



TEAMCENTER

Service Asset Management

Service Lifecycle Management 2412

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Support Center: support.sw.siemens.com

Send Feedback on Documentation: support.sw.siemens.com/doc_feedback_form

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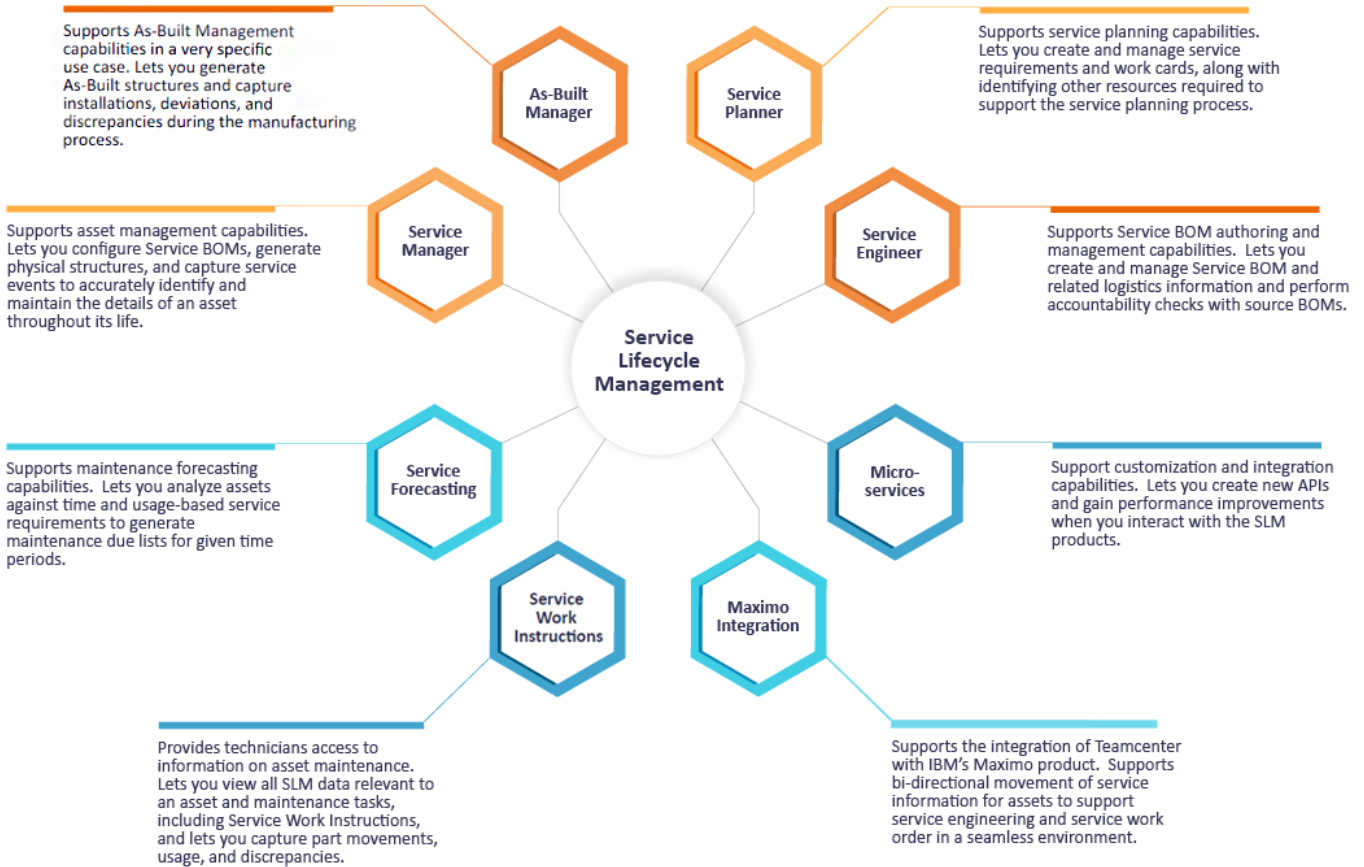
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1. Service Lifecycle Management

Service Lifecycle Management on web client

Capitalize on the re-use of product knowledge from engineering and manufacturing to improve service planning and execution. Provide feedback to engineering to improve product designs for serviceability and reliability. Communicate and coordinate operational activities for greater compliance, faster service, and lower costs.



Service Lifecycle Management products

Select a link below to access the help documentation for each product.

[Service Engineering](#)

[Service Work Instruction](#)

[Service Manager](#)

As-Built Manager

Service Planner

Maximo Integration

Microservices for Service Lifecycle Management Integration

2. What's new in Active Workspace Service Lifecycle Management

What's new in Service Lifecycle Management 2312



- You can now **create move part functionality** in the context of a service event.

What's new in Service Lifecycle Management 6.2

- Easily **evaluate maintenance needs** of physical parts by simulating monthly usage values.
- **Create an alert** to notify you when the life value of a part indicates scheduled maintenance is needed soon.
- In Active Workspace you can **create a lot** to group physical parts that are associated in some way, for example, from a particular manufacturer.
- Create an alert that notifies you of a **new discrepancy** for a specific part
- You can **view the details of an alert** by opening it from the **Alerts** icon or from either the **News Feed** tab or the **My Subscriptions** tab in the **Subscription Manager**.
- Service Lifecycle Management includes information regarding physical part usage and upcoming maintenance requirements. You **identify maintenance needs** by evaluating the frequency of required maintenance and usage records.
- You are now able to **view the service discrepancies** associated with either the selected physical part or the selected service event.
- Move part functionality, install, uninstall, and replace, works with **structures configured with Product Configurator**.
- **Service discrepancy approval** is easier in Active Workspace 6.2. You can approve a service discrepancy with a simple manual approval or submit it to a workflow, individually. Also, a service discrepancy is automatically approved when the service event is approved.
- You can quickly identify pending maintenance needs with the **configurable color indicators** in Service Lifecycle Management, beginning with Active Workspace 6.2.
- Life characteristics are now available for use in frequency expressions, along with keywords. For example, you can **create a frequency expression** to perform an inspection requirement every one thousand engine hours.

- You can **create multiple as-maintained physical structures** from a neutral structure.

What's new in Service Lifecycle Management 6.1

- A *characteristic definition* is information related to a neutral part, which service organizations need to maintain mission-critical assets. In Active Workspace 6.1, you can now **create characteristic definitions** that contain information such as how many hours a part has been used, the date the asset was put into commission, or the operating temperature of the part.
- Service Lifecycle Management 6.1 uses the **frequency of required maintenance and usage records** to forecast maintenance needs. It provides simple but effective markings to quickly identify upcoming service needs.
- In the **Service Events** tab, beginning with Active Workspace 6.1, **service discrepancies** are easily identified with indicators for individual parts  and for assemblies  with parts that have service discrepancies.

What's new in Service Lifecycle Management 6.0

- You can now create as-built structures, as-maintained structures, and service plans from **configured neutral structures** in Service Lifecycle Management.

3. Service Lifecycle Management

Service Lifecycle Management (SLM) provides a way to manage your service operation, which includes scheduled (routine) maintenance, unscheduled (repair) maintenance, or refurbishment or remanufacture (overhaul).

You can also use SLM to record the components on a delivered physical structure (as-built) for warranty or recall purposes, or to record the components when upgrading an as-built physical structure from one revision to another.

Example:

As a manufacturer, you want to capture the manufacturer, lot, and serial number of all parts that comprise each product you sell so that you can apprise your customers when parts are reaching the end of their warranty period.

Service Lifecycle Management procedures are completed on a physical product, such as an engine, airplane, or vehicle.

Active Workspace supports the manage physical asset phase of Service Lifecycle Management.

4. Install local HTML documentation

Siemens Digital Industries Software gives you the ability to install HTML documentation locally. By installing the **Siemens Documentation Server**, you can host HTML documentation for multiple languages on your local host or intranet.

There are four basic steps in the process:

- Access the local HTML help installation instructions on the Siemens Support Center.

Warning:

You must follow those instructions to perform these next three steps.

- Download the **Siemens Documentation Server** from the Siemens Support Center and install it.

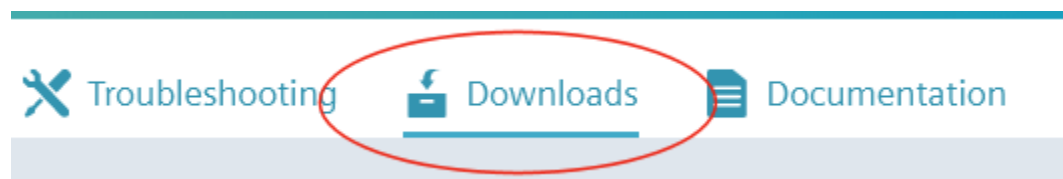
Note:

Installing the Siemens Documentation Server does not automatically give you access to the product documentation. You must download and install the product documentation after installing the documentation server.

- Download the documentation zip file you need from the Siemens Support Center.

There is one zip file that contains the documentation for Service Lifecycle Management on Teamcenter (*docs-service-lifecycle-management-teamcenter-2412-en-US.zip*) and one zip file that contains the documentation for Service Lifecycle Management on Active Workspace (*docs-service-lifecycle-management-active-workspace-2412-en-US.zip*).

The zip files are in the **Downloads** area of their respective products. Be sure to download the appropriate zip file for your needs.



Caution:

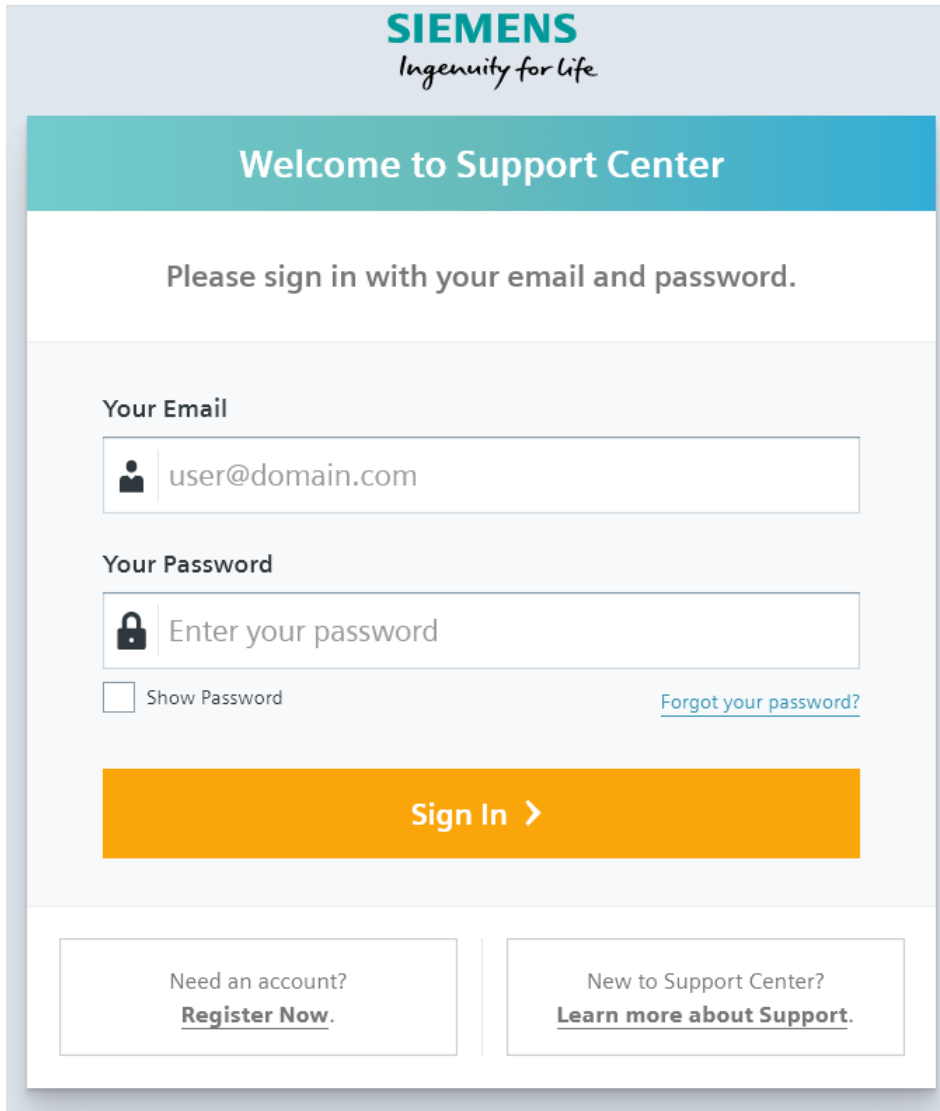
You must download and install the English documentation package before installing the documentation package of any other language.

- Install the HTML documentation using the installer in the zip file.

Access the local help installation instructions

The instructions for installing the documentation server and the documentation are contained in a single document stored on the Siemens Support Center. It can be viewed in HTML format from the Siemens Support Center or downloaded in PDF format.

1. Log on to the **Siemens Support Center**.



The screenshot shows the Siemens Support Center login interface. At the top, the Siemens logo and tagline 'Ingenuity for life' are displayed. Below this is a teal header with the text 'Welcome to Support Center'. The main content area has a white background with a teal border. It contains the instruction 'Please sign in with your email and password.' followed by two input fields: 'Your Email' with a user icon and the text 'user@domain.com', and 'Your Password' with a lock icon and the text 'Enter your password'. Below the password field is a 'Show Password' checkbox and a 'Forgot your password?' link. A large orange 'Sign In >' button is centered below the fields. At the bottom, there are two white boxes with teal borders: 'Need an account? **Register Now.**' and 'New to Support Center? **Learn more about Support.**'

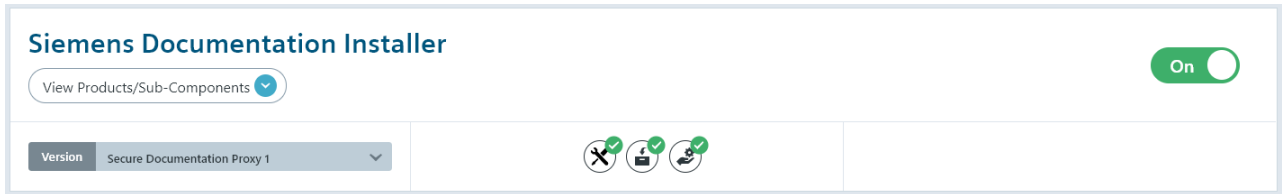
If you do not have an account, click **Register Now** and fill out the information.

2. Once on Siemens Support Center, click **Manage Products**.

Not seeing a product you expect?

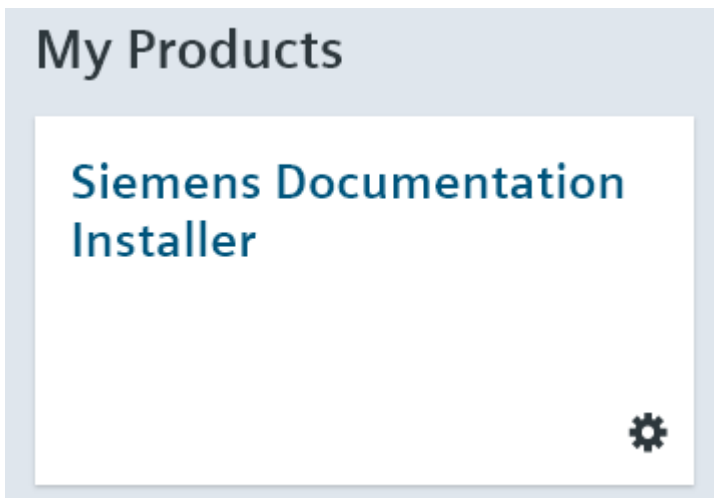
Manage Products 

3. Scroll down and toggle **On** the **Siemens Documentation Installer** product.



The screenshot shows the configuration interface for the 'Siemens Documentation Installer' product. At the top, the product name is displayed in blue. To the right of the name is a green toggle switch labeled 'On'. Below the product name is a dropdown menu labeled 'View Products/Sub-Components' with a downward arrow. Underneath this is a table with a 'Version' column containing 'Secure Documentation Proxy 1' and a dropdown arrow. To the right of the table are three circular icons: a wrench with a checkmark, a document with a checkmark, and a person with a checkmark.

The installer is added to your list of products.

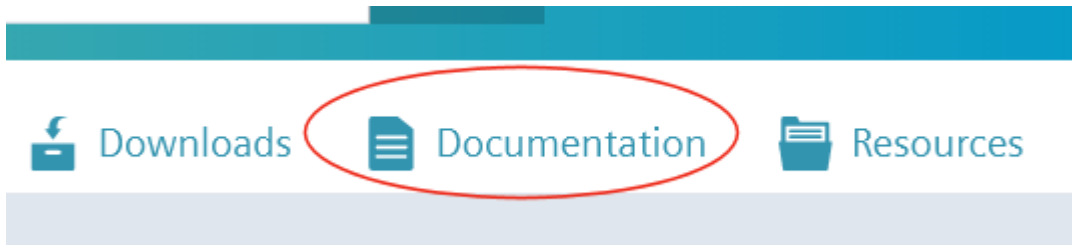


The screenshot shows a 'My Products' section with a light blue header. Below the header is a white card with the text 'Siemens Documentation Installer' in blue. In the bottom right corner of the card is a small grey gear icon.

4. Scroll back to the top and click **Support Center** in the bread crumb, to go back to see the products you are tracking.

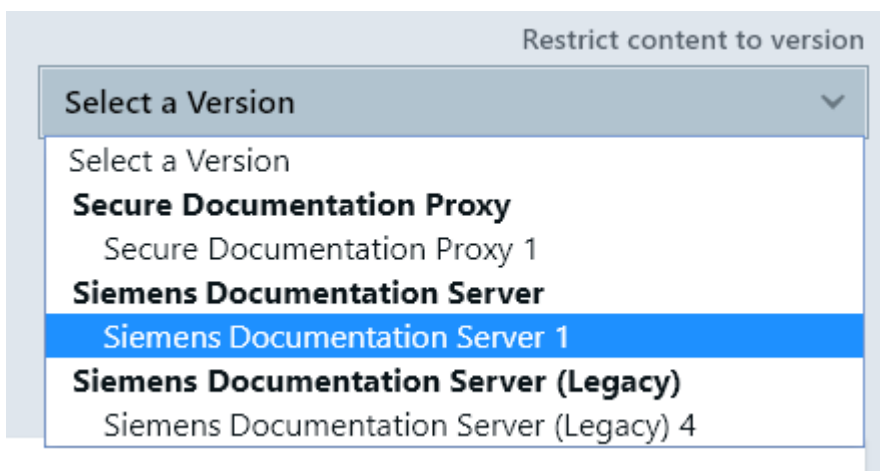


5. Click the **Siemens Documentation Installer** box.
6. Click **Documentation**.



If you see a message about selecting a product version, click the **X** in the upper right to close the message window.

7. In the drop-down list on the right, select the most recent **Siemens Documentation Server** listed.



8. Click the installation guide for your operating system.

RECENTLY UPDATED Updated: 10 days ago

Siemens Help Server Installation Guide for Linux

SIEMENS DISW DOCUMENTATION SERVER 1.0

RECENTLY UPDATED Updated: 10 days ago

Siemens Help Server Installation Guide for Windows

SIEMENS DISW DOCUMENTATION SERVER 1.0

The HTML version is displayed.

This Document All Documents

Search This Document

- Conventions and requirements
- Hardware and Software requirements
- Web-served documentation
- Setting up the Siemens Help Server
- Installing product

Conventions and requirements


Conventions

All references to "Windows" in this manual refer to 64-bit versions of Windows

Windows menu items and commands appear in **bold letters** or courier font.

An arrow (→) is used to represent submenus on Windows machines, for exampl

- To view or download the PDF version, in the upper right, click **View Document PDF**.

 **View Document PDF**

- Now, using either the HTML or PDF version, follow the instructions to download and install the documentation server and documentation.

5. Service Lifecycle Management configuration tasks

What can I configure?

You can configure the following aspects of Service Lifecycle Management:

- Configure physical structures.

What do I need to do before configuring?

Before you can configure Service Lifecycle Management, you must install the features. Install the following from the **Features** panel of Teamcenter Environment Manager (TEM):

- **As-Built**

Provides searching and BOM extensions necessary to support Service Lifecycle Management As-Built capabilities.

Select **Active Workspace**→**Server Extensions**→**MRO**→**As-Built**.

- **As-Maintained**

Provides searching and BOM extensions necessary to support Service Lifecycle Management As-Maintained capabilities.

Select **Active Workspace**→**Server Extensions**→**MRO**→**As-Maintained**.

- **Service Event**

Provides searching and BOM extensions necessary to support Service Lifecycle Management Service Event Management capabilities.

Select **Active Workspace**→**Server Extensions**→**MRO**→**Service Event**.

You must also install Service Lifecycle Management features to Teamcenter using the **Extensions**→**Maintenance Repair and Overhaul** menu in TEM.

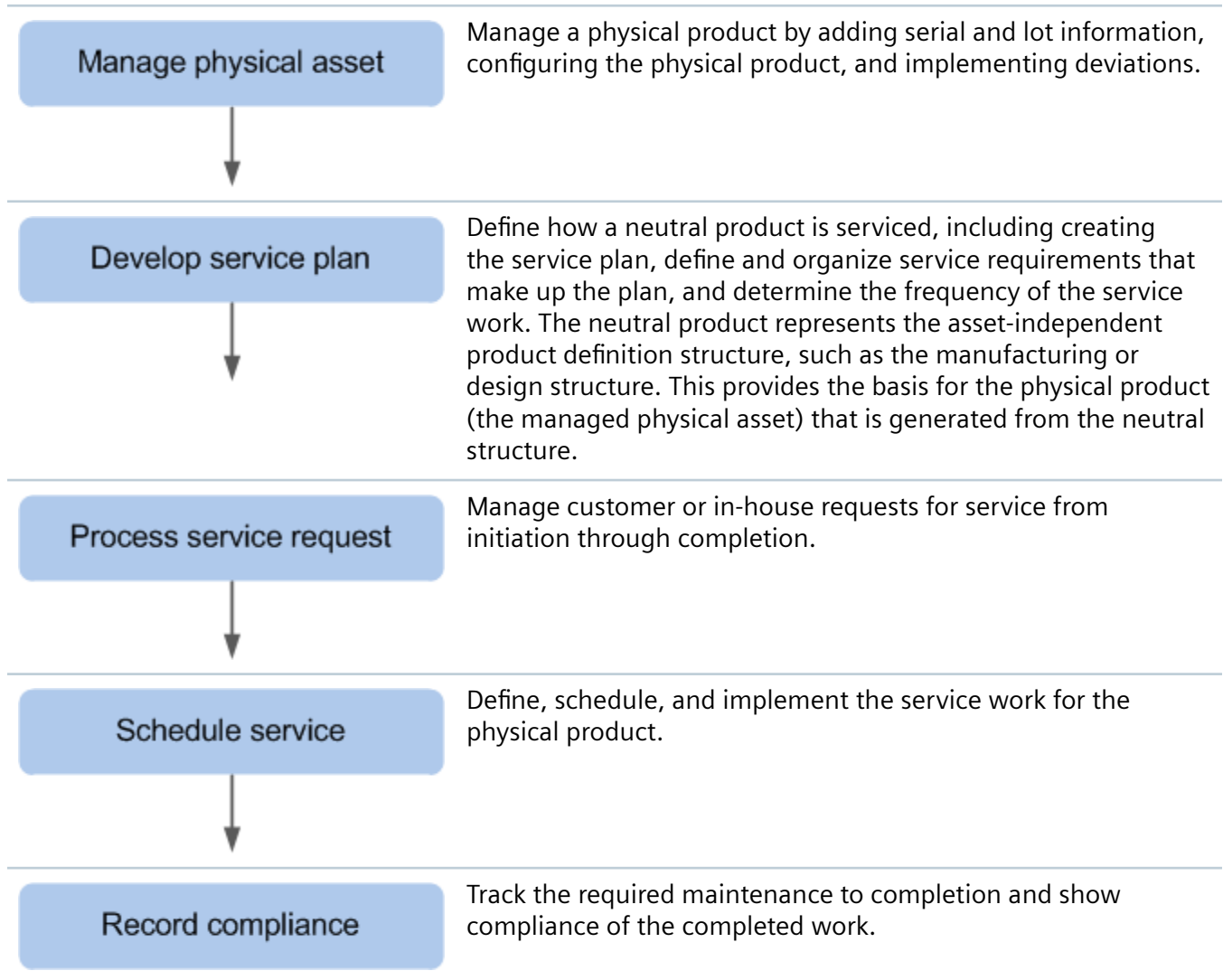
Configuring physical structures

To add a list of manufacturers to the **Manufacturer's ID** field in the **Generate As-Built Structure**, **Generate As-Maintained Structure**, and **Create Lot** dialog boxes, the Business Modeler IDE creates a list of values and attaches it to the **ManufacturerOrgId** property on the **PhysicalPartRevision** and **Lot** business objects.

Where can I find out more about Service Lifecycle Management?

See the Service Lifecycle Management documentation in the Teamcenter help.

6. Service Lifecycle Management process overview



7. Reviewing a physical structure

Search for a physical part

You can search for physical parts in Active Workspace by physical part name, physical part number, serial number, manufacturer's ID, or lot number.

1. Above the search box, click **Type** and select **Physical Part Revision** from the list.
2. In the search box, type the search criteria for the physical part and click **Search** 🔍.
3. Optionally, filter the search results to narrow the number of items that display in the Results list.

Find a child part in an as-maintained structure

Use **Find** to search for a child part in an as-maintained structure.

1. With an as-maintained structure open, select **Find** 🔍.

Note:

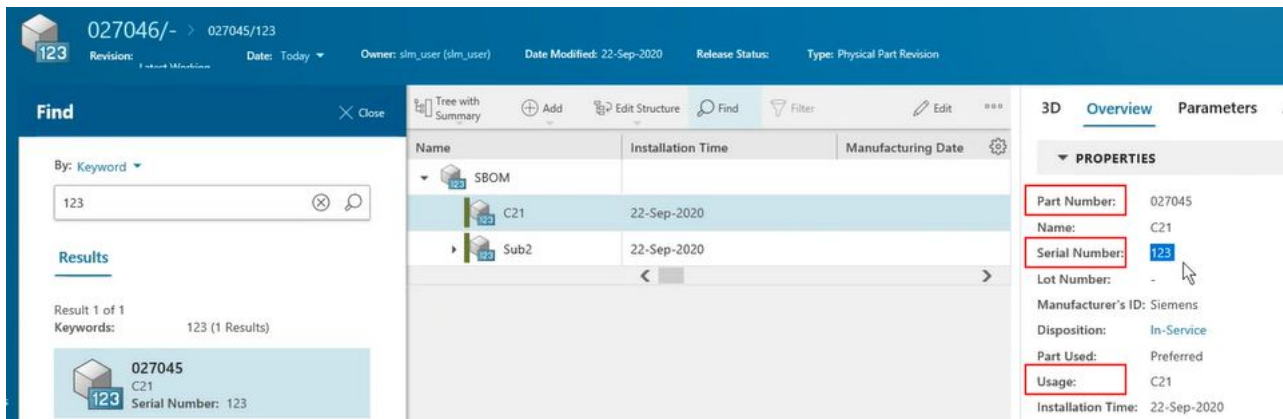
There are three properties by which you search for a child part in the physical structure, **part number**, **serial number**, and **usage**.

2. Enter the value you want to search.



Parts that match the find criteria are listed under **Results** and highlighted in the structure.

3. Select the part to see its properties in the **Overview** tab.



View the properties of a physical part


You can view the property details of a physical part, including part number, serial number, lot number, manufacturer's ID, disposition, location, and neutral part (Physical Realization).

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, select the part you want to view.
3. Click the **Overview** tab to view the properties of the physical part.

Use the one-step commands and the tools and information toolbar to complete more actions on the selected physical part.

View the contents of a physical structure

You may want to view the contents of a physical structure prior to installing or replacing, or uninstalling a part.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, click **Open**  to open the part.

The physical part structure appears. Each physical part is color-coded according to type. The default colors are:

Color	Description
	Preferred part
	Missing part
	Substitute part
	Alternate part
	Deviation part
	Extra to design part

Note:

This legend does not apply if your organization has customized the part type colors.

Review the history of an as-maintained physical part

Review the historical summary to gain a better understanding of the service events, utilization data, and location history associated with the selected as-maintained physical part.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, select the part you want to view.
3. Review the following historical event details:
 - a. On the **Service Event** tab, view the service event and service discrepancy issues for this physical part.

Service event	Data captured as a result of service activity performed on a physical part.
----------------------	---

Service discrepancies	Irregularities or observations that are discovered for the physical part while performing service.
------------------------------	--

- b. On the **Utilization** tab, view the utilization log entries for this physical part.

Utilization	Physical part utilization information, for example, number of landings or flight hours, based on a part's defined characteristics.
--------------------	--

Log Entries	The date and time the utilization occurred.
--------------------	---

- c. On the **History** tab, view the disposition (location) history for this physical part.

Location history	Physical location changes, for example, Ann Arbor warehouse or Dallas service center, for the selected physical part.
-------------------------	---

Disposition history	Disposition state changes, for example, In-Service or In-Repair, for the physical part.
----------------------------	---

View the neutral part associated with a physical part

To see part master information, supplier details, or related drawings and schematics, view the neutral part from which the selected physical part was generated.

Note:

If physical parts were added to neutral structures in Teamcenter Structure Manager, Multi-Structure Manager, or another BVR application, you will see an error when trying to view the neutral part in Active Workspace.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, select the part you want to view.
3. On the **Overview** tab, click the **Physical Realization** value, which is the name of the neutral part.

The neutral part properties appear.


Use the one-step commands and the tools and information toolbar to complete more actions on the neutral part.

View untraced parts in a physical structure

When a physical structure is generated, only traceable parts are generated, so when you view a physical structure assembly in Active Workspace, you see only traced parts. To see parts below the traced parts, you must view the untraced parts of the structure.

Example:

A pump is a traceable part, but the rotor, stator, and other parts that comprise the pump are not traced parts. When **Show Untraced Parts** is selected, untraced parts such as the rotor and stator show on the assembly.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. Select the physical part.
3. From the one-step commands, click **Show Untraced Parts** .

Both traced and untraced parts appear in the structure.

8. Create lot definition

Create a lot definition

Create a lot to group physical parts that are associated in some way, for example, from a particular manufacturer.

A *lot* contains a group of physical parts controlled by the same lot number. You can define the maximum number of parts that a lot can contain. Based on this information, you can assign lot numbers to the physical parts that make up the physical structure.

The lot usage value increments for every physical part assigned to that lot. When the lot usage is more than the maximum number of parts available, the lot cannot be used further. You can also define an expiration date for the lot.

Note:

Lots can be assigned only if the part logistics **lot** property is **true** for the neutral part.

1. Open a neutral structure in Active Workspace.
2. Select the part in the neutral structure to which you want to add a lot definition.
3. Click **New** ✱ from the primary tool bar.
4. Select **Create Lot**.
5. In the **Create Lot** dialog box, enter the following information for the new lot.

Field name	Definition	Valid values
Lot Number	Unique lot ID number	Alphanumeric (1–32 characters)
Manufacturer's ID	Lot manufacturer ID	Alphanumeric (1–128 characters)
Lot Size	Number of items in the lot	Integer

Field name	Definition	Valid values
	<div style="border: 1px solid black; padding: 5px;">Note: If you leave the lot size blank, the lot size is set to infinite.</div>	
Expiration Date	Lot expiration date	Click the Set Date icon and select a date from the calendar.

6. Click **Create**.

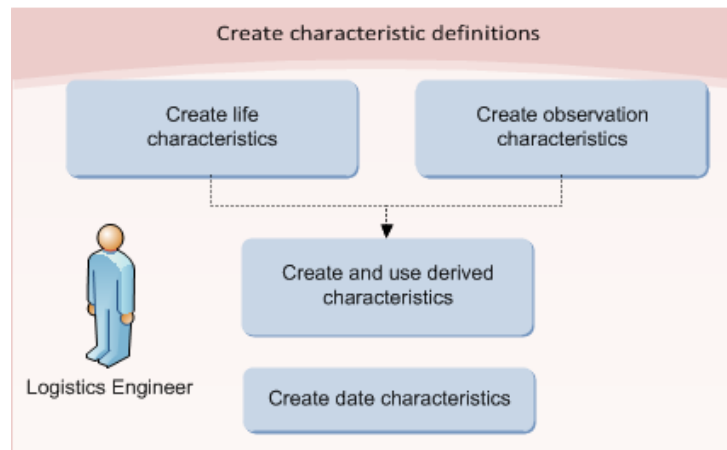
9. Creating characteristic definitions

Characteristic definition

A *characteristic definition* is information related to a neutral part that is important for service organizations maintaining mission critical assets. You can create characteristic definitions that contain information such as how many hours a part has been used, the date the asset was put into commission, or the operating temperature of the part.

As the following figure shows, you can create characteristic definitions that define life, date, and observation characteristics for a physical part. You can also create derived characteristics which are characteristics values that are calculated by the system based on formulas or expressions. Only life and observation characteristics can be defined as derived characteristics by specifying the evaluation expression.

The characteristic definitions must be assigned to the neutral part. The generated physical part inherits the characteristic definitions that are used for recording utilizations.



Creating characteristic definitions

- Life characteristic definition

A life characteristic defines the individual characteristics that measure the life of a physical part and are cumulated each time they are updated during the life of the physical part. Life characteristics can be propagated throughout an entire physical structure providing the child physical parts share the same life characteristic definitions.

- Date characteristic definition

A date characteristic defines a date when a specific action occurred on a physical part.

- Observation characteristic definition

An observation characteristic defines the operational characteristics observed about a physical part.

- Derived characteristic definition

A derived characteristic value is calculated by the system, and is based on formulas or expressions. You can use existing life or observation characteristics when you define the formula for the derived characteristic.

Create a life characteristic

A *life characteristic* is used to record characteristics that measure the life of a physical part and are cumulated each time they are updated during the life of the physical part.

Note:

Life characteristics are propagated to child parts and assemblies that have the characteristic. If an assembly has a life characteristic, and one of its subassemblies does not have that characteristic but a child of that subassembly does, then the child part will not record a value because the parent, the subassembly, breaks the propagation chain.


Example:

You may want to track the number of landings for an aircraft using a life characteristic. When the number of landings reaches a specific value, scheduled maintenance on the aircraft is performed.

1. Select the part from a neutral structure to which you want to associate a life characteristic.

Note:

In your **Home** folder, you can also create a standalone characteristic that you can apply to any neutral part. See [Assign a standalone characteristic to a neutral part](#).

2. Click **New**  in the primary toolbar on the right side of the Active Workspace interface.
3. Select **Create Characteristics**.
4. In the **Create** dialog box, select **Life Characteristic Definition**.
5. Enter the following information for the life characteristic.

Field name	Definition	Valid values
Characteristic Name	Name of the life characteristic	Alphanumeric (1–128 characters)
Unit	Unit of measure for the recorded value	Alphanumeric (1–128 characters)
Precision	The number of decimal places	Integer

- Click **Add** to create the life characteristic. Alternatively, click **Cancel** to exit.

Create a date characteristic

A *date characteristic* is used to record certain operational characteristics that a technician observes about a physical part. The value of this operational characteristic is a date.

Note:

Date characteristics do not propagate to child parts or subassemblies.


Example:

You may want to capture the commission date or warranty date of a physical part.

- Select the part from a neutral structure to which you want to associate a date characteristic.

Note:

In your **Home** folder, you can also create a standalone characteristic that you can apply to any neutral part. See [Assign a standalone characteristic to a neutral part](#).

- Click **New**  in the primary toolbar on the right side of the Active Workspace interface.
- Select **Create Characteristics**.
- In the **Create** dialog box, select **Date Characteristic Definition**.
- Enter the following information for the date characteristic.

Field name	Definition	Valid values
Name	Name of the date characteristic	Alphanumeric (1–128 characters)

- Click **Add** to create the date characteristic. Alternatively, click **Cancel** to exit.

Create a numeric observation characteristic

A *numeric observation characteristic* is used to record certain operational characteristics that a technician observes about a physical part. The value of this operational characteristic is numerical.

Note:

Numeric characteristics do not propagate to child parts or subassemblies.


Example:

You may need to record any cracks or record the operating temperature for a specific physical part. When the gap distance or operating temperature exceed certain values, maintenance must be performed.

- Select the part from a neutral structure to which you want to associate a numeric observation characteristic.

Note:

In your Home folder, you can also create a standalone characteristic that you can apply to any neutral part. See [Assign a standalone characteristic to a neutral part](#).

- Click **New**  in the primary toolbar on the right side of the Active Workspace interface.
- Select **Create Characteristics**.
- In the **Create** dialog box, select **Observation Characteristic Definition**.
- Enter the following information for the numeric observation characteristic.

Field name	Definition	Valid values
Characteristic Name	Name of the observation characteristic	Alphanumeric (1–128 characters)
Type of Value	Numeric , Logical, or Textual	
Unit	Unit of measure for the recorded value	Alphanumeric (1–128 characters)
Precision	The number of decimal places	Integer

- Click **Add** to create the numeric observation characteristic. Alternatively, click **Cancel** to exit.

Create a logical observation characteristic

A *logical observation characteristic* is used to record certain operational characteristics that a technician observes about a physical part. The value of this operational characteristic is either a true or false condition. For example, the value of this characteristic for a pump can be on or off.


Note:

Logical characteristics do not propagate to child parts or sub-assemblies.

1. Select the part from a neutral structure to which you want to associate a logical observation characteristic.

Note:

In your **Home** folder, you can also create a standalone characteristic that you can apply to any neutral part. See [Assign a standalone characteristic to a neutral part](#).

2. Click **New**  in the primary toolbar on the right side of the Active Workspace interface.
3. Select **Create Characteristics**.
4. In the **Create** dialog box, select **Observation Characteristic Definition**.
5. Enter the following information for the logical observation characteristic.

Field name	Definition	Valid values
Characteristic Name	Name of the observation characteristic	Alphanumeric (1–128 characters)
Type of Value	Numeric, Logical , or Textual	
Value	True or False	Alphanumeric (1–128 characters) The default values, if no other values are entered, are True and False .

6. Click **Add** to create the logical observation characteristic. Alternatively, click **Cancel** to exit.

Create a textual observation characteristic

A *textual observation characteristic* is used to record certain operational characteristics that a technician observes about a physical part. Predefined text strings are used to define the value of this operational characteristic.

Note:

Textual characteristics do not propagate to child parts or subassemblies.

Example:


A service engineer needs to record conditions that define a pump failure. Use the textual observation to define a list of values (LOV) such as:

- No power
- Intake blockage
- Impeller frozen
- Motor failed

1. From a neutral structure, select the part to which you want to associate a textual observation characteristic.

Note:

In your **Home** folder, you can also create a standalone characteristic that you can apply to any neutral part. See [Assign a standalone characteristic to a neutral part](#).

2. Click **New**  in the primary toolbar on the right side of the Active Workspace interface.
3. Select **Create Characteristics**.
4. In the **Create** dialog box, select **Observation Characteristic Definition**.
5. Enter the following information for the textual observation characteristic.

Field name	Definition	Valid values
Characteristic Name	Name of the observation characteristic	Alphanumeric (1–128 characters)
Type of Value	Numeric, Logical, or Textual	
Values	Alphanumeric strings	Alphanumeric (1–128 characters)

Note:
Multiple alphanumeric strings are permitted.

- Click **Add** to create the textual observation characteristic. Alternatively, click **Cancel** to exit.

Create a derived characteristic


Derived characteristic values are calculated by the system, and are based on formulas or expressions. You use existing life or observation characteristics when you define the formula for the derived characteristic. If the expression contains one of the life characteristics, then the characteristic type is life. Otherwise, the type is observation.

Note:
Only derived characteristics that are of the type life are propagated. Also, life characteristics that are included in the derived characteristics are propagated.

Example:
An aircraft engine can have different life characteristics, such as in-flight usage and number of landings, while in use. The actual life of the engine is a combination of these values based on some predefined formulas. You can define a formula to calculate the derived life characteristic value based on the two base life characteristic values that you provide. The derived life characteristic value can then be used for calculating maintenance schedules.

- Select the part from a neutral structure to which you want to associate a derived characteristic.

Note:
In your Home folder, you can also create a standalone characteristic that you can apply to any neutral part. See [Assign a standalone characteristic to a neutral part](#).

- Click **New**  in the primary toolbar on the right side of the Active Workspace interface.
- Select **Create Characteristics**.

4. In the **Create** dialog box, select **Derived Characteristic Definition**.
5. Enter the following information for the derived characteristic in the **Create** dialog box.

Field name	Definition	Valid Values
(1) Name	Name of the life characteristic.	Alphanumeric (1–128 characters).
(2) Expression	The expression is used for the derived characteristic.	Existing life and numeric observations

Note:

The expression box can either be manually filled in or you use the (3) add characteristic box to select each characteristic to add to the expression, and the (4) operator box to add the Boolean operators.


Field name	Definition	Valid Values
(3) Type to add characteristics	Names of existing life or observation characteristics you wish to use in the formula for the derived expression.	Existing life and numeric observations
(4) Type to add operator	The Boolean operation you want to use in the expression.	<ul style="list-style-type: none"> • Select + for addition • Select – for subtraction. • Select * for multiplication. • Select / for division. • Select (or) to group expressions. <p>Click Append to append the operation in the Derived Expression box.</p>
(5) Unit	Unit of measurement for the expression, for example, hr to represent hours.	Alphanumeric (1–128 characters).
(6) Precision	The number of decimal placed to display for the resulting value.	Any integer.

6. Click **Add** to create the life characteristic. Alternatively, click **Cancel** to exit.

Assign a standalone characteristic to a neutral part

You can assign previously created standalone characteristics to a neutral part. This is an efficient way to reuse common characteristics in multiple parts and structures.

Procedure

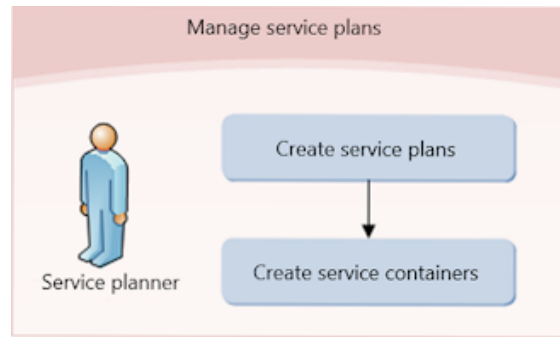
1. From a neutral structure, select the part to which you want to assign a previously defined characteristic.
2. Click **New**  in the primary toolbar on the right side of the Active Workspace interface.
3. Select **Create Characteristics**.

4. In the **Create** characteristic dialog box, select the **Search** tab.
5. In the **Search** box, begin typing the name of the characteristic. Once the list is populated with characteristics that match the text string, select the desired characteristic.
6. Click **Add** to create the life characteristic. Alternatively, click **Cancel** to exit.

10. Create and manage service plans

Setting up and managing service plans

As a service planner, you create and manage the service plans related to the neutral parts.



Service plans contain information such as the service requirements, frequency of service, and service activities that contain information about:

- The service to be performed.
- When the service should be performed.
- How the service should be performed.
- The resources that are required to perform the service.

You create service containers to group together service requirements within a service plan.

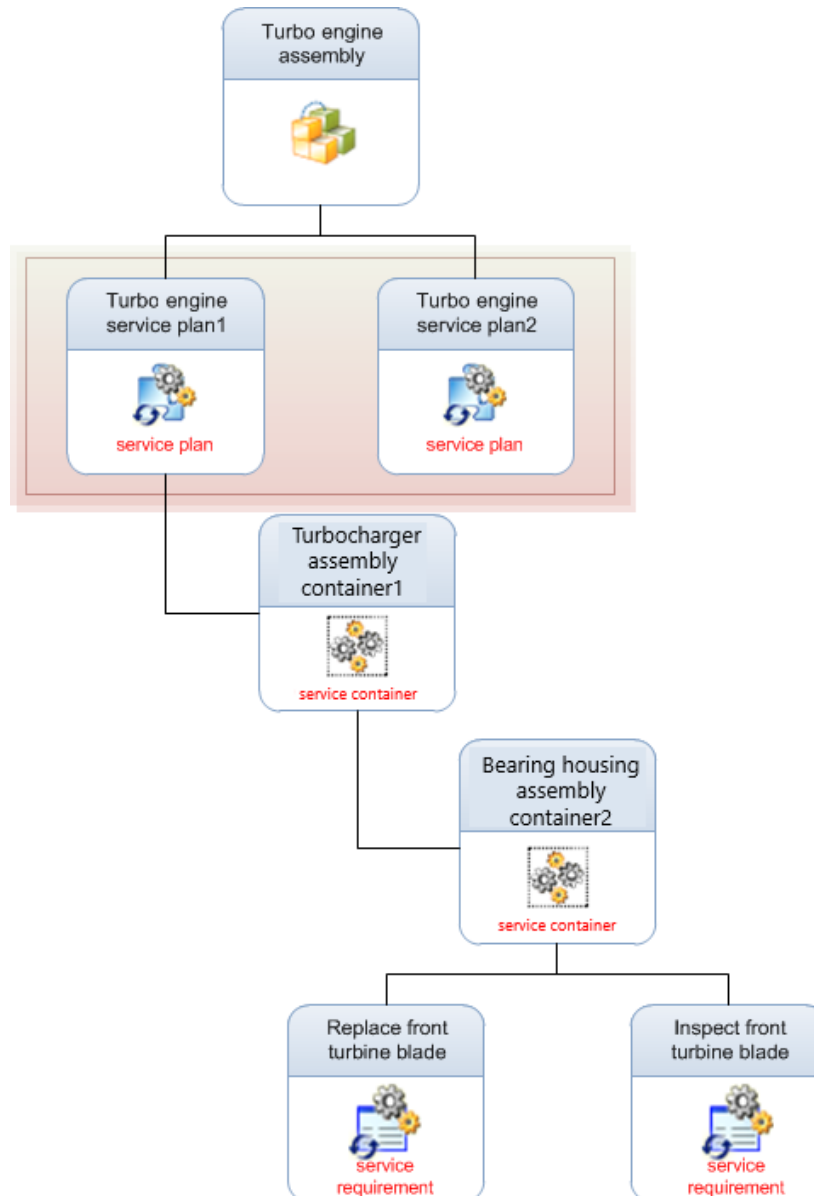
Creating service plans

Service plan

A *service plan* is related to a neutral part and is the high-level container for the service containers that group together service requirements.

You can create multiple service plans for a neutral part.

The following figure shows an example of a turbo engine assembly that contains multiple service plans. The service containers group together all the service requirements for the turbocharger assembly.



When you create the service plan, the **Service Plan** view is displayed. The service plan contains the following sections:



- The left section contains the neutral structure or service bill of materials (SBOM).
- The middle section contains the service plan.
- The right section contains three tabs:
 - 3D
 - Overview

- Service Properties


Create a service plan

When you define the required maintenance for a neutral structure, you must first create a service plan.

Procedure

1. Open the neutral structure for which you are creating a service plan.
2. Click  **New**.
3. Select  **Create Service Plan** from the primary toolbar on the right.

Note:

The  **Create Service Plan** command is available for part structures. If the structure is an item structure, you need to change your role to service engineer to make the **Create Service Plan** command available.

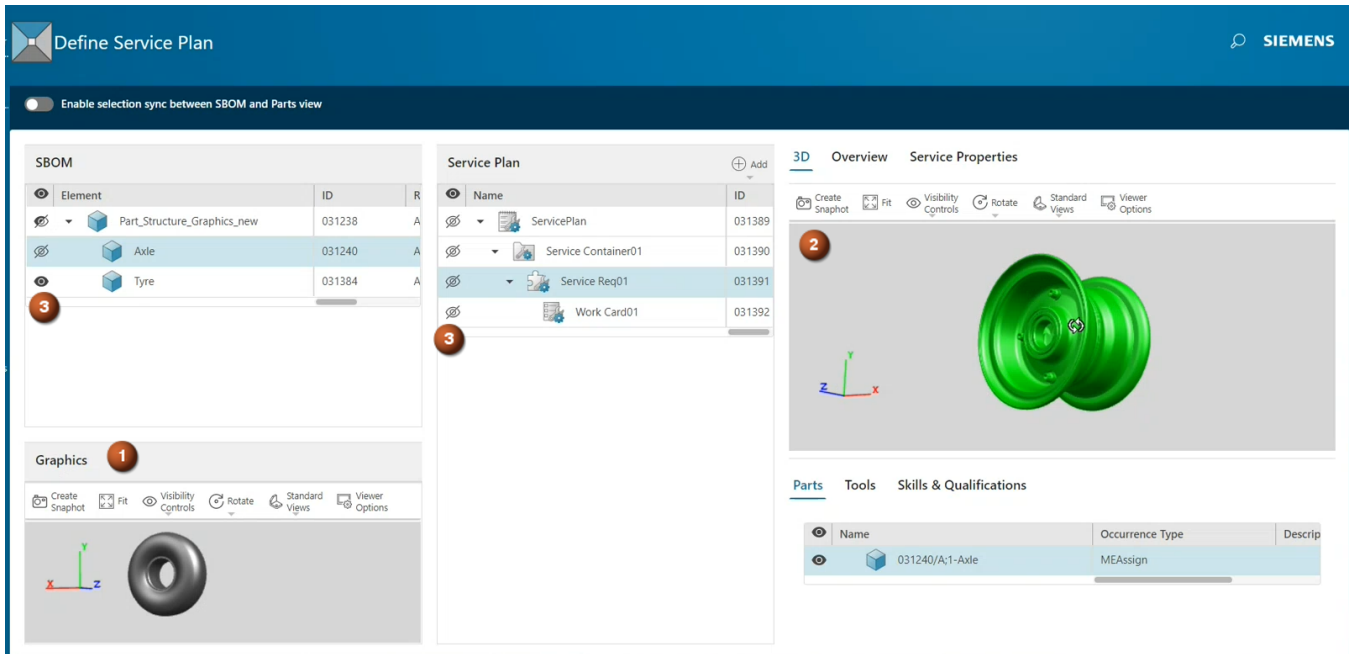
4. Enter the following information for the service plan.

Field name	Definition	Valid Values
ID	The service plan ID (required). Unique number automatically assigned.	Alphanumeric string (1–128 characters)
Revision	The service plan revision (required). Automatically assigned revision value.	Alphanumeric (1–32 characters)
Name	The service plan name (required).	Alphanumeric string (1–128 characters)
Description	Description of the service plan.	Alphanumeric string (1–240 characters)

5. Click **Create**.




Visualizing structures from the Define Service Plan window


The **Define Service Plan** window contains two visualization windows.






- 1 Graphical view of the neutral structure or service bill of material (SBOM)
- 2 Graphical view of the parts consumed in the service requirement




Features for controlling 3D display

	Create Snapshot	Capture an image of the current 3D view.
	Fit	Fit all of the components to the work area. Selecting specific components fits the selection to the work area.
	Visibility Controls	Show or hide parts and subassemblies. All On, All Off, Remove Analysis Results.

	Pan, Rotate, Zoom	<p>Pan—Move the 3D view vertically and horizontally with the mouse to change the center of the view</p> <p>Rotate—Rotate the view of the 3D model around the center of the view with the mouse. This is the default navigation mode.</p> <p>Zoom—Zoom in or zoom out of the current work area with the mouse.</p>
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	Standard Views	Align the 3D view of the model to a standard angle. You can choose from the following views: Top, Bottom, Left, Right, Front, Back, +Isometric, -Isometric.
	Viewer Options	Set options to control the 3D display.

Show/hide parts in 3D graphics windows 

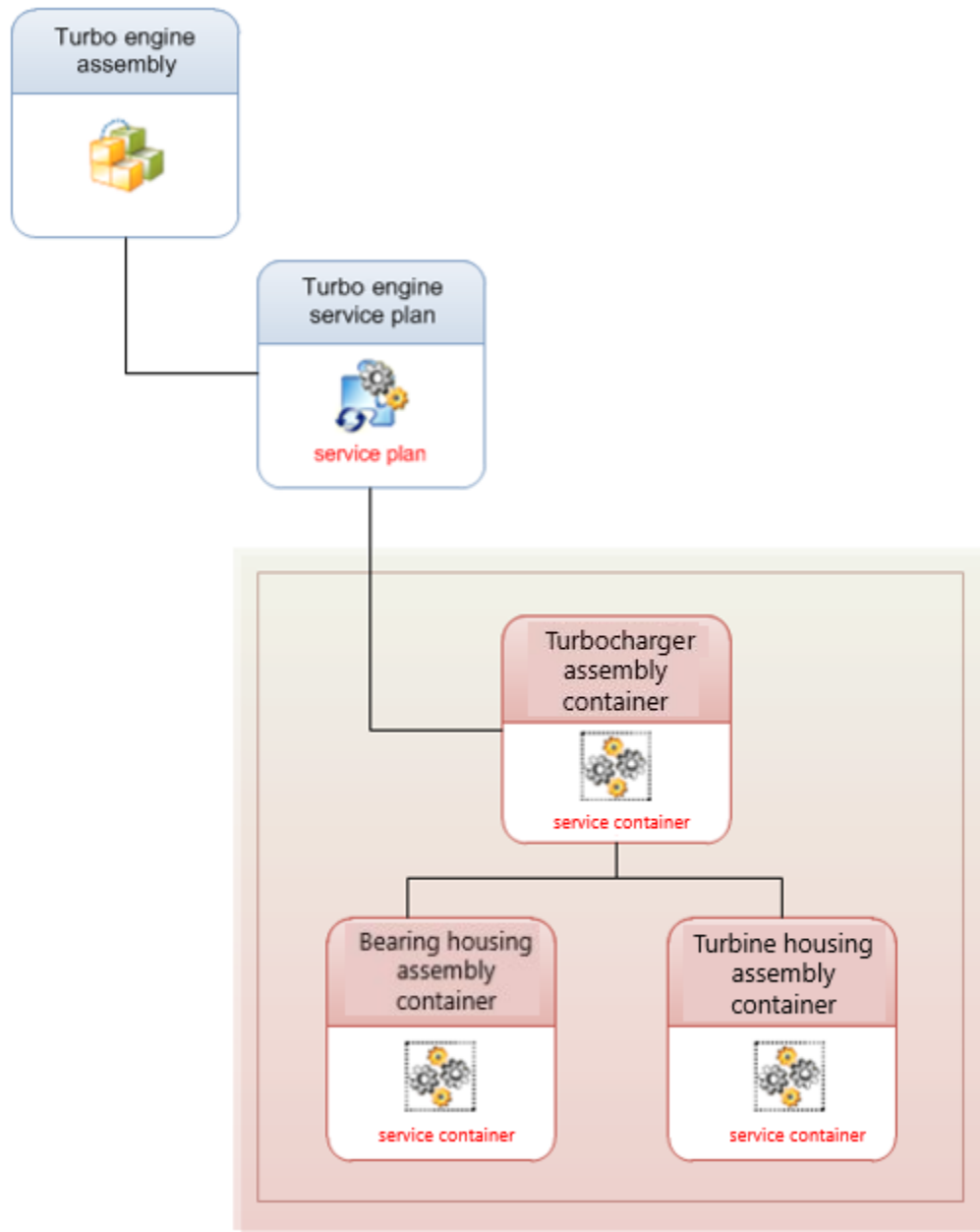
	Visible (Show)
	Not visible (Hide)
	Partially visible

Creating service containers

Service containers

A *service container* is the hierarchical grouping of service requirements. A service plan can contain many service containers. You can also nest service containers by creating service containers under another service container.



The following figure shows an example of a service plan for a turbo engine assembly that contains nested containers to group together the bearing housing assembly and turbine housing assembly requirements for the turbocharger subassembly.



Create a service container

You create a service container to group service requirements within a service plan.

Procedure

1. Click  **Add** from the **Service Plan** section of the **Define Service Plan** window.
2. Select  **Service Container**.

3. In the **Create Service Container** dialog box, enter the following information.

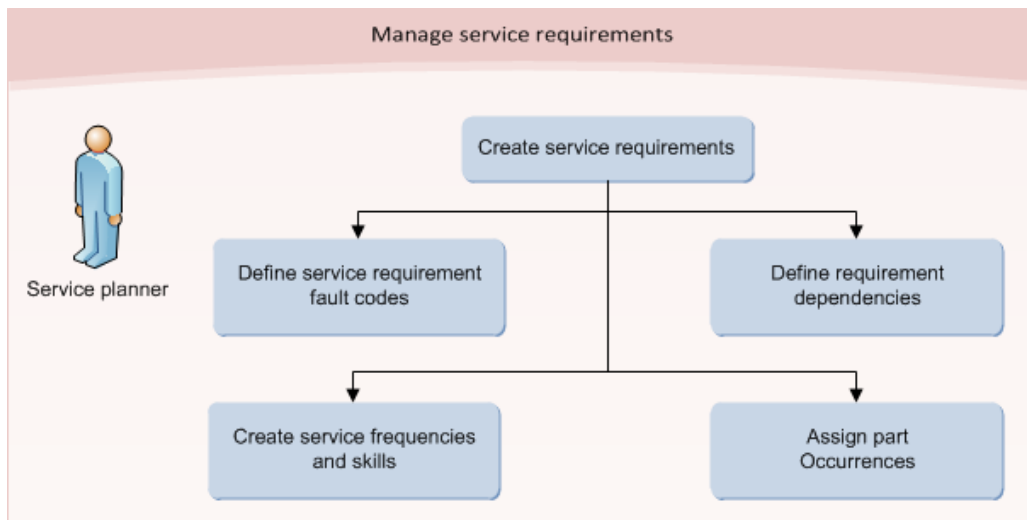
Field name	Definition	Valid Values
ID	Unique number automatically assigned (required).	Numeric string (1-128 characters)
Revision	Automatically assigned revision value (required).	Alpha string (1–128 characters)
Name	The service partition name (required).	Alphanumeric string (1–128 characters)
Description	Description of the service partition.	Alphanumeric string (1–240 characters)

4. Click **Add**.

Setup and manage service requirements

Setting up and managing service requirements

As a service planner, you create and manage the service requirements that are part of the service plan. Service requirements determine *what* service must be performed. They define the maintenance that can be performed on a part or assembly. Service requirements are grouped under service containers.



You create and manage service requirements by:

- Creating the service requirements.

- Creating service frequencies that determine the interval or period for performing maintenance.
- Assigning the neutral part occurrences that are impacted by the service requirement.

Creating service requirements

Service requirement



A *service requirement* is the maintenance requirement for an assembly or part. Service requirements are grouped together under service containers.

The following figure shows an example of a turbo engine assembly that has multiple service requirements for the bearing housing sub assembly. The service requirements include inspecting and replacing the right turbine blade that is a component of the bearing housing assembly. The service requirements for the bearing housing sub assembly are grouped together under the service container for the turbocharger assembly requirements.

Create a service requirement

You capture the maintenance needs of parts and assemblies by creating service requirements in Service Lifecycle Management.

Procedure

1. Click  **Add** from the **Service Plan** section of the **Define Service Plan** window.
2. Select  **Service requirement**.
3. In the **Create Service Requirement** dialog box, enter the following information for the service requirement.

Field name	Definition	Valid Values
ID	The service requirement ID (required). Unique number automatically assigned.	Alphanumeric string (1–128 characters)
Revision	The service revision (required). Revision value assigned automatically.	Alphanumeric string (1–128 characters)
Name	The service requirement name (required).	Alphanumeric string (1–128 characters)

Field name	Definition	Valid Values
Description	Description of the service requirement.	Alphanumeric string (1–240 characters)
Requirement Category	Category for service requirement (read-only). This field is populated after you set the requirement type in the Requirement Type field.	Alphanumeric string (1–128 characters)
Requirement Type	The type of service requirement (required).	Valid values already defined by the system: <ul style="list-style-type: none"> • Inspection • Repair • Overhaul • Other
Upgrade	Defines whether the service requirement represents an upgrade or modification to an existing product (required). If Upgrade is set to True , the purpose of the work card is to upgrade a physical part from one configuration to another. It also specifies that a rebase of the impacted physical part is to be performed as part of the completion of the work card.	True/false

4. Click **Add**.

Create service requirement frequencies

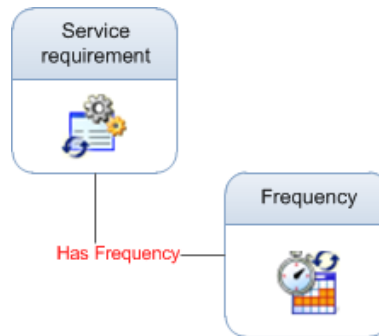
Service requirement frequency

The *frequency* for a service requirement defines the interval or period for performing the maintenance. It defines *when* the service needs to be performed.

Example:

You can create a frequency that specifies an inspection maintenance requirement be performed every two months.

As the following figure shows, frequencies are associated to the service requirement with a **Has Frequencies** relationship. After creating the frequency for a service requirement, the **Occurrence Type** for the frequency is set to **Has Frequency**.



You create a frequency by defining an expression. The expression can be made up of keywords and characteristic definitions. The evaluation of the frequency expression always returns a Boolean.

A frequency expression may contain more than one phrase using phrase separators such as **AND** or **OR**.

Keywords indicate whether a frequency is threshold or repetitive.

Example:

You use the keyword **At** to define that maintenance has to be performed at a specific date only. You use the keyword **Every** to define that maintenance has to be performed every three days.

The characteristics values that are available to use in the frequency expression are determined by the following:

- Any life, observation, or date characteristics related to the neutral parts assigned to the service requirement with the **MEAssign** relationship are available as valid characteristics to use in the frequency expression.
- Any life, observation, or date characteristics related to the neutral part assigned to the parent service plan are available as valid characteristics to use in the frequency expression. This is only true if there are *no* assigned or impacted parts assigned to the service requirement with the **MEAssign** relationship.

Example:

You defined a life characteristic to record the engine hours for a turbo-engine. The turbo-engine is assigned to a service requirement for inspection. You use engine hours in the frequency expression to perform the inspection requirement every one thousand engine hours.

The system provides the following options in addition to any life, observation, or date characteristics:

- **Calendar**

Used for adding calendar time to the expression.

- **Installation Date**

Indicates that the installation time of a part in a structure should be used.

- **Manufacturing Date**

Indicates that the date of manufacture should be used.

- **Days**

Indicates the number of days.

- **Months**

Indicates the number of months.

- **Years**

Indicates the number of years.

Create a service frequency


1. In the **Define Service Plan** view **1**, select the service requirement **2** to which you want to add a frequency.
2. Select the **Service Properties** **3** tab.
3. Click the add **Frequency** **4** option.

The screenshot shows the 'Define Service Plan' interface. On the left is the 'SBOM' table with columns 'Element', 'ID', and 'Revis'. It lists 'Car' (ID: 031779), 'Engine' (ID: 031780), and 'Wheel' (ID: 031781). In the center is the 'Service Plan' table with columns 'Name', 'ID', and 'Description'. It lists 'SP1' (ID: 031782) and 'SR1' (ID: 031783). On the right is the 'Service Properties' tab, which has a 'FREQUENCY' section with an 'Add Frequency' button. Below this is a table with columns 'Name' and 'Frequency Preview'.

Name	Frequency Preview
test1	Every 100 Days - 1 % After obs1 > ...
test2	When obs1 < 200 +- 2 % After ob...
test3	At date 12/2022/08/18 Then When ...
freq	Every 3 Days And Every 3 Months
rt	(When obs2 > 100 Then (Every 1...

4. In the **Create Frequency** dialog box, enter the following information for the frequency.

Field name	Definition	Valid Values
ID	The service frequency ID. Leave the field blank to automatically assign an ID.	Alphanumeric string (1–128 characters).
Name	The service frequency name (required), which needs to be manually entered.	Alphanumeric string (1–128 characters).
Description	Description of the service frequency.	Alphanumeric string (1–240 characters)
Phase Separator	Conditional keywords that separate the phrases. This option is available when you add a frequency expression in the Frequency Expression box.	Valid values are: <ul style="list-style-type: none"> • And • Or • Then
Keywords	Indicates whether the frequency is a threshold or a repetitive one.	Valid values are: <ul style="list-style-type: none"> • Every • Within • When • At
Value	Numeric value used in the expression. This field is only available after you select the keyword in the Keywords box.	Floating point value.
Characteristics	The life, observation, or date characteristics	The valid values depend on the selected keyword in the Keywords box.

Field name	Definition	Valid Values										
	used in the expression.	<table border="1"> <thead> <tr> <th>Selected Keyword</th> <th>Valid Values</th> </tr> </thead> <tbody> <tr> <td>Every</td> <td>Any valid life characteristic value, Days, Months, Years.</td> </tr> <tr> <td>Within</td> <td>Any valid life characteristic value.</td> </tr> <tr> <td>When</td> <td>Any valid observation characteristic value.</td> </tr> <tr> <td>At</td> <td>Any valid life or date characteristic value, Calendar, Days, Months, Years, Install Date, or Manufacturing Date.</td> </tr> </tbody> </table>	Selected Keyword	Valid Values	Every	Any valid life characteristic value, Days, Months, Years.	Within	Any valid life characteristic value.	When	Any valid observation characteristic value.	At	Any valid life or date characteristic value, Calendar, Days, Months, Years, Install Date, or Manufacturing Date.
Selected Keyword	Valid Values											
Every	Any valid life characteristic value, Days, Months, Years.											
Within	Any valid life characteristic value.											
When	Any valid observation characteristic value.											
At	Any valid life or date characteristic value, Calendar, Days, Months, Years, Install Date, or Manufacturing Date.											
Tolerance	Tolerance value added to the expression.	For the first field, valid values are: +, .-, or +-. Type a numeric value for the second field. For the third field, valid values are %.										
Date	The date when the maintenance should take place. This field is only available if a date characteristic or the Calendar option is selected in the Characteristics box.	Click the  button to set the date.										
	<div style="border: 1px solid black; padding: 5px;"> <p>Note:</p> <p>The Calendar option is only available when Keywords is set to At.</p> </div>											

Field name	Definition	Valid Values
Operators	Operator used in the expression when Keywords is set to When .	Valid values are < (less than) and > (greater than).
Value	Numeric value to be used in the expression. This field is only available after you select the operator in the Operators box.	Floating point value.

5. Under the **Advanced** section of the **Create Frequency** dialog box, add the following optional information to the frequency expression.



Field name	Definition	Valid Values
After/Until	Specifies whether the maintenance is performed after or until a specific value.	Valid values are: <ul style="list-style-type: none"> • After • Until
Value	Numeric value used in the expression.	Floating point value.
Characteristics	The life, observation, or date characteristics used in the expression.	Any valid life, date, or observation characteristic value, Calendar, Days, Months, Years, Install Date, or Manufacturing Date .




6. Click **Create**.

The frequency is created for the service requirement with the **Occurrence Type** set to **Has Frequency**.

Managing service frequency expressions

You can use the following options to manage frequency expressions:

	Remove the expression.
	Move the expression down in the equation.

	Move the expression up in the equation.
	Group the selected expressions.
	Ungroup expressions.

Tip:

To select multiple expressions, press the Alt key and select the expressions.

Service frequency examples

The following table contains examples of service frequencies using the following keywords, characteristics, and phrase connectors.

Keywords	At, Every, Within, When, Install Date, Manufacturer Date, Calendar
Characteristics defined	Landings, Months, Flight Hours, Oil Pressure, Tire Change
Phrase Connectors	Or, Then, And

At 100 Landings +- 10 Landings

At 100 Landings Or At 2 Months

At 120 Months After Manufacture Date

At 10 Landings After Calendar "3/22/2010"

At 10 Landings After Calendar "3/22/2010"

Within 50 Cycles After Oil Pressure > 1000 PSI

Within 50 Cycles After Calendar "3/22/2010"

Within 50 Cycles After Manufacture Date

Every 100 Flight Hours Until 10000 Flight Hours

Every 100 Flight Hours +- 10 Flight Hours Until 10000 Flight Hours

Every 100 Flight Hours +- 10 Flight Hours Until 10000 Flight Hours After Calendar "3/22/2010"

Every 100 Flight Hours +- 10 Flight Hours Until 10000 Flight Hours After Install Date

Every 100 Flight Hours Until 10000 Flight Hours Then Every 80 Flight Hours Until 20000 Flight Hours

Every 100 Flight Hours Until 10000 Flight Hours

When Oil Pressure > 1000 PSI +-100 PSI And When Oil Pressure < 2000 PSI

Create and manage work cards

Setting up and managing work cards

As a service planner, you create and manage the work cards that are related to service requirements. Work cards define *how* you will address the service requirement.

You create and manage work cards by:

- Creating work cards that are related to service requirements.
- Defining time and cost estimates for a work card.

Creating work cards

Work card

A *work card* defines how to accomplish a service requirement. The work card contains information about the tasks, effort, and cost estimates and the resources required to perform the tasks. You can create multiple work cards for a service requirement to define the tasks. You can optionally assign activities to the work card to break down the tasks. If there are no activities, all the tasks are performed at the work card level.

You can perform the following actions on work cards:

- Assign states to a work card.

You can assign states to a work card by submitting it to an approval workflow. A work card can be assigned the following states:

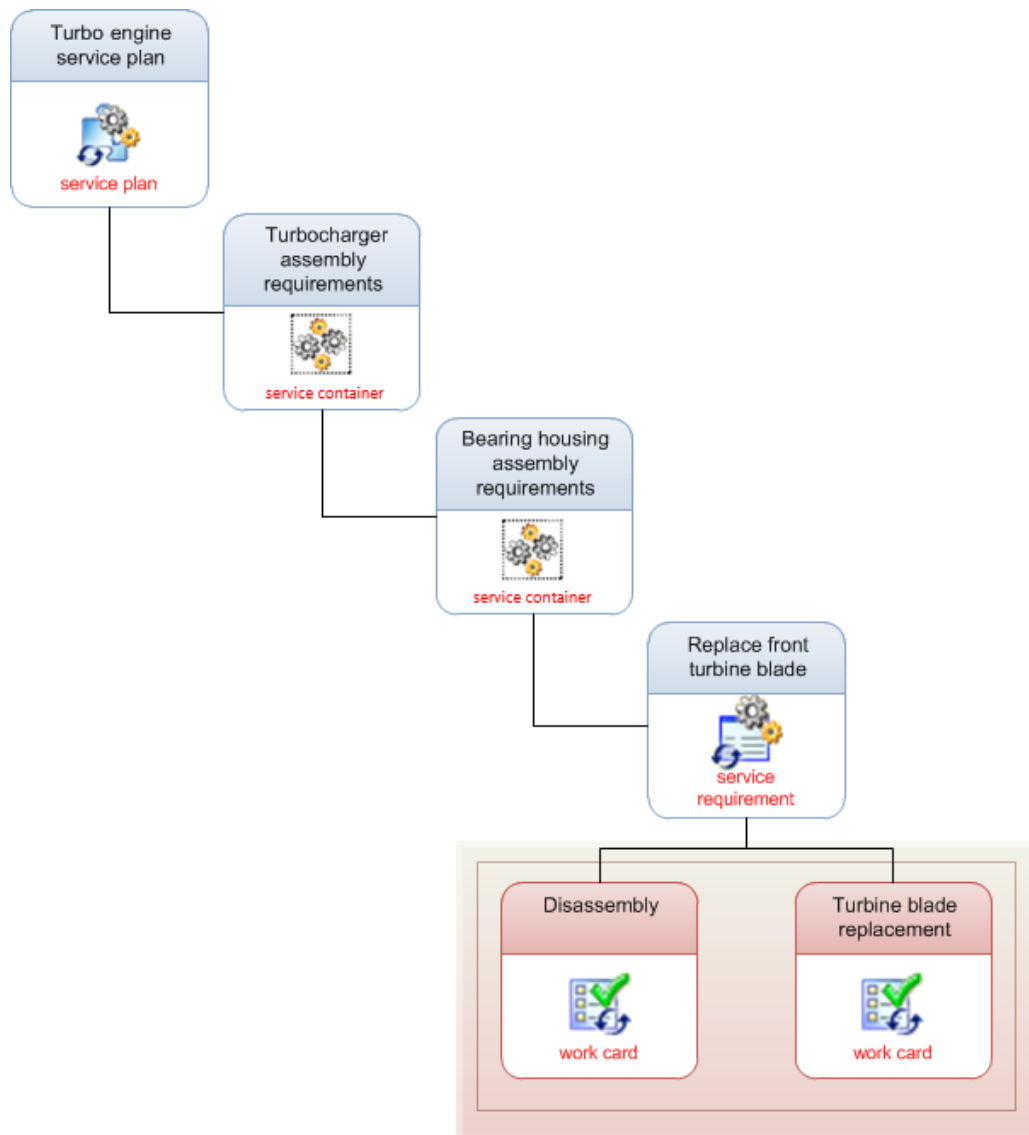
- **in-work**
- **approved**
- **deprecated**
- Revise work cards to create new revisions.
- Define the revision effectivity for a work card.

- Use options and variants to configure a work card.

For example, you may want to set an option or variant to distinguish work cards that are war time or peace time work cards for a service plan assigned to a missile.

The following figure shows an example of a bearing housing assembly for a turbo engine that has a service requirement to replace the rear turbine blade. Work cards are created to:



- Disassemble the turbine blade and other components of the bearing housing assembly that are in close proximity to the blade.
- Assemble the replacement turbine.



Create work card

You create a work card to capture the method by which a service requirement is completed.

Procedure

1. Select the service requirement to which you plan to add a work card.
2. Click  **Add** in the **Service Plan** section of the **Define Service Plan** window.
3. Select  **Work Card**.
4. In the **Work Card** dialog box, enter the following information.

Field name	Definition	Valid Values
ID	The work card ID (required). Unique ID that is assigned automatically.	Alphanumeric string (1–128 characters)
Revision	The revision of the work card (required). The revision value is assigned automatically.	Alphanumeric string (1–32 characters)
Name	The work card name (required).	Alphanumeric string (1–128 characters)
Activity Execution Type	Defines whether the assigned skill resource will perform or sign off on the work card.	Valid values are: <ul style="list-style-type: none"> • Perform • Sign-off
Description	Description of the work card.	Alphanumeric string (1–240 characters)
Labor Cost	The total labor cost for the work card.	Number limited to two decimal places
Material Cost	The total material cost for the work card.	Number limited to two decimal places
Narrative	Narrative description for the work card. The narrative can be used as input for work instructions.	Long string

5. Click **Add**.

Create and manage activities

Creating activities

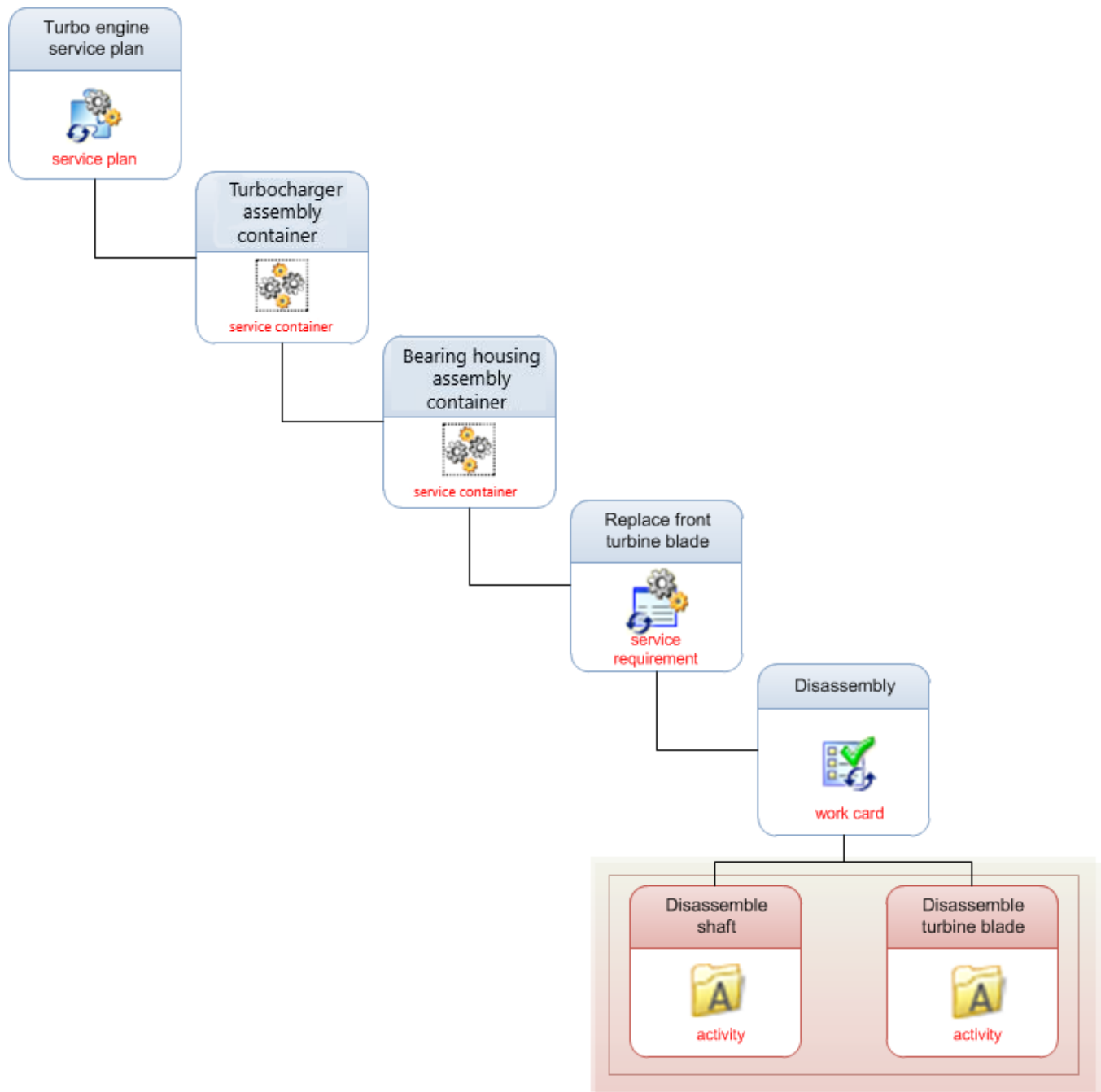
An *activity* defines the specific steps a service technician must perform to complete required service tasks.

The activity is created as a child of the work card. You can also create subactivities that are children of a parent activity.

Note:


You cannot create revisions of activities.

The following figure shows an example of a bearing housing assembly for a turbo engine that has a service requirement to replace the rear turbine blade. A work card is created to disassemble the turbine blade and other components of the bearing housing assembly that are in close proximity to the blade. The activities are created to disassemble the shaft first and then disassemble the turbine blade.

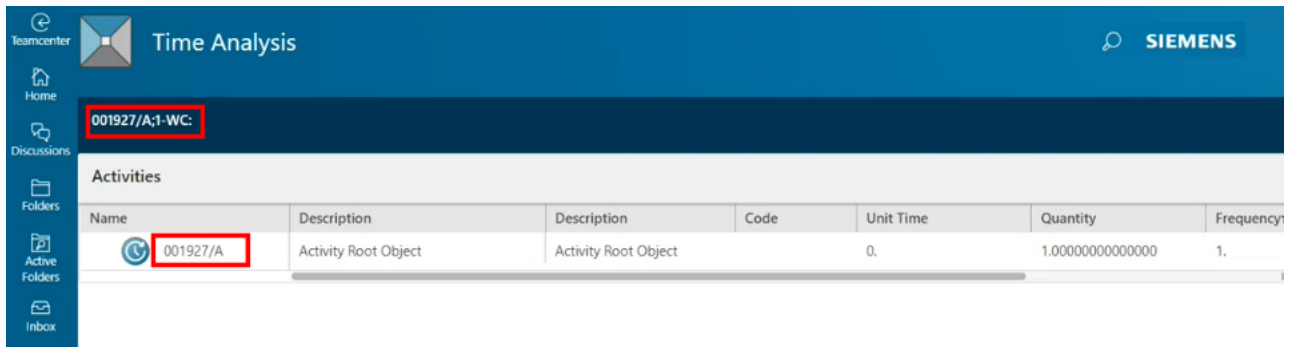


Create an activity

You add activities to a work card to break down the work card into detailed steps.

1. From the **Define Service Plan** page, select the work card to which you want to add an activity.
2. Click the **Time Analysis**  icon.

The **Time Analysis** page is opened and a new **Activity Root Object** is created with the same name as the work card.



3. Select the **Activity Root Object**.
4. Click the **Add Activity** \oplus icon.
5. In the **Activity** dialog box, enter the following information for the activity.

Field name	Definition	Valid Values
Name	The activity name (required).	Alphanumeric string (1–128 characters)
Activity Execution Type	Defines whether the skill resource performs the activity or signs off the activity.	Valid values are: <ul style="list-style-type: none"> • Perform • Sign-off
Description	The description of the activity.	Alphanumeric string (1–240 characters)

6. Click **Add**.

The message **Activity was created successfully** is displayed.

The activity is created as a child of the **Activity Root Object**.



The screenshot shows the 'Time Analysis' interface. At the top, there is a header with a logo and the text 'Time Analysis'. Below the header, there is a dark blue bar with the text '001927/A;1-WC:'. Underneath, there is a section titled 'Activities' which contains a table. The table has two columns: 'Name' and 'Description'. The first row has '001927/A' in the 'Name' column and 'Activity Root Object' in the 'Description' column. The second row has 'Act01' in the 'Name' column and an empty 'Description' column. The 'Act01' row is highlighted with a red border.

Name	Description
001927/A	Activity Root Object
Act01	

Update activity properties

You can easily modify activity properties from the **Time Analysis** page.

1. Select any property and modify the value.

Activity properties

a. Category

The time category to which this activity belongs. Valid values are:

- A. **Not Assigned**
- B. **Value Added**
- C. **Non Value Added**
- D. **Non Value Added But Required**

b. Activity Execution Type

Defines if the skill resource will perform or sign off the activity.

Valid values are:

- A. **Perform**
- B. **Sign-off**

Time analysis activity properties

a. Code

The code of an activity is defined in a time standard or in your company's standard.

b. **Unit Time**

The time it takes to perform this activity. The **Unit Time** cannot be updated for a parent activity.

c. **Frequency**

The number of times this activity is performed. The default is 1.

d. **Work Time**

The total time it takes to perform this activity. This is the result of multiplying the unit time by the frequency.

The **Work Time** value for a parent activity is based on the sum of the **Work Time** for its child activities.


e. **Category**

The time category to which this activity belongs. Valid values are:

- A. **Not Assigned**
- B. **Value Added**
- C. **Non Value Added**
- D. **Non Value Added But Required**

Remove activity

You can easily remove any of the activities except the root activity, which is automatically created when the work card is created.

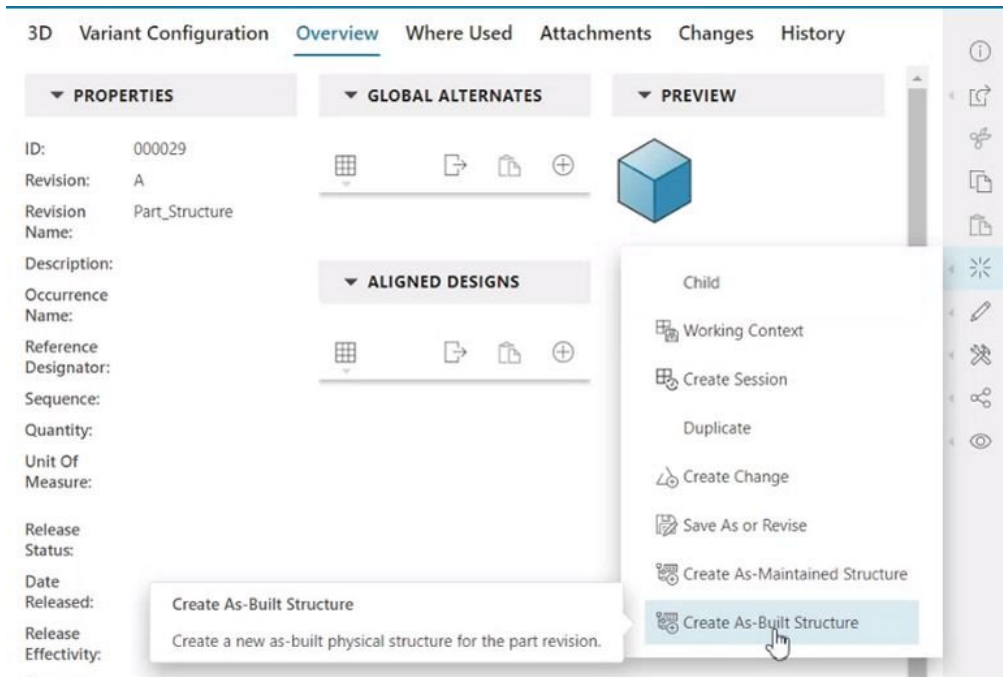
1. Select the activity you want to remove.
2. Click the **Remove Activity**  icon.

A message confirms the activity is deleted.

11. Create as-built and as-maintained structures



Create an as-built structure

1. Create an as-built structure from a neutral structure by selecting the **New** ✨ icon, and choose **Create As-Built Structure**.



2. In the **Create As-Built Structure** dialog box, enter the mandatory information denoted with an asterisk.

Field name	Definition	Valid values
Levels to Include: *	Number of levels to be generated for the physical structure. To generate physical parts for the entire structure, type All .	Integer or All
Serial Number:	Serial number for the copied physical structure or part. This field is unavailable if the selected part for which physical structure is generated needs to have Serialized set to true.	Alphanumeric (1–128 characters)
Lot Number	The Lot Number column identifies the lot that the part was assigned to in the neutral structure. The Lot Number is available if Lot is set to True on the top level part in the neutral structure prior to creating the physical structure.	
Quantity: *	Number of physical parts to generate for the top-level part. Quantity is automatically set to one.	Alphanumeric (1–128 characters)

Field name	Definition	Valid values
Manufacturer's ID: *	Manufacturer of the physical part. The Manufacturer's ID box is filled in manually. But it is automatically populated if the neutral structure has the Lot field set to True , and the Lot Number is completed by selecting from the list of available manufacturers.	Predefined manufacturer IDs. See Service Lifecycle Management configuration tasks for information on defining the manufacturer IDs.
Manufacturing Date:	Manufacturing date for physical structure. The manufacturing date must be before the installation date.	Click the Set Date  button and select a date from the calendar.
Installation Time:	Installation date for physical structure. The installation date must be after the manufacturing date.	Click the Set Date  button and select a date from the calendar.

3. Click **Create**.

Note:


The sequence of the parts in the neutral structure is maintained in the as-built structure.

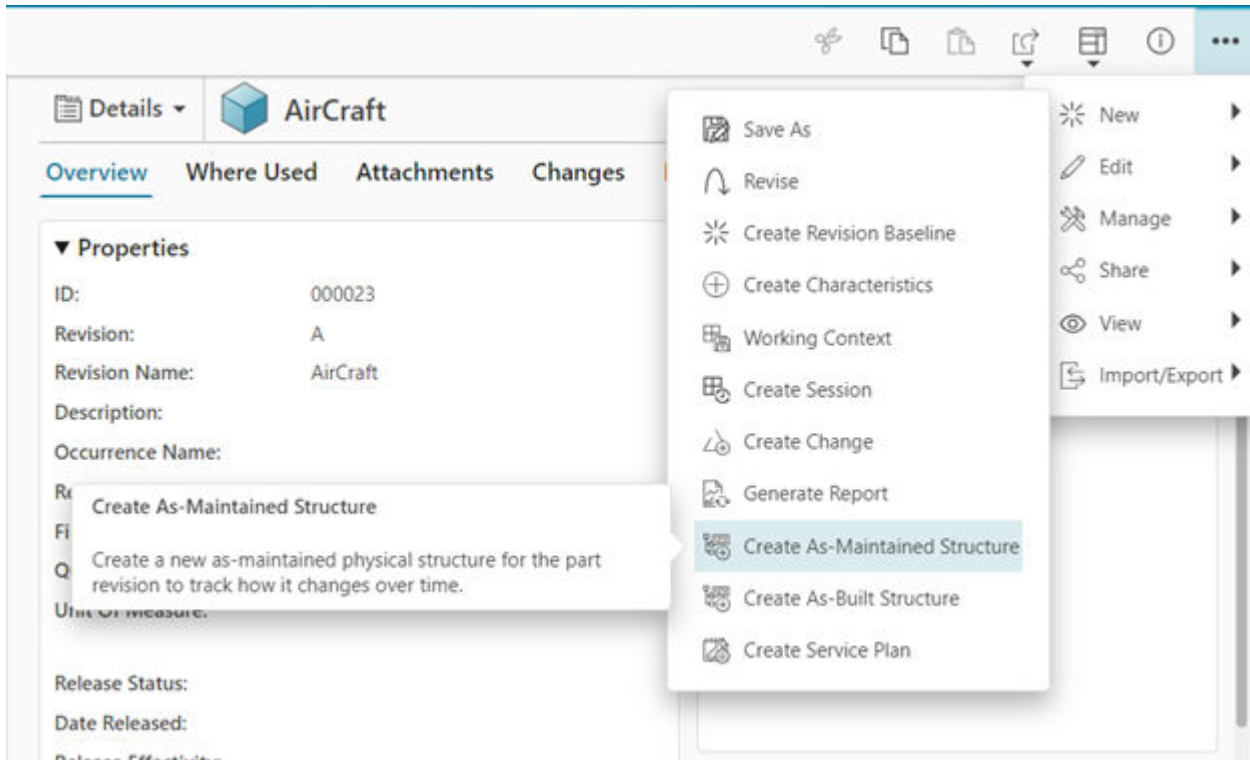
Create as-maintained structures

Create one or more as-maintained physical structures from a neutral structure.

Note:

To enable the creation of multiple physical structures, you must set the preference **MROAllowMultipleStructuresGeneration** to **True**.

1. Create an as-maintained structure from a neutral structure by selecting the **New**  icon, and choose **Create As-Maintained Structure**.



2. In the **Create As-Maintained Structure** dialog box, enter the required information in the fields that include an asterisk. The fields that do not include an asterisk are optional.

Create As-Maintained ... Pin Panel Close

▼ FOR SERVICE STRUCTURE



Crane

031694

Revision: A

* Levels to Include:

Required

▼ ASSET INFORMATION

* Quantity:

1

* Manufacturer's ID:

Required

Manufacturing Date:

DD-MMM-YYYY



HH:MM:SS



Installation Time:

DD-MMM-YYYY



HH:MM:SS



▼ INITIAL TRACING INFORMATION

* Location:

Pune



* Disposition:

In-Service





* Number of Physical Structures:

2



Open in new tab

Field name	Definition	Valid values
Levels to Include: *	Number of levels to be generated for the physical structure. To generate physical parts for the entire structure, type All .	Integer or All
Serial Number:	Serial number for the copied physical structure or part. This field is unavailable if the selected part for which physical structure is generated needs to have Serialized set to true.	Alphanumeric (1–128 characters)
Quantity: *	Number of physical parts to generate for the top-level part. Quantity is automatically set to one.	Alphanumeric (1–128 characters)
Manufacturer's ID: *	Manufacturer of the physical part. The Manufacturer's ID box is filled in manually. But it is automatically populated if the neutral structure has the Lot field set to True , and the Lot Number is completed by selecting from the list of available manufacturers.	Predefined manufacturer IDs. See Service Lifecycle Management configuration tasks for information on defining the manufacturer IDs.
Manufacturing Date:	Manufacturing date for physical structure. The manufacturing date must be before the installation date.	Click the Set Date  button and select a date from the calendar.
Installation Time:	Installation date for physical structure. The installation date must be after the manufacturing date.	Click the Set Date  button and select a date from the calendar.
Location: *	The initial physical location of the physical part/structure being created. You choose a location from the available locations in the Location field.	Alphanumeric (1–128 characters)
Disposition: *	The initial disposition of the physical part selected from a list in the Disposition field. By default, the only disposition available is In-Service .	Alphanumeric (1–128 characters)

Field name	Definition	Valid values
	<p>Note:</p> <p>If the Disposition_Propagate_To_Child preference is set to true, the disposition is also applied to the children parts of the structure.</p>	
Number of Physical Structures: *	The number of physical structures to create.	Integer value.
Open in new tab:	If selected, a new tab is opened and the list of new structures is displayed.	Select or clear the Open in new tab check box.

- (Optional) Enter the number of physical structures to create in the **Number of Physical Structures** box.
- (Optional) Select the **Open in new tab** check box so the newly created list of physical structures opens in a new window.
- Click **Create**.

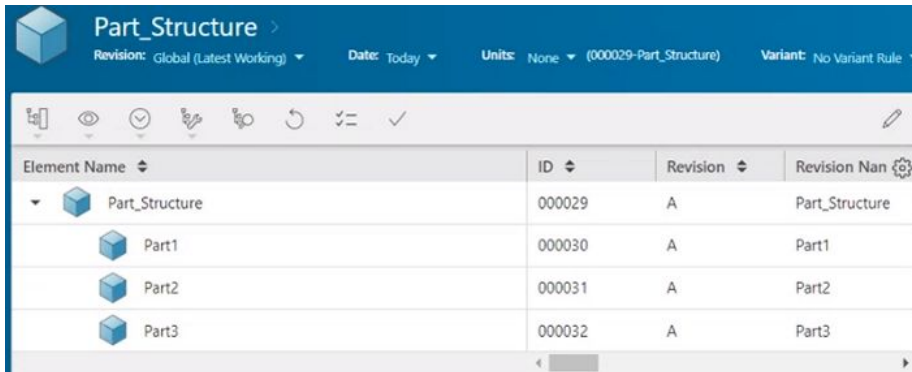
Note:

The sequence of the parts in the neutral structure is maintained in the physical structure.

Structure alignment maintained from neutral structure to new structure

When you create an as-built or as-maintained structure from a neutral structure, the sequence of the new structure is maintained.

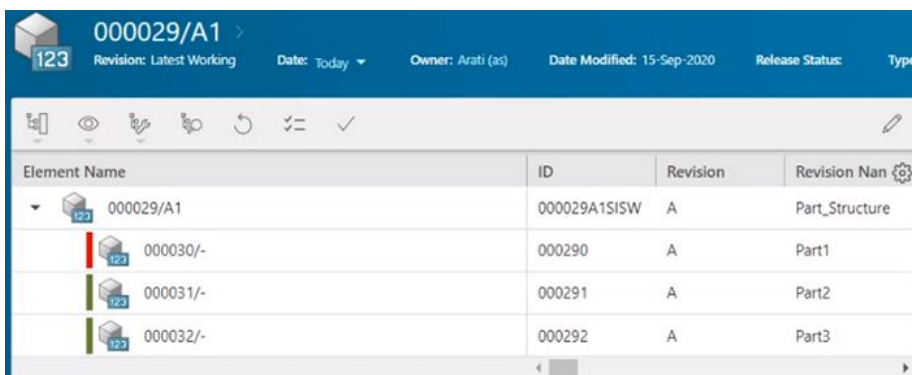
The neutral structure:



The screenshot shows the 'Part Structure' interface. At the top, it displays 'Revision: Global (Latest Working)', 'Date: Today', 'Units: None (000029-Part_Structure)', and 'Variant: No Variant Rule'. Below this is a toolbar with various icons. The main area contains a table with the following data:

Element Name	ID	Revision	Revision Name
Part_Structure	000029	A	Part_Structure
Part1	000030	A	Part1
Part2	000031	A	Part2
Part3	000032	A	Part3

The as-built structure:



The screenshot shows the '000029/A1' structure interface. At the top, it displays 'Revision: Latest Working', 'Date: Today', 'Owner: Arati (as)', 'Date Modified: 15-Sep-2020', 'Release Status', and 'Type:'. Below this is a toolbar with various icons. The main area contains a table with the following data:

Element Name	ID	Revision	Revision Name
000029/A1	000029A1SISW	A	Part_Structure
000030/-	000290	A	Part1
000031/-	000291	A	Part2
000032/-	000292	A	Part3

Create configured physical structures

Configure neutral structures

Service Lifecycle Management supports the creation of physical structures based on specific optional product features. You use the Teamcenter Product Configurator to define various options.

Note:

To learn more about the Siemens Digital Industries Software Product Configurator, refer to the documentation for the **Product Configurator**.

You create a configured neutral structure, or service bill of materials (sBOM), by applying variants before you create as-built and as-maintained physical structures and service plans.

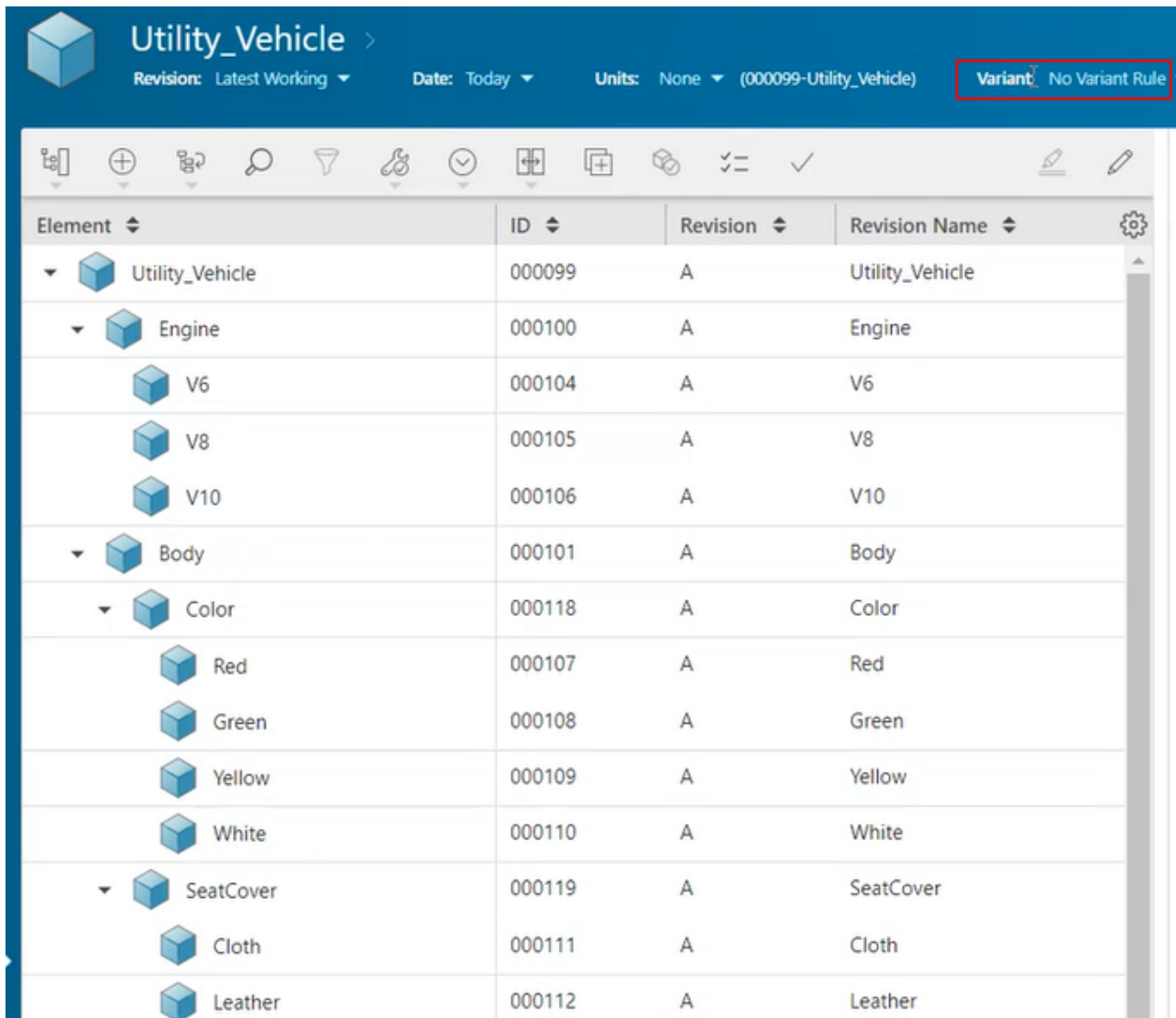
Once the physical structure is created, there is no association to the configured sBOM. This means that any subsequent changes to the sBOM configuration are not reflected in the physical structure.

Create configured as-built or as-maintained structure

To create a configured physical structure, as-built or as-maintained, you first configure variants on the neutral structure, or service bill of materials (sBOM).

Configure a neutral structure (sBOM)

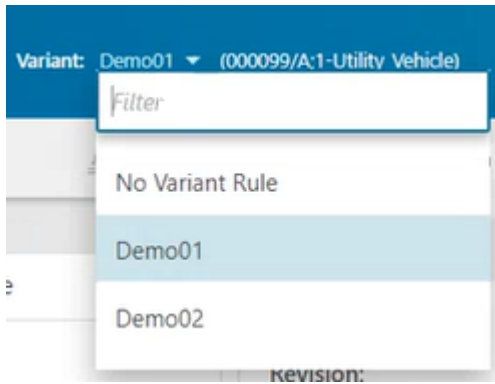
1. In Active Workspace, open a neutral structure that contains variants.



The screenshot shows the SAP Active Workspace interface for a structure named 'Utility_Vehicle'. The header includes the title 'Utility_Vehicle', revision 'Latest Working', date 'Today', units 'None', and a 'Variant' dropdown menu currently set to 'No Variant Rule'. Below the header is a toolbar with various icons for navigation and editing. The main area displays a tree view of the structure with the following elements:

Element	ID	Revision	Revision Name
Utility_Vehicle	000099	A	Utility_Vehicle
Engine	000100	A	Engine
V6	000104	A	V6
V8	000105	A	V8
V10	000106	A	V10
Body	000101	A	Body
Color	000118	A	Color
Red	000107	A	Red
Green	000108	A	Green
Yellow	000109	A	Yellow
White	000110	A	White
SeatCover	000119	A	SeatCover
Cloth	000111	A	Cloth
Leather	000112	A	Leather

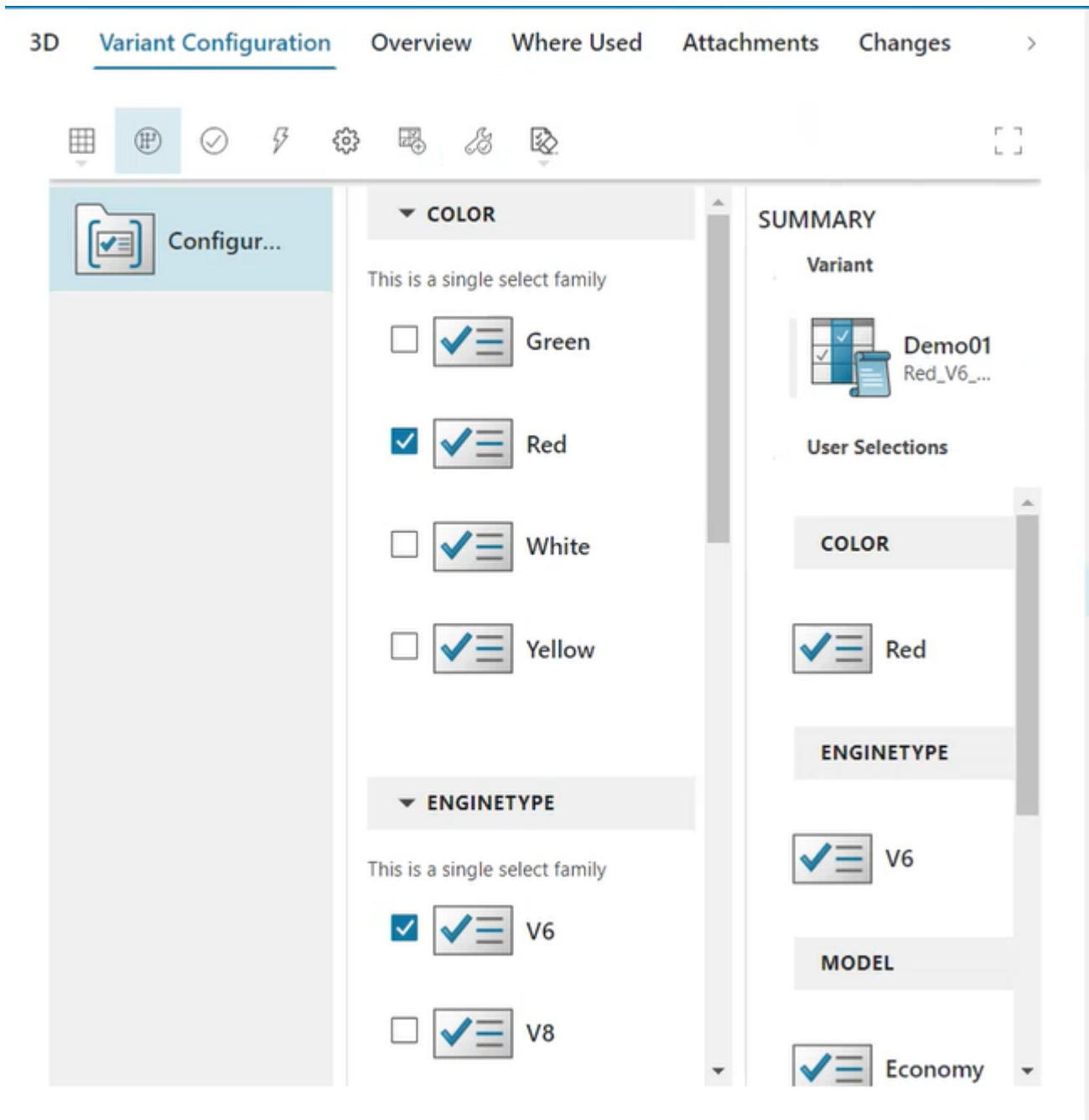
2. To apply a variant, click the **Variant** menu in the header and select a saved variant.




The sBOM is updated according to the saved variant rule.

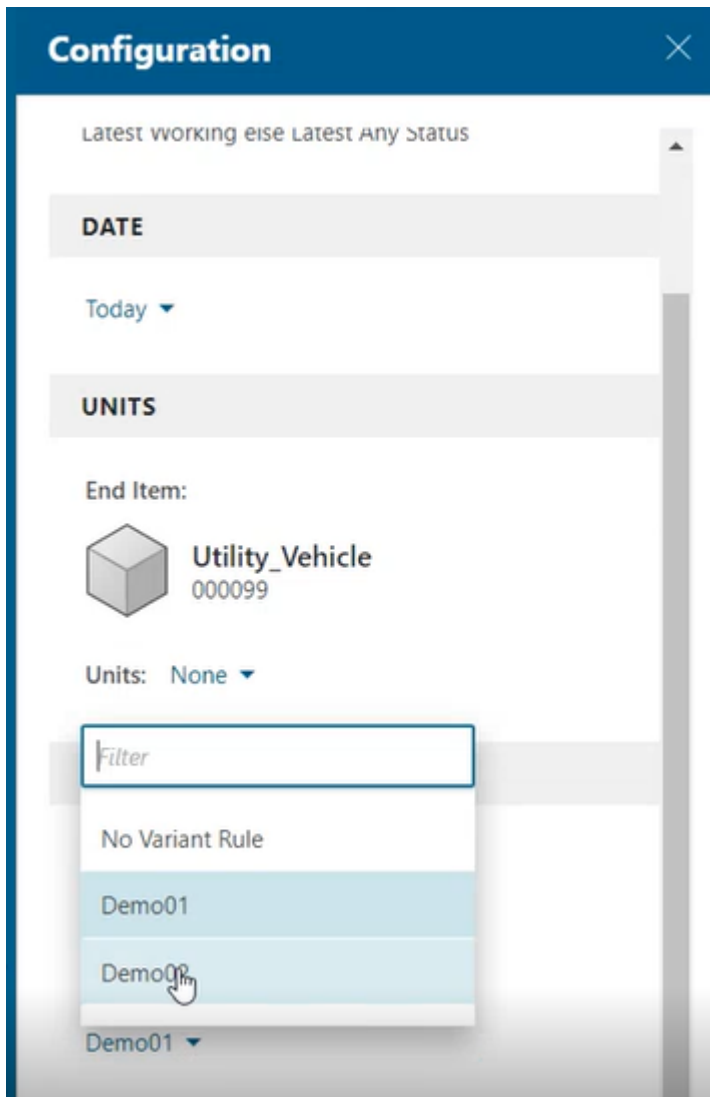
Element	ID	Revision	Revision Name
Utility_Vehicle	000099	A	Utility_Vehicle
Engine	000100	A	Engine
V6	000104	A	V6
Body	000101	A	Body
Color	000118	A	Color
Red	000107	A	Red
White	000110	A	White
SeatCover	000119	A	SeatCover
Cloth	000111	A	Cloth
Model	000102	A	Model
Economy	000113	A	Economy
Type	000103	A	Type
HatchBack	000117	A	HatchBack

- (Optional) Select the **Variant Configuration** tab to view the variant rules.



Apply variant rule using alternative method


1. Click **Configure**  and select **Configuration**.
2. Select the saved variant rule from the **Configuration** panel.



The sBOM is updated according to the saved variant rule.

3. (Optional) Select the **Variant Configuration** tab to view the variant rules.


Create an as-built structure from the configured sBOM

1. Click **New**  on the primary toolbar on the right side of the interface and select **Generate As-Built Structure** to generate the configured as-built structure.
2. Enter the required information in the **Generate As-Built Manager Structure** dialog box and click **OK**.

Note:

The as-built structure matches the configuration of the configured sBOM.

Create an as-maintained structure from the configured sBOM

1. Click **New**  on the primary toolbar on the right side of the interface and select **Generate As-Maintained Structure** to generate the configured as-maintained structure.
2. Enter the required information in the **Generate As-Maintained Structure** dialog box and click **OK**.

Note:

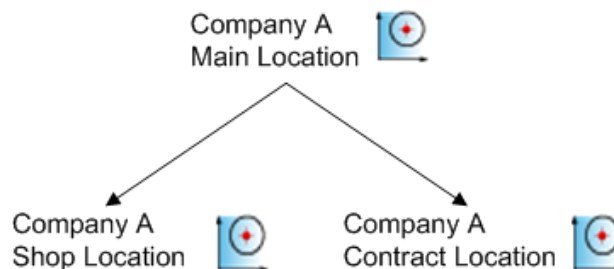
The as-maintained structure matches the configuration of the configured sBOM.

Managing physical locations

Managing physical location structures

A *physical location* is an area where physical parts are stored. A location can be a site, region, inventory, customer, contractor, or shop. Locations can be of various types and as an administrator, you define location types based on your requirements. You can relate locations to one another because of their structured nature. The locations are assigned to the physical parts when you create the as-maintained structure. You must set preferred locations before generating the as-maintained physical structure.

The following figure shows an example of a location structure.



The following location types are provided with the As-Maintained Management application:

- **Contractor**
- **Customer**
- **In-Service**
- **Inventory**

- **Region**
- **Shop**
- **Site**



You can define additional physical location types by configuring the **Physical Location Type** LOV.

Creating physical locations

You create physical locations and physical location structures according to your requirements and assign the physical parts to the locations when creating the as-maintained structure. A location structure is comprised of sublocations created in the context of a parent location.

You can optionally link a physical location to a defined company location. The physical location will display the properties of the company location such as **Street**, **City**, and **State**.

Create physical locations


1. Open Service Lifecycle Management in Active Workspace.
2. On the primary toolbar, click **New** .
3. Click **Add** .
4. Select, or search for, a **Physical Location** from the **Add** dialog box.
5. Enter the required information in the dialog box.

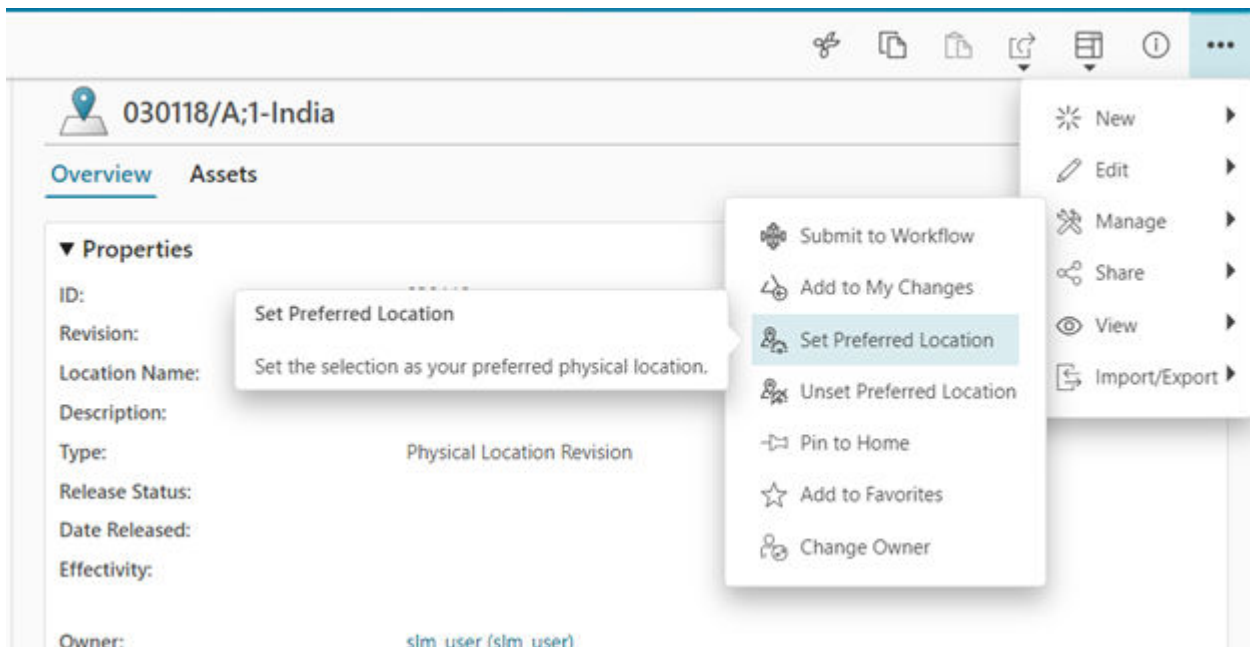
Field name	Definition	Valid values
ID	Unique ID for the physical location (required). If blank, the ID is automatically assigned.	Alphanumeric (1–128 characters)
Revision	Revision for the physical location (required). The revision is automatically assigned.	Alphanumeric (1–32 characters)
Location Name	Name for the physical location (required).	Alphanumeric (1–128 characters)
Location Type	The type of physical location (required).	Types are defined by the Physical Location Type LOV.
Description	Description of the physical location.	Alphanumeric (1–240 characters)

- Click **Add**.

Set or unset preferred physical locations

Set a preferred physical location

- Open Service Lifecycle Management in Active Workspace.
- Open a folder containing the desired location or search for a location.
- Select a location from the results panel.
- On the primary toolbar, click **Manage** .
- Select **Set Preferred Location**.



The location is now available in menus that include the location attribute.

Unset preferred physical location

Follow the same steps above except select **Unset Preferred Location**.

The screenshot displays a software interface for managing assets. At the top, the asset ID '030118/A;1-India' is shown. Below this, there are tabs for 'Overview' and 'Assets'. The 'Properties' section is expanded, showing various fields such as ID, Revision, Location, Description, Type, Release Status, Date Released, Effectivity, Owner, Group ID, Last Modifying User, Checked-Out, Checked-Out By, and Current Location Code. A context menu is open over the 'Location' field, listing several actions: 'Submit to Workflow', 'Add to My Changes', 'Set Preferred Location', 'Unset Preferred Location' (highlighted), 'Pin to Home', 'Add to Favorites', and 'Change Owner'. A tooltip for 'Unset Preferred Location' is also visible, stating: 'Remove the selected location as your preferred physical location.'

030118/A;1-India

Overview Assets

▼ Properties

ID: 030118

Revision: [redacted]

Location: [redacted]

Description: [redacted]

Type: [redacted]

Release Status: [redacted]

Date Released: [redacted]

Effectivity: [redacted]

Owner: sim_user (sim_user)

Group ID: Engineering

Last Modifying User: sim_user (sim_user)

Checked-Out: [redacted]

Checked-Out By: [redacted]

Current Location Code: [redacted]

Submit to Workflow

Add to My Changes

Set Preferred Location

Unset Preferred Location

Pin to Home

Add to Favorites

Change Owner

Unset Preferred Location

Remove the selected location as your preferred physical location.

New

Edit

Manage

Share


View

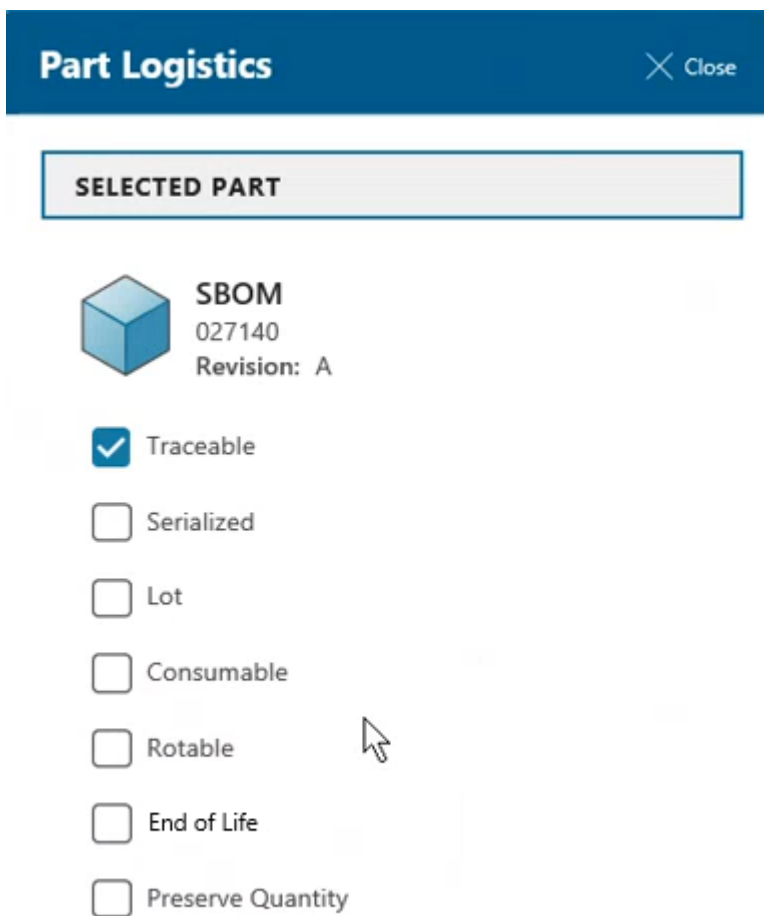
Import/Export

12. Create and manage part logistics data

Edit part logistic data


Edit a part's logistic values by selecting the part and accessing the **Part Logistic** dialog box.

1. Select the part in the physical structure.
2. Select the **Edit**  icon.
3. Select **Part Logistics** to access the **Part Logistic** dialog box.



Part Logistics Close

SELECTED PART

 **SBOM**
027140
Revision: A

Traceable

Serialized

Lot

Consumable

Rotable

End of Life

Preserve Quantity

Note:

The **Part Logistics** option is only available for the **Service Engineer** role.

4. Make the desired changes and select **Save**.

Note:

If you select a different part without saving you are prompted to save or discard your changes.

The following values are included on the **Part Logistic** dialog box.

Property	Definition	Default
Traceable	Defines if a physical part will be generated from the neutral part.	true
Serialized	Defines if a physical part requires a serial number.	false
Lot	Defines if a physical part requires a lot number.	false
Rotable	Defines if a physical part can be easily repaired.	false
Consumable	Defines if a physical part can be used and discarded.	false
Preserve Quantity	Defines if one physical part with the quantity defined can represent a multi-quantity neutral part.	false
End of Life	Defines if a physical part has a finite life.	false

Note:

Any **Part Logistics** values set on the neutral structure are carried over when the as-built structure is created.

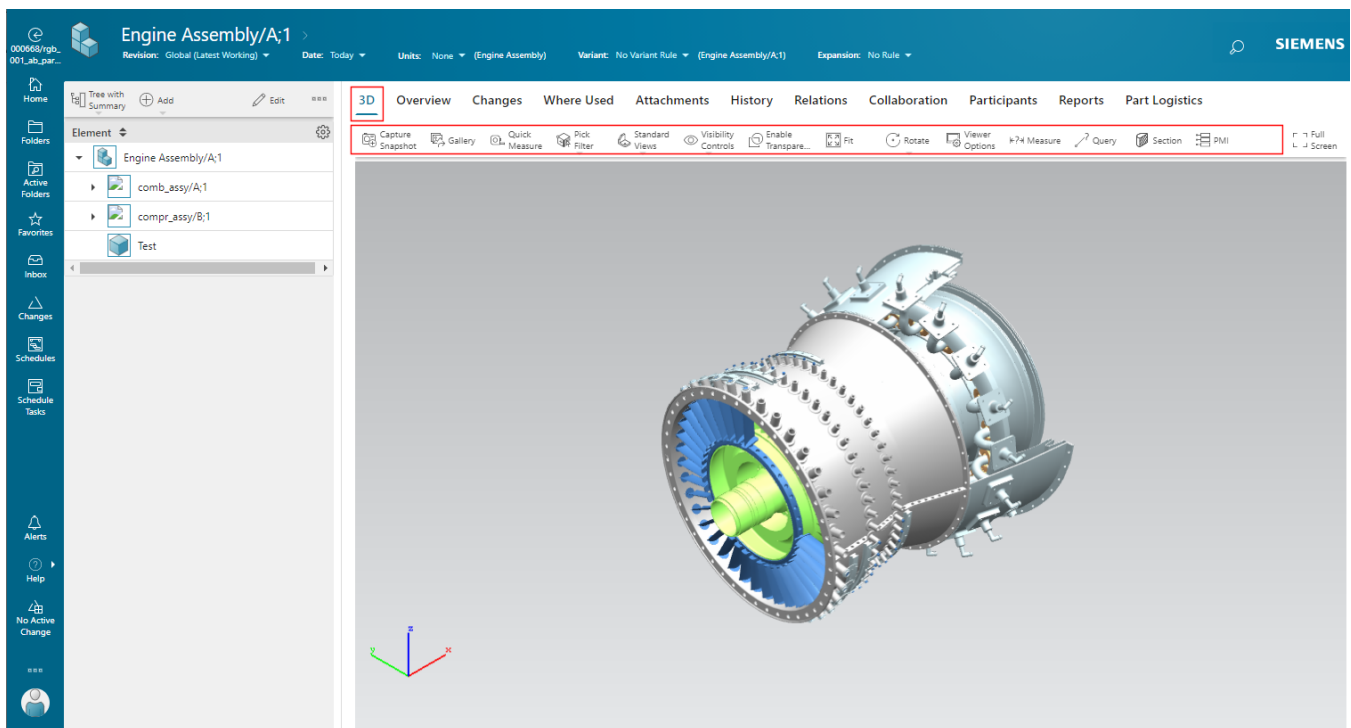
13. Maintaining a physical structure

Visualize Service Lifecycle Management structures in 3D viewer



Visualizing structures in 3D viewer






On the **3D** tab in Service Lifecycle Management, the service technician can explore 3D data (JT) associated with parts and assemblies in neutral and physical structures. You can use the 3D viewer to manipulate views, query and measure parts and features, view part and assembly level product and manufacturing information (PMI), and create 3D sections through your parts.


For more detailed information about the 3D Visualization capabilities in Active Workspace, see **Visualizing 3D Product Data** on the Siemens Support Center.









Features for controlling 3D display

	Gallery	Show a collection of snapshots in the 3D view.
	Quick Measure	Calculate temporary measurements between the parts or features in an assembly. The default unit is meters.

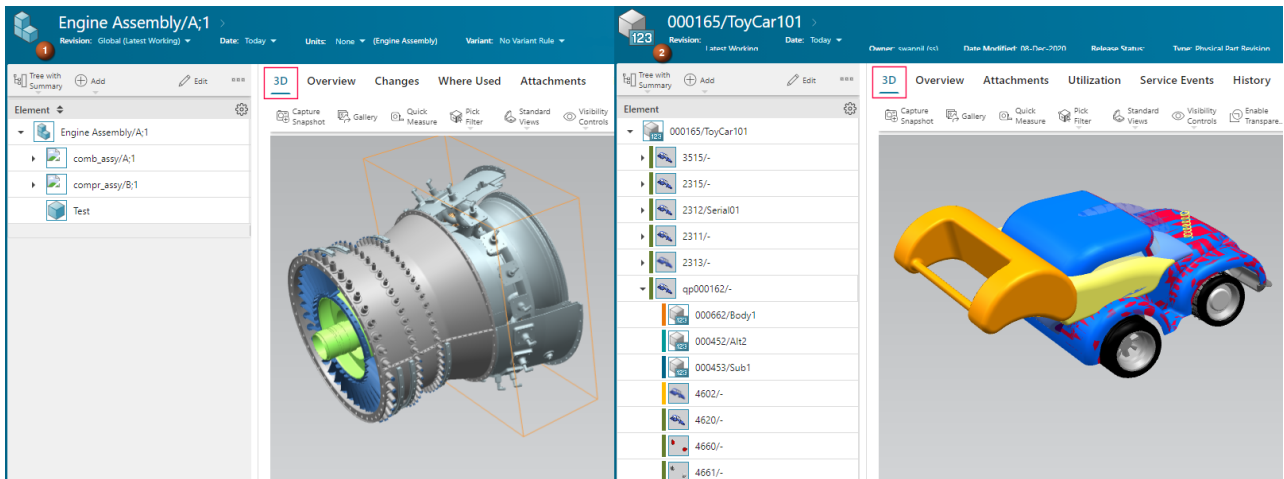
	Pick Parts/Pick Features	Calculate distances between the selected parts or selected features such as edges, points, or arc centers.
	Standard Views	Align the 3D view of the model to a standard angle. You can choose from the following views: Top, Bottom, Left, Right, Front, Back, +Isometric, -Isometric.
	Visibility Controls	Show or hide parts and subassemblies. All On, All Off, Remove Analysis Results
	Enable Transparent Selection Display Mode	Enable to view the selected parts in their original color and with bounding boxes. Unselected parts appear transparent. Disable to view the selected parts in the highlight color and the unselected parts in their original color.
	Fit	Fit all of the components to the work area. Selecting specific components fits the selection to the work area.

	Pan, Rotate, Zoom	<p>Pan - Move the 3D view vertically and horizontally with the mouse the change the center of the view</p> <p>Rotate - Rotate the view of the 3D model around the center of the view with the mouse. This is the default navigation mode.</p> <p>Zoom - Zoom in or zoom out of the current work area with the mouse.</p>
---	-------------------	--

	Viewer Options	Control the view's characteristics, such as the material, units, and 3D navigation model.
	Measure	Calculate the minimum distance between the selected parts of features.
	Query	Display geometric information of the selected parts or features.
	Section	Create and manage sections used to clip portions of the 3D geometry in the 3D view. This allows users to view internal elements to expose conditions such as interference and clearance issues.
	PMI	Show and hide specific PMI or apply Model Views.
	Full Screen	Switch to the full-screen view.

Visualize neutral and physical structures in 3D viewer

1. Open a (1) neutral structure or a (2) physical structure.




2. Select the **3D** tab.
3. Adjust the display of the structure using the features at the top of the graphics window in the **3D** tab.





Assign a lot number to a physical part

When managing a physical structure or performing service work, you may be instructed to identify the lot number of one or more missing parts. When installing or moving a part, or you can assign an existing lot to the part, or create a new lot and assign it to the part you are installing or moving.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, click **Open** .
3. Select a missing physical part from the physical part list; or select multiple parts from the list.

The default color assigned to a missing part is red.

You can only assign a lot to multiple missing physical parts if the selected parts are from the same neutral part and are being assigned to the same lot.

4. Do one of the following:
 - If the missing part is not serialized (does not require a serial number), go to the next step.
 - If the missing part is serialized (requires or has a serial number), change the display view to **Table** , and then go to the next step.
5. Click **Assign Lot** .
6. In the **Assign Lot** panel, do one of the following:
 - Select an existing lot from the returned list.
 - Click the **New** tab to add a new lot.
7. Complete the **Assign Lot** panel step values.

Only the **Quantity** value can be defined for an existing lot.

8. Click **Assign**.

Assigning lot field values


The following assign lot fields are displayed in the **Assign Lot (New tab)** panel. Not all fields may apply.

Field name	Definition	Valid values
Lot Number	The lot number associated with the missing physical part.	<p>If a lot number is assigned to this physical part, select a value from the list.</p> <p>Add a new lot if no lot number is assigned to this physical part, or if you want to assign a new lot.</p>
Manufacturer's ID	The manufacturer ID associated with the lot number of the missing physical part.	Predefined manufacturer IDs. See Service Lifecycle Management configuration tasks for information on defining the manufacturer IDs.
Install Part Quantity	The number of parts being installed.	<p>Enter a value less than or equal to the allowable installation quantity.</p> <p>The following apply:</p> <ul style="list-style-type: none"> • If a value less than the allowable installation quantity is defined, the remaining allowable quantity is identified in a single missing part. • If you are assigning a new lot to a physical part that already has an assigned lot, this field cannot be modified. • When assigning a lot to a part that is being uninstalled and replaced, the quantity of any missing part represents the total remaining quantity to be installed. <p>This field appears only if a quantity can be specified for this action.</p>



Field name	Definition	Valid values
Lot Size	The number of physical parts in this lot.	
Expiration Date	The date and time that the lot expires.	Click in the field to select a date from the calendar. The time value defaults to 12:00:00 AM. If no value is selected, the expiration date defaults to the current date and 12:00:00 AM.

Edit the serial number of a physical part


When managing a physical structure or doing service work, you may be instructed to identify the serial number of a missing part.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, click **Open** .
3. Select a missing physical part from the physical part list.

The default color assigned to a missing part is red.

4. Change the display view to **Table** .
5. Click **Edit** .

An editable box displays under the **Serial Number** column.


6. Enter the serial number for the desired part.
7. Click **Save** .

Create a log book

A log book is used to capture utilization records. Once created, the log book becomes available in the **Record Utilization** dialog box.

Procedure

1. Select the **Home** folder.



2. Click **New**  in the primary toolbar on the right side of the Active Workspace interface.
3. Select **Create Log Book**.
4. Enter the following information for the **Create** Log book dialog box.

Field name	Definition	Valid values
Log Book Name	Name of the log book	Alphanumeric (1–128 characters)
Description	Description of the log book.	Alphanumeric (1–128 characters)

5. Click **Add** to create the log book. Alternatively, click **Cancel** to exit.

Track utilization for a physical structure

When managing physical structures or doing service work, you may be instructed to record utilization information on a physical structure. For example, you may be required to track life, observation, or date characteristics of installed parts, such as hours in service, amount of wear, or warranty expiration date.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, click **Open** .
3. Select the physical part from the list.
4. Click **Record Utilization** .

Note:

If you record a utilization on an assembly part, that value propagates to any child part with the same **Characteristic Name**.

5. In the **Record Utilization** panel, enter information in the utilization fields.

The fields on this panel vary because the unique characteristics assigned to physical structures vary.

On the **Utilization** tab, view the units of measure for the characteristics.

Overview Viewer Attachments **Utilization** }

Utilization

CHARACTERISTICS NAME	UNIT	TIME SINCE
Cycle1	meter	
TempF1	F	
DerivedCycles1	dc	
InspectionDate1		
DerivedTempC	DC	

6. Click **Record**.

Part movement

Install a new part, or replace an existing part on an as-maintained or as-built physical structure

As part of managing a physical structure or performing service work, you may be instructed to install a part on the as-maintained physical structure, for example, when rebuilding an asset after a teardown procedure. Or, you may be instructed to install a part on an as-built structure to upgrade the physical structure to the latest product revision.

Note:

This procedure applies to child parts within an assembly or subassembly. You can also create and install a new part on an assembly (top level) part.

You can install a preferred, alternate, substitute, or deviation physical part as:



- A new part (one that does not currently exist in the system) that fulfills a missing part or replaces an existing part.
- An existing part that fulfills a missing part or replaces an existing part.

When you replace an existing physical part, the following occurs:

- The original physical part is removed from the structure and replaced with the new physical part.
- The uninstall time on the original physical part is updated with the date the physical part was replaced.

Note:

Move part functionality—install, uninstall, and replace—works with structures configured with Product Configurator.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, click **Open** .
3. Do one of the following:
 - To install an assembly, select the part.
 - To install a child of the assembly, click **Show Children**  on the selected assembly.


Note:

If multiple child parts are displayed, select the desired child part.

4. Click **Move Part** .

The **Move Part** panel appears.

Note:

The **Move Part**  command is also used to move an asset, or top physical part, to a new location. If you select a top-level physical part, the **Move Part** panel looks and behaves differently than when you select a physical part that is installed into an assembly. When you select a physical part that is installed into an assembly, the **Move Part** panel is used to install, uninstall, or replace the part in the assembly. For this procedure, make sure you have selected an installed physical part.

5. On the **Search** tab, enter the search information for the part that you want to install.
6. Click **Search Physical Parts**.
7. From the returned parts that appear at the bottom of the panel, select the desired part and do one of the following:
 - If you select an approved part, enter the part movement information that appears on the **Move Part** panel and click **Install**.
 - If you select an existing part (replacing a part with an approved part), enter the part movement information that appears on the **Move Part** panel and click **Replace**. The existing part is replaced with the selected part.

- If you select an unapproved part (unapproved parts are displayed only if you select the **Include Unapproved Parts** check box), create a part deviation request.

Note:

If you enter a lot number that does not exist, a new lot is created and assigned to the part that you are installing or replacing.

To support this work task, you can view an existing attachment or add an attachment to this physical part. For example, you can attach build records or inspection reports for this part.

Use table view to install, or create and install, parts on an as-maintained physical structure

As part of managing a physical structure or performing service work, you may be instructed to install a part on the as-maintained physical structure, for example, when rebuilding an asset after a teardown procedure. Use this procedure to quickly install, or create and install, parts on an as-maintained physical structure. This installation method cannot be used to replace an existing part, nor can it be used to install a part on an as-built structure. To replace an existing part, or to install a part on an as-built structure, follow the instructions in *Install a new part, or replace an existing part on an as-maintained or as-built physical structure*.



This procedure is particularly suited to allow a technician to quickly create and install parts by simply entering the part's serial number into the table view of a physical structure.

You can install a preferred, alternate, substitute, or deviation physical part as:

- A new part (one that does not currently exist in the system) that fulfills a missing part.
- An existing part that fulfills a missing part.


Note:

You must be in table view  to complete this procedure.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, click **Open** .
3. Do one of the following:
 - To install an assembly, select the part.
 - To install a child of the assembly, click **Show Children**  on the selected assembly.

Note:

If multiple child parts are displayed, select the desired child part.

4. Click **Start Edit** .
5. In the **Serial Number** box, type the serial number of the part you want to install.

Note:

If you enter a serial number of a part that exists and is available, the part is installed. If the part exists but is not available, you will receive an error. If the part does not exist, the part is created and installed.

6. Click **Save** .

Install a non-operational physical part

You can create both an as-maintained structure with a physical part and an as-maintained part from a neutral part structure, using the disposition type **In-Service**. In the physical structure you create, you can install and uninstall parts of service and operations.

1. Create an as-maintained structure from a neutral structure by selecting the **New** icon, and choose **Create As-Maintained Structure**.
2. In the **Create As-Maintained Structure** dialog box, enter the required information in the required fields, including **Manufacturer's ID** and **Disposition**.
3. Click **Create**.

Note:

The sequence of the parts in the neutral structure is maintained in the physical structure.

4. Click **Move Part** .

The **Move Part** panel appears.

5. Click the **New** tab and enter the new part information for the part that you want to create.
6. Click the **Uninstall** tab to change the disposition type to non-operational.
7. Enter the information for the part that you want to uninstall.
8. Click **Uninstall**.

The uninstalled part in the physical structure is displayed in red.

9. Click **Move Part** .

The **Move Part** panel appears.

10. On the **Search** tab, enter the search information for the part that you want to install.
11. Click **Search Installable Physical Parts**.
12. Select the part you want.



The system shows a warning message that you are trying to install a non-operational physical part.

13. Click the **Install** tab.

The part is installed again in the physical structure.

Create and install a new child part

As part of managing a physical structure or performing service work, you may be instructed to install a part on the physical structure, for example, when rebuilding an asset after a teardown procedure. If the part that you need to install does not exist, you can create a new part. This procedure applies to child parts within an assembly or subassembly. You can also create and install a new part on an assembly (top level) part.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, click **Open** .
3. Do one of the following:
 - a. To install an assembly, click the part to select it.
 - b. To install a child of the assembly, click **Show Children**  on the selected assembly.

Note:

If multiple child parts are displayed, select the desired child part.

4. Click **Move Part** .

The **Move Part** panel appears.

5. Click the **New** tab and enter the new part information for the part that you want to create.

6. Do one of the following:

a. Select an approved part from the returned list:

A. Enter the new part information.

Note:

It you enter a new lot number for the new part, a new lot is created and assigned to the new part.

B. Click **Install** (if this is a missing part), or click **Replace** (if this is an existing part that you are replacing).

b. Search for a different part:

A. Type the search criteria in the **Search** box.

B. Click **Search** .

C. Select the desired part from the returned list.

D. Enter the new part information.

E. Click **Install** (if this is a missing part), or click **Replace** (if this is an existing part that you are replacing).

F. If you select an unapproved part, you must complete a part deviation request.

Create a part deviation

You are required to create a deviation when you attempt to install a physical part that is not a preferred, alternate, or substitute physical part into an as-maintained structure. Or if you attempt to install a part that is an extra to design part into an assembly. After the deviation is approved, you can install the part into the structure. An authorized deviation can be used only once, so if you uninstall and reinstall a deviated physical part, you must create a new part deviation request for approval.

You arrive at the deviation request if you select an unapproved part when:

- Creating a new part
- Installing a part
- Installing an extra to design part

Note:

Deviations are routed through workflows during the approval process. Workflows are configured by your system administrator.

1. Select the desired deviation authority type document from the list. If there is only one document type, this step does not apply.
2. Complete the deviation request fields.

Note:

If you enter a lot number that does not exist, a new lot is created and assigned to the part deviation that you are creating.

3. Click **Create Deviation**.


After the approved deviated part is installed, you can view the document that allowed the deviated part to be installed by clicking the **Deviation Document** link on the physical part's **Overview** tab.

Uninstall parts from a physical structure

As part of managing a physical structure or performing service work, you may be instructed to uninstall one or more physical parts from the physical structure, for example, when tearing down an asset. You can uninstall a preferred, alternate, substitute, or deviation physical part.

Note:

Move part functionality—install, uninstall, and replace—works with structures configured with Product Configurator.

1. Search for the physical part using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the physical part, click **Open** .
3. Do one of the following:
 - To uninstall an assembly, select one or more parts.

Note:

Hold down the Shift key and select the beginning and ending parts to select a range of contiguous parts, or hold down the Ctrl key and select parts to select multiple, noncontiguous parts.

- To uninstall a child of the assembly, click **Show Children** ► on the selected assembly.

Note:

If multiple child parts are displayed, select one or more desired child parts.

4. Click **Move Part** .

The **Move Part** panel appears.

5. Click the **Uninstall** tab.
6. Enter the information for the part that you want to uninstall.

Note:

You cannot uninstall missing parts.

7. Click **Uninstall**.



To support this work task, you can view an existing attachment or add an attachment to this physical part. For example, you can attach build records or inspection reports for this part.

Move a physical part to a new location

You can move a top physical part, or asset, from one physical location to a different physical location. You cannot move an installed physical part to a new location.


Example:

You can move an airplane from the Dallas hangar to the Detroit hangar, but the installed parts of the airplane, such as the wheels or engines cannot be moved to a new location independently from the airplane. Their location reflects the location of the assembly they are installed in.

1. Search for the assembly using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the assembly, select the assembly, or click **Open** .
3. Click **Move Part** .

The **Move Part** panel appears.

Note:

The **Move Part**  command is also used to install, uninstall, or replace a physical child part that is installed in an assembly. If you select a physical part that is installed into an assembly, the **Move Part** panel looks and behaves differently than when you have a top physical part selected. When you select an asset, or top physical part, the **Move Part** panel is used to move the part's physical location. For this procedure, make sure you have selected a top physical part.

4. On the **Move Part** panel, do the following:
 - Select a location from the list, or narrow the list by typing a value in the **Location** box, and then select the desired location from the list.
 - Under **Move Date**, click in the date box to select a date from the calendar, and then click in the time box to select the time. If no values are selected, the move date and time default to the current date and time.
5. Click **Move Part**.

Part movement and install part field definitions

The following part movement fields can be found on one or more of the **Move Part** panels (**Search**, **New**, **Uninstall**, and deviation) or **Install Part** panels (**Search**, **New**, and deviation). Not all fields may apply.

Field name	Definition	Valid values
Description	Description of the unapproved physical part for which you are requesting a deviation.	Enter a description, if desired.
Disposition	Disposition of the physical part you are installing.	Click in the box and press the down arrow key on the keyboard to select a value from the list. If no value is selected, the disposition defaults to the current disposition.
Document Author	Name of the person who authored the deviation document associated with this unapproved physical part.	Enter the document author.
Document Subject	Subject of the deviation document associated with this unapproved physical part.	Enter the document subject.

Field name	Definition	Valid values
Document Title	Title of the deviation document associated with this unapproved physical part.	Enter the document title.
Include Unapproved Parts	If selected, all available parts (including unapproved parts) are returned. If not selected, only approved parts are returned.	
ID	Manufacturer ID of the unapproved physical part for which you are requesting a deviation.	Defaults to the ID of the selected unapproved part. Enter a new ID, if appropriate.
Installation Time	Date and time the part was installed on the physical structure. For a part replacement, this field value reflects both the uninstall time for the old part and the installation time for the new part.	Click in the field to select a date from the calendar. The time value defaults to the current time. If no value is selected, the time defaults to the current date and time.
Location	Location where the physical part is located.	Select a value from the list. If no value is selected, the location defaults to the current location.
Lot Number	Lot number associated with the physical part.	If a lot number is assigned to an existing physical part, select a value from the list, or enter a new lot number to create a new lot and assign it to this part. When creating a new part or a part deviation, select an existing lot number or create a new lot number by entering a value in this field.
Manufacturing Date	Date and time the part was manufactured.	Click in the field to select a date from the calendar. The time value defaults to the current time. If no value is selected, the time defaults to the current date and time.

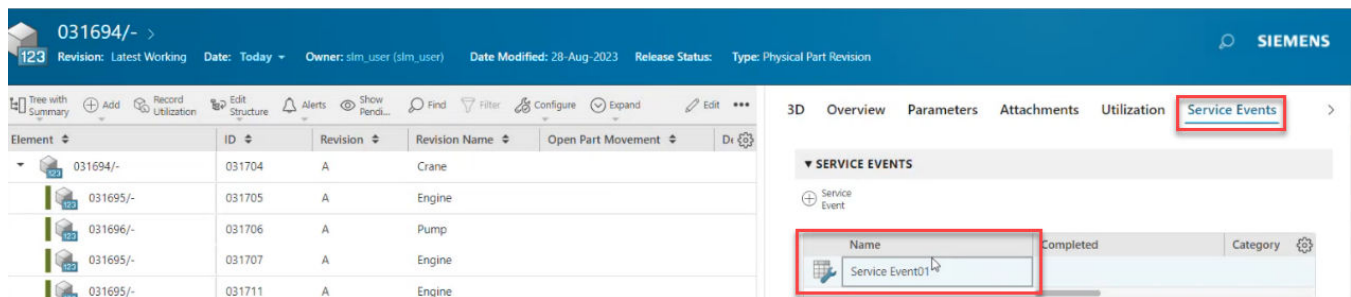
Field name	Definition	Valid values
Manufacturer's ID	Manufacturer ID associated with the physical part you are searching for.	<p>Predefined manufacturer IDs. See Service Lifecycle Management configuration tasks for information on defining the manufacturer IDs.</p> <p>When you replace an existing part, this ID automatically populates if the lot number is entered.</p>
Name	Name of the unapproved physical part for which you are requesting a deviation.	Enter the name of the physical part.
Part Number	Neutral part number of the physical part. This value is required.	Select a value from the list.
Revision	Revision level of the selected unapproved part.	Defaults to the ID of the selected unapproved part.
Serial Number	Serial number of the physical part you are searching for, if applicable or known.	Enter the serial number of the physical part you are searching for.
Show All Usage	If selected, pulls all of the open usages in which a part can be installed. It displays the usage name combined with the preferred part number in the Usage list of values.	
Uninstall Disposition	Disposition state of the physical part after it is replaced or uninstalled. Applies only when replacing a part.	<p>Click in the box and press the down arrow key on the keyboard to select a value from the list.</p> <p>If no value is selected, the disposition defaults to the current disposition.</p>
Uninstall Location	Intended physical location of the part after it is replaced or uninstalled. Applies only when replacing a part.	<p>Select a value from the list.</p> <p>If no value is selected, the location defaults to the current location.</p>
Uninstall Time	Date and time that the part was uninstalled.	Click in the field to select a date from the calendar. The time value defaults to the current time.

Field name	Definition	Valid values
		If no value is selected, the time defaults to the current date and time.
Usage	If Show All Usage is selected, displays all missing parts in Teamcenter; if Show All Usage is not selected, defaults to Extra To Design.	Select a value from the list.
Quantity	The number of parts included in this assembly part.	

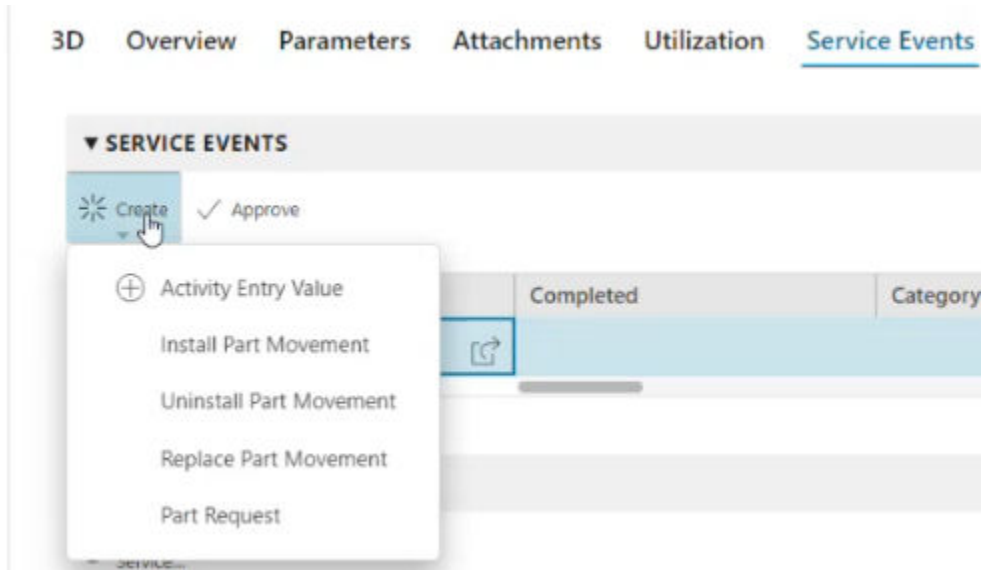
Creating part movement in context of service event

You can create move part functionality in the context of a service event.

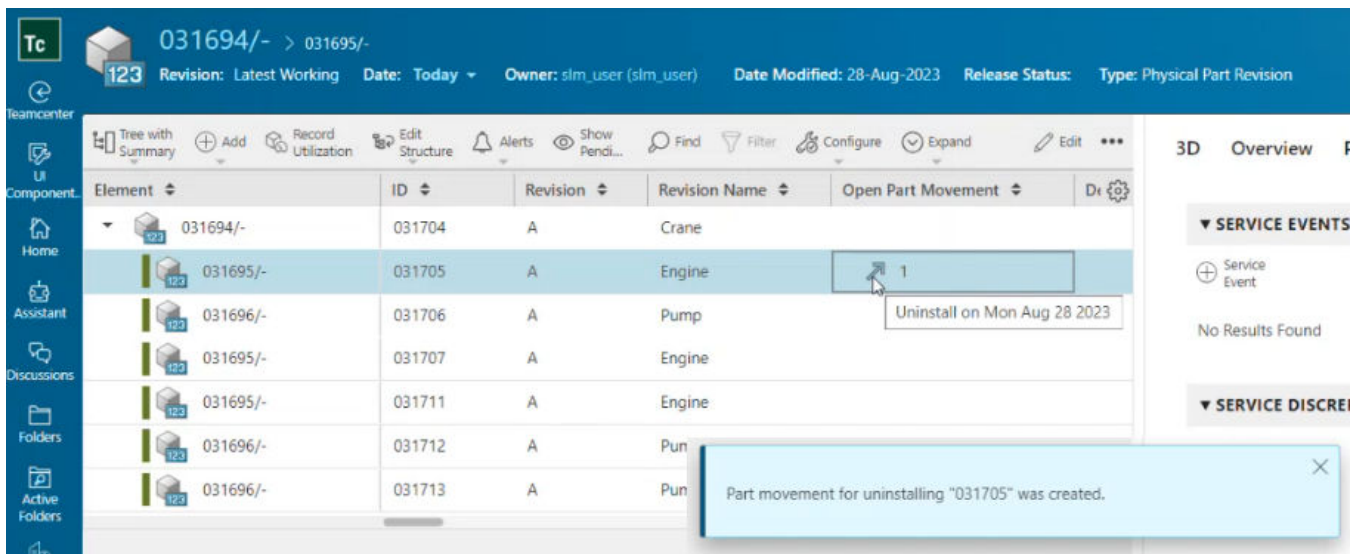
From the **Service Events** tab, you can create install, uninstall, and replace part movements.



After you select a service event to which you want to add a part movement, the **Create** ✨ icon becomes available. You can select any of the available part movements.



After a part movement is created in the context of a service event, a message displays to confirm it. In addition, the physical structure includes indicators of the number of part movements assigned to the part, the type of part movement, and the date the part movement is created.



The different types of part movement are identified by their unique indicators.

Element	ID	Revision	Revision Name	Open Part Movement	Dr
031694/-	031704	A	Crane		
031695/-	031705	A	Engine	1	
031696/-	031706	A	Pump		
031695/-	031707	A	Engine	2	
031695/-	031711	A	Engine		
031696/-	031712	A	Pump		
031696/-	031735	A	Pump	3	

- (1) Uninstall part movement
- (2) Replace part movement
- (3) Install part movement

Install missing parts

What are missing parts, ungenerated missing parts, and extra to design parts?

Parts can be identified as missing from an assembly (top level or parent part) when:

- The child part position was included when the physical structure was generated, but the part has not yet been installed. These are called *missing parts*.

Example:

A wheel assembly is generated indicating that five lug nuts are required on the assembly, but none have been installed on the assembly. These are called *missing parts* and, by default, have a red bar next to the physical part when the parent part is expanded in Active Workspace.

- The child part was not generated when the physical structure was generated. These are called *ungenerated missing parts*.

Example:

A wheel assembly that contains five lug nuts is generated, but with the setting that 0 levels should be generated. The lug nuts should be installed, and the structure has five open usages, but no missing parts are created. The five lug nuts are not shown on the generated part, but are considered open usages, or *ungenerated missing parts* that must have parts installed in them. These open usages are displayed on the **Install Part** panel when **Show All Usage** is selected.



- The part was not included in the engineering structure. These are called *extra to design parts*.

Example:

You need to install a temperature sensor into a car assembly temporarily to take measurements for a test. Because this part is not part of the original approved engineering, this sensor is considered *extra to design*.

Install an extra to design part

Extra to design parts are installed only on an assembly (top level or parent part). By contrast, part movement refers to installing, uninstalling, or replacing an existing part on a physical structure that is a child part. Use this procedure to install any part that is extra to design.

1. Search for the assembly using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the assembly, click **Open** .
3. Click **Install Part** .

The **Install Part** panel appears.

4. On the **Search** tab, enter the search information for the part that you want to install.
5. Click **Search**.
6. From the returned parts that appear at the bottom of the panel, select the desired part and do one of the following:
 - If you select an approved part, enter the part information that appears on the **Install Part** panel and click **Install**.
 - If you select an unapproved part (unapproved parts appear only if you select the **Include Unapproved Parts** check box), create a part deviation request.



To support this work task, you can view an existing attachment or add an attachment to this physical part. For example, you can attach build records or inspection reports for this part.

Create a new assembly part


As part of managing a physical structure or performing service work, you may be instructed to install a new part or an extra to design part on an assembly.

Note:

This procedure applies to assemblies. You can also create and install child parts on an assembly or subassembly.

1. Search for the assembly using the search box, or navigate to it in your folder structure.
2. From the list of search results or the folder containing the assembly, click **Open** .
3. Click **Install Part** .

The **Install Part** panel appears.

4. Click the **New** tab and enter the new part information for the part that you want to create.
5. Do one of the following:
 - a. Select an approved part from the returned list:
 - A. Enter the new part information.
 - B. Click **Install**.
 - b. Search for a different part:
 - A. Type the search criteria in the **Search** box.
 - B. Click **Search** .
 - C. Select the desired part from the returned list.
 - D. Enter the new part information.
 - E. Click **Install**.

Note:

If you select an unapproved part, you must complete a part deviation request.

Maintenance forecasting

Identifying maintenance needs by evaluating utilization life values


Service Lifecycle Management includes information regarding physical part usage and upcoming maintenance requirements. You identify maintenance needs by evaluating the frequency of required maintenance and usage records.


You must set two preferences to support this feature.

- | | |
|---|---|
| MROEnableLifingIndicator | Set this preference to True to display the Life Value indicator. |
| AWC_SLM_EnableColorUsagePercentage | Set this preference to control the range of values that define the color of the usage indicator.
The value must consist of two numbers separated by a comma. |

Example:

The preference value of **75,95**, results in the following ranges:

A usage between 0 and 75% is represented by a green indicator .

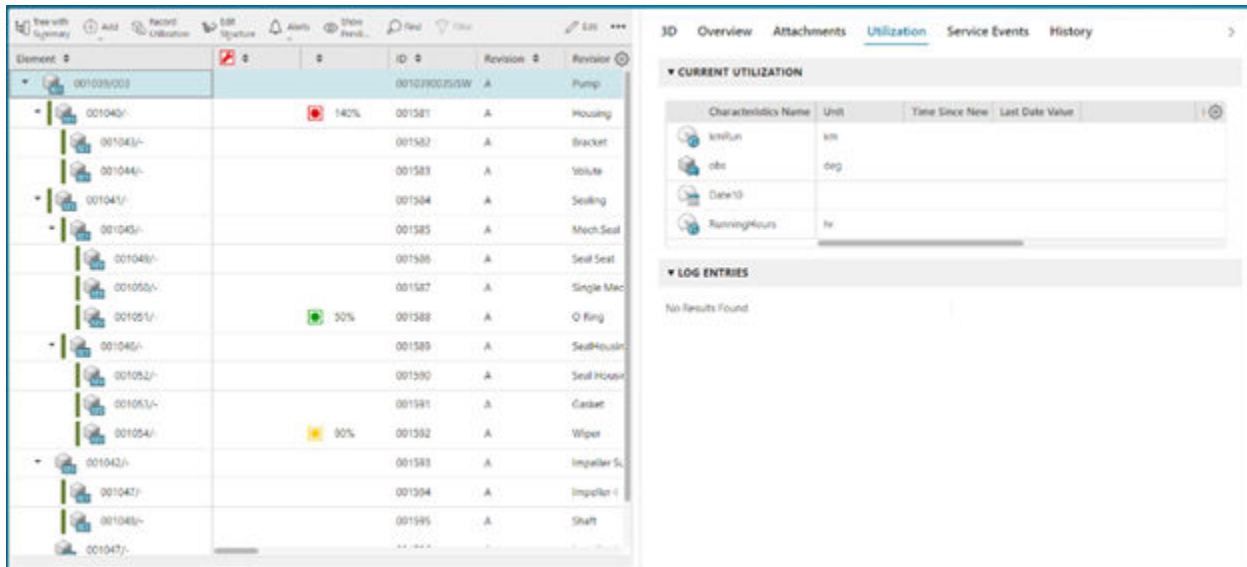
A usage between 75% and 95% is represented by a yellow indicator .

A usage above 95% is represented by a red indicator .

Note:

The **Life Value** is based on the:

- **Latest Working** version of a service requirement if the service requirement has not been released.
- **Latest Released** version of a service requirement if the service requirement is released, regardless of whether there are newer versions that have not been released.



Calculating maintenance due dates

Service Lifecycle Management uses the following values to calculate the **Due Date** of maintenance needs.

- **Installation Time**—Indicates the installation time of a physical part in a structure.
- **Frequency**—The *frequency* for a service requirement defines the time interval within which the maintenance must be performed. It defines *when* the service needs to be performed.
- **Part utilization** records— These records track part utilization information based on life, observation, and date characteristics.

Using the **Installation Time**, the **Frequency** of required maintenance, and the utilization records for life characteristics, Service Lifecycle Management calculates the due date for the required maintenance.

Example:

A pump requires an **inspection** maintenance action after every 16 hours of operation. Installation is completed on Monday morning, July 1, at 7:00 AM. After the production shift on that same Monday, a technician captures a **Life Characteristic** of 8 hours running time. The **Due Date** for the next inspection is calculated to be required after the second day of operation, July 2.

Forecasting maintenance actions

Forecasting maintenance actions is performed on parts that have been consumed in a service requirement and have the **Occurrence Type** status of **MEAssign**. Forecasting is based on the frequencies defined in the service requirement, which must include the **Keyword** value of **Every**.

Note:

For more information on service requirements and frequencies, refer to the section titled **Setting up and managing service requirements** in the **Service Planner** documentation.

The screenshot shows the 'Maintenance Forecasting' tab in a software interface. At the top, there are navigation tabs: Overview, Attachments, Utilization, Service Events, History, and Maintenance Forecasting. The 'Maintenance Forecasting' tab is selected. Below the navigation bar, there are three main sections: 1. 'Up To Date' field with a date picker set to 28-Nov-2024. 2. 'Scope' dropdown menu set to 'Selected Part and its ...'. 3. A 'Show Maintenance Due' button. Below these sections is a table titled 'Next Due Dates of Maintenance' with columns: Service Requirement, Affected Physical Part, Affected Asset, and Last. The table contains three rows of data.

Service Requirement	Affected Physical Part	Affected Asset	Last
030174-SR	020028/--A	020028/-	
030174-SR	030050/--A	020028/-	
030176-Service req1	020028/--A	020028/-	

Maintenance Forecasting tab

The **Maintenance Forecasting** tab contains information under the heading **Next Due Dates of Maintenance**. The information in this section is described below.

1	Up To Date:	Controls the display of Service Requirements based on the scheduled date of the Service Requirements .	The default date is one year from the current date.
2	Scope:	Selected Part	This is the default setting, and it results in Service Requirements being displayed only for the selected part in the physical structure.
		Selected Part and its Child	This setting results in Service Requirements being displayed for the selected part in the physical structure and in its first level child parts.
		All Parts	This setting results in Service Requirements being displayed for all parts in the physical structure, regardless of the existence of multiple levels of child parts.

3	Show Maintenance Due	Triggers an update to the results that meet the criteria. Changes are not reflected in the results table until this option is selected.
4	Results table	<p>Displays the Service Requirements that match the date and selection criteria. The table includes the following attributes:</p> <ul style="list-style-type: none"> • Name of the Service Requirement • Affected Physical Part • Affected Asset • Last Completed Date • Frequency • Due Date • Maintenance Action Status

Simulate a maintenance forecast

Easily evaluate maintenance needs of physical parts by simulating monthly usage values.

1. Select a part in the physical structure that is consumed in a service requirement.
2. Click the **Maintenance Forecasting** tab.
3. Enter an estimated value in the **Usage Per Month** box.
4. Click **Show Maintenance Due**.

The **Next Due Dates Of Maintenance** panel shows the simulated due date.

Example:

Service Lifecycle Management estimates the maintenance due date for the engine 028016/-, using the planned maintenance frequency of 100 **RunningHours** and the current usage of 10 hours or 10%.

Note:

RunningHours is a characteristic defined by you to capture the hours of run time for the engine.

- (1) **Frequency—Every 100 RunningHours**
- (2) Running hours recorded life value to date—10 hours which equates to **10%**
 Remaining running hours until maintenance—90 hours
- (3) Current **Due Date**—26-May-2023

If you enter a 9 hour per month usage estimate and click **Show Maintenance Due**, the maintenance due date to service the engine changes to 10-Mar-2024.

Because the requirement is to service the engine every 100 running hours, there are 90 running hours left before maintenance is due. The estimate entered is 9 hours per month, which results in 10 more months before maintenance is required.

Note:

The simulated due date is not permanent. As soon as you remove the value from the **Usage Per Month** box, the simulated due date reverts to the original date.

Forecasting maintenance based on part applicability

It is common to have a part supplied by more than one vendor. If the maintenance requirements differ for the same part supplied by different vendors, *part applicability* is used to properly forecast maintenance requirements. A specific service requirement must be defined for each part provided by each vendor in the neutral structure.

Each part must have a serial number because you use the serial numbers to configure the service requirements.

For more information on defining part applicability, refer to define part applicability in the Service Planner help documentation.

Note:

Creating service requirements is done in Service Planner. For more information, refer to creating service requirements in the Service Planner help documentation.

In Active Workspace, to examine the service requirements that are based on the physical assets in the as-maintained structure, select the **Maintenance Forecasting** tab.

Service requirement for one of the vendors

This example service requirement, **000287/A;1-Vendor1 SR**, includes a serialized part with the serial number 05. The part applicability for this service requirement is defined by a serial number range from 01 to 10.

Since the part's serial number is within the range, it is consumed in this service requirement and appears in the service requirement list when the part is selected.

The screenshot shows the Service Lifecycle Management interface for part 000256/TopPart10. The 'Maintenance Forecasting' tab is active, displaying a table of 'NEXT DUE DATES OF MAINTENANCE'. The table includes columns for Service Requirement, Affected Physical Part, Frequency, Maintenance Action Status, and Last t. The service requirement 000287/A;1-Vendor1 SR is highlighted, showing it affects physical part 000258/05-A with a frequency of Every 3 Months and a status of Not Generated.

Service Requirement	Affected Physical Part	Frequency	Maintenance Action Status	Last t
000287/A;1-Vendor1 SR	000258/05-A	Every 3 Months	Not Generated	

- 1 Part obtained from multiple vendors.
- 2 Service requirement for one vendor. This part requires service every three months.

Service requirement for a second vendor

This example service requirement, **000288/A;1-Vendor2 SR**, includes a serialized part with the serial number 15. The part applicability for this service requirement is defined by a serial number range from 11 to 20.

Since the part's serial number is within the range, it is consumed in this service requirement and appears in the service requirement list when the part is selected.

The screenshot shows a software interface for a part with ID 000256/TopPartB and revision 000258/15. The interface includes a table of elements and a maintenance forecasting section.

Element	ID	Life Value	R
000256/TopPartB	000256TopPart...	0.000000000000...	A
000257/B	000257BSISW	0.000000000000...	A
000258/15	00025815SISW	0.000000000000...	A
000259/-	000298	0.000000000000...	A

Service Requirement	Frequency	Due Date
000288/A;1-Vendor2 SR	Every 6 Months	22-Mar-2022

- 1 Part obtained from multiple vendors.
- 2 Service requirement for a different vendor. This part requires service every six months.



Generate a maintenance event

You create the maintenance event because it provides you with information you need, including the date on which the maintenance action is due. After you create the event, it is placed in the technician's inbox.




1. From the results table in the **Maintenance Forecasting tab**, locate the service requirement for which a maintenance action needs to be generated.
2. If necessary, scroll to the **Maintenance Action Status** column.
3. Click on the status to change it from **Not Generated** to **Generated**.

The color coding also changes in the **Maintenance Action Status** cell.

Overview Attachments Utilization Service Events History Maintenance Forecasting

* Up To Date: 28-Nov-2024  Scope: Selected Part  [Show Maintenance Due](#)

▼ Next Due Dates of Maintenance

Service Requirement	Due Date	Maintenance Action Status
 030174-SR	31-Dec-2023	Generated
 030176-Service req1	29-Feb-2024	Not Generated 

14. Comparing as-maintained structures

Comparing as-maintained structures

A user, such as a service engineer, can identify changes or differences between two physical structures.

For example, you can compare two structures to highlight the missing and non-traceable parts or compare two different installations of the same physical structure to show differences. The analysis considers all levels of the structure, regardless of whether any line items are packed. The results are displayed using colors that represent items that match, are different in some way, or are unique between the structures.

-  Matched
-  Different
-  Unique in Left View
-  Unique in Right View

Note:

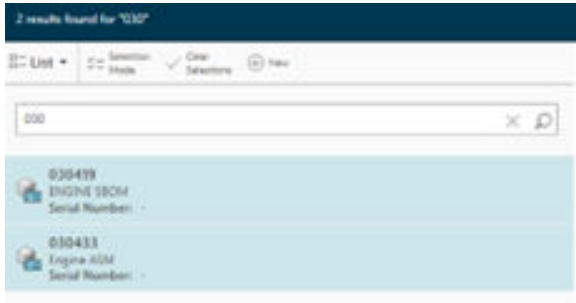
- **ID in Context** must be defined for the compare results to be accurate.
- The preference **AWBPropertiesToCompare.MRO** controls the values that are used to compare the structures.


The default values are:

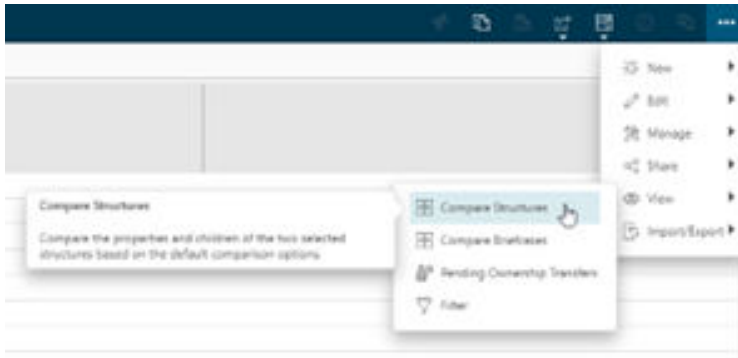
- **phbl_part_number**
- **phbl_part_used_is**
- **phbl_part_usage_name**

Compare two physical structures

1. Select two physical structures in the **Navigation pane**.



- Click **View**  in the primary toolbar and choose **Compare Content**.



- Under **Display** in the **Compare** dialog box, select the types of comparison you want to evaluate.

Display

- Matched
- Different
- Unique in Left View
- Unique in Right View

- Click **Compare**.

The results of the comparison very clearly show the status of the line items in each structure, with color coded status and highlighted differences.

Element	ID	Revision	Revision Name
029261/-	029262	A	MTruck_sBOM
029246/-	029263	A	Engine
029247/-	029264	A	Chassis1
029249/-	029265	A	Transmission
029250/-	029269	A	Cab
029251/-	029270	A	FrontAxleAssembly
029254/-	029271	A	RearAxleAssembly
029255/-	029273	A	FuelTank
029256/-	029274	A	ExhaustSystem

Element	ID	Revision	Revision Name
029261/BN569	029261BN569S...	A	MTruck_sBOM
029293/-	029339	A	CAT_Alternate
029247/-	029327	A	Chassis
029249/558	029249558Sie...	A	Transmission
029325/-	029341	A	Extended_Cab_Alternate
029251/-	029333	A	FrontAxleAssembly
029254/-	029334	A	RearAxleAssembly
029255/-	029336	A	FuelTank
029256/-	029337	A	ExhaustSystem
029275/-	029338	A	auxiliaryPowerUnit

- (1) | Indicates the part is the same in both structures.
- (2) | Indicates that there are differences in the parts in each structure.
- (3) | Indicates a unique part in one structure.

Example of a line item with a different **Revision Name** because there is an alternate part defined:

Element	ID	Revision	Revision Name
029261/-	029262	A	MTruck_sBOM
029246/-	029263	A	Engine
029247/-	029264	A	Chassis1
029249/-	029265	A	Transmission
029250/-	029269	A	Cab
029251/-	029270	A	FrontAxleAssembly
029254/-	029271	A	RearAxleAssembly
029255/-	029273	A	FuelTank
029256/-	029274	A	ExhaustSystem

Element	ID	Revision	Revision Name
029261/BN569	029261BN569S...	A	MTruck_sBOM
029293/-	029339	A	CAT_Alternate
029247/-	029327	A	Chassis
029249/558	029249558Sie...	A	Transmission
029325/-	029341	A	Extended_Cab_Alternate
029251/-	029333	A	FrontAxleAssembly
029254/-	029334	A	RearAxleAssembly
029255/-	029336	A	FuelTank
029256/-	029337	A	ExhaustSystem
029275/-	029338	A	auxiliaryPowerUnit

Example of a line item with a different **Usage Name**:

14. Comparing as-maintained structures

Element	Part Used	Usage
029261/-	-	-
029246/-	Preferred	Engine
029247/-	Preferred	Chassis
029249/-	Preferred	Transmission
029250/-	Preferred	Cab
029251/-	Preferred	FrontAxleAsm
029254/-	Preferred	RearAxleAsm
029255/-	Preferred	FuelTank
029256/-	Preferred	ExhaustSystem

Element	Part Used	Usage
029261/BN569	-	-
029293/-	Alternate	Engine_6Cylinder
029247/-	Preferred	Chassis
029249/558	Preferred	Transmission
029325/-	Alternate	Cab
029251/-	Preferred	FrontAxleAsm
029254/-	Preferred	RearAxleAsm
029255/-	Preferred	FuelTank_Left
029256/-	Preferred	ExhaustSystem
029275/-	Preferred	APU

(1) Example of a different **alternate** component.

(2) Example of a different location of the same part.

Example of a line item with different **Part Usage** values. One is the **Preferred** item and the other an **Alternate** item:

Element	Part Used	Usage
029261/-	-	-
029246/-	Preferred	Engine
029247/-	Preferred	Chassis
029249/-	Preferred	Transmission
029250/-	Preferred	Cab
029251/-	Preferred	FrontAxleAsm
029254/-	Preferred	RearAxleAsm
029255/-	Preferred	FuelTank
029256/-	Preferred	ExhaustSystem

Element	Part Used	Usage
029261/BN569	-	-
029293/-	Alternate	Engine_6Cylinder
029247/-	Preferred	Chassis
029249/558	Preferred	Transmission
029325/-	Alternate	Cab
029251/-	Preferred	FrontAxleAsm
029254/-	Preferred	RearAxleAsm
029255/-	Preferred	FuelTank_Left
029256/-	Preferred	ExhaustSystem
029275/-	Preferred	APU

15. Service events and discrepancies

Managing service events

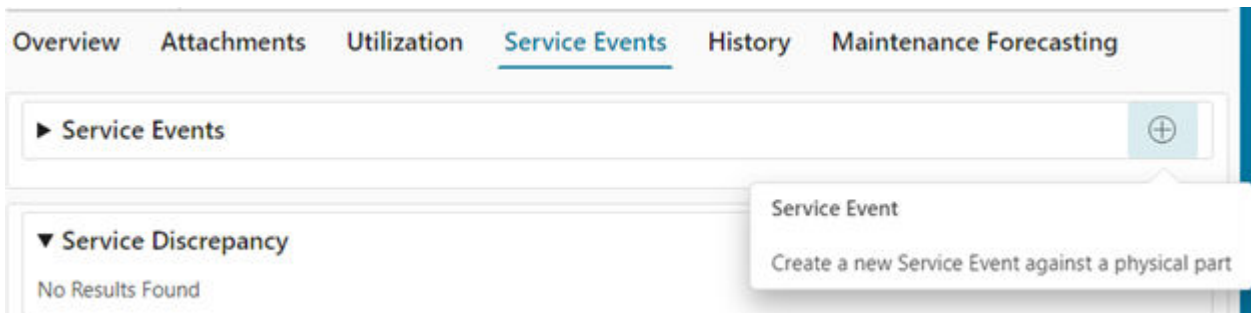
Service event

A *service event* is informational data that is captured as a result of service activity that an external source performs on a physical part. A service event captures information such as the service type, work scope, resource information, maintenance time, and cost.

When you create a service event, you can associate it to a service group or create it without a parent service group, but you must associate it to a single physical part. After a service event is approved, you can edit it, but you cannot delete it or add service data to it.

Create a service event

1. Select the physical part to which you want to associate the service event.
2. Click on the **Service Events** tab.
3. Select **Add** (+).



4. Enter information for the service event as needed.

Field name	Definition	Valid values
Name	Name of the service event (required). <i>It is recommended that you define a naming convention specific to corrective actions.</i>	Alphanumeric string (1–128 characters).
ID	Identification number of the service event.	Alphanumeric string (1–32 characters).

Field name	Definition	Valid values
Activity Number	Activity number of the service event.	Alphanumeric string (1–32 characters).
Purpose	Purpose of the service event.	Alphanumeric string (long string).
Category	Category of the service event.	Non-editable property.
Action Type	Type of service completed for this service event.	Select one of the following: <ul style="list-style-type: none"> • Overhaul • Inspection • Repair • Other
Authorized By	Name of the person who authorized the service.	Alphanumeric string (1–40 characters).
Work Start Date	Date when the work starts.	Click in the Work Start Date box and enter a date.
Needed By Date	Date when the work needs to be complete.	Click in the Needed By Date box and enter a date.
The following fields are available when you select the MORE PROPERTIES option in the Create Service Event dialog box.		
Zones	Zone where the service event occurred.	Alphanumeric string (1–256 characters).
Job Cards	Job cards associated to the service event.	Alphanumeric string (long string).
Work Location	Location where the work occurred.	Alphanumeric string (long string).
Signed Off By	Name of the person who signed approval for the service.	Alphanumeric string (1–40 characters).
Actual Labor Cost	Actual cost of the labor.	Numeric (float).
Actual Labor Hours	Actual hours of labor.	Numeric (float).
Actual Material Cost	Actual cost of the material.	Numeric (float).

Note:

You can remove the requirement to complete the **Activity Number** and **ID** fields in the **Create Service Event** dialog box using **Business Modeler IDE** functionality.

5. Click **Create**.

Once you create the service event, it appears in the list in the **Service Event** section.

Name	Completed	Category
SE01		Repair Category

Note:

You can add information related to the service event from this list.

Edit a service event

There are three ways that you can edit a service event:

- You can edit any of the information in the available columns from the list in the **Service Event** section.
- You can edit the service event from the **Information** dialog box.
- You can open the service event.

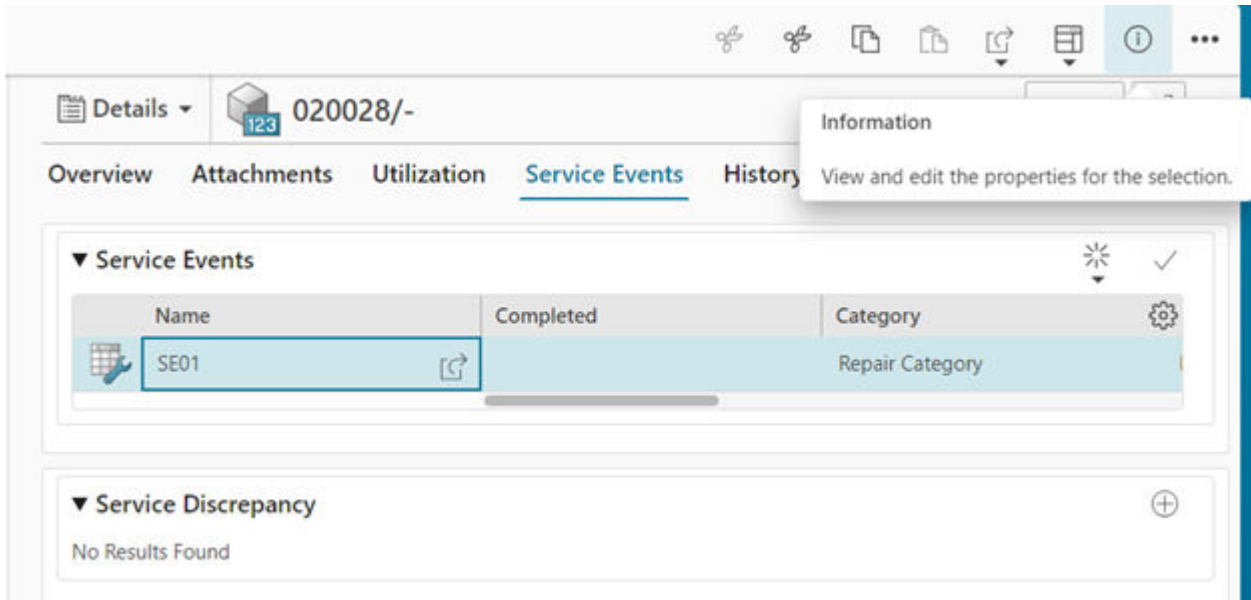
Edit a service event from list

1. Select the service event you want to edit from the list in the **Service Event** section.
2. Edit the information in the columns as needed.
3. Click **Save**.

Edit a service event from Information dialog box

1. Select the service event you want to edit from the list in the **Service Event** section.

- Click **Information** .




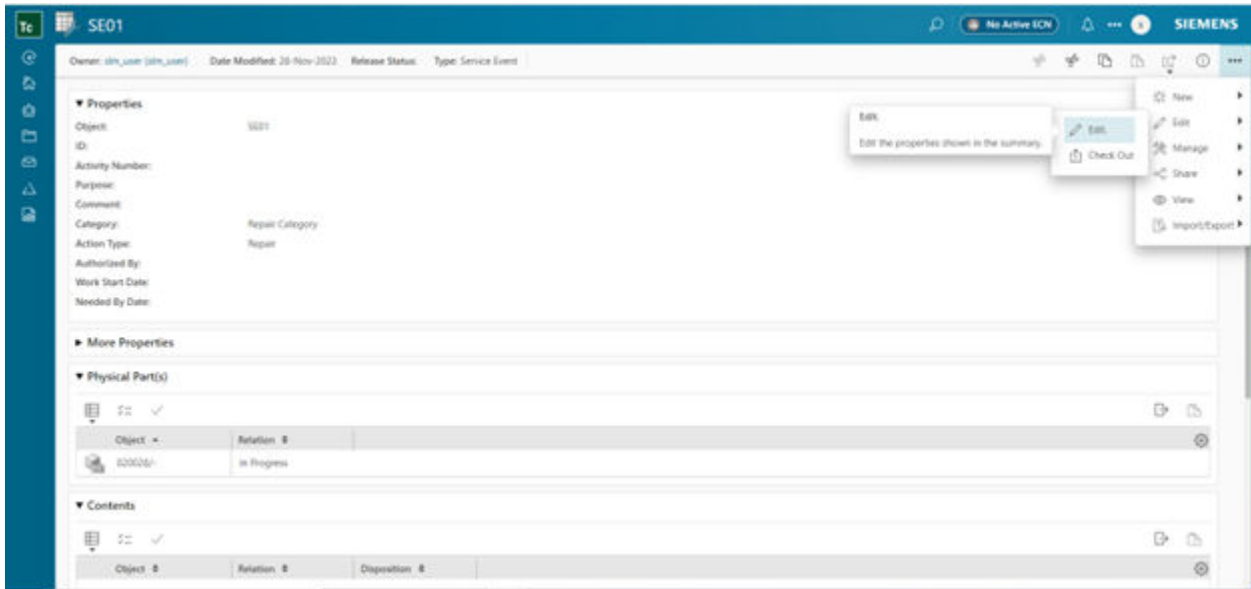
- Click **Edit** at the bottom of the **Information** dialog box.
- Edit the property fields as needed.
- Click **Save**.


Note:

In addition to the property fields, the **Information** dialog box includes the physical parts to which the service event is associated, associated contents, part movements, and part requests.

Open a service event for edit


- Select the service event you want to edit from the list in the **Service Event** section.
- Click **Open** .




3. Click **Edit** .
4. Edit the property fields as needed.
5. Click **Save**.

Move a service event to a different physical part

Sometimes you might need to move a service event from one part to another. For example, a service event may originally be assigned to a root part, but once the work is more clearly defined, the service event is applicable to a specific subassembly or part.

1. Select the service event you want to move.
2. Click **Cut** .


A message confirms the service event was cut and added to the clipboard.

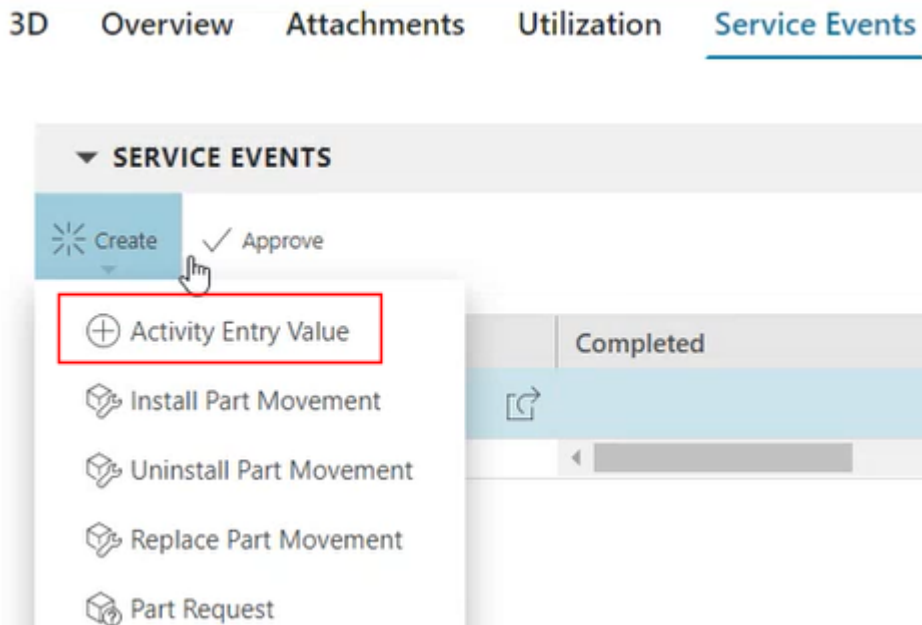
3. Select the physical part or subassembly to which you want to move the service event.
4. Click **Paste** .

The service event now appears in the list of service events under the newly selected part or subassembly.

Create an activity entry value

You can capture life, date, or observation characteristic type data on a service event for an associated physical part. You must create characteristic definitions on the neutral structure before you can capture this information on a service event. These characteristics are referred to as *activity entry values* on a service event and they record utilization information for the associated physical part. The utilization information for the physical part is not updated until the service event is approved. An activity entry value can be contained only within a service event.

1. From the **Service Events** tab, select the service event to which you want to add the activity entry values.
2. Click **Create**  and choose **Activity Entry Value**.



3. Enter information for the activity entry as needed.

Field name	Definition	Valid values
Name	Name of the activity entry value (required).	Click ▼ and select the activity entry name.
Description	Description of the activity entry value (required).	Alphanumeric string (1–240 characters).
Characteristic Value	Value of Life and Observation characteristics.	Alphanumeric string (1–40 characters).

Field name	Definition	Valid values
Characteristic Date	Value of the Date characteristics.	Click in the Characteristic Date box and enter a date.
Propagate	Determines whether to propagate the collected values down the physical part structure.	Select or clear the Propagate check box.

4. Click **Create** to apply the changes.

Review utilization values

The **Utilization** tab displays the utilization values that have been recorded in an approved service request.

1. Select the part for which you want to view the utilization values recorded for previously defined characteristics.
2. Select the **Utilization** tab.

3D Overview Attachments Utilization Service Events History >

▼ UTILIZATION

1

Characteristics Name	Unit	Time Since New
MaintenanceDate		
Temperature	deg	
RunningHours	km	1130.0

▼ LOG ENTRIES

2

Name	Recording
R3	11-May-2020
R2	11-May-2020
R1	11-May-2020


3

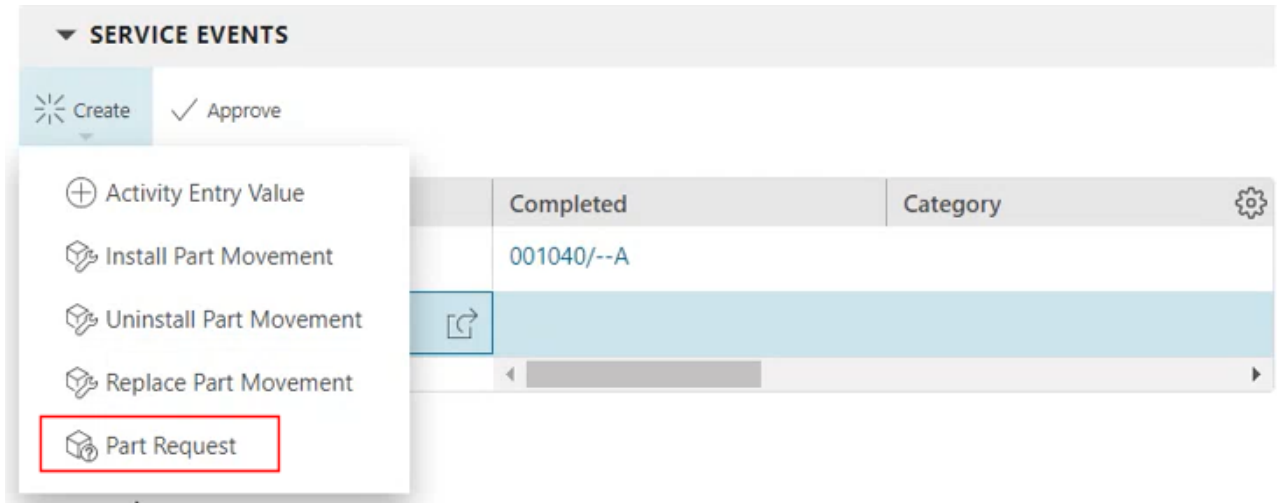
Characteristics Definition	Value
RunningHours	1000.0

- (1) The characteristics defined for the selected part and the utilization entries that have been recorded as a part of approved service events. The **Utilization** table displays the latest values of the **Observation** and **Date** characteristics, as well as the cumulative values of **Life** characteristics.
- (2) A list of the utilization entries for the selected part.
- (3) The entry values for the selected utilization entry.

Request part via service event

Create part request

- Select either the service event or the corrective action from the **Service Event** list and click **Create** .
- Select **Part Request**.



- In the **Part Request** dialog box, enter information as needed for the part movement.

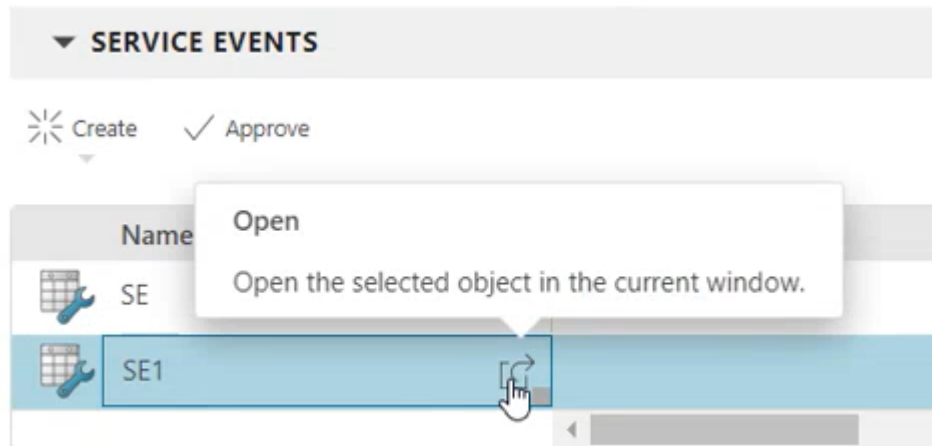
Field name	Definition	Valid values
Name:	The name of the part request (required).	Alphanumeric string (1–128 characters).
Description:	The description of the part request.	Alphanumeric string (1–240 characters).
Initiation Date:	The date the part request is created. If you do not enter a value for the action date, the date is set from the current date/time on the server.	Enter the date the part request is initiated.
Due Date:	The date the part is needed. If you do not enter a value for the action date, the date is set from the current date/time on the server.	Enter the date the part request is due.
Quantity Requested:	The number of parts you are requesting.	Numeric value.
Part Number:	The part number of the physical part you are requesting.	Alphanumeric string (1–128 characters).
Filter	Enter a text string to filter the part list.	
Part list	List of neutral or physical parts, including possible substitution parts, available for part movement.	

- Click **Part Request**.

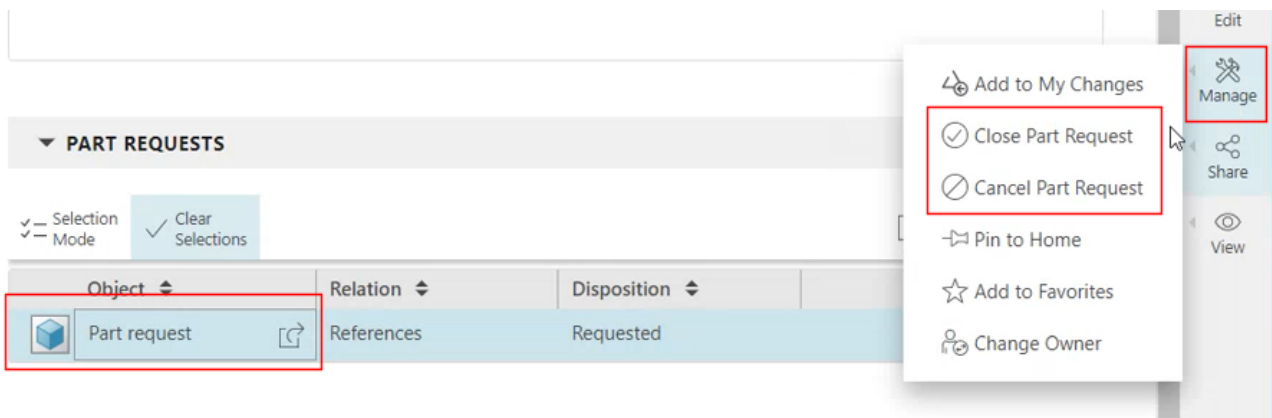
Resolve part request

Once the part request is created, you can close it as **complete** or cancel it.

1. **Open** the service event from the **Service Events** list.



2. Select the part request.



3. Click **Manage** .
4. Select either **Close Part Request** or **Cancel Part Request**.

Managing service discrepancies

Service discrepancies and fault codes

Discrepancies are irregularities or observations about the maintenance of assets or physical parts. Discrepancies can also identify if there was a failure with the physical part. You must create an

associated corrective action service event to address each service discrepancy. You can associate one or more fault codes to a discrepancy. When you create a service discrepancy, you must relate it to a physical part or a service event.

A service discrepancy can also contain fault information about the part. This fault information, or *fault code*, identifies an itemized fault or problem that a manufacturer has identified with a part. Physical parts can also report fault codes as a result of internal diagnostics.

Create a service discrepancy

- From the **Service Events** tab, select either a (1) physical part or a (2) service event with which to associate a service discrepancy, and click (3) **Create Service Discrepancy** (+).

The screenshot displays the SAP Service Lifecycle Management interface. The top navigation bar shows the part number '001039/800' and revision '001041/-'. The 'Service Events' tab is active. On the left, a tree view lists various parts, with '001041/-' (Sealing) highlighted and marked with a red '1'. On the right, the 'SERVICE EVENTS' table shows 'SE02' selected and marked with a red '2'. Below this, the 'SERVICE DISCREPANCY' section shows 'SD2' with a red '3' next to the 'Create Service Discrepancy' (+) button.


- Enter information for the following as needed.

Field name	Definition	Valid values
Selected Part	Part or service event to associate this service discrepancy with.	Automatically populated based on the part or service event selected before you choose Create Service Discrepancy .
Name	Name of the service discrepancy (required).	Alphanumeric string (1–128 characters).
ID	Identification number of the service discrepancy.	Alphanumeric string (1–32 characters).
Activity Number	Activity number of the service discrepancy.	Alphanumeric string (1–32 characters).


Field name	Definition	Valid values
Description	Description of the service discrepancy.	Alphanumeric string (1–240 characters).
Initiation Date	Date when the discrepancy is first recorded.	Click in the Initiation Date box and enter a date.
Severity	Severity level of the discrepancy.	Select one of the following: <ul style="list-style-type: none"> • Critical • Major • Minor
Is Failure	Indicates whether this discrepancy is a part failure.	true or false (default value).
Discovered By	Name of the person who discovered the discrepancy.	Alphanumeric string (1–40 characters). This field is automatically populated with the Teamcenter user's user-name.
Discovery Date	Date when the discrepancy was discovered.	Click in the Discovery Date box and enter a date. This field is automatically populated with the current date. An earlier date can be manually entered, but a future date is not allowed.
Due Date	Date when the corrective action work needs to be complete.	Click in the Due Date box and enter a date.
Fault Code	Associated fault codes for this service discrepancy.	Select a fault code from the list.

3. Click **Create**.

Displaying service discrepancies

In the **Service Discrepancy** list, the **Service Events** tab shows the service discrepancies associated with either the selected physical part or the selected service event. Parts or assemblies with discrepancies are designated by the discrepancy indicator .

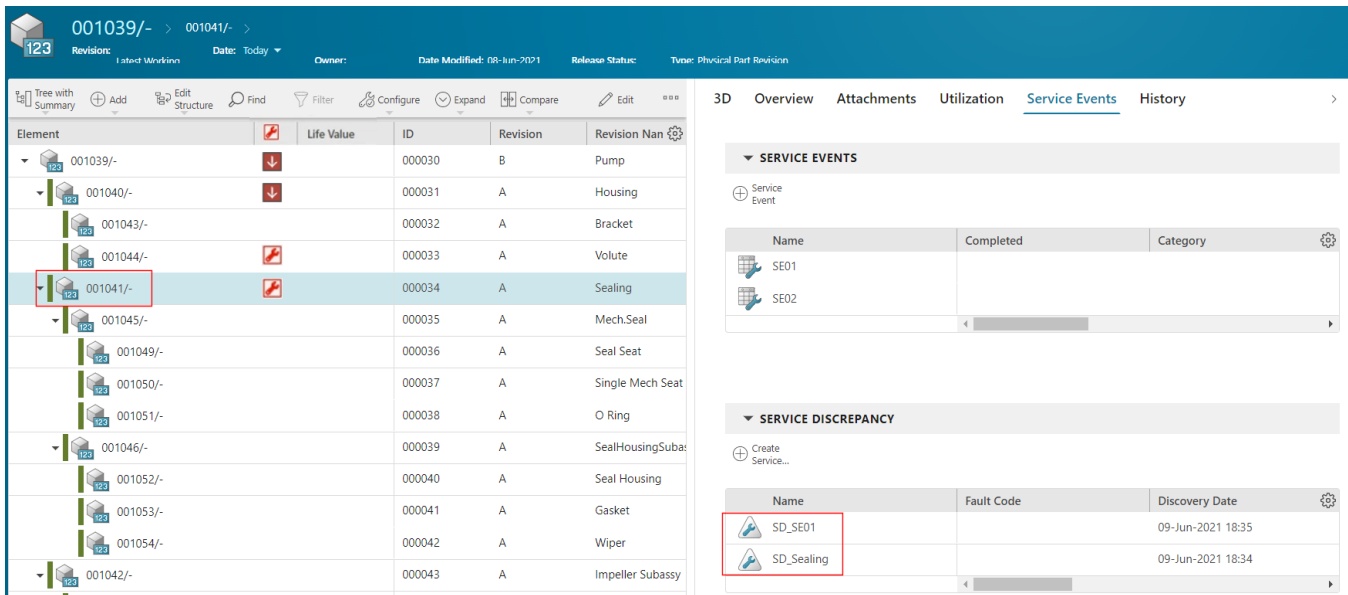
Note:

The roll up discrepancy indicator  is displayed on an assembly that includes one or more child parts with discrepancies.

Select the top root node and then click **Show Pending Service Actions On Parent**  to display the roll up icon.

Part related discrepancies

When you select a part in the tree structure, the service discrepancies associated with the part are shown in the **Service Discrepancy** list.





Element	Life Value	ID	Revision	Revision Nan
001039/-		000030	B	Pump
001040/-		000031	A	Housing
001043/-		000032	A	Bracket
001044/-		000033	A	Volute
001041/-		000034	A	Sealing
001045/-		000035	A	Mech.Seal
001049/-		000036	A	Seal Seat
001050/-		000037	A	Single Mech Seat
001051/-		000038	A	O Ring
001046/-		000039	A	SealHousingSuba
001052/-		000040	A	Seal Housing
001053/-		000041	A	Gasket
001054/-		000042	A	Wiper
001042/-		000043	A	Impeller Subassy

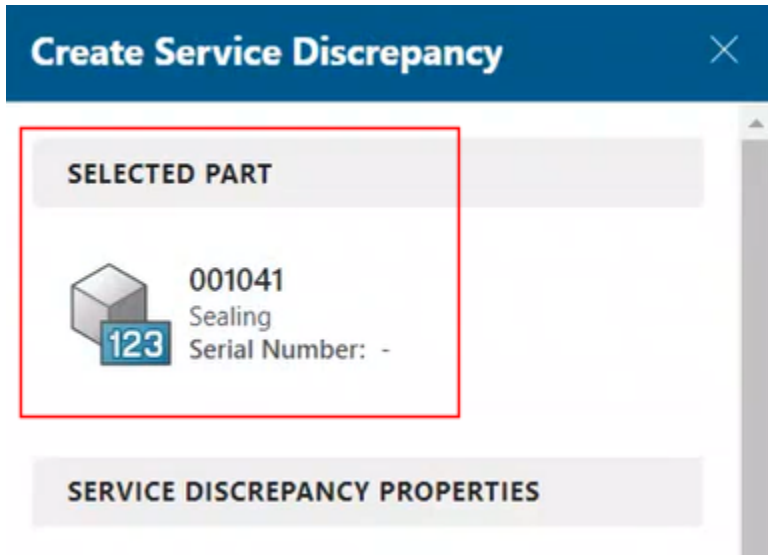
Name	Completed	Category
SE01		
SE02		

Name	Fault Code	Discovery Date
SD_SE01		09-Jun-2021 18:35
SD_Sealing		09-Jun-2021 18:34

Note:

Select **Table Settings**  to open the service discrepancy column in the table.

To associate a service discrepancy with a part, you select the part and then click **Create Service Discrepancy**  on the **Service Discrepancy** banner. The **Create Service Discrepancy** dialog box is automatically populated with the selected part information.



Service event-related discrepancies

When you select a part and a service event in the **Service Events** tab, only the service discrepancies that are common to both are shown in the **Service Discrepancy** list.

Element	Life Value	ID	Revision	Revision Name
001039/-		000030	B	Pump
001040/-		000031	A	Housing
001043/-		000032	A	Bracket
001044/-		000033	A	Volute
001041/-		000034	A	Sealing
001045/-		000035	A	Mech.Seal
001049/-		000036	A	Seal Seat
001050/-		000037	A	Single Mech Seat
001051/-		000038	A	O Ring
001046/-		000039	A	SealHousingSuba
001052/-		000040	A	Seal Housing
001053/-		000041	A	Gasket
001054/-		000042	A	Wiper

Name	Completed	Category
SE01		
SE02		


Name	Fault Code	Discovery Date
SD_SE01		09-Jun-2021 18:35

To associate a service discrepancy with a service event, you select the service event and then select **Create Service Discrepancy** (+) on the **Service Discrepancy** banner. The **Create Service Discrepancy** dialog box is automatically populated with the selected service event information.




Add a fault code

Add an existing fault code

1. Select the service discrepancy to which you want to add a fault code.
2. Click **Add**  on the **Service Discrepancy** banner.

Note:


The **Add**  icon includes different commands, depending on the object you select before you click the icon. When you select a service discrepancy, the available commands are:

- Add Fault Code
- Corrective Action

3. Select **Add Fault Code**.
4. Click on the **Search** tab.
5. Enter a text string to initiate the search.
6. Select an existing fault code and click **Add**.

Add a new fault code

1. Select the service discrepancy to which you want to add a fault code.


- Click **Add**  on the **Service Discrepancy** banner.
- Select **Add Fault Code**.
- Click on the **New** tab.
- Enter the following fault code information as needed.

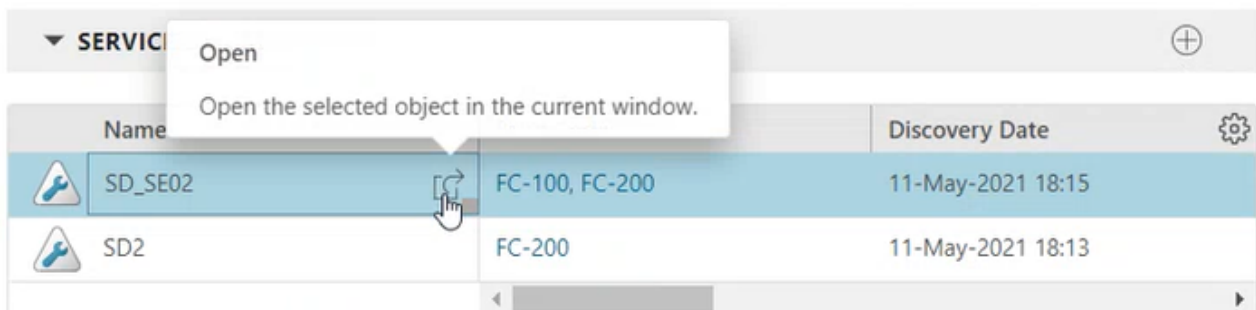
Field name	Definition	Valid values
Name	Name of the fault code (required).	Alphanumeric string (1–128 characters).
Description	Description of the fault code.	Alphanumeric string (1–240 characters).

- Click **Create**.

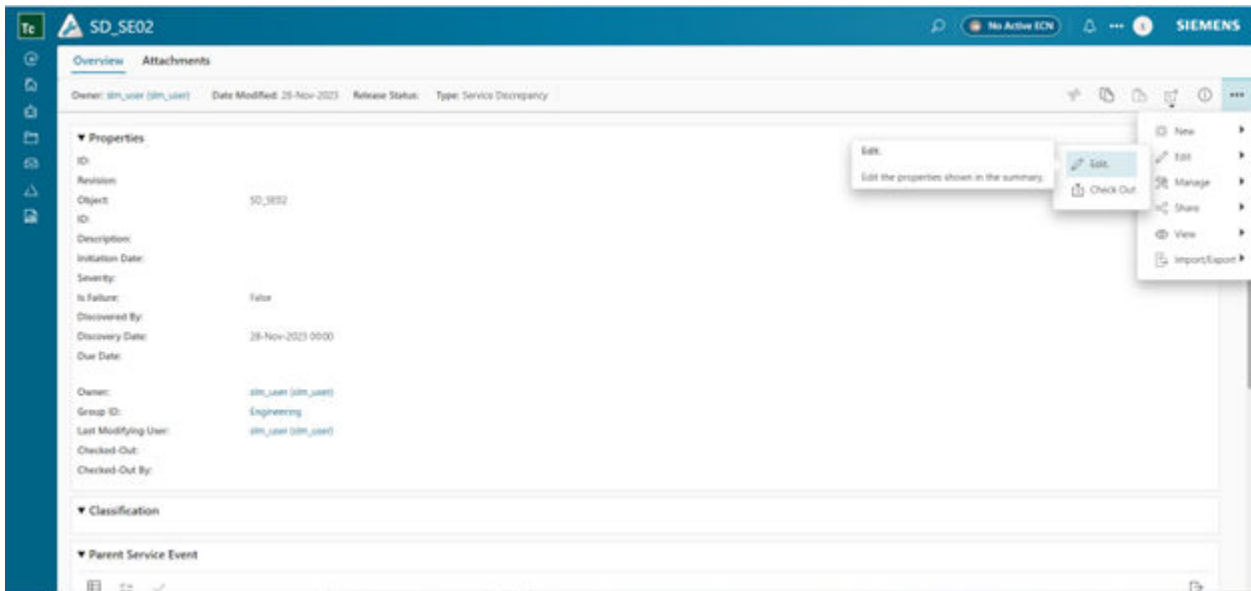
The newly created fault code is visible in the **Fault Code** column and is available as an existing fault code.


Edit service discrepancy

- Select the service discrepancy you want to edit by clicking **Open** .




- From the summary view, click **Edit** , and select **Start Edit**.



3. Add or change the information in the summary view and click **Edit** , and select **Save Edits**.

Note:

You are also able to add attachments from the summary view.



4. Click on the **Attachments** tab and click **Add** .

Note:


You also can edit a service discrepancy from the information window by clicking **Edit**.

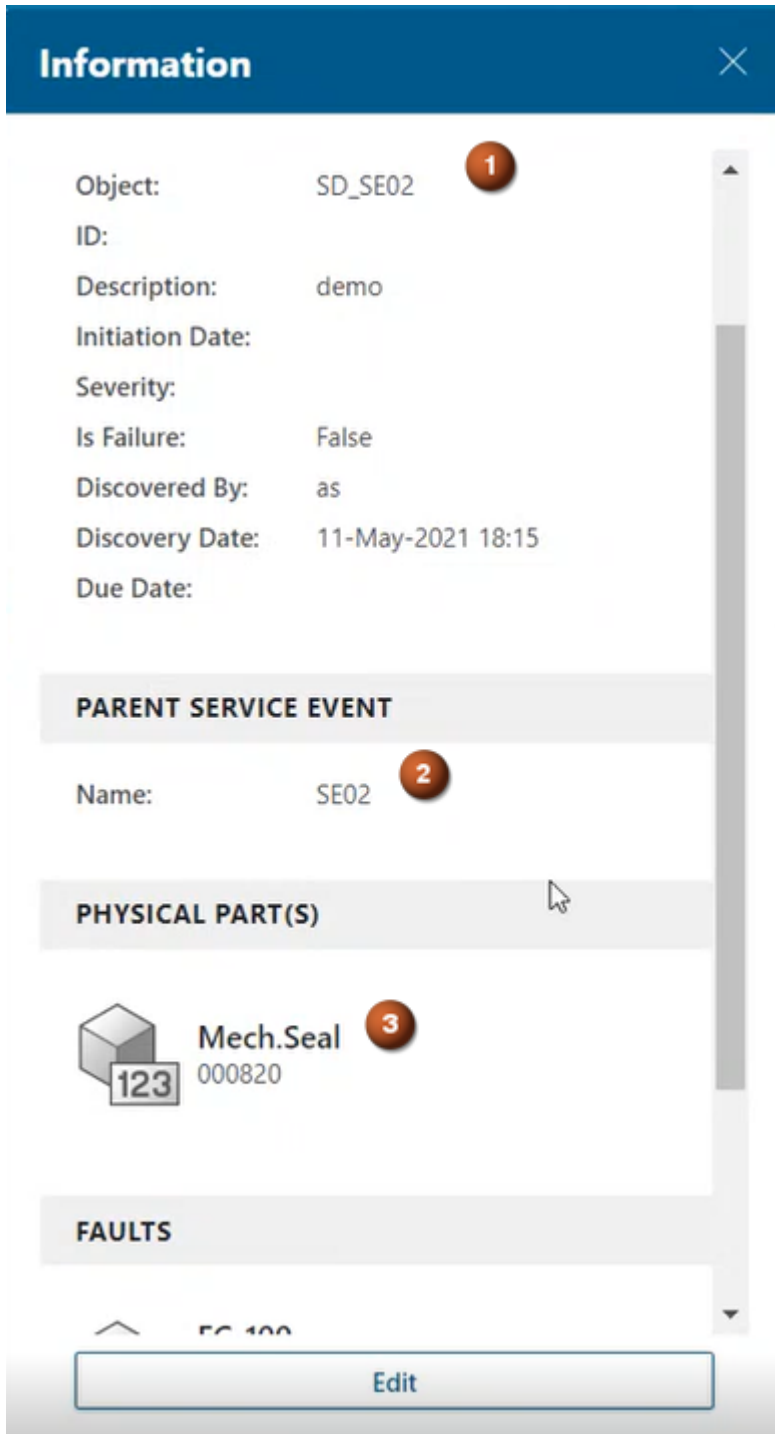
Move service discrepancy

Sometimes you need to move a service discrepancy from one part to another, or from the physical part to a service event associated with the same part. You can cut the service discrepancy from the part and paste it to a service event, or you can cut the service discrepancy from one part and paste it to another part. The service event to which the service discrepancy is associated does not change, however.

1. Select the service discrepancy you want to move and click **Cut** .
2. Select the part to which the service discrepancy should be associated.
3. Click **Paste** .

View service discrepancy information

1. Select the service discrepancy and click **Information** .



The screenshot shows a dialog box titled "Information" with a close button (X) in the top right corner. The dialog contains the following information:

- Object:** SD_SE02 (marked with a red circle 1)
- ID:**
- Description:** demo
- Initiation Date:**
- Severity:**
- Is Failure:** False
- Discovered By:** as
- Discovery Date:** 11-May-2021 18:15
- Due Date:**

Below this information is a section titled "PARENT SERVICE EVENT" containing:

- Name:** SE02 (marked with a red circle 2)

Next is a section titled "PHYSICAL PART(S)" with a mouse cursor pointing to it. It contains:


- An icon of a cube with the number 123 on it.
- Mech.Seal** (marked with a red circle 3)
- 000820

Below this is a section titled "FAULTS" with a mouse cursor pointing to it. At the bottom of the dialog, there is an "Edit" button.


The service discrepancy is associated to these objects:

- (1) Service discrepancy name
- (2) Service event name
- (3) Physical part

Create corrective action

1. Select the service discrepancy to which you want to add a corrective action.
2. Click **Add**  on the **Service Discrepancy** banner.

Note:

The **Add**  icon includes different commands depending on the object you select before you click the icon. When you select a service discrepancy, these commands are available:

- Add Fault Code
- Corrective Action




3. Select **Corrective Action**.
4. Enter the corrective action information as needed.

Field name	Definition	Valid values
Name	Name of the corrective action (required). <i>It is recommended that you define a naming convention specific to corrective actions.</i>	Alphanumeric string (1–128 characters).
ID	Identification number of the corrective action.	Alphanumeric string (1–32 characters).
Activity Number	Activity number of the corrective action.	Alphanumeric string (1–32 characters).
Purpose	Purpose of the corrective action.	Alphanumeric string (long string).
Category	Category of the corrective action.	Non-editable property.
Action Type	Type of service completed for this corrective action.	Select one of the following: <ul style="list-style-type: none"> • Overhaul • Inspection • Repair

Field name	Definition	Valid values
		<ul style="list-style-type: none"> • Other
Authorized By	Name of the person who authorized the service.	Alphanumeric string (1–40 characters).
Work Start Date	Date when the work starts.	Click in the Work Start Date box and enter a date.
Needed By Date	Date when the work needs to be complete.	Click in the Needed By Date box and enter a date.
<p>The following fields are available when you select the MORE PROPERTIES option in the Create Service Event dialog box.</p>		
Zones	Zone where the corrective action occurred.	Alphanumeric string (1–256 characters).
Job Cards	Job cards associated to the corrective action.	Alphanumeric string (long string).
Work Location	Location where the work occurred.	Alphanumeric string (long string).
Signed Off By	Name of the person who signed approval for the service.	Alphanumeric string (1–40 characters).
Actual Labor Cost	Actual cost of the labor.	Numeric (float).
Actual Labor Hours	Actual hours of labor.	Numeric (float).
Actual Material Cost	Actual cost of the material.	Numeric (float).

5. Click **Create**.

Once you create the corrective action, it appears in the list in the **Service Event** section and in the service discrepancy table.

▼ SERVICE EVENTS		
Name	Completed	Category 
 CA03		
 SE03		

Service data approval

To finalize any changes to the physical structure, such as part movements or activity entry value updates, you must approve service data. You can approve service data manually, or you can submit the service data through an approval workflow process. If there are any errors during the approval, all changes made during the approval process are rolled back and the process is terminated.

- **Service events**

Approve a service event with a simple manual approval or submit it to a workflow.

- A service event can be approved individually.
- A service event is automatically approved when all of the service discrepancies associated with the service event are approved.

- **Service discrepancies**

Approve a service discrepancy with a simple manual approval or submit it to a workflow.

- A service discrepancy can be approved individually.
- A service discrepancy can be approved only if it has an associated corrective action service event.
- All service discrepancies associated with a service event are automatically approved when the service event is approved, if corrective actions are defined for the discrepancies.

- **Corrective actions**

Approve a corrective action individually with a simple manual approval or submit it to a workflow.

- A corrective action can be approved individually.

- All corrective actions associated with a service discrepancy are automatically approved when the service discrepancy is approved.

Note:

Service events can be approved only by a user who shares the same role as the creating user.

After the service data is approved, the system:

- Performs all related operations, such as part movements.
- Sets the approval attribute for the approved service data to **Approved**.
- Removes the **In-Process** relationship between each transaction element and the related physical part master, and adds a **Completed** relationship to the physical part revision.
- Releases the related physical structure.
- Sets the date and time of the last overhaul to the completion date and time of the service event, if the service event is in the **Overhaul** category.
- Sets the date and time of the last repair to the completion date and time of the service event, if the service event is in the **Repair** category.
- Locks the service data objects, and you cannot add additional information.

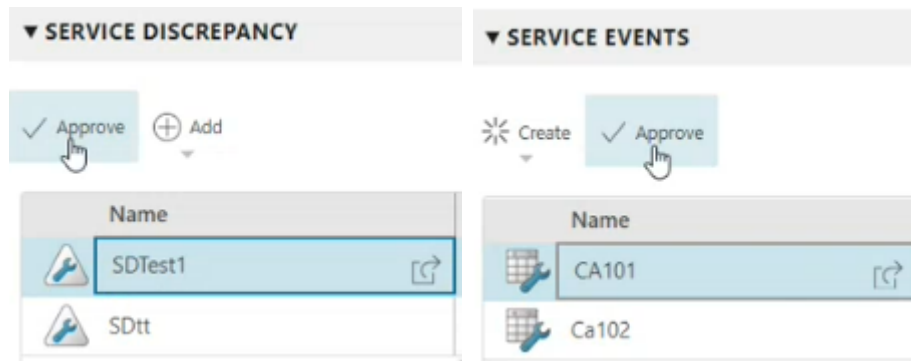
Approve service data


Approve service data to finalize changes to the physical structure, such as part movements or activity value updates.

You can approve service data manually, or you can submit the service data through an approval workflow process.

Procedure

1. To approve service data, do one of the following:
 - Select the service event, service discrepancy, or corrective action that you want to approve and click **Approve** ✓.



- Click **Manage**  and select **Submit to Workflow** to route the service event or corrective action that you want to approve to a workflow that uses the **SERVICEPROCESSING-approve-service-structure** workflow handler.

Service event part movement

Initiating service event related part movement

Part movement is a record of each physical part that is installed, replaced, or uninstalled as a result of a service event, or more frequently, as a part of a corrective action.

You can create the following types of part movements.


Type of Part Movement	Description
Uninstall	An <i>uninstall</i> part movement uninstalls a physical part from the physical structure.
Install	An <i>install</i> part movement installs an existing or new physical part into the physical structure.
Replace	A <i>replace</i> part movement uninstalls a part from a physical structure and installs an existing or new replacement physical part into the physical structure.

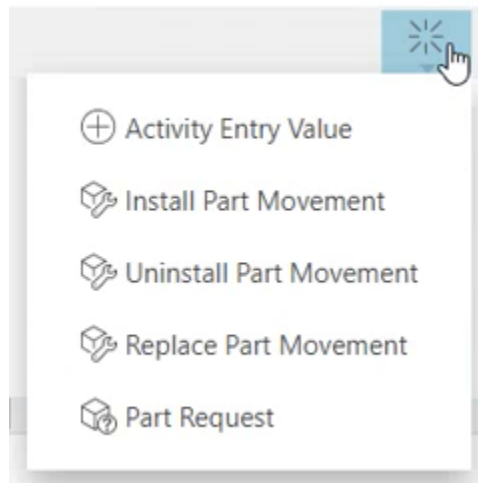
Part movements can be categorized as traceable or untraceable. Traceable part movements are necessary for parts that affect the physical structure. The changes to the physical structure from a traceable part movement are not applied until the parent service event is approved. Untraceable part movements capture only the part number and serial number of the physical part and are used for parts that do not affect the physical structure, such as a filter change.

Part movements must be **approved** to execute the changes to the physical structure. If the approval fails, all changes are rolled back and the process is terminated.


The install and replace part movement contains a **New** option.

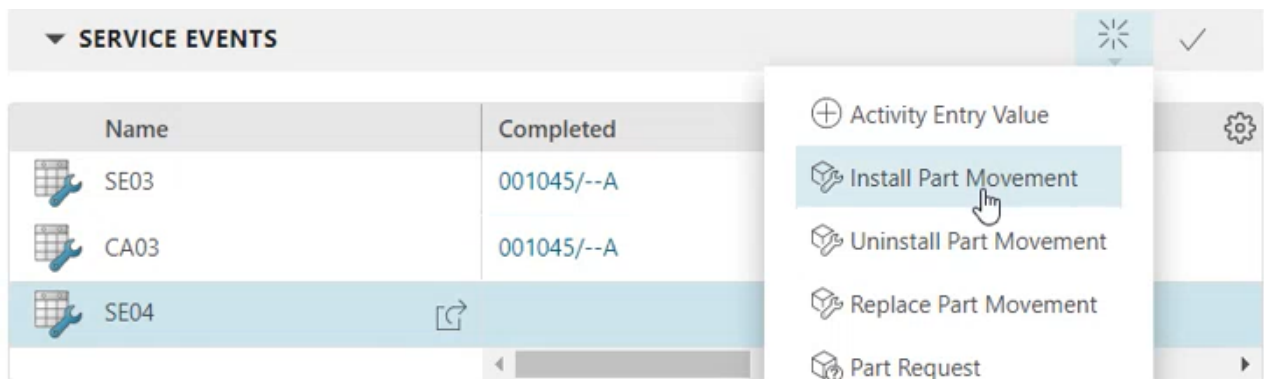
- If you select **New**, you must specify an existing neutral part to be used as the basis for the new physical part. After approval, the new physical part is created and used for the installation or replacement.
- If you do not select **New**, you must specify an existing physical part. After approval, the specified physical part is used for the installation or replacement.

You initiate each action by selecting either the service event or the corrective action from the **Service Event** list and clicking **Create** . Then you select the desired action from the list.



Install part via service event

1. Select either the service event or the corrective action from the **Service Event** list and click **Create** .
2. Select **Install Part Movement**.




3. In the **Create Part Movement** dialog box, enter information as needed for the part movement.

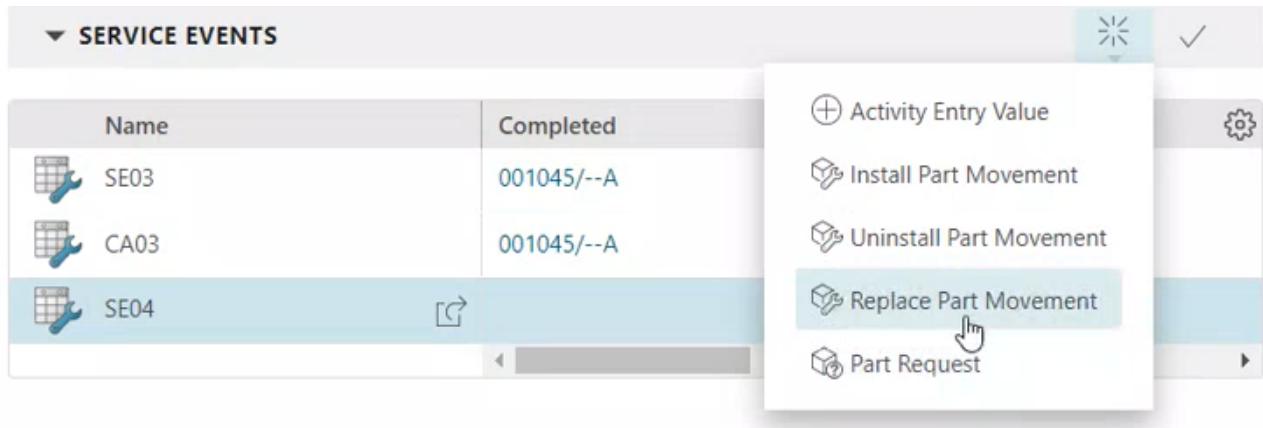
Field name	Definition	Valid values
Service Event:	The parent service event associated to this part movement (required).	This field is automatically populated.
Name:	The name of the part movement (required).	Alphanumeric string (1–128 characters).
Description:	The description of the part movement.	Alphanumeric string (1–240 characters).
Traceable:	Indicates whether this part movement is for a part that affects the physical structure. If not selected, the system captures only the part number and serial number of the physical part being installed.	Selected (default value) or not selected.
Extra To Design:	Indicates whether this part movement involves a part that was not part of the design.	Selected or not selected (default value).
Approved Deviation:	Determines whether this part movement is an approved deviation.	Selected or not selected (default value).
Action Date:	The date of the part installation. If you do not enter a value for the action date, the date is set from the current date/time on the server where the part movement is created.	Enter the date the part is installed.
Parent Physical Structure:	The physical part you are installing.	Select the part from the structure on the left.
Usage Name:	Usage name for the installed physical part. Display the usage (position) of the part that you select. You are only able to modify this field if the Extra To Design is selected.	Usage (position) of the part selected.
New:	Indicates whether this part exists as a neutral part in the database and does not have a realized physical part.	Selected or not selected (default value).
Physical Part:/ Neutral Part:	Physical Part is only valid for the following conditions:	Selected from the list of physical or neutral parts at the bottom of the dialog box.

Field name	Definition	Valid values
	<ul style="list-style-type: none"> • New is not selected, indicating the physical part selected for the install already exists. • Traceable is selected, indicating it is traceable part movement. <p>Neutral Part is only valid if New is selected indicating the neutral part does <i>not</i> have a realized physical part.</p> <p>The neutral part that is used to create the new physical part to be installed.</p>	
Serial Number:	<p>The serial number of the new physical part if it is a serialized part.</p> <p>This field is automatically populated if New is not selected and Traceable is selected.</p> <p>The Serial Number is editable if New is selected and Traceable is not selected.</p>	Alphanumeric string (1–128 characters).
Manufacture ID:	<p>The manufacturer's ID of the new physical part.</p> <p>This field is automatically populated if New is not selected.</p> <p>The Manufacture ID is editable if New is selected and Traceable is not selected.</p>	Alphanumeric string (1–128 characters).
Lot Number:	<p>The lot number of the new physical part.</p> <p>This field is automatically populated if New is not selected.</p> <p>The Lot Number is editable if New is selected and Traceable is not selected.</p>	Alphanumeric string (1–128 characters).
Part Number:	<p>The part number of the new physical part. The field is automatically populated if Traceable is selected.</p>	Alphanumeric string (1–128 characters).
Filter	Enter a text string to filter the part list.	
Part list	List of neutral or physical parts, including possible substitution parts, available for part movement.	

4. Click **Install Part Movement**.

Replace part via service event

1. Select either the service event or the corrective action from the **Service Event** list and click **Create** .
2. Select **Replace Part Movement**.



3. In the **Replace Part Movement** dialog box, enter information as needed for the part movement.


Field name	Definition	Valid values
Service Event:	The parent service event associated to this part movement (required).	This field is automatically populated.
Name:	The name of the part movement (required).	Alphanumeric string (1–128 characters).
Description:	The description of the part movement.	Alphanumeric string (1–240 characters).
Action Date:	The date of the part installation.	Enter the date the part is installed.
	<p>Note:</p> <p>If you do not enter a value for the action date, the date is set from the current date/time on the server where the part movement is created.</p>	
Parent Physical Element:	The parent of the selected physical part you are replacing.	Select the part from the structure on the left.
Usage Name:	Usage name for the installed physical part. Display the usage (position) of the part that you select.	Usage (position) of the part selected.

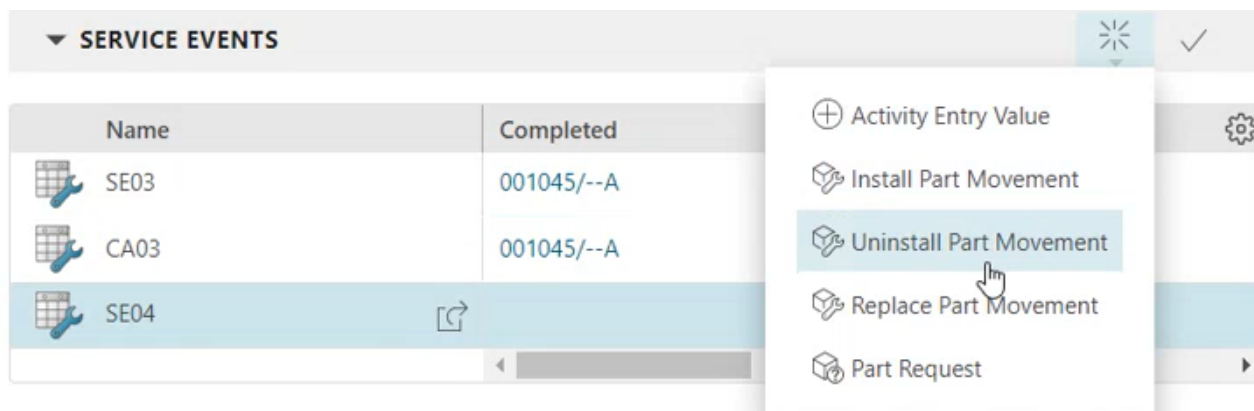
Field name	Definition	Valid values
	You are able to modify this field only if the Extra To Design is selected.	
Traceable:	Indicates whether this part movement is for a part that affects the physical structure. If set to false, the system captures only the part number and serial number of the physical part being installed.	Selected (default value) or not selected.
Approved Deviation:	Indicates whether this part movement is an approved deviation.	Selected or not selected (default value).
New:	Indicates whether the replacement part exists as a neutral part in the database and does not have a realized physical part.	Selected or not selected (default value).
Physical Part:/ Neutral Part:	<p>Physical Part is only valid for the following conditions:</p> <ul style="list-style-type: none"> • New is not selected, indicating the physical part selected for the install already exists. • Traceable is selected, indicating it is traceable part movement. <p>Neutral Part is only valid if New is selected, indicating the neutral part does <i>not</i> have a realized physical part.</p> <p>The neutral part that is used to create the new physical part to be installed.</p>	Selected from the list of physical or neutral parts at the bottom of the dialog box.
Serial Number:	<p>The serial number of the new physical part if it is a serialized part.</p> <p>This field is automatically populated if New is not selected and Traceable is selected.</p> <p>The Serial Number is editable if New is selected and Traceable is not selected.</p>	Alphanumeric string (1–128 characters).
Manufacture ID:	<p>The manufacturer's ID of the new physical part.</p> <p>This field is automatically populated if New is not selected.</p>	Alphanumeric string (1–128 characters).

Field name	Definition	Valid values
	The Manufacture ID is editable if New is selected and Traceable is not selected.	
Lot Number:	The lot number of the new physical part. This field is automatically populated if New is not selected. The Lot Number is editable if New is selected and Traceable is not selected.	Alphanumeric string (1–128 characters).
Uninstall Location:	The physical location where the part is uninstalled.	Click ▼ and select an existing location or click in the box and enter a new location.
Part Number:	The part number of the replacement physical part. The field is automatically populated if Traceable is selected.	Alphanumeric string (1–128 characters).
Filter	Enter a text string to filter the part list.	
Part list	List of neutral or physical parts, including possible substitution parts, available for part movement.	

4. Click **Replace Part Movement**.

Uninstall part via service event

1. Select either the service event or the corrective action from the **Service Event** list and click **Create** .
2. Select **Uninstall Part Movement**.



3. In the **Uninstall Part Movement** dialog box, complete the following information for the part movement.

Field name	Definition	Valid values
Service Event:	The parent service event associated to this part movement (required).	This field is automatically populated.
Name:	The name of the part movement (required).	Alphanumeric string (1–128 characters).
Description:	The description of the part movement.	Alphanumeric string (1–240 characters).
Traceable:	Determines whether this part movement is for a part that affects the physical structure. If set to false, the system only captures the part number and serial number of the physical part being installed.	Selected (default value) or not selected.
Part Number:	The part number of the physical part you are uninstalling. The field is automatically populated if Traceable is selected.	Alphanumeric string (1–128 characters).
Uninstall Location:	The physical location of the uninstalled part.	Click ▼ and select an existing location or click in the box and enter a new location.
Usage Name:	Usage name for the uninstalled physical part.	
Serial Number:	The serial number of the new physical part if it is a serialized part. This field is automatically populated if Traceable is selected. The Serial Number is editable if Traceable is not selected.	Alphanumeric string (1–128 characters).
Lot Number:	The lot number of the new physical part. This field is automatically populated if New is not selected. The Lot Number is editable if New is selected and Traceable is not selected.	Alphanumeric string (1–128 characters).
Manufacture ID:	The manufacturer's ID of the new physical part.	Alphanumeric string (1–128 characters).

Field name	Definition	Valid values
	<p>This field is automatically populated if New is not selected.</p> <p>The Manufacture ID is editable if New is selected and Traceable is not selected.</p>	


4. Click **Uninstall Part Movement**.

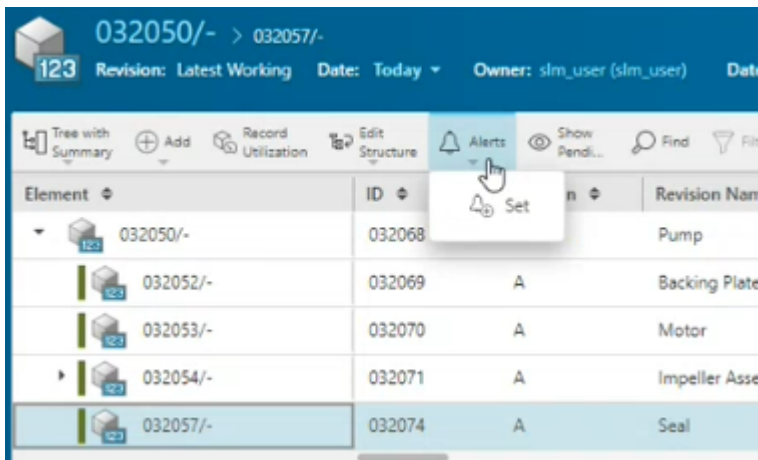
16. Creating and viewing alerts

Set discrepancy alert

Create an alert that notifies you of a new discrepancy for a specific part.

An *alert* is a personal notification. Only the individual who sets the alert is notified when a discrepancy is created.

1. Select a part in a physical structure.
2. Click the **Alerts**  icon.



3. Select **Set** .

The **Set Alerts** window is displayed.

4. Choose **Discrepancy**.
5. Click **Set**.

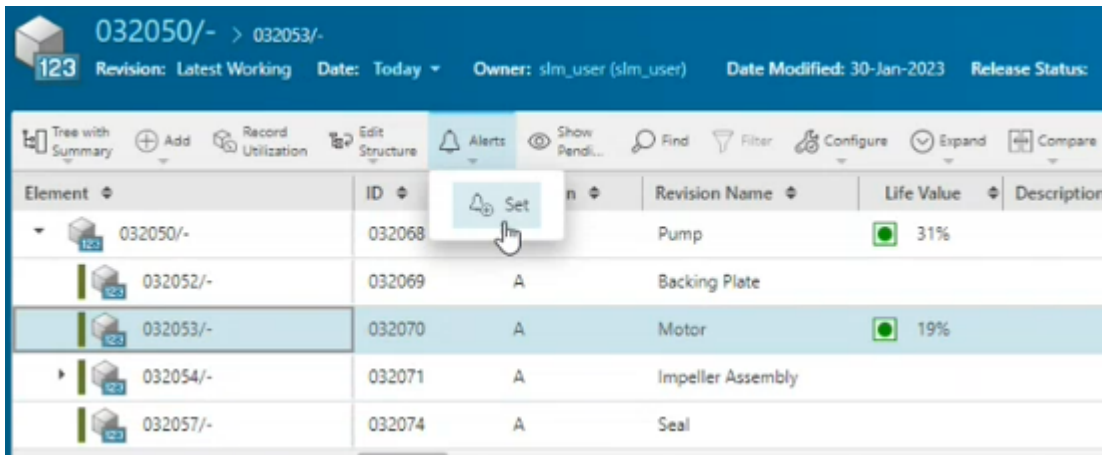
A message confirms that an alert is set.

Create repair notice alert based on life value

Create an alert to notify you when the life value of a part is above 90%, which indicates scheduled maintenance is needed soon.

An *alert* is a personal notification. Only the individual who sets the alert is notified.

1. Select a part in a physical structure.
2. Click the **Alerts**  icon.




3. Select **Set**.

The **Set Alerts** window is displayed.

4. Choose **90% Utilization**.
5. Click **Set**.

A message confirms that an alert is set.

Access alerts

Access alerts from the **Alerts**  icon or from either the **News Feed** tab or the **My Subscriptions** tab in the **Subscription Manager**.

Note:

Subscription Manager must be installed to access alerts from the **My Subscriptions** tab or the **News Feed** tab.

The **News Feed** tab displays alerts that you receive, for all subscribed parts.


The **My Subscriptions** tab displays subscription events set by you.

The **Event Type** for a discrepancy alert subscription is *Attach*.

The **Event Type** for a life value alert subscription is *Utilize*.

You can view the details of an alert by opening it from the **Alerts**  icon or from either the **News Feed** tab or the **My Subscriptions** tab in the **Subscription Manager**.

Access alerts from the Alerts icon

If you have set an alert, the **Alerts**  icon includes a bubble with the numeral indicating the number of alerts.

1. Click the **Alerts**  icon.

A window displays with the alert listed.




2. Click the alert link in the window to display details.

▼ PROPERTIES

Message Subject: Subscription 032057/--A-Seal Subscribed: Attach Event Has Been Triggered for Object Seal
Priority: High
Event Type: Attach
Sent Date: 30-Jan-2023 19:12
Receiver: slm_user (slm_user)
Message Body: Subscription Message
Subscription Name: 032057/--A-Seal Subscribed
Subscription object: 032057/--Seal
Subscription object type: Physical Part
Notification for event: Attach
Event initiated by: manny
Time of event: 30-Jan-2023 19:12
Site name: IMC--1734828468
Related Objects: 032057/--A-Seal Subscribed


▼ TARGET OBJECT

List Selection Mode Select All


 **Seal**
032074

▼ SUBSCRIPTION OBJECT

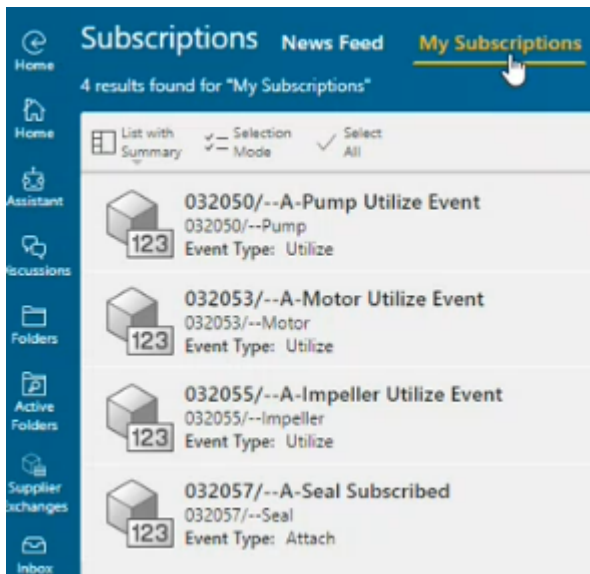
List Selection Mode Select All


 **032057/--A-Seal Subscribed**
032057/--Seal
Event Type: Attach

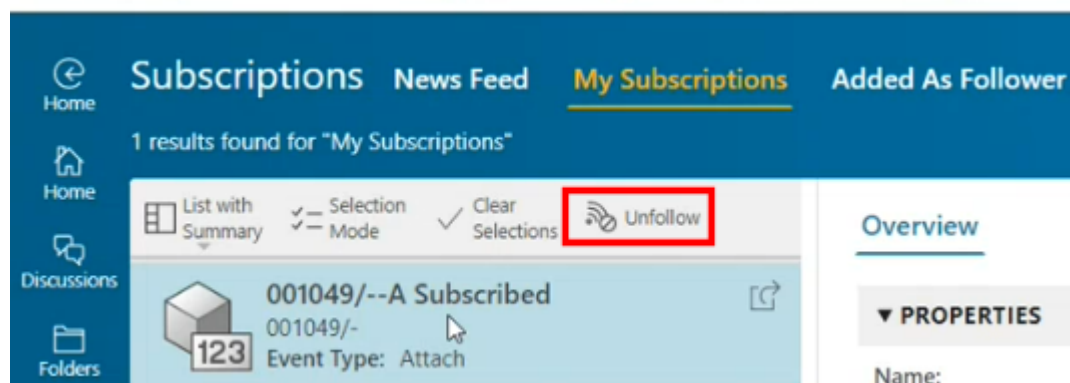
Access alerts from the My Subscriptions tab

1. Navigate to the Active Workspace **Home** page.
2. Click the **Subscription**  tile.
3. Click the **My Subscriptions** tab.


The results panel displays a list of the parts for which you have set alerts.



- (Optional) To unfollow a subscription, select the subscription and click **Unfollow** .



Access alerts from the New Feed tab

- Navigate to the Active Workspace **Home** page.
- Click the **Subscription**  tile.
- Click the **New Feed** tab.

The results panel displays a list of the parts for which you have set alerts.

The screenshot displays a software interface for managing subscriptions. At the top, the 'Subscriptions' section is active, showing '11 results found for "News Feed"'. A 'Filters' sidebar is open on the left, allowing users to filter by property, message type, event, and read/unread status. The main content area shows a list of subscription alerts, each with a '123' icon, a title, a sent date, and a priority level.

Filters

Filter by Property

▼ MESSAGE TYPE

- Subscription Manager (11)

▼ EVENT

- Attach (2)
- Utilize (9)

▼ READ/UNREAD

- Read (10)

Subscription Alerts:

- Subscription 032057/--A-Seal Subsc... [G]
 - 032057/--Seal
 - Sent Date: 30-Jan-2023 19:13
 - Priority: High
- Subscription 032057/--A-Seal Subsc...
 - 032057/--Seal
 - Sent Date: 30-Jan-2023 19:12
 - Priority: High
- Subscription 032055/--A-Impeller U...
 - 032055/--Impeller
 - Sent Date: 30-Jan-2023 18:43
 - Priority: High
- Subscription 032055/--A-Impeller U...
 - 032055/--Impeller
 - Sent Date: 30-Jan-2023 16:54
 - Priority: High