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Australia Industrial Connected Workforce

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Table of Contents

Industrial Connected Workforce

Industrial Connected Workforce (ICW) helps you run manufacturing operations and digitize the factory floor.

The Industrial Connected Workforce (ICW) is a set of applications that helps you run your industry operations and digitize the factory floor and its procedures.

It can be accessed either from the workspace or on mobile. All authoring tasks are performed in the Digital Factory Workspace.

Dynamic filtering of tasks by location, functional location, equipment, and shift is supported.

Industrial Connected Workforce Core

Industrial Connected Workforce (ICW) Core helps industrial organizations structure and manage shop floor operations efficiently. It establishes essential frameworks, such as organizational hierarchy, equipment models, shift patterns, and task flows, which enables reliable execution of industrial work.

Get started

Configure

Set up prerequisites and configure components for Digital Factory Workspace.

Industrial Connected Workforce reference

Reference

Look up additional technical details about ICW Core.

ICW Core provides the structural foundation for the Industrial Connected Workforce suite. It converts industrial operational elements, such as organizational structure, equipment hierarchies, and worker shifts, into digital models. These models combine with knowledge and workflows to enable precise, contextual, and compliant execution of industrial tasks.

Configuring ICW Core

Configure Industrial Connected Workforce (ICW).

Configuration overview

To make sure that all required components are installed, start by installing the ICW Mobile app.

When you install ICW Mobile, it automatically installs the following dependencies for you:

- ICW Core
- Industrial Standards
- Industrial Guided Tasks

Note: The ICW Core, Industrial Standards, and Industrial Guided Tasks applications are not intended to be used as stand-alone solutions.

Archive rules in the Industrial Connected Workforce

Archiving rules in the Industrial Connected Workforce (ICW) helps maintain system efficiency by automatically managing outdated records. These rules verify that only relevant and current data remains active.

The system applies archiving rules to the following record types:

- Deviations
- Actions
- Root cause analyses (RCAs)

The system automatically archives records that haven't been updated in two years (both active and inactive).

By default, archiving rules are active in the ICW. You can manage these rules by going to **All** > **System Archiving** > **Archive Rules** and deactivating rules as needed.

The ICW includes the following predefined rules:

- Archive stale actions after 2 years: Archives actions that haven't been updated in two years.
- Archive stale deviations after 2 years: Archives deviations that haven't been updated in two years.
- Archive stale RCAs after 2 years: Archives root cause analysis tasks that haven't been updated in two years.

These archiving rules support data hygiene and system usability by making sure that outdated records don't interfere with active workflows.

For more information on archive rules, see Create an archive rule in Core UI.

Configure the contextual sidebar

Configure whether the sidebar is open or closed by default for users in your instance.

Before you begin

Role required: sn_icw.application_admin

About this task

The sidebar tab that contains Agent assist, Recommended Actions, attachments, and other additional information for the record is by default not open. To change settings and make it open by default across the instance, follow the instructions provided here.

Procedure

1. Navigate to **All** > **User Administration** > **User Preferences**.
2. Select **New**.
3. On the User Preference record form, fill in the fields.
   For a description of the field values, see User preference form.
4. Select **Submit**.

Result

The new user preference record is displayed in the list of user preferences.

Industrial Connected Workforce reference

Reference topics provide additional information about Industrial Connected Workforce.

Components installed with the Industrial Connected Workforce

Several types of components are installed with activation of the plugin, including tables and user roles.

Roles installed

Role title [name]	Description	Contains roles
Action Expert [sn_icw.action_expert]	Expert role for the Actions module	sn_icw.action_user
Action User [sn_icw.action_user]	User role for the Actions module	• sn_icw.user • sn_nb_action.next_best_action_user
ICW Admin [sn_icw.admin]	Administrator role for the ICW Core application	• category_manager • cmdb_ot_isa_editor • sn_ent.classification_manager • sn_icw.user • view_changer • schedule_admin • cmdb_ot_isa_admin • model_manager • sn_smart_asmt.assessment_admin
ICW Application Admin sn_icw.application_admin	Role for administering the ICW application	sn_icw.admin

Role title [name]	Description	Contains roles
ICW Config [sn_icw.config]	Configuration role for the ICW Core application	• sn_icw.user • cmdb_ot_isa_editor • schedule_admin
Deviation Expert [sn_icw.deviation_expert]	Expert role for the Deviations module	sn_icw.deviation_user
Deviation User [sn_icw.deviation_user]	User role for the Deviations module	• sn_icw.user • sn_nb_action.next_best_action_user
Knowledge Author [sn_icw.knowledge_author]	Knowledge Author role for the ICW Core application	• knowledge • sn_icw.user
Knowledge Manager [sn_icw.knowledge_manager]	Knowledge Manager role for the ICW Core application	• knowledge_coach • knowledge • sn_icw.user • knowledge_manager • knowledge_view_as
Root Cause Analysis Expert [sn_icw.rca_expert]	Expert role for Root Cause Analysis	sn_icw.rca_user
Root Cause Analysis User [sn_icw.rca_user]	User role for root Cause Analysis	• sn_icw.user • sn_nb_action.next_best_action_user
ICW Report User [sn_icw.report_user]	Report user role for the ICW Core application	• cmdb_read • cmdb_ot_viewer • sn_ent.classification_reader
Safety Incident User [sn_icw.safety_incident_user]	Can view and report safety incidents	• sn_icw.user • sn_ohs_im.incident_reader • sn_ohs_im.incident_writer • sn_ohs_im.workspace_user

Role title [name]	Description	Contains roles
ICW User [sn_icw.user]	User role for the ICW Core application	• canvas_user • cmdb_ot_isa_viewer • sn_ent.classification_reader

Tables installed

- Industrial Action [sn_icw_action]
- Action Priority Data lookup [sn_icw_action_dl_priority]
- Industrial Deviation [sn_icw_deviation]
- Deviation Priority Data lookup [sn_icw_deviation_dl_priority]
- Failure [sn_icw_failure]
- Industrial Calendar [sn_icw_industrial_calendar]
- Industrial Calendar Span [sn_icw_industrial_calendar_span]
- Industrial Root Cause Analysis [sn_icw_rca]
- Root Cause Analysis Priority Data lookup [sn_icw_rca_dl_priority]
- Industrial Task [sn_icw_task]
- Worker profile [sn_icw_worker_profile]

User preference form

The following table describes the field values for the user preference form.

User preference form

Field	Description
Description	An optional short description of the feature or functionality. For example "Show the agent assist in the form."
User	Name of the user for whom the setting is customized. If this field is empty, the record is for a system-wide default.
Name	Name of the feature or functionality. Enter the value `workspace.showAgentAssist`.
Value	Current setting for this record. Enter the value `true`.
Type	Data type of entry accepted for the Value. Select **true | false**.
System	Option to enable or disable the system-wide default. Select this option.

Digital Factory Workspace

Digital Factory Workspace helps standardize processes and improve efficiency on the factory shop floor by bringing tasks, equipment details, and standards together in one place. It provides

structured layouts and a Standards hub to support consistent task execution and better operational performance.

Get started

Explore  Learn about the features and benefits of Digital Factory Workspace.	Configure  Set up prerequisites and configure components for Digital Factory Workspace.
Use  Manage your shop floor processes and everyday tasks in Digital Factory Workspace.	Reference  Get details about Digital Factory Workspace components such as forms, fields, roles, and properties.

Digital Factory Workspace acts as a centralized operational hub for Industrial Connected Workforce ICW, which enables operators and equipment owners to manage deviations, breakdowns, actions, and root cause analysis through structured task flows. Digital Factory Workspace enables you to use access and use:

- Standards hub for governing operational standards
- Operational Equipment Model for managing ISA-95 hierarchies
- Industrial Materials for organizing material classes
- Manufacturing Standards, Industrial Guided Tasks, and knowledge articles across the shop floor environment.

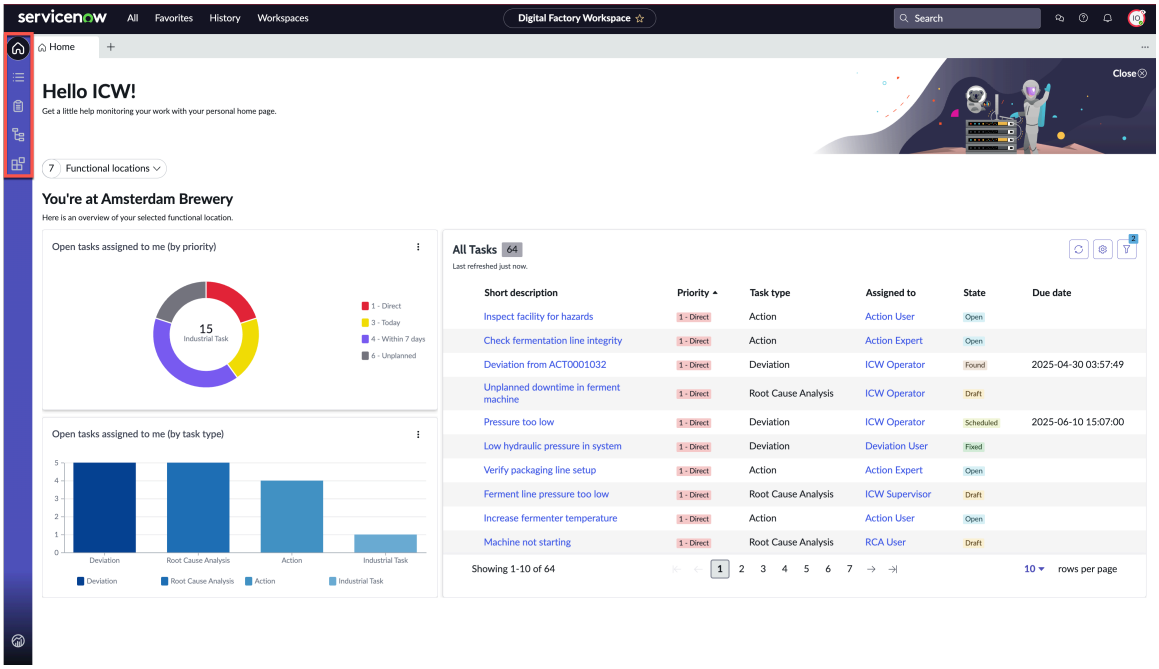
Exploring Digital Factory Workspace

The Digital Factory Workspace is a workspace that enables the Industrial Connected Workforce (ICW) users to manage their shop floor processes.

Digital Factory Workspace overview

Learn about features of the Digital Factory Workspace to run and standardize shop-floor operations across Industrial Connected Workforce (ICW). Digital Factory Workspace brings together list views, Standards hub, and industrial data models so operators and owners can find, execute, and govern work in one place.

The following image shows an example of the icons available in the Digital Factory Workspace.



Digital Factory Workspace benefits

Digital Factory Workspace provides the following benefits.

Digital Factory Workspace benefits

Benefit	Feature	Users
Standardize task execution and knowledge	Standards hub	• Operators • Equipment owners
Find answers fast	AI Search	All Workspace users
Get contextual guidance	Recommended Actions	• Operators • Equipment owners
Collaborate without context-switching	Initiate a Sidebar chat	All Workspace users
Keep equipment data accurate	Operational Equipment Model	Equipment owners
Manage materials in one place	Industrial Materials	Equipment owner
Capture and classify failures	Industrial Failure Modes	Equipment owners
Log quick actions	Action Management	• Operators • Equipment owners

Digital Factory Workspace benefits (continued)

Benefit	Feature	Users
Manage deviations	Deviation Management	• Operators • Equipment owners
Get to the root cause	Root Cause Analysis	• Operators • Equipment owners

Exploring Industrial Standards

Industrial Standards enable you to manage consistency and control across your manufacturing environment. Standardizing components such as standard operating procedures, shift structures, and production calendars. Standardization helps improve traceability, reduce errors, and support scalable, compliant operations.

The Industrial Standards application provides the foundation for authoring and scheduling different types of manufacturing standards. You can create standards for any type of industrial work. All standards include common features, such as scheduling plans, managing approvals, and tracking compliance. You can use this functionality across all standards, and it works the same way for each standard.

Shift-based scheduling for manufacturing standards

Shift-based scheduling enables you to create schedule plans that automatically generate standard tasks aligned with your factory's shift patterns and production day configurations. In shift-based scheduling, you don't have to specify precise start and end date-time values manually.

Overview of shift-based scheduling

Manufacturing standard tasks are planned activities that must be released in alignment with operational shift schedules. Previously, creating a custom schedule requires you to align the start and end date-time settings with shift time frames precisely. Any misalignment can cause errors in task generation, causing scheduling failures and operational delays.

Shift-based scheduling enables you to address these challenges by using the shift configuration defined for the functional location. In shift-based scheduling, the system automatically calculates when tasks must be generated, released, and expired. You are only required to select a start date and one or more shifts.

How shift-based scheduling works

When you create a shift-based schedule plan, the system follows a shift-first logic to generate tasks:

1. Shift selection: You select which shifts the schedule applies to. The available shifts are determined by the industrial shift configuration associated with the functional location of the manufacturing standard. The shift selection is positioned at the top of the custom schedule modal, so you define whether the schedule is shift-based before setting up the recurrence pattern.

2. Start date: You specify the date from which the schedule begins releasing tasks. You do not need to specify a time. The system uses the shift start times to determine when tasks are released.
3. Sequential task generation: The system generates tasks one shift at a time rather than all at once. For each scheduled date, the system checks whether the schedule is active and creates tasks for each selected shift according to the shift's defined boundaries.
4. Timezone application: The system applies the factory timezone from the location record linked to the functional location's site to ensure that shift times are interpreted correctly.
5. Automatic timeframe calculation: The system calculates the start and end timeframes for each task based on the production day configuration of the functional location as defined in the industrial shift configuration.

Task lifecycle management

Shift-based scheduling includes automated task lifecycle management to ensure data integrity and reduce clutter:

- Task release: Tasks are released at the start of each selected shift on the scheduled dates, according to the recurrence pattern defined in the schedule plan.

  You can also set an offset on a schedule plan. An offset determines the how much time in advance the task is generated in relation to planned start.

  The default offset time is 1 hour. For example, a task is planned to start at 20:00. Based on the default offset of 1 hour, Task is generated 19:00.

- Task expiration: Tasks expire according to the expiration setting on the standard in relative to the planned start time.
- Duplicate prevention: The system detects and cleans up duplicate events and tasks during schedule updates, ensuring that only valid, non-duplicated tasks are present.
- Schedule changes: When a schedule plan is deactivated, modified, or has its shift configuration updated, the system invalidates pending occurrence checks and adjusts future task generation accordingly.

Benefits of shift-based scheduling compared to non-shift based scheduling

Feature	Shift-based scheduling	Non-shift based scheduling
Date-time configuration	Only a start date is required. Start and end times are automatically calculated from the shift configuration.	Requires precise start and end date-time values that must align with the intended schedule window.
Task generation	Tasks are generated sequentially, one shift at a time, based on the selected shifts and production day configuration.	Tasks are generated based on the configured date-time range and recurrence pattern.

Prerequisites for shift-based scheduling

Make sure you have set up the following prerequisites before using shift-based scheduling:

- Industrial shift configurations are defined for the functional location associated with the manufacturing standard. For more information about configuring shifts, see Define a shift.
- The site location record linked to the functional location has a timezone defined.
- The manufacturing standard is published and is associated with a functional location that has shift configurations.

Example: Scheduling quality inspection standards for shifts

As a line leader at a food and beverage manufacturer, you spend 30 minutes setting up shift schedules for quality inspection standards. You may encounter frequent errors when timeframes don't align with shift boundaries, which requires multiple attempts.

With shift-based scheduling, you may be able to complete the same scheduling in under 5 minutes:

1. Open the manufacturing standard and navigate to the **Scheduled Plans** tab.
2. Select **New schedule** and then **Custom schedule**.
3. Enable the shift option at the top of the custom schedule modal.
4. Select the morning, afternoon, and night shifts.
5. Set the start date to the beginning of the next work week.
6. Verify the factory timezone is correctly applied.
7. Configure a daily recurrence pattern and saves the schedule.

The system automatically generates inspection tasks for each shift on each scheduled day. Tasks are released at the start of each shift and expire at the end of the shift window if not completed.

Work set standards

Use a work set standard to group related standards and actions into a single procedure that operators can execute as one guided flow on the shop floor.

Complex shop floor processes such as Clean-Inspect-Lubricate (CIL), changeover, and line startup involve multiple sub-activities that have different schedules, dependencies, and triggers. A work set standard organizes these sub-activities into one standard so process engineers can plan the whole process once and operators can execute it as a single flow.

Components of a work set standard

A work set standard has three components.

Work set standard

The grouped standard record that defines scope, ownership, location, and the sub-activities that are part of the procedure.

Sub-activity

An individual step in the work set standard. A sub-activity can be of type **Standard** (links to a published Industrial Guided Task standard) or **Action** (creates an industrial action when the work set runs).

Work set task

The execution record that is created when a work set standard runs. When the work set task is created, the system generates a standard task or action for each sub-activity.

Roles for work set standards

The following roles control who can author, supervise, and execute a work set standard.

Role	Description
`sn_icw_std.work_set_standard_author`	Assigned to process engineers. Can create, update, and publish work set standards and sub-activities.
`sn_icw_std.work_set_expert`	Assigned to line leaders. Can cancel work set tasks and perform user actions.
`sn_icw_std.work_set_user`	Assigned to operators. Can execute work set tasks and the child tasks that they generate.

Note: The standard author role inherits the expert role, and the expert role inherits the user role.

When to use a work set standard

Use a work set standard when a single shop floor procedure includes several related activities that share scope, schedule, or location. Common examples include daily maintenance routines, line startups, and product changeovers.

Do not use a work set standard for a single, standalone task. For those cases, use an Industrial Guided Task standard.

Related topics

- Work set standard and task life cycles
- Components installed with work set standards
- Work set standard form
- Work set sub-activity form

Exploring Industrial Guided Tasks

Manage your industrial guided task (IGT) standards with Industrial Guided Tasks.

Industrial Guided Tasks overview

Industrial Guided Tasks (IGT) are designed to streamline and improve operational efficiency across the shop floor. These tasks offer step-by-step guidance to operators and cover a wide array of use cases, from equipment management to shop floor inspections. By integrating guided instructions, Industrial Guided Tasks enable accurate execution and help standardize processes.

The solution enables you to design tasks in a structured and consistent way based on standards and templates. For example, it enables operators and line managers to do the following:

- Author and manage their own tasks without extensive technical knowledge
- Centralize process management by removing paperwork and additional applications and tools
- Create sets of tasks that are tailored to a specific factory use case
- Standardize the execution of work processes
- Schedule tasks
- Assign tasks only to workers who meet the specified criteria

- Analyze execution insights directly from an industrial standard record to drive continuous improvement
- Track the actual duration of task execution on both the Digital Factory Workspace and Industrial Connected Workforce Mobile Experience (ICW) mobile to compare actual performance against planned timelines

Industrial Guided Tasks users

Users

User	Description
Operator	Operators perform tasks or standards that are planned for their line or equipment. They might also request a standard when needed.
Equipment owner	Equipment owners can be operators. They're responsible for running their equipment in the most optimal conditions and maintaining manufacturing standards.

Industrial Guided Tasks benefits

The Industrial Guided Tasks application enables you to:

- Develop standards from templates that apply to various manufacturing use cases, such as cleaning instructions, equipment inspections, and workplace ordering.
- Provides a guided experience so that you can effectively and efficiently execute the planned work.
- When you create and save standards, you can view, request, or copy them in the Standards hub.
- When you attach a knowledge article to an IGT standard, the related article is available for every task created from that standard via the Recommendations sidebar.
- View embedded shopfloor insights on every published standard record to analyze execution performance across shifts, lines, and versions.
- Use execution analytics to identify performance gaps, track completion rates, and monitor follow-up actions and deviations.
- Compare execution results across standard versions to measure the impact of improvements to the standard.
- Automatically track actual task execution duration on both the Digital Factory Workspace and ICW mobile to measure the percentage of tasks closed in time and compare actual versus planned performance.

Scoring in Industrial Guided Tasks

Scoring enables the automatic calculation of performance scores after completing an Industrial Guided Task (IGT).

By using scoring, operators are provided with immediate feedback to support continuous improvement in a task execution and operating conditions. You can enable scoring for a standard using the IGT standard form. Scoring enables you to assign values to questions in task authoring and customize how results are calculated.

You can enable scoring at two points:

- During standard creation: Scoring can be enabled directly in the IGT standard form. Once enabled, you can immediately configure scores for questions in the Task authoring interface.
- For an existing standard: If scoring is enabled after the standard is created, you must refresh the Workspace. After refreshing, scoring options become available in Task authoring.

If scoring is enabled on the IGT standard:

- The system calculates the total score for the IGT based on the results of the linked assessment template.
- The Score status reflects how the total score compares to the Target score set in the standard:
  - If the total score is equal to or greater than the target score, the task is marked as Successful.
  - If the total score is below the target score, the task is marked as Unsuccessful.
- If scoring is enabled but no target score is set on the standard, the score status is set to No target available. In this case, only the total score is displayed and the score status is hidden from the guided task.
- If scoring isn't enabled or the user doesn't complete the scoring, the score status is set to Not scored.

Scoring without a target score

You can enable scoring on an IGT standard without setting a target score. This is useful when you want to capture and display a total score for a task without evaluating whether the result is successful or unsuccessful.

The following table describes the scoring behavior based on whether a target score is set.

Scoring behavior by target score configuration

Scenario	Behavior
Scoring is performed and the standard has a target score	Score status displays as Successful or Unsuccessful based on the comparison of the total score against the target score. Both the total score and the score status are displayed on the guided task.
Scoring is performed and the standard does not have a target score	Score status is set to No target available. The total score is displayed on the guided task. The score status field is hidden from the guided task view.
Scoring is not performed	Score status displays as Not scored.

Score normalization

Score normalization allows ICW administrators to apply advanced scoring calculations to Industrial Guided Tasks. When normalization is enabled on the assessment template category, you can use normalization strategies to adjust raw scores before they are saved to the guided task.

When normalization is enabled:

- An ICW administrator modifies the Industrial Guided Task assessment template category to enable normalization.
- Authors enable normalized scoring on a Guided Task Standard through the Advanced configuration view in the Smart Assessment Workspace.
- The system saves the normalized score to the guided task instead of the raw score.

Related topics

Configure scoring and automation in Industrial Guided Tasks

Task lists in the Digital Factory Workspace

Use the task lists in the Digital Factory Workspace to access and manage all types of tasks for your organization.

When you select the Lists icon (), you're taken to the Digital Factory Workspace list view. Here you have the access to all the task lists related to your Industrial Connected Workforce (ICW) processes.

From each of these lists, you can access the following tasks:

Lists	Tasks
My tasks	Shows active tasks assigned to or created by the user that: • Are due during their current shift • Have no due date • Have no due date shift defined or • Are no more than seven days overdue
Area tasks	Shows active tasks in the user's functional location that: • Have a due date that falls within the current shift • Have no due date • Are no more than seven days overdue
Opened by Me	Shows active tasks created by the current user that: • Are due during their current shift • Have no due date • Have no due date shift defined or • Are no more than seven days overdue
Unassigned	Shows the tasks that are not assigned to any user.

Lists	Tasks
Upcoming	Shows active tasks in the user's functional location that are due within the upcoming next seven days, including today. Tasks in this list are sorted by the due date.
Done	Shows inactive tasks in the user's functional location that were deactivated within the last seven days. Tasks in this list are sorted by the closed field.

Additionally, by switching to the **My Lists** tab, you can create custom lists according to your requirement. You can set complex filtering conditions for the lists of tasks by using the condition builder. The condition builder provides the following date/time dynamic filter options for shifts and production days on date/time fields such as **Due date**:

- My current shift
- My next shift
- My previous shift
- My current production day
- My next production day
- My previous production day

Within an individual task record, excluding guided tasks, two tabs provide access to associated tasks.

- The **Tasks** tab displays all child tasks created from the current task. All child tasks must be completed before you can complete the parent task.
- The **Related** tab displays all follow-up tasks that originate from the current task. You can complete the current task without completing its related tasks.

Reporting and metrics for industrial task flows

Use the fields available to distinguish workflows and produce reliable metrics.

Industrial operations often run multiple task flow on the same underlying tables, which makes clean reporting difficult unless one flow can clearly be distinguished from another. To address this requirement, a configurable field called task_classification has been introduced across all industrial task types. Although it doesn’t have to be visible in the UI, it provides the essential metadata. This metadata separates tasks that share storage from the tasks that should follow different workflows. It's primarily used to distinguish breakdowns from deviations and to differentiate breakdown analyses from root cause analyses (RCAs). The tables remain common, but the classification value determines the workflow branch, which enables that each category can be reported independently without duplicating data structures.

In addition to classification, deviations include a system-only contact_type field with default values that the system sets automatically. These values aren’t user-facing and exist only to support metrics and funnel reporting. A deviation with the contact_type:

- None: Follows the regular deviation life cycle
- New: A deviation is created with classification breakdown
- Converted: A deviation is escalated to a breakdown

With these two markers, teams can produce straightforward counts. For example, how many breakdowns were created, how many deviations remained regular, and how many deviations escalated, without introducing additional UI complexity.

AI Search in Digital Factory Workspace

Access the AI Search for Digital Factory Workspace by using the search bar. The system interprets queries to return the most relevant results across configured record types, such as standards, tasks, and knowledge articles.

AI Search in the Digital Factory Workspace

AI Search in the Digital Factory Workspace interprets user queries to return the most relevant results across configured record types, such as standards, tasks, and knowledge articles. The system processes the search input and identifies associated terms. For example, searching for 'brew' may also return results for 'brewery.' When a person's name is entered, the system first checks for direct matches in the configured records. If no direct match is found, it searches for closely linked records. The more AI Search is used, the more it learns and improves the relevance of retrieved results.

The search returns the following result types.

- Standards: Only published standards are shown.
- Knowledge articles: Only published knowledge articles are shown.
- Tasks: All tasks are shown, except those with a Canceled status.

Faceted filters appear on the side of the results page and help refine search results. Available filters include:

- Functional Location
- Equipment
- Assignment Group
- Assigned To
- Category (for standards)

Note: Available filters depend on the context and only appear when they're relevant. For smaller result sets, some filters may not be displayed.

The following sorting options are supported:

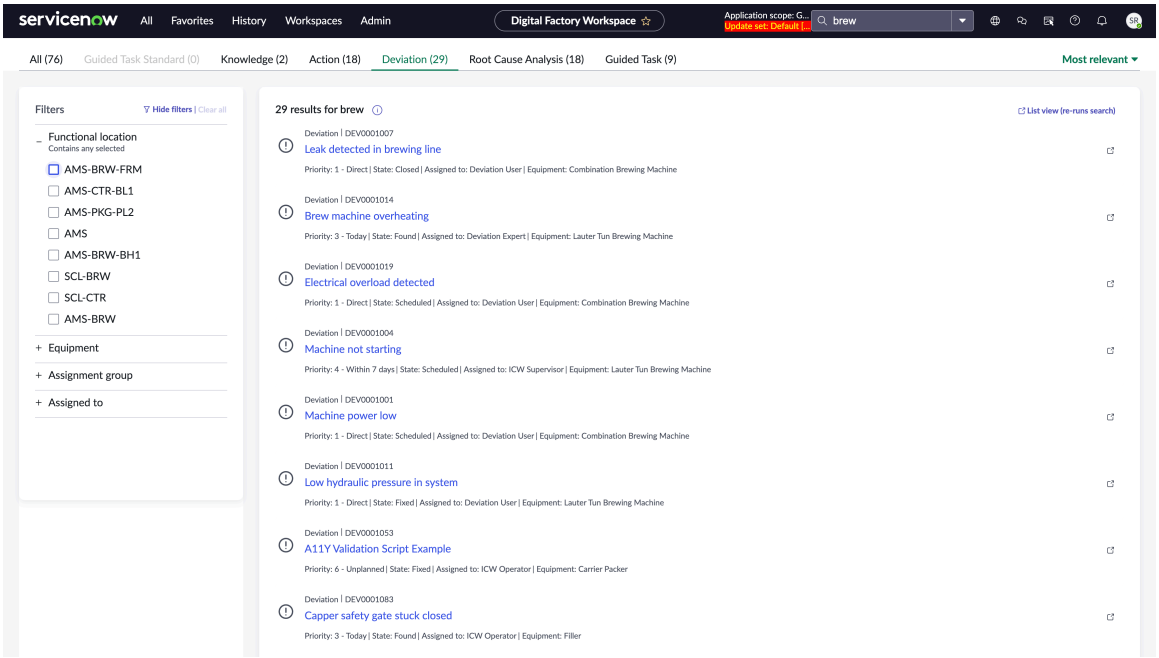
- Most relevant
- Updated (Oldest)
- Updated (Newest)

For knowledge articles, two additional options are available:

- Created (Newest)
- Created (Oldest)

While synonym matching is predefined, you can also configure custom keywords, synonyms, and related words for better accuracy.

To learn more about the AI Search capability, see Searching in AI Search. The following image shows an example of AI Search results for a query run in the Digital Factory Workspace.



Recommended Actions for the Industrial Connected Workforce

The Recommended Actions feature displays suggested actions directly on task forms. These suggestions are based on the current context of the task. They're intended to support you during the manufacturing processes with a relevant guidance.

Each recommended action is generated dynamically using the information that is specific to a task. This feature helps to focus on the actions that are relevant to your current task and reduce the time spent searching for supporting information.

Supported use cases

The following use cases are currently supported and configured:

- Create a guided task from recommended actions on deviations:

  When working on a deviation, you can create a related guided task directly from the recommended actions sidebar. The deviations must be active, and related standards must be published and the Allow ad-hoc request must be enabled.

- Attach standards from recommended actions on root cause analyses:

  During a root cause analysis, you can attach applicable standards using the recommended actions. The root cause analysis must be active and related standards must be published.

- View articles attached to an Industrial Guided Task (IGT) standard:

  You can view knowledge articles that are linked to an IGT standard from within the task form.

Exploring Industrial Connected Workforce Integration with Health and Safety Incident Management

The ServiceNow Health and Safety Incident Management connects with the Industrial Connected Workforce (ICW) suite and enables you to report, triage, and eliminate safety incidents directly from the shop floor.

ICW Health and Safety overview

The ICW Health and Safety Integration helps you to reduce recurring incidents and strengthen workplace safety by connecting by connecting safety incident reporting with ICW task flows, standards, and root cause analysis.

When operators encounter safety-related issues during their work, they can report incidents directly from the Digital Factory Workspace or ICW Mobile Experience. These incidents can be linked to existing ICW tasks such as actions, deviations, and Industrial Guided Tasks, providing context for investigation and follow-up.

Safety teams can then triage reported incidents, identify root causes, and take corrective action by updating relevant manufacturing standards or creating follow-up tasks. This closed-loop approach helps eliminate recurring safety issues and supports continuous improvement.

For more information on Health and Safety Incident Management, see Health and Safety Incident Management.

ICW Health and Safety Integration Personas

ICW Health and Safety Integration Personas

User	Description
Operator	Reports safety incidents from the shop floor and their work areas. Can create incidents from existing tasks.
Equipment owner	Reports safety incidents and can create incidents related to equipment they manage.
Safety team member	Triages reported incidents, links to root causes, and creates follow-up actions.
Safety team manager	Oversees incident triage, approves standard updates, and monitors safety metrics.

ICW Health and Safety Integration workflow

The integration supports a structured workflow for managing safety incidents:

1. Report: Operators report safety incidents from the shop floor using the workspace or mobile app. Incidents can be created standalone or from existing ICW tasks.
2. Triage: Safety team members review reported incidents, assess severity, and determine root causes. Incidents can be linked to equipment, functional locations, and failure modes.
3. Eliminate: Based on triage findings, teams can update relevant manufacturing standards to prevent recurrence or create follow-up actions to resolve identified hazards.

For more information, see Health and Safety Incident Management workflow example.

ICW Health and Safety Integration benefits

benefits

Benefit	Feature	Users
Lower reporting barriers	Report safety incidents directly	Operators, Equipment owners

benefits (continued)

Benefit	Feature	Users
	from workspace and mobile	
Contextual incident creation	Create safety incidents from existing ICW tasks (actions, deviations, IGTs)	Operators, Equipment owners
Structured triage process	Link incidents to root causes and initiate Industrial Root Cause Analysis	Safety team members, Safety team managers
Standards-driven elimination	Connect incidents to manufacturing standards for updates and improvements	Safety team managers, Equipment owners
Follow-up action tracking	Create and track Industrial Actions to resolve hazards	Safety team members

What to explore next

To learn more about configuring and using ICW Integration with Health and Safety, see:

- Using ICW Health and Safety Integration
- Create a safety incident from an ICW task
- View safety incidents in the Digital Factory Workspace
- ICW Health and Safety Integration reference
- Create a safety incident from a task
- Report safety incident from ICW Mobile
- Exploring Health and Safety Incident Management

Configuring Digital Factory Workspace

Set up prerequisite tasks before proceeding to use the Digital Factory Workspace.

Configuration overview

- Set up a worker profile

  Set up worker profile for your users.

- Assign equipment model site access

  Grant equipment model site access to non-admin roles.

- Define a shift

  Organize work shifts to support daily operations.

- Define a production day

  Set up the daily structure used for shift planning and production tracking.

Setting up prerequisites for Digital Factory Workspace

Set up prerequisite tasks before proceeding to use the Digital Factory Workspace.

Create a functional location of the type site

Create a location for your user to be able to work with the Industrial Connected Workforce (ICW).

Before you begin
Role required: sn_icw.application_admin

About this task
The location is the site. Every user must set their location in the user profile to be able to work with ICW. In addition, the filter on task forms works based on the location.

Procedure

1. Create a location.
   a. Navigate to **All** > **User administration** > **Locations**.
   b. Select **New**.
   c. On the Location form, enter the location name, address, contact, and other location details.
   d. Select **Submit**.
2. Create a functional location for your site.
   a. Navigate to **All** > **Equipment Model - ISA** > **Equipment Model Entities**.
   b. Select **New**.
   c. On the Equipment Model Entity form, enter the details.
   Make sure that you select ISA 95 Default Template for the template and Site for the level.
   d. Select **Save**.
3. Create a timezone for the functional location of your site.
   a. Navigate to the location record associated with the site of the functional location.
   b. In the **Timezone** field, select the timezone that corresponds to the factory's physical location.
   c. Save the location record.

Result
The functional location of the type site is available in the Digital Factory Workspace, from where you can create child functional locations.

Related topics

Review and update the equipment model details

Create a functional location

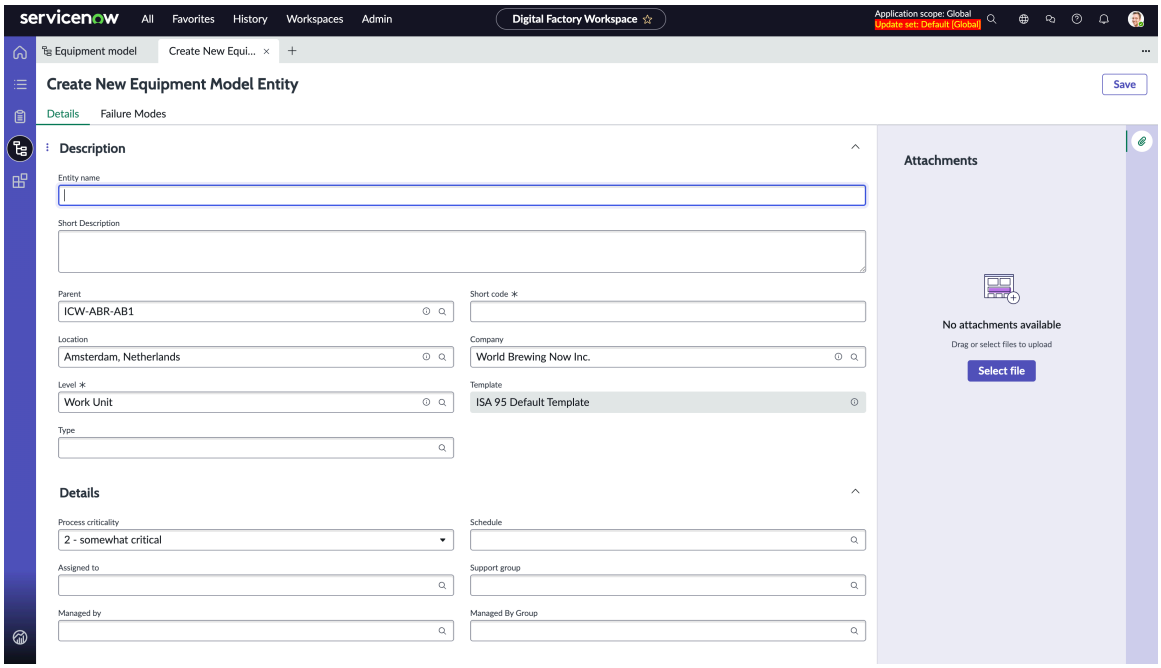
Create a functional location in the Digital Factory Workspace.

Before you begin
Role required: sn_icw.admin

Procedure

1. Navigate to **Equipment model**.
2. From the tree, select the location that you want to be the parent of the functional location.
3. Select **Functional Locations** and then **New functional location**.
4. On the Functional location form, fill in the fields.
   For a description of the field values, see Functional location form.
5. Select **Save**.

   The following image shows an example of the form for creating a functional location.



Result
The functional location is displayed in the list of functional locations for the parent functional location.

Related topics

Review and update the equipment model details

Create operational equipment

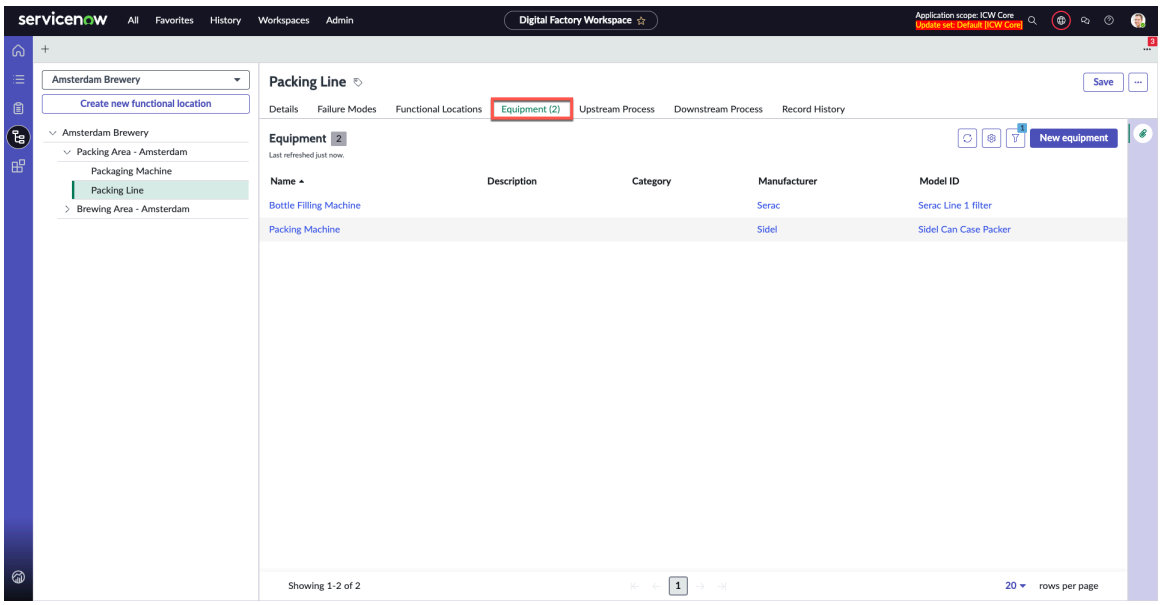
Create operational equipment in the Digital Factory Workspace.

Before you begin
Role required: sn_icw.admin

Procedure

1. Navigate to **Equipment model**.
2. From the tree, select the location that you want to associate with the new equipment.
3. Select **Equipment** and then **New equipment**.

The following image shows an example of the Equipment tab on the operational equipment page.



4. On the Operational equipment form, fill in the fields.
   For a description of the field values, see Operational equipment form.
5. Select **Save**.

Result

The new operational equipment is displayed in the list of equipment for the functional location or equipment model entity.

Set up a worker profile

Establish a connection between a functional location and a user by setting up a worker profile in Industrial Connected Workforce.

Before you begin

Your functional location must be created and available in the list of equipment model entities.

Role required: sn_icw.admin

Note: Users without the admin role can only edit their own worker profiles.

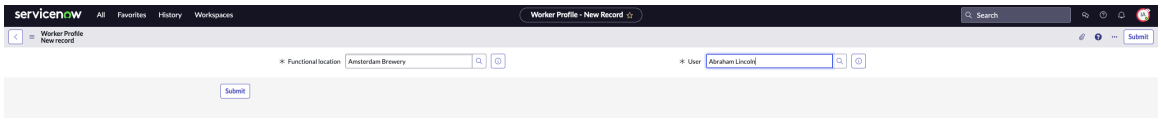
About this task

The sn_icw_worker_profile table contains the link between a user and a functional location. Setting up this link is a prerequisite to use the system.

Procedure

1. In the **All** tab search bar, enter `sn_icw_worker_profile.list`.
2. Select **New**.
3. In the **Functional location** field, enter the location that you need.
4. In the **User** field, enter the user that you want to link to the location.

5. Select **Submit**.



Assign equipment model site access

Assign equipment model site access to non-administrator roles. This configuration is required so that these roles can view or create functional locations, which is essential for proper use of Industrial Connected Workforce (ICW).

Before you begin

Role required: sn_icw.application_admin

Procedure

1. Navigate to **All** > **Equipment Model - ISA** > **Sites**.
2. From the list, select a site record.
3. To assign read access, complete the following actions.
   a. Select the Can Read Equipment Models related list.
   b. Create a record by selecting **New**.
   c. In the **Site** field, select the equipment model site record that you need.
   d. In the **User Criteria** field, select the user criteria to define which users can read or view the selected site's equipment model entities.
   e. Select **Submit**.
4. To assign edit access, complete the following actions.
   a. Select the Can Edit Equipment Models related list.
   b. Create a record by selecting **New**.
   c. In the **Site** field, select the equipment model site record that you need.
   d. In the **User Criteria** field, select the user criteria to define which users can edit the selected site's equipment model entities.
   e. Select **Submit**.

Define a shift

Define shifts for your organization in the Industrial Connected Workforce by using the scheduling functionality. Configuring shifts is a prerequisite for scheduling standard tasks and for filtering tasks to see which shift they were created in or which shift they're due.

Before you begin

Role required: sn_icw.application_admin or sn_icw.admin

About this task

Schedule records are saved in the Schedule [cmn_schedule] table. Schedule entries are saved in the Schedule Entry [cmn_schedule_span] table. For more information about scheduling, see Define a schedule.

Procedure

1. Navigate to **All** > **System Scheduler** > **Schedules**.
2. Select **New**.

3. In the **Name** field, name the schedule as needed.
   For example, a name that relates to a functional location.
4. In the **Type** field, enter `industrial_shift_config`.
   If you select **Floating** in the **Time zone** field, the time zone is relative to the process that accesses the item at the specified time.

   If you select a time zone, users in different time zones see the schedule with their own time zone applied.
5. Select **Submit**.
6. Create a child schedule.
   Create a child schedule for each shift and name them accordingly, for example, morning, afternoon and evening.

   a. Open the schedule record and then select the **Child Schedules** tab.

   b. Select **New**.

   c. For the field **Type**, enter `industrial_shift_entry`.

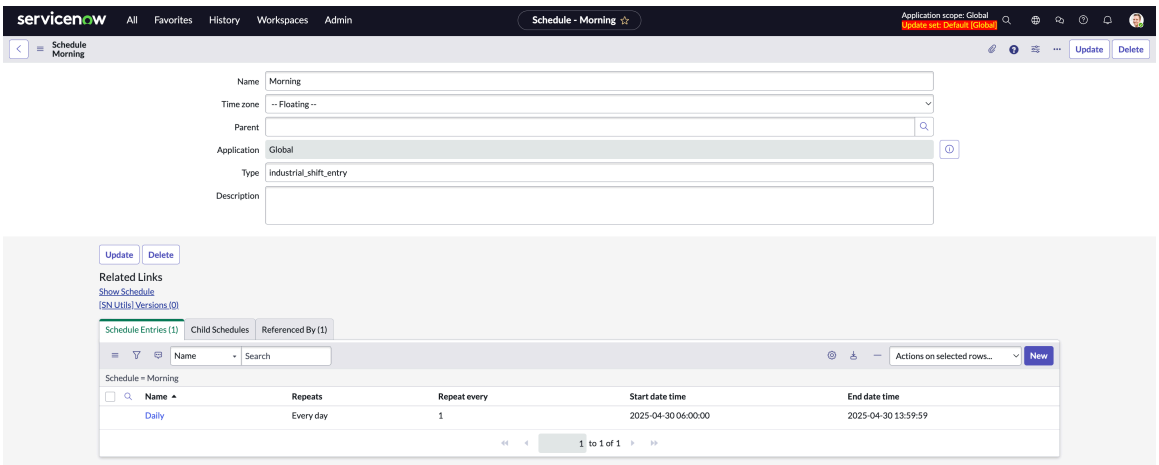
   d. Select **Submit**.

   e. Open the child schedule and scroll down to the **Schedule Entries** tab.

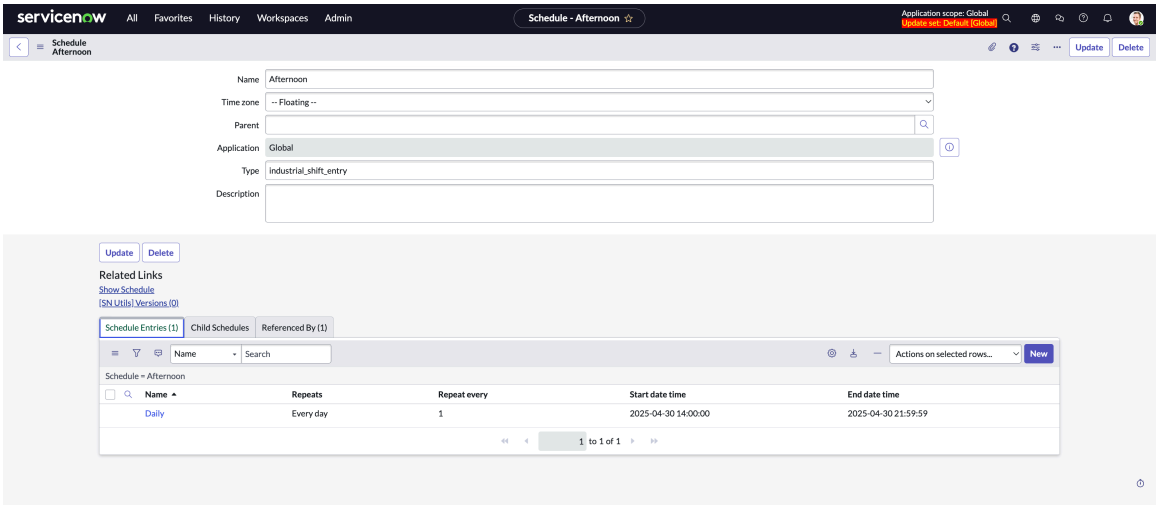
      The **Schedule Entries** related list contains the definitions of the time periods that you want to include in or exclude from the schedule.

   f. Create a schedule entry to define the schedule span or repeating pattern for that shift.

   g. Select **New** and define the shift pattern, such as start and end time and the repeating pattern, such as daily.
      - The fields **Type** and **Show as** aren't important for this configuration and can be ignored.
      - Set the end time to one second before the start of the next shift to avoid overlap.
      - The value between **When** and **To** is smaller than 24 hours.
      - Always select a value for the **Repeats** field. If no value is selected, the shift occurs only once.



h. Select **Submit**.



7. Link functional locations to a schedule:

a. Navigate to **All** > **Equipment Model Entities**.

b. Select the functional location that you want to link to the schedule.

c. For the column **Schedule**, enter the parent schedule that you created in the initial steps.

d. Select and hold (or right-click) and select **Save**.

Result

The shift and its business calendar entries have been created successfully and are displayed in the **sn_icw_industrial_calendar.list** list. Task lists in the Digital Factory Workspace and Industrial Connected Workforce Mobile Experience can be filtered by shifts. In the date/time fields, such as **Due date**, you can use the following date/time dynamic filter options:

- My current shift
- My next shift
- My previous shift

Define a production day

Define a production day for your organization within Industrial Connected Workforce.

Before you begin

Role required: sn_icw.application_admin or sn_icw.admin

Procedure

1. Navigate to **All** > **System Scheduler Schedules** and find the parent schedule that you need.

2. Navigate to the **Schedule Entries** tab and select **New**.

3. On the Schedule Entry form, fill in the fields.

- For the detailed description of schedule entry fields, see Schedule entry fields.
- Set the end time to one second less than a full hour to avoid overlap.
- The expected value for **Repeats** is **Daily**.

4. Select **Submit**.

Result

The production day has been created successfully and is displayed in the **sn_icw_industrial_calendar.list** list.

The production day calendar record automatically includes a reference to the source schedule in the **source_schedule** field. This reference is set when the calendar is generated and is system-managed. Non-admin users cannot modify this field.

Configuring Industrial Guided Tasks

Learn how to configure Industrial Guided Tasks.

Archive rules in Industrial Guided Tasks

Archive rules in the Industrial Guided Tasks are designed to manage and organize records, so that you can focus on current and relevant data.

The system automatically archives guided tasks that are inactive and that haven't been updated in two years. The name of the rule that applies to guided tasks is "Archive inactive Guided Tasks after 2 years".

By default, the archiving rule is active in the ICW. You can manage the rule by going to **All** > **System Archiving** > **Archive Rules** and deactivating it as needed.

The archiving rules support data hygiene and system usability by making sure that outdated records don't interfere with active workflows.

For more information on archive rules, see Create an archive rule in Core UI.

Configure scoring and automation in Industrial Guided Tasks

Configure scoring and automation for guided tasks to provide a measure of task performance and automation of processes.

Before you begin

Role required: sn_icw_igt.standard_author

Procedure

1. Navigate to **Standards hub** > **Standards**.
2. Open the standard that you want to configure.
3. Select **Advanced configuration**.
   You're in the Smart Assessment Workspace.
4. Configure the following advanced features in the Smart Assessment Workspace:

   a. Configure automation of guided tasks by selecting the **Automations** tab.
   The availability of the Automation feature is dependent on the installation of Automation plugins described in Smart Assessment Engine automation plugin dependencies. For the detailed information about configuring automations in Smart Assessment Engine, see Configure post-assessment actions.

   b. Configure scoring for guided tasks by selecting the **Scoring** tab.

   For detailed information about configuring Scoring in Smart Assessment Engine, see Configure scoring for an assessment.

   c. Enable normalized scoring for the standard.

Normalized scoring applies advanced calculations that adjust raw assessment scores for guided tasks. To enable normalized scoring on a standard:

i. In the Smart Assessment Workspace, navigate to the scoring configuration for the standard.

ii. Enable the normalization option for the standard.

Note: Normalization must first be enabled on the assessment template category by an ICW administrator. To enable normalization, select **Enable Normalization** on the Industrial Guided Task category. For more information, see Create an assessment template category.

When normalization is enabled and a normalized score is calculated on the assessment metric, the system saves the normalized score to the guided task instead of the raw score.

Related topics

Scoring assessments

Post-assessment automations

Smart Assessment Engine automation plugin dependencies

To be able to use the advanced automation features of the Smart Assessment Engine (SAE), several plugins must be installed.

SAE automation plugin dependencies

Name	Description
Smart Assessment Dependencies (com.snc.smart_asmt_dep)	This plugin should be installed first. The plugin is directly available on the platform as a global plugin.
Reusable Impact Framework (com.sn_reusable_impact_framework/ com.sn_impact_fwk)	Dependency of SAE Post Assessment Actions. This plugin bundles the user interface logic.
Post Assessment Actions for Smart Assessments (com.sn_smart_imp_auto)	This plugin bundles the back-end logic. **Note:** For the detailed instructions on installing the required SAE plugins, see Configuring Smart Assessment Engine.

Configure Recommended Actions for the Industrial Connected Workforce

Configure Recommended Actions for the Industrial Connected Workforce. Recommended Actions are based on context, rules, and recommendations and can be configured to support additional use cases. You can create rules and recommendations or modify existing ones to meet the specific requirements of your organization.

Before you begin

Role required: sn_nb_action.next_best_action_author or sn_icw.application_admin

Procedure

1. Navigate to **All** > **Recommended Actions** > **Contexts**.
2. Configure Recommended Actions for the Industrial Connected Workforce for either tasks, standard tasks, or rules for recommended actions.

What to configure	Description
Task (deviation and root cause analysis)	From the list of contexts, select Industrial tasks context and make changes as needed.
Standard task	From the list of contexts, select the Industrial standard task context and make changes as needed.
Rule for recommended actions	Create a context and within it rules and rec ommendations, as explained in: ○ Create a context in Recommended Ac ○ ○ Create a recommendation in Recommend

Using Digital Factory Workspace

Use the Digital Factory Workspace to manage your Industrial Connected Workforce (ICW) data.

Digital Factory Workspace enables you to manage your organization data and processes.

Industrial Standards Library

Manage and schedule operational standards to guide task execution across equipment, lines, and locations.

Action Management

Log and track ad-hoc tasks such as inspections or follow-ups that fall outside structured workflows.

Deviation Management

Record and resolve equipment or process anomalies that impact safety, quality, or performance.

Breakdown Management

Capture, classify, and analyze equipment breakdowns to support timely resolution and continuous improvement.

Root Cause Analysis

Use a guided playbook to investigate disruptions and document findings to help prevent recurrence.

Operational Equipment Model

Define and manage functional locations and equipment using the ISA-95 hierarchy.

Industrial Materials

Organize and navigate material classes and instances through a hierarchical model.

Industrial Failure Modes

Create and categorize failure modes linked to equipment and process states to support downtime analysis and corrective actions.

Using Industrial Standards

Use the Industrial Standards application to manage industrial standards in your organization.

Scheduling standards

Plan recurring tasks based on operational standards to maintain equipment conditions and reduce manual tracking.

Create a standard schedule plan

Define when and how tasks should be automatically created from a standard using templates or custom schedules.

Industrial Standards Library

Use the Industrial Standards Library (Standards hub) to manage standards for the Industrial Connected Workforce (ICW).

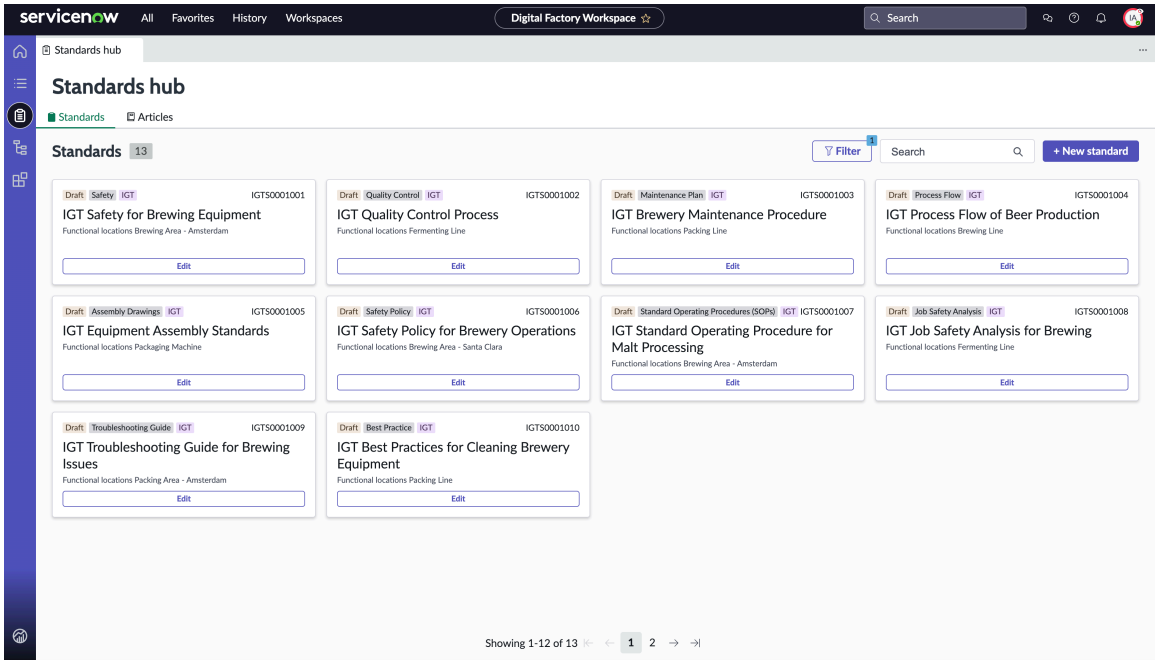
Standards hub overview

Standards establish consistency and uniformity in how tasks and activities are performed within a factory, line, or equipment. They provide guidance to the operators who are performing those tasks and help achieve increased safety, efficiency, and quality. Use the Standards hub to do the following:

- Create standards according to your organization's needs
- Schedule, request, and browse standards
- View and manage knowledge articles
- View embedded shopfloor insights on published standards to analyze execution performance

For more information about Industrial Knowledge Management, see Industrial Knowledge Management.

The following image shows an example of the main page in the Standards hub.



Use case example

An equipment owner wants weekly cleaning and inspection tasks for a bottling line to be performed consistently across shifts. Using the Standards hub, they can:

1. Create an Industrial Guided Task (IGT) standard with step-by-step instructions for cleaning procedures, safety checks, and inspection points.
2. Attach a knowledge article with visual guidance and troubleshooting tips.
3. Define required skills so only certified operators are eligible to perform the task.
4. Set up a scheduled plan to automatically generate the task every Monday morning.
5. Enable scoring to track task performance and identify areas for improvement.
6. Publish the standard, making it available for execution and automation.
7. Monitor execution insights of the published standard on the Insights Overview tab. Use the insights to compare performance across shifts and versions to identify areas for standard improvement.

This use of the Standards hub promotes consistency, supports compliance, and reduces manual planning effort.

Standards hub benefits

Standards hub benefits

Benefit	Feature	Users
Search for and view the standards in the library. Each standard has a tile with the labels for state, category, and type. Filter standards by the following fields: • State • Document scope • Category	Browse the Standards hub	• Operator • Equipment owner

Standards hub benefits (continued)

Benefit	Feature	Users
• Equipment model • Functional location (filtered based on the user's location) • Allow ad-hoc request Combine the filter and search functionality to refine your search. Selection saves when you refresh the page.		
Plan and schedule standards to maintain operating conditions	Schedule standards	Equipment owner
If enabled, it enables you to create tasks directly from a standard in the Standards hub. A new form for the guided task opens with automatically populated fields for: • Short description • Assigned to • Functional location • Planned start • Due date • Standard (not available on the form)	Create standard tasks	• Operator • Equipment owner
Create, edit, and publish standards	Create or edit standards	Equipment owner
Create, edit, and publish knowledge articles	Create or edit knowledge articles	Knowledge expert

Scheduling standards

Scheduling of standards and tasks enables a proactive planning approach in manufacturing.

This feature enables equipment owners and operators in manufacturing environments to plan and schedule all operational standards needed to maintain optimal equipment conditions. It replaces manual, spreadsheet-based planning with a centralized approach to task management. By doing so, it helps bring together planning activities that were previously spread across different systems.

The system offers flexible scheduling options. You can set up daily, weekly, and monthly tasks, including more complex patterns such as "every Tuesday of every other week." This helps align maintenance and operational standards with how the equipment is used.

The scheduling feature creates tasks automatically based on predefined standards. It reduces the mental effort required from operators to remember or track tasks manually. They receive system prompts, which helps make sure that no critical tasks are missed.

The following rules exist for event scheduling:

- Users with the **sn_icw.admin** role can configure the property *sn_icw_std.scheduled_creation_minutes_offset*, which specifies how much ahead of the specified time the scheduled tasks should be created.
- The planned start and planned end are automatically set according to the schedule.
- The shift must be part of the production day.
- For custom schedules, the period when the schedule is active is determined by the overlap between the recurrence pattern and the time span allocated for shifts.

Shift-based scheduling

Shift-based scheduling provides a simplified approach to scheduling manufacturing standard tasks for shifts:

- You can select shifts before configuring the recurrence pattern. The shift selection is positioned at the top of the custom schedule modal, which streamlines the setup flow.
- You only need to select a start date. The system automatically calculates the start and end timeframes for task generation based on the selected shifts and the production day configuration of the functional location.
- The **Start date/time** and **End date/time** fields are hidden when shift-based scheduling is enabled, because the system derives these values from the shift configuration.
- Tasks are generated sequentially, one shift at a time, aligned with shift boundaries. This shift-first logic ensures that tasks are accurately created for each selected shift.
- Tasks that are not completed within the designated shift window are automatically expired and removed, keeping operator dashboards clean.
- Duplicate events and tasks are detected and cleaned up during schedule updates, maintaining data integrity.

Scheduling calendar

The calendar view provides a visual interface for scheduling manufacturing tasks. It helps operators and line leaders plan, view, and manage task schedules more easily by showing occurrences, overlaps, and exceptions in a familiar calendar format.

Scheduling calendar overview

The calendar view is a visual scheduling tool designed to simplify how manufacturing tasks are planned and managed. The clear, interactive calendar shows when tasks are scheduled, how they're repeated, and how they relate to production shifts.

This view supports both historical and future task occurrences, making it easier to understand what has been scheduled and what is coming up. It also enables you to modify schedules directly from the calendar, improving flexibility and reducing errors. To access the calendar view, open a standard in the Standards hub and navigate to the **Schedule plans** tab. From there, you can view, create, and manage schedules or standard schedule plans.

Benefits

Operators and line leaders often face challenges when scheduling tasks due to limited visibility and complex interfaces. The calendar view addresses these issues by:

- Providing a clear visual overview of scheduled tasks
- Reducing reliance on manual entry and memory
- Supporting quick identification of overlaps and gaps

- Enabling easy adjustments for planned or unplanned events
- Improving planning accuracy and reducing scheduling errors

Users

Users of the scheduling calendar

User	Responsibilities and goals
Operator	• Schedule tasks for their line • View task timing and avoid overlaps • Follow visual prompts for execution
Line leader	• Review and adjust task schedules • Remove or reschedule tasks for specific days • Make sure that standards are followed
Equipment owner	• Monitor task compliance and performance • Use calendar data for planning and reporting

Key features

Key features of the scheduling calendar

Feature	Description
Visual scheduling interface	Displays task schedules in a calendar format.
Past and future visibility	Shows historical and upcoming task occurrences.
Schedule editing	Enables authorized users to modify schedules directly from the calendar.
Task differentiation	Distinguishes between predicted tasks and completed tasks.
Expiration capability	Automatically expires unused standards.
Offset flexibility	Supports flexible scheduling to accommodate production changes.
Incomplete schedule indicator	Flags schedules with missing configuration using the icon (⚠). Hovering over the icon displays the message "Schedule has incomplete configuration."

Create a standard schedule plan

Create a plan for the scheduled creation of standard tasks.

Before you begin

To create a template schedule, you must define a schedule first. For more information about defining schedules, see Define a schedule. To create a custom template that is based on shifts, refer to Define a shift to configure shifts.

Role required: sn_icw_std.standard_author

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Select the Standards hub menu** ( )
2. Open the standard for which you want to create a plan.
3. Navigate to the tab **Scheduled Plans**.
4. Select **New schedule**.
5. On the Scheduled plan form, fill in the fields.
   For a description of field values, see Schedule plan form.
6. Select **Save**.
7. For custom schedules, select **Custom schedule** to configure the scheduled plan.
8. To create a shift-based schedule, enable the **Shift** option before filling in the Custom schedule form fields.

   Note: If you enable shift-based scheduling, the form hides the **Start date/time** and **End date/time** fields and displays a **Start date** field instead. The system automatically calculates the start and end time frames from the shift configuration. For more information, see Create a shift-based schedule plan.

9. On the Custom schedule form, fill in the fields.
   For a description of field values, see Custom schedule plan form.
10. Select **Save**.

Result

The new schedule plan is displayed in the list of schedule plans for the standard.

Create a shift-based schedule plan

Create a scheduled plan for standard tasks based on shift configuration of a functional location.

Before you begin

Role required: sn_icw_std.standard_author

To use shift-based scheduling with automatic time zone and time frame calculation, make sure that the following additional prerequisites are met:

- Industrial shift configurations are defined for the functional location associated with the manufacturing standard.
- The site location record linked to the functional location has a time zone defined. If the time zone isn't defined, the system uses the logged-in user's time zone, which may cause tasks to be generated at unexpected times.

About this task

In the Create a standard schedule plan procedure, you can create a customized schedule. If you want to create a shift-based schedule, select the **Shift** option at the top of the form before configuring the recurrence pattern.

Procedure

1. Select one or more shifts.

   The available shifts are determined by the industrial shift configuration associated with the functional location. When you enable shift-based scheduling:

   - The **Start date/time** and **End date/time** fields are hidden.
   - A **Start date** field is displayed with date only. Select the date from which the schedule plan starts initiating tasks.
   - The system automatically calculates the start and end time frames based on the selected shifts and the production day configuration of the functional location.

   For more information about shift-based scheduling, see Shift-based scheduling for manufacturing standards.

2. Verify the time zone displayed on the custom schedule page.

   The system automatically applies the time zone from the factory location. If a warning is displayed indicating that the time zone isn't defined, you can:

   - Select a different time zone from the displayed **Timezone** field.
   - Select the link in the warning to navigate to the location record and add the missing time zone.

Result

For shift-based schedules, the system generates standard tasks sequentially, one shift at a time, aligned with the shift boundaries defined in the industrial shift configuration. The system automatically manages the task lifecycle:

- Tasks are released at the start of each selected shift on the scheduled dates.
- Tasks that aren't completed within the designated shift window are automatically expired.
- Duplicate events and tasks are detected and cleaned up during schedule updates.
- If the schedule is deactivated or modified, the system invalidates pending occurrences and adjusts future task generation accordingly.

Skill-based task management

Use skill-based task management to assign manufacturing tasks only to workers who hold the necessary skills and certifications. This method helps reduce operational risk, supports compliance efforts, and contributes to higher job satisfaction by matching tasks to worker capabilities.

Overview of skill-based task management

Manufacturing operations often encounter issues when tasks are given to workers who lack the required qualifications. These issues may include:

- Higher error rates and increased rework
- Safety incidents and regulatory violations
- Lower production quality and audit challenges

Skill-based task management addresses these problems by applying rules that restrict task assignments to qualified personnel.

Benefits

Skill-based task management provides the following benefits:

- Improve task effectiveness: Assign tasks only to workers who meet the defined skill and certification requirements.
- Support regulatory compliance: Apply rules to task execution to meet industry and safety standards.
- Reduce operational risk: Avoid errors and safety concerns by helping prevent unqualified task execution.
- Increase job satisfaction: Assign tasks based on workers' strengths and training, which can lead to better engagement and performance.

Add required skills to each standard. This step creates a clear set of qualifications needed for task execution. If a task is assigned to unqualified personnel, it can't be saved.

Activate Skills Management plugin

This capability depends on having the Skills Management plugin [com.snc.skills_management] enabled. To learn more about it, see Exploring Skills Management.

Relationship between industrial standards and published standards

Industrial standards and published standards are stored in separate back-end tables. See how they relate. Choose the correct version of a standard depending on whether you need a specific version or the latest published one.

Relationship overview

In the back end, two tables represent standards:

- Industrial Standard [sn_icw_std_standard]: Contains individual versions of standards. Use this table when working with a specific version, such as for reporting or historical analysis.
- Published Industrial Standard [sn_icw_std_publ_standard]: Represents the most recently published version of a standard. Use this table when the goal is to reference the latest version.

Working with specific and latest versions

When a task or report must reference a particular version of a standard, the Industrial Standard table is used. This method is common in reporting, where accuracy depends on the exact version that was active at the time.

In contrast, when the goal is to work across versions or use the most current configuration (for example, in automation), the Published Industrial Standard table is used. This type of query enables the system to dynamically reference the latest version without manual selection.

Selecting standards across versions

Each record in the Industrial Standard table includes a reference to its corresponding published standard via the published_standard field. This relationship enables queries to group or filter records by their published version.

For example, to retrieve all versions of a standard that belong to the same published group, query the Industrial Standard table where the published_standard field matches the ID of the desired published standard. This approach supports cross-version reporting and automation by linking multiple versions to a single published reference.

Work set standard and task life cycles

A life cycle is the list of states that a work set standard or work set task can go through from creation to closure.

Work set standard states

Life cycle states for work set standards

State	Description
Draft	The standard can be edited by users with the work set standard author role.
Review	An approval request has been sent to the owner group. The standard can't be edited.
Published	The standard is active and can be scheduled or run from the Standards hub. The standard can't be edited.
Retired	The standard is inactive and can't be requested. The standard is read-only and can't be edited.
Revised	End state for an older version that has been replaced by a newer version. The standard is read-only and can't be edited.

Approval states

Life cycle states for approvals

State	Description
Not yet requested	The standard has not been submitted for approval.
Requested	The approval request is awaiting review. Any active user in the owner group can approve the request.
Approved	The request has been approved. The state of the standard changes to **Published**.
Rejected	The request has been rejected. The state of the standard moves back to **Draft**.
Canceled	The request was withdrawn before a decision was made.

Work set task states

Life cycle states for work set tasks

State	Description
Ready	The work set task is created and waiting to be picked up.
Work in Progress	The work set task is being executed. The system records the actual start time on entry to this state and moves the task to this state automatically when a child task starts or a child action closes.
On Hold	The work set task is paused. Operators can resume it by setting it back to **Work in Progress**.

Life cycle states for work set tasks (continued)

State	Description
Closed Complete	All child records are submitted or closed and the operator has submitted the work set task. The system records the actual end time.
Closed Skipped	The work set task has expired. Active child tasks move to **Closed Skipped** and active child actions move to **Canceled**.
Canceled	The work set task has been canceled by a work set expert. Active child tasks move to **Canceled** and active child actions move to **Canceled**.

Important: A work set task can't be closed while it has active child tasks. Complete or cancel the remaining child records first.

Related topics

- Create a work set standard
- Execute a work set task
- Publish a work set standard
- Components installed with work set standards
- Work set standard form
- Work set sub-activity form

Create a work set standard

Create and update a work set standard or create a copy of a published or retired work set standard, and use it as a template for a new one.

Before you begin

Role required: sn_icw_std.work_set_standard_author

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace**.
2. Open the work set standard from the Standards hub.
3. From the overflow actions menu, select **Create new version**.
   This option is available when the standard is in the **Published** or **Retired** state. The new version starts in the **Draft** state and includes the sub-activities of the source version.
4. Update the field values and sub-activities as required.
   For field descriptions, see Work set standard form.
5. Select **Save**.
6. When the standard is ready for review, select **Request approval**.

Result

After approval, the new version replaces the previous published version, which moves to the **Revised** state. A copied standard is as a new draft that can be edited and approved independently.

Related topics

- Create copy of a work set standard
- Execute a work set task
- Publish a work set standard

Create copy of a work set standard

Create and update a work set standard or create a copy of a published or retired work set standard, and use it as a template for a new one.

Before you begin

Role required: sn_icw_std.work_set_standard_author

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace**.
2. Open the work set standard from the Standards hub.
3. From the overflow actions menu, select **Use as template for new standard**.
   This option is available for any state. You can create a work set standard with the same field values and sub-activities as the source standard.
4. Update the field values and sub-activities as required.
   For field descriptions, see Work set standard form.
5. Select **Save**.
6. When the standard is ready for review, select **Request approval**.

Result

After approval, the new version replaces the previous published version, which moves to the **Revised** state. A copied standard is as a new draft that can be edited and approved independently.

Related topics

- Create a work set standard
- Components installed with work set standards
- Work set standard form
- Work set sub-activity form

Execute a work set task

Run a work set task to complete all sub-activities of the underlying work set standard as part of one guided flow.

Before you begin

The parent work set standard is in the **Published** state and has at least one sub-activity.

Role required: sn_icw_std.work_set_user

About this task

When a work set task is created, the system generates a child record for each sub-activity of the parent standard. Standard sub-activities create Industrial Guided Tasks records, and action sub-activities create industrial action records. The work set task tracks the overall progress of these child records.

Procedure

1. From the Digital Factory Workspace task list, select the work set task according to their requirement.
2. Select **Set to Work in Progress**.

   The work set task also moves to **Work in Progress** automatically when any child task starts or when a child action closes.
3. Open and complete each child task or action from the related lists on the work set task form. You can also pause the progress by selecting **Set on hold** from the overflow menu and resume by selecting **Set to Work in Progress**.
4. **Optional:** Select **Create Deviation** or **Create Safety Incident** to capture an issue that you find while running the task.
   Create Safety Incident is available only when the health and safety integration is installed.
5. When all child records are submitted or closed, select **Submit**.

   Note: If any child task is still active, the work set task can't close. You must complete or cancel the remaining child records first.

Result

The work set task moves to the **Closed Complete** state. The system records the actual start time when the task moves to **Work in Progress** and the actual end time when the task is submitted.

If a work set task is canceled or expires (**Closed Skipped**), any active child tasks move to the same end state. Active child actions are canceled.

Publish a work set standard

Create a work set standard, add sub-activities, and request approval to publish it so that line leaders and operators can run it on the shop floor.

Before you begin

Role required: sn_icw_std.work_set_standard_author

Procedure

1. Navigate to the **Standards hub**.
2. Select **New standard**.
3. On the **Work set** tile, select **New standard**.
4. On the work set standard form, fill in the fields.
   For field descriptions, see Work set standard form.
5. Select **Save**.
   The standard is saved in the **Draft** state and appears as a tile in the Standards hub.
6. Open the **Sub-activities** tab.
7. For each step in the procedure, select **New** and add a sub-activity.

   Set the sub-activity **Type** to one of the following values.

   - **Standard**: Select a published Industrial Guided Task standard to run as part of the work set. Work set standards can't reference other work set standards.
   - **Action**: Enter a short description for an industrial action that the system creates when the work set runs.

For field descriptions, see Work set sub-activity form.

8. When the standard is ready for review, select **Request approval**.

   An approval request is sent to active members of the owner group. If the owner group has no active users, the request is blocked and a message appears.

   For the standard state transitions, see Work set standard and task life cycles.

Result
When an approver in the owner group approves the request, the standard moves to the **Published** state. A published work set standard can be scheduled and run from the Standards hub.

Using Industrial Guided Tasks

Use Industrial Guided Tasks to manage Industrial Guided Task standards.

Industrial Guided Tasks enables you to create, publish, and execute step-by-step task standards that guide operators through consistent and accurate shop floor activities.

Publish an Industrial Guided Task standard

Build a structured guided task standard with guided instructions, then publish it for execution on the shop floor.

Using templates to create standards

Create standards by using templates to maintain consistency and reduce manual setup across similar processes.

Copy an Industrial Guided Task standard

Use an existing standard as a template to reuse its structure and content without having to build a new standard from the beginning.

Create an Industrial Guided Task from the Standards hub

Generate a task from a published standard to guide operators through a specific activity.

Create an Industrial Guided Task from Recommended Actions

Trigger a guided task directly from a deviation using contextual recommendations.

Scoring in Industrial Guided Tasks

Automatically calculate task performance based on assessment responses and defined scoring rules.

Configure scoring and automation in Industrial Guided Tasks

Set up scoring logic and automation rules to optimize task execution and follow-up actions.

Publish an Industrial Guided Task standard

Use Industrial Guided Task (IGT) standards to create and publish custom industrial standards tailored to your industry and operations.

Before you begin
Role required: sn_icw_igt.standard_author

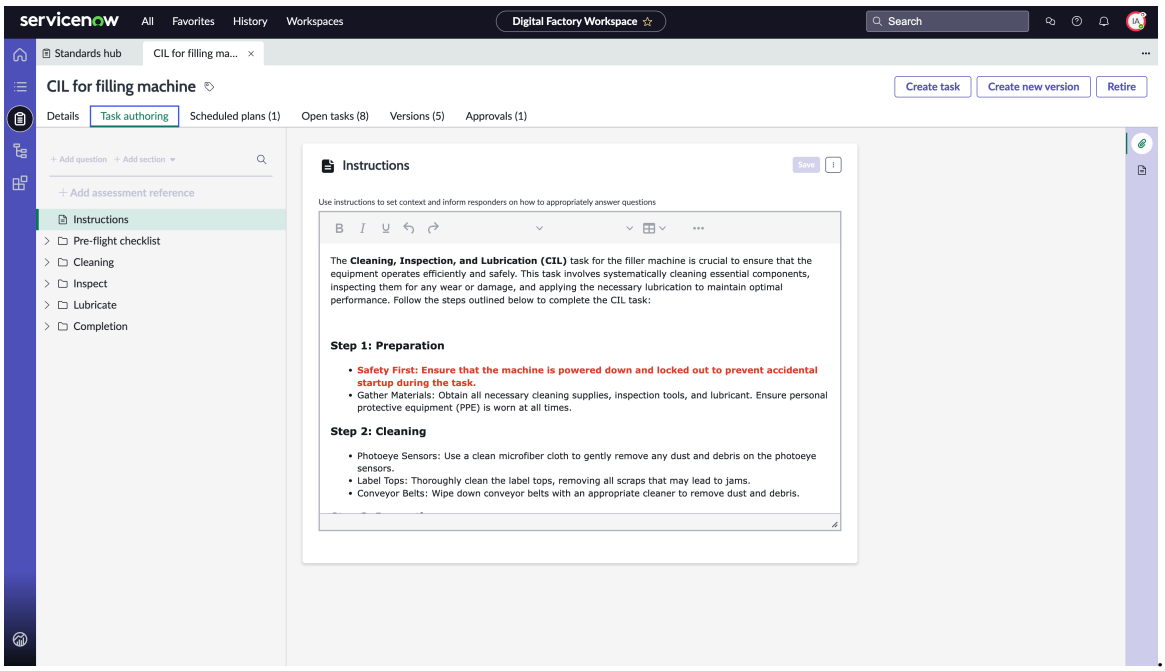
Procedure

1. Navigate to the **Standards hub**.
2. Select **New standard**.
3. On the Guided task tile, select **New standard**.
4. On the Industrial Guided Task Standard form, fill in the fields.
   For a description of the field values, see Industrial Guided Task standard form.
5. Save the draft version of the standard by selecting **Save**.
   The tile for the created standard appears in the Standards hub.
6. Navigate to the **Task authoring tab**.
7. Create an assessment template for your standard.
   The Industrial Guided Tasks uses the Smart Assessment Engine for designing the templates for standards. To learn how to create an assessment template, see Add instructions and questions to an assessment template.

   The following authoring rules are in place.

   - A standard must have a template with sections and optionally, subsections and questions to be able to move to the next state.
   - A question can be added directly to a section.
   - A subsection can't be added to a section that already contains questions.

   The following image shows an example of an assessment template for a standard.



8. When the standard is ready to be reviewed for publishing, select **Request approval**.

   If there's no assigned owner group or the group has no active users, the standard can't be approved and published. To learn more about approval states and the life cycle of a standard, see Industrial Guided Task standard and task life cycles.

9. Select **Save**.

Result
A new standard is created and displayed in the Standards hub. Depending on its state, the standard displays a label of either Draft or Published.

Task authoring configuration settings

Some settings configured in the Workspace have their limitations and don't apply to both workspace and mobile.

Some configurations set in the Workspace aren’t reflected on mobile devices. The expected behavior for each setting is as follows:

- For the **Allow justification** option, justification is enabled by default on mobile, and the settings only apply to the Digital Factory Workspace.
- For the **Allow attachment** option, attachments are enabled by default on mobile and the settings only apply to the Digital Factory Workspace.
- For the **Mark preferred answers** option, the settings for preferred answers apply only to the Digital Factory Workspace and aren’t available on mobile.
- For the **Question description** option, the settings apply only to the Digital Factory Workspace. For mobile, use the **Guidance** option instead.
- For the **Field to display in drop down selection** option for a question of the type reference, the settings apply only to the Digital Factory Workspace and aren’t available on mobile.

Copy an Industrial Guided Task standard

Copy an Industrial Guided Task (IGT) standard to reuse it as a template, without having to draft the entire standard from the start.

Before you begin
Role required: sn_icw_igt.standard_author

About this task
The standard can be in any state when it’s copied. The entire content of the standard is duplicated, including the smart assessment template. However, the scheduled plan associated with the standard and any versioning information aren't included in the copy.

Procedure

1. Navigate to the **Standards hub**.
2. Select the standard that you want to create a copy of.
3. Select the three-dot menu in the top corner and select **Use as template for new standard**.

   The short description of the copied standard is the original one with ‘Copy of’ added at the beginning.
4. Change the short description or other fields as necessary.
5. Select **Save**.

Result
The tile for the newly created copy of the standard appears in the Standards hub in the Draft state.

Using templates to create standards

You can create templates as a means to implement structured standards. These templates are developed and maintained by Industrial Connected Workforce (ICW) admins and are made accessible to operators through the Standards hub.

About standard templates

Standard templates are reusable models for common industrial tasks. ICW admins, such as implementation partners and pillar leads, can create, approve, and publish these templates. Operators can then use them to build their own standards.

Templates are available in the Standards hub. When an operator selects a template, the system fills in key details like location and author, helping them get started quickly. Each standard created from a template keeps a link to the original, so you can see which templates are being used.

Benefits

Benefits of standard templates

Benefit	User
• Create standards faster by selecting and adapting existing templates • Guided onboarding using templates can help reduce mistakes and confusion • Reliable and consistent tasks increase confidence and independence	Operator
• Ability to create, approve, and manage templates • Easier sharing of templates across different locations and teams • Quicker and more dependable deployment of standards across production sites • Clear tracking of who used or changed each template for better compliance • Easier expansion of proven manufacturing practices across suppliers and factories	ICW admin

Examples

- An operator uses a health check template to create an equipment inspection standard, adjusting steps to match local needs.
- A consultant builds a changeover template for a product line and shares it with site leads during onboarding.

Template categories and roles

Templates are grouped into categories like Health Check or Clean Inspect Lubricate (CIL). ICW admins choose the category when creating a template. Only categories connected to the correct user role are available for selection. The default category “Industrial Guided Task” isn’t used for new templates.

Creating standards from templates

Operators can find templates in the Standards hub and use them to create standards. When a standard is created from a template:

- The related assessment template is copied.
- The category is set automatically.

- The form includes details specific to a user, such as location and author.
- The new standard keeps a system-managed link to the original template.

Operators can also choose to create a standard without using a template.

Create an assessment template category

Set up an assessment template category so that you can build standard templates for that category and use them in the Standards hub.

Before you begin

Role required: sn_icw.admin

Procedure

1. Navigate to **All** > **Smart Assessment Engine** > **Administration** > **Template Categories**.
2. Select **New**.
3. On the Assessment template category form, fill in the fields.

   For a description of the field values, see Create an assessment template category. The Category role must be sn_icw_igt.user or any role that contains this role, such as sn_icw_igt.expert, sn_icw_igt.author, or any other role that you create.

   Assessment template category form

Field	Description
Name	Unique meaningful name for the template category.
Category role	Minimum role that you must have to view any template that is a member of this category. The role must be sn_icw_igt.user or any role that contains this role, such as sn_icw_igt.expert, sn_icw_igt.author, or any other role that you create.
Description	Text that helps others to understand the purpose of including templates in this category.
Active	Option to activate the category. By default, newly defined template categories are active.
Enable Normalization	Option to enable the use of normalization strategies for assessment templates in this category. Normalization allows advanced scoring calculations that adjust raw scores for guided tasks. **Note:** For the default Industrial Guided Task template category, an ICW administrator can select this option to allow normalization on IGT scoring.
Normalization strategies	Available normalization strategies for the category. This field is available only when Enable Normalization is selected.
Default normalization strategy	Default normalization strategy applied for assessment templates in this category. This field is available only when Enable Normalization is selected.

4. Select **Submit**.

Result
The assessment template category appears in the list of categories that can be specified when designing an assessment template in the Digital Factory Workspace.

Create an assessment template

Create an assessment template for creating standards from templates in the Digital Factory Workspace.

Before you begin
Role required: sn_icw_igt.standard author

Procedure
1. Navigate to **Workspaces** > **Assessment Workspace**.
2. Select **New template**.
3. One the Assessment template form, fill in the fields.
   For a description of the field values, see Create assessment template form. The Purpose field lets you select from the list of assessment template categories.

   Note:
   - Don't select the Industrial Guided Task category because it's reserved for creating standards without the use of templates.
   - Make sure that the selected category is linked to the ICW User [sn_icw.user] or one of its extended roles.

     To check categories and their roles, navigate to **All** > **Smart Assessment Engine** > **Template Categories**.
   - Don't set the Assessment target, as setting this field breaks the execution.
4. Select **Create**.
   The template is now created and available in the list of assessment templates in the Assessment Workspace.
5. In the **Questions** tab, fill in the template.
   For a description of the field values, see Add instructions and questions to an assessment template.

   Note: The following controls are to be kept as is:
   - Don't set **General** > **Details** > **Assessment targets**.
   - Don't set or change **General** > **Settings** > **Assessment reader role**.
6. Select **Publish**.

Result
The template is now available when creating standards in the Standards hub.

Create a standard from a template

Create a standard by using available templates within your organization. This approach saves time and promotes consistency compared to building a new standard manually.

Before you begin
Role required: sn_icw_igt.standard_author

Procedure

1. Navigate to the **Standards hub**.
2. Select **New standard**.
3. On the Guided task tile, select **Use template**.
   The available templates are displayed, with a tile for each template. You can search them by key words or filter them by template category.
4. To apply a desired template, locate its tile and select **Use template**.
5. Follow the steps for creating and publishing a standard.
   To learn more about the following steps, see Publish an Industrial Guided Task standard.

Result

A new standard is created and displayed in the Standards hub. The standard is in either the Draft or Published state.

Create an Industrial Guided Task from the Standards hub

Create an Industrial Guided Task (IGT) from an IGT standard.

Before you begin

Role required: sn_icw_igt.user or sn_icw_igt.expert

Note: The sn_icw_igt.expert can put tasks on hold or cancel them.

Procedure

1. Navigate to the **Standards hub**.
2. Select the published standard for which you want to request a task.
3. Select **Create task**.
4. On the Guided Task form, fill in the fields.
   For a description of the field values, see Industrial Guided Task form.
5. Select **Save**.

Result

The new industrial guided task is displayed in the following lists:

- List of all tasks
- List of industrial guided tasks
- The **Open tasks** tab for an Industrial Guided Task standard

Create an Industrial Guided Task from Recommended Actions

Create an Industrial Guided Task (IGT) based on the Recommended Actions for a deviation.

Before you begin

Make sure that you:

- Published a standard that should appear in Recommendations
- Enabled Allow ad-hoc request
- Set a deviation to active

Role required: both sn_icw.deviation_user and sn_icw_igt.user

Procedure

1. Navigate to **Lists** > **Deviations**.
2. Open the deviation that you need.
   The standard appears in the **Suggestions** tab of the **Recommendations** sidebar if any of the following conditions are met:
   - The functional location of the standard contains the functional location of the deviation.
   - The equipment model of the standard contains the equipment model ID of the deviation.
   - The equipment in the standard matches the equipment in the deviation.
   - The failure mode of the standard contains the failure from the deviation.
   - The material model of the standard contains active material from the deviation.
3. On the card for the recommended standard, create a task from a recommended standard by selecting **Create task**.
4. **Optional:** Remove a recommendation from the sidebar by selecting **Dismiss**.
   The card disappears but the action is saved in actions history.

Result

A new standard task is created and displayed in the list of tasks. It contains all the information from both the standard and the deviation.

Use automation to create standard tasks

Set up an automation to create a standard task that is directly related to the Industrial Guided Task (IGT) that triggered the standard task.

Before you begin

Make sure you published a standard.

Role required: sn_icw_igt.standard_author

About this task

The automation action belongs to the Action Category called Guided Task Automation, which is linked to the Assessment Template Category named Industrial Guided Task. Therefore, any assessment template created in the Industrial Guided Task category can access this automation action.

Procedure

1. Navigate to **Standards hub** > **Standards**.
2. Open the standard for which you want to configure the automation.
3. Select **Advanced configuration**.
   You're in the Smart Assessment Workspace.
4. Provide the name and description for the new automation.
5. Select **Create**.
6. Select **Add standalone action set**.
7. Select the existing **then** action set.
8. For the field **Action type**, select **Create standard task for Automation**.
9. On the Set actions form, fill in the fields.
   For a description of the field values, see Standard automation task form.
10. Select **Close**.

11. Select **Activate**.
12. Select the option **I understand the automation will no longer be editable** and then select **Activate**.

Industrial Workflows

Use Industrial Workflows to manage different types of tasks in the Industrial Connected Workforce (ICW).

An Industrial Workflow in Industrial Connected Workforce (ICW) refers to a structured process for managing a specific type of an industrial task.

Action Management

Use Industrial Action Management to manage all ad-hoc tasks that don't fit into any of the standard processes. Document activities like following up on a safety incident or updating an Industrial Guided Task (IGT) standard in response to equipment behavior changes.

Action Management overview

Actions are temporary tasks meant for short-term, specific tasks, such as inspection. Creating a new action enables specifying an activity to be performed. This activity can be related to a specific piece of equipment or a functional location within the organizational hierarchy. They can also be created directly from a deviation or as a follow-up task from an industrial guided task.

Use case example

The following is an example of an ad-hoc equipment inspection and follow-up.

A line manager notices unusual vibrations in a packaging machine during a routine walk through. To address the issue quickly without disrupting scheduled tasks, they use Action Management in the Digital Factory Workspace:

1. Create a new action to document the inspection task, linking it to the affected equipment and functional location.
2. Assign the task to a qualified technician based on skill-based task management rules.
3. Set priority and urgency using the built-in matrix to reflect the potential safety impact.
4. Track progress as the technician performs the inspection and adds notes or attachments.
5. Trigger a deviation or update a standard if the inspection reveals a recurring issue or gap in existing procedures.

This use of Action Management enables fast, flexible response to emerging issues, supports traceability, and helps maintain equipment reliability between scheduled tasks.

Create an action

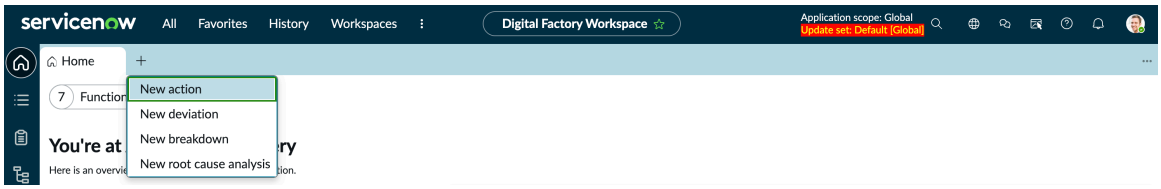
Create an action in the Digital Factory Workspace.

Before you begin
Role required: sn_icw.action_user or sn_icw.action_expert

Note: When an action is in the open state, the sn_icw.action_user can modify functional location and equipment fields, and the sn_icw.action_expert role can edit any field.

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Add** > **New Action**.



2. On the Action form, fill in the fields.
   For a description of the field values, see Action form.
3. Select **Save**.

Result
The new action is displayed in the action list and the list of all tasks.

Create an action from another task

Create an action from another task in the Digital Factory Workspace.

Before you begin
You can create an action from an existing action, deviation, breakdown or root cause analysis.

Role required: sn_icw.action_user or sn_icw.action_expert

Procedure

1. Navigate to **Lists** ( ) in the Digital Factory Workspace.
2. Select the task that you want to be the parent of the new action.
3. Select the three-dot menu at the top corner and select **Create action**.
   A new form for the action opens with automatically populated fields for:
   - Short description
   - Description
   - Functional location
   - Equipment
   - Opened by
   - Assignment group
   - Assigned to
   - Impact
   - Urgency
   - Priority
   - Due date
   - Parent (not available on the form)
4. On the Action form, fill in or change the values for the fields.
   For a description of the field values, see Action form.
5. Select **Save**.

Result
The new action is displayed in the **Tasks** list of the parent task. The parent task cannot be closed until all child tasks in the **Tasks** list are closed.

Create a follow-up action

Create a follow-up action from a task in the Digital Factory Workspace.

Before you begin
You can create a follow-up action from an existing action, deviation, breakdown, or root cause analysis.

Role required: sn_icw.action_user or sn_icw.action_expert

Procedure

1. Navigate to **Lists** ( ) in the Digital Factory Workspace.
2. Select the task that you want to be the origin of the new action.
3. Select the three-dot menu at the top corner and select **Create follow-up action**.
   A new form for the action opens with automatically populated fields for:
   - Short description
   - Description
   - Functional location
   - Origin
   - Opened by
   - Assigned to
   - Impact
   - Urgency
   - Priority
   - Due date
4. On the Action form, fill in or change the values for the fields.
   For a description of the field values, see Action form.
5. Select **Save**.

Result
The new action is displayed in the **Related** list of the origin task. Closing of related tasks isn't a pre-requisite for closing of the origin task.

Priority matrix for actions

Use the priority matrix to see how priority is calculated based on impact and urgency.

Priority matrix for actions

	Urgency			
Impact	**1 -Critical**	**2 - Important**	**3 - Routine**	**4 - Not urgent**
1 - Safety	1 - Direct	2 - This shift	3 - Today	5 - Within 30 days
2 - Quality	1 - Direct	2 - This shift	3 - Today	5 - Within 30 days

Priority matrix for actions (continued)

	Urgency			
Impact	**1 -Critical**	**2 - Important**	**3 - Routine**	**4 - Not urgent**
3 - Reliability	1 - Direct	2 - This shift	3 - Today	5 - Within 30 days
4 - Operations	2 - This shift	3 - Today	4 - Within 7 days	5 - Within 30 days
5 - Other	3 - Today	4 - Within 7 days	5 - Within 30 days	5 - Within 30 days

Deviation Management

A deviation is any type of equipment or work anomaly that has an impact on work safety, performance, or quality. It doesn't necessarily cause a complete outage, but it requires mitigation or resolution. Deviation management is the process of creating, evaluating, resolving, and closing deviations.

Deviation Management overview

Identifying and resolving deviations is a key principle in performance improvement.

Industrial Deviation Management helps you with the following:

- Promote timely corrective actions
- Maintain product quality
- Promote compliance with regulations
- Reduce the risk of recurring issues that lead to production delays and increased costs

Deviations can be created directly from the Workspace or as part of another task's execution.

- To create a deviation directly from the Workspace, select the **Plus** button (+) that is available on any window or page.
- To create a deviation from an action, open the action task. Then, select the three-dot menu at the top corner and select **Create deviation**.

You can start the sidebar discussion with an expert user to close the resolved deviation. To learn more about this functionality, see Initiate a Sidebar chat in the Digital Factory Workspace.

Example use case

The following is an example of managing a quality deviation during production.

During a routine quality check on a beverage filling line, an operator notices that several bottles are under filled. This could indicate a calibration issue with the filling equipment. To document and resolve the issue, the operator uses Deviation Management in the Digital Factory Workspace:

1. Create a deviation to log the anomaly, linking it to the specific equipment and functional location.
2. Categorize the deviation under Quality and assign an appropriate urgency and impact level using the built-in priority matrix.
3. Assign the deviation to a maintenance technician for investigation.

4. Track the deviation through its life cycle: from Found to Open, and eventually to Fixed and Closed.
5. Trigger a guided task for recalibrating the equipment, or initiate a root cause analysis if the issue recurs.
6. Document the resolution and attach any supporting evidence, such as photos or calibration reports.

This use of Deviation Management helps maintain product quality, supports traceability for audits, and enables timely corrective actions to minimize production impact.

Create a deviation

Create a deviation in the Digital Factory Workspace.

Before you begin

Role required: sn_icw.deviation_user or sn_icw.deviation_expert

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Add** > **New Deviation**.
2. On the Deviation form, fill in the fields.
   For a description of the field values, see Deviation form.
3. Select **Save**.
   The new deviation with the state Found appears in the list of deviations.
4. To open the deviation and move it to the state Opened, select **Open**.
5. Fix the deviation immediately by filling in the Resolution and Resolution code.
6. Select **Fix deviation**.

Result

The new deviation is displayed in the deviation list and the list of all tasks.

Deviations life cycle

The deviation life cycle is the list of states that a deviation can go through.

The deviation life cycle has the following states:

- Found
- Open
- Scheduled
- Fixed
- Closed
- Canceled

Once the deviation is fixed, it can be closed or reopened by a deviation expert.

Note: Deviations in the Fixed state are automatically moved to Closed after the number of days defined by the system property *sn_icw.deviation_close_after_days*. The default value is seven days.

Only the resolution and resolution code are still editable. If it's in any other state, it can be canceled.

Note: The actions Close, Cancel and Reopen are restricted to users with the sn_icw.deviation_expert role, while other actions are supported for both the sn_icw.deviation_user and sn_icw.deviation_expert role.

You can manage deviations, such as bulk assign from the list view, which is only available in the Workspace.

Deviation categories

This page contains the reference information about the deviation categories and subcategories.

The following categories and belonging subcategories are available and can be assigned to a deviation. **Category** is a required field, while **Subcategory** is optional and can remain unspecified or set to **None**.

Deviation categories and subcategories

Category	Subcategories
Mechanical	• Worn • Scratched • Bent • Cracked • Broken • Discolored • Burned • Leaking • Jammed
Electrical	• No supply • Low supply • High supply • Overload • Bad connections • Software
Pneumatic	• Leaking • Broken • Ruptured • Low supply • High supply • Overpressure
Hydraulic	• Leaking • Broken

Deviation categories and subcategories (continued)

Category	Subcategories
	• Ruptured • Low supply • High supply • Overpressure
Environmental	• Dirty • Spill • Airborne contaminants • Flooded
Defect	• Rework • Scrap • Hold
Other	Other

Priority matrix for deviations

Use the priority matrix to see how priority is calculated based on impact and urgency.

Priority matrix for deviations

	Urgency			
Impact	1 -Critical	2 - Important	3 - Routine	4 - Deferred
1 - Safety	1 - Direct	1 - Direct	2 - This shift	6 - Unplanned
2 - Quality	1 - Direct	2 - This shift	3 - Today	6 - Unplanned
3 - Reliability	2 - This shift	3 - Today	4 - Within 7 days	6 - Unplanned
4 - Operations	2 - This shift	3 - Today	4 - Within 7 days	6 - Unplanned
5 - Other	2 - This shift	3 - Today	4 - Within 7 days	6 - Unplanned

Breakdown Management

Breakdown Analysis helps industrial teams investigate and resolve serious equipment failures and process stops. You can either escalate an unresolved deviation or create a breakdown record directly, depending on how the issue is identified. This structured workflow helps timely issue resolution and long-term reliability improvements.

Breakdown and Breakdown Analysis overview

Breakdowns are events that are more serious than regular deviations. They cause longer downtime, higher costs, and a greater impact on production.

Every breakdown is a deviation, but not every deviation is a breakdown.

Factors that help determine the severity include:

- Value of replacement parts
- Effort required to fix the issue
- Lost production time or opportunity

Breakdowns Analysis is a structured process used to investigate:

- Breakdowns: Machine stops that require major repairs or part replacements
- Process failures: Machine stops that last longer than a set time, where the default is 15 minutes

Methods for logging breakdown events

Escalating a deviation

When a deviation remains unresolved or its impact increases, you can escalate it to Breakdown Analysis. This method keeps all original data, such as timestamp, asset ID, and operator notes. It avoids duplicate data entry, links to deviation and breakdown records for traceability, and optionally closes the deviation when the breakdown is resolved.

Creating a breakdown record directly

Sometimes breakdowns are identified outside the deviation workflow, for example through alerts, manual observation, or scheduled reviews. In such cases, you can create a Breakdown Analysis record directly to log the event immediately. Capture details such as duration, symptoms, and impact, classify the issue and assess its cost, as well as trigger deeper analysis if needed.

Users

Breakdown analysis is used mostly by:

Breakdown analysis users

Users	Responsibilities
Line operator	• Logs deviations or breakdowns • Minimizes downtime • Provides context for escalation
Shift lead	• Monitors issues • Escalates deviations or logs breakdowns • Coordinates investigations
Maintenance engineer	• Investigate root causes • Records fixes and preventive actions • Close Breakdown analysis records after resolution
Equipment owner	• Oversees equipment performance • Makes sure that breakdowns are logged and analyzed

Example scenario

A machine stops during production. The operator logs a deviation. After two hours, the shift lead escalates it to Breakdown Analysis. The system creates a linked record with all relevant data. The maintenance engineer investigates, replaces a faulty part, and closes the breakdown. The deviation is also marked as resolved. In another situation, a breakdown is identified directly through a system alert. The operator logs it manually, records the impact, and assigns it for investigation. The team performs a breakdown analysis and updates the record with corrective actions.

Create a breakdown

Create a breakdown record in the Digital Factory Workspace to document a significant equipment failure or process stop. Use this task to capture key details such as duration, impact, and cause, and begin structured investigation and resolution.

Before you begin

Role required: sn_icw.deviation_user or sn_icw.deviation_expert

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Add** > **New Breakdown**.
2. On the Breakdown form, fill in the fields.
   For a description of the field values, see Deviation form.
3. Select **Save**.
   A new breakdown with the Open state appears in the list of breakdowns.
4. **Optional:** Write and post work notes with additional details about the progress and steps you have taken.
   To view the **Work notes** field next to other record details, make sure that you select the **Editable record form and list of record activities** view by selecting the view selector icon ( ).
5. **Optional:** From the Recommendations sidebar, create a guided task related to the breakdown.
   To learn more about the Recommended Actions in the Digital Factory Workspace, see Recommended Actions for the Industrial Connected Workforce.

Result

The breakdown is displayed in the breakdown list of and the list of all tasks. You can fix the breakdown and initiate a breakdown analysis for in-depth investigation.

Escalate a deviation to a breakdown

Convert a deviation into a breakdown when it no longer fits the deviation criteria and requires structured analysis.

Before you begin

Role required: sn_icw.deviation_user or sn_icw.deviation_expert

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Select Lists view icon** ( ).
2. From the list of deviations, select the deviation task that you want to escalate to a breakdown.
3. Select the three-dot menu in the top corner and select **Escalate to breakdown**.
4. Confirm your choice by selecting **Yes, escalate to breakdown**.

Result

The deviation has been escalated to a breakdown and is displayed in the breakdown list and the list of all tasks. To start breakdown analysis, select **Start breakdown analysis** from the three-dot menu in the top corner of the record page.

Initiate a breakdown analysis

Start a breakdown analysis to investigate the root cause of a recurring or complex issue.

Before you begin

Role required: sn_icw.deviation_user or sn_icw.deviation_expert

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Select Lists view icon** ().
2. From the list of breakdowns, select the breakdown task for which you want to initiate the root cause analysis.
3. Select the three-dot menu in the top corner and select **Start breakdown analysis**.
4. On the Breakdown analysis form, fill in the field Description and change other fields as needed.
   For a description of the field values, see Root cause analysis form.
5. Select **Save**.
   The Playbook opens that helps you get to the root of the breakdown. To learn more about Playbook Experience, see About Playbook Experience.
6. **Optional:** From the Recommendations sidebar, attach a standard related to the breakdown analysis.
   To learn more about the Recommended Actions in the Digital Factory Workspace, see Recommended Actions for the Industrial Connected Workforce.
7. On the Review information form, fill in the fields.
   For a description of the field values, see Breakdown analysis form.
8. Select **Mark Complete**.
   The task state changes to Open and you're navigated to the first step of the Playbook, which is Data Validation.
9. After you're done with the first section called Input fix details, select **Mark complete**.
   This step and any of the subsequent steps can be reopened if needed.
   The Action results page opens where you can describe the corrective action taken, similarity with past events, and estimated costs of the breakdown.
10. After you're done with this step, select **Mark complete**.
    The Follow-up actions page opens, where you can create a follow-up action as a consequence of this event.
11. To create a follow-up action, select **Create New Follow-up Action** and fill in the fields.
    For a description of the field values, see Action form.
12. After you're done with this step, select **Mark complete**.
    You're taken to the Monitoring step.
13. Check all the boxes to complete this step.
    The state of the breakdown has been moved to Monitoring.
14. To complete the analysis, select **Close analysis**.
15. Confirm your choice by selecting **OK**.

Result
The state of the analysis moves to Closed and the record is displayed in **Lists** > **Root cause analyses** > **Done**.

Root Cause Analysis

Use the Industrial Root Cause Analysis to identify the cause of disruptions and help prevent re-occurrences.

Use the Industrial Root Cause Analysis (RCA) and its Playbook to standardize the RCA process across manufacturing operations. This centralized, interactive guide helps teams identify and resolve production issues efficiently. By following a consistent RCA workflow, teams can reduce downtime, improve product quality, and support continuous improvement. The Playbook promotes faster decision-making and consistent problem solving across all operations.

Create a root cause analysis

Create and perform a root cause analysis (RCA) for an issue in the Digital Factory Workspace.

Before you begin
Role required: sn_icw.rca_user or sn_icw.rca_expert

Note: The sn_icw.rca_expert can cancel a root cause analysis.

Procedure
1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Add** > **New Root Cause Analysis**.
2. On the Root cause analysis form, fill in the fields.
   For a description of the field values, see Root cause analysis form.
3. Select **Save**.
   The Playbook opens that helps you get to the root of the problem. To learn more about Playbook Experience, see About Playbook Experience.
4. On the Information Gathering form, fill in the fields.
   For a description of the field values, see Root cause analysis form.
5. Select **Mark complete**.
   The Basic Conditions Check page opens where you can attach existing related standards or create them directly from where you are.

   A standard must be published to appear in the **Recommendations** sidebar. This step and the following ones can be reopened if needed, but you can't move to the next step if the previous one is still not complete.
6. After you're done with this step, select **Mark complete**.
7. Select **Yes** or **No** to confirm if the standards have been properly executed or not.
8. Select **Mark complete**.
   The Action Plan section enables you to create necessary actions that originate from this root cause analysis.
9. Select **Mark complete**.

Result
The new root cause analysis is displayed in the root cause analysis list and the list of all tasks.

Priority matrix for root cause analysis

With the priority matrix for root cause analysis, you can find the relationships and how the priority is calculated based on impact and urgency.

Priority matrix for root cause analysis

	Urgency			
Impact	**1 -Critical**	**2 - Important**	**3 - Routine**	**4 - Deferred**
1 - Safety	1 - Direct	1 - Direct	2 - This shift	5 - Within 30 days
2 - Quality	1 - Direct	2 - This shift	3 - Today	5 - Within 30 days
3 - Reliability	2 - This shift	3 - Today	4 - Within 7 days	5 - Within 30 days
4 - Operations	2 - This shift	3 - Today	4 - Within 7 days	5 - Within 30 days
5 - Other	2 - This shift	3 - Today	4 - Within 7 days	5 - Within 30 days

Industrial Data Models

Use the Industrial Data Models to manage data models for the Industrial Connected Workforce (ICW).

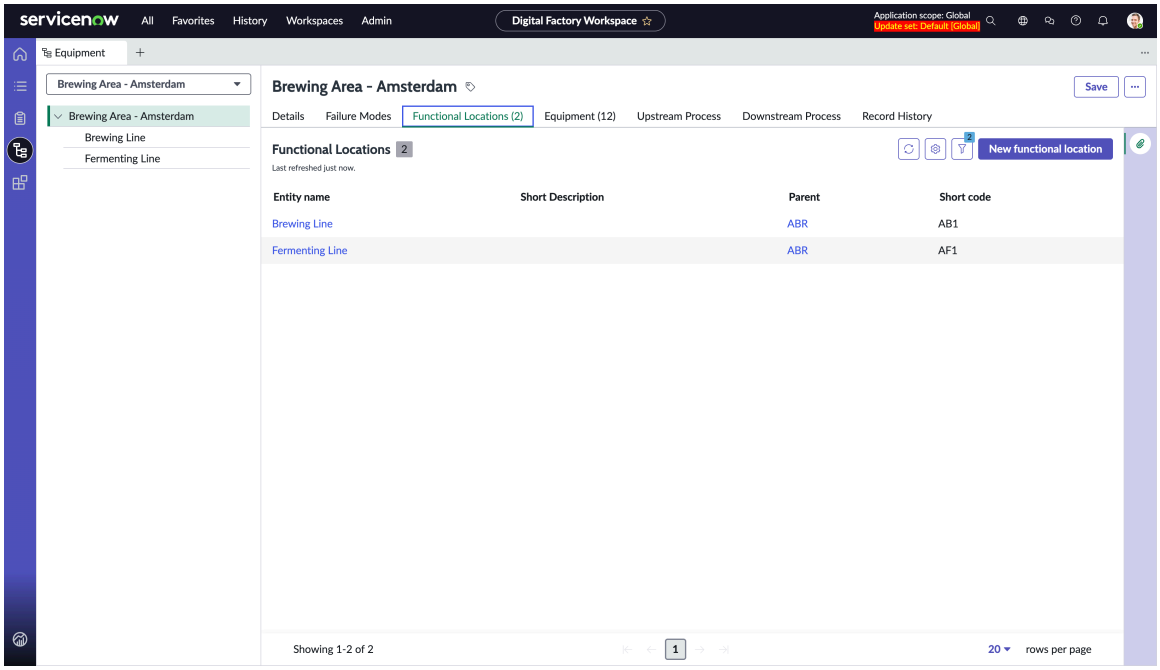
Operational Equipment Model

Use the Operational Equipment Model to define functional locations and equipment in accordance with the ISA-95 model.

The Operational Equipment Model in the Digital Factory Workspace is used to manage the operational equipment model data. It displays all functional locations within the Workspace and enables you to view detailed information such as identity, short code, and other relevant data. It also enables you to create a parent functional location directly from the main page, as well as to add equipment within functional locations.

Newly added equipment appears in the equipment list. They can be used for various tasks. The Operational Equipment Model supports environments that are specific to the customer and setup, reflecting the organizational structure and equipment layout. You can also improve collaboration among team members by sharing the URL of operational equipment. When your colleagues access it, the system loads the item you selected.

The following image shows an example of the Operational Equipment Model.



Functional location vertical navigation

The functional location view in the Digital Factory Workspace uses a vertical navigation panel and a breadcrumb trail so that you can move between sections of a functional location and between locations in the equipment model.

The functional location view in the Digital Factory Workspace arranges the equipment model in a vertical layout. A panel on the left lists the sections that are available for the selected functional location, and the main area shows the content for the section that you select.

Vertical navigation layout

When you open the functional location view, the page is divided into two areas:

- A vertical navigation panel on the left lists the sections that are available for the selected functional location.
- A content area on the right shows the page title for the selected section, the breadcrumb trail, and the content for that section.

The vertical layout accommodates additional sections, such as analytics, without changes to the overall page structure.

Breadcrumb trail

A breadcrumb trail appears above the page title and shows the full equipment model hierarchy path for the selected functional location. The trail starts with a home icon and ends with the current location. Select a segment to open that level in the hierarchy. The home segment uses the same icon as the icon that opens the equipment view.

Default landing location

When you open the functional location view, the page opens to the functional location that is set in your worker profile. From this default landing location, you can drill down through the equipment model or open the list of functional locations to switch to a different one within your entitlement scope.

Navigate the equipment model with the breadcrumb trail

Use the breadcrumb trail at the top of the page title to open a different level in the equipment model hierarchy from the current functional location.

Before you begin

Select a functional location from the Home menu in the Digital Factory Workspace to set the context.

Role required: ICW worker

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Equipment Model**.
2. Select the tab with the functional location in the content area.

   The breadcrumb trail at the top of the tab, shows the full equipment model hierarchy path for the current functional location. It starts from the tHome icon and ends with the current location.
3. To open a level in the hierarchy, select that segment in the breadcrumb trail.

   The page opens at the selected level and the vertical navigation panel and content area refresh to match.
4. **Optional:** To return to the top of the equipment model, select the home icon at the start of the breadcrumb trail.

Open a different functional location

Switch to a functional location that is not on the current breadcrumb trail by opening the list of functional locations within your entitlement scope.

Before you begin

Your worker profile must grant access to more than one functional location. The list shows only the functional locations that are within your entitlement scope.

Role required: sn_icw.user

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Equipment Model**.
   You can view the functional location that is set in your worker profile.
2. Select the drop-down button to view the list of the functional locations that are within your entitlement scope.
3. From the list, select the functional location that you want to open in the content area.
4. Expand and select the functional location to view it in a new tab in the content area.
   The view refreshes and the selected functional location is used as the active context. The breadcrumb trail updates to show the equipment model hierarchy path for the selected functional location.

Functional location vertical navigation elements

Use these elements to move between sections and locations in the functional location view of the Digital Factory Workspace.

Functional location view elements

Element	Description
Vertical navigation panel	Panel on the left side of the page that lists the sections available for the selected functional location.
Page title	Heading in the content area that names the section selected in the vertical navigation panel.
Breadcrumb trail	Path that appears above the page title and shows the equipment model hierarchy for the selected functional location.
Home icon	First segment of the breadcrumb trail. Opens the top of the equipment model. Uses the same icon as the icon that opens the equipment view.
Breadcrumb segment	Level in the breadcrumb trail. Select a segment to open that level in the equipment model hierarchy.
Functional locations	Entry in the vertical navigation panel that opens the list of functional locations within your entitlement scope.

Industrial Materials

Use Industrial Materials to manage the materials used for the Industrial Connected Workforce (ICW).

Industrial Materials overview

The Industrial Materials feature provides a hierarchical view of all material classes defined in your system. It helps you manage and navigate through material classifications. Classes represent types, and materials are the actual products within each level of the tree.

You can access the Industrial Materials feature by selecting the **Material model** icon () in the Digital Factory Workspace. The tree displays all material classes defined in your system, enabling you to navigate through the parent and child relationships. Select any material class to view its details, such as material instances with the **Materials** tab.

When you select a material class, a form loads displaying detailed information about the selected class. If you have sufficient permissions, you can edit the details. When you create classes and materials using the forms, the new entries appear at the configured level within the tree. The system supports inheritance behavior, which enables materials and classes to be configured at different levels.

The feature includes a list showing all classes defined below the selected material class. You can open any class from this list in a new tab, providing an easy way to explore and manage different material classes. Also, you can search within the tree, and the system highlights the relevant node, which helps you find specific material classes.

You can help improve collaboration among team members by sharing the URL for a material class. When your colleagues access it, the system loads and highlights the item you selected.

Industrial Materials benefits

The Industrial Materials feature has the following benefits.

- Provides accurate and up-to-date information with the ability to view and edit material details.
- Simplifies navigation through complex material classifications.

- Helps explore and manage different material classes with related lists and search functionality.
- Enables collaboration among team members through URL sharing.

Industrial Failure Modes

Use Industrial Failure Modes to manage failure modes in the Industrial Connected Workforce.

Failure mode overview

A failure mode describes an anomalous condition that you may encounter in an industrial environment. The failure mode model defines a hierarchy of faults related to the ISA-95 equipment model. This hierarchy consists of the following two levels.

- Failure mode categories
- Failure modes

Failure mode categories are independent of the equipment model and serve as a grouping method for failure modes. They're defined across an instance and in relation to an element of the equipment model. They're related to the process or machine state. Each failure mode has a planning status that classifies how time spent in the failure mode is categorized.

Industrial Failure Modes benefits

You can define failure mode categories to group and organize failure modes. Grouping and organizing failure modes makes it easier to manage and understand different types of failures across your equipment. These categories are defined across an instance, which provides consistency across your system.

You can define failure modes with categories, making it easier to pinpoint issues related to your equipment. Each failure mode can be associated with an element of the equipment model, helping you to identify exactly where the problem lies.

Each failure mode can be optionally associated with a code or other identifier from the related equipment, which helps to reference and track specific failures.

You can associate each failure mode with a process or machine state (running, stopping, stopped, or starting) to understand the context of the failure better. Also, each failure mode can be associated with a planning status (planned, unplanned, or excluded), which helps you classify and manage downtime more effectively.

Failure modes are inherited from the parent equipment model level to every level below where they're initially assigned. This organization helps you verify that all levels of your equipment hierarchy are covered and provides a comprehensive view of potential issues.

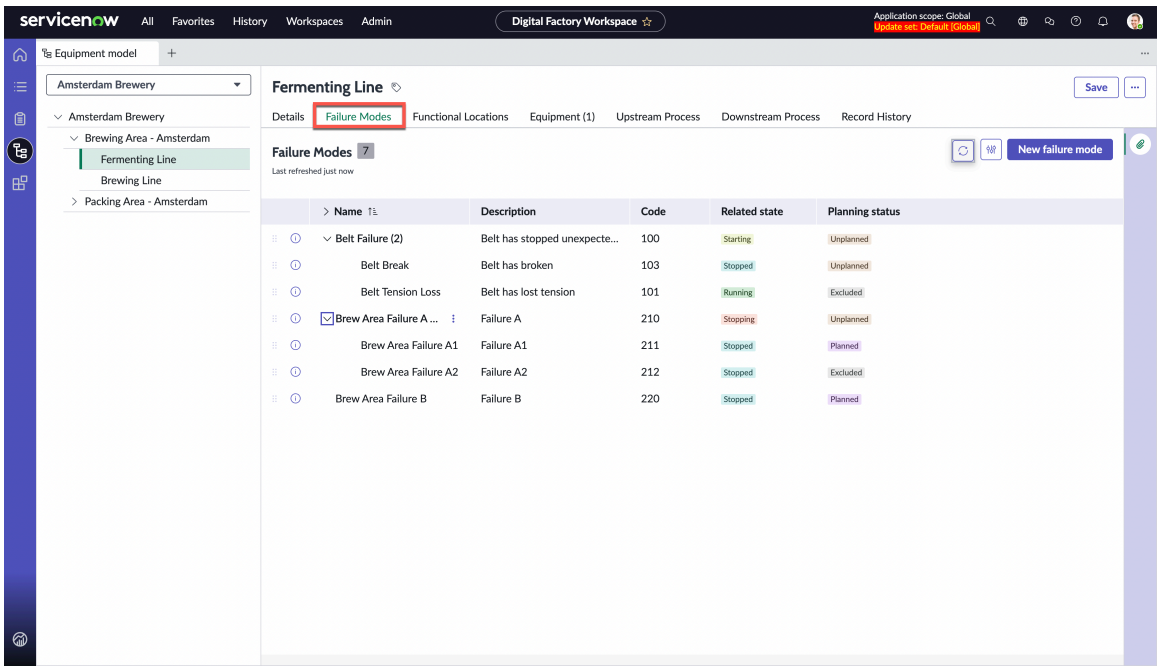
You can edit fields directly in the tabular view with inline editing. You only have to select the field and change it as necessary.

Using Industrial Failure Modes

Failure modes can be used to do the following.

- Trigger workflows as reactive or corrective measures.
- Show guidance in recommended actions.
- Describe features of process or equipment anomalies.
- Classify time intervals when calculating availability.

The following image shows the **Failure Modes** tab available when viewing part of the equipment model.



Create a failure mode from a functional location

Create a failure mode from a functional location in the Digital Factory Workspace to help identify and organize equipment or process issues.

Before you begin

Role required: sn_icw.admin

About this task

You can create failure modes from a functional location or an equipment entity. The following procedure describes creation from a functional location.

Procedure

1. Navigate to **Equipment model**.
2. From the tree, select the location that you want to associate with the failure mode.
3. Select **Failure Modes** then **New failure mode**.
4. On the Failure mode form, fill in the fields.
   For a description of the field values, see Failure mode form.
5. Select **Save**.

Result

The failure mode is displayed in the list of failure modes for the functional location or equipment and all inherited items.

Initiate a Sidebar chat in the Digital Factory Workspace

Initiate a Sidebar chat in the Digital Factory Workspace. Sidebar discussion enables operators to collaborate with others when working on deviations, actions, root cause analyses, and standards. For example, if you want to notify the deviation expert that a deviation is fixed and can be closed.

Before you begin
Role required: sn_icw.user

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace**.
2. Open the task or standard for which you want to initiate a sidebar discussion.
3. Select the three-dot menu at the top corner and select **Start discussion**.
4. On the Start a Sidebar discussion dialog box, fill in the fields.
5. Select **Start discussion**.

Result
Added participants are notified. They can join the discussion by selecting the **Sidebar discussions** icon ( ). To read more about the Sidebar discussions functionality, see Exploring Sidebar .

Using ICW Health and Safety Integration

Use the ICW Health and Safety Integration application to manage and resolve safety incidents in your organization.

Create a safety incident from an ICW task

Create a safety incident directly from an existing ICW task when the task reveals a safety-related issue.

Before you begin
Role required: sn_icw.safety_incident_user

About this task
You may discover a safety issue while working on an action, deviation, or Industrial Guided Task. The safety incident requires formal reporting. Creating a safety incident from the task automatically links the two records through the origin field that provides context for investigation.

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace**.
2. Select the task from which you want to create a safety incident.

   You can create safety incidents from the following task types:

   - Actions
   - Deviations
   - Root Cause Analysis

3. Select More Actions ( ) in the top corner.
4. Select **Report safety incident**.
5. On the Safety Incident form, review the pre-populated fields.

   The following fields are automatically populated from the originating task:

   - Short description
   - Opened by

- Assigned to
- Functional location

6. Complete the remaining required fields, including the incident summary.
7. **Optional:** Add attachments to provide additional context.
8. Select **Submit**.

Result
The safety incident is created and linked to the originating task through the origin field. The incident appears in the safety incidents list and in the Related tab of the originating task.

Related topics

Exploring Industrial Connected Workforce Integration with Health and Safety Incident Management

View safety incidents in the Digital Factory Workspace

View safety incidents in the Digital Factory Workspace

Access and manage safety incidents from the Digital Factory Workspace list views.

Before you begin
Role required: sn_icw.safety_incident_user

Procedure

1. Navigate to **Workspaces** > **Digital Factory Workspace** > **Select List menu (**  **)**.
2. Select **Safety Incidents** from the available lists.
3. Use filters to refine the list by:
   - Functional location
   - State
   - Severity
   - Assignment group
   - Assigned to
4. Select an incident to view details and take action.

Result
The safety incidents list displays incidents based on your access permissions and selected filters.

Related topics

Exploring Industrial Connected Workforce Integration with Health and Safety Incident Management

Create a safety incident from an ICW task

Digital Factory Workspace reference

Reference topics provide additional information about Digital Factory Workspace.

Industrial Standards reference

Reference topics that provide additional information about Industrial Standards.

Components installed with Industrial Standards

Several types of components are installed with activation of the Industrial Standards application. This includes tables, user roles, and scheduled jobs.

Roles installed

Role title [name]	Description	Contains roles
Standard Standard Author sn_icw_std.standard_author	Can plan and manage standards data	sn_icw_std.user
Standard User [sn_icw_std.user]	Can read standards tables	• oc_read • sn_icw.user

Tables installed

- Published Industrial Standard [sn_icw_std_publ_standard]
- Standard Schedule [sn_icw_std_schedule]
- Standard scheduled plan [sn_icw_std_scheduled_plan]
- Industrial Standard [sn_icw_std_standard]
- Industrial Standard Applied to Task [sn_icw_std_standard_applied_to_task]
- Industrial Standard Task [sn_icw_std_task]

Schedule plan form

The following table describes the field values for the Schedule plan form.

Schedule plan form

Field	Description
Name	Name for the standard schedule plan.
Schedule type	Type of schedule. Options are: • Custom • Template
Table	Type of standard. This field is automatically set and can't be edited.
Schedule	Schedule template that is used for the schedule plan. This field is required if the Schedule type field is set to Template.
Functional location	Work area where the standard is executed.
Task creation offset	Lead time that defines how much earlier than the scheduled execution time a task should be created. Options are:

Schedule plan form (continued)

Field	Description
	• Default • Custom
Custom offset value	Custom time period for how early tasks should be created before they start. This field is available if Task creation offset is set to Custom.
Active	Option to make the system start scheduling standards. This field is selected by default.
Task values	Task values for the schedule plan. Available options for this field depend on the value for the Table field. (Optional) The **Short description** field. **Note:** You can create a schedule plan without specifying task values such as a short description. This is useful when you want to create a schedule that applies broadly and the generated tasks inherit their descriptions from the manufacturing standard.

Custom schedule plan form

Use this reference to understand the fields available when configuring a custom schedule.

Custom schedule plan form

Field	Description
Schedule time zone notice	Schedule time zone, which is the time zone of the currently logged-in user.
Recurrence	How often the task runs. Options are: • Daily • Weekly • Monthly
Start date	Date and time when the task begins. Format: yyyy-MM-dd HH:mm:ss. If shift-based scheduling is enabled, this field changes from a date-time field to a date-only field. Select only the date from which the schedule plan starts releasing tasks. The time is automatically calculated from the shift configuration.
End date	Date and time when the task ends. Format: yyyy-MM-dd HH:mm:ss.

Custom schedule plan form (continued)

Field	Description
	The time format is not displayed when shift-based scheduling is enabled. The end time frame is automatically calculated from the selected shifts and production day configuration.
Repeat until	Last date for recurrence. Format: yyyy-MM-dd.
Every x Day(s)	Interval for recurrence. Enter a number to indicate how many days between task runs.
Every x Week(s)	Interval for recurrence. Enter a number to define how many weeks between runs.
Every x Month(s)	Interval for recurrence. Enter a number to define how many months between runs.

Repeat on	• For weekly recurrence, select specific days of the week for the recurrence (Mon–Sun check boxes).
	• For monthly recurrence, select the recurrence within the month. Options are:
	  ○ Same day of the month
	  ○ Same day of the week
	  ○ Last day of the month
	  ○ First weekday of the month

Define shift(s) toggle	Option to enables shift selection. When active, tasks are scheduled for selected shifts only.
Available items	Shifts that are available.
Selected items	Shifts that you selected. For shift-based schedules you are not required to manually enter start and end times.

Components installed with work set standards

Several types of components are installed with the work set standard feature. This includes roles and tables.

Roles installed

Role title [name]	Description	Contains roles
Work Set Standard Author [sn_icw_std.work_set_standard_author]	Can create, update, and publish work set standards and sub-activities.	sn_icw_std.work_set_expert

Role title [name]	Description	Contains roles
Work Set Expert [sn_icw_std.work_set_expert]	Can execute and cancel work set tasks.	sn_icw_std.work_set_user
Work Set User [sn_icw_std.work_set_user]	Can execute work set tasks and the child tasks and actions that they generate.	• sn_icw_std.user • sn_icw_igt.user

Tables installed

- Work Set Standard [sn_icw_std_work_set_standard]
- Work Set Sub-Activity [sn_icw_std_work_set_sub_activity]
- Work Set Task [sn_icw_std_work_set_task]

Related topics

Work set standards

Work set standard and task life cycles

Work set standard form

The following table describes the field values for the work set standard form.

Work set standard form

Field	Description
Number	System-generated unique number for the standard.
Short description	Title for the standard.
Category	Process category that the standard belongs to, used to differentiate between processes in a factory.
State	Current state of the standard. Set to **Draft** when the standard is created. Not editable.
Owner group	Group of users who own the standard. Members of this group receive approval requests for the standard.
Author	User who created the standard. Auto-populated and editable.
Document scope	Scope of the standard. Options are: • **Local**: The standard applies to a single site. • **Global**: The standard applies to all sites.
Location	Factory site that the standard applies to. Required when **Document scope** is **Local**.
Material classifications	Groups of materials based on their properties and applications. Stored in the Enterprise model classification [sn_ent_model_classification] table.
Material models	Categories of finished goods based on their materials. Stored in the Enterprise good models [sn_ent_model] table.

Work set standard form (continued)

Field	Description
CMDB assignment type	Type of equipment assignment. Options are: • Equipment models • Specific equipment • Functional location
Functional locations	Work area where the standard is executed.
Equipment models	Group of equipment items. Required when **CMDB assignment type** is **Equipment models**. Available options depend on the selected functional location.
Equipment	Piece of equipment or machinery used to execute the standard. Required when **CMDB assignment type** is **Specific equipment**. Available options depend on the selected functional location.
Failure modes	Failure mode that the standard relates to. Available options depend on the selected functional location or equipment.
LOTO level	Lockout/Tagout safety level. Possible values are 0 to 3.
Line status	Required status of the production line. Options are: • None • Running • Stopped
Knowledge Article	Knowledge articles that provide background for the operator who runs the task.
Attachments	Files that support the standard, such as reference documents or diagrams.

Tabs on the work set standard form

The following tabs appear on the work set standard form.

Tab	Description
Sub-activities	Lists the sub-activities that make up the work set. Add and edit sub-activities while the standard is in the **Draft** state. For field descriptions, see Work set sub-activity form.
Schedule plan	Calendar view of the schedule plans that generate work set tasks from this standard.
Open tasks	Lists the work set tasks generated from this standard. Available only when tasks exist.
Approval	Lists approval records for the standard. Available when an approval request has been sent.

Tab	Description
Versioning	Lists prior versions of the standard. Available when the standard has at least one published version.

Related topics

Work set standards

Work set standard and task life cycles

Work set sub-activity form

The following table describes the field values for the sub-activity form on a work set standard.

Work set sub-activity form

Field	Description
Type	Type of record that the sub-activity creates when the work set runs. Options are: • **Standard**: Runs a referenced Industrial Guided Task standard as a child task. • **Action**: Creates an industrial action with the specified short description.
Standard	Industrial Guided Task standard to run. Visible and required when **Type** is **Standard**. Work set standards are excluded from selection because a work set can't contain another work set. Available standards are filtered to those that are global or in the user's site.
Short description	Short description for the generated action. Visible when **Type** is **Action**.
Functional location	Work area where the sub-activity runs. Filtered to the location of the parent standard when the parent is of scope local. When the parent is global, all functional locations are available.
Equipment	Equipment for which the sub-activity runs. This field is hidden when **Functional location** is empty. Filtered to equipment in the selected functional location.
Values to copy from work set task	Fields whose values are copied from the parent work set task to the generated child task or action at runtime. Use this field when a value should be supplied at execution time instead of on the sub-activity.
Schedule-based exception	When clear, the planned start and planned end of the generated child task follow the planned times of the work set task.

How field values are resolved at runtime

When instantiating sub-activities, the system applies the following rules:

1. Short description (for action): The short description from the sub-activity configuration is used as the short description for the child task (sub-activity).
2. Functional location and equipment: When no functional location and equipment are defined in the sub-activity configuration, the functional location and equipment of the Work Set Standard are inherited by the child task.
3. Collision handling: In case values for the sub-activity are defined in multiple locations for the same field, the follow order is used (top is most important):
   - Functional location
   - equipment field
   - short description
   - Values to copy from work set task
4. If the dedicated field on the sub-activity is set.
5. If the **Values to copy from work set task** field is empty.

If a functional location is not provided in either location, the standard can't be saved. A message prompts you to set a custom location on the sub-activity or to add the field to **Values to copy from work set task**.

Related topics

Work set standards

Work set standard and task life cycles

Industrial Guided Tasks reference

Reference topics provide additional information about Industrial Guided Tasks.

Components installed with Industrial Guided Tasks

Several types of components are installed with activation of the plugin, including tables and user roles.

Roles installed

Role title [name]	Description	Contains roles
Industrial Guided Task Expert [sn_icw_igt.expert]	Expert role for the Industrial Guided Tasks application	sn_icw_igt.user
Industrial Guided Task Standard Author [sn_icw_igt.standard_author]	Can contribute to the Industrial Guided Task standards	• sn_icw_std.standard_author • sn_smart_imp_auto.automation_creator • sn_smart_asmt.template_manager • sn_icw_igt.expert
Industrial Guided Task User [sn_icw_igt.user]	User role for the Industrial Guided Tasks application	• sn_smart_asmt.assessment_reader • sn_smart_asmt.template_reader

Role title [name]	Description	Contains roles
		• sn_smart_asmt.actor • sn_icw_std.user

Note: Only users with the sn_icw.application_admin role can override the IGT standard and task access control lists (ACLs).

Tables installed

- Industrial Guided Task Standard [sn_icw_igt_standard]
- Industrial Guided Task [sn_icw_igt_task]

Industrial Guided Task standard form

The following table describes the field values for the Industrial Guided Task standard form.

Industrial Guided Task standard form

Field	Description
Number	System-generated unique number for the standard.
Category	Enables you to differentiate between processes in a factory.
Allow ad-hoc request	When enabled, it enables you to initiate tasks directly from the Standards hub.
State	Automatically set to Draft, not editable.
Task expires after	Can be None or Custom time.
Custom time for expiration	Available if Task expires after is set to Custom. Specifies the custom expiration time for the task.
Enable scoring	When enabled, it enables the score field to be displayed and used on guided tasks.
Target score	A numerical value (float), which represents the desired score set as a performance goal. If a target score is set, the score status indicates whether the task result is Successful or Unsuccessful. If no target score is set, the score status is set to No target available and only the total score is displayed on the guided task.
Short description	Short description or title for the standard.
Owner group	Group of users who own the standard and can approve it.

Industrial Guided Task standard form (continued)

Field	Description
Author	Auto-populated with the name of the user who initiated the process of creation, can be edited.
Document scope	Specifies whether the standard applies to a single site (local) or across all sites (global).
Location	Required for the document scope local. Factory that the standard is used for.
Material classifications	Groups of materials based on their properties and applications. Stored in the Enterprise model classification [sn_ent_model_classification] table.
Material models	Categories of finished goods based on the materials they are made from. Stored in the Enterprise good models [sn_ent_model] table.
CMDB assignment type	Options are: • Equipment models • Specific equipment • Functional location
Functional locations	Work area where the standard is executed.
Equipment models	Group of equipment items. This field is required if the CMDB assignment type is set to Equipment models. Available options vary depending on the selected functional location. **Note:** To make the filtering by equipment model work, make sure that the equipment is related to the equipment model. This connection is established by using the **model ID** reference field to establish the relationship. When you select a functional location, this relationship is then used to filter down the equipment models.
Equipment	Piece of equipment or machinery used to execute the standard. This field is required if the CMDB assignment type is set to **Specific equipment**. Available options vary depending on the selected functional location.
Failure modes	Failure mode to which the standard relates. Available options depend on the selected functional location or equipment.

Industrial Guided Task standard form (continued)

Field	Description
LOTO level	Lockout/Tagout safety procedures with possible values of 0-3.
Line status	Information about the status of the production line. Options are: • None • Running • Stopped
Required skills	Defines the set of skills required for task eligibility. Only operators with these skills can perform the task.
Knowledge Article	Knowledge articles that are related to the standard and provide more information about the standard for the operator who executes the task.
Attachments	Attachment that can be used for descriptive purposes.

Insights Overview tab

The Insights Overview tab displays embedded shopfloor insights for the published standard. This tab is visible on every IGT standard record in the Digital Factory Workspace when the standard is not in Draft or Review state.

Note: The Insights Overview tab displays data related to the published standard, showing all execution results across versions.

The following filters are available on the Insights Overview tab:

Filter	Description
Functional location	Filter by functional location. All available functional locations are displayed by default. You can manually select the functional locations, which you want to filter.
Equipment	Filter by equipment. Only equipment relevant to the selected functional location is shown.
Date filter	Filter by time period. Options include: • Last day • Today • Last week (default) • Last 15 days • Last month

Filter	Description
	• This month • Last 6 months
Version	Filter by standard version to compare execution results across versions and track how changes affect performance.

Industrial Guided Task form

The following table describes the field values for the Industrial Guided Task form.

Industrial Guided Task form

Field	Description
Number	System-generated unique number for the task.
Priority	Options are: • 1 - Direct • 2 - This shift • 3 - Today • 4 - Within 7 days • 5 - Within 30 days • 6 - Unplanned
Short description	Auto-populated with the name of the standard from which the task is being created.
Work notes	Additional information and comments that can help execute the task successfully.
Assignment group	Group of users that the task can be assigned to.
Assigned to	User that the task has been assigned to.
Functional location	Industrial facility work area where the task is to be completed. Defined using the ISA-95 standard as an operational model site. Automatically filled based on the logged-in user's worker profile.
Equipment	Machine to which the task relates. This field is already populated if the equipment is specified in the standard.
Planned start	Planned start of the task execution.
Planned end	Planned end of the task execution. **Note:** If you create a task without a planned end date, the system automatically sets the planned end to match the due date. This automatic population enables the embedded dashboard to use the planned end data for calculations, such as measuring the percentage of tasks closed in time.
Due date	The date by which the task is to be executed. If not set, it's calculated based on priority. For more details, see Due date calculation.

Standard automation task form

The following table describes the field values for the standard automation task form.

Standard automation task form

Field	Description
Action type	The selected value should be Create standard task for Automation.
Origin	Standard that the task originates from.
Short description	Brief description of the task.
Priority	Priority of the task. Options are: • 1 - Direct • 2 - This shift • 3 - Today • 4 - Within 7 days • 5 - Within 30 days • 6 - Unplanned The default value is 6 - Unplanned.
Standard	Standard that is used to create a new standard task.
Functional location	Industrial facility work area where the task is completed. The location is defined using the ISA-95 standard.
Equipment	Machine to which the task relates.
Assignment group	Team or department responsible for completing the task.
Assigned to	User that the task should be assigned to.

Industrial Guided Task standard and task life cycles

A life cycle is the list of states that an Industrial Guided Task (IGT) standard or task can go through.

Industrial Guided Task standard states

Life cycle states for Industrial Guided Task standards

State	Description
Draft	The standard can be edited.
Review	Approval has been requested and the standard is being reviewed. The standard cannot be edited.
Published	The standard is active and published. The standard can be requested, which means a

Life cycle states for Industrial Guided Task standards (continued)

State	Description
	task can be created. The standard cannot be edited.
Retired	The standard is inactive, read-only, and can't be requested. The standard cannot be edited.
Revised	End state. An older version that has been revised. The standard is available as read only for reference. The standard cannot be edited.

Industrial Guided Task standard approval states

Life cycle states for approvals

State	Description
Not yet requested	The standard has not been submitted for approval yet.
Requested	The approval request has been submitted and is awaiting review. Any user from the assigned owner group can approve it for publishing.
Approved	The request has been reviewed and officially approved. The state of the standard changes to Published.
Rejected	The request was reviewed and not approved. When the request is rejected, the state of the standard moves back to Draft.
Canceled	The request was withdrawn before a decision was made.
No Longer Required	The request is obsolete due to changes.

Industrial Guided Task states

Life cycle states for Industrial Guided Tasks

State	Description
Ready	The task is created and ready to be picked up for execution. When a task transitions to this state, the system automatically captures the actual start time. On ICW mobile, the actual start is captured when the operator selects **Perform task**.
Work in Progress	The task is being executed on the shop floor.
On Hold	The task has been temporarily paused due to dependencies or external factors.

Life cycle states for Industrial Guided Tasks (continued)

State	Description
Submitted	The standard has been submitted, but some child sub tasks are still pending before the task is fully complete. When a task transitions to this state, the system automatically captures the actual end time and calculates the business duration.
Closed Complete	The task has been completed on the shop floor and submitted in the Workspace.
Closed Skipped	The task has expired.
Canceled	The task has been removed from the schedule. It won't be executed due to cancellation of the order, process changes, or other strategic decisions.

Industrial Guided Task life cycle

When you start a task, you can make changes and select **Save**. The task then changes to Work in Progress but you can still change the state to On Hold. When you cancel the task, you must fill in the justification and then select **Cancel task**. If the task is a work in progress, the **Continue task** button is available. Once you select **Submit**, the state changes to Closed Complete.

When the state of a task changes it triggers an automatic tracking of task duration. The actual start time is recorded when the task moves to Work in Progress, and the actual end time is recorded when the task is submitted. The system captures the total duration spent on the task, from Work in Progress state till Submitted state. The duration value is then recorded in the business duration field.

Action form

The following table describes the field values for the Action form.

Action form

Field	Description
Short description	Brief description of the action.
Description	Description of the action and its purpose.
Functional location	Industrial facility work area where the action is completed. The location is defined using the ISA-95 standard. This field is automatically set based on the logged-in user's worker profile.
Equipment	Machine to which the action relates. This field is automatically set if equipment is specified in the standard.
Origin	Task from which the action originates.

Action form (continued)

Field	Description
Opened by	User opening the action. This field is automatically set by the system and can't be modified.
Assignment group	Team or department responsible for completing the task.
Assigned to	User that the action should be assigned to.
Additional assignee list	List of users to be notified or contributing to the task, but not as the primary assignee. Available options vary depending on the selected functional location or assignment group.
Impact	Measure of effect the action has on an industrial process. Options are: • 1 - Safety • 2 - Quality • 3 - Reliability • 4 - Operations • 5 - Other
Urgency	Measure of how long the action can be delayed until there's a significant impact on an industrial process. Options are: • 1 - Critical • 2 - Important • 3 - Routine • 4 - Not urgent
Priority	Priority of the action. This field is automatically set based on impact and urgency. Options are: • 1 - Direct • 2 - This shift • 3 - Today • 4 - Within 7 days • 5 - Within 30 days For more details, see Priority matrix for actions.
Due date	Date by which the task should be executed. If you don't set the due date, it is calculated based on priority when you save the form. For more details, see Due date calculation.
Escalate to	User that the action should be escalated to.

Deviation form

The following table describes the field values for the Deviation form.

Deviation form

Field	Description
Short description	Brief description of the deviation you're creating.
Description	Detailed description of the deviation you're creating.
Functional location	Industrial facility work area where the deviation is observed. This field is defined using the ISA-95 standard. Automatically filled based on the logged-in user's worker profile.
Equipment	Machine to which the deviation relates.
Have you retained one or more parts?	Only available if the Classification is set to Breakdown.
Classification	Type of the deviation. Options are: • Deviation • Breakdown • Process failure • Defect When initiating a breakdown, this field is automatically set to Breakdown.
Category	Group to which the deviation belongs based on characteristics. Options can be: • Mechanical • Electrical • Pneumatic • Hydraulic • Environmental • Defect • Other
Subcategory	Subcategory of the deviation.
Active material	Active material to which the deviation relates.
Failure	Available options vary depending on the selected functional location or equipment.
Origin	Task from which the deviation originates.
Impact	Impact of the deviation. Options are: • 1 - Safety • 2 - Quality

Deviation form (continued)

Field	Description
	• 3 - Reliability • 4 - Operations • 5 - Other
Urgency	Urgency of the deviations. Options are: • 1 - Critical • 2 - Important • 3 - Routine • 4 - Deferred
Priority	Priority that is set automatically based on impact and urgency. Options are: • 1 - Direct • 2 - This shift • 3 - Today • 4 - Within 7 days • 6 - Unplanned For more details, see Priority matrix for deviations.
Assignment group	Team or department responsible for completing the task.
Assigned to	User to which the deviation has been assigned. If not set, the deviation is automatically assigned to the user that opened the deviation.
Additional assignee list	List of users to be notified or contributing to the task, but not as the primary assignee. Available options vary depending on the selected functional location or assignment group.
Resolution code	Resolution code for the impact. Options are: • None • Not fixed • Fixed by operator • Fixed by maintenance
Resolution	Description of how the deviation has been resolved.

Deviation form (continued)

Field	Description
Attachments	Attachment that can be used for descriptive purposes.

Root cause analysis form

The following tables describe the field values for the Root cause analysis form.

Root cause analysis form

Field	Description
Short description	Brief description of the root cause analysis that you're creating.
Description	Detailed description of the root cause analysis that you're creating.
Functional location	Industrial facility work area where the root cause analysis is required. This field is defined using the ISA-95 standard. This field is automatically set based on the logged-in user's worker profile.
Equipment	Machine to which the root cause analysis relates.
Origin	Task from which the root cause analysis originates.
Found in	Origin or source of the root cause analysis. Options are: • Deviation • Defect • Loss • Other
Type	Type of root cause analysis. Options are: • None • Breakdown • Safety • Quality • Performance • Other
Assignment group	Team or department responsible for completing the task.
Assigned to	User to which the root cause analysis has been assigned. If not selected, this field is

Root cause analysis form (continued)

Field	Description
	populated by the user who opened the root cause analysis.
Additional assignee list	List of users to be notified or contributing to the task, but not as the primary assignee. Available options vary depending on the selected functional location or assignment group.
Impact	Segment that the root cause analysis has impact on. Options are: • 1 - Safety • 2 - Quality • 3 - Reliability • 4 - Operations • 5 - Other
Urgency	Measure of how long the root cause analysis can be delayed until there's a significant impact on an industrial process. Options are: • 1 - Critical • 2 - Important • 3 - Routine
Priority	Priority of the analysis. This field is automatically set based on impact and urgency. Options are: • 1 - Direct • 2 - This shift • 3 - Today • 4 - Within 7 days • 5 - Within 30 days For more details, see Priority matrix for root cause analysis.
Work notes	Internal notes about checks, tests, and findings that help identify the cause of the issue.

Information Gathering form

Field	Description
Who	Individuals or teams involved in the issue or affected by it.
What	Description of the problem or incident in clear, concise terms.
When	Timeline of the issue: When it was first detected, when it occurred, and the duration of its impact.
Where	Location of the issue.
Why	Underlying causes of the issue.
How	Details of how the issue occurred and how it was resolved.

Breakdown analysis form

The following table describes the fields for the Breakdown analysis form. Most questions require a written response rather than selecting from predefined options.

Breakdown analysis form

Field	Description
Review information: When did the breakdown occur?	Date and time the issue was first identified in the format YYYY-MM-DD HH:mm:ss
Active material	The substance or item being processed or handled when the breakdown occurred.
What was the initial observation?	First signs or symptoms noticed before diagnosis.
Provide additional explanation for the workaround.	Details on how the workaround addressed the issue temporarily.
Was a temporary workaround applied?	Indicate if a short-term fix was used before full repair.
Input fix details: What was done to restore operation?	Actions taken to bring the equipment back to working condition.
Who performed the repair?	Name or team responsible for executing the fix.
Was the fix temporary or permanent?	Option to specify whether the solution was a lasting repair or a temporary fix.
When has the equipment been returned?	Date the equipment was handed back after repair.
Has the equipment been returned to service?	Option to confirm if the equipment is now operational.
Failure mode	Classification of failure types associated with equipment behavior and process conditions.

Breakdown analysis form (continued)

Field	Description
What was the total downtime duration?	Total time the equipment wasn't operational.
Action results: What corrective action was implemented?	Steps taken to resolve the root cause of the breakdown.
Was this breakdown similar to past events?	Option to indicate if this issue resembles previous failures.
What event?	Reference to the past event or breakdown for comparison.
What were the estimated costs?	Approximate financial impact of the breakdown and repair.
Follow-up actions	Button to create a follow-up action related to the analysis.
Monitoring: Is all relevant documentation attached (e.g., photos, work orders, other attachments)?	Option to confirm if supporting materials have been uploaded.
Have all follow-up actions necessary been created?	Option to make sure that tasks for further investigation or prevention are logged.
Have all questions been answered accurately?	Option to verify completeness and correctness of the form.
Was standard maintenance procedure updated?	Option to indicate if maintenance protocols were revised after the breakdown.

Functional location form

The following table describes the field values for the Functional location form.

Functional location form

Field	Description
Entity name	Name of the functional location or equipment model entity that you're creating.
Short description	Brief description of the functional location.
Parent	Name of the functional location, if any, that is the parent to this functional location. To change the parent, search for and select the entity that is a parent to the entity that you're creating. This field is empty for the top-level parent entity, which has no parent.
Location	Location of the functional location or equipment model entity.
Level	Hierarchical level that is assigned from the selected equipment model template for data sorting and structuring purposes.

Functional location form (continued)

Field	Description
Type	Name of the level type that is assigned to the equipment model template level.
Short code	Short code that is assigned to this functional location.
Company	Name of the company that is associated with the functional location.
Template	Equipment model template that is assigned to the functional location you're creating. This fields is automatically set to ISA 95 Default Template.
Process criticality	Process criticality of the functional location. Options are: • 1 - most critical • 2 - somewhat critical • 3 - less critical • 4 - not critical
Assigned to	Assigned user who operates and handles this functional location.
Managed by	Assigned person who owns and is responsible for managing this record.
Schedule	Schedule that is assigned to this functional location.
Support group	Name of the group that supports this functional location.
Managed By Group	Name of the assigned group that owns and is responsible for managing this functional location.

Operational equipment form

The following table describes the field values for the Operational equipment form.

Operational equipment form

Field	Description
Name	Name for the piece of operational equipment that you're creating.
Description	More detailed explanation of the equipment, including its purpose, location, or other characteristics.

Operational equipment form (continued)

Field	Description
Category	A high-level classification that groups equipment based on its general function or purpose within the manufacturing process.
Subcategory	A more specific classification within a category that provides detailed identification of the equipment type.
Model ID	Internal or system-generated identifier for the model of the equipment.
Model number	The manufacturer's model number. This field is used for identifying the version or configuration of the equipment.
Manufacturer	Name of the company that produced the equipment.
Correlation ID	Unique identifier used to link this equipment record with other systems or records.
Company	Organization that owns or is responsible for the equipment.
Managed By Group	Name of the group responsible for the management and maintenance of the equipment.
Change Group	Name of the group responsible for approving or implementing changes to the equipment.
Department	Department that uses or is assigned the equipment.
Support group	Name of the group that provides technical support or troubleshooting for the equipment.
Approval group	Name of the group that must approve actions related to the equipment. For example, for procurement or decommissioning.
Operational status	Operational status of the equipment. Options are: • Operational • Non-Operational • Repair in Progress • DR Standby • Ready • Retired • Design
Hardware status	Hardware status of the equipment. Options are:

Operational equipment form (continued)

Field	Description
	• Installed • In Maintenance • In Stock • Out of Stock • In Transit • Defective • In Disposition • Retired • On Order • Pending Install • Pending Repair • Pending Transfer • Stolen

Failure mode form

The following table describes the field values for the Failure mode form.

Failure mode form

Field	Description
Name	Name for the failure mode that you're creating.
Description	Description for the failure mode that you're creating.
Effect	Consequence of the failure on the system, process, or product.
Functional location	Work area where the failure has occurred.
Parent	Parent failure mode that the failure has been inherited from.
Type	Type of failure. Options are: • Failure • Failure mode
Severity	A numerical rating (1-10) indicating how serious the effect of the failure is. Higher values mean more severe consequences.
Occurrence	A numerical rating (1–10) estimating how frequently the failure is likely to occur.

Failure mode form (continued)

Field	Description
Detection	A numerical rating (1–10) indicating how likely it is that the failure is detected before it causes harm. Lower values mean better detectability.
Code	A unique identifier or reference number for the failure mode.
Related state	The operational condition of the system when the failure occurs. Options are: • Running • Stopping • Stopped • Starting
Planning status	Status of mitigation or maintenance planning. Options are: • Planned • Unplanned • Excluded

Due date calculation

Use this table to see how the due date for a task is calculated based on its priority.

Due date calculation

Priority	Due date
1 - Direct	Add one hour to the current time
2 - This shift	At the end of the current shift
3 - Today	At 23:59:59 of the current date
4 - Within 7 days	Add seven days to the current date
5 - Within 30 days	Add 30 days to the current date
6 - Unplanned	None

ICW Health and Safety Integration reference

Reference topics provide additional information about ICW Health and Safety Integration.

Safety Incident form

The following table describes the field values for the safety incident form.

Safety Incident form

Number	Auto-generated unique identifier for the safety incident.
Short description	Brief summary of the safety incident. Required.
State	Current state of the incident (for example, New, In Progress, Closed).
Severity	Severity level of the incident (for example, Minor, Major, Critical).
Occurred on	Date and time when the incident occurred.
Location	Location where the incident occurred. Uses cmn_location.
Functional location	ICW functional location associated with the incident.
Category	Category classification for the incident.
Assignment group	Group responsible for triaging and resolving the incident.
Assigned to	Individual assigned to the incident.
Sequence of events	Rich text field capturing what happened before, during, and after the incident.
Origin	Reference to the originating ICW task, if the incident was created from an existing task.

Components installed with ICW integration with Health and Safety

Components are installed with activation of the application. This includes tables, user roles, and scheduled jobs.

Roles installed

Role title [name]	Description	Contains roles
User [sn_icw.safety_incident_user]	Can view and report safety incidents	• sn_ohs_im.incident_reader • sn_ohs_im.incident_writer • sn_ohs_im.workspace_user
Admin [sn_icw.admin]	Can permanently delete safety incidents	sn_ohs_im.incident_manager

Related topics

Components installed with Health and Safety Incident Management

Industrial Knowledge Management

Industrial Knowledge Management for Industrial Connected Workforce (ICW) enables you to organize and manage your knowledge resources in a single place.

Get started

Explore

Learn about the features and benefits of Industrial Knowledge Management.

Use

Create, organize, and publish industrial knowledge articles and knowledge blocks.

Reference

Look up additional technical details about Industrial Knowledge Management.

Industrial Knowledge Management provides a preconfigured knowledge base integrated with the Standards hub, where knowledge authors and managers can create, version, and publish articles using standard or one-point lesson templates. The application supports knowledge categories and subcategories, reusable knowledge blocks, and search capabilities. These features enable operators and equipment owners to quickly access relevant industrial information alongside their standards and tasks.

Exploring Industrial Knowledge Management

Industrial Knowledge Management for Industrial Connected Workforce (ICW) enables you to organize and manage your knowledge resources in a single place.

Industrial Knowledge Management overview

The ICW knowledge base comes preconfigured with the Workspace. Knowledge categories and subcategories, knowledge blocks as well as article versioning are supported. Certain categories and subcategories come by default but are configurable in the admin area.

AI configuration and search capabilities are supported for the knowledge base functionality. When performing a search, if the article has an associated category, you can only see a faceted filter for that category.

Knowledge authors and knowledge managers can contribute to the knowledge base, while other users can read published articles in the Standards hub. Authors have published articles displayed by default. The system remembers the last selected tab and bring you back the next time you access the Standards hub. Also, your selected filters are saved in your user settings so they stay the same when you return.

Knowledge articles can be linked to functional locations and equipment records. This association makes maintenance and troubleshooting guidance immediately accessible in the context of the asset that the operator is working on. You can manage these associations from the related lists on the knowledge article form.

Using Industrial Knowledge Management

Industrial Knowledge Management helps you capture, organize, and share specialized industrial information, making it easier for teams to access accurate insights and apply best practices in their work.

Create an industrial knowledge article

Create a knowledge article to record and save information related to industrial processes.

Before you begin
Role required: sn_icw.knowledge_manager or sn_icw.knowledge_author

Procedure

1. Navigate to the **Standards hub** > **Articles**.
2. Select **Create article**.
3. Specify the knowledge base that the article should be included in.
   Each article can belong to only one knowledge base.
4. Select the template for your article.
   The template can be Standard or One point lesson.
5. On the Industrial knowledge article form, fill in the fields.
   For a description of the field values, see Industrial knowledge article form.
6. **Optional:** Add attachments to the article if needed.
7. **Optional:** Create custom templates that can be reused if needed.
8. **Optional:** Create a knowledge block if needed.
   Knowledge blocks are pieces of content that can be reused in multiple articles.
9. Select **Save** and then **Publish**.
   If you select **Checkout**, a new version of the published article is created.
10. **Optional:** Link the knowledge article to functional locations or equipment records.

    (Optional) After saving the article, you can associate it with specific assets from **Related lists** on the article form.

a. On the knowledge article form, navigate to the **Functional Locations** or **Equipment** related list.

b. Select **New**.

c. Select the functional location or equipment record that you want to associate with the article.

(Optional) The **Knowledge article** field is automatically populated with the current article.

d. Select **Submit**.

Result
Published articles are displayed and available in the search functionality.

Industrial Knowledge Management reference

Find additional information about Industrial Knowledge Management.

Industrial Knowledge Management roles

You can assign the Industrial Knowledge Management roles to your users.

Industrial Connected Workforce roles applicable to Industrial Knowledge Management

Role	Description
ICW user [sn_icw.user]	Can read.
Knowledge manager [sn_icw.knowledge_manager]	Can contribute to the knowledge base and edit categories.
Knowledge author [sn_icw.knowledge_author]	Can contribute.

Industrial knowledge article form

The following table describes the field values for the Industrial knowledge article form.

Industrial knowledge article form

Field	Description
Short description	Brief description of the knowledge article that is used as the title.
Article body	Content of the knowledge article.

Industrial knowledge article form (continued)

Field	Description
Knowledge base	Knowledge base that the knowledge article should be included in.
Category	Category of an article to help classify the content.
Scheduled publish date	Date and time when the content is planned to be published.
Valid to	Date until when the knowledge article is valid.
Version	Version of the knowledge article. This field is automatically set by the system and can't be edited.
Workflow	Workflow of the knowledge article. This field is automatically set by the system and can't be edited.
Attachment link	Option for downloading an attached file automatically when a user accesses the article, instead of opening the article view.
Display attachments	Option for displaying attachments to users viewing this knowledge article.
Source Task	Original process or activity from which the lesson is derived.
Aim/Purpose	Goal of the lesson, or what it aims to teach, improve, or prevent.
Description	Brief explanation of the task or issue being addressed.
Problem/Defect point to Check	Issue or risk area that needs attention or inspection.
What will happen if it is left as is?	Potential consequences if the issue isn't corrected.
Why did this occur?	Root cause or contributing factors behind the issue.
What countermeasures to take?	Recommended actions to resolve or prevent recurrence of the issue.

Related lists

The following related lists are available on the Industrial knowledge article form. Use these related lists to associate knowledge articles with functional locations and equipment records, making troubleshooting and maintenance guidance immediately accessible in the context of specific assets.

Industrial knowledge article related lists

Related list	Description
Functional Locations	Displays functional locations associated with the knowledge article. Select **New** to link a functional location to the article. The list is filtered to show records of the Equipment Model Entity class. The **Knowledge article** field is automatically populated when you create a new association.
Equipment	Displays equipment records associated with the knowledge article. Select **New** to link an equipment record to the article. The list is filtered to show records of the Operational Equipment class. The **Knowledge article** field is automatically populated when you create a new association.

Industrial Connected Workforce Mobile Experience

Use Industrial Connected Workforce Mobile Experience to streamline your factory shop floor processes.

Get started

Explore

Learn about the features and benefits of ICW Mobile Experience.

Configure

Set up the ICW Mobile Agent for your shop floor operators.

Use

Execute guided tasks, manage deviations and actions, and access standards from mobile devices.

Reference

Look up additional technical details about ICW Mobile Experience.

ICW Mobile Experience extends the Digital Factory Workspace to mobile devices, enabling shop floor operators to create and execute guided tasks, log deviations and actions, escalate issues to breakdowns, initiate breakdown analyzes, and report safety incidents directly from the factory floor. The mobile agent also provides access to the Standards hub and search capability, allowing operators to find standards, knowledge articles, and tasks without returning to a desktop workstation.

Exploring Industrial Connected Workforce Mobile Experience

The Industrial Connected Workforce Mobile Experience enables shop floor operators to execute tasks, request standards, and access knowledge within their organization through mobile devices.

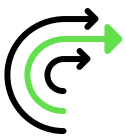
Industrial Connected Workforce Mobile Experience overview

The Industrial Connected Workforce Mobile Experience helps operators manage work directly from their mobile devices. It brings together tasks, standards, and knowledge in one place, making it easier to keep production running smoothly and respond quickly to issues.

The Industrial Connected Workforce Mobile Experience enables operators to:

- Create and complete guided tasks, deviations, and actions
- Access and link knowledge articles
- Use AI search to find standards, tasks, and articles

Agent mobile application experience and its functions

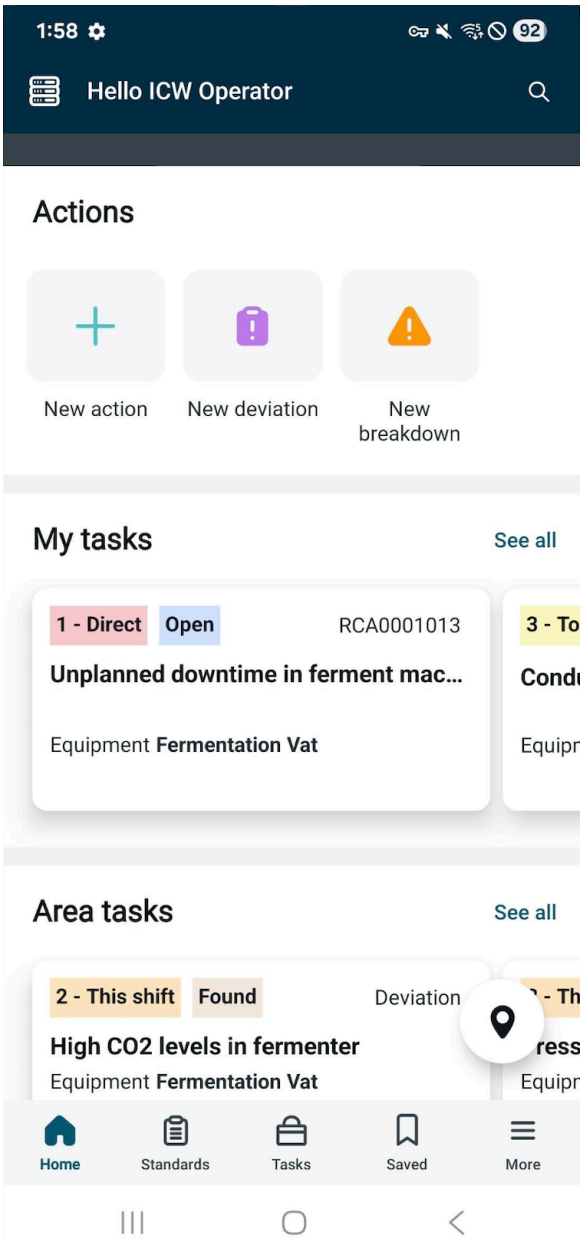
 Create industrial guided tasks	Create an Industrial Guided Task with the Industrial Connected Workforce Mobile Experience • Request standards to create guided tasks • Standardize operations and support safe, reliable production
 Create actions	Create an action in the Industrial Connected Workforce Mobile application • Automate steps of an industrial process • Create temporary, short-term specific tasks, such as inspection
 Report deviations	Create a deviation in the Industrial Connected Workforce Mobile application • Report non-conformance • Set category, impact, urgency, or attach media
 Find helpful information	Standards hub in the Industrial Connected Workforce Mobile Experience Search through knowledge base articles for assistance

Industrial Connected Workforce Mobile Experience benefits

Industrial Connected Workforce Mobile Experience benefits

Benefit	Feature	Users
• Create actions, deviations, and breakdowns • View tasks assigned to you • View area tasks • View recently updated articles • Select or change the functional location via the pin icon ( )	Home page	Operators
• Search for published standards and create tasks to execute them • Search for published knowledge articles • Rate, leave comments, and browse through related knowledge articles (articles of the same category)	Standards hub	Operators
Task list that provides a clear overview of pending tasks with a clear labeling according to their priority and status **My Tasks** Shows active tasks assigned to or created by the user that: • Have a due date that falls within their current shift • Have no due date • Are no more than seven days overdue **Area Tasks** Shows active tasks in the user's functional location that: • Have a due date that falls within the current shift • Have no due date • Are no more than seven days overdue **Upcoming** Shows active tasks in the user's functional location that are due within the upcoming next seven days, including today. Tasks in this list are sorted by the due date. **Done** Shows inactive tasks in the user's functional location that were deactivated within the last	Tasks	Operators

Industrial Connected Workforce Mobile Experience benefits (continued)

Benefit	Feature	Users
seven days. Tasks in this list are sorted by the closed field. To filter the task list, select the filter icon ( ). You can filter by task type or by specific attributes within a selected task type.  Within an individual task record, excluding guided tasks, the **Related** tab contains two tabs: • The **Related** tab displays all follow-up tasks that originate from the current task. You can complete the current task without completing its related tasks. From this tab, you can create a deviation, create a follow-up action, or start a root cause analysis.		

Industrial Connected Workforce Mobile Experience benefits (continued)

Benefit	Feature	Users
• The **Tasks** tab displays all child tasks created from the current task. All child tasks must be completed before you can complete the parent task. From this tab, you can create an action (another child task).		

Empower operators with Industrial Connected Workforce Mobile Experience

The Industrial Connected Workforce Mobile Experience gives operators a single place to manage work, report issues, and access knowledge. It supports quick decisions, accurate task execution, and better communication on the shop floor. The app includes offline access, QR and bar code scanner integration in guided task execution, AI-driven search, and standards integration. These features help keep operations moving without interruptions.

Standards hub in the Industrial Connected Workforce Mobile Experience

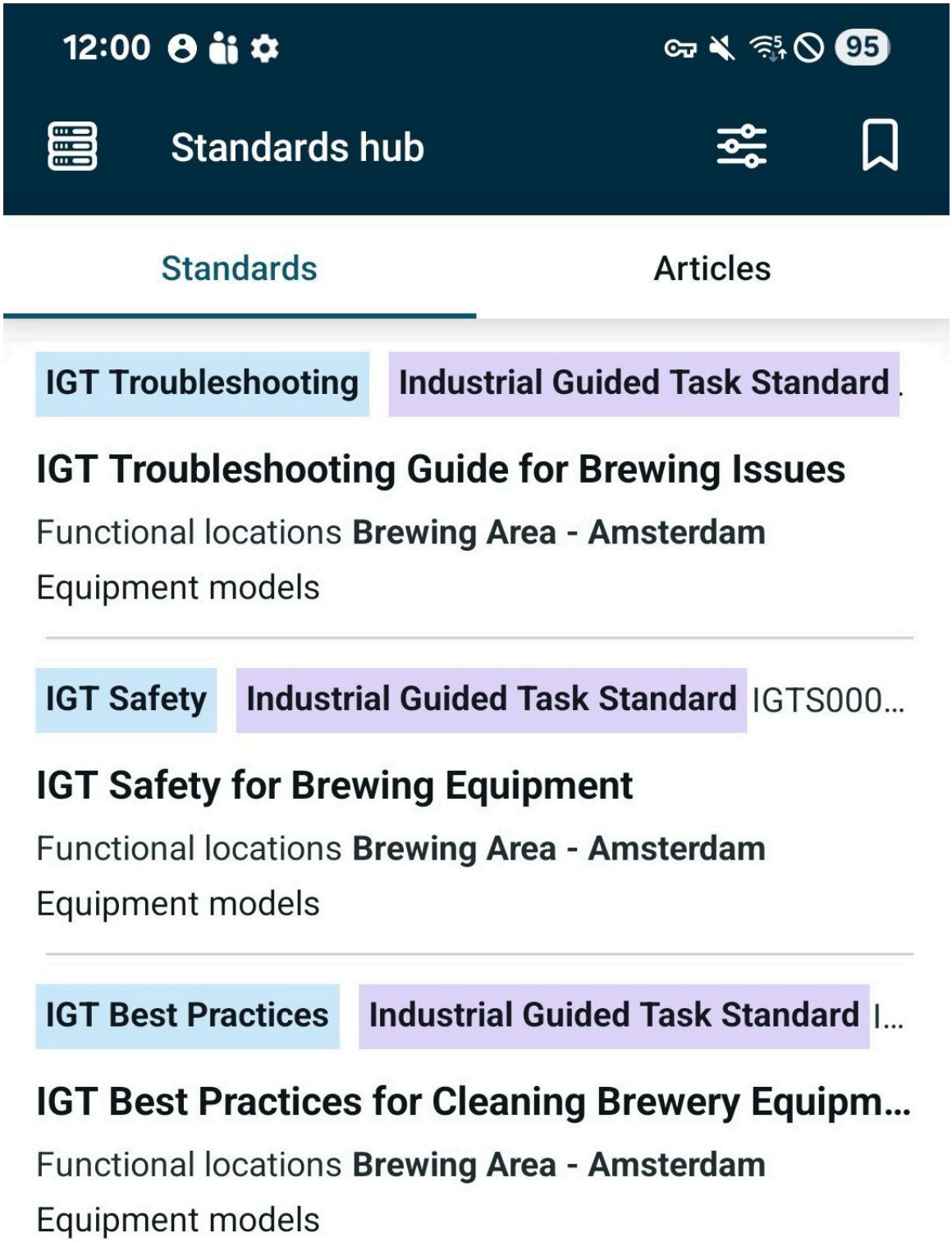
The Industrial Standards Library or Standards hub in the Industrial Connected Workforce Mobile Experience is a collection of published standards and knowledge articles available within your organization.

Standards hub overview

The Standards hub in the Industrial Connected Workforce Mobile Experience shows standards that are active, published, and local, or alternatively, standards that are active, published, and global. If the scope of the standard is set to **Local**, the hub only shows standards with the same functional location as the logged-in user.

The **Articles** tab within the Standards hub displays knowledge articles published within your organization. You can view, rate, and leave comments on the knowledge articles available from the list.

The following image shows an example of the Standards hub that you can view with the Industrial Connected Workforce Mobile Experience.



Actions performed in the Standards hub

After creating a task from a standard in the Standards hub on mobile, you can perform one of the following actions:

- Edit the task
- Perform or execute the task
- Add comments
- Attach files or images
- Create a follow-up action
- Create a deviation
- Put the task on hold
- Cancel the task

For more information about requesting and creating a standard, see Create an Industrial Guided Task with the Industrial Connected Workforce Mobile Experience.

AI Search in Industrial Connected Workforce Mobile Experience

Access the AI Search for Industrial Connected Workforce Mobile Experience by using the search bar on the home page. The system interprets queries to return the most relevant results across configured record types, such as standards, tasks, and knowledge articles.

The system processes the search input and identifies associated terms. For example, searching for 'brew' may also return results for 'brewery.' When a person's name is entered, the system first checks for direct matches in the configured records. If no direct match is found, it searches for closely linked records. The more you use AI Search, the more it learns and improves the relevance of retrieved results.

The search returns the following result types.

- Standards: Only published standards are shown.
- Knowledge articles: Only published knowledge articles are shown.
- Tasks: All tasks are shown, except the ones with a Canceled status.

> **Note:** The task type 'root cause analysis' isn't supported in AI Search on mobile.

To learn more about the AI Search capability, see . .

Recommended Actions in the Industrial Connected Workforce Mobile Experience

The Recommended Actions feature in Industrial Connected Workforce Mobile Experience (ICW Mobile) displays suggested actions directly in the Recommendations tab of a task. These suggestions are based on the current context of the task and are intended to support you during manufacturing processes by providing relevant guidance at the point of need.

Each recommended action is generated dynamically using the information that is specific to a task. This helps to focus on the actions that are relevant to your current task and reduce the time spent searching for supporting information. The Recommended Actions for ICW Mobile is available through the Now Mobile Agent.

Recommendations on mobile are produced by the same task contexts and rules as the Digital Factory Workspace experience, so the guidance you receive in the field is consistent with a mobile device or a computer.

Supported use cases

The following use cases are currently supported and configured:

- View tasks and articles from recommended actions on deviations

  When working on a deviation, you can view related tasks and knowledge articles in the **Recommendations** tab. Each item is labeled to show whether it's linked to the deviation or returned by AI Search, so you can understand its relevance.

- View articles attached to an IGT standard.

  You can view knowledge articles that are linked to an IGT standard from within the task form.

Opening a recommendation on mobile

When you select a recommended record, such as a related deviation or IGT, the record opens in its native mobile screen instead of a web view. This keeps you in the mobile app while you continue working.

Configuring the Industrial Connected Workforce Mobile Experience

Configure Industrial Connected Workforce Mobile Experience.

If you have the Industrial Connected Workforce (ICW) application configured, you can use the Industrial Connected Workforce Mobile Experience.

To customize the Industrial Connected Workforce Mobile Agent, see Setting up the Industrial Connected Workforce Mobile Agent.

Configuration overview

- Configure the Now Mobile Agent application

  Configure the Now Mobile Agent application and customize it for Industrial Connected Workforce (ICW) users.

- Connect to your Industrial Connected Workforce data

  Connect the Now Mobile Agent application to your Industrial Connected Workforce (ICW) application instance to manage work on your mobile device.

- Customizing UI actions for the Now Mobile Agent application

  Make it easier for your end users to get things done faster with the Industrial Connected Workforce Mobile Experience by creating custom UI actions.

- Configure UI actions in the Now Mobile Agent application

  Configure the desired UI actions on the mobile device to minimize the load on the mobile resources.

Setting up the Industrial Connected Workforce Mobile Agent

Setting up the Industrial Connected Workforce mobile application involves configuring the Mobile Agent application, customizing UI actions, and other functionalities to enable task management from your phone or other mobile device.

Configure the Now Mobile Agent application

Configure the Now Mobile Agent application and customize it for Industrial Connected Workforce (ICW) users.

Before you begin

Role required: sn_icw.application_admin

Procedure

1. Navigate to **All** > **System Applications** > **Studio**.
2. In the Select Application screen, select **ICW Mobile**.
3. Customize the application to display the desired widgets and fields on the mobile application instance.
4. Configure the Now Mobile Agent application.

Configuration options

Option	Link
Connect to ICW data	Connect to your Industrial Connected Workforce data
Customize UI actions	Customizing UI actions for the Now Mobile Agent application
Configure UI actions	Configure UI actions in the Now Mobile Agent application
Configure push notifications for task assignments	Configuring push notifications for task assignment
Configure scheduled offline caching **Note:** In offline mode, reference fields are limited to a maximum of 1,000 records. If the referenced dataset exceeds this limit, only the first 1,000 records are available, which may impact data completeness and look-up functionality. For more details, see Reference field attributes for input form screens in offline mode.	Configure scheduled offline caching
Configure the recently closed work order tasks list	Configure the recently closed work order tasks list
Configure special handling notes	Configure special handling notes for the Now Mobile Agent application
Enable chat	Enable chat in the Now Mobile Agent application
Location tracking	Location tracking for mobile
Enable dark theme	Enable dark theme in the Now Mobile Agent application

Connect to your Industrial Connected Workforce data

Connect the Now Mobile Agent application to your Industrial Connected Workforce (ICW) application instance to manage work on your mobile device.

Before you begin

Download the Now Mobile Agent application on an iOS platform using the App Store or on an Android platform using the Play Store.

Role required: wm_agent or wm_dispatcher

Procedure

1. Open the mobile application and tap the plus sign (+).
2. Connect to your ICW application instance in one of the following ways:
   - To enter the address manually, enter the instance address provided by your administrator in the Instance address field.

     For example, `https://<instance name>.service-now.com`.
   - To scan the QR code, tap the QR code icon and scan the QR code provided by your administrator.
3. Tap **Industrial Connected Workforce** to get started with your work.

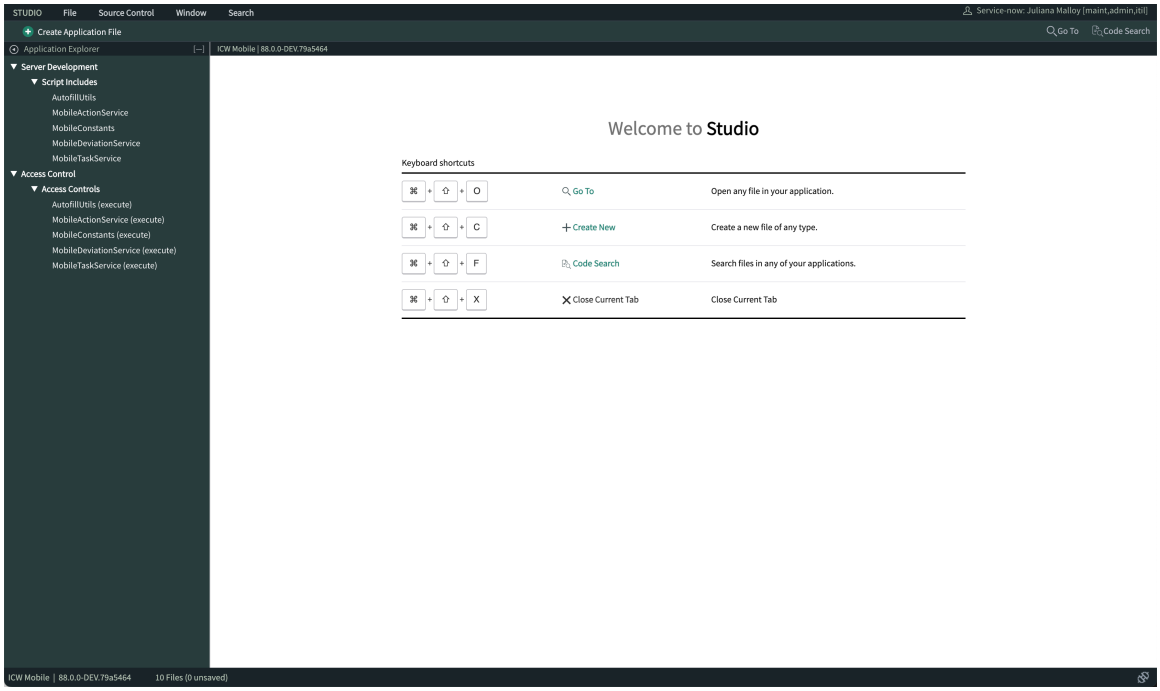
Customizing UI actions for the Now Mobile Agent application

Make it easier for your end users to get things done faster with the Industrial Connected Workforce (ICW) mobile application by creating custom UI actions.

The configurations for UI action conditions are different in the ICW mobile application than those in the desktop application. Unlike the desktop application, the UI action conditions on mobile don’t execute any database queries and therefore don’t take up mobile resources. On the mobile application, instead of performing a system check on whether the ICW configuration is enabled, you can configure the button to be active or inactive.

As an administrator, you can review the mobile UI actions and disable the ones that aren’t being used to use less mobile resources.

The following image shows the Now Mobile Agent application open in Studio. The Now Mobile Agent application open in Studio is where you can configure UI actions.



Configure UI actions in the Now Mobile Agent application

Enable or disable the desired UI actions to reduce the load on mobile devices. In some factory areas, the internet connection can be slow or unstable. To keep the app working smoothly, you can set it up to load only the most important information.

Before you begin

Role required: sn_icw.application_admin

Procedure

1. In the desktop application navigator, enter `sys_sg_button_instance.list` and press **Enter**.
2. Set the filter condition on the Function Instances form to **[Application][is] [Industrial Connected Workforce]**.
3. Select and hold (or right-click) the **Function** field and select **Group**.
4. Set the **Active** field to false for the buttons that you want to disable in the Industrial Connected Workforce Mobile Experience mobile interface.

Using the Industrial Connected Workforce Mobile Experience

The Industrial Connected Workforce Mobile Experience app helps operators manage work on the shop floor from their mobile devices. It brings together tasks, deviations, actions, and knowledge in one interface, so operators can stay productive without leaving their work area.

Overview of Industrial Connected Workforce Mobile Experience

To complete a task in the Industrial Connected Workforce Mobile Experience, do the following:

1. Create and execute guided tasks

   Request tasks from published standards and complete them step by step with attachments and comments.

2. Report deviations

Log issues that deviate from expected standards.

3. Create actions

   Start ad-hoc or follow-up actions, assign them to the right people, and track progress.

4. Access standards and knowledge

   Browse published standards and related knowledge articles, rate and comment on articles, and link them to tasks.

Additional information

- If you close the form, your changes are saved in the cache.
- If you close the app while online without submitting, all unsaved changes are lost.
- If you select **Submit**, your work is saved.
- For Industrial Guided Tasks, you can save your progress to the outbox while working in offline mode. Changes saved to the outbox persist even if you close the app, and are automatically uploaded when your device reconnects. For more information, see Save an Industrial Guided Task while offline.

Create an Industrial Guided Task with the Industrial Connected Workforce Mobile Experience

Create an Industrial Guided Task (IGT) with the requested standard to keep processes consistent and compliant across the shop floor.

Before you begin

Role required: sn_icw_igt.user or sn_icw_igt.expert

Note: The sn_icw_igt.expert can put tasks on hold or cancel them.

If the standard is active and published, requesting a standard or creating a task is possible.

About this task

An IGT is designed to streamline and improve operational efficiency across the shop floor. These tasks offer step-by-step guidance to operators and cover a wide array of use cases, from equipment management to shop floor inspections.

Procedure

1. Navigate to the **Standards** tab.
2. On the **Standards hub** page, select the **Standards** tab.
3. Select the published standard for which you want to request a task.
4. On the Guided Task form, fill in the fields.
   For a description of the field values, see Industrial Guided Task form.
5. Select **Submit**.

Result

The new industrial guided task is displayed in the lists of tasks in the **Tasks** tab.

Execute an Industrial Guided Task with the Industrial Connected Workforce Mobile Experience

Execute an Industrial Guided Task (IGT) with the Industrial Connected Workforce Mobile Experience to keep operations consistent, safe, and aligned with industry standards.

Before you begin

Role required: sn_icw_igt.user

Procedure

1. Navigate to the **Tasks** tab.
2. From the following tabs, select the one that contains the task you need.
   - My Tasks
   - Area Tasks
   - Upcoming
   - Done
3. Select the task that you want to execute by tapping its tile.
4. From the **Details** tab, select **Perform task** to start the execution of the task.
5. In case the task isn't already assigned to you, select the **Assign to me** button to continue. You must have the required skills to execute the task. If you don’t, an error message is displayed and you’re prevented from completing the action.
6. Follow the instructions, and after answering all questions, select **Submit**. If a question requires scanning a bar code or QR code, it will be marked with the scan icon ( ).
7. **Optional:** Navigate to the three-dot menu and then tap **Add attachment** to provide additional information while executing the task.
8. Navigate to the three-dot menu and then tap **Follow up actions** to access the list of follow-up actions or to create a follow-up action directly from the task.
9. **Optional:** If you're working in offline mode, save your progress by navigating to the three-dot menu and selecting **Save**.

   (Optional) When you save while offline, the IGT progress is stored in the outbox on your device. Your changes are saved even if you close the app. When your device reconnects, the saved changes are automatically uploaded to the server.

   For more information, see Save an Industrial Guided Task while offline.

Result

The task is completed successfully, and its status is changed to Closed Complete.

Save an Industrial Guided Task while offline

Save the progress of an Industrial Guided Task (IGT) to the outbox while working in offline mode so that your changes are preserved and automatically uploaded when connectivity is restored.

Before you begin

Role required: admin

About this task

As an operator, you may need to execute Industrial Guided Tasks in areas with limited or no network connectivity. The offline save feature allows you to save your IGT execution progress to

the outbox on your device. When your device reconnects, the saved changes are automatically uploaded to the server so that your work is not lost.

Note: This feature applies to saving IGT progress when you are offline. This is not the same as submitting a task. You can save your progress and continue the task later.

Procedure

1. Open the Industrial Guided Task that you are executing on the Industrial Connected Workforce Mobile Experience.
2. Complete or partially complete the steps in the guided task:

   While offline, you can answer questions and fill in step responses.
3. Navigate to the three-dot menu and select **Save**.

Result

Your IGT progress is saved to the outbox on your device. A confirmation is displayed indicating that the save is successful.

- Your saved changes persist even if you close the app.
- When your device goes back online, the saved changes are automatically uploaded to the server.
- Other users on any device can then continue the work from the point where you saved.

Create an action in the Industrial Connected Workforce Mobile application

Create an action in Industrial Connected Workforce Mobile Experience to manage all ad-hoc tasks that don't fit into any of the standard processes.

Before you begin

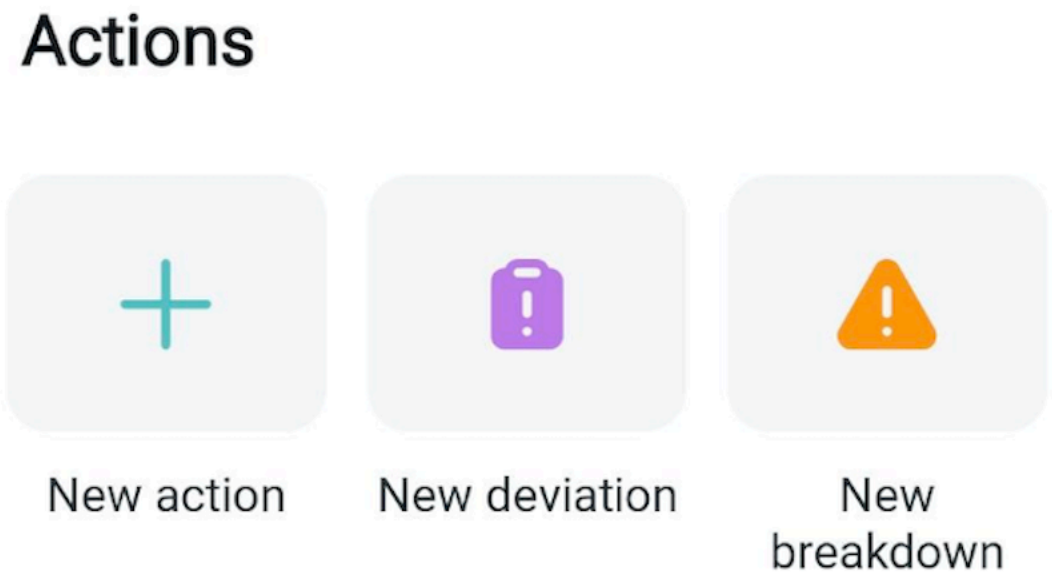
Role required: sn_icw.action_user or sn_icw.action_expert

About this task

Creating an action can help automate one or more steps of an industrial process. You can specify the functional location and equipment that the action is related to.

Procedure

1. Navigate to **Home page**.
2. From the Actions menu, select **New action**.



3. On the Action form, fill in the fields.
   For a description of the field values, see Action form.
4. Select **Next**.
5. On the Action form, fill in the fields.
   For a description of the field values, see Action form.
6. **Optional:** If needed, select the due date.
7. **Optional:** If needed, select a user to escalate to.
8. Select **Submit**.

Result
The action is displayed in the list of industrial tasks and can be edited or completed.

What to do next
From the three-dot menu you can create a deviation, create a follow-up action, or cancel the action. A follow-up action can also be created from the **Related** tab.

Create an action from another task

Create an action as a child task to another task Industrial Connected Workforce Mobile Experience.

Before you begin
Role required: sn_icw.action_user or sn_icw.action_expert

About this task
You can create an action from an existing action, deviation, breakdown, or root cause analysis.

Procedure
1. Navigate to the **Tasks** tab.
2. Select the task that you want to be the parent of the new action.
3. Select the three-dot menu in the top corner and select **Create action**.
   A new form for the action opens with the automatically populated fields.

4. **Optional:** Change the values for the fields.
   For a description of the field values, see Action form.
5. Select **Next** twice to go through the entire form.
6. Select **Submit**.

Result
The action is created and can be found in the **Actions** related list of the parent task. The parent task can't be closed until all child tasks in the Actions list are closed.

Create a follow-up action

Create a follow-up action for a task with the Industrial Connected Workforce Mobile Experience.

Before you begin
Role required: sn_icw.action_user or sn_icw.action_expert

About this task
The following procedure describes creating a follow-up action from an existing action, deviation, breakdown, or root cause analysis. To create a follow-up action from a guided task, open the task that you need and navigate to **Related** > **Follow-up actions** > **Create follow-up action** and fill in the fields on the record form.

Procedure
1. Navigate to the **Tasks** tab.
2. Select the task for which you want to create a follow-up action.
3. Select the three-dot menu in the top corner and select **Create follow-up action**.
   The short description gets copied with the prefix [Follow up].
   A new form for the action opens with the automatically populated fields.
4. **Optional:** Change the values for the fields.
   For a description of the field values, see Action form.
5. Select **Next** twice to go through the entire form.
6. Select **Submit**.

Result
The new follow-up action is created and displayed in the Follow-up actions related list of the origin task. Follow-up actions can also be created from this list. Closing of follow-up tasks isn't a prerequisite for closing of the origin task.

Create a deviation in the Industrial Connected Workforce Mobile application

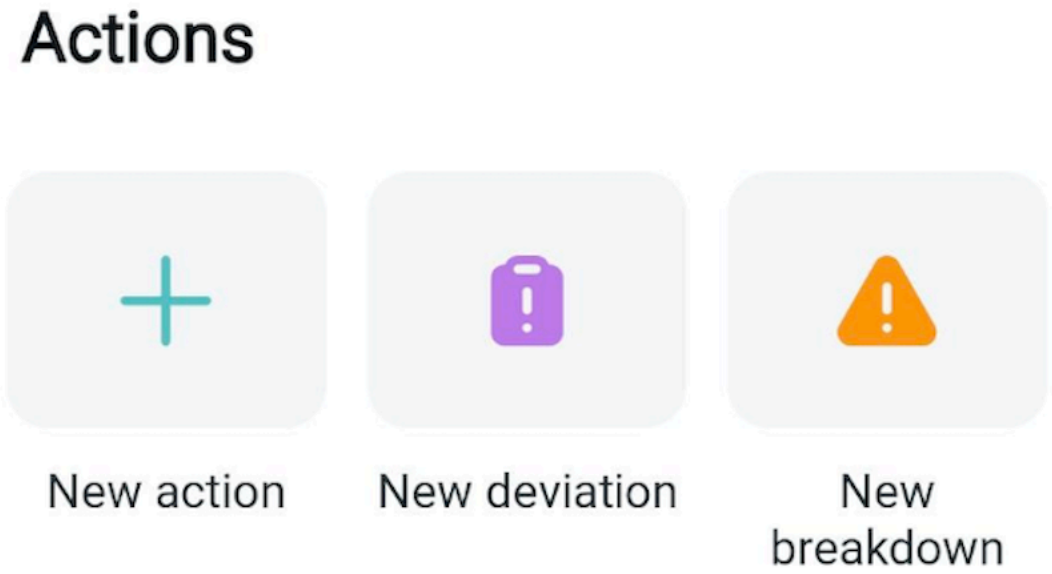
Create a deviation in the mobile app to report an issue that deviates from standard operations, such as an equipment malfunction. This way the issue can be tracked, investigated, and resolved.

Before you begin
Role required: sn_icw.deviation_user or sn_icw.deviation_expert

About this task
A deviation is any type of equipment or work anomaly that has an impact on work safety, performance, or quality. Creating a deviation means reporting an issue that deviates from the expected standard of operation and starting the resolution process needed to address the issue.

Procedure

1. Navigate to **Home page**.
2. From the Actions menu, select **New deviation**.



3. On the Deviation form, fill in the fields.
   For a description of the field values, see Deviation form.
4. Select **Next**.
5. On the Deviation form, fill in the fields.
   For a description of the field values, see Deviation form.
6. Select **Next**.
7. If applicable, select the origin.
8. Select the active material that relates to the deviation.
9. If applicable, select a resolution code.
   The resolution code can be one of the following:
   - None
   - Not fixed
   - Fixed by operator
   - Fixed by maintenance
10. Select **Submit**.

Result

The deviation is displayed in the list of industrial tasks and can be viewed or edited. If a resolution code is provided while creating a deviation, the deviation is created in the Closed state by default. In all other cases, the deviation is created in the Found state.

The opened deviation can be:

- Edited
- Scheduled for a different time
- Delayed

- Fixed
- Closed
- Canceled

Note: The actions Close, Cancel, and Reopen are restricted to users with the sn_icw.deviation_expert role. Other actions are supported for both the sn_icw.deviation_user and sn_icw.deviation_expert role.

Contextualize an external document using AI Enhanced recommended actions for ICW Mobile

With the AI Enhanced recommended actions for Industrial Connected Workforce Mobile Experience, you can contextualize an external document to get an explanation of why the document is relevant to a deviation.

Before you begin

Role required: sn_icw.deviation_user and sn_ai_enhanced_ra.document_user

Procedure

1. Navigate to **All** > **Digital Factory Workspace**.
2. Open the Digital Factory Workspace list view.
3. In the Deviation list module, select one of the available lists.
4. Open the deviation record that you want to view the recommended actions for.
5. In the Recommendations panel, select the **Suggested actions** tab to view the suggested action search results for your deviation.
6. To view why the document was selected, select the **Contextualize document** UI action. A summary appears that explains why the selected document is relevant to your deviation.

What to do next

Generate an action plan using AI Enhanced recommended actions for ICW Mobile.

Related topics

AI Enhanced recommended actions for Industrial Connected Workforce (ICW)

Configure AI Enhanced recommended actions for Industrial Connected Workforce

Generate an action plan using AI Enhanced recommended actions for ICW Mobile

Generate an action plan to document and track remediation steps for an Industrial Connected Workforce Mobile Experience (ICW Mobile) deviation. Action plans help you organize tasks, assign responsibilities, and monitor progress toward resolution.

Before you begin

Role required: sn_icw.deviation_user and sn_ai_enhanced_ra.action_plan_user

About this task

The AI Enhanced recommended actions for ICW Mobile enables you to generate a structured action plan, which you can use to resolve a deviation. Each action plan lists steps to follow, contains assigned owners, and tracking mechanisms for a timely resolution.

Procedure

1. In the new deviation, select the **Recommendations** tab and then select the **Suggestions** section.
2. In the Action plan section, select **Generate Action Plan**.

3. Select ⌄ to expand and view the full action plan.
   Review the listed steps. The action plan is created using your uploaded resources and information available in the deviation record.
4. After reviewing the steps, select **Add to work notes** to copy the generated action plan in the **Work notes** field of the deviation record.
5. Select the **Activity** tab and refresh to view the generated action plan in the work notes.
6. In the generated action plan, select the **More** (⋮) icon and then select **Create follow-up actions**.
   Use this option to create a follow-up action for either the entire action plan or a step listed in the action plan.
7. Select the **Related** tab to view the follow-up action you have created.

Result

The action plan appears in Work notes of the deviation record that you can refer to as the remediation work progresses.

You can also track and continue working on the follow-up actions.

Related topics

- Contextualize an external document using AI Enhanced recommended actions for ICW Mobile
- AI Enhanced recommended actions for Industrial Connected Workforce (ICW)
- Configure AI Enhanced recommended actions for Industrial Connected Workforce

Escalate a deviation to a breakdown

Escalate a deviation to a breakdown to perform deeper analysis, uncover root causes, and help prevent similar issues in future processes.

Before you begin

Role required: sn_icw.deviation_user or sn_icw.deviation_expert

Procedure

1. Navigate to the **Tasks** tab.
2. Select the deviation task that you want to escalate to a breakdown.
3. Select the three-dot menu in the top corner and select **Escalate to breakdown**.
4. Confirm your choice by selecting **Escalate to breakdown**.

Result

The record is reclassified to a breakdown and can be fixed, canceled or you can decide to initiate a breakdown analysis.

Create a breakdown in the Industrial Connected Workforce Mobile Experience

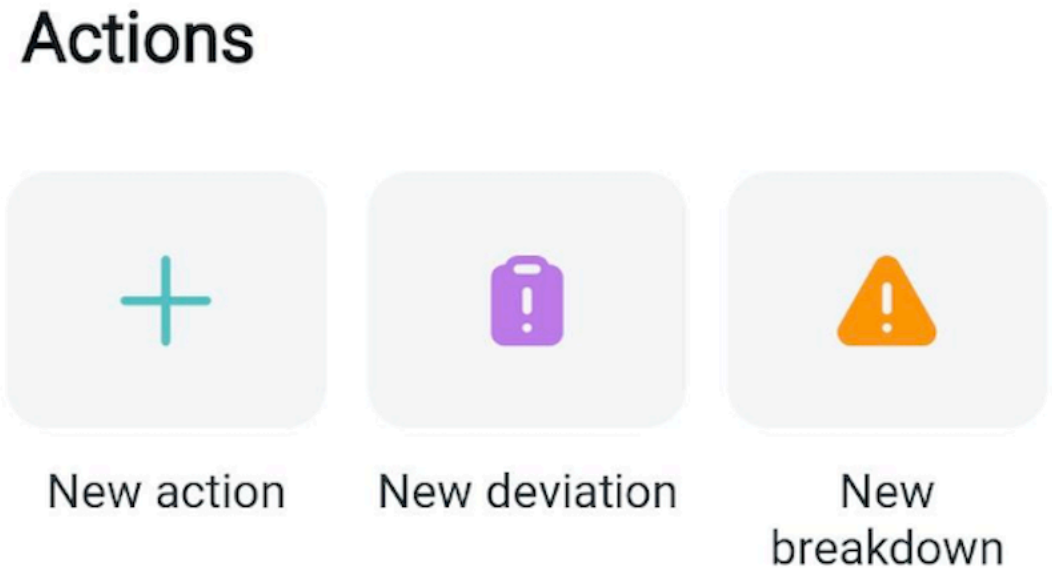
Create a breakdown when the impact of the anomaly increases. For example, when the duration of production impairment increases as the problem remains unresolved.

Before you begin

Role required: sn_icw.deviation_user or sn_icw.deviation_expert

Procedure

1. Navigate to the home page.
2. From the Actions menu, select **New breakdown**.



3. On the Breakdown form, fill in the fields.
   For a description of the field values, see Deviation form.
4. Select **Next**.
5. On the Deviation form, fill in the fields.
   For a description of the field values, see Deviation form.
6. Select **Next**.
7. If applicable, select the values for the following fields:
   a. Select the failure mode.
   b. Select the active material related to the breakdown.
   c. Select the resolution code.
8. Select **Submit**.

Result

The breakdown is created and displayed in the list of industrial tasks. You can choose to initiate a breakdown analysis from the newly created breakdown.

Initiate a breakdown analysis

Use breakdown analysis to investigate the cause of breakdown further.

Before you begin

Role required: sn_icw.rca_user or sn_icw.rca_expert

Procedure

1. Navigate to the **Tasks** tab.
2. Select the breakdown task for which you want to initiate the root cause analysis.

3. Select the three-dot menu in the top corner and select **Start breakdown analysis**.
4. On the Breakdown analysis form, fill in the fields.
   For a description of the field values, see Root cause analysis form.
5. Select **Submit**.

Result
The breakdown analysis is created and displayed in the list of root cause analyses in the Workspace. You can access the Playbook only in the Digital Factory Workspace.

Create a safety incident from a task

Create a safety incident directly from an existing task when you are using the Industrial Connected Workforce Mobile Experience.

Before you begin
Role required: sn_icw.safety_incident_user, and one of sn_icw.deviation_user, sn_icw.rca_user, or sn_icw.action_user

You must have the sn_icw.safety_incident_user role to create safety incident from a deviation, from a root cause analysis, and an action respectively.

The task must be active on ICW Mobile application for you to create a safety incident.

Procedure
1. Navigate to the **Tasks** tab in the ICW Mobile app.
2. Select the task from which you want to create a safety incident.

   You can create safety incidents from actions, deviations, and Industrial Guided Tasks.
3. Select the three-dot menu in the top corner.
4. Select **Create safety incident**.
5. On the Safety Incident form, review and complete the fields.

   Fields from the originating task are automatically populated.
6. Select **Submit**.

Result
The safety incident is created and linked to the originating task. The incident can be viewed in the workspace for detailed triage and investigation.

Related topics
- Exploring Industrial Connected Workforce Integration with Health and Safety Incident Management
- Report safety incident from ICW Mobile
- Using ICW Health and Safety Integration

Report safety incident from ICW Mobile

Report a safety incident directly from your mobile device when you encounter a safety-related issue on the shop floor.

Before you begin
Role required: sn_icw.safety_incident_user

About this task

The Industrial Connected Workforce Mobile Experience enables operators to quickly report safety incidents while on the shop floor. This mobile reporting flow is designed for rapid incident capture, with your functional location automatically pre-filled.

Note: The mobile experience is optimized for quick incident reporting. For detailed investigation and triage, use the Digital Factory Workspace.

Procedure

1. Navigate to the **Home** page in the ICW Mobile app.
2. From the **Actions** menu, select **New safety incident**.
3. On the Safety Incident form, fill in the required fields.

   Your functional location is pre-filled based on your user profile.
4. Enter a description of the incident in the **Short description** field.
5. Complete the **Sequence of events** section describing:
   - What happened before the incident
   - What happened during the incident
   - What happened after the incident
6. **Optional:** Use the camera to capture photos or scan barcodes related to the incident.
7. Select **Submit**.

Result

The safety incident is created and submitted for triage. You can view the incident status from the safety incidents list.

Related topics

Exploring Industrial Connected Workforce Integration with Health and Safety Incident Management

Create a safety incident from a task

Using ICW Health and Safety Integration

Industrial Connected Workforce Mobile Experience reference

Reference topics provide additional information about Industrial Connected Workforce Mobile Experience.

Industrial Guided Task form

The following table describes the field values for the Industrial Guided Task form in Industrial Connected Workforce Mobile Experience.

Industrial Guided Task form

Field	Description
Short description	Short description of the guided task. This field is automatically filled with the name of the standard from which the task is being created.
Priority	Priority of the guided task. Options are:

Industrial Guided Task form (continued)

Field	Description
	• None • 1 - Direct • 2 - This shift • 3 - Today • 4 - Within 7 days • 5 - Within 30 days • 6 - Unplanned If not selected, the default value is **3 - Today**.
Planned start	Planned start of the task execution.
Planned end	Planned end of the task execution.
Due date	Date by which the task is to be executed. If not set, this field calculated based on priority.
Functional location	Industrial facility work area where the task is to be completed. The location is defined using the ISA-95 standard.
Equipment	Machine to which the task relates. This field is automatically filled if equipment is specified in the standard.
Assigned to	User that the task has been assigned to.

Action form

The following table describes the field values for the Action form in Industrial Connected Workforce Mobile Experience.

Action form

Field	Description
Short description	Brief description of the action.
Description	Description of the action and its purpose.
Functional location	Industrial facility work area where the action is completed. The location is defined using the ISA-95 standard. Automatically filled based on the logged-in user's worker profile.
Equipment	Machine to which the action relates. This field is automatically filled if equipment is specified in the standard.
Add attachment	Attachment for the form, such as a file or image.

Action form (continued)

Field	Description
Impact	Measure of effect the action has on an industrial process. Can be one of the following: • 1 - Safety • 2 - Quality • 3 - Reliability • 4 - Operations • 5 - Other
Urgency	Measure of how long the action can be delayed until there's a significant impact on an industrial process. Can be one of the following: • 1 - Critical • 2 - Important • 3 - Routine • 4 - Not urgent
Priority	Priority that is set automatically based on impact and urgency. Can be one of the following: • 1 - Direct • 2 - This shift • 3 - Today • 4 - Within 7 days • 5 - Within 30 days
Opened by	User opening the action.
Assignment group	Team or department responsible for completing the task.
Assigned to	User that the action should be assigned to.
Additional assignee list	List of users to be notified or contributing to the task, but not as the primary assignee. Available options vary depending on the selected functional location or assignment group.
Origin	Task from which the action originates.
Parent	Task from which the action is being created. This field is automatically filled with the number of the parent task.

Action form (continued)

Field	Description
Due date	Date by which the task should be executed. If you don't set the due date, it's calculated based on priority when you save the form.
Escalate to	User that the action should be escalated to.

Deviation form

The following table describes the field values for the Deviation form in Industrial Connected Workforce Mobile Experience.

Deviation form

Field	Description
Short description	Brief description of the deviation.
Description	Description of the deviation and its purpose.
Classification	Type of the deviation. Options are: • Deviation • Breakdown • Process failure • Defect
Have you retained one or more parts?	Only available if the Classification is set to Breakdown.
Functional location	Industrial facility work area where the deviation is completed. The location is defined using the ISA-95 standard. This field is automatically filled based on the logged-in user's worker profile.
Equipment	Machine to which the deviation relates. This field is automatically filled if equipment is specified in the standard.
Add attachment	Attachments to add, such as a file or image.
Category	Type of deviation. Can be one of the following: • Mechanical • Electrical • Pneumatic • Hydraulic • Environmental • Defect • Other

Deviation form (continued)

Field	Description
Subcategory	Type of deviation within the selected category.
Impact	Measure of effect the deviation has on an industrial process. Can be one of the following: • 1 - Safety • 2 - Quality • 3 - Reliability • 4 - Operations • 5 - Other
Urgency	Measure of how long the deviation can be delayed until there's a significant impact on an industrial process. Can be one of the following: • 1 - Critical • 2 - Important • 3 - Routine • 4 - Deferred
Priority	Priority that is set automatically based on impact and urgency. Can be one of the following: • 1 - Direct • 2 - This shift • 3 - Today • 4 - Within 7 days • 6 - Unplanned
Opened by	User opening the deviation.
Assignment group	Team or department responsible for completing the task.
Assigned to	User that the deviation should be assigned to.
Additional assignee list	List of users to be notified or contributing to the task, but not as the primary assignee. Available options vary depending on the selected functional location or assignment group.
Origin	Task from which the deviation originates.
Failure mode	Available options vary depending on the selected functional location or equipment.

Deviation form (continued)

Field	Description
Active material	Active material to which the deviation relates.
Resolution code	Resolution code for the impact. Options are: • None • Not fixed • Fixed by operator • Fixed by maintenance

AI Enhanced recommended actions for Industrial Connected Workforce

The AI Enhanced recommended actions for Industrial Connected Workforce (ICW) feature accesses external sources related to a deviation, and contextualizes how the document is relevant to the deviation.

Get started

Explore	Configure	Use
		
Learn about the AI Enhanced recommended actions feature for ICW	Set up the AI Enhanced recommended actions feature for ICW	Learn how you can use the AI Enhanced recommended actions feature for ICW

AI Enhanced recommended actions for Industrial Connected Workforce (ICW)

The AI Enhanced recommended actions for Industrial Connected Workforce feature accesses external sources related to a deviation, and contextualizes how the document is relevant to the deviation.

AI Enhanced recommended actions for ICW overview

AI Enhanced recommended actions for ICW leverages the external content connector to collect data from an external source. This feature currently supports using Microsoft SharePoint Online as the external source.

Note: The external content connector is part of the existing ServiceNow AI Platform capabilities. For more information about the external content connector, see External Content Connectors.

Using the AI Enhanced recommended actions for ICW for your recommended actions

AI Search fetches the data from the external source. Then AI Enhanced recommended actions for ICW displays the fetched data as search results in the **Suggested Actions** tab of the Recommendations panel. You can use the **Contextualize document** UI action in the **Suggested Actions** tab to summarize why a fetched document is relevant to your search prompt.

By default, AI Search uses the short description, description, site, ICW device, and equipment model entity field values to display the most relevant external sources for your deviation. The following image shows an example of what the **Contextualize document** UI action looks like in an existing deviation record in the Digital Factory Workspace.

Image/screenshot: Contextualize document UI action under an external document in the Digital Factory Workspace.

What to explore next

To learn more about configuring and using AI Enhanced recommended actions for ICW, see:

- Configure AI Enhanced recommended actions for Industrial Connected Workforce
- Contextualize an external document for a Deviation in the Digital Factory Workspace

Configure AI Enhanced recommended actions for Industrial Connected Workforce

Configure AI Enhanced recommended actions for ICW to contextualize external sources related to a deviation.

Configuration overview

1. Create a Microsoft SharePoint Online external content connector

   Create a Microsoft SharePoint Online external content connector to use as the external source.

2. Configure crawl settings for a Microsoft SharePoint Online external content connector

   Configure the crawl settings to specify the sites you want your Microsoft SharePoint Online external content connector to crawl.

3. Set up the search source

   Set the search source in the **[RA-ICW AI] Search Profile** record to the Microsoft SharePoint Online external content connector you created.

4. Edit the fields used for search results

   If needed, add or remove the deviation record fields leveraged during the search process.

Set up AI Enhanced recommended actions for Industrial Connected Workforce

Set up AI Enhanced recommended actions for ICW so that you can contextualize external sources related to a deviation.

Before you begin

You must have Recommended Actions for ICW installed and configured. For more information, see Recommended Actions for the Industrial Connected Workforce.

Role required: admin

Procedure

1. Create a Microsoft SharePoint Online external content connector.
2. Configure crawl settings for a Microsoft SharePoint Online external content connector.
3. Set up the search source.
   a. Navigate to **All** > **AI Search** > **Search Experience** > **Search Profiles**.
   b. Find and select the **[RA-ICW AI] Search Profile** record
   c. In the search profile record, select the **Search Sources** tab.
   d. Select **Create and link**.
   e. In the **Indexed source** field, select **SharePoint Online**.

      For more information about the additional form fields, see Search Source form.
   f. Select **Submit**.
4. If needed, add or remove the deviation record fields that are later used to produce search results.

   Note: If you edit the fields later, the search process restarts so you can view the updated search results.

   a. Navigate to **All** > **Recommended Actions** > **Context**.
   b. Select the **Deviation context** record.
   c. In the context record, select the **Rules** tab.
   d. Select the **Deviation being active** rule.
   e. In the rule record next to **Fields affecting this rule**, select the **Unlock fields affecting this rule** icon.
   f. Using the Add item and Remove item icons, add or remove fields as needed.
   g. Select **Save**.

   Important: Removing the predefined fields might impact the output of the contextualized document and the generated action plan.

What to do next

After you set up AI Enhanced recommended actions for ICW, you can use the feature in the Digital Factory Workspace. For more information see, Contextualize an external document for a Deviation in the Digital Factory Workspace.

Using AI Enhanced recommended actions for Industrial Connected Workforce

After you configure AI Enhanced recommended actions for Industrial Connected Workforce, you can use the feature to contextualize external sources related to a deviation and generate an action plan.

Contextualize an external document for a Deviation in the Digital Factory Workspace

With the AI Enhanced recommended actions for Industrial Connected Workforce, contextualize an external document to get an explanation of why the document is relevant to a deviation.

Before you begin

Role required: sn_icw.deviation_user and sn_ai_enhanced_ra.document_user

Procedure

1. Navigate to **All** > **Digital Factory Workspace**.
2. Open the Digital Factory Workspace list view.
3. In the Deviation list module, select one of the available lists.
4. Open the deviation record that you want to view the recommended actions for.
5. In the Recommendations panel, select the **Suggested actions** tab to view the suggested action search results for your deviation.
6. To view why the document was selected, select the **Contextualize document** UI action.
   A summary appears that explains why the selected document is relevant to your deviation.

What to do next

You can generate an action plan based on the contextualized external documents and information available in the deviation. For more information see, Generate an action plan to resolve a Deviation in the Digital Factory Workspace.

Related topics

Contextualize an external document using AI Enhanced recommended actions for ICW Mobile

Generate an action plan to resolve a Deviation in the Digital Factory Workspace

Generate an action plan to document and track remediation steps for an Industrial Connected Workforce (ICW) deviation. Action plans help you organize tasks, assign responsibilities, and monitor progress toward resolution.

Before you begin

Role required: sn_icw.deviation_user and sn_ai_enhanced_ra.action_plan_user

About this task

The AI Enhanced recommended actions for ICW enables you to generate a structured action plan, which you can use to resolve a deviation. Each action plan lists steps to follow, contains assigned owners, and tracking mechanisms for a timely resolution.

Procedure

1. Navigate to Digital Factory Workspace.
2. Open the Digital Factory Workspace list view.
3. In the Deviation list module, select one of the available lists.
4. Open the deviation record that you want to create an action plan for.
5. In the Recommendations panel, select the **Suggested Actions** tab to view the suggested action search results for your deviation.
6. In the Action plan section, select **Generate Action Plan**.

7. Select **View full action plan** and review the listed steps.
   The action plan is created using your uploaded resources and information available in the deviation record.
8. After reviewing the steps, select **Add to work notes** to copy the generated action plan in the **Work notes** field of the deviation record.
9. Select the **More** icon, then select **Create follow-up actions**.
   Use this option to create a follow-up action for either the entire action plan or a step listed in the action plan. The **More** icon appears as ⋮.

Result

The action plan appears in Work notes of the deviation record that you can refer to as the remediation work progresses.

Related topics

Generate an action plan using AI Enhanced recommended actions for ICW Mobile