select both **Fred Luddy** and **Beth Anglin**. Because multi choice results in an OR query, records assigned to either Fred Luddy or Beth Anglin display.
Active	Whether the filter option displays in search results.
Use mapped facet filters	Maps a facet to a query condition, such as **[Updated][After][Last week]**. When selected, the **Fields** and **Sort** fields are removed from the form. After saving, define filters in the Facet Filters related list.
Order	Defines the display order when multiple facets are defined. If some facets do not have an order value defined, facets with an order defined display first. Facets without an order defined are displayed alphabetically.
Table	Table that the query is created for. This value is read-only and defined by the table used in the search source.
Field	Field that end users can filter search results by. For example, if **Active** is selected, the user can filter search results by true or false.

Field	Description
	Only fields of the following types are supported: True/False, Choice, Decimal, Floating Point Number, Integer, IP Address, Long, Reference, String, String (Full UTF-8), and URL.
Sort	Determines the order in which filter options display. ◦ **Ascending**: Sorts filter options from A to Z when alphabetical, and from lowest to highest when numerical. This is the default option. ◦ **Descending**: Sorts filter options from Z to A when alphabetical, and from highest to lowest when numerical.

6. Save the record.
   If **Use mapped facet filters** is selected, the **Facet Filters** related list appears in the facet form.
7. **Optional:** If **Use mapped facet filters** is selected, define facet filters.
   Map facet filters map a query condition to a facet label. When the end user selects the label from the facet list, the defined query executes.

   a. In the **Facet Filters** related list, click **New**.
      The Mapped Facet Form appears.

   b. Define the facet filter fields.

Field	Description
Name	Display name of the facet filter option.
Order	Defines the display order when multiple facet filters are defined. (Optional) If some facet filters do not have an order value defined, facets filters with an order defined display first. Facet filters without an order defined are displayed alphabetically.
Application	The application scope of the search source. This value is read-only.
Facet	The search facet that uses the mapped query. This value is read-only.
Table	The table defined in the search facet. This value is read-only.
Mapped query	A query condition that users can set to filter search results. For example, **[Updated][On][Today]**.

   c. Click **Submit**.
      Users can filter search results based on the query defined.

Disable facets for a search source

Disable facets for one or more search sources by adding a system property. Once disabled, the search source does not display search facets in the Faceted Search widget on the sp_search page. You can disable facets for simple or advanced search sources.

Before you begin

Role required: admin or sp_admin

Procedure

1. Enter `sys_properties.list` in the Application Navigator to navigate to the System Properties table.
2. Click **New**.
3. In the **Name** field, enter `glide.service_portal.disable_facets_for_search_sources`.
4. In the **Value** field, enter a comma-separated list of search source Sys IDs to disable facets for. Do not include spaces. For example, `c6170ae86721220023c82e08f585efe6,c96eb1686721220023c82e08f585efff`.
5. Click **Submit**.

Result

Facets do not display when the defined search source is selected in the sp_seach page.

Populate search suggestions in Service Portal

If you are upgrading from a previous release, run a script to populate search suggestions with data from a platform search table to provide search suggestions to your users. Alternatively, you can wait until users search for keywords instead of running this script.

Before you begin

Role required: admin

In new instances, the search suggestions are enabled by default. In upgraded instances, you must enable the search suggestions. For more information, see Enable search suggestions.

About this task

The ServiceNow AI Platform collects search data and analytics that generate search suggestions. If you are upgrading from a previous release, the search analytics do not contain any data yet. To immediately provide suggestions to your users, you can populate the search suggestions using data from either the Text Searches [text_search] table or the Service Portal Log Entries [sp_log] table. The Service Portal Log Entries table includes search data from Service Portal only and may take less time to populate search suggestions. The Text Search table includes search data from the entire platform.

Search suggestions improve over time as more people use Service Portal. Search Suggestions is a ServiceNow AI Platform feature. For more information, see Search Suggestions.

> **Warning:** Populating search suggestions can be a resource-intensive task that may take a while to complete. Do not run this script during peak hours. Populating search suggestions is not supported on domain-separated instances.

Procedure

1. Navigate to **All** > **System Definition** > **Scheduled Jobs**.
2. Open the **Populate Suggestions to avoid Cold Start - Portals** scheduled job.
3. Modify the script for your search implementation.

   a. Define which portals the suggestions apply to.
   By default, the script populates suggestions in the base system service portal, but you can add as many as you want to the array.

   ```
   var portals = ["Service Portal"];
   ```

   b. Change where the data comes from

By default, the script imports data from the Text Searches [text_search] table, but you can change the source table to the Service Portal Log Entries [sp_log] table. The Service Portal Log Entries only saves records from the last 90 days.

```
var searchLogTable = "text_search";
```

c. Push data to any custom search sources in your instance.

Suggestions are not enabled for external search sources. You must push data to both the search source name and the Sys ID.

For example, push text searches from the Incident table to your custom Incident search source. For more information about custom search sources, see Define a search source. By default, the system pushes text searches from the Catalog and Knowledge tables to the respective search sources.

Add the following code after line 11 in the script for each of your custom search sources.

```
searchSources.push("<search-source-table-name>");
searchSourceIds.push("<search-source-sys-id>");
```

If the search source table does not exist, the system does not push suggestions to that search source.

d. Save the record.
Make sure that the script includes the configuration you need. You can only run the script once.

4. Activate the record and select **Execute Now**.
Running this scheduled job populates the Search Events [sys_search_event], Search Source Events [sys_search_source_event], and Search Suggestions [sys_search_suggestion] tables.

Result
Users see suggestions when they start typing in a Service Portal search widget.

Add a text index group to a portal

Define how users see search results. For example, combine search results from several sources, or set the weight of certain fields.

Before you begin
Role required: admin
If you have a custom search source or portal, consider whether you want to use the base system **portal_index_group** text index group, or create your own text index group. The base system text index group includes the Catalog items and Knowledge tables. When a user searches for an item in Service Portal, they see combined results from these tables.

Note: Index tables before adding them to a text index group. To learn more about text indexing, see Configure a table for indexing and searching.

Text index groups are a ServiceNow AI Platform feature. To learn more, see Configure multiple tables for indexing and searching.

About this task
Note: Text index groups do not support external search sources.

Procedure

1. Navigate to **All** > **Service Portal** > **Portals**.
2. Open the portal that you would like to add a text index group to.
3. Configure the form to add the **Text Index Group** field.
4. Add the text index group you want to the **Text Index Group** field.

Result

Search results display according to the text index group's rules.

Set the default portal search source

Use the *glide.service_portal.default_search_sources* system property to define default search sources.

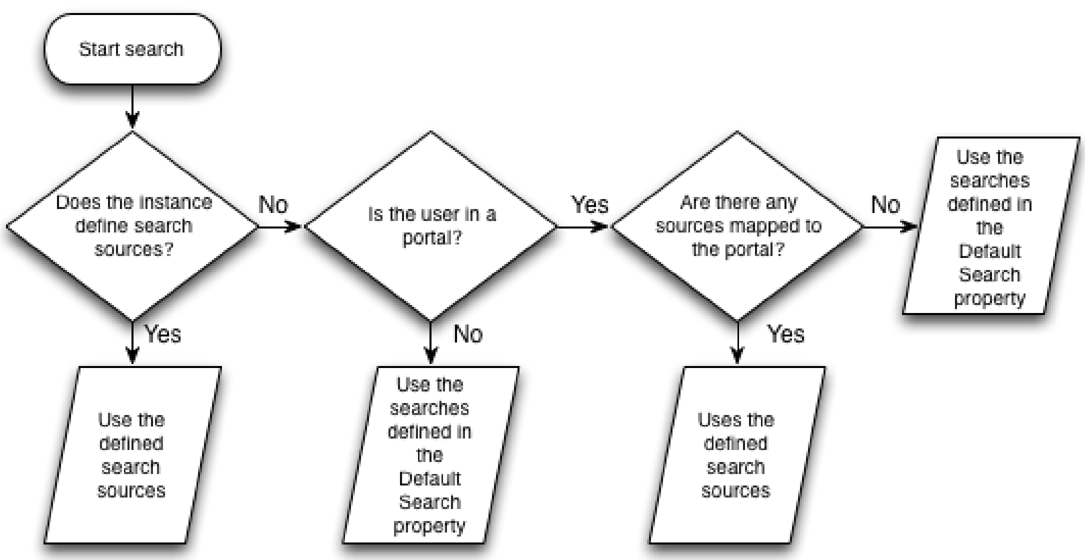
Before you begin

Role required: admin

About this task

If you don't define specific search sources for your portal, the system uses default search sources instead.

Default search source flow chart



Procedure

1. In the Navigation filter, enter `sys_properties.list`.
   The entire list of properties in the System Properties [sys_properties] table appears.
2. On the list, find the system property *glide.service_portal.default_search_sources*, and then open the property record.
3. Copy the sys_ID of any search source you want to add into the **Value** field of the system property using a comma-separated list.

   To change the order in which the default search sources show in the Search List, change the order of the IDs in the property.

You can remove the default search source behavior by deleting the property value or deleting the property altogether.

4. Click **Update**.

Configure Search Sources available on a page

Use contextual search to limit search results for an instance of the type-ahead search widget.

With contextual search enabled, users only see type-ahead results for specific search sources. For example, searching on the Service Catalog page only shows results from the Service Catalog search source when contextual search is enabled.

1. In the Service Portal Designer (**Service Portal** > **Service Portal Configuration** > **Service Portal Designer**, find an instance of the type-ahead search widget.
2. Point to the widget and click the edit icon ( ).

   Alternatively, in any preview page containing the type-ahead search widget, for example the Service Catalog homepage, control + right-click to open the widget context menu. Then click **Instance Options**.
3. In the Contextual Search Sources field, select search sources from the list.

   Search sources listed for contextual search can be limited to just one, several, or all search sources.

Default search sources are defined in the `glide.service_portal.default_search_sources` property, so even if you do not have search sources configured, type-ahead search widget still shows type-ahead suggestions. For more information on default search sources, see Set the default portal search source.

Managing portal access

Control user access to a portal.

Control who accesses your portal and what they can see in the following ways:

- Authentication: Configure login and single sign on for users
- Limit page access by role: Use roles to limit the users who can see a page.
- Public pages: Use the *public* check box on a page record to make the page publicly accessible.

  Note: A number of portal pages that are installed by default are marked public. Filter your list of Service Portal pages for *Public [is] true* to identify these pages. Setting the *Public* value to *false* will prevent these pages from being publicly available.
- User criteria: For a more advanced way of limiting user access, create and apply user criteria to pages, widgets, widgets instances, and search sources.
- Multifactor authentication: If an instance is configured to require multifactor authentication, users are automatically directed to set up multifactor authentication upon initial login. For setup instructions, see Setup multi-factor authentication upon initial login. If multifactor authentication is optional, users can still enable or disable authentication from their user profile. For setup instructions, see Setup multi-factor authentication on your user profile.

Single sign-on, logins, and URL redirects

Service Portal uses a combination of system properties and script includes to determine how the system handles URL redirects for users logging in to the portal.

Only users who understand SSO, URL redirects, and the ServiceNow platform should make any changes.

Single sign-on and Service Portal

To use single sign-on with Service Portal, you must enable the Integration - Multiple Provider Single Sign-On Installer plugin (com.snc.integration.sso.multi.installer).

If you are using the system property to automatically redirect to your primary IdP, then Service Portal automatically redirects to that IdP. If you have multiple identity providers, Service Portal shows a link on the login page to **Use external login**. For more information on SSO and authentication in the platform, see Multiple-Provider single sign-on (SSO).

To redirect users to the SSO Identify Provider (IdP) login page without first redirecting them to the portal login page, you can configure the *glide.service_portal.sso.early_redirect.portals* system property. For more information, see Service Portal properties. If your portal uses a customized version of the Login widget, you must update the `sp_sso_early_redirection` UI macro as needed to redirect users to the SSO Identify Provider (IdP) login page without trying to load the portal page first.

> **Note:** Service Portal has a known issue related to using Multi-Provider SSO and Okta. For more information about this issue and a workaround, see the Service Portal: After enabling Multi SSO, end users are able to access navpage.do through OKTA if they are already logged in [KB0687717] article in the Now Support Knowledge Base.

Require authentication for a Service Portal page

If you want to require authentication for a Service Portal page, ensure that the **Public** flag on the page record is not selected. For more information, see Create and edit a page using the Service Portal Designer. If a user navigates to a non-public page, they are redirected to the login page for the requested portal.

Because every page request is routed through the **$sp** page, this page must be public. The following values in the Public Pages `sys_public` table define the page as public:

- **Page**: `$sp`
- **Active**: `true`

Configure a portal as the instance login page

Direct all unauthenticated users to a portal login page to log in. The portal login page becomes the primary login page for your instance.

Before you begin

Role required: admin

Procedure

1. Add a system property with the following settings:
   - Name: glide.entry.page.script
   - Type: string

- Value:

```
new SPEntryPage().getLoginURL()
```

2. **Optional:** If you need to direct users to a portal other than the default portal, edit the portal specified in the SPEntryPage script include.

   (Optional) SPEntryPage uses the default portal on the instance as the portal path to redirect to. Employee Center (esc) is the default portal by default.

   Note: If you edit the script include, it won't be upgraded with future updates.

   a. Navigate to **All** > **System Definition** > **Script Includes**.

   b. From the Script Includes [sys_script_include] table, search for a script include named **SPEntryPage**.

   c. In the **Script** field, edit the script to change the assigned portal to the portal_suffix you want.

   (Optional) For example, change `this.portal = this.getDefaultPortal();` to `this.portal = "/sp/";` to redirect to Service Portal.

```
SPEntryPage.prototype = {

    initialize: function() {
        this.logVariables = false; // for debugging
        this.portal = this.getDefaultPortal(); // The URL suffix for
 default portal
    },
```

   Note: The slash character (/) after `/sp` may cause issues when configuring single sign-on. If you're experiencing issues, try removing the character from the script.

Redirect to Service Portal after login

Conditionally redirect users to a Service Portal page after logging in.

Before you begin

Role required: admin

Procedure

1. Enter `sys_properties.list` in the navigation filter.
2. In the System Properties [sys_properties] table, add the following properties and values.

Property	Type	Value	Description
glide.entry.first.page.script	string	`new SPEntryPage().getFirstPageURL()`	First page after authentication
glide.entry.page.script	string	Server script that redirects users to where to log in. For example:	Contains the call to the server script include method that determines where to log in

Property	Type	Value	Description
		`new SPEntryPage().getLoginURL()`	

getFirstPageURL primarily does the following:

- Redirects to `login_redirect.do` to break out of the frameset (if there is one).
- Redirects to the default portal if the user has no roles or to the full platform for users with roles who are not trying to go to a portal directly.

  When the user has no roles, they are redirected to the portal equivalent of a page. For example,

  https://<instance_name>.service-now.com/nav_to.do?uri=change_request_list.do

  sends users without roles to:

  https://<instance_name>.service-now.com/sp/?id=list&table=change_request.

  Note: This change does not prevent users without roles from accessing the full platform. To prevent users without roles from accessing the platform and always redirect to a portal, set the value of the *glide.entry.loggedin.page_ess* system property to the portal suffix, such as `/sp`.

3. **Optional:** Customize the after-login behavior in the **SPEntryPage** script include.

   (Optional) For more information about modifying script includes, see Script includes.

   For example, if you want users with certain roles to be redirected to Service Portal, you could modify `user.hasRoles()` in the following code.

   ```
   if (user.hasRoles() && !redirectURL && !isServicePortalURL)
   ```

   Note:

   - If you edit the script include, it won't be upgraded with future updates.
   - Users with the admin role always pass a `user.hasRoles()` check.
   - If you are using external authentication, ensure that your IdP supports the RelayState URL parameter. This parameter retains the originally requested URL while the user authenticates, and is necessary for redirection after login.

What to do next

To debug redirection, see Debug Service Portal URL redirects. For additional redirection troubleshooting information, see the Frequently Asked Questions on redirection with service portal [KB0747432] article in the Now Support Knowledge Base.

Debug Service Portal URL redirects

Debug the URL redirects for logging in to Service Portal and redirecting to the first page.

To view debug output from SPEntryPage and see the session variables it redirects based on:

1. Make sure the system property glide.entry.first.page.script has the value: `new SPEntryPage().getFirstPageURL()`.
2. From the SPEntryPage script include, set `this.logVariables = true`.

3. In a separate browser, log in.
4. From the system navigator, view the log output by navigating to **System Logs** > **System Log** > **All**.

Configure page security by role

Set up pages to be public or filter them by role.

Before you begin

Role required: admin or sp_admin

About this task

Public pages won't require a user login; anyone can access them. All other options require user authentication.

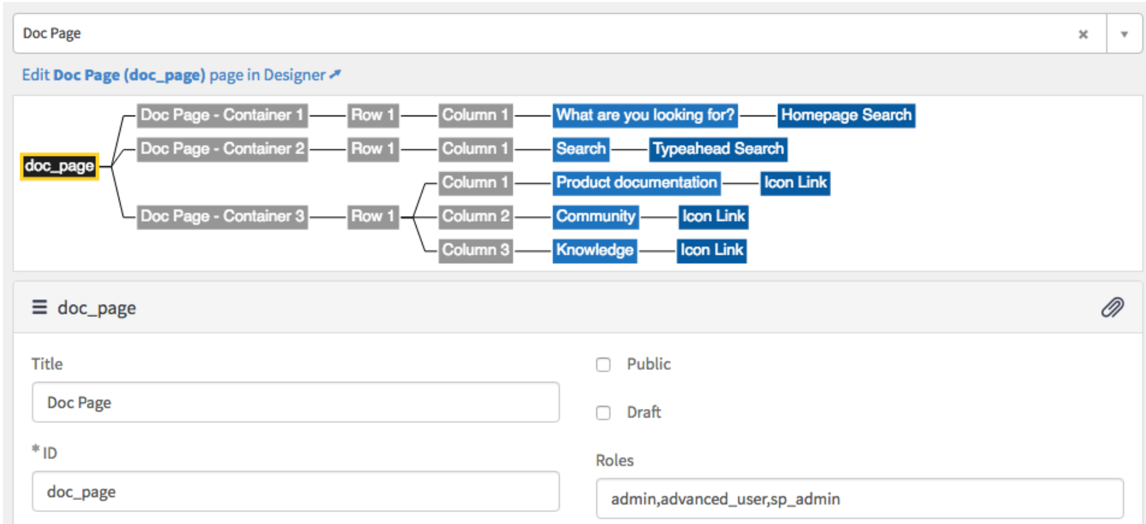
Procedure

1. In the Service Portal configuration page (**Service Portal** > **Service Portal Configuration**), open the Page Editor.
2. In the Select Page list, search for the page to apply page security to.
3. Select the highest level node in the tree view.
4. Configure page security.
    - To make a page public, select the **Public** check box. All users can access pages marked as **Public**.
    - To limit access to a certain role, add roles in a comma separated list. Users without the role listed can see links to the page if they appear in the portal. Trying to open the page results in a "page not found" error.

      Note: If you select **Public** and add a list of roles, the page is still accessible by any user.
    - To create a draft page that only administrators can see while the page is still in development, select **Draft**. Users must have the admin role to see any pages in draft. Everyone else sees a "page not found" error.
5. Click **Save**.

Example:

Page with limited access by role



What to do next

Follow the steps in Configure widget security to configure security for the widgets on your page.

Configure widget security

Configure widget security to ensure that your widget is being accessed only by the intended audience.

Before you begin

Role required: admin or sp_admin

About this task

There are several ways to configure widget security:

- Restrict the widget to users with a login only (authenticated users)
- Restrict the widget to users with certain roles only
- Restrict which tables a public widget can access and return data from for guest (unauthenticated) users

When you configure widget security, configure the page security accordingly so that users can access the widget via the page on which it appears. For more information, see Configure page security by role.

Procedure

1. Navigate to **All** > **Service Portal** > **Widgets**.
2. Open the record of the widget to configure.
3. On the form, configure the widget security.

Option	Procedure
Restrict the widget to authenticated users	Clear the **Public** check box and leave the **Roles** field blank.
Restrict the widget to certain roles	**a.** Clear the **Public** check box. **b.** Next to **Roles**, select the edit icon ( ).

<table>
<tr><th>Option</th><th>Procedure</th></tr>
<tr><td></td><td>

c. On the Roles window, select a role by moving it from the **Available** list to the **Selected** list.

d. Select **Done**.

</td></tr>
<tr><td>Restrict which tables public widgets can access for guest users</td><td>

a. Select the **Public** check box.

Note: Public widgets are accessible by any user even if the **Roles** list contains roles.

b. Specify the tables that public widgets can access for guest users.

This applies to widgets that accept the table input parameter only.

i. In the **Public Table Allow List** related list, select **New**.

ii. In the **Tables** field, select a table from which guest users can access data in the widget.

iii. Select **Submit**.

iv. Repeat these steps to add additional tables.

c. In the **Server script** field, call the *SPWidgetAccessControl* API before any call to *GlideRecord(options.table)* and *GlideRecordSecure(options.table)*. For example:

```
if(!new
 global.SPWidgetAccessContro
l().hasPublicAccess(options.
table, $sp, options,
 input)){
  gs.warn("Deny access to
 table which is not public: " +
 options.table);
  data.isValid = false;
  return;
 }
```

The parameters passed with *SPWidgetAccessControl* should be the same as those passed with *GlideRecord(options.table)* and *GlideRecordSecure(options.table)*. For details on the SPWidgetAccessControl

</td></tr>
</table>

Option	Procedure
	API, see SPWidgetAccessControl - Glob. d. Select **Save**.

4. Select **Update**.

User criteria for Service Portal

User criteria enables you to allow access to users based on role, department, group, location, or company. Administrators can control access to pages, widgets, widget instances, announcements, and search sources in a portal by creating and applying user criteria.

User criteria records define conditions that are evaluated against user records. When user criteria is defined, portal records are only visible to users who pass the defined conditions.

User criteria is a platform feature used in Service Portal. Learn more about user criteria in the ServiceNow AI Platform:

- Service Catalog: Set security for items and categories.
- Knowledge management: Control access at the knowledge base level through user criteria.

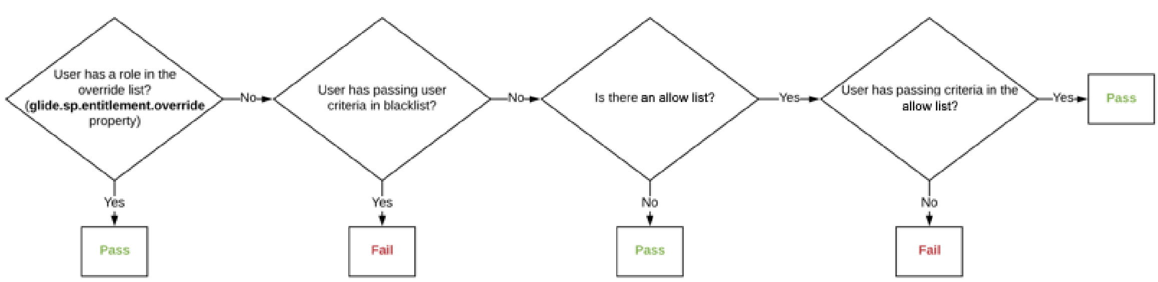
Important: After making user criteria additions or changes, you may need to log out and log back in to clear the prior configuration.

Converting role-based permissions to user criteria records

User criteria in Service Portal replaces role-based permissions. After activating the user criteria for Service Portal plugin, you must Set the user criteria for Service Portal system property to **true**. When the system property is set to true, any existing roles defined for a page, widget, or search source are automatically converted into user criteria records. To disable user criteria and continue using role-based permissions, set the system property to **false**.

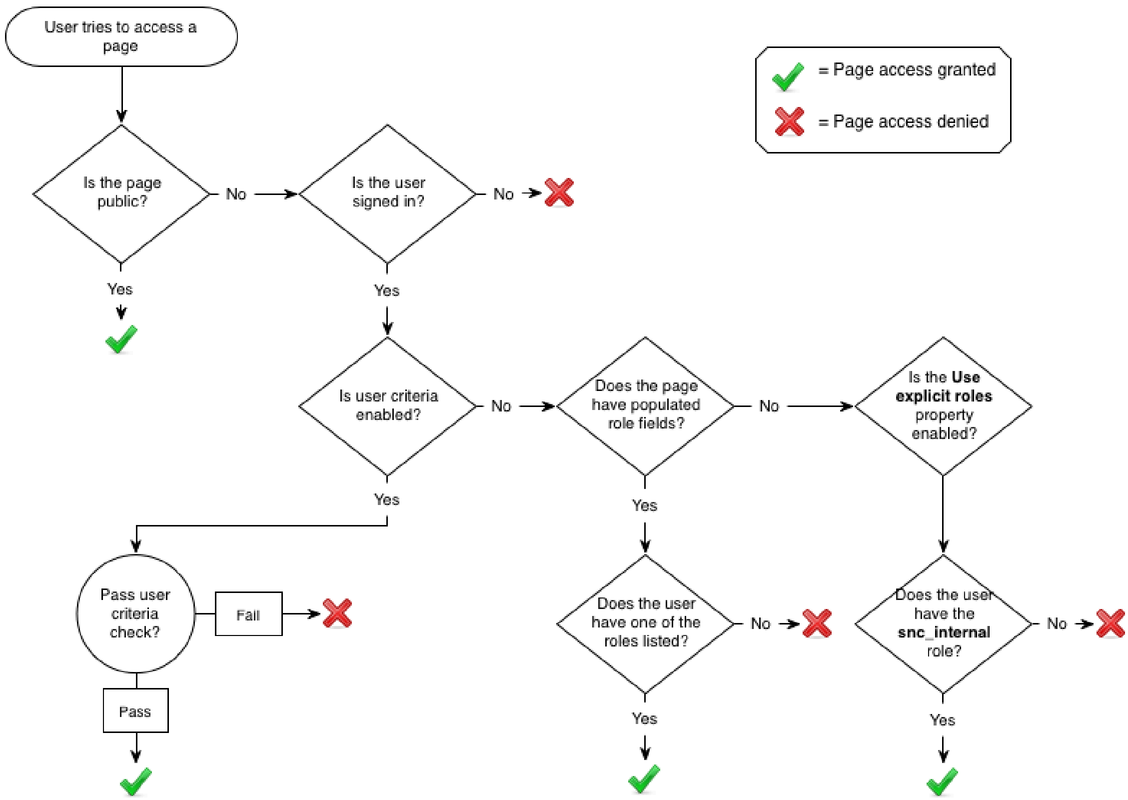
User criteria checks

User criteria uses the following checks in Service Portal to verify user access.



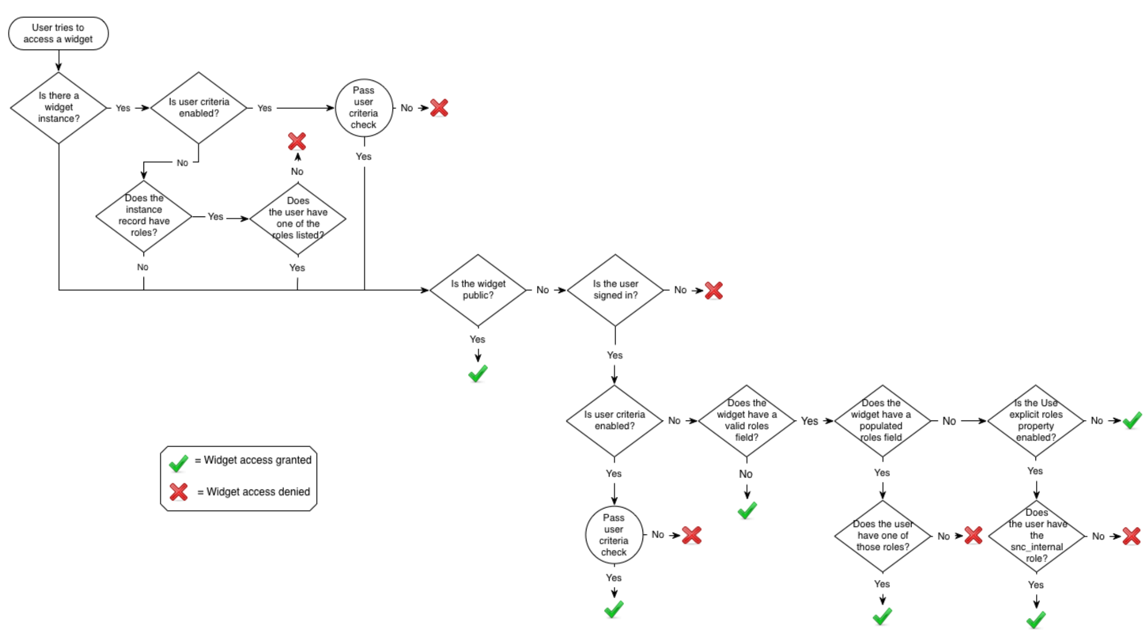
Page access user criteria

The following diagram shows how the system decides whether a user can access a page based on user criteria.



Widget access user criteria

The following diagram shows how the system determines whether a user has access to a particular widget or widget instance.



Activate the user criteria for Service Portal plugin

You can activate the Service Portal User Criteria Support plugin (com.glide.service-portal.user-criteria) if you have the admin role.

Before you begin

Activating the plugin creates user criteria records for Service Portal records already on the instance. The plugin does not create user criteria for any Service Portal records added by plugins installed after this one. For those records, you must manually create or import the user criteria.

Role required: admin

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the plugin using the filter criteria and search bar.

   You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.

3. Select **Install** to start the installation process.

   Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.

   You will see a message after installation is completed. For information about the components installed with a plugin, see Find components installed with an application.

Related topics

List of plugins (Yokohama)

Set the user criteria for Service Portal system property

After activating the Service Portal User Criteria Support plugin, you must set the system property to true.

Before you begin

Role required: admin

About this task

Setting the system property activates user criteria for Service Portal. When the system property is set to true, any existing roles defined for a page, widget, or search source are automatically converted into user criteria records. To disable user criteria and continue using role-based permissions, set the system property to false.

Procedure

1. Navigate to **All** > **Service Portal** > **Properties**.
2. Click the check box to set the following property to true.

3. Click **Save**.

Create a user criteria record for Service Portal

Create a user criteria record to apply to items in Service Portal and control user access to pages, widgets, widget instances, and search sources.

Before you begin

Role required: admin

About this task

You can apply existing user criteria to records in Service Portal through Service Portal configuration (**Service Portal** > **Service Portal configuration**). You can only create user criteria within the platform UI.

Procedure

1. In the navigation filter, type **Service Portal**.
2. Select a page, widget, or widget instance record.
3. In the related list at the bottom of the record, select the **Can View** or **Cannot View** tab, then click **New**.

   If a user criteria record is already created, you can click **Edit** to apply user criteria to the page, widget, or widget instance.

   User criteria records are stored in the [user_criteria] table.
4. Complete the fields on the form, as appropriate.

Service Portal User Criteria

Field	Description
Name	Name of the criteria record.
Users	User records to match access criteria.
Groups	Group records to match access criteria.
Roles	Roles to match access criteria.
Advanced	Displays or hides the **Script** field.
Script	Defines any additional criteria, and returns true or false. This field is available only if **Advanced** is selected. **Note:** ◦ Because scripts are evaluated dynamically, including scripts in user criteria records can decrease performance. ◦ Do not use a function with its name as answer, that is, answer().
Application	Application scope for the user criteria record.
Active	Activate or deactivates this criteria record.
Companies	Companies to match access criteria.
Locations	Locations to match access criteria.
Departments	Departments to match access criteria.

Field	Description
Match All	Determines whether all elements from each populated criteria field must match. If selected, only users who match all criteria are given access. If cleared, the user must meet one or more of the set criteria to be given access. By default, this check box is cleared so that any condition met provides a match. For example, consider a user criteria record for the following: ◦ Locations A or B ◦ Company C or D With **Match All** selected, only users meeting all these conditions are matched. For example, a user with a location A and a company C. With **Match All** cleared, users meeting any of these conditions are matched. For example, a user with a location B. **Note:** If you select **Match All**, ensure that you do not create contradictory conditions that can never be met. For example, if all users in location A work for company G, then the conditions in this example can never be met.

5. Click **Submit**.

Apply user criteria to a page, widget, or widget instance

Assign user criteria to pages, widgets, or widget instances to limit user access to content in a portal.

Before you begin

Activate the Service Portal User Criteria Support (com.glide.service-portal.user-criteria) plugin and set the `glide.service_portal.user_criteria_enabled` system property to **true**.

Role required: admin or sp_admin

About this task

You can apply several user criteria records to a single portal item.

Procedure

1. In the Service Portal Configuration page (**Service Portal** > **Service Portal Configuration**), open the Page Editor.
2. Select a page from the list.
3. Select a page, widget, or widget instance node from the page tree.
4. Under related lists, click **Who Can View** or **Who Cannot View**.
5. Click **New**.
6. Select a criteria from the **Can View** or **Cannot View** list.

Selecting criteria from the **Can View** or **Cannot View** list applies user criteria records created in Create a user criteria record for Service Portal to the selected page, widget, or widget instance.

7. Click **Save**.

Apply user criteria to a search source

Assign user criteria to search sources to limit user access to content in a portal.

Before you begin

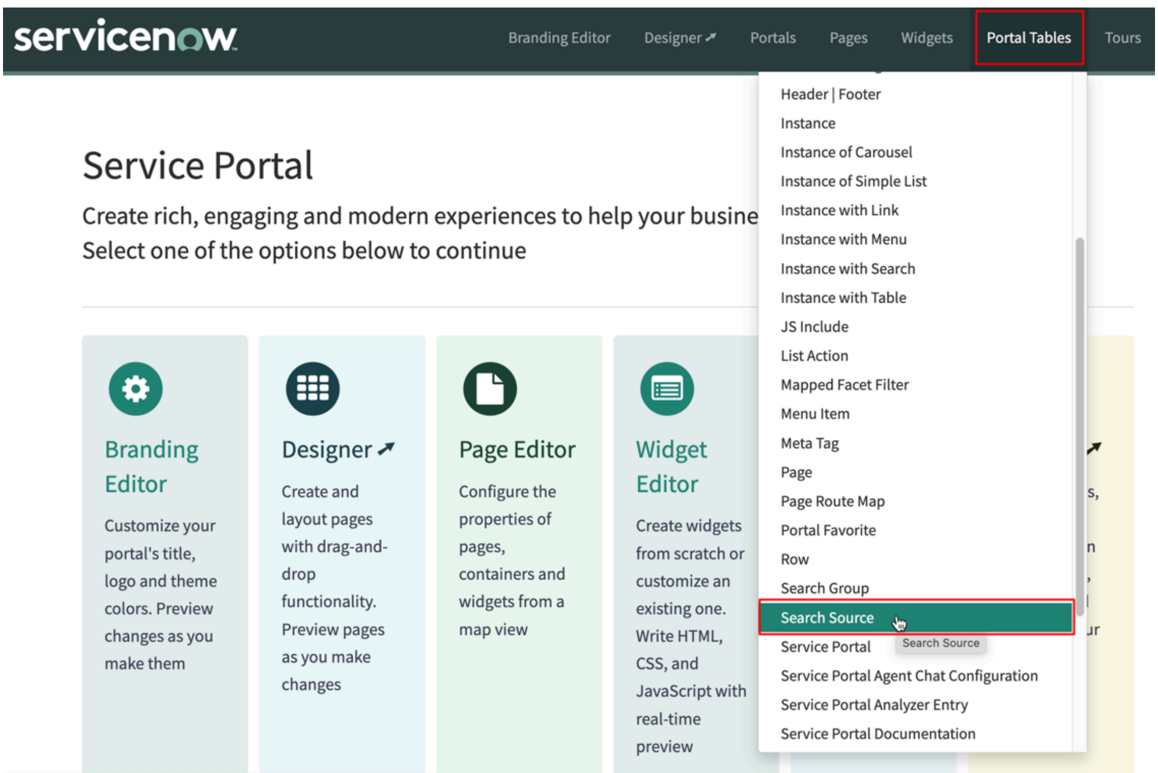
Role required: admin

About this task

You can add user criteria to custom or default Configuring search in a portal.

Procedure

1. In the Service Portal Configuration page (**Service Portal** > **Service Portal Configuration**), navigate to **Portal Tables** > **Search Source** in the header menu.



2. Open the search source record that you would like to modify.
3. Under related lists, click **Who Can View Search Sources** or **Who Cannot View Search Sources**.
4. Click **New**.
5. Select a criteria from the **Can View** or **Cannot View** list.

   Selecting criteria from the **Can View** or **Cannot View** list applies user criteria records created in Create a user criteria record for Service Portal to the selected search source.

6. Click **Save**.

Enable e-signature for Service Portal

You can configure e-signature in Service Portal to require re-authentication from approving users.

Before you begin

The *com.snc.integration.esig.window* system property is supported to enable SSO login in a new window.

Role required: admin

Procedure

1. Activate the Approvals with e-Signature [com.glide.e_signature_approvals] plugin.
2. Navigate to **System Definition** > **e-Signature Registry**.
3. Add any tables you want to require an e-signature for to the list.

Result

With e-signature enabled, approvers are required to provide a password to approve or reject any requests. Authentication with touch ID works in the mobile app. On the mobile web, approvers are still required to enter a password. For more information on configuring e-signature, see Approval with e-signature.

Enable SSO login in a new window

Open a new window for SSO authentication when using e-Signature for approvals.

Before you begin

Security Assertion Markup Language (SAML) login is only supported on the desktop Service Portal.

For additional information, see the e-signature SSO login KB article.

Role required: admin

Procedure

1. Enter the spEsignatureCustom script.
   a. Enter `sys_ui_script.list` in the Filter navigator.
   b. Select **New**, and create a new UI script.
   c. On the UI Script form, enter `spEsignatureCustom` in the API Name field.
   d. In the UI Type field, select **Mobile/Service Portal**.
   e. Paste the spEsignatureCustom script in the **Script** field.
   f. Select **Submit**.
2. Enter the spAuthCustom script.
   a. In the same `sys_ui_script.list` table, create another new UI script by selecting **New**.
   b. On the UI Script form, enter `spAuthCustom` in the API Name field.
   c. In the UI Type field, select **Mobile/Service Portal**.
   d. Paste the spAuthCustom script in the **Script** field.
   e. Select **Submit**.
3. Associate the UI scripts to the JS Include record.

a. Navigate to **Service Portal** > **Portals**.

b. Identify the Service Portal you want to apply the esignature support to and select the Theme.

c. In the related lists, select **JS Includes**.

d. Select **New**.

e. On the form, fill in the fields.

JS Include form

Field	Description
Display name	Name for your JS Include. Enter `spEsignatureCustom` and associate the record with the spEsignatureCustom UI script you created, or enter `spAuthCustom` and associate the record with spAuthCustom you created.
Source	Source for your JS Include record. Select **UI Script**.
UI script	UI script source for your JS Include record. Select either spEsignatureCustom or spAuthCustom depending on the record you're creating.
Application	Application for your JS Include record. The default application is **Global**.
Updated	Field displaying when the record was last updated.
Package	Field that establishes the JS Include package.

f. Select **Submit**.

Result

A new window opens when you use E-Signature for approvals.

spEsignatureCustom script

Paste the spEsignatureCustom script in the sys_ui_script.list script field.

```
angular.module('sn.$sp').provider('spEsignature', function() {
 'use strict';

 this.$get = function spEsignature($q, $http, $window, urlTools,
 xmlUtil) {
  var w = window;
  var esignOW;
  var windowWidth;
  var windowHeight;
  var redirectURL;
```

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```
function isWindowChosen() {
 var postParams = {
  sysparm_scope: 'global',
  sysparm_processor: 'ESignatureAuthUtils',
  sysparm_name: 'isWindowChosen'
 };
 return $http({
  method: 'POST',
  url: '/xmlhttp.do',
  data: urlTools.encodeURIParameters(postParams),
  headers: {
   'Content-Type': 'application/x-www-form-urlencoded'
  },
  transformResponse: function(response) {
   return xmlUtil.getDataFromXml(response);
  }
 }).then(
  function(response) {
   var data = response.data ? response.data[0] : {};
   return data.answer ===  'true'
  },
  function(response) {
   // Handling failure case.
   switch (response.status) {
    default:
    case 404:
     return false;
   }
  });
}

function initiateEsignature() {
 var postParams = {
  sysparm_scope: 'global',
  sysparm_processor: 'ESignatureAuthUtils',
  sysparm_name: 'fetchAuthDetails'
 }
 return $http({
  method: 'POST',
  url: '/xmlhttp.do',
  data: urlTools.encodeURIParameters(postParams),
  headers: {
   'Content-Type': 'application/x-www-form-urlencoded'
  },
  transformResponse: function(response) {
   return xmlUtil.getDataFromXml(response, 'result');
  }
 }).then(
  function(response) {
   var data = response.data ? response.data[0] : {};
   process(data);
  });
}

function process(data) {
 var shouldLogoutFirst = data.logoutFirst === 'true';
 w['windowHeight'] = data.popup_window_height;
```

```
   w['windowWidth'] = data.popup_window_width;
   w['redirectURL'] = data.loginURL;
   if (shouldLogoutFirst)
    openEsignatureWindow(data.logoutURL);
   else
    authenticate();
  }

  function openEsignatureWindow(url) {
   w['esignOW'] = window.open(url, 'esignatureAuthentication',

 'height='+w['windowHeight']+',width='+w['windowWidth']+',top=10
0,left=100,toolbar=0,location=0,menubar=0');
  }

  w['authenticate'] = function(){
   if(w['redirectURL']){
    if(w['esignOW']) //when we signed out previously, a window
 is already opened. reuse it.
     w['esignOW'].location.href = w['redirectURL'];
    else
     openEsignatureWindow(w['redirectURL']);
   }
  };

  w['evaluateRedirect'] = function(msg) {
   w['esignOW'].close();
   if (msg == "saml2 login complete") {
    $window.onReauthenticationComplete(msg);
   }
  };

  return {
   isWindowChosen: isWindowChosen,
   initiateEsignature: initiateEsignature
  };

 };
});
```

spAuthCustom script

Paste the spAuthCustom script in the sys_ui_script.list script field.

```
angular.module('sn.$sp').factory('spAuthModal', function($q,
 spModal, i18n, $http, spAuthentication, glideUserSession,
 cabrillo, $cookies, $window, spUtil, $uibModal, spEsignature) {
 "use strict";

 function _showAuthenticationModal(requestParams, username,
 userSysId) {
  var currentUser;
  var deferred = $q.defer();
  glideUserSession.loadCurrentUser({reload:
 true}).then(function(user) {
   if (!user) {
    deferred.reject({
     error: {
```

```
      status: 'ANONYMOUS',
      message: i18n.getMessage('Not logged in')
     }
    });
    return;
   }
   currentUser = user;
   var serializedUser = {
    sysId: currentUser.userID,
    userName: currentUser.userName,
    firstName: currentUser.firstName,
    lastName: currentUser.lastName
   };

   // hand off to native clients
   if (cabrillo.isNative()) {
    cabrillo.auth.reauthenticate(currentUser).then(function() {
     deferred.resolve(serializedUser);
    }, function(error) {
     if (error && error.status) {
      deferred.reject({
       error: error
      });
     }
     //TODO: Handle rejection a little more gracefully
     deferred.reject();
    });
    return;
   }

   var loginMethod = currentUser.$private.loginMethod;
   if (!loginMethod) {
    // As we were unable to determine the login method via the
HTTP session, trying to get glide_sso_id cookie which is set in
case of multisso login
    var providerSysId = $cookies.get('glide_sso_id');
    loginMethod = providerSysId ? 'multisso' : 'db';
   }

   if (loginMethod === 'saml' || loginMethod === 'oidc' ||
loginMethod === 'multisso') {
    spEsignature.isWindowChosen().then(function(result) {
     var modal;
     if (!spUtil.isMobile() && loginMethod !== 'oidc' && result
=== true) {
      // If enabled, Opening a new window for desktop saml login
      spEsignature.initiateEsignature();
     } else {

glideUserSession.getSsoReauthenticationUrl().then(function(url)
{
       requestParams.externalLoginURL = url;
       openExternalAuthModal(requestParams).then(function(m) {
        modal = m;
       });
      });
     }
```

```
    $window.onReauthenticationComplete = function(result) {
     deferred.resolve(serializedUser);
     if (modal)
      modal.close();
    };
   });
  } else {
   spModal.open({
    title:i18n.getMessage("Approver authentication"),
    message:i18n.getMessage("Additional authentication is
required, enter your usename and password to continue."),
    footerStyle: {border: 'none', 'padding-top': 0},
    widget: 'simpleloginui',
    widgetInput: {},
    shared: requestParams,
    onSubmit: function() {
     return onLoginModalSubmit(requestParams, username);
    }
   }).then(function(confirm) {
    if (confirm.label == i18n.getMessage("OK")) {
     deferred.resolve(serializedUser);
    } else {
     deferred.reject();
    }
   });
  }
 });

 return deferred.promise;
}

function onLoginModalSubmit(requestParams, username) {
 //(1) call login service to verify auth
 //(2) verify same user
 return $q(function(resolve, reject) {
  var errorMessage = null;

  if(!requestParams.username || requestParams.username.trim()
=== "" ||
    !requestParams.password || requestParams.password.trim()
=== "") {
   errorMessage = i18n.getMessage("User name or password
invalid");
  } else if(requestParams.username !== username) {
   errorMessage = i18n.getMessage("Attempted to authenticate as
a different user");
  }

  if(!errorMessage || errorMessage === "") {
   spAuthentication.validateCreds(requestParams.username,
requestParams.password).then(function(res) {
    resolve({status: res.success, errorMessage: res.message});
   });
  } else {
   resolve({status: !errorMessage || errorMessage === "",
errorMessage: errorMessage});
  }
```

servicenow

```
  });

 }

 function openExternalAuthModal(requestParams) {
  var deferred = $q.defer();

  var options = {
   title: i18n.getMessage("Approver authentication"),
   message: '',
   messageOnly: false,
   errorMessage: '',
   input: false,
   label: '',
   size: 'lg',
   value: '',
   required: false,
   footerStyle: {border: 'none', 'padding-top': 0},
   values: false,
   onSubmit: null,
   widget: 'simpleloginui',
   widgetInput: {},
   shared: requestParams,
   buttons: [{label: i18n.getMessage('Cancel'), cancel:true}]
  };

  var widgetURL = spUtil.getWidgetURL(options.widget);
  $http.post(widgetURL,
 options.widgetInput).success(function(response) {
   options.widget = response.result;
   options.widget.options.shared = options.shared;
   var modal = $uibModal.open({
    templateUrl:'sp-modal.html',
    controller: spModalCtrl,
    size: options.size,
    resolve: {
     options: function() {
      return options;
     }
    }
   });

   deferred.resolve(modal);
  });

  return deferred.promise;
 }

 function spModalCtrl($scope, options) {
  $scope.options = options;
  $scope.form = {};

  $scope.buttonClicked = function(button){
   if (button.cancel) {
    $scope.$dismiss();
    return;
   }
```

```
  }
 }

 return {
  prompt: _showAuthenticationModal
 }
}).decorator("spAuthModal", function($delegate)
 { return( $delegate );});
```

Enable external user self-registration for Service Portal

Enable external users to register to a ServiceNow app through Service Portal.

Before you begin

Role required: admin

Complete the previous tasks:

1. Activate External User Registration
2. Configure the registration form for an external user configuration

Role required: admin

About this task

External user self-registration enables a large group of users to register to a ServiceNow app without the help of an administrator. For more information, see Enable external users to self-register to your ServiceNow instance.

Procedure

1. Navigate to **All** > **Service Portal** > **Portals**.
2. Open a portal record.
3. On the form, fill in the **External user registration configuration** field.

   Select a user registration configuration.
4. Click **Update**.

Result

The login widget includes a link to the registration form that you previously configured.

Register your PIV/CAC card for Service Portal login

Register your Personal Identity Verification (PIV) or Common Access Card (CAC) card so that you can log in to your organization's portal without entering a password.

Before you begin

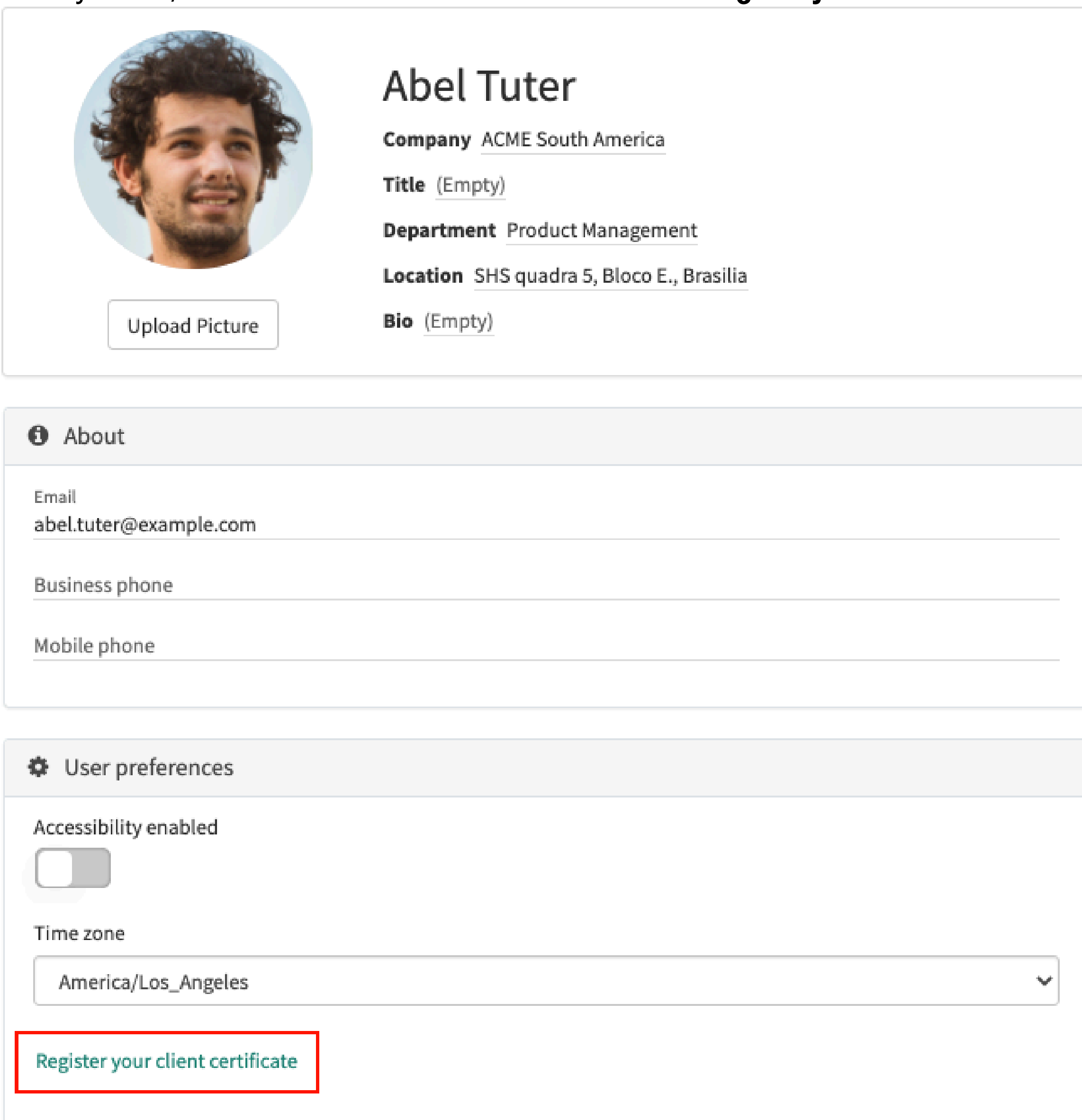
To register your PIV/CAC card, an administrator must activate certificate-based authentication and then set up PIV/CAC authentication. For more information on this setup process, see Personal Identity Verification (PIV) card or Common Access Card (CAC) based authentication.

The following task assumes that you have a card reader connected to your system.

Role required: none

Procedure

1. Log in to a portal using your user name and password.
2. In the portal, open your user profile.
3. Insert your PIV/CAC card into a card reader and then select **Register your client certificate**.



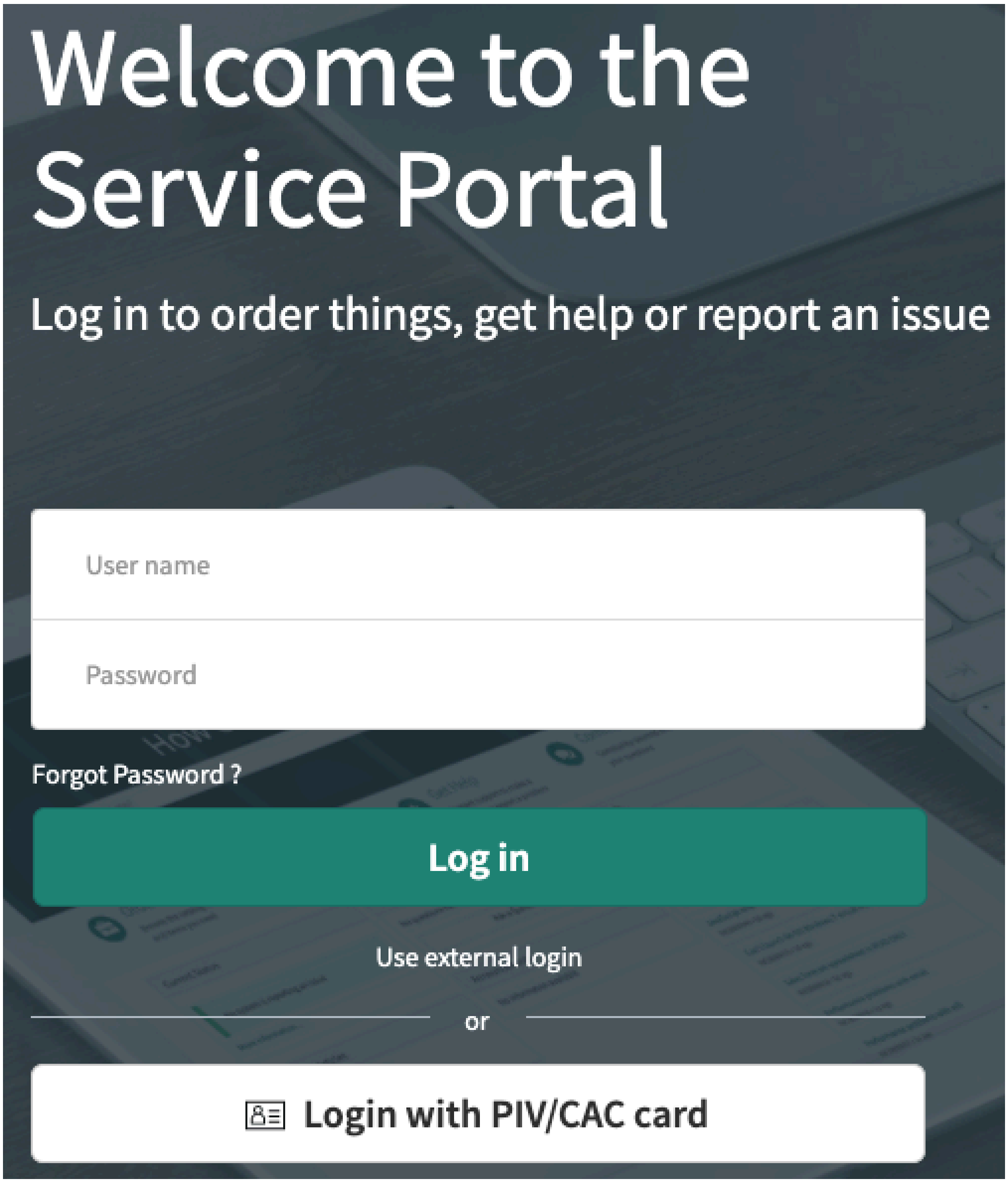
4. In the dialog box that appears, review the PIV/CAC certificate and then select **Register**.

If the registration is successful, the system provides the following alert message: `The PIV/CAC certificate has been successfully registered and linked to the user account.`

Close the dialog box to finish.

Result

The next time you log in to your portal, you can log in using your PIV/CAC card. To log in, insert your PIV/CAC card into a card reader and then select **Login with PIV/CAC card**.



To log out of the portal, select your avatar and then select **Logout**. Then, close the browser window.

Related topics

Login widget

Deactivate a portal

Turn off access to a portal that you no longer want users to visit and optionally redirect them to another portal.

Before you begin

Role required: sp_admin or admin

About this task

After you deactivate a portal, users are either redirected to an alternate portal that you configure, or they receive a message that the portal is inactive.

If an alternate portal is selected, pages are redirected by replacing the URL suffix of the inactive portal with the suffix of the alternate portal. To confirm that users are redirected to the correct page, complete the following steps:

- Verify that all necessary resources, such as knowledge base articles and catalog items, are available on the alternate portal.
- If different pages are used on each portal, set up page route maps to map pages from the inactive portal to the alternate portal. For more information, see Redirect a reference to a page ID.
- If customizations exist for page redirects using the SPEntryPage script include or other methods, test these customizations thoroughly to confirm that there are no conflicts or remove the customizations. For more information, see Single sign-on, logins, and URL redirects.

To support deactivating and reactivating public portals without search engines deindexing their pages, temporary HTTP 302 redirects are used for inactive portals.

Procedure

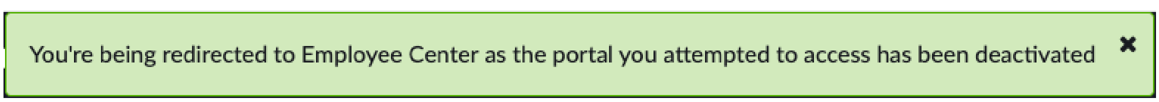
1. Navigate to **All** > **Service Portal** > **Portals**.
2. Select a portal.

   Note: You can't deactivate the default portal on an instance or any portal configured as an alternate portal for an inactive portal. You can't deactivate or redirect to the Mobile Employee Service Portal (/mesp).

3. Select **Inactive**.
4. **Optional:** In the **Alternate portal** field, select an active portal to which to redirect users who attempt to access the inactive portal.
   Multiple inactive portals can redirect to the same alternate portal.
5. Select **Update**.

Result

If you selected an alternate portal, users attempting to access the inactive portal are redirected to the alternate portal. They receive a message informing them that they've been redirected. For example:



If you don't specify an alternate portal, users receive a message that the portal has been deactivated. You can customize these messages from the Message [sys_ui_message] table. For more information see, Message table.

To reactivate a portal, clear the **Inactive** option.

Developing custom widgets

Develop custom widgets for portals using AngularJS, Bootstrap, and the ServiceNow API.

Before you begin

To develop widgets, you need ServiceNow API experience to:

- Run record queries on the server.
- Create and update records.

You need AngularJS experience to:

- Bind variables to client controllers.
- Access server objects in a widget.
- Gather user input.

Optionally, you can build on the Bootstrap template by accessing Bootstrap components.

Parts of a widget

Like Angular directives, widgets execute a specified behavior within a Service Portal page. A widget includes mandatory and optional scripting components.

HTML template

A mandatory widget component.

The HTML template requires knowledge of AngularJS to display and gather data. Use the HTML template to:

- Render the dynamic view that a user sees in the browser using information from the model and controller.
- Bind client script variables to your markup.
- Gather data from the end user.

Client script

A mandatory widget component.

A client script requires knowledge of both the ServiceNow API and AngularJS to create a client controller. Use the client script to:

- Map server data from JavaScript and JSON objects to client objects.
- Process data before rendering it.
- Pass data to the HTML template.
- Pass user input and data back to the server for processing.

Server script

A mandatory widget component.

A server script requires knowledge of the ServiceNow API to work with record data. Use the server script to:

- Set the initial state of the widget.
- Send record data to the widget client script using the **data** variable.
- Run server-side queries.

Link function

An optional widget component.

The link function requires knowledge of AngularJS. Use a link function to directly manipulate the DOM.

Option schema

An optional widget component.

Allows a Service Portal admin to configure a widget. Use the option schema to:

- Specify the parameters for a widget.
- Allow admin users to define instance options for a widget instance.
- Develop flexible, reusable widgets.

Angular Providers

An optional widget component.

Angular Providers require knowledge of AngularJS. Use Angular Providers to:

- Keep widgets in sync when changing records or filters.
- Share context between widgets.
- Maintain and persist state.
- Create reusable behaviors and UI components and inject them into multiple widgets.

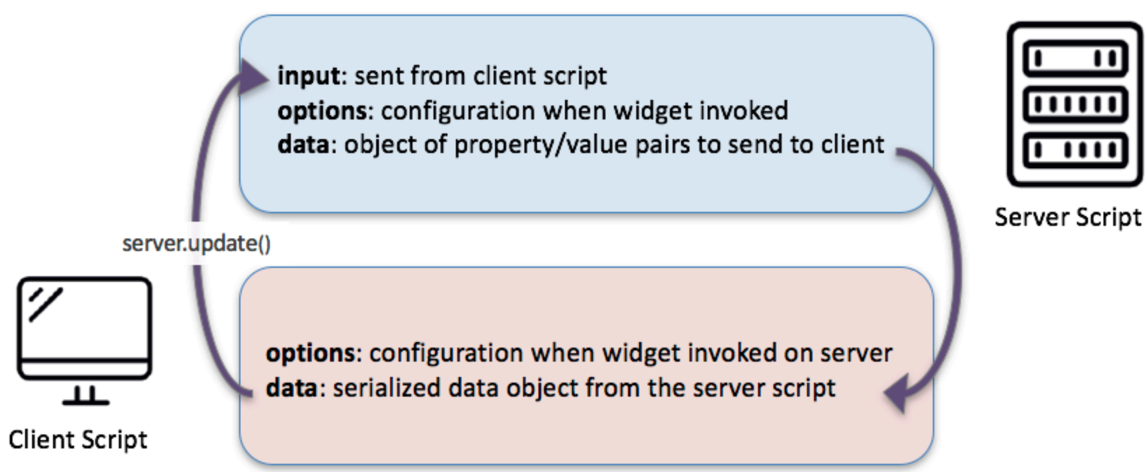
Dependencies

An optional widget component.

A widget dependency is an external resource used by your widget such as JavaScript or CSS files.

Global objects in widgets

When a widget begins to render for the first time on a page, the server script executes first and accesses three global objects: **input**, **options**, and **data**. Because the **input** variable is a data object sent from the client script, this variable is undefined when first initialized.



When a widget is first instantiated, the server script:

1. Initializes an empty **data** object.
2. Initializes the **input** object with any data sent from the client controller, or the **options** object with any data used to initialize the widget.
3. Sends the **data** object to the client controller as JSON.

The client script:

1. Accesses the server **data** object using `c.data`.

   Note: By default, widgets use the **c** variable to represent the controller instance using `controller as` syntax. You can change this variable when creating or cloning widgets.

2. Uses `server.update()` to post changes to the data model. This method updates the server script using the **input** object.

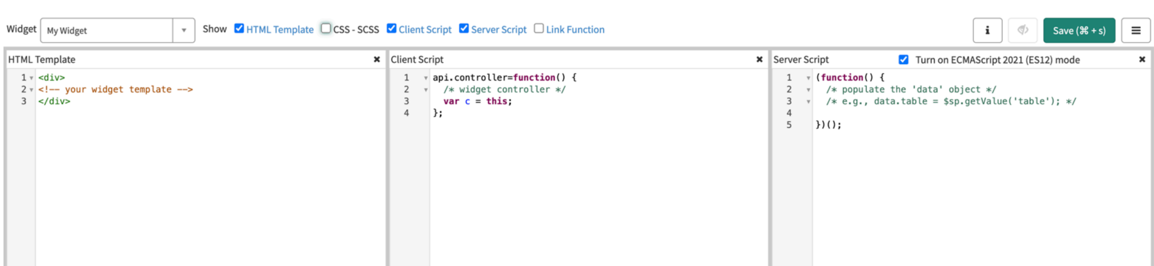
   Note: After calling `server.update()`, the client script **data** object is automatically overwritten by the server script **data** object.

3. Uses `c.options` to access the values used to invoke the widget on the server. This object is read-only.

Using the Widget Editor

When you create a widget, a record is created in the sp_widget table. However, you can use the Widget Editor in Service Portal Configuration as your scripting environment. The Widget Editor is a full page application similar to an IDE. You can show the parts of the widget you want to edit and hide the rest, while previewing your changes in real time.

Note: For server-side scripts, you can turn on using the ECMAScript 2021 (ES12) JavaScript mode if your application uses ES5 Standards mode or Compatibility mode. Scripts in applications with the JavaScript mode set to ECMAScript 2021 (ES12) use ECMAScript 2021 (ES12) by default. For more information, see Turn on ECMAScript 2021 (ES12) mode for a script.



General guidelines for developing widgets

When developing custom widgets, keep these general guidelines in mind for optimal performance, scalable development, and a good user experience.

Create a default state that provides an example to the end user

A widget does not have instance options defined when initially added to a page. A widget in this empty state can appear blank and cause confusion. In situations where a widget requires some initial configuration, ensure that your widget has a default state that communicates to the admin what configuration is necessary.

Widgets can also be created with demo data. Demo data can also be used to:

- Clearly demonstrate the widget functionality to the user.
- Provide data when previewing the widget in the widget editor. (Demo data is not visible in the designer).

Learn more: Tutorial: Build a custom widget.

Embed a widget rather than clone when possible

Embedding an existing widget into your custom widget takes advantage of pre-existing functionality without cloning or duplicating code. You can still pass parameters into the embedded widget to control its behavior.

Learn more: Embed an existing widget

Avoid using large data sets to improve performance

Querying data, evaluating ACLs, running business rules, and data processing take time and can slow performance. Determine how much data portal users need and then apply the appropriate limits and filters to your scripts and queries. Isolate widgets that require significant data or processing to their own separate pages in the portal. Avoid implementing the following items that use large data sets:

- Scripted menu items that load large amounts of data, which can cause every page in the portal to load slowly.
- Large files and attachments, such as high-definition media files or fonts from the Attachments [sys_attachment] table.
- Auto-refreshing widgets. Every time a widget's client controller calls *`server.update()`*, *`spUtil.update()`*, *`server.refresh()`*, or *`spUtil.refresh()`*, the application runs the widget's server script and sends a data object back to the client.
- Unfiltered record watchers. The *`recordWatch()`* function watches for updates to a table or filter and returns the value from the callback function. Adding filters for specific fields to watch reduces the number of calls a widget makes to the server. Specifying when to refresh widgets in response to a record producer notifying the client that there is an update in the callback function can also improve performance.
- Server-side scripts with GlideRecord queries without the `setLimit` function. Using the `setLimit` function can restrict the number of records returned and improve response time on queries. For added flexibility, you can tie this limit to an instance option rather than assigning a hard-coded value (for example: `gr.setLimit(options.limit || 100)`).

Learn more:

- Six common performance pitfalls in Service Portal and how to avoid them [KB0634588]
- spUtil - recordWatch
- GlideRecord setLimit Function

Create a directive instead of embedding a complex widget

When an embedded widget is called from the server, all the scripts associated with that widget are returned. If you only need a subsection of a widget, embedding the entire widget creates unnecessary overhead. Instead, use directives to share lightweight code between widgets. Directives are useful, for example, when building UI components. Complex components with server-side and client-side functionality are best left as widgets. Use a directive instead of an embedded widget to:

- Share scope or custom scope behavior with multiple widgets.
- Share a reusable, lightweight subsection of a widget.
- Share a common UI feature, such as a list or an avatar.
- Augment widget behavior.

Learn more: Reuse components with Angular Providers.

Use a service or factory to share data and persist state

Data services and factories maintain and persist state in a widget without requiring multiple calls to the server, enabling you to:

- Keep widgets synchronized when changing records or filters.
- Share data between widgets.
- Develop more performant widgets.

Learn more: Reuse components with Angular Providers.

Handle events with a publish/subscribe service

Avoid using $broadcast in the DOM. *`$broadcast`* dispatches the event name to all child scopes notifying registered listeners, which can be an expensive call that requires the use of the *`$rootScope`* global object.

Instead, use a publish/subscribe service to handle events. When using a publish/subscribe service, a clear relationship forms between your widgets through callback handlers. In this model, you can better control the state of your events.

Use REST calls or `server.get` to fetch data from the server

When you call `server.update()`, the entire widget is returned from the server. If your widget includes divergent code paths, multiple calls to update the server can affect performance. As a rule, use your server script to set up the initial state of your widget. For subsequent updates, use scripted REST APIs that call script includes on your instance. This practice:

- Separates business logic from UI elements.
- Centralizes your code, allowing changes to be made in one place.

You can also use `server.get` to pass information to the server. Use this function along with `input.action` to execute specific parts of the server script.

Develop with localization, accessibility, and UI in mind

To create the best experience for your users, follow these guidelines:

- Consider the impact of your widget in a mobile environment. For example, avoid using mouse-over and other events that do not translate to a mobile device.
- Use SCSS variables to reuse items. See SCSS variables.
- Use variable names when using colors.
- Wrap strings for translation in localization APIs. See Internationalize a widget.

Remove unused Angular Providers from client script

For easier maintenance, remove any unused Angular Providers that were injected into the client script function statement.

Avoid using <script> tags in HTML templates

To lessen the likelihood of production issues in Service Portal, avoid using inline templates using <script> tags in a widget's HTML template. Instead, create a related Angular ng-template record for the widget.

Tutorial: Build a custom widget

Follow this tutorial to build a custom widget that displays Service Catalog items. Use this tutorial as a model to help you understand the advanced scripting power of the Service Portal.

In this tutorial, you will create the Quick Order widget. This widget:

- Displays popular items to the user prior to any search.
- Queries the Service Catalog and displays available options to the user.
- Includes an embedded SC Catalog Item widget, allowing the user to view and order items within the Quick Order widget.
- Uses an Angular Provider to display a category icon beside each queried item.

Create a widget and set up a template

Create the Quick Order widget to query items in the Service Catalog.

Before you begin

Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration** and click **Widget Editor**.
2. Click **Create a new widget**.
3. Define the following values.

    - **Widget Name**: Quick Order
    - **Widget ID**: quick_order
    - **Create a test page**: Active
    - **Page ID**: quick_order

    Adding a widget to a test page creates a record in each of the following tables:

    - sp_page
    - sp_container
    - sp_row

- sp_column
- sp_instance
- sp_widget

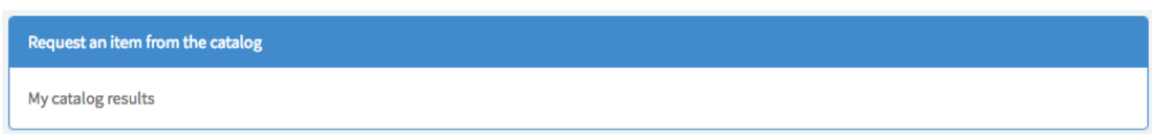
Note: You can use the Page Editor in Service Portal Configuration to view the hierarchy of elements on your test page.

4. Click **Submit**.
5. From the **Widget Editor**, open the Quick Order widget.
6. Add the following simple template to the HTML field.

```
<div class="panel panel-primary">
 <div class="panel-heading">Request an item from the
 catalog</div>
 <div class="panel-body">
   My catalog results
 </div>
</div>
```

7. Click **Save**.
8. Preview your test page in a new tab using the following URL: `<yourInstanceUrl>/sp?id=quick_order`.

   Your widget template displays on the test page.



Add a server script to query an instance table

After adding your widget and creating a basic template, you can define advanced client and server scripts that enable users to query data from an instance table. You can pass the data model between the client and server by querying data from the database, displaying it to the user, and sending any updates back to the server.

Before you begin

Role required: admin or sp_admin

Procedure

1. From the **Widget Editor**, open the Quick Order widget.
2. Select **Server Script** to open the server script field.
3. Replace the default server script with the following custom script.

```
(function() {
 if (input.keywords != null && input.keywords != '')
  data.items = getCatalogItems(input.keywords);

 function getCatalogItems(keywords) {
  var sc = new GlideRecord('sc_cat_item');
  sc.addActiveQuery();
  sc.addQuery('123TEXTQUERY321', keywords);
```

```
  sc.addQuery('sys_class_name', 'NOT
IN', 'sc_cat_item_wizard,sc_cat_item_content');
  sc.addQuery('sc_catalogs', 'e0d08b13c3330100c8b837659bba8fb4');
  sc.setLimit(100);
  sc.orderByDesc("ir_query_score");
  sc.query();
  var results = [];
  while (sc.next()) {
   if (!$sp.canReadRecord(sc))
    continue;

   var item = {};
   $sp.getRecordDisplayValues(item, sc, 'name,price,sys_id');
   item.category = sc.getValue('category');
   results.push(item);
  }
  return results;
 }
})();
```

This script performs a keyword search on the sc_cat_item table using the 123TEXTQUERY321 query method.

4. Replace the HTML template with the following script:

```
<div class="panel panel-primary">
 <div class="panel-heading">Request an item from the
 catalog</div>
 <div class="panel-body">
   <input class="form-control" type="search" placeholder="Start
 typing here to search the list of catalog items"
 ng-model="c.data.keywords" ng-change="c.server.update()"
 ng-model-options="{debounce: 250}" />
   <ul class="list-group result-container">
     <li class="list-group-item" ng-repeat="item in
 c.data.items">
       <a href>{{item.name}}</a><span
 class="pull-right">{{item.price}}</span>
     </li>
   </ul>
 </div>
</div>
```

This template adds a search field and displays the results of the query performed in the server script using the following Angular directives. To learn more about these directives, review the Angular API Reference.

Angular directives used in the template

Angular directive	Description
ng-model	Automatically reads and writes value changes to the model variable `c.data.keywords`.
ng-model-options	Configures ng-model behavior. In this template, ng-model updates the model after a user has stopped typing for 250 milliseconds.

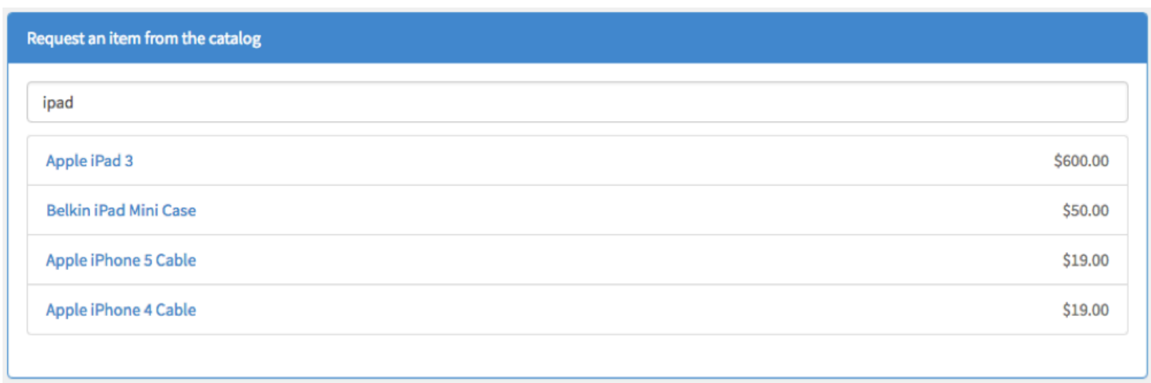
Angular directive	Description
ng-change	Executes `c.server.update()` after the model value changes. This function posts the data object to the server script. After the script is executed, the data object is automatically updated with the new values from the server generated data object.
ng-repeat	Creates a template from the parent element and child elements. For each `item in c.data.items`, an instance of the template is created and the expressions `{{item.name}}` and `{{item.price}}` are replaced with the values from each item.

5. Add the following script to the **CSS - SCSS** field:

```
.result-container {
 margin-top: 10px;
}
```

6. Refresh your test page preview to view the changes.

As you type in the search box, matching catalog items appear. Try searching for **ipad**.



Manage the empty state of a widget

Display a list of popular items to the user before any search terms are entered.

Before you begin

Role required: admin or sp_admin

About this task

Because no search has been executed when the widget initializes, the server **input** variable is undefined. This empty state may cause confusion when a user first interacts with the widget. To solve this issue, give your widget something to display when the **input** variable is empty. This initial data can guide your users when initially interacting with your widget.

Procedure

1. From the **Widget Editor**, open the Quick Order widget.

2. Replace the existing server script with the following script:

```
(function() {
    if (input.keywords != null && input.keywords != '')
        data.items = getCatalogItems(input.keywords);
    else data.items = getPopularItems();
```

```
    function getCatalogItems(keywords) {
        var sc = new GlideRecord('sc_cat_item');
        sc.addActiveQuery();
        sc.addQuery('123TEXTQUERY321', keywords);
        sc.addQuery('sys_class_name', 'NOT
 IN', 'sc_cat_item_wizard,sc_cat_item_content');
        sc.addQuery('sc_catalogs', 'e0d08b13c3330100c8b837659bba8fb4');
        sc.setLimit(100);
        sc.orderByDesc("ir_query_score");
        sc.query();
        var results = [];
        while (sc.next()) {
            if (!$sp.canReadRecord(sc))
                continue;

            var item = {};
            $sp.getRecordDisplayValues(item,
 sc, 'name,price,sys_id');
            item.category = sc.getValue('category');
            results.push(item);
        }
        return results;
    }

    function getPopularItems() {
        var items = [];
        var count = new GlideAggregate('sc_req_item');
        count.addAggregate('COUNT', 'cat_item');
        count.groupBy('cat_item');
        count.addQuery('cat_item.sys_class_name', 'NOT
 IN', 'sc_cat_item_guide,sc_cat_item_wizard,sc_cat_item_content');

 count.addQuery('cat_item.sc_catalogs', 'e0d08b13c3330100c8b837659bba8fb4
');
        count.orderByAggregate('COUNT', 'cat_item');
        count.query();
        while (count.next() && items.length < 9) {
            if (!$sp.canReadRecord("sc_cat_item",
 count.cat_item.sys_id.getDisplayValue()))
                continue; // user does not have permission to see this item

            var item = {};
            item.name = count.cat_item.name.getDisplayValue();
            item.category = count.cat_item.category.toString();
            item.price =
 count.cat_item.price.getDisplayValue();
            item.sys_id =
 count.cat_item.sys_id.getDisplayValue();
            items.push(item);
        }
        return items;
    }
})();
```

This script introduces a new function `getPopularItems()` to query the database and return popular items when the **input** variable is empty.

3. Replace the HTML template with the following script:

```
<div class="panel panel-primary">
  <div class="panel-heading">Request an item from the
 catalog</div>
  <div class="panel-body">
    <input class="form-control" type="search"
 placeholder="Start typing here to search the list
 of catalog items" ng-model="c.data.keywords"
 ng-change="c.server.update()" ng-model-options="{debounce:
 250}" />
    <h5 ng-if="!c.data.keywords">Showing the most popular
 items</h5>
    <ul class="list-group result-container">
      <li class="list-group-item" ng-repeat="item in
 c.data.items">
        <a href>{{item.name}}</a><span
 class="pull-right">{{item.price}}</span>
      </li>
    </ul>
  </div>
  <div class="panel-footer" ng-if="c.data.keywords">
    <ng-pluralize count="c.data.items.length"
                 when="{'0': 'No items found for ',
                     '1': 'One item matching ',
                     'other': 'Found {} items matching '}">
    </ng-pluralize>
    {{c.data.keywords}}
  </div>
</div>
```

This script provides a template to display the popular items returned from the server script.

4. Refresh your test page preview to view the changes.

The widget displays popular items to the user prior to any search input.

Embed an existing widget

Enable the user to view and purchase Service Catalog items in the Quick Order widget by embedding the SC Catalog Item widget.

Before you begin

Role required: admin or sp_admin

About this task

Instead of duplicating code, you can embed widgets to leverage pre-existing functionality. The SC Catalog Item widget is a base system widget that enables the user to view and purchase Service Catalog items.

Procedure

1. Inspect the SC Catalog Item widget.
   Before embedding the SC Catalog Item widget, inspect the widget to understand what data it needs access to. You may need to update your Quick Order widget client or server script to make sure that the correct data is passed to the embedded widget.

   a. Navigate to `<yourInstanceURL>/sp_config?id=widget_editor`.

   b. Open the SC Catalog Item widget.

   c. Note that the widget ID is `widget-sc-cat-item`.
   You will use this ID to embed the widget model in the client script.

   d. Examine the server script.

   Notice that the **data** object includes a sys_id property populated by either the **input** or **options** objects. If neither **input** nor **options** include a sys_id, the $sp.getParameter() method retrieves the sys_id from the request query string.

   Server script

```
  if (input)
    data.sys_id = input.sys_id;
  else if (options.sys_id)
    data.sys_id = options.sys_id;
  else
    data.sys_id = $sp.getParameter("sys_id") || $sp.getParameter('sl_sys_id');

  if (!data.sys_id)
    return;

  data._attachmentGUID = gs.generateGUID();
  var validatedItem = new sn_sc.CatItem('' + data.sys_id);
  if (!validatedItem.canView())
    return;

  data.sc_cat_item = $sp.getCatalogItem(data.sys_id, true);
  if (data.sc_cat_item.category) {
    var categoryJS = new sn_sc.CatCategory(data.sc_cat_item.category);
    data.category = {
      name: categoryJS.getTitle(),
      url: '?id='+data.sc_category_page+'&sys_id=' + data.sc_cat_item.category
    }
  }

  $sp.logStat('Catalog View', data.sc_cat_item.sys_class_name, data.sys_id, data.sc_cat_item.name);
})()
```

   To populate the **input** object, you can pass a catalog item sys_id from the Quick Order widget client script.

2. From the **Widget Editor**, open the Quick Order widget.
3. Replace the Quick Order widget client script with the following script.

```
function($location, spUtil) {
    var c = this;

    c.select = function(item_id) {
        if (c.openItem == item_id) {
            c.openItem = null;
            return;
        }

        renderCatalogItemWidget(item_id);
    }

    function renderCatalogItemWidget(item_id) {
        c.catalogItemWidget = null;
        spUtil.get("widget-sc-cat-item", {
            sys_id: item_id
        }).then(function(response) {
            c.catalogItemWidget = response;
            c.openItem = item_id;
        });
    }
}
```

This script uses `spUtil.get()` to retrieve the widget model by ID (`widget-sc-cat-item`) and define the `{sys_id: item_id}` object. This object posts to the server script as **input**.

4. Replace the HTML template with the following script:

```
<div class="panel panel-primary">
  <div class="panel-heading">Request an item from the
 catalog</div>
  <div class="panel-body">
    <input class="form-control" type="search"
 placeholder="Start typing here to search the list
 of catalog items" ng-model="c.data.keywords"
 ng-change="c.server.update()" ng-model-options="{debounce:
 250}" />
    <h5 ng-if="!c.data.keywords">Showing the most popular
 items</h5>
    <ul class="list-group result-container">
      <li class="list-group-item" ng-repeat="item in
 c.data.items">
        <a href
 ng-click="c.select(item.sys_id)">{{item.name}}</a><span
 class="pull-right">{{item.price}}</span>
        <div class="catalog-item" ng-if="item.sys_id ==
 c.openItem">
          <sp-widget ng-if="c.catalogItemWidget"
 widget="c.catalogItemWidget" />
        </div>
      </li>
    </ul>
  </div>
  <div class="panel-footer" ng-if="c.data.keywords">
    <ng-pluralize count="c.data.items.length"
```

```
                    when="{'0': 'No items found for ',
                        '1': 'One item matching ',
                        'other': 'Found {} items matching '}">
    </ng-pluralize>
    {{c.data.keywords}}
  </div>
</div>
```

This template:

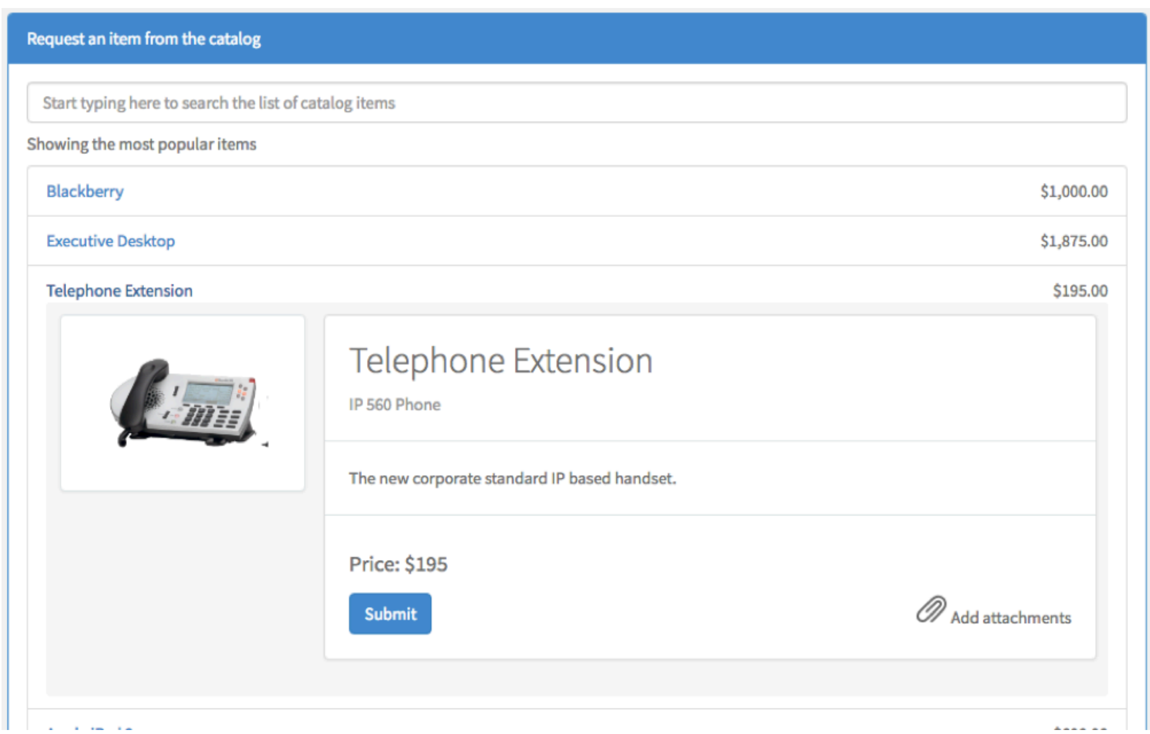
- Adds on-click behavior using the ng-click directive.
- Displays the embedded SC Catalog Item widget using the sp-widget directive.

5. Replace the CSS with the following script:

```
.result-container {
  margin-top: 10px;
}

.catalog-item {
  background-color: #f5f5f5;
  padding: 10px;
  @include border-top-radius($panel-border-radius);
  @include border-bottom-radius($panel-border-radius);
}
```

6. Refresh your test page preview to view the changes.

   When you select a search result, the item opens in the embedded SC Catalog Item widget.



Create a reusable directive and add it to a widget

Angular Providers are reusable components that can be added to multiple widgets. Using the Widget Angular Providers table, create a directive that shows a category icon next to each result in the Quick Order widget.

Before you begin

Role required: admin or sp_admin

About this task

Angular Providers let you build angular directives and services that can be injected into your client script controller. The code in a Provider differs from a typical Angular directive or service because it must be anonymous, without being appended to a specific module.

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration** > **Portal Tables** > **Widget Angular Provider**.
   The Widget Angular Providers table opens.
2. Select **New** to create a new record.
3. Fill out the form.

   a. Add the type and name.

   - **Type**: Directive
   - **Name**: categoryIcon

   b. Add the client script.

```
function() {
    return {
        template: '<span class="fa fa-stack fa-lg"><i class="fa fa-circle
fa-stack-2x"></i><i class="fa fa-{{::icon}} fa-stack-1x fa-inverse"></i></span>',
        restrict: 'E',
        replace: true,
        scope: {
            category: '='
        },
        link: function(scope, element) {

            var _iconMap = {
                "b06546f23731300054b6a3549dbe5dd8": "tablet",
                /* Tablets */
                "15706fc0a0a0aa7007fc21e1ab70c2f": "question",
                /* Can we help you? */
                "d68eb4d637b1300054b6a3549dbe5db2": "mobile-phone",
                /* Mobiles */
                "109cdff8c6112276003b17991a09ad65": "print",
                /* Office and Print */
                "5d643c6a3771300054b6a3549dbe5db0": "print",
                /* Printers */
                "2c0b59874f7b4200086eeed18110c71f": "plug",
                /* Peripherals */
                "2809952237b1300054b6a3549dbe5dd4": "desktop",
                /* Software */
```

```
            };

            scope.icon = _iconMap[scope.category]
 || "shopping-cart";
        }
    }
}
```

This script associates the sys_id of the Category record with the Service Catalog item. The icon that displays is the icon defined in the Category record in the Service Catalog.

c. Select **Save**.

4. Associate the new Angular directive with the Quick Order Widget.
   a. Navigate to **All** > **Service Portal** > **Widgets**.
   b. Open the Quick Order widget.
   c. Under **Related Lists**, select **Angular Providers**.
   d. In the Angular Providers list, select **Edit** and associate the categoryIcon Angular Provider with the Quick Order widget.
   e. Select **Save**.
5. Add the categoryIcon directive to your Quick Order HTML template.

   a. From the **Widget Editor**, open the Quick Order widget.

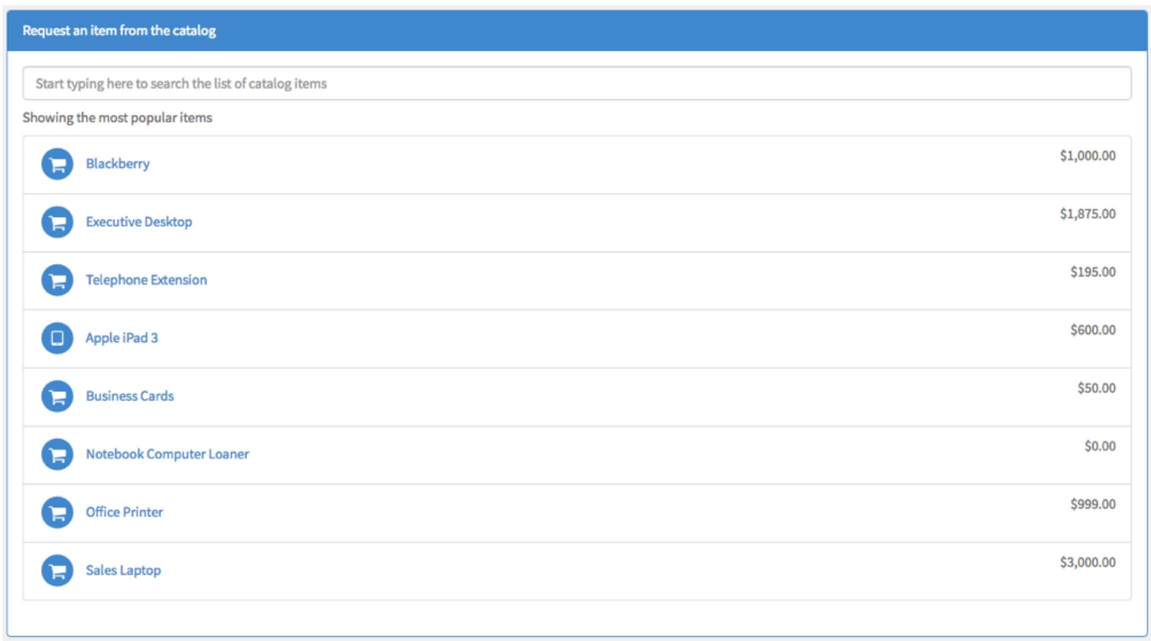
   b. Replace the HTML template with the following script.

```
<div class="panel panel-primary">
  <div class="panel-heading">Request an item from the
 catalog</div>
  <div class="panel-body">
    <input class="form-control" type="search"
 placeholder="Start typing here to search the
 list of catalog items" ng-model="c.data.keywords"
 ng-change="c.server.update()" ng-model-options="{debounce:
 250}" />
    <h5 ng-if="!c.data.keywords">Showing the most popular
 items</h5>
    <ul class="list-group result-container">
      <li class="list-group-item" ng-repeat="item in
 c.data.items">
        <a href
 ng-click="c.select(item.sys_id)"><category-icon
 category="item.category" style="margin-right:
 10px"></category-icon>{{item.name}}</a><span
 class="pull-right">{{item.price}}</span>
        <div class="catalog-item" ng-if="item.sys_id ==
 c.openItem">
            <sp-widget ng-if="c.catalogItemWidget"
 widget="c.catalogItemWidget" />
          </div>
      </li>
    </ul>
  </div>
```

```
  <div class="panel-footer" ng-if="c.data.keywords">
    <ng-pluralize count="c.data.items.length"
                  when="{'0': 'No items found for ',
                      '1': 'One item matching ',
                      'other': 'Found {} items matching '}">
    </ng-pluralize>
    {{c.data.keywords}}
  </div>
</div>
```

6. Refresh your test page preview to view the changes.

   A category icon displays beside each result.



Clone a widget

Take advantage of existing code by cloning and editing an existing widget.

Before you begin

Role required: admin or sp_admin

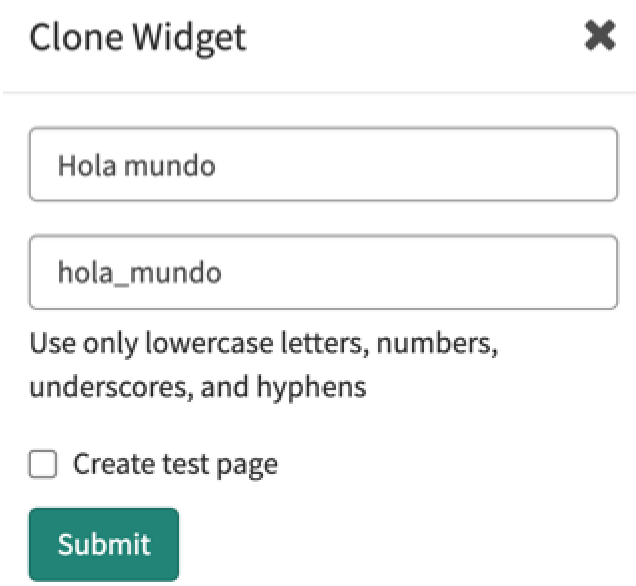
About this task

Note: Base system widgets are read-only so you can benefit from future updates. To make changes, you can clone base system widgets. However, cloned widgets are considered custom and don't benefit from future updates to the widgets they were cloned from.

Procedure

1. Open the Widget Editor in the Service Portal Configuration page, then select an existing widget from the **Select a widget** list.
   For example, select **Hello World 2**.
2. From the list menu in the widget header, click **Clone "Hello World 2"**.

Clone a widget

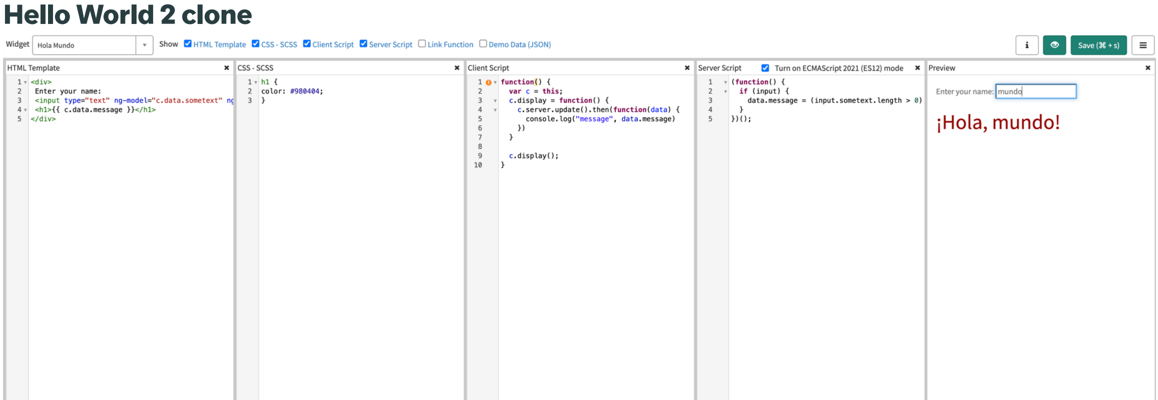


3. Enter a name for the cloned widget.
   The widget ID is created automatically based on the widget name.
4. **Optional:** Select **Create test page** to automatically create a page containing the widget.
5. Use the check boxes to show or hide the different components of the widget editor as needed.

   Make changes to the HTML Template, CSS, client script, server script, or the link function.

   > **Note:** For server-side scripts, you can turn on using the ECMAScript 2021 (ES12) JavaScript mode if your application uses ES5 Standards mode or Compatibility mode. Scripts in applications with the JavaScript mode set to ECMAScript 2021 (ES12) use ECMAScript 2021 (ES12) by default. For more information, see Turn on ECMAScript 2021 (ES12) mode for a script.

   Hello World 2 clone

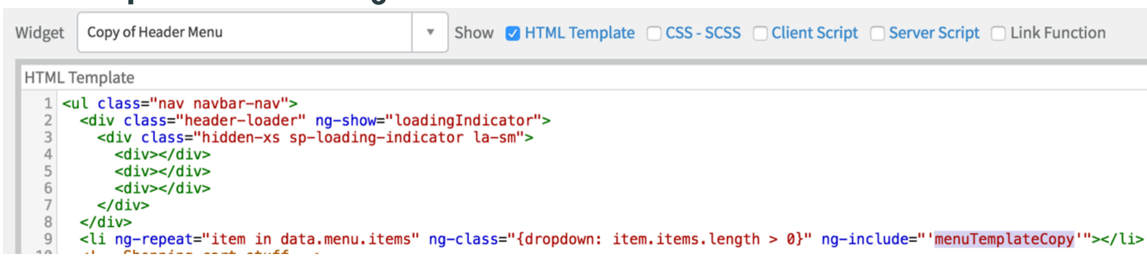
6. In order to enable a preview of your widget, use **Enable Preview** from the menu.
   Use the eye icon that appears to show or hide a preview of your widget.

What to do next

If you clone a widget that uses the Angular ng-template, you must manually clone the template and change the name of the template reference in the widget.

For example, the header menu widget uses the Angular ng-template `menuTemplate`. If you clone the header menu widget, you must also clone the `menuTemplate` and give the clone a unique name. When you open the clone of the header menu widget, you can see a reference to the menuTemplate in the HTML.

menuTemplate in header widget HTML



Create a new widget

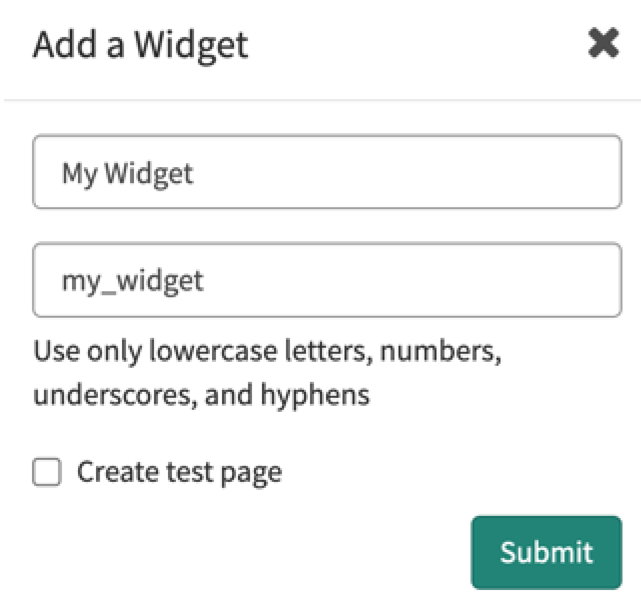
Create a new widget to build a custom widget from scratch.

Before you begin

Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration**.
2. Select **Widget Editor**.
3. Click **Create a new widget**.
4. Enter a name for the new widget.
   The widget ID is created automatically based on the widget name. You can then select **Create test page** to automatically create a page containing the widget.

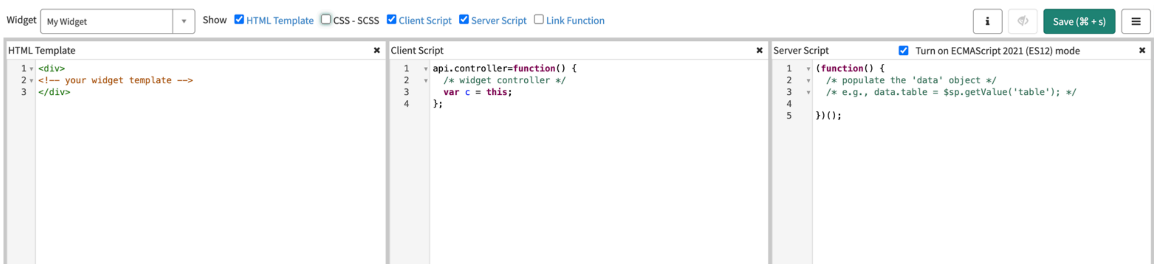


Note: After completing development of a widget with a test page, delete the test page. Maintaining test pages can create clutter when managing pages.

5. Click **Submit**.

The widget HTML template, client script, and server script display in the widget editor. Basic script templates are included as a guide.

Note: For server-side scripts, you can turn on using the ECMAScript 2021 (ES12) JavaScript mode if your application uses ES5 Standards mode or Compatibility mode. Scripts in applications with the JavaScript mode set to ECMAScript 2021 (ES12) use ECMAScript 2021 (ES12) by default. For more information, see Turn on ECMAScript 2021 (ES12) mode for a script.



Widget option schema

Widget instances allow users to uniquely configure each widget they add to a page. Use the option schema to define the parameters for your widget.

Storing instance options

When developing a widget, you can edit the option schema to create parameters for your widget, or you can create a table to store instance options. If you edit the existing option schema, any instance options defined are stored in JSON format in the **Additional options, JSON format** field in the sp_instance table. The following field types are available:

- String
- Boolean
- Integer
- Reference
- Choice
- Field_list (depends on table)
- Field_name (depends on table)
- Glide_list

To use other field types not supported in the option schema, create an extension table to store your custom widget option schema. Using a table enables you to:

- Add any ServiceNow field type, including fields with advanced customization, to the option schema.
- Define a complex option schema.
- Search and filter instance options.

Note: While storing options in a table enables you to define more complex options, this method is more difficult to maintain than editing the option schema. To avoid creating unnecessary tables and adding additional server calls to your widget, edit the existing option schema when possible. Store options in a table only when complex or searchable options are required.

Using options in a widget

Access options in the widget from both the client script and the server script using the **options** global variable. You can access to any option value in your widget client script or server script using `options.optionName`.

Client script

```
function() {
  /* widget controller */
  var c = this;
    console.log(c.options.text_color) //Outputs the text_color
 option for this instance
}
```

Server script

```
(function() {
     $sp.log(options.text_color) //Logs the value of the
 text_color option to the browser console.
})();
```

Defining default options

Before an option value is set on an instance, it appears as an undefined value when you access that option variable. Use the widget server script to specify default values for your options.

```
(function() {
  options.text_color=options.text_color||"blue";
  options.maximum_entry_count=options.maximum_entry_count||5;
})
```

Edit the widget option schema

Widget instances allow users to uniquely configure each widget they add to a page. Edit the option schema to define basic parameters for your widget.

Before you begin

You must have cloned or created a new widget.

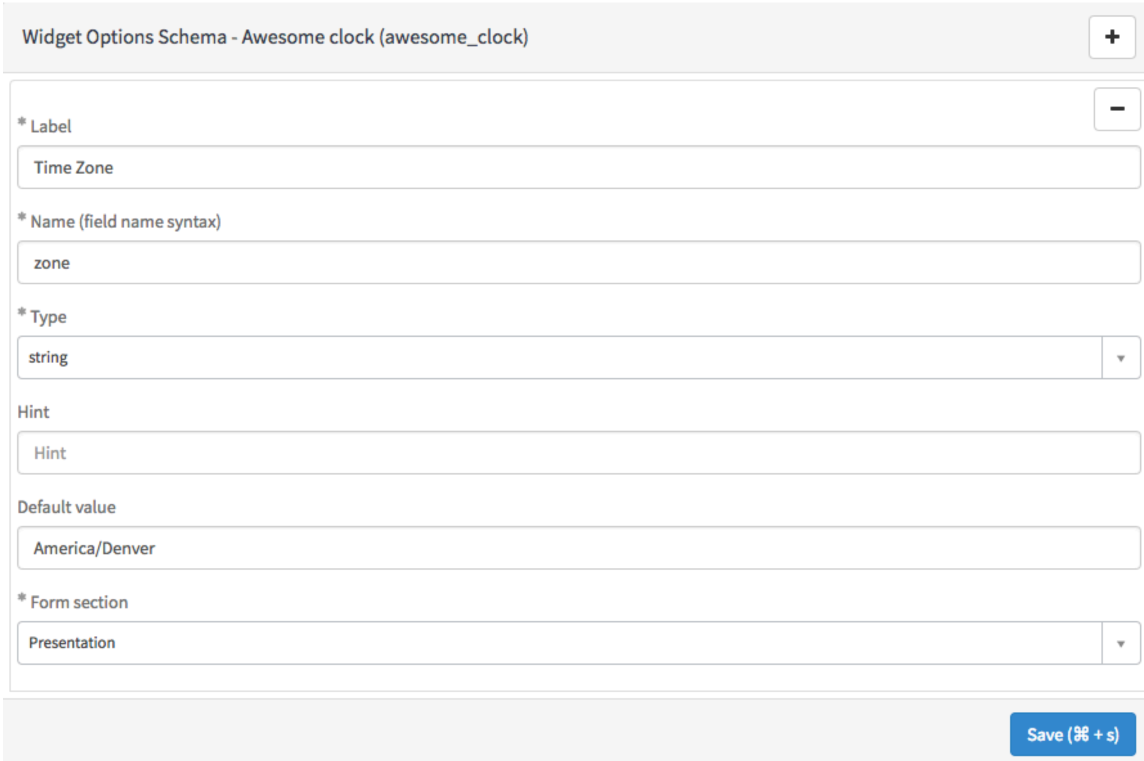
Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration** > **Widget Editor**.
2. Select the widget you want to configure the option schema for.
3. Click the menu icon (≡) and select **Edit option schema**.
   This option only appears for users that have the right to edit the widget.
4. Click **+** to add a widget option.
5. Define a label, name, type, hint and form section.

More fields appear depending on the **type** you select.

Adding flexible widget options allows you to create more reusable widgets. You can add default values to help users understand each widget option. If you do not select a form section, the default is set to **Other options**.



6. Click **Save**.
   The option schema you defined is stored in JSON format in the **Option schema** field in the sp_widget table. Based on this option schema, each instance of the widget can use individually defined instance options.
7. Test the option schema by adding the widget to a page in the Service Portal Designer.
   a. Navigate to **Service Portal** > **Service Portal Configuration** > **Service Portal Designer**.
   b. Add the widget to a page and click the edit icon on the widget instance to view the instance options.
   c. Configure the widget instance options.
   d. View the configuration by navigating to the instance record in the sp_instance table.
      The instance options are stored in JSON format in the **Additional options, JSON format** field.

Store instance options in a table

Create a table to store widget instance options instead of editing the existing option schema. When using a table as your widget option schema, you can define custom fields using any ServiceNow field type, add filters to fields, and search or query instance options.

Before you begin
Role required: admin or sp_admin

About this task

To define a custom option schema, add fields to an sp_instance extension table, then set your widget to use the extension table as a data source. Using an extension table enables you to:

- Add any ServiceNow field type, including fields with advanced customization, to the option schema.
- Define complex widget options.
- Search and filter instance options.

Note: While storing options in a table enables you to define more complex options, this method is more difficult to maintain than editing the option schema. To avoid creating unnecessary tables and adding additional server calls to your widget, edit the existing option schema when possible. Store options in a table only when complex or searchable options are required.

Procedure

1. Create a table that extends an sp_instance table to store your custom option schema.

   a. Navigate to **System Definition** > **Tables**.

   b. Click **New**.

   c. Define a label and name.

   d. In the **Extends table** field, select an sp_instance table that provides the necessary fields.

Instance table	Description
Instance [sp_instance]	Includes base instance fields.
Instance with Table [sp_instance_table]	Includes sp_instance fields and fields to display table data such as Table and Filter.

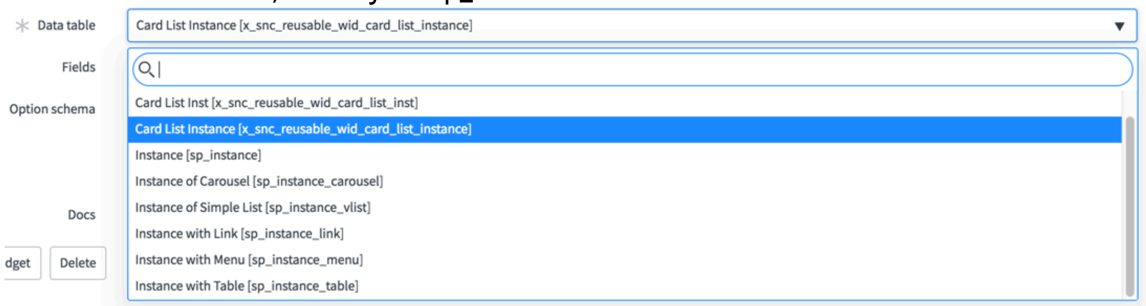
   e. Save the form.

2. Define custom fields in the extension table.
   You can define any field type to use in your option schema by adding new columns in the **Columns** list.
3. Update your widget to use the extension table as a data source.

   a. Navigate to **Service Portal** > **Widgets**.

   b. Open the widget you would like to create custom options for.

c. In the **Data table** field, select your sp_instance extension table.



4. Configure the extension table form to display the desired fields.
   Fields configured on the form are available as instance options.

   a. Navigate to the extension table form: `<yourInstance>/<your_extenstion_table>.do`.

   b. Right-click the header menu and select **Configure** > **Form Layout**.

   c. Add the fields to the form.

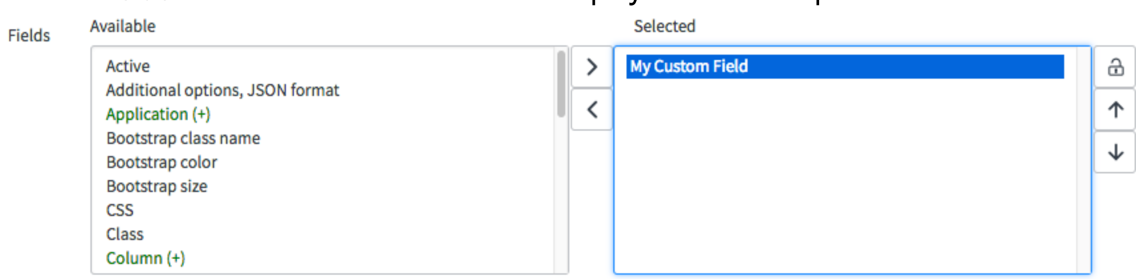
   d. Click **Save**.

5. Configure the widget to display the desired fields as instance options.

   a. Navigate to **Service Portal** > **Widgets**.

   b. Open the widget that has the extension table set as the data source.

   c. Use the **Fields** slushbucket to select fields to display as instance options.



   d. Save the form.

What to do next

Test the option schema by adding the widget to a page in the Service Portal Designer. Click the edit icon on the widget instance to view the instance options. After configuring the widget instance options, view the configuration by navigating to the instance record in the sp_instance extension table.

Widget API reference

Service Portal includes client and server side APIs to use in widget client and server scripts.

Service Portal client-side APIs

These are Service Portal APIs that you can use in a widget client controller.

See the API reference for detailed class and method information.

Class	Description
spAriaUtil	Shows messages on a screen reader.
spContextManager	Makes data from a Service Portal widget available to other applications and services in a Service Portal page. For example, pass widget data to Agent Chat when it opens in a Service Portal page.
spUtil	Utility methods to perform common functions in a Service Portal widget client script.
spModal	Shows alerts, prompts, and confirmation dialogs in Service Portal widgets. The `spModal` class is available in Service Portal client scripts.

Note: g_form as a global object cannot be used in a widget client controller or in a UI script.

Service Portal server-side APIs

These are Service Portal APIs that you can use in a widget server script.

Class	Description
GlideSPScriptable	The `GlideSPScriptable` API provides methods to interact with data and perform record operations in Service Portal widgets.
GlideSPSearchAnalytics	The `GlideSPSearchAnalytics` API provides methods to generate search analytics from custom ServiceNow search widgets.
SPScriptedFacet - Scoped	Defines facet items, filters, or mapped queries for a facets object.
SPScriptedFacetService - Scoped	Generates a multi-choice or single-choice facets object for an advanced search source.
SPSEOUtilsSNC - Global	Return human-readable URLs for a specific page, or for the current page, based on the transaction request.
SPWidgetAccessControl - Global	Check whether a provided table is granted access to a widget to ensure that a widget is securely accessed by an intended audience.

Widget properties

Global variable and functions available in widget client and server scripts.

Server script global objects

Property	Description
`input`	An object containing client-side properties set under `c.data`. The value is `undefined` until the client controller calls `c.server.update()`.
`data`	An object containing properties set during server-side execution.
`options`	An object containing the schema option properties.

Client script global functions

Property	Description
`this.server.get([Object])`	Calls the server and sends custom `input`. Returns `Promise`.
`this.server.update()`	Calls the server and posts `this.data` to the server script. Returns `Promise`.
`this.server.refresh()`	Calls the server and automatically replaces the current options and data from the server response. Returns `Promise`.

A `promise` represents the eventual result of an asynchronous operation. For more information on promises, see https://promisesaplus.com/ or AngularJS documentation.

Reuse components with Angular Providers

Angular Providers are reusable components that can be injected into multiple widgets. To ensure quick loading widgets and a high performing portal, create Angular Providers instead of overloading your client controllers with persistent data and additional logic. With Angular Providers, you can maintain data for the lifetime of your Service Portal and reuse components and data objects across multiple widgets.

Before you begin

Role required: admin or sp_admin

About this task

By creating an Angular Provider, you can:

- Keep widgets in sync when changing records or filters.
- Share context between widgets.
- Maintain and persist state.
- Create behaviors and inject them into multiple widgets.

To learn more, visit Angular Providers.

Tip: For easier maintenance and troubleshooting, remove any unused providers from the Angular Providers related list in the Widget [sp_widget] table.

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration** > **Portal Tables** > **Widget Angular Provider**.
   The Widget Angular Providers table opens.
2. Click **New** to create a new record.
3. Select the type of Angular Provider.
   - Directive
   - Factory
   - Service

   To facilitate migration to ECMAScript 6 or later, consider using services over factories.
4. Define a name.
   You will use the name to associate the Provider with your widget.
5. Add a script in the **Client Script** field.

   Example

   A basic factory that formats a number in US currency.

   ```
   function formatterFactory(){
     var myVal = Number;
     return {
       format: function(myVal) {
         return '$' + myVal.toFixed(2);
       }
     }
   }
   ```

6. Associate the Angular Provider with a widget.
   a. Navigate to `<yourInstanceURL>/sp_config?id=widget_edit`.
   b. Open the widget you would like to associate with the Angular Provider.
   c. Under **Related Lists**, select **Angular Providers**.
   d. In the **Angular Providers** list, click **New**.
   e. In the **Angular Provider** field, select the appropriate Provider.
   f. Check the **Widget** field to ensure that you are associating the Angular Provider with the correct widget.
   g. Click **Save**.
7. Update the appropriate scripts in your widget to inject the Angular Provider into the widget.

   Example

   Inject the factory into your widget client script by passing the name of the factory as an argument in your client controller function. You can then access the object defined in the factory function in your widget client script.

   ```
   function(formatterFactory) {
     /* widget controller */
     var c = this;
     console.log(formatterFactory.format(300));
   }
   ```

If defining a directive, use the directive in the widget HTML template.

8. To edit the Angular Provider after it is registered with your widget, open the Angular Provider client script in the widget editor.

   a. Navigate to **Service Portal Configuration** > **Widget Editor**.

   b. Under **Edit an existing widget**, select the widget associated with your Angular Provider.

   c. From the **Show** menu, open the **Dependencies** list and select the Angular Provider.

      Note: Only Angular Providers associated with the widget are displayed in the **Dependencies** list. This list includes any external resources your widget depends on.

   The Angular Provider client script displays in the widget editor. In the widget editor interface, you can edit and save your widget and Provider scripts at the same time.

What to do next

To use an Angular Provider with multiple widgets, register your Provider with each widget and update the appropriate scripts.

Embedded widgets

Embed a widget in the HTML template, server script, or client script.

Embed a widget in an HTML template

Use the `<widget></widget>` element to embed a widget in an HTML template. Pass in the ID of the widget you are trying to embed as a parameter.

```
<div>
    <widget id="widget-cool-clock"></widget>
</div>
```

If a widget has an option schema, you can define instance options in JSON format.

```
<widget id="widget-cool-clock" options='{"zone":
 "America/Los_Angeles","title": "San Diego, CA"}'></widget>
```

Alternatively, you can define options in the widget server script.

HTML template

```
<widget id="widget-cool-clock"
 options='data.clockOptions'></widget>
```

Server script

```
(function() {
  data.clockOptions = {"zone":
 "America/Los_Angeles","title": "San Diego, CA"};
})();
```

Embed a widget in a client script

Use spUtil.get() to get a widget model in the client script.

```
spUtil.get("widget-sc-cat-item", {sys_id:
 "your_catalog_item_sys_id"}).then(function(response) {
```

```
    c.catalogItemWidget = response;
});
```

When using the *spUtil* class in a widget client script, you must inject the class into the client script function. The following example embeds the Cool Clock widget:

Client script

```
function(spUtil) {
    var c = this;

 spUtil.get("widget-cool-clock").then(function(respon
se) {
            c.myClockWidget = response;
    });
}
```

HTML template

```
<sp-widget widget="c.myClockWidget"></sp-widget>
```

Embed a widget in a server script

Use $sp.getWidget() to get a widget model in the server script.

```
data.catalogItemWidget = $sp.getWidget("widget-sc-cat-item");
```

The following example embeds the Cool Clock widget:

Server script

```
(function() {
    var coolClockOptions = {"zone":
 "America/Los_Angeles","title": "San Diego, CA"}
    data.coolClockWidget =
 $sp.getWidget('widget-cool-clock', coolClockOptions);
})();
```

HTML template

```
<sp-widget widget="data.coolClockWidget"></sp-widget>
```

Widget model properties

When a widget model is called from within another widget, the HTML template, client script, and link function are loaded just as they are in the sp_widget record. The data property is the result of the widget server script execution. Anything that you put on the data object on the server is available in the data object on the client.

Property name	Type	Description
client_script	string	Widget client script field.
css	string	Compiled CSS output from the SASS field for the widget.
data	object	Data object containing keys and values from the widget server script.
dependencies	array	Any third-party libraries to load before the widget executes.

Property name	Type	Description
options	object	Options used to initialize the widget.
template	string	HTML template field for the widget.

Embed a widget multiple times with custom options

Embed the cool clock widget multiple times using custom options.

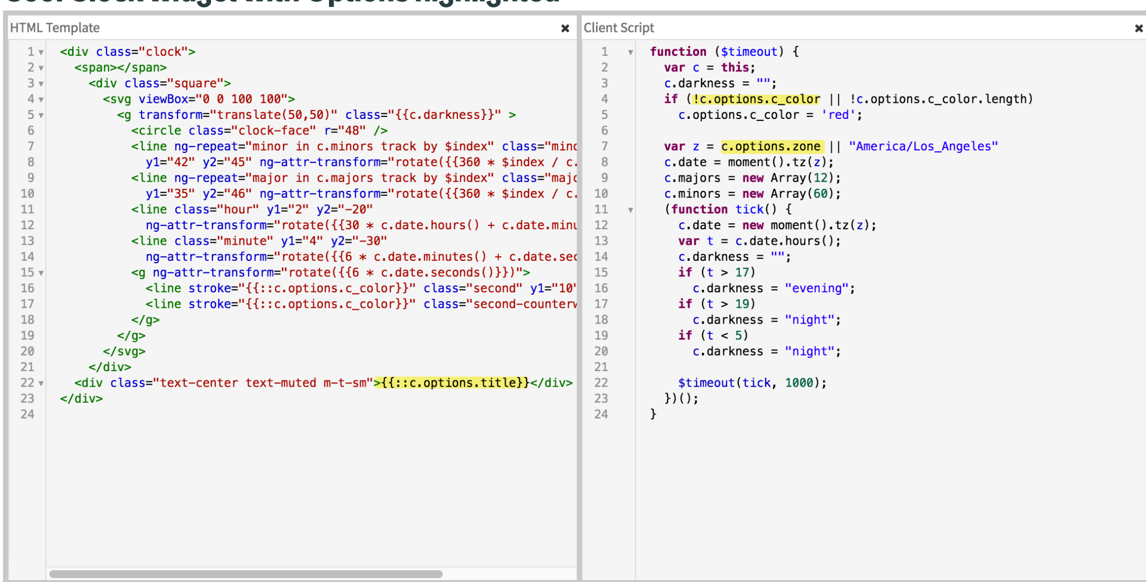
Before you begin

Role required: admin or sp_admin

About this task

Create a widget that embeds multiple instances of the cool clock widget, each with a different time zone and title. Open the cool clock widget in the Widget Editor to see widget options referenced in the HTML template and the Client Script.

Cool Clock widget with Options highlighted



Procedure

1. Clone the Cool Clock widget with the name `Embedded clock`.
2. Replace the code blocks with the following:

   HTML Template

```
<div class="panel panel-default">
  <div class="panel-heading">Time across the US</div>
  <div class="panel-body">
    <div class="row">
      <div class="col-sm-3" ng-repeat="myClock in
 c.data.clocks">
        <sp-widget widget="myClock"></sp-widget>
      </div>
    </div>
  </div>
</div>
```

   CSS

```
.panel {
    margin-top: 10px;
}
```

Client Script

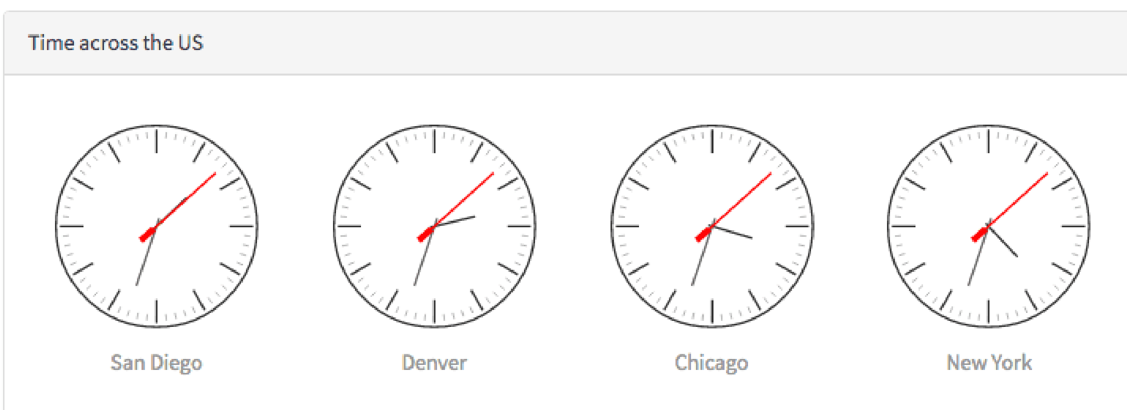
```
function() {
    // nothing to do here...
}
```

Server Script

```
(function() {
    var options = [
        {zone: "America/Los_Angeles", title: "San Diego"},
        {zone: "America/Denver", title: "Denver"},
        {zone: "America/Chicago", title: "Chicago"},
        {zone: "America/New_York", title: "New York"}
    ];

    data.clocks = [];
    for (var i in options) {
        data.clocks.push($sp.getWidget("widget-cool-clock",
 options[i]));
    }
})();
```

Result
Each instance of the clock in the embedded clock widget appears with a different time zone.

Sample clock options



Create a widget dependency

In Service Portal, you can link JavaScript and CSS files to widgets to create dependencies between widgets and third-party libraries, external style sheets, and angular modules.

Before you begin
Role required: sp_admin or admin

About this task
Dependencies are loaded asynchronously from the server when needed.

Widgets can have as many or as few dependencies as needed. However, the more you add, the more content a widget must download to render on the page. Keep dependencies as small as possible for more efficient load times.

Procedure

1. Create a dependency package.

   A dependency package is a collection of JavaScript and CSS files that can be connected to a widget.

   a. Navigate to **Service Portal** > **Dependencies**.

   b. In the dependency record, define the following fields.

Field	Description
Name	The name of your dependency. (Useful for selecting a dependency from a dropdown list.)
Application	Application scope for the dependency record.
Include on page load	Select if you want your dependency to be loaded onto the page on the initial page load of Service Portal, or leave unchecked to load the dependency only when the linked widget is loaded onto a page.
Angular module name	Optional. Define the value if the linked JavaScript is an Angular module. Provide the name of the Angular module being loaded, so that it can be injected into the Service Portal Angular application.

2. Add files to the dependency package.

   After you save the information for your dependency package, use the related lists to add JS and CSS Include files. For each related list, include the following information:

Field	Description
Display name	Name of the script include.
Source	Depending on whether you add a JS Include or a CSS Include, select one of these options from the list: ◦ URL ◦ UI script (for a JS Include) or Style Sheet (for a CSS Include) For a JS Include, use the UI Script field to reference a UI Script found in **System UI** > **UI Scripts**. For the CSS Include, use the Style Sheet field to reference a record in the `sp_css` table.

3. Add a dependency package to a widget.

After you have created a dependency package and added files, create a relationship between the dependency and a widget.

a. Navigate to **Service Portal** > **Widgets** and find the widget record you want to add the dependency to.
b. From the Dependencies related list, click **Edit**.
c. In the slushbucket, find the dependency you created and double-click to add it to the selected items column on the right.
d. Save the page to return to the widget record.

Include a font icon in a single widget

If you only want one widget to have access to a font icon, include the font icon in a single widget.

Before you begin

Role required: admin or sp_admin

About this task

Adding an icon to a specific widget keeps the icon scoped and prevents it from interfering with other CSS on the page.

Procedure

1. In the platform UI, navigate to **Service Portal** > **Widgets**, then click the widget you want to add an icon to.
2. Attach the individual icon file to the widget record.
3. In the HTML template, include something like the following:

```
<div>
<i class='font-family'>icon_name</i> you did it!
</div>
```

   Make sure that the class is exactly the same as the font family called out in the CSS. For example, `<i class='material-icons'>` should be the same as the `.material-icons` included in the CSS. The `icon_name` should match the name of the file you attached.

4. In the CSS field for the widget, add the CSS for the font-icon definition.

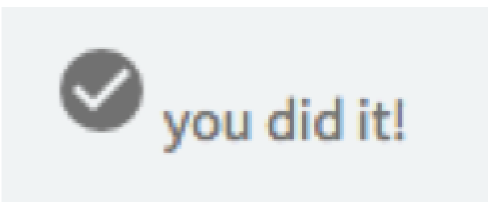
   Most font-icon sets include a CSS file similar to the material icons one used below. Use the sys_id of the attachment as the `src` in the CSS. For example:

```
/* fallback */
@font-face {
   font-family: 'Material Icons';
   font-style: normal;
   font-weight: 400;
   src: url('/828b8ca8b7033010897725cbde11a9f7.iix') format('woff2');
}

.material-icons {
   font-family: 'Material Icons';
   font-weight: normal;
   font-style: normal;
   font-size: 24px;   /* Preferred icon size */
   display: inline-block;
   line-height: 1;
   text-transform: none;
```

```
    letter-spacing: normal;
    word-wrap: normal;
    white-space: nowrap;
    direction: ltr;

    /* Support for all WebKit browsers. */
    -webkit-font-smoothing: antialiased;
    /* Support for Safari and Chrome. */
    text-rendering: optimizeLegibility;

    /* Support for Firefox. */
    -moz-osx-font-smoothing: grayscale;

    /* Support for IE. */
    font-feature-settings: 'liga';
}
```

Result

An icon that you can select in the widget or widget instance. For example:



What to do next

To use custom font-icons across widgets, add the icon to a page or make it a widget dependency.

Related topics

Include font icons on a page

Include font icons as a widget dependency

Include font icons as a widget dependency

You can include font icons wherever a widget is loaded by including them as a widget dependency.

Before you begin

Role required: admin or sp_admin

About this task

Note: CSS included as a widget dependency is not scoped and can disrupt other CSS on a page.

Procedure

1. In the platform UI, navigate to **Service Portal** > **CSS** and create a new style sheet.
2. Attach the font-icon set to the sp_css record you created, and use the sys_id of the attachment as the `src` for the font icon.

   Example

   For example:

```
@font-face {
    font-family: 'Material Icons';
```

```
    font-style: normal;
    font-weight: 400;
    src: url('/828b8ca8b7033010897725cbde11a9f7.iix') format('woff2');
}

.material-icons {
    font-family: 'Material Icons';
    font-weight: normal;
    font-style: normal;
    font-size: 24px;  /* Preferred icon size */
    display: inline-block;
    line-height: 1;
    text-transform: none;
    letter-spacing: normal;
    word-wrap: normal;
    white-space: nowrap;
    direction: ltr;

    /* Support for all WebKit browsers. */
    -webkit-font-smoothing: antialiased;
    /* Support for Safari and Chrome. */
    text-rendering: optimizeLegibility;

    /* Support for Firefox. */
    -moz-osx-font-smoothing: grayscale;

    /* Support for IE. */
    font-feature-settings: 'liga';
}
```

3. Navigate to **Service Portal** > **Dependencies** and create a new dependency.
4. Attach the CSS record you created to the new dependency using the **CSS Includes** related list.

Internationalize a widget

Use the `${}` or `gs.getMessage()` syntax in the **HTML Template**, **Client Script**, or **Server Script** fields of a widget to tag strings for translation so you can localize your Service Portal content.

The `${}` or `gs.getMessage()` searches in the messages table [sys_ui_message] in the platform to see what the translation would be.

Use the HTML template to internationalize strings in a widget. Type the following in an HTML template.

```
<div>
  <p>${This message will be internationalized.}</p>
  <p>However, this will NOT be.</p>
</div>
```

Writing text as `${message}` is the equivalent of writing `${gs.getMessage("message")}` in other parts of the system, but written as a more legible shorthand.

Note: In some cases, the translation might have quotes or double quotes on it. That could lead to JavaScript errors if you are using the ${} syntax in the client script. The safest way to fetch a translated message is to do it in the server script. Then, assign the value to a client-side Angular binding.

Translating strings in the client script

```
function() {
  var c =this;
  c.message="${This message will be internationalized}";
}
```

HTML template:

```
<div>
  <!-- The output of this text will be internationalized. -->
  <p>{{c.message}}</p>
</div>
```

Translating strings in the server script

Use the server script to translate schema options and other values during server-side runtime.

Server script

```
function() {
  data.message=gs.getMessage("this message contains 'quotes'");
  //You can also translate schema options using the server
 script
  //For example, data.message=gs.getMessage(options.title);
}
```

HTML template

```
<div>
  <p>{{c.data.message}}</p>
</div>
```

Replace a Service Catalog form script with a widget

You can use widgets in Service Portal to replace UI Macros. If your Service Catalog form includes a UI Macro that references other fields or variables on the form, you can create a widget to hold reusable code and embed it within the Service Catalog form. Use special syntax to access any variable fields on the form.

Before you begin
Role required: admin or sp_admin

Procedure

1. Create a widget that performs the action you would like to use in catalog item forms.
   See step 7 for a simple example widget that accesses another variable on the form.
2. Open a catalog item that previously used a UI Macro or other reusable component not supported in Service Portal.
3. In related lists, add a new variable to the catalog item.
4. Configure the variable form to add the **Widget** field.
5. In the **Type** field, select **Macro**.
6. In the **Widget** field, select a widget that performs the desired action.
7. **Optional:** Use the `$scope.page.g_form()` or `$scope.page.field` syntax in the embedded widget to access the catalog item values.

Example
This example shows how to modify the value of a single-line text variable with the name **color** associated with the catalog item.

Widget HTML Template

```
<div>
  Data from catalog variable:
  <h1>{{ c.data.message }}</h1>
</div>
```

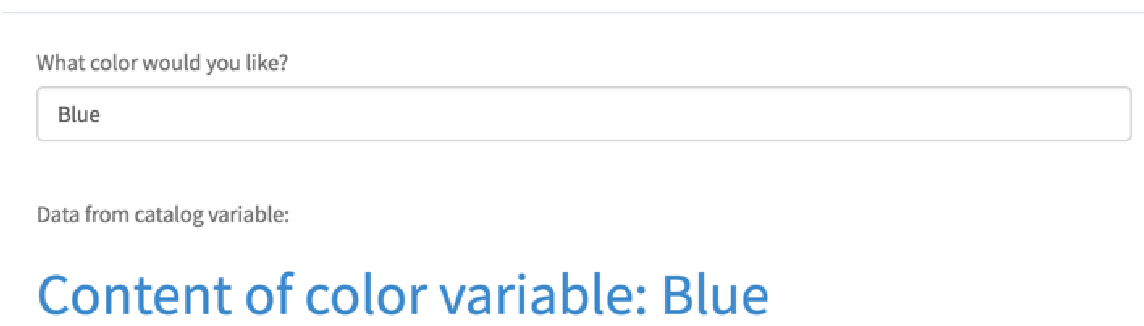
Widget client script

```
function($scope) {
     var c = this;

     //Watch for changes in the color variable
     $scope.$watch(function () {
          return $scope.page.g_form.getValue('color');
     }, function (value) {
     //Update local data object with data from
 variable
     c.data.message = value ? 'Content of color
 variable: ' + value : '';
});
}
```

You can use the following to access variable or catalog item fields:

- `$scope.page.g_form()`: The g_form instance on the form. You can use all supported g_form methods described in Service Portal and client scripts. For example, `g_form.setValue('variable_name', 'new value');`.
- `$scope.page.field()`: The object that represents the variable.

When you open the catalog item in the Service Portal, the embedded widget accesses the variable fields associated with the catalog item.



Widget troubleshooting guide

Use the following tools to investigate and resolve unexpected behavior in your custom Service Portal widgets.

Reduce complexity

Deactivate widgets unrelated to the widget you are troubleshooting to isolate parts of the page that may be causing errors or unexpected behavior. Set the active field to false on a widget record to hide the widget on the page, and prevent associated scripts from executing.

Use the browser developer console

All supported desktop browsers have built in developer tools. Access your browsers developer tools to view console messages and errors thrown by client-side JavaScript. Many of the logging tools detailed below output information to this console.

If you experience performance issues, check the JavaScript console to see if there are errors, a large number of HTTP requests, or HTTP requests that take a long time to resolve. You can use the console to identify any widgets that load slowly. For more information, see the How to identify a slow widget on a page [KB0744521] article in the Now Support Knowledge Base.

Determine the cause of performance issues

The following tips can help determine the cause of performance issues in portals:

- Determine if the issue is related to the portal or platform-wide by comparing the functionality in both interfaces. For more information about platform performance issues, see Platform performance.
- Determine if the issue affects the entire portal or specific pages. If all pages in the portal are slow, check if scripted menu items in the header menu or themes with large font or image files could be the cause. If a specific page is slow, use the browser developer console to determine which widget could be the cause.
- Check the Log [syslog] table for warnings related to large JSON objects causing slowness. If these warnings are appear with the action that causes slowness, this indicates that a widget is using too much data.

For more information, see the Six common performance pitfalls in Service Portal and how to avoid them [KB0634588] article in the Now Support Knowledge Base.

Use the widget context menu to access information and options

CTRL+right-click a widget to access configuration options for the widget. There are also options to output the scope and scope data object to the browser console. For more detail on this menu, see Using portal widgets.

Use script methods to capture debugging output

Several methods are available to output debugging information within your server and client-side code.

Scripted debugging methods

Method	Availability	Description
console.log()	Server and client	Logs output to the browser developer console.
$sp.log()	Server	Logs output to the Service Portal Log Entries [sp_log] table, when the logged in user has the `sp_admin` or `admin` role.
gs.log()	Server	Logs output to the Log [syslog] table. **Note:** gs.log creates records on the syslog table. Excessive use can adversely affect performance.

Scripted debugging methods (continued)

Method	Availability	Description
gs.warn()	Server	Produces warning level output in the Log [syslog] table.
gs.error()	Server	Produces error level output in the Log [syslog] table.
gs.addInfoMessage()	Server	Displays a green information message at the top of the browser window.
gs.addErrorMessage()	Server	Displays a red error message at the top of the browser window.
spUtil.addErrorMessage()	Client	Displays an error message within the browser window.
spUtil.addInfoMessage()	Client	Displays an Info message within the browser window.
spUtil.addTrivialMessage()	Client	Displays a message which automatically disappears after a short time.
debugger	Client	Sets a break point in Chrome and Firefox browsers, allowing you to step through a script line by line in the browsers developer console.
{{data|json}}	HTML	This code can be added to the HTML code of a page to output the data object to the portal page in JSON format.

Check for security restrictions

Often, widget display issues are caused by access rules or user criteria rather than the widget script. Check the user criteria for records and verify that any records that are not accessible within a widget are accessible using the platform UI. Use the ACL debugger to ensure that your users have the expected access to records used by your widgets. For more detail on the debugger, see ACL debugging tools.

Service Catalog items can also be restricted to not appear in Service Portal. If you get a `You are either not authorized or record is not valid` error message for a Service Catalog widget, check that the item is not hidden from Service Portal.

Check the associated Angular Providers

Verify that the necessary Angular Providers are associated with widgets. Removing the default Angular Providers associated with a base system widget can cause unexpected behavior. For example, removing the scToggleData or scBindHtmlCompile Angular Providers from the SC Catalog Item widget.

Create a reference to the widgets scope in the console

Use reference to a widget to manipulate scope data or manually run the widgets client and server scripts. Use the following steps to create the reference.

- 1. Right-click the widget and choose **Inspect**.
- 2. In dev tools Elements tab, click to highlight the element with attribute widget=`widget`. You can find it a few elements above the currently inspected element. This element points the $0 scripting tool at the widget.
- In the Javascript console, run the following code:

  ```
  var scopeRef = angular.element($0).scope();
  ```

  Use the reference to your widget to change data within the console. See the following example. Remember to run `AngularJS $apply()` on the scope to apply changes to the page.

  ```
  scopeRef.data.prop1 = "Pear";
  scopeRef.$apply();
  ```

  Run any function defined in the widgets client controller from your reference using the syntax below.

  ```
  scopeRef.exampleFunction();
  ```

  Use the refresh command to manually execute the widgets server script.

  ```
  scopeRef.server.refresh();
  ```

Widget diagnostics

Resolve Service Portal page issues by identifying widget customization levels and checking widget code directly from a portal page.

If a portal page isn't working as expected, it may be because of a bug in widget code. To diagnose the page, try diagnosing the widgets on the page.

Diagnosing widgets involves:

- Identifying widget customization levels
- Checking the code that is used in each widget

Identifying customization levels

Customization levels describe how widgets have been modified or developed. Identifying the customization level of a widget can help you know which part of the widget code is most important to check. There are four levels of widget customization.

Customization level	Description
Base	Base widget installed on a base system or with other ServiceNow plugins. Base widgets have no modifications but can have widget instances for which you have set instance options.
Cloned	Widget that you cloned from a base widget.
New	Widget that you created.
Customized	Base widget that you configured in any of the following ways:

Customization level	Description
	• Modified the widget code directly • Modified widget option schema • Modified widget dependencies, ng-templates, or Angular Providers

To identify the customization levels of widgets on a portal page, open the Widget Context Menu and select **Show Widget Customizations**. Widgets are color-coded as follows:

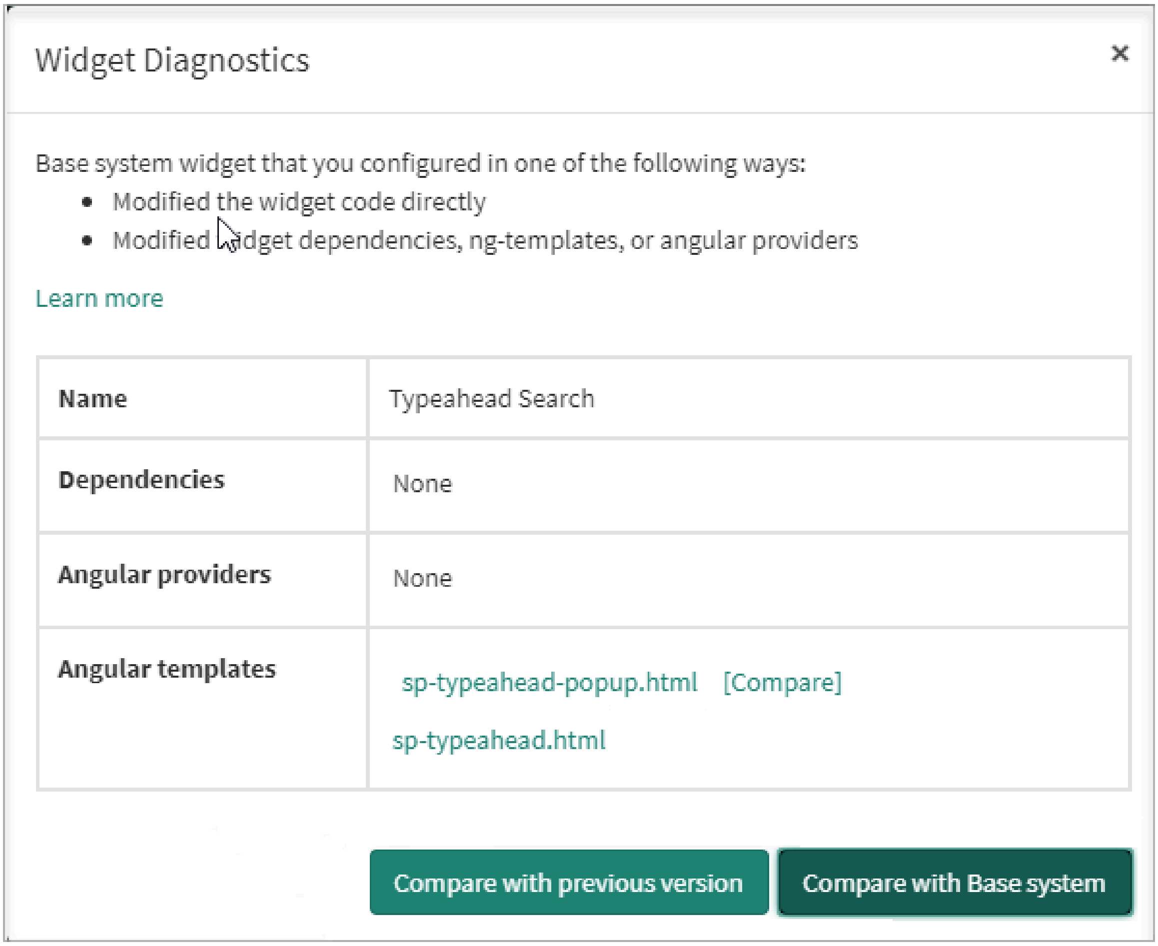
- Green: base widget
- Yellow: cloned widget
- Blue: new widget
- Red: customized widget

Widget customizations highlighted on a portal page

Checking the widget code

After you've identified the customization levels of widgets on a portal page, check the code in each widget.

To view the widget code from the portal page, click the information icon ( ) on a widget.



From the widget diagnostics window, you can check the widget code in several ways:

- View a widget record from a portal page

  View and identify potentially problematic code in the widget record without navigating away from the portal page.

- Identify customizations in widget related records

  View and identify potentially problematic code in the widget dependencies, Angular Providers, and ng-templates that are being used by the widget.

- Compare versions of a widget related record

  Compare an Angular Provider or ng-template against its previous version so that you check if your most recent code changes are causing issues on a portal page.

- Compare versions of a customized widget

  Compare your most recent update of a customized widget against the previous version to check if your recent changes are causing issues on a portal page.

- Compare a cloned or customized widget against a base widget

  Identify customizations to a widget so that you can revert your cloned or customized widgets and resolve issues on a portal page.

Recommendations for diagnosing widgets

Of the four customization levels, the highest priority issue is customized widgets. These widgets aren't supported in system upgrades. If you're experiencing page issues during an upgrade, it may be because you have a customized widget on your portal page.

To resolve page issues that may be caused by customized widgets, identify which parts of the widget code have been customized. Then revert the code to the original configuration. For more information on identifying these code differences, see Compare a cloned or customized widget against a base widget.

Tip: Even if a customized widget is not causing page issues now, you may want to revert to the original widget to prevent issues during upgrades later.

If you're still experiencing page issues after reverting customized widgets, check your new and cloned widgets next.

With a new widget, it's likely that your most recent code changes are causing issues on your portal page. To identify your most recent changes so that you can debug your code, follow the steps in Compare versions of a widget related record.

If you cloned a widget prior to a system upgrade, it's likely that the cloned widget didn't receive the same updated code as the base widget. In this case, it's recommended that you clone the widget again and add your customizations to the clone.

A base widget is least likely to cause page issues. If you've already checked other widgets and are still experiencing page issues, remove base widgets from the page and add them again without any widget options set. You can also try adding base widgets to another page instead.

Limitations

There are several known limitations using widget diagnostics from a portal page:

- Although you can view and compare widget code, you can't fix or revert code directly. Navigate away from the portal to change the code.
- If you navigate to another portal page while using widget diagnostics, the system disables the tool.
- Because the tool uses color to categorize widgets, it may not be accessible for visually impaired users.
- The widget dependencies that are listed on the portal page reflect only the first-level dependencies. Any dependency that is nested deeper than the first level is not included. To further troubleshoot the widget, check the nested dependencies in the widget record.
- There is no way for the system to track a Widget Dependency after you've deleted it.

View a widget record from a portal page

View and identify potentially problematic code in the widget record without navigating away from the portal page.

Before you begin
Role required: admin or sp_admin

Procedure

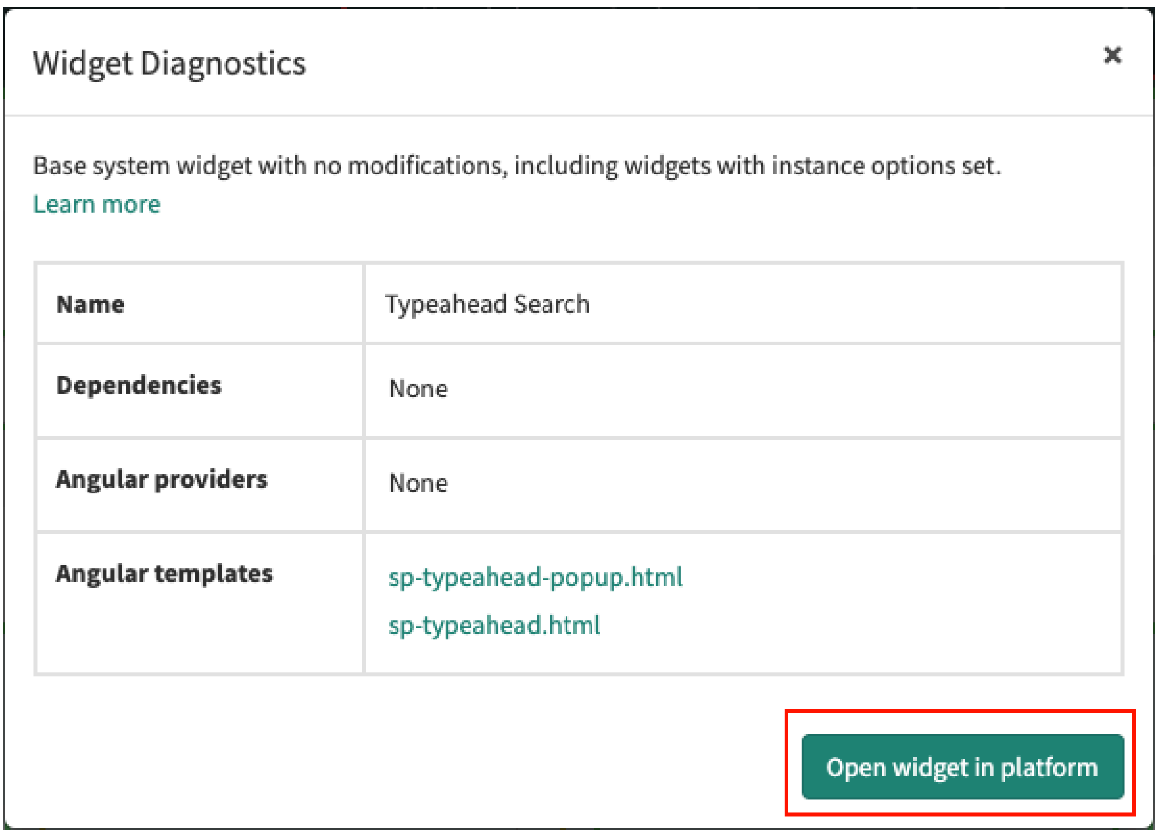
1. Navigate to a portal page.
2. On the page, open the widget context menu by CTRL+right-clicking any widget.

3. On the widget context menu, click **Show Widget Customizations**.

   Widgets are color-coded as follows:

Color	Customization level
Green	Base system widget
Yellow	Cloned widget
Blue	New widget
Red	Customized widget

4. On any widget, click the information icon ( ).
5. On the window, click **Open widget in platform**.



Note: The **Open widget in platform** button doesn't appear for all customized widgets. The button appears for customized widgets only if you modified one or more widget dependencies, Angular Providers, or ng-templates.

Result

A new window opens with a read-only view of the widget record.

Compare versions of a customized widget

Compare your most recent update of a customized widget against the previous version to check if your recent changes are causing issues on a portal page.

Before you begin

Role required: admin or sp_admin

About this task

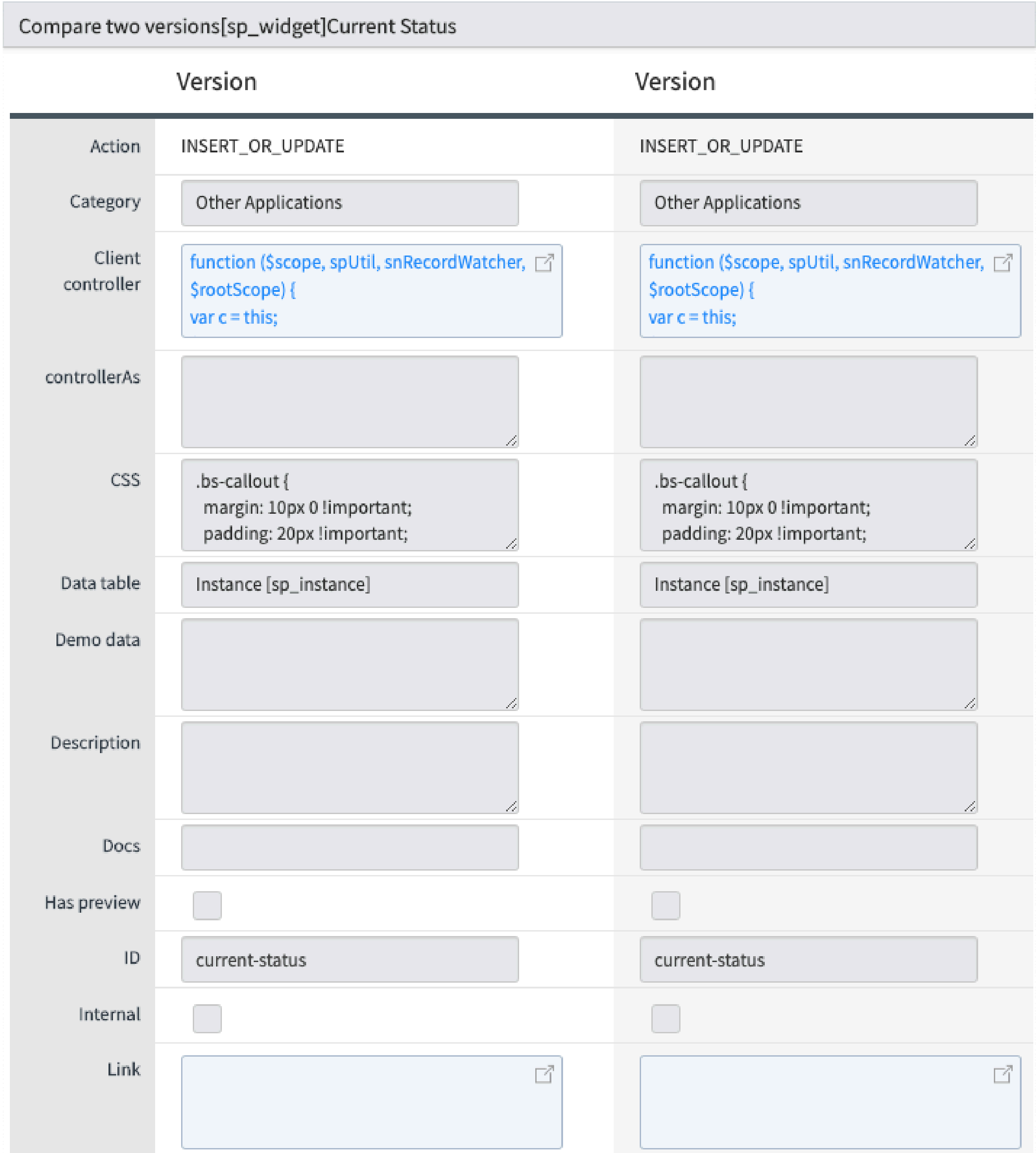
The option to compare versions is available only for customized widgets that you modified directly. There's no option to compare versions of a customized widget for which you modified only the widget dependencies, Angular Providers, or ng-templates.

There's no option to compare versions for new, cloned, or base system widgets.

Procedure

1. Navigate to a portal page.
2. On the page, open the widget context menu by CTRL+right-clicking any widget.
3. On the widget context menu, click **Show Widget Customizations**.
   Customized widgets are outlined in red.
4. On a customized widget, click the information icon ().
5. On the window, click **Compare with previous version**.

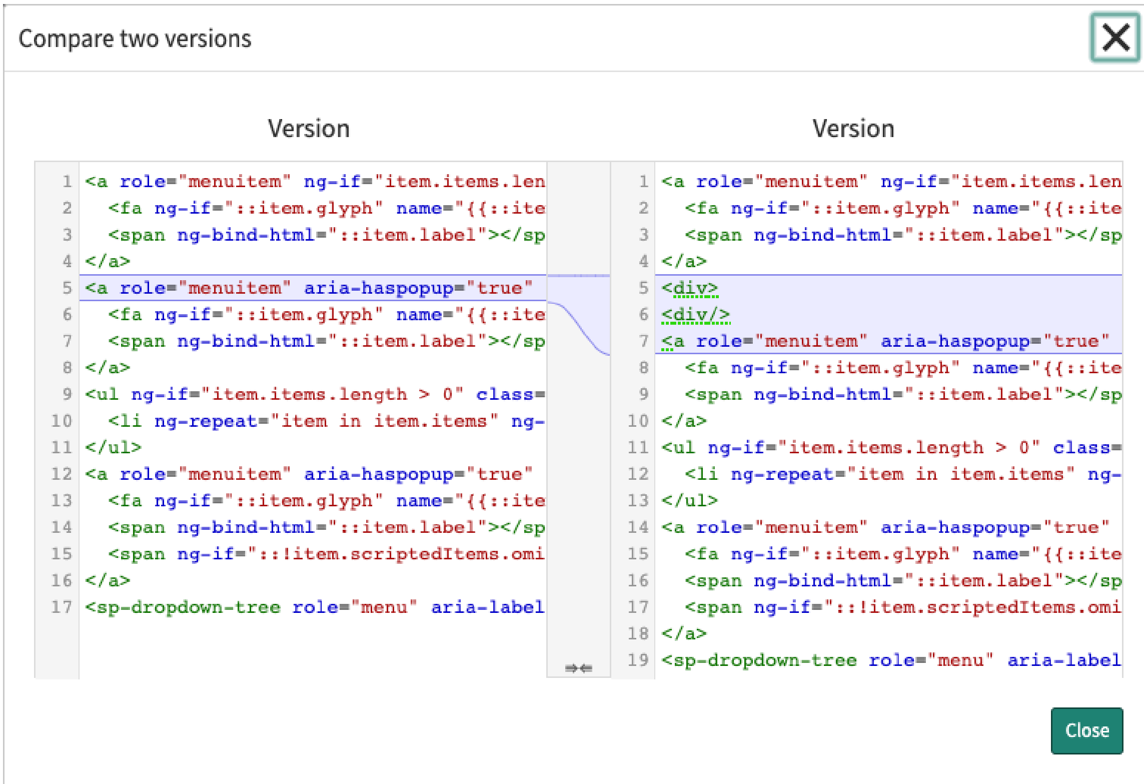
   The system displays the widget records of the current and previous widget versions side by side.



Although both widget records are labeled **Version**, the left-side record represents the previous version and the right-side record represents the current version.

6. For each field in which it appears, click the window icon ( ) to open the code comparator.

Your most recent changes to the widget code are highlighted in the code comparator.



Compare a cloned or customized widget against a base widget

Identify customizations to a widget so that you can revert your cloned or customized widgets and resolve issues on a portal page.

Before you begin

Role required: sp_admin or admin

About this task

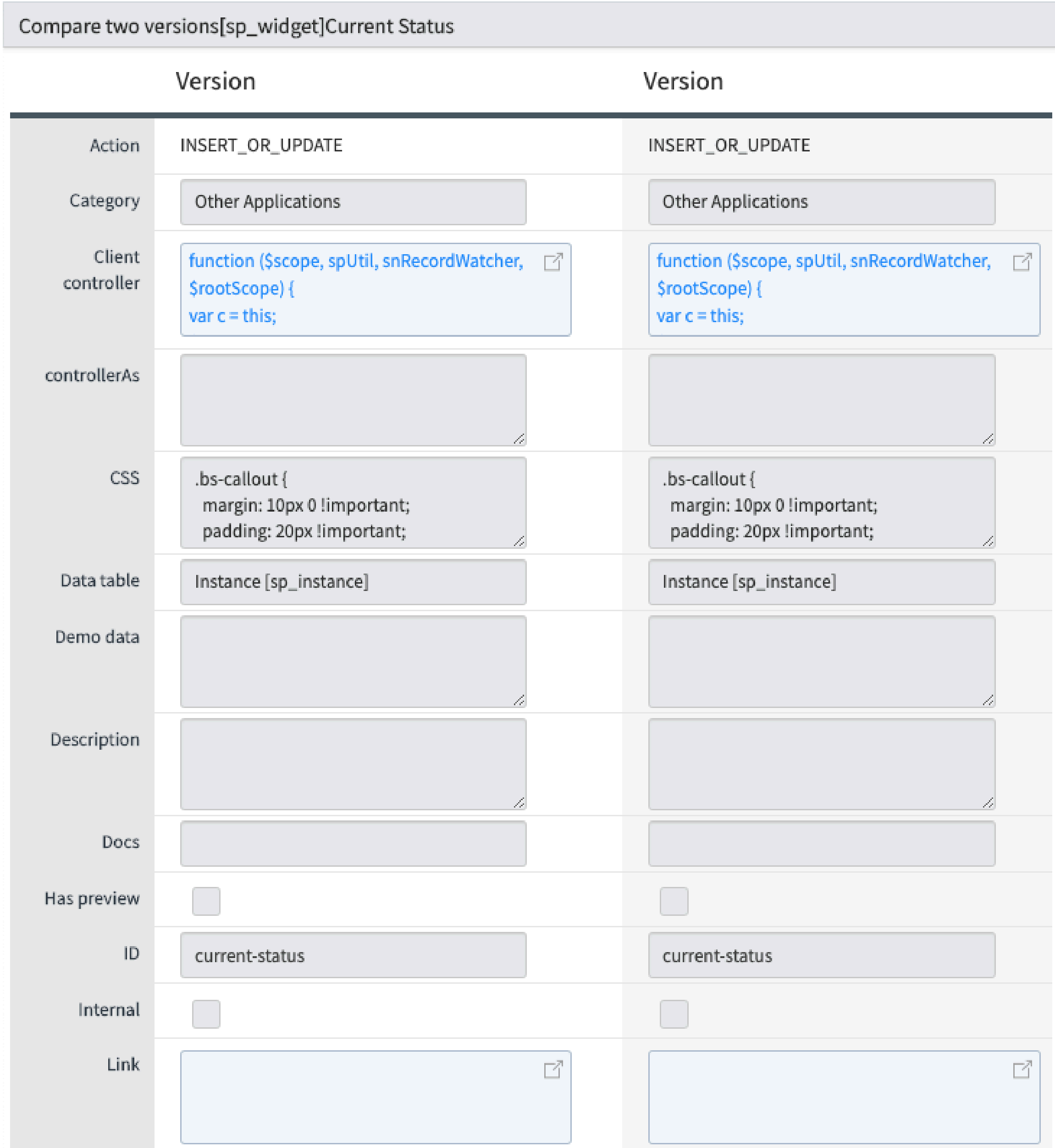
If a widget is cloned from another cloned widget, both clones are compared against the base widget.

Procedure

1. Navigate to a portal page.
2. On the page, open the widget context menu by CTRL+right-clicking any widget.
3. On the widget context menu, select **Show Widget Customizations**.
   Customized widgets are outlined in red. Cloned widgets are outlined in yellow.
4. On any customized or cloned widget, select the information icon ().
5. From the Widget Diagnostics dialog box, select **Compare with base widget**.

   The system displays the widget records of the base widget and cloned or customized widgets side by side.

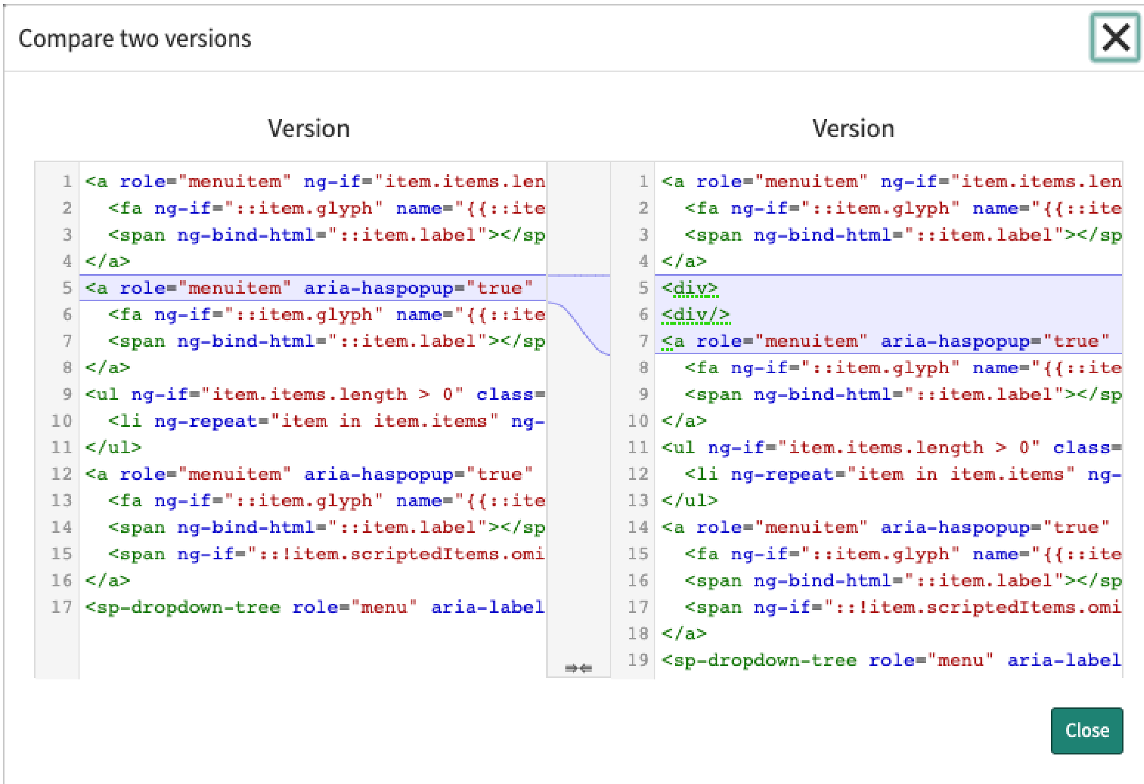
   Note: The left-side record represents the base widget and the right-side record represents the cloned or customized widget.



6. For each field in which it appears, select the window icon ( ) to open the code comparator.

   Differences between the code of the customized or cloned widget and base widget versions are highlighted.

Note: The left-side record represents the base widget and the right-side record represents the cloned or customized widget.



Identify customizations in widget related records

View and identify potentially problematic code in the widget dependencies, Angular Providers, and ng-templates that are being used by the widget.

Before you begin

Role required: admin or sp_admin

About this task

Your widget may be using potentially problematic code from any of the following records:

- Widget Dependencies
- Angular Providers
- Angular ng-templates

You can view these related records directly from your portal page to check the code in each record.

Procedure

1. Navigate to a portal page.
2. On the page, open the widget context menu by CTRL+right-clicking any widget.
3. On the widget context menu, click **Show Widget Customizations**.

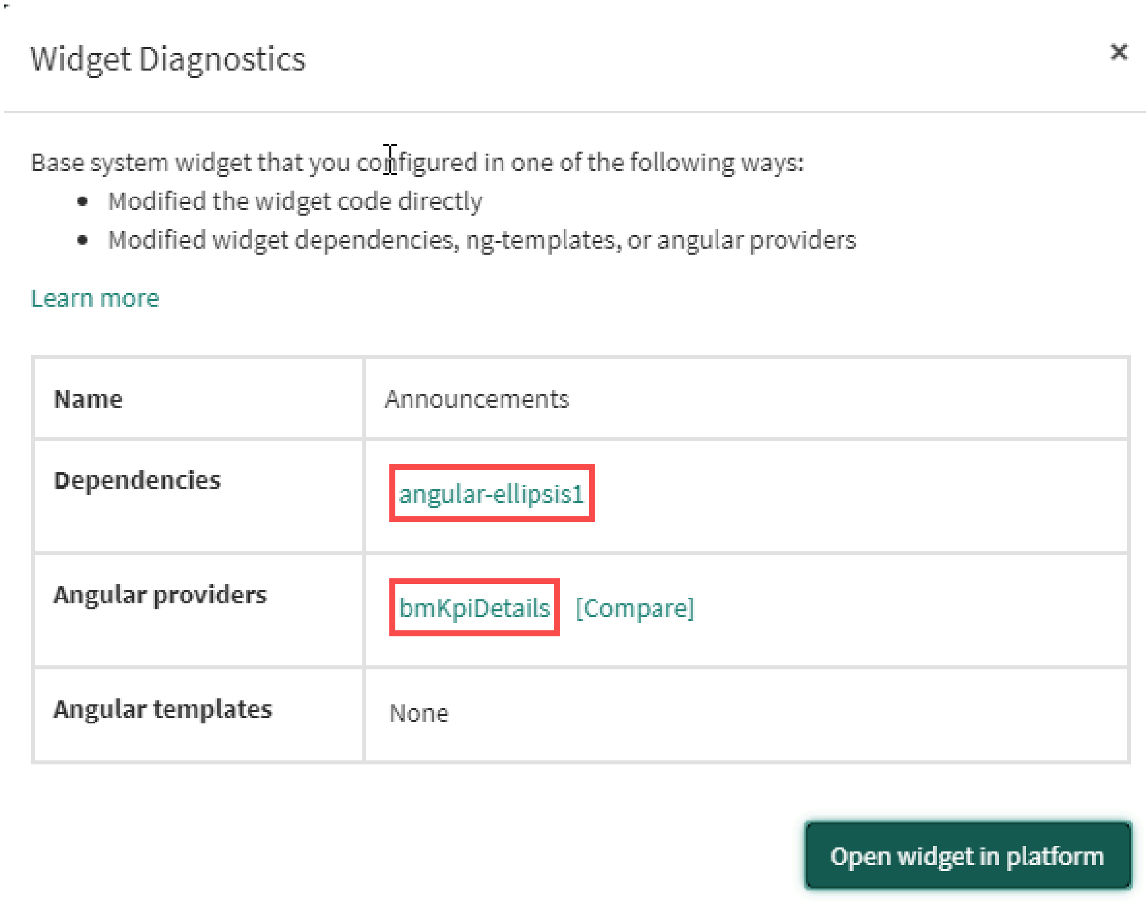
   Widgets are color-coded as follows:

Color	Customization level
Green	Base system widget
Yellow	Cloned widget
Blue	New widget
Red	Customized widget

4. On any widget, click the information icon ( ).
5. On the window, open links to the following related records:

Field	Description
Dependencies	JavaScript and CSS files that the widget uses from the Widget Dependencies [sp_dependency] table. **Note:** The widget dependencies listed on this window only reflect the first-level dependencies. Any dependency that is nested deeper than the first level is not included. To further troubleshoot the widget, check the nested dependencies in the widget record.
Angular Providers	Angular Providers that the widget uses from the Widget Angular Providers [sp_angular_provider] table.
Angular templates	Angular ng-templates that the widget uses from the Angular ng-templates [sp_ng_template] table.

Related records that you modified or developed are outlined in red.



You can open each related record by clicking the record name.

What to do next

If you're still unable to diagnose the widget, consider checking nested dependencies or URL dependencies.

Compare versions of a widget related record

Compare an Angular Provider or ng-template against its previous version so that you check if your most recent code changes are causing issues on a portal page.

Before you begin

Role required: admin or sp_admin

About this task

Your widget may be using potentially problematic code from any of the following records:

- Widget Dependencies
- Angular Providers
- Angular ng-templates

You can compare versions for these related records directly from your portal page to check code changes for each related record.

> **Note:** There's no option to compare versions for Widget Dependency records. Also, there's no option to compare versions for related records that you created. You can only compare versions of a base system record that you modified.

Procedure

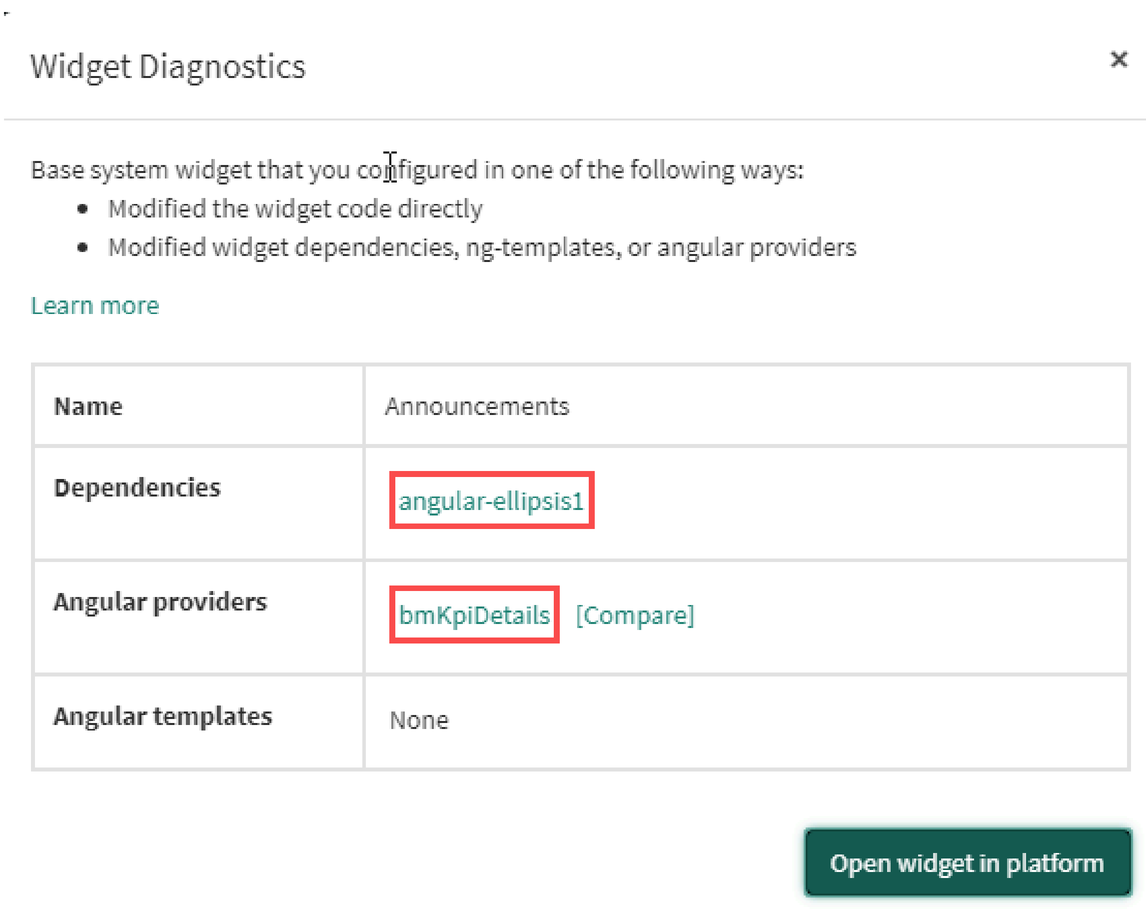
1. Navigate to a portal page.
2. On the page, open the widget context menu by CTRL+right-clicking any widget.
3. On the widget context menu, click **Show Widget Customizations**.

   Widgets are color-coded as follows:

Color	Customization level
Green	Base system widget
Yellow	Cloned widget
Blue	New widget
Red	Customized widget

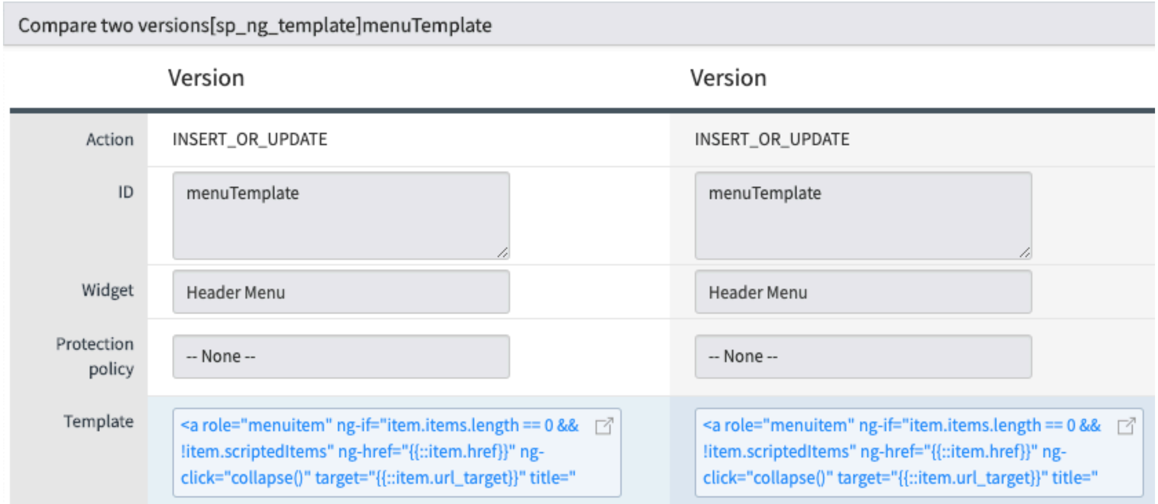
4. On a widget, click the information icon ( ).

   Related records that you modified or developed are outlined in red.



5. Next to a Angular Provider or ng-template record, click **Compare**.

   The system displays the records of the current and previous versions side by side.



Although both sides are labeled **Version**, the left-side record represents the previous version and the right-side record represents the current version.

6. For each field in which it appears, click the window icon ( ) to open the code comparator.

Your most recent changes to the widget code are highlighted in the code comparator.

Improving search engine optimization for portals

Search engine optimization (SEO) helps portal users find the information they need and be more engaged with your portal. Adding SEO information to your public portal pages improves how external search engines index and rank pages to make them more findable.

You can add the following types of information to Service Portal pages to improve SEO:

- Human readable keywords in URLs.
- Meta tags that include information about the page or portal in the `<head>` section of a page.
- Dynamic page titles that are descriptive of the page contents.
- *hreflang* tags that specify all the available languages of a page.
- Canonical URLs that specify which pages to index from sets of duplicate URLs.

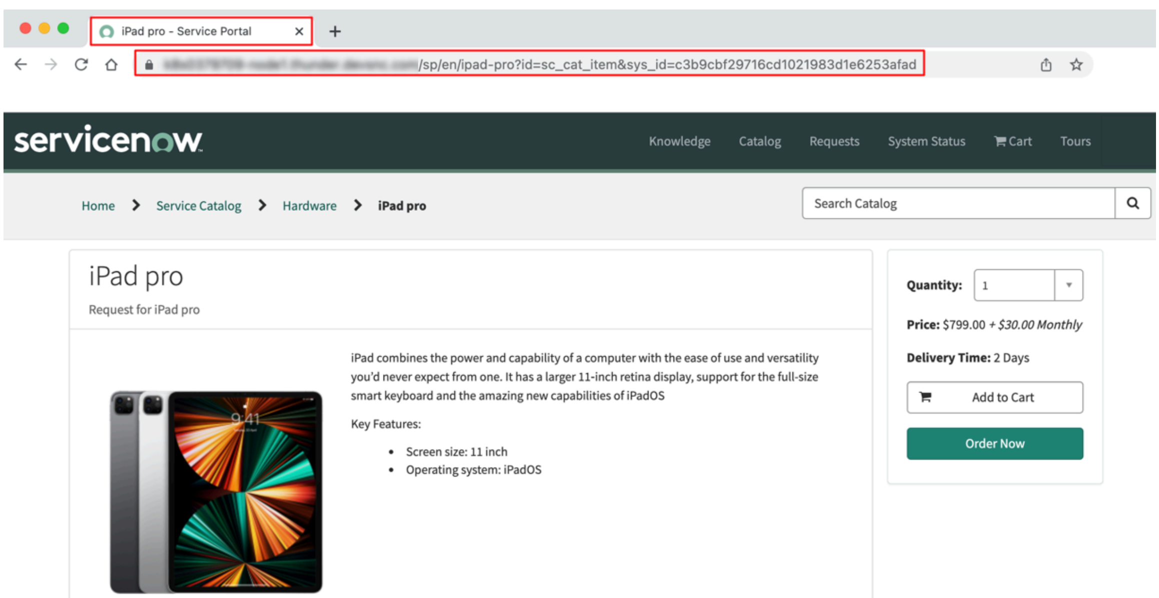
To improve SEO for your portal further, you can also define and automatically generate XML sitemaps for search engines to index using the Sitemap Generator application.

Some portal pages load data from a record that's specified by a parameter in the URL. For these pages, you can use dynamic page variables to add meta tags, page titles, and human readable URL keywords that vary depending on the record loaded in the page.

Using a Service Catalog page as an example, the following URL includes a sys_id parameter in addition to the page ID. Different content loads on the page depending on the value of the sys_id parameter, which specifies a catalog item record.

```
https://<instance>/sp?
id=sc_cat_item&sys_id=c3b9cbf29716cd1021983d1e6253afad
```

In this example, the sys_id is for the iPad pro catalog item. The sc_cat_item page has been configured to generate a dynamic title and dynamic keywords in the URL based on the **Name** field of the catalog item record.



Add human readable keywords to page URLs

Add human readable keywords to the URLs of portal pages to improve search engine optimization (SEO) and click-through rates and help users understand what to expect on the page.

Before you begin

Role required: sp_admin or admin

About this task

Human readable keywords are added to URLs in the following format:

```
https://<instance>/<portal suffix>/<guest language>/<keywords>?
id=<page id>&<page parameters>
```

Keywords can be populated using static content or dynamic page variables and can include a single slash (/). Dynamic page variables load keywords that are based on data in a record. The page parameters in the URL specify which record to use. In the following examples, the category and short description of a knowledge article and the category and name of a catalog item are added as keywords:

- `https://<instance>/kb/en/faq/what-is-a-cookie?id=kb_article_view&sysparm_article=KB0000007`
- `https://<instance>/sp/es/hardware/developer-laptop-mac?id=sc_cat_item&sys_id=774906834fbb4200086eeed18110c737`

Note: To turn off human readable URLs for an instance, add the *`glide.service_portal.enable_human_readable_urls`* property to the System Properties [sys_properties] table and set the value to `false`.

Procedure

1. Navigate to **All** > **Service Portal** > **Pages**.
2. Select a page.
3. **Optional:** Use keywords that are dynamic based on the page content by adding a dynamic page variable to the page.

   a. Select the Dynamic page variables related list tab.

   b. Select **New**.

   c. On the form, fill in the fields.

Dynamic page variables form

Field	Description
Name	The variable that loads keywords in the page URL from record data. The variable name must begin with `%` and can't contain spaces. For example, `%short_descr`.
Order	The priority order from lowest to highest for when multiple dynamic page variables with the same name have different URL query parameters.
Page	The page that uses the dynamic page variable to include keywords in the URL.
URL query parameter	The parameter in the page URL that determines which record displays.
Relevant table column	The column in the specified table that includes the values of the URL query parameter. The default value is **Sys ID**.
Table	The table that includes the records used to populate keywords in the URL and the column with the values of the URL query parameter.
Table field	A field from records in the specified table that populates the keywords in the URL.

Field	Description
Query condition	Conditions that filter the records in the table. A record must meet the query conditions for the variable to apply.

Example

(Optional) This example shows the values for a variable that references the short description of a knowledge base article identified by its number for a published workflow.

Dynamic page variable

Field	Value
Name	%short_descr
Page	kb_article_view
Order	100
URL query parameter	sysparm_article
Relevant table column	Number
Table	Knowledge[kb_knowledge]
Table field	Short description
Query condition	[Workflow][is][Published]

4. Select **Submit**.
5. In the **Human readable url structure** field of the page record, specify the keywords to populate in the page URL using static content, dynamic page variables, or a combination.

   Keywords can include alphanumeric characters, hyphens (-), one slash (/), and percent signs (%) for variables.

   Example

Human readable url structure	Example value
Static content	`faq/what-is-a-cookie`
Dynamic page variables	`%category/%short_descr`
Static content and dynamic page variable	`faq/%short_descr`

   Keywords are automatically formatted to use only lowercase letters, replace spaces with hyphens, and remove any disallowed special characters added by dynamic page variables. If the keywords in the URL exceed 75 characters, they're truncated to be less than or equal to 75 characters.
6. Select **Update**.

Result

If users access the page using the URL without human readable keywords, the page URL is updated in one of the following ways:

- On the initial page load by a guest user, the page redirects to the human readable URL.
- On the initial page load by an authenticated user, the URL is updated to include the human readable keywords without redirection.
- On subsequent page loads for all users, the URL is updated to include the human readable keywords without redirection.

Example: Knowledge article page with human readable keywords in the URL

In this example, the kb_article_view page displays knowledge article KB0000007. The knowledge article record has the following fields and values:

- **Category** is **FAQ**
- **Short description** is `What is a cookie?`

The page has been configured to add keywords based on these field values to the URL using dynamic page variables such as `%category/%short_descr`. The question mark in the short description isn't an allowed character in the URL keywords so it's automatically removed from the URL. The question mark that is in the URL is the query parameter that's always included before the page ID.

The URL that is displayed in the browser appears as: `http://<instance>.com/kb/en/faq/what-is-a-cookie?id=kb_article_view&sysparm_article=KB0000007`.

What to do next

For pages that have canonical URLs, you must include the human readable keywords in the canonical URL. In the SEO script include that returns canonical URLs for pages, use one of the *`getHumanReadableUrl`* methods in the *`SPSEOUtilsSNC`* class to return the human readable keywords in page URLs and include them in the canonical URLs.

For more information about including human readable keywords in canonical URLs, refer to the following resources:

- Configure custom SEO tags for canonical URLs and localized knowledge articles
- SPSEOUtilsSNC - Global

Add meta tags to a public page

Improve the searchability of Service Portal pages by adding meta tags. You can add the meta name and description attributes to a page, define the robots attribute, or create dynamic meta tags for pages that load record data based on a URL parameter.

Before you begin

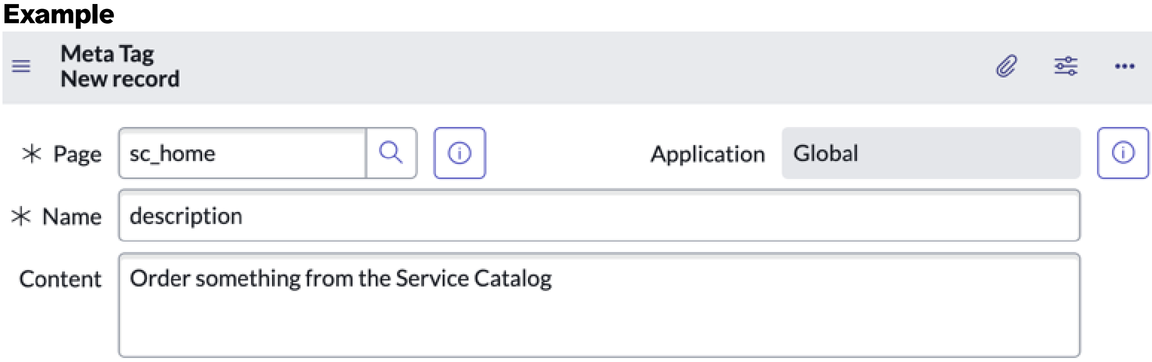
Role required: admin or sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Pages**.
2. Open a page.
3. Check that **Public** is selected.
   Pages that are not public are not indexed by external search engines.
4. Click the **Meta tags** related list tab.
5. Click **New** to create a new meta tag.
6. Complete the form.

Field	Description
Page	Page to apply the meta tag to.
Application	Application scope of the page. This value is read-only.
Name	The HTML meta name attribute. To define the meta robots attribute, add **ROBOTS**.
Content	The HTML meta description attribute. If **ROBOTS** is defined in the **Name** field, you can add one of the following content values: ◦ **INDEX, FOLLOW**: The search engine shows the page in search results and trusts any links in the page. This is the default value. ◦ **NOINDEX, FOLLOW**: The search engine does not show the page in search results, but trusts any links in the page. ◦ **INDEX, NOFOLLOW**: The search engine shows the page in the search results, but does not trust links in the page. ◦ **NOINDEX, NOFOLLOW**: The search engine does not show the page in search results and does not trust links in the page. Alternatively, you can pass a variable into this field based on record data. For example, you can define a `%description` variable in this field, and create a content variable to populate the content tag with record data.

Example



7. Click **Submit**.
   The meta information is added to the page header. For example:

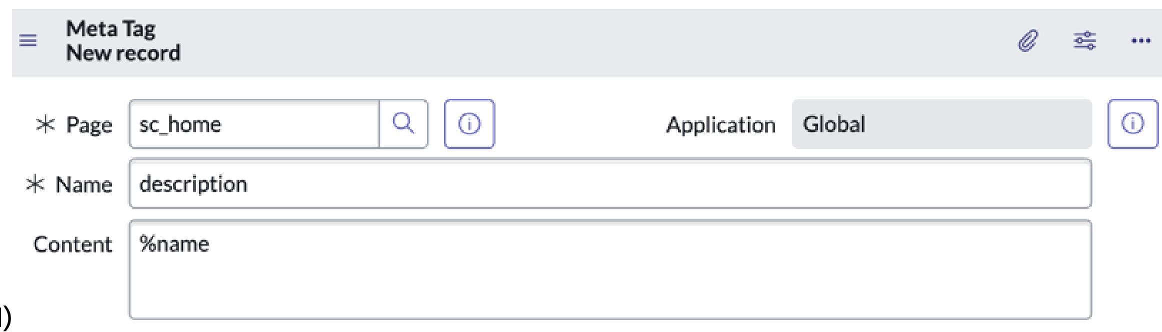
```
<meta name="description" content="Order something from the
 Service Catalog">
```

8. **Optional:** Create a content variable to populate the content tag with record data.
   If the page loads record data based on one or more URL parameters, you can add meta tags generated from the record data.

a. Open a meta tag record and check that the **Content** field contains a variable, or add a variable.
Depending on the available URL parameters and the meta tag you would like to define, you can add the following types of values:

Value types	Description	Example value
One URL parameter variable	Populates the content tag with the value defined in the associated content variables record.	`%description`
More than one URL parameter variable	Populates the content tag with the values defined in the associated content variables records.	`%description %price`
Static value and a URL parameter variable	Populates the content tag with a static value and the associated content variables record.	`Catalog item: %description`

Example



(Optional)

b. In the **Content variables** related list, click **New**.
The **Content variables** related list is only available after saving the meta tag record.

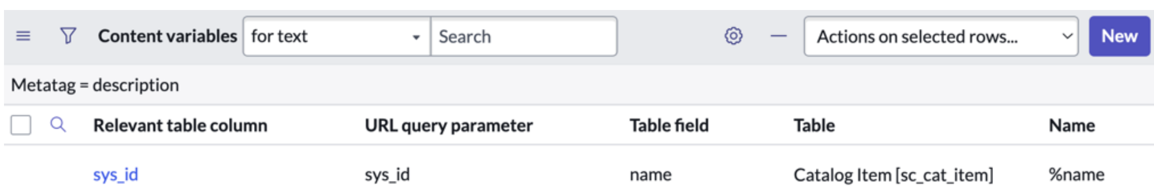
c. Complete the form.
Associate a field with a URL query parameter. When the value of the query parameter is used to display content, a field from the same record is used to generate the content tag. You can define the field to generate the content tag through the **Table field** field.

Field	Description
Name	The variable to store the value. Must begin with **%** and cannot contain spaces. This value must match one of the variables defined in the **Content** field in the Meta tag record.
Application	Application scope of the page. This value is read-only.
Metatag	The meta tag to apply the dynamic variable to.
URL query parameter	URL parameter to indicate the record that is being displayed. You can enter any string.

Field	Description
	Tip: To create a URL parameter that is meaningful and easily identifiable, use a field name from the record. For example, to refer to a knowledge article, you can enter `number` to reference the article by its number.
Relevant table column	Table field to match the URL query parameter. For example, if you entered `number` to reference a knowledge article by its number, select **Number**. If left blank, the system uses the record sys_id.
Table	The source table of the URL query parameter record.
Table field	Select a field from the table defined in the **Table** field. This field is used to generate the value of the content tag. **Important:** To support SEO, ensure that the referenced table field is public. For more information on granting access to a table field, see Create an ACL rule.

If more than one content variables match a variable defined in the **Content** field of the meta tag record, the record with the earliest Created date is used.

d. Click **Submit**.



The content tag loads record data. For example:

```
<meta name="description" content="Apple iPad 3">
```

Add dynamic titles to a page

Create variables to generate descriptive titles depending on the content loaded into a page.

Before you begin

Role required: admin

About this task

Note: The dynamic titles don't apply to the knowledge article view page in the Knowledge Management Service Portal.

Procedure

1. Navigate to **All** > **Service Portal** > **Pages**.
2. Open a page.
3. Add one or more variables to the **Dynamic page title** field.
   Depending on the available URL parameters and the dynamic title you would like to define, you can add the following types of values:

Value types	Description	Example value
One URL parameter variable	Generates a page title using the associated record of one URL parameter.	`%first_name`
More than one URL parameter variable	Generates a page title using the associated records of multiple URL parameters.	`%first_name %last_name`
Static value and a URL parameter variable	Generates a page title using a static value and the associated record of a URL parameter.	`Employee: %first_name`

Enter the variables in the intended syntax of the title. For example, to have an employee's name and title separated by a hyphen, you would enter `%first_name - %title`. In the page title, this syntax would render as something like "Beth - System Administrator".

4. Click the **Dynamic page variables** related list tab.
5. Click **New** to create a new variable.
6. On the form, fill in the fields.
   Associate a field with a URL query parameter. When the value of the query parameter is used to display content, a field from the same record is used to generate the title. You can define the field to generate the title through the **Table field** field.

Field	Description
Name	Variable to store the value. Must begin with **%** and cannot contain spaces. This value must match one of the variables defined in the **Dynamic page title** field.
Application	Application scope of the page. This value is read-only.
Page	Page to apply the dynamic variable to.
URL query parameter	URL parameter to indicate the record that is being displayed. You can enter any string. **Tip:** To create a URL parameter that is meaningful and easily identifiable, use a field name from the record. For example, to refer to a knowledge article, you can enter `number` to reference the article by its number.
Relevant table column	Table field to match the URL query parameter. For example, if you entered `number` to reference a knowledge article by its number, select **Number**. If left blank, the system uses the record sys_id.
Table	The source table of the URL query parameter record.
Table field	Field from the table defined in the **Table** field. This field is used to generate the dynamic page title.

If more than one dynamic page variables match a variable defined in the **Dynamic page title** field, the record with the latest Updated date is used.

Variables with same name aren't supported and won't be created multiple times. Each variable should be unique.

In this example, the value of the Title field in the User [sys_user] table populates the page title. The `%title` variable must also be defined in the **Dynamic page title** field in the page record.

7. Click **Submit**.

Result

When the page loads, the record defined in the URL query parameter displays. The field defined in **Table field** determines the title of the page.

Configure the main tag on a page

Specify the main content of a page to include in the *<main>* tag to improve search engine optimization and accessibility.

Before you begin

Role required: sp_admin or admin

About this task

The *<main>* tag is a semantic HTML element that contains the main content of the page. The *<main>* tag should be applied to content that is unique to the page and should be configured for only one element on the page.

Procedure

1. Navigate to **All** > **Service Portal** > **Service Portal Configuration**.
2. Select **Designer**.
3. Select a page.
4. Switch to the portal you want to design pages for by selecting the portal name in the header.

5. Select a container, row, or column on the page that contains the main content of the page.

   See the breadcrumbs in the header to confirm you have the correct element selected. You can't add the *<main>* tag to a widget.

6. Select the edit icon [ ].
7. In the **Semantic tag** field, select **Main**.
8. Select **Save**.

Result

In the HTML of the page, the *<main>* tag contains the container, row, or column. In Service Portal Designer, a *<main>* tag displays in the bottom-right corner of the element.

servicenow

Enable SEO for localized versions of a portal page

Allow users to discover portal pages in their preferred language by adding *`hreflang`* tags.

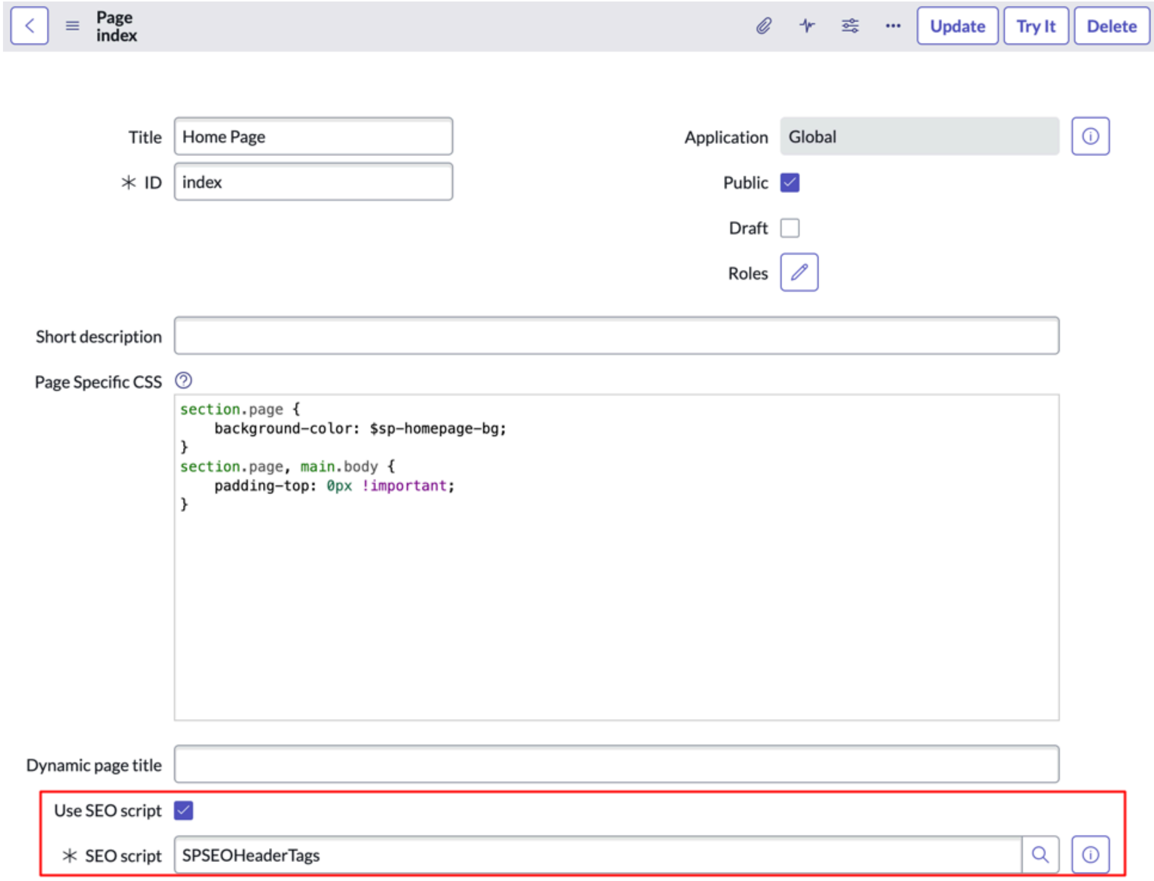
Before you begin

Role required: sp_admin or admin

Procedure

1. Navigate to **All** > **Service Portal** > **Pages** and open a page record.
   Ensure that **Public** is selected for the page. Pages that are not public are not indexed by external search engines.
2. On the form, select the **Use SEO script** check box.

   Selecting this check box causes the **SEO script** field to appear. By default, the system uses the SPSEOHeaderTags script include. You can use a different script include by updating this field.



3. Click **Update**.

Result

The system adds default `hreflang` tags for each active language in your instance.

What to do next

You can override the default `hreflang` tags, add a canonical URL, or add custom header tags by updating the script include that is referenced in the **SEO script** field. This needs to be set by the page or content author.

To specify a canonical URL for the page, update the `generateCanonicalURL` function in the script include.

To specify custom header tags for the page, update the `generateCustomTagsForSEO` function in the script include.

For an example of inserting custom SEO tags into the knowledge article view page, see Configure custom SEO tags for canonical URLs and localized knowledge articles.

Sitemap Generator

Use the ServiceNow® Sitemap Generator application to define and automatically generate XML sitemaps to improve search engine optimization of public portal pages.

Activation information

You can activate the Sitemap Generator application (sn_ux_seo_sitemap) from your instance. For more information, see Activate Sitemap Generator.

You can also activate Sitemap Generator from the ServiceNow Store. Visit the ServiceNow Store website to view all the available apps and for information about submitting requests to the store. For cumulative release notes information for all released apps, see the ServiceNow Store version history release notes.

Sitemap requirements

The sitemap is generated from a script or static XML. When creating a sitemap, you must ensure that its contents meet the following requirements because validating them isn't handled automatically:

- Includes only pages with unauthenticated user access.

  Sitemap Generator automatically excludes portal URLs that aren't publicly accessible from sitemaps. However, this doesn't apply for URLs with custom domains instead of the ServiceNow domain. URLs that are excluded from the sitemap are listed in the Application Log [syslog_app_scope] table.
- Excludes pages that respond with a 301 redirect.
- Excludes pages with the NOINDEX meta tag, such as retired or expired pages. If you use a script to create the sitemap, include logic similar to that of the SEO script include you used to add NOINDEX meta tags to pages to exclude those pages from the sitemap. For more information, see Configure custom SEO tags for canonical URLs and localized knowledge articles.
- For any pages with canonical URLs or `hreflang` tags, the sitemap includes those canonical URLs or URLs with `hreflang` tags returned by the SEO script include for that page. If you use a script to create the sitemap, include logic similar to that of the SEO script include you used to return canonical URLs or URLs with `hreflang` tags. For more information, see SEO for canonical URLs and localized versions of knowledge articles.
- For any pages with human readable keywords in URLS, the sitemap includes those URLs with human readable keywords. If you use a script to create the sitemap, use one of the `getHumanReadableUrl` methods in the `SPSEOUtilsSNC` class to return the human readable keywords and include them in the sitemap URLs. For more information, see Add human readable keywords to page URLs.

Note: Guidance on how to meet these requirements is included in the code templates in the **Script** and **Static XML** fields where the sitemap contents are defined. For more information, see Generate XML sitemaps for SEO indexing.

For more information about sitemap requirements for SEO, refer to the following resources:

- Build and submit a sitemap in the Google documentation
- XML schema for the Sitemap protocol on the sitemaps.org website

Activate Sitemap Generator

You can activate the Sitemap Generator plugin (sn_ux_seo_sitemap) for Service Portal if you have the admin role.

Before you begin

Role required: admin

About this task

Scheduled jobs and tables are installed with Sitemap Generator.

For more information, see Components installed with Sitemap Generator.

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the Sitemap Generator plugin (sn_ux_seo_sitemap) using the filter criteria and search bar.

   You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.

3. Select **Install** to start the installation process.

   Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: `Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.`

   You will see a message after installation is completed. For information about the components installed with a plugin, see Find components installed with an application.

Components installed with Sitemap Generator

Several types of components are installed with activation of the Sitemap Generator plugin, including tables and scheduled jobs.

Scheduled jobs installed

Scheduled job	Description
Sitemap Scheduler	Updates the sitemap contents daily at midnight.
SitemapPurgeScheduler	Deletes the previous version of the sitemap.

Tables installed

Table	Description
UX Sitemap Configuration [sys_ux_seo_sitemap_config]	Sitemaps configured on the instance.
UX Sitemap Definition [sys_ux_sitemap_definition]	Definitions that specify the content to include in a sitemap.

Generate XML sitemaps for SEO indexing

Create XML sitemaps for web crawlers to index your public portal pages and improve search engine optimization for your portals.

Before you begin

Add SEO information to portal pages, such as meta tags that improve the searchability of Service Portal pages. For more information, see Improving search engine optimization for portals.

Review the "Sitemap requirements" section of the Sitemap Generator documentation topic to determine what content should be in the sitemap.

Role required: admin

Procedure

1. Navigate to **All** > **Sitemap Generator** > **Sitemap Configuration**.
2. In the UX Sitemap Configurations [sys_ux_seo_sitemap_config] table, select **New**.
3. On the form, fill in the fields.

UX Sitemap Configuration form

Field	Description
Sitemap Name	A unique name for the sitemap.
Description	A description of the sitemap contents.
Active	Option for whether the sitemap is automatically generated.

4. From the form context menu, select **Save**.
5. From the **Sitemap Config Definition** tab, select **New**.

> **Important:**
> - You must ensure that the contents of your sitemap meet the Sitemap requirements.
> - You don’t need to add the header and footer of the sitemap XML. These are added automatically when the sitemap is generated.

6. In the **Type** field of the UX Sitemap Definition form, select one of the following options to define the contents of the sitemap either with a script or by specifying static URL elements.

Type	Action
Script	Dynamically generate the content from a script. **Note:** If special characters such as <,>, &, or " are included in URLs, you must replace them with their equivalent escape characters.
Static	Specify the static URL elements to include in the sitemap. **loc** The full page URL. **lastmod** The date the page was last modified. **changefreq** The approximate frequency at which the page is updated. For more information about valid values for these elements, see the Sitemaps XML topic on the sitemaps.org website.

7. Select **Active** and then select **Submit**.

8. **Optional:** Repeat steps 5 through 7 to define additional content to include in the sitemap.
   You can create multiple sitemap definitions with any combination of types that combine to create the sitemap. For example, you could include both static XML and dynamic content from a script or you could include content from multiple scripts.
9. **Optional:** Configure the number of URL elements to include per sitemap page to control how many pages are in your sitemap.
   By default, 750 URLs are included per sitemap page. For URLs with *`hreflang`* tags, you should limit the number of URLs per page to the default value of 750 URLs.

   a. Enter `sys_properties.list` in the navigation filter.

   b. Open the *`glide.sitemap.page.count`* property and set the value to the number of URLs to include per page.
      The maximum value is 5,000.

   c. Select **Update**.

10. From the UX Sitemap Configuration record, select **Generate Sitemap**.

    If a sitemap includes more than the number of URL elements specified with the *`glide.sitemap.page.count`* system property, a sitemap index file that specifies the URLs of the sitemap pages is generated. The sitemap index file naming structure is `sitemap-<sitemap-config-sysid>.xml` and the sitemap page naming structure is `sitemap-<page>-<sitemap-config-sysid>.xml`.
11. Select **Copy Sitemap URL** and add the sitemap URL in Google Search Console or to your `robots.txt` file with the Google Custom Search integration.

    Note: This URL accesses the latest sitemap or, if the sitemap is paginated, the latest sitemap index. It doesn't execute scripts on the fly to regenerate the sitemap.

    For information about using Google Search Console, see Manage your sitemaps using the Sitemaps report in the Google documentation. For information about the Google Custom Search integration, see ServiceNow provided integrations.
12. **Optional:** Review any portals URLs that were excluded from the sitemap because they aren't publicly accessible.

    a. Navigate to **All** > **System Logs** > **System Log** > **Application Logs**.

    b. In the condition builder, enter the filter **[App Scope] [is] [Sitemap Generator] AND [Message] [starts with] [The given URL]**.
       The **Message** field includes the excluded URLs. For example, "The given URL `https://<instance>/kb?id=kb_article_view` is not public".

Result
All active sitemaps automatically regenerate once a day and include content from any of their active sitemap definitions. Previous versions of the sitemap are deleted. You can check the status of the daily job at **All** > **System Logs** > **System Log** > **Application Logs** using the filter **[App Scope] [is] [Sitemap Generator]**.

Posting announcements to portal users

Announcements broadcast messages to Service Portal users. They display in an announcement banner or an announcement widget instance.

Announcements are active on new instances. To activate announcements after upgrade, you can activate the Service Portal Announcements plugin (com.glide.service-portal.announcements).

When creating announcements, you can define the way an announcement displays.

Sort order

Announcements are displayed depending on the order defined in:

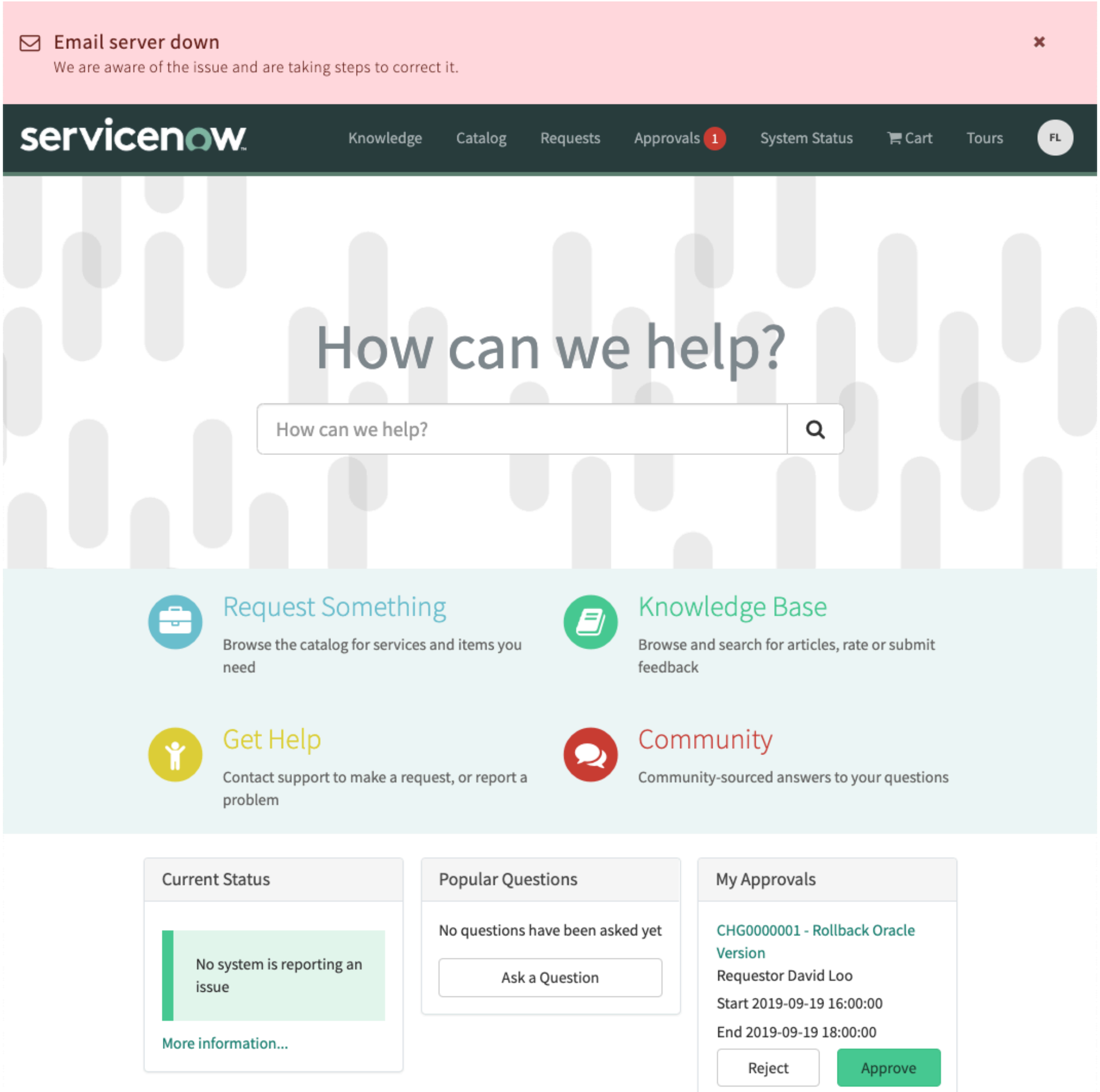
- The *glide.service_portal.announcement.default_sort_order* system property. See Service Portal properties.
- The **Display First** field in the announcement record.

If there is a tie between two records set to **Display first**, the sort order defined in the system property is honored.

Display location

Announcements can display in the following locations:

- Announcement banner
- Announcements widget instance



To define the announcement display location, define the announcement type in the announcement record.

Display Style

Using display styles, you can:

- Create a custom color scheme.
- Change the text alignment.

Announcements that appear in a banner use the display style defined in the Announcement record by default. To use the display style in an instance of the Announcements widget, you can select the **Use Display Style** instance option.

User criteria

If user criteria is set up for the Service Portal, you can define who can and who cannot view an announcement. Through user criteria, you can create announcements only visible to specific users, groups, roles, organizations, and more.

Create an announcement

An announcement appears as a banner in Service Portal or within the announcements widget.

Before you begin

Role required: announcement_admin, sp_admin, or admin

About this task

The title and summary of an announcement can be localized in the Translated Text [sys_translated_text] table. For more information, see Translating text fields.

Procedure

1. Navigate to **All** > **Service Portal** > **Announcements**.
   The Announcements [announcement] table displays all announcements.
2. Click **New**.
3. On the form, fill in the fields.

Field	Description
Name	Internal title that doesn't display in the announcement.
Active	Option to activate the announcement. To hide an announcement, clear the **Active** check box.
Title	Title to appear in the announcement.
From	Date and time that the announcement begins to appear.
To	Date and time that the announcement ends. If left empty, the announcement continues to appear until it's deactivated.
Summary	Text to appear in the announcement.
Display style	Defines the background color, text color, and text alignment of banner announcements. Base system styles include: ◦ **Normal**: Blue background and left-aligned, white text. ◦ **Urgent**: Red background and left-aligned, white text. Announcements that appear in a banner use the display style defined in the Announcement record, by default. To use the display style in an instance of the Announcements widget, you can select the **Use Display Style** instance option.
Type	Defines where an announcement displays. By default, announcements appear in the following locations: ◦ **Banner**: Announcement banner above the banner frame in the Service Portal. ◦ **Widget**: Instance of the announcements widget. You can create an announcement type to define other widget instances to display an announcement.
Glyph	Glyph to display to the left of the title in banner announcements.
Glyph alt text	Alternative text for the glyph icon used with screen readers.

Field	Description
Public	Option to display the announcement to users before and after they've logged in.
Display first	If selected, the announcement displays before all other announcements. If there is a tie between two records set to **Display first**, the sort order defined in the *glide.service_portal.announcement.default_sort_order* system property is honored. See Service Portal properties.
Roles	If **Public** is not selected, you can define the roles that the announcement is visible to. If left empty, the announcement is visible to all roles. **Note:** Alternatively, you can define user criteria for the announcement instead. To do so, set up User criteria for Service Portal and clear the **Public** check box. Announcements display to only the users who pass the access criteria.
Unauthenticated only	Option to display the announcement only to users who haven't logged in. This option appears only if **Public** is selected.
Click target	Creates a link below the announcement body that opens to a target page or URL. ◦ **None**: Announcement doesn't include a link. ◦ **Page**: Opens a Service Portal page in the current browser tab. ◦ **URL in current browser tab**: Opens a URL in the current browser tab. ◦ **URL in new browser tab**: Opens a URL in a new browser tab.
Details page	The page that opens in the current browser tab. Available if the **Click target** is **Page**.
Details URL	The URL that opens in the current or new browser tab. Available if the **Click target** is **URL in current browser tab** or **URL in new browser tab**.
Details link text	Link text for the page or URL click target. If you leave this field empty and define a click target, the title of the announcement is "Learn More".
Dismiss options	Determines whether the user can dismiss the announcement. Options include: ◦ User can dismiss - no redisplay ◦ User can dismiss for current session only ◦ User cannot dismiss
Portals	Portals that display the announcement. If this field is empty, the announcement displays in all portals.

4. Save or submit the record.

What to do next

If the **Type** is **Banner**, test your announcement by navigating to the portal defined in the **Portals** field. If the **Type** is **Widget** or a custom type, test your announcement by navigating to the page with the associated widget instance.

Create an announcement display style

Define the background color, foreground color, and text alignment of an announcement.

Before you begin

Role required: admin, sp_admin, or announcement_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Announcements**.
2. Open an existing announcement or create a new announcement.
3. In the **Display style** field, click the reference lookup icon to open the referenced table.
   The Announcement Styles [announcement_style] list view opens.
4. Click **New** to create a new display style.
5. Complete the form.

Field	Description
Name	Internal name of the display style.
Application	The application scope of the announcement. This value is read-only.
Background color	Color name or HEX value in the format #000000 for the announcement background.
Foreground color	Color name or HEX value in the format #000000 for the announcement text.
Alignment	Text alignment. Options include: ◦ Left align ◦ Center align

6. Click **Submit**.

Result

By default, the announcement appears in both the portal banner and the Announcements widget, but only the banner uses your new display style. You can configure the widget to use the display style also. For more information, see the instance options in Announcements widget.

Create an announcement type

Announcement types determine where an announcement displays. Announcements include two base system types: banner and widget.

Before you begin

Role required: admin, sp_admin, or announcement_admin

About this task

Similar to creating a category tag, you can create alternative types to define custom locations. For example, to display an announcement only in a specific widget instance, you can create an announcement type for that widget instance. Any announcements tagged with that type will only display in the desired widget instance.

Procedure

1. Navigate to **All** > **System Definition** > **Tables** > **Announcement Consumer Type**.
   The Announcement Consumer Type table [announcement_consumer_type] opens.
2. In the Columns section of the form, Click **New**.
3. Define a **Name**.
   The name is used to associate an announcement with a widget instance.
4. Click **Save**.
5. Add the custom type to an announcement.
   a. Navigate to **Service Portal** > **Announcements**.
   b. Open an existing announcement or create a new announcement.
   c. In the **Type** field, select the custom type.
   d. Click **Save**.
6. If using the type in a widget, define the type as a widget instance option.
   The announcement banner only displays announcements tagged with the **Banner** type.
   a. Navigate to an instance of the Announcement widget.
   b. Control + right-click the widget instance and select **Instance Options**.
   c. In the **Type** field, select the custom announcement type.

Result
The widget instance associated with the type displays any announcements tagged with the same type.

Analyzing portal performance and usage

Analyze the user experience and performance of a portal. With these analytics and performance evaluation tools, you can gather insights to improve your portal's performance and usage.

Analytics and Reporting Solutions for Service Portal

Platform Analytics Solutions contain prepackaged Performance Analytics and Reporting content for use with other ServiceNow AI Platform products. This Platform Analytics Solution provides metric visualizations to better understand the Service Portal user experience and identify how to improve it.

Required roles

The following roles and tasks are associated with this Solution:

- ServiceNow AI Platform administrator (admin): Install and activate this Analytics and Reporting Solution and make any necessary changes to system properties.
- Performance Analytics administrator (pa_admin): Review the indicators, breakdowns, widgets, and dashboards. Set up and start data collection. Share the dashboards with appropriate stakeholders.

For information about additional roles, see .

Related topics

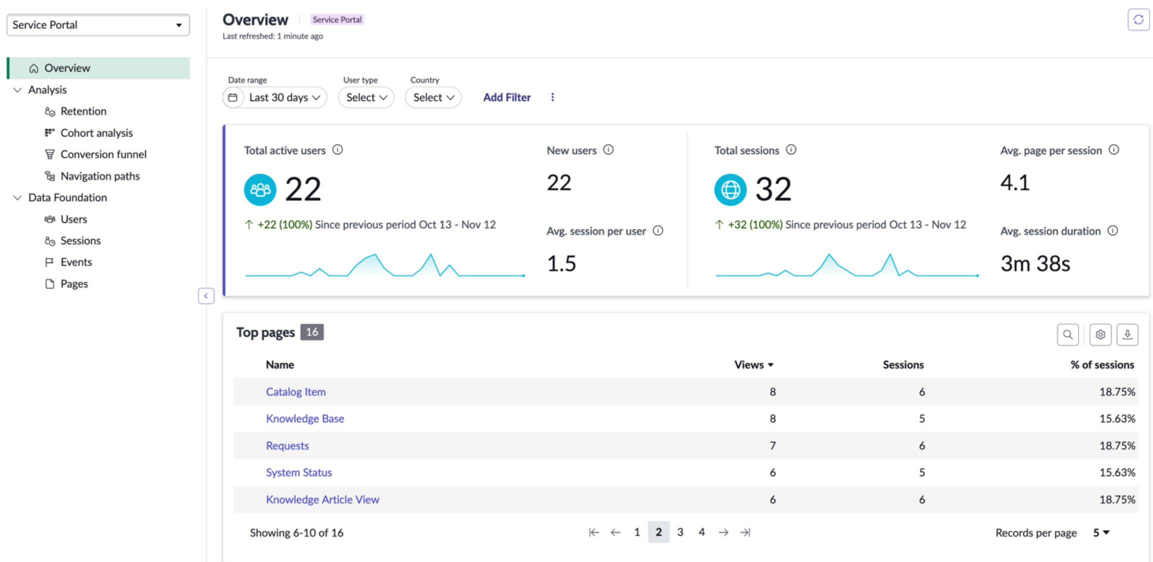
Analytics and Reporting Solutions

Usage Insights for Service Portal

The Usage Insights application provides views for monitoring usage analytics of your Service Portal applications. Visualize metrics and interactions to better understand the Service Portal user experience and identify how to improve it.

https://player.vimeo.com/video/1107546571?h=347a86e18b&badge=0&autopause=0&player_id=0&app_id=58479

You can view user analytics tracking for the portal in the Usage Insights application. For more information, see Overview of the User Experience Analytics application.



Usage Insights for Service Portal provides views for monitoring the key performance indicators (KPIs) of web applications built on Service Portal. You can use these insights to optimize your portal.

For example, Usage Insights tracks when a user orders a catalog item or views a knowledge article. You can use this data to infer which items or articles are the most popular among users. For more information on user-triggered events that are tracked automatically, see Service Portal events.

- **Note:** Usage Insights tracking is enabled for all portals by default. You need to enable tracking for a portal only if you enabled tracking for some portals but not others in a previous version. For more information, see Track Usage Insights in Service Portal.

- **Note:** If you make certain key changes to portals, such as changing the sys_id, data is not carried over and you see a different dashboard.

Roles

The portal_analytics_admin and portal_analytics_viewer roles are installed with the Service Portal Analytics plugin (com.glide.service-portal.analytics). For information on other roles associated with Usage Insights, see Roles installed with Usage Insights.

User consent notices

User consent notices must conform to the ServiceNow Data Processing Addendum. Review your ServiceNow template user consent notices before they are presented to users. You can tailor the options for how these notices are presented to users, including the wording. For more information, see Define texts for Notice and Explicit Opt-in user consent management policies.

Related topics

User Experience Analytics

Track Usage Insights in Service Portal

Track Usage Insights for Service Portal to monitor key performance indicators with the Usage Insights application.

Before you begin

Role required: portal_analytics_admin

About this task

By default, tracking is not enabled for portals. You need to enable tracking for a specific portal only if you enabled tracking for some portals but not others in a previous version.

Portals that have been configured for tracking are listed in the Usage Insights settings [sys_analytics_bucket] table. For information about managing existing analytics settings for a portal, see Configure User Experience Analytics Settings.

Procedure

1. Navigate to **All** > **Service Portal** > **Portals**.
2. Select the portal title.
3. On the portal form, select **Create Analytics Settings**.

   Note: If a portal has already been configured for tracking, the button name will be **View Analytics Settings**.

4. On the User Experience Analytics Settings form, specify which users to track.
   - To track analytics only for authenticated users, clear the **Enable Unauthenticated User Tracking** check box.
   - To track analytics for both unauthenticated and authenticated users, select the **Enable Unauthenticated User Tracking** check box.

   Note: If you enabled unauthenticated user tracking, you might be required by law to notify unauthenticated users that you are tracking their usage for analysis. To display a legal notice, activate the Privacy Notice announcement, which is inactive by default. For more information, see Activate the privacy notice for unauthenticated users.

5. Select **Update**.

Result

You can now view user analytics tracking for the selected portal by navigating to **All** > **Platform Analytics** > **User Experience Analytics**. For more information on using the Usage Insights application, see Overview of the User Experience Analytics application.

Related topics

Disable User Experience Analytics tracking servicenow.

Activate the privacy notice for unauthenticated users

If you enabled unauthenticated user tracking in your portal, you may be required by law to notify unauthenticated users that you are tracking their usage for analysis. You can display a legal notice by activating the Privacy Notice announcement.

Before you begin

By default, unauthenticated user tracking is turned off for portals. To modify analytics settings for a portal, see Configure User Experience Analytics Settings.

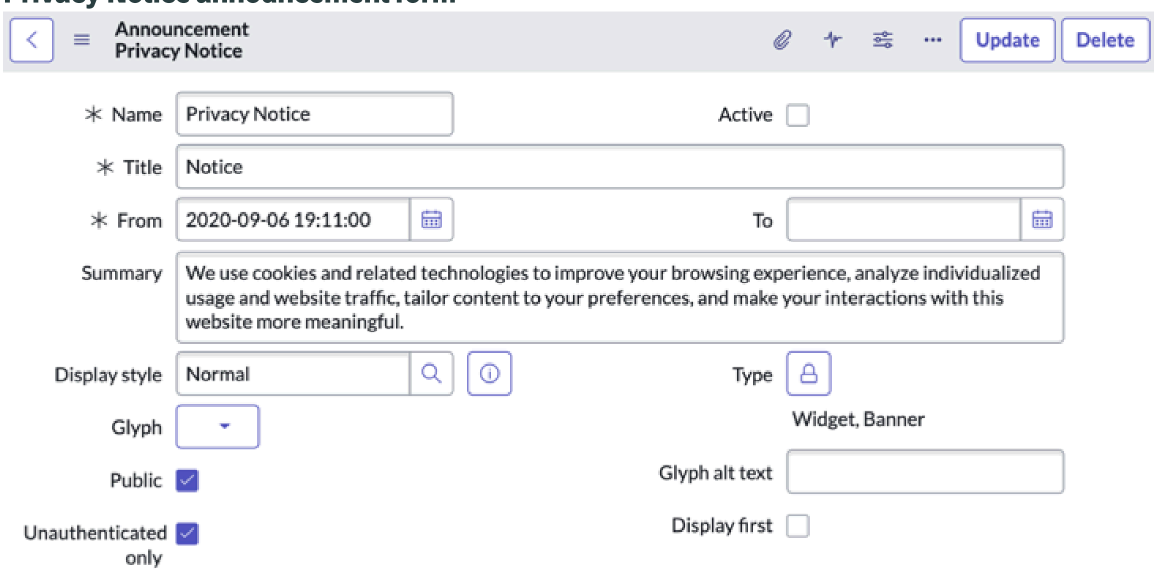
Role required: sp_admin

Procedure

1. Navigate to **All** > **Service Portal** > **Announcements** and open the inactive record named **Privacy Notice**.
2. Review the form.

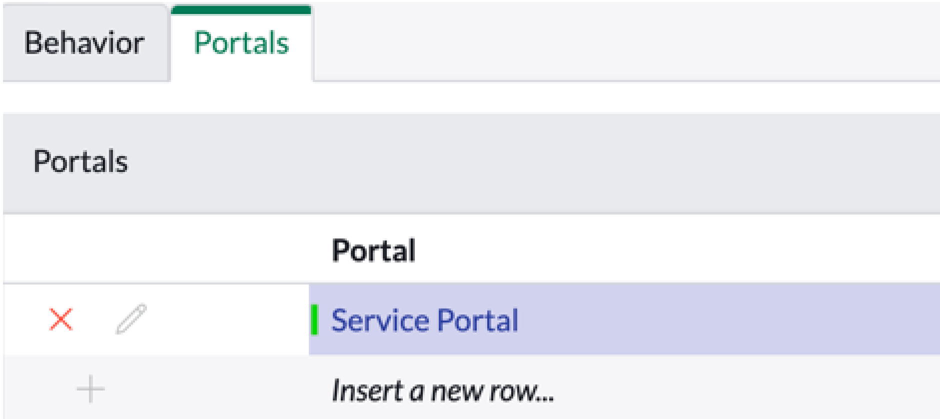
   You can modify the default text of the **Summary** field or leave it as-is.

   ### Privacy Notice announcement form

   By default, the **Unauthenticated only** option is selected to display the announcement only to users who haven't logged in to the portal. The announcement disappears after the user logs in.
3. In the Portals section, select a portal in which to display the announcement.
   If no portals are available, select **Insert a new row** and specify a portal.

Portals section



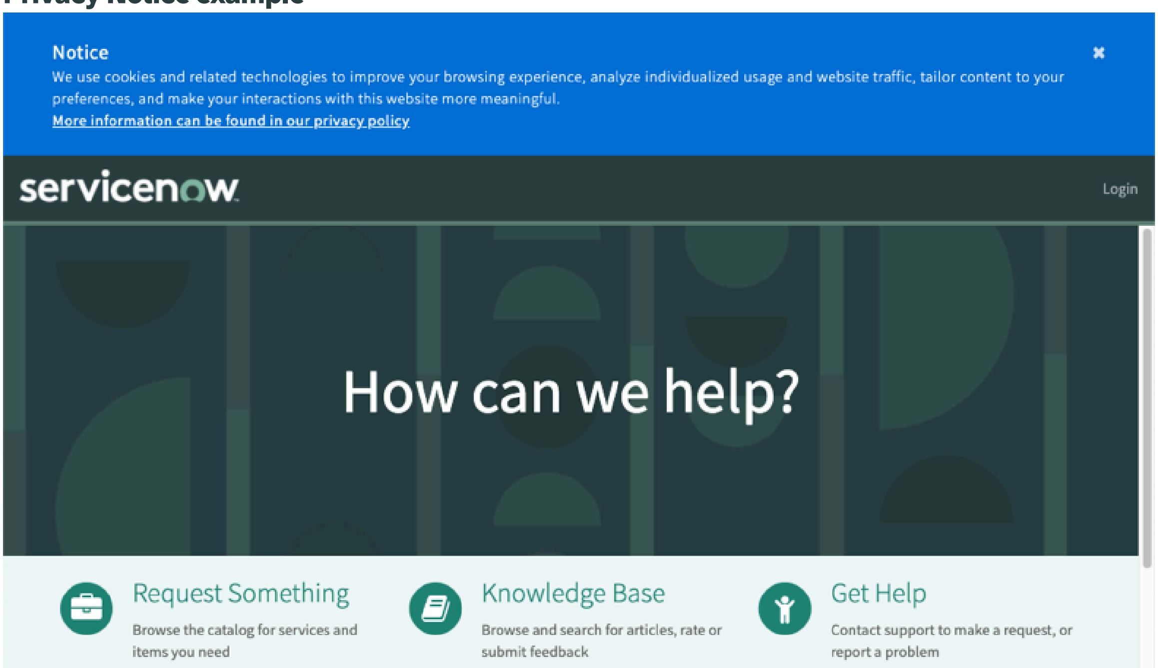
> **Note:** The Privacy Notice announcement appears only in portals for which have User Experience Analytics settings.

4. Activate the announcement by selecting the **Active** option.
5. Select **Update**.

Result

The Privacy Notice announcement is displayed to unauthenticated portal users.

Privacy Notice example



Related topics

Create an announcement

Service Portal events

View Service Portal events to get insight into how a portal is being used in your organization.

Usage Insights automatically detects the gestures and actions of portal users. You can view each occurrence of these events in the Usage Insights application.

Event	Description
Submit Catalog Request	Tracks when a user submits a request through the SC Catalog Item widget. You can view the request ID and the number of items in each request. Use these analytics to optimize the Service Catalog.
Order Catalog Item	Tracks when a user orders a catalog item through the SC Catalog Item widget. You can view the name and ID of each ordered item. You can also view the associated request ID. Use these analytics to optimize the Service Catalog.
Submit Record Producer Request	Tracks when a user submits a request through any record producer. Use these analytics to optimize the Service Catalog.
View Knowledge Article	Tracks when a user views a knowledge article. You can view the name, ID, and language of each viewed article. Use these analytics to optimize the knowledge base.
Initiate Search	Tracks when a user searches the portal using the Faceted Search and Typeahead Search widgets. You can view the search keywords that users enter. You can also compare usage of the two search widgets. Use these analytics to improve search in Service Portal.
Search Result Selected	Tracks when a user selects a search result when using the Faceted Search widget. You can view the click rank and sys_id of the selected search item. Use these analytics to improve search in Service Portal.
Successful Login	Tracks when a user logs in to Service Portal. Use these analytics to monitor login activity within a given time period.
PortalPageLoad	Tracks which pages users visit and in which languages. Use these analytics to understand your user base and the pages they interact with.
SP File Attach	Tracks how users attach files to records from portal pages: by navigating the file system, pasting files from the clipboard, or dragging and dropping files. Use these analytics to optimize how users can attach files to records from portal pages.

You can create custom events to be triggered. For more information, see SNAnalytics - Client

Related topics

SC Catalog Item widget

Faceted Search widget

Typeahead Search widget

Usage Insights related properties for Service Portal

Use system properties to configure Usage Insights for Service Portal.

glide.analytics.tracking.force_allowed.portals

Turns off the user consent pop-up for specified portals. You specify a portal by pasting its sys_id in the **Value** field. To specify multiple portals, enter a comma-separated list with no spaces.

- Type: string
- Default value: none

glide.analytics.tracking.restricted.portals

Turns off user analytics tracking for specified portals. You specify a portal by pasting its sys_id in the **Value** field. To specify multiple portals, enter a comma-separated list with no spaces.

- Type: string
- Default value: none

Related topics

Add a system property

Unique record identifier (sys_id)

Evaluate the performance of a portal page

Evaluate how the widgets on a page perform against performance benchmarks that you specify.

Before you begin

Role required: sp_admin or admin

Procedure

1. Turn on the Performance Analyzer for the portals that you want to evaluate.
   By default, the Performance Analyzer is enabled for the Service Portal (sp).
   a. In the navigation filter, enter `sys_properties.list`.
   b. Filter the list by entering *sp_allow_perf_debug_option_for_portals* for the Name field.
   c. Select the *sp_allow_perf_debug_option_for_portals* record.
   d. In the Value field, enter the suffixes of the portals to analyze.

   For users with the sp_admin or admin roles, the open Performance Analyzer icon ( ) appears on pages in the specified portals.
2. Navigate to the portal page that you want to analyze.
3. Select the open Performance Analyzer icon ( ).

The Performance Analyzer opens in another browser tab. The Portal Page URL field automatically populates with the URL of the page from which you open the Performance Analyzer.

4. From the Benchmarks details tab, enter the performance benchmarks to analyze the page against.

Benchmark	Description
Widget Load Time (ms)	The time, in milliseconds (ms), that it takes for a widget to load on the page.
ACL Execution time (ms)	The time, in milliseconds (ms), that it takes for a widget to execute any applicable ACLs.
DB Call Execution Time (ms)	The time, in milliseconds (ms), that it takes for a widget to execute database queries.
Business Rule Execution Time (ms)	The time, in milliseconds (ms), that it takes for a widget to execute business rules.
Ajax Calls Time (ms)	The time, in milliseconds (ms), that it takes for a widget to execute AJAX calls.
Ajax Waiting Time (sec)	The time, in seconds (s), to wait for AJAX calls after the page has finished loading.

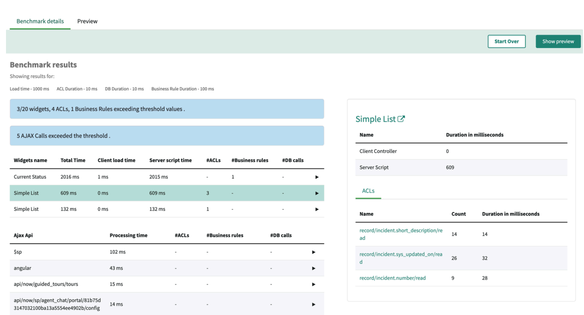
5. Select **Validate**.

Note: During validation, refrain from interacting with other pages on the instance as doing so could impact the results of the page evaluation.

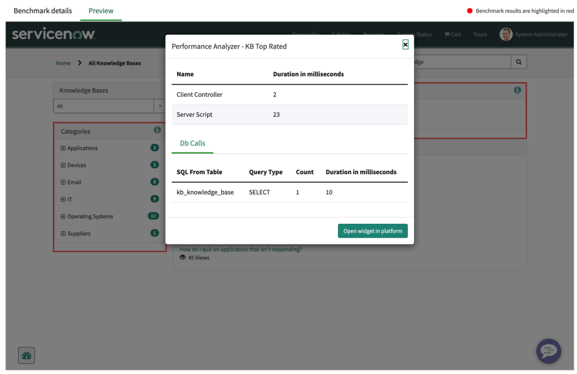
The Performance Analyzer returns the benchmark results, which include any widgets on the page that exceed the benchmarks and details about their performance.

6. Review the benchmark results.

<table>
<tr><th>Option</th><th>Steps</th></tr>
<tr><td>Benchmark de tails</td><td>From the Benchmark results list, select a widget or AJAX API to view addi tional details about its ACLs, business rules, or database calls.


</td></tr>
<tr><td>Preview</td><td>a. Select Show preview.

Any widgets on the page that exceed the specified benchmarks are highlighted on the page.</td></tr>
</table>

Option	Steps
	b. Select the information icon (ⓘ) for a highlighted widget to view its benchmark results. 

7. **Optional:** To evaluate the page against different benchmarks, select **Start Over** and enter new benchmarks.

What to do next

Consider updating any widgets that don't meet your performance benchmarks to improve the page performance. For example, if a widget's server script takes too long to load, evaluate if the script can be improved to load faster.

Get a list of widgets per page

Get a summary of all widgets that appear on Service Portal pages. Use this data to better understand widget customizations and page usage.

Before you begin

Role required: sp_admin or admin

About this task

The Portal Analyzer is a scheduled job that runs on-demand. After you select to run the Portal Analyzer job, the system produces a list of each widget and the page that it appears on.

The list also includes the following information:

- Level of customization of each widget
- Number of views on each page
- Number of user visits on each page

Use the exported list to consider which pages and widgets to focus on while redesigning your portal. For example, you might consider removing a page that has fewer user visits or replacing a customized widget with a cloned widget.

Procedure

1. Navigate to **All** > **System Definition** > **Scheduled Jobs**.
2. Open the Portal Analyzer record.
3. On the form header, select **Execute Now**.
   The system creates a list of all the widgets on each page in your instance.
4. In the navigation filter, enter `sp_portal_analyzer.list`.

5. Review the list and, if needed, export it as a CSV, Excel, XML, JSON, or PDF file to reference during a system upgrade.
   For more information on exporting list data, see List export.

Related topics

Scheduled jobs

Service Portal reference

Reference topics provide information about roles, configuration properties, SCSS variables, domain separation, and more.

Service Portal roles

Service Portal installs these roles.

To learn more about managing subscriptions, see Managing per-user subscriptions in Subscription Management and contact your account representative.

Service Portal administrator [sp_admin]

Manages the configuration of portals created by Service Portal.

Contains Roles

List of roles contained within the role.

- evam_admin
- taxonomy_admin
- search_application_admin
- announcement_admin

Groups

List of groups this role is assigned to by default.

None.

Special considerations

Note: Avoid granting an admin role when more specialized roles are available.

Announcements administrator [announcement_admin]

Manages posting announcements to portals.

Contains Roles

List of roles contained within the role.

None.

Groups

List of groups this role is assigned to by default.

None.

Special considerations

Note: Avoid granting an admin role when more specialized roles are available.

Portal analytics administrator [portal_analytics_admin]

Can create Usage Insights settings for Service Portal.

Contains Roles

List of roles contained within the role: portal_analytics_viewer.

Groups

List of groups this role is assigned to by default.

None.

Special considerations

Note: Avoid granting an admin role when more specialized roles are available.

Portal analytics viewer [portal_analytics_viewer]

Users with this role can view the **Analytics Dashboard** link and settings within in the application navigator, and have viewer role permissions for portal metrics in the **Service Portal** > **Analytics** Dashboard.

Contains Roles

List of roles contained within the role.

None.

Groups

List of groups this role is assigned to by default.

None.

Special considerations

Read-only access to analytics. Use the Portal analytics administrator [portal_analytics_admin] role to manage analytics.

Service Portal properties

Service Portal properties control aspects of the portal experience for admin and end users.

The most commonly used Service Portal properties are set on the Service Portal properties page. Some less commonly used properties are available only from the System Properties [sys_properties] table.

You can access the properties listed in the following table by navigating to **All** > **Service Portal** > **Properties**.

Service Portal page properties

Property	Description
Default 404 page (page ID or sp_page sys_id) for Service Portal *glide.service_portal.default_404_page*	Set the default page that your users see whenever a page can't load properly. • Type: string • Default value: 404 • Learn more: Assign a default error page The string must match the name of the page exactly.
Show a message to admin users in Service Portal pages if a browser error is encountered *glide.sp.show_console_error*	• Type: true | false • Default value: true
Maximum number of stream entries displayed in Service Portal (activity widget, conversation widget, and so on) *glide.service_portal.stream_entry_limit*	Limit the number of entries users can see in the ticket conversation widget. Users only see the most recent entries and can't go further back in the history than the maximum allowed amount. • Type: integer • Default value: 100
Duration (in seconds) info and error messages persist in the Service Portal before auto-dismissal *glide.service-portal.notification_timeout.seconds*	Set the duration in seconds that non-critical notifications remain on the screen before they are auto-dismissed. If set to 0, messages do not auto-dismiss and require that a user close them. • Type: integer • Default value: 5 Critical notifications should be tagged with the `sn-sticky-notification` HTML class attribute to prevent them from being automatically dismissed. If the glide.ui.accessibility preference is enabled, messages don't auto-dismiss, regardless of the system property value. To set this preference, see Enabling accessibility features.
Default sort order for announcements *glide.service_portal.announcement.default_sort_order*	Define the sort order for banner announcements. • Type: choice list • Default value: Start Date Descending

Service Portal page properties (continued)

Property	Description
	Options include: • Start Date Ascending: The oldest start date appears first. • Start Date Descending: The most recent start date appears first. • End Date Ascending: The oldest end date appears first. • End Date Descending: The most recent end date appears first.
Enable debug runtime information `glide.sp.debug`	Controls whether the Angular.js flag `$compileProvider.debugInfoEnabled` is set to true or false. This option allows debug runtime information in the compiler, such as adding binding information and a reference to the current scope on to DOM elements. This property is turned off by default to improve performance on the instance. • Type: true | false • Default value: false

If user criteria [*com.glide.service-portal.user-criteria*] is enabled, the following properties also appear in the Service Portal properties page:

User criteria properties

Property	Description
Enable use of User Criteria records instead of Roles fields for Service Portal entitlements `glide.service_portal.user_criteria_enabled`	Define permissions for Service Portal widgets, widget instances, pages, and search sources. • Type: true | false • Default value: true • More information: User criteria for Service Portal
List of roles (comma-separated) that bypass User Criteria validation in Service Portal `glide.sp.entitlement.override`	Allow users with a specific role to see any page, widget, widget instance, or search source regardless of user criteria. • Type: string • Default value: admin

You can access the properties listed in the following table in the System Properties [sys_properties] table.

Service Portal system properties

Property	Description
glide.service_portal.enable_acls_for_encoded_query_in_list	Option to always enforce read ACLs for filter conditions specified in Simple List widget instances. If false, the **Enforce field-level Read ACLs on Filter query terms** option in Simple List widget instances determines whether to enforce the ACLs. • Type: true | false • Default value: true • For more information, see Simple List widget.
glide.service_portal.enable_human_readable_urls	Option to allow configuring human readable keywords in portal page URLs for the instance. • Type: true | false • Default value: true • For more information, see Add human readable keywords to page URLs.
glide.service_portal.enforce_cross_scope_check_in_form	Option to enforce cross-scope privileges to a table when the form widget fetches data from a table. • Type: true | false • Default value: true • For more information, see Form widget.
glide.service-portal.notification.threshold	Specify how many notifications should appear before users have the option to clear all notifications at once. • Type: integer • Default value: 5
glide.service_portal.sso.early_redirect.portals	Redirects users to the SSO Identify Provider (IdP) login page without first redirecting them to the portal login page. Provide a comma-separated list of portal suffixes.

Service Portal system properties (continued)

Property	Description
	Note: If your portal uses a customized version of the Login widget, you must update the `sp_sso_early_redirection` UI macro as needed to redirect users to the SSO Identify Provider (IdP) login page without trying to load the portal page first. • Type: String • Default value: None • For more information, see Single sign-on, logins, and URL redirects.
glide.sp.portals.language_selector_enabled	Allows any user to choose and view content in their preferred language. This property contains a list of portal sys IDs separated by commas. By default, the sys IDs for the Knowledge (/kb), Customer Support (/csm), and Customer Service (/csp) portals are included. For any portal specified, the language selector appears in the portal header if any languages are installed and active on the instance in addition to English. • Type: string • Default value: 2086b814c3221200f3897bfaa2d3aea8,89275a53cb1302000 • For more information, see Enable a language selector in portal headers.
glide.sp.starting.page.ignore.list	Ignores intermediate pages used during SSO authentication in order for users to be directed to their starting page rather than an intermediate page. Provide a comma-separated list of page IDs. • Type: String • Default value: login_with_sso,idp_disco
glide.sp.theme.parse_scss	Option to allow compiled SCSS files to be loaded as links to improve repeat page view performance. If set to false, SCSS files are included inline in the page HTML instead.

Service Portal system properties (continued)

Property	Description
	• Type: true | false • Default value: true
sp_allow_perf_debug_option_for_portals	Specify the portals to evaluate using the Performance Analyzer by providing a comma-separated list of portal suffixes. For users with the sp_admin or admin roles, the Performance Analyzer icon ( ) appears on pages in the specified portals. • Type: String • Default value: sp • For more information, see Evaluate the performance of a portal page.

Service Portal SCSS Primer

SCSS is a subset of the Syntactically Awesome StyleSheets (Sass) specification and is an extension of CSS. Every valid CSS style sheet is valid SCSS.

SCSS variables

SCSS variables are a way to store information that you want to reuse throughout your style sheet. You can store things like colors, font stacks, or any CSS value you think you want to reuse. SCSS uses the $ symbol to make something a variable.

SCSS supports the follow data types:

- Numbers (including units)
- Strings (with quotes or without)
- Colors (name, or names)
- Booleans

Variables can also be arguments to or results from one of several available functions or mixins. During translation, the values of the variables are inserted into the output CSS document.

For example:

```
$font-stack:    Helvetica, sans-serif;
$primary-color: #333;

body {
  font: 100%$font-stack;
  color: $primary-color;
}
```

For more information on Sass, see the Sass/SCSS reference.

SCSS functions

List of functions for Service Portal SCSS compiler.

RGB functions

Function	Description
rgb($red, $green, $blue)	Creates a Color from red, green, and blue values.
rgba($red, $green, $blue, $alpha)	Creates a Color from red, green, blue, and alpha values.
red($color)	Gets the red component of a color.
green($color)	Gets the green component of a color.
blue($color)	Gets the blue component of a color.
mix($color1, $color2, [$weight])	Mixes two colors together.

HSL functions

Function	Description	Availability
hsl($hue, $saturation, $lightness)	Creates a Color from hue, saturation, and lightness values.	Yes
hsla($hue, $saturation, $lightness, $alpha)	Creates a Color from hue, saturation, lightness, and alpha values.	Yes
hue($color)	Gets the hue component of a color.	Yes
saturation($color)	Gets the saturation component of a color.	Yes
lightness($color)	Gets the lightness component of a color.	Yes
adjust-hue($color, $degrees)	Changes the hue of a color.	Yes
lighten($color, $amount)	Makes a color lighter.	Yes
darken($color, $amount)	Makes a color darker.	Yes
saturate($color, $amount)	Makes a color more saturated.	Yes
desaturate($color, $amount)	Makes a color less saturated.	Yes
grayscale($color)	Converts a color to grayscale.	Yes
complement($color)	Returns the complement of a color.	No
invert($color)	Returns the inverse of a color.	No

Opacity functions

Function	Description	Availability
alpha($color)	Gets the alpha component (opacity) of a color.	Yes
opacity($color)	Gets the alpha component (opacity) of a color.	Yes
rgba($color, $alpha)	Changes the alpha component for a color.	Yes
opacify($color, $amount)	Makes a color more opaque.	No
fade-in($color, $amount)	Makes a color more opaque.	No
transparentize($color, $amount)	Makes a color more transparent.	No
fade-out($color, $amount)	Makes a color more transparent.	No

Other color functions

Function	Description	Availability
adjust-color()	Increases or decreases one or more components of a color.	Yes
scale-color()	Fluidly scales one or more properties of a color.	Yes
change-color()	Changes one or more properties of a color.	No
ie-hex-str()	Converts a color into the format understood by IE filters.	No

String functions

Function	Description	Availability
unquote($string)	Removes quotes from a string.	Yes
quote($string)	Adds quotes to a string.	Yes
str-length($string)	Returns the number of characters in a string.	No
str-insert($string, $insert, $index)	Inserts $insert into $string at $index.	No
str-index($string, $substring)	Returns the index of the first occurrence of $substring in $string.	No
str-slice($string, $start-at, [$end-at])	Extracts a substring from $string.	No

Function	Description	Availability
to-upper-case($string)	Converts a string to upper case.	No
to-lower-case($string)	Converts a string to lower case.	No

Number functions

Function	Description	Availability
percentage($number)	Converts a unitless number to a percentage.	Yes
round($number)	Rounds a number to the nearest whole number.	Yes
ceil($number)	Rounds a number up to the next whole number.	Yes
floor($number)	Rounds a number down to the previous whole number.	Yes
abs($number)	Returns the absolute value of a number.	Yes
min($numbers...)	Finds the minimum of several numbers.	Yes
max($numbers...)	Finds the maximum of several numbers.	Yes
random([$limit])	Returns a random number.	No

List functions

Lists in SCSS are immutable. All list functions return a new list rather than updating the existing list in-place.

All list functions work for maps as well, treating them as lists of pairs.

Function	Description
length($list)	Returns the length of a list.
nth($list, $n)	Returns a specific item in a list.
set-nth($list, $n, $value)	Replaces the nth item in a list.
join($list1, $list2)	Joins two lists into one.
append($list1, $val)	Appends a single value onto the end of a list.
zip($lists...)	Combines several lists into a single multidimensional list.
index($list, $value)	Returns the position of a value within a list.
list-separator($list)	Returns the separator of a list.

Adding custom functions

Scss @function my-calculation-function($some-number, $another-number){ @return $some-number + $another-number }

SCSS nesting

SCSS lets you nest your CSS selectors in a way that follows the same visual hierarchy of your HTML.

For example:

```
nav {
  ul {
    margin: 0;
    padding: 0;
    list-style: none;
  }

  li { display: inline-block; }

  a {
    display: block;
    padding: 6px 12px;
    text-decoration: none;
  }
}
```

The `ul`, `li`, and `a` selectors are nested inside the `nav` selector, which is a great way to organize your CSS and make it more readable. When the widget is rendered, the generated CSS looks something like the following code block:

```
nav ul {
  margin: 0;
  padding: 0;
  list-style: none;
}

nav li {
  display: inline-block;
}

nav a {
  display: block;
  padding: 6px 12px;
  text-decoration: none;
}
```

For more information on Sass, see the Sass/SCSS reference.

SCSS operators

SCSS has a handful of standard math operators like +, -, *, /, and %.

Use simple math to calculate widths for an aside `&` article. For example:

```
.container { width: 100%; }

article[role="main"] {
  float: left;
```

```
  width: 600px / 960px * 100%;
}

aside[role="complementary"] {
  float: right;
  width: 300px / 960px * 100%;
}
```

The generated CSS looks like:

```
.container {
  width: 100%;
}

article[role="main"] {
  float: left;
  width: 62.5%;
}

aside[role="complementary"] {
  float: right;
  width: 31.25%;
}
```

For more information on Sass, see the Sass/SCSS reference.

SCSS mixins

A mixin lets you make groups of CSS declarations that you want to reuse throughout your site. You can pass in values to make your mixin more flexible.

The following code block is an example for border-radius.

```
@mixin border-radius($radius) {
  -webkit-border-radius: $radius;
     -moz-border-radius: $radius;
      -ms-border-radius: $radius;
          border-radius: $radius;
}

.box { @include border-radius(10px); }
```

The generated CSS looks like:

```
.box {
  -webkit-border-radius: 10px;
  -moz-border-radius: 10px;
  -ms-border-radius: 10px;
  border-radius: 10px;
}
```

For more information on Sass, see the Sass/SCSS reference.

Domain separation and Service Portal

Domain separation is unsupported in Service Portal. Domain separation enables you to separate data, processes, and administrative tasks into logical groupings called domains. You can control several aspects of this separation, including which users can see and access data.

servicenow

Support level: No support

- The domain field may exist on data tables but there is no business logic to manage the data.
- This level is not considered domain-separated.

For more information on support levels, see Application support for domain separation.

Overview

Domain separation provides complete data isolation for domain-specific users.

How domain separation works in Service Portal

Elements of the Service Portal platform such as settings, portals, pages and widgets are not domain-separated. However, the data within widgets does display when based on the appropriate domain. To provide different experiences, admins should create separate service portals, each with unique URLs, that they can redirect users to.

Related topics

Domain separation for service providers

Plugins installed with Service Portal

The following plugins are installed with the Service Portal for Enterprise Service Management [com.glide.service-portal.esm] plugin, which is a ServiceNow AI Platform feature that is active by default.

- Service Portal - Knowledge Base [com.glide.service-portal.knowledge-base]
- Service Portal - Service Catalog [com.glide.service-portal.service-catalog]
- Service Portal - Service Status [com.glide.service-portal.service-status]
- Service Portal Configuration Pages [com.glide.service-portal.config]
- Service Portal Designer [com.glide.service-portal.designer]
- Service Portal Surveys [com.glide.service-portal.survey]

If Service Portal [com.glide.service-portal.esm] is not active on your instance, you can activate by following the Activate a plugin instructions.

Adoption services

Adoption Services is a suite of solutions, both products and features, that provide user support and critical information at the anticipated time of need. Such services include in-product help, onboarding modals, guided setups and guided tours that teach users how to interact with the UI pages that they're looking at in their instance.

Get started

Choose one of the tiles below to get started.

In-product help	Onboarding modals

Provide users with helpful, contextual information about what they can accomplish while they're using a configurable workspace or a specific UI page.

Create onboarding modals to introduce users to new experiences, products, and applications.

Guided setup

Use guided setup to go through the initial configuration of any product or application that provides a Guided Setup module.

Guided tours

Use guided tours to provide step-by-step walkthroughs of applications within your instance.

For additional getting started information, see the following Getting Started with Adoption Services video.

In-product help

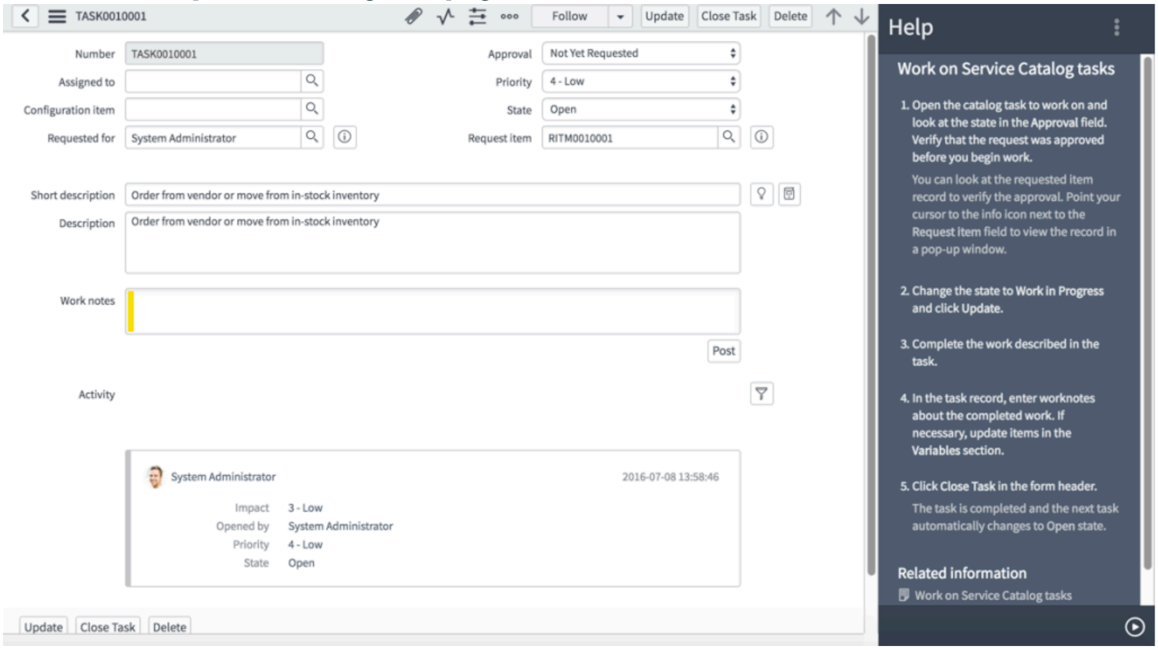
There are two kinds of in-product help to assist users in understanding the UI that they are using: Embedded Help and Help Center.

In-product help overview

For both in-product help experiences, ServiceNow® provides some help content out of box, and you can replace it or create your own custom help content based on the needs of your users.

Embedded Help provides targeted help content to a user in a page in the classic environment based on the user's role. For more information, see Embedded Help.

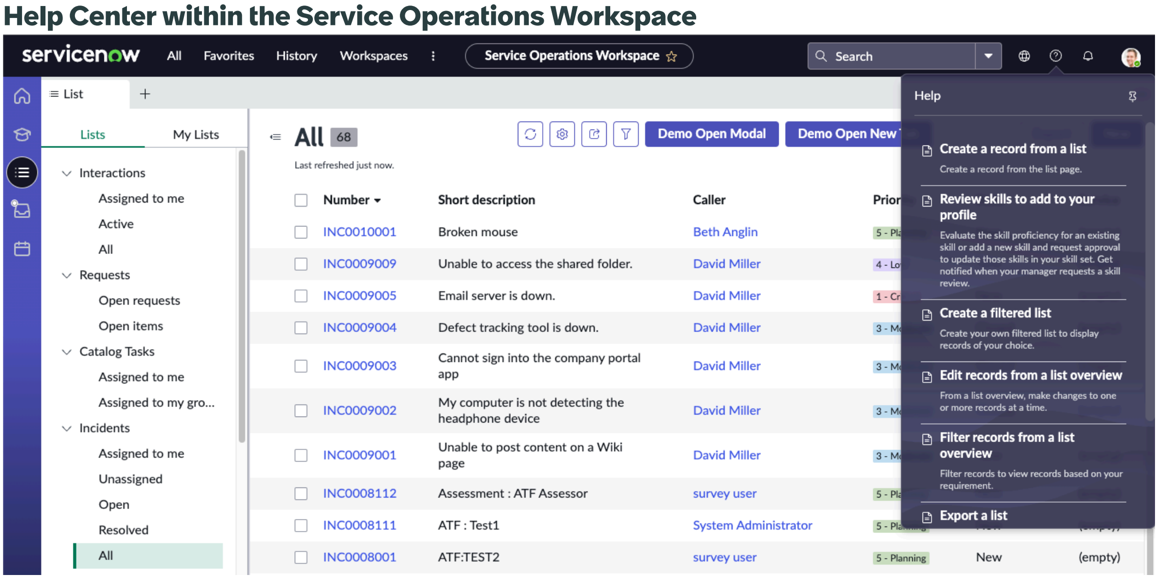
Embedded Help for a Catalog task page



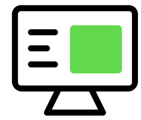
The Help Center is the next-generation Embedded Help product for configurable workspaces. The Help Center provides targeted help content to users based on their role and specific to their location in a configurable workspace or page built with the Next Experience UI Framework.

Help Center will display Embedded Help content, so you do not need to rewrite any content you previously created for Embedded Help. For more information, see Help Center.

Help Center within the Service Operations Workspace



Get started

Embedded Help	Help Center
	
Embedded Help provides targeted help content to a user in a UI page, based on their role.	Help Center is the next-generation Embedded Help product for configurable workspaces and pages built on the Next Experience UI framework. Help Center provides targeted help content to users in a UI page, based on the user's role.

Workarounds

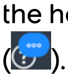
- Check out Getting Started with Help Center on the ServiceNow Community
- Search the Known Error Portal for known error articles
- Contact Customer Service and Support

Embedded Help

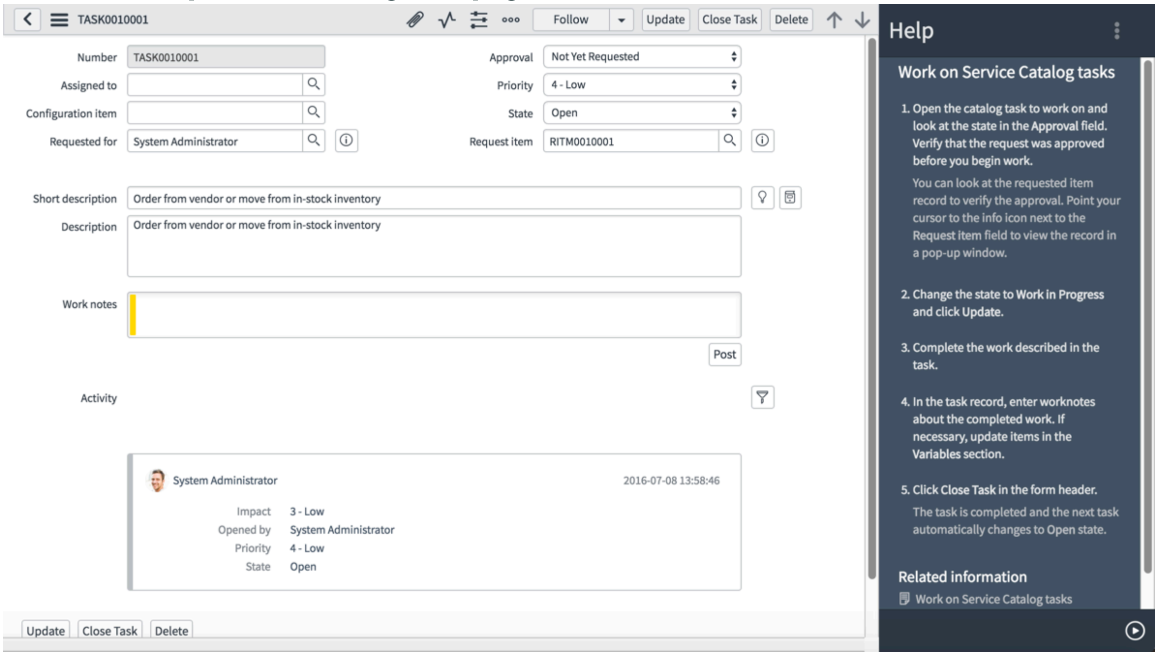
Embedded help provides targeted help content to a user in a UI page, based on their role. Some embedded help content comes with the base instance. Your organization can add or replace embedded help content.

Overview

Note: Required: Embedded help is only available in Core UI. For configurable workspaces, use Help Center.

The Embedded Help plugin (com.glide.embedded_help) is active by default for all new and upgraded instances. Embedded help content appears in the right sidebar when the user clicks the help icon. If embedded help exists for the current UI page, the help icon has an indicator ().

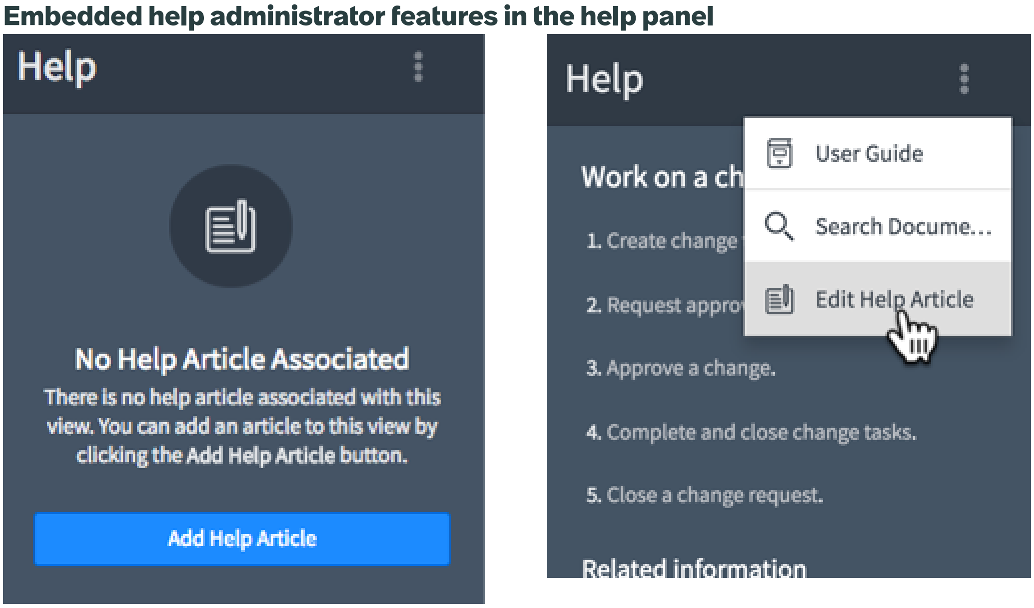
Embedded help for the Catalog Task page



If there is no embedded help for a list or form, the sidebar displays links to the User Guide and the documentation site search. Click **Search Documentation** to search for documentation about that feature.

Users with the embedded_help_admin or admin role can add help to the page. They can also edit custom content that appears for a page. The following image shows what the admin sees when there is no help article, and how to open an existing article. If you want to edit base system help content, follow the steps in Add custom Embedded Help from a copy.

Embedded help administrator features in the help panel



Embedded help is displayed based on the user's role. If the content has no associated role, all users see it. If the role is different than admin, users with the specified role and above see the content. For example, content with the itil role appears for itil, itil_admin, and admin.

Get started

Explore	Configure	Reference
Learn about the features and benefits of Embedded Help.	Configure the Embedded Help content in your instance.	Review system properties and domain separation information.

Troubleshoot and get help

- Search the Known Error Portal for known error articles
- Contact Customer Service and Support

Exploring Embedded Help

Embedded help provides targeted help content to a user in a UI page, based on their role. Some embedded help content comes with the base instance. Your organization can add or replace embedded help content.

Embedded Help overview

Embedded Help enables you to provide the help that your users need, as well as benefit from help topics available in the base system. You can add new embedded help content or replace content. Replacing content involves deactivating the existing topic and adding a topic.

Your organization may want to add or replace embedded help content for some of the following reasons:

- To provide help for custom applications.
- To provide more specific instructions or embedded videos to describe your business process.
- To provide embedded help content where none exists for a page.
- To provide embedded help content in languages other than English (default).
- To provide different content for different roles.

The UI page name identifies embedded help content. To find the page name, look for the table name in the URL for that view. For example, the page name for the list view of Assessment Metric Types is asmt_metric_type_list and is found in this address: `instancename.service-now.com/nav_to.do?uri=%2Fasmt_metric_type_list.do%3Fsysparm_userpref_module%`. The page name for the form view is asmt_metric_type.

You cannot edit the content in a base system topic. In base system topics, the read-only **ServiceNow Help** check box is selected. If you edit the content and try to save changes, you see an error message. To change the information that appears in a base system topic, make a copy of the topic, which clears the **ServiceNow Help** check box. Modify the topic with your content and save it. Customized content takes precedent over ServiceNow help content and is displayed when a user opens help for that UI page.

Starting this release, Embedded Help also supports non-English content import without overriding the last uploaded language content.

Embedded Help workflow

The ServiceNow datacenter contains the Content Delivery Network (CDN) where embedded help content is stored. Topics in the local (instance) Embedded Help Content [sys_embedded_help_content] table are populated from the CDN. Help content in the CDN is refreshed every 30 days.

When a user accesses a UI page, the embedded help process displays a custom topic if one exists for the user's role. If there is no custom topic, the following steps are performed.

1. Checks the browser cache first, and displays the content if found in the cache. It then checks the Embedded Help Content [sys_embedded_help_content] table for the corresponding embedded help topic with the role and qualifier, if applicable.
    - If a topic is found, it checks the date in the **Last sync** field. If the date is 15 or more days old, it places a request in the Embedded Help Queue [sys_embedded_help_queue] table with the last sync date and the resource ID.
    - If a topic is not found, it places a request in the Embedded Help Queue [sys_embedded_help_queue] table with the current date and the resource ID.
2. Within a minute of the page being viewed, the system processes the request and checks the CDN. In the first case, it checks whether the topic was updated since the **Last sync** date. In either case, after a minute, refresh the page to see the content.
    - If the topic was updated, it pulls the updated topic into the table and updates the **Last sync** date.
    - If the topic was not updated, it displays the local cached or database topic, and updates the **Last sync** date.
3. If the topic was not in the local database, it pulls the topic into the table if it exists on the CDN. If it does not exist, there is no action.

The administrator can modify the default 15-day synchronization duration in system properties

Configuring Embedded Help

Plan and configure the Embedded Help topics that your organization's users would benefit from.

Configuration overview

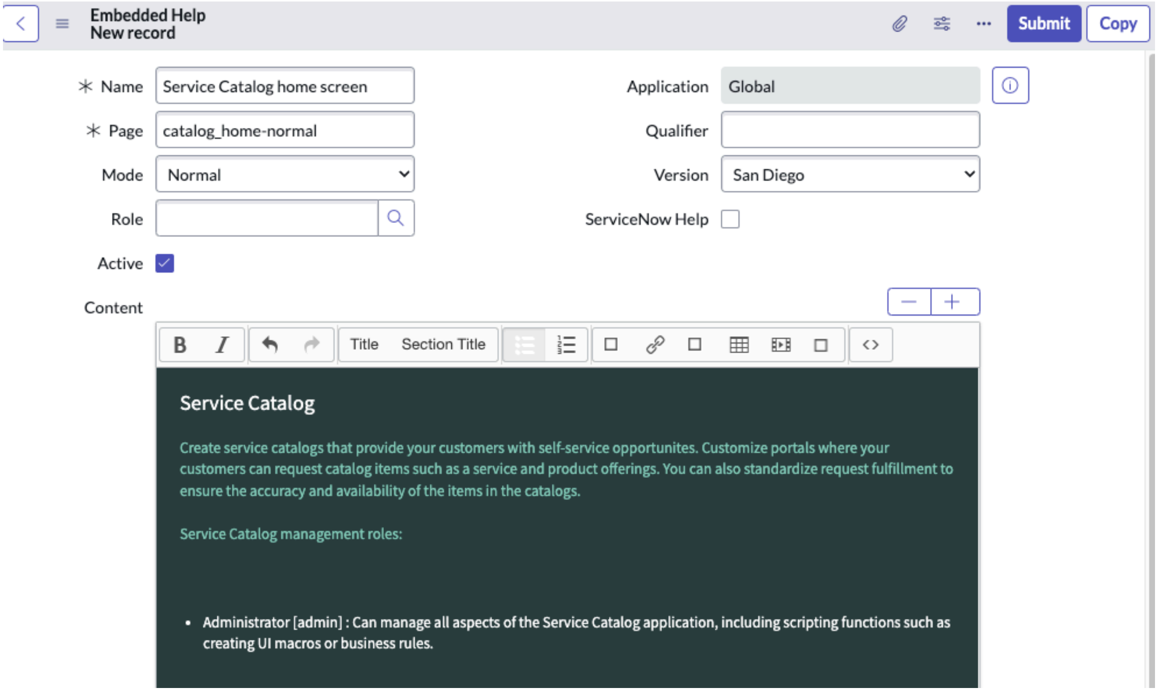
You should begin your Embedded Help configuration by planning, including identifying features, forms, and lists that your users could use additional guidance on. Then, begin to map and create or update the topics you will create.

Embedded Help planning

Before writing custom embedded help, plan the content and note the information used in the Embedded Help form. Careful planning ensures that the topic appears for the right page and role.

Each UI page can display embedded help, specified in the **Page** field as shown in the following example.

Embedded help topic for the Service Catalog home page



In planning for embedded help topics, consider how the following fields are used and note the values that you need for your custom topics.

Page

Identify and note the UI page name which is found in the URL when the page is displayed as shown. If the page name begins with a dollar sign, such as $mid_server_user, include the dollar sign in the page name. Before you write an embedded help topic for the page, search for the page name to locate a file you can copy.

Modifier

- **Normal** content appears for any user with the appropriate role who navigates to the page.
- **Setup** content appears when the page is accessed from a link in Guided Setup.

Many embedded help topics in the base system are for Guided Setup. You can copy **Setup** content and change the **Modifier** to **Normal** to quickly provide help for all users.

Qualifier

Identify pages you want custom help for that are used in many applications. For example the `home.do` page opens for every Homepage module and for many Dashboard modules. The embedded help administrator can use qualifiers to customize content for a common page in the instance.

Role

Specify the lowest level role to provide access to this embedded help topic. All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page.

For example, if you add embedded help content for the itil role that describes your business process for entering incidents, the itil_admin role also sees the content. If you write a different topic with the itil_admin role, the itil_admin sees that content instead of the itil content.

Product

Write content only for the **Enterprise** topic. You can copy an **Express** topic and change this field to **Enterprise** if appropriate.

Version

Base system content is typically specified to the current software version. If you are editing the content for a custom application or to provide information relevant to your organization business process, select **All**.

Domain

If your organization uses domain separation and customizes help content, specify the domain the content applies to.

ServiceNow Help

If the check box is selected, this field indicates a base system topic. You cannot edit a base system topic, but you can create a copy to add custom content.

Content

You can use the formatting tools to format the content. The following list describes the limitations.

- You cannot include images in embedded help content.
- To embed video, you must code the video information in the source code **<<>>** view. Video content from YouTube and Vimeo are supported.
- To add a related information link, you must use a full URL, not a relative URL.
- Best practice is not to use the highlight text tool, as the color may make text unreadable depending on the theme the user has selected.
- Any changes you make to embedded help are not automatically deployed to another instance.
- Changes to the embedded help table are not captured in update sets, update_sync=false is set intentionally.

Use qualifiers in Embedded Help

The embedded help administrator can use qualifiers to customize content for a common page in the instance.

Before you begin

Role required: embedded_help_admin

About this task

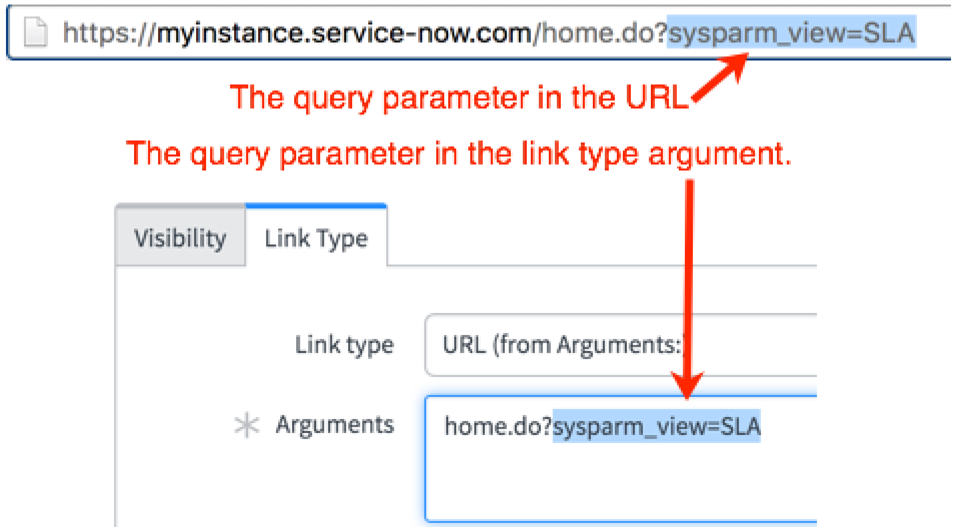
The `home.do` page is opened for every Homepage module and for many Dashboard modules. The specified query parameters in the URL define which homepage to open.

Imagine that your organization wants to provide specific instructions for the SLA homepage. You can write custom embedded help content and use a qualifier to accomplish that goal. Create the qualifier, and then associate it with custom embedded help content that you write.

Procedure

1. To get the information for the qualifier, open the module in a new browser window and copy the query parameter.

   Notice that the query parameter uses underscores between words instead of hyphens or dashes.



You can also select the query parameter from the **Arguments** field on the module link type. To see the module link type, click the pencil icon beside the module in the application navigator, and then click the **Link Type** tab.

2. Navigate to **Embedded Help** > **Help Qualifiers**, and then click **New**.
3. Complete the form.

Embedded help qualifier form

Field	Description
Path	Enter the page to display the embedded help content. Do not include `.do`. For example, for the SLA homepage, enter `home`.
Query params	Enter the query parameters or the link argument using the format `id=query_parameters`. **Warning:** If the query parameter contains more than one word, use underscores between words instead of hyphens or dashes. If you use hyphens or dashes, the system uses only the first word in the parameter and ignores the rest.
Fragment	Enter the `#<string>` at the end of the URL. This is rarely found in the URL of a page in the instance. If you want custom help for a page that ends with `#<string>`, place it into this field. **Note:** The proven practice is to include at least a query parameter. If you do not, the custom help appears for every `home.do` page. You can use either the query parameter, the fragment, or both.
Qualifier	Enter the qualifier to use, for example `sla_homepage`. Record the qualifier to use in the embedded help content record. **Warning:** If the query parameter contains more than one word, use underscores between words instead of hyphens or dashes. If you use hyphens or dashes, the system uses only the first word in the parameter and ignores the rest.

4. Click **Submit**.
5. Follow the steps in Add custom Embedded Help content to create the content, and include the following information.
   - **Name** and **Page**: The page you created the qualifier for, for example, **home**.
   - **Qualifier**: The qualifier you entered, for example **sla_homepage**.

   Note: You can also copy an existing embedded help topic and enter the qualifier in the copied record.
6. Test the qualifier by opening the page you added the content for, and then opening the help panel.

   Note: If you added a role to the embedded help content, ensure that you are logged in as a user with the role, or impersonate a user with that role.

Embedded Help roles

Embedded help content can be targeted to users with a specified role who access the UI page. All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page.

For example, if you add embedded help content for the itil role that describes your business process for entering incidents, the itil_admin role also sees the content. If you write a different topic with the itil_admin role, the itil_admin sees that content instead of the itil content.

Embedded help role priority

The embedded help role priority is stored in the Embedded Help Role Priority [sys_embedded_help_role] table. Each role is assigned a default priority order number based on the role name in the Roles [sys_user_role] table.

Default embedded help priority order numbers

Order number	Role name
10	admin Examples: admin, chat_admin, pa_admin, survey_admin Exception: itil_admin
100	manager or itil_admin Examples: itil_admin, catalog_manager, content_manager, sla_manager
300	itil (only)
1000	All other roles or no role (ESS user) Examples: approver_user, financial_management_user, personalize_form, template_editor

The priority executes from the lowest number to the highest, meaning that embedded help content with no role displays only if no other content is available for the UI page and the user's role. All base system content is targeted to a role unless the content is intended for all users, including ESS users. When you add a role, such as a role for a custom application, it is automatically added to the Embedded Help Role Priority [sys_embedded_help_role] table with the appropriate default order. You can modify the order of priority as needed.

If a page requires different help content for different roles, separate topics must be added. For example, users with any role can access the `incident.do` page, and it opens with a view appropriate for their role.

The following list describes how content for different roles can be targeted for the Incident form.

Admin

Provides information and links to help with configuring the Incident form.

itil_admin

Describes how to monitor the progress of the incident.

itil

Describes how to work on an incident.

No role

Explains what the user can review and modify in the Self-Service view of the Incident form.

Modify embedded help role priority

You can modify the default order of priority that is assigned to a role in the Embedded Help Role Priority [sys_embedded_help_role] table. The priority order determines what embedded help content a user accesses on a UI page, based on roles assigned to the user.

Before you begin

Role required: embedded_help_admin or admin

About this task

When you add a role, such as a role for a custom application, it is automatically added to the Embedded Help Role Priority [sys_embedded_help_role] table with the appropriate default order. You can modify the role priority, including adding priority numbers between the default priority numbers, if appropriate.

Procedure

1. Navigate to **All** > **Embedded Help** > **Role Priority** and locate the role to modify the priority.
2. Double-click the value in the **Order** column to open the list editor.
3. Enter the new priority order number and click the green check mark to save it.

Embedded Help internationalization

Embedded help internationalization provides the ability for you to localize your embedded help content to a variety of languages to meet global user needs. You can write your embedded help content in a language of your choice and decide what languages to display.

Existing embedded help content records are written in English by default. You can translate the English embedded help content provided with the base system into other languages to meet your needs. You can also create custom embedded help content in the language of your choice.

Understanding localized embedded help content

To translate English embedded help content into another language or to create embedded help content in a language other than English, your working session must be configured to the language in which you want to write. For example, you must be working in a French session if you want to write embedded help content in French. Refer to Localization settings for more information.

Configure embedded help content to display in the language of your choice by accessing the **Language** field on the Embedded Help Queue [sys_embedded_help_queue] table. Depending on the foreign language translations activated on your instance, you can choose which language to display your embedded help content.

If embedded help content is available in a particular language and users are working in an instance with that language, they will see available embedded help in the desired language.

Working with localized embedded help content

When a user requests an embedded help content record, the associated embedded help queue record populates accordingly and the language specified in the embedded help queue record is set to the current session language.

When embedded help content is available in a user's session language, content will be shown in that same language. If embedded help content is not available in the user's session language, than English content is shown. However, if you do not want to see English content in a non-English session, you can configure the sys_property to False (default is True).

Embedded help content prioritization

Displaying embedded help content in the user's session language takes priority over all other mechanisms, such as role, whether content is user-created, and the latest content version.

When a user is in a non-English working session, the priority for embedded help content display is as follows:

1. Working-session language (other than English) content displays, if available.
2. User-created content displays when working-session language content is not available.
3. Version-related content displays when working-session language and user-created content are not available.

For example, if an admin user is in a French working session and requests embedded help content, but French content is not available for the admin role, the same-language content for a lower role is displayed if available.

If there is no embedded help content for the French admin role, but there is content for the French itil role and English admin role, the French itil role takes priority over the English admin role. The French-language content will display at the itil-role level.

Create internationalized embedded help

Translate provided English embedded help content into other languages or create custom embedded help content in the language of your choice.

Before you begin

Role required: embedded_help_admin or admin

About this task

All embedded help content records are in English by default. To create a non-English embedded help content record, there must first be an English content record in the Embedded Help [sys_embedded_help_content] table. The English embedded help content record is parent to all other language embedded help content records. Once you create a non-English embedded help content record, it resides in the Translated Texts [sys_translated_text] table.

To translate provided English content into another language, create a copy of the English content record and save the edited, non-English, copy record. The new record is saved to the Translated Texts [sys_translated_text] table. Refer to Add custom embedded help from a copy to translate available embedded help content.

To create a non-English custom embedded help content record, your working instance must be configured to the same language you intend to write in. You create custom non-English embedded help content when English embedded help content is not available to copy.

After creating a non-English embedded help content record, you must create the same content record in English and store it in the Embedded Help [sys_embedded_help_content] table. The English embedded help content record is parent to all other languages.

Procedure

1. Navigate to **All** > **Embedded Help** > **Help Content**.
2. Open the embedded help topic to copy.
   You can also open an embedded help topic by selecting **Edit Help Article** from the menu in the embedded help pane.
3. Update the fields as appropriate.

Field	Description
Name	The embedded help topic name.
Page	The UI page this topic corresponds to. Typically, you do not change the page name.
Modifier	◦ **Normal** content appears for any user with the appropriate role who navigates to the page. ◦ **Setup** content appears when the page is accessed from a link in Guided Setup.
Role	The role that the topic is written to assist. Users assigned to the role see the content when they navigate to the associated UI page. All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page. For more information, see Embedded Help roles
Active	Specifies whether this content displays for the UI page. Clear the check box to prevent the content from being available.
Product	**Enterprise** is the default, and should not be changed.
Qualifier	The qualifier that provides custom embedded help for a common UI page. For example, the `home.do` page is opened for every Homepage module and for many Dashboard modules. Create the qualifier before you enter it into this embedded help record.
Version	The version this topic is appropriate for. If you are editing the content for a custom application or to provide information relevant to your organization business process, select **All**.
Last sync	The last date and time that the CDN was checked for updated content. When a user accesses this UI page, the platform determines whether the last sync date and time are more than 15 days ago. If it is, the CDN is checked for updated content and the date is refreshed.

Field	Description
	Note: The administrator can change the last sync duration in system properties.
Order	The order defaults based on the role, and determines what content to display when the user has an assigned role. For more information, see Embedded Help roles.
Domain	Specify the domain this content is used for, if applicable. This field appears in the form if the administrator configured the form to display it.

4. In the **Content** field, update the text using the HTML formatting tools as needed.
   If you add a link, enter the full URL to the web page. A good practice is to select **New window (_blank)** as the **Target**.

   Note: Do not add images in an embedded help topic. Images are removed from the content section when the record is saved.

   To add an embedded video, see Embed video content in help topics.

5. **Optional:** To add another line below tables, videos, or related links, click the newline icon (⏎).
6. Click **Copy** in the form header.
   The edited topic is saved and the list redisplays. The **ServiceNow Help** check box is cleared in the saved topic.

Add custom Embedded Help from a copy

To customize embedded help for your organization, you can edit a topic in the base system and save it as a copy.

Before you begin

Role required: embedded_help_admin or admin

About this task

In base system topics, the read-only **ServiceNow Help** check box is selected. When you create a copy, the **ServiceNow Help** check box is cleared, allowing you to modify the content.

When a user navigates to a UI page for which custom content exists, the custom content displays instead of the base system content.

Note: Embedded help records are also used to create content for the Help Center within a configurable workspace. For more information, see Create Help Center content for configurable workspaces.

Procedure

1. Navigate to **All** > **Embedded Help** > **Help Content**.
2. Open the embedded help topic to copy.
   You can also open an embedded help topic by selecting **Edit Help Article** from the menu in the embedded help pane.
3. Update the fields as appropriate.

Field	Description
Name	The embedded help topic name.
Page	The UI page this topic corresponds to. Typically, you do not change the page name. **Note:** If you are using the embedded help record to display in the Help Center, as described in Create Help Center content for configurable workspaces, enter the same value in the Name and Page fields, replacing spaces with underscores in the Page field.
Mode	◦ **Normal** content appears for any user with the appropriate role who navigates to the page. ◦ **Setup** content appears when the page is accessed from a link in Guided Setup.
Role	The role that the topic is written to assist. Users assigned to the role see the content when they navigate to the associated UI page. All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page. For more information, see Embedded Help roles
Active	Specifies whether this content displays for the UI page. Clear the check box to prevent the content from being available.
Product	**Enterprise** is the default, and should not be changed.
Qualifier	The qualifier that provides custom embedded help for a common UI page. For example, the `home.do` page is opened for every Homepage module and for many Dashboard modules. Create the qualifier before you enter it into this embedded help record.
Version	The version this topic is appropriate for. If you are editing the content for a custom application or to provide information relevant to your organization business process, select **All**.
Last sync	The last date and time that the CDN was checked for updated content. When a user accesses this UI page, the platform determines whether the last sync date and time are more than 15 days ago. If it is, the CDN is checked for updated content and the date is refreshed. **Note:** The administrator can change the last sync duration in system properties.
Order	The order defaults based on the role, and determines what content to display when the user has an assigned role. For more information, see Embedded Help roles.
Domain	Specify the domain this content is used for, if applicable. This field appears in the form if the administrator configured the form to display it.

4. In the **Content** field, update the text using the HTML formatting tools as needed.
If you add a link, enter the full URL to the web page. A good practice is to select **New window (_blank)** as the **Target**.

Note: Do not add images in an embedded help topic. Images are removed from the content section when the record is saved.

To add an embedded video, see Embed video content in help topics.

5. **Optional:** To add another line below tables, videos, or related links, click the newline icon (⏎).
6. Click **Copy** in the form header.
   The edited topic is saved and the list redisplays. The **ServiceNow Help** check box is cleared in the saved topic.

Add custom Embedded Help content

You can create a new custom embedded help topic, for example, if you have a custom application and you want to provide help to users.

Before you begin

Role required: embedded_help_admin or admin

About this task

When you write content for your users, keep the following limitations in mind.

- You cannot include images in embedded help content.
- To embed video, you must code the video information in the source code **<>** view. Video content from YouTube and Vimeo are supported.
- To add a related information link, you must use a full URL, not a relative URL.
- Best practice is not to use the highlight text tool, as the color may make text unreadable depending on the theme the user has selected.
- Any changes you make to embedded help are not automatically deployed to another instance.
- Changes to the embedded help table are not captured in update sets, update_sync=false is set intentionally.

Note: Embedded help records are also used to create content for the Help Center within a configurable workspace. For more information, see Create Help Center content for configurable workspaces.

Procedure

1. Navigate to **All** > **Embedded Help** > **Help Content**.
2. Click **New**.
3. Complete the form.

Field	Description
Name	Enter the embedded help topic name. A typical name is the title of the page to which it applies.
Page	Enter the UI page this content provides help for, without the .do file extension. 

Field	Description
	Note: If you are using the embedded help record to display in the Help Center, as described in Create Help Center content for configurable workspaces, enter the same value in the Name and Page fields, replacing spaces with underscores in the Page field.
Modifier	Select the modifier, typically **Normal**. ◦ **Normal** content appears for any user with the appropriate role who navigates to the page. ◦ **Setup** content appears when the page is accessed from a link in Guided Setup.
Role	Select the role that the topic is written for. All roles that contain the role also see the content, unless another topic targeted to their role exists for the same page. For more information, see Embedded Help roles
Active	Select the check box to make this content appear. Clear the check box to prevent the content from being available, for example, to have someone review it before it is accessed on the UI page.
Product	**Enterprise** is the default, and should not be changed.
Qualifier	The qualifier that provides custom embedded help for a common UI page. For example, the `home.do` page is opened for every Homepage module and for many Dashboard modules. Create the qualifier before you enter it into this embedded help record. **Note:** Dynamic IDs are supported in Embedded Help Qualifier route parameters. For example, adding `$dynamic_value$` in the fragment field makes your content available for the same URL, even when the value changes. This can happen when selecting different languages for the same page.
Version	Select a version, if different from the current version of your instance. To provide content for a custom application or information relevant to your organization business process, select **All**.
Order	Change the default role, if needed. The order defaults based on the selected role. For more information about default order priority numbers, see Embedded Help roles.
Domain	Specify the domain this content is used for, if applicable. This field appears in the form if the administrator configured the form to display it.

4. In the **Content** field, enter the text using the HTML formatting tools as needed.
   If you add a link, enter the full URL to the web page. A good practice is to select **New window (_blank)** as the **Target**.

   Note: Do not add images in an embedded help topic. Images are removed from the content section when the record is saved.

   To add an embedded video, see Embed video content in help topics.

5. **Optional:** To add another line below tables, videos, or related links, click the newline icon (⏎).
6. Click **Submit**.

Embed video content in help topics

You can embed a link to video content in a custom embedded help topic. YouTube and Vimeo video content is supported.

Before you begin

Role required: embedded_help_admin or admin

About this task

You cannot use the insert/edit video icon in the HTML editor to embed the video. You must enter the source code.

HTML editor icons

The administrator can disable the ability for users to see embedded video in the Embedded Help system properties.

Procedure

1. Complete the following steps to obtain the embed code for the video.

   a. Navigate to the location of the video on YouTube or Vimeo.

   b. Open the **Share** option for the video.
   In YouTube, the text appears below the video. In Vimeo, click the share icon beside the video.

   c. Under **Embed**, select the code and paste it into a text editor.

   d. Modify the code to enclose it in a <div> and remove elements that do not get rendered in the embedded help content page.

   Example

   For example, here is the embed code for a YouTube video. The modified code also contains a title for the embedded video enclosed in a <p> tag.

```
<iframe width="560" height="315"
 src="https://www.youtube.com/embed/bqh-5yew2yQ"
frameborder="0" allowfullscreen></iframe>
```

   After modification, the code looks like this.

```
<div class="video"><iframe
 src="https://www.youtube.com/embed/bqh-5yew2yQ"
allowfullscreen=""></iframe>
<p class="p">Video: Work at Now</p>
</div>
```

   Vimeo embed code has more attributes. Strip them out so it looks like the following example. Notice the difference between YouTube and Vimeo for the `allowfullscreeen` attribute.

```
<div class="video"><iframe
 src="https://player.vimeo.com/video/67392563"
 frameborder="0"
allowfullscreen></iframe>
<p class="p">Video: Work at Now</p>
</div>
```

Note: As shown in the examples, enclose the `<iframe>` and the `<p>` tags within a `<div class="video">` tag. If the administrator disables the property to display video content, all content within the `<div class="video">` tag are hidden.

2. Navigate to **Embedded Help** > **Help Content**, and then open the custom help topic to embed a video.
3. Click the source code icon (**<>**).
4. Position your cursor at the end of the line above the location of the video.
5. Press the Enter key to move to a blank line enter the embed code you modified.
6. Click **OK**, and then click **Update**.
7. To test that the video appears, open the page that displays the content you just updated, and then open the help panel.

Embedded Help reference

Reference topics provide information about system properties you may need to configure, as well as basic information about domain separation.

Embedded Help system properties

Embedded help is active by default on your instance. The administrator can change system properties to modify how the instance interacts with embedded help.

The administrator navigates to **Embedded Help** > **Properties** to change these properties.

Embedded help system properties

Name	Description
com.glide.embedded_help.auto_close	Auto-closes the help pane when the user clicks **Start a Tour** or **Back To Guided Setup**. • Type: true | false • Default value: true
com.glide.embedded_help.cdn_timeout	Duration in milliseconds at which a content pull from the Content Delivery Network (CDN) is timed out. • Type: integer • Default value: 2000
com.glide.embedded_help.enabled	Enables the embedded help plugin for activation.

Embedded help system properties (continued)

Name	Description
	• Type: true | false • Default value: true
com.glide.embedded_help.enable_video	Enables users to see embedded videos in help content. The administrator can embed video and a description, but if this property is **false**, the video and description are hidden in the help pane. • Type: true | false • Default value: true **Note:** When you embed video content, enclose the video embed code and description inside a `<div class="video">` tag. If you disable the property, the content inside the `<div class="video">` tag is hidden when the content is displayed.
com.glide.embedded_help.sync	Enables the instance to look in the CDN for updated content when a user accesses a UI page. The instance checks the **Last sync** date in the topic against the specified frequency to determine whether to look in the CDN for updated content. • Type: true | false • Default value: true If the property is disabled (false), the embedded help content is never synced with CDN topic updates.
com.glide.embedded_help.sync_frequency	Specifies how many days must pass from the **Last sync** date in the topic for the embedded help process to look for updated content in the CDN. • Type: integer • Default value: 15
com.glide.embedded_help.sync_self_hosted	Specifies whether a self-hosted instance syncs content with the CDN. • Type: true | false • Default value: false
com.glide.embedded_help.url	Lists the location from where embedded help is dynamically retrieved.

Embedded help system properties (continued)

Name	Description
	• Type: string • Default value: varies
com.glide.embedded_help.version	Specifies the instance version for which help is displayed. • Type: string • Default value: Jakarta If blank, displays the help for the version the instance is currently running.

The following system property is available by navigating to the [sys_properties] table.

Name	Description
com.glide.embedded_help.guided_setup.persist_actions	Enables Guided Setup actions in the embedded help panel that are based on states to display on all pages. An example is the **Mark as Complete** action. The default behavior (false) is to only show actions on the initial Guided Setup page. • Type: true | false • Default value: false

Domain separation and Embedded Help

Domain separation is supported for Embedded Help. Domain separation enables you to separate data, processes, and administrative tasks into logical groupings called domains. You can control several aspects of this separation, including which users can see and access data.

Support level: Basic

- Business logic: Ensure that data goes into the proper domain for the application's service provider use cases.
- The application supports domain separation at run time. The domain separation includes separation from the user interface, cache keys, reporting, rollups, and aggregations.
- The owner of the instance must set up the application to function across multiple tenants.

Sample use case: When a service provider (SP) uses chat to respond to a tenant-customer's message, the customer must be able to see the SP's response.

For more information on support levels, see Application support for domain separation.

Overview

The goal of Embedded Helpis to enable your users to benefit from base system help topics, as well as to create your own custom help topics. If your organization uses domain separation, you can create custom embedded help for each domain.

How domain separation works in Embedded Help

If your organization uses domain separation, you can create custom embedded help for each domain. To associate help content with a domain, the administrator configures the Help Content form to include the **Domain** field. When custom content is created, the author selects the domain to which the content applies.

Note:

- Content with no specified domain is in the global domain.
- If domain-specific content does not exist for a user in a domain, the user sees the global help content.
- Users in the global domain only see global help content. An administrator who wants to test domain-specific help must impersonate a user in that domain.

Related topics

Domain separation for service providers

Help Center

Help Center is the next-generation Embedded Help product for configurable workspaces. Help Center provides targeted help content to users in a UI page, based on the user's role.

Note: Help Center is a ServiceNow AI Platform feature that is active by default.

About Help Center

Help Center provides users with the information they need, and tells users what they can accomplish while they're using a configurable workspace. Help Center content appears in the right sidebar when the user clicks the help icon. If Help Center content exists for the current UI page, then the help icon has an indicator. Multiple help topics for the same page are available in Help Center.

Get started

Exploring Help Center	Using Help Center	

Workarounds

- [Search the Known Error Portal for known error articles]
- [Contact Customer Service and Support]

Exploring Help Center

Help Center provides users with the information they need, and tells users what they can accomplish while they're using a configurable workspace. Help Center content appears in the right sidebar when the user clicks the help icon.

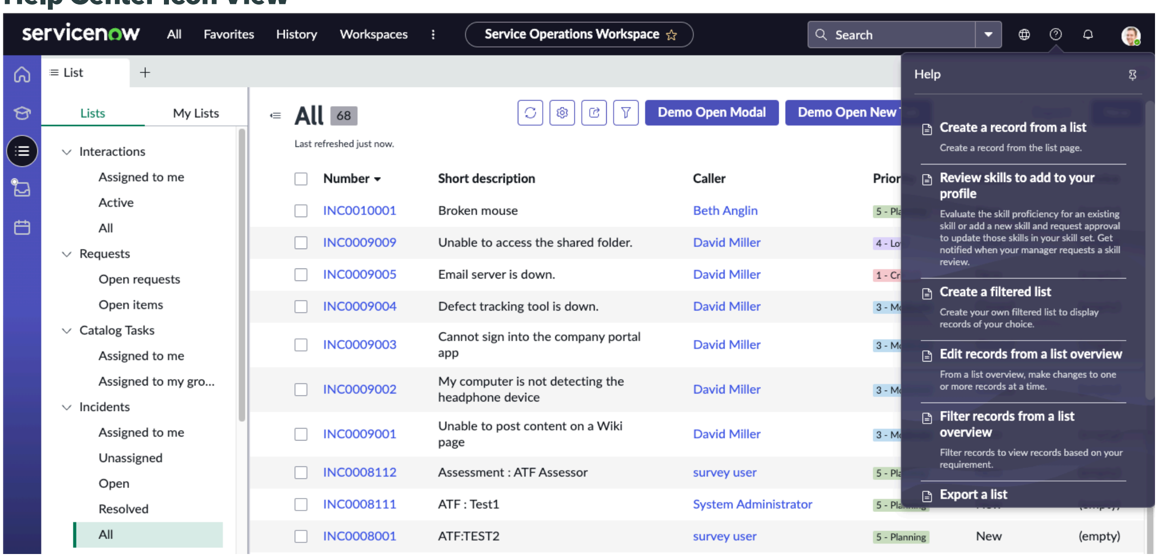
Help Center overview

Help Center provides users with the information they need, and tells users what they can accomplish while they're using a configurable workspace. Help Center content appears in the right sidebar when the user clicks the help icon. If Help Center content exists for the current UI page, then the help icon has an indicator. Multiple help topics for the same page are available in Help Center.

Starting this release, Help Center panel has additional adoption features:

- Attachable and detachable from the help header
- Draggable and resizeable when detached from the help header
- Draggable and resizeable using keyboard to support accessibility

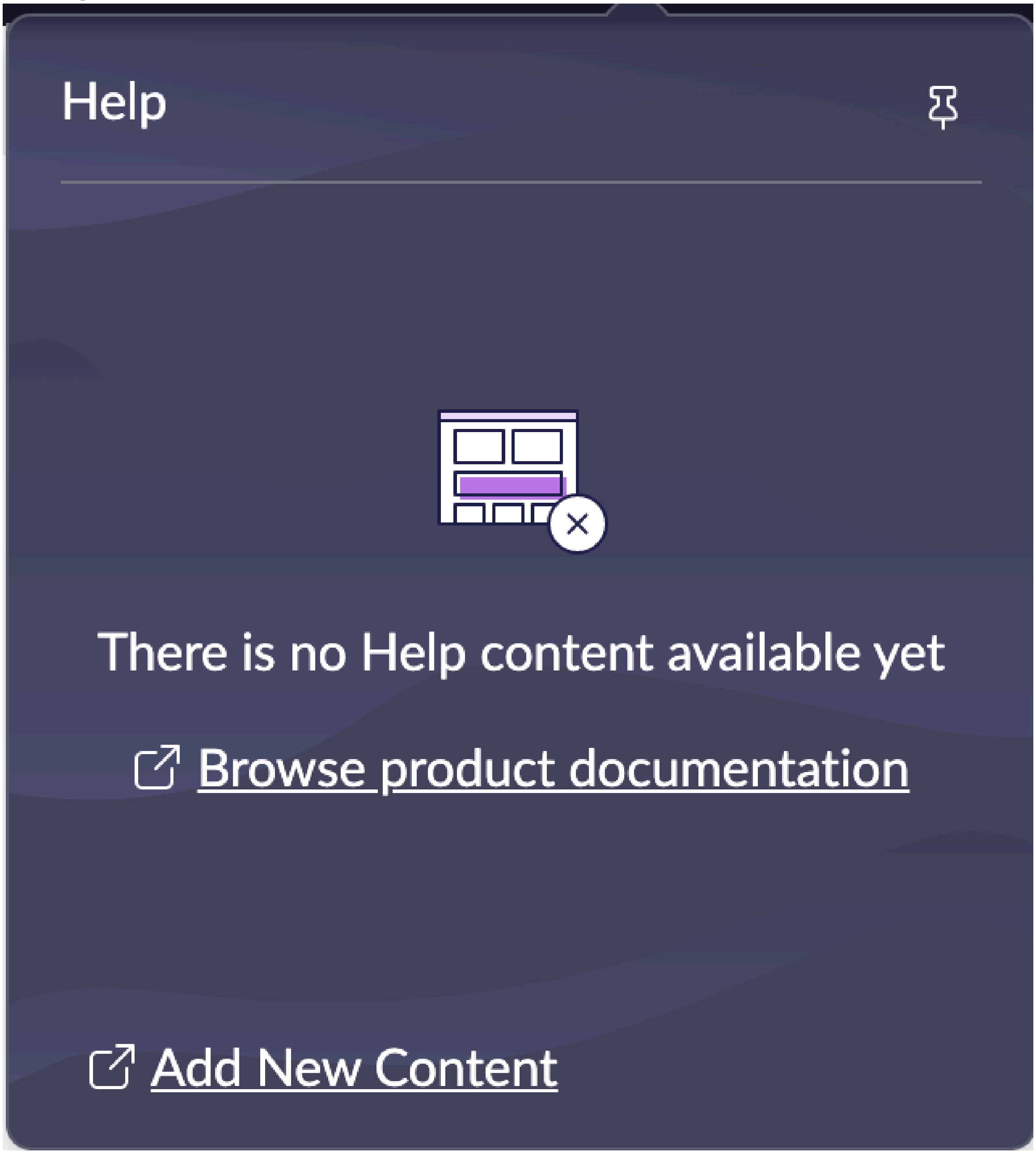
Help Center Icon View



If there is no help content available for the current page, then the help icon will not display the indicator. If the user clicks the help icon, the Help Center displays a message that there is no help content and provides a link to browse product documentation instead.

You can add new content to the Help Center with the add new content link, described in Create Help Center content for configurable workspaces.

No Help content available view

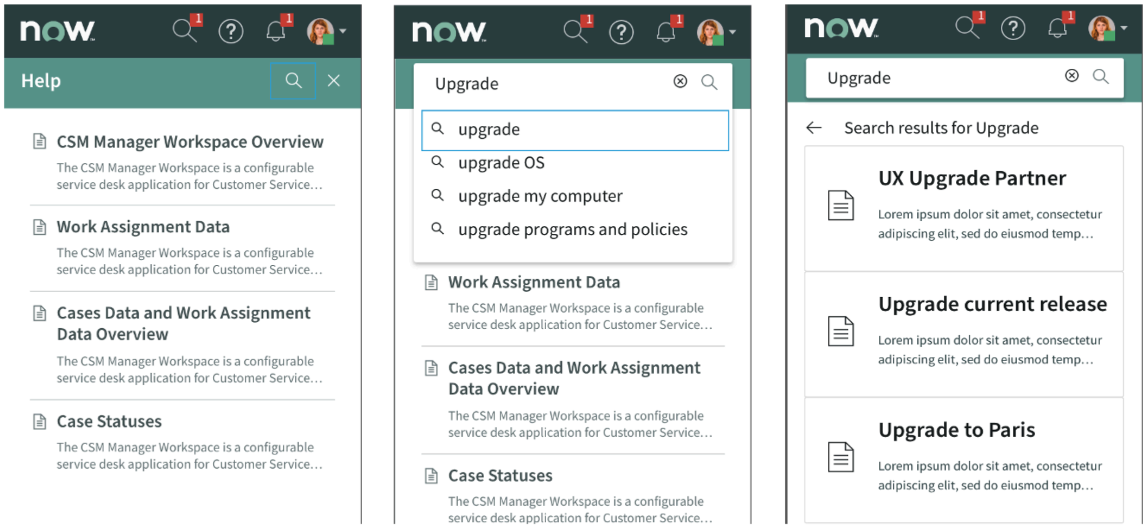


AI Search within App Engine Studio Help Panel

AI Search extends support to search within Help Panel for knowledge articles and embedded help documents. Only relevant content to the user will be displayed based on their role.

Note: This feature is dependent on the AI Search Plugin. AI Search is a ServiceNow AI Platform feature that is active by default.

App Engine Studio Help Panel AI Search



Note: The search results will be from knowledge tables and embedded help tables. Results are based on context that are relevant to the users.

For more information about AI Search see AI Search.

Using Help Center

Use Help Center to create Help Center content to provide users with helpful information about the page they are working on within a workspace. Help Center content appears in the right sidebar when the user clicks the help icon

Create Help Center content

To Create Help Center content, you will create or modify two record types: guidance records and embedded help records. The guidance record enables your content, which is in an embedded help record, to display in the Help Center. This procedure explains how to enable displaying existing embedded help content in the Help Center. For more information see Create Help Center content for configurable workspaces.

Provide Feedback to ServiceNow

The Help Center menu includes an option you can use to provide your feedback to ServiceNow about your experience with the current product. All feedback is reviewed and may be used to improve the product. For more information see Provide feedback to ServiceNow.

Create Help Center content for configurable workspaces

Create Help Center content to provide your users with helpful information about the page that they are working on within a configurable workspace.

Before you begin

Create or edit an embedded help record prior to creating a guidance record by following the steps in Add custom Embedded Help content to create new content or Add custom Embedded Help from a copy to modify existing content.

Role required: admin

About this task

To create Help Center content, you will create or modify two record types: guidance records and embedded help records. The guidance record enables your content, which is in an embedded help record, to display in the Help Center.

help record, to display in the Help Center. This procedure explains how to enable displaying existing embedded help content in the Help Center.

Procedure

1. Navigate to the configurable workspace page for which you are creating Help Center guidance.
2. Copy or otherwise take note of the page URL, such as `<instance name>.service-now.com/now/sow/home`.
3. Select the **Show help** icon (?) in the Unified Navigation menu to expand the Help Center.
4. Scroll to the bottom of the Help Center and select **Add New Content**.
   A new tab with the Guidance form displays.
5. Fill in the fields on the Guidance form.

Guidance form

Field	Description
Name	The title of your guidance, which displays in the Help Center.
Type	Select **Embedded Help**.
Roles	The user roles required to see your guidance. **Note:** Help content that is only relevant to your chosen role is supported. For example, users with the ITIL role will only see help created for the ITIL role, previously all help was displayed for all roles.
Application route	Part of the URL for the workspace page that you're targeting, in the format `now/<yourpagename>`. Refer to the URL you noted earlier and enter this portion of the URL, for example `now/sow`. See the examples following these steps for more information on identifying the application route from the URL. To target all workspace pages use `sn_all`for the application route and context fields.
Embedded help content	The content of your guidance, which is displayed to users in the Help Center. Select an existing embedded help record, or create a new embedded help record as described in Add custom Embedded Help content.
Context	A value found in the URL of the workspace page you're targeting that immediately

Field	Description
	follows the Application Route. For example, in `now/sow/home`, the context is `home`. Refer to the URL you noted earlier and provide only the word immediately following the value entered in the Application Route field. Values depend on the workspace and may also include `list` and `record`. See the examples following these steps for more information on identifying the context from the URL. To target help content on all pages in a particular workspace use the appropriate workspace application route, and enter `sn_all` for the context field.
Description	The description of your guidance, which displays in the Help Center as a short description below the title provided in the Name field.
Route parameters	An advanced configuration to display guidance only when users view specific lists or record types within your workspace. To provide guidance when a user is viewing a specific list, review the URL you noted earlier and look for the list id number, such as `list-id/d03d64feebd1301080de83402a5228f1`. Then, enter route parameters in the following format: `{"params":{"listId":"d03d64feebd1301080de83402a5228f` To provide guidance when a user is viewing a specific record type, review the URL you noted earlier and look for the record name, such as `record/problem`. Then, enter route parameters in the following format: `{"params":{"table":"problem"}}`. To provide guidance when a user is viewing a related record (a record accessed from within another record), look for the second record name in the URL, such as `sub/record/incident`. Then, enter route parameters in the following format: `{"params":{"table":"incident"}}`. See the examples following these steps for more information on identifying route parameters from the URL.
Application	The scope of your application.

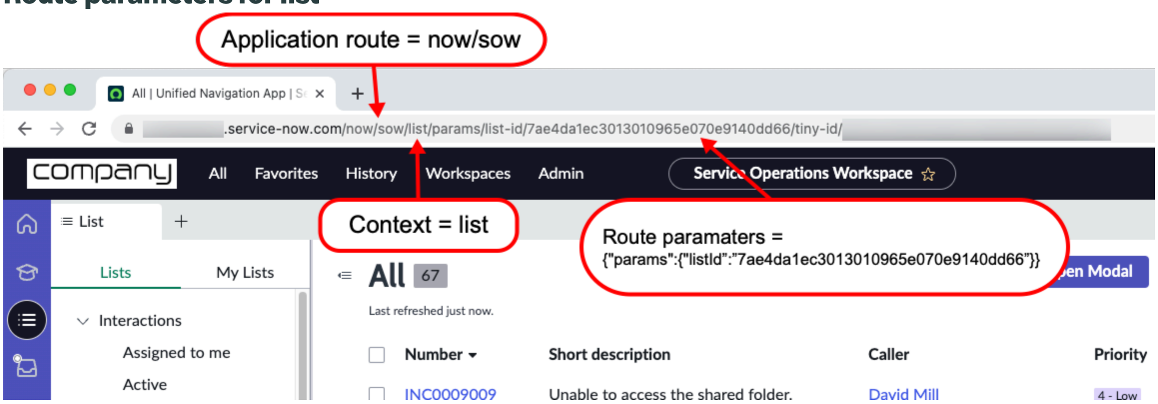
Field	Description
Status	The status of your guidance. Select **Published** when the guidance is ready to display in the Help Center.
Active	Indicates that the guidance is active. Ensure this is checked when the guidance is published.
ServiceNow created	Indicates that the guidance was created by ServiceNow. Reserved for ServiceNow use only.
Version	The current family release version for your guidance.

6. Select **Submit**.

Example: Creating guidance for a list in a configurable workspace

To provide guidance when a user is viewing a specific list, review the URL and look for the list id number, such as `list-id/7ae4da1ec3013010965e070e9140dd66`. Then, enter route parameters in the following format: `{"params":{"listId":"7ae4da1ec3013010965e070e9140dd66"}}`.

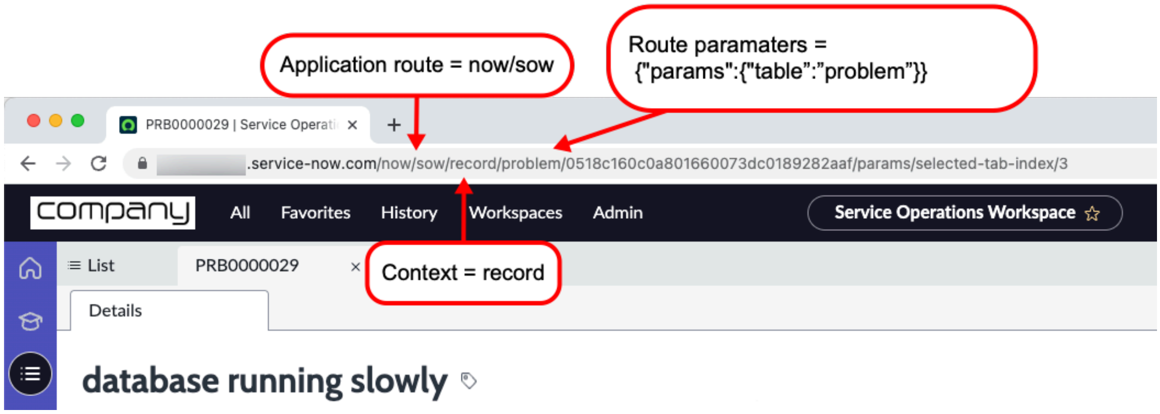
Route parameters for list



Example: Creating guidance for a record in a configurable workspace

To provide guidance when a user is viewing a specific record type, review the URL and look for the record name, such as `record/problem`. Then, enter route parameters in the following format: `{"params":{"table":"problem"}}`.

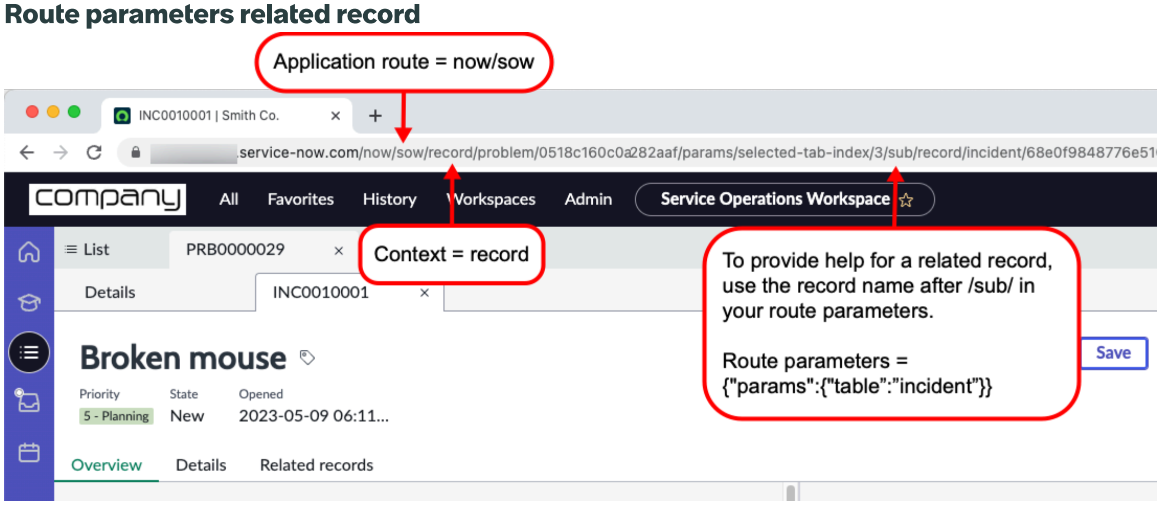
Route parameters record type



Example: Creating guidance for a related record in a configurable workspace

To provide guidance when a user is viewing a related record (a record accessed from within another record), look for the second record name in the URL, such as `sub/record/incident`. Then, enter route parameters in the following format: `{"params":{"table":"incident"}}`.

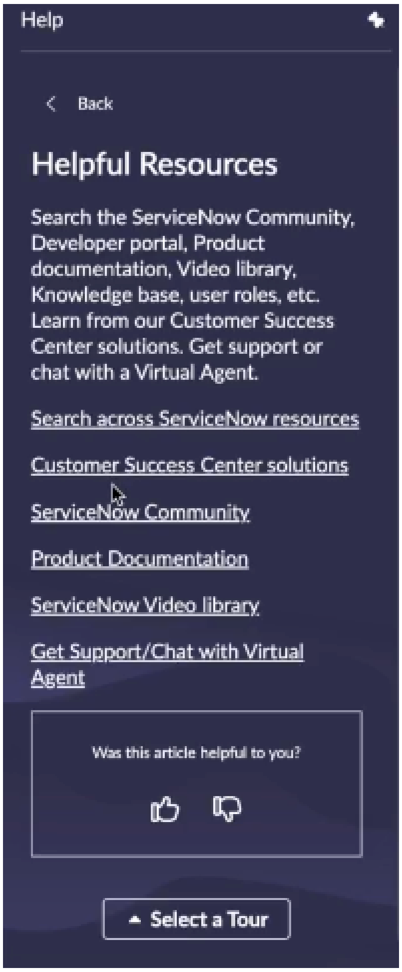
Route parameters related record



Help Center content thumbs up and down feedback

Help center content includes a thumb up or thumbs down feedback option for each Help center article in your instance.

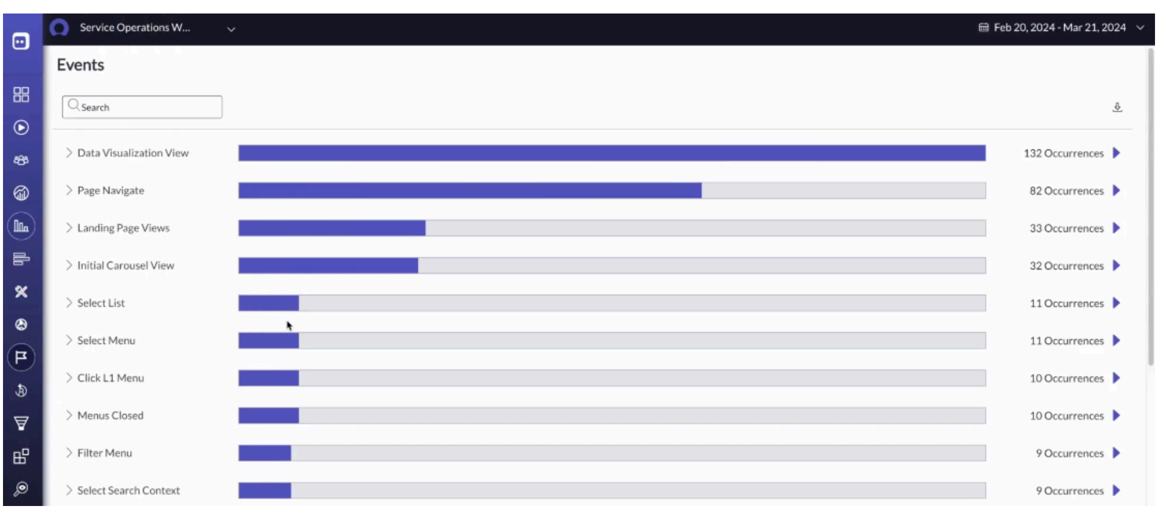
Help Center content feedback



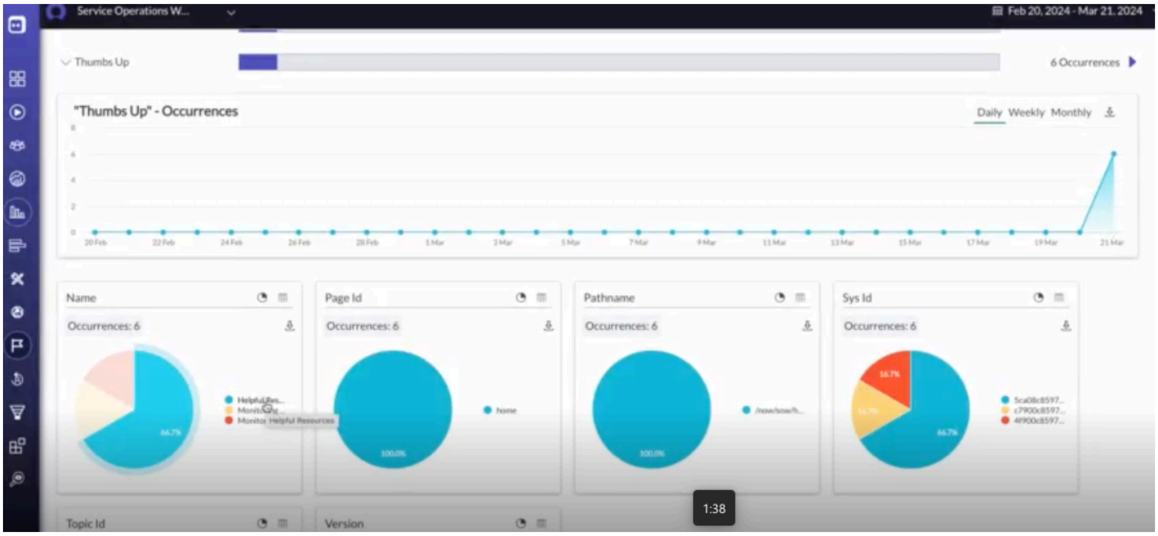
When viewing Help center content, after an article is selected, a thumb up or thumbs down feedback option is included for each Help center article in your instance. Feedback helps to notify whether the article is helpful or if improvements can be made.

Feedback analytics

To view the feedback analytics, navigate to **All** > **User Experience Analytics** > **Dashboard**.



In the example provided, Service Operations Workspace is selected, and in the left-hand navigation **Analytics** > **Events** are selected. The events page displays a list of events within the workspace, and the number of occurrences for each event.



In this example, after selecting the **Thumbs up** event, the thumbs up dashboard displays to show

- Occurrences
- Page name
- Page Id
- Pathname
- Sys_Id
- Topic Id
- Version

.

Provide feedback to ServiceNow®

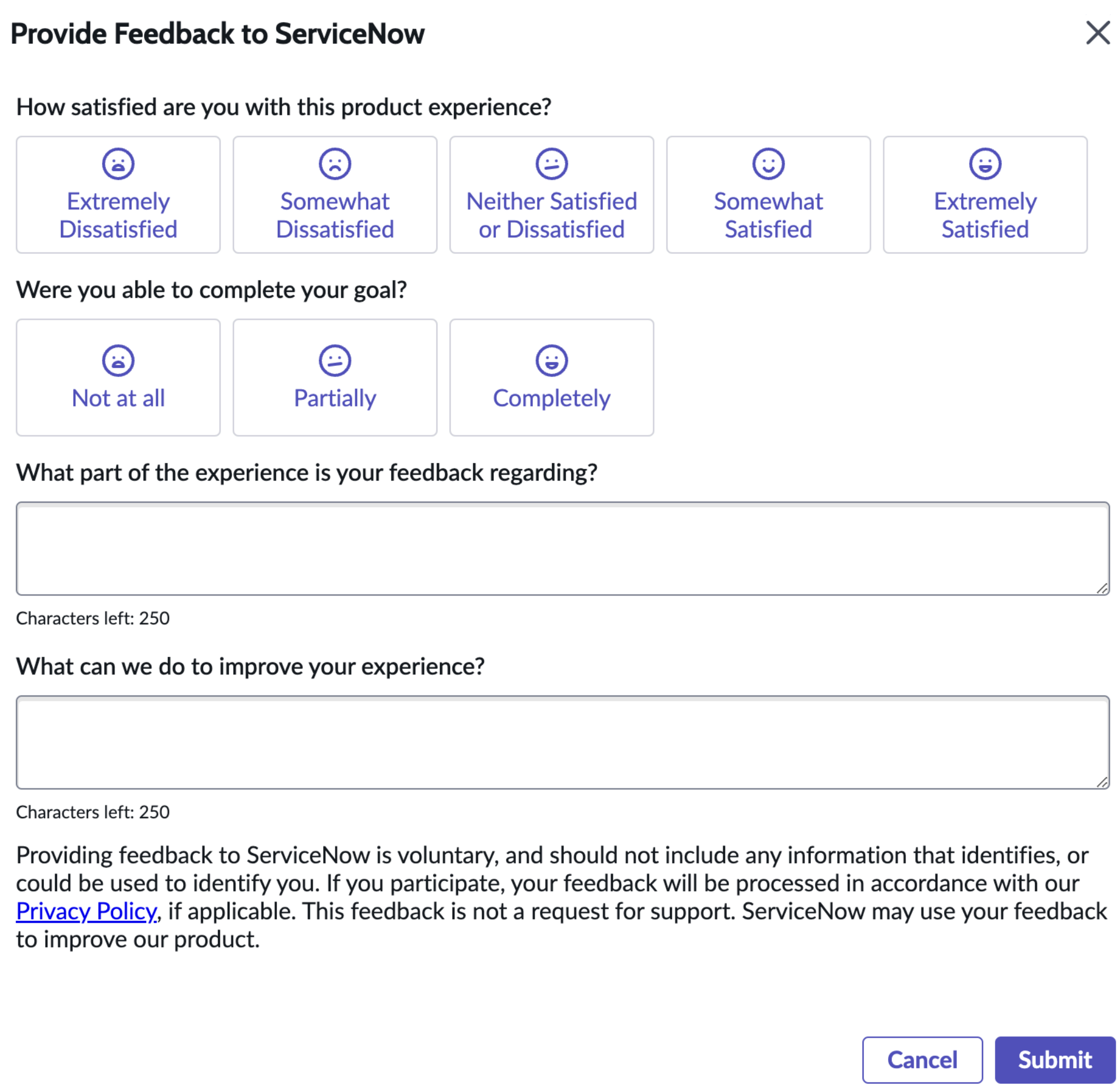
The Help Center menu includes an option you can use to provide your feedback to ServiceNow about your experience with the current product. All feedback is reviewed and may be used to improve the product.

Before you begin

Role required: none

Procedure

1. Open the Help Center by selecting the Help Center icon .
2. Scroll to the bottom of the Help Center menu and select **Provide feedback**.
3. Rate your experience and provide as much or as little detail in the entry boxes as you want.



Your feedback is important to us and we appreciate all comments, both positive and negative.

4. When you have completed your feedback, select **Submit**.

Note: If you do not want the **Provide Feedback** button to appear in the Help Center, you can disable it.

Disable feedback

You can disable the Provide feedback mechanism by creating a system property and disabling it.

Before you begin

Role required: admin

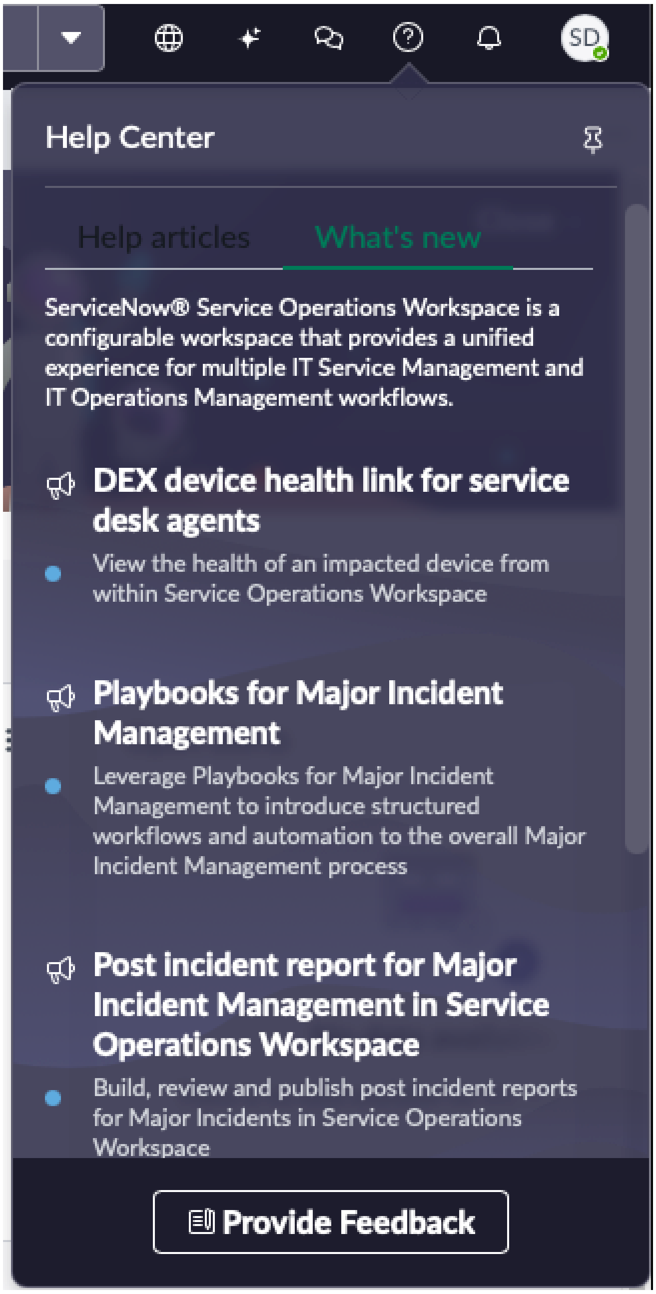
Procedure

1. In the unified navigation, type sys_properties.list and press **Enter**.
2. Select **New**.
3. In the **Name** field, type *`glide.ui.product_feedback_enabled`*.
4. In the **Type** field, select `true | false`.

5. In the **Value** field, select false.
6. Save the system property.

What's New

The What's New tab in the Help Center displays information about the new and important features for applications in your instance, including features from the latest ServiceNow release(s).

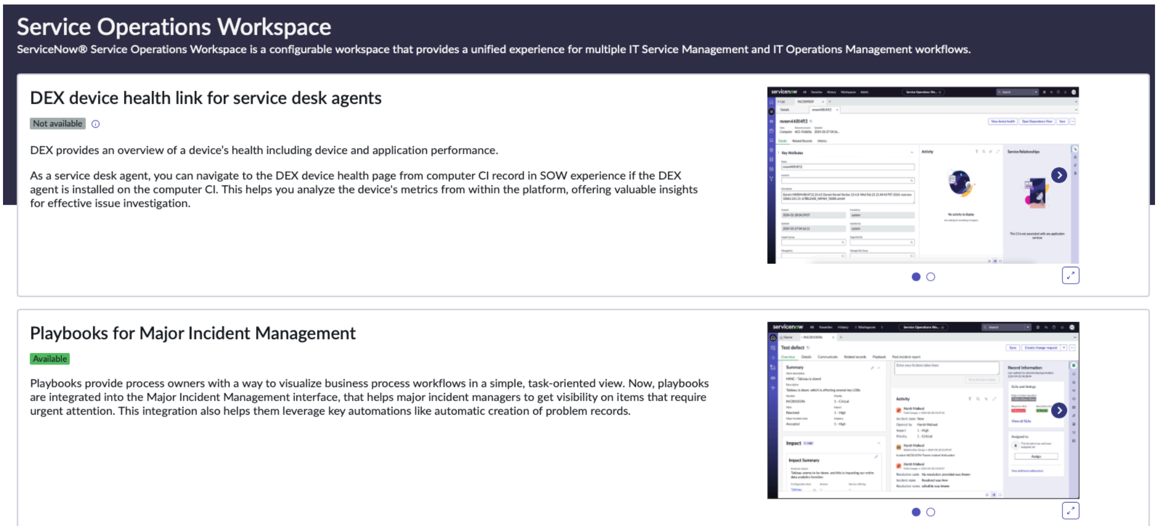


The What's New tab is a great way to learn about features, which are existing features and of what will be available to you on version upgrade (if not on the latest versions), without having to rely on the documentation site. The content in the What's new tab is relevant to each application the tab is accessed from and the role of the user accessing the content.

Note: Starting with this release, you can navigate to What's New in Help Center across all experiences. Configuration support for this new feature is available in classic and custom pages. This feature is however, not supported for non-Polaris users.

If there is new content available for you, the Help Center button is indicated. The blue indicator next to a feature notifies that the feature content is new and unread for the application and the user on your instance.

You can select a feature from the tab to access the feature page for more information including video demos and graphics if available. A view all features option is included at the bottom.



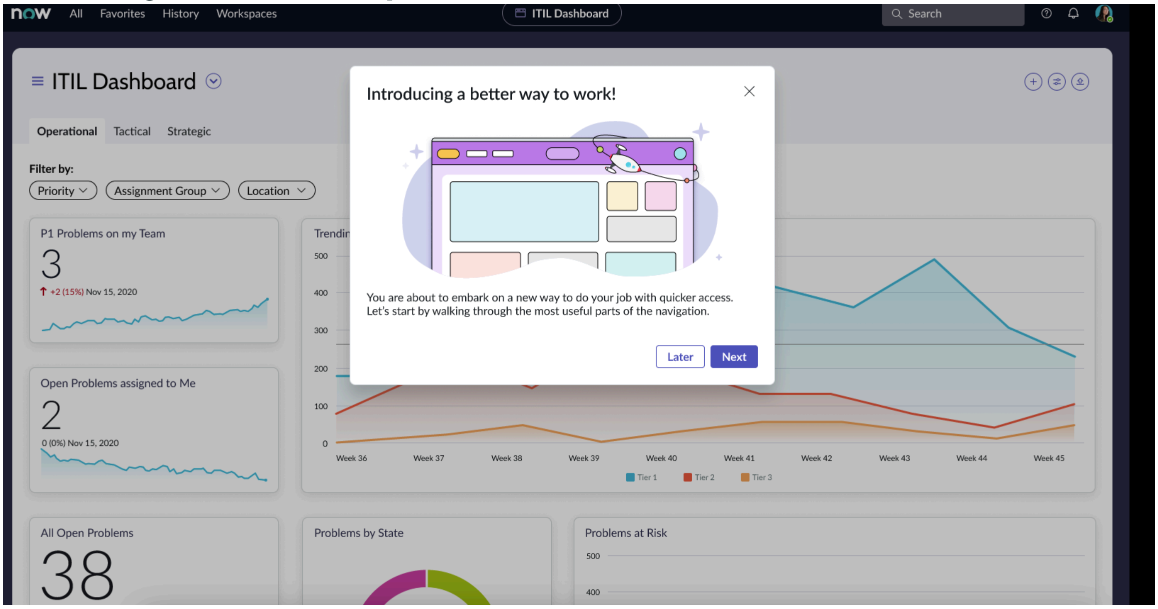
The feature page displays information on all new features for the application. Features are tagged to notify you of their availability state. In this example, Configure the Catalog Builder experience for catalog item editors, is a feature that is not available. This could be either due to an upgrade requirement, or due to the required plugins for the feature not being installed on the instance. For most features, links are provided to expand information or to navigate to the documentation site.

Onboarding modals

Onboarding modals provide a wizard-like experience to introduce users to new experiences and applications in their ServiceNow® Next Experience instance.

Some onboarding modals are included by default in your instance, such as the onboarding modal displayed the first time you log in to an instance with Next Experience enabled. You can also create your own custom onboarding modals to introduce new experiences and applications to users.

Onboarding modal slide example



Create an onboarding modal

Create your own onboarding modals to introduce your users to a new experience or application.

Before you begin
Role required: admin

Procedure

1. Navigate to **All** > **Adoption Services** > **Create Guidance**.
2. To create your onboarding modal, do the following:

   a. On the form, fill in the fields.

   Guidance form

Field	Description
Order	Order that the guidance displays. The lowest number displays first and the next chronological number follows.
Name	Name of the onboarding experience.
Type	Type of guidance that appears in the UI. Select **Modal**.
Roles	Roles for this guidance.
Application	Application for the guidance.
Status	Status of the guidance.
Active	Select to enable or disable the guidance.

   b. Select **Submit**.

3. To launch an Onboarding modal once created, do the following:

a. Create a client script in UIB.

b. Under the code snippet enter `api.emit('SN_HELP#GUIDANCE_START_REQUESTED',{guidanceId:"ID"});`

c. Replace the ID with the sys_id of the modal guidance to be opened.

d. Save the page.

e. Select **Body** in the left panel of the UIB page.

f. In the right panel, select the **Events** tab.

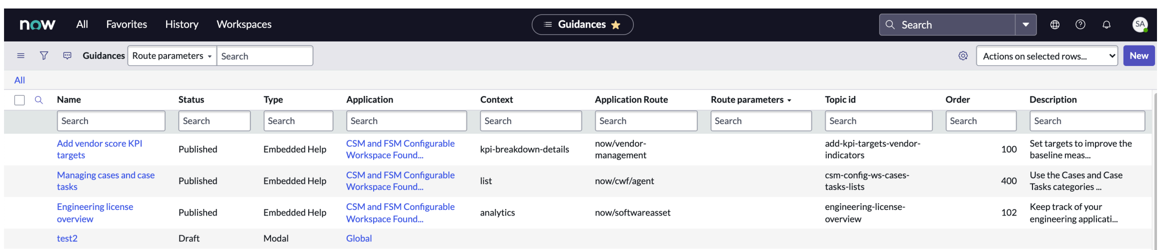
g. Under **Dispatched Events** select **Add**.

h. In the event name, add `SN_HELP#GUIDANCE_START_REQUESTED` and give the label with a name.

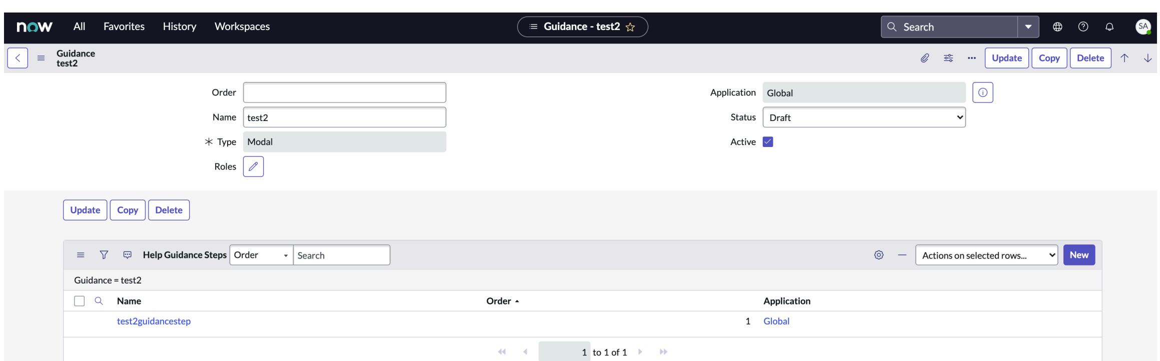
i. Select **Save**.

4. To create embedded help guidance steps, do the following:

a. Select your guidance from the Guidances list.



b. On the Help Guidance Steps related list, select **New**.



c. On the form, fill in the fields.

Help Guidance Step form

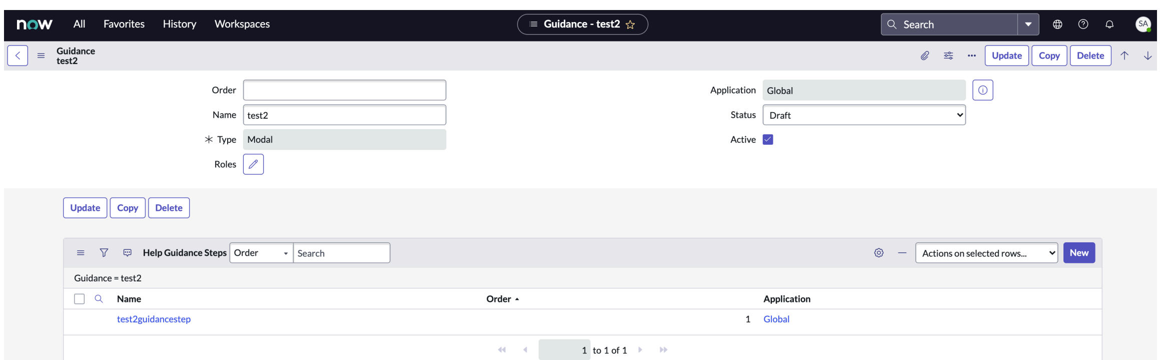
Field	Description
Name	Name of your guidance.
Layout	Selected layout of the guidance. ▪ Video ▪ Image ▪ Text ▪ Question

Field	Description
	▪ Image and Text ▪ Image and Question
Order	Order that the guidance displays. The lowest number displays first and the next chronological number follows.
Action Label	Button labels that enable the user to navigate the guidance modal.
Application	Application scope for the guidance. This guidance applies to the Global scope.
Guidance	The guidance that this Help Guidance Step applies to.

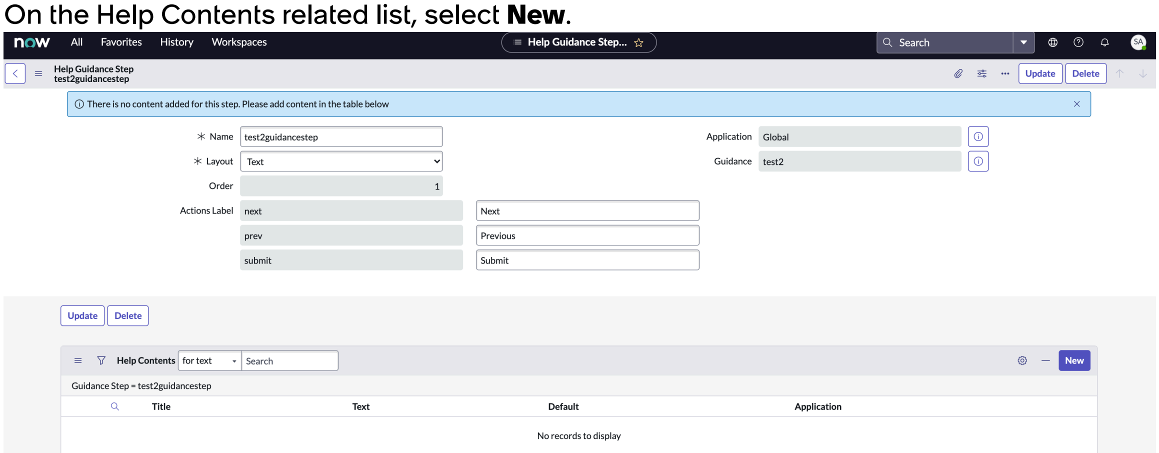
d. Select **Submit**.

5. To create help contents for your help guidance steps, do the following:

a. Select your help guidance step in the related list.



b. On the Help Contents related list, select **New**.



c. **Note:** Form fields are different for each type of guidance. Refer to the correct form for your guidance.

On the text form, fill in the fields.

Help Content text form

Field	Description
Title	Title of the help content.
Subtitle	Subtitle that's displayed in the modal of the help content in the UI.
Type	Type of guidance that's selected.
Application	Application scope for the guidance.
Guidance Step	Help Guidance Step that this Help Content is associated with. For example, Intro/ welcome, All menu, and History.
Default	Help content that is the default for the guidance step.
Footer	Footer that's displayed in the modal of the help content in the UI.
Provide Custom HTML	Custom HTML for your help content.
Text	Text that displays in the modal of the help content in the UI.

d. Click **Submit**.

e. On the video form, fill in the fields.

Help Content video form

Field	Description
Title	Title of the help content.
Subtitle	Subtitle that's displayed in the modal of the help content in the UI.
Type	Type of guidance that's selected.
Video Link	The link for your video to display. **Note:** Only YouTube and Vimeo are supported.
Application	Application scope for the guidance.
Guidance Step	Help Guidance Step that this Help Content is associated with. For example, Intro/ welcome, All menu, and History.
Default	Help content that is the default for the guidance step.
Footer	Footer that's displayed in the modal of the help content in the UI.
Provide Custom HTML	Custom HTML for your help content.

Field	Description
Alternate Text	Alternate text that displays in the modal of the help content in the UI.

f. Click **Submit**.

g. On the image form, fill in the fields.

Help Content image form

Field	Description
Title	Title of the help content.
Subtitle	Subtitle that's displayed in the modal of the help content in the UI.
Type	Type of guidance that's selected.
Image	The image selected to display in your guidance.
Application	Application scope for the guidance.
Guidance Step	Help Guidance Step that this Help Content is associated with. For example, Intro/ welcome, All menu, and History.
Default	Help content that is the default for the guidance step.
Footer	Footer that's displayed in the modal of the help content in the UI.
Provide Custom HTML	Custom HTML for your help content.
Provide Image Link	The image link is displayed in the guidance.
Alternate Text	Alternate text that displays in the modal of the help content in the UI.

h. Click **Submit**.

i. On the question form, fill in the fields.

Help Content question form

Field	Description
Title	Title of the help content.
Subtitle	Subtitle that's displayed in the modal of the help content in the UI.
Type	Type of guidance that's selected.
Application	Application scope for the guidance.
Guidance Step	Help Guidance Step that this Help Content is associated with. For example, Intro/ welcome, All menu, and History.

Field	Description
Default	Help content that is the default for the guidance step.
Footer	Footer that's displayed in the modal of the help content in the UI.
Provide Custom HTML	Custom HTML for your help content.

j. Select **Submit**.

k. Select **New** in the Help Question related field.

Help question form

Field	Description
Question	The content of the question to add in the guidance.
Order	The order of the question in the guidance.
Variant	The variant of the question. ▪ Radio is selected for questions with only one answer. ▪ Checkbox is selected for questions with multiple answers.
Application	Application scope for the guidance.
Help Content	The Help Content that the question is created for.
Mandatory	The question is Mandatory when selected.

l. Select **New** in the Help Answers related field to create answers.

Help answer form

Field	Description
Label	The label for the answer.
Value	The value for the answer.
Order	The order of the answer.
Application	Application scope for the guidance.
Question	The question the answer is created for.

m. Select **Submit**.

6. Create any additional guidance that you want to build your onboarding experience.
7. When you're done building your onboarding guidance, confirm that the status of your guidance is set to **Published** on the Guidance form.
8. On the Guidance form, select **Update**.

Launch an Onboarding Modal

Launch an Onboarding Modal you have created in your instance.

Before you begin

Role required: admin

Procedure

1. To launch an Onboarding modal once created, do the following:
2. Create a client script in UIB.
3. Under code snippet enter `api.emit('SN_HELP#GUIDANCE_START_REQUESTED', {guidanceId:"ID"});`
4. Replace the ID with the sys_ID of the modal guidance to be opened.
5. Save the page.
6. Select **Body** in the left panel of the UIB page.
7. In the right panel, select the **Events** tab.
8. Under **Dispatched Events** select **Add**.
9. In the event name, add `SN_HELP#GUIDANCE_START_REQUESTED` and give the label with a name.
10. Select **Save**.

Edit the default onboarding modal

Edit the default onboarding modal to personalize content for your users.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **Adoption Services** > **All Guidance**.
2. On the Guidance list, select **Onboarding**.
3. On the Guidance related list, select the guidance list entry that corresponds to the onboarding slide that you want to edit.
   The list entries include **Intro/welcome**, **Pinning**, **All menu**, **Favorites menu**, **History**, and **Application Pill**.
4. On the form, edit the fields.

   Help Guidance Step

Field	Description
Name	Name of the guidance.
Layout	Selected layout of the guidance.
Order	Order that the guidance displays. The lowest number displays first and the next chronological number follows.
Action Label	Button labels that enable the user to navigate the guidance modal.

Field	Description
Application	Application for the guidance.
Guidance	The guidance that this Help Guidance Step applies to.

5. On the Help Contents related list, select the list entry associated with the guidance.
   For example, **Jump between things with ease** for the History guidance and **Everything you need is right here** for the All menu guidance.
6. On the form, edit the fields.

   Help Content form

Field	Description
Title	Title of the help content.
Subtitle	Subtitle that's displayed in the modal of the help content in the UI.
Type	Type of guidance that's selected.
Application	Application for the guidance.
Guidance Step	Help Guidance Step that this Help Content is associated with. For example, Intro/welcome, All menu, and History.
Default	Help content is selected as default.
Footer	Footer that's displayed in the modal of the help content in the UI.
Provide Custom HTML	Select to input custom HTML into the help content.
Text	Text that displays in the modal of the help content in the UI.

7. Select **Update**.

Guided Setup

Guided Setup is the product support that organizes configuration activities into categories. Use Guided Setup to step through the initial configuration of any product or application that provides a Guided Setup module.

Guided Setup organizes configuration activities into categories. Each category provides information, such as planning guidance, pre-setup steps, and links to useful help content. Categories also provide a set of links to the pages in your instance where you perform the configuration.

Guided Setup home page

The Guided Setup homepage contains an overview of configuration types for your Guided Setup. You can select the Guided Setup type and **Continue** to launch the Guided Setup steps and begin configuration.

Features supported in Guided Setup are:

- Categories page
- Task page
- Other features

Multiple-run support in Guided Setup

It's important to note that the Guided Setup builder and player support multiple run or execution of tasks. You can switch between the two execution types, single and multiple. You can skip the execution creation page and load your default configuration with each run when you select multiple run on the configuration page.

Exploring Guided Setup

Guided Setup assist you with planning the roll-out of the product and performing the basic configuration to go live. The included features and steps assist you with planning the roll-out of the product and performing the basic configuration to go live.

The Guided Setup process keeps track of what tasks you have completed, so that you can stop and start again where you left off.

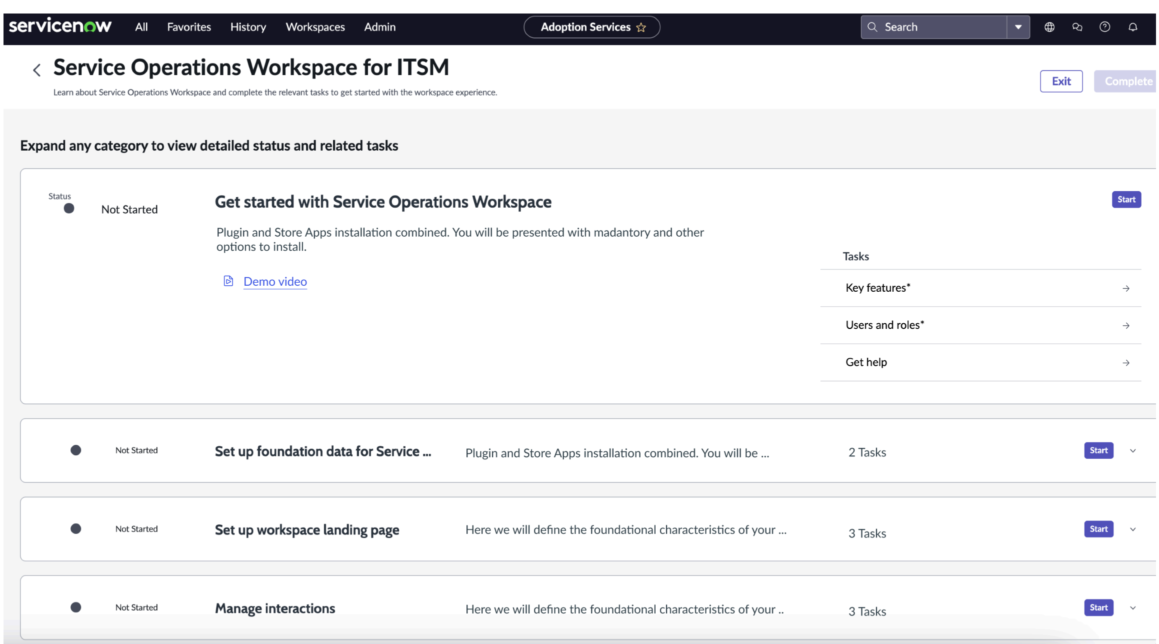
Navigation support in Guided Setup

Guided Setup player is supported in Playbook Experience and Next Experience. You can choose between the two experiences where the playbook player experience provides the forward and back navigation support and the immersive reader experience supports only the current category tasks in the left navigation. You can also access Guided Setup task pages in Playbook Experience for a vertically focused experience.

Guided Setup home page

The Guided Setup homepage contains an overview of configuration types for your Guided Setup. You can select the Guided Setup type and **Continue** to launch the Guided Setup steps and begin configuration.

Guided Setup categories page



The categories page contains an overview and descriptions of the categories and associated tasks. You can click either the drop down arrow to view information about the category or the **Start** button to open the Guided Setup steps and begin configuration.

1. **Completion indicator**

   The completion indicator shows all progress through Guided Setup steps at a glance. Each circle represents a category and its status.

   - Empty circle: Category is not started.
   - Lock symbol: Feature is not activated. You can look at the setup tasks, but not perform them.
   - Purple circle: Category is completed.

   Note: You can enable or disable the **mark complete** action in Guided Setup player based on the user's action on that task. If a task is mandatory, **Skip** option is hidden in the player interface and * sign is displayed alongside the task name with a 'Mandatory' tag.

2. **Category task completion status**

   For each category you can start or continue working on tasks, or edit the statuses of completed tasks.

3. **Category information**

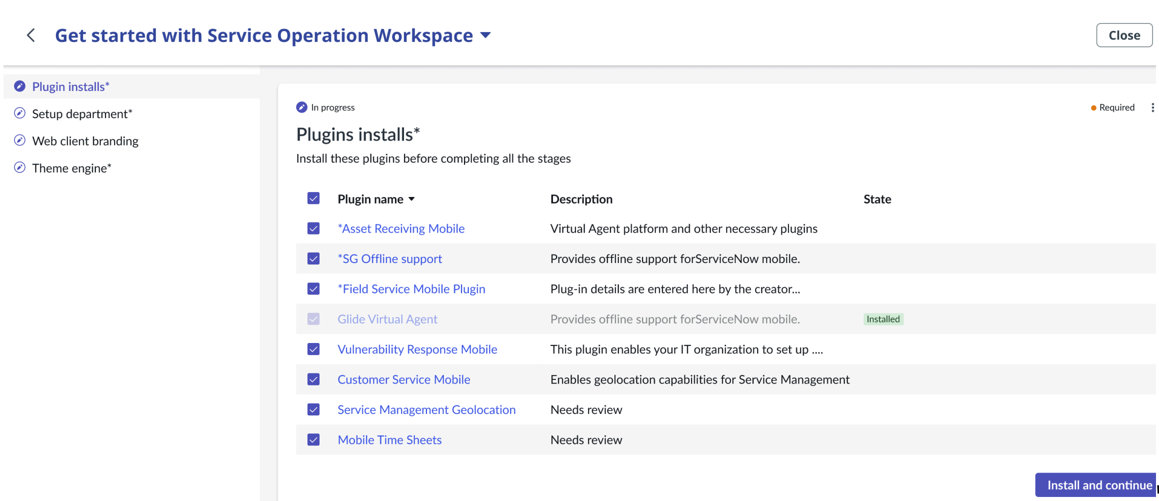
   The category name and description appear. The description includes further planning information and links to additional content to help you with configuration.

4. **Tasks**

   Lists the tasks and completion status for each activity. Click a task to go to the tasks for that category.

   Use the filter above the task list to display only complete or incomplete tasks, as desired. Assign tasks to relevant users as required.

Guided Setup task page



To perform a task click on one of the tasks listed and select **Mark as complete** once completed.

Other actions you can take include:

- **<Category>**: Click your category drop down to view a list of all categories.
- **Assign tasks**: Assignment of Guided Setup tasks includes these features:

    - Assign and transfer Guided Setup tasks to relevant users, for execution. This capability requires admin roles and the assigned user gets notified on task assignment. The assigned task is locked and shows a lock sign for other users.
    - Access any unassigned task, a user with admin rights of Guided Setup.
    - As a task assignor, you can remove the task assignment in the absence of the assigned user.
- Add optional steps to an existing Guided Setup at the runtime of the player experience. This feature is available in the Playbook Experience as custom steps.
- **Add Notes**: Add notes when assigning task, such as stating how far you got before you had to exit. Notes can help another administrator who continues the work.
- **Mark as Complete**: Click this to mark a task as complete in your Guided Setup.

  Note: It may be necessary to mark a task as complete to move on to the next task.

- You can also create a UI page by accessing a Guided Setup task template in the UI Builder template section.
- **Embedded Help** Click to learn more about the task.

More Guided Setup features

Lock icon

When it appears against an activity, task, or subtask, you cannot access the item. You may need to activate a plugin or complete a prerequisite task to unlock it.

Action buttons

After beginning Guided Setup tasks, **Get Started** options are changed to **Continue**. Other action buttons change to prompt you to continue with or edit completed tasks.

Create a Guided Setup

Create a Guided Setup to assist users with planning the roll-out of a product and performing the basic configurations to go live.

Before you begin

Role required: sn_help_setup_admin or sn_help_setup_player

The Guided Setup builder is supported by the Process Automation Designer.

Procedure

1. Navigate to **All** > **Adoption Services** > **Guided Setup**.
2. Select the **Build your guided setups** tab.
3. Select **Create new**.
4. Select **Get started**.
5. Fill in the form.

Introduce the Guided Setup form

Field	Definition
Name	The name of your guided setup.
Description	Describe the purpose of this guided setup.

Field	Definition
User roles	Roles required to access the guided setup.

6. Select **Continue**.
7. To add a stage to your Guided Setup, select **Board view** do the following:

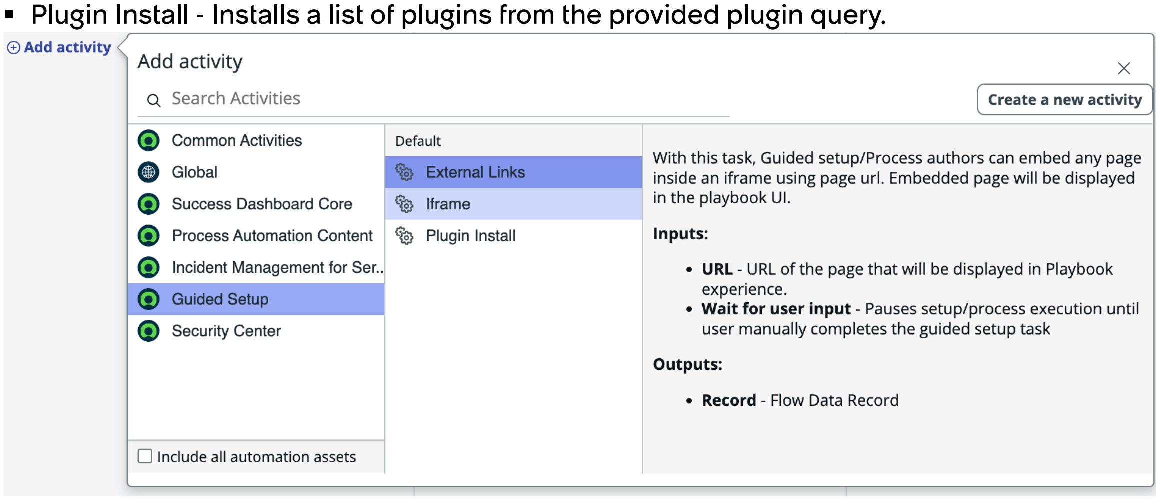
   a. Select **Add stage**.

   b. Fill in the form.
      - Label
      - Description
      - Start rule
        - When the process starts
        - After specific stages

   c. Select **Save and close**.

   d. After creating your stages, select **Add activity**.

   e. Select **Guided Setup** and one of the following activities:
      - External links - Shows a list of external links such as docs and videos in the playbook UI.
      - Iframe - Embed any page inside an iframe using a page url.
      - Plugin Install - Installs a list of plugins from the provided plugin query.



   f. Fill in the form.

   g. In the Details tab, fill in
      - Label
      - Description
      - Start Rule
      - Select **Show additional options**

   - Playbook display order
   - Start with delay
   - Run condition
   - Restart rules

h. In the Automation tab, fill in
   - For Iframe activity: Add URL
   - For External Links activity: Add External links
   - For Plugin Install activity: Add Plugin query
   - select **Show additional options**
     - Assigned to
     - Assignment group
     - Wait for user input

i. **Optional:** In the UI Layout tab, fill in
   - Select **Show additional options**
   - associated_table
   - associated_record
   - experience_status_table
   - experience_status_record
   - title
   - description
   - icon
   - footer
   - tagline

j. Select **Save and close**.

k. Select **Activate** and then **Finalize** when you're complete with configuring your stages.

l. Select the check box and **Continue**.

m. Create an optional pre-setup checklist and select **Finalize**.
   For example:
   - Image for header
   - Content for company description
   - Company logo

8. To delete a stage or activity, do the following:

a. To delete a stage, select the more actions menu ⋮ on your stage.
   - Configure stage
   - Add stage before
   - Add stage after
   - Delete stage

b. To delete an activity, select the more actions menu ⋮ on an activity.
   - Configure activity
   - Configure subflow in Flow Designer
   - Move activity
   - Delete activity

Domain separation and Guided Setup

Domain separation is supported for Guided Setup. Domain separation enables you to separate data, processes, and administrative tasks into logical groupings called domains. You can control several aspects of this separation, including which users can see and access data.

Support level: Basic

- Business logic: Ensure that data goes into the proper domain for the application's service provider use cases.
- The application supports domain separation at run time. The domain separation includes separation from the user interface, cache keys, reporting, rollups, and aggregations.
- The owner of the instance must set up the application to function across multiple tenants.

Sample use case: When a service provider (SP) uses chat to respond to a tenant-customer's message, the customer must be able to see the SP's response.

For more information on support levels, see Application support for domain separation.

Key points

There are some key points to note with domain separation support.

- Guided Setup player can view new guided setup execution for every domain.
- Creation and updation of Guided Setup is allowed in global domain scope only. This requires builder roles.

  Migration of existing setups is initiated only in global scope.

  Status of setups in progress is shown as applicable to the domain scopes.

Related topics

Domain separation for service providers

Guided Tours

Guided Tours train and onboard users in the ServiceNow user interface (UI) by providing interactive steps for completing online tasks in their browser. You can create steps that users simply read and acknowledge, or offer an interactive experience that allows them to engage directly with the application.

Watch this five-minute video to learn about creating Guided Tours that help users learn how to perform tasks in ServiceNow.

Get started

Explore	Configure	Using
Learn about Guided Tours features.	Configure Guided Tours.	Using Guided Tours.

Workarounds

- Search the Known Error Portal for known error articles
- Contact Customer Service and Support

Exploring Guided Tours

Learn about Guided Tours features that enable you to demonstrate to users how to perform a task.

Get to know Guided Tours

Guided Tours help train and onboard users within the ServiceNow user interface (UI). Each tour contains a series of interactive steps that help users complete online tasks within their browser window. Administrators can create tours for ServiceNow applications, service portals, and custom applications. For example, you can create a tour to represent a training model for specific policies and processes, such as creating an incident or reviewing change requests.

Guided Tours use a series of steps that may span multiple pages. You can create purely informational steps that users read through and acknowledge, which result in no change to the ServiceNow instance. Alternatively, you can provide users with an interactive experience where they click through and actively work with the application at hand. For example, an “Introduction to Incidents” tour may simply show them the key features of the Incidents table, while a “Create your first incident” tour may actually walk them through creating a real incident, which results in a new record in the Incidents list.

servicenow

> **Important:** Guided Tours are supported in Next Experience pages, such as configurable workspaces or pages configured in UI Builder using the Next Experience UI Framework. To enable Next Experience support, configure the `com.snc.guided_tours.standard_ui.enable` system property and set to **True**. For more information about Guided Tours in Configurable Workspaces see Guided Tours in Configurable Workspaces. The following scenarios are still supported with Next Experience enabled.
>
> - Creating and running new or existing Guided Tours in the Classic Environment (including lists and forms).
> - Creating and running new or existing Guided Tours for a Service Portal.
> - Creating new Guided Tours for Unified Navigation menus (such as the All or Favorites menus).
>
> See Next Experience. The Guided Tour Designer is only available in Core UI. The designer is not compatible with UI15. For information about how to activate the Core UI plugin, see Activate Core UI

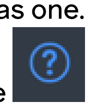
Several Guided Tours are provided in the base system for particular applications, for example, Performance Analytics. As an administrator, you can edit existing tours or create tours. You can also assign one or more roles to a tour to control access.

The Guided Tours feature uses these two plugins: Guided Tour (com.glide.guided_tours) and Guided Tour Designer (com.glide.sn_tourbuilder).

Navigating to Guided Tours

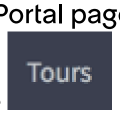
Guided Tours run on four types of UI: Standard, Service Portal, Custom and Workspaces. Tours launch differently when accessed based on each tour type as follows.

Standard Forms and Lists UI:

Users access a guided tour by navigating to a page that has one. If they have one or more roles that the tour is targeted to, they can click the  icon so that GTD panel opens to show the **Take a Tour**. If more than one tour is available to a user on a page, the **Select Tour** choice list appears so they can select which tour to launch.

Tours on **Custom UI pages/applications** can be accessed in the same way. This is only applicable for custom pages which are opened in the navigator. The tours are not visible if the user opens a Custom UI page without the navigator.

Service Portal UI:

Users access a guided tour by navigating to a page that has one. When a user accesses a Service Portal page that has a guided tour on it, no GTD panel is present. Instead, the  menu item appears on the banner indicating a tour is available. If a guided tour is available on a page on the service portal, a color indicator appears to the right of the **Tours** menu. When the user clicks **Tours**, all available tours for the page appear.

If a page has no Service Portal Header Menu, the Tours menu item is not accessible to the user. In this case, the tour is accessible to users only via auto-launch. See Configure auto-launch for guided tours.

When you add at least one role to a tour, it limits the audience to those users who have that role. For more Service Portal guided tour information, see Activate guided tours.

Workspaces

Users access a guided tour by navigating to a page that has one. When a user accesses a Workspace page that has a guided tour on it, they can click the  icon so the GTD panel opens to show the **Take a Tour** button. If more than one tour is available to a user on a page, the **Select Tour** choice list appears so they can select which tour to launch.

Guided Tours support

Note: The same system property as Standard UI is used to enable and disable Guided Tours.

The Guided Tour Designer (GTD) supports most of the standard platform UI areas and their content, such as lists, forms, and the elements they reference. It also supports Service Portal pages, including those that have custom UI elements.

Guided Tour Designer is a standard feature provided by default, with Guided Tours for any business unit. Users with role `guided_tour_admin` has access to Guided Tour Designer.

Guided Tours workflow

Guided Tours are composed of the following components that function as building blocks for the tours that you create.

Guided Tours components

Component	Description
Introduction	Shows an introductory message to your users.
Step	A discrete component of a guided tour that implies an order. A step can provide a definition, an instruction, or both.
Callout	Shows the definition and instruction about the current step in the tour. The callout includes the instruction to proceed to the next step. It points to the element that the instruction describes.
Element	The objects that the tour points to, such as a record in the database, or a widget on a page. Elements require formatting so that the tour can link to them.
Trigger	Moves the tour to the next step. Triggers include pressing the Enter key, clicking or right-clicking a UI element, or clicking a **Next** button in the callout.
Conclusion	Shows a closing message to your users at the end of the guided tour.

Guided tours require careful planning before entering the tour into the instance. You can create an outline and include any assumptions to guide you when you create the guided tour. List each step, callout, and trigger.

Sample guided tour outline: Set a vacation delegate

Step	Callout	Trigger
This tour assumes that the user has navigated to **User Administration** > **Delegates**. The UI page is `sys_user_delegate_list.do`.		
Open the Delegate form to enter a new record.	• Points to the **New** button in the Delegates list view. • Text: Click **New** to set up a delegate who receives your notifications while you are on vacation.	Click the element: **New** button
Describe the **User** field.	• Points to the **User** field. • Text: Your name defaults as the user who wants to delegate to another user. If you are setting up a delegate for someone else, you can select a different user.	**Next** button
Select the delegate	• Points to the **Delegate** field. • Text: You specify who you want to delegate to. Type the user's name, and select it when it appears.	**Next** button
Set the start date	• Points to the **Starts** field. • Text: Enter the date and time to start forwarding notifications. Click away from the field to proceed.	Change the Value: **Starts** field
Set the end date	• Points to the **Ends** field. • Text: Select the date and time to stop forwarding notifications. Click away from the field to proceed.	Change the Value: **Ends** field
Describe the delegate options	• Points up from below the **Meeting invitations** field. • Text: If you do not want these notifications forwarded to your delegate, you can clear any of these fields.	**Next** button
Submit the delegate record	• Points to the **Submit** button • Text: Click **Submit** to add the delegate.	Click the element: **Submit** button

Note: To view the Guided Tours Overview dashboard with statistics on guided tour usage, see Guided Tours dashboard.

Limitations of GTD

Learn about the limitation of the Guided Tour Designer.

The GTD does not currently support the following areas:

Standard Forms and Lists UI:

- Flow Designer
- Agent Workspace
- Pop-up windows
- Connect Chat and Embedded Help on the GTD sliding panel
- Select2 elements
- SVG elements
- Custom Tags
- Standard UI pages that have custom UI elements, such as Contextual search.

Service Portal:

- Service Portal pages that contain IFRAMES
- The Service Portal Branding Editor, which also contains IFRAMES
- Select2 elements
- SVG elements
- Custom Tags
- Seismic components (shadow dom). For example: sn-search-combobox - AI search box, sn-search-results-container - AI search results.
- Tours when loaded in the Next Experience UI.

Workspaces

- Only the following app shell experiences are supported:
  - Breadcrumb App shell
  - ACE Unified Nav App shell
  - Workspace App shell
  - Custom App shell
- Experiences with an empty app shell are not supported.
- Tours that start in a custom app shell and go to the Polaris app shell are not supported.
- Not recommended to create tours on workspaces in UI16
- Variants
- Callouts inside iframes in a workspace
- Guided Tours that start in a standard UI or workspace and go to a service portal
- Guided Tours are only supported within a page, if a link opens in a new tab the tour does not continue

  Note: Admins must add the right action for the callout on elements that can open in a new tab.

- Guided Tours are not supported in mobile view
- Callouts on elements inside visualisation components or par widgets

Technical limitations

- Elements that are loaded in DOM by scrolling the page effect Guided Tours. The admin must inform the user to scroll further when the form is present.
- If there is no click action on the elements that are selectable while creating the tour, place the callout on the parent element.

Guided Tours dashboard

The Guided Tours Overview dashboard provides statistics related to guided tour usage.

To access the Guided Tours dashboard, navigate to **Guided Tour Designer** > **Guided Tours Overview**. The dashboard has two tabs:

- User Engagement: Shows the number of users actively working with Guided Tours and trends over time.
- Tour Statistics: Shows trends and patterns for user engagement so you can analyze tour completions and tour failures and build more successful tours.

You can view reports by selecting options in the interactive filter based on the guided tour type (Platform, Service Portal, and Custom) and the guided tours present in the instance. The statistics provided in the User Engagement and Tour Statistics tabs change based on the options selected in the interactive filter.

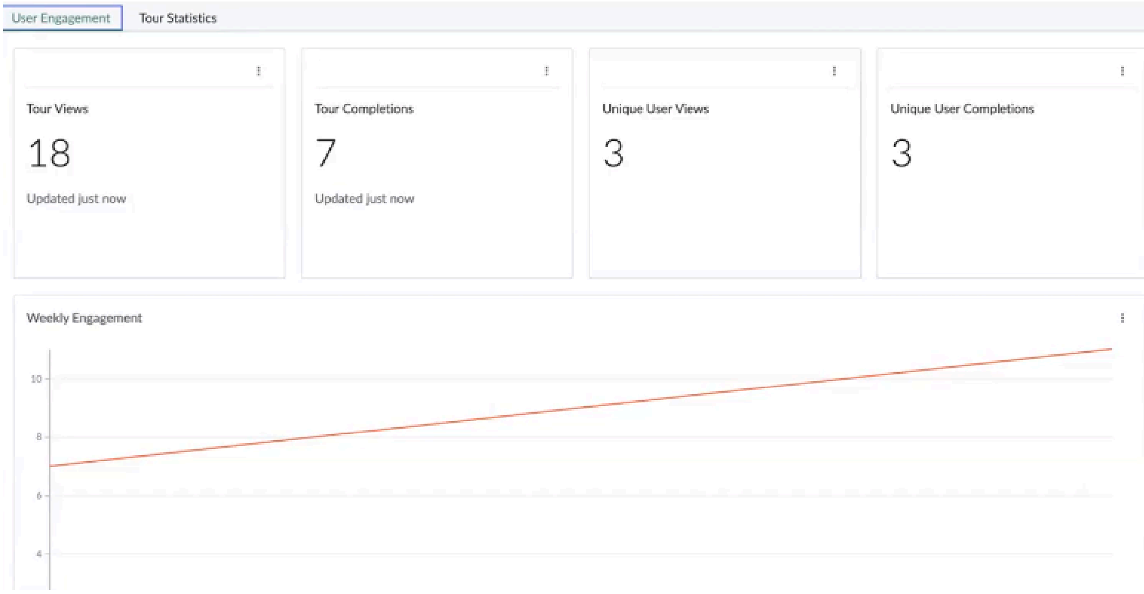
User Engagement

The User Engagement tab displays the following widgets.

Widgets in the User Engagement tab

Widget	Description
Tour Views	Number of user views of guided tours per day.
Tours Completed	Number of tours completed by users per day.
Unique Users Views	Number of individual users viewing guided tours per day.
Unique User Completion	Number of individual users who have completed guided tours per day.
Daily Engagement	Trends and patterns of user engagement with guided tours per day over a period of time. You can save this graph in PNG or JPEG format by hovering over the graph and choosing the relevant format from the context menu.
Disengaged Users	Number of users who disabled the auto launch feature for the guided tour per day over a period time. You can see the number of viewers not interested to look at the guided tours while using the application. You can save this graph in PNG or JPEG format by hovering over the graph and choosing the relevant format from the context menu.

Sample User Engagement tab



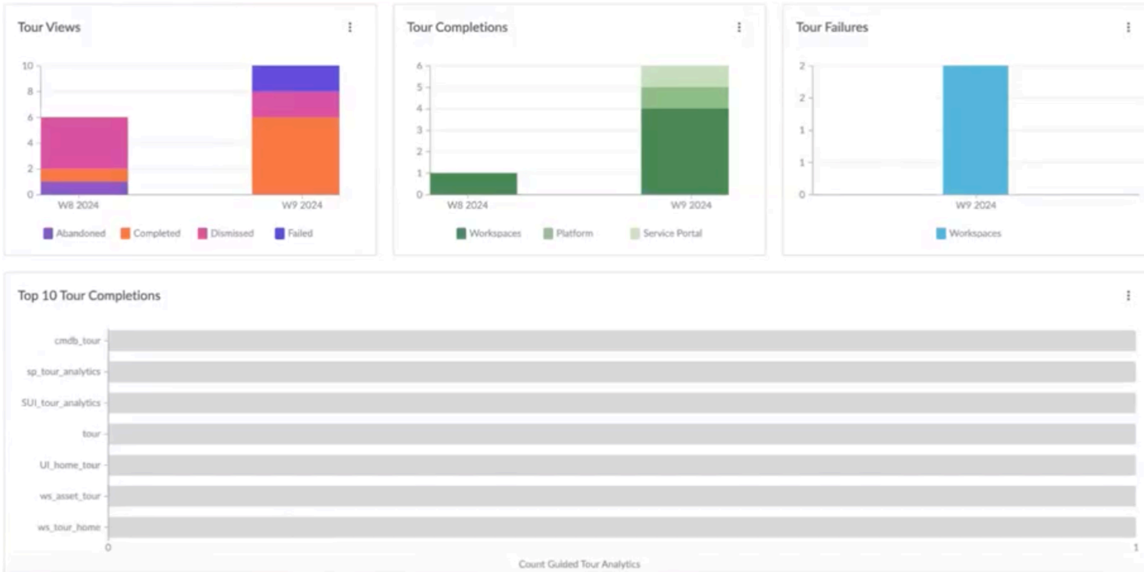
Tour Statistics

The Tour Statistics tab displays a list of tours sorted by context. The tab has the following widgets.

Widgets in Tour Statistics tab

Column	Description
Tour Views	Number of tour views abandoned, completed, dismissed, and failed over a period of time. Click the related color in the bar graph to view further details.
Tour Completions	Number of tours completed across Guided Tour Types and Guided Tours over a period of time. Click the related color in the bar graph to view further details.
Tour Failures	Number of tours failed in Guided Tour Types and Guided Tours over a period of time. Click the related color in the bar graph to view further details.
Top 10 Tour Completions	Number of completed tours by tour name.
Top 10 Tour Failures	Number of failed tours by tour name.
Top 10 Tour Dismissals	Number of dismissed tours by tour name.

Sample Tour Statistics tab

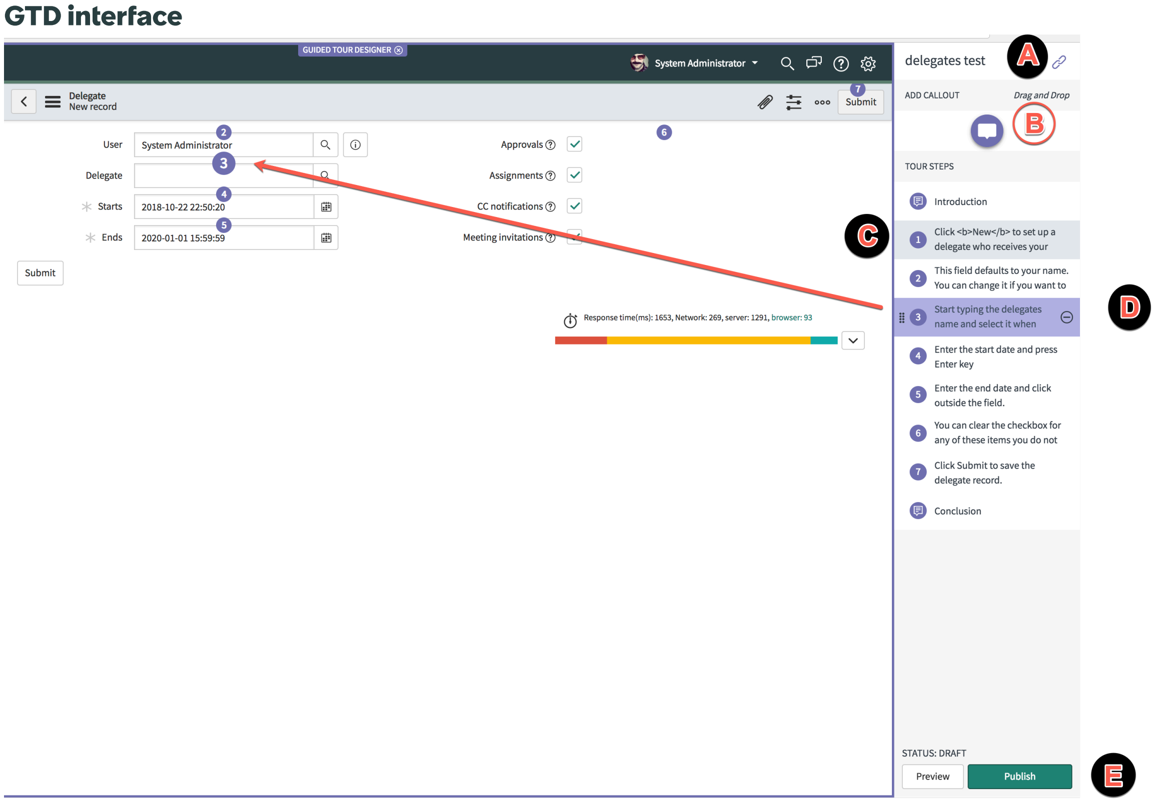


Guided Tour Designer interface

The Guided Tour Designer (GTD) is a simplified way to create a guided tour. You can drag a callout to the element, and enter the step instructions and trigger in one step. You can test the steps as you build them, and modify them as needed.

The GTD has the following features:

GTD interface



Guided tour actions (A)

The icons on the upper right are used to copy a link to the tour so you can share it with another user, such as a tester.

Callouts (B)

When you build a tour, drag and drop the callout at the desired position on the page element. The callout pointer must touch the element you are assigning it to.

Note: Guided tours callouts don't work on user interface elements made on seismic. The AI Search feature utilizes Seismic technology.

Steps (C)

When you hover over a step, it appears in the current view. If the step belongs to a previous page, then the **Not found in current view** message appears. In this example, the first step does not appear in current view. To change this step, you can click the back arrow on the upper left and open the list view where the step appears.

Note: Do not put more than one interaction with a field in a step. Each step should describe or provide an interaction with just one field or other object.

Step interaction (D)

As pictured, when you point to a step, its corresponding number in the page is enlarged. Click the step to edit the text or change the trigger. Drag it to a different position as needed. Click the (-) icon to delete it.

If you make a mistake with a step, such as pointing it to the wrong element, you must delete it. Then you can add a new step with the correct information and drag it into place.

Tour action buttons (E)

Click **Exit** to close the GTD. The browser tab or window closes and changes you made are automatically saved.

Click **Play** to open the instance and designated UI page in a new browser tab or window and proceed through the steps. When you finish, close the tab or window to return to the GTD.

Related topics

Guided tour triggers

Create a guided tour

Guided Tours in Configurable Workspaces

Guided Tours is a feature in ServiceNow that assists users in onboarding and training processes. Guided Tours are supported in Configurable Workspaces to instruct users how to use features in your workspace.

Create Guided Tour in Configurable Workspaces

To create a Guided Tour in your Configurable Workspace, see Create a guided tour.

Example: Create an incident using Service Operations Workspace

The following is an example of how you can use Guided Tours to explain to a user the steps to create an Incident in your workspace. In this example it shows the introduction, callouts, callout steps, and the conclusion for your tour.

1. Navigate to **All** > **Guided Tours Designer** > **Create Tour**.
2. Fill in the new guided tour form.

Guide tour form

Field	Description
Name	The name of your tour. In this example, it's **Create New Incident Tour on Workspace**.
Tour Type	The area the tour is created for. In this example, it's **Workspaces**. Select **Manual Selection**.
Starting Page	The page the tour is created for. In this example, it's **Service Operations Workspace: Record**.
Table	The type of record needing guidance. In this example, it's **incident**. **Note:** Make sure the term 'incident' is always written in lower case letters.
Sys_id	**Note:** It's important that you set up your tour this way, instead of copying and pasting a new incident URL as workspaces append an additional id such as -1_uid_1, or -1_uid_3, etc. If you use one of these URLs your tour will only work when a new incident matches that uid. Also, it's important to ensure that your steps are captured with the Options of: {"url":"/now/sow/record/incident/-1"}, if you start with these recommendations you should not have to change them, but if you have tour steps with options with the uid appended, change the JSON to: {"url":"/now/sow/record/incident/-1"} and it should work. The sys_id for the page needing guidance. In this example it's **-1**.

3. Select the **Create Tour** button.
4. The Guided Tour Designer window opens with the page that is selected in the steps above.

Updating an existing Guided Tour

To enable your newly created Guided tour to work on any sys-id, update the **Route Parameters** manually. This is essential for enabling the **Take a Tour** option in Help Center.

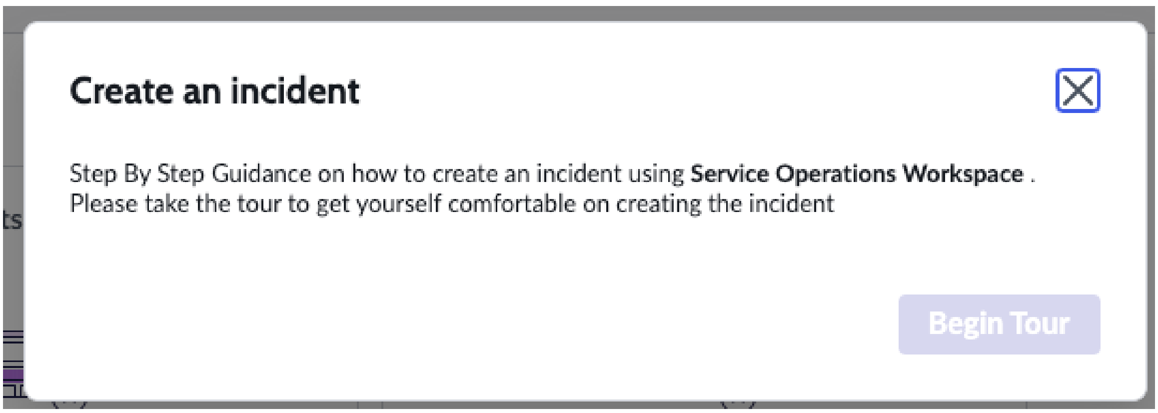
- Select the tour you want to update from the Guided Tour Designer list view. Edit the **Route Parameters** in the editable form.
- Among other parameters displayed, the admin can set **isDynamic** to True.

This update will enable your Guided tour across different sys-id and invoke the **Take a Tour** option in Help Center.

Guided tour introduction

The introduction established the foreword to the steps mentioned in the Guided Tour and also explains the milestone you will accomplish once all the actions are complete.

Guided tour introduction



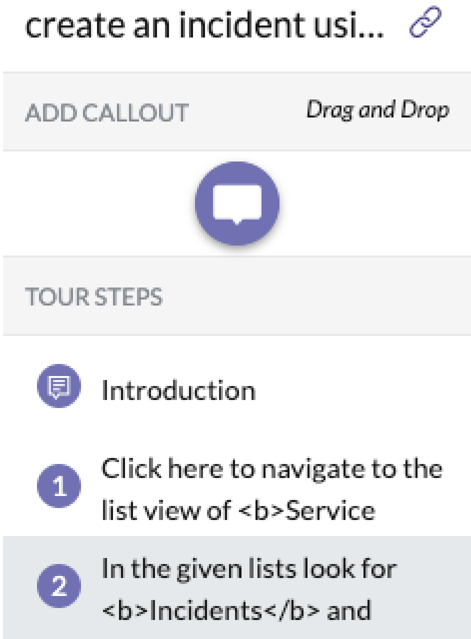
Guided tour callouts

Callouts direct the user, with step-by-step guidance, to navigate and operate within the workspace. You can drag callouts anywhere within your workspace to give more context on the screen or instruction for the task. You can choose how the callout is displayed in the area you want to provide more information about. The options for the callout displays are:

- Above
- Below
- To the left
- To the right

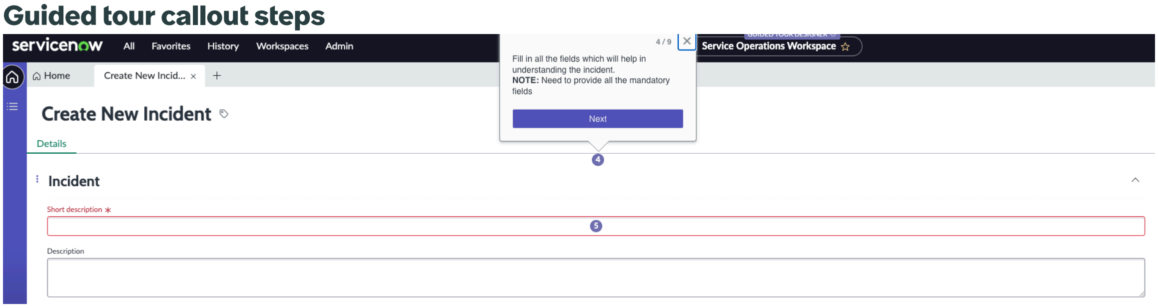
For example, in this scenario, the callouts direct the user to navigate to the list view and look for the Incidents tab. As you create your tour steps list, you can also drag the steps in the list to reorder them.

Guided tour callouts



You can create steps on multiple pages and areas within the workspace. You can also configure the triggers that will advance the user to the next step. As the user selects through the tour, the next callout step displays after the trigger is completed. In this example, the trigger is configured to go to the next step on after selecting the next button.

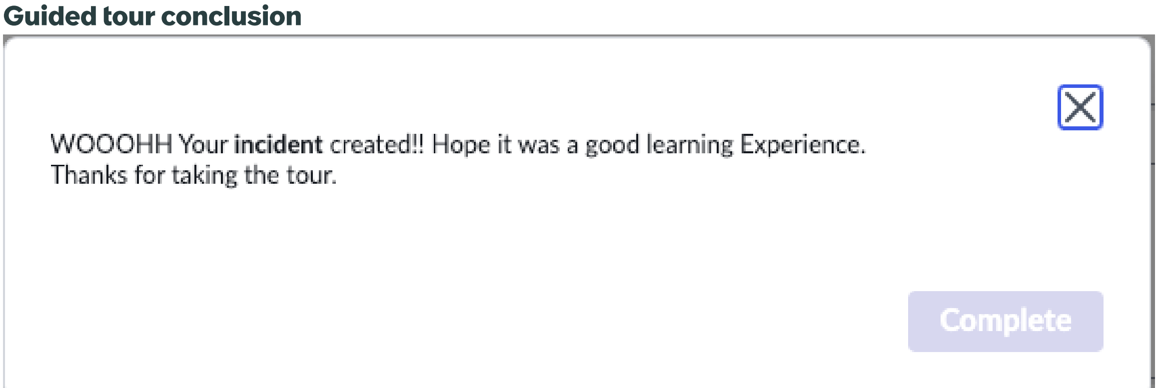
Guided tour callout steps



Note: As you create your tour, be sure to identify areas that may be confusing or need extra attention.

At the completion of the tour, the user is presented with a conclusion notifying the provided the tour is finished. Here you can direct your users to check out other tours, or give them follow-up information of what to do next now that they've completed the tour.

Guided tour conclusion



After you have completed creating your tour, you can select to preview the tour to make sure it displays and guides the user properly before submitting.

Configuring Guided Tours

Guided tours configurations let you enable tours, configure tours to automatically launch, and customize the tour experience.

Configuration overview

Guided tours offer a variety of configurations to create a customised experience for the users. Set up the tours to launch automatically when the instance starts up, ensuring that users are provided with relevant information immediately. Additionally, you can configure specific triggers that will display subsequent steps in the tour, guiding users through critical processes and features at the right moments.

This customization enhances user engagement by providing a proactive and interactive onboarding experience.

- Enable Guided Tours
- Guided tour triggers
- Configure auto-launch for Guided Tours

Enable guided tours

Enable guided tours for Service Portal pages as well as the standard platform UI.

Before you begin
Role required: admin

About this task
The Guided Tour Designer was first introduced in the Jakarta release. For new instances that were created in Jakarta and beyond, guided tours are active by default. For instances that originate from pre-Jakarta, guided tours are inactive by default.

With the Yokohama release, you can also enable guided tours to run on Service Portal pages. When you upgrade your instance to Yokohama, the following results occur:

- For instances that are new in Yokohama, the Guided Tours for Service Portal feature is active by default.
- For pre-Yokohama instances that you upgrade to Yokohama, the Guided Tours for Service Portal feature is inactive by default.

> **Note:** The Service Portal application provides a framework that enables you to customize your portal so that your users can access specific platform features in a custom context. You can create a guided tour for a Service Portal page to guide your users through its content step by step.

Procedure

1. In the application navigator, enter `sys_properties.list`.
2. From the System Properties list, find the following properties and set their values to **True**.

Property	Description
com.snc.guided_tours.standard_ui.enable	Enables guided tours across your instance to run on the standard platform UI and Workspaces.
com.snc.guided_tours.sp.enable	Enables guided tours across your instance to run on Service Portal pages. You can create and publish tours for standard UI pages regardless of this property setting.
com.snc.guided_tours.custom_ui.enable	Enables guided tours across your instance to run on the Custom UI pages.

Result

You can create, update, and play guided tours that reference both standard platform UI elements and tours that reference custom UI elements on a Service Portal page. Your users can play these tours.

What to do next

Start planning, outlining, and drafting your guided tours. If you are drafting Service Portal guided tours, refer to these items.

Item	Details
Guided tour callout steps	Guided tours must be able to recognize every element that they point to so they can locate it after a callout step is created on the element. Therefore, Service Portal page creators must ensure that every custom element they create has a unique name to help validate it as a record in the database. For example, if you create two widgets on a Service Portal page, you must assign them with unique names, such as Widget1 and Widget2. You can customize the elements further by appending additional attributes to the HTML and unique values to their properties. For example, the system currently uses `data-gtd-eid` and `data-id` attributes to identify the elements as unique.
Service Portal pages	In the base system, you can only launch tours from pages that use the SP Header Menu. Manually launched tours do not display on pages with custom header menus. If your guided tour is on a Service Portal page that does not use the SP Header Menu, you must configure your tour for auto-launch so the tour is visible to your users. To ensure this type of tour is visible to your users, see Configure auto-launch for guided tours.

Item	Details
	If your Service Portal uses Page Route Maps, tours may not show when expected. For example, your users may not see a tour when expected if the tour is configured for a redirected page. For more information, see Redirect a reference to a Page ID .
Service Portal branding	When you update the branding for a Service Portal page, the callouts in the guided tour for that page also update accordingly. For example: You update your Service Portal panel background theme color to yellow, and its primary color to red. Result: Your guided tour callout panel background becomes yellow and the callout text field becomes red.

Service Portal guided tour callout colors		
You can customize your guided tour callout colors or use the guided tour defaults.		
Parameter	**Default**	**Custom**
	Guided tour callouts use the following Service Portal properties:	To set the callout color independently of the Service Portal colors, apply the following CSS variables:
Callout background color	Panel background color	$gtd-callout-background
Callout text color	Text color	$gtd-callout-content-color
Callout number color (Example: 2/5)	Text muted	$gtd-callout-number-color
Callout close button (X) color	Text muted	$gtd-callout-close-color
Callout primary button color	Primary button background color	$gtd-callout-active-color

Guided tour triggers

Each callout in a guided tour step has a defined action that triggers the next step to occur. You specify the trigger for each callout. Only applicable triggers appear based on the UI element the callout points to.

Guided tour triggers

Action	Description
Next Button	Places a **Next** button in the callout, which the user clicks to progress to the next step. This trigger is useful for the following steps:

Guided tour triggers (continued)

Action	Description
	• The callout describes the element it points to and the user does not have to click a UI element. • To enter information in a reference or date picker field. Users can use the lookup function, enter the data, or select it from a list. They can proceed when they have completed the entry for the step.
Click the Element	Progresses to the next step when the element that the callout points to is clicked. For more information on how to display a step on a different page after users click a link, see How to show a step on a different page after the user clicked on a link (KB0725875).
Mouse over the Element	Progresses to the next step when the user points the cursor at the element.
Right-click the Element	Progresses to the next step when the element that the callout points to is right-clicked.
Press Enter Key	Progresses to the next step when the user presses the Enter key. Use this trigger to acknowledge that the user has entered something, such as in a text box.
Change Element Value	Progresses to the next step when the user enters or selects a value in a field and clicks outside the field.
Press any key	Progresses to the next step when the user presses any key.
Select	Progresses to the next step when the user selects an option from a drop-down menu.
Double click	Progresses to the next step when the user double clicks an element.

Configure auto-launch for guided tours

Configure one or more tours to launch automatically when a user lands on a page.

Before you begin

Role required: guided_tour_admin and embedded_help_admin, or admin

Note: Guided tours are only available for logged in users.

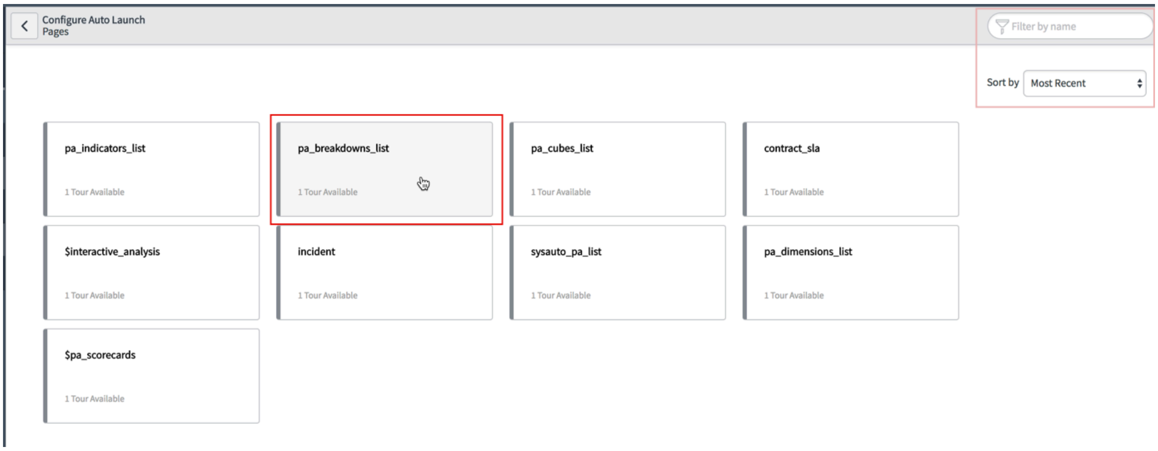
About this task

You can choose to configure auto-launch for any guided tour starting page. Choose this option if you want to ensure that users take the tour on their first page visit.

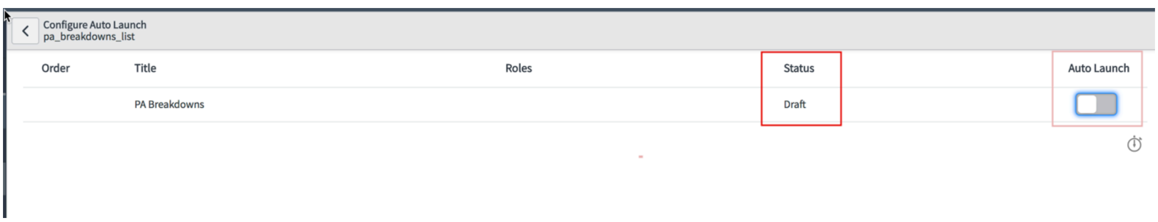
Procedure

1. Navigate to **All** > **Guided Tour Designer** > **Configure Auto Launch**.
   The Configure Auto Launch page appears, showing tiles for each page on which one or more tours are configured. You can filter the tiles by part or all of the page name, and sort the tiles by name, or by the most recently edited tours.

2. Select a tile that represents the page where you want a tour to launch automatically.



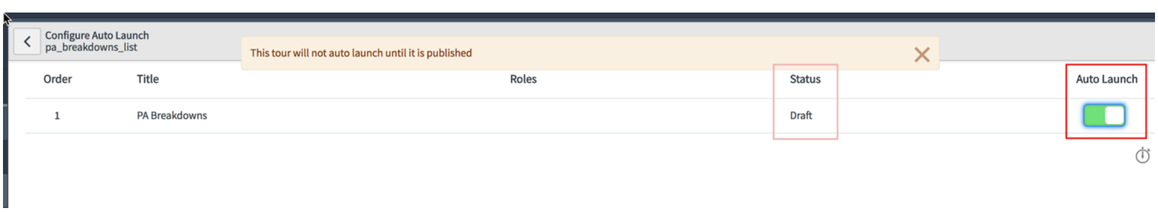
The tour for the page appears as a row on the Configure Auto Launch screen.



You can enable or disable auto-launch on the tour whether it is in draft or published status. When you enable auto-launch:

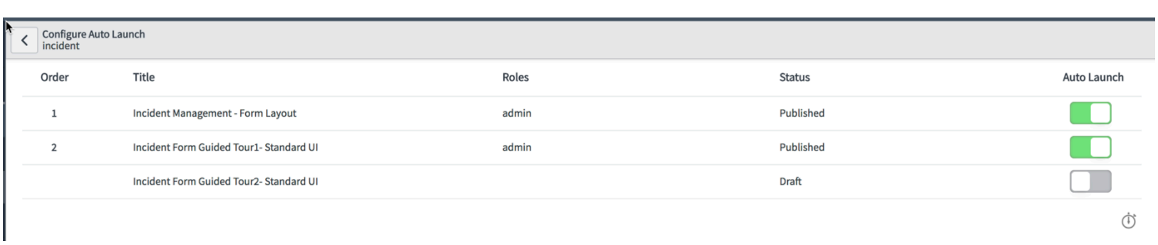
- Tours in published status launch automatically when users access the starting page associated with the tour.
- Tours in draft status do not launch automatically. When a tour in draft state is configured for auto-launch and is published later on, it starts auto-launching.

3. Click the **Auto Launch** toggle so it switches to the right.



The toggle color changes to green, indicating auto-launch is enabled on the tour. If you want to disable auto-launch, switch the toggle to the left.

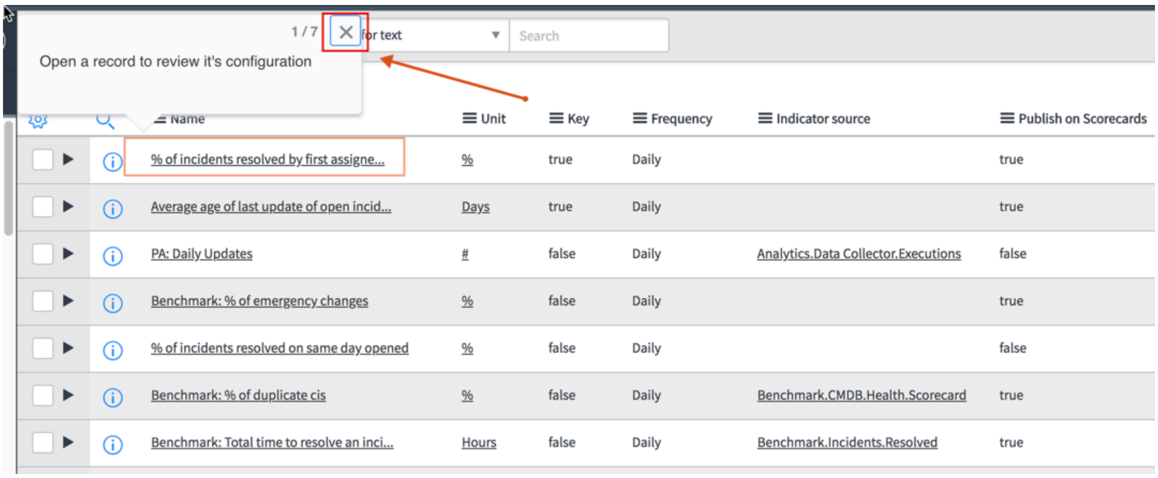
4. Configure auto-launch for more than one tour on a page.
If you have more than one tour enabled on a page, they appear as additional rows. For further context on multiple pages, see Designing guided tours.

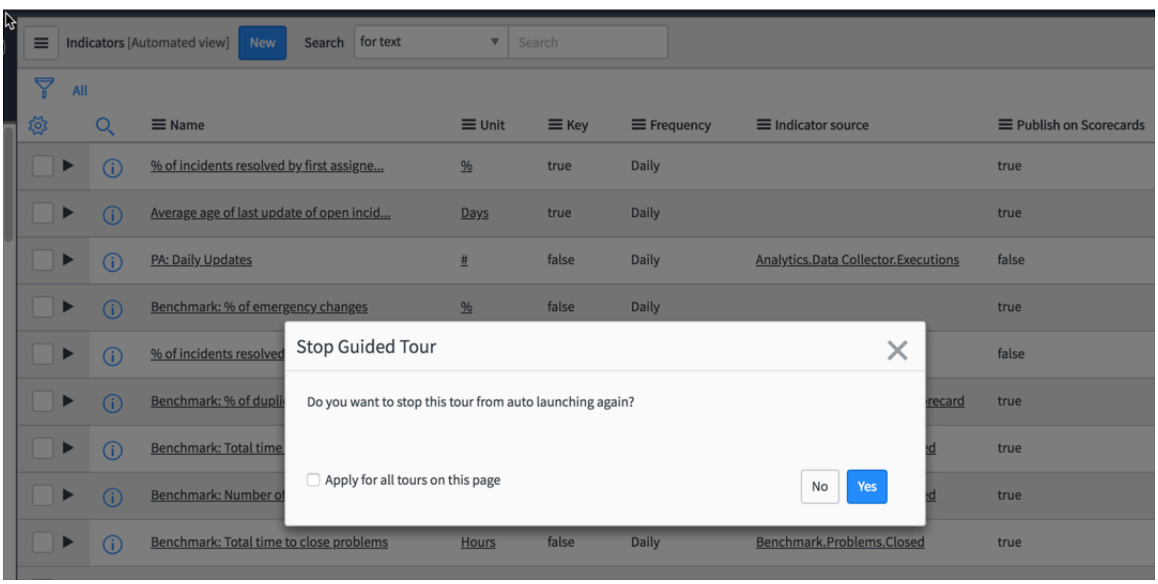


a. Repeat steps 2–3 for additional tours that you want to enable for auto-launch.
The tours move to the top of the list in the order that you enable them.

b. Drag rows to reorder the tours so they appear in the order you want users to see when they visit the page successive times.
For example, the first tour may provide an overview of a page while the second tour guides the user through a specific task.

When users access a page that has a guided tour enabled for auto-launch, the tour begins immediately. If they stop the tour by clicking the **X** icon on a tour step, a message appears that provides them the option to stop both the current tour and other tours from auto-launching the next time they access the page.





5. **Note:** After you've gone through a tour on a page, the tour doesn't get triggered automatically if you revisit the same page. To reset an auto-launch tour for the page, do the following.

Navigate to **All** > **Guided Tours**.

a. Open the tour that you want to reset.

b. Under **Related Links**, click **Override tour Auto Launch Preferences**.
A list of records shows each user who has used the tour already.

c. Deselect the **Disable Autolaunch** check box to reset the tour.

d. Click **Submit**.

Using Guided Tours

Use Guided Tours to train and onboard users within the ServiceNow user interface (UI).

Create a Guided Tour

Create a guided tour to direct users how to interact with their instance. For more information see Create a guided tour.

Edit a guided tour

You can modify the settings of a guided tour, such as the roles that access the tour. You can also edit, add, delete, and reorganize the guided tour steps, and apply additional formatting to the instructional text. For more information see Edit a guided tour.

Designing guided tours

For information to help you create effective guided tours for your users see Designing guided tours.

Use a view with a guided tour

You can assign a list or form view to a guided tour step if you are changing from the Default view to a different view, such as Self-Service. For more information see Use a view with a guided tour.

Create a guided tour

After you outline the guided tour, use the Guided Tour Designer (GTD) to enter the steps using callouts and triggers.

Before you begin
Role required: guided_tour_admin or admin

About this task
This task is an example that illustrates how to create a guided tour for assigning a vacation delegate.

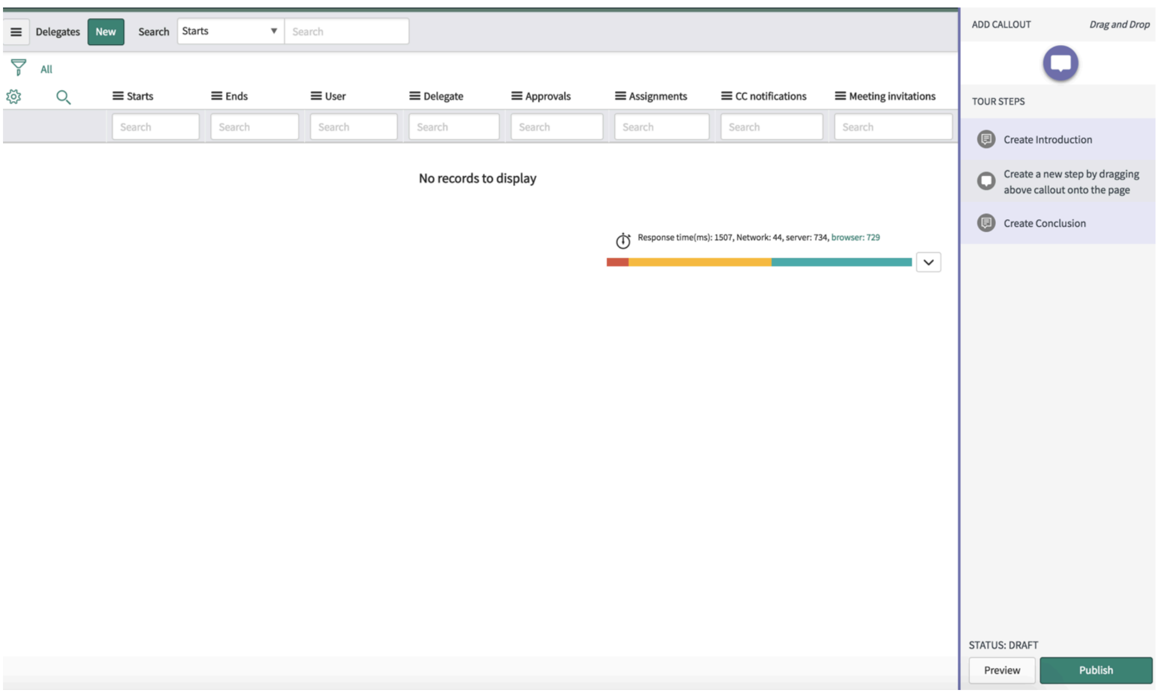
Procedure

1. Navigate to **All** > **Guided Tour Designer** > **Create Tour**.
2. Complete the fields on the form.

Field	Description
Name	Enter a name for the tour that describes what the user accomplishes by completing it. For example, in this case, `Set a vacation delegate`.
Tour Type	Select: ◦ **Standard UI** for tours that start from system platform content, such as a list or a form. ◦ **Service Portal** for tours that start from a Service Portal page. **Note:** When you select **Service Portal**, a **Portal** option appears, where you choose a record from the Service Portals table. ◦ **Custom UI** for tours that start from Custom UI page. ◦ **Workspaces** for tours that start from a Workspace page.
Starting Page	Select the page the tour starts on. ◦ If your Tour Type is Standard UI, your choices include pages that show lists and forms. ◦ If your Tour Type is Service Portal, your choices include Service Portal pages. **Note:** In the base system, you can only launch tours from pages that use the SP Header Menu. Manually launched tours do not display on pages with custom header menus. ◦ If your Tour Type is Custom UI, your choices include pages that show Custom UI pages. ◦ If your Tour Type is Workspaces, your choices include pages that show Workspaces pages. You can select the page in two ways: ▪ Paste URL: You can copy the URL of the workspace page and paste it. If the URL is not a valid experience, the **Create Tour** button is not enabled. ▪ Manual Selection: You can select the page from the dropdown by typing the name of the page. **Note:** If the selected page contains parameters, you must mention the values of the parameters. You can configure the page parameters as dynamic if you want the tour to apply to the same page without exact parameters. You can begin typing the UI page name to show a list of matching pages, and then select it from the list. **Note:** In some cases, navigating to standard forms and lists while creating custom tours might not work as expected. You can choose a following workaround to create the custom UI tour in such cases. **a.** Create standard UI type tour on any page, ideally home page. **b.** Go to system property - `com.snc.guided_tours.homepages` and add the name of the custom page in the **Value** field of this page. You can enter multiple values separated by commas. **c.** Update the context of the tour from form view to your custom page.

Field	Description
Roles	◦ If the tour can be accessed by all the roles, then select **All**. ◦ If the tour can be accessed by specific roles, then select **Specific**. Select the roles that can access this guided tour and move them to the **Roles that can view the tour** list from **Available Roles** list. **Note:** When you add at least one role to a tour, it limits the audience to only those users who have that role.

3. Click **Create**.
The Guided Tour Designer opens in draft status in a new tab or window. In this example, no records are displayed in the list as new delegates are created.

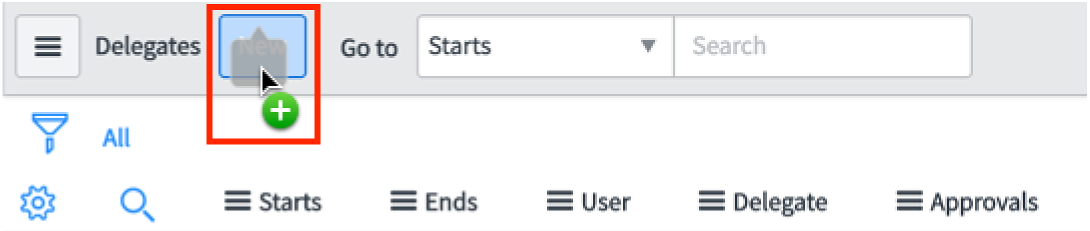


4. Click **Create Introduction**.
   a. Enter an introductory title for your guided tour, such as `Cover your approvals during your vacation`.
   b. Type a message to your end users introducing the goal of the demo, such as `Join this tour to learn how to create a vacation delegate.`

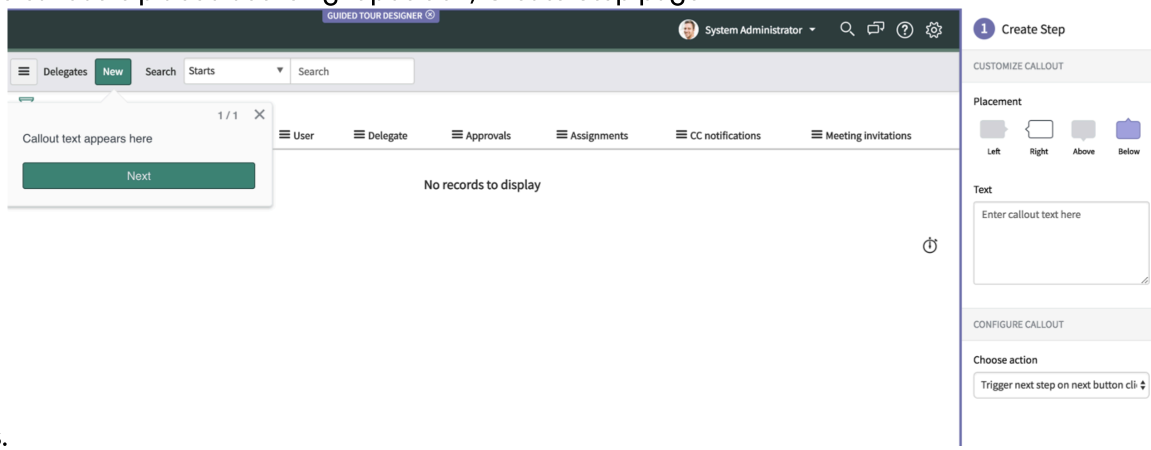
   You can edit and delete introductions, conclusions, and callouts at any time while your tour is in draft status. You can also insert HTML markup into your Conclusions, Introductions, and callouts.

   All standard HTML tags compatible with your browser are supported.

5. Complete the following steps to add a tour step with a callout and trigger.
   a. Drag a callout shape from the upper right corner of the screen and drop it on top of the UI element.
   The element is highlighted when the callout is positioned correctly. When you release the callout, it locks into the position.



b. Once the callout is placed at the right position, Create Step page

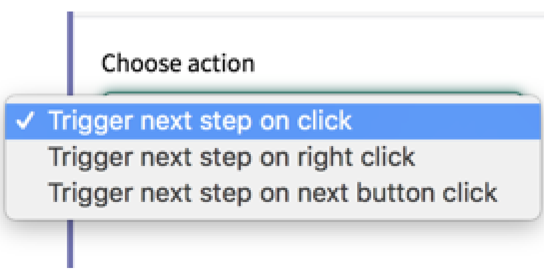


appears.

c. Enter the instructions in the **Text** box on the panel at the right.

d. Change the direction of the callout by selecting the appropriate option under **Placement**. Only placement options that you can use for the selected element are enabled in the options.

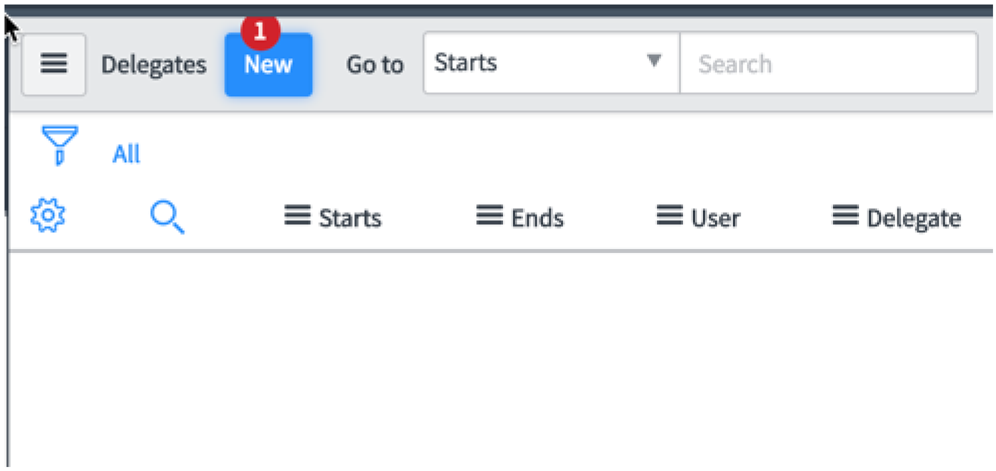
e. Select the trigger under **Choose action** field. Only triggers that you can use for the selected element appear in the list.



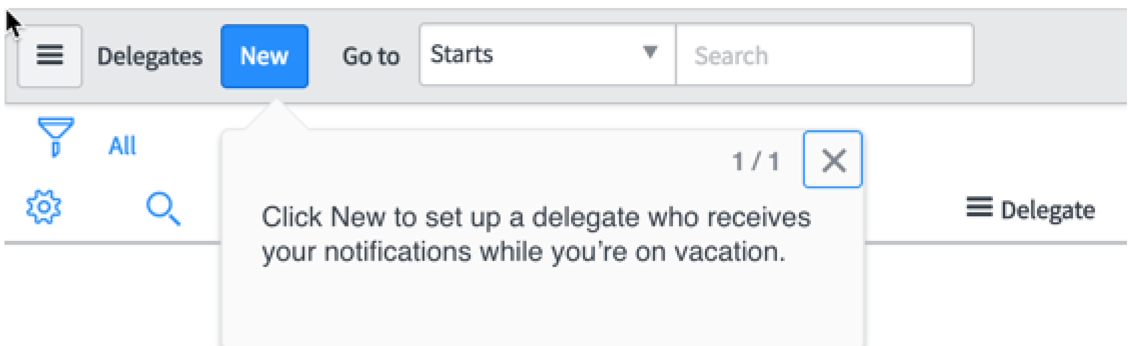
f. **Optional:** To apply text formatting, such as bold or italic, add html tags around the text to format.
For example, enter `Click <b>New</b> to set up a delegate...`. You can add other HTML tags, including tags for images.

g. **Optional:** Select the **Skippable** check box if a user can skip the step and proceed to the next if an element or field is unavailable at runtime.

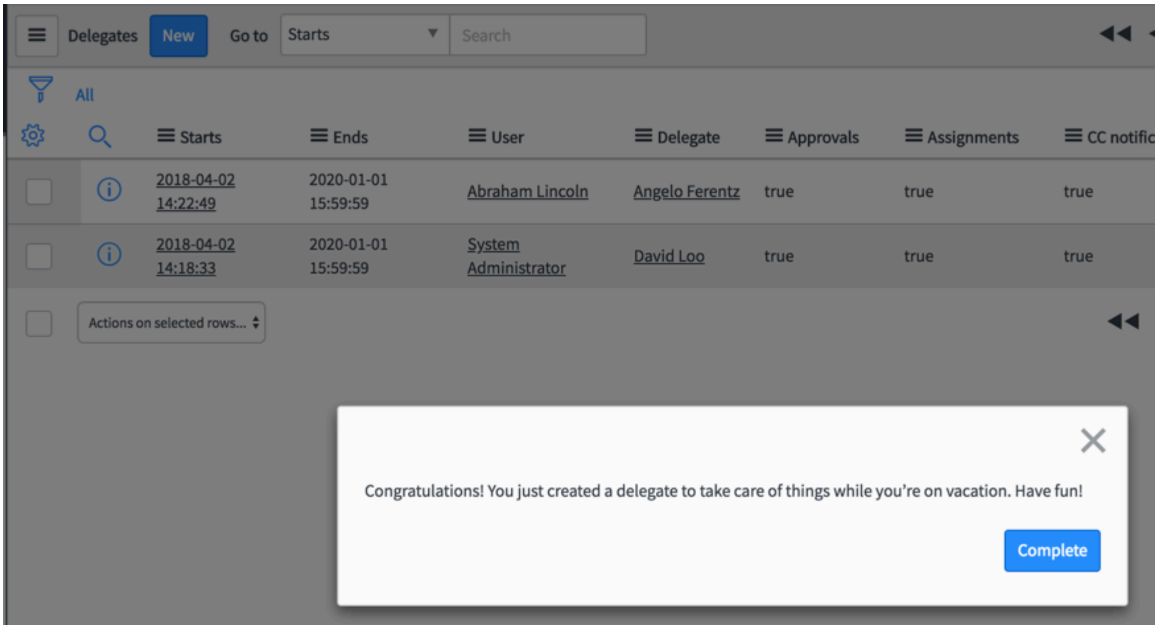
h. Click **Save**.
Your first step label appears.



When your end users click the label, they see your first step instructions rendered as a message.



6. Continue adding steps until you have completed the tour.
   The tour is saved as you save each step.
7. Click **Create Conclusion**.
   Enter a message to your end users that concludes the demo, and summarizes what they accomplished. For example, enter `Congratulations! You just created a delegate to take care of things while you're on vacation. Have fun!`.
8. Click **Save**.
   Your Conclusion message appears after your last tour step, showing the final result of the tour. When users click **Complete**, the tour ends.



9. Click **Preview** at any time to test your steps and make any final revisions to the tour until you are satisfied.
   Note the steps that are not working properly or that need correction. Edit the tour or the steps as described in Edit a guided tour.
10. To share your draft or published tour with internal colleagues for review, you can:
    a. Click the Copy URL icon to copy the tour URL.
    b. Send the URL to reviewers.
11. Click **Publish** to make your guided tour visible to your end users.
    Each guided tour is allotted with a unique tour ID when it is created. The tours appear in alphabetical order if you set property *(com.snc.guided_tours.sort)* to true. When users access a starting page of the guided tour, they can access the tour from the following.
    - If the tour type is Standard UI, they can click **Take a Tour** in the Help Center.
    - If the tour type is Service Portal, they can click **Tours** on the banner of the page.

Related topics

Exploring Guided Tours

Edit a guided tour

You can modify the settings of a guided tour, such as the roles that access the tour. You can also edit, add, delete, and reorganize the guided tour steps, and apply additional formatting to the instructional text.

Before you begin

Role required: guided_tour_admin or admin

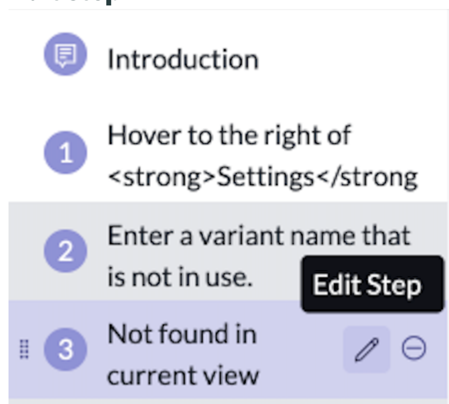
About this task

Use the Guided Tour Designer (GTD) to add, delete, and reorganize guided tour steps. Use the Guided Tour form only to perform tasks you cannot do easily from the GTD. For demonstration purposes, we begin with edits to the form that appears when you open the guided tour record, and continue with edits you can make in the GTD itself. You can invoke the GTD from the **Edit with Designer** button located in the form.

Procedure

1. Navigate to **All** > **Guided Tour Designer** > **Guided Tours**.
2. Open the guided tour you want to edit from the list.
3. In the Guided Tour form, take any of the following actions.
   - Edit the name.
   - Enter a different page name in the **Context** field. For example, if the form page is listed and you want the user to start on the list view to enter a new record.
   - Choose a different tour type. If the tour type is **Standard UI**, the **Type** field cannot be changed. If the tour type is **Service Portal**, both the **SP Portal** and **SP Page** values can be changed.
   - Enter or edit the **Description**.
   - Start a Service Portal tour from a specific widget, record, or view within a page instead of the page itself. You can enter URL parameters that point to the item in the Add Additional URL Parameters field. For example, enter the section of the URL that contains the sys-id of a widget, or type parameters for a specific record or view, such as `sys_id=abc123&view=myView`.
   - Clear the **Active** check box to disable the guided tour, which sets it to read-only status, where it cannot be edited, and renders it invisible to end users. If you want to use the tour in the future but keep it unavailable to end users, consider setting it back to draft status for further revision. Select the check box to re-enable the tour.
4. To view the starting page for the tour while you test and refine its steps, click **Edit with Designer** in the form header.
   The starting page opens in the GTD in a new tab or window.
5. Having exited the form view, you can perform any of the following steps in the GTD.

To	Do this
Edit the text or trigger in a step	Navigate to the UI page the step is in and click the step in the list on the right. For exam ple, if the tour starts in the list view but you want to edit a step in the form, open the form. The steps in the current view are numbered in side a red circle. Complete your changes and click **Save**.
Delete an introduction, step, or conclusion	Point to the step that you want to delete and then select the **#** icon.
Place the callout on a different page ele ment	**a.** Point to the step that you want to delete and then select the **#** icon to delete the step with the incorrect placement. **b.** Create a step on the correct page element. **c.** Drag the step into the correct position in the order of steps.
Apply text formatting in the step instruc tions	In the Guided Tour Steps related list, click the step number.

To	Do this
	a. Point to the step that you want to edit and then select the edit icon to open the Con tent HTML formatter. **Edit step**  **b.** Edit the content and apply formatting as ap propriate. **Note:** All standard HTML tags compatible with your browser are supported. Do not add images or video to the text. These media types are not supported in callouts. **c.** Click **Update**.
Rearrange steps	Drag the steps to the desired order.
Test the tour	Click **Preview** if the tour is in draft status. Click **Play** if it is published. The page opens in a new list or tab and you can test each step. Note any steps that need corrections.
Change the guided tour status	If the tour is in draft status, click **Publish**. If the tour is published, click **Draft**. Consider setting the tour to draft status until you are finished editing it.

Designing guided tours

Use these tips to help you create effective guided tours for your users.

Planning a guided tour

Before you begin outlining the details of a guided tour, answer the following questions.

- What is the purpose of the tour? Do you want to use callouts that provide detailed user interface descriptions so your users can better understand the feature? Or do you want the user to learn how to perform a task, such as how to create a new incident? It is important that you consider these questions and perhaps do some research before you begin to plan the tour so that you can properly break down the overall objective into discrete steps.

- Where should the tour be available? If you intend to guide your users to complete tasks that they might perform daily, such as ordering an item from the Service Catalog or creating an incident, it makes sense to make the tour available on your production instance. If you intend to train users to explore these tasks without creating actual records in the system, consider making the tour available on a non-production instance for training purposes instead. Both scenarios are valid.
- What should you name your tour? When you create a tour, you are prompted to provide a tour name. The name must be unique and intuitive so your users can understand the purpose of the tour. For example, use "Create a New Incident" or "Review the Incident List" as possible tour names.
- What assumptions are you making regarding what the user already knows about the page or task? Do all users who can take the tour have the same level of understanding? Use this information to decide how much description to provide at the beginning of the tour so that any user who takes the tour understands the content.
- If the purpose of the tour is to perform a task, how can you personalize the instructions so that each user who takes the tour creates a different record? For example, if the tour walks users through creating a group called Facilities, you can prevent subsequent users from getting a duplicate name error by instructing them in a callout to assign a unique value to the group Name field.

In planning your tour, you can also address these additional questions.

- What page should the tour start on?
- What steps are important to accomplishing the objective?
- How should a user navigate from one step to the next?

Guided tour plan

Review the following sample plan for a guided tour whose objective is to explore the Service Portal home page.

Note this key information you will need to provide and the fields values you will use as you create a guided tour.

- Tour Name: Service Portal Overview
- Goal: Users should have a good understanding of how to navigate key elements of the Service Portal home page
- Portal Name: Service Portal
- Starting Page: Service Portal: ID Index
- Roles: All

Sample guided tour plan: Service Portal home page overview

Step	Callout	Trigger
Introduction	• Title: Service Portal Overview • Text: Welcome to this guided tour of your new Service Portal home page.	**Next** button

Sample guided tour plan: Service Portal home page overview (continued)

Step	Callout	Trigger
1	• Points to this element: How can we help? • Placement: Below • Text: We begin with the **How can we help?** search bar. If you cannot find what you are looking for, enter it here, click the **Search** icon, or press Enter on your keyboard. For now we will take a look at some other areas first.	**Next** button
2	• Points to this element: Order Something • Placement: Top • Text: If you would like to order something, such as a new phone, select **Order Something**.	**Next** button
3	• Points to this element: Knowledge Base • Placement: Top • Text: If you would like to search the knowledge base, select **Knowledge Base**.	**Next** button
4	• Points to this element: Get Help • Placement: Top • Text: If you would like to get help for an issue, select **Get Help**.	**Next** button
5	• Points to this element: Community • Placement: Top • Text: If you would like to ask your colleagues a question, select **Community**.	**Next** button
6	• Points to this element: Knowledge in title bar • Placement: Left • Text: You can also check the knowledge base, order something, look at requests you have logged, and check other options up here in the title bar.	**Next** button
7	• Points to this element: Your name • Placement: Left • Text: View your profile or log out by clicking your name.	**Next** button

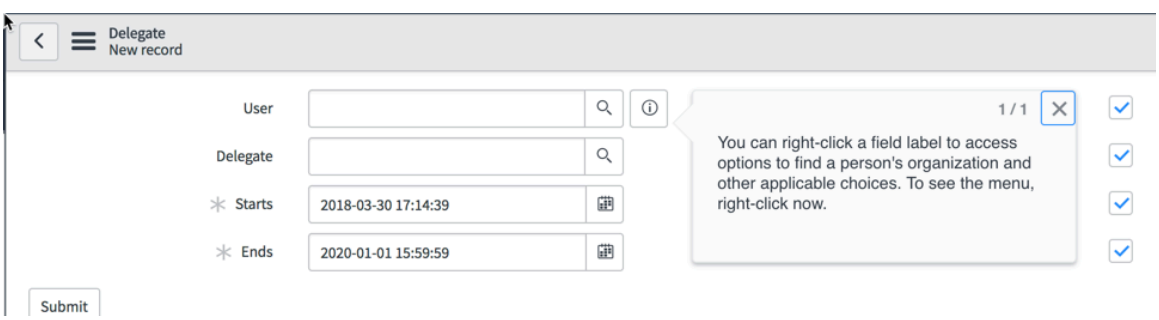
Sample guided tour plan: Service Portal home page overview (continued)

Step	Callout	Trigger
8	• Points to this element: Logo top-left • Placement: Below • Text: Navigate back to your Service Portal home page by clicking your company logo.	**Next** button
Conclusion	Text: Congratulations! Now you have a general understanding of the Service Portal home page.	Click **Complete** to end the tour.

Selecting triggers

If the purpose of the tour is to introduce your users to the features of a page so that they can become familiar with the product, such as a custom dashboard, use the **Next** button as the trigger. If the purpose is to accomplish a task, such as creating a record, consider the following.

- To populate a field with a lookup element, such as a reference field or a date field, do not use a trigger that opens the lookup window. The tour ends when the lookup window opens. Use one of the following triggers:
  - **Next** button: The user types the value or looks it up and selects it, and then clicks **Next**.
  - **Change Element Value** trigger: After the user selects the value and clicks outside the field, the trigger moves to the next step.
- For some UI elements, you can use the **Right click the Element** trigger. Typically, the right-click action is used to open a menu, however, you cannot place a callout on a right-click menu option. You can use this trigger in a descriptive guided tour where you want to describe right-click menu options. Put the descriptive information into the callout text, and tell your users to right-click the element to look at the menu. Following is an example of this type of callout.

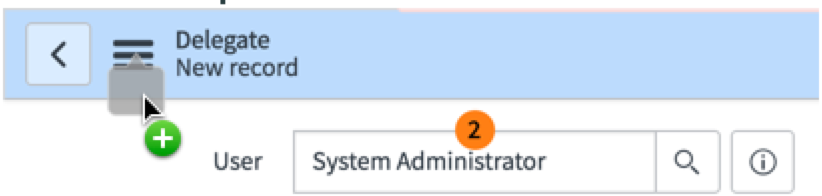
  When the user right-clicks the element, in this case a field label, this instruction disappears, and the next one appears.

- The **Mouse over the Element** trigger is similar to the **Right click the Element** trigger. When the user points to the element, the callout disappears. For example, if you demonstrate that a hint appears when you point to a field label, the callout step disappears before the hint text appears. This type of trigger can seem disruptive to the guided tour flow.

Using callouts

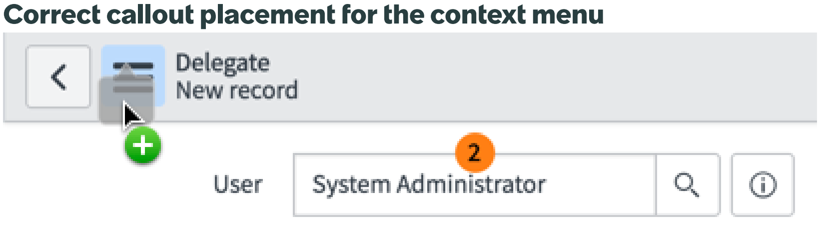
You must place a callout on top of an element to interact with it. The element is highlighted in blue when it is selected as the target. In the following example, it looks like the callout is pointing to the context menu icon, but notice that the header bar is highlighted blue.

Incorrect callout placement for the context menu



This example depicts the correct placement of the callout for the context menu. Notice that the context menu icon is highlighted blue.

Correct callout placement for the context menu



The following tips may also be helpful:

- When you place a callout on a form that contains tabs, consider that a user may not have the tab open for viewing. Create a new callout that instructs the user to first open the tab before proceeding with the rest of the tour.
- Minimize callouts on fields that are associated with dynamic content. A delayed page refresh may prematurely end the tour if the user cannot find the associated tour element.
- When you guide a user through pop-up windows, add your callout to the originating page on or near the pop-up icon. Within the callout instructions, guide your user through the steps intended for the pop-up window, because callouts cannot be added to the pop-up window.
- While the color of a callout is static in the standard platform UI, you can customize callouts on Service Portal. Consider using this capability to ensure a consistent look-and-feel between your callouts and your Service Portal pages. For more information on guided tours that you create on Service Portal pages, see Request guided tours.

Auto-launching your tour

Auto-launch a tour if you want your users to take the tour on their first page visit.

You may choose to auto-launch multiple tours from a single starting page. In this case, you can apply the auto-launch order to each tour successively so that your users begin the second tour upon their second page visit, their third tour upon their third page visit, and so forth. Use this option if you intend to start your users with an introductory tour and add increasing levels of complexity or different areas of focus with follow-up tours.

Start a guided tour in the help center

Locate and start a guided tour in the help center on your instance.

Before you begin

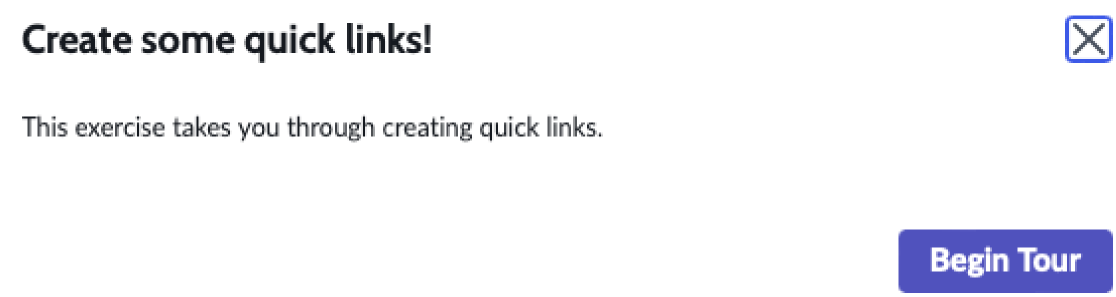
Role required: admin

Procedure

1. To access this tour again, select the icon in navigation bar to open the help center.

2. **Note:** You only need to select the **Help articles** tab if a **What's New** tab is also available. Otherwise, the help icon should open in **Help articles**.

   Select the **Help articles** tab, and scroll to the bottom of the help center.
3. Select the button.
4. Select a tour from the guided tours list.



5. Select **Begin Tour** to start the guided tour.

Use a view with a guided tour

You can assign a list or form view to a guided tour step if you are changing from the **Default view** view to a different view, such as **Self-Service**.

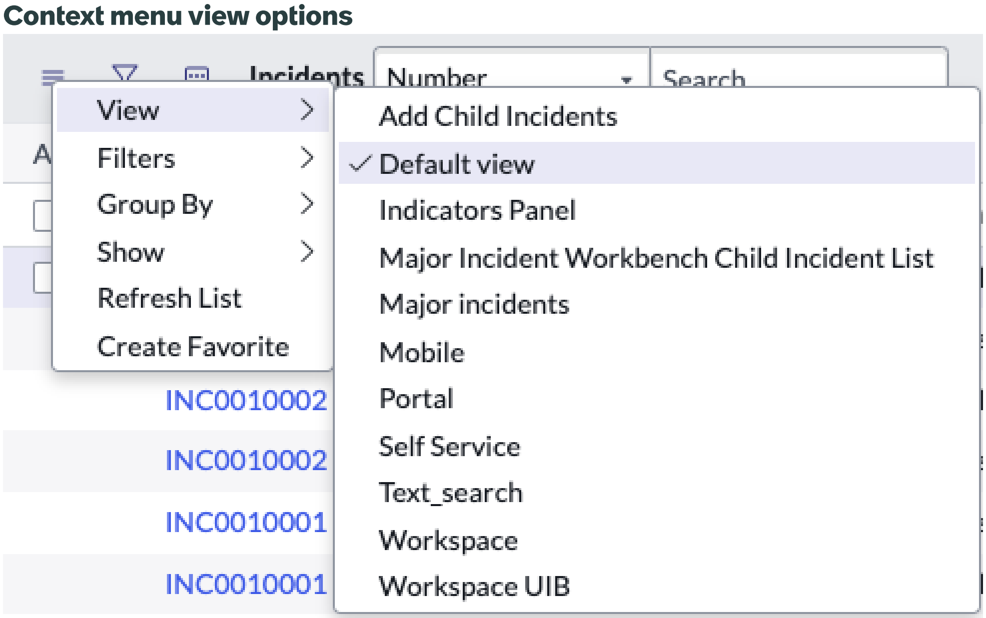
Before you begin

Role required: guided_tour_admin or admin

About this task

To assign a view to a tour step, you must know the view name. The name you see in the context menu **View** option is the title of the view. Look up the view name before you assign it to a tour step.

Context menu view options



Note: You can add a view to only one tour step in a guided tour, and only if the step starts on the default view. When the tour is played and the step is executed, the UI page refreshes with the new view.

Procedure

1. Complete the following steps to locate the view name:

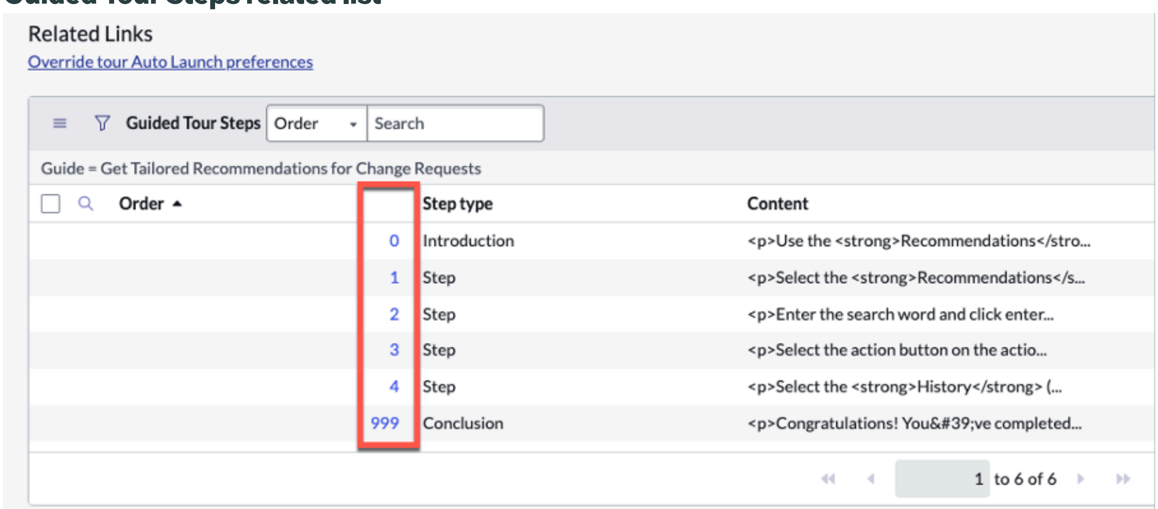
   a. Navigate to **System UI** > **Views**.

      The first two columns are **Name** and **Title**.

   b. Locate the view by its **Title**, and note the value in the **Name** column.

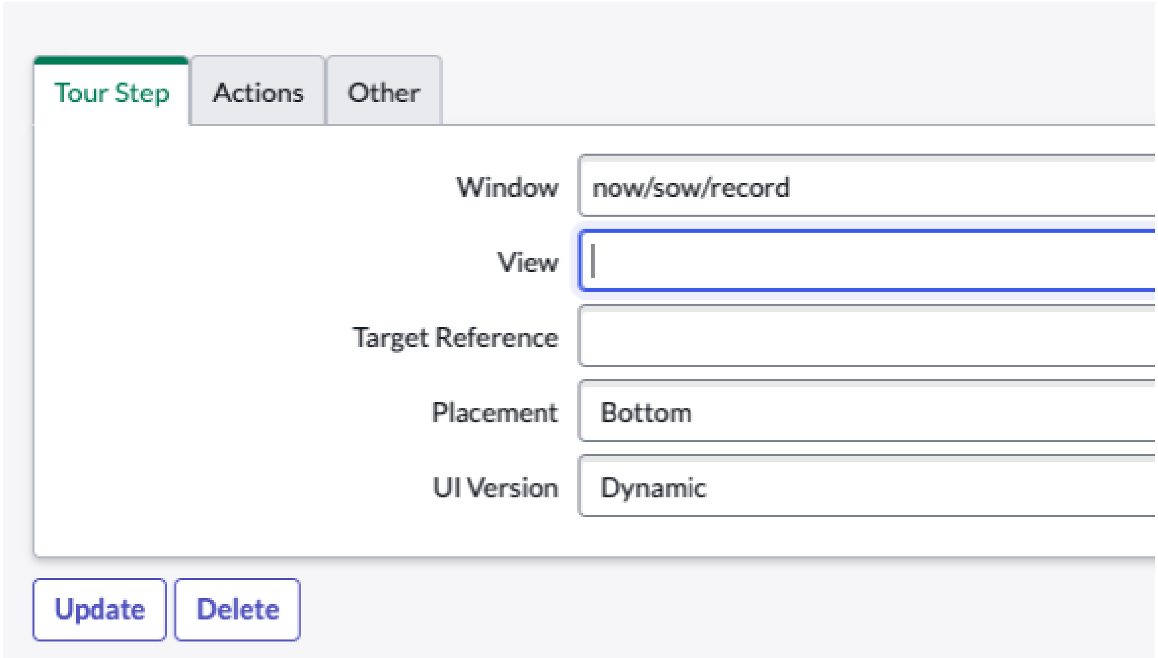
2. Navigate to **Guided Tours Designer** > **Guided Tours**.
3. Open the tour to be modified with a view.
4. In the **Guided Tour Steps** related list, select the step you wish to add a tour for.

Guided Tour Steps related list



5. In the Tour Step form section, enter the view name in the **View** field.

Tour Step form



6. Click **Update**.
7. Complete the following steps to test the tour with the view.
   a. In the Guided Tour form, click **Edit with Designer**.
   b. In the Guided Tour Designer tab or window, click **Play** below the list of steps.
   c. Verify that the step you modified displays the correct view.

Testing a guided tour

Test your guided tour to ensure that it meets your intended objective.

Impersonate User

Impersonate a role to verify the tour through the eyes of the intended user. By impersonating a user that holds a role targeted by the tour, or multiple users if the tour targets multiple roles, you can experience the tour just as the user does.

Guided Tour feedback

Send the tour URL link to your colleagues to review the tour and provide feedback. If the feedback is valuable, modify your tour accordingly. For more information about tour feedback, see Create a guided tour.

Guided Tour review

After the tour is published, review any tour failures due to errors that you see from the Guided Tours Overview page. Review these failures to provide you with insight into which users experienced problems with the tour, on which step the tour failed, and what the error message was. You can then use this information to troubleshoot and resolve issues.

Guided Tour Designer accessibility

The Guided Tour Designer has accessibility features so that users can design tours using screen readers and keyboard navigation.

For the most part, accessibility functionality is the same for the Guided Tour Designer accessibility is the same as platform accessibility. See Accessibility features.

Use the Guided Tour Designer with accessibility enabled

The Guided Tour Designer has extended the accessibility features of the ServiceNow platform.

Before you begin

Role required: guided_tour_admin or admin

Procedure

1. If accessibility features are not enabled, navigate to **User Administration** > **User Preferences** and enable the preference `glide.ui.accessibility`.
2. Navigate to **Application** > **Module**.
3. Navigate to **All** > **Guided Tour Designer** > **Create Tour**.
4. Press tab to the **Tour Name** field and enter a unique name for the guided tour.
5. Press tab to the **Application Page Name** field.
6. Enter part of the name to open a list of pages to scroll through and choose from.
7. Tab to the **Roles this tour is for** slushbucket and use skip links to select roles.
8. Click **Create**.
   The selected application page opens in the Guided Tour Designer.
9. Press tab to the field you want to add a step to.
10. Press tab again and then press Enter to open the **Editing** window for the Guided tour step.
    The editing window has the following features:
    - An icon for placing the callout. Press Enter to open a list to choose the callout's placement. Only viable callout locations are enabled.
    - The number of the guided tour step and how many steps have been created. When you create your first step this is step 1/1.
    - A text box to instruct the user what to do at this step.
    - A choice list to select the trigger. under **Choose action** field. Only triggers that you can use for the selected element appear in the list.
    - **Cancel** and **Save** buttons.
11. Continue adding steps until you have completed the tour.
    The tour is saved as you save each step.

What to do next

Tab to the panel on the right side to edit the name of the tour, copy the tour's URL, and rearrange the tour's steps.

Domain separation and guided tours

With the ServiceNow Platform, service providers (SPs) can provide their customers with faster onboarding, meet compliance, and protect their data using domain separation. You can separate client data, processes, and reports into logical groupings called domains. SPs control who sees and accesses what content. You can create and modify guided tours that apply to specific domains in your instance as well as tours that are available to users globally.

Create domain-specific guided tours

You can assign a domain to a guided tour during its creation or edit the domain of the tour at any time.

Before you begin

Role required: guided_tour_admin or admin. To use domain separation in guided tours, you must request domain separation.

Note: The Guided Tour Designer requires Core UI. For more information, see Activate Core UI.

About this task

With the ServiceNow AI Platform®, service providers (SPs) can provide their customers with faster onboarding, meet compliance, and protect their data using domain separation. You can separate client data, processes, and reports into logical groupings called domains. SPs control who sees and accesses what content. You can create and modify guided tours that apply to specific domains in your instance as well as tours that are available to users globally. You can also copy the tour so that you can modify it for a specific domain.

Procedure

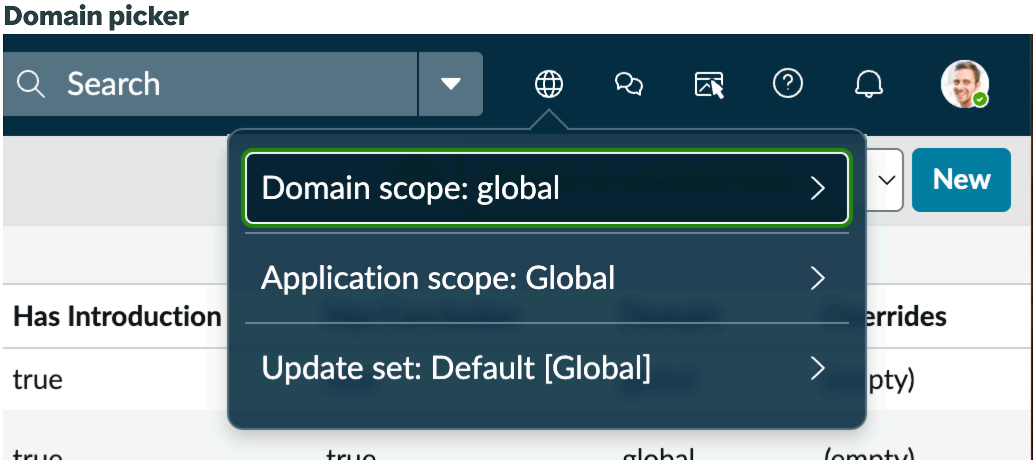
Add the **Domain** column to the list:

1. Navigate to **All** > **Embedded Help** > **Guided Tour Designer** > **Guided Tours**.
2. Select and add the **Domain** columns.
   The **Domain** column indicates the domain to which a tour belongs.

Set a **Domain** for the guided tour:

3. Select the globe icon and then select **Domain scope**.

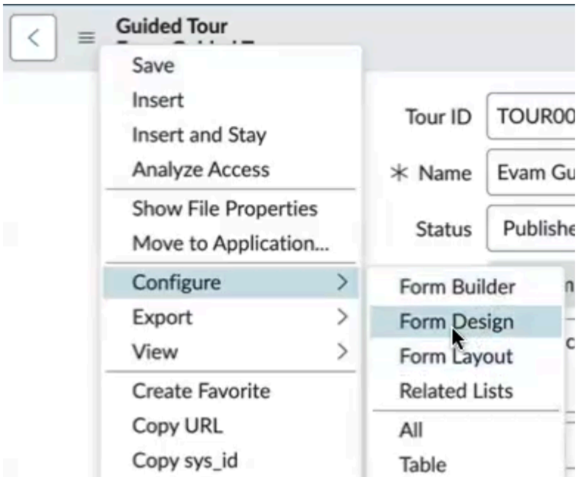
Domain picker



4. From the **Domain scope** list select a domain.
5. Create a tour.

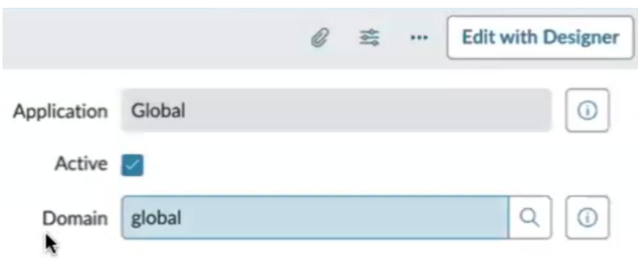
Change the **Domain** of a guided tour:

6. Navigate to **All** > **Guided Tour Designer** > **Guide Tours**.
7. Select the tour for which you want to change the domain.
8. Click , select **Configure**, and then select**Form Design**.



9. On the **Form Design** page, drag **Domain**
10. Select **Save**.
11. Go back to the Form view.

    You will see that the **Domain** field has been added to the form.



12. Select any domain you prefer and save the record.

Result
In the specified domain, the saved version of the tour overrides the original for users in that domain.

Personalize your experience

Work with various visual options for task tracking, project timelines, and homepage customizations.

Visual Task Boards	Timeline Visualization
Navigate through forms and lists with this graphic interactive UI.	Monitor projects and interact with time-based or task-based views of operations.

Visual Task Boards

Streamline your management of lists, forms, and other task records. Visual Task Boards presents an intuitive graphic interface with freeform or data-driven boards. Display records in quick-reference card formats, and lanes categorizing status or progress. Delegate specific team members to view and alter records, with access control rules for card visibility and task board management.

Timeline Visualization

Track activities in your organization over time using Timeline Visualization. Interactive month-based two-dimensional (2D) and task-card-based three-dimensional (3D) views provide comprehensive assessment of operations and strategies in your business. Personalize visual records, manage project portfolios, and evaluate present and future projects.

Visual Task Boards

Visual Task Boards (VTB) transform the navigation of lists and forms into an interactive graphical experience.

Visual Task Boards Overview

https://player.vimeo.com/video/1171947527?h=9f62b408f3&badge=0&autopause=0&player_id=0&app_id=58479

Note: Core UI or Next Experience is required to use Visual Task Boards.

Get started

Explore Learn about Visual Task Boards concepts and features.	Activate Activate Visual Task Boards.
Use Create, modify, delete, view, share, and customize Virtual Task Boards.	Reference See details about domain separation, supported browsers, and components that are installed with Virtual Task Boards.

Troubleshoot and get help

- Ask or answer questions in the Visual Task Boards community
- Search the Known Error Portal for known error articles
- Contact Customer Service and Support

Exploring Visual Task Boards

Visual Task Boards provide a visual representation of the work that needs to be done, allowing team members to easily collaborate, track and prioritize tasks. You can use Visual Task Boards in a variety of contexts, including project management, personal or team task management, and employee onboarding.

Visual Task Boards overview

Teams can easily manage their workloads by assigning and reassigning tasks, updating task status, and setting priorities. This helps to improve productivity and reduce the time it takes to complete tasks. Any user can use task boards, regardless of role, though access control rules (ACLs) may limit which cards each user can see.

The Visual Task Board interface provides a graphic-rich environment suited for managing and collaborating on records. For example, a support manager might create a board for a team to track their assigned incidents by state in real time.

You can customize Visual Task Boards to fit the unique needs of a team or organization. Teams can create their own workflows, labels, and columns to represent their specific process, making it easier to manage tasks and achieve their goals. Access Visual Task Boards from any device, including smartphones and tablets. This allows team members to stay connected and up to date with their tasks.

Visual Task Boards benefits

Anyone on the team can be given access to a Visual Task Board.

Benefit	Feature
Teams can easily manage their workloads by assigning and reassigning tasks, updating task status, and setting priorities. This helps to improve productivity and reduce the time it takes to complete tasks. Create a visual data driven board for team collaboration. You can add your individual tasks and add tasks from a form or a list too, modify lanes, add or remove members.	Creating Visual Task Boards
View and share board details or in a list. Add as favourite, share or create a connect conversation.	Viewing and sharing Visual Task Boards
Customize and configure Visual Task Boards.	Customizing and configuring Visual Task Boards
You can edit card details, add attachments, configure card view and card limit, label, assign, archive and move cards.	Working with Visual Task Board cards
Create checklist and checklist template. Configure task types that can be created.	Visual Task Board checklists

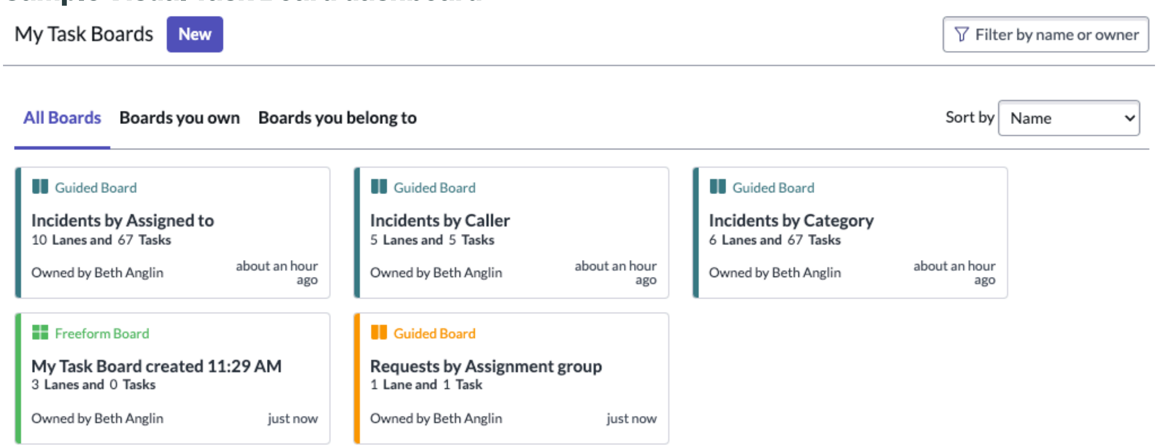
Types of Visual Task Boards

You can create guided Visual Task Boards, which are driven by data in your ServiceNow® instance. You can also create freeform boards that display a variety of information, or flexible boards, which combine both types.

There are three types of Visual Task Boards.

Board type	Description
Freeform boards	Display all types of task records, including personal tasks. Members of freeform boards can add and remove task cards and lanes. Freeform boards are indicated with the Freeform board icon .
Flexible boards	Display tasks that match a filter against a particular table. Members of flexible boards can add task cards. Cards are removed automatically when the tasks no longer match the filter conditions. Members can define custom lanes, similar to a freeform board. Flexible boards are indicated with the Flexible board icon .
Guided boards	Similar to flexible boards except that guided board lanes correspond to field values and cannot be edited in most cases. Guided boards are indicated with the Guided board icon .

Sample Visual Task Board dashboard



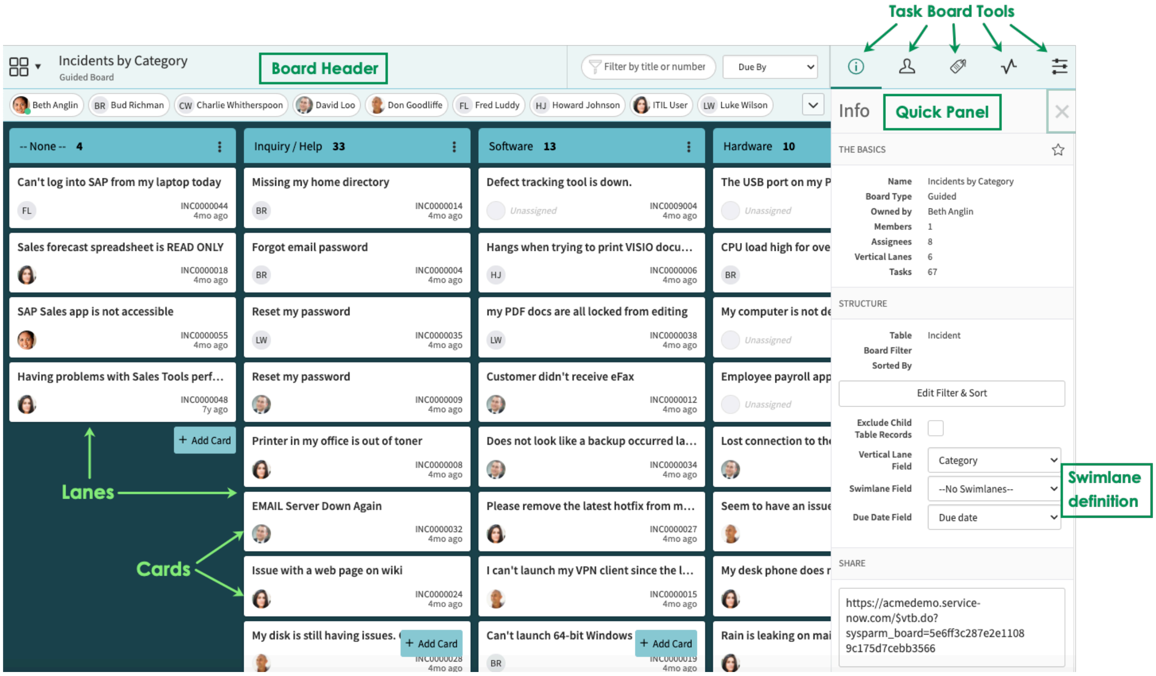
All boards have the displayed elements. The color of a card represents the color you choose in the color palette for that board.

Elements of Visual Task Boards

Visual Task Boards contain cards that represent a task. These cards are arranged in lanes based on the criteria you choose to sort them.

Visual Task Boards contain the elements shown in the image below. Each element is described in the following table.

Sample Visual Task Board elements



Task board elements

Element	Description
Board header	Displays the board name in the title bar. You can rename the board by double-clicking on the board name. Filter the tasks in the board by: • Entering the title or number of the task card • Selecting an option in the **Due By** list
Lanes	Organize cards on a board into vertical groups. These groups often represent the status of the task, such as **To Do**, **Doing**, and **Done**. When using a guided board, each lane represents a possible field value. For example, a board on the Incident table can display one lane for each **State** value such as **New**, **Active**, or **Resolved**. Users can move cards from one lane to another to update the task that card represents.
Cards	Represent individual tasks that you can assign to users. You can add comments, attachments, and labels to cards. Each card is tied to a task record; updating one immediately updates the other. For freeform boards, each card represents a personal task.

Task board elements (continued)

Element	Description
	For flexible and guided boards, each card represents a record from the list that board was created from. For more information, see Create Flexible and Guided boards.
Quick panel	Displays labels and users associated with the board. Board members can use the quick panel to quickly label or assign tasks. Members can also configure what appears in the quick panel.
Visual Task Board tools	Displays board information, board members, the board activity stream, and board labels.
Swimlanes	Organize cards on a board into horizontal lanes. These lanes often represent the user assigned to a task. You can add any number of swimlanes to the board, and move cards from one user to another easily.

Visual Task Board tools

The task board tools area in a Visual Task Board contains several tabs, each represented by an icon.

Click an icon to open the tab. Click the same icon again to hide the tab. The tabs you see for each conversation depend on the conversation type and other conditions.

Conversation tool tabs

Tab icon	Tab name	Description
ⓘ	Info	Contains the following information about the task board: • Board Name • Board type • Board Owner • Number of members • Number of assignees • Number of lanes • Number of tasks • Table name • Edit Filter (visible on data driven boards only) • Lane field (visible to the board owner, on data driven boards only) • Swimlane field - To change Swimlane field for the board • Due Date field - To change the Due Date field for the board. • URL

Conversation tool tabs (continued)

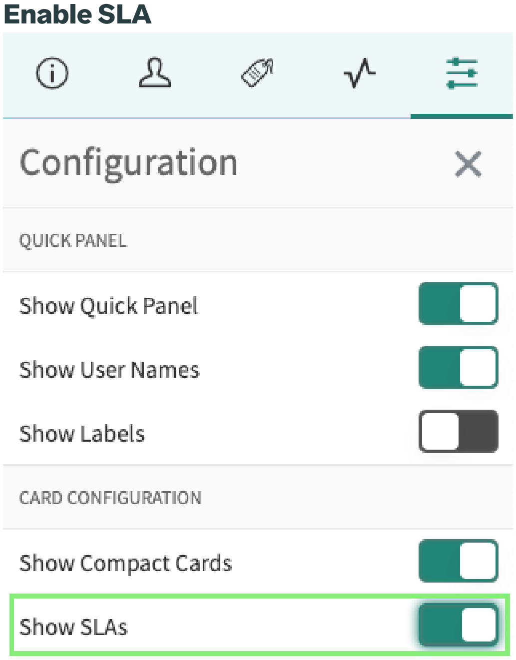
Tab icon	Tab name	Description
	Members	Lists all members and assignees of the board. You can add or remove board members, promote assignees to be members, and filter the board by member or assignee.
	Labels	Use labels to visually distinguish tasks on the task board. Filter board contents by toggling the label. You need to enable labels before being able to use this tab.
	Activity	Displays all of the activity for cards on the board.
	Configuration	Configure the settings for the task board. This setting is only available for the board owner. For more information, see Customize the look and feel of a task board.

Visual Task Board SLA indicators

SLA (service-level agreement) indicators alert board members if any cards on the board have breached SLAs.

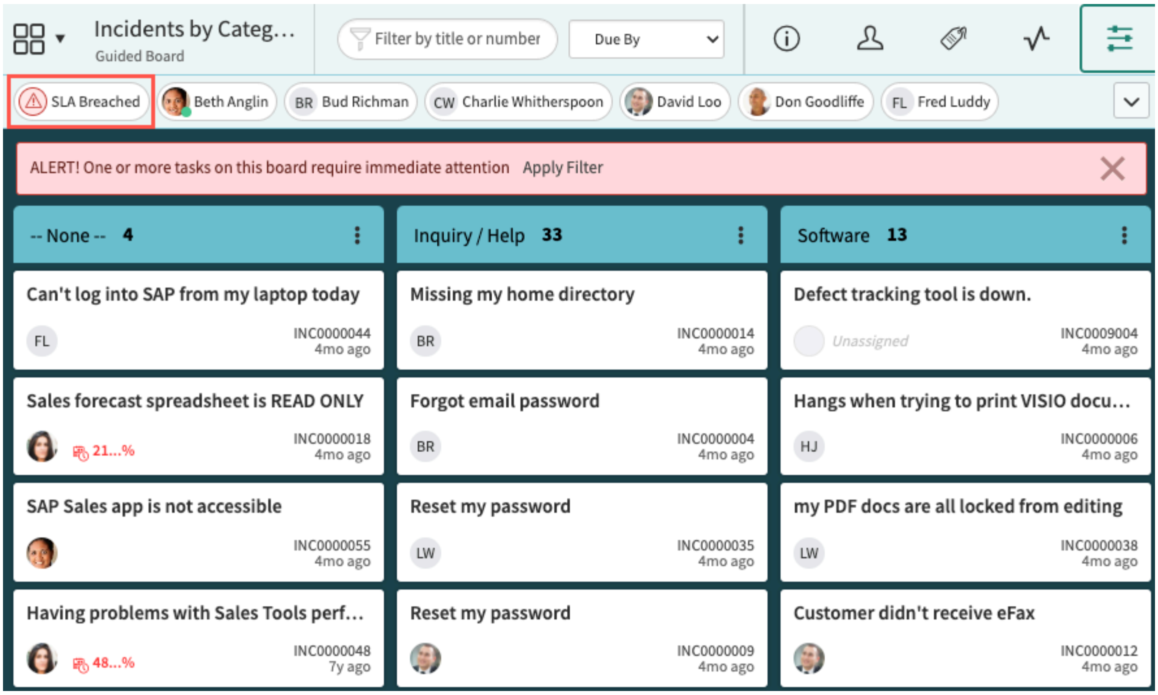
Board members can enable SLA indicators from the board configuration menu. The setting applies to the current user only.

Enable SLA



When SLA indicators are enabled, a status bar appears on each card that has an associated SLA. If any cards have breached SLAs, an alert appears at the top of the board and a filter option appears in the quick panel. The indicator displays the elapsed percentage of the SLA. If there are multiple SLAs associated with a task card, the indicator displays the status of the SLA with the greatest elapsed percentage. For more information on SLA see .

Visual Task Board with SLA indicators enabled



Related topics

Service Level Management concepts

Visual Task Board accessibility

Accessibility improvements in Visual Task Boards include skip links and the ability to view card details.

Skip links

Skip links allow you to tab directly to the main content on a page. When accessibility mode is enabled, task boards include a skip link to view tasks as a list. The **View tasks as a list** skip link switches all the task cards to the table view. For more information on viewing task boards in a list view, see View a Visual Task Board in a list.

View card details

With accessibility mode enabled, visual indicators appear on task cards that users can tab to in order to open card details. For more information, see View card details in a Visual Task Board.

View card details in a Visual Task Board

With accessibility mode enabled, tab through cards in a task board. Use the card details button to view task card details.

Before you begin

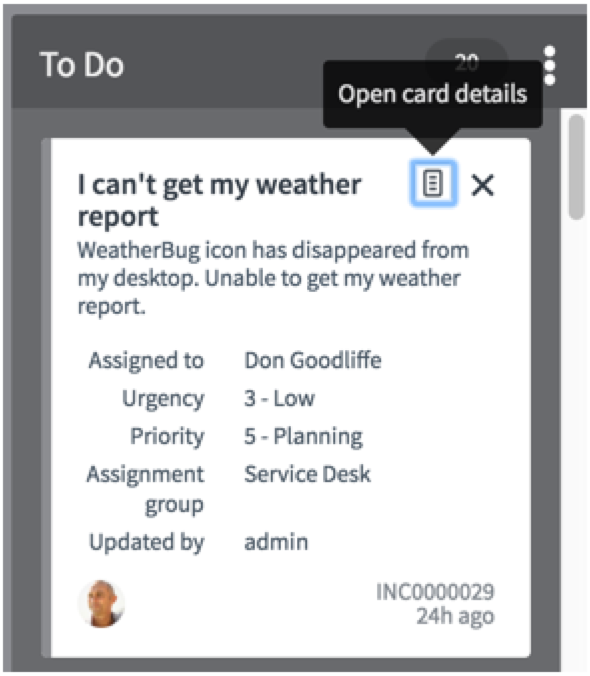
Enable accessibility from the General tab of the system settings menu.
Role required: none

Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Open an existing task board.
3. Press the Tab key to navigate through the board to get to a task card.

4. Press the Tab key to navigate through the card until the Open Card Details button appears.

Card details



5. Press **Enter** to open the card.
6. To exit the card, press **Escape**.

Activate Visual Task Boards

Visual Task Boards are active by default on new instances. For upgraded instances, you can activate the Visual Task Boards plugin [com.glide.ui.vtb] if you have the admin role.

Before you begin

Role required: admin

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the Visual Task Boards plugin (com.glide.ui.vtb) using the filter criteria and search bar.

   You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.

3. Select **Install** to start the installation process.

   Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: `Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.`

   You will see a message after installation is completed. For information about the components installed with a plugin, see Find components installed with an application.

Using Visual Task Boards

Create, view, and edit freeform, flexible, and guided Visual Task Boards, and add users to these boards as members.

As a member of a Visual Task Board, you can view and share the board, customize card views, assign and move cards, and create checklists.

Getting started with Visual Task Boards

To find Visual Task Boards, navigate to **Self-Service** > **Visual Task Boards**. If the application does not display after a general search, contact your admin.

https://player.vimeo.com/video/952369652?h=e5240fa717&badge=0&autopause=0&player_id=0&app_id=58479

Creating Visual Task Boards

You can create, view, and edit freeform, flexible, and guided Visual Task Boards, and add users to these boards as members.

To find Visual Task Boards, navigate to **Self-Service** > **Visual Task Boards**. If the application does not display after a general search, contact your admin.

Freeform Visual Task Boards

You can add personal task cards directly to lanes on a freeform board. You can also add other kinds of task cards to a freeform board from a list or form.

Create a freeform Visual Task Board

You can create freeform Visual Task Boards (VTBs) for tracking any kind of task or project.

Before you begin
Role required: none

Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Next to My Task Boards, click **New**, or if you have never created a task board before, click **Create New Visual Task Board**.
3. From the Create New Board window, click **Freeform**.
   A new task board opens with the default freeform lanes, **To Do**, **Doing**, and **Done**.
4. Click the board name and enter a new name.

What to do next

- Add a personal task to a freeform Visual Task Board
- Add a task to a freeform Visual Task Board from a form
- Add a task to a freeform Visual Task Board from a list

Add a personal task to a freeform Visual Task Board

You can add cards directly to a freeform board lane. These cards are called personal tasks and represent records on the Private Task [vtb_task] table.

Before you begin
Role required: none

Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Select a freeform board to add a personal task.
3. Select **Add Card** at the bottom of a lane.
   A new task card appears in the lane.
4. Enter a short description for the new task card.
5. To save the card, select another area of the board or press **Enter**.

Add a task to a freeform Visual Task Board from a form

You can add a task card to a freeform board from any table that extends Task. These cards represent records on whichever table you add them from.

Before you begin

Role required: none

About this task

You can add cards from multiple task tables, such as Incident or Problem, to the same freeform board.

Procedure

1. Open a task record, such as an incident.
2. Click the menu icon (≡) or right-click the form header to show the form context menu.
3. Select **Add to Visual Task Board**.
4. Click the name of the board you want to add the card to.
5. To view the board, click the board name in the confirmation message.
   The task appears in the first lane by default.

Add a task to a freeform Visual Task Board from a list

You can add a task card to a freeform board from any table that extends Task. These cards represent records on whichever table you add them from.

Before you begin

Role required: none

About this task

You can add cards from multiple task tables, such as Incident or Problem, to the same freeform board.

Procedure

1. Navigate to a list of task records, such as **All** > **Incident** > **Open**.
2. Perform either of the following actions.

Option	Description
Add one task	Right-click a record and select **Add to Visual Task Board**.

Option	Description
Add multiple tasks	**a.** Select the check boxes beside the records you want to add. **b.** In the column context menu, select **Add to Visual Task Board**.

3. Click the name of the board you want to add the card to.
   A confirmation message appears.
4. To view the board, click the board name in the confirmation message.
   The task appears in the first lane by default.

Data driven Visual Task Boards

You can add a task to a flexible or guided task board.

Create a data driven Visual Task Board

You can create a flexible or guided data-driven Visual Task Board (VTB) for any table that extends Task, such as Incident or Change.

Before you begin

Role required: none

About this task

Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Next to My Task Boards, click **New**, or if you have never created a task board before click **Create New Visual Task Board**.
3. From the Create New Board window, click **Data Driven Board**.
4. From the Task Table list, select a base table of tasks on which to base your board, for example, an incident table.
5. **Optional:** From the Lane Field list, select the field you want to use for the lane headers.

   (Optional) To create a flexible board with editable lane headers, select **None**.

   The type of board that is created and the lanes that appear on the board depend on which type of column you select. If you select a reference or choice column, the board is a guided board. Each lane in a guided board represents one possible value for that column and the cards appear in the appropriate lane. For example, if you create a guided task board for incidents using the **State** column, the board shows one lane for each incident state, such as **New** or **Closed**. If you select a column that is not a reference or choice, the board is a flexible board and the board shows the default lanes, **To Do**, **Doing**, and **Done**, with all cards in the **To Do** lane.

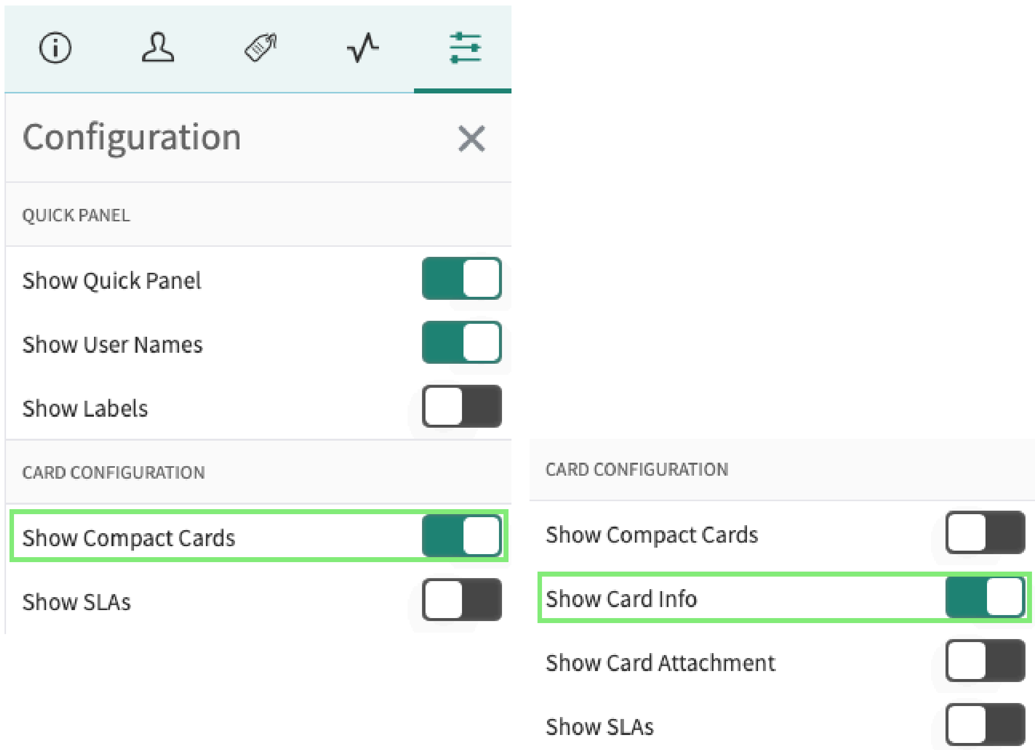
6. **Optional:** Create a filter to show only the records you want to work with.
   For example, you might filter out incidents that are not assigned to you.

   (Optional) Any card that no longer fits the parameters of the filter is automatically removed from the task board.

7. **Optional:** Click the board name and enter a new name.

Note:

- For guided boards created from choice fields, such as **State**, the system creates a lane for each possible choice value. For guided boards created from reference fields, the system creates a lane only for each value in use by a task card. Lanes are added as needed if the reference field values change.
- Be sure to enable Card View for more options. Clear the option **Show Compact Cards** > **Show Card Info**.



What to do next

Add a task to a flexible or guided Visual Task Board

Add a task to a flexible or guided Visual Task Board

Cards in a flexible or guided board represent records on whichever table the board is associated with.

Before you begin

Role required: none

Procedure

1. In a lane header, click the lane menu ( ) and select **Add Card**.
   Alternatively, click **Add Card** at the bottom of a lane.

   Fields are populated based on any filter conditions for the board and, for guided boards, the lane you add the card to.

   Consider the example of a guided board that shows incidents with the **Software** category, with a lane for each assignee. If you add a card to the **ITIL User** lane, the new incident record **Category** and **Assigned to** fields are automatically set to **Software** and **ITIL User**.

2. Complete the form and click **Submit**.
   A new task card appears in the lane.

Add or modify Visual Task Board lanes

Any board member can change the names and add new lanes to accommodate the task workflow you want to track. When you create a freeform or flexible task board, it includes the default lanes **To Do**, **Doing**, and **Done**.

Before you begin

Role required: none

About this task

Unlike guided boards, the lanes on a freeform or flexible task board do not match possible field values.

Note: You cannot remove lanes from guided boards.

Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Open a task board.
3. Perform any of the following actions.

Option	Description
Create a new lane	a. Scroll past the last lane and click **Add Lane**. b. Enter a title for the lane, then press the En ter key. The **Add Lane** option is always available for freeform and flexible boards. It is available for guided boards only if the lanes are based on a reference field, such as **Assigned to**.
Edit a lane name	a. Select the lane name in the lane header. b. Enter a title for the lane, then press the En ter key.
Rearrange lanes	Select a lane header and drag the lane to the desired drop zone. To cancel the move, press the Escape key while you drag the lane. You can also change the lane order from the board configuration menu.
Hide a lane	a. Select the lane menu ( ) in a lane header. b. Select **Hide Lane**.
Unhide a lane	a. Select the configuration menu ( ). b. Select **Advanced Settings**. c. Select the hidden lane in the **Lane Configu ration** section.

<table>
<tr><th>Option</th><th>Description</th></tr>
<tr><td>Delete a lane</td><td>

a. Select the lane menu in a lane header.

b. Select **Delete Lane**.

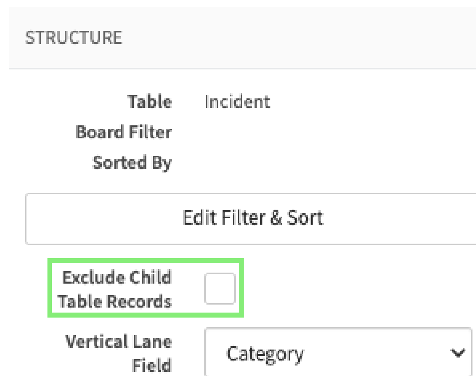
c. In the confirmation dialog box, click **Delete**. When you delete a lane on a freeform or flexible board, all the cards in the deleted lane are archived.

The **Delete Lane** option is always available for freeform and flexible boards. It is available for guided boards only if the lanes are based on a reference field, and only for lanes that con tain no cards.

</td></tr>
<tr><td>Exclude Child Table Records</td><td>

a. Select **Info** icon (ⓘ

b. Under **Structure** menu, select **Exclude Child Table Records**



The Child table lanes and records are ex cluded.

Note: **Exclude Child Table Records** check box is only visible for choice type field.

</td></tr>
</table>

Note: When moving the card from lane to another, if you get an error message while having write access to the record then create a system property **glide.vtb.enable_list_edit_acl** and set it to **false**.

Add or remove a Visual Task Board member

You can add and remove task board members using the members tab of the activity stream. You can also promote assignees to board members.

Before you begin

Role required: none

About this task

Only members of a task board can access the board. Any board member can add or remove other members.

Procedure

1. On a Visual Task Board, open the task board tools.
2. Click the members tab.

3. Perform one of the following actions.

Option	Description
Add a member	**a.** In the **Users** section, click **Add Members**. **b.** Enter a user's name or select a user from the drop-down menu.
Remove a member	**a.** In the **Members** section, point to a user. **b.** Click the remove icon ( ).
Promote an assignee to a member	**a.** In the **Assignees** section, point to a user. **b.** Click the upward arrow icon.
Promote all assignees to members	In the **Assignees** section, click **Promote All**.

Delete a Visual Task Board

You can delete any task board that you own.

Before you begin

Role required: none

About this task

Deleting a board does not impact the underlying task records. However, you cannot recover a board after you delete it.

Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Under **Boards you own**, hover over the board and click the delete icon (**X**).
3. In the confirmation dialog, click **Delete**.

Viewing and sharing Visual Task Boards

View details about Visual Task Boards, view them as a list, and share them with others.

View Visual Task Boards details

You can display the key information about any Visual Task Board.

Before you begin

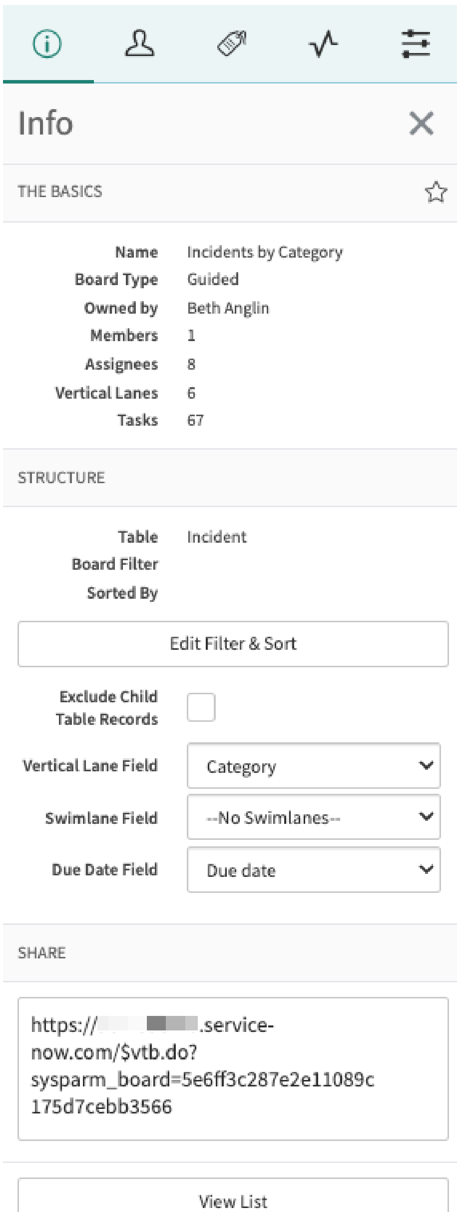
Role required: none

Procedure

1. Navigate to**All** > **Self-Service** > **Visual Task Boards**.
2. Click the board information icon ( ).

Result

The board information displays.



View a Visual Task Board in a list

You can view a Visual Task Board in the list view using the board information option.

Before you begin

Role required: none

Procedure

1. Open a task board.
2. From the task board tools, click the board information icon (ⓘ).
3. Click **View List** at the bottom of the information panel.
   The cards from the board open in the list view.

   Note: The freeform board list view only shows cards made by the board and no other tasks that might be added manually.

Add a Visual Task Board as a favorite

Add Visual Task Boards you access frequently to the application navigator using the favorite option.

Before you begin

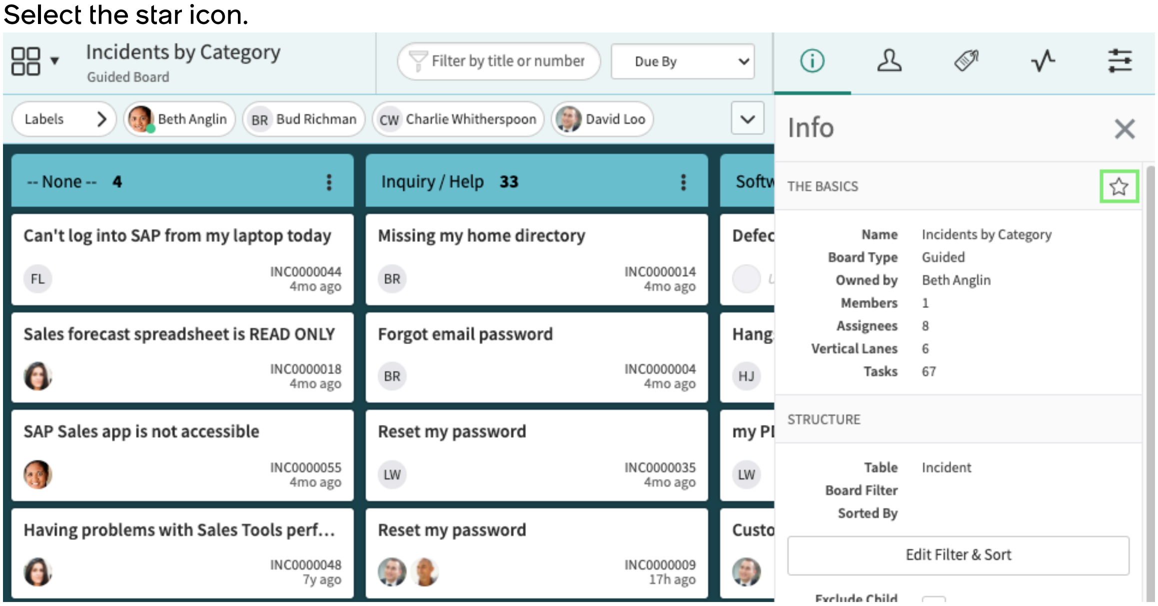
Role required: none

About this task

Adding a board as a favorite is only available in Core UI.

Procedure

1. Navigate to **All** > **Self Service** > **Visual Task Boards**.
2. From the board that you want to favorite, select the information icon from the board tools.
3. Select the star icon.



Share a Visual Task Board in a Connect conversation

You can share a Visual Task Board in a Connect Chat or Connect Support conversation.

Before you begin

Role required: none

Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Drag a task board to a Connect mini window.

A link to the task board appears in the conversation. The task board is also listed in the conversation tools, which are visible in the Connect workspace. Only conversation members who are members of the board can access it. If you share a task board in a Follow a record in Connect, it appears as a URL in the record activity stream.

Related topics

Connect

Visual Task Boards

Create a Connect conversation from a Visual Task Board

Create a Connect Chat conversation from a Visual Task Board to collaborate with board members and keep track of activity as it happens.

Before you begin

Role required: none

About this task

When you create a conversation from a task board, all the board members become members of the conversation. The members are synchronized between the task board and the conversation. For example, if you remove a user from the conversation, the system automatically removes the user from the board as well.

Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Open a task board.
3. In the board header, click the connect with board members icon ( ).
   The system automatically opens a record conversation for the board. Each board member becomes a member of the conversation.

Related topics

Connect Chat

Visual Task Boards

Customizing and configuring Visual Task Boards

You can customize the information in a Visual Task Board, as well as the way this information is displayed.

You can customize individual Visual Task Boards to display your tasks in whatever way works best for you. You can change the look and feel of the board, add labels and swimlanes, set lane limits, or modify the query.

Customize the look and feel of a task board

By default, the visual task board inherits the look-and-feel from the user's Theme preference. You can, however, configure several options in the Visual Task Boards to customize the look-and-feel of the board.

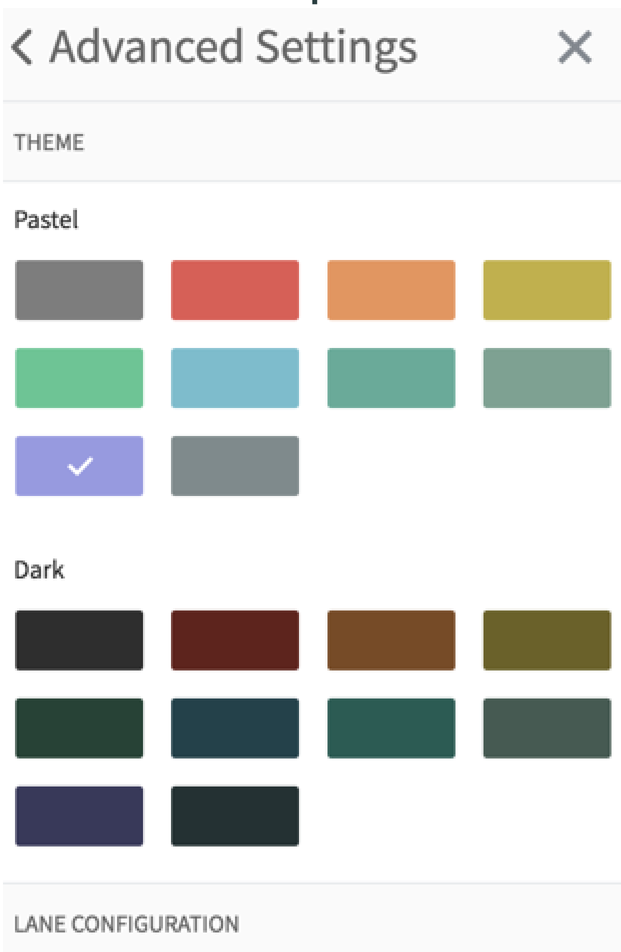
Before you begin

Role required: none

Procedure

1. From the task board tools, click the menu icon ( ).
2. Click **Advanced Settings**.
3. In the **Theme** section, select a color from the palette.
   The selected theme is applied to the background of the board, lane header, add card button, quick filter, tab header, quick panel, and board header. It also appears as the color for the board on the My Task Boards page. This setting applies only to the boards of the user.

   Visual Task Board color palette

4. In the Quick Panel section, toggle the options to customize the quick panel.

   Note: Unless otherwise noted, these settings apply to the current user only.

   Quick panel options

Option	Description
Show Panel	Option for making visible on the board.
User Names	User names that appear next to user avatars in the quick panel.
Show Labels	Labels that appear on cards and in the quick panel. **Note:** The setting applies to all users.

Option	Description
Label Names	Label name that appears beside the colored icon for that label in the quick panel. **Note:** This setting is available only when you enable **Show Labels**.

When all these options are enabled, a quick panel resembles the following illustration.

5. In the Card Configuration section, toggle the options to customize the appearance and information of cards.

   Changes to the cards apply to the current user only.

View options

Option	Description
Show Compact Cards	Decreases the lane width and card information. Thumbnail images do not appear on the card.
Show Card Info	Displays card information on each card. Card information typically includes details like the task state, date opened, and last user to update it. This setting is available only when **Compact Cards** is disabled.
Show Card Attachment	Cards display the first image attached to that card as a thumbnail. This setting is available only when **Compact Cards** is disabled.
Show SLAs	SLA status indicators appear on cards and alerts appear when one or more card has a breached SLA. SLA status indicators are hidden when **Compact Cards** is enabled. This setting is available only when SLAs are associated with the tasks on the board.

6. Under Advanced Settings, in the Lane Configuration section, show or hide lanes by selecting or clearing the check box for each lane.
   This setting is a user preference.

Related topics

Visual Task Board tools

Add or remove a Visual Task Board member

Sort Visual Task Boards

You can sort Visual Task Boards using criteria that you create with a Sort-Filter option, grouping items by properties to help organize your cards.

Before you begin
Role required: admin

About this task

Only the owner of the board can create the sorting criteria, and add, edit, or delete the criteria. The criteria appear as "read-only" for other users.

Note: The procedure is slightly different for Data Driven and Freeform boards. The instructions below contain both options.

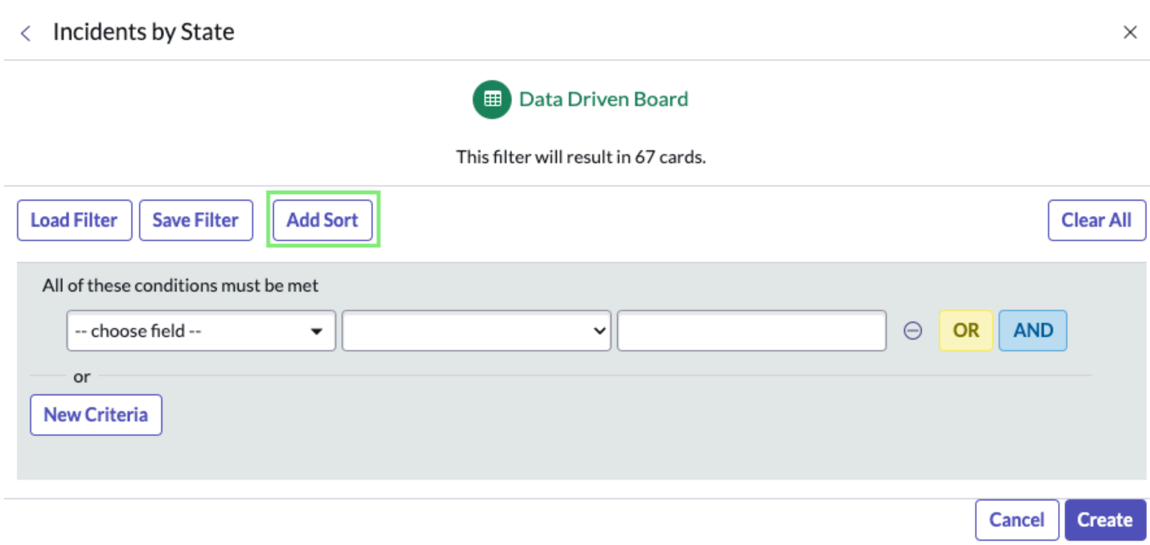
Procedure

1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. On the My Task Boards page, select **New**.
3. For a **Data Driven** board, follow these steps.

   a. From the Create New Board window, select **Data Driven Board**.

   b. Fill out the fields with your choices and then select **Next**.

   c. Select **Add sort**, choose the conditions you want from the fields and then select **Create**.

   d. In the Add Sort window, choose your sorting order and then select **Save**.
   Your criteria displays. You can edit your sort order here, or add new criteria. You can also edit your choices in the navigation pane on the right.

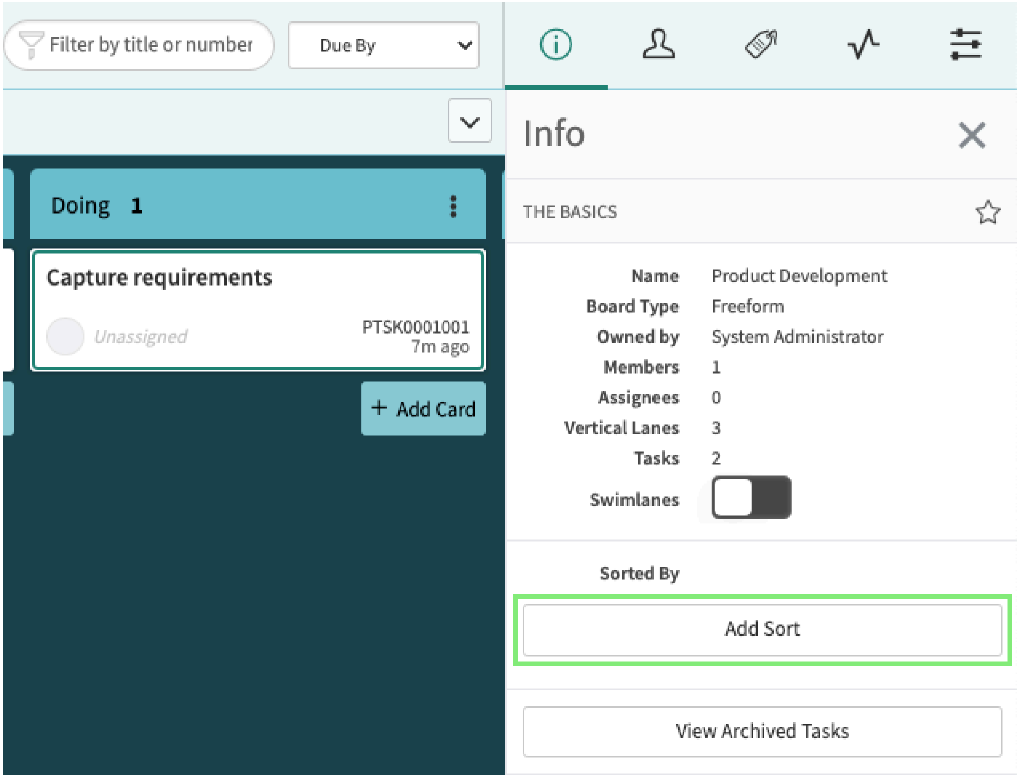
4. For a **Freeform Board**, follow these steps.

   a. From the Create New Board window select **Freeform Board**.

   b. Create task cards for the board.

   c. Select the info icon ( ).

The sorting criteria and filtering appear in the Info navigation pane.



You can edit your sorting criteria for both Freeform and Data Driven boards by selecting the **Edit Filter and Sort** button.

Configure Visual Task Boards labels

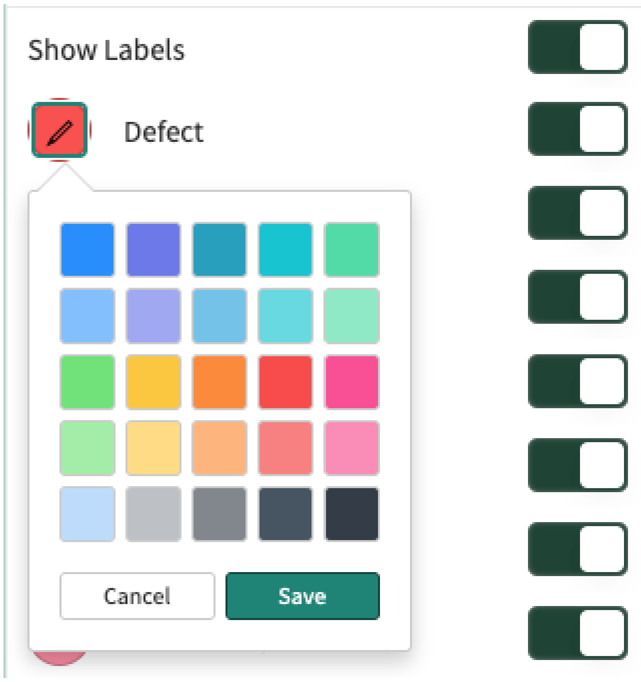
Labels help categorize tasks and visually distinguish them on the task board. You can disable or rename labels using the labels tab of the activity stream.

Before you begin

Role required: tags_admin and global_tags_creator

About this task

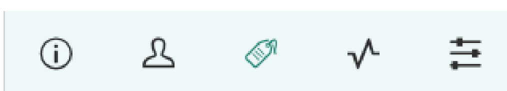
Every board has seven labels by default.



Board members can edit the labels on a board. All the labels are visible on the **Quick Panel** under **Labels**

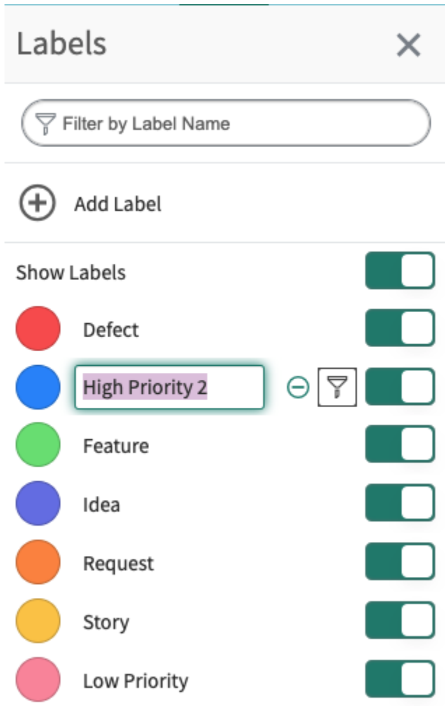
Procedure

1. From the task board tools, click the **Labels** tab.



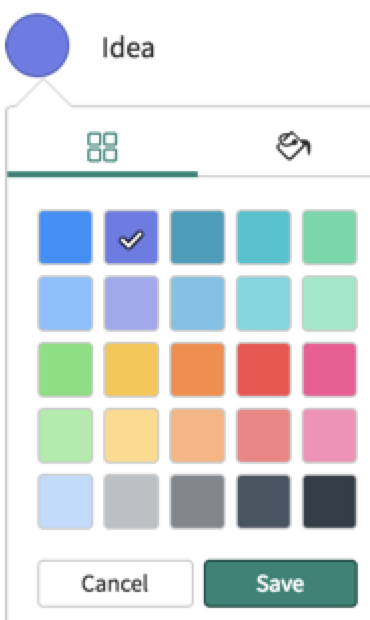
2. Turn on the **Show Labels** button if it is turned off.
   You can see seven default labels.
   - Users with global_tags_creator role can add labels to the board and rename the label.
   - To add labels, click **Add Labels** . Newly added label remains in off state by default. You can assign any color or no color to the label. To rename the label, click the label text and enter new value.

- To rename labels, click on the label and change the name of the



label.

- To change the color of the label, click the Select color icon beside the label. Select the color of your choice from the color picker, and then click **Save**.



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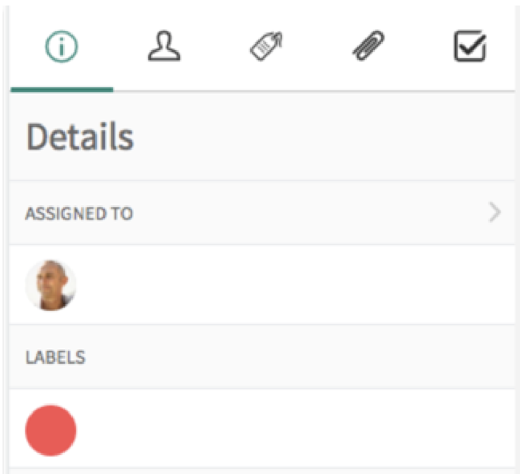
- To disable or enable a specific label, toggle the button next to the label. To turn on or turn off a specific label, toggle the button next to the label. Only turned on labels show up in the quick filter and can be applied to a card

- The board owner can delete the label by clicking **Delete Label** icon. next to the label.
- To filter the cards by labels, type the Label name in the Search bar 

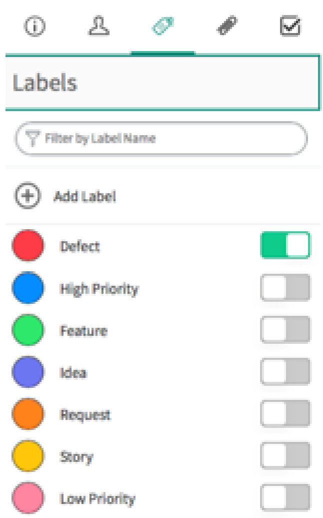
or click **Add to Filter** icon against the label. Once you filter by the label, you can only see cards with that label.

Labels on Card Details Page

When user clicks the card, the card opens with the details of the card. It contains all the applied labels under **Details** tab.



Under the **Labels** tab, the toggle button for applied labels is On and Off for the labels that are



not applied.

Note: The **table** label can also be used for Tags.

Configure a Visual Task Board with swimlanes

Swimlanes enable you to create an environment with horizontal lanes in addition to vertical lanes. Swimlanes use only compact cards in Visual Task Board.

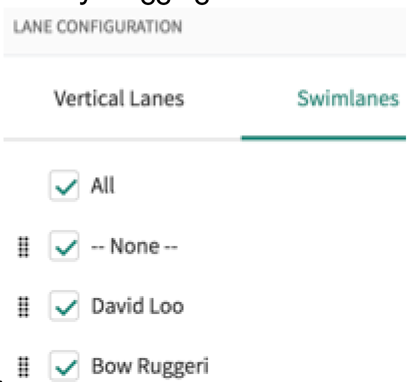
Before you begin

Role required: none

About this task

You can add swimlanes in all types of Visual Task Boards. For more information see Add or modify Visual Task Board lanes.

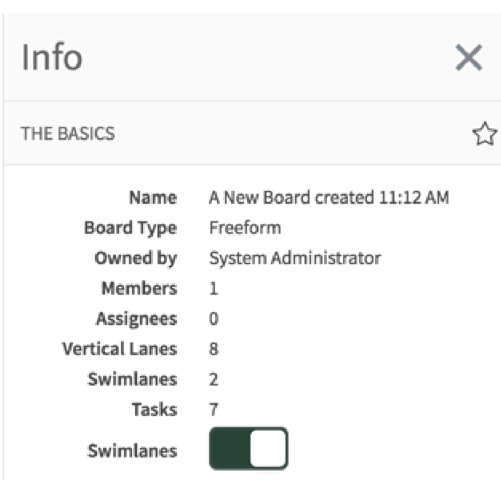
When you select swimlanes in Visual Task Boards, you can do the following:

- Name and rename the swimlanes.
- Move the tasks horizontally and vertically from one user to another.
- Drag the cards across swimlanes.
- Reorder swimlanes by dragging them or from **Lane**


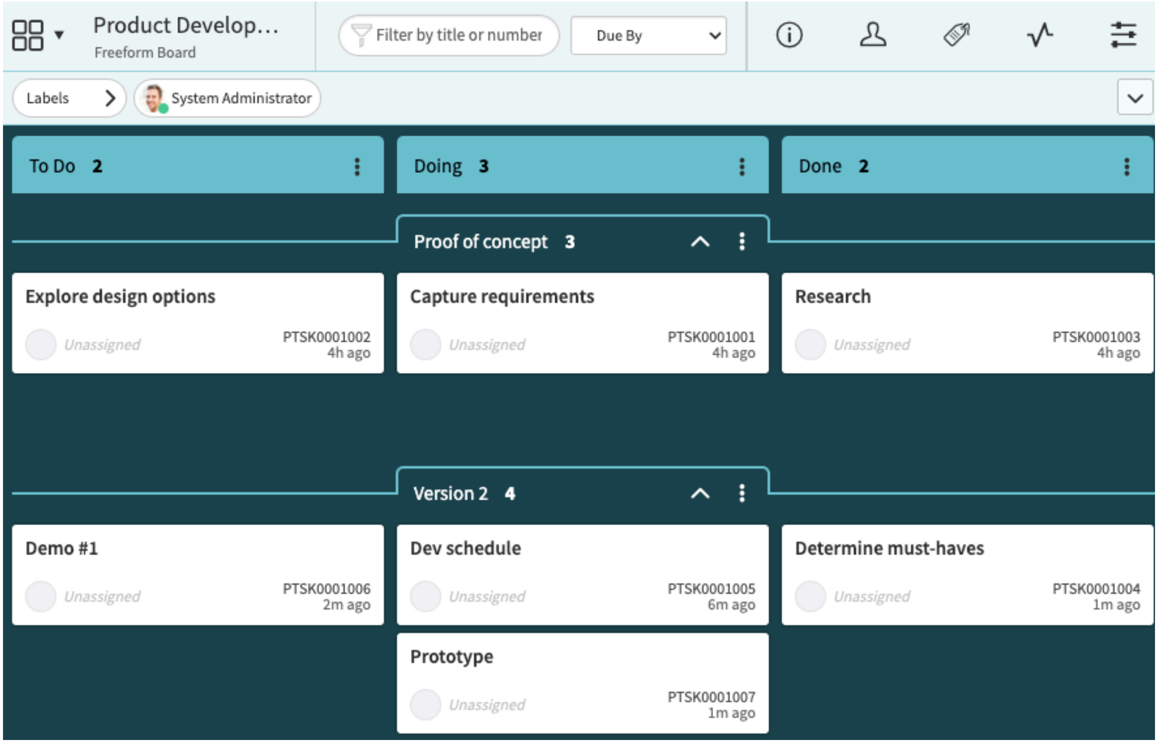
Configuration.
- Collapse and expand swimlanes.

Procedure

1. Navigate to **All** > **System Definition** > **Self-service** > **Visual Task Boards**.
2. Click **New** and select the board type.
   - Freeform Board
   - Data Driven Board
3. Configure swimlanes in the boards.
   - In a freeform board, activate the swimlanes by sliding the **Swimlanes** toggle switch in the **Info** tab.

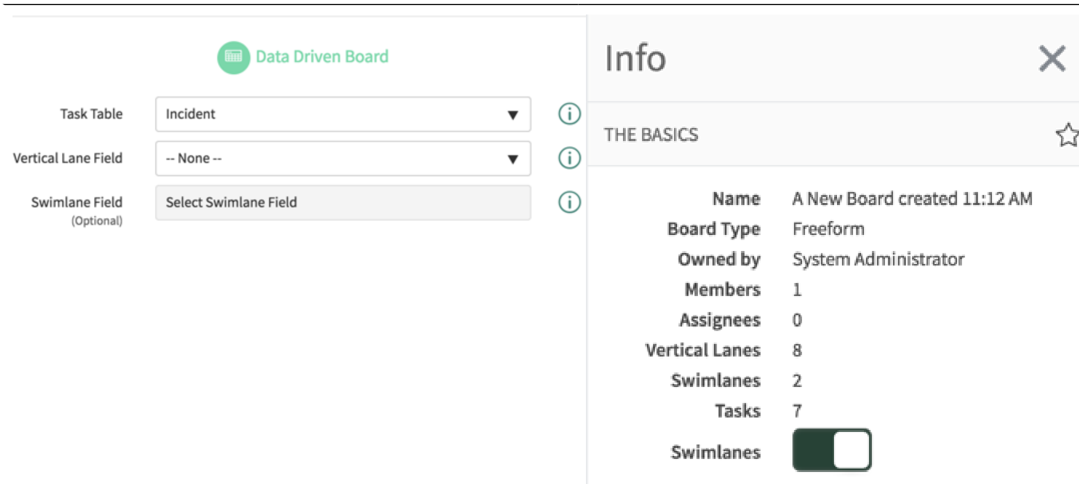
     The following figure shows a sample freeform board created with swimlanes.



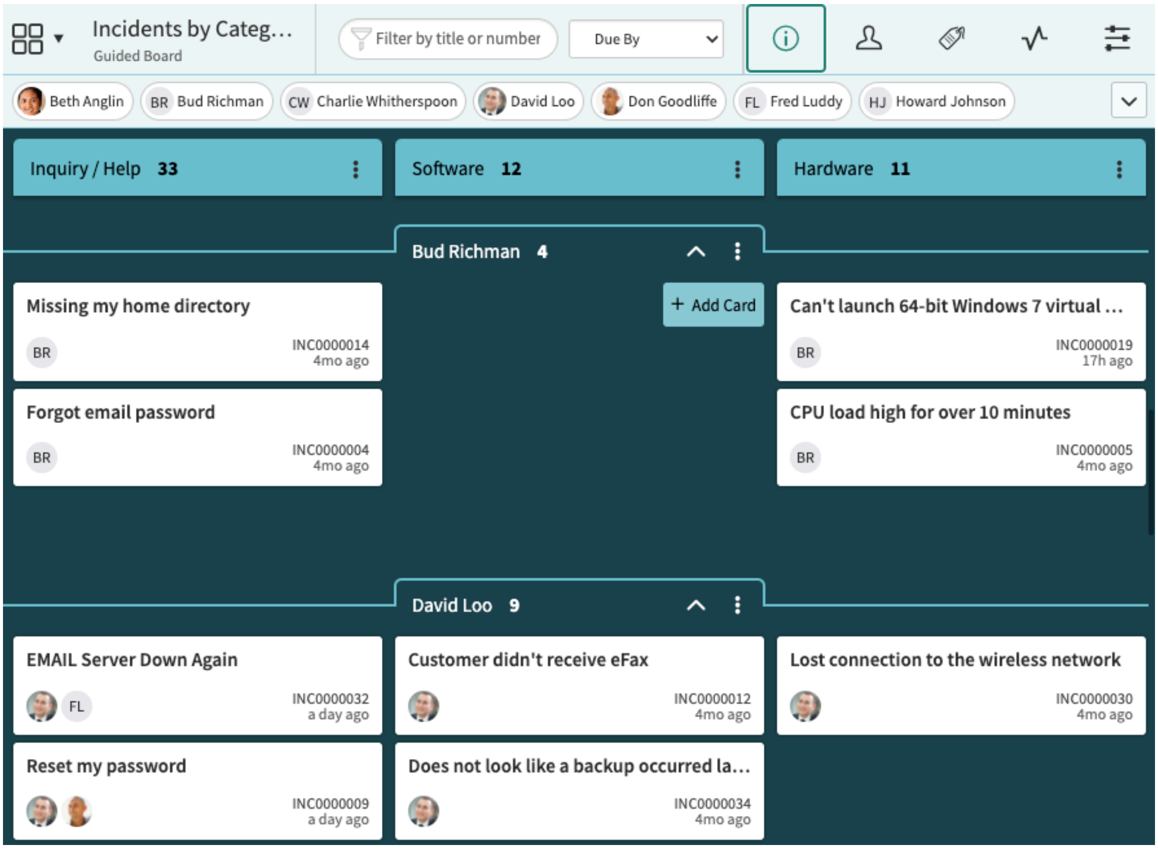
- In a data driven flexible board, do the following:

  a. Select **None** in **Vertical Lane Field** from the drop-down.

  b. Click **Next** and slide the toggle under the **Info** tab to the right.

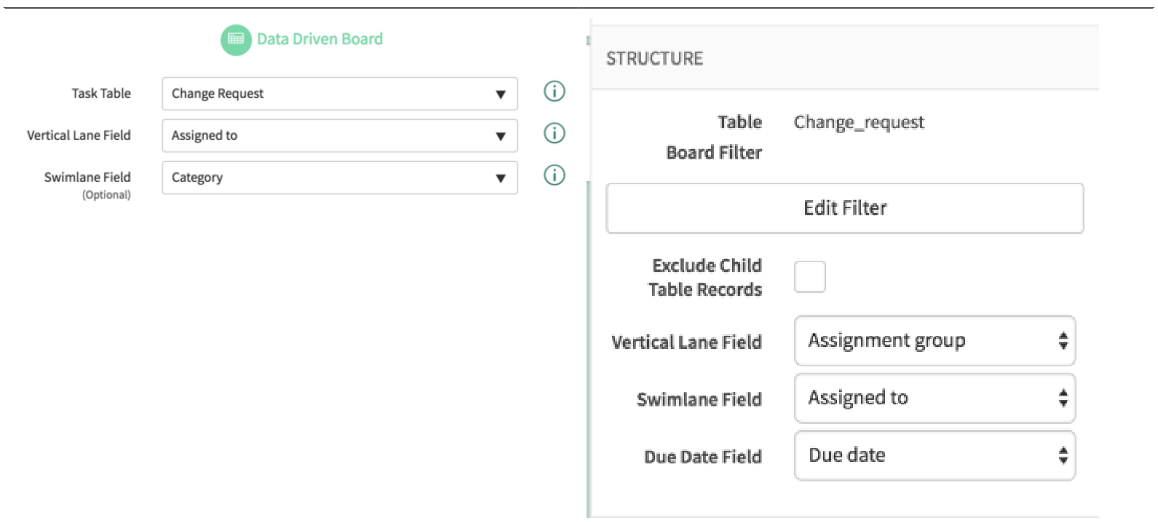


The following figure shows a data driven guided board created with swimlanes.



- In a data driven guided board, select **Vertical Lane Field** and **Swimlane Field** while creating the board. You must have created a freeform board in order to create a guided board.

  You can also add swimlanes to the existing guided board by selecting **Swimlane Field** under **Info** tab in the board.



Modify the query or lane field for an existing Visual Task Board

For flexible and guided Visual Task Boards, you can edit the board query or lane field. This ability enables you to change the board contents while preserving the member list, board configuration settings, and, if applicable, Connect Chat conversation history.

Before you begin

Inform the board members that you plan to change the board query or lane field. If you or any members have manually sorted cards within a lane, the order may be reset.
Role required: none, but you must be the board owner

About this task

The board query consists of filter conditions that determine which tasks the board tracks. For example, you might edit the query so the board shows only active incidents, rather than all incidents.
The lane field is the field on the underlying table that defines the lanes. For example, you might change the lane field so the lanes represent incident states, rather than assignees. This change is called a lane field pivot. Lane field pivots also make it possible to convert a flexible board to a guided board or vice versa.

Procedure

1. Open a Visual Task Board.
2. Select the information icon (ⓘ) by the board name.
3. Perform one of the following actions.

Option	Description
Edit the board query	**a.** Under **Board Filter**, select**Edit Filter** to open the condition builder. **b.** Add and remove conditions as needed to edit the query. **c.** Select **Save**.
Change the lane field	**a.** Select the **Lane Field** picker and select a field or the **None** option. Guided boards have the **Lane Field** set to a field, such as **State**. Flexible boards have the **Lane Field** set to **None**. You can change the **Lane Field** value accordingly to change the board type. **b.** In the confirmation dialog, select **OK**.

The board reloads to reflect the changes.

Set lane limits on a Visual Task Board

You can set a limit to the number of cards added to a lane on a Visual Task Board. If the limit is not set, any number of cards can be added to a lane by default.

Before you begin

Role required: admin

Procedure

1. Open a Visual Task Board.
2. Click the More icon (⋮) on the lane header.
3. Select **Set Lane Limit**. **Set Lane Limit for <name of the lane>** window appears.

4. Enter the number you want to set for the specific lane.
   Leave blank, if you want set no limit to the lane.
5. Click **Save**.

Result

The number appears on the lane header. 

If the number of cards exceeds the set limit, the Red symbol appears on the lane header for all the board members.

If a card is moved to a lane with exceeded WIP lane limit, an error message appears at the top of the page. The member who moves a card to the lane with exceeded limit can view the error message.

Working with Visual Task Board cards

Visual Task Board task cards can represent a personal task or a record on a table. You can add task cards, edit task card details, add labels to cards, and access the underlying task record the card represents, depending on the board type.

Task cards are used to do the following:

- Represent tasks in a single view
- Update and make changes to tasks
- Drag and drop cards
- Customize labels

Note: Each board can display up to 1,000 cards by default. When the number of tasks exceeds the maximum, a warning appears and the system determines which cards to show by most recent update time. Administrators can configure a different maximum card limit. For details, see Configure the card limit for Visual Task boards.

Edit Visual Task Board card details

Edit the details of the card if you need to assign tasks, add comments, change the due date, or change other features of the card.

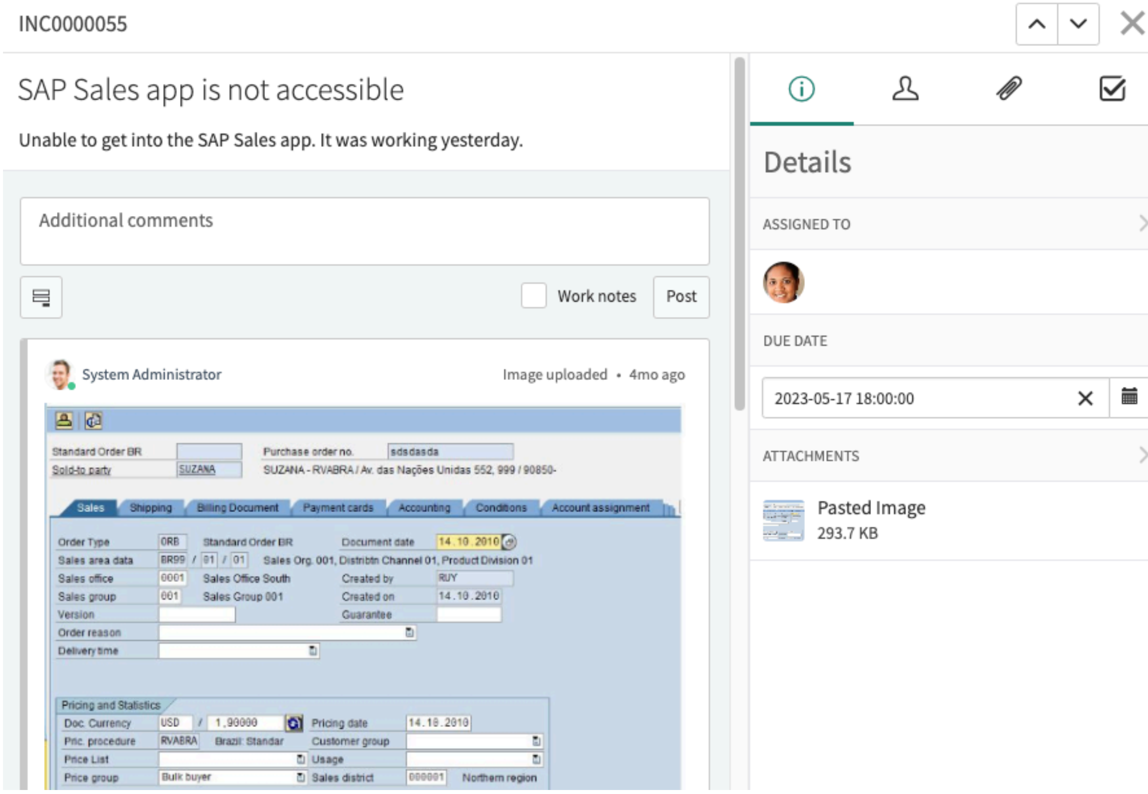
Before you begin

Role required: none

About this task

You can edit various card details. Updating these values also updates the underlying task record.

Sample Visual Task Board card

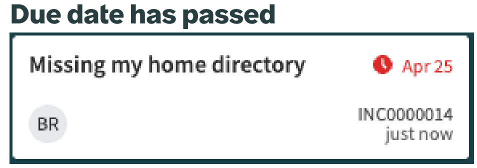


Procedure

1. Open the task board from the **My Task Boards** dashboard.
2. Click a card on the board.
   The details for the card appear in a pop-up window.
3. Modify the card details.
   Possible modification actions include:
   - Rename the card by clicking the card title and providing the new name.
   - Modify the short description.
   - Add comments or work notes in the activity stream.
   - Edit the users assigned to tasks.
   - Add a label to the card by selecting one or more of the available labels.
   - Add or edit the **Due Date**.If the completion of a task exceeds the due date, the date appears in red.

Due date in future

Due date has passed



   - View attachment by disabling **Show Compact Cards** from Configuration.
   - Add or remove file attachments.

- Archive the card (freeform boards only). Once archived, the card is not visible in active items.
- Move the card to a different board (freeform boards only).

Add an attachment to a Visual Task Board card

You can add an attachment to a record within a Visual Task Board.

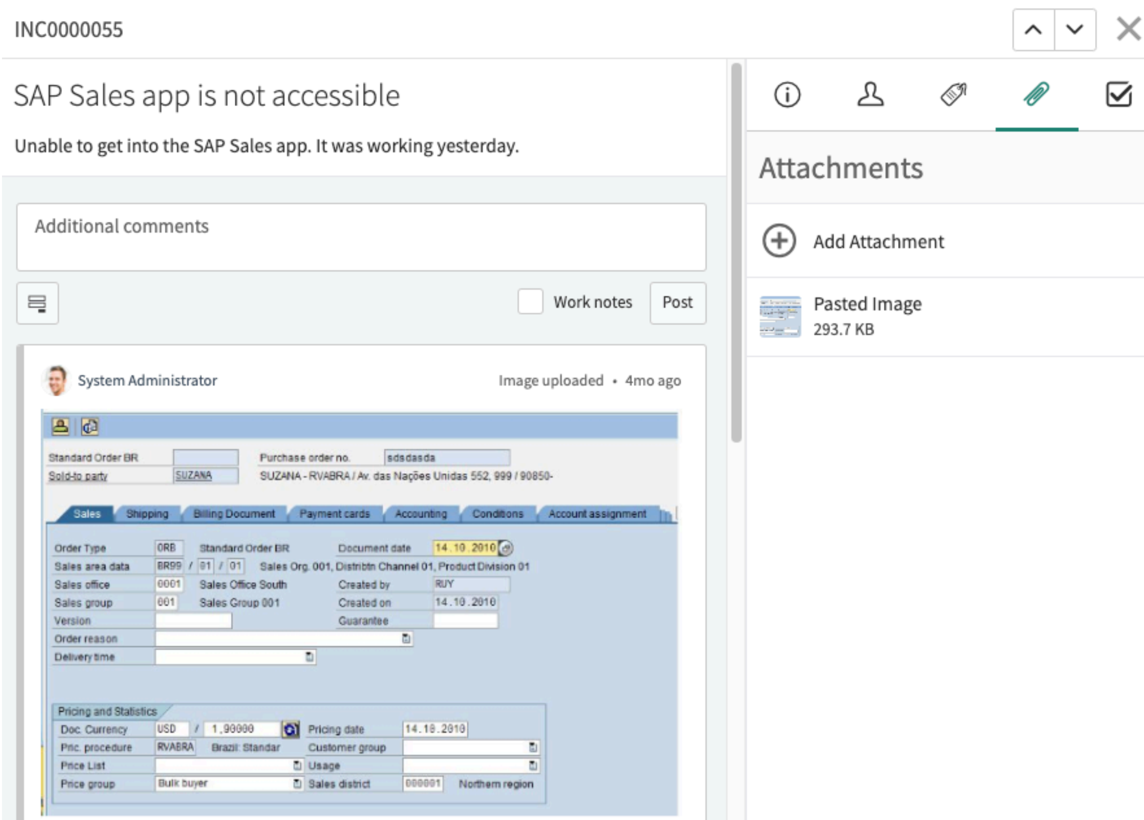
Before you begin

Role required: none

About this task

Adding an attachment to a task card also adds the attachment to the underlying task record.

Add attachment



Procedure

1. Click a card.
2. Click the attachment tab ( ).
3. Click **Add Attachment** and select a file to add as an attachment.

Configure the card view on a Visual Task Board

Configure the fields that appear on a card in a task board.

Before you begin

Role required: admin

Procedure

1. Navigate to the form you want to configure fields for.
2. Select the Additional actions icon from the header(≡), and then select **Configure** > **Form Layout**.
3. Under the Form view and section, select the VTB view.
   You may need to create a VTB view for the form. For more information, see Create and delete views.
4. Select the fields to appear on the card by adding or removing the fields from the **Selected** column.
5. Select **Save**.

Configure the card limit for Visual Task boards

Freeform and data driven boards can display up to 1,000 cards by default. You can change the default card limit by adding a system property.

Before you begin

Role required: admin

About this task

You can set card limit for both Freeform board and Flexible and Guided board in Data Driven board.

Procedure

1. Add a new system property with the following field values:

Field	Value
Name	glide.vtb.board_max
Type	integer

2. Set the **Value** to the maximum number of cards allowed for each board.

   Note: Performance degradation may occur if you set the **Value** to a number greater than 1,000, especially on tablet devices.

Label a Visual Task Board card

Labels help categorize tasks and visually distinguish them on the task board.

Before you begin

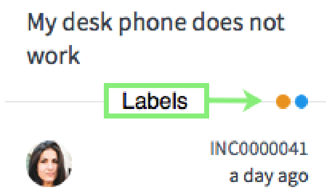
Role required: none

Enable labels for the board.

About this task

You can filter the visible tasks to show only those with certain labels. Labels appear on cards as colored dots.

Task card labels



You can add one or more labels to a task card.

Procedure

Do one of the following actions.

Option	Description
Add a label to a card from the quick panel	**a.** Drag a label from the quick panel directly to a task card. **b.** Drop the label in the drop zone.
Add a label to a card from the card details	**a.** Open the card details for a task. **b.** Click the details tab (). **c.** Under **Labels**, select one or more labels. Point to a label to display its name. **d.** Close the card detail pop-up window.

What to do next

You can use configuration options to rename or disable labels or to hide labels altogether.

Assign a Visual Task Board card to a user

Assignees represent ownership of task cards and the associated records. Each task card can have one primary assignee and multiple additional assignees.

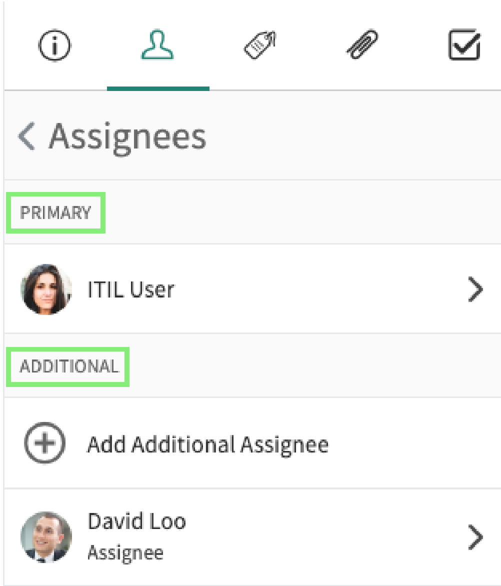
Before you begin

Role required: admin

About this task

You can filter the visible tasks on a board to show only tasks assigned to a certain user. Assignees appear on cards as avatars.

Task card assignees



When a card changes lanes, all the assignees receive an email notification.

For flexible and guided boards, the primary assignee corresponds to the underlying task's **Assigned to** field. For example, on a board created from the Incident table, if you add Joe Employee as the primary assignee for a card, the associated incident is assigned to Joe. Note that assignment rules on the associated table may restrict who you can make the primary assignee of a card. If you attempt to assign a task card to a user in a way that violates an assignment rule, a notification appears and the assignment does not take place.

Note: Assignees are not automatically granted access to the board. Only members can access the board.

Procedure

Do one of the following actions.

Option	Description
Add an assignee from the quick panel	**a.** Drag a user's avatar from the quick panel directly to the task card. **b.** Drop the avatar in the **Primary** or **Additional** drop zone.
Add an assignee from the card details	**a.** Open the card details for a task. **b.** Click the assignees tab ( ). **c.** Click **Add Primary Assignee** or **Add Additional Assignee**. The **Add Primary Assignee** option is not available if there is already a primary assignee. **d.** Select a user. **e.** Close the card detail pop-up window.

The system sends an email notification to inform the new assignee of the change.

Archive a Visual Task Board card

Archiving a card is a non-destructive way to remove a card from a freeform Visual Task Board. You can archive cards you are no longer working on to reduce visual clutter.

Before you begin

Role required: none

About this task

Note: You can only archive cards on a freeform board.

Procedure

Perform one of the following actions.

Option	Description
Archive one card from the lane view	1. Point to a card and click the **X** icon that ap pears in the corner. 2. In the confirmation dialog, click **Archive**.
Archive one card from the card details	1. Click a card and view the **Details** tab. 2. Under **Tools**, click **Archive**. 3. In the confirmation dialog, click **Confirm**.
Archive all the cards in a lane	1. In the lane header, click the more options icon ( ). 2. Select **Archive All Tasks**. 3. In the confirmation dialog, click **Archive**.

What to do next

- To see all archived cards for the current board, from the board navigation panel, open the board information menu ( ) and click **View Archived Tasks**.
- To restore an archived card, point to it and click **Restore**.

Access a task record from a Visual Task Board card

You can open the form view of any task card. Viewing a task record on a form allows you to see all fields for that record, including fields that are not visible in the card details.

Before you begin

Role required: none

About this task

Access a task record using one of the following options.

Procedure

- Access the record from the task card by clicking the record number on the task card.
- Access the record from the card details by doing the following:
  1. Open the card details for a task.
  2. Click the record number in the header.

Move a Visual Task Board card to a different lane

You can move a card from one lane to another on a Visual Task Board.

Before you begin

Role required: none

About this task

When you move a card to a different lane on a guided board, the field on which the lanes are based is updated to reflect the new lane value.

Procedure

1. Open a Visual Task Board.
2. Select a card and drag it to a different lane.
   To cancel the move, press the Escape key while you drag the card.

   Note:

   All mandatory fields on a record must be filled in to move the associated card to a new lane. For example, assume you have a guided board based on the Incident [incident] table, with a lane for each **State**. The **Close code** and **Close notes** fields become mandatory when the **State** changes to **Closed**. If you attempt to move an incident card from the **New** lane to the **Closed** lane, a pop-up view of the form appears and prompts you to fill in the mandatory fields.

   If you get an error message saying **You do not have the permission to modify this record**, create system property `glide.vtb.enable_list_edit_acl` and setting it to **false**.

Move a freeform Visual Task Board card to a different board

You can move a card from one freeform board to another.

Before you begin

Role required: none

Procedure

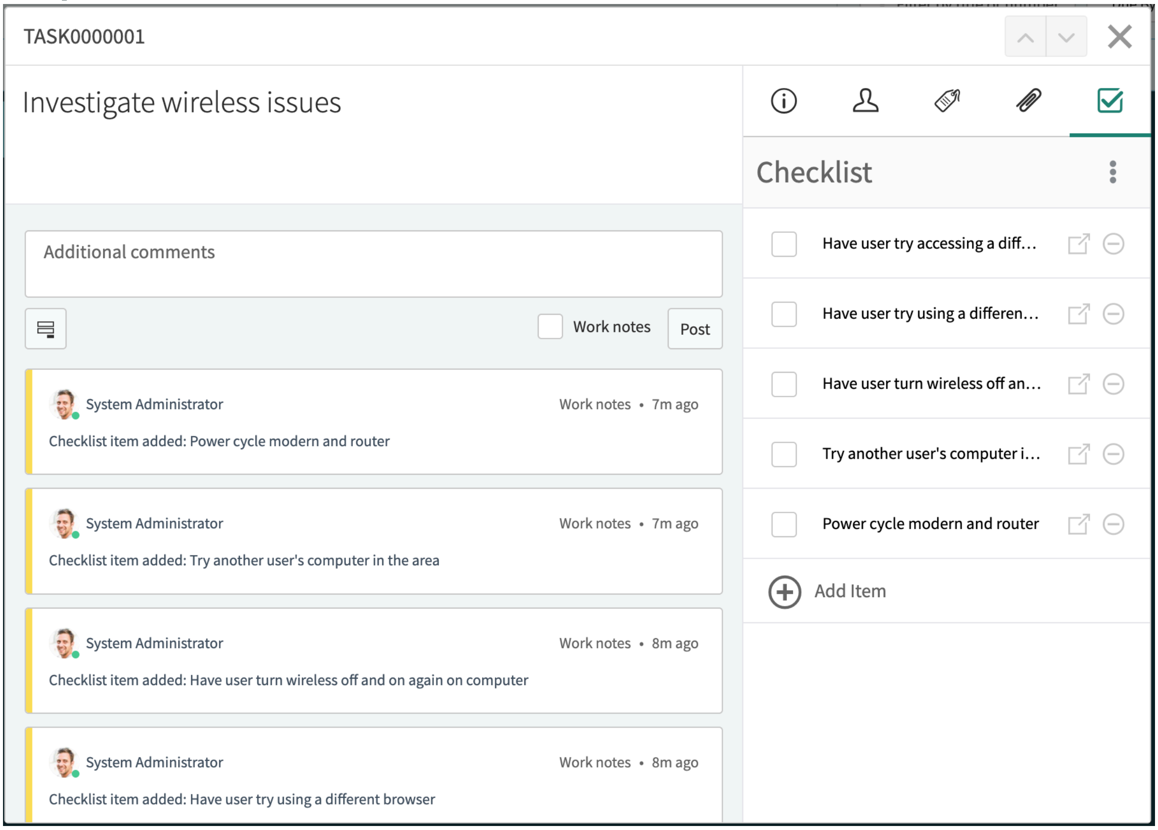
1. Navigate to **All** > **Self-Service** > **Visual Task Boards**.
2. Open a task board.
3. Open the card details.
4. In the details tab (ⓘ), select **Move**.
5. In the pop-up window that appears, select the board and lane to move the card to.
   The board selection list displays freeform boards only.

Visual Task Board checklists

Checklists help you track the progress of tasks on your Visual Task Board.

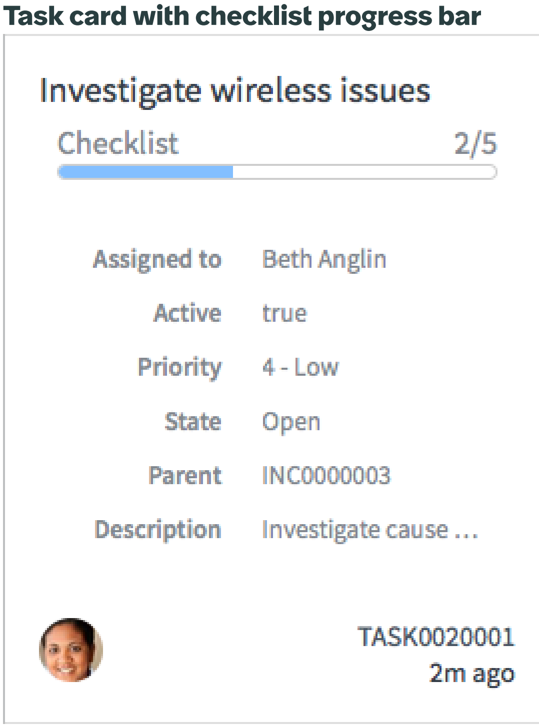
Checklists are available as a tab in the card details.

Sample checklist



You can add, remove, or rearrange checklist items. You can also save a checklist as a template for future use on other cards. Any user can create or edit a checklist. When the compact card view is disabled, the task card displays a progress bar to show how many items are complete.

Task card with checklist progress bar



You can also use checklists with task records in the standard interface. For more information, see Checklists.

Create a checklist for a Visual Task Board card

You can create a unique checklist for each Visual Task Board card or create a task from a checklist item.

Before you begin

Role required: none

Procedure

1. Open the card details for a task.
2. Click the checklist tab ().
3. Click **Add Item**.
4. Enter text for the checklist item.
5. Press the Enter key to add the checklist item.
6. Create as many additional checklist items as desired.
7. To delete a checklist item, click the minus (-) icon.
8. To reorder checklist items, click the drag icon () and drag a checklist item to a different position in the list.
9. To create a task from a checklist item:
   a. Point to a checklist item and click the create task icon ().
   b. Select the type of task you want to create.
      An administrator can configure which task types are available.
      The new task record appears in a pop-up window. The short description is automatically populated with the checklist item text.
   c. Fill in the form with additional detail as necessary.
   d. Click **Update**.

Create a checklist template for Visual Task Board tasks

A template saves time by creating checklist items automatically. You can add, edit, or remove checklist items without impacting the template.

Before you begin

Activate Visual Task Boards.

Role required: none

About this task

There are two ways that you can create a checklist template:

- In the Visual Task Board interface,
- or in the ServiceNow AI Platform.

Procedure

Adding a checklist template in Visual Task Board

1. In Visual Task Board, open the card details for a task.

   > **Note:** You cannot give a checklist template a name when you create a checklist template in the Visual Task Board interface. To give a checklist a name, you must configure the checklist template in the ServiceNow AI Platform.

2. Click the checklist tab ( ).
3. Add items to the checklist that you want to save as part of the template.
4. Click the more icon ( ).
   The more icon does not display unless you have added an item to the checklist, or if you have a pre-existing checklist template.
5. Select **Save as Template**.
6. In the dialog box, enter a descriptive template name to identify the checklist.
   When a user creates a checklist from a template, all templates are listed in alphabetical order and there is no way to filter which templates appear. To provide a better user experience, consider implementing a naming system for checklist templates. For example, include the name of the table or another identifier to clarify how the checklist should be used.
7. Click **Save**.

Adding a checklist in the ServiceNow AI Platform

8. Navigate to **All**, and search for `checklist_template.list`.
9. Select **New** to create a new checklist template.
10. Configure the fields for your new checklist template.

Option	Description
Group	You can use this field to limit the group of users that are allowed to use this checklist template.
Template	Your template in JSON. Example: `{"owner":"2816f79cc0a8916401c5a33be04be443 of items","items": [{"name":"Call the vendor","order":0}, {"name":"Follow up email to customer","order":1}, {"name":"Slack the supervisor","order":2}]}` The attributes of a checklist template are: **Owner** The sys_ID of the user who owns or creates the checklist tem plate. **Name**

Option	Description
	The name of the checklist tem plate. **Items** The checklist items. **Name** The name of a checklist item. **Order** The order in which a checklist item appears in the checklist.
Name	The name of the checklist template.
User	The role required to use the checklist tem plate.

11. Select **Submit**.

Result

Your checklist template is created.

What to do next

Create a checklist from a checklist template by selecting the template from the more icon.

Delete a checklist from a Visual Task Board card

You can remove a checklist from a Visual Task Board card.

Before you begin

Role required: none

Procedure

1. Open a task card that contains a checklist.
2. Click the checklist tab ( ).
3. Click the more icon ( ).
4. Select **Remove Checklist**.
   A confirmation dialog box appears.
5. Click **Delete**.

Configure which types of tasks can be created from Visual Task Board checklist items

A system property controls which types of tasks you can create from a Visual Task Board checklist item.

Before you begin

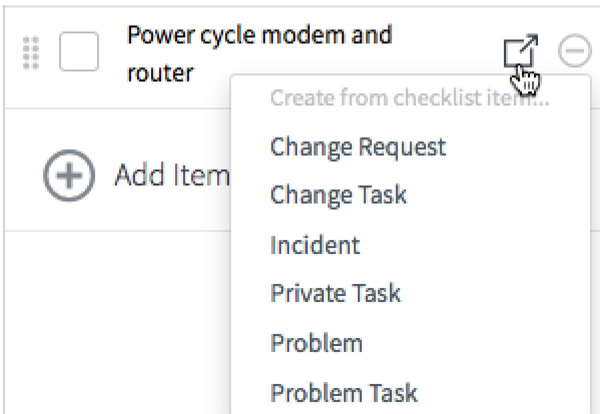
Role required: admin

About this task

You might want to add custom tables or remove tables you do not use.

Procedure

1. Navigate to `sys_properties.list`.
2. Locate the *`glide.ui.create_task_type_option_list`* property.
3. Edit the **Value** to add or remove tables.
   You can add any table that extends Task [task]. Use the table name, not the label. For example, you would enter `change_request`, not Change Request. Ensure the tables listed are separated by commas, with no spaces.
   The property value populates the task type selection list users choose from when they create a task from a checklist item. Note that users can only see task types for which they have the appropriate access roles.



Visual Task Boards reference

The following sections describe the installed components and properties for Visual Task Boards, along with domain separation and supported browser information.

Domain separation and Visual Task Boards

Domain separation is supported in the Visual Task Boards application. Domain separation enables you to separate data, processes, and administrative tasks into logical groupings called domains. You can control several aspects of this separation, including which users can see and access data.

Support level: Basic

- Business logic: Ensure that data goes into the proper domain for the application's service provider use cases.
- The application supports domain separation at run time. The domain separation includes separation from the user interface, cache keys, reporting, rollups, and aggregations.
- The owner of the instance must set up the application to function across multiple tenants.

Sample use case: When a service provider (SP) uses chat to respond to a tenant-customer's message, the customer must be able to see the SP's response.

For more information on support levels, see Application support for domain separation.

How domain separation works in Visual Task Boards

Visual Task Boards that are "data-driven" show the data from tables that are like Task tables. The data that is domain separated is also supported.

Condition-based criteria is used to filter that data. Free-form VTBs' use Private Tasks (vtb_task), which supports domain separation as an extension of Task and inherits domain separation logic as a result.

Related topics

Domain separation for service providers

Supported browsers for Visual Task Boards

The system supports Visual Task Boards on most modern browsers.

Supported browsers

- The latest public release of Firefox or Firefox ESR
- The latest public release of Chrome
- Safari version 12
- Access Visual Task Boards on your mobile device using either a browser or the native mobile app. For more information, see Tested devices and supported versions for ServiceNow mobile apps.

For more information, see Browser support.

Scripting support

Visual task boards do not interact with client scripts. Use a UI policy or a data policy instead.

Installed with Visual Task Boards

Several types of components are installed with Visual Task Boards.

Tables installed with Visual Task Boards

Tables are added to your instance when you activate Visual Task Boards.

Table	Description
Board Member [vtb_board_member]	Stores a record for each member of each task board.
Private Task [vtb_task]	Stores a record for each personal task on each freeform board.
Visual Task Board [vtb_board]	Stores a record for each task board.
Visual Task Board Card [vtb_card]	Stores a record for each task card on each task board.

Table	Description
Visual Task Board Card History [vtb_card_history]	Stores records for certain task card changes, such as lane or assignee changes. Each record indicates the previous value and the new value.
Visual Task Board Lane [vtb_lane]	Stores a record for each lane on each task board.

Properties installed with Visual Task Boards

Properties are added to your instance when you activate Visual Task Boards.

Note: To open the System Property [sys_properties] table, navigate to All, and then enter `sys_properties.list` in the navigation filter.

Property	Description
vtb.board.upload_limit	Sets the maximum file size in megabytes allowed for each task card attachment. • **Type**: integer • **Default value**: 10 • **Location**: System Property [sys_properties] table

Script includes installed with Visual Task Boards

Script includes are added to your instance when you activate Visual Task Boards.

Script include	Description
VisualTaskBoards	Provides general utilities for Visual Task Boards.
VTBBoardSecurity	Provides security utilities to control board access.
VTBGetBoardsByUser	Provides a method that retrieves all the boards a specified user owns or is a member of.
VTBTaskSecurity	Provides security utilities to control task access.

Client scripts installed with Visual Task Boards

Client scripts are added to your instance when you activate Visual Task Boards.

Client script	Table	Description
Add Kanban Choice	Visual Task Board [vtb_board]	Adds the **-- Kanban Board --** option to the **Lane field** field. This option indicates that the task board is a flexible board.

Business rules installed with Visual Task Boards

Business rules are added to your instance when you activate Visual Task Boards.

Business rule	Table	Description
Add members to live group	Board Member [vtb_board_member]	If a Connect Chat conversation is created for a task board, this business rule adds the board members as conversation members.
Remove member from live group	Board Member [vtb_board_member]	If a Connect Chat conversation exists for a task board and a user is removed from the board members, this business rule removes the user from the conversation members.
Remove member from VTB	Live Group Member [live_group_member]	If a Connect Chat conversation exists for a task board and a user is removed from the conversation members, this business rule removes the user from the task board members.
Sync board name to Connect	Visual Task Board [vtb_board]	If a Connect Chat conversation exists for a task board and someone updates the board name, this business rule updates the conversation name.
Sync chat name to VTB board	Live Group Profile [live_group_profile]	If a Connect Chat conversation exists for a task board and someone updates the conversation name, this business rule updates the board name.
Sync Members With VTB	Live Group Member [live_group_member]	If a Connect Chat conversation exists for a task board and a user is added to the conversation members, this business rule adds the user as a board member.
Update Board on Card Change	Visual Task Board Card [vtb_card]	Triggers the system to update the task board when changes occur to the cards.
Update Board on Lane Change	Visual Task Board Lane [vtb_lane]	Triggers the system to update the task board when changes occur to the lanes.
update board on lane change	Board Member [vtb_board_member]	Triggers the system to update the task board when changes occur to the board members.
VTB Previous Additional Assignees	Private Task [vtb_task]	Triggers the system to send an email notification to users when they are designated as additional assignees for cards.

Related topics

Connect Chat

Notifications installed with Visual Task Boards

Notifications are added to your instance when you activate Visual Task Boards.

Notification	Description
VTB member addition notification	Sends an email notification to the member about their addition to the board.
VTB member deletion notification	Sends an email notification to the member about their removal from the board.
VTB additional assignee notification	Sends an email notification to users when they are designated as additional assignees for tasks.
VTB assignee notification	Sends an email notification to users when they are designated as the primary assignees for personal tasks.
VTB lane change notification	Sends an email notification to a task's assignees when the task changes lanes.
VTB lane limit reached	Sends an email notification to the board member that the number of tasks in the lane has reached the set lane limit.
VTB lane limit exceeded	Sends an email notification to the board member that the number of tasks in the lane has exceeded the set lane limit.
VTB card movement across vertical lanes and swimlanes	Sends an email notification to the board member with the details of the card moved and the member who moved the card.

Timeline Visualizations

A timeline visualization is a representation of an organization's activities over time.

Note:

Starting with the Xanadu release, timeline visualization is being prepared for future deprecation. It will be hidden and no longer activated on new instances but will continue to be supported. For details, see the Deprecation Process [KB0867184] article in the Now Support Knowledge Base.

Install the Portfolio Planning (standard customers) or Strategic Planning (Pro customers) application from the ServiceNow® Store. Review the Planning roadmaps in Portfolio Planning or Roadmaps in Strategic Planning documentation for guidance on the roadmap functionality available within these workspaces. Migrate to the Portfolio Planning Workspace (SPM Standard) application that provides latest experience for this functionality.

Typically, timeline visualizations are useful for quickly assessing the impact of future strategic and operational activities such as change requests and projects. Timeline visualizations come in two varieties: a two-dimensional (2D) view where activities are grouped by month, and a three-dimensional (3D) view where activities are grouped in lanes. Both views are interactive, and the 2D view can be printed.

Timeline administrators, users with the timeline_admin role, can set up visualizations to represent ITSM-related activities, such as incidents, problems, changes, and projects. Timeline administrators or users with the timeline_user role can personalize their timeline visualizations from the Settings pane in the visualization.

The CIO Roadmap timeline visualization shows your organization's projects grouped by portfolios. Organizational leaders can use the CIO Roadmap to monitor and evaluate the status of current and upcoming projects.

Note: Activating timeline visualizations does not activate predefined CIO roadmap. You require PPM (com.snc.financial_planning_pmo) plugin to use CIO roadmap.

Key terms for timeline visualizations

Lane

A logical grouping of items on the 3D timeline visualization. For example, one lane might show pending projects while another lane shows open projects.

Panel

A block that represents an item record in a 2D timeline visualization, or a block that represents one or more item records in a 3D timeline visualization.

Summary view

A pop-up window that appears when a user clicks a panel in either the 2D or 3D timeline visualization. The summary view contains additional information about the record. Timeline administrators configure the information that appears in the summary view.

Marker

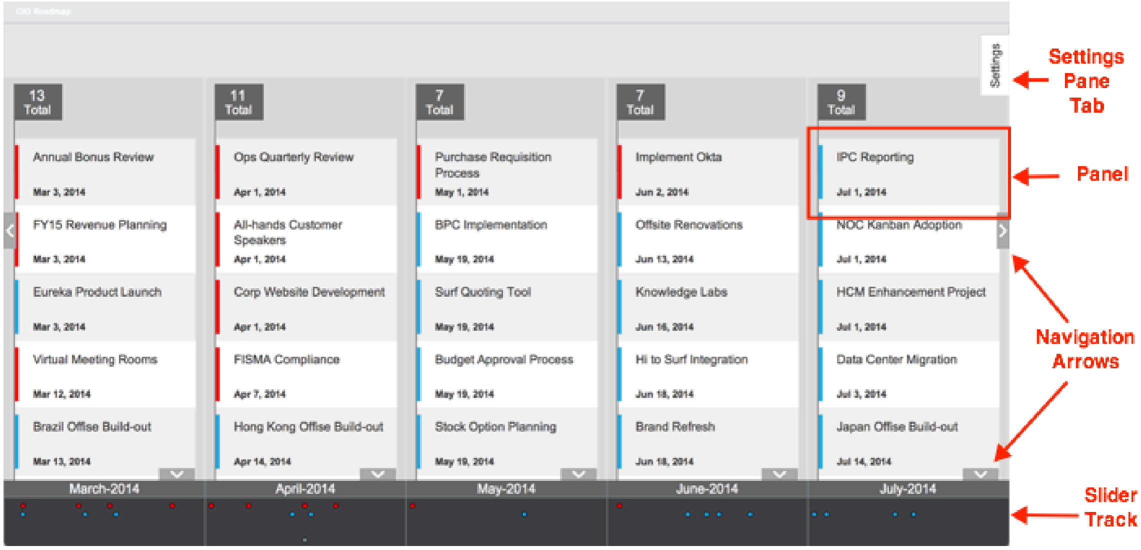
A bar indicating the start of a month in a 3D timeline visualization.

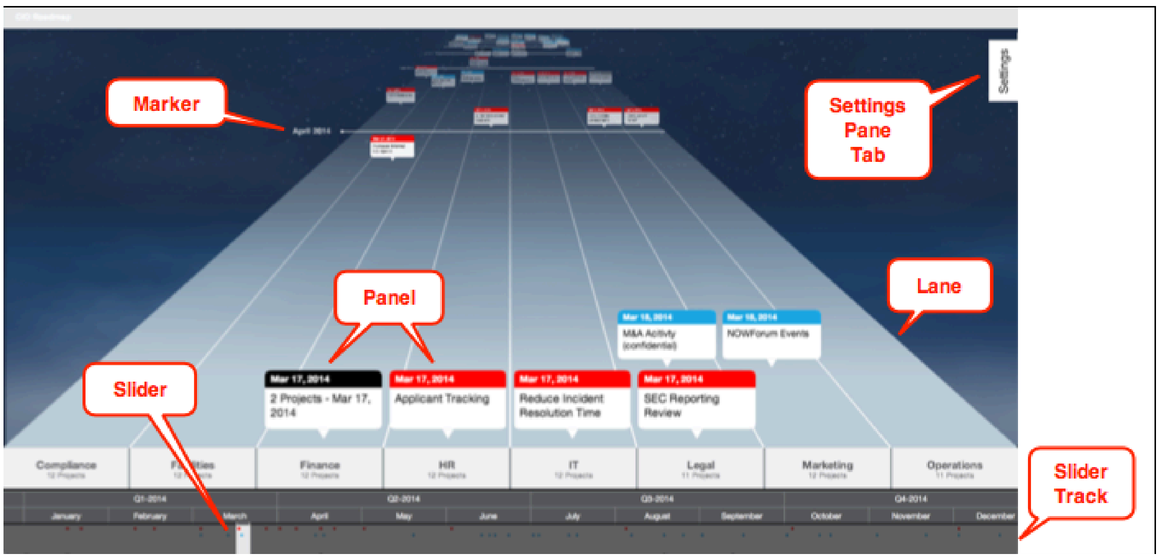
Slider

A tool used to control the time period seen in a 3D visualization.

Slider track

An alternative view of the panels displayed in both the 2D and 3D timeline visualization.





Activate Timeline Visualization

An administrator can activate the Timeline Visualization plugin (com.snc.timeline_visualization) to access the functionality.

Before you begin

Role required: admin

About this task

To use the CIO roadmap with timeline visualization, you must activate Project Portfolio Management (com.snc.financial_planning_pmo) plugin.

Procedure

1. Navigate to **All** > **System Applications** > **All Available Applications** > **All**.
2. Find the plugin using the filter criteria and search bar.

   You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.
3. Select **Install** to start the installation process.

Note: When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: `Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.`

You will see a message after installation is completed. For information about the components installed with a plugin, see Find components installed with an application.

Installed with Timeline Visualizations

Several components are installed with timeline visualizations.

Tables

Timeline visualization adds the following table.

Table	Description
Timeline Visualization [roadmap_page]	Stores all available timeline visualizations.
Personalize Timeline [roadmap_user_page]	Stores timeline personalization settings for all timeline visualizations.

UI Policies

Timeline visualization adds the following UI policy.

Name	Table	Description
Control Timeline Visualization configuration Page to enable/ disable certain fields	Timeline Visualization [roadmap_page]	Script that hides fields in the Timeline Visualization form when the form loads.

Script Includes

Timeline visualization adds the following script includes.

Name	Description
Roadmap2DUtil	Timeline Visualization - 2D API to generate data for lanes and panels.
RoadmapCommonUtil	Timeline visualization common utility to handle generic functions.

(continued)

Name	Description
RoadmapConfig	Timeline visualization utility allowing configuration through the Timeline Visualization [roadmap_page] table.
RoadmapItems	Timeline visualization utility to get lane items.
RoadmapUtil	API to generate data for lanes and panels.

Client Scripts

Timeline visualization adds the following client scripts.

Name	Table	Description
Roadmap Color Choice	Timeline Visualization [roadmap_page]	Sets color values for the color choice fields in the timeline visualization configuration page.
Roadmap Item Table	Timeline Visualization [roadmap_page]	Allows changing the color fields for the item_color_key whenever there is a change to the panel table.
Roadmap On Load	Timeline Visualization [roadmap_page]	Loads the personalized version of the roadmap/ visualization.
Roadmap Panel Table Change	Timeline Visualization [roadmap_page]	Allows changing the field name for item_color_key whenever there is a change to the panel/visualization table.

Business Rules

Timeline visualization adds the following business rule.

Name	Table	Description
Check only one default	Timeline Visualization [roadmap_page]	Checks if another visualization is already set as default when

(continued)

Name	Table	Description
		user sets a new visualization as the default.

Timeline visualizations roles

Timeline visualizations provides two roles.

To learn more about managing subscriptions, see Managing per-user subscriptions in Subscription Management and contact your account representative.

Timeline administrator [timeline_admin]

Create and edit timeline visualization pages and view timeline visualizations.

Contains Roles

Timeline administrator contains the Timeline User [timeline_user] role.

Groups

List of groups this role is assigned to by default.

None.

Special considerations

Important: Avoid granting an admin role when more specialized roles are available.

Timeline user [timeline_user]

View timeline visualizations. Timeline user access is also granted to users with the `project_manager` and `project_user` roles.

Contains Roles

List of roles contained within the role.

None.

Groups

List of groups this role is assigned to by default.

None.

Special considerations

None.

Create a Timeline Visualization

Set up timeline visualizations for the organization's leaders by creating a timeline that provides visual representations of the organization's operational and strategic activities.

Before you begin
Role required: timeline_admin

servicenow

About this task

Additionally, create timeline visualization views to define what data appears in the summary window when a user clicks a panel on the timeline.

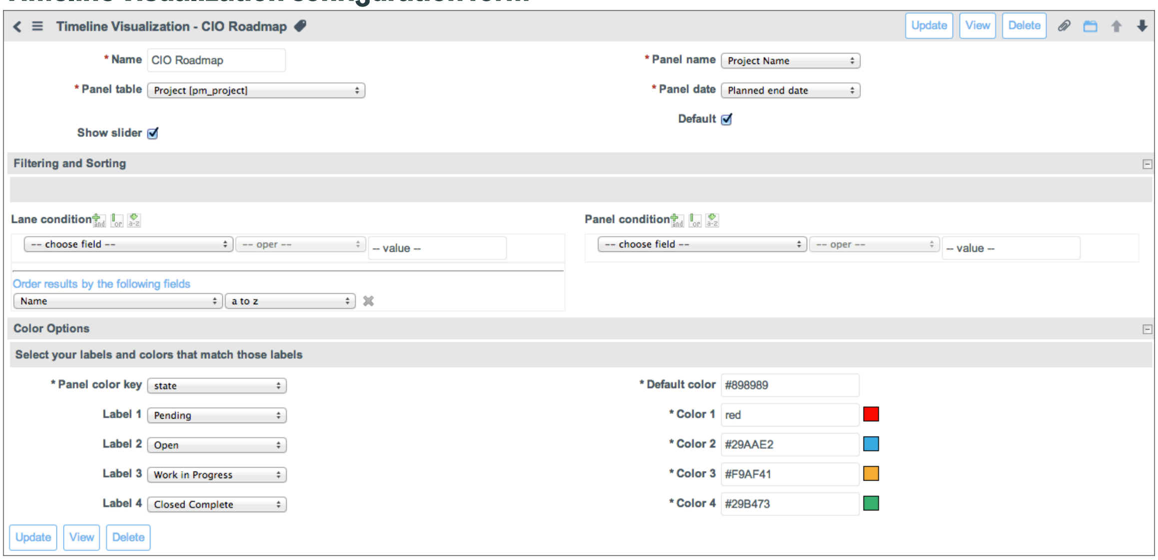
Note: Activating timeline visualizations doesn't activate predefined CIO roadmap. You require PPM (com.snc.financial_planning_pmo) plugin to use CIO roadmap.

Procedure

Navigate to **Timeline Visualization** > **Create New** and create a new record.

Example

Timeline visualization configuration form



Timeline visualization configuration form field descriptions

Field	Description
Name	Unique name for the visualization.
Panel table	Table that provides the records displayed as lanes and panels in the timeline. **Note:** The list shows only tables and database views that are in the same scope as the visualization.
Relationship field	Field on the table that contains values displayed as lane titles. Typically this field is a reference field or a field that contains a limited range of values. **Note:** The CIO Roadmap timeline visualization is a ServiceNow customized visualization for the Project application that does not use the Relationship field.
Show slider	Check box that enables (selected) or disables (cleared) displaying the timeline slider that users move to change the dates shown.
Panel name	Field from the Panel table that contains the values displayed in the panel body.
Panel date	Field from the Panel table that contains the date values displayed in the panel head in 3D view and in the panel body in 2D view. These dates also determine placement of panels on a lane. Only date and date-time fields are available on the choice list.

Field	Description
Default	Check box that sets (selected) or removes (cleared) the default status of a visualization when you have more than one defined for a specific table. Applications that include a visualization use the default visualization.
Max items per lane	Maximum number of items that are displayed in a lane in 3D view. The default value is 500. **Note:** The field is not visible on the form by default. Configure the form to add this field.
Max items per lane 2d	Maximum number of items that are displayed in a lane in 2D view. The default value is 99. **Note:** The field is not visible on the form by default. Configure the form to add this field.

Timeline visualization configuration filtering and sorting form field descriptions

Field	Description
Lane condition	Condition builder used to create filters and apply sorting to values that are used as lanes in 3D view visualizations. For example, if you set **[Name] [is not] [IT]** as a lane condition for the CIO Roadmap, then IT no longer appears as a lane in the roadmap, nor does it appear as a lane option in the Settings pane. Removing the filter restores the IT lane to the visualization and to lane options in the Settings pane. To order the results, specify sorting based on relevant field names. For example, to order the portfolio names so that they appear in reverse alphabetical order on the CIO Roadmap, set the sort fields to **[Name] [z to a]**.
Panel condition	Condition builder used to create filters and apply sorting to values that are used as panels in 2D and 3D view visualizations. For example, if you set **[State] [is one of] [Pending, Open, Work in Progress]** as the panel condition for the CIO Roadmap, only projects that are in one of those states appear on the roadmap.

Timeline visualization configuration color options form field descriptions

Field	Description
Panel color key	Field from the Panel table that contains values used for color coding the information displayed. The field selected here determines the values that are available in the **Label** fields on the form. The CIO Roadmap uses **State**, which is a field in the Project table. Panels on the CIO Roadmap are color coded according to the project state, which can be *Pending*, *Open*, *Work in Progress*, *Closed Complete*, *Closed Incomplete*, and *Skipped*. **Note:** You require PPM (com.snc.financial_planning_pmo) plugin to use CIO roadmap. Examples of other fields that are suitable for this selection include **Priority**, **Risk**, and **Approval**.

Field	Description
Label 1 Label 2 Label 3 Label 4	Values to be color coded. The values available are determined by the **Panel color key** field. For example, the CIO Roadmap is based on the Project table and has the **Panel color key** set to the **State** field, which contains the values *Pending*, *Open*, *Work in Progress*, *Closed Complete*, *Closed Incomplete*, and *Closed Skipped*. You can set set specific colors for up to four values from the selected field. Other values are shown in the **Default color**.
Default color	Color applied to values that are not selected for labels. For example, the CIO Roadmap color codes and creates labels for the values *Pending*, *Open*, *Work in Progress*, and *Closed Complete*. The additional values, *Closed Incomplete* and *Closed Skipped*, use the default color.
Color 1 Color 2 Color 3 Color 4	Colors that correspond to each of the **Label** field values. For example, if **Label 1** is the *Pending* state, and **Color 1** is *red*, then panels for projects in the pending state are red.

Create a Timeline Visualization view

The timeline visualization view determines which record details appear in the pop-up summary window when a user clicks a panel.

Before you begin

Role required: admin

About this task

You can create one timeline visualization view per table. For example, if your view shows incident records, you can create a view on the Incident table to show only certain information, such as the incident number, priority, and short description.

If no Timeline Visualization view exists, all panels use the default view that shows all the fields that currently appear on the default view of the form for that table. After you create a Timeline Visualization view for a table, all panels then use that view.

For example, to create a Timeline Visualization view using the Incident form:

Procedure

1. Navigate to **Incident** > **All**.
2. Open an incident.
3. Right-click the form header and select **Configure** > **Form Layout**.
4. Under **Form view and section**, go to the **View name** field and select **New**.
5. Enter **timeline visualization** in the **View** name field.

6. Click **Ok** to create the timeline visualization view.
7. Add fields to or remove items from the timeline visualization view using the **Available** and **Selected** columns.
8. Click **Save**.

Planning Your Timeline Visualization

Before creating a timeline visualization, you should have a clear idea of the information that you want to display.

This planning process helps you identify the required table and fields, and determine filtering and sorting requirements. Since users can personalize the visualization, avoid setting restrictive filters that may prevent users from finding categories that they are accustomed to seeing. You can use the CIO Roadmap as a starting point for creating your own timeline visualizations.

> **Note:** Activating timeline visualizations doesn't activate predefined CIO roadmap. You require PPM (com.snc.financial_planning_pmo) plugin to use CIO roadmap.

Use Timeline Visualization

Timeline Visualization provides a high-level view of an organization's strategic and operational activities over time.

Organizational decision makers can use the information in visualizations for activities such as planning future projects and estimating resource requirements. Users can personalize the information displayed with the visualization Settings pane.

Activating the Timeline Visualization application does not install the CIO Roadmap. You require PPM (com.snc.financial_planning_pmo) plugin to use CIO roadmap. CIO Roadmap is a timeline visualization that displays an organization's IT projects and portfolios. This following sections use the CIO Roadmap to demonstrate features of timeline visualizations.

Lanes, markers, and panels

Lanes, markers, and panels are the fundamental elements of a timeline visualization. appear in the 3D view only.

> **Note:** Lanes and markers are available in the 3D view only. A panel in the 2D view always represents a single record, while panels in 3D view may represent one or more records.

Lanes

A lane is a channel in which activities are grouped. A visualization can display up to eight lanes at a time. While viewing a visualization, you can use the Settings pane to show or hide individual lanes.

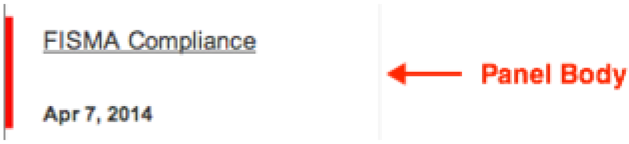
> **Note:** The number of items displayed in a lane depends on the **Max items per lane** and **Max items per lane 2d** settings on Timeline Visualization form.

Markers

Markers are horizontal lines that cross all lanes and identify a transition to the next month.

Panels

Panels in both 2D and 3D views are color coded according to values that the administrator selects during the initial setup.



In 2D view, panels are grouped by month and stacked in chronological order, from the earliest date to the latest date. By default, the 2D view opens with the current month displayed on the left side of the visualization. You can print visualizations from the 2D view using the browser's print option. In 3D view, panels are grouped in lanes and ordered by date, from earliest to latest. The date that appears on the panel determines its placement in 2D and 3D view. The date displayed is based on a value the timeline administrator selects during initial setup.

Panels appear in the CIO Roadmap according to the planned completion date for the project. In 3D view, projects with the same planned date of completion are consolidated into a single panel. In 2D view, projects with the same planned date of completion are displayed as individual panels.

Panel headers in the CIO Roadmap are color coded based on project state. However, in 3D view, if a panel represents more than one project, the panel header is colored black. The Settings pane contains a key showing each available project state and the corresponding color.

Note: Activating timeline visualizations doesn't activate predefined CIO roadmap. You require PPM (com.snc.financial_planning_pmo) plugin to use CIO roadmap.

To view additional information about a panel:

- Click a panel for a single record while in 2D or 3D view to open a summary window that contains additional information. Click the heading in the summary window to open the full record.
- Press the Shift key and then click a panel to open the full record.
- Click a panel that represents multiple records to open a list of those records. Click a record number to open the full record.

The timeline administrator can configure the information that appears in summary windows.

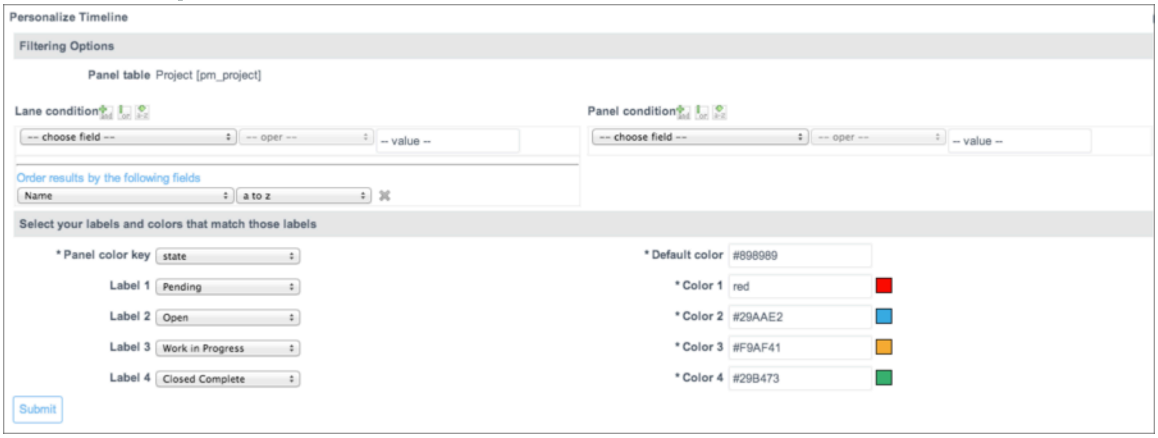
Personalize Timeline Visualizations

You can configure settings for timeline visualizations like lane and panel conditions, colors, and labels.

Personalization

Open the Settings pane and click **Configure**. Complete the form as appropriate (see table).

Visualization personalization



Timeline visualization personalization form

Field	Description
Lane conditions	Condition builder used to create filters and apply sorting to values that are used as lanes in 3D view visualizations. For example, if you set [Name] [is not] [IT] as a lane condition for the CIO Roadmap, then IT no longer appears as a lane in the roadmap, nor does it appear as a lane option in the Settings pane. Removing the filter restores the IT lane to the visualization and to lane options in the Settings pane. To order the results, specify sorting based on relevant field names. For example, to order the portfolio names so that they appear in reverse alphabetical order on the CIO Roadmap, set the sort fields to [Name] [z to a].
Panel conditions	Condition builder used to create filters and apply sorting to values that are used as panels in the visualization. For example, if you set [State] [is one of] [Pending, Open, Work in Progress] as the panel condition for the CIO Roadmap, only projects that are in one of those states appear on the roadmap.
Panel color key	Field from the Panel table that contains values used for color coding the information displayed. The field selected here determines the values that are available in the Label fields on the form. The CIO Roadmap uses State, which is a field in the Project table. Panels on the CIO Roadmap are color coded according to the project state, which can be Pending, Open, Work in Progress, Closed Complete, Closed Incomplete, and Skipped. Examples of other fields that are suitable for this selection include Priority, Risk, and Approval.
Label 1 Label 2 Label 3 Label 4	Values to be color coded. The values available are determined by the Panel color key field. For example, the CIO Roadmap is based on the Project table and has the Panel color key' set to the State field, which contains the values Pending, Open, Work in Progress, Closed Complete, Closed Incomplete, and Closed Skipped. You can set specific colors for up to four values from the selected field. Other values are shown in the Default color.

Timeline visualization personalization form (continued)

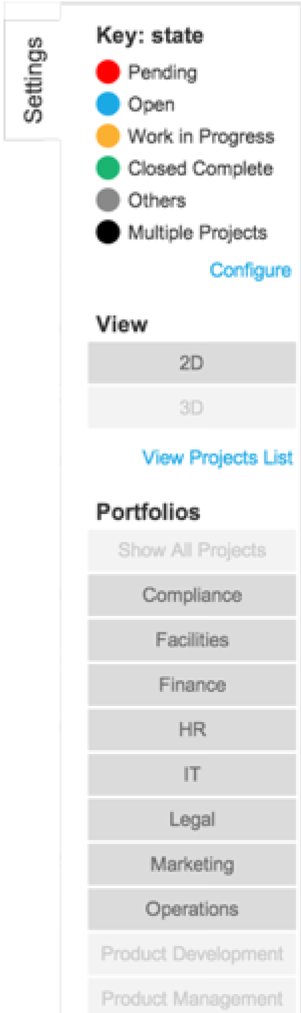
Field	Description
Default color	Color applied to values that are not selected for labels. For example, the CIO Roadmap color codes and creates labels for the values Pending, Open, Work in Progress, and Closed Complete. The additional values, Closed Incomplete and Closed Skipped, use the default color.
Color 1 Color 2 Color 3 Color 4	Colors that correspond to each of the Label field values. For example, if Label 1 is the Pending state, and Color 1 is red, then panels for projects in the pending state are red.

Note:

- Activating timeline visualizations doesn't activate predefined CIO roadmap. You require PPM (com.snc.financial_planning_pmo) plugin to use CIO roadmap.
- If the **Max items per lane** field is set to more than `1000`, you may observe a delay when displaying the timeline data using Internet Explorer (IE) as the browser.

The Settings pane

Element names in the Settings pane vary based on the table and fields used to create the visualization.



The Settings pane contains the following elements:

Settings pane elements

Element	Description
Key	Identifies the type of information that is color coded on the timeline, such as state or priority. It also lists the color assigned to each possible value, such as pending state and open state.
Configure	Allows you to personalize a visualization by creating filters on lane information and panel information, specifying sort order for results, and reassigning panel colors. These changes affect your view of the visualization only.
View	Allows you to switch between 2D and 3D view.
View <table> List	Opens a separate browser tab showing the complete record list for the associated table.
Portfolio	Allows you to click lane names to add or remove them from the visualization. While the visualization is in 2D view, the Settings pane displays a *Show all <records>* button that allows you to override lane filters applied to the initial setup.

Use the slider and slider track

The slider and slider track are useful for quickly navigating to any point in time on a visualization.

Note: Activating timeline visualizations doesn't activate predefined CIO roadmap. You require PPM (com.snc.financial_planning_pmo) plugin to use CIO roadmap.

For the CIO Roadmap, the slider track allows you to quickly view the distribution of projects over time and determine project states. While in 3D view, click and drag the slider to move the timeline forward or backward. In 2D view, click and drag the slider track right or left to move the timeline forward or backward.

The slider track provides an alternative view of panels on a visualization. For the CIO Roadmap, a colored dot in the slider track indicates the presence of one or more projects for a given day. The different dot colors correspond to different project states. This allows you to scan the slider track to identify projects of interest by their color, and then use the slider or slider track to quickly navigate to those projects. For example, if you are interested in projects that are in a pending state, you can use the slider to navigate to the colored dots that represent that state.

Note: Dots in the slider track do not correspond one-to-one with panels in a visualization. A dot represents the presence of one or more projects on a given date. In 3D view, if there is more than one project for a given day, all of the projects for that day are combined into a single panel on the roadmap. When the slider track is populated, projects in a multi project panel are analyzed for project state and then represented as appropriately colored dots in the slider track.

Similarly, you can use the slider or slider track in conjunction with the calendar to quickly navigate to any point in time. For example, if you are concerned about resource issues in April 2014 because you see a large cluster of dots during that time, dragging the slider or slider track to those dots brings those projects into view. Click the individual panels to view additional information.

View timeline visualization

You can view timeline visualizations from a project.

Before you begin

Role required: none

Procedure

1. Navigate to **Project** > **Projects** > **All**.
2. Scroll to the bottom of the list and click the **Timeline Visualization** related link.

   By default, the CIO Roadmap opens in three-dimensional (3D) view with the current date at the forefront of the timeline. You can use the Settings pane to change between two-dimensional (2D) and 3D view. As soon as you view a timeline visualization, it is considered personalized. After that, you see your personalized view even if the timeline administrator makes changes to the default visualization.

   Note: Activating timeline visualizations doesn't activate predefined CIO roadmap. You require PPM (com.snc.financial_planning_pmo) plugin to use CIO roadmap.

   Timeline administrators can create timeline visualizations on other tables. If you are not sure whether a timeline visualization exists for a certain application, use the application navigator to open the application of your choice, and click **All**. If a timeline visualization exists for the application's table, a Timeline Visualization related link appears.

Work with timeline visualizations

There are various tools that allow you to move visualizations backward and forward in time depending on whether you are in 2D or 3D view.

The following options are available for navigating between months.

2D views

Option	Description
Dragging	Hold down the left mouse button and drag the slider track right or left to view other months.
Left and right arrow keys	Press the left or right arrow keys on the keyboard to move the timeline forward or backward.
Mouse wheel button	Scroll the wheel to move the timeline forward or backward.
Right and left navigation arrows	Click the arrows to move from month to month. Arrows do not appear if there are no additional months to view.

The following options are available for navigating stacked panels.

Navigating stacked panels

Option	Description
Dragging	Hold down the left mouse button and drag the stack up or down to view other panels.
Up and down navigation arrows	Click the arrows in a stack to view additional panels for the same month. Arrows do not appear if there are no additional panels to view.

The following options are available for navigating in 3D view.

3D view

Option	Description
Dragging	Hold down the left mouse button and drag the slider along the slider track to move the timeline forward or backward.
Mouse wheel button	Scroll the wheel to move the timeline forward or backward.
Up and down arrow keys	Press the arrow keys to move the timeline forward or backward.
Shift key	Press the shift key and click the panel for a single record to open the complete record that contains additional information.