

Using Teamcenter

**Student Activities
August 2013
MT25150 – Teamcenter 10.1**

**Publication Number
MT25150_W_101**

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Contents

Proprietary and restricted rights notice; Trademarks	2
Introduction to Teamcenter	1-1
Start Teamcenter and open the My Teamcenter perspective	1-1
Working in My Teamcenter	2-1
Find items and add them to a favorites folder	2-1
Create and rename a folder	2-5
Working with items in Teamcenter	3-1
Create an item and edit properties	3-1
Create a new item based on existing data	3-4
Create a new item revision	3-6
Viewing and modifying object properties	4-1
Customize the Details view data display	4-1
Print information about your data	4-4
Creating and managing datasets	5-1
Create a dataset	5-1
Create a dataset using a drag and drop method	5-3
Import a dataset	5-5
Modify a dataset and work with versions	5-7
Applying data security practices	6-1
Change your group setting	6-1
Use implicit and explicit checkout	6-3
View the checkout history of an object	6-6
View access privileges for an object	6-7
Performing and managing searches	7-1
Perform an advanced search	7-1
Rename and save a search	7-3
Perform a search for checked-out objects	7-5
Generate a report of items by status	7-11
Generate a BOM structure report	7-14
Working in projects	8-1
Investigate available projects	8-1
Add an object to a project	8-3
Find objects in a project	8-6

Contents

Opening and viewing product structures	9-1
View a product structure	9-1
Controlling assembly configuration views	10-1
Configure product structure using revision rules	10-1
Toggle between a precise and imprecise assembly	10-4
Creating and managing product structures	11-1
Create a product structure	11-1
Modify a product structure	11-5
Working with product structures	12-1
Compare two product structures	12-1
Clone a product structure	12-6
Edit a product structure clone	12-10
Create and apply markup	12-14
Configuring a product structure with variants	13-1
Create variant options	13-1
Set the variant conditions	13-4
Configure the assembly	13-9
Navigating the relation hierarchy of an object	14-1
View and navigate a relation hierarchy	14-1
Perform where-used and where-referenced searches	14-4
Classifying and using standard product data	15-1
Search all ICOs in a selected class	15-1
Search the classification hierarchy for a class	15-5
Add classified objects to a product structure	15-7
Viewing and working with visualization files	16-1
Navigate the Viewer view	16-1
Adjust view preferences	16-5
Select parts and assemblies	16-13
Adjust performance settings	16-21
Initiating a workflow	17-1
Initiate a workflow process and assign a task	17-1
Review workflow tasks	17-7
Managing workflow task assignments	18-1
Select the signoff team	18-1
Perform the design review	18-6
Perform the standards review	18-13
Perform the manufacturing review	18-19
Perform the manager acknowledge review	18-28

Managing Teamcenter data through the Microsoft Office integration	19-1
Import a new Word document to Teamcenter	19-1
Activity: Insert Teamcenter data into a Word document	19-7
Check out the dataset	19-8
Search for Teamcenter data	19-10
Insert part data	19-12
Insert a 3D drawing	19-14
Save and check in the dataset	19-17
Activity: Initiate a workflow process from Office	19-18
Find the dataset to submit to the workflow	19-19
Submit the document to the workflow	19-21
Activity: Complete the review tasks	19-23
View task assignment	19-24
Select the signoff team for the review	19-25
Synchronize Teamcenter tasks	19-26
View a task assignment	19-27
Open a target file	19-29
Create a markup	19-31
Extract a markup	19-33
Sign off on the review task	19-34
View a task assignment	19-37
Review markups	19-39
Sign off on the review feedback task	19-41
Activity: Export BOM and update the live Excel spreadsheet	19-43
Configure BOM for export	19-44
Export a BOM to Excel	19-46
Modify the Excel spreadsheet	19-47
Using Change Manager	20-1
Find and view a problem report	20-1
Creating and managing change objects	21-1
Create a change request	21-1
Elaborate the change request	21-7
Review and approve the change request	21-16
Elaborating and executing the change	22-1
Create a change notice	22-1
Create the implementation plan	22-12
Review and approve the implementation plan	22-18
Complete the execution phase	22-21
Verify the change is in place	22-29
Working in the Teamcenter thin client	23-1
Start the thin client and search for an item	23-1
Create a new item in the thin client	23-3

Section

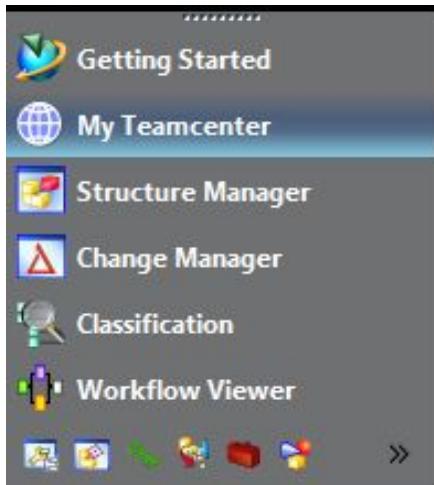
1 *Introduction to Teamcenter*

Start Teamcenter and open the My Teamcenter perspective

Activity: Start Teamcenter and open the My Teamcenter perspective

In this activity, you:

- Start Teamcenter.
- Configure the navigation pane.
- Open the **My Teamcenter** perspective.



Launch the [Start Teamcenter and open the My Teamcenter perspective](#) activity.

Related information

For more information, review these topics in the online help:

- [Working with the rich client navigation pane](#)

Start Teamcenter and open a perspective

Step 1: Start a Teamcenter rich client, by double-clicking the **Teamcenter** icon



on the desktop or, if there is no desktop icon, choose **Start**→**All Programs**→**Teamcenter 10.1**→**Teamcenter 10.1**.

The **Teamcenter Login** window appears.

Step 2: Enter your user ID (*user_id*) and password (*password*).

A screenshot of the Siemens PLM Software TEAMCENTER login window. The window title is "Siemens PLM Software TEAMCENTER". It contains five input fields: "User ID" with value "rs#", "Password" with value "****", "Group" (blank), "Role" (blank), and "Server" set to "Teamcenter Training". Below the fields are three buttons: "Clear", "Login", and "Cancel".

Note

Leave the **Group** and **Role** boxes blank to log on as your default group and role.

The default server for your site is automatically selected.

Step 3: Click **Login**.

The Teamcenter software is loaded and the rich client window opens.

The navigation pane appears on the left side of the window, and the **Getting Started** perspective and view appear on the right side.

Note

After initial startup, the perspective you had open when you last exited Teamcenter is shown on the right, in place of the **Getting Started** perspective.

Step 4: Open the **My Teamcenter** perspective by clicking **My Teamcenter** in the navigation pane.

The **My Teamcenter** perspective opens.

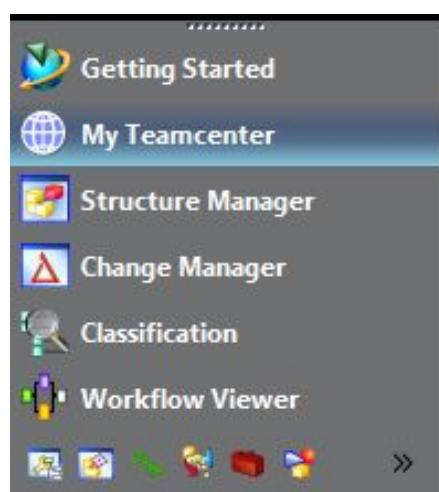
- The **Home** component view appears next to the navigation pane.
- The **Summary** view appears next to the **Home** component view.

- Tabs for selecting the **Details**, **Impact Analysis**, **Viewer**, **JT Preview**, and **Process History** views are also available.

Configure the navigation pane

- Step 1:** Click **Configure Applications** » at the bottom of the navigation pane.
- Step 2:** Select **Navigation Pane Options**.
- Step 3:** Use the **Navigation Pane Options** dialog box to add and remove applications from the **Primary Applications** box.
- To add an application, select an application in the **Available Applications** box and click the plus symbol + to the left of the **Primary Applications** box.
 - Click **Classification** and then click + to the left of the **Primary Applications** box to add the selected application to the navigation pane.
 - Click **Workflow Viewer** and then click + to the left of the **Primary Applications** box to add the selected application to the navigation pane.
 - To remove an application, select an application in the **Primary Applications** box and click the minus symbol - to the left of the **Primary Applications** box.
 - Click **Lifecycle Viewer** and then click - to the left of the **Primary Applications** box to remove the selected application from the navigation pane.

- Step 4:** Click **OK**.



Section

2 *Working in My Teamcenter*

Find items and add them to a favorites folder

Activity: Find items and add them to a favorites folder

In this activity, you search for items, add the items to your **Home** folder, create a favorites folder in the navigation pane, and add items to the favorites folder.



Launch the [Find items and add them to a favorites folder](#) activity.

Related information

For more information, review these topics in the online help:

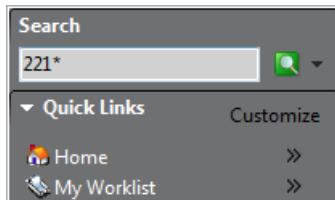
- [*Searching in Teamcenter*](#)

Use quick search to find items

Step 1: In the quick search box at the top of the navigation pane, type **221***.

Note

A quick search can be performed based on item ID or other search criteria listed in the quick search menu. Item ID is the default search type.

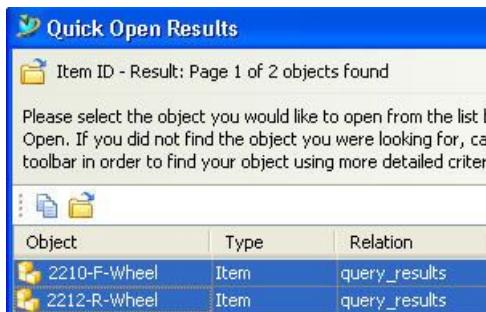


Step 2: Click **Find** or press Enter.

Step 3: Select both items in the **Quick Open Results** dialog box.

Tip

To select both, select one and then press the Shift key and click the other.



Step 4: In the **Quick Open Results** dialog box, click **Copy** to copy the items to the clipboard.

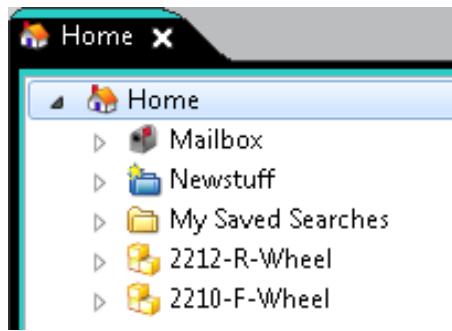
Step 5: Click **Cancel** to close the **Quick Open Results** dialog box.

Step 6: Select the **Home** folder in the **Home** component view.



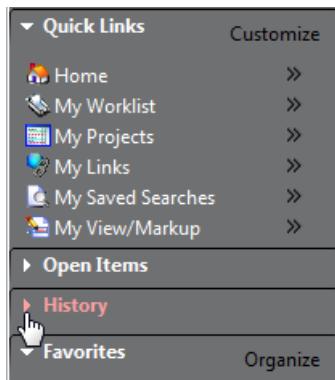
Step 7: Right-click **Home** and choose **Paste**.

The items are pasted in your **Home** folder.



Create a folder to organize your favorites

Step 1: Click the **History** arrow to collapse the pane.



Step 2: Click **Organize** in the **Favorites** section of the navigation pane.



Step 3: In the **Organize Favorites** dialog box, click **Create a favorites folder** .

Step 4: Type **Wheel items** as the folder name and click **OK**.



The **Wheel items** folder is created in the **Favorites** section.

Step 5: Close the **Organize Favorites** dialog box.

Add the wheel items to your favorites folder

- Step 1:** Select the **2212-R-Wheel** items in the **Home** folder.
- Step 2:** Right-click the selected item and choose  **Add To Favorites**.
The **Add Favorites** dialog box appears.
- Step 3:** In the **Add Favorites** dialog box, select the **Wheel items** folder.
- Step 4:** Click **OK**.
- Step 5:** Select the **2210-F-Wheel** items in the **Home** folder and drag it to the **Wheel items** folder in the **Favorites** area in the navigation pane.



- Step 6:** In the **Favorites** section of the navigation pane, expand the **Wheel items** folder to verify the items you added to your favorites are in the folder.

Note

You can now access these items from your **Favorites** folder. This saves you from performing a search each time you want to access the item or storing the item in your **Home** folder.

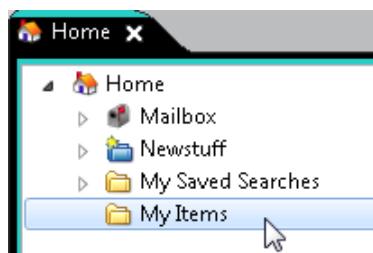


- Step 7:** Remove the **2210-F-Wheel** and **2212-R-Wheel** items from your **Home** folder by selecting the items and clicking .

Create and rename a folder

Activity: Create and rename a folder

In this activity, you create a new folder to organize your data.



Launch the [Create and rename a folder](#) activity.

Related information

For more information, review these topics in the online help:

- [Working with folders](#)

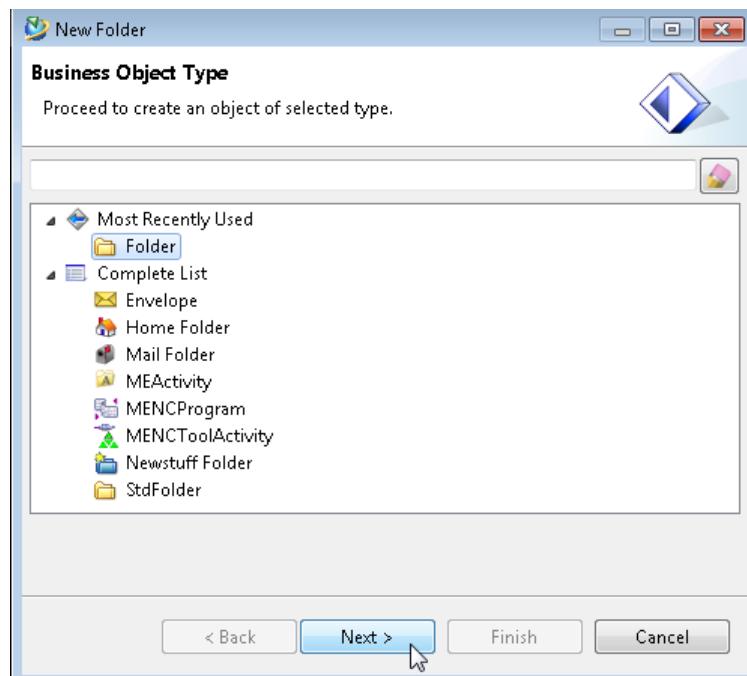
Create a new folder

Step 1: Select the **Home** folder.

Step 2: Choose **File→New→Folder**.

The **New Folder** dialog box appears.

Step 3: Verify **Folder** is selected as the type, and click **Next**.



Step 4: In the **Name** box, type **My Parts**.

Ensure the **Open on Create** check box is not selected.

Step 5: Click **Finish**.

The **My Parts** folder is created in the **Home** folder.

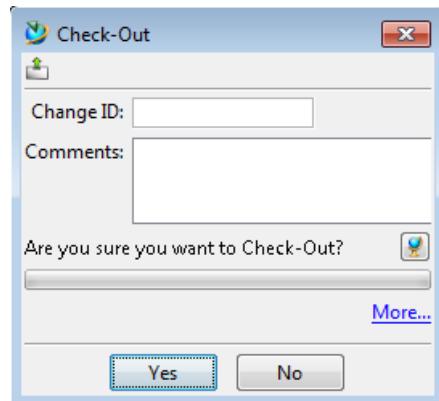


Step 6: Click **Cancel** to close the **New Folder** dialog box.

Rename the My Parts folder

Step 1: Right-click the **My Parts** folder and choose **Edit Properties**.

The **Check-Out** dialog box appears.



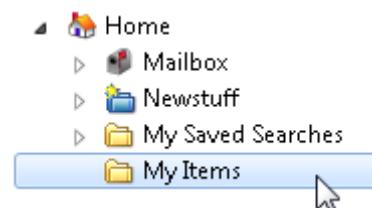
Step 2: Click **Yes**.

The **Edit Properties** dialog box appears.

Step 3: Edit the contents of the **Name** box to replace **My Parts** with **My Items**.

Step 4: Click **Save and Check-In**, and then click **Yes** to confirm the action.

The **My Parts** folder is renamed to **My Items**.



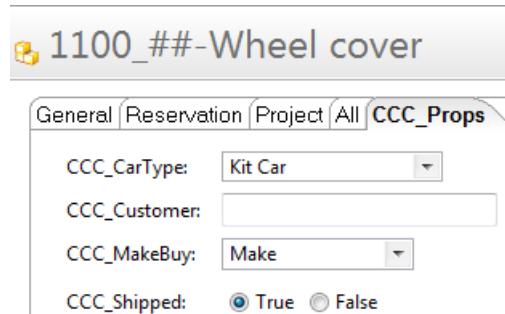
Section

3 *Working with items in Teamcenter*

Create an item and edit properties

Activity: Create an item and edit properties

In this activity, you create an item and edit properties.



Launch the [Create an item and edit properties](#) activity.

Related information

For more information, review these topics in the online help:

- [Creating items](#)

Create an item

Step 1: Select a container for the item by selecting your **My Items** folder in the **Home** folder.

Step 2: Choose **File→New→Item**.

The **New Item** dialog box appears.

Step 3: Select **CCC_Item** as the item type to create.

Step 4: Click **Next >**.

Step 5: In the item **ID** box, type **1100_##**.

Step 6: Do not enter a **Revision** identifier; the system generates it automatically.

Step 7: In the **Name** box, type **Wheel cover**.

Step 8: Click **Finish**.

The **1100_##-Wheel cover** item is created in the **My Items** folder.

Step 9: Click **Cancel** to close the **New Item** dialog box.

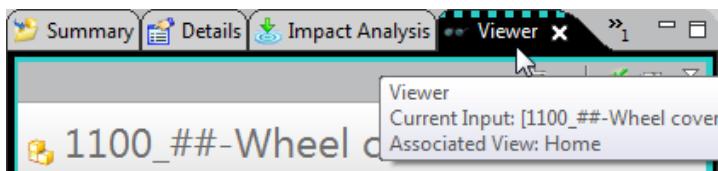
Edit properties

Step 1: Expand the **My Items** folder.

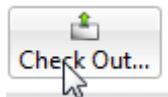
Step 2: Select the item in the folder tree.



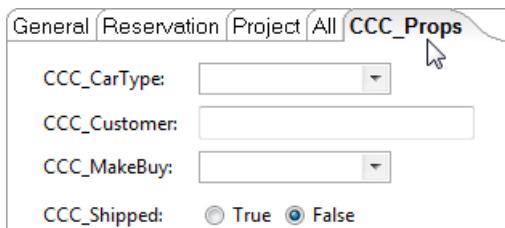
Step 3: Click the **Viewer** tab.



Step 4: Click **Check Out** in the lower left corner of the window, and then click **Yes** in the **Check-Out** dialog box.

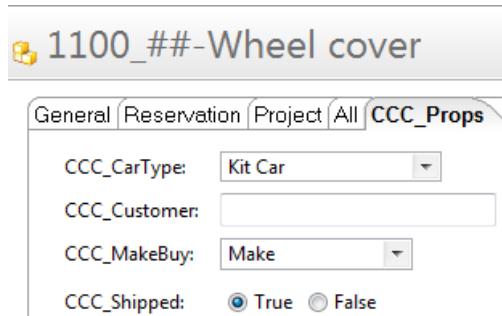


Step 5: Click **CCC_Props** to view the customer-specific properties.



Step 6: Select the following values:

- Set **CCC_CarType** to **Kit Car**.
- Leave the **CCC_Customer** box blank.
- Set **CCC_MakeBuy** to **Make**.
- Set **CCC_Shipped** to **True**.



Step 7: Click **Check In**, and then click **Yes** in the **Check-In** dialog box.



Create a new item based on existing data

Activity: Create a new item based on existing data

In this activity, you create a new item based on an existing item revision.



Launch the [Create a new item based on existing data](#) activity.

Related information

For more information, review these topics in the online help:

- [Creating new items based on existing items or item revisions](#)

Create a new item based on existing data

Step 1: If not selected, in the **My Items** folder, select the **1100_##-Wheel cover** item.



Step 2: Choose **File→Save As**.

The **Save As** dialog box appears.

Note

The item on which the new item is based as identified at the top of the dialog box.

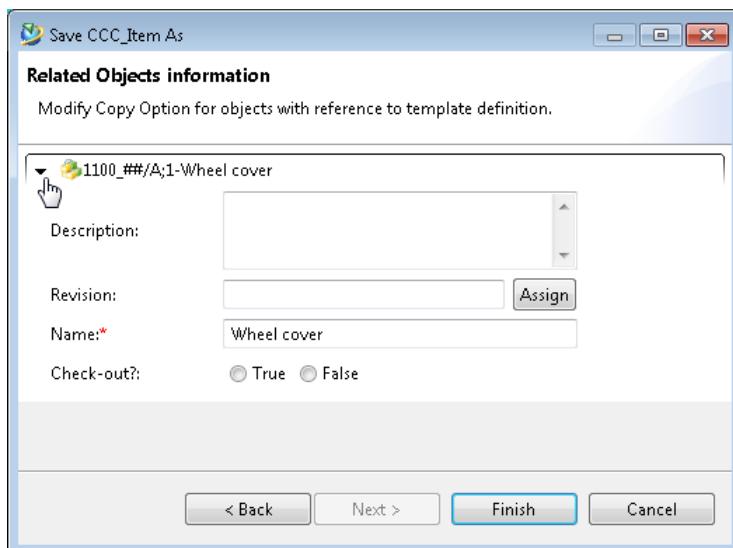
Step 3: In the item **ID** box, type **1100_##2** and click **Next**.

Step 4: Click **Next** again.

Step 5: In the **Related Objects information** step, click **Assign** to populate the **Revision** box.

Tip

In the **Related Objects information** step, you may need to expand the **1100_##2** item revision.



Step 6: Click **Finish** .

A new item, based on the existing item, is created.

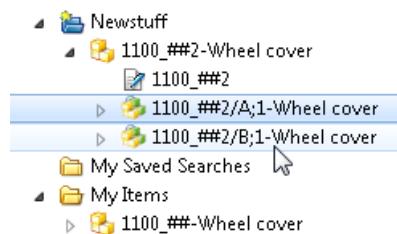
Step 7: Expand the **Newstuff** folder and locate the newly created item.



Create a new item revision

Activity: Create a new item revision

In this activity, you create a new item revision using the **Revise** command.



Launch the [Create a new item revision](#) activity.

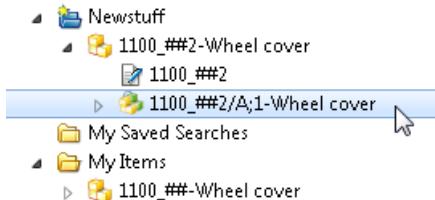
Related information

For more information, review these topics in the online help:

- [Creating a new revision of an item](#)

Create a new revision

Step 1: Expand the newly created **1100_##2** item in the **Newstuff** folder and select the item revision.

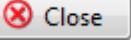


Step 2: Choose **File→Revise**.

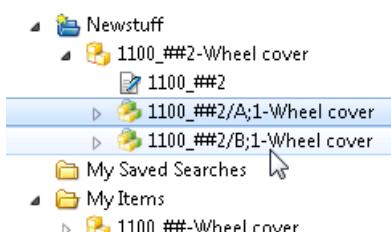
Note

If you select the item rather than revision, an error message appears indicating that only item revisions can be revised.

The **Revise** dialog box appears.

Step 3: Click **Finish** , and then click **Close** .

Revision **B** of the **1100_##2** item is created.



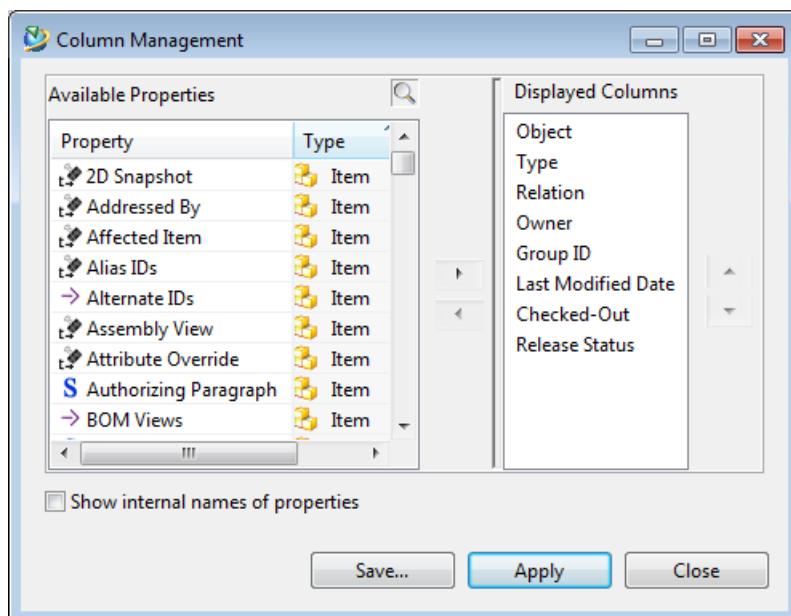
Section

4 Viewing and modifying object properties

Customize the Details view data display

Activity: Customize the Details view data display

In this activity, you configure the **Details** view columns.



Launch the [Customize the Details view data display](#) activity.

Related information

For more information, review these topics in the online help:

- [Configure the Details view table](#)

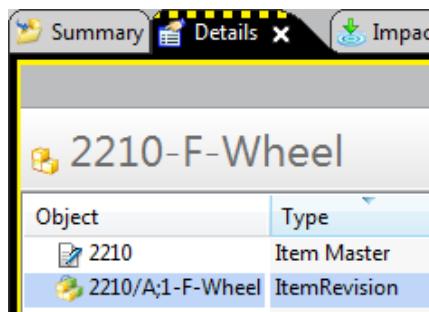
Display the details of the Wheel items

- Step 1:** Select the **2210-F-Wheel** item in the **Wheel items** folder in the **Favorites** section of the navigation pane.

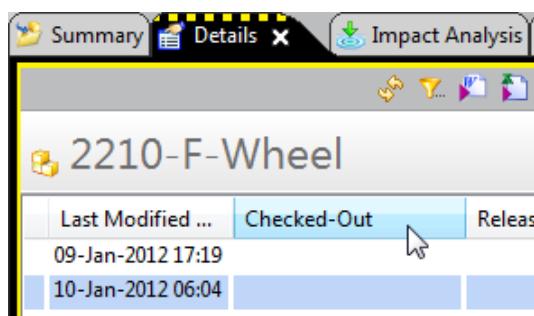


The selected item is opened in the component view next to the **Home** view.

- Step 2:** Choose the **Details** view.



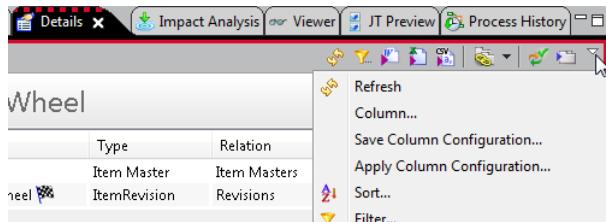
- Step 3:** Scroll to the right and review the item details.



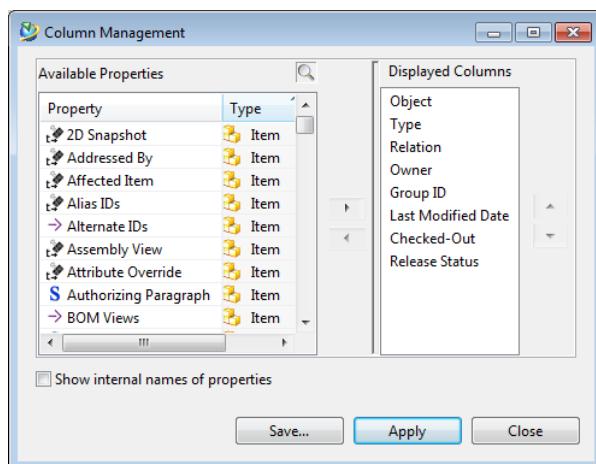
The **Checked Out** column indicates whether the object is checked in or out of the database. You can add a column to see who has the object checked out.

Insert a column in the Details view

- Step 1:** In the **Details** view, click **View Menu** ▾ on the right side of the pane and choose **Column**.



The **Column Management** dialog box appears.

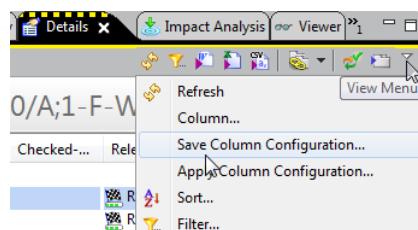


- Step 2:** In the **Column Management** dialog box, do the following:

- In the **Available Properties** column, scroll down and select **Checked Out By** and click **Add to Displayed Columns** ▶ .
Checked Out By appears in the **Displayed Columns** column.
- In the **Displayed Columns** column, select **Checked Out By** and click **Move Up** ▲ to display **Checked Out By** immediately after **Checked Out**.
- Click **Apply** to add the **Checked Out By** column to the current view.
The **Checked Out By** column appears in the **Details** view.
- Click **Close** to close the **Column Management** dialog box.

Save the column configurations

- Step 1:** Click the column titles and drag the columns to the right or left in the **Details** view.
- Step 2:** Drag the edge of a column to expand its width to better view the column headings and contents.
- Step 3:** In the **Details** view, click **View Menu** ▾ on the right side of the pane and choose **Save Column Configuration**.



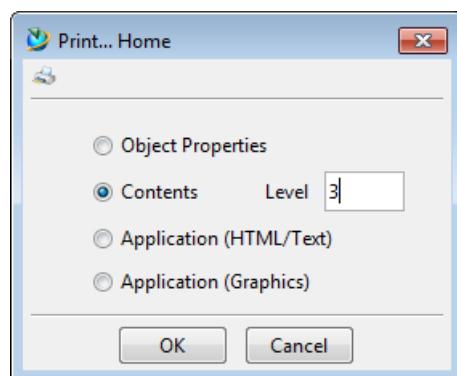
The **Save Column Configuration** dialog box appears.

- Step 4:** In the **Name** box, type **My column configuration**.
- Step 5:** Click **Save** to save the configuration.
- Step 6:** Click **X** on the **2210-F-Wheel** tab to close the view.

Print information about your data

Activity: Print information about your data

In this activity, you print object contents.



Launch the [Print information about your data](#) activity.

Related information

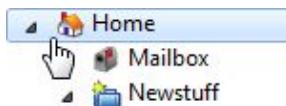
For more information, review these topics in the online help:

- [Printing information about your data](#)

Print information about your data

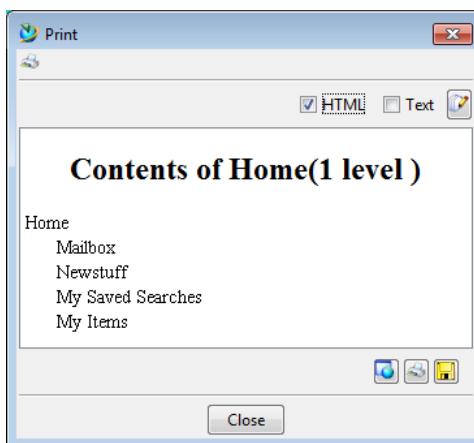
Step 1: Do the following to print one level of your **Home** folder contents:

- Select your **Home** folder.



- Choose **File→Print**.

The contents of your **Home** folder (one level) are displayed in the **Print** window.



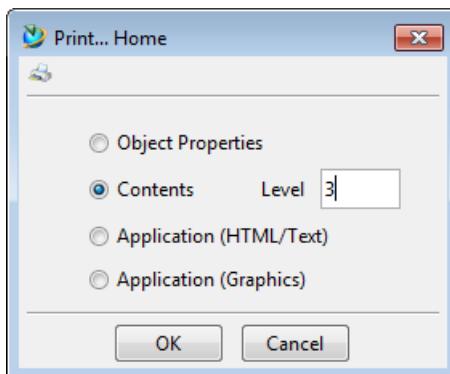
- Click **Close**.

Step 2: Do the following to print multiple levels of your **Home** folder contents:

- With the **Home** folder selected, choose **File→Print....**

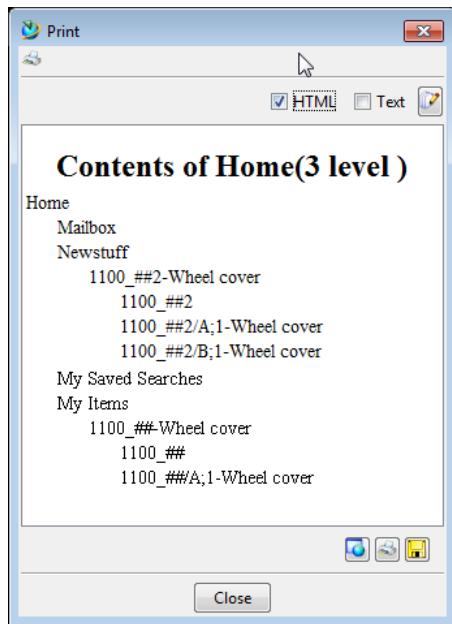
The **Print...** dialog box appears.

- Select **Contents** and type **3** in the **Level** box.



- Click **OK**.

The contents of your **Home** folder (3 levels) are displayed in the **Print** window.



- Click **Close**.

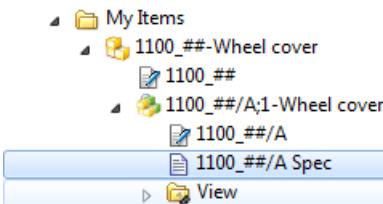
Section

5 *Creating and managing datasets*

Create a dataset

Activity: Create a dataset

In this activity, you create a text dataset to document specifications for an item.



Launch the [Create a dataset](#) activity.

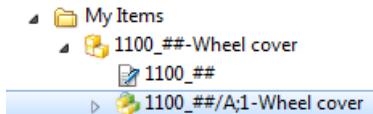
Related information

For more information, review these topics in the online help:

- [Creating datasets](#)

Create a dataset

Step 1: In your **My Items** folder, select the **1100_##/A;1-Wheel cover** item revision.



Step 2: Choose **File→New→Dataset**.

The **New Dataset** dialog box appears.

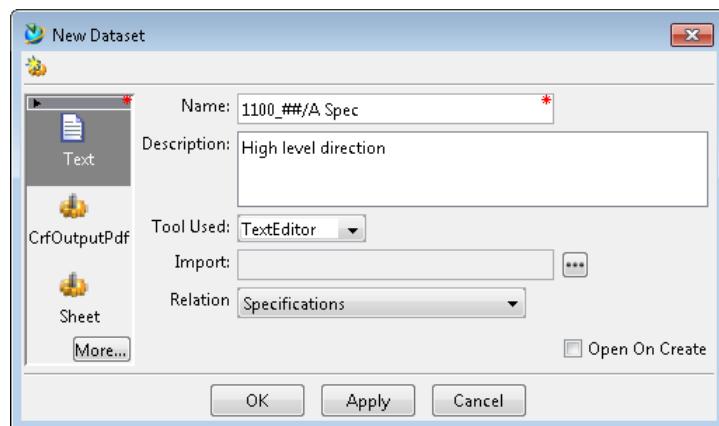
Step 3: Type or select the following values for the dataset:

- If necessary, click **More** and select **Text** as the dataset type.

Note

By default, **Text** may already be selected as the dataset type.

- In the **Name** box, at the end of the default name, type **Spec**.
- In the **Description** box, type **High level direction**.



Step 4: Click **OK**.

The **1100_##/A Spec** dataset is created.

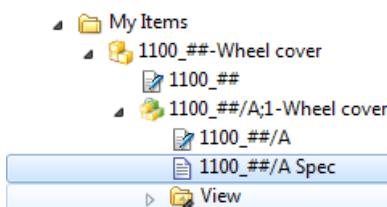
Record the design specifications for the item revision

- Step 1:** Expand the **1100_##/A;1-Wheel cover** item revision to locate the **1100_##/A Spec** dataset.
- Step 2:** Double-click the **1100_##/A Spec** dataset to open it in the text editor.
- Step 3:** Type the following specification information in the text editor:

**Design a selection of wheel covers
for our kit cars.**

- Step 4:** Save and close the text file.

The design specifications for the **1100_##/A;1-Wheel cover** item revision are captured in a text dataset related to the item revision.



Create a dataset using a drag and drop method

Activity: Create a dataset using a drag and drop method

In this activity, you create a new dataset using drag and drop.



Launch the [Create a dataset using a drag and drop method](#) activity.

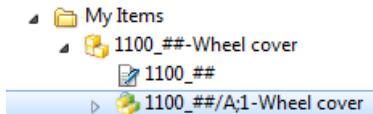
Related information

For more information, review these topics in the online help:

- [Create a new dataset by drag-and-drop](#)

Create a dataset using drag and drop

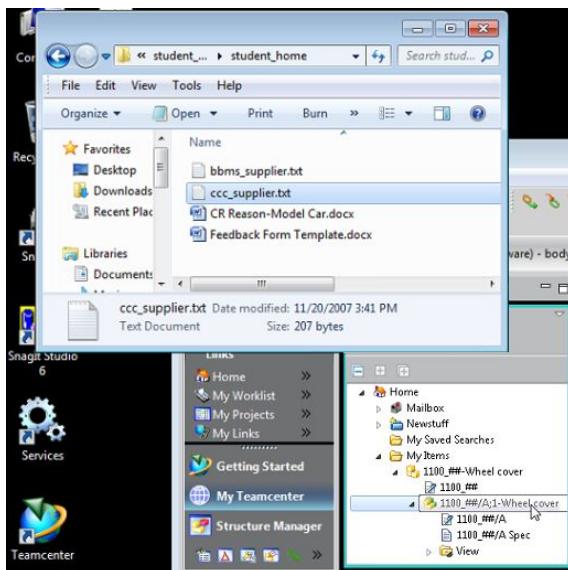
- Step 1:** In your **My Items** folder, select the **1100_##/A;1-Wheel cover** item revision.



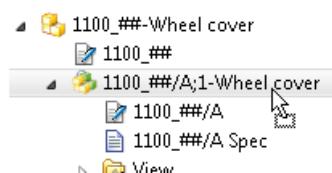
- Step 2:** Open the **Windows Explorer** window and navigate to the **STUDENT_HOME** folder.

- Step 3:** In the **STUDENT_HOME** folder, select the **ccc_supplier.txt** file.

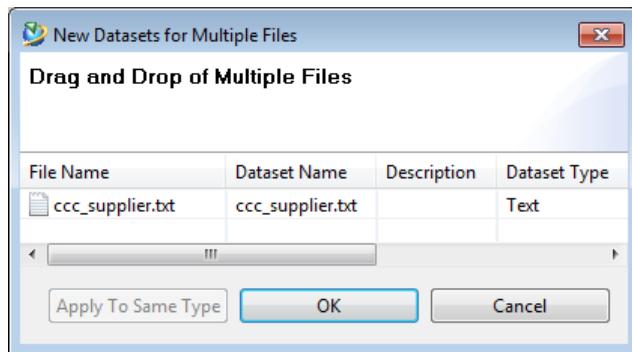
- Step 4:** Arrange the windows so you can see both the **STUDENT_HOME** folder and the Teamcenter window.



- Step 5:** Click and hold your **ccc_supplier.txt** file, and then drag and drop it over the **1100_##/A;1-Wheel cover** item revision.



The **New Datasets for Multiple Files** window appears.



Step 6: Click **OK**.

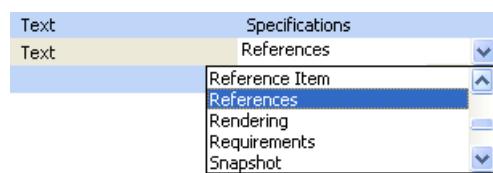
Step 7: If necessary, expand the **1100_##/A;1-Wheel cover** item revision to view the imported dataset.



Import a dataset

Activity: Import a dataset

In this activity, you create a dataset using import and modify the relation type.



Launch the [Import a dataset](#) activity.

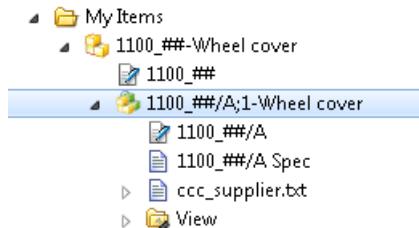
Related information

For more information, review these topics in the online help:

- [Importing and exporting named references](#)

Import the text file listing CCC approved suppliers

Step 1: Select the **1100_##/A;1-Wheel cover** item revision.



Step 2: Choose **File→New→Dataset**.

The **New Dataset** dialog box appears.

Step 3: Type or select the following values for the dataset:

- Select **Text** as the dataset type.
- In the **Name** box, add **Suppliers** to the end of the default name.

Step 4: Click **Select an import file** .

The **Import File** dialog box appears.

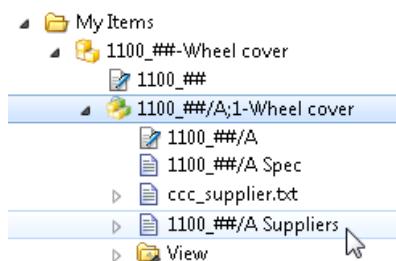
Step 5: Navigate to the **STUDENT_HOME** folder and select the **bbms_supplier.txt** file.

Step 6: Click **Upload**.

The **Import** box is populated with the path to the text file to import.

Step 7: If necessary, clear the **Open on Create** check box, and then click **OK**.

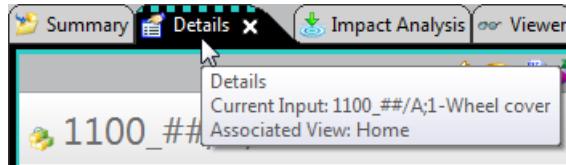
The dataset is added to the **1100_##/A;1-Wheel cover** item revision.



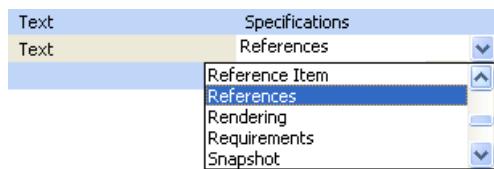
By default, the dataset is created with a **Specification** relation. In the next step, you change the relation type to **References**.

Change the relation type for the dataset

Step 1: With the **1100_##/A;1-Wheel cover** item revision selected, confirm the **Details** tab is selected.



Step 2: In the **Relation** column, click the relation for the newly created suppliers dataset, and then select **References** from the list of relations.



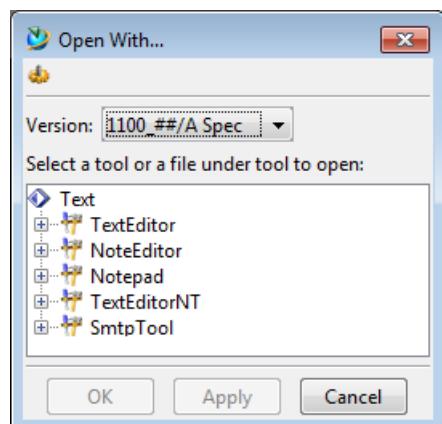
Step 3: Press Enter.

The **Relation** column in the **Details** view shows the **1100_##/A Suppliers** dataset is a **References** relation and the **1100_##/A Spec** dataset is a **Specifications** relation.

Modify a dataset and work with versions

Activity: Modify a dataset and work with versions

In this activity, you modify the **1100_##/A Spec** dataset and work with versions of the dataset.



Launch the [Modify a dataset and work with versions](#) activity.

Related information

For more information, review these topics in the online help:

- [Dataset versions, revisions, and identifiers](#)

Modify your 1100 Spec text dataset

Step 1: Double-click the **1100_##/A Spec** dataset you created previously to open it for edit.

Step 2: In the text editor, type the following additional line of text:

Only use materials from approved suppliers.

Step 3: Choose **File→Save**.

Step 4: Close the text editor.

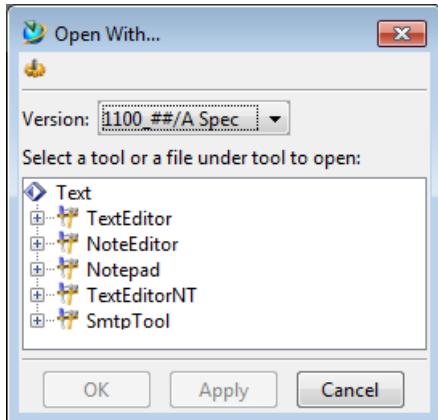
Step 5: Double-click the **1100_##/A Spec** dataset to open it for edit.

The additional line of text you added has been saved.

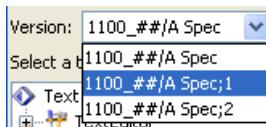
Step 6: Close the text editor without saving.

Access a previous version of the dataset

- Step 1:** Select the **1100_##/A Spec** text dataset and choose **File→Open With...**.
The **Open With...** dialog box appears.



- Step 2:** Scroll through the **Version** list and select version 1.



- Step 3:** Select **Notepad** as the tool, and then click **OK**.

Version 1 of the dataset is opened in the selected text editor.

The last edit you entered is not in this version of the dataset. You can enter additional edits, or no edits, and then save the dataset to create the new latest version. This way, you can access and work with previous versions of a dataset.

- Step 4:** Close the text editor without saving.

Section

6 *Applying data security practices*

Change your group setting

Activity: Change your group setting

In this activity, you change your group setting and observe the current setting.

(Ware, Connie (de##) - drivetrain / Design Engineer

Launch the [Change your group setting](#) activity.

Related information

For more information, review these topics in the online help:

- [Change your default group and volume settings](#)

Change the user group setting to drivetrain

Step 1: Choose **Edit→User Setting**.

The **User Settings** dialog box appears.

Step 2: From the **Group** list, select **drivetrain**.

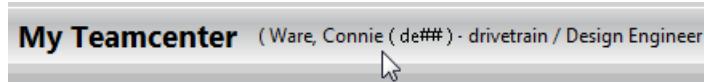
Step 3: Click **OK**.

Your current user group setting appears in the **My Teamcenter** application banner.

(Ware, Connie (de##) - drivetrain / Design Engineer

Change the user group setting to body

- Step 1:** Click your current user information link in the application banner to access the **User Settings** dialog box.



The **User Settings** dialog box appears.

- Step 2:** From the **Group** list, select **body**.

- Step 3:** Keep **Design Engineer** in the **Role** list.

- Step 4:** Click **OK**.

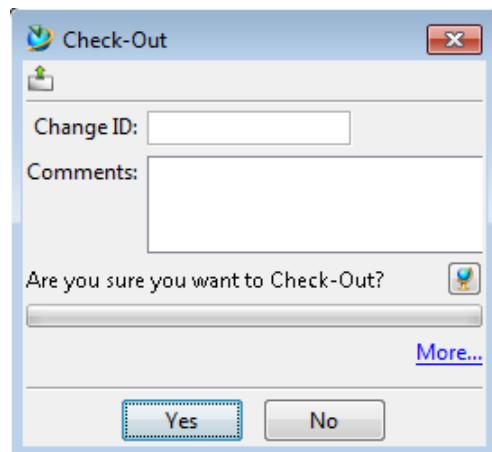
Your current user group setting appears in the **My Teamcenter** application banner.



Use implicit and explicit checkout

Activity: Use implicit and explicit checkout

In this activity, you use implicit and explicit checkout to manage access to your data.



Launch the [Use implicit and explicit checkout](#) activity.

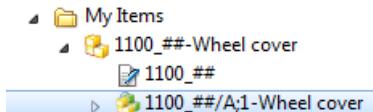
Related information

For more information, review these topics in the online help:

- [Checking out and checking in Teamcenter data](#)

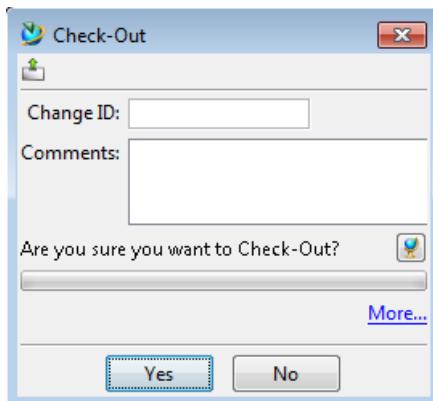
Perform an explicit checkout

- Step 1:** In the **My Items** folder, select the **1100_##/A;1-Wheel cover** item revision.



- Step 2:** Choose **Tools**→**Check-In/Out**→ **Check-Out**.

The **Check-Out** dialog box appears.



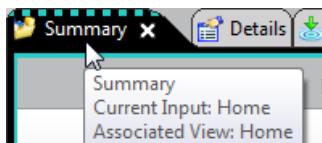
- Step 3:** Click **More** to verify the object selected to check out.

- Step 4:** Type **Long term editing** in the **Comments** box.

- Step 5:** Click **Yes**.

Note that the sequence number for the item revision is increased by one, and the checkout symbol appears next to the object.

- Step 6:** Click the **Summary** tab.



- Step 7:** Observe that **Y** appears in the **Checked-Out** box in the **Summary** view indicating the selected object is checked out.

Check the item revision back into the database

Step 1: With the **1100_##/A;2-Wheel cover** item revision selected, choose **Tools**→**Check-In/Out**→ **Check-In**.

The **Check-In** dialog box appears.

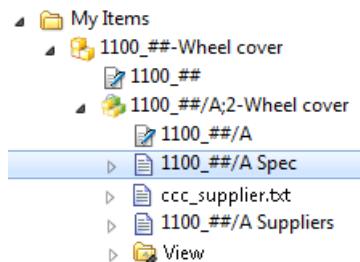
Step 2: Click **Yes**.

The **Checked-Out** box in the **Summary** view is cleared indicating the selected object is checked in.

Observe the implicit checkout and checkin operations

Step 1: If necessary, expand the **1100_##/A;2-Wheel cover** item revision.

Step 2: Double-click the **1100_##/A Spec** text dataset.



The dataset is opened in the default text editor.

Step 3: Resize and move the text editor window so you can observe the **Summary** view.

Note that the checkout symbol appears next to the object, and **Y** appears in the **Checked-Out** box in the **Summary** view indicating the selected object is checked out.

Step 4: Close the text editor window.

The **Checked-Out** box is cleared, indicating the object is checked in. This is an implicit checkin.

View the checkout history of an object

Activity: View the checkout history of an object

In this activity, you view the checkout history of the **1100_##-Wheel Cover** item revision.

A screenshot of a dialog box titled 'Checkout History (Read Only)'. The title bar has a standard Windows-style window control. The main area contains a table with the following data:

Date/Time	User	Activity	Change ID	Comments
2012-01-17 ...	Ware, Connie (cware)	Check-Out	-	Long term e...
2012-01-17 ...	Ware, Connie (cware)	Check-In	-	-

A 'Close' button is located at the bottom center of the dialog box.

Launch the [View the checkout history of an object](#) activity.

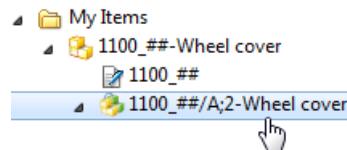
Related information

For more information, review these topics in the online help:

- [View the checkout history of an object](#)

View the checkout history of an object

Step 1: Select the **1100_##/A;2-Wheel cover** item revision in the folder tree structure.



Step 2: Choose **Tools→Check-In/Out→** **Checkout History**.

The **Checkout History** window appears.

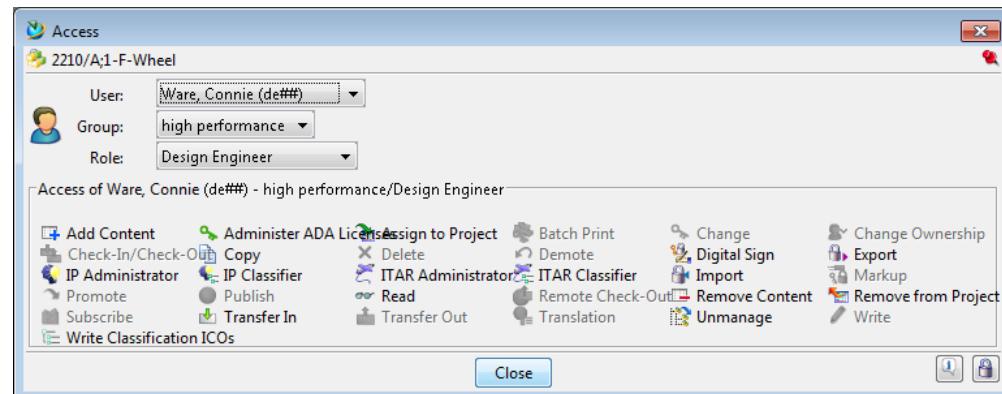
The checkout history shows the explicit checkin and checkout operations for the selected object.

Step 3: Click **Close** to close the window.

View access privileges for an object

Activity: View access privileges for an object

In this activity, you view the access privileges for the **2210/A-F-Wheel** item revision.



Launch the [View access privileges for an object](#) activity.

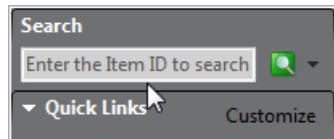
Related information

For more information, review these topics in the online help:

- [View access privileges](#)

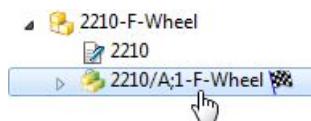
View access privileges for the item revision

Step 1: In the quick search box, type **2210***.



Step 2: Click **Perform Search** or press Enter.

Step 3: Select the **2210/A;1-F-Wheel** item revision.



Step 4: Click **Access** on the toolbar.

The **Access** dialog box appears.

Step 5: Review the list of access privileges shown for the selected object.

Note that you have subscribe permissions to the object as the **Design Engineer** role in the **body** group.

Determine if the group setting impacts access privileges

Step 1: In the **Group** list, select **high performance**.

Step 2: Review the list of access privileges for the object available to the **high performance** group.

Note

Members of the **high performance** group do not have subscribe permissions to the object.

Step 3: Click **Close**.

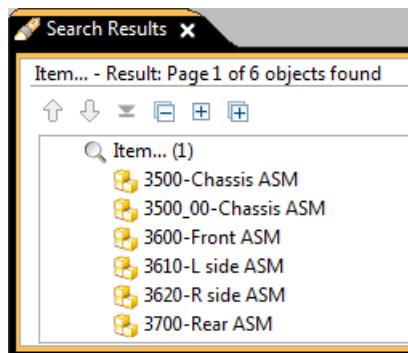
Section

7 *Performing and managing searches*

Perform an advanced search

Activity: Perform an advanced search

In this activity, you practice using advanced search methods to find objects in the Teamcenter database.



Launch the [Perform an advanced search](#) activity.

Related information

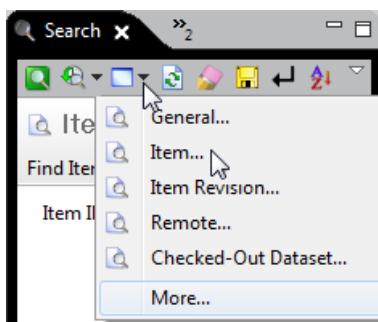
For more information, review these topics in the online help:

- [Using advanced search](#)

Select and perform an Item... search

Step 1: Click **Open Search View**  on the toolbar.

The **Search** view appears.

Step 2: In the **Search** view, click  in **Select a Search** A screenshot of the 'Search' view window. The title bar says 'Search'. The main area shows a list of search types: 'Find Item', 'Item...', 'Item Revision...', 'Remote...', 'Checked-Out Dataset...', and 'More...'. A mouse cursor is hovering over the 'Item...' option, which is highlighted with a blue selection bar.

The **Item...** search form is loaded and appears in the **Search** view.

Step 3: Click **Clear all search fields** .

The values are cleared from the search form.

Note

When all fields are not listed, you can click **More...** to expand the form.

Step 4: In the **Name** box, type ***asm***.

Note

At the Classic Car Company, all assemblies in the database include **asm** in the name.

Step 5: In the **Owning User** box, select or type **Andretti, Maria**.

Note

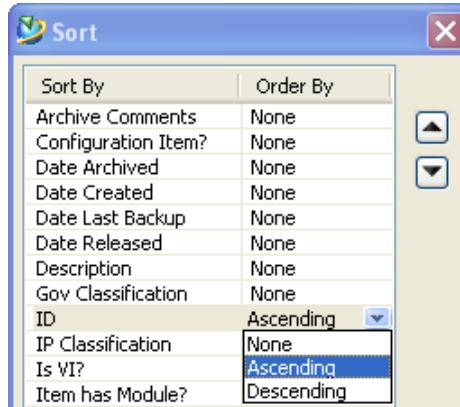
Maria Andretti, as the project lead for the body group, owns the car assembly files.

Step 6: Click **Sort** .

The **Sort** window appears.

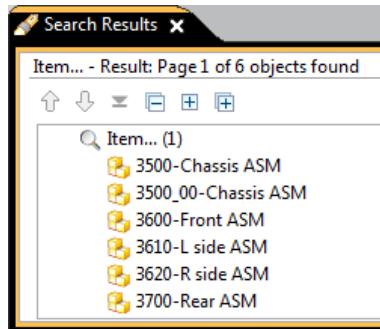
Step 7: In the **Sort by** column, click **ID**.

Step 8: Select **Ascending** from the **Order by** list, and then click **OK**.



Step 9: Click **Execute** .

The search is executed and the results appear in the **Search Results** view.

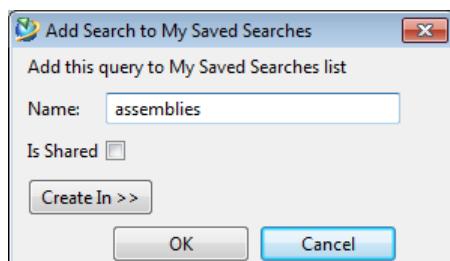


All assemblies in the database that include **asm** in the name and are owned by **Andretti, Maria** were found.

Rename and save a search

Activity: Rename and save a search

In this activity, you rename a search and add it to the **My Saved Searches** folder.



Launch the [Rename and save a search](#) activity.



Related information

For more information, review these topics in the online help:

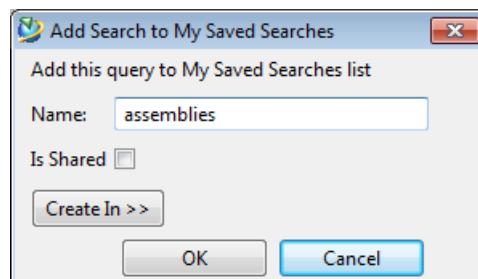
- *My Saved Searches*

Rename and save a search

Step 1: In the **Search** view, click **Add Search to My Saved Searches** .

The **Add Search to My Saved Searches** dialog box appears.

Step 2: Type **assemblies** to replace the current name.



Step 3: Click **OK**.

Step 4: View the saved assemblies search, by clicking the **My Saved Searches** menu » in the **Quick Links** section in the navigation pane.

The assemblies search is listed as a saved search and can be executed as needed.



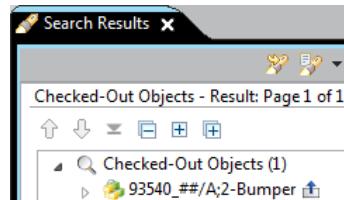
Step 5: Click  in the frame to close the **My Saved Searches** pane.

Step 6: Click  in the view tabs to close the **Search** view and the **Search Results** view.

Perform a search for checked-out objects

Activity: Perform a search for checked-out objects

In this activity, check out an object and then find it using advanced search methods. Subsequently, save the search and add it to the **My Saved Searches** folder.



Launch the [Perform a search for checked-out objects](#) activity.

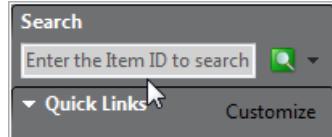
Related information

For more information, review these topics in the online help:

- *Using advanced search*

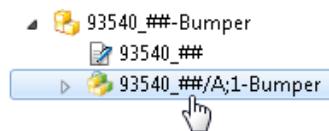
Find an item and perform an explicit checkout

Step 1: In the quick search box, type **93540_##**.



Step 2: Click **Perform Search** .

Step 3: Select the **93540_##** item revision.



Step 4: Choose **Tools→Check-In/Out→Check-Out**.

The **Check-Out** dialog box appears.

Step 5: If necessary, click **More...** to verify the object selected to check out.

Step 6: Click **Yes**.

Note that the checkout symbol  appears next to the object, and **Y** appears in the **Checked-Out** box in the **Summary** view indicating the selected object is checked-out.

Tip

If necessary, click the **Summary** tab.

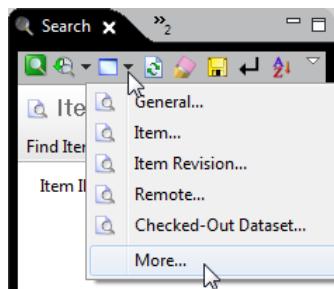


Find checked-out objects

Step 1: Click **Open Search View**  on the toolbar.

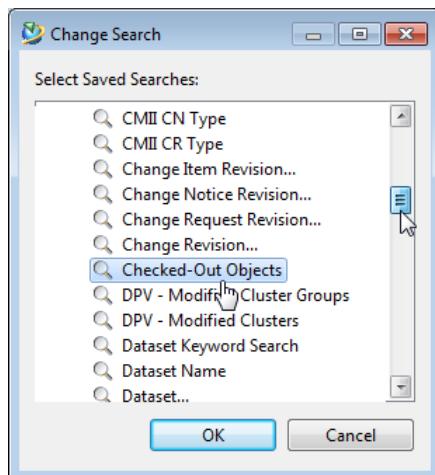
The **Search** view appears.

Step 2: In the **Search** view, click  in **Select a Search**  and select **More**.



The **Change Search** dialog box appears.

Step 3: In the **Change Search** dialog box, under **System Defined Searches**, select **Checked-Out Objects** and then click **OK**.

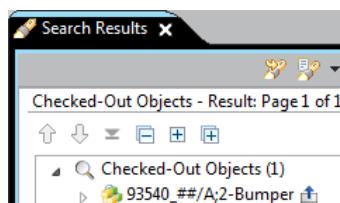


The **Checked-Out Objects** search form is loaded and appears in the **Search** view.

Step 4: In the **Check-Out by User** box, select or type your user ID.

Step 5: Click **Execute** .

The search is executed and the results appear in the **Search Results** view.



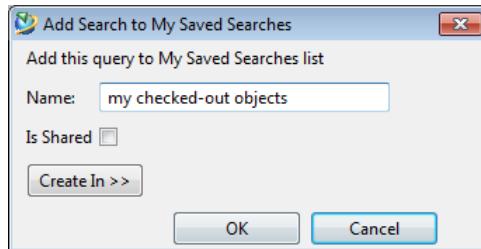
All objects that you checked-out for modification are found.

Rename and save the checked-out objects search

Step 1: In the **Search** view, click **Add Search to My Saved Searches** .

The **Add Search to My Saved Searches** dialog box appears.

Step 2: Type **my checked-out objects** to replace the current name.

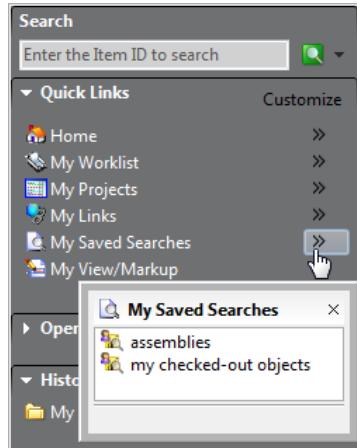


Step 3: Click **OK**.

View the saved search

Step 1: Click the **My Saved Searches** menu » in the **Quick Links** section in the navigation pane.

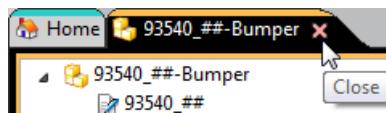
The **my checked-out objects** search is listed as a saved search and can be executed as needed.



Step 2: Click the **x** in the frame to close the **My Saved Searches** pane.

Check in the item revision

- Step 1:** Click the **x** in the view tabs to close the **Search** view and the **Search Results** view.
- Step 2:** Select the **93540_##** item revision.
- Step 3:** Choose **Tools**→**Check-In/Out**→ **Check-In**.
- The **Check-In** dialog box appears.
- Step 4:** Click **Yes**.
- Step 5:** Click  on the **93540_##** tab to close the view.

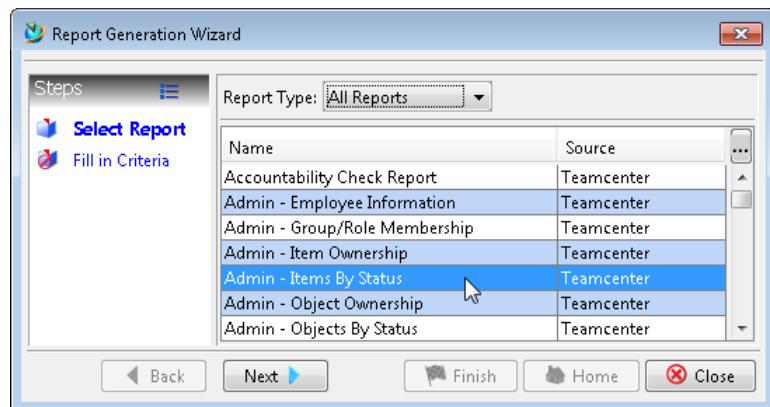


The **93540_##** view is closed.

Generate a report of items by status

Activity: Generate a report of items by status

In this activity, you generate a report of items by status.



Launch the [Generate a report of items by status](#) activity.



Related information

For more information, review these topics in the online help:

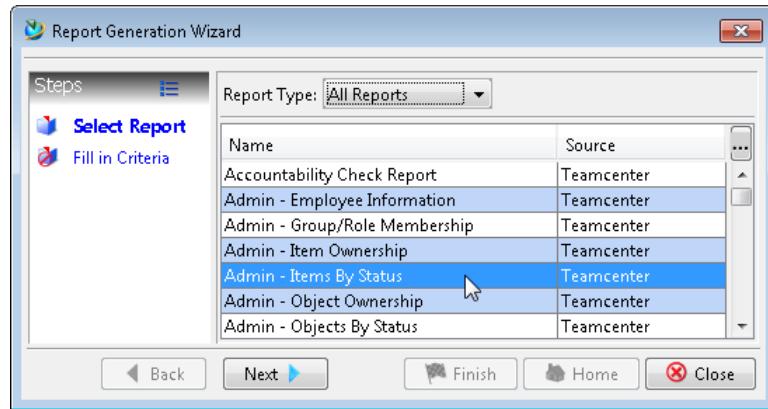
- [Generate an item report on a Teamcenter object](#)

Select an items by status report

Step 1: Start the **Report Generation Wizard** by choosing **Tools→Reports→Report Builder Reports**.

The **Report Generation Wizard** dialog box appears.

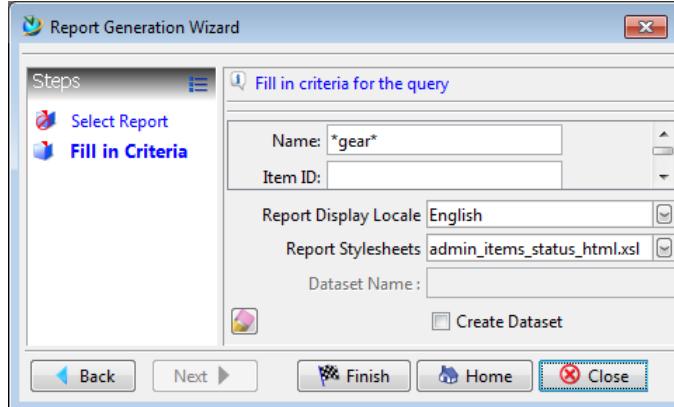
Step 2: Select the **Admin – Items by Status** report.



Step 3: Click **Next** .

Select criteria for the report and review the results

Step 1: In the **Fill in Criteria** step in the **Report Generation Wizard** dialog box, do the following:



- Click **Clear the current panel** to clear the values from the form.
- In the **Name** box, type ***gear***.
- In the **Report Stylesheets** box, confirm that **admin_items_status_html.xsl** is selected.
- Click **Finish** to generate the report.

The **Creating report...** message appears in the wizard as the report generates. The report appears in a browser in HTML format when generation is complete.

Step 2: Review the HTML report. Depending on your criteria, the results may vary.

When you are finished, close the browser.

Item Id	Item Revision Id	Object Name	Object Type
3770	A	Reducer gears	ItemRevision
3771	A	Drive gears	ItemRevision
3760	A	Main gear	ItemRevision
3601	A	Steer gear	ItemRevision

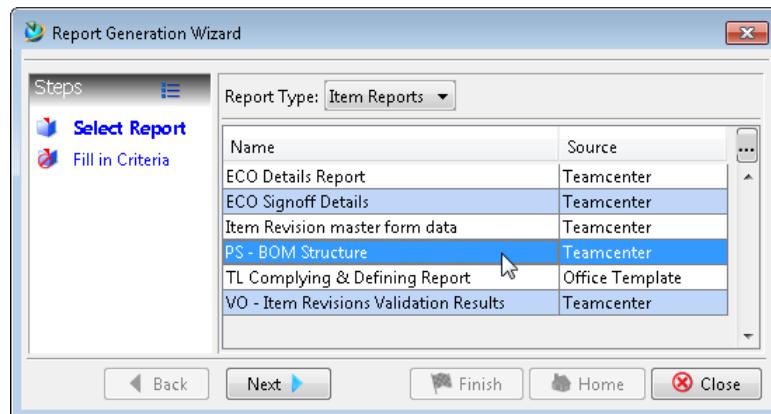
"/>

Step 3: Click **Close** to close the **Report Generation Wizard** dialog box.

Generate a BOM structure report

Activity: Generate a BOM structure report

In this activity, you generate a bill of materials structure report for the assembly components.



Launch the [Generate a BOM structure report](#) activity.

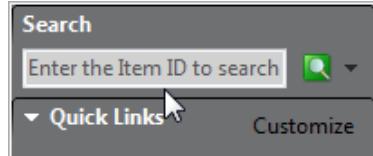
Related information

For more information, review these topics in the online help:

- [Generating Report Builder reports in the rich client](#)

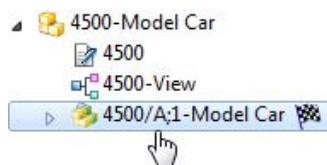
Find a Teamcenter object for the report

Step 1: In the quick search box, type **4500**.



Step 2: Click **Perform Search** or press Enter.

Step 3: Select the **4500/A;1-Model Car** item revision.

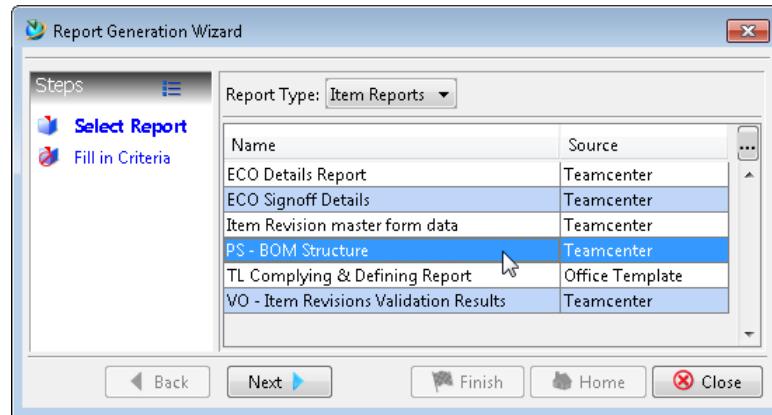


Run a BOM structure report

Step 1: Start the **Report Generation Wizard** by right-clicking the item revision and choosing **Generate Report**.

The **Report Generation Wizard** dialog box appears.

Step 2: Select the **PS – BOM Structure** report.



Step 3: Click **Next**.

Step 4: In the **Report Stylesheets**, confirm **ps_bom_report_html.xls** box is selected.

Step 5: Click **Finish** to generate the report.

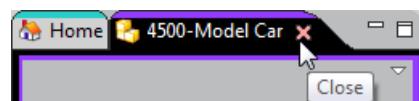
The *Creating report...* message appears in the wizard as the report generates. The report appears in a browser in HTML format when generation is complete.

Step 6: Review contents of the **PS (BOM) Report HTML** report.

Step 7: Close the browser.

Step 8: Click **Close** to close the **Report Generation Wizard** dialog box.

Step 9: Click on the **4500–Model Car** tab to close the view.



The **4500–Model Car** view is closed.

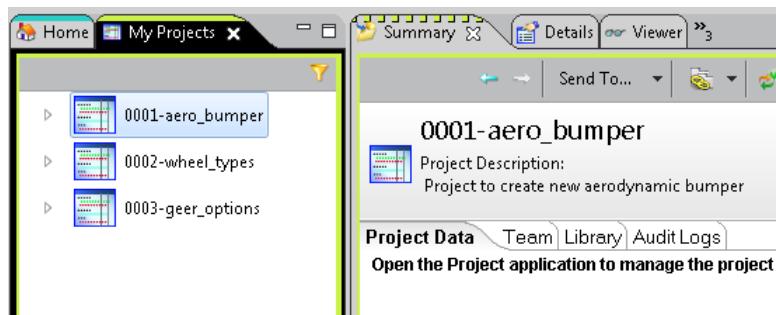
Section

8 Working in projects

Investigate available projects

Activity: Investigate available projects

In this activity, you determine which projects exist in the database and review the purpose and members of each project.



Launch the [Investigate available projects](#) activity.

Related information

For more information, review these topics in the online help:

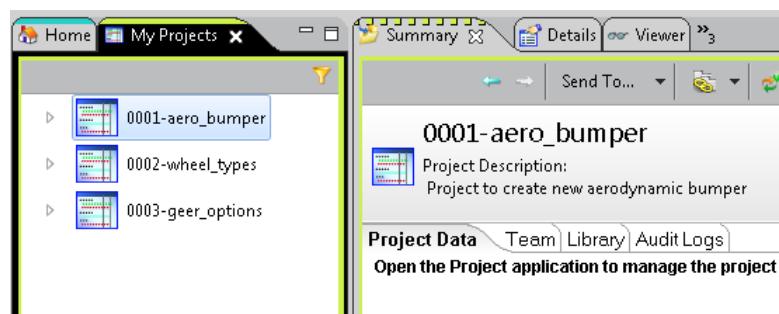
- [Finding projects and project data](#)

Review the purpose and members of each project

Step 1: Click **My Projects** in the **Quick Links** section in the navigation pane.



A list of the projects appears in the **My Projects** view.

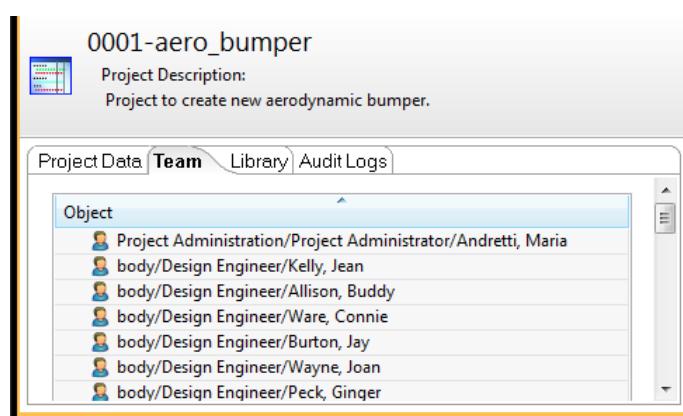


Step 2: If necessary, click the **Summary** tab.

Step 3: With the first project selected, click the **Team** tab.

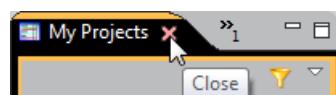
Step 4: Review the list of team members in the **Selected Members** pane.

Note the user designated as the project team administrator for the team.



Step 5: Repeat for each project listed in the **My Projects** view.

Step 6: Close the **My Projects** view.



Add an object to a project

Activity: Add an object to a project

In this activity, you add the **1100_##/A-Wheel cover** item revision to the **0002-wheel_types** project and view the **Project ID** property in the **Details** view.

Object	Type	Relation	Project IDs
1100_##/A	CCC_ItemRevItem Masters		
1100_##/A Spec	Text	Specifications	0002
ccc_supplier.txt	Text	Specifications	0002
1100_##/A Suppliers	Text	References	0002
View			Collection

Launch the [Add an object to a project](#) activity.

Related information

For more information, review these topics in the online help:

- [Assigning objects to projects](#)

Add the Project IDs property to the Details view

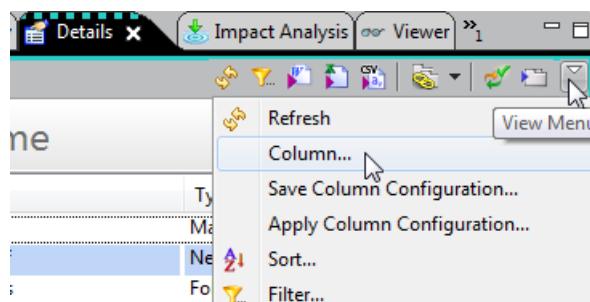
Step 1: In the **Home** folder, if needed, expand the **My Items** folder and the **1100_##-Wheel cover** item and item revision objects.

Step 2: Select the **1100_##-Wheel cover** item.

Step 3: Click the **Details** tab.



Step 4: Click **View Menu** ▾ in the upper right corner of the **Details** view and then select **Column**.



The **Column Management** dialog box appears.

Step 5: Select **Project IDs** from the list in the **Available Properties** pane.

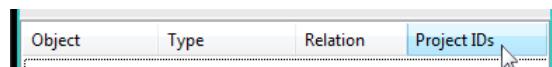
Step 6: Click the right arrow ➤ to add the selected property to the **Displayed Columns** pane.

Step 7: In the **Displayed Columns** list, select **Project IDs** and click **Move Up** ▲ to display it immediately after the **Relation** column.

Step 8: Click **Apply**.

Step 9: Close the **Column Management** dialog box.

The **Project IDs** column appears in the **Details** view.



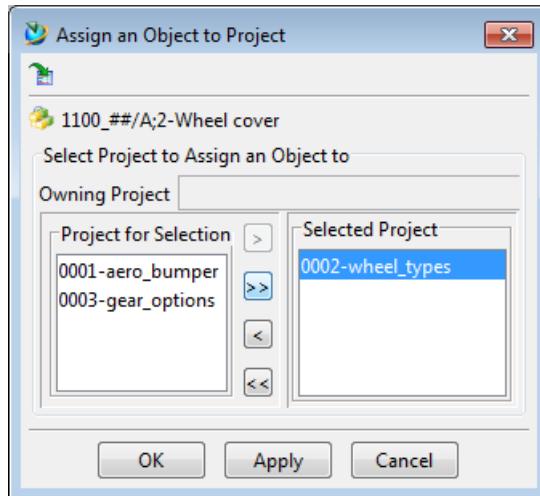
Step 10: Select the item revision and repeat these steps to add the **Project IDs** column.

Add the item revision to the project

Step 1: Right-click the **1100_##/A;2-Wheel cover** item revision and choose **Project→Assign**.

The **Assign an Object to Project** dialog box appears.

Step 2: Select the **0002-wheel_types** in the **Project for Selection** pane, and then click the right arrow to move it to the **Selected Project** pane.



Step 3: Click **OK**.

The object is assigned to the selected project.

Verify the object is assigned to the project

Step 1: In your **Home** folder, select the **1100_##-Wheel cover** item.

The assigned project ID for the **1100_##/A;2-Wheel cover** item revision object appears in the **Project ID** column in the **Details** view.

1100_##-Wheel cover			
Object	Type	Rel...	Project IDs
1100 ##	CCC_ItemMaster		
1100_##/A;2-Wheel cover	CCC_ItemRevision		0002

Step 2: In your **Home** folder, select the **1100_##/A;2-Wheel cover** item revision object.

Step 3: In the **Details** view, look at the values in the **Project IDs** and **Relation** columns.

The assigned project ID appears in the **Project IDs** column for the object with the **Specifications** relation to the **1100_##/A;2-Wheel cover** item revision.

In this case, the project ID value appears in the rows for both the **1100_##/A Spec** and the **ccc_supplier.txt** datasets.

Object	Type	Relation	Project IDs
1100 ##/A	CCC_ItemRevItemMasters		
1100_##/A Spec	Text	Specifications	0002
ccc_supplier.txt	Text	Specifications	0002
1100_##/A Suppliers	Text	References	
View		Collection	

Find objects in a project

Activity: Find objects in a project

In this activity, you search for the Teamcenter objects assigned to a specific project.

Objects in Projects

Find objects by object name, project id, project name etc

Owning User:	<input type="text"/>
Owning Group:	<input type="text"/>
Name:	<input type="text"/>
Description:	<input type="text"/>
Type:	<input type="text"/>
Project ID:	<input type="text"/> 0002

Launch the [Find objects in a project](#) activity.

Related information

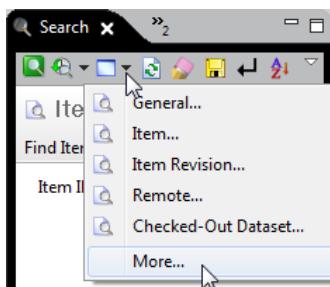
For more information, review these topics in the online help:

- *Finding projects and project data*

Search for the objects in a project

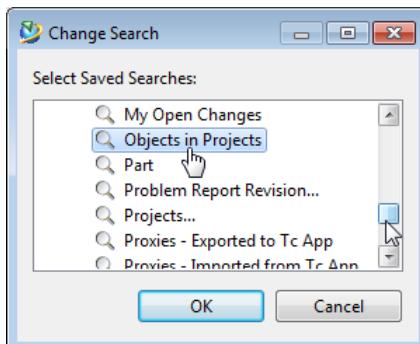
- Step 1:** Click **Open Search View**  on the My Teamcenter toolbar.
The **Search** view appears.

- Step 2:** In the **Search** view, click  in **Select a Search**  and select **More**.



The **Change Search** dialog box appears.

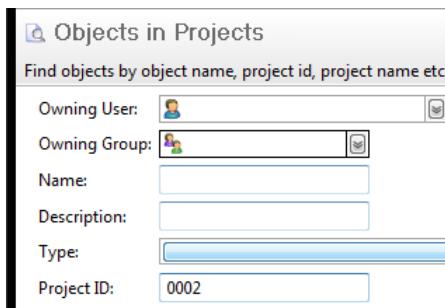
- Step 3:** In the **Change Search** dialog box, under **System Defined Searches**, select **Objects in Projects** and click **OK**.



The **Objects in Projects** search form is loaded and appears in the **Search** view.

- Step 4:** Click **Clear**  in the **Search** view.
The values in the **Objects in Projects** search form are cleared.

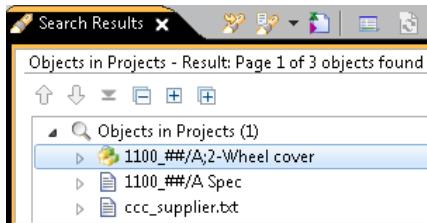
- Step 5:** In the **Objects in Projects** search form, type **0002** in the **Project ID** box and then click **Execute** .



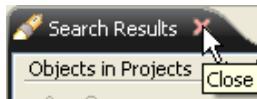
The screenshot shows the 'Objects in Projects' search form. It includes fields for 'Owning User' (with a user icon), 'Owning Group' (with a group icon), 'Name', 'Description', 'Type', and 'Project ID'. The 'Project ID' field contains the value '0002'.

- Step 6:** Click **Execute** .

The search results are the **1100_##/A;2-Wheel cover** item revision and the **1100_##/A Spec** and the **ccc_supplier.txt** datasets.



Step 7: Close the **Search Results** view.



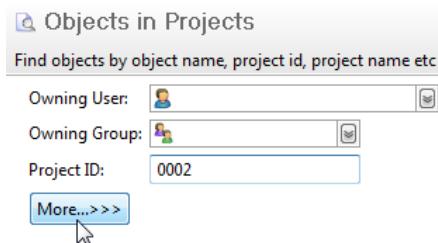
Find only item revision objects assigned to the project

Step 1: Click **Clear**  in the **Search** view.

The values in the **Objects in Projects** search form are cleared.

Step 2: Type **0002** in the **Project ID** box.

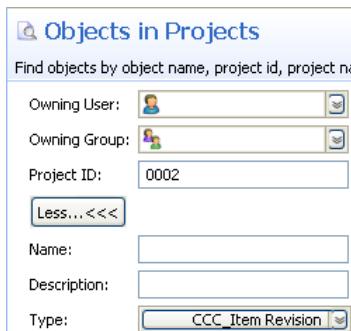
Step 3: Click **More** to display all the search fields.



The screenshot shows the 'Objects in Projects' search interface. It includes fields for 'Owning User' and 'Owning Group', both with dropdown menus. Below these is a 'Project ID' field containing '0002'. At the bottom left is a blue rectangular button labeled 'More...>>>' with a mouse cursor pointing to it.

Step 4: In the **Type** box, type **CCC_ItemRevision** or select **CCC_ItemRevision** from the list.

The **Type** box on the search form is populated with the object type.



The screenshot shows the 'Objects in Projects' search interface with additional fields: 'Name' and 'Description'. The 'Type' field is highlighted and contains the text 'CCC_Item Revision'. Above the 'Type' field is a blue rectangular button labeled 'Less...<<<'.

Step 5: Click **Execute** .

The search results now include only the item revision object assigned to the project.

Step 6: Close the **Search** view and the **Search Results** view.

Section

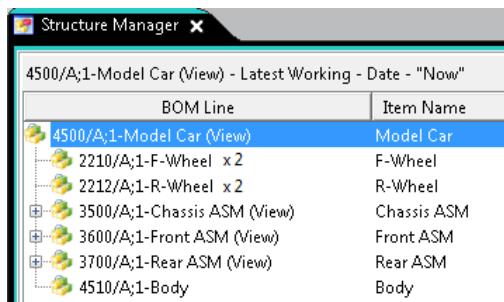
9 *Opening and viewing product structures*

View a product structure

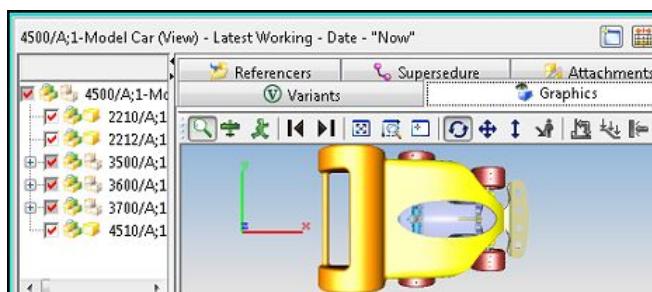
Activity: View a product structure

In this activity, you use Structure Manager to:

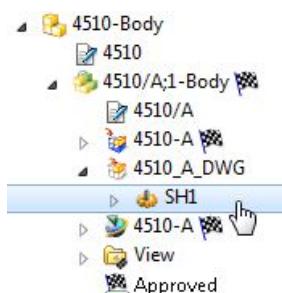
- View a product structure.



- View the assembly visualization data.



- View the drawing of an assembly.



Launch the [View a product structure](#) activity.

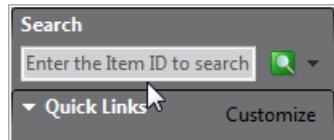
Related information

For more information, review these topics in the online help:

- [Viewing the structure](#)
- [Visualizing product structure](#)

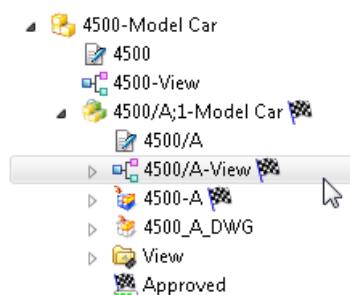
Find an assembly and open it in Structure Manager

Step 1: In the quick search box in My Teamcenter, type **4500** to find the **4500-Model Car** item.



Step 2: Click **Execute** or press Enter.

Step 3: In the item revision tree, double-click the BOM view revision object.



Note

You can also open the product structure in Structure Manager by:

- Selecting the BOM view revision object and clicking **Open selected object** on the toolbar.
- Right-clicking the BOM view revision object and choosing **Send To→Structure Manager**.

This launches the Structure Manager application and opens the product structure in Structure Manager.

Note the number of piece parts and subassemblies in the **4500-Model Car** assembly.

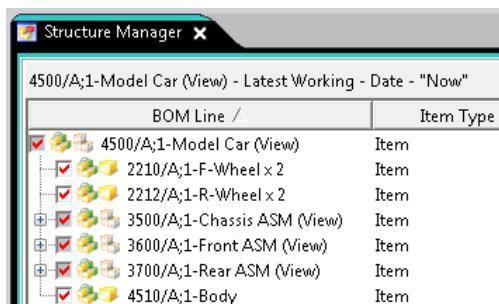
View visualization data

Step 1: With the top **4500/A;1-Model Car (View)** BOM line selected, click **Show/Hide the data panel**  on the Structure Manager toolbar to show the data panel.

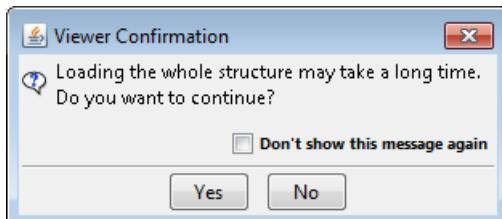
Step 2: Click the **Graphics** tab.

The embedded viewer is loaded into Structure Manager.

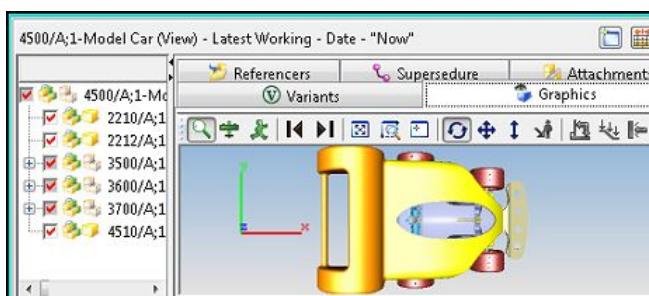
Step 3: Select the box next to the **4500/A;1-Model Car (View)** BOM line.



Step 4: If the **Viewer Confirmation** dialog box appears, click **Yes** to continue.



Step 5: If necessary, click **Fit All**  to fit the entire assembly into the **Graphics** pane.



Step 6: From here, you can select or clear boxes to turn on or off the display of any part or assembly. You can also manipulate the view using the toolbar in the **Graphics** pane.

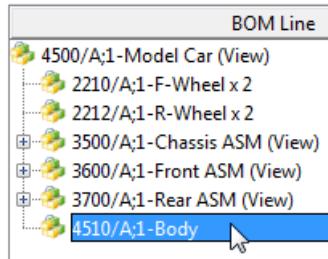
Note

The basics of viewing and working with visualization tools are explained later in the course.

Step 7: Click **Show/Hide the data panel**  on the Structure Manager toolbar to hide the data panel.

View the drawing of an assembly component

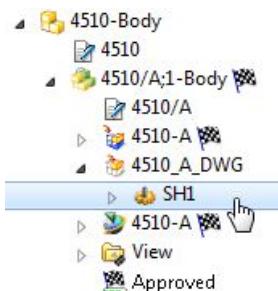
- Step 1:** Right-click the **4510/A;1-Body** item revision and choose **Send To→ My Teamcenter**.



The selected component is opened in a My Teamcenter tri-pane component view.

- Step 2:** Expand **4510_A_DWG**.

- Step 3:** Select the **SH1 DrawingSheet** dataset.



- Step 4:** Click the **Viewer** tab.

The drawing of the car body appears in the **Viewer** pane.

From here, you can view the assembly component drawing. You can also manipulate the drawing view using the toolbar in the **Viewer** pane.

Note

The basics of viewing and working with visualization tools are explained later in the course.

- Step 5:** Click the **Summary** tab.

Section

10 Controlling assembly configuration views

Configure product structure using revision rules

Activity: Configure product structure using revision rules

In this activity, you configure the product structure for the **3500-Chassis ASM** using revision rules.

3500/A;1-Chassis ASM (View) - Latest Working - Date - "Now"	
BOM Line	Item Rev Status
3500/A;1-Chassis ASM (View)	Approved
3510/A;1-Pan	Approved
3530/A;1-P-Pack	Approved
3540/B;1-Bumper	

Launch the [Configure product structure using revision rules](#) activity.

Related information

For more information, review these topics in the online help:

- [Understanding revision rules](#)

Find and review the 3500-Chassis ASM assembly in Structure Manager

Step 1: Return to Structure Manager.



Step 2: In the quick search box, type **3500** and press Enter.

The objects that include 3500 in the item ID are found and listed in the **Quick Open Results** dialog box.

Step 3: In the **Quick Open Results** dialog box, double-click the **3500-Chassis ASM** item in the list.

The product structure for the item is found and appears in Structure Manager.

3500/A;1-Chassis ASM (View) - Latest Working - Date - "Now"	
BOM Line	Item Rev Status
3500/A;1-Chassis ASM (View)	Approved
3510/A;1-Pan	Approved
3530/A;1-P-Pack	Approved
3540/B;1-Bumper	

Step 4: Review the **Chassis ASM** product structure in Structure Manager.

- Note that the bumper does not have a value in the **Item Rev Status** column.

Because there is no release status for this item revision, it is considered **Working**.

- Note, as indicated in the window frame, that the revision rule is currently set to **Latest Working**.

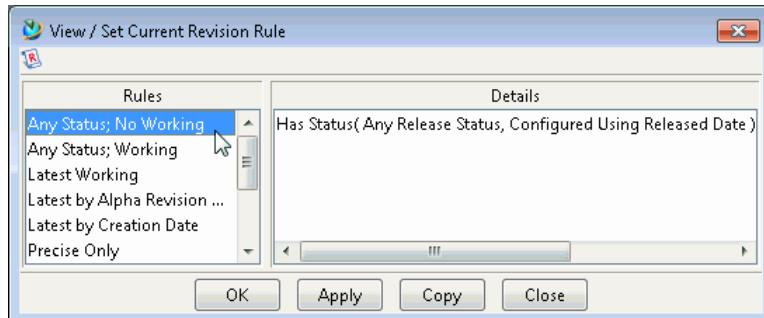
This rule loads the components in the following order of precedence:

- o Precise components, if the structure is precise
- o Working components
- o Components containing a release status (of any type)

Change the revision rule and view the results

Step 1: Click **Revision Rule**  on the Structure Manager toolbar.

Step 2: Select **Any Status; No Working** as the revision rule.



Step 3: Click **OK**.

Note that **3540/A** is now the configured revision of the bumper. It is the latest revision of the bumper with a status of **Approved**.

3500/A;1-Chassis ASM (View) - Any Status; No Working - Date - "Now"	
BOM Line	Item Rev Status
3500/A;1-Chassis ASM (View)	Approved
3510/A;1-Pan	Approved
3530/A;1-P-Pack	Approved
3540/A;1-Bumper	Approved

Change the revision rule back and view the results

Step 1: Click **Revision Rule**  on the Structure Manager toolbar.

Step 2: Select **Latest Working** as the revision rule and click **OK**.

The product structure is again configured with the **3540/B Bumper** component.

3500/A;1-Chassis ASM (View) - Latest Working - Date - "Now"	
BOM Line	Item Rev Status
3500/A;1-Chassis ASM (View)	Approved
3510/A;1-Pan	Approved
3530/A;1-P-Pack	Approved
3540/B;1-Bumper	

Toggle between a precise and imprecise assembly

Activity: Toggle between a precise and imprecise assembly

In this activity, you create a new assembly revision and toggle between a precise and imprecise assembly structure.

3500_#/A;1-Chassis ASM (View) - Latest Working - Date - "Now"	
BOM Line	Item Rev Status
3500_#/A;1-Chassis ASM (View)	Approved
3510/A;1-Pan	Approved
3530/A;1-P-Pack	Approved
3540/B;1-Bumper	

* 3500_#/B;1-Chassis ASM (View) - Any Status; No Working - Date	
BOM Line	Item Rev Status
3500_#/B;1-Chassis ASM (View)	
3510/A;1-Pan	Approved
3530/A;1-P-Pack	Approved
3540/A;1-Bumper	Approved

Launch the [Toggle between a precise and imprecise assembly](#) activity.

Related information

For more information, review these topics in the online help:

- [Understanding precise and imprecise assemblies](#)

Create a new assembly revision

Step 1: In Structure Manager, in the quick search, type **3500_##** and press Enter.

Step 2: In the **Quick Open Results** dialog box, double-click the **3500_##** item in the list.

The assembly structure appears in Structure Manager.

3500_##/A;1-Chassis ASM (View) - Latest Working - Date - "Now"	
BOM Line	Item Rev Status
3500_##/A;1-Chassis ASM (View)	Approved
3510/A;1-Pan	Approved
3530/A;1-P-Pack	Approved
3540/B;1-Bumper	

Note the white background color indicating this is an imprecise BOM.

Step 3: Verify that the top-level **3500_##/A-Chassis ASM** item revision BOM line is selected.

Note that revision **A** of the **Chassis ASM** is released.

Step 4: Choose **File→Revise**.

The **Revise** dialog box appears.

Step 5: Click **Finish** and then click **Close**.

Revision **B** of **Chassis ASM** is created and opened in Structure Manager.

Save the product structure as precise

Step 1: Verify that the top-level **3500_##/B-Chassis ASM** item revision BOM line is selected.

Step 2: Click **Revision Rule** .

Step 3: Select **Any Status; No Working** and click **OK**.

The latest *released* BOM configuration appears.

Step 4: Choose **Edit→Toggle Precise/Imprecise** to change the assembly structure from imprecise to precise.

The green background indicates the BOM is set to precise. At this point, you can save the precise BOM configuration.

The precise configuration of the product structure appears.

* 3500_##/B;1-Chassis ASM (View) - Any Status; No Working - Date - "Now"		
BOM Line	Item Rev Status	Rule c
3500_##/B;1-Chassis ASM (View)		
3510/A;1-Pan	Approved	Has Status
3530/A;1-P-Pack	Approved	Has Status
3540/A;1-Bumper	Approved	Has Status

Step 5: Click **Save**  to save the precise configuration in the database.

Step 6: Click **Revision Rule** .

Step 7: Select **Precise Only** and click **OK**.

The *as saved* configuration displays with the **Precise** rule configured.

Save the product structure as imprecise

Step 1: Click **Revision Rule** .

Step 2: Select **Working; Any Status** and click **OK**.

The latest working BOM configuration appears.

Step 3: With the top BOM line selected, choose **Edit→Toggle Precise/Imprecise** to change the assembly structure from precise to imprecise.

Note

The white background color indicates that this is now an imprecise BOM.

Step 4: Click **Save**  to save the imprecise configuration in the database.

Step 5: In Structure Manager, choose **File→Close** or click  on the **Structure Manager** tab .

Section

11 *Creating and managing product structures*

Create a product structure

Activity: Create a product structure

In this activity, you create a product structure for the **6500_##-Perf Car ASM** assembly.

* 6500_##/A;1-Perf Car ASM (View) - Latest Working - Date - "Now"		
BOM Line	Item Rev Status	Find No.
6500_##/A;1-Perf Car ASM (View)		
5500_##/A;1-Perf Chassis ASM (View)	10	
3510/A;1-Pan	Approved	10
3530/A;1-P-Pack	Approved	20
93540/A;1-Bumper	Approved	30

Launch the [Create a product structure](#) activity.

Related information

For more information, review these topics in the online help:

- [Building and editing product structure](#)

Create the top-level item for the performance car assembly

Step 1: In your **Home** folder, select the **My Items** folder.

Step 2: Choose **File→New→Item**.

The **New Item** dialog box appears.

Step 3: Select **CCC_Item** as the type.

Step 4: Click **Next >**.

Step 5: In the **Item ID** box, type **6500_##**.

Step 6: Click **Assign**  to automatically assign the revision ID.

Step 7: In the **Name** box, type **Perf Car ASM**.

Step 8: In the **Description** box, type **High Performance Car Assembly**.

Note

When the **Unit of Measure** box is left blank, it implies *each*.

Step 9: Click **Finish**  to create the item.

The new item is created and added to your **My Items** folder.

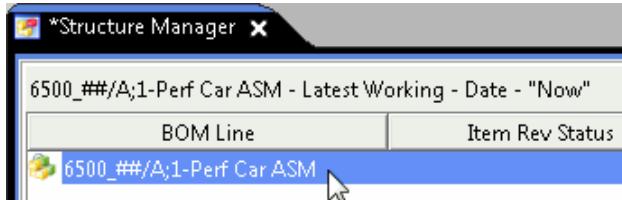
Step 10: Click **Cancel** to close the **New Item** dialog box.

Create a new item to add to the structure

Step 1: In the **My Items** folder, expand the **6500_##-Perf Car ASM** item, and select the **6500_##/A;1-Perf Car ASM** item revision.

Step 2: Right-click and choose **Send To→Structure Manager**.

Step 3: With the **6500_##/A;1** top BOM line selected, choose **File→New→Item**.



Note

You can also use the **Ctrl+T** key combination to access the **New Item** dialog box and create the new item.

Step 4: Select **CCC_Item** for type and click **Next >**.

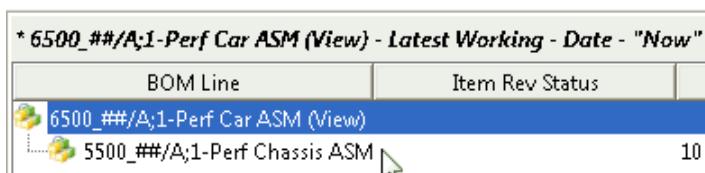
Step 5: Complete the item information as follows:

- In the **Item ID** box, type **5500_##**.
- Click **Assign** to automatically assign the revision ID.
- In the **Name** box, type **Perf Chassis ASM**.
- In the **Description** box, type **High performance chassis assembly**.

Step 6: Click **Finish** .

Step 7: Click **Cancel** to close the **New Item** dialog box.

The item is placed in the **6500_##** product structure.



Note

An asterisk on the **Structure Manager** tab indicates the structure is not saved.

Step 8: Click **Save** on the **Structure Manager** toolbar to save the structure.

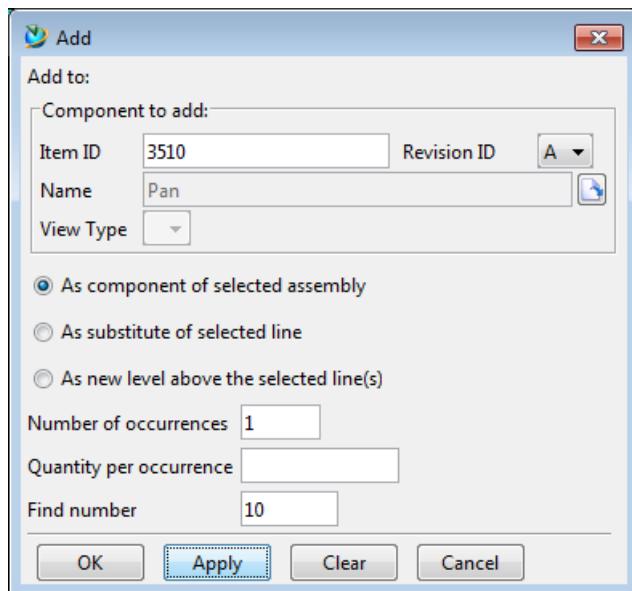
Add existing components to the item

Step 1: Select the **5500_##/A** BOM line.

Step 2: Choose **Edit→Add**.

The **Add** dialog box appears.

Step 3: In the **Item ID** box, type **3510** and press Enter.



The **Add** dialog box is populated with information about the **3510** item.

Step 4: Click **Apply** to add the component to the assembly.

The **Add** dialog box is still displayed.

Step 5: In the **Item ID** box, type **3530** and press Enter.

Step 6: Click **Apply** to add the component to the assembly.

The **Add** dialog box is still displayed.

Step 7: In the **Item ID** box, type **93540** and press Enter.

Step 8: Click **OK** to add the component to the assembly and close the dialog box.

Step 9: Click **+** to expand the **5500_##** assembly.

At this point the **6500_##** product structure should look like the structure in the following diagram.

* 6500_##/A;1-Perf Car ASM (View) - Latest Working - Date - "Now"			
BOM Line	Item Rev Status	Find No.	
6500_##/A;1-Perf Car ASM (View)			
5500_##/A;1-Perf Chassis ASM (View)	Approved	10	
3510/A;1-Pan	Approved	10	
3530/A;1-P-Pack	Approved	20	
93540/A;1-Bumper	Approved	30	

Step 10: Click **Save**  to save the product structure.

Modify a product structure

Activity: Modify a product structure

In this activity, you add three occurrences of a spring component to the **5500_##/A-Perf Chassis ASM** product structure.

* 6500_##/A;1-Perf Car ASM (View) - Latest Working - Date - "Now"		
BOM Line		Item Rev Status
6500_##/A;1-Perf Car ASM (View)		
5500_##/A;1-Perf Chassis ASM (View)		
3510/A;1-Pan		Approved
3530/A;1-P-Pack		Approved
93540/A;1-Bumper		Approved
3605/A;1-Spring x 3		Approved

Launch the [Modify a product structure](#) activity.

Related information

For more information, review these topics in the online help:

- [Building and editing product structure](#)

Find an existing component to add to the assembly

Step 1: Return to My Teamcenter.



Step 2: Click **Search** .

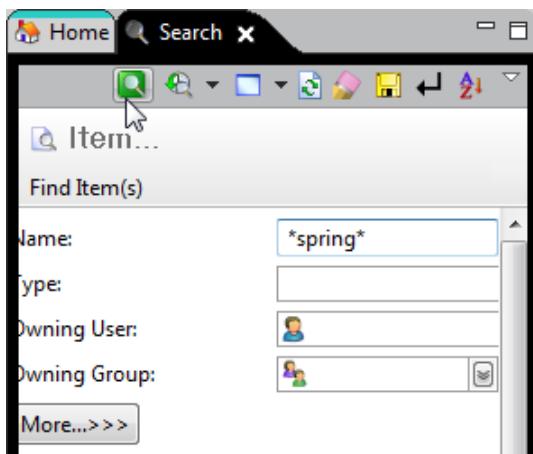
Step 3: In the **Search** view, click in **Select a Search** , and select **Item....**.
The **Item** search criteria appears in the **Search** pane.

Step 4: Click **Clear** to clear the values in the search criteria boxes.

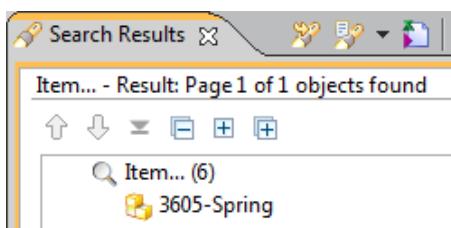
Step 5: Type ***spring*** in the **Name** box and click **Execute** .

Note

You can also press the Enter key to execute the search.



The **3605-Spring** item is found.



Add three occurrences of the component

- Step 1:** Select the **3605-Spring** item in the search results window and click **Copy** .
- Step 2:** Click **Structure Manager** to return to the **Structure Manager** perspective.
- Step 3:** Ensure that the **5500_##/A-Perf Chassis ASM** BOM line is selected.

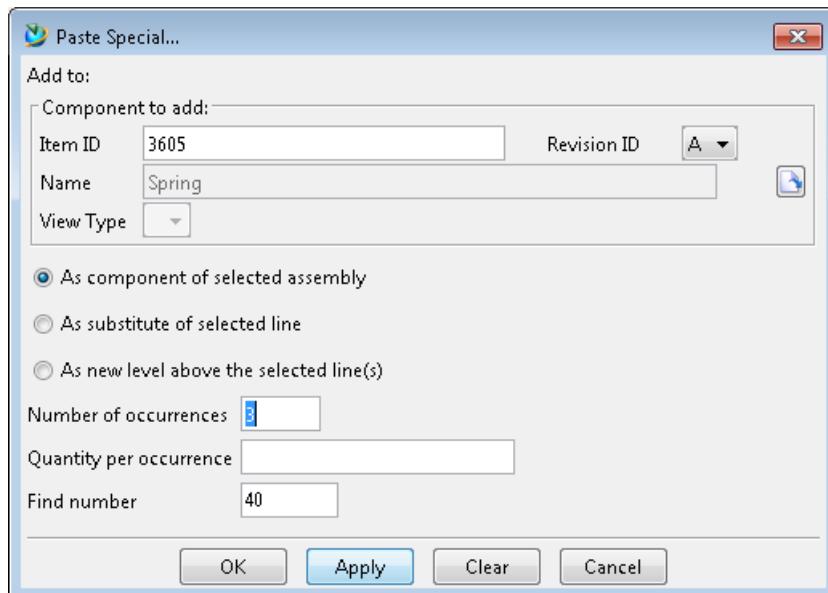
Note

In the next action, be sure to choose **Edit→Paste Special** rather than **Edit→Paste** to access the **Paste Special** dialog box.

- Step 4:** Choose **Edit→Paste Special**.

The **Paste Special** dialog box appears.

- Step 5:** In the **Number of occurrences** box, type **3**.



- Step 6:** Click **OK**.

Three occurrences of the **3605/A-Spring** component are added to the **5500_##/A-Perf Chassis ASM** product structure.

* 6500_##/A;1-Perf Car ASM (View) - Latest Working - Date - "Now"	
BOM Line	Item Rev Status
6500_##/A;1-Perf Car ASM (View)	
5500_##/A;1-Perf Chassis ASM (View)	
3510/A;1-Pan	Approved
3530/A;1-P-Pack	Approved
93540/A;1-Bumper	Approved
3605/A;1-Spring x 3	Approved

Step 7: Click **Save**  to save the changes to the product structure.

Section

12 Working with product structures

Compare two product structures

Activity: Compare two product structures

In this activity, you compare two configurations of the **3500-Chassis ASM** assembly to determine differences in the product structures. Use the **Latest Working** revision rule for one configuration and the **Any Status, No Working** revision rule for the other.

BOM Compare Report - 3500/A;1-Chassis ASM (View) -> 3500/A;1-Chassis			
Item Id	Item Name	Rev	Qty
3540	Bumper	B->A	1

Launch the [Compare two product structures](#) activity.

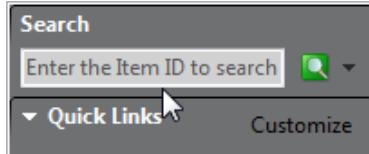
Related information

For more information, review these topics in the online help:

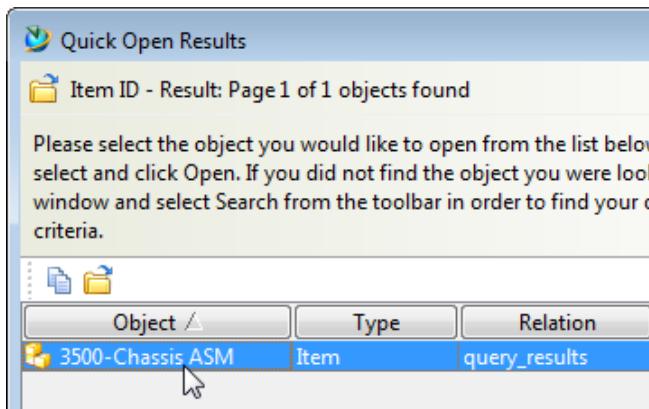
- [Understanding product structure \(BOM\) comparisons](#)

Configure the structures for comparison

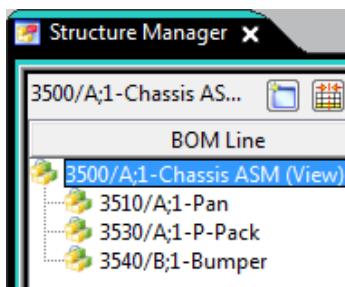
- Step 1:** In the navigation pane in Structure Manager, in the quick search box, type **3500** and press the Enter key.



The **Quick Open Results** dialog box appears.



- Step 2:** In the **Quick Open Results** dialog box, double-click **3500–Chassis ASM**.
The product structure appears in Structure Manager.

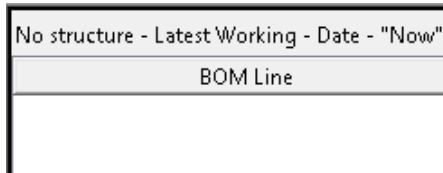


- Step 3:** Click **Splits the window in two** located at the upper right portion of the **Structure Manager** window.

The **Structure Manager** window is split in two with the empty target window on the right.

- Step 4:** Click in the empty target window to select it.

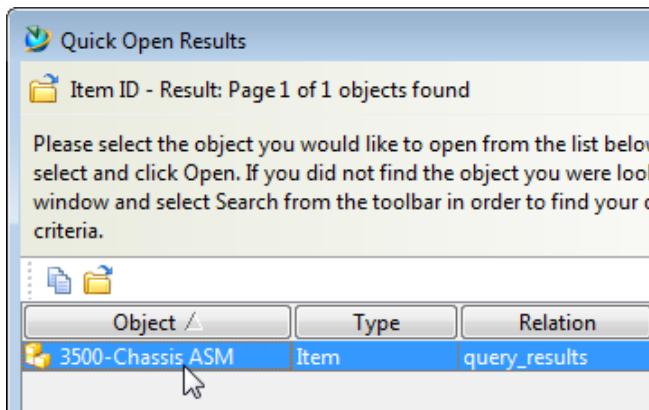
The target window frame appears in bold to indicate the window is selected.



- Step 5:** In the quick search box, click to find **3500–Chassis ASM** again.



The **Quick Open Results** dialog box appears.

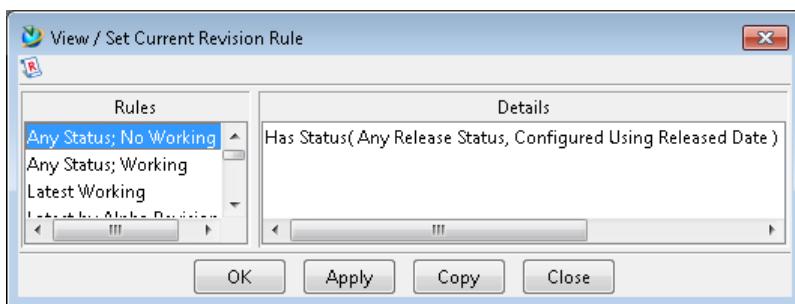


- Step 6:** In the **Quick Open Results** dialog box, double-click **3500–Chassis ASM**.

A copy of the **3500 Chassis ASM** assembly opens in the selected target window.

- Step 7:** With the target window on the right selected, click **Revision Rule** on the Structure Manager toolbar.

- Step 8:** Select **Any Status, No Working** as the revision rule.



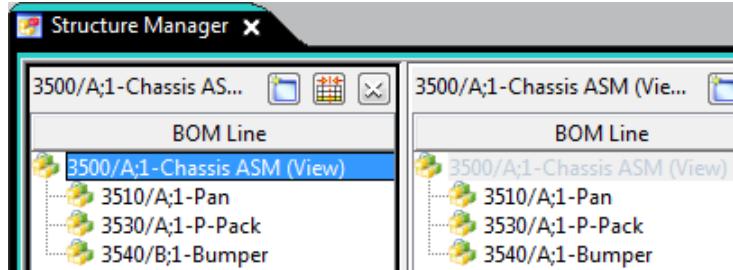
- Step 9:** Click **OK**.

Note

The assemblies are now configured for comparison. The source configuration is **Latest Working** and the target configuration is **Any Status, No Working**.

Perform the comparison

- Step 1:** Verify the **3500 Chassis ASM** assembly structure is expanded in both the source and target windows.

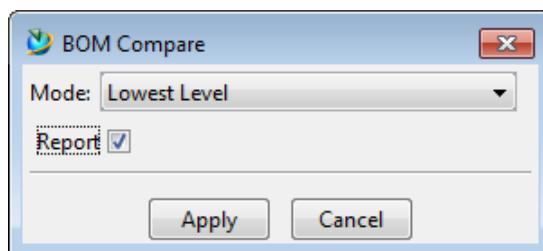


- Step 2:** Choose **Tools→Compare**.

The **BOM Compare** dialog box appears.

- Step 3:** In the **Mode** box, select **Lowest Level**.

- Step 4:** Select the **Report** check box.



- Step 5:** Click **Apply**.

The BOM comparison is shown with the differences between the two structures highlighted.

The comparison report appears in the lower view.

BOM Compare Report - 3500/A;1-Chassis ASM (View) -> 3500/A;1-Chassis			
Item Id	Item Name	Rev	Qty
3540	Bumper	B->A	1

- Step 6:** In the **BOM Compare** dialog box, click **Cancel** and view the comparison report.

- Step 7:** Choose **Tools→** **Graphical BOM Compare**.

The **Graphical BOM Compare** dialog box appears.

- Step 8:** (Optional) Use the comparison sliders in the **Graphical BOM Compare** dialog box to dynamically view the changes.

- Step 9:** Click **Close** to close the **Graphical BOM Compare** dialog box.

Step 10: In the target window on the right, click **Closes the window**  to close the target window.

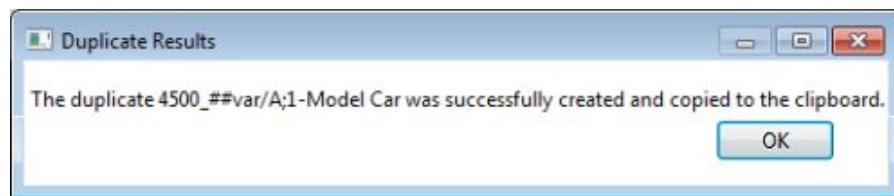


Step 11: Click **Closes the window**  to close the source window.

Clone a product structure

Activity: Clone a product structure

In this activity, you clone the **4500_##/A-Model Car** product structure.



Launch the [Clone a product structure](#) activity.

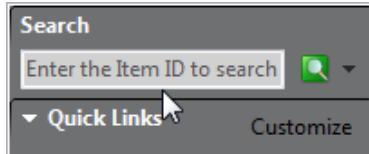
Related information

For more information, review these topics in the online help:

- [*Cloning a structure*](#)

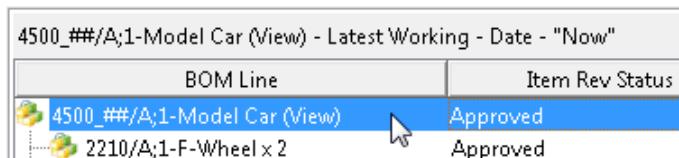
Clone the assembly and assign new item ID values

- Step 1:** In Structure Manager, in the quick search box, type **4500_##** and press the Enter key.



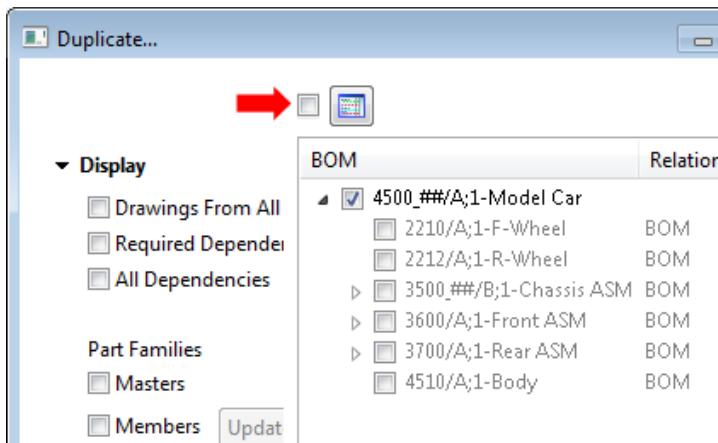
The **Quick Open Results** dialog box appears.

- Step 2:** In the **Quick Open Results** dialog box, double-click **4500_##-Model Car**.
The product structure appears in Structure Manager.
Step 3: With the top BOM line of the **4500_##/A-Model Car** assembly selected, choose **File→Duplicate**.



The **Duplicate** dialog box appears.

- Step 4:** Clear the **Duplicate all items** check box.



- Step 5:** In the **Duplicate** dialog box, select the check boxes for both the **4500_##/A-Model Car** and **3500_##/B-Chassis ASM** BOM lines as shown.

BOM	Relation
<input checked="" type="checkbox"/> 4500_##/A;1-Model Car	
<input type="checkbox"/> 2210/A;1-F-Wheel	BOM
<input type="checkbox"/> 2212/A;1-R-Wheel	BOM
<input checked="" type="checkbox"/> 3500_##/B;1-Chassis ASM	BOM
<input type="checkbox"/> 3600/A;1-Front ASM	BOM
<input type="checkbox"/> 3700/A;1-Rear ASM	BOM
<input type="checkbox"/> 4510/A;1-Body	BOM

Step 6: In the **Default ID Mapping** section of the **Duplicate** dialog box, do the following:

- Clear the **Assign New IDs** check box.
- In the **Replace** box, type `_##`.
- In the **With** box, type `_##var`.

▼ **Default ID Mapping**

<input type="checkbox"/>	Assign New IDs
Prefix	<input type="text"/>
Suffix	<input type="text"/>
Replace	<input type="text"/> _##
With	<input type="text"/> _##var
<input type="button" value="Apply"/>	

- Click **Apply**.

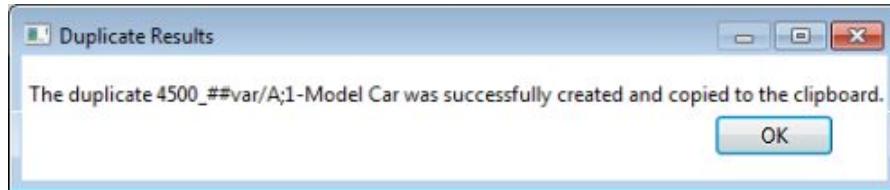
The new item ID values for those two assemblies appear in the **New Item ID** column of the **Duplicate** dialog box.

Old Item ID	Default	New Item ID
4500_##	<input checked="" type="checkbox"/>	4500_##var
2210	<input type="checkbox"/>	
2212	<input type="checkbox"/>	
3500_##	<input checked="" type="checkbox"/>	3500_##var
3600	<input type="checkbox"/>	
3700	<input type="checkbox"/>	
4510	<input type="checkbox"/>	

Create the clone

Step 1: In the **Duplicate** dialog box, click **OK**.

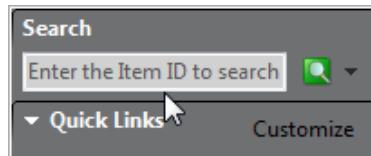
When the duplication process is complete, the **Duplicate Results** dialog box appears.



Step 2: Click **OK** to close the dialog box.

Locate and verify the clone structure

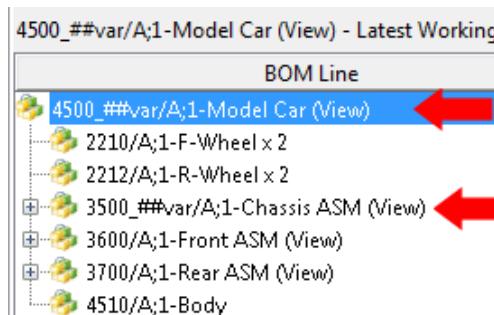
Step 1: In the quick search box, type **4500_##var** and press the Enter key.



The **Quick Open Results** dialog box appears.

Step 2: In the **Quick Open Results** dialog box, double-click **4500_##var-Model Car**.

The product structure appears in Structure Manager.



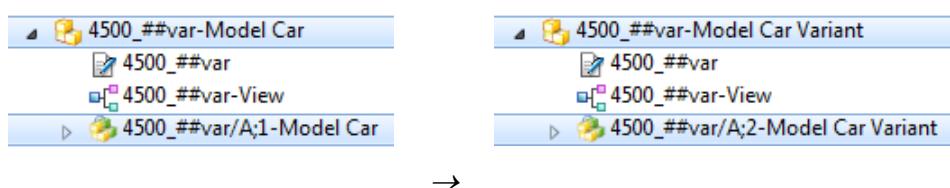
The **4500_##var/A-Model Car** product structure clone contains the duplicates of the **4500_##/A-Model Car** assembly and the **3500_##/B-Chassis ASM** subassembly.

Step 3: Close **Structure Manager**.

Edit a product structure clone

Activity: Edit a product structure clone

In this activity, edit the description and name of the product structure clone you created in the previous activity.



Launch the [Edit a product structure clone](#) activity.

Related information

For more information, review these topics in the online help:

- [*Clone \(duplicate\) a structure*](#)

View the assembly properties and check out the item and item revision

Step 1: If necessary, click the **Home** tab.

Step 2: Expand your **Newstuff** folder.

The **4500_##var-Model Car** is in the **Newstuff** folder.



Note

It may be necessary to select your **Newstuff** folder and choose **View→Refresh**.

Step 3: Expand the **4500_##var-Model Car** assembly item and select both the item and item revision objects.

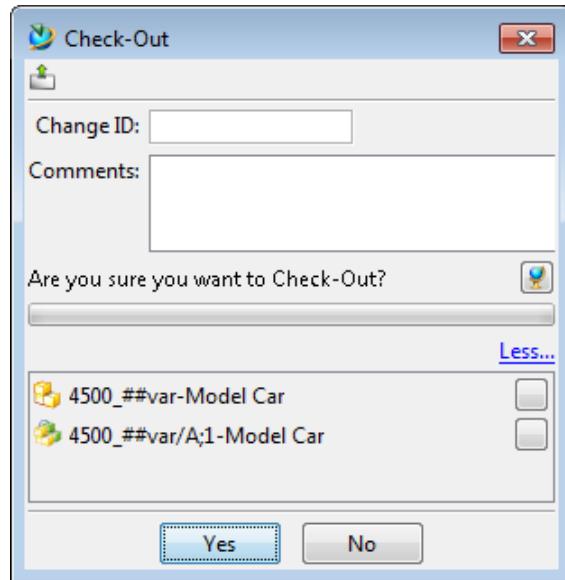
Tip

Use the **Ctrl** key to select noncontiguous lines.



Step 4: Choose **Edit→Properties**.

The **Check-Out** dialog box appears.

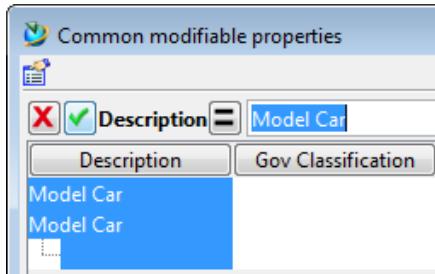


Step 5: Click Yes.

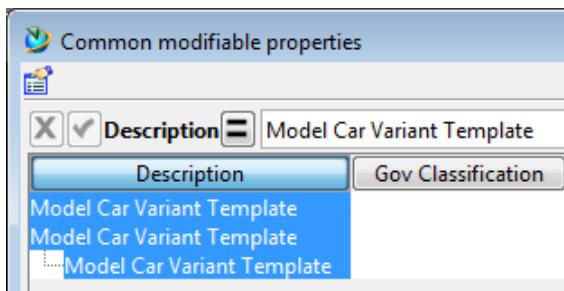
Modify the properties of the product structure clone

Step 1: In the **Common modifiable properties** dialog box, click the **Description** column header.

The label for the property input box changes to **Description**.



Step 2: In the **Description** box, type **Model Car Variant Template** and press Enter.



Step 3: Click the **Name** column header.

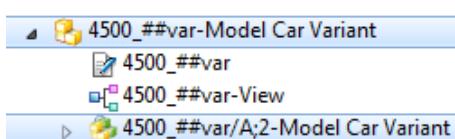
The label for the property input box changes to **Name**.

Step 4: In the **Name** box, type **Model Car Variant** and press Enter.

Step 5: Click **Save and Check-In** to check in and save the changes.

Step 6: Click **Yes** to verify the checkin.

The assembly item and item revision in your **Newstuff** folder reflect the changes to property values.



Create and apply markup

Activity: Create and apply markup

In this activity, you modify the product structure in markup mode and apply markup.

6500_#/A;1-Perf Car ASM (View) - Latest Working - Date - "Now"		
BOM Line	Item Rev Status	Find No.
6500_#/A;1-Perf Car ASM (View)		
5500_#/A;1-Perf Chassis ASM (View)	10	
B510/A;1-Pan	Approved	100 
3530/A;1-P-Pack	Approved	20
93540/A;1-Bumper	Approved	30
3605/A;1-Spring	Approved	40
3605/A;1-Spring	Approved	40
3605/A;1-Spring	Approved	40
3605/A;1-Spring		40

Launch the [Create and apply markup](#) activity.

Related information

For more information, review these topics in the online help:

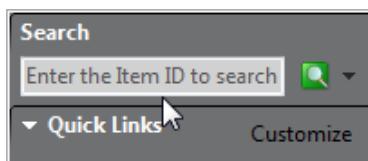
- [Marking up the product structure](#)

Turn on markup mode and modify the structure

- Step 1:** Return to the **Structure Manager** perspective by clicking **Structure Manager** in the navigation pane.



- Step 2:** In the quick search box, type **6500_##** and press the Enter key.

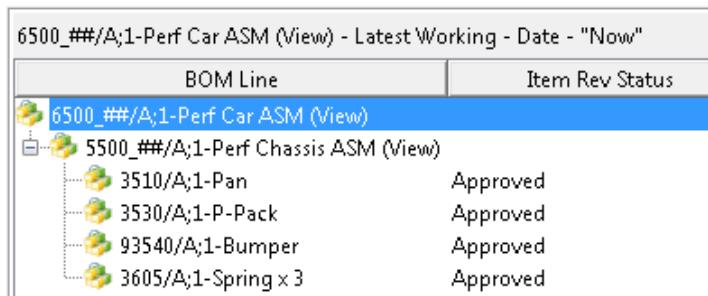


The **Quick Open Results** dialog box appears.

- Step 3:** In the **Quick Open Results** dialog box, double-click **6500_##-Perf Car ASM**.

The product structure appears in Structure Manager.

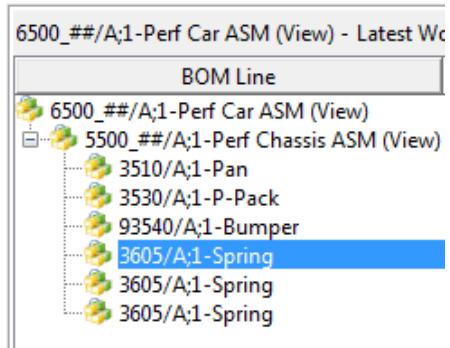
- Step 4:** Expand the **6500_##-Perf Car ASM** assembly.



- Step 5:** Choose **Tools**→**Markup**→ **Markup Mode** or click **Markup** on the toolbar to turn on the markup mode.

- Step 6:** Select the **3605/A-Spring x 3** item.

- Step 7:** Choose **View**→ **Unpack** to view all three occurrences of the spring component.



- Step 8:** Copy one of the occurrences of the **3605/A-Spring** component.
- Step 9:** Select the **5500_##/A-Perf Car ASM** assembly.
- Step 10:** Click Paste to paste an additional occurrence of the spring item to the selected assembly.
The new occurrence of the spring item appears in green.
- Step 11:** Click the corresponding value in the **Find No.** column for **3510/A-Pan** and change it from **10** to **100**, and then press Enter.
Observe the original find number appears with a red strike-through line.

6500_##/A;1-Perf Car ASM (View) - Latest Working - Date - "Now"		
BOM Line	Item Rev Status	Find No.
6500_##/A;1-Perf Car ASM (View)		
5500_##/A;1-Perf Chassis ASM (View)	10	
3510/A;1-Pan	Approved	100 10
3530/A;1-P-Pack	Approved	20
93540/A;1-Bumper	Approved	30
3605/A;1-Spring	Approved	40

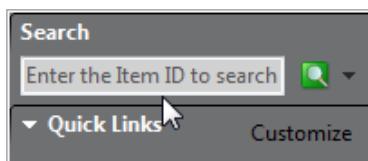
- Step 12:** Close the **Structure Manager** perspective.
In the next task, you reopen the same assembly in Structure Manager to view this markup.

Review and apply the markup

Step 1: Return to Structure Manager.



Step 2: In the quick search box, if needed, type **6500_##** and press the Enter key.



The **Quick Open Results** dialog box appears.

Step 3: In the **Quick Open Results** dialog box, double-click **6500_##**.

The product structure appears in Structure Manager.

Step 4: Expand the assembly and observe the number of the **3605/A-Spring** occurrences and the find number for the **3510/A-Pan** item.

6500_##/A;1-Perf Car ASM (View) - Latest Working - Date - "Now"	
BOM Line	Item Rev Status
6500_##/A;1-Perf Car ASM (View)	
5500_##/A;1-Perf Chassis ASM (View)	
3510/A;1-Pan	Approved
3530/A;1-P-Pack	Approved
93540/A;1-Bumper	Approved
3605/A;1-Spring x 3	Approved

Step 5: Choose **Tools→Markup→Markup Mode** or click **Markup** on the toolbar to turn the markup mode on.

Step 6: Choose **Tools→Markup→Show Markup View** or click **BOM Markup Viewer** on the toolbar to open the BOM markup viewer.

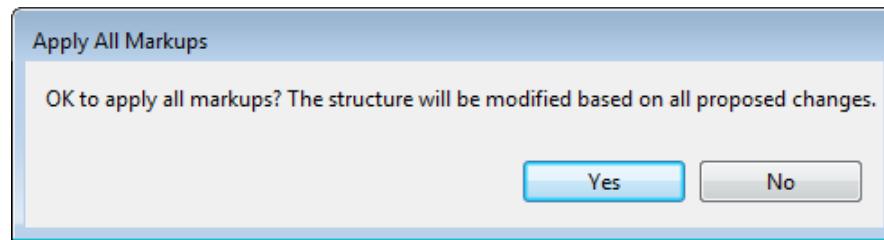
Teamcenter displays **BOM Markup** view.

All existing markups to the structure are loaded and displayed.

Step 7: Select the **5500_##/A-Perf Car ASM** assembly.

Step 8: Review the details of the markup, and then choose **Tools→Markup→Apply Markups (all levels)**.

Step 9: Click **Yes** in the confirmation window.



Teamcenter applies the changes in the markup to the structure.

- Step 10:** Close the **BOM Markup** view and click **Markup**  on the toolbar to turn the markup mode off.

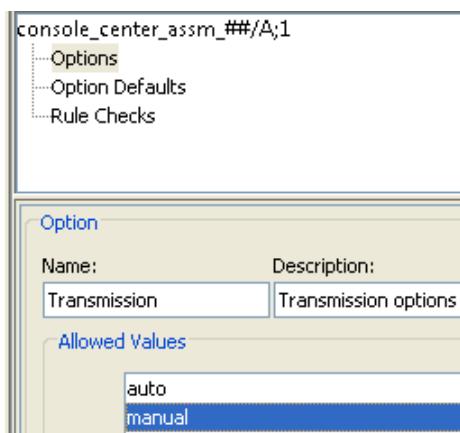
Section

13 Configuring a product structure with variants

Create variant options

Activity: Create variant options

In this activity, you create a variant option to use for configuring automatic or manual transmission options for the **console_center_assm_##** assembly.



Launch the [Create variant options](#) activity.

Related information

For more information, review these topics in the online help:

- [Using classic variants](#)

Find and open `console_center_assm` in Structure Manager

Step 1: In the navigation pane in Structure Manager, type `console_center_assm##` in the quick search box and click .

Step 2: In the **Quick Open Results** dialog, highlight the item and click **Open**.

The product structure for the item is found and appears in Structure Manager.

console_center_assm##/A;1 (View) - Latest Working - Date - "Now"	
BOM Line	Item Type
 console_center_assm##/A;1 (View)	Item
+  console_armrest_assm/A;1 (View)	Item
+  console_center_base_assm/A;1 (View)	Item
+  console_lighter_shroud_assm/A;1 (V... Item	Item
+  console_shifter_assm##/A;1 (View)	Item

Step 3: Scroll to the right and move the **VOC Variant Occ. Config'd** column to the left so it is located next to the **BOM Line** column.

console_center_assm##/A;1 (View) - Latest Working - Date - "Now"	
BOM Line	VOC - Variant Occ. Config'd

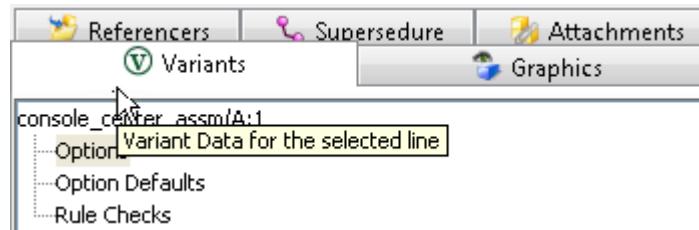
Step 4: Move the **Variant Conditions** column to the left so it is located next to the **VOC – Variant Occ. Config'd** column.

console_center_assm##/A;1 (View) - Latest Working - Date - "Now"		
BOM Line	VOC - Variant Occ. Config'd	Variant Conditions

Step 5: Change the column sizes, as needed for viewing, by dragging the sash bars.

Open the Variants view

- Step 1:** Verify the top BOM line of the **console_center_assm_##** assembly is selected in Structure Manager.
- Step 2:** Click **Show/Hide Data Panel**  on the Structure Manager toolbar.
- Step 3:** Click the **Variants** tab to open the view.



Create the variant option for transmission

Step 1: In the **Variants** view, select **Options** in the top window.

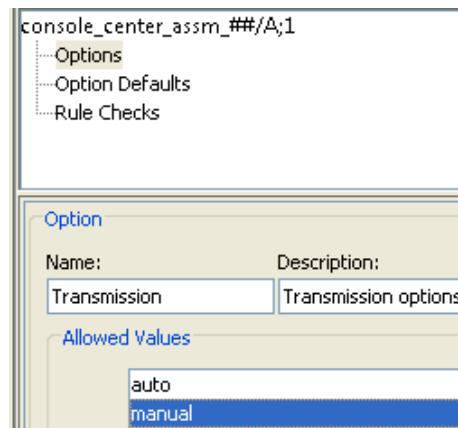


Step 2: In the bottom **Option** window, type **Transmission** in the **Name** box and **Transmission options** in the **Description** box.

Step 3: Type **auto** in the **Value** box and click **Add Value** .

Step 4: Type **manual** in the **Value** box and click **Add Value** .

Step 5: Confirm your options and values are completed as shown.



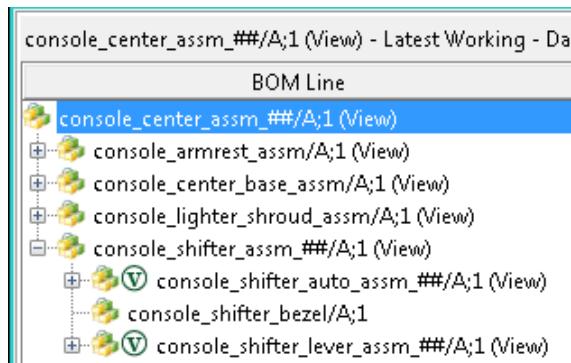
Step 6: Click **Create Option** .

Step 7: Click **Save variant data** .

Set the variant conditions

Activity: Set the variant conditions

In this activity, you set the variant conditions for the automatic and manual transmission in the **console_center_assm_##** assembly.



Launch the [Set the variant conditions](#) activity.

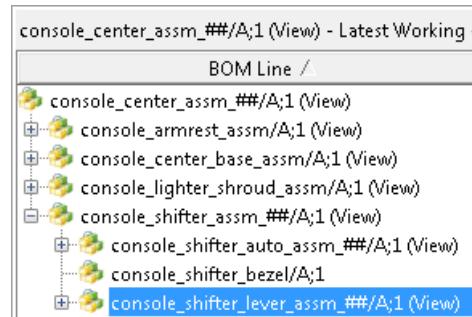
Related information

For more information, review these topics in the online help:

- [Using classic variants](#)

Set the variant condition for the manual transmission

- Step 1:** Expand the **console_shifter_assm_##** assembly BOM line.
- Step 2:** Select the **console_shifter_lever_assm_##** assembly BOM line.



- Step 3:** Choose **Edit→Variant condition**.

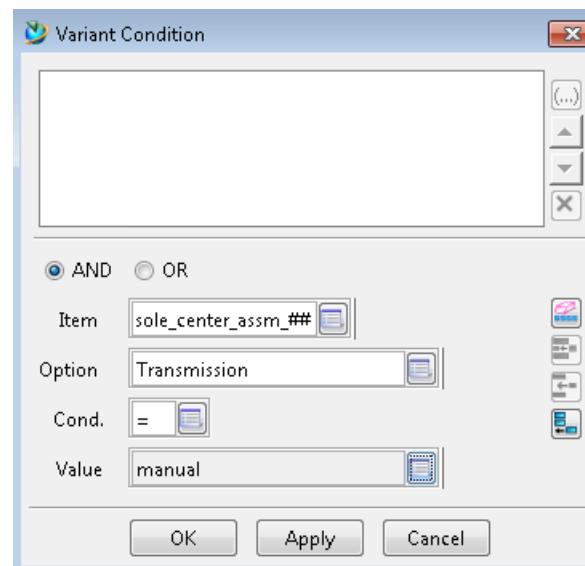
The **Variant Condition** dialog box appears.

In the next steps, you set the variant condition for the automatic transmission using the **Variant Condition** dialog box.

- Step 4:** In the **Option** box, click and select **[console_center_assm_##]Transmission**.
- Step 5:** Confirm the **Cond.** box is set to **=**.

- Step 6:** In the **Value** box, click and select **manual**.

The variant condition for the **console_center_assm_##** is defined as follows.



- Step 7:** Click **Appends after last line** .

Step 8: Click **OK**.

The variant condition is set for the **console_shifter_lever_assm_##** assembly in the **console_center_assm_##** BOM.

 A screenshot of a BOM line. It shows a blue header row with columns for part number, description, and variant status. Below this, there is a single row for the 'console_shifter_lever_assm_##/A;1 (View)' component. The variant status column contains a green circle with a white 'V' symbol, indicating a variant condition is set. The text 'Y Transmission = manual' is also visible in this row.

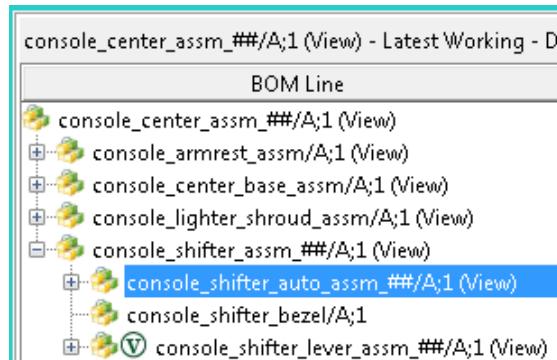
Step 9: Observe the variant symbol  in the BOM line.

It indicates that a variant condition is set for that component.

Step 10: Expand the **Variant Condition** column to view the condition set for the **console_shifter_lever_assm##** manual transmission.

Set the variant condition for the automatic transmission

Step 1: Select the BOM line for the **console_shifter_auto_assm_##** assembly.



Step 2: Choose **Edit→Variant condition**.

The **Variant Condition** dialog box appears.

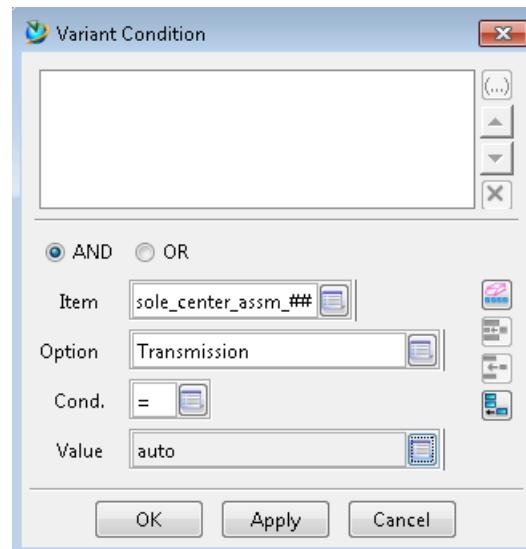
In the next steps, you set the variant condition in the **Variant Condition** dialog box.

Step 3: In the **Option** box, click and select **[console_center_assm_##]Transmission**.

Step 4: Confirm the **Cond.** box is set to **=**.

Step 5: In the **Value** box, click and select **auto**.

The variant condition for the **console_bezel_automatic_assm_##** is defined as follows.



Step 6: Click **Appends after last line** .

Step 7: Click **OK**.

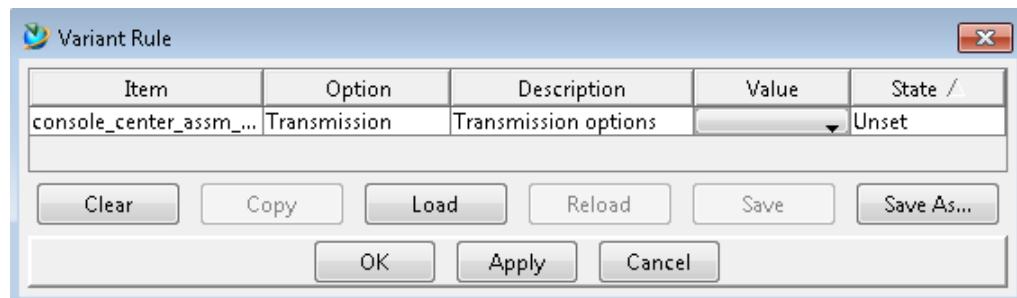
The variant condition is set for the **console_shifter_auto_assm_##** assembly in the **console_center_assm_##** BOM.

- Step 8:** Observe the variant symbol  in the BOM line.
It indicates that a variant condition is set for that component.
- Step 9:** Expand the **Variant Condition** column to view the condition set for the **console_shifter_auto_assm_##** automatic transmission.

Configure the assembly

Activity: Configure the assembly

In this activity, you configure the **console_center_assm_##** assembly with the automatic or manual transmission.



Launch the [Configure the assembly](#) activity.

Related information

For more information, review these topics in the online help:

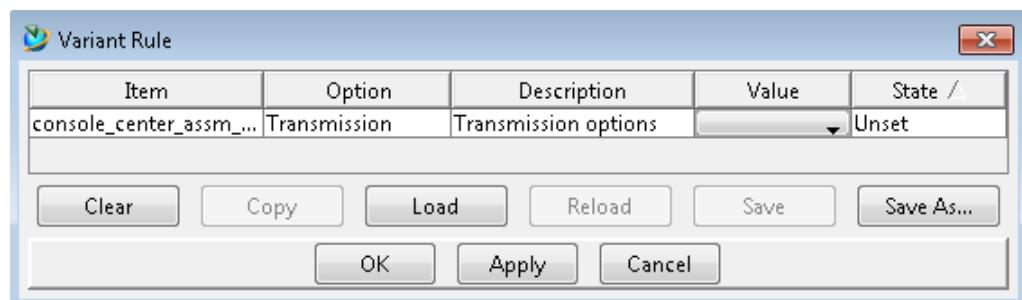
- [Using classic variants](#)

Configure the assembly with the automatic transmission

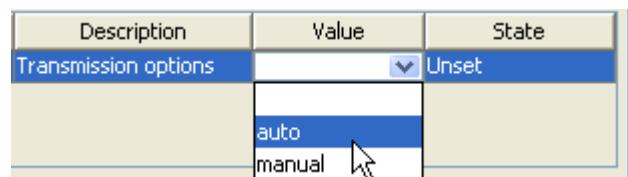
Step 1: Select the top **console_center_assm_##** BOM line.

Step 2: Click **Set option values for selected module**  on the Structure Manager toolbar.

The **Variant Rule** dialog box appears.



Step 3: Click the **Value** box and select **auto**.



Step 4: Click **OK** to see this result.

A **Y** in the **VOC** column for the **console_shifter_auto_assm_##** BOM line indicates the module is now configured with the **console_shifter_auto_assm_##** assembly.

BOM Line	VOC...	Variant Conditions
console_center_assm_##/A;1 (View)	Y	
console_armrest_assm/A;1 (View)	Y	
console_center_base_assm/A;1 (View)	Y	
console_lighter_shroud_assm/A;1 (View)	Y	
console_shifter_assm_##/A;1 (View)	Y	
console_shifter_auto_assm_##/A;1 (View)	Y	Transmission = auto
console_shifter_bezel/A;1	Y	
console_shifter_lever_assm_##/A;1 (View)		Transmission = manual

Note

A **Y** in the **VOC** column is removed from the manual transmission BOM line.

View only the configured components in the structure

Step 1: Choose **View→Show Unconfigured Variants**.

The BOM now shows only the configured components of the product structure.

* console_center_assm_##/A;1 (View) - Latest Working - Date - "Now"		
BOM Line	VOC...	Variant Conditions
console_center_assm_##/A;1 (View)	Y	
console_armrest_assm/A;1 (View)	Y	
console_center_base_assm/A;1 (View)	Y	
console_lighter_shroud_assm/A;1 (View)	Y	
console_shifter_assm_##/A;1 (View)	Y	
console_shifter_auto_assm_##/A;1 (View)	Y	Transmission = auto
console_shifter_bezel/A;1	Y	

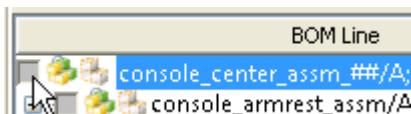
Note

You can choose **View→Show Unconfigured Variants** to switch between showing and hiding the unconfigured components in the product structure.

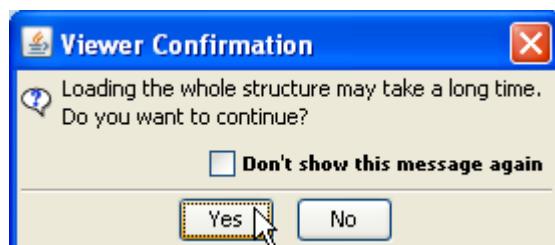
Step 2: Click **Show/Hide Data Panel**  on the Structure Manager toolbar, if not previously opened.

Step 3: Click the **Graphics** tab.

Step 4: Select the check box next to the **console_center_assm_##** BOM line, and view the assembly configuration with the auto transmission.



Step 5: Click **Yes** in the **Viewer Confirmation** window.



Step 6: Click **Fit All**  to fit the entire assembly into the **Graphics** view.

Step 7: Click **Rotate** , and then click the middle of the part and drag upward to provide a better view of the part.

Configure the assembly with the manual transmission

Step 1: With the top **console_center_assm_##** BOM line selected, click **Set option values for selected module**  on the Structure Manager toolbar.

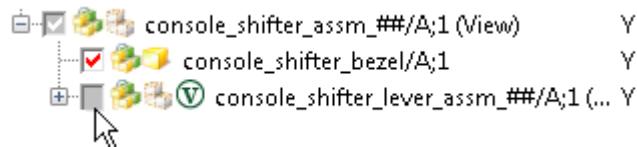
The **Variant Rule** dialog box appears.

Step 2: Click the **Value** box and select **manual**.

Step 3: Click **OK**.

A **Y** appears in the **VOC** column for the **console_shifter_lever_assm_##** BOM line. This indicates the module is now configured with the **console_shifter_assm_##** assembly.

Step 4: Select the check box next to the **console_shifter_lever_assm_##/A;1(view)** BOM line to view the visualization data for the configured assembly.



Step 5: Close the Structure Manager.

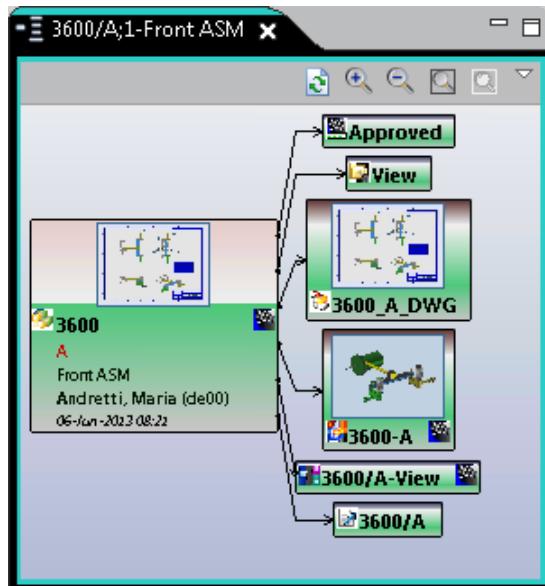
Section

14 Navigating the relation hierarchy of an object

View and navigate a relation hierarchy

Activity: View and navigate a relation hierarchy

In this activity, you view and navigate the hierarchy of the **3600-Front ASM** assembly using Relation Browser.



Launch the [View and navigate a relation hierarchy](#) activity.

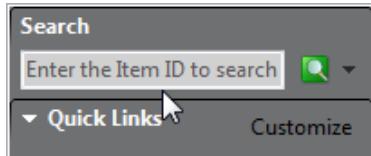
Related information

For more information, review these topics in the online help:

- [Working with Relation Browser](#)

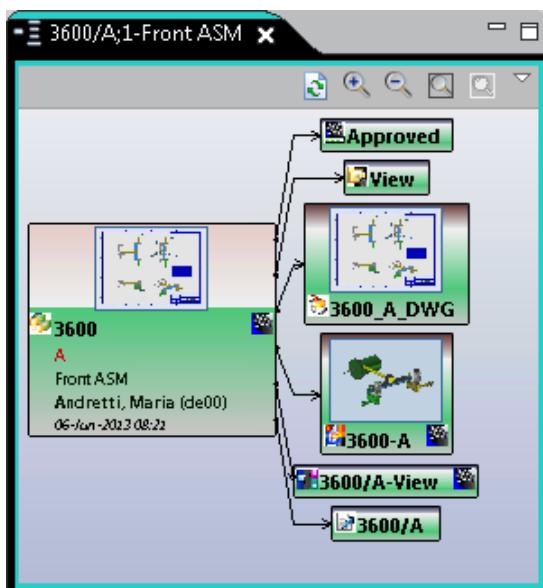
Open 3600-Front ASM in Relation Browser

- Step 1:** In My Teamcenter, in the quick search box, type **3600** and press the Enter key.



- Step 2:** Select the **3600/A;1-Front ASM** item revision.

- Step 3:** Right-click the item revision and choose **Send To** → **Relation Browser**.
Relation Browser opens and displays the selected object.



The **3600/A-Front ASM** assembly is expanded.

- Step 4:** Use zoom in zoom out to adjust the hierarchy view.

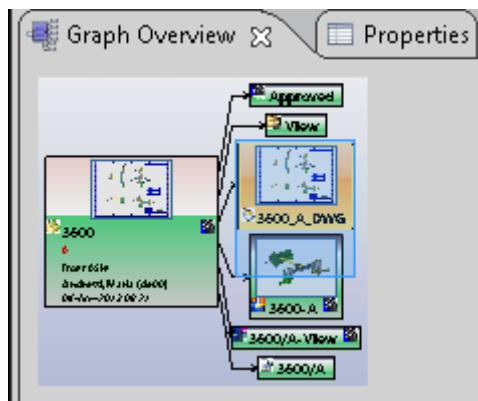
- Step 5:** Double-click the **View** node to show the first-level children nodes in the assembly hierarchy.

- Step 6:** Double-click the **View** node again.

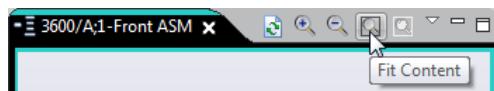
The children for that node collapse and are no longer visible in the hierarchy.

Determine where nodes appear in the overall assembly hierarchy

- Step 1:** If necessary, click the **Graph Overview** tab.
- Step 2:** Select child nodes in the assembly hierarchy in the **Relation Browser** view, and observe the effect on the display in the **Graph Overview** view.



- Step 3:** Click **Fit Content** to fit the entire assembly hierarchy in the **Relation Browser** view.



- Step 4:** Observe the effect on the image in the **Graph Overview** view.

- Step 5:** Observe a thumbnail image of a node in the hierarchy by selecting different nodes in the **3600/A-Front ASM** assembly hierarchy.

The same image related to the selected node appears in the **Image Preview** view.

View the properties for a node in the assembly hierarchy

- Step 1:** Click the **Properties** tab, or click **Show list**  next to the **Graph Overview** tab and then select **Properties**.

Tip

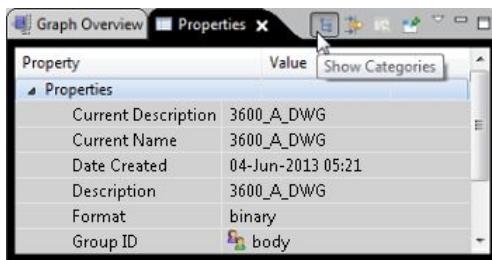
You can expand the **Graph Overview** view pane to display the **Properties** tab and then click the **Properties** tab.

The **Properties** view appears.

- Step 2:** Select the **3600_A_DWG** node in the assembly hierarchy.

- Step 3:** If necessary, click **Show Categories**  in the **Properties** view toolbar.

The property categories for the selected object, and the associated values, appear in the **Properties** view.



- Step 4:** Choose **Window→Close Perspective** to close Relation Browser.

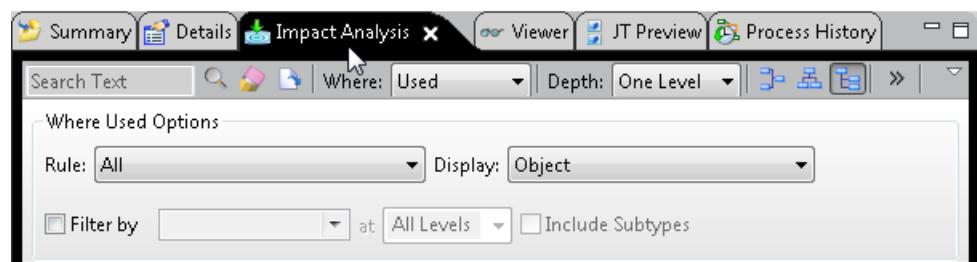
Tip

You can also click  to close Relation Browser.

Perform where-used and where-referenced searches

Activity: Perform where-used and where-referenced searches

In this activity, you perform where-used and where-referenced searches on the **3610/A-L side ASM** assembly.



Launch the [Perform where-used and where-referenced searches](#) activity.

Related information

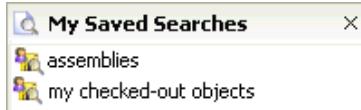
For more information, review these topics in the online help:

- [*Where-referenced searches*](#)
- [*Where-used searches*](#)

Find assemblies

Step 1: In the navigation pane in My Teamcenter, click the **My Saved Searches** menu » .

The **My Saved Searches** pane appears.

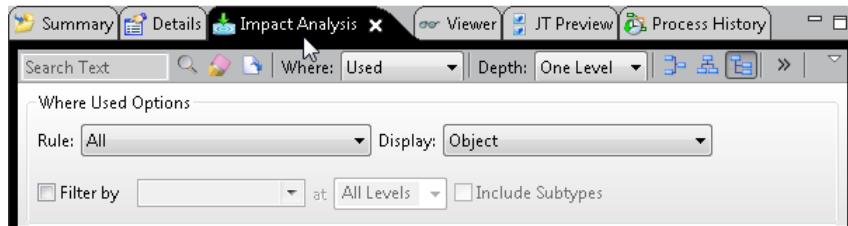


Step 2: Click **assemblies**.

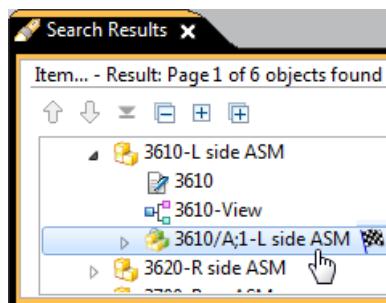
The assemblies search is executed and the **Search Results** view is displayed.

Perform a where-used search

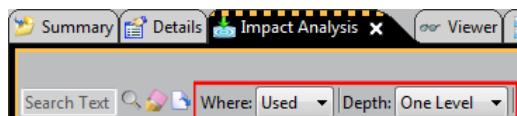
Step 1: Select the **Impact Analysis** view.



Step 2: In the **Search Results** view, expand the **3610-L side ASM** item and select the **3610/A;1-L side ASM** item revision.



Step 3: In the **Impact Analysis** view, ensure **Used** is selected from the **Where** options with **Depth** set to **One Level**.



Step 4: Double-click the **3610/A;1-L side ASM** item in the **Impact Analysis** view to activate the search.

A hierarchical representation of the search results is shown in the **Impact Analysis** view. The **3610/A-L side ASM** assembly is used in **3600/A Front ASM**.

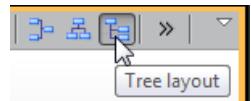


Note

Your display may look different than this graphic, depending on the display layout selected for the **Impact Analysis** view. The buttons on the **Impact Analysis** view toolbar control the display mode.

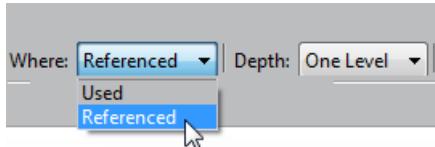


Step 5: Click **Tree layout** to change the display layout.

Section 14 *Navigating the relation hierarchy of an object*

Perform a where-referenced search

- Step 1:** In the **Impact Analysis** view, select **Referenced** from the **Where** options with **Depth** set to **One Level**.



- Step 2:** If necessary, double-click the **3610/A;1-L side ASM** item in the **Impact Analysis** view to activate the search and observe the results.

A hierarchical representation of the search results is shown in the **Impact Analysis** view. The **3610/A;1-L side ASM** assembly revision is referenced in the **3610/A-L side ASM** assembly.

- Step 3:** Click **x** in the view tab to close the **Search Results** view.

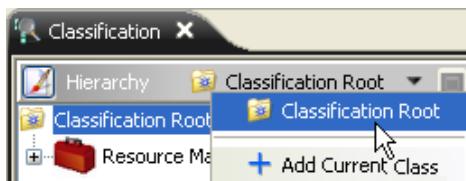
Section

15 *Classifying and using standard product data*

Search all ICOs in a selected class

Activity: Search all ICOs in a selected class

In this activity, you become familiar with the Classification hierarchy and search options.



Launch the [Search all ICOs in a selected class](#) activity.

Related information

For more information, review these topics in the online help:

- [Find an ICO](#)

Locate and select the Industrial Robots class

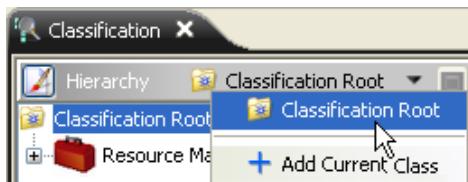
Step 1: Choose **Window→Open Perspective** and select  **Classification** or click  **Classification** in the navigation pane.

Teamcenter opens the **Classification** perspective.

Step 2: Choose **Window→Navigation Pane** to close the navigation pane to free up working space.

Step 3: Double-click **Classification Root** in the **Hierarchy** pane.

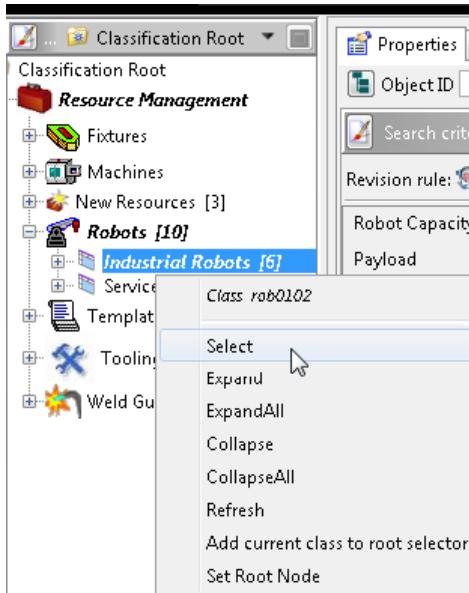
You can also choose **Classification Root** from the **Hierarchy** menu.



Step 4: Expand the **Resource Management** node.

Step 5: Expand the **Robots** group.

Step 6: Right-click the **Industrial Robots** class object and choose **Select**.



The direct path through the hierarchy to the selected object is shown in bold. This helps you identify which classification object is currently selected.

Note

You may also double-click to select a class or classification object in the hierarchy, but selection results are more consistent using the **Select** command.

Search for all classification objects (ICOs) in the selected class

Step 1: Click the **Search** button located at the bottom of the **Properties** view.



The instance navigator is activated.



Step 2: Click the **Goto next Instance** arrow.



The first instance of an ICO found in the **Industrial Robots** class appears in the **Properties** view.

Navigate the search results to view the object's properties

Step 1: Click the **Table** tab.



Tip

You may need to click **Load all found instances** .

The button is located at the bottom of the **Table** view, on the right side of the view.



All ICOs in the **Industrial Robots** class are listed in the **Table** view.

Step 2: Double-click the **rob010105_001/A** object in the **Table** view.

A screenshot showing the software interface with tabs for "Properties" and "Table". The "Properties" tab is currently active.

M/I	Object ID	Object Name	Robot Capac [Kg]
metric	rob010101_001/A	rob010101_001	410.000
metric	rob010102_001/A	rob010102_001	420.000
metric	rob010103_001/A	rob010103_001	430.000
metric	rob010104_001/A	rob010104_001	440.000
metric	rob010105_001/A	rob010105_001	450.000
metric	rob010106_001/A	rob010106_001	460.000

The properties values for the selected object appear in the **Properties** view.

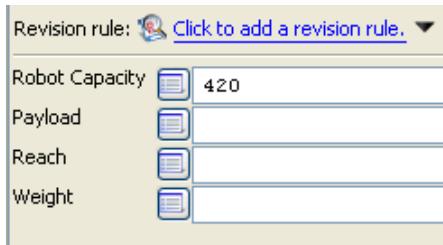
Tip

The path to the selected object is shown in bold in the **Hierarchy** pane.

Step 3: To view the properties of other ICOs, return to the **Table** view and double-click other ICOs whose properties you want to view.

Perform a class attribute search

- Step 1:** Click the **Clear** button  located at the bottom of the **Properties** view to clear any existing search criteria.
- Step 2:** In the **Hierarchy** pane, right-click the **Industrial Robots** class object and choose **Select**.
- Step 3:** In the **Search criteria** pane, click in the **Robot Capacity** box and type **420**.



- Step 4:** Click the **Search** button  located at the bottom of the **Properties** view. The instance navigator is activated showing one item found.

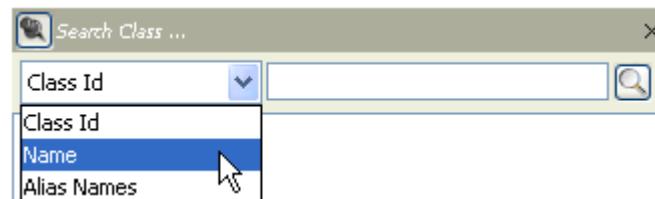


- Step 5:** Click the **Goto last Instance** arrow .
- The ICO that matches the attribute search, the **Cylindrical Robot**, appears in the **Properties** view.

Search the classification hierarchy for a class

Activity: Search the classification hierarchy for a class

In this activity, you search for a class in the classification hierarchy, based on the class name.



Launch the [Search the classification hierarchy for a class activity](#).

Related information

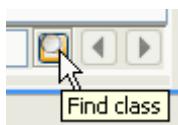
For more information, review these topics in the online help:

- [Searching the class hierarchy](#)

Search the classification hierarchy for a class

Step 1: In Classification, click the **Clear** button  located at the bottom of the **Properties** pane to clear any existing search criteria.

Step 2: Click the **Find class** button  located at the bottom of the hierarchy pane.



The **Search Class** dialog box appears.



Step 3: Change the search context from **Class Id** to **Name**.



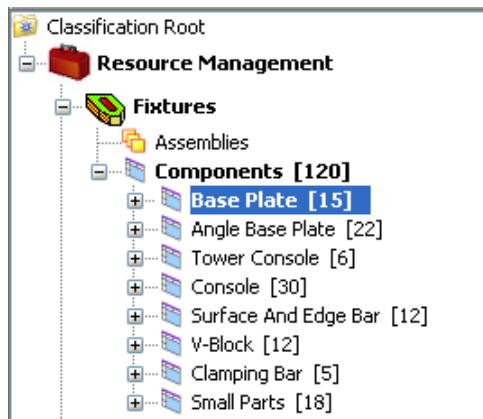
Step 4: In the **Name** box, type **base plate** and press Enter.

The class matching the search term appears.



Step 5: Double-click the search result (**ugfc0101;Base Plate**) to automatically select that class in the hierarchy.

The class is selected in the hierarchy pane.



Step 6: Close the **Search Class** dialog box.



Add classified objects to a product structure

Activity: Add classified objects to a product structure

In this activity, you find the classified wheel sets objects and add them to the product structure for the **4500_##var-Model Car Variant** assembly.



Launch the [Add classified objects to a product structure](#) activity.

Related information

For more information, review these topics in the online help:

- [Working with classification objects](#)
- [Building and editing product structure](#)

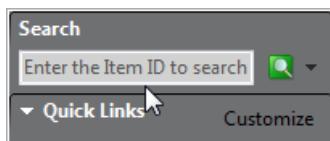
Locate and select the racing class

Step 1: Choose **Window→Navigation Pane** to open the navigation pane.

Step 2: Open Structure Manager.



Step 3: In the quick search box, type **4500_##var** and press the Enter key.



Step 4: In the **Quick Open Results** dialog box, double-click **4500_##var** item in the list.

The product structure for the **4500_##var-Model Car Variant** assembly opens in Structure Manager.

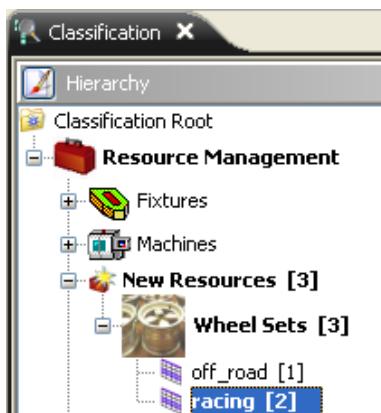
Step 5: Open the **Classification** perspective.

Step 6: If necessary, double-click **Classification Root** in the **Hierarchy** pane.

Step 7: If necessary, expand the **Resource Management** node.

Step 8: Expand the **New Resources** group and the **Wheel Sets** class.

Step 9: Right-click **racing** and choose **Select**.



Copy classified Teamcenter objects for the racing and off road wheel sets

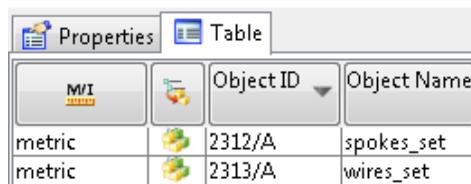
- Step 1:** Click the **Search** button  located at the bottom of the **Properties** view.



All instances of **racing** wheel sets are found.

- Step 2:** Click the **Table** tab.

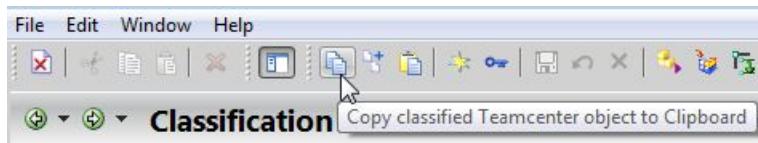
The **racing** classified objects are listed in the table.



M/I		Object ID	Object Name
metric		2312/A	spokes_set
metric		2313/A	wires_set

- Step 3:** In the **Table** view, double-click the **2312** object to open it in the **Properties** view.

- Step 4:** On the Classification toolbar, click **Copy classified Teamcenter object to Clipboard** .

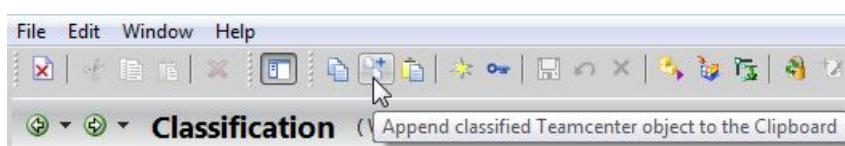


The object is copied to the clipboard.

- Step 5:** Click **Goto next instance**  at the bottom of the **Properties** view.

The **2313** object appears in the **Properties** view.

- Step 6:** On the Classification toolbar, click **Append classified Teamcenter object to the Clipboard** .



There are now two objects in the clipboard .

- Step 7:** Double-click the **off_road** class in the **Hierarchy** pane to select it.

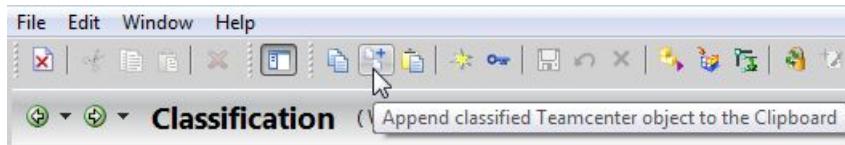
- Step 8:** Click the **Search** button located at the bottom of the **Properties** view.

All instances of **off_road** wheel sets are found.

- Step 9:** Click **Goto next instance**  at the bottom of the **Properties** view.

The **2314** object appears in the **Properties** view.

- Step 10:** On the Classification toolbar, click **Append classified Teamcenter object to the Clipboard** .



There are now three objects in the clipboard.

- Step 11:** Close the **Classification** perspective.

Add the wheel sets to the BOM and move them to the top of the structure

- Step 1:** In Structure Manager, with the top BOM line of the **4500_##var/A-Model Car Variant** assembly selected, click **Paste** .
- The wheel set classified objects are added to the bottom of the product structure.
- Step 2:** Double-click the **Find No.** cell for the **2312** wheel set object.
- The cell is opened for edit.
- Step 3:** Type **5** to replace the existing value in the **Find No.** cell and press Enter.
- Step 4:** Do the same for the **2313** and **2314** BOM lines, replacing the existing find number with **6** and **7**, respectively.
- The wheel sets are now listed at the top of the BOM.
- Step 5:** Click **Save**  to save the product structure.

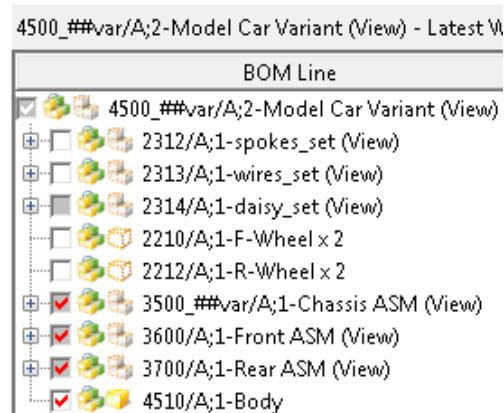
View the assembly configured with the different wheel sets

Step 1: Click **Show/Hide Data Panel** .

Step 2: Click the **Graphics** tab.

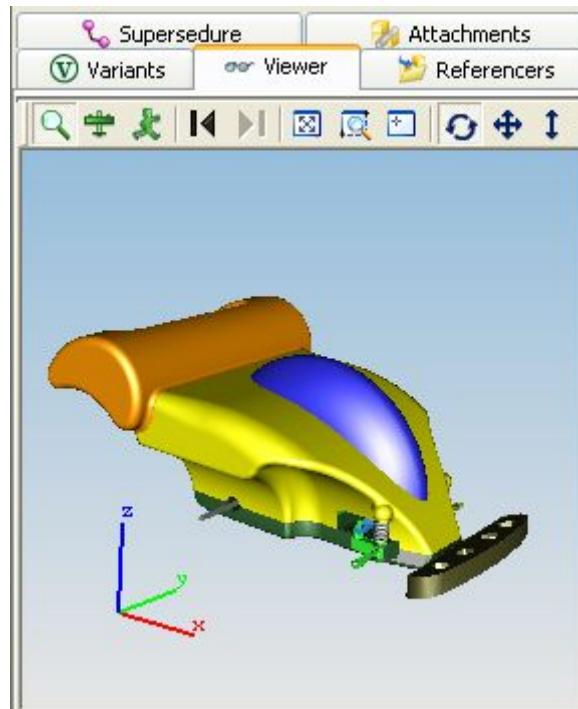
If not opened previously, the visualization software is loaded.

Step 3: Select the **3500_##var/A-Chassis ASM**, **3600/A-Front ASM**, **3700/A-Rear ASM**, and **4510/A-Body** BOM lines for viewing.



Step 4: Click **Fit All**  to zoom out and fit the selected 3D model in the **Graphics** view.

Step 5: With **Rotate**  already selected, click the middle of the part and drag upward to provide a better view of the part.



- Step 6:** Select the empty check box next to the **spokes_set** in the BOM line to view this configuration.
- Step 7:** Clear the check box next to **spokes_set**, and then select **wires_set** to view this configuration.
- Step 8:** Clear the check box next to **wires_set**, and then select **daisy_set** to view this configuration.

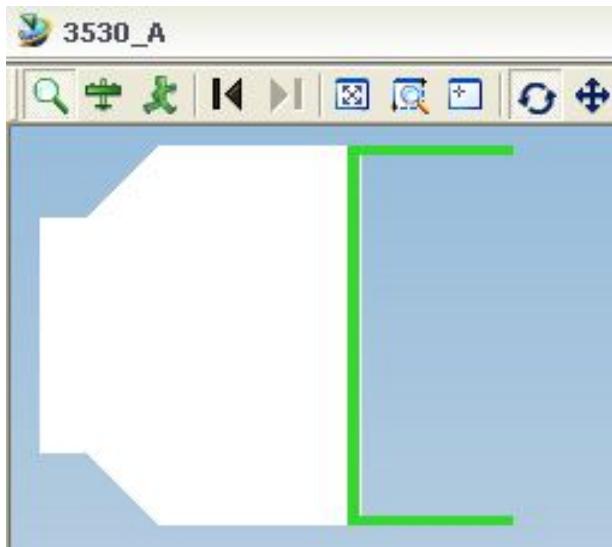
Section

16 Viewing and working with visualization files

Navigate the Viewer view

Activity: Navigate the Viewer view

In this activity, you practice navigating a 3D model in the **Viewer** view.



Launch the [Navigate the Viewer view](#) activity.

Related information

For more information, review these topics in the online help:

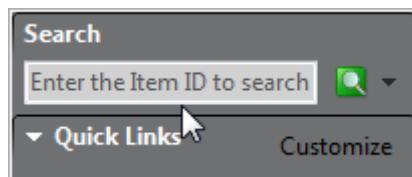
- [Opening visualization data in other Teamcenter applications](#)

Locate and view the part

- Step 1:** Click **My Teamcenter** in the navigation pane to open the **My Teamcenter** perspective.

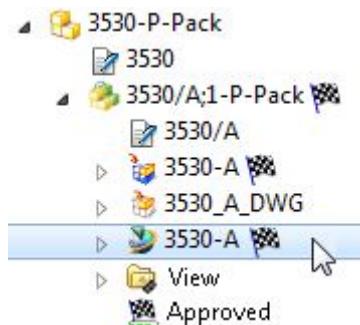


- Step 2:** In the **Quick Search** box at the top of the navigation pane, type **3530** and press Enter.

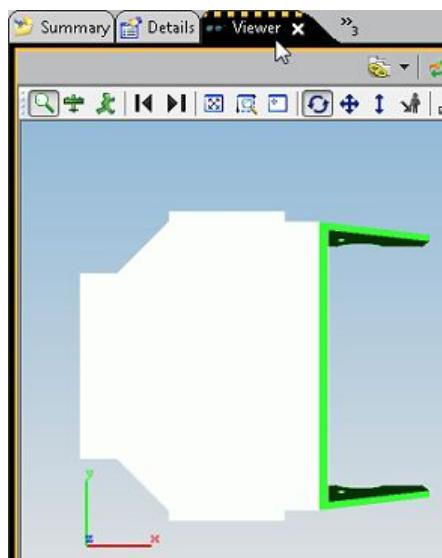


- Step 3:** If not expanded, expand the **3530-P-Pack** item revision.

- Step 4:** Select the **3530-A DirectModel** dataset and click the **Viewer** tab.



The 3D visualization data for the **3530-A DirectModel** dataset appears in the **Viewer** view.



Rotate, pan, and zoom in the view

- Step 1:** Click in the middle of the viewing window and drag to rotate the view around the model.

By default, both **Examine**  and **Rotate**  are initially active in the **Viewer** view 3D toolbar.

- Step 2:** Click near the edge of the viewing window and drag to rotate the view of the model in a 2D plane.

Note

If you inadvertently select the model (it turns yellow), click anywhere on the background to clear the model.

- Step 3:** With the left mouse button selected, press and hold the Shift key as you move your mouse up or down to zoom your view.

- Step 4:** With the left mouse button selected, press and hold the Ctrl key as you move your mouse to pan your view.

- Step 5:** Click **Zoom Area**  and click and drag a rectangular box around the area you would like to zoom in.

Note

Unlike **Rotate**, **Pan**, and **Navigate**, **Zoom Area** only works for a single time. To use **Zoom Area** again, you must click the button again.

- Step 6:** Click **Fit All**  to zoom out and fit the entire 3D model in the **Viewer** view.

Use Seek and work with Previous and Next views

Step 1: Click **Seek**  and select anywhere on the model.

The part recenters in the viewing window around the point you selected.

Note

This is a temporary new center of rotation. **Fit All** recenters visible parts back to their original position.

Step 2: Experiment on your own with **Previous View**  and **Next View** .

Note

The **My Teamcenter** perspective also displays the **JT Preview** view

 Like the **Viewer** view, the **JT Preview** view displays direct model files.

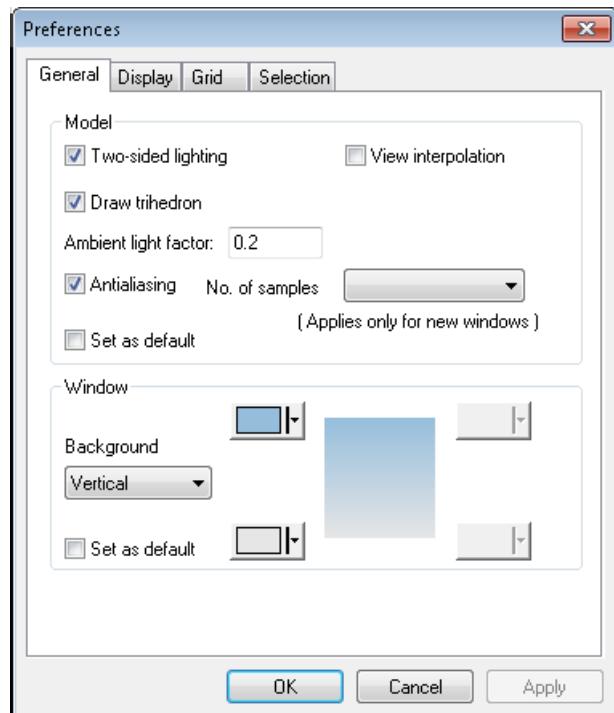
The **JT Preview** view supports the following actions:

- Click and drag in the view to rotate the model.
- Click and drag your mouse up and down while pressing the Shift key to zoom.
- Move your mouse while holding the Ctrl key to pan.

Adjust view preferences

Activity: Adjust view preferences

In this activity, you customize the appearance of the viewing window, set part selection behavior, and choose model display modes.



Launch the [Adjust view preferences](#) activity.

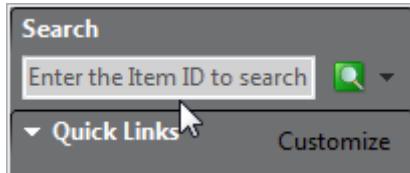
Related information

For more information, review these topics in the online help:

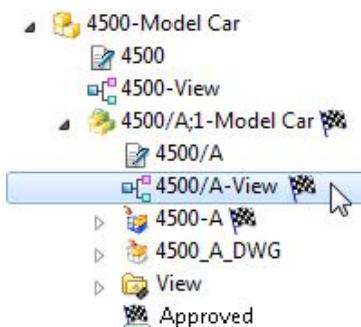
- [Change the background color](#)
- [Change 3D display modes](#)
- [3D Display Modes toolbar](#)

Open the assembly in Structure Manager for viewing

- Step 1:** In the **Quick Search** box at the top of the navigation pane, type **4500** and press Enter.



- Step 2:** Double-click the **4500/A-View** BOM view object to open it for viewing in Structure Manager.



- Step 3:** In Structure Manager, set the revision rule for the product structure to **Any Status; No Working**.

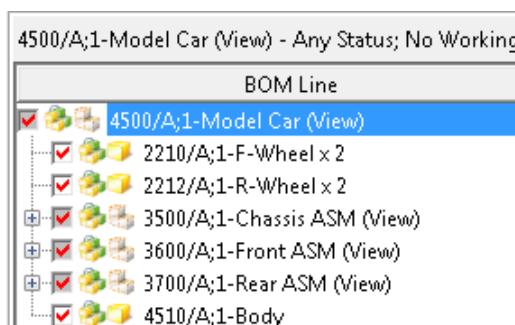
Tip

To change the revision rule, click **Revision Rule**  on the Structure Manager toolbar and select the revision rule.

- Step 4:** Click **Show/Hide the data panel** .

- Step 5:** Click the **Graphics** tab.

- Step 6:** Select the check box in the first BOM line for the **4500/A-Model Car (View)**.



- Step 7:** If the **Viewer Confirmation** dialog box appears, click **Yes** to proceed.

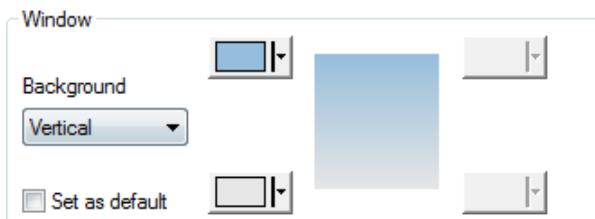
Step 8: If necessary, click **Fit All**  to fit the entire assembly into the **Graphics** view.

Set the view preferences

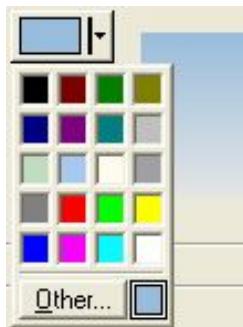
Step 1: Right-click the background of the **Graphics** view and choose **Preferences**.

Step 2: In the **Preferences** dialog box, make sure the **General** tab is selected.

The default background is **Vertical** and two different colors are available.



Step 3: Click in the small upper left color box and choose a new color.



Step 4: Click **Apply** to see the change without closing the dialog box.

Step 5: Experiment with the different background types as well as different colors. Select **Apply** after each change.

Do not close the **Preferences** dialog box. You use it in the next task.

Change display modes

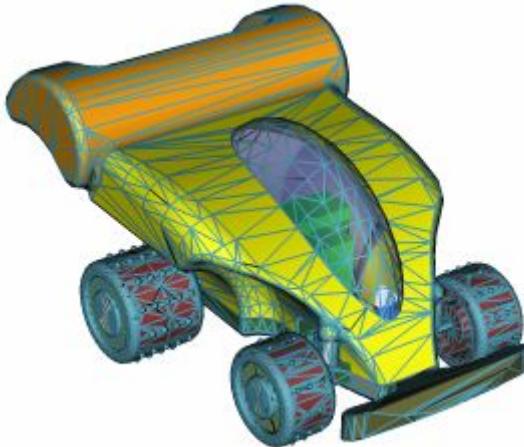
Note

At least one display mode is always active, but you can select more than one.

Step 1: In the **Preferences** dialog box, click the **Display** tab.



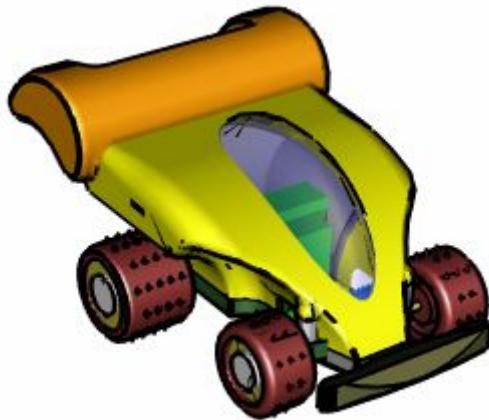
Step 2: Click **Tessellation Lines** and click **Apply** to add tessellation lines to the view.



Step 3: Click **Tessellation Lines** again and click **Apply** to turn off tessellation lines.



Step 4: Click **Feature Lines** and click **Apply** to add feature lines to the view. Silhouette lines are added to the model.



Step 5: Under **Feature Line Options**, select **Use B-Rep if available**, and click **Apply**.

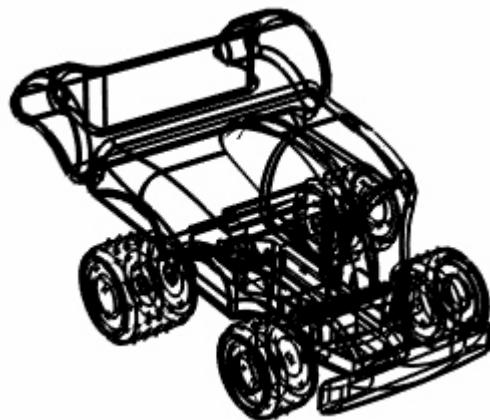
Additional lines are added to the model.



Step 6: Click **Shaded**  and click **Apply** to turn off shaded mode.

Note

You cannot turn off all display modes at the same time.



Do not close the **Preferences** dialog box. You use it in the next task.

Control how hidden lines appear

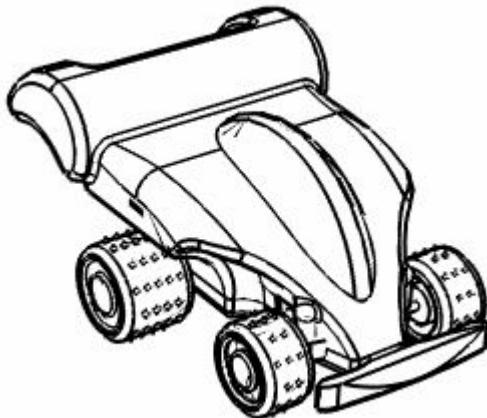
Step 1: If necessary, turn on **Feature Lines**  and turn off the **Shaded**  and **Tessellation Lines**  display modes.

Step 2: Experiment with the three **Hidden Lines** modes:

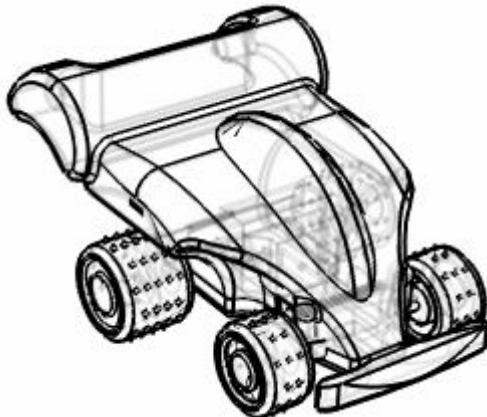
Tip

Be sure to click **Apply** after each mode change.

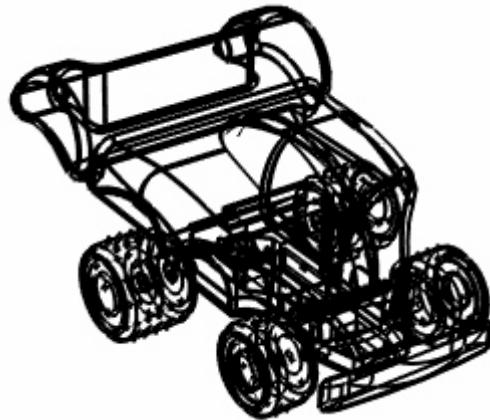
- Click **Invisible** 



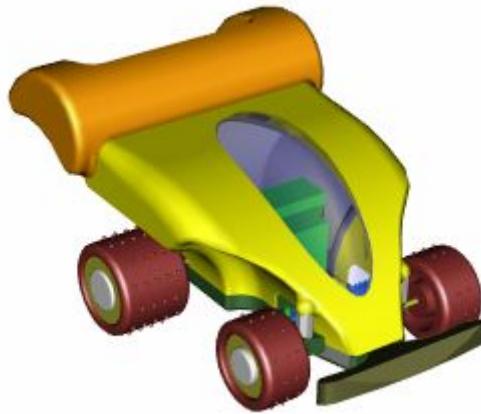
- Click **Ghosted** 



- Click **Visible** 



- Step 3:** Click **Shaded**  to activate shaded mode and click **Feature Lines**  to deactivate feature lines and click **Apply**.

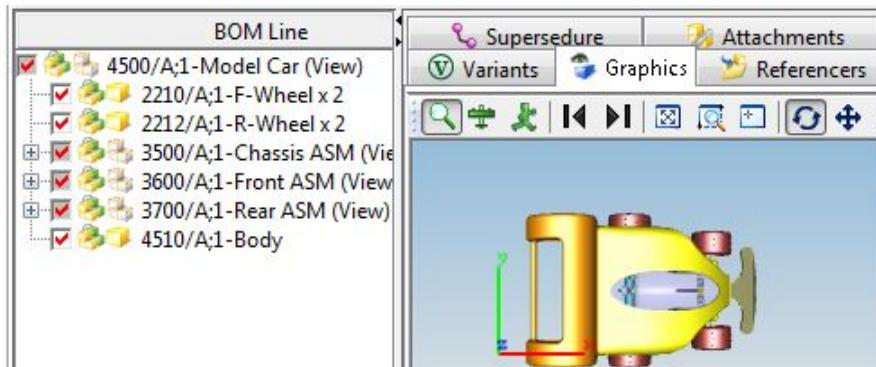


- Step 4:** Click **OK** to close the **Preferences** dialog box.

Select parts and assemblies

Activity: Select parts and assemblies

In this activity, you learn several ways to select parts and assemblies.



Launch the [Select parts and assemblies](#) activity.

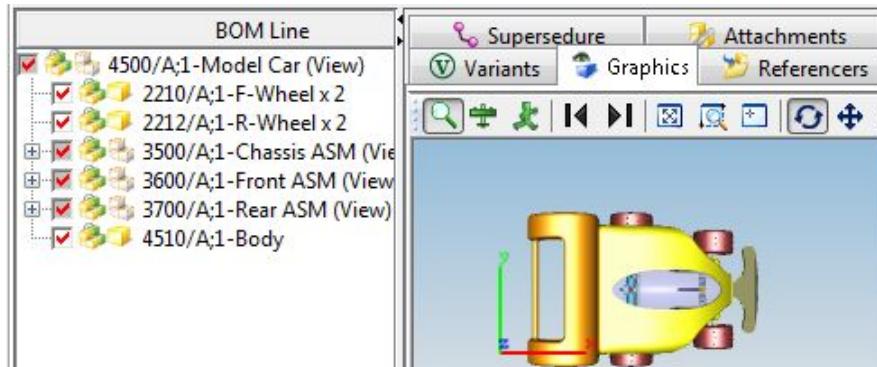
Related information

For more information, review these topics in the online help:

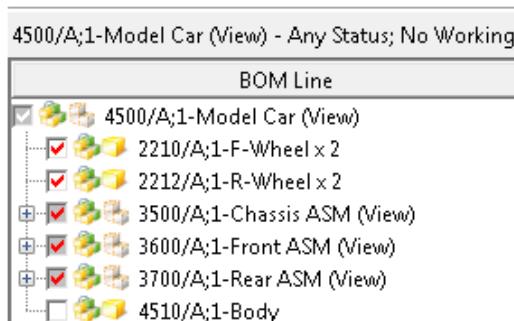
- [Opening visualization data in other Teamcenter applications](#)

Turn off a part and set selection preferences

Step 1: Ensure that the **4500/A;1-Model Car** visualization data is shown in the Structure Manager **Graphics** view and the revision rule is set to **Any Status; No Working**.

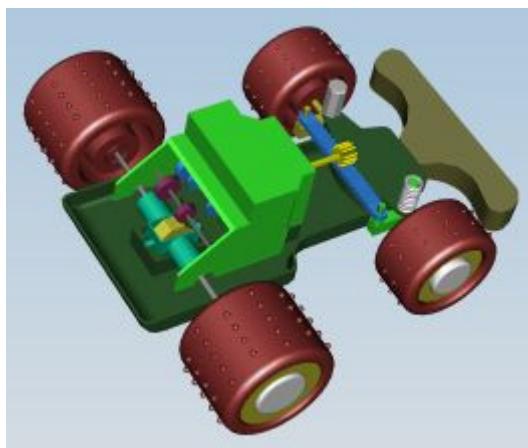


Step 2: Turn off a part to reveal interior parts by clearing the check box for the **4510/A;1-Body** BOM line in the **BOM Line** pane.



The **4510/A;1-Body** part no longer appears in the **Graphics** view.

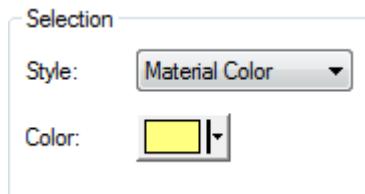
Step 3: Rotate your view so it is similar to the following.



Step 4: Observe the selection preferences, as follows:

- Right-click the background of the **Graphics** view and choose **Preferences**.

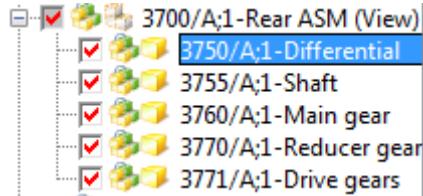
- In the **Preferences** dialog box, on the **Selection** tab, confirm that **Selection Color** is set to **Yellow** and the **Selection Style** is set to **Material Color**.



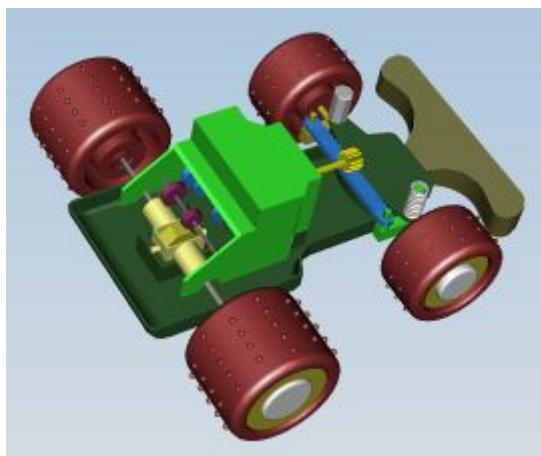
- Click **OK**.
- Select the **P-Pack** part (the box in the middle of the car assembly).
Its color changes to yellow.

Select parts in the BOM Line pane

- Step 1:** In the **BOM Line** pane, expand the **3700/A;1-Rear ASM** assembly and select the **3750/A;1-Differential** part.



In the **Graphics** view, the selected part turns yellow.



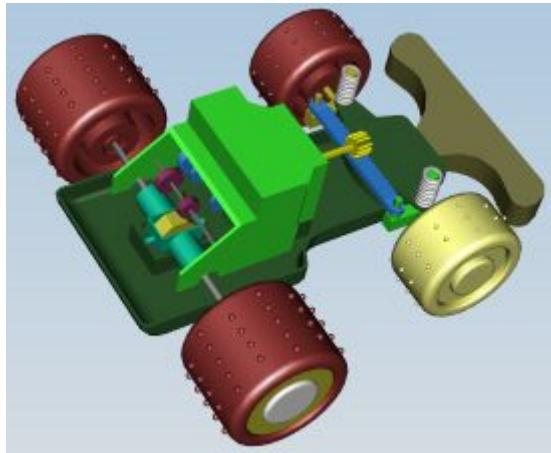
- Step 2:** In the **BOM Line** pane, select the **3600/A;1-Front ASM** assembly.

In the **Graphics** view, the differential automatically returns to its original color and the parts that comprise the front assembly turn yellow.

Select parts in the Graphics view

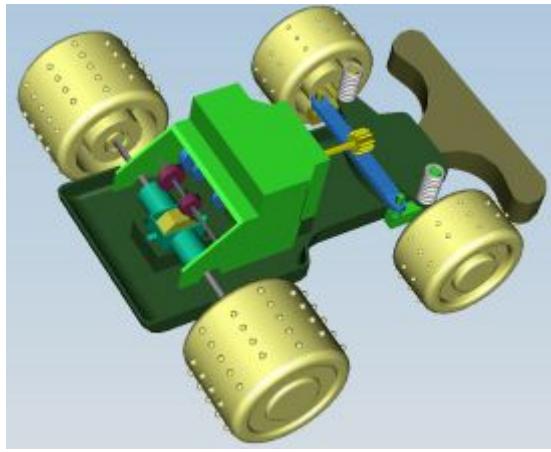
Step 1: Click away from the assembly in the **Graphics** view to clear the selected parts.

Step 2: In the **Graphics** view, click to select one of the front wheels.

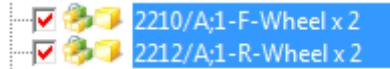


Note that the corresponding BOM line is automatically selected.

Step 3: Hold down the Ctrl key and click the remaining wheels.



The corresponding BOM lines are automatically selected.



Step 4: Hold down the Ctrl key and click one of selected parts to clear it.

Step 5: Click in the background of the **Graphics** view to clear all parts.

Step 6: Right-click any empty area in the **Graphics** view.

The context menu appears.

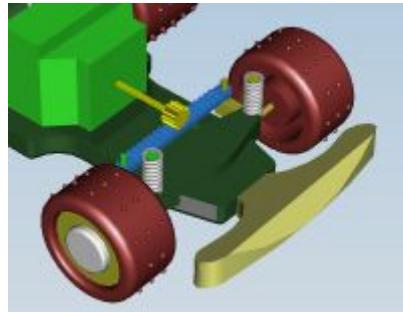


- Step 7:** Optionally, select parts and experiment with **Fly to Selected**, **View Selected**, **Blank Selected**, **Blank All**, **Unblank All**, **Reverse Blank All**, **Select All**, and **Select None**.

Change your selection preferences

Step 1: In the **BOM Line** pane, expand the **3500/A;1-Chassis ASM** assembly and select the **3540/A-Bumper** part.

In the **Graphics** view, the bumper part changes color to indicate it is selected.

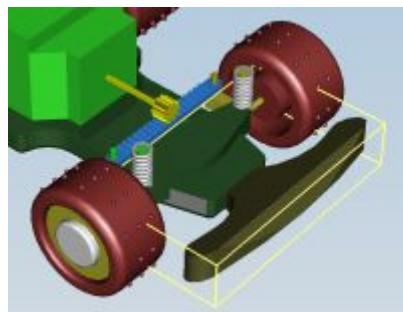


Step 2: Right-click in the background of the **Graphics** view and choose **Preferences**.

Step 3: In the **Preferences** dialog box, on the **Selection** tab, change **Selection Style** from **Material Color** to **Bounding Box**.

Step 4: Click **OK**.

The bumper part is now indicated by a yellow bounding box in the **Graphics** view.



Step 5: Select several different parts either in the **Graphics** view or the **BOM Line** pane.

Each part you select is indicated by a bounding box in the **Graphics** view.

Step 6: Click away from the assembly in the **Graphics** view to clear currently selected parts.

Step 7: Right-click in the background of the **Graphics** view and choose **Preferences**.

Step 8: In the **Preferences** dialog box, on the **Selection** tab, change **Selection Style** back to **Material Color**.

Step 9: Click **OK**.

Step 10: Right-click the background of the **Graphics** view and choose **Select All**.
All the loaded parts are selected.

Step 11: Right-click the background of the **Graphics** view and choose **Select None**.

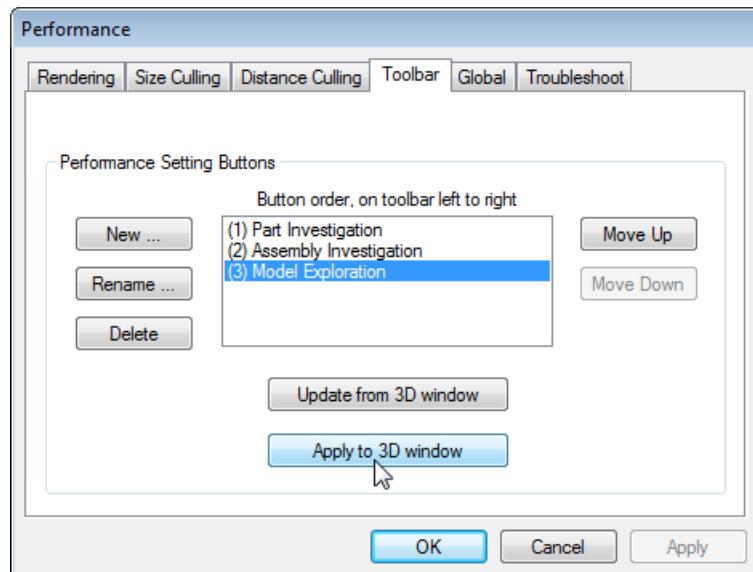
Note

This is the same as clicking in the background of the **Graphics** view to clear all parts.

Adjust performance settings

Activity: Adjust performance settings

In this activity, you adjust and try different performance settings.



Launch the [Adjust performance settings](#) activity.

Related information

For more information, review these topics in the online help:

- [Navigating through models](#)

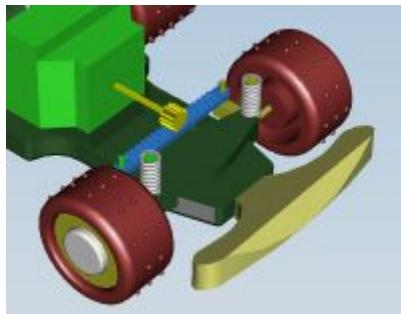
Adjust performance settings

Note

The difference in performance and image quality is not evident in this activity because of the size of the assembly. The impact of performance settings is greater as the size of the assembly increases.

Step 1: Ensure that the **4500/A;1-Model Car** visualization data is shown in the Structure Manager **Graphics** view.

Step 2: In the **BOM Line** pane, if not expanded, expand the **3500/A;1-Chassis ASM** assembly and select the **3540/A-Bumper** part.



Step 3: In the **Graphics** view, right-click the background and choose **Performance**.

The **Performance** dialog box appears.

Step 4: Click the **Toolbar** tab.

Step 5: Select **(2) Assembly Investigation**.

This option gives you a slightly lower level of image quality but a higher level of system performance.

Step 6: Click **Apply to 3D Window**.

Step 7: Rotate the model to see the effect.

Step 8: Select **(3) Model Exploration**.

This option gives a lower level of image quality while trying to maximize system performance.

Step 9: Click **Apply to 3D Window**.

Step 10: Rotate the model to see the effect.

Step 11: Select **(1) Part Investigation**.

This option gives you the highest level of image quality.

Step 12: Click **Apply to 3D Window**.

Step 13: Rotate the model to see the effect.

Step 14: Click **OK** to retain the setting and close the dialog box.

Step 15: Close the Structure Manager perspective.

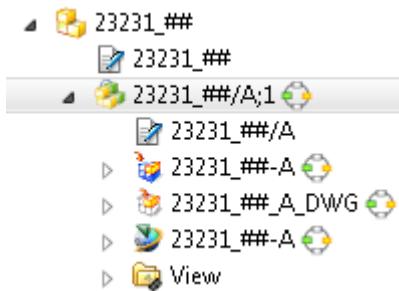
Section

17 Initiating a workflow

Initiate a workflow process and assign a task

Activity: Initiate a workflow process and assign a task

In this activity, initiate the workflow process to release the **23231/A** part.



Launch the [Initiate a workflow process and assign a task](#) activity.

Related information

For more information, review these topics in the online help:

- [Performing interactive tasks](#)

Create a folder for your workflow items

Step 1: In My Teamcenter, verify that your role is set to **Design Engineer**.

For this activity, the Design Engineer, **de##**, initiates the workflow process.

The current user role setting appears in the **My Teamcenter** perspective.

My Teamcenter (Ware, Connie (de##) - high performance / Design Engineer - [Teamcenter 10.1 Training]

If necessary, click the current user information link in the application header to change the **Role** setting to **Design Engineer**.

Step 2: With the **Home** folder selected, choose **File→New→Folder**.

The **New Folder** dialog box appears.

Step 3: Select **Folder**, and then click **Next**.

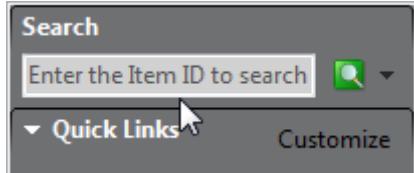
Step 4: In the **Name** box, type **Workflow Items**.

Step 5: Click **Finish**, then click **Cancel** to close the **New Folder** dialog box.

The **Workflow Items** folder is created in the **Home** folder.

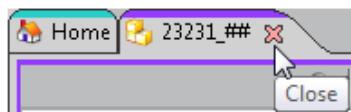
Find a part to submit to the workflow

Step 1: In the **Quick Search** box at the top of the navigation pane, type **23231_##** and press Enter.



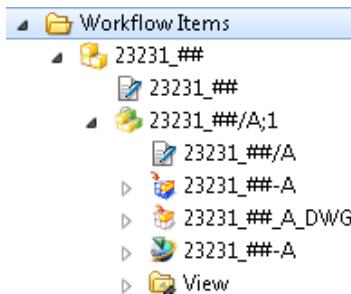
Step 2: Copy the **23231_##** item.

Step 3: Click **x** in the **23231_##** component view tab to close it.



Step 4: Paste the **23231_##** item into the **Workflow Items** folder.

Step 5: Expand the **Workflow Items** folder, and then expand the item and item revision.



Verify that the data being released is checked in**Note**

Not all workflows require data to be checked in.

- Step 1:** In the **Workflow Items** folder, select the **23231_##/A;1** item revision and review the **Checked-Out** property in the **Summary** view.

The **23231_##/A** item revision is not checked out.



The screenshot shows the 'Properties' tab of the Item Summary view for item **23231_##/A;1**. The 'Checked-Out' field is listed under the 'Properties' section, showing the value **No Value**.

Name:	23231_##
Description:	
Release Status:	
Date Released:	
Effectivity:	
Revision Effectivity...	
Owner:	Ware, Connie (de##)
Group ID:	high performance
Last Modifying User:	Ware, Connie (de##)
Checked-Out:	
Checked-Out By:	No Value

- Step 2:** With the **23231_##/A;1** item revision selected, click the **Details** tab and confirm that the datasets are not checked out.

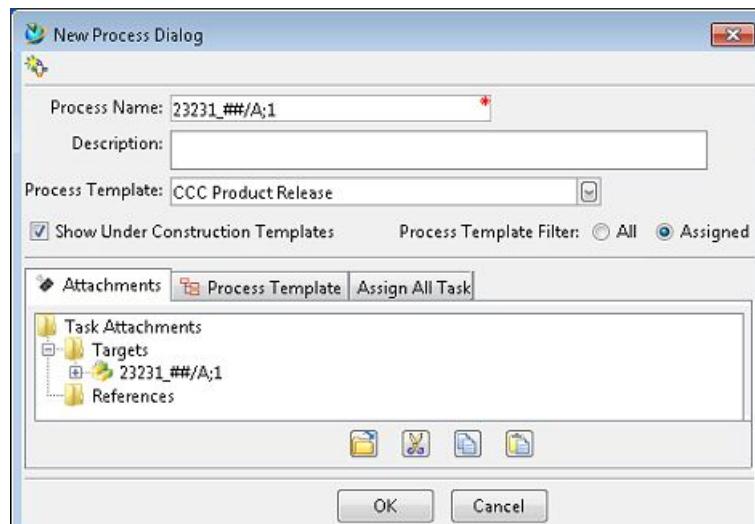
Note

You may need to scroll to the right and expand the **Checked-Out** column to view the checkout status.

Submit the item revision to the workflow

- Step 1:** With the **23231_##/A;1** item revision selected, choose **File→New→Workflow Process**.

The **New Process Dialog** appears.



The value in the **Process Name** box defaults to the name of the object you submit to workflow.

Note

The **23231_##/A;1** item revision is automatically pasted into the **Process Name** box. A relation of **Targets** is indicated by the folder name in the **Attachments** pane.

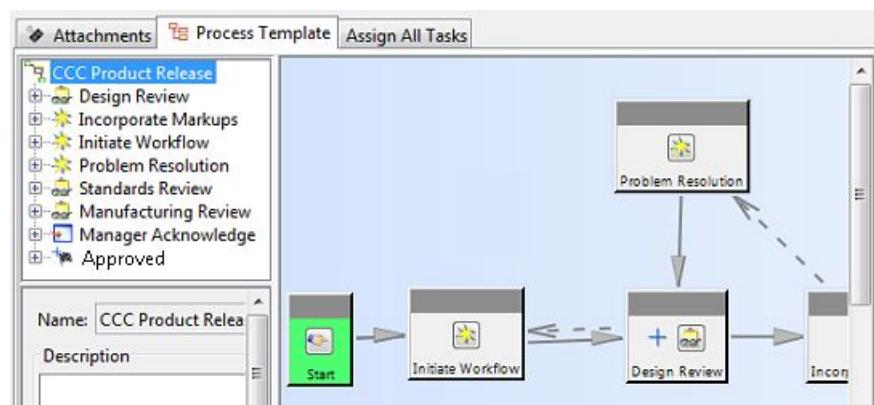
- Step 2:** (Optional) In the **Description** box, type a description.

- Step 3:** Verify the **Process Template** box is set to **CCC Product Release**.

Note

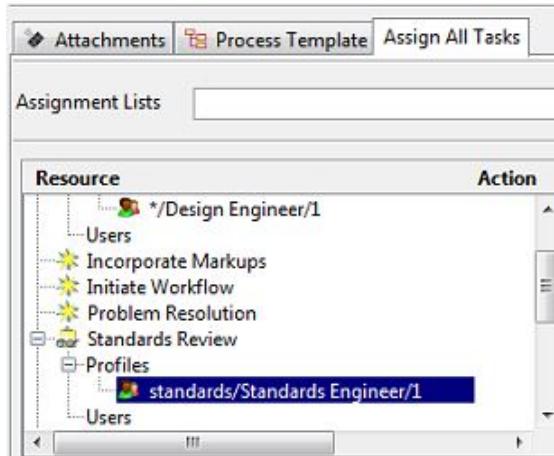
This is the default workflow set by the application administrator.

- Step 4:** In the **New Process Dialog**, click the **Process Template** tab to view the graphical display of **CCC Product Release** process template.



Assign the reviewer for the Standards Review task and start the process

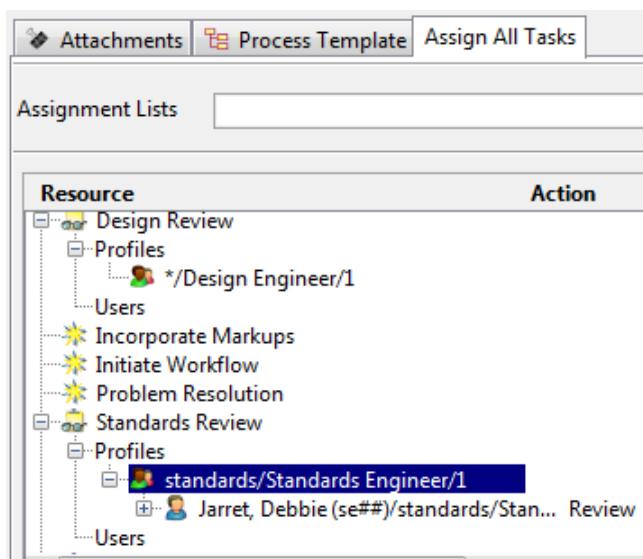
- Step 1:** In the **New Process Dialog**, click the **Assign All Tasks** tab.
- Step 2:** In the left pane, expand **Standards Review** and **Profiles**, if not expanded, and select **standards/Standards Engineer/1**.



In the right pane, the organization for the profile appears.

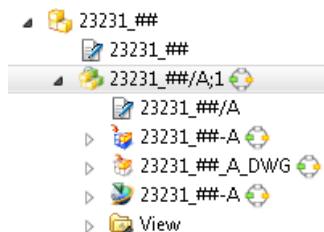
- Step 3:** In the **Organization** pane, expand the **Standards Engineer**, if needed, and select **Jarret, Debbie(se##)**.
- Step 4:** Click **Add**.

In the left pane, **Jarret, Debbie(se##)** appears under the selected **standards/Standards Engineer/1**.



- Step 5:** Click **OK** in the **New Process Dialog** to submit the data to the **CCC Product Release** workflow.

The process symbol indicates the data is submitted to workflow.



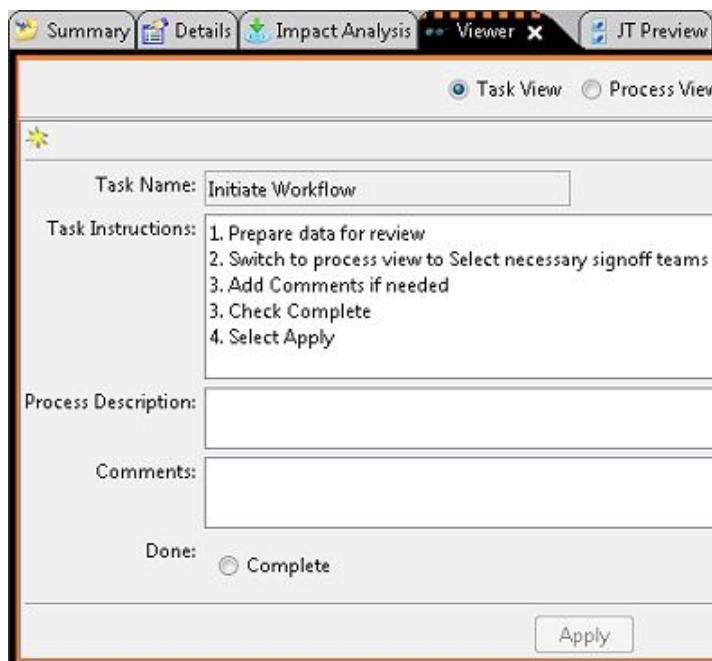
Note

Because you are the initiator of the process, the next task is sent to your **My Worklist** (inbox).

Review workflow tasks

Activity: Review workflow tasks

In this activity, continue in the role of Design Engineer to review your workflow tasks.



Launch the [Review workflow tasks](#) activity.

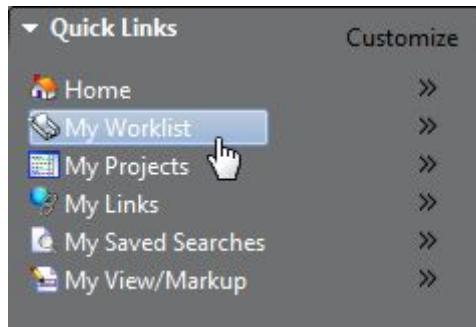
Related information

For more information, review these topics in the online help:

- [Performing interactive tasks](#)

Verify the correct targets are in the Initiate Workflow task

Step 1: In the navigation pane, click **My Worklist** located under **Quick Links**.



Your **My Worklist** folder opens.



Your **Inbox** in the **My Worklist** folder contains the **Tasks to Perform** and **Tasks to Track** folders.

Step 2: Expand your inbox, and then expand the **Tasks to Perform** folder.

The Design Engineer is assigned to perform the **Initiate Workflow** task.

Note

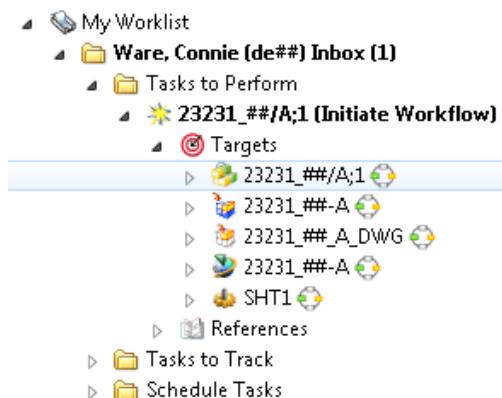
The task name display is formatted to show the process name assigned when the workflow was initiated, followed by the task name.

Tasks that have not yet been viewed are indicated by bold text.

Step 3: Expand the **Initiate Workflow** task.

Step 4: Expand the **Targets** folder.

The data listed in the **Targets** folder is the data to be submitted for review.



View the current step in Process View

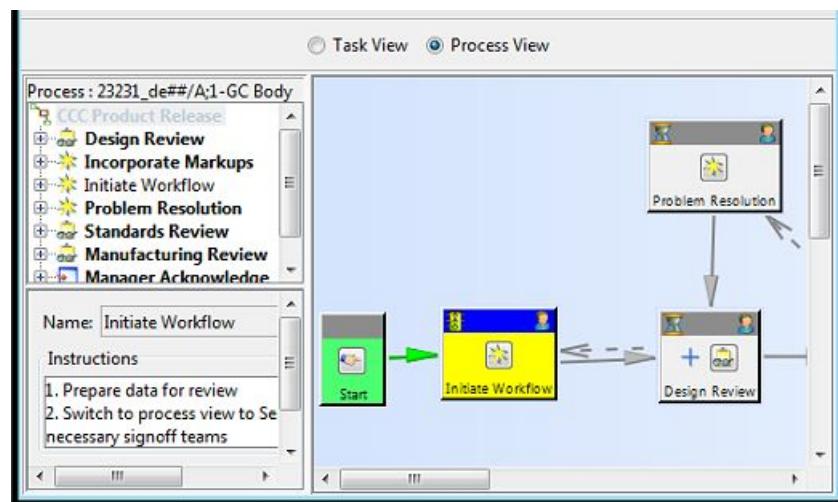
Step 1: Select the **Initiate Workflow** task.

Step 2: Click the **Viewer** tab.

The **Viewer** view appears with the **Task View** selected.

Step 3: Select **Process View**.

The **Process View** shows all levels of the process.

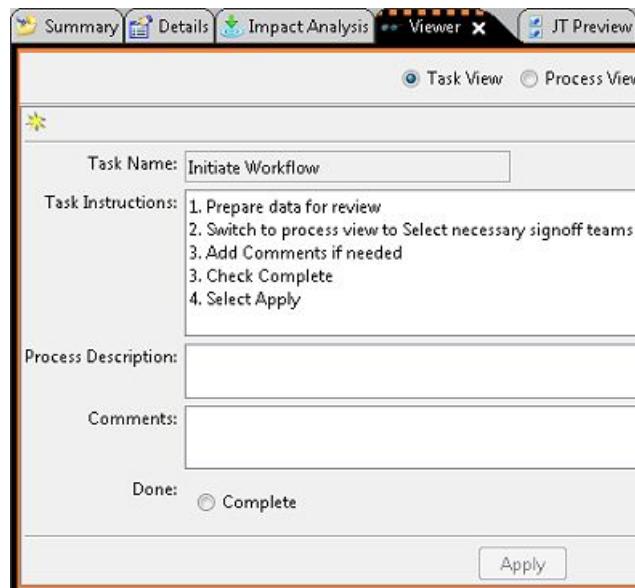


Reviewing the process in the **Process View** shows that after all reviews are complete, an **Approved** status is applied.

View the task instructions in Task View

Step 1: Select **Task View**.

The **Task View** shows the instructions for completing the **Initiate Workflow** task.



Because the correct targets have been verified, step 1 of **Task Instructions** is complete.

Warning

*Do not select **Complete**. Step 2 of **Task Instructions** will be completed in the next activity.*

Section

18 *Managing workflow task assignments*

Select the signoff team

Activity: Select the signoff team

In this activity, continue in the role of Design Engineer to select the signoff team for the manufacturing review and complete the **Initiate Workflow** task. Then, select a signoff team for the **Design Review** task.

Reviewer assignments for this workflow are assigned at different points in the process.

Tasks	Assignments
Design Review	Assigned real time when the task occurs.
Standards Review	Assigned during workflow creation.
Manufacturing Review	Assigned during Initiate Workflow task.
Manager Acknowledge	Assigned automatically to a resource pool.

Launch the [Select the signoff team](#) activity.

Related information

For more information, review these topics in the online help:

- [Performing interactive tasks](#)

Select the signoff team for the Manufacturing review

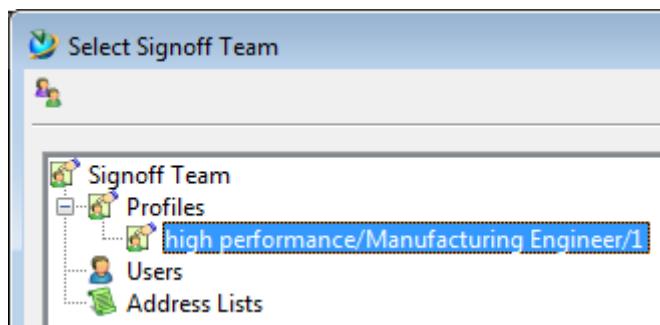
Step 1: In the **Viewer** view, select **Process View**.

Step 2: In the **Process View**, click the **Review** button  in the center of the **Manufacturing Review** task in the workflow process diagram.

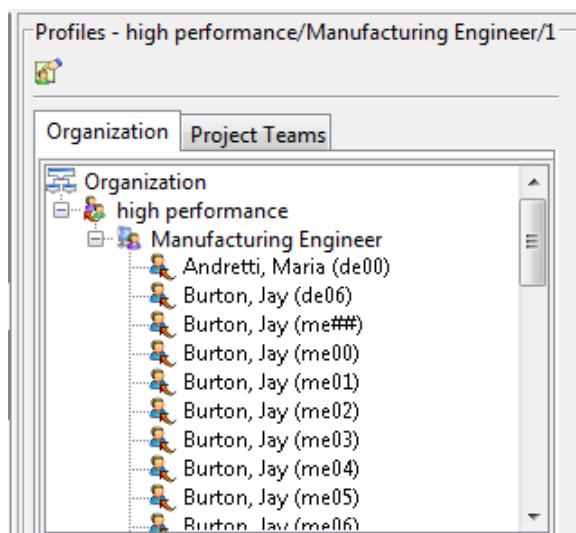


The **Select Signoff Team** dialog box appears.

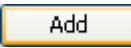
Step 3: In the left pane of the **Select Signoff Team** dialog box, select the **high performance/Manufacturing Engineer/1** profile.



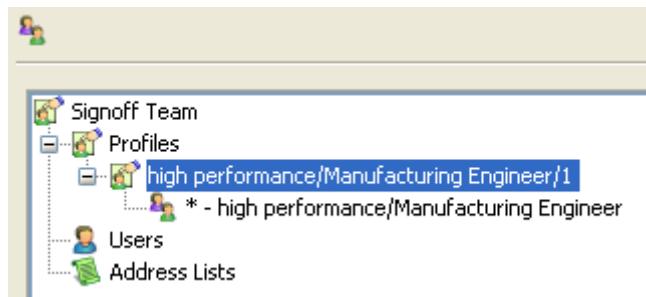
In the right pane of the **Select Signoff Team** dialog box, observe the **Profiles** pane.



Step 4: In the **Organization** pane, select **Manufacturing Engineer**.

Step 5: Click  to assign the pool of users.

In the left pane, * - **high performance/Manufacturing Engineer** appears under the selected **high performance/Manufacturing Engineer/1**.



The * assigns the task to a resource pool, which means that any user with the role of **Manufacturing Engineer** in the **high performance** group can perform this signoff.

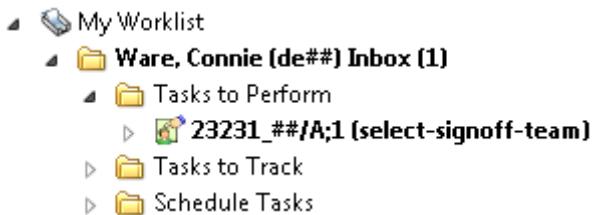
Step 6: Click **Close**.

Complete the Initiate Workflow task

- Step 1:** In the **Viewer** view, select **Task View**.
- Step 2:** In the **Comments** box, type **Manually assigned a resource pool to the Manufacturing Review Task**.
- Step 3:** At the bottom of the **Task View** pane, select **Complete**.
- Step 4:** Click **Apply**.

Note that the **Initiate Workflow** task object is removed from your **Tasks to Perform** folder.

The task moved to **Select Signoff Team** for the **Design Review** task.



Select a signoff team for the Design Review task

Step 1: In the **Tasks to Perform** folder, select the **select-signoff-team** task.

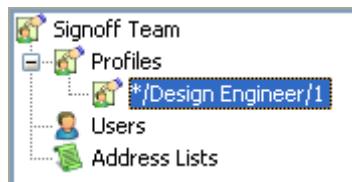
Step 2: Choose **Actions→Perform**.

Note

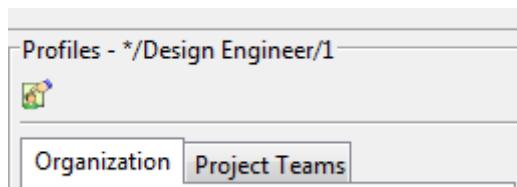
Optionally, you can select the signoff team using the **Task View**.

The **Select Signoff Team** dialog box appears.

Step 3: In the left pane of the **Select Signoff Team** dialog box, note that the ***/Design Engineer/1** profile is selected.



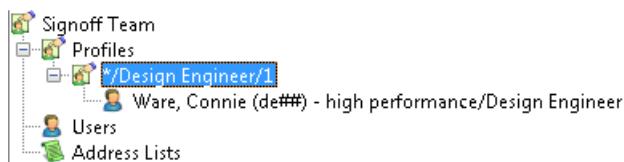
In the right pane of the **Select Signoff Team** dialog box, observe the **Profiles** pane.



Step 4: In the **Organization** pane, under the **Design Engineer** role and the **high performance** group, ensure **de##** is selected to assign yourself as one of the reviewers.

Step 5: Click **Add** to assign the selected user.

The assigned user (**de##**) appears under the selected ***/Design Engineer/1** in the left pane.



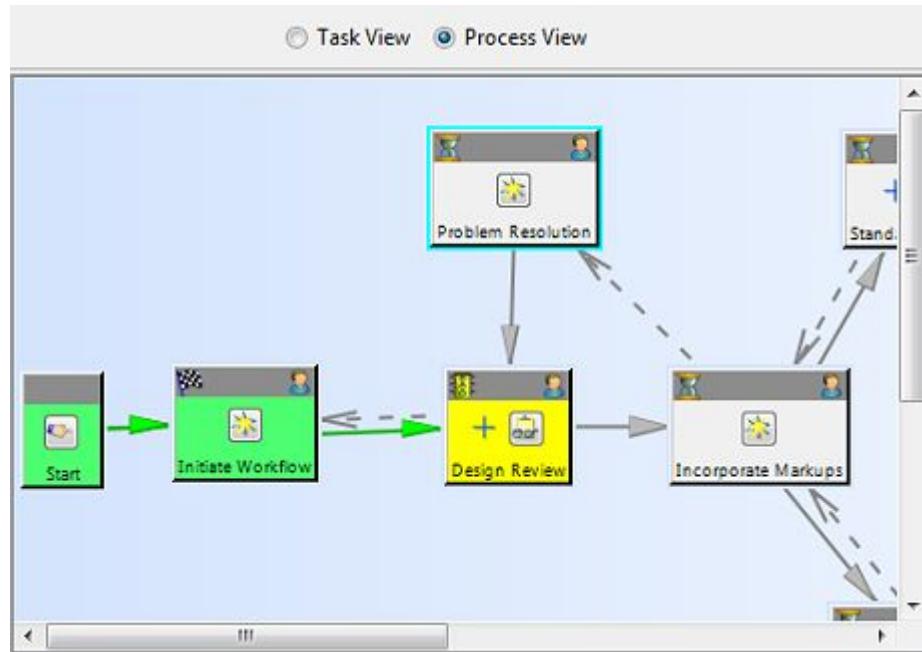
Step 6: Click **Apply**.

Step 7: Click **Close**.

Perform the design review

Activity: Perform the design review

In this activity, continue in the role of Design Engineer to perform your assigned tasks.



Launch the [Perform the design review](#) activity.

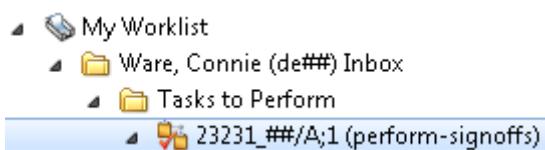
Related information

For more information, review these topics in the online help:

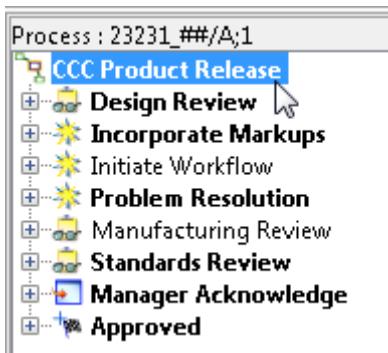
- [Performing interactive tasks](#)

View the current state of the process

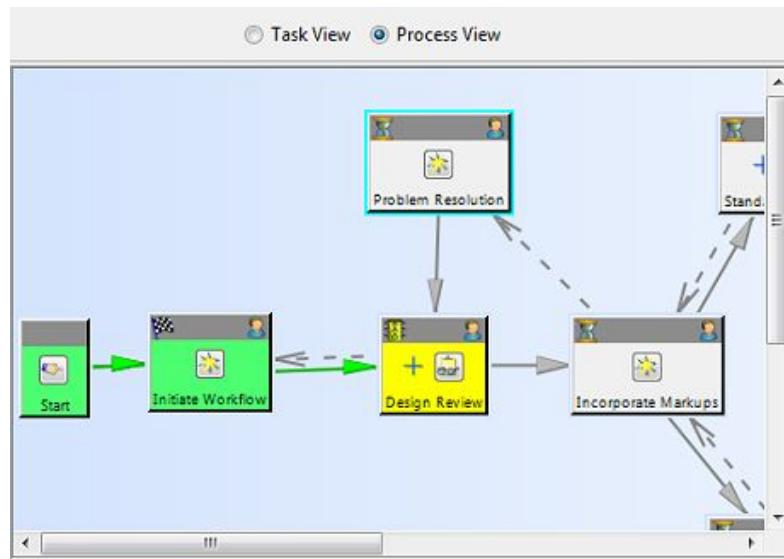
- Step 1:** You should be logged on to My Teamcenter as the Design Engineer, **de##**. Verify that your role is set to **Design Engineer**.
- Step 2:** In the **Tasks to Perform** folder, if needed, expand the **perform-signoffs** task.
- Step 3:** Expand the **Targets** folder.
This is the data you are being asked to review.
- Step 4:** Select **perform-signoffs** task.



- Step 5:** In the **Viewer** view, select **Process View**.
- Step 6:** In the left side of the **Process View** pane, select the top node of the task tree, **CCC Product Release**.

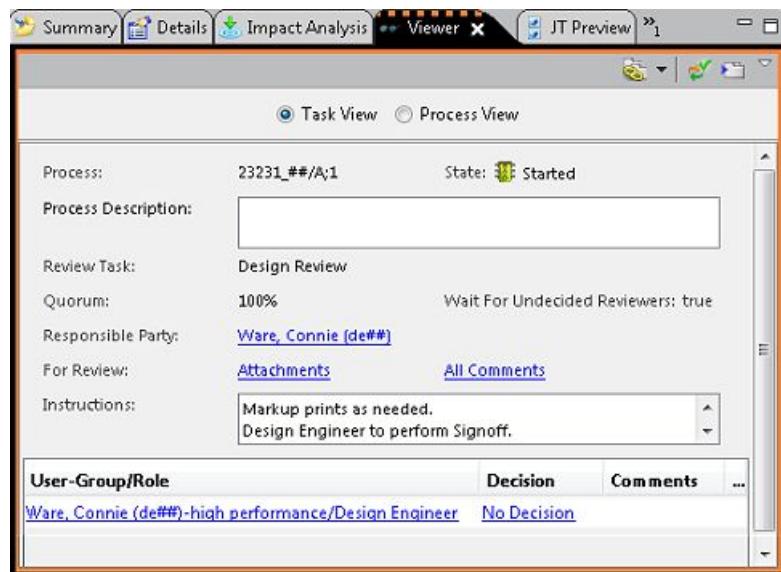


- Step 7:** Note that, in the task flow diagram, the **Initiate Workflow** task is complete (flag symbol) and the **Design Review** task is currently active (green traffic light symbol). When the **Design Review** task completes, the process moves to the **Incorporate Markups** task. The **Incorporate Markups** task has not yet begun so is pending (hourglass symbol).



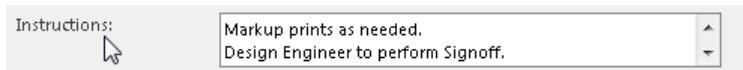
Step 8: In the **Viewer** view, select **Task View**.

Step 9: In the **Task View**, you can see that Design Engineer **de##** is currently assigned to review the task. The current disposition of the task is **No Decision**.



Approve the review

Step 1: In the **Task View**, read the instructions.

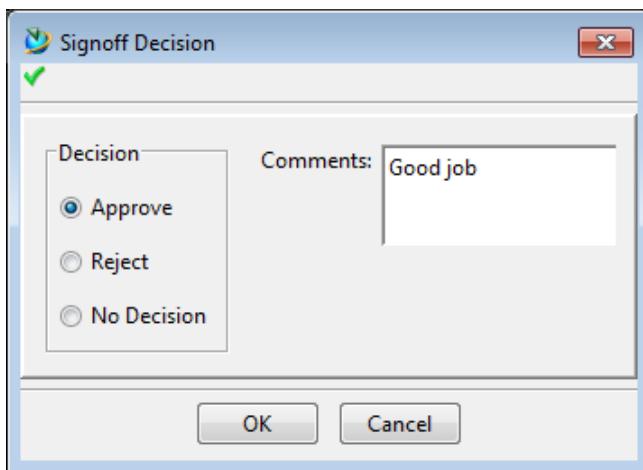


Step 2: In the **Decision** column, click **No Decision**.

The **Signoff Decision** dialog box appears.

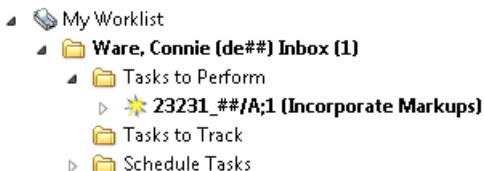
Step 3: Select **Approve**.

Step 4: In the **Comments** box, type a comment.



Step 5: Click **OK**.

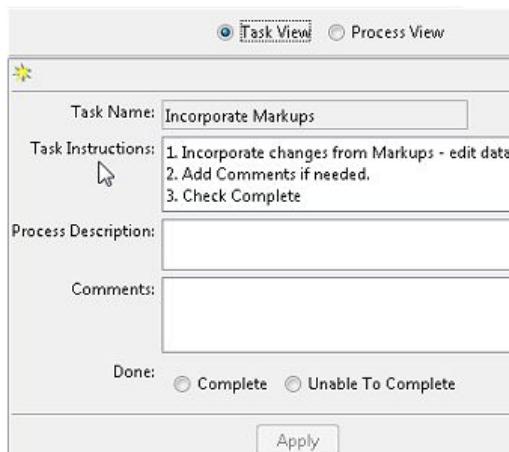
Step 6: Observe that the **perform-signoffs** task is removed from your **Tasks to Perform** folder and there are no objects in your **Tasks to Track** folder. Also observe there is a new task in the **Tasks to Perform** folder, **Incorporate Markups**.



Sign off on the Incorporate Markups task

Step 1: Select **Incorporate Markups** task.

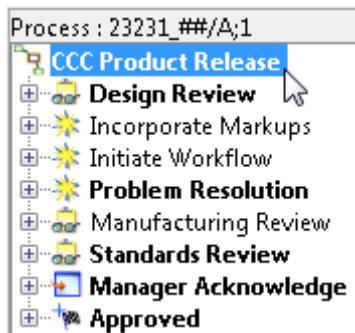
Step 2: In **Task View**, read the task instructions.



Step 3: Click **Process View** to view the overall process.

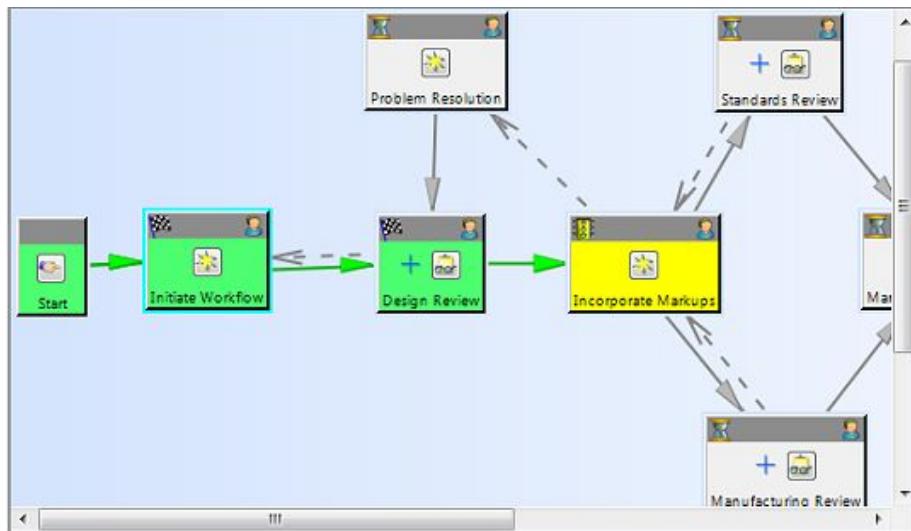
Click to the right of the scroll bar on the bottom of the **Viewer** view.

Step 4: In the **Process View** pane, ensure the top **CCC Product Release** node of the task tree is selected to show the entire process flow.



Step 5: Note that, in the task flow diagram, the **Design Review** task is complete (flag symbol) and the **Incorporate Markups** task is currently active (green traffic light symbol). When the **Incorporate Markups** task completes, the process moves to the **Standards Review** and **Manufacturing Review** tasks.

The **Standards Review** and **Manufacturing Review** tasks have not yet begun and are pending (hourglass symbol). Also note that the completed tasks are green and the in process task is yellow.



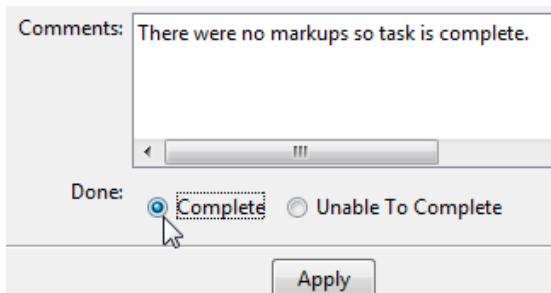
Step 6: Click **Task View**.

Step 7: Read the task instructions.

There are no markups to incorporate.

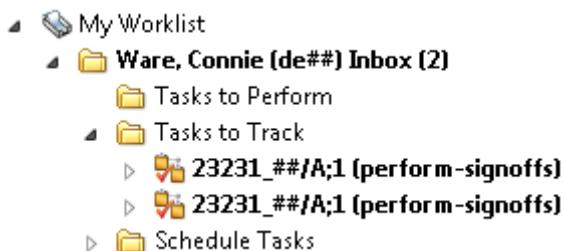
Step 8: In the **Comments** box, type **There were no markups so task is complete**.

Step 9: At the bottom of the **Task View**, select **Complete**.



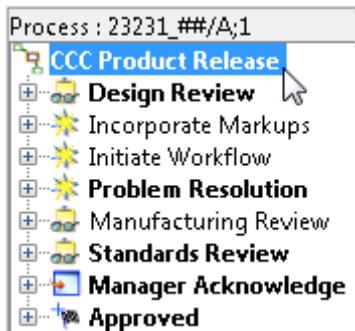
Step 10: Click **Apply**.

Step 11: Note that the **Incorporate Markups** task is removed from your **Tasks to Perform** folder. Also note that two tasks are added to your **Tasks to Track** folder.



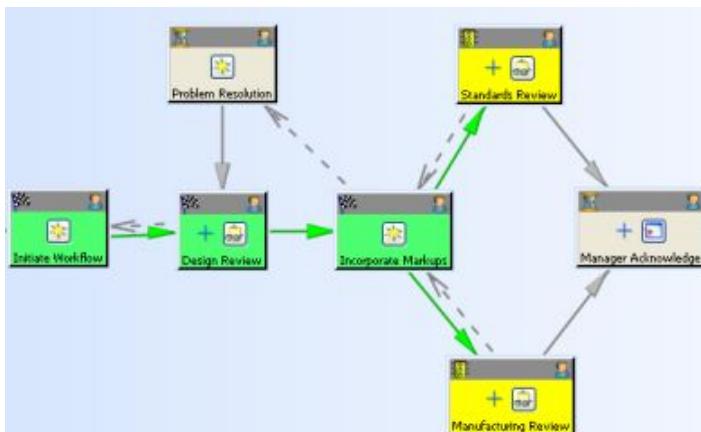
View the current state of the process

- Step 1:** In the **Tasks to Track** folder, select the first **perform-signoffs** task.
- Step 2:** In the **Viewer** view, select **Process View**.
- Step 3:** In the left side of the **Process View** pane, select the top node of the task tree, **CCC Product Release**.



Resize the **Process** pane to see the full name of each review task and scroll the **Process View** window to see the full task flow diagram.

- Step 4:** Note that, in the task flow diagram, the **Incorporate Markups** task is complete (flag symbol) and the **Standards Review** and **Manufacturing Review** tasks are currently active (green traffic light symbol).



When the **Standards Review** and **Manufacturing Review** tasks complete, the process moves to the **Manager Acknowledge** task. The **Manager Acknowledge** task has not yet begun so is pending (hourglass symbol).

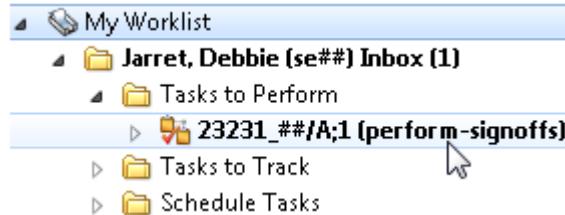
The **Standards Review** was assigned to **se##** when the workflow was initiated. The **Manufacturing Review** was manually assigned to the **high performance/Manufacturing Engineer** resource pool during the **Initiate Workflow** task.

- Step 5:** Exit Teamcenter.

Perform the standards review

Activity: Perform the standards review

In this activity, log on as the Standards Engineer and perform your assigned tasks.



Launch the [Perform the standards review](#) activity.

Related information

For more information, review these topics in the online help:

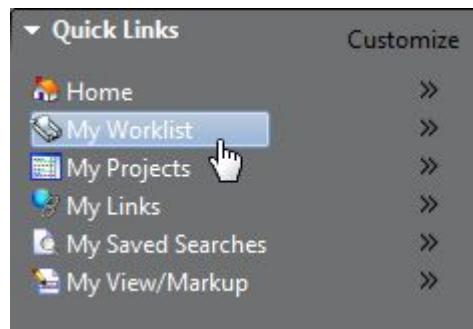
- [*Performing interactive tasks*](#)

View the tasks assigned to the Standards Engineer

Step 1: Log on to Teamcenter as the Standards Engineer, as the user ID **se##** and password **se##**.

Verify that your role is set to **Standards Engineer**.

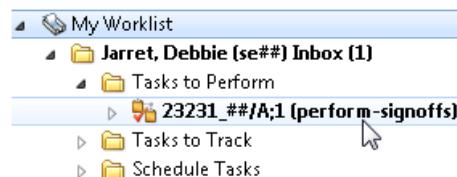
Step 2: In **My Teamcenter**, in the navigation pane, click **My Worklist** located under **Quick Links**.



Your **My Worklist** folder opens.

Step 3: Expand your inbox, and then expand the **Tasks to Perform** folder.

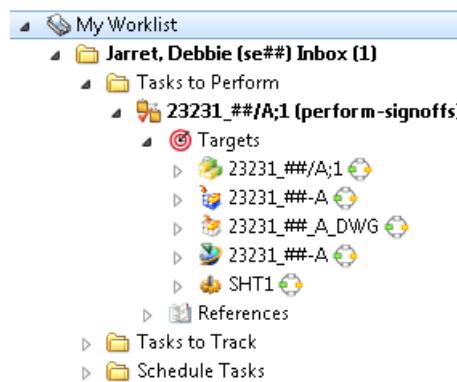
You see a **perform-signoffs** task in your folder.



Step 4: Expand the **perform-signoffs** task.

Step 5: Expand the **Targets** folder.

This is the data you are being asked to review.



Step 6: Select the **perform-signoffs** task and read the instructions.

Note

In the **Viewer** view, **Task View** is displayed by default.

Copy the target item revision to a folder for future use

Step 1: In **My Worklist**, copy the **23231_##/A;1** item revision.

Step 2: Click the **Home** tab to return to the **Home** pane.

Step 3: With the **Home** folder selected, choose **File→New→Folder**.

The **New Folder** dialog box appears.

Step 4: Ensure **Folder** is selected, and click **Next**.

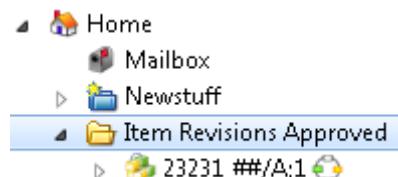
Step 5: In the **Name** box, type **Item Revisions Approved**.

Step 6: Click **Finish**, and then click **Cancel**.

The **Item Revisions Approved** folder is created in the **Home** folder.

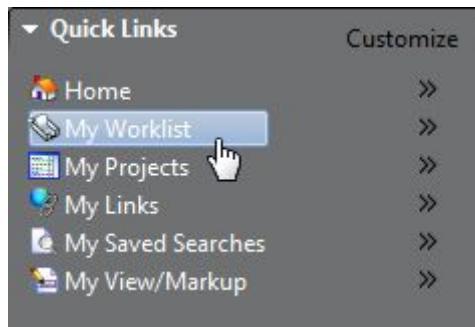
Step 7: Select the **Item Revisions Approved** folder and paste the copied item revision.

You can save time by making it easier to find and retrieve your approved items if you paste them in such folder.



Approve the signoff review for the data

Step 1: Click **My Worklist**.



Step 2: In **My Worklist**, select the **perform-signoffs** task.

Step 3: In the **Decision** column, click **No Decision**.

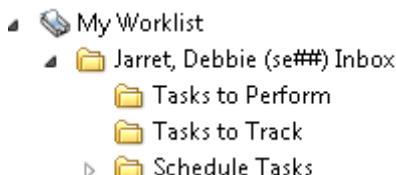
The **Signoff Decision** dialog box appears.

Step 4: Select **Approve**.

If you reject **Standards Review**, the process returns to the **Incorporate markups** task. The design engineer receives the task and reviews all the comments. Once the identified issues are resolved and the **Incorporate markups** task is approved by the design engineer, the standards engineer receives the task with all comments to review the results.

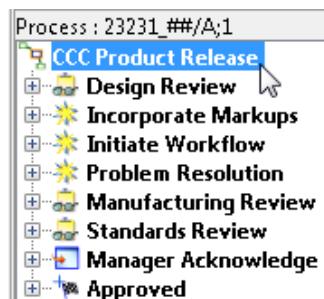
Step 5: Click **OK**.

Step 6: Note that the **perform-signoffs** task is removed from your **Tasks to Perform** folder and there are no objects in your **Tasks to Track** folder.

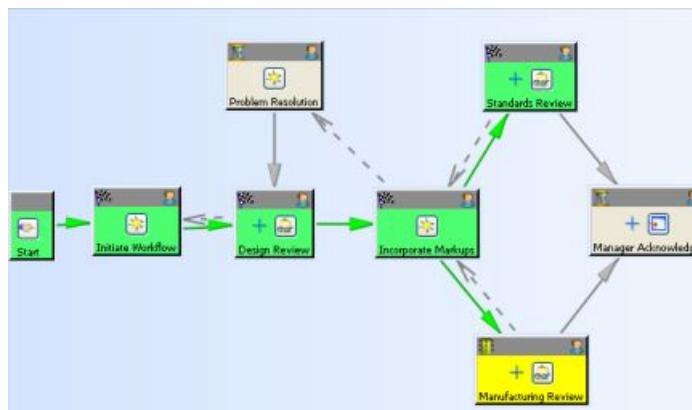


View the current state of the process in Workflow Viewer

- Step 1:** Click the **Home** tab.
- Step 2:** If not expanded, expand the **Item Revisions Approved** folder.
- Step 3:** Right-click **23231_##/A;1** and choose **Send To→Workflow Viewer**.
The **Workflow Viewer** window appears with the item revision's workflow process.
- Step 4:** On the left side of the **Workflow Viewer** window, ensure the top **CCC Product Release** node of the task tree is selected.



- Step 5:** Note that, in the task flow diagram, the **Standards Review** task is complete (flag symbol), and the **Manufacturing Review** task is currently active (green traffic light symbol). When the **Manufacturing Review** task completes, the process moves to the **Manager Acknowledge** task. The **Manager Acknowledge** task has not yet begun so is pending (hourglass symbol).
- The **Manufacturing Review** is assigned to the **high performance/Manufacturing Engineer** resource pool.



- Step 6:** Choose **Window→Close Perspective** to close **Workflow Viewer**.

Tip

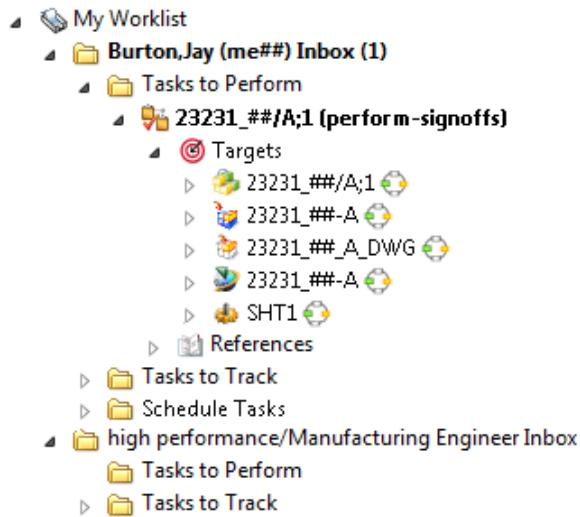
You can also click to close the Workflow Viewer perspective.

- Step 7:** Exit Teamcenter.

Perform the manufacturing review

Activity: Perform the manufacturing review

In this activity, log on as the Manufacturing Engineer and perform your assigned tasks.



Launch the [Perform the manufacturing review](#) activity.

Related information

For more information, review these topics in the online help:

- [Performing interactive tasks](#)

Create a folder for the approved item revision for future use

Step 1: Log on to My Teamcenter as the Manufacturing Engineer, **me##** and password **me##**.

Verify your role is set to **Manufacturing Engineer**.

Step 2: With the **Home** folder selected, choose **File→New→Folder**.

The **New Folder** dialog box appears.

Step 3: Ensure **Folder** is selected, and click **Next**.

Step 4: In the **Name** box, type **Item Revisions Approved**.

Step 5: Click **Finish**, and then click **Cancel**.

The **Item Revisions Approved** folder is created in the **Home** folder.

Add the Manufacturing Engineer resource pool to your inbox

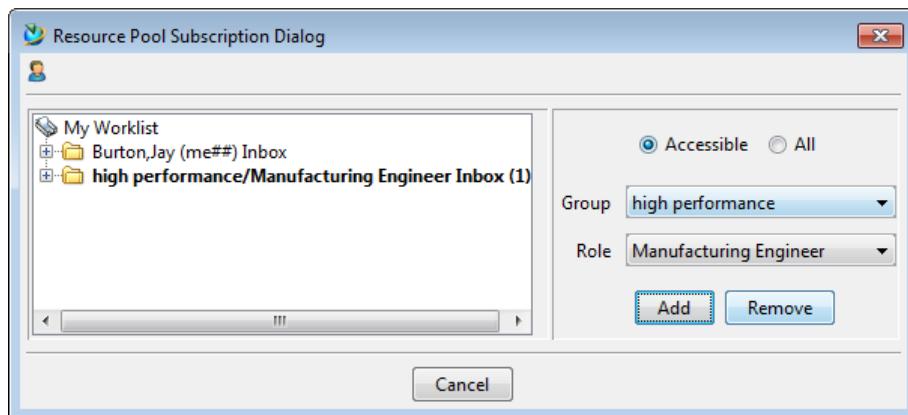
Step 1: Choose **Tools→Resource Pool Subscription**.

Step 2: Set **Group** to **high performance**.

Step 3: Set **Role** to **Manufacturing Engineer**.

Step 4: Click **Add**.

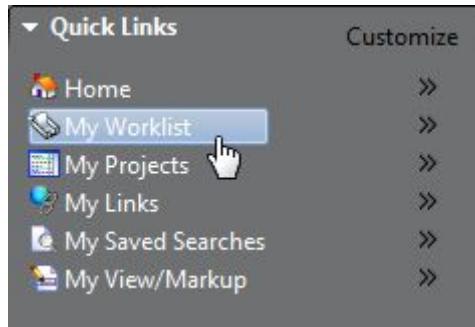
The resource pool is added to your inbox.



Step 5: Click **Cancel**.

Locate and view the tasks assigned to the Manufacturing Engineer

Step 1: In the navigation pane, click **My Worklist** located under **Quick Links**.



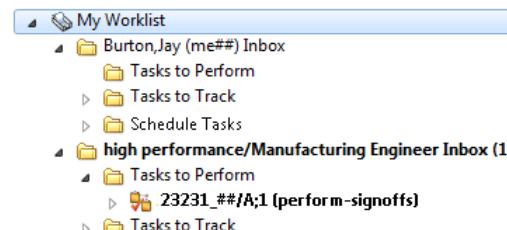
Your **My Worklist** folder opens.

Step 2: In your (me##) inbox, expand the **Tasks to Perform** folder.

There are no tasks in your user inbox because the task was assigned to the **Manufacturing Engineering** resource pool.

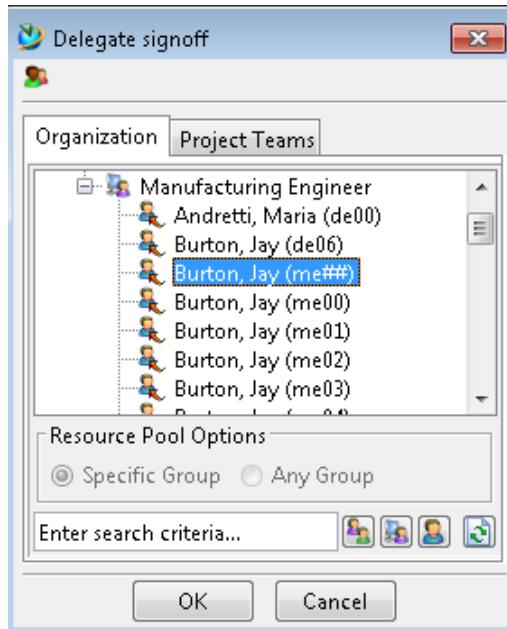
Step 3: In the **high performance/Manufacturing Engineer Inbox**, expand the **Tasks to Perform** folder.

The **perform-signoffs** task appears.

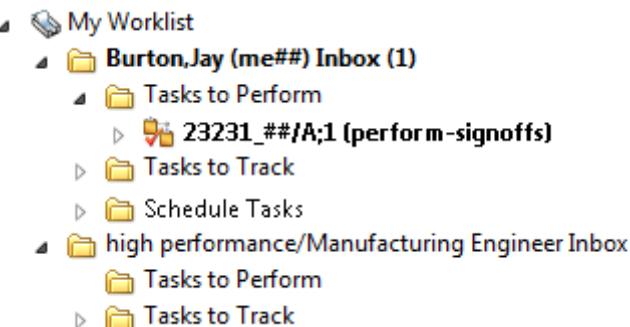


Delegate the task to yourself

- Step 1:** Select the **23231_de##/A;1 (perform-signoffs)** task.
- Step 2:** If necessary, click the **Viewer** view.
- Step 3:** In the **User-Group/Role** column of the **Task View** pane, click **high performance/Manufacturing Engineer**.
- The **Delegate signoff** dialog box appears.
- Step 4:** In the **Organization** pane, expand **Manufacturing Engineer** and select your **me##** user ID.

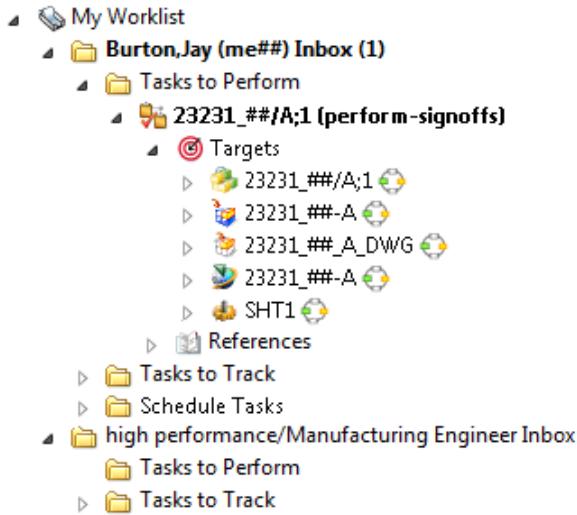


- Step 5:** Click **OK**.
- Step 6:** Note that the task is removed from **high performance/Manufacturing Engineer Inbox** and placed in your **Tasks to Perform** folder. The responsibility of this task is transferred to you.



Copy the target item revision to a folder for future use

Step 1: In **My Worklist**, expand the **perform-signoffs** task, and then expand **Targets** to locate the **23231_##/A;1** item revision.



Step 2: Copy the **23231_##/A;1** item revision.

Step 3: Click the **Home** tab.

Step 4: Select the **Item Revisions Approved** folder and paste the copied item revision.

Approve the data

Step 1: Click **My Worklist**.

Step 2: In the **Tasks to Perform** folder, select the **perform-signoffs** task.

Note

In the **Viewer** view, **Task View** is displayed by default.

Step 3: In the **Decision** column, click **No Decision**.

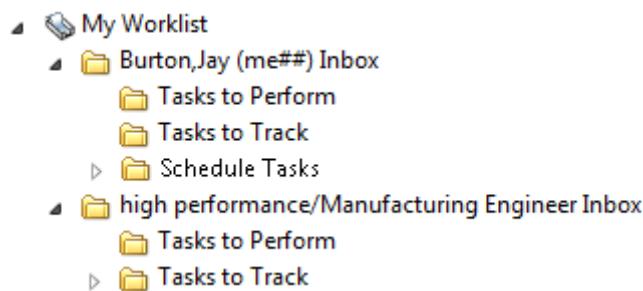
The **Signoff Decision** dialog box appears.

Step 4: Select **Approve**.

Step 5: In the **Comments** box, type any comment.

Step 6: Click **OK**.

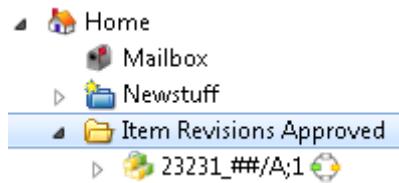
The task is removed from the **Tasks to Perform** folder in your inbox.



Send the item revision to Workflow Viewer

Step 1: Click **Home**.

Step 2: If not expanded, expand the **Item Revisions Approved** folder.

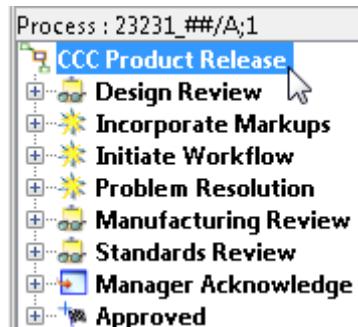


Step 3: Right-click **23231_##/A;1** and choose **Send To→Workflow Viewer**.

The **Workflow Viewer** window appears with the item revision's workflow process.

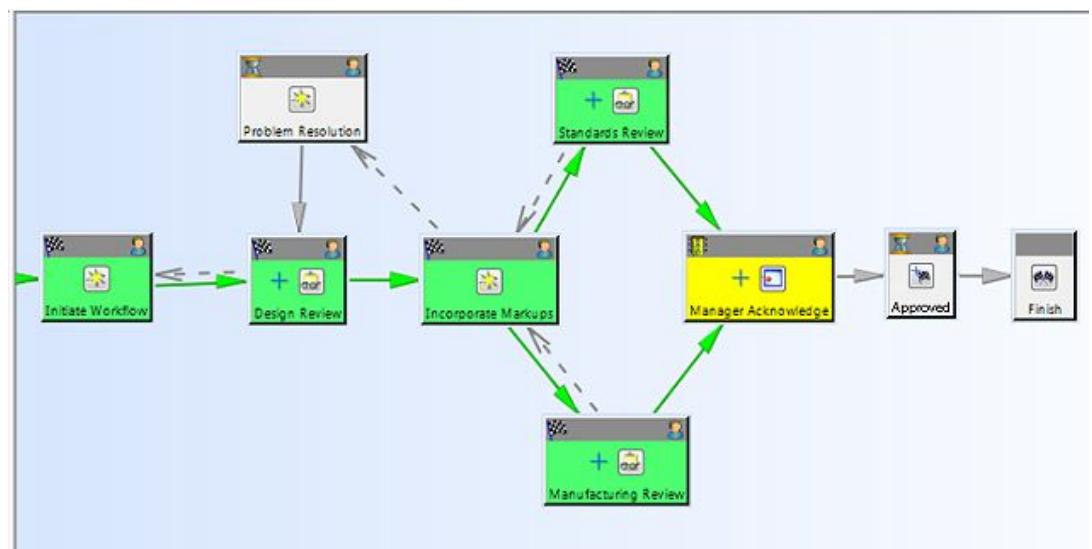
View the current state of the process

- Step 1:** On the left side of the **Workflow Viewer** window, ensure the top **CCC Product Release** node of the task tree is selected.



- Step 2:** Note that, in the task flow diagram, the **Manufacturing Review** task is complete (flag symbol), and the **Manager Acknowledge** task is currently active (green traffic light symbol).

When the **Manager Acknowledge** task completes, the process moves to the **Approved** task. The **Approved** task has not yet begun so is pending (hourglass symbol).



- Step 3:** Choose **Window→Close Perspective** to close Workflow Viewer.

Tip

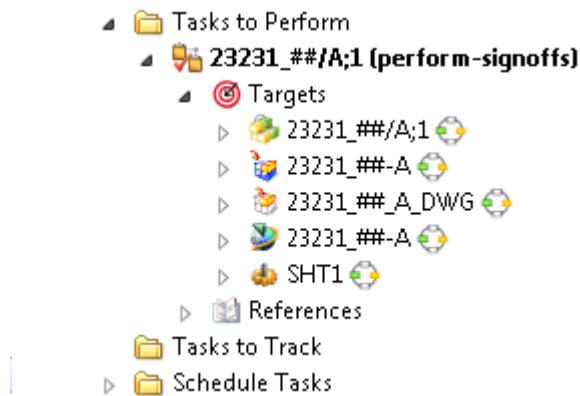
You can also click to close the **Workflow Viewer** perspective.

- Step 4:** Exit Teamcenter.

Perform the manager acknowledge review

Activity: Perform the manager acknowledge review

In this activity, log on as Manager to acknowledge attached data.



Launch the [Perform the manager acknowledge review](#) activity.

Related information

For more information, review these topics in the online help:

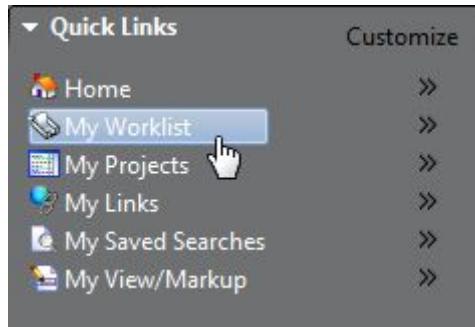
- [Performing interactive tasks](#)

Create a folder for the approved item revision

- Step 1:** Log on to My Teamcenter as the Manager, **mgr##** and password **mgr##**. Verify that your role is set to **Manager**.
- Step 2:** With the **Home** folder selected, choose **File→New→Folder**. The **New Folder** dialog box appears.
- Step 3:** Ensure **Folder** is selected, and then click **Next**.
- Step 4:** In the **Name** box, type **Item Revisions Approved**.
- Step 5:** Click **Finish**, and then click **Cancel**.
The **Item Revisions Approved** folder is created in the **Home** folder.

Locate and view the Manager task

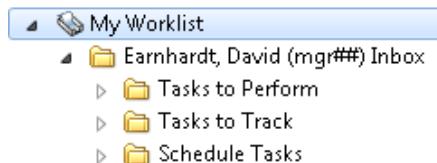
Step 1: In the navigation pane, click **My Worklist** located under **Quick Links**.



Your **My Worklist** folder opens.

Step 2: Expand your inbox, and then expand your **Tasks to Perform** folder.

There are no tasks in your user inbox because the task was assigned to the **Manager** resource pool.



Add the Manager resource pool to your inbox

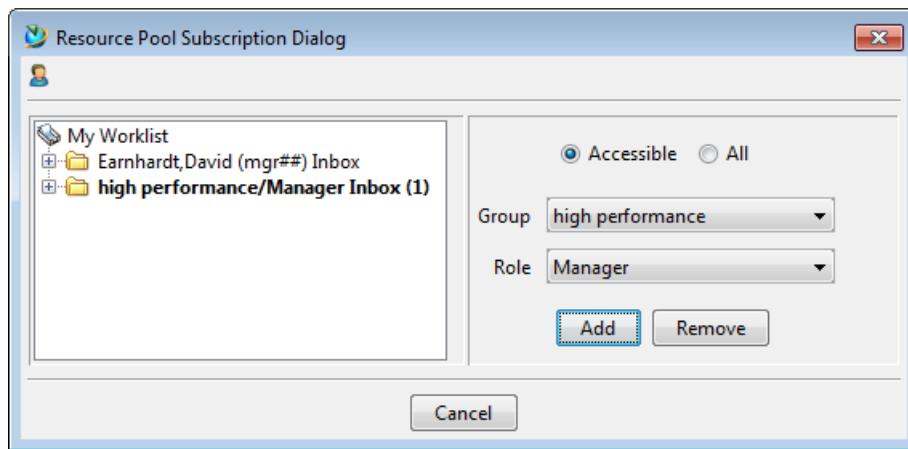
Step 1: Choose **Tools→Resource Pool Subscription**.

Step 2: Set **Group** to **high performance**.

Step 3: Set **Role** to **Manager**.

Step 4: Click **Add**.

The resource pool is added to your inbox.



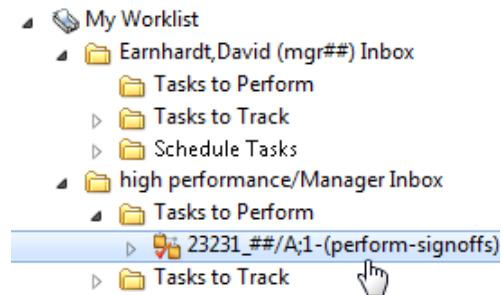
Step 5: Click **Cancel**.

Look for the task in the resource pool inbox

Step 1: Expand **high performance/Manager Inbox**.

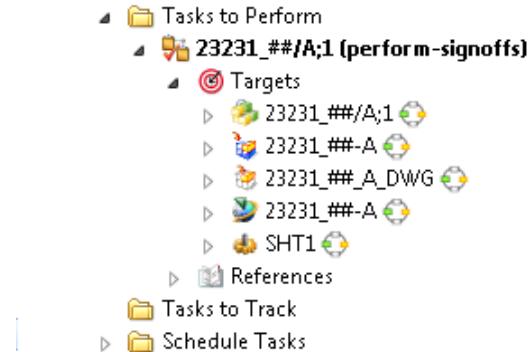
Step 2: Expand the **Tasks to Perform** folder.

The **perform-signoffs** task appears.



Copy the target item revision to a folder for future use

- Step 1:** Expand the **perform-signoffs** task, and then expand **Targets** to locate the **23231_##/A;1** item revision.



- Step 2:** Copy the **23231_##/A;1** item revision.
- Step 3:** Click the **Home** tab.
- Step 4:** Select the **Item Revisions Approved** folder and paste the copied item revision.

Acknowledge the attached data

Step 1: Click **My Worklist**.

Step 2: In the **Tasks to Perform** folder, select the **perform-signoffs** task.

Note

In the **Viewer** view, **Task View** is displayed by default.

Step 3: In the **Decision** column, click **Not Acknowledged**.

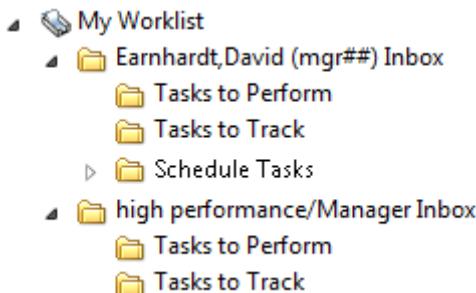
The **Signoff Decision** dialog box appears.

Step 4: Select **Acknowledged**.

Step 5: In the **Comments** box, type any comment.

Step 6: Click **OK**.

Step 7: Note that the **perform-signoffs** task is removed from the **Tasks to Perform** folder. There are no objects in the **Tasks to Track** folder.

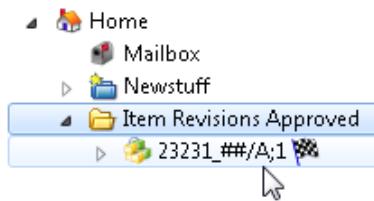


View the release status of the item revision

Step 1: Click the **Home** tab.

Step 2: Expand the **Item Revisions Approved** folder.

The item revision has the release status attached (flag symbol ).

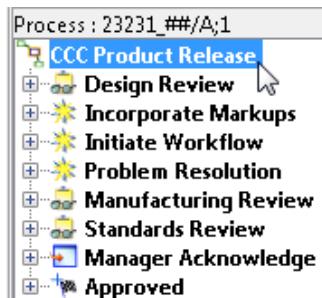


View the current state of the process

Step 1: Right-click **23231_##/A;1** and choose **Send To→Workflow Viewer**.

The **Workflow Viewer** window appears with the item revision's workflow process.

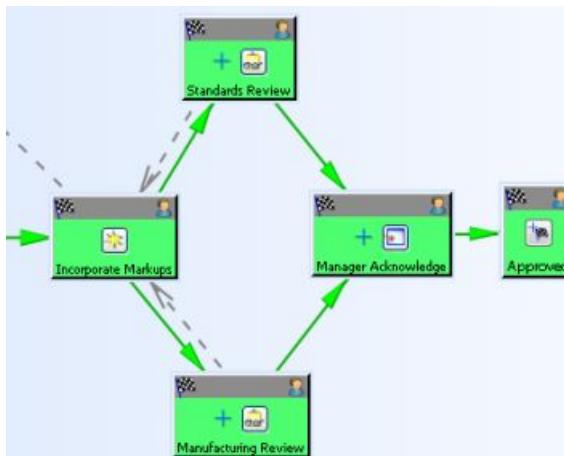
Step 2: On the left side of the **Workflow Viewer** window, ensure the top **CCC Product Release** node of the task tree is selected.



Step 3: Note that, in the task flow diagram, the **Manager Acknowledge** and **Approved** tasks are complete (flag symbol).

There are no active (green traffic light symbol) tasks.

The **CCC Product Release** workflow is complete.



Step 4: Choose **Window→Close Perspective** to close Workflow Viewer.

Tip

You can also click to close the **Workflow Viewer** perspective.

Step 5: Exit Teamcenter.

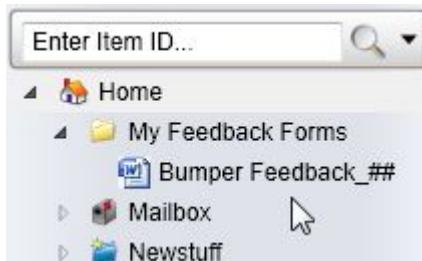
Section

19 Managing Teamcenter data through the Microsoft Office integration

Import a new Word document to Teamcenter

Activity: Import a new Word document to Teamcenter

In this activity, you create a folder and import a new Word document to Teamcenter.



Launch the [Import a new Word document to Teamcenter](#) activity.

Related information

For more information, review these topics in the online help:

- [Create a new dataset](#)

Find the document to import

Step 1: Choose **Start**→**All Programs**→**Microsoft Office**→**Microsoft Word 2010**.

The Microsoft Word application appears.

Step 2: A dialog box may appear asking you to confirm the installation of the Teamcenter plugin. The Teamcenter plugin provides the **Teamcenter** tab on the Microsoft Office ribbon.

Click **Install** in the **Microsoft Office Customization Installer** dialog box.

A **Welcome to Microsoft Office 2010** dialog box may appear. If so, click **Don't make changes**, and then click **OK**.

Step 3: Choose **File** → **Open**.

The **Open** dialog box appears.

Step 4: Navigate to the **STUDENT_HOME** directory.

Step 5: Select **Feedback Form Tempate.docx** and click **Open**.

The **Feedback Form** appears in the Microsoft Word application.

Create a folder

Step 1: Click the **Teamcenter** tab.

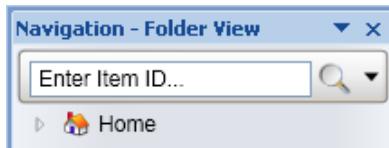
The Teamcenter ribbon appears.

Step 2: Click **Navigate** .

The **Teamcenter Login** window appears.

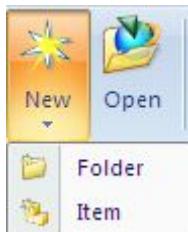
Step 3: Enter your user ID (*user_id*) and password (*password*) and click **Login**.

The **Navigation – Folder View** pane appears.



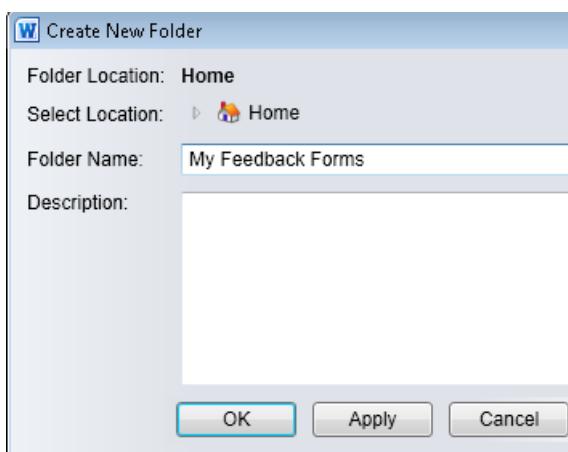
Step 4: Select  **Home**.

Step 5: Choose **New→Folder**.



The **Create New Folder** dialog box appears.

Step 6: In the **Folder Name** box, type **My Feedback Forms**.

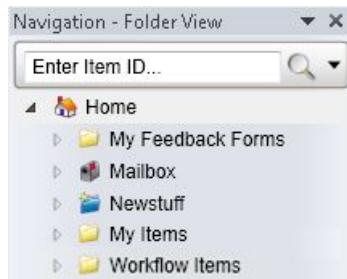


Step 7: Click **OK**.

The **Create New Folder** dialog box closes.

Step 8: Click the triangle to the left of  **Home**.

The **My Feedback Forms** folder appears under  **Home**.



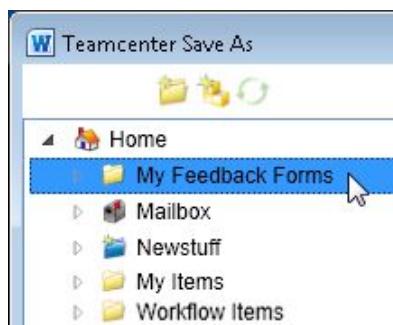
Save the document to Teamcenter

Step 1: Choose **Save As→Dataset**.

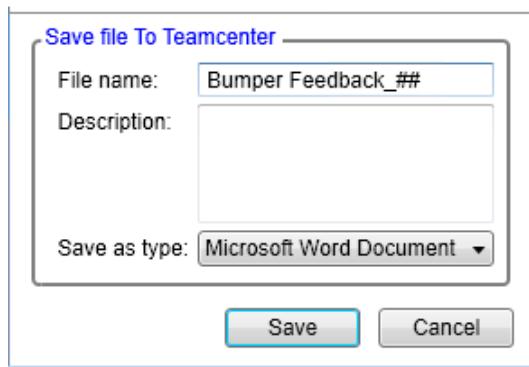


The **Teamcenter Save As** window appears.

Step 2: In the **Teamcenter Save As** window, click the triangle to the left of **Home** and select **My Feedback Forms**.



Step 3: In the **File name** box, type **Bumper Feedback_##**.



Step 4: Click **Save**.

The **Teamcenter Save As** dialog box closes.

The **Status** dialog box appears briefly.

The **Confirm Check-Out** dialog box appears.

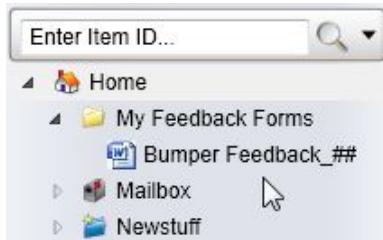
Step 5: Click **No**.

The **Confirm Check-Out** dialog box closes.

The message **File Saved** appears briefly.

Step 6: Click the triangle to the left of the **My Feedback Forms** folder.

The **Bumper Feedback_##** document appears under **My Feedback Forms**.



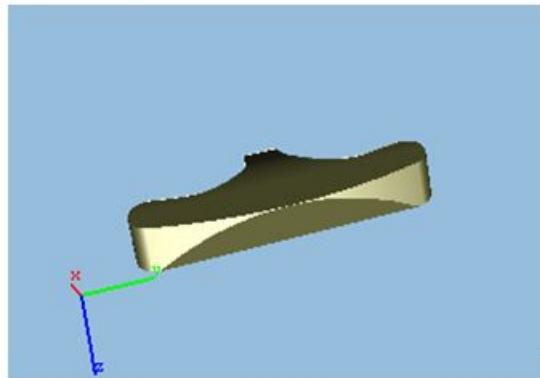
Activity: Insert Teamcenter data into a Word document

In this activity, you insert Teamcenter part data and a 3D model into a Word document.

Part Revision

Object Name	Owner	Item ID
Bumper	Andretti, Maria (de00)	3540

Model



Launch the [Insert Teamcenter data into a Word document](#) activity.

Related information

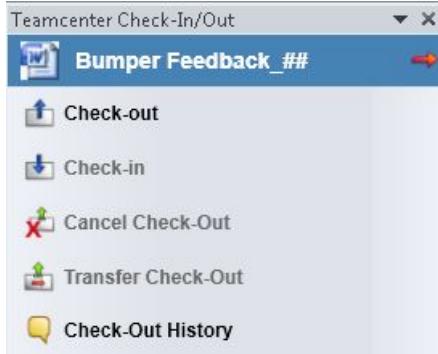
For more information, review these topics in the online help:

- [*Save changes to an existing dataset*](#)

Check out the dataset

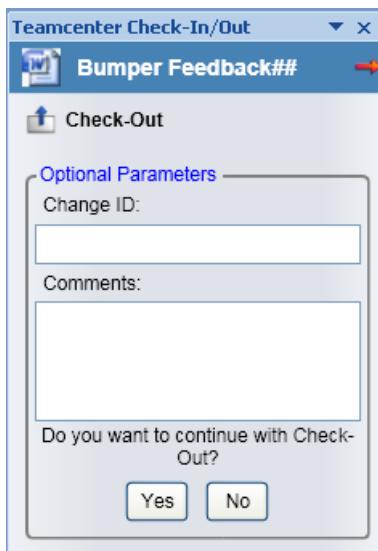
Step 1: In the Teamcenter ribbon, click **Check-In/Out** .

The **Teamcenter Check-In/Out** view appears on the right.



Step 2: In the **Teamcenter Check-In/Out** view, click  **Check-Out**.

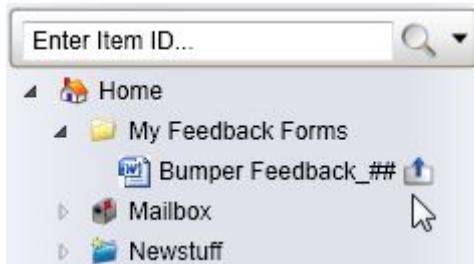
The **Check-Out** properties and buttons appear.



Step 3: Click **Yes**.

The **Check-Out** properties collapse.

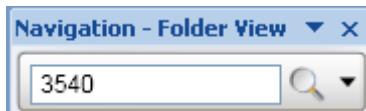
In the **Navigation – Folder View**, a checkout symbol  appears to the right of **Bumper Feedback##**.



Step 4: Close the **Teamcenter Check-In/Out** view.

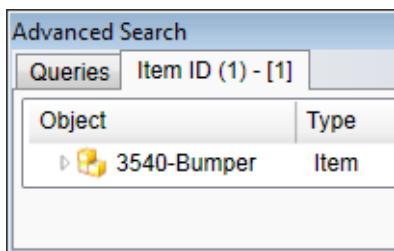
Search for Teamcenter data

Step 1: In the simple search box, type **3540**.



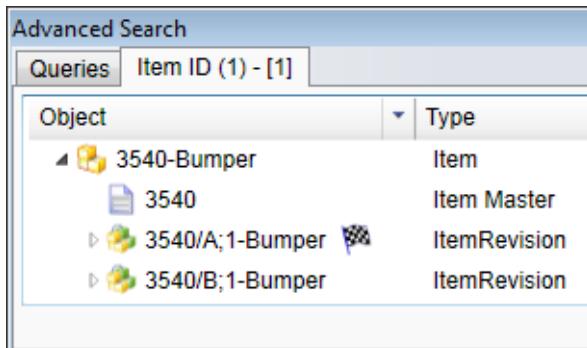
Step 2: Click **Search**  to the right of the simple search box.

The **Advanced Search** dialog box appears with the **Queries** tab open. The search executes and the **Item ID** tab appears with the search results.



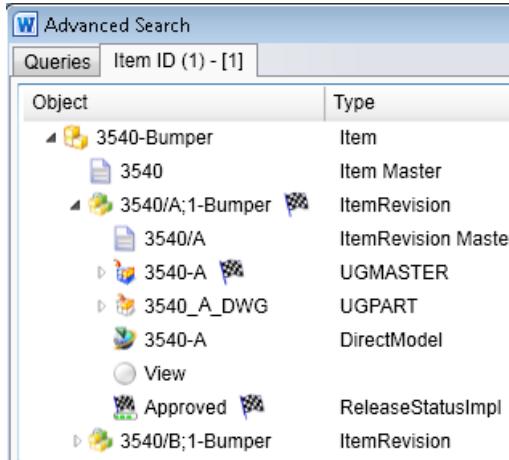
Step 3: In the **Item ID** tab, click the triangle to the left of **3540–Bumper**.

The **3540** item master, **3540/A;1–Bumper** and **3540/B;1–Bumper** item revisions appear under **3540–Bumper**.



Step 4: In the **Item ID** tab, click the triangle to the left of **3540/A;1–Bumper**.

The **3540-A UGMASTER**, **3540-A DirectModel**, **3540_A_DWG** **UGPART**, and **3540/A** Item Revision Master form appear under **3540/A;1–Bumper**.



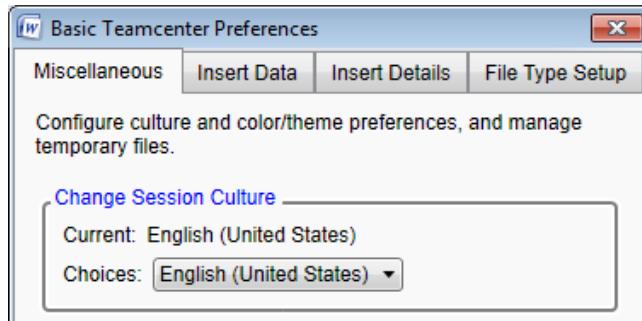
Warning

Do not close the **Advanced Search** dialog box. You use it later in the next activity.

Insert part data

Step 1: In the Teamcenter ribbon, click  **Current Settings**→**Basic Teamcenter Preferences**.

The **Basic Teamcenter Preferences** dialog box appears.



Step 2: In the **Basic Teamcenter Preferences** dialog box, click the **Insert Details** tab.

The **Insert Details** tab appears.

Step 3: In the **Insert Details** tab in the **Insert** column, select the following properties:

- **Object Name**
- **Owner**
- **Item ID**
- **Revision ID**
- **Release Status**

The **Insert Details** tab shows the following rows selected:

Insert Column Name
<input checked="" type="checkbox"/> Object Name
<input checked="" type="checkbox"/> Owner
<input type="checkbox"/> Last Modified
<input type="checkbox"/> Link to Web Client
<input checked="" type="checkbox"/> Item ID
<input checked="" type="checkbox"/> Revision ID
<input type="checkbox"/> GUID
<input type="checkbox"/> Type
<input type="checkbox"/> Created
<input type="checkbox"/> Content Length
<input type="checkbox"/> Group
<input type="checkbox"/> Relation
<input checked="" type="checkbox"/> Release Status
<input type="checkbox"/> Checked-Out
<input type="checkbox"/> Checked-Out By
<input type="checkbox"/> Read Only

Step 4: Click **OK**.

The **Basic Teamcenter Preferences** dialog box closes.

Step 5: In the **Bumper Feedback_##** document, click under **Part Revision**. This is the location to insert the part data.

Action

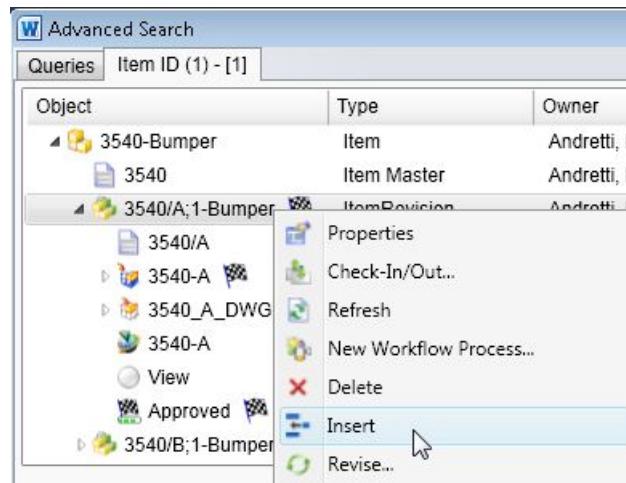
Review the part design

Part Revision

| [

Model

Step 6: In the **Advanced Search** dialog box, right-click **3540/A;1-Bumper** and choose  **Insert**.



The Teamcenter part data appears in table format at the cursor location.

Action

Review the part design and provide feedback below

Part Revision

Object Name	Owner	Item ID
Bumper	Andretti, Maria (de00)	3540

Model

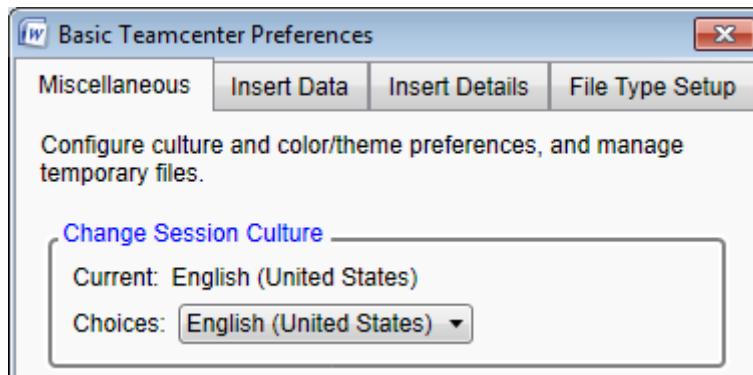
Warning

Do not close the **Advanced Search** dialog box. You use it later in the next activity.

Insert a 3D drawing

Step 1: In the Teamcenter ribbon, click  **Current Settings**→**Basic Teamcenter Preferences**.

The **Basic Teamcenter Preferences** dialog box appears.



Step 2: Click the **Insert Data** tab, and change the following configuration choice:

JT Files→**Embed**

The **Insert Data** tab shows the **JT Files** row with **Embed** selected.

Step 3: Click **OK**.

The **Basic Teamcenter Preferences** dialog box closes.

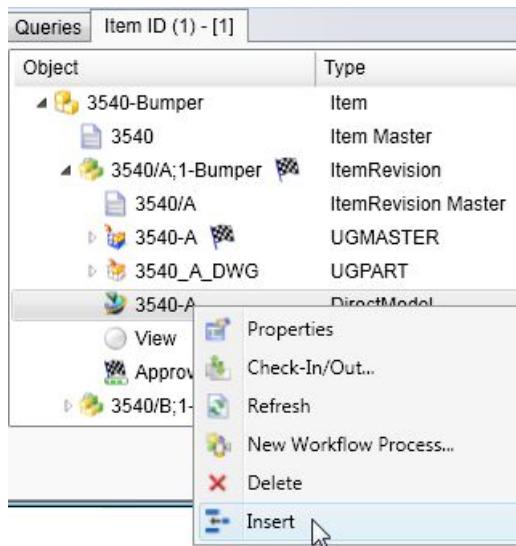
Step 4: In the **Bumper Feedback_##** document, click under **Model**. This is the location to insert the 3D model.

Part Revision	
Object Name	Owner
Bumper	Andretti, Maria (de00)

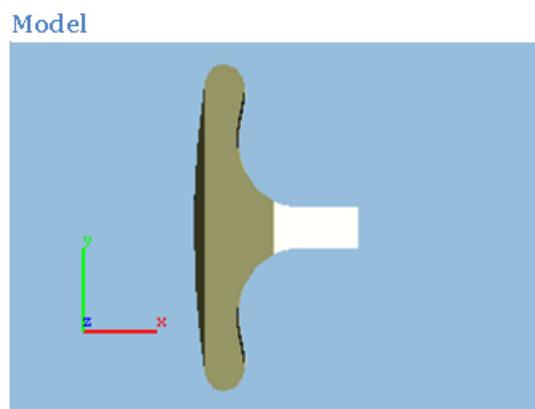
Model

|

Step 5: In the **Advanced Search** dialog box, right-click **3540/A DirectModel** and choose  **Insert**.

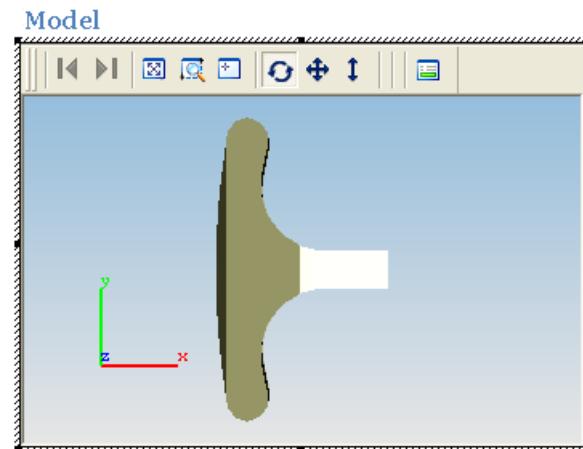


The Teamcenter model appears at the cursor location.



Step 6: In the **Bumper Feedback_##** document, double-click the model.

The JT2Go viewer appears. In this view, you can rotate and resize the model.



Step 7: In the **Advanced Search** dialog box, click **Close** .

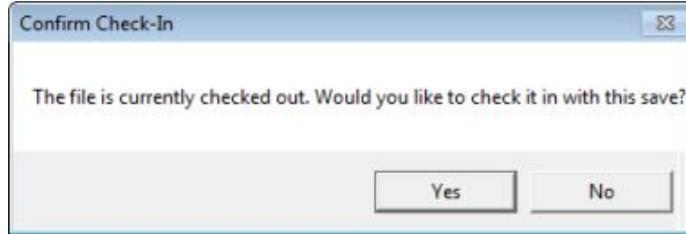
The **Advanced Search** dialog box closes.

Save and check in the dataset

Step 1: In the Teamcenter ribbon, click **Save** .

The **Status** dialog box appears briefly.

The **Confirm Check-In** dialog box appears.



Step 2: Click **Yes**.

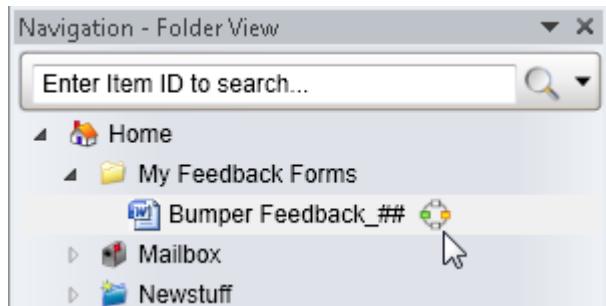
The message **File saved and Checked in** appears briefly.

In the **Navigation – Folder View**, the checkout symbol  disappears to the right of **Bumper Feedback_##**.

Step 3: Exit Microsoft Word.

Activity: Initiate a workflow process from Office

In this activity, you initiate a workflow process from Microsoft Office.



Launch the [Initiate a workflow process from Office](#) activity.

Related information

For more information, review these topics in the online help:

- [*Initiate a workflow process for a Teamcenter object*](#)

Find the dataset to submit to the workflow

Step 1: In Microsoft Word, click the **Teamcenter** tab.

The Teamcenter ribbon appears.

Step 2: Click **Navigate** .

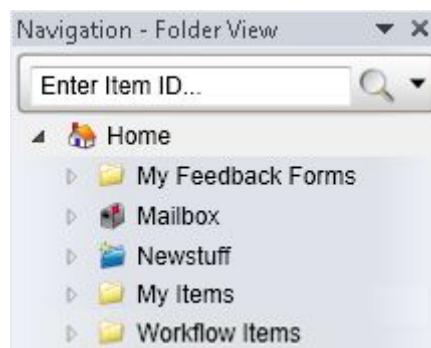
The **Teamcenter Login** window appears.

Step 3: Enter your user ID (*user_id*) and password (*password*) and click **Login**.

The **Navigation – Folder View** pane appears.

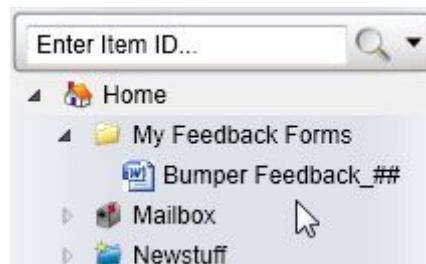
Step 4: In the **Navigation – Folder View** pane, click the triangle to the left of  **Home**.

The **My Feedback Forms** folder appears under **Home**.



Step 5: Click the triangle to the left of **My Feedback Forms**.

The **Bumper Feedback_##** document appears under **My Feedback Forms**.



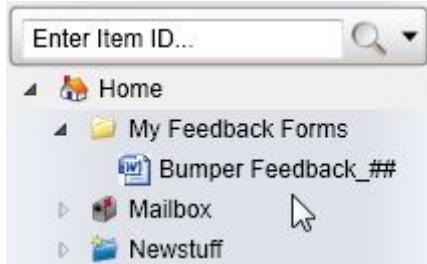
Step 6: Verify that **Bumper Feedback_##** is checked in.

Tip

In the **Navigation – Folder View**, a checkout symbol  does not appear to the right of **Bumper Feedback_##**.

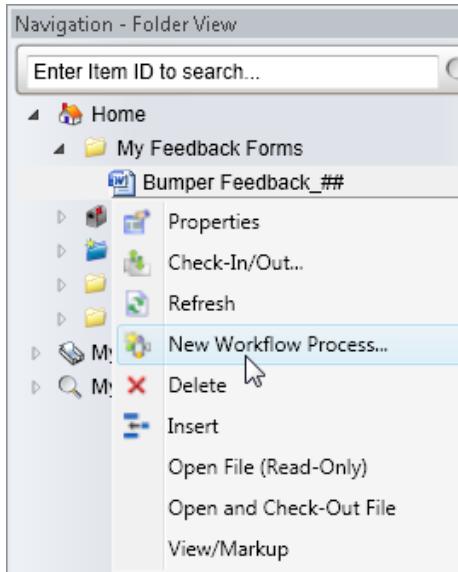
If the checkout symbol  does appear, you must check in the document or cancel the checkout before submitting it to a workflow process.

The **Bumper Feedback_##** is not checked out.



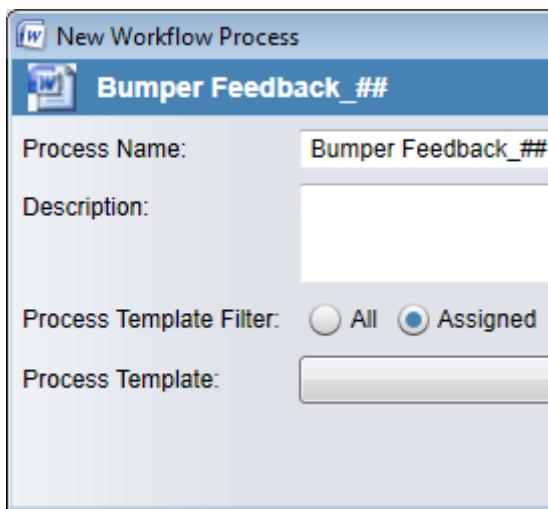
Submit the document to the workflow

- Step 1:** Right-click the **Bumper Feedback_##** document and choose  **New Workflow Process**.



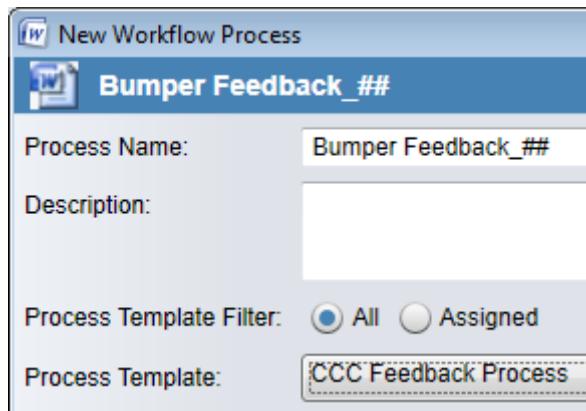
The **New Workflow Process** dialog box appears.

The value in the **Process Name** box defaults to the name of the object you submit to workflow.



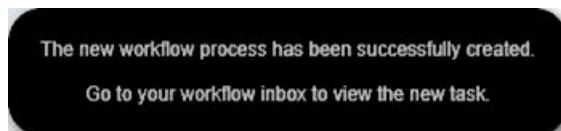
- Step 2:** In **Process Template Filter**, select **All**.

- Step 3:** In the **Process Template** box, select **CCC Feedback Process**.

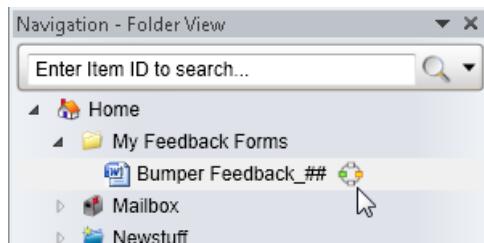


- Step 4:** Click **OK** in the **New Workflow Process** dialog box to submit the document to the workflow.

The message **The new workflow process has been successfully created** appears briefly.



The process symbol indicates the document is submitted to workflow.

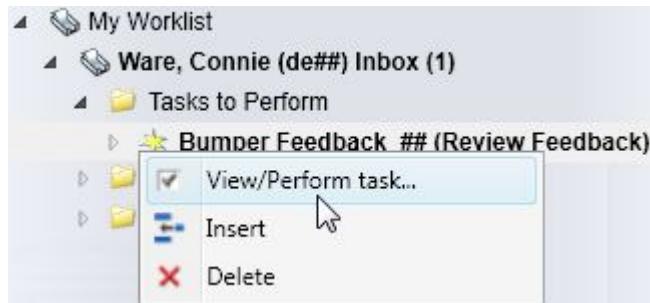


Note

Because you are the initiator of the process, the next task is sent to your **My Worklist** (inbox).

Activity: Complete the review tasks

In this activity, you complete the tasks in a workflow process from Microsoft Office.



Launch the [Complete the review tasks](#) activity.

Related information

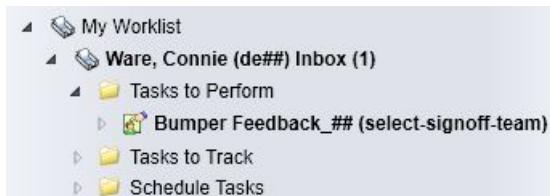
For more information, review these topics in the online help:

- [Perform a task](#)

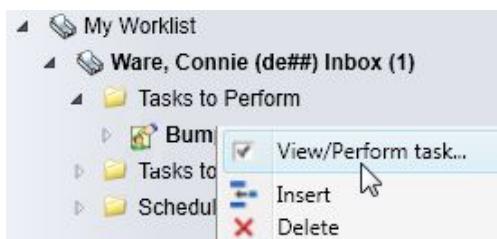
View task assignment

Step 1: In the **Navigation – Folder View** pane, click the triangle to the left of **My Worklist** to expand, and then continue to expand your **Inbox** and **Tasks to Perform**.

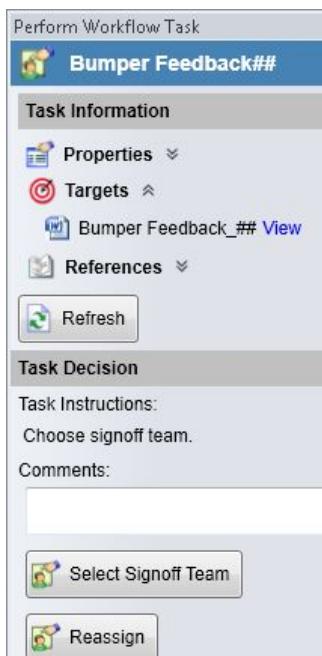
The **Bumper Feedback_## (select-signoff-team)** task appears.



Step 2: Right-click the **Bumper Feedback_## (select-signoff-team)** task and choose **View/Perform Task**.



The **Perform Workflow Task** view appears on the right.



Select the signoff team for the review

Step 1: Click **Select Signoff Team**.

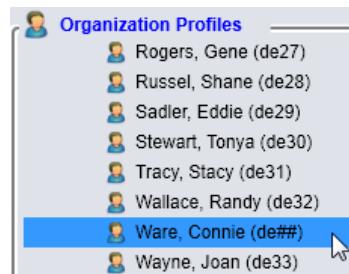


The **Select Signoff Team** dialog box appears.

Step 2: In the **Signoff Team** pane, select **body/Design Engineer/1**.

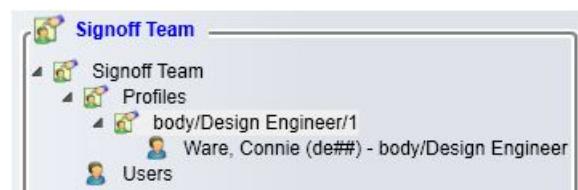


Step 3: In the **Organization Profiles** pane, expand **body**, then expand **Design Engineer**, and select your user (*user_id*).



Step 4: Click to assign the user.

In the left pane, the user you selected appears under the selected **body/Design Engineer/1**.



Step 5: Click **Submit**.

The message **The workflow task has been successfully performed** appears briefly.

The **Bumper Feedback_## (select-signoff-team)** task is removed from your inbox.

Step 6: Exit Microsoft Word.

Synchronize Teamcenter tasks

Step 1: Choose Start→All Programs→Microsoft Office→Microsoft Outlook 2010.

Note

For this training, you do not use your e-mail account.

The Microsoft Outlook application appears.

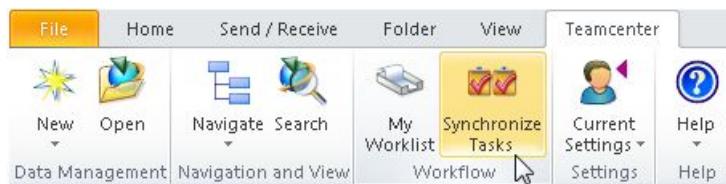
Step 2: A dialog box may appear asking you to confirm the installation of the Teamcenter plug-in. The Teamcenter plug-in provides the Teamcenter toolbar in the Microsoft Outlook.

Click **Install** in the **Microsoft Office Customization Installer** dialog box.

Step 3: Click the **Teamcenter** tab.

The Teamcenter ribbon appears.

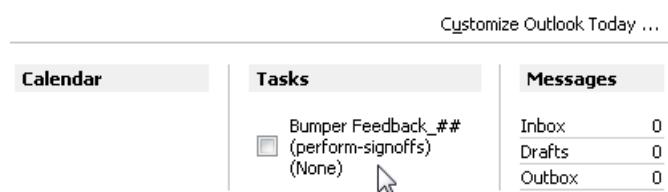
Step 4: Click  **Synchronize Tasks**.



The **Teamcenter Login** window appears.

Step 5: Enter your user ID (*user_id*) and password (*password*) and click **Login**.

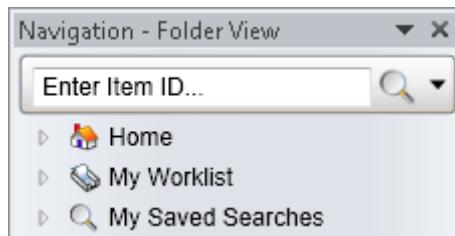
Your Teamcenter tasks are synchronized to Outlook and appear in the Outlook **Tasks** and **To-Do** lists.



View a task assignment

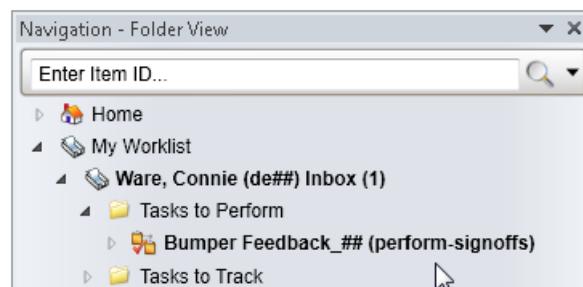
Step 1: Click **Navigate** .

The **Navigation – Folder View** pane appears.

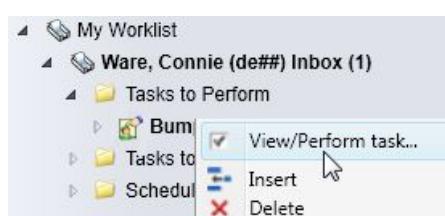


Step 2: Click the triangle to the left of  **My Worklist** to expand, and then continue to expand your  **Inbox** and **Tasks to Perform**.

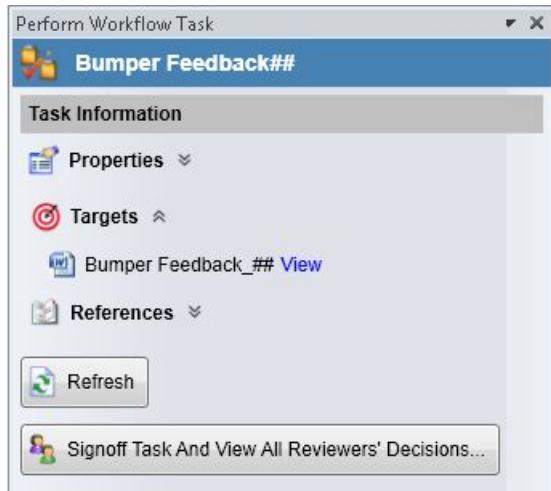
The **Bumper Feedback_##** task appears under **Tasks to Perform**.



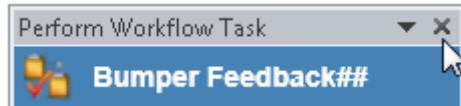
Step 3: Right-click **Bumper Feedback_## (perform-signoffs)** task and choose **View/Perform Task**.



The **Perform Workflow Task** view appears.



Step 4: Close the **Perform Workflow Task** view.



Do not close Microsoft Outlook.

Open a target file

Step 1: Choose **Start→Microsoft Word 2010.**

The Microsoft Word application appears.

Step 2: Click the **Teamcenter** tab.

The Teamcenter ribbon appears.

Step 3: Click **Navigate** .

The **Teamcenter Login** window appears.

Note

If single sign-on is configured, you do not need to log on to Teamcenter again.

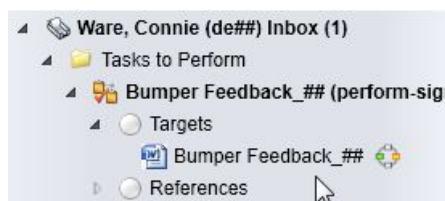
Step 4: Enter your user ID (*user_id*) and password (*password*) and click **Login**.

The **Navigation – Folder View** pane appears.

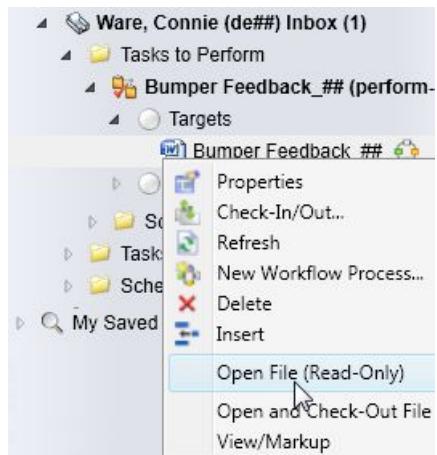


Step 5: Click the triangle to the left of  **My worklist** to expand, and then continue expand your  **Inbox**, **Tasks to Perform** and the **Bumper Feedback_##** task, and the **Targets** folder.

The **Bumper Feedback_##** document appears under the **Bumper Feedback_## (perform-signoffs)** task in the **Targets** folder.



Step 6: Right-click the **Bumper Feedback_##** document and choose **Open File (read-only)**.



The **Status** dialog box appears briefly.

A new Microsoft Word window appears with the **Bumper Feedback_##** document.

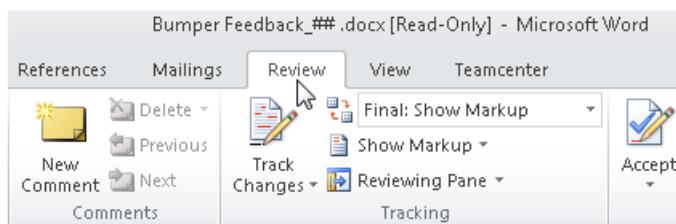
Caution

The new Microsoft Word window may appear in the background.

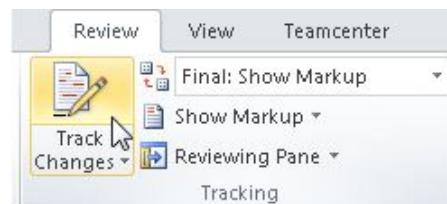
Create a markup

Step 1: Click the **Review** tab.

The review ribbon appears.



Step 2: Choose **Track Changes**.

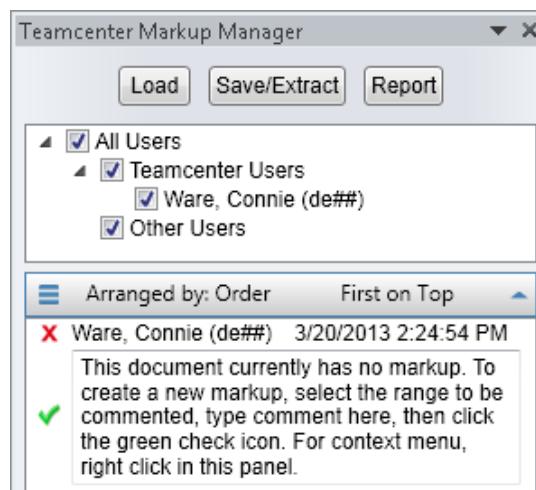


Step 3: Click the **Teamcenter** tab.

The Teamcenter ribbon appears.

Step 4: Click **Markup**.

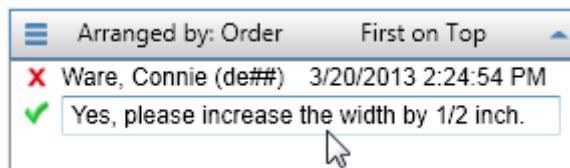
The **Teamcenter Markup Manager** view appears.



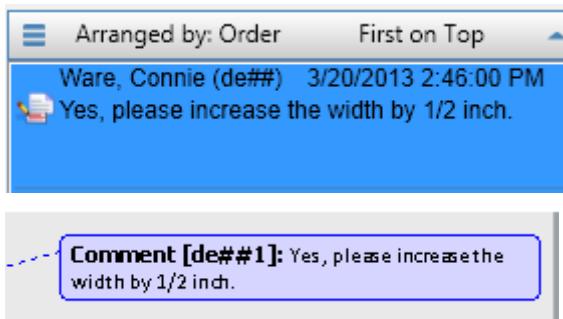
Step 5: Under **Action** in the **Feedback Form** document, select **Can this part be improved?**

below. **Can this part be improved?**

Step 6: In the **Teamcenter Markup Manager** view, delete the existing comment and type **Yes, please increase the width by 1/2 inch.**

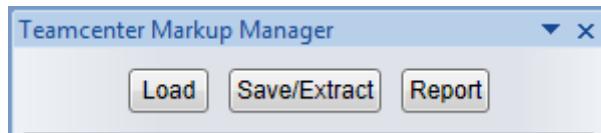


- Step 7:** Click the green check mark to the left of the comment.
The comment is saved and applied to the document.



Extract a markup

Step 1: In the **Teamcenter Markup Manager** view, click **Save/Extract**.



The comment is saved as a Teamcenter markup.

The **Status** dialog box appears briefly.

The message `Markups saved` appears briefly.

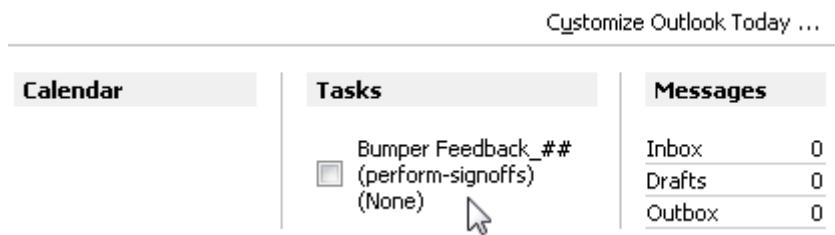
Step 2: Exit Microsoft Word.

Step 3: In the **Microsoft Word** dialog box, click **No** when asked to save the changes.

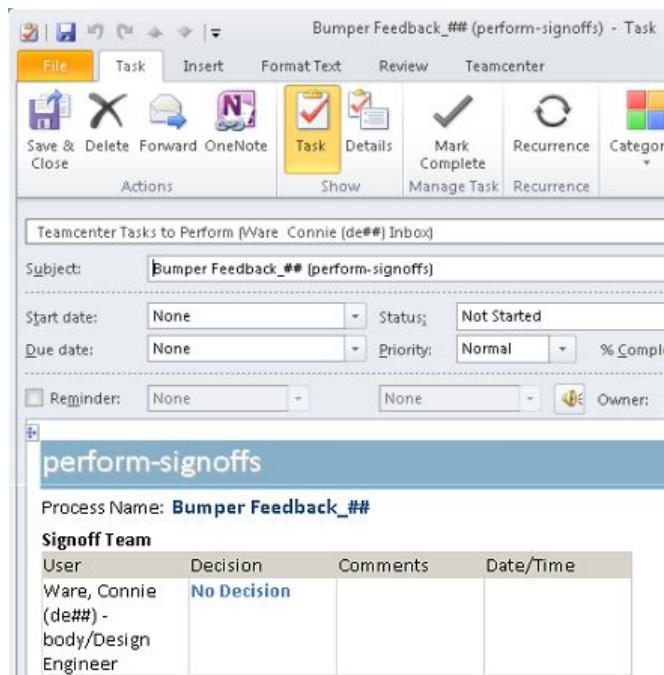
The changes have already been saved to the markup file.

Sign off on the review task

- Step 1:** In Microsoft Outlook, click the Outlook task **Bumper Feedback_## (perform-signoffs)**.



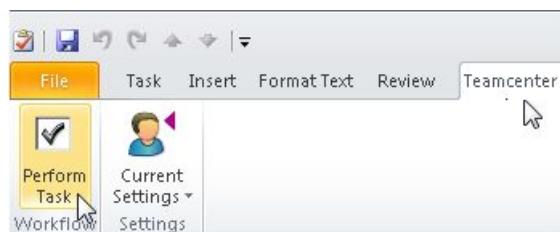
The **Bumper Feedback_## (perform-signoffs)** - Task window appears.



- Step 2:** Click the **Teamcenter** tab.

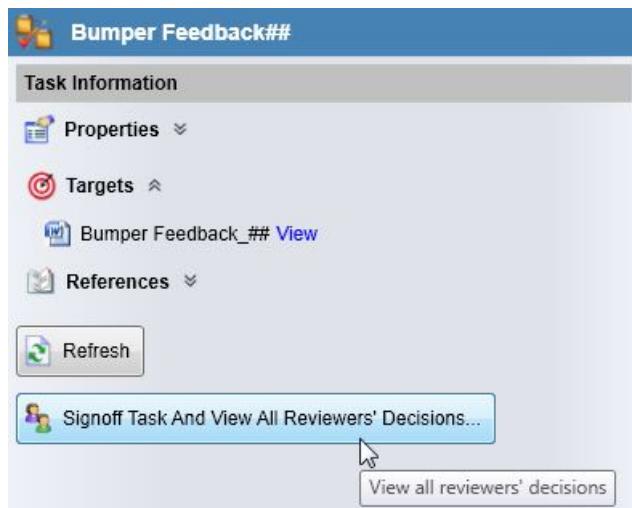
The Teamcenter ribbon appears.

- Step 3:** Click **Perform Task**.

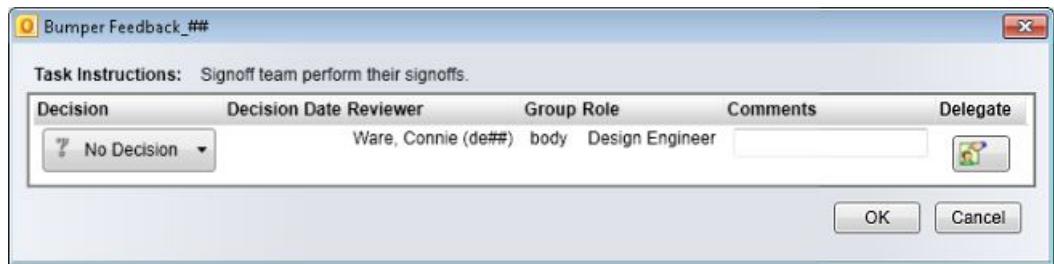


The **Perform Workflow Task** view appears.

- Step 4:** In the **Perform Workflow Task** view, click **Signoff Task and View all Reviewers' Decisions**.

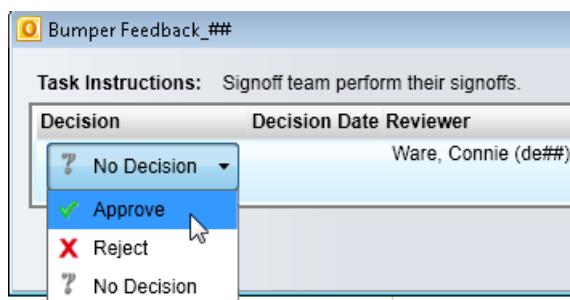


The **Bumper Feedback##** window appears.



- Step 5:** In the **Bumper Feedback##** window, do the following to approve the task:

- Click **No Decision**.
- Click **Approve**.
- Click **OK**.



The message **The workflow task has been successfully performed** appears briefly.

The **Bumper Feedback## (perform-signoffs) - Task** window is closed.

The **Bumper Feedback_## (perform-signoffs)** task is removed from your inbox.

Step 6: Exit Microsoft Outlook.

View a task assignment

Step 1: Choose Start→Microsoft Word 2010.

The Microsoft Word application appears.

Step 2: Click the Teamcenter tab.

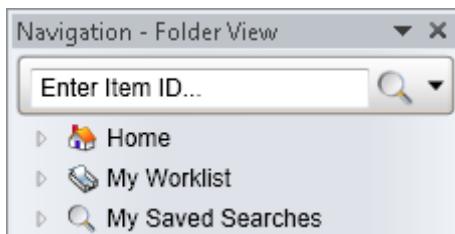
The Teamcenter ribbon appears.

Step 3: Click Navigate .

The Teamcenter Login window appears.

Step 4: Enter your user ID (*user_id*) and password (*password*) and click Login.

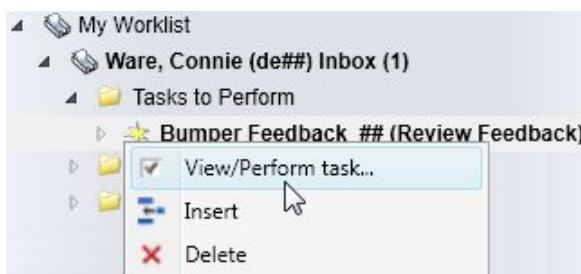
The Navigation – Folder View pane appears.



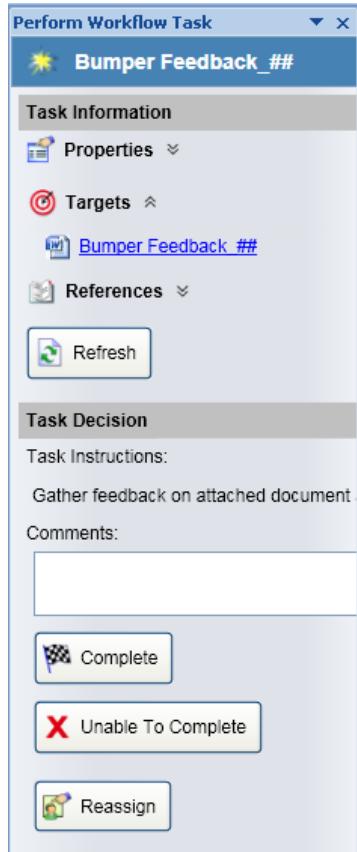
Step 5: In the Navigation – Folder View pane, click the triangle to the left of  My Worklist to expand, then continue to expand your  Inbox and Tasks to Perform.

The Bumper Feedback_## (Review Feedback) task appears under Tasks to Perform.

Step 6: Right-click Bumper Feedback_## (Review Feedback) task and choose View/Perform Task.



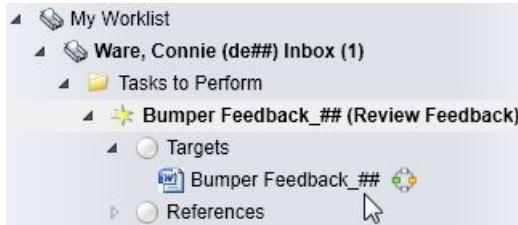
The Perform Workflow Task view appears.



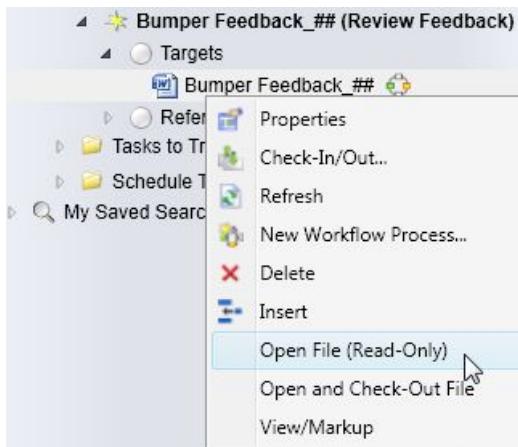
Review markups

Step 1: Click the triangle to the left of the **Bumper Feedback_##** task and the **Targets** folder to expand.

The **Bumper Feedback_##** document appears under **Bumper Feedback_## (Review Feedback)** task.



Step 2: Right-click the **Bumper Feedback_##** document and choose **Open File (read-only)**.



The **Status** dialog box appears briefly.

The **Bumper Feedback_##** document appears.

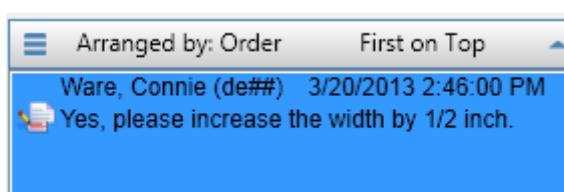
Step 3: Click the **Teamcenter** tab.

The Teamcenter ribbon appears.

Step 4: Click **Markup** .

The message **Markups loaded** appears briefly.

The **Teamcenter Markup Manager** view appears.



Step 5: Review the **Feedback Form** comments. There are other actions you can take, such as incorporating comments.

Step 6: Close the **Teamcenter Markup Manager** view.

Sign off on the review feedback task

Step 1: Click **Navigate** .

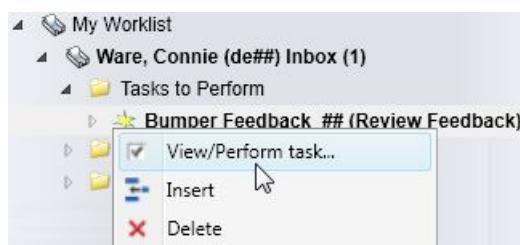
The **Navigation – Folder View** pane appears.



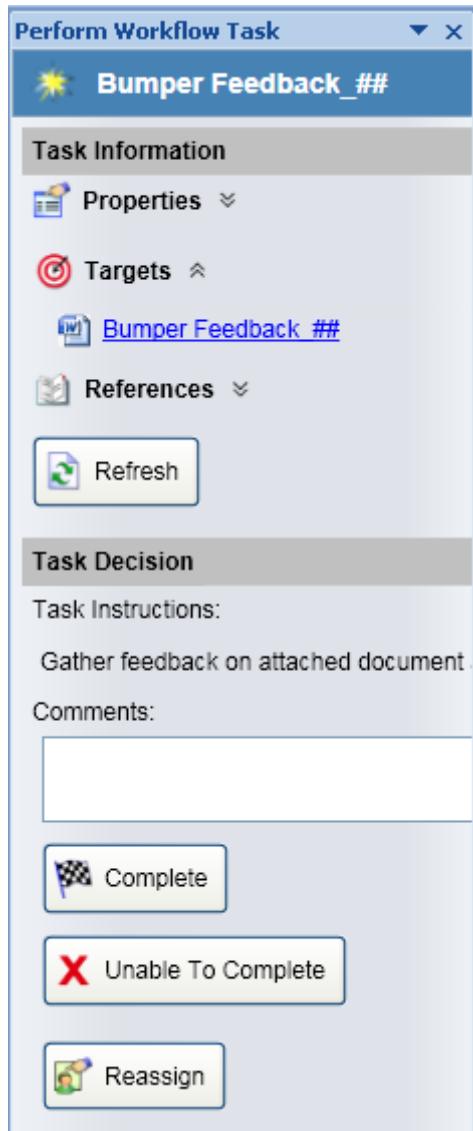
Step 2: In the **Navigation – Folder View** pane, click the triangle to the left of  **My Worklist** to expand, and then continue to expand your  **Inbox** and **Tasks to Perform**.

The **Bumper Feedback_## (Review Feedback)** task appears under **Tasks to Perform**.

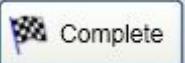
Step 3: Right-click the **Bumper Feedback_## (Review Feedback)** task and choose  **View/Perform Task**.



The **Perform Workflow Task** view appears.



Step 4: Click **Complete**.



The message **The workflow task has been successfully performed** appears briefly.

The **Perform Workflow Task** view is closed.

The **Bumper Feedback_## (Review Feedback)** task is removed from your inbox.

Step 5: Exit Microsoft Word.

Step 6: In the **Microsoft Word** dialog box, click **No** when asked to save the changes.

Activity: Export BOM and update the live Excel spreadsheet

In this activity, you export a BOM from Structure Manager to Microsoft Excel, and then modify values in the Excel spreadsheet.

Teamcenter			Microsoft Excel		
Home	BOM Line	Item Name	Home	BOM Line	Item Name
3500_#/A;1-Chassis ASM (View) - Latest Working - Date - "Now"			1	3500_#/A;1-Chassis ASM (View)	Chassis ASM
BOM Line	Item Name	Item Descr	2	3510/A;1-Pan	Pan
 3500_#/A;1-Chassis ASM (View)	Chassis ASM	Chassis ASM #	3	3540/B;1-Bumper	Bumper
		Chassis ASM Description	4	3530/A;1-P-Pack	P-Pack

When you update column values in Excel, you see those updates in Structure Manager.

Microsoft Excel			Teamcenter		
Home	BOM Line	Item Name	Home	BOM Line	Item Name
1	3500_#/A;1-Chassis ASM (View)	Chassis ASM	3500_#/A;1-Chassis ASM (View) - Latest Working - Date - "Now"		
2	3510/A;1-Pan	Pan	BOM Line	Item Name	Item Description
3	3540/B;1-Bumper	Bumper	 3500_#/A;1-Chassis ASM (View)	Chassis ASM #	Chassis ASM Description
4	3530/A;1-P-Pack	P-Pack	 3510/A;1-Pan	Pan	Pan
			 3540/B;1-Bumper	Bumper	Bumper
			 3530/A;1-P-Pack	P-Pack	P-Pack

Launch the [Export BOM and update the live Excel spreadsheet](#) activity.

Related information

For more information, review these topics in the online help:

- [Basic concepts of Live Excel](#)

Configure BOM for export

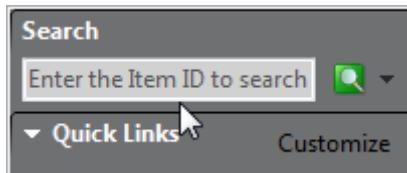
Step 1: Log on to the Teamcenter rich client as the user ID *user_id* and password *password*.

Step 2: In the navigation pane, select **Structure Manager**.



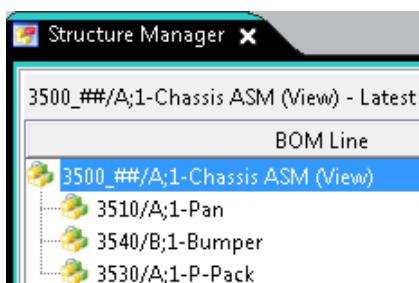
The **Structure Manager** view appears.

Step 3: In the navigation pane in the quick search box, type **3500_##** and press Enter.



Step 4: In the **Quick Open Results** dialog box, double-click to open the **3500_##-Chassis ASM** item in the list.

The product structure for the item is found and appears in Structure Manager.



Step 5: Right-click the **Item Type** column and choose **+ Insert column(s)**.

The **Change Columns** dialog box appears.

Step 6: In the **Available Columns** list, select **Item Name** and click the plus button.

Item Name moves to the **Displayed Columns** list.

Step 7: In the **Available Columns** list, select **Item Description** and click the plus button.

Item Description moves to the **Displayed Columns** list.



- Step 8:** In the **Displayed Columns** list, select both **Item Name** and **Item Description**, and then click **Move Up** to display both columns immediately after **BOM Line**.

Tip

To select both, select one and then press the Shift key and click the other.

- Step 9:** Click **Apply**, and then click **Close**.

The new columns appear in the **Structure Manager** view.

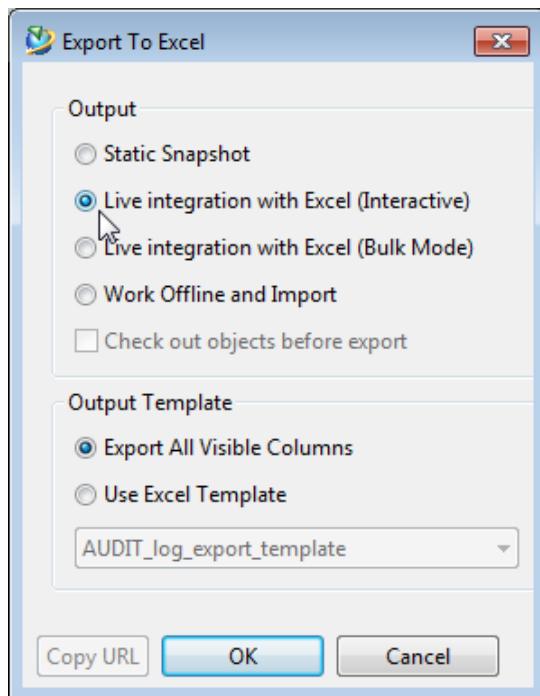
3500_##/A;1-Chassis ASM (View) - Latest Working - Date - "Now"		
BOM Line	Item Name	Item Description
3500_##/A;1-Chassis ASM (View)	Chassis ASM	Chassis ASM

Export a BOM to Excel

Step 1: With the **3500_##/A;1-Chassis ASM (View)** assembly selected, choose **Tools→Export→Objects to Excel**.

The **Export To Excel** dialog box appears.

Step 2: In the **Objects to Excel** dialog box, ensure **Live integration with Excel (Interactive)** is selected.



Step 3: Click **OK**.

Caution

The Microsoft Excel window may appear in the background.

The **Export to Excel** progress bar appears briefly.

The Microsoft Excel application appears with the **3500_##/A;1-Chassis ASM (View)** assembly.

Note

The file may take a few seconds to appear.

Home	BOM Line	Item Name	Item Description
1	3500_##/A;1-Chassis ASM (View)	Chassis ASM	Chassis ASM
2	3510/A;1-Pan	Pan	Pan
3	3540/B;1-Bumper	Bumper	Bumper
4	3530/A;1-P-Pack	P-Pack	P-Pack

Modify the Excel spreadsheet

Step 1: In the Excel spreadsheet, in the **Item Name** and **Item Description** column for the **3500_##/A;1-Chassis ASM (View)**, add ## to the end of each value and press Enter.

Home	BOM Line	Item Name	Item Description
<u>1</u>	3500_##/A;1-Chassis ASM (View)	Chassis ASM ##	Chassis ASM ##
<u>2</u>	3510/A;1-Pan	Pan	Pan
<u>3</u>	3540/B;1-Bumper	Bumper	Bumper
<u>4</u>	3530/A;1-P-Pack	P-Pack	P-Pack

Step 2: In Structure Manager, validate the new values.

3500_##/A;1-Chassis ASM (View) - Latest Working - Date - "Now"		
BOM Line	Item Name	Item Description
3500_##/A;1-Chassis ASM (View)	Chassis ASM ##	Chassis ASM ##
3510/A;1-Pan	Pan	Pan
3540/B;1-Bumper	Bumper	Bumper
3530/A;1-P-Pack	P-Pack	P-Pack

Step 3: Exit Excel.

Step 4: Close Structure Manager.

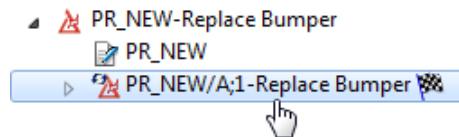
Section

20 Using Change Manager

Find and view a problem report

Activity: Find and view a problem report

In this activity, you find and view a problem report.



Launch the [Find and view a problem report](#) activity.

Related information

For more information, review these topics in the online help:

- [Create a problem report](#)

Find the problem report and copy to your Home folder

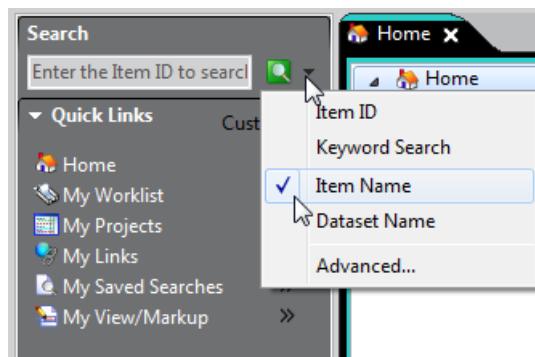
- Step 1:** In My Teamcenter, verify that you are logged on as *user_id* and your group is set to **high performance** and role is set to **Design Engineer**.

My Teamcenter (Ware, Connie (def##) - high performance / Design Engineer

Tip

If not, click the current user information link in the application header to change it.

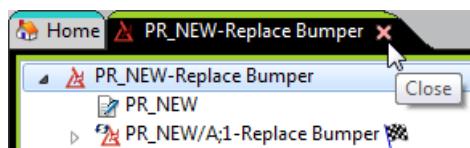
- Step 2:** In the quick search box, search by **Item Name**.



- Step 3:** In the quick search box, type **Replace Bumper** and press Enter.

- Step 4:** Copy **PR_NEW-Replace Bumper** item.

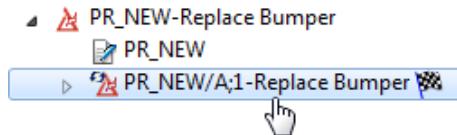
- Step 5:** Click the **x** in the **PR_NEW-Replace Bumper** component view tab to close it.



- Step 6:** With the **Home** folder selected, paste the **PR_NEW-Replace Bumper** item.

View the PR change states and participants

- Step 1:** Expand the **PR_NEW-Replace Bumper** problem report item and select the **PR_NEW/A;1-Replace Bumper** problem report revision.



- Step 2:** In the **Summary** tab, locate the **Closure**, **Disposition**, and **Maturity** state properties.

Maturity: Complete

Disposition: Approved

Closure: Closed

- Step 3:** In the **Summary** tab, locate the **Requestor**, **Analyst**, and **Change Specialist I** participants.

▼ Assigned Participants

[Assign Participants...](#)

Requestor:	high performance/Design Engineer/Andretti, Maria
Analyst:	body/Design Engineer/Andretti, Maria
Change Specialist I:	high performance/Design Engineer/Andretti, Maria

Section

21 Creating and managing change objects

Create a change request

Activity: Create a change request

In this activity, as a design engineer from the **high performance** group, you create an change request (ECR) based on the existing problem report (PR) and submit it to the **CM Change Request** workflow process.



The screenshot shows the 'Change Request' dialog box. In the 'Properties (required)' section, the 'ECR Number' field is set to 'CR_##'. The 'Synopsis' field contains 'Replace Bumper', and the 'Description' field contains 'Replace existing bumper with a new improved bumper for the new model year'. In the 'Relationships Information' section, there is a warning message: 'Your selections will be added to Implements.' followed by a list box containing 'PR_NEW/A;1-Replace Bumper'. A checkbox labeled 'Propagate relations' is checked.

Launch the [Create a change request](#) activity.

Related information

For more information, review these topics in the online help:

- [Create an enterprise change request](#)

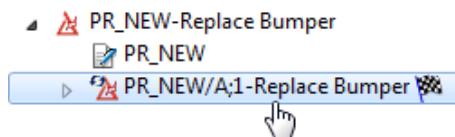
Create a new ECR change object to implement the problem report

- Step 1:** Observe that your group is set to **high performance** and role is set to **Design Engineer**.

My Teamcenter (Ware, Connie (de##) - high performance / Design Engineer

This is the profile of a change specialist responsible for the creating of a change request in the context of this problem report, assigning the change review members, and submitting the change request to the workflow.

- Step 2:** Right-click the **PR_NEW/A;1-Replace Bumper** problem report revision.



- Step 3:** Choose  **Derive Change**.

The **Derive Change** dialog box appears.

- Step 4:** Select  **Change Request** as the change type.

Note

If you do not see **Change Request** type in the list, verify that your group is set to **high performance**. If it is not, your group must be changed before clicking **Next**.

- Step 5:** Click **Next**.

- Step 6:** In the **ECR Number** box, type **CR_##**.

Note

If you leave the **ECR Number** box empty, the value is assigned automatically.

- Step 7:** Leave the **Revision** box empty. The value is assigned automatically.

- Step 8:** The **Synopsis** and **Description** values are populated with the same values from the problem report.

The selected problem report revision appears and is added to the **Implements** folder.

- Step 9:** Confirm **Propagate relations** is selected to carry over the problem report's problem items and reference items.



Step 10: Click **Finish**.

Step 11: Click **Cancel** to close the **Derive Change** dialog box.

The new change request report is created and appears in the **Newstuff** folder in the **Home** view.

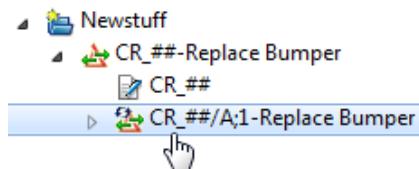
Note

The new change request also appears in the problem report's **Implemented By** folder.

Step 12: Under the **PR##** problem report revision, expand the **Implemented By** folder to view the associated change request.

Assign a change analyst to the change request

- Step 1:** Expand the **Newstuff** folder.
- Step 2:** Expand the **CR_##-Replace Bumper** change request item.
- Step 3:** Select the **CR_##/A;1-Replace Bumper** item revision.



- Step 4:** Choose **Tools**→ **Assign Participants**.

For this training, the change management process flow is simplified. As *user_id*, you are responsible for the change request creation, validation and approval. Based on your company's release process, you can assign workflow tasks to various users from different groups.

- Step 5:** In the **Assign Participants** dialog box, select **Analyst**.
- Step 6:** In the **Organization** tab, expand the **body** group and then the **Design Engineer** role.
- Step 7:** Select *user_id* to assign as the change analyst.
- Step 8:** Click **Add**.
- Step 9:** Click **Apply**.

Assign a change review board to the change request

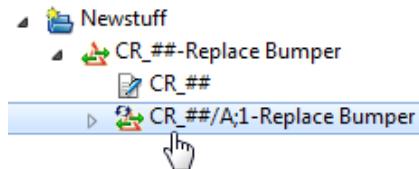
- Step 1:** In the **Assign Participants** dialog box, select **Change Review Board**.
- Step 2:** In the **Organization** tab, expand the **high performance** group and then the **Manager** role.
- Step 3:** Select *user_id* to assign as the review board.
- Step 4:** Click **Add**.
- Step 5:** Click **Apply**.

Assign a change specialist to the change request

- Step 1:** In the **Assign Participants** dialog box, select **Change Specialist I**.
- Step 2:** In the **Organization** tab, expand the **high performance** group and then the **Design Engineer** role.
- Step 3:** Select *user_id* to assign as the change specialist.
- Step 4:** Click **Add**.
- Step 5:** Click **OK**.

Submit the change request to the CM Change Request workflow

- Step 1:** With the **CR_##/A;1-Replace Bumper** change request revision selected, choose **File→New→Workflow Process**.



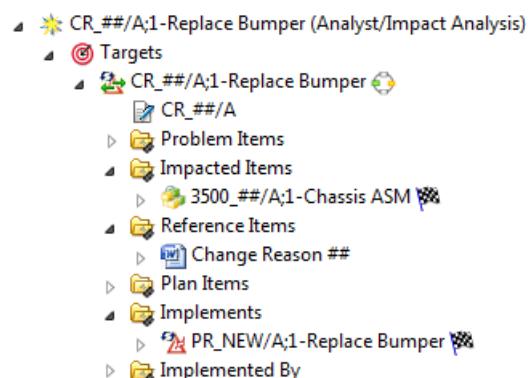
The **New Process Dialog** box appears.

- Step 2:** Verify the **Process Template** box is set to **CM Change Request**.
- Step 3:** In the **New Process Dialog** box, click the **Process Template** tab to view the steps in the **CM Change Request** workflow.
- Step 4:** In the **New Process Dialog** box, click **OK** to submit the change to the **CM Change Request** workflow.

Elaborate the change request

Activity: Elaborate the change request

In this activity, as a member of the change review board, you complete the change request planning.



Launch the [Elaborate the change request](#) activity.

Related information

For more information, review these topics in the online help:

- [Create an enterprise change request](#)

Review the task instructions

- Step 1:** Click your current user information link in the application banner to access the **User Settings** dialog box and change your group to **body** and role to **Design Engineer** to perform this task as **Change Analyst**.

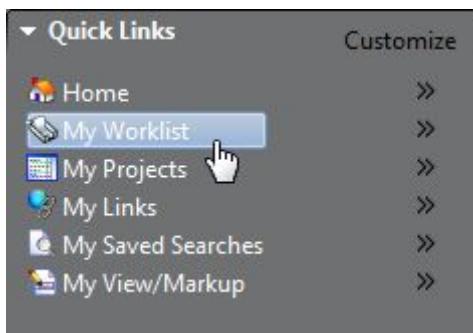
Note

This is the profile of user you previously selected as an analyst responsible for the change request impact analysis and planning.

The current user role setting appears in the **My Teamcenter** window.

My Teamcenter (Ware, Connie (cware) - body / Design Engineer)

- Step 2:** In the navigation pane, click **My Worklist** located under **Quick Links**.



Your **My Worklist** folder opens.

- Step 3:** Expand your inbox, and then expand the **Tasks to Perform** folder.

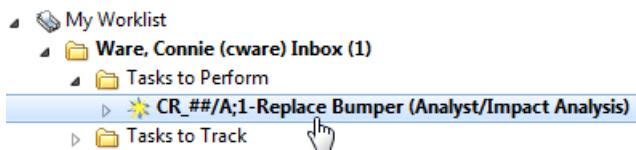
The Design Engineer is assigned to perform the **Analyst/Impact Analysis** task.

Note

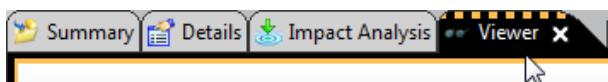
The task name display is formatted to show the process name assigned when the workflow was initiated, followed by the task name.

Tasks that have not yet been viewed are indicated by bold text.

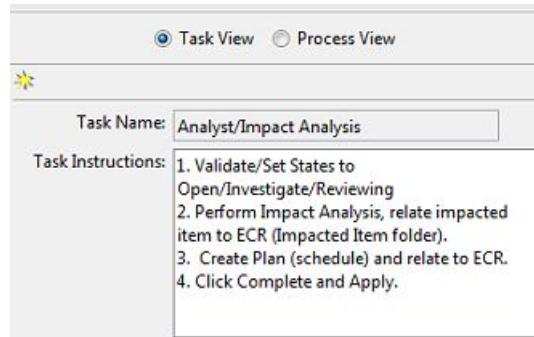
- Step 4:** Select the **CR_#/A;1-Replace Bumper (Analyst/Impact Analysis)** task.



- Step 5:** If necessary, click the **Viewer** tab.



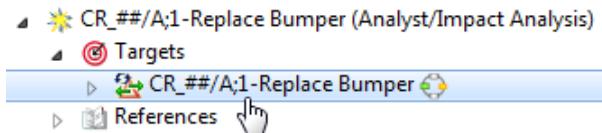
Step 6: In the **Task View**, review the task instructions.



Validate the change request is in reviewing state

Step 1: Expand the **CR_##/A;1-Replace Bumper (Analyst/Impact Analysis)** task, and then expand the **Targets** folder.

Step 2: Select the **CR_##/A;1-Replace Bumper** change request revision.



Step 3: In the **Viewer** tab, review the ECR states.

Closure:	Open
Disposition:	Investigate
Maturity:	Reviewing

Import the document that describes the change request justification

Step 1: Expand the **CR_##/A;1-Replace Bumper** change request revision.

Step 2: Select the **Reference Items** folder and choose **File→New→Dataset**.

The **New Dataset** dialog box appears.

Step 3: Select **MSWordX** as the type.

Note

If **MSWordX** does not appear, click **More...** to find and select it.

Step 4: In the **Name** box, type **Change Reason ##**.

Step 5: Click **Select an import file ...** next to the **Import** box.

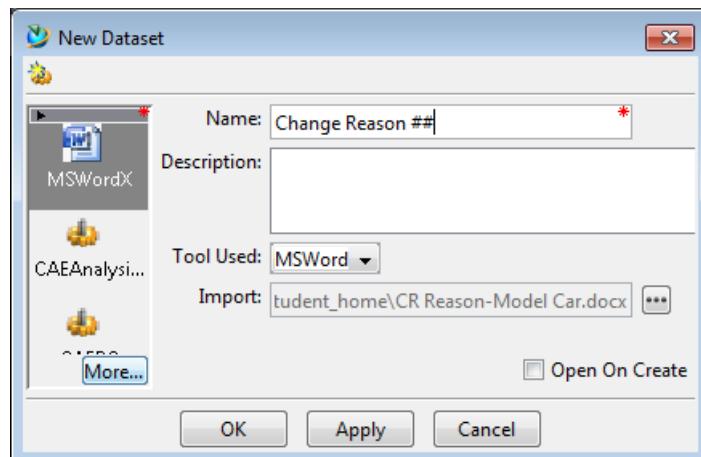
The **Import File** dialog box appears.

Step 6: Select the **CR Reason-Model Car.docx** file.

Note

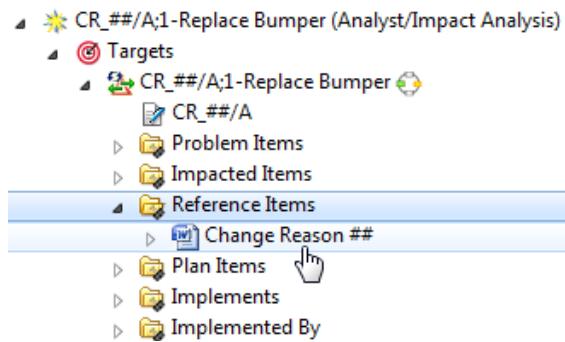
This file is located in the **STUDENT_HOME** directory path but may be selected by default.

Step 7: Click **Upload**.



Step 8: Click **OK**.

The document is imported to your **Reference Items** folder.

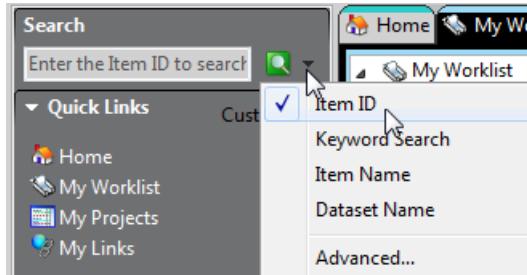


Add the item revision to your change request Impacted Items folder

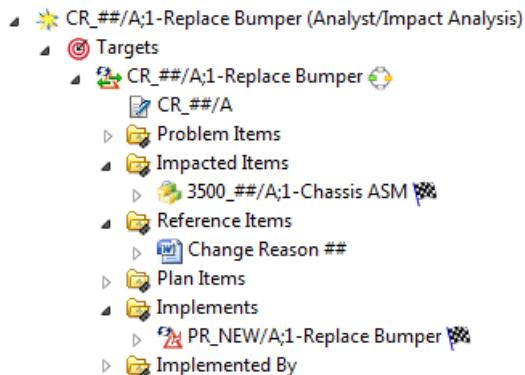
Note

This is the assembly that contains the item to be replaced.

- Step 1:** In the quick search box, change the search type to **Item ID**.

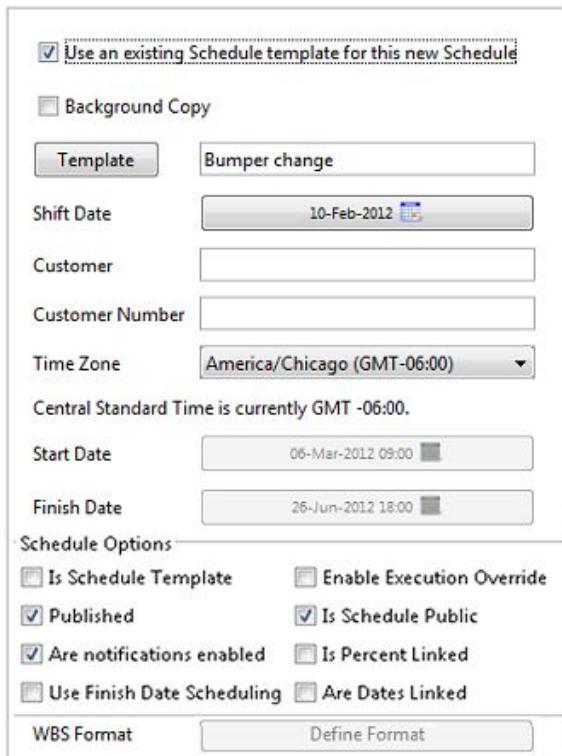


- Step 2:** In the quick search box, type **3500_##**.
- Step 3:** Press the Enter key to execute the search.
- Step 4:** Copy the **3500_##/A;1-Chassis ASM** item revision.
- Step 5:** Click the **x** in the **3500_##** component view tab to close it.
- Step 6:** Paste the **3500_##/A;1-Chassis ASM** item revision into the **Impacted Items** folder.



Add a schedule to the Plan Items folder

- Step 1:** Select the **Plan Items** folder.
- Step 2:** Choose **File→New→Schedule**.
The **New Schedule** dialog box appears.
- Step 3:** With the **Schedule** type selected, click **Next**.
- Step 4:** Click **Assign**.
- Step 5:** In the **Schedule Name** box, type **Bumper change**.
- Step 6:** Click **Next**.
- Step 7:** Select **Use an existing Schedule template for this new Schedule**.
The **Template** button is available.
- Step 8:** Click **Template**.
The **Choose a Schedule Template** dialog box appears.
- Step 9:** Select **Bumper change** schedule template and click **Select**.
The **Bumper change** template appears in the **Template** box.



- Step 10:** In the **Schedule Options** box, ensure that **Is Schedule Public** is selected.
- Step 11:** Click **Finish**.

The **Bumper change** schedule appears in the **Plan Items** folder.

Perform the signoff

Step 1: In **My Worklist**, select the **CR_##/A;1-Replace Bumper (Analyst/Impact Analysis)** task.

Step 2: In the **Task View**, click **Complete**.

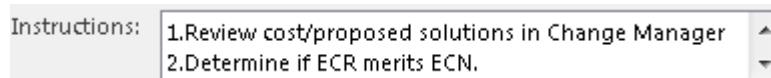
Step 3: Click **Apply**.

The **Analyst/Impact Analysis** task is now complete.

Review and approve the change request

Activity: Review and approve the change request

In this activity, as a member of the change review board, you review and approve the change request.



Launch the [Review and approve the change request](#) activity.

Related information

For more information, review these topics in the online help:

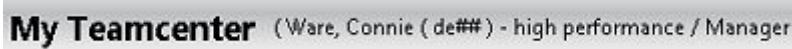
- [Create an enterprise change request](#)

Send the change request to Change Manager

- Step 1:** Click your current user information link in the application banner to access the **User Settings** dialog box to change your group to **high performance** and role to **Manager**.

Note

This is the profile of user you previously selected as a change review board member responsible for reviewing costs, proposed solution and scheduled tasks, as well as determining if this change request requires a change notice.



- Step 2:** Select the **CR_#/A;1-Replace Bumper (perform-signoffs)** task.

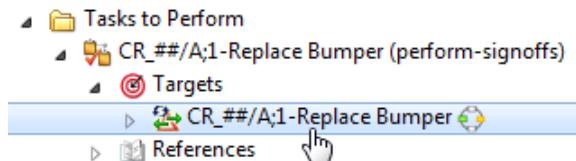
- Step 3:** In the **Task View**, review the task instructions.



- Step 4:** Expand the **CR_#/A;1-Replace Bumper (perform-signoffs)** folder.

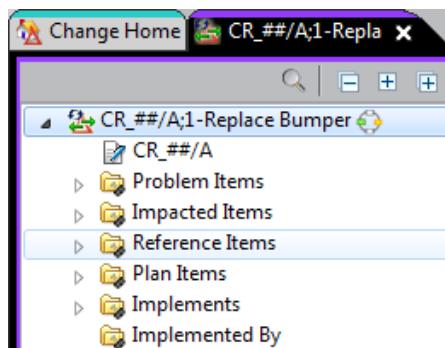
- Step 5:** Expand the **Targets** folder.

- Step 6:** Right-click the **CR_#/A;1-Replace Bumper** change request revision.



- Step 7:** Choose **Send To → Change Manager**.

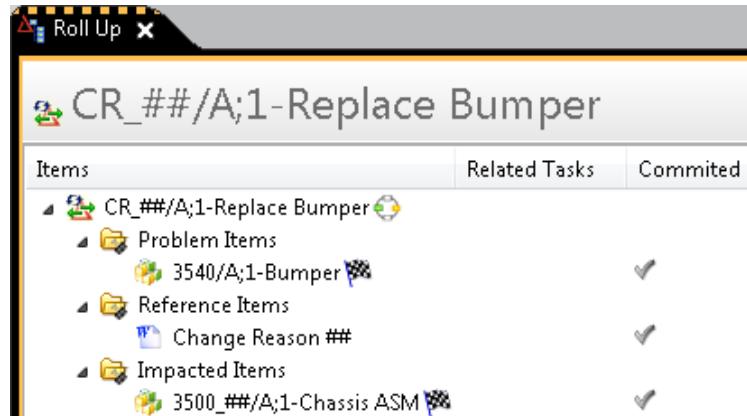
The **Change Manager** view appears with **CR_#/A;1-Replace Bumper** displayed.



Roll up items from the schedule's tasks

Step 1: With the **CR_##/A;1-Replace Bumper** selected, click **Perform rollup for the current change object**  at the top of the CR tab.

The **Roll Up** view appears.



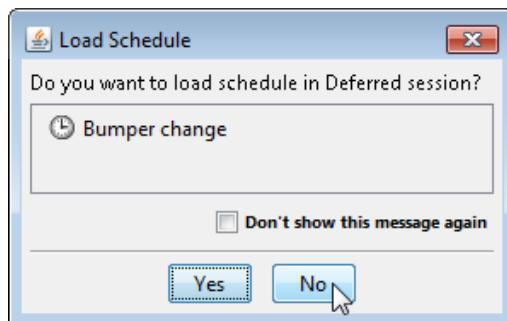
Step 2: Close the **Roll Up** view.

Review costs and proposed solutions

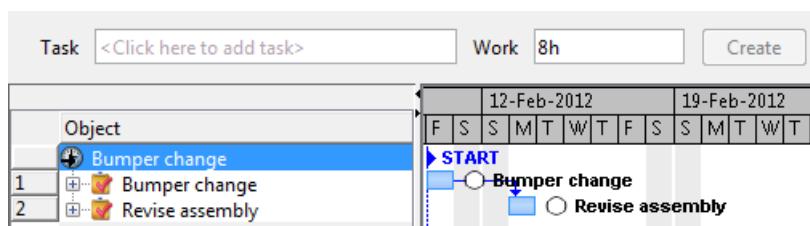
Step 1: Expand the **Plan Items** folder and select **Bumper change**.

Step 2: Click **Opens Schedule**  at the top of the CR tab.

Step 3: In the **Load Schedule** dialog box, click **No**.



The **Bumper Change** schedule view appears.



Step 4: When you finish reviewing the project schedule, click  to close Change Manager.

Perform the signoff

Step 1: In **My Worklist**, select the **CR_##/A;1-Replace Bumper (perform-signoffs)** task.

Step 2: In the **Task View**, click **No Decision**.

Step 3: Click **Approve** and in the **Comments** box, type **Looks good**.

Step 4: Click **OK**.

The review task is now complete.

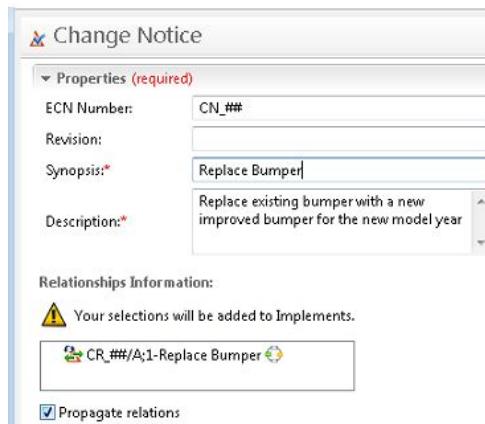
Section

22 Elaborating and executing the change

Create a change notice

Activity: Create a change notice

In this activity, you create a change notice (ECN) and submit it to the **CM Change Notice** workflow process. The ECN is used to implement the change request. The desired outcome of the ECN is to release **3500_##-Chassis ASM** with the new **93540_##/A;1-Bumper** component. This task is performed by **Change Specialist I**.



The screenshot shows the 'Change Notice' dialog box. In the 'Properties (required)' section, the 'ECN Number' field contains 'CN_##'. The 'Synopsis:' field contains 'Replace Bumper'. The 'Description:' field contains 'Replace existing bumper with a new improved bumper for the new model year'. In the 'Relationships Information' section, there is a warning message: 'Your selections will be added to Implements.' followed by a list box containing 'CR_##/A;1-Replace Bumper'. At the bottom, there is a checked checkbox labeled 'Propagate relations'.

Launch the [Create a change notice](#) activity.

Related information

For more information, review these topics in the online help:

- [Create an enterprise change notice](#)

Review the task instructions

Step 1: Click the current user information link in the application banner to change your group to **high performance** and role to **Design Engineer**.

Note

This is the profile of user selected in a previous activity as a change review board member responsible for creating a change notice (ECN).

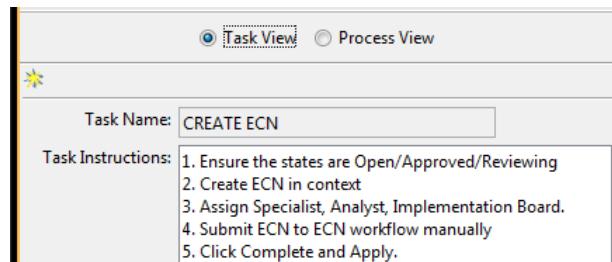
My Teamcenter (Ware, Connie (de##) - high performance / Design Engineer

Step 2: Select the **CR_##/A;1-Replace Bumper (CREATE ECN)** task.

Step 3: In the **Task View**, review the task instructions.

Note

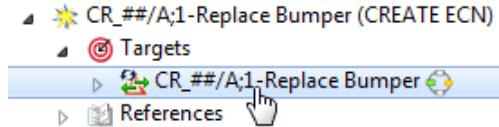
Ensure the **Viewer** tab is selected.



Validate the change request is approved

Step 1: Under the **CR_##/A;1-Replace Bumper (CREATE ECN)** task, expand the **Targets** folder.

Step 2: Select the **CR_##/A;1-Replace Bumper** change request revision.

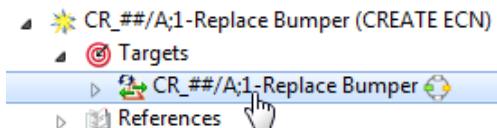


Step 3: In the **Viewer** view, review the change request states.

Closure:	Open
Disposition:	Approved
Maturity:	Reviewing

Create a new ECN change object to implement the change request

Step 1: Right-click the **CR_##/A;1-Replace Bumper** change request revision.



Step 2: Choose **Derive Change**.

The **Derive Change** dialog box appears.

Step 3: Select **Change Notice** as the change type.

Note

If you do not see the **Change Notice** type in the list, verify that your group is set to **high performance**. If it is not, your group must be changed before clicking **Next**.

Step 4: Click **Next**.

Step 5: In the **ECN Number** box, type **CN_##**.

Note

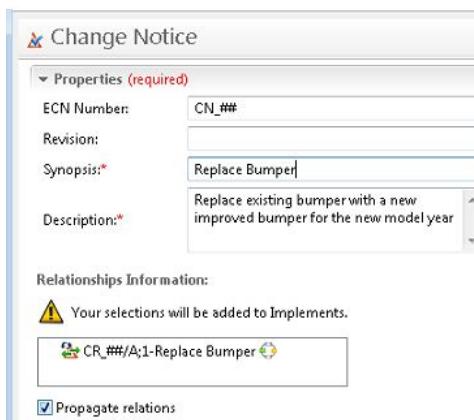
If you leave the **ECN Number** box empty, the value is assigned automatically.

Step 6: Leave the **Revision** box empty. The value is assigned automatically.

Similarly, the **Synopsis** and **Description** values are populated with the same values from the problem report.

The selected problem report revision appears and is added to the **Implements** folder.

Step 7: Verify **Propagate relations** is selected to carry over the change request's related items.

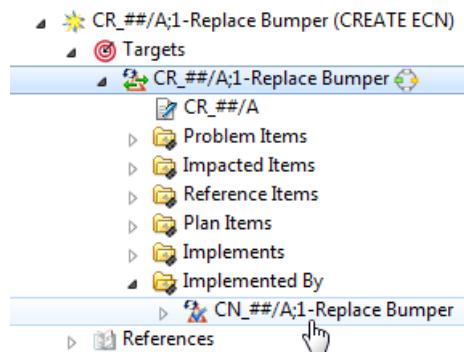


Step 8: Click **Finish**.

The new change notice is created and appears in the change request's **Implemented By** folder.

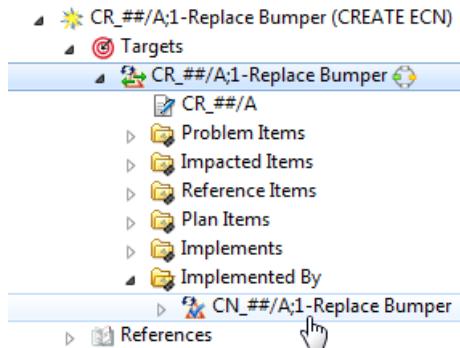
Step 9: Click **Cancel** to close the **Derive Change** dialog box.

Step 10: Under the **CR_##/A;1-Replace Bumper** change request revision, expand the **Implemented By** folder.



Assign a change analyst to the change notice

Step 1: Select **CN_##/A;1-Replace Bumper.**



Step 2: Choose **Tools**→**Assign Participants**.

For this training, the change management process flow is simplified. As *user_id*, you are responsible for the change notice creation, validation and approval. Based on your company's release process, you can assign workflow tasks to various users from different groups.

Step 3: In the **Assign Participants** dialog box, select **Analyst**.

Step 4: In the **Organization** tab, expand the **body** group and then the **Design Engineer** role.

Step 5: Select *user_id* to assign as the change analyst.

Step 6: Click **Add**.

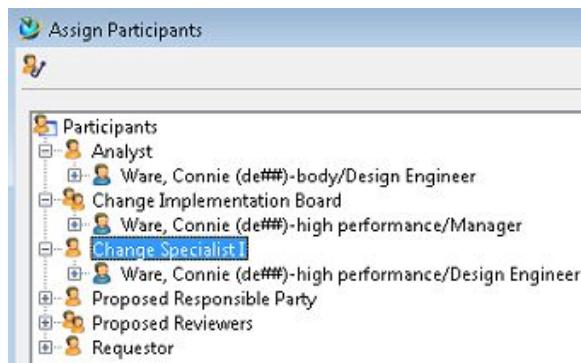
Step 7: Click **Apply**.

Assign a change implementation board to the change notice

- Step 1:** In the **Assign Participants** dialog box, select **Change Implementation Board**.
- Step 2:** In the **Organization** tab, expand the **high performance** group and then the **Manager** role.
- Step 3:** Select *user_id* to assign as the change implementation board member.
- Step 4:** Click **Add**.
- Step 5:** Click **Apply**.

Assign a change specialist to the change notice

- Step 1:** In the **Assign Participants** dialog box, select **Change Specialist I**.
- Step 2:** In the **Organization** tab, expand the **high performance** group and then the **Design Engineer** role.
- Step 3:** Select *user_id* to assign as the change specialist.
- Step 4:** Click **Add**.



- Step 5:** Click **OK**.

Verify participants and states

Step 1: In the **Viewer** view, with the **CN_##/A;1-Replace Bumper** change notice revision selected, verify the **Change Specialist I, Analyst**, and **Change Implementation Board** values are correct.

Requestor:  [high performance/Design Engineer/Ware, Connie](#)

Analyst:  [body/Design Engineer/Ware, Connie](#)

Change Specialist I:  [high performance/Design Engineer/Ware, Connie](#)

Change Implementation Board:  [high performance/Manager/Ware, Connie](#)

Step 2: Review the ECN states.

These states change as the change revision progresses through the workflow process.

Closure: Open

Disposition: None

Maturity: Elaborating

Submit the change notice to the workflow

Step 1: With the **CN_##/A;1-Replace Bumper** selected, choose **File→New→Workflow Process**.

The **New Process Dialog** box appears.

Step 2: Verify the **Process Template** box is set to **CM Change Notice**.

Note

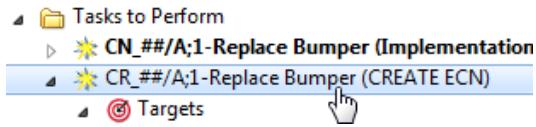
If necessary, click **All** to access the list of process templates, and then select **CM Change Notice** from the list.

Step 3: In the **New Process Dialog** box, click the **Process Template** tab to view the steps in the **CM Change Notice** workflow.

Step 4: In the **New Process Dialog** box, click **OK** to submit the change to the **CM Change Notice** workflow.

Perform the signoff

Step 1: Select the **CR_##/A;1-Replace Bumper (CREATE ECN)** task.



Step 2: Click **Complete**.

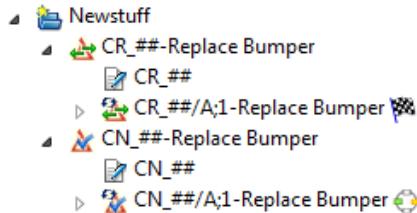
Step 3: Click **Apply**.

The **CREATE ECN** task is now complete.

The **CM Change Request** workflow is now complete.

Validate the ECR states

- Step 1:** Return to **Home** and expand the **Newstuff** folder.
- Step 2:** Expand **CR_##-Replace Bumper** and **CN_##-Replace Bumper**.



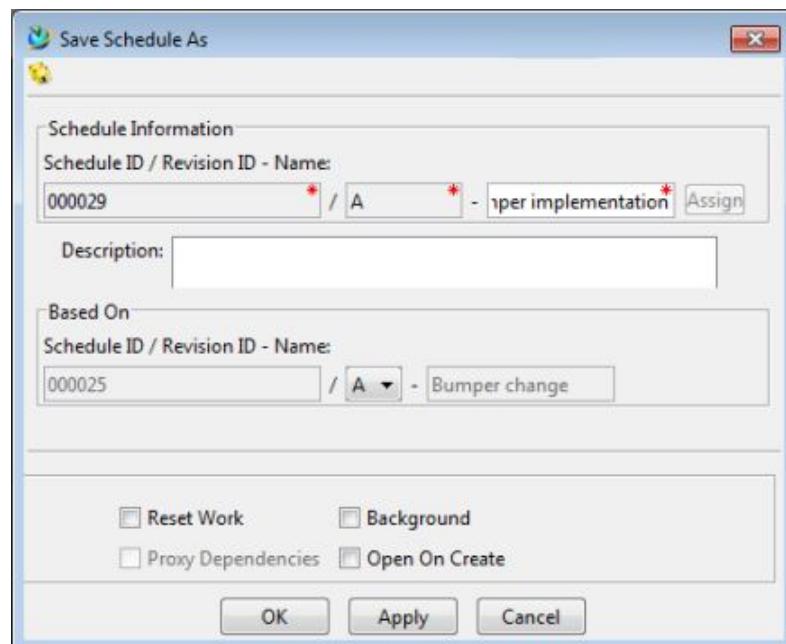
- Step 3:** Select the **CR_##/A;1-Replace Bumper** change request revision.
- Step 4:** In the **Viewer** view, review the change request states.

Closure:	Closed
Disposition:	Approved
Maturity:	Complete

Create the implementation plan

Activity: Create the implementation plan

In this activity, as a change analyst, you create the implementation plan schedule for the change notice.



Launch the [Create the implementation plan](#) activity.

Related information

For more information, review these topics in the online help:

- *Developing and implementing changes*
- *Scheduling implementation activities*

Review the task instructions

Step 1: Change your group to **body** and role to **Design Engineer**.

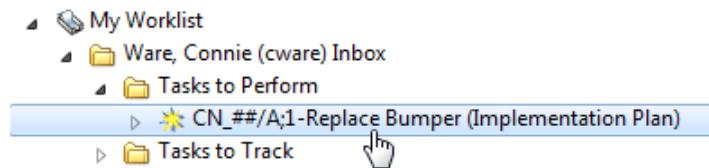
Note

This is the profile of user you previously selected as a change analyst responsible for creation of the implementation plan.

The current user role setting appears in the **My Teamcenter** window.

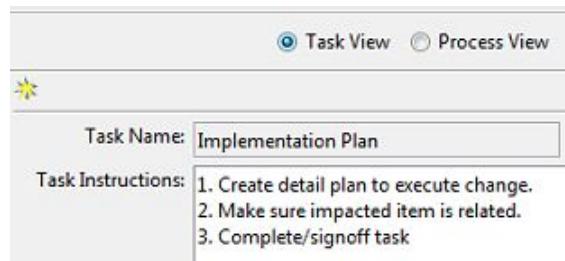


Step 2: In **My Worklist**, select the **CN_##/A;1-Replace Bumper (Implementation Plan)** task.



Step 3: In **Task View**, review the task instructions.

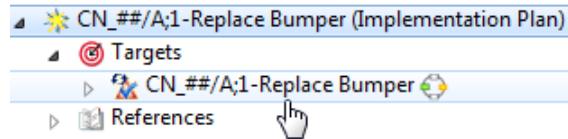
Ensure the **Viewer** tab is selected.



Validate the change notice is in reviewing state

Step 1: Under the **CN_##/A;1-Replace Bumper (Implementation Plan)** task, expand the **Targets** folder.

Step 2: Select the **CN_##/A;1-Replace Bumper** change notice revision.



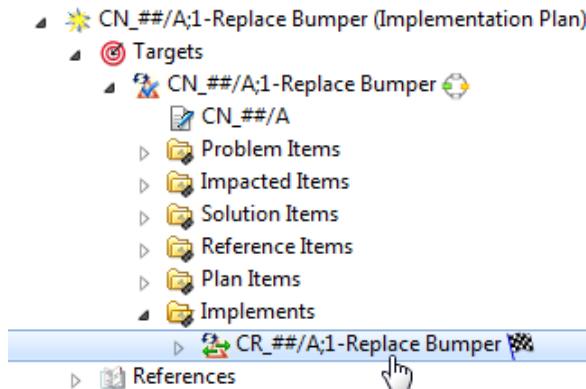
Step 3: In the **Viewer** tab, review the ECN states.

Closure:	Open
Disposition:	Investigate
Maturity:	Reviewing

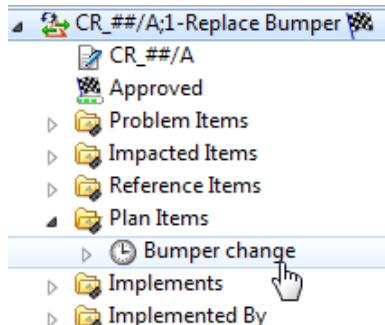
Create a work breakdown for the change notice

Step 1: Expand the **CN_##/A;1-Replace Bumper** change notice revision and the **Implements** folder to locate the change request.

Step 2: Expand the **CR_##/A;1-Replace Bumper** change request revision.



Step 3: Expand the **Plan Items** folder and select **Bumper change**.



Step 4: Choose **File→Save As**.

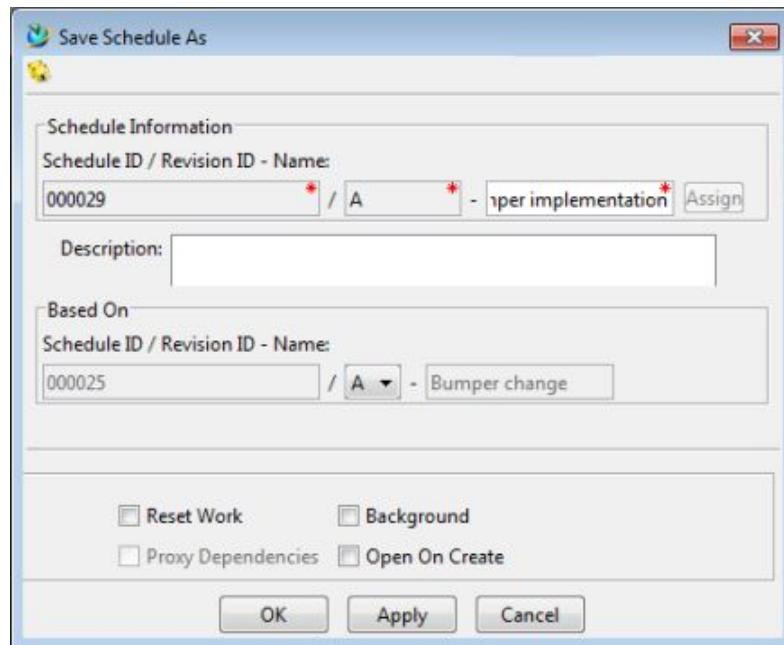
The **Save Schedule As** dialog box appears.

Step 5: Click **Assign**.

The **Schedule ID** and **Revision ID** boxes are populated.

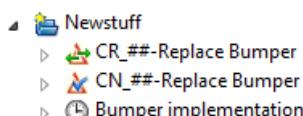
Step 6: In the **Name** box, type **Bumper implementation**.

Step 7: Clear **Open On Create**.



Step 8: Click **OK**.

Step 9: Return to the **Home** view, and locate **Bumper implementation** schedule in the **Newstuff** folder.



Step 10: Cut the **Bumper implementation** schedule from the **Newstuff** folder.

Step 11: Click the **My Worklist** tab.

Step 12: Paste the **Bumper implementation** schedule into your CN's **Plan Items** folder.

Step 13: Verify the impacted item is related to the change notice, by expanding the **Impacted Items** folder.

The **3500_##/A;1-Chassis ASM** item revision appears.

Perform the signoff

Step 1: Select the **CN_##/A;1-Replace Bumper (Implementation Plan)** task.

Step 2: Click **Complete**.

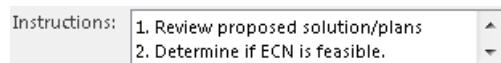
Step 3: Click **Apply**.

The **Implementation Plan** task is now complete.

Review and approve the implementation plan

Activity: Review and approve the implementation plan

In this activity, as the change implementation board member, you review and approve the change notice.



Launch the [Review and approve the implementation plan activity](#).

Related information

For more information, review these topics in the online help:

- [*Developing and implementing changes*](#)
- [*Scheduling implementation activities*](#)

Review the task instructions

Step 1: Change your group to **high performance** and role to **Manager**.

This is the profile of user you previously selected as a change implementation board member responsible for the change notice review and approvals.

Tip

Click the current user information link in the application banner to change the **Group** and **Role** settings.

The current user role setting appears in the **My Teamcenter** window.

My Teamcenter (Ware, Connie (de##) - high performance / Manager

Step 2: Select the **CN_##/A;1-Replace Bumper (perform-signoffs)** task.

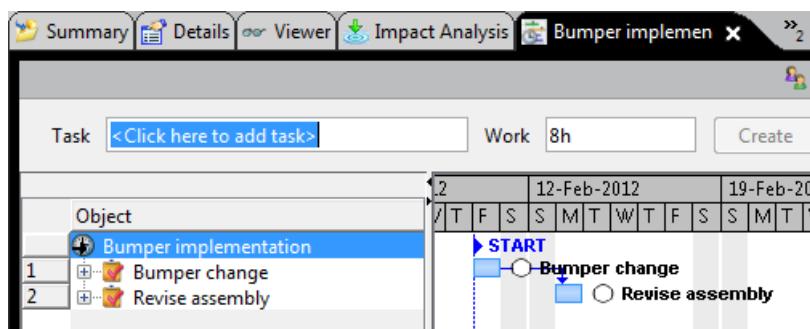
Step 3: In the **Viewer** view, with the **Task View** selected, review the task instructions.

Instructions:

1. Review proposed solution/plans	▲
2. Determine if ECN is feasible.	▼

Review plans and proposed solutions in Change Manager

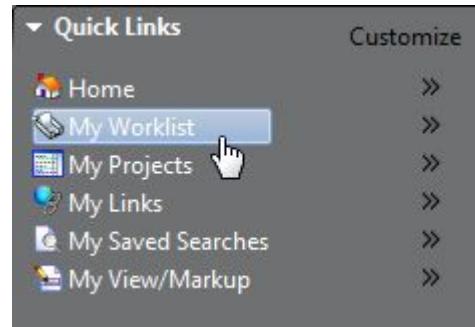
- Step 1:** Under the **CN_##/A;1-Replace Bumper (perform-signoffs)** task, expand the **Targets** folder.
- Step 2:** Expand the **CN_##/A;1-Replace Bumper** change notice revision.
- Step 3:** Expand the **Plan Items** folder.
- Step 4:** Double-click the **Bumper implementation** schedule to open it.
The schedule appears in Schedule Manager.
- Step 5:** In the **Load Schedule** dialog box, click **No**.
The **Bumper implementation** schedule view appears.



- Step 6:** Review the schedule and tasks.

Perform the signoff

Step 1: Under **Quick Links**, click **My Worklist**.



Step 2: In **My Worklist**, select the **CN_##/A;1-Replace Bumper (perform-signoffs)** task.

Step 3: Click **No Decision**.

Step 4: Click **Approve**.

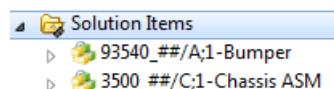
Step 5: Click **OK**.

The task is now complete.

Complete the execution phase

Activity: Complete the execution phase

In this activity, as a **Design Engineer** in the **body** group, you execute the implementation plan for the change notice by revising the impacted item and implementing a new bumper.



Launch the [Complete the execution phase](#) activity.

Related information

For more information, review these topics in the online help:

- [*Developing and implementing changes*](#)
- [*Scheduling implementation activities*](#)

Review the task instructions

Step 1: Change your group to **body** and role to **Design Engineer**.

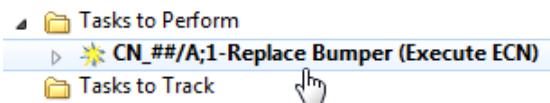
As previously assigned, **Design Engineer** in the **body** group is responsible for the implementation of the change notice.

The current user role setting appears in the **My Teamcenter** window.

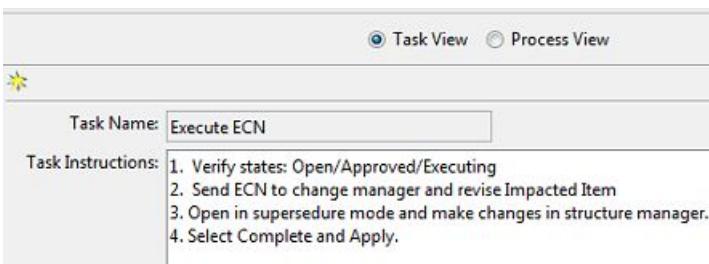


A screenshot of the 'My Teamcenter' window. The title bar reads 'My Teamcenter (Ware, Connie (de##) - body / Design Engineer)'. The main area shows a tree view with 'Tasks to Perform' expanded, revealing 'CN_##/A;1-Replace Bumper (Execute ECN)' which is selected and highlighted in blue. A cursor arrow points to the right of this item. Below it is another folder 'Tasks to Track'.

Step 2: In **My Worklist**, select the **CN_##/A;1-Replace Bumper (Execute ECN)** task.



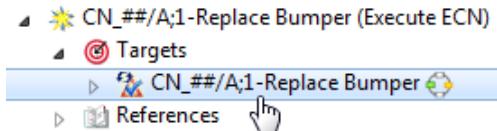
Step 3: In the **Viewer** tab, with **Task View** selected, review the task instructions.



Verify the change notice is approved

Step 1: Under the **CN_##/A;1-Replace Bumper (Execute ECN)** task, expand the **Targets** folder.

Step 2: Select the **CN_##/A;1-Replace Bumper** change notice revision.

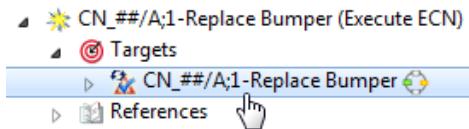


Step 3: In the **Viewer** tab, review the states.

Closure:	Open
Disposition:	Approved
Maturity:	Executing

Revise the impacted item

Step 1: Right-click the **CN_##/A;1-Replace Bumper** change notice revision.



Step 2: Choose **Send To→** **Change Manager**.

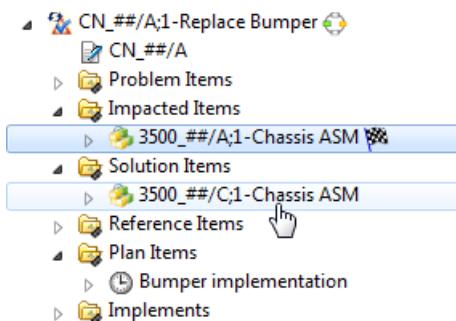
The **Change Manager** view appears with **CN_##/A;1-Replace Bumper** displayed.

Step 3: Expand the **Solution Items** folder.

Note that the **Solution Items** folder is empty.

Step 4: Expand the **Impacted Items** folder.

Step 5: Right-click the **3500_##/A;1-Chassis ASM** assembly item revision and choose **Revise Impacted Item**.



The new **3500_##/C;1-Chassis ASM** assembly item revision appears in the **Solution Items** folder.

Note

The new revision may take a few seconds to appear. It may be necessary to select your **Solution Items** folder and choose **View→ Refresh**.

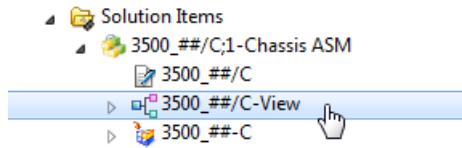
Revision **C** is automatically assigned as the next revision.

The name assigned to the new revision matches the name of the previous revision.

Replace 3540/B;1-Bumper in the product structure with one for the new model year

Step 1: Expand the **3500_##/C;1-Chassis ASM** item revision.

Step 2: Double-click the BOM view revision  object.



Step 3: In Structure Manager, select the **3540/B-Bumper** BOM line in the product structure.

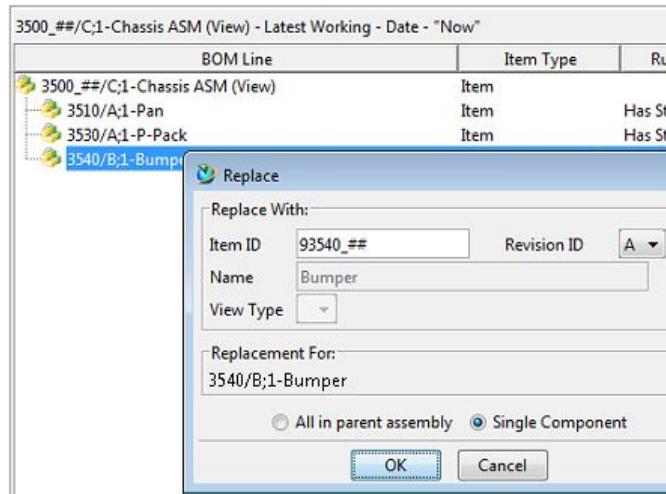
Step 4: Choose **Edit→Replace....**

The **Replace** dialog box appears.

Step 5: In the **Item ID** box, type **93540_##**.

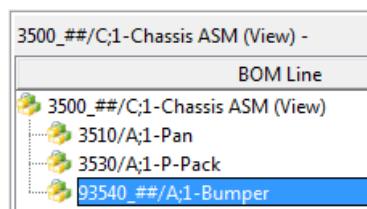
Step 6: Press Enter.

The **93540_##/A;1** item revision is found and the **Replace** dialog box is filled in with the associated data.



Step 7: Click **OK**.

93540_##/A;1 replaces **3540/B;1-Bumper** in the **3500_##/C;1-Chassis ASM** product structure.

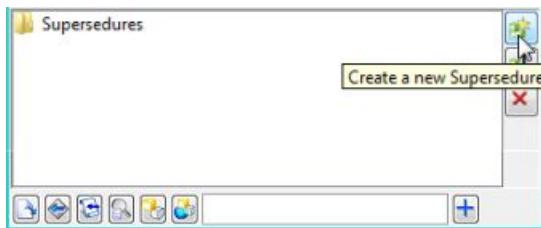


- Step 8:** In Structure Manager, click **Save**  to save the new bumper to the product structure.
- Step 9:** In the **Confirmation Dialog** dialog box, click **Yes** to update the BOM changes.

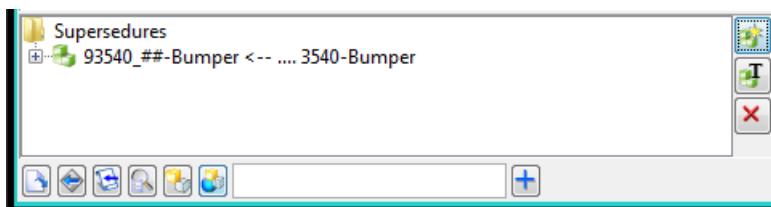
Create a new supersedure

Step 1: Select **93540_##/A;1** and then **3540/B;1-Bumper**.

Step 2: To the right of the **Supersedures** folder, click **Create a new Supersedure** .



The supersedure displays under the **Supersedures** folder.

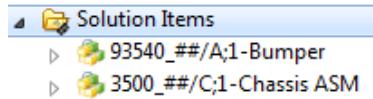


Add the new bumper to the Solution Items folder

Step 1: In Structure Manager, select **93540_##/A;1-Bumper** and copy it to your clipboard.

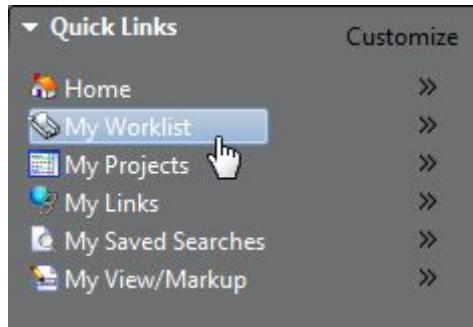
Step 2: Close Structure Manager.

Step 3: In Change Manager, select the **Solutions Items** folder and paste **93540_##/A;1-Bumper**.

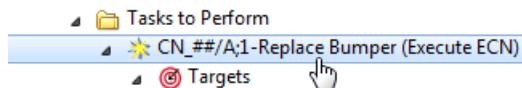


Perform the signoff

Step 1: Under **Quick Links**, click **My Worklist**.



Step 2: In **My Worklist**, select the **CN_##/A;1-Replace Bumper (Execute ECN)** task.



Step 3: Click **Complete**.

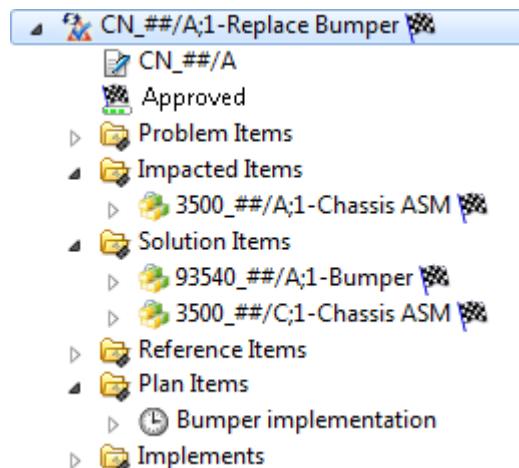
Step 4: Click **Apply**.

The **Execute ECN** task is now complete.

Verify the change is in place

Activity: Verify the change is in place

In this activity, you set effectivity and verify the change is complete. This task is performed by **Change Specialist I**.



Launch the **Verify the change is in place** activity.

Related information

For more information, review these topics in the online help:

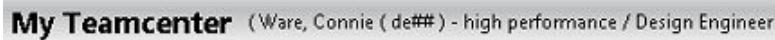
- *Developing and implementing changes*
- *Scheduling implementation activities*

Review the task instructions

Step 1: Change your group to **high performance** and role to **Design Engineer**.

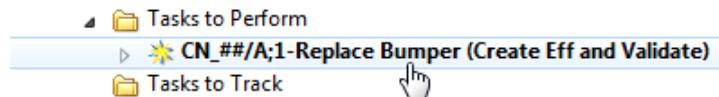
This is the profile of user you previously selected as a change analyst responsible for the change notice approvals.

The current user role setting appears in the **My Teamcenter** window.

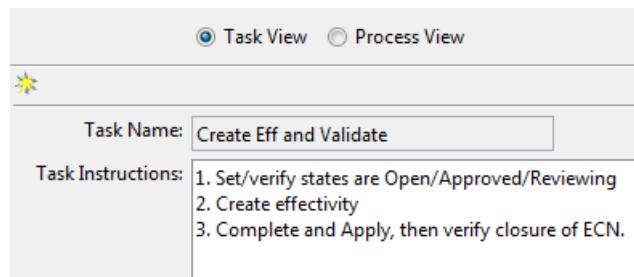


My Teamcenter (Ware, Connie (d#) - high performance / Design Engineer)

Step 2: Select the **CN_##/A;1-Replace Bumper (Create Eff and Validate)** task.



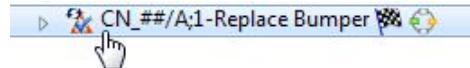
Step 3: Review the task instructions.



Validate the change notice is approved and in reviewing state

Step 1: Under the **CN_##/A;1-Replace Bumper (Create Eff and Validate)** task, expand the **Targets** folder.

Step 2: Select the **CN_##/A;1-Replace Bumper** change notice revision.

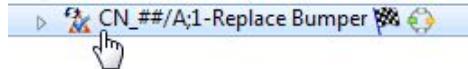


Step 3: In the **Viewer** tab, review the ECN states.

Closure:	Open
Disposition:	Approved
Maturity:	Reviewing

Set the effectivity on the change notice

Step 1: Right-click the **CN_##/A;1-Replace Bumper** change notice revision.



Step 2: Choose **Send To → Change Manager**.

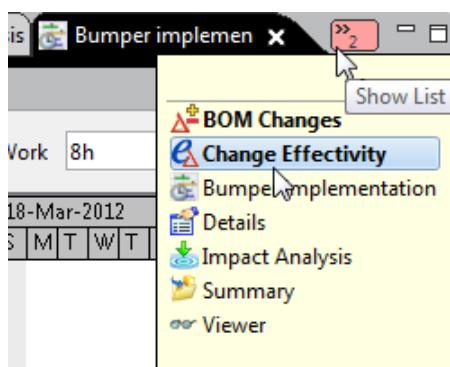
The **Change Manager** view appears with **CN_##/A;1-Replace Bumper** displayed.

Step 3: Select the **CN_##/A;1-Replace Bumper** change notice revision.

Step 4: Click the **Change Effectivity** tab.

Note

If the **Change Effectivity** tab is not visible, click **Show list** and then select **Change Effectivity**.



Step 5: Click **Create**.

The **Release Status Effectivity for Pending** dialog box appears.

Step 6: Click the **Dates** effectivity.

Step 7: With the **From Date** box selected, select tomorrow's date on the calendar.

Step 8: Click **Set Date**.

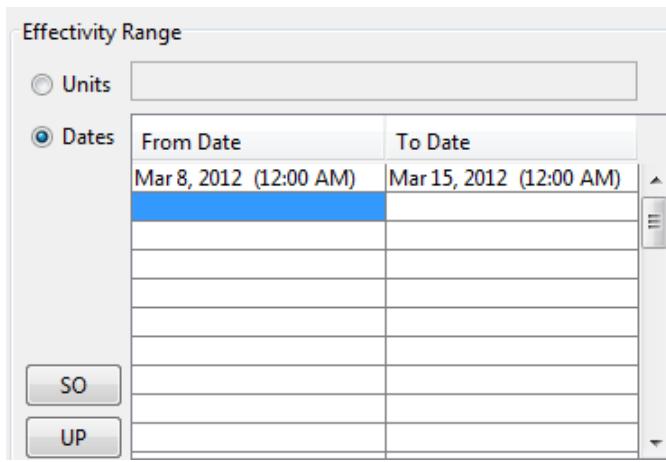
The **From Date** box now has tomorrow's date.

Step 9: Next, set **To Date** in the same row.

Select a date on the calendar that would be a week from today.

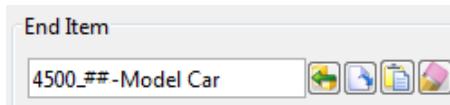
Step 10: Click **Set Date**.

The **To Date** box now has a date.



Step 11: In the **End Item** box, type **4500_##** and press Enter.

The **4500_##-Model Car** end item appears.



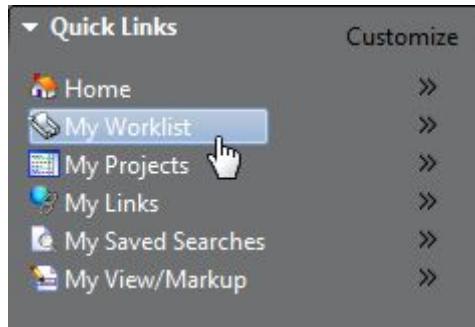
Step 12: Click **OK**.

In the **Change Effectivity** view, the *to* and *from* effectivity dates appear in the **Unit/Date Range** column.

<input type="checkbox"/> Pack effectivities				
Release Status	ID	Unit/Date Range	End Item	Is Protected?
Pending		08-Mar-2012 00:00 to 15-Mar-2012 00:00	4500_##-Model Car	<input type="checkbox"/>

Perform the signoff

Step 1: Under **Quick Links**, click **My Worklist**.



Step 2: In **My Worklist**, select the **CN_##/A;1-Replace Bumper (Create Eff and Validate)** task.

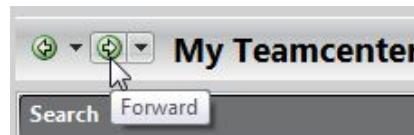
Step 3: Click **Complete**.

Step 4: Click **Apply**.

The **Create Eff and Validate** task is now complete.

Validate the change notice is complete and closed

Step 1: Click **Forward**  to return to Change Manager.



Step 2: Click the **Viewer** tab.

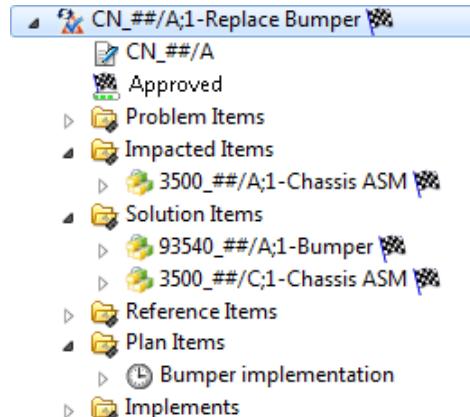


Step 3: With **CN_##/A;1-Replace Bumper** selected, review the ECN states.

Closure:	Closed
Disposition:	Approved
Maturity:	Complete

Step 4: If needed, expand the **Solution Items** folder.

Note the flags indicating the items have a release status.



View the configuration of the assembly before the change

Step 1: In the **Solution Items** folder, select **3500_##/C;1-Chassis ASM**.

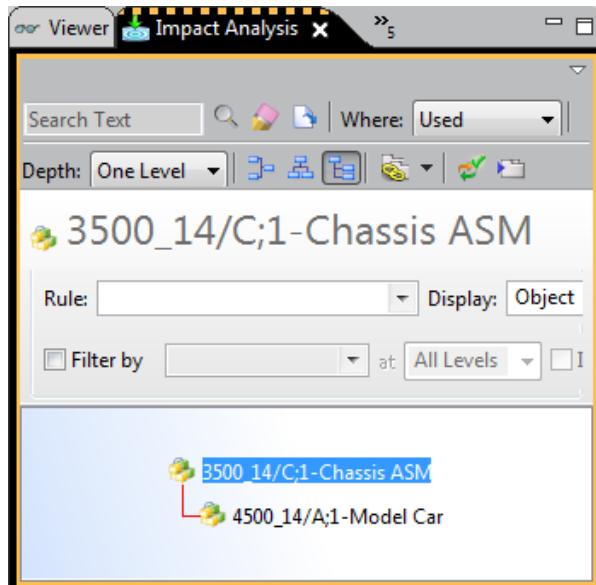
Step 2: Click the **Impact Analysis** tab.

If the **Impact Analysis** tab is not visible, click **Show list** , and then select **Impact Analysis**.

In the **Impact Analysis** tab, note that the **Where** box is set to **Used** and **Depth** to **One Level**. If not, change the setting accordingly.

Step 3: If necessary, double-click **3500_##/C;1-Chassis ASM**.

The parent assembly **4500_##/A;1-Model Car** appears.



Note

Your display may look different than this graphic, depending on the display layout selected for the **Impact Analysis** view. The buttons on the **Impact Analysis** view toolbar control the display mode.



Step 4: Right-click the **4500_##/A;1-Model Car** assembly and choose **Send To**  **Structure Manager**.

The **Structure Manager** perspective appears with the entire model car assembly. The **3500_##/B;1-Chassis ASM** item revision appears in the assembly.

Step 5: Choose **Tools**→**Revision Rule**→ **View/Set Current**.

The **View/Set Current Revision Rule** dialog box appears.

Step 6: Select **CCC Approved; Config by Date** and click **OK**.

Note that question marks appear because a date was not set.

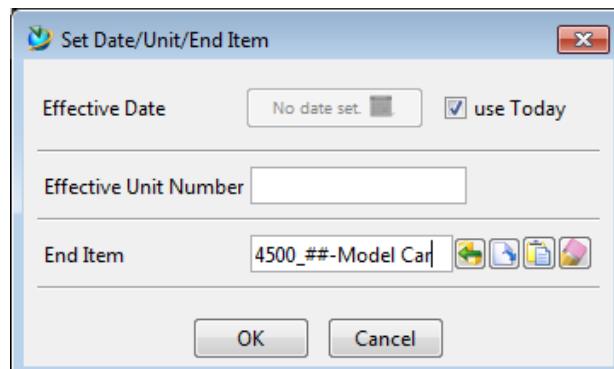
4500_##/A;1-Model Car (View) - CCC Approved; Config by Date - Date - "Now"		
BOM Line /	Item Name	Item Description
4500_##/A;1-Model Car (View)	Model Car	Model Car
2210/A;1-F-Wheel x 2	F-Wheel	F-Wheel
2212/A;1-R-Wheel x 2	R-Wheel	R-Wheel
3500_##/??-/Chassis ASM ##	Chassis ASM ##	Chassis ASM ##
3600/A;1-Front ASM (View)	Front ASM	Front ASM
3700/A;1-Rear ASM (View)	Rear ASM	Rear ASM
4510/A;1-Body	Body	Body

Step 7: Choose **Tools→Revision Rule→Set Date/Unit/End Item**.

The **Set Date/Unit/End Item** dialog box appears.

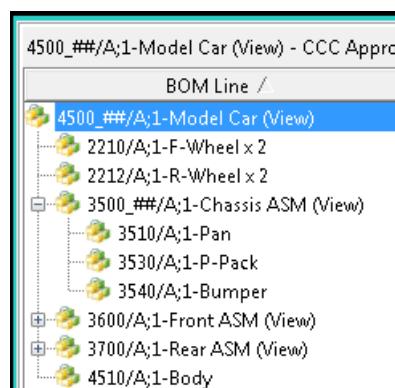
Step 8: Leave **use Today** selected.

Step 9: In the **End Item** box, type **4500_##** and press Enter.



Step 10: Click **OK**.

Step 11: If necessary, expand the **3500_##/A;1-Chassis ASM** to view its components.



The structure is as it is before the change takes place.

The **3500_##/A;1-Chassis ASM** item revision appears in the assembly.

Note

It may be necessary to select the top BOM line, and then choose **View→Refresh Window**.

Set date in the future

Step 1: Choose **Tools→Revision Rule→Set Date/Unit/End Item**.

The **Set Date/Unit/End Item** dialog box appears.

Step 2: Clear the **use Today** check box.

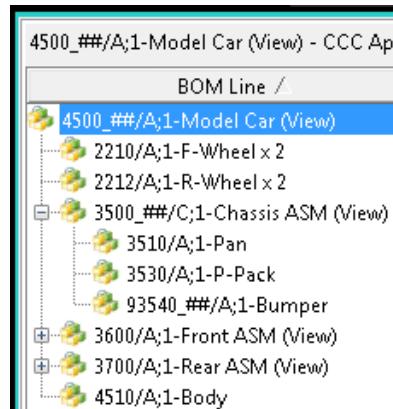
Step 3: Click **No date set**, select tomorrow's date, and then click **OK**.

Step 4: In the **End Item** box, keep **4500_##**.

Step 5: Click **OK**.

The structure is as it is after the change takes place.

The **3500_##/C;1-Chassis ASM** item revision appears in the assembly.



Step 6: Choose **File→Exit** and then click **Yes** to exit Teamcenter.

Section

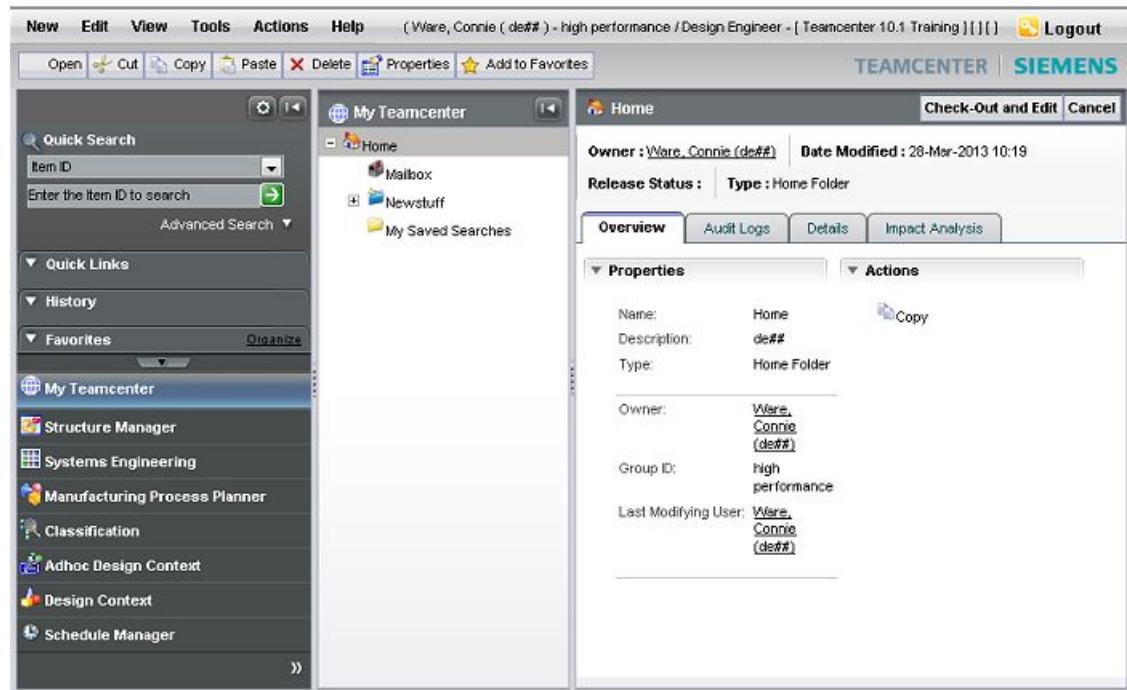
23 Working in the Teamcenter thin client

Start the thin client and search for an item

Activity: Start the thin client and search for an item

In this activity, you:

- Start the thin client.
- Search for an item in the thin client.



Launch the [Start the thin client and search for an item](#) activity.

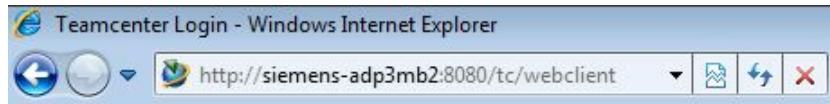
Related information

For more information, review these topics in the online help:

- [Thin client interface](#)
- [Searching in Teamcenter](#)

Start the thin client

- Step 1:** Open the Microsoft Internet Explorer browser and type the URL of the Web server in the address box.



Note

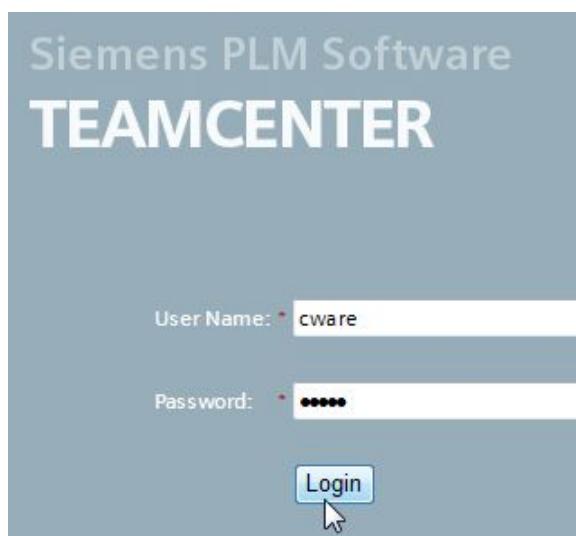
Your instructor will provide the URL for the thin client.

- Step 2:** Press Enter.

Teamcenter displays the logon page.

- Step 3:** Enter your user ID (*user_id*) and password (*password*).

- Step 4:** Click **Login**.



Note

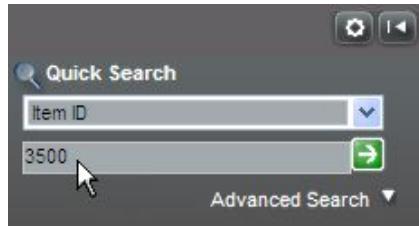
A **Security Information** dialog box may appear. Click **Run** to continue.

If logon is successful, the thin client displays your home page.

- The top navigation bar displays menu commands.
- The navigation pane appears on the left side of the window, and the **My Teamcenter** perspective and views appear on the right side.
- The **Overview** view appears next to the **Home** folder.
- Tabs for selecting the **Details**, **Audit Logs**, and **Impact Analysis** views are also available.

Perform a quick search

Step 1: In the navigation pane, under **Quick Search**, type **3500** as the value for the search criteria.



Step 2: Click **Go** .

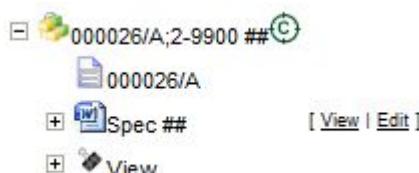
The results are listed in the main window.

Search Query: 3500		
Results: Page 1 of 1 objects found		
	Name	Type
	 3500-Chassis ASM	Item

Create a new item in the thin client

Activity: Create a new item in the thin client

In this activity, create new items, and then add and view a new dataset in the thin client.



Launch the [Create a new item in the thin client](#) activity.

Related information

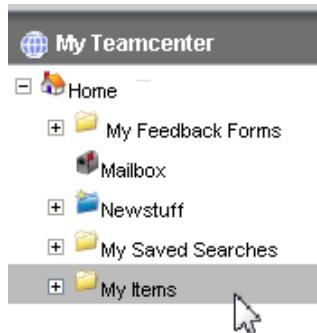
For more information, review these topics in the online help:

- [Create an item](#)
- [Managing basic data](#)

Create a new item based on existing data

Step 1: Under **Quick Links**, click  **Home** to return to your home page.

Step 2: Select the **My Items** folder.



Step 3: Choose **New→Item**.

Teamcenter displays the **New Item** dialog box.

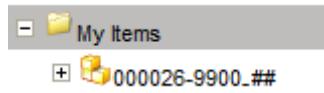
Step 4: In the **Item ID** box, enter the following information for the new item:

- On the **Type** tab:
 - Keep **Item** as the type of the new item from the list of available types.
- On the **General Tab** tab, in the **Item Information** section:
 - **ID**
Do not enter an identifier; the system generates it automatically.
 - **Revision**
Do not enter a revision identifier; the system generates it automatically.
 - **Name**
Type **9900_##**.
 - **Description**
Leave blank.
 - **Unit of Measure**
Leave blank.

Step 5: Click **Finish** to create the new item.

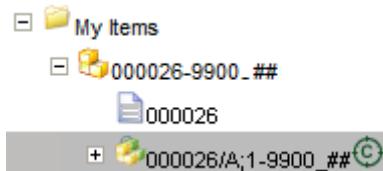
A new item is created.

Step 6: Expand the **My Items** folder and locate the newly created item.



Create a new item based on existing data

Step 1: Expand the **9900_##** item and select its item revision.



Step 2: Choose **Edit→Save As**.

Step 3: In the **Name** box, type **9999_##**.

If left blank, the **ID** and **Rev ID** values are automatically generated.

The properties for the new revision are automatically generated.

Step 4: Click **Finish**.

A new item, based on the existing item, is created.

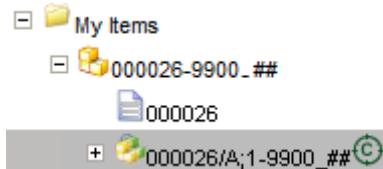
Step 5: Expand the **Newstuff** folder and locate the newly created item.

Note

It may be necessary to refresh your window by pressing the F5 key.

Create and open a dataset

Step 1: In the **My Items** folder, select the **9900_##** item revision.

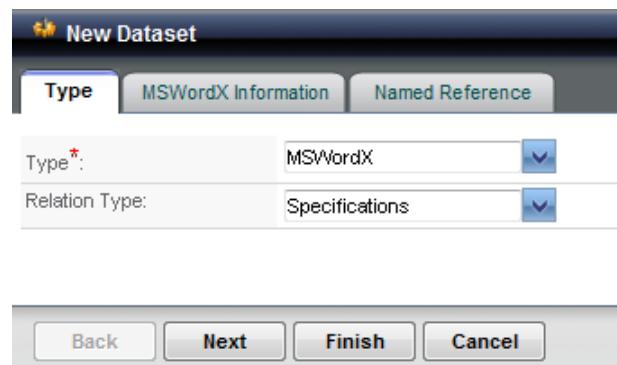


Step 2: Choose **New→Dataset**.

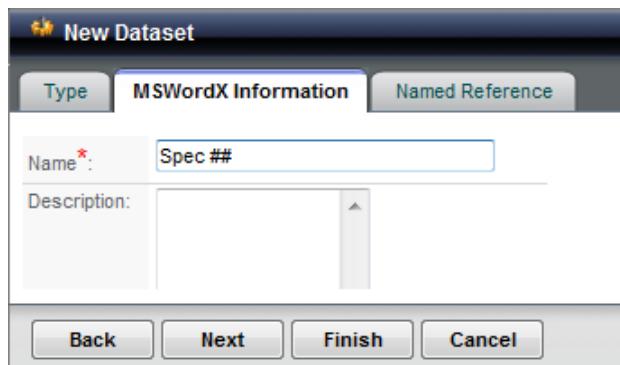
The **New Dataset** dialog box appears.

Step 3: Type or select the following values for the dataset:

- On the **Type** tab:
 - Select **MSWordX** from the list of available types.



- On the **MSWordX Information** tab:



- **Name**
Type **Spec ##**.
 - **Description**
Leave blank.
- On the **Named Reference** tab:

- o Click **Browse** and navigate to the **STUDENT_HOME** folder and select the **CR Reason-Model Car.docx** file.
- o Click **Open**.

Step 4: Click **Finish** to create the new dataset.

Step 5: Click **OK** to close the confirmation dialog box.

Step 6: Expand the item revision and locate the dataset.



Step 7: Click the **View** link next to the **Spec ##** dataset.

Step 8: Click **Open** in the **File Download** dialog box.

The **CR Reason-Model Car** file appears in the new browser window.

Step 9: Close the browser window.

Step 10: Log off by clicking **Logout** in the top right corner of the Web browser.

Step 11: Click **OK**.