ENTERPRISE
BUSINESS TECHNOLOGY

Teamcenter Training

Introduction to Objects
and Relationships

It takes approximately 15 minutes to complete this module.

There is no audio. You are required to click **Next** to advance.

OBJECTIVES

After this training, you will be able to:

- Explain Teamcenter key terms
- Describe object relationships, including Items, Item Revisions, and Datasets
- Create folders
- Complete a search

TEAMCENTER TERMS

Teamcenter uses a container structure and relational database to store data. So it is important for you to understand key terms associated with Teamcenter.

Term	Description
Item	An object generally used to represent a product, part, or component. Items can contain other objects, including other Items and object folders.
Item Revision	An object used to manage revisions to Items.
Item Master Revision Form	This form must be completed for each revision prior to release.
Dataset	Data objects that manage data files created by other software applications. Each Dataset references at least two other objects: a Dataset type that contains a list of tools that can operate on the Dataset, and a tool that is used to create or modify the Dataset. Each Dataset can manage multiple operating system files. Each type of operating system file is called a Named Reference. Examples include: • UGMaster-NX (Cadramaster, Scanmaster, MSWord, Autocad, PDF, Solidworks) • UGPart • UGAltrep
Relations	Relations associate objects. There are different kinds, including Specifications, References, Manifestations, and Altrep. Examples include: • Datasets are associated with Item revisions using relation objects. *(You will learn more about relations later in the training.)*

ITEMS, REVISIONS, AND DATASETS

For each revision, there is typically a solid model, drawing, and CAM files. NX files, for example, are stored as Datasets. Each Dataset has a relationship in Teamcenter. Types of relationships include:
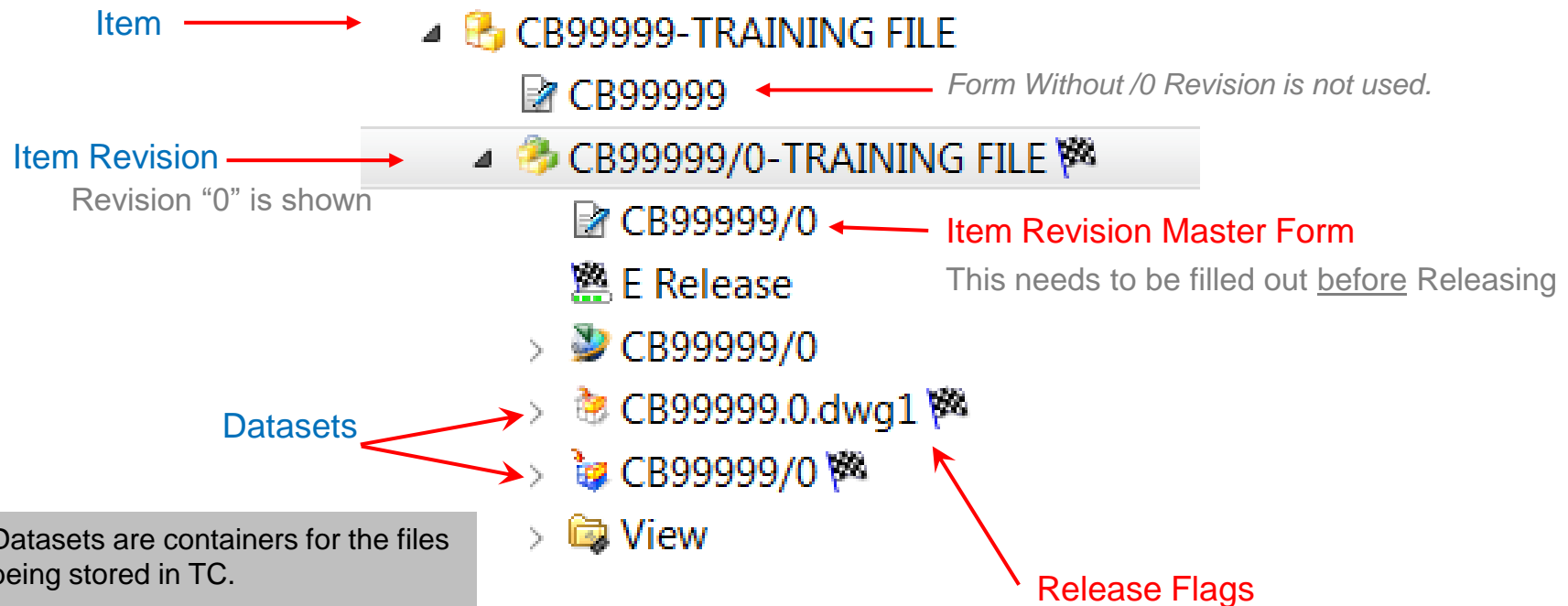
- Specifications—files will get release flags and get copied over to new revisions.

- References—files will *not* get release flags or get copied over to new revisions.

- Manifestations—files will *not* get release flags or get copied over to new revisions.

- Altrep—files will *not* get release flags or get copied over to new revisions (e.g., NX File).

Remember: Reference Datasets should be locked by highlighting and choosing a Dataset Release.

HOW ITEMS ARE ORGANIZED

When working with objects, it is important to understand the relationships between them. Review the example of an Item object and its relationships. Some fields may be required before Releasing.

Item → CB99999-TRAINING FILE

CB99999 ← *Form Without /0 Revision is not used.*

Item Revision → CB99999/0-TRAINING FILE
Revision "0" is shown

CB99999/0 ← Item Revision Master Form
This needs to be filled out before Releasing

E Release

CB99999/0

Datasets → CB99999.0.dwg1

CB99999/0

View

Release Flags

Datasets are containers for the files being stored in TC.
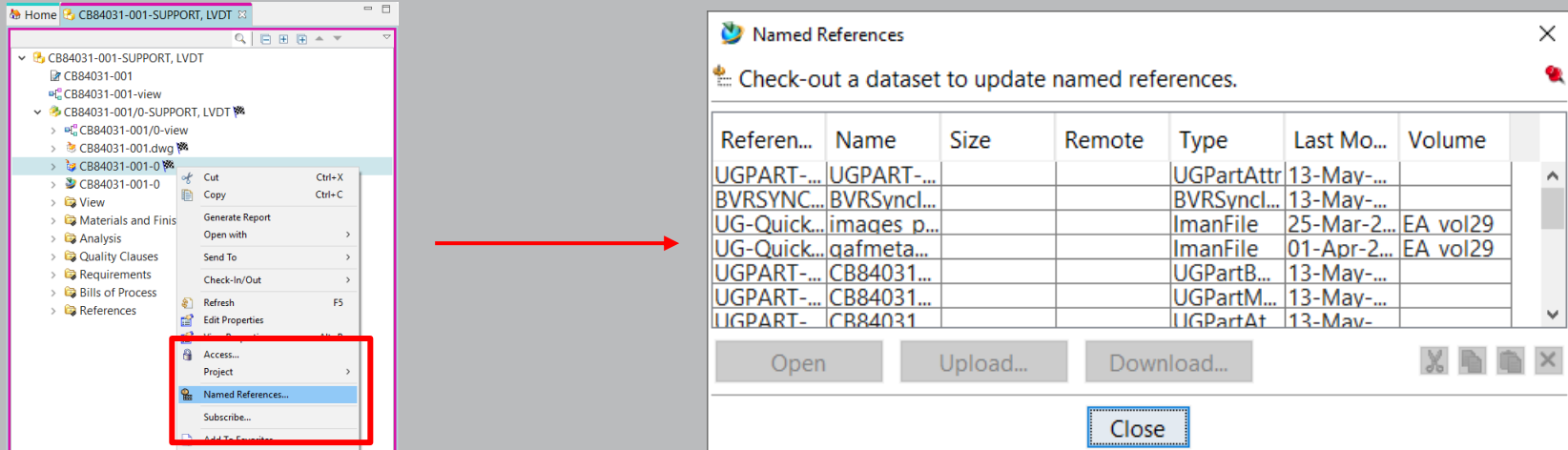
Example Datasets include: UGMASTER (Model), UGPART (.dwg1), Autocad, Cadramaster, Scanmaster, MS Word, PDF, Excel, Solidworks, etc.

DATASET—NAMED REFERENCES

Datasets are containers for storing files. You can use Named References to view associated files. You can upload and download data with Named References.

To view Named References:

Right-click **Dataset** → **Named References** to open the Named References window. You can upload and download data directly from Teamcenter.
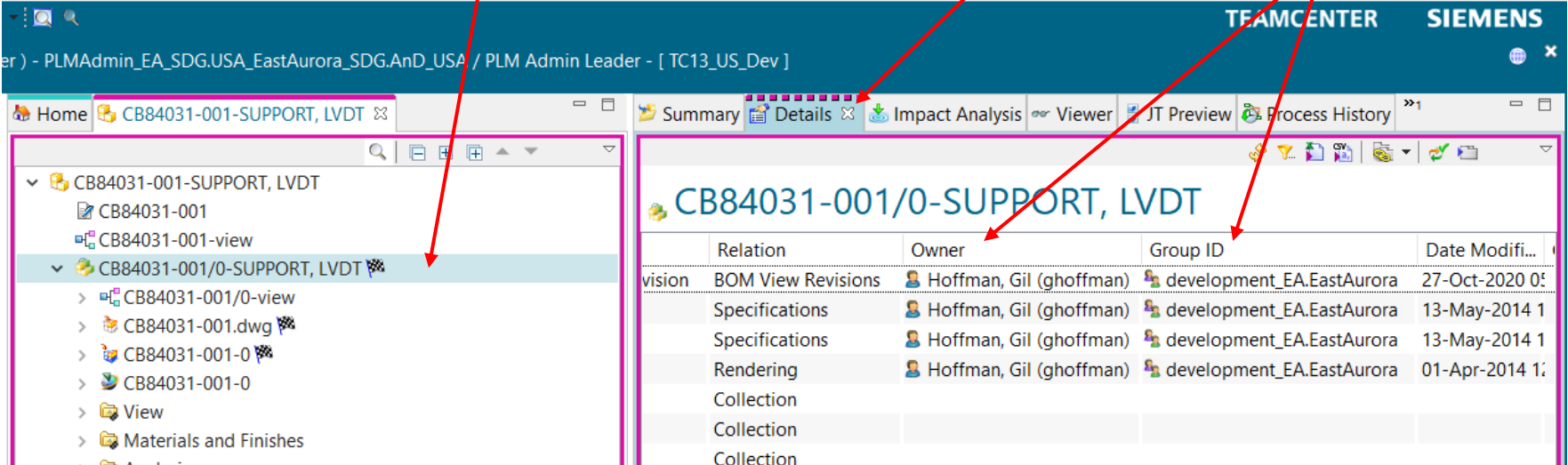
! **Remember:** Check-out and check-in is required to upload via Named References.

DETAILS TAB

To view specific information about an Item Revision in Teamcenter, select the Item Revision and view the Details Tab located in the Data Pane.

Highlight the Item Revision

Details tab – Shows data columns

Tip: If the Details tab (or any other tab) is not visible, select
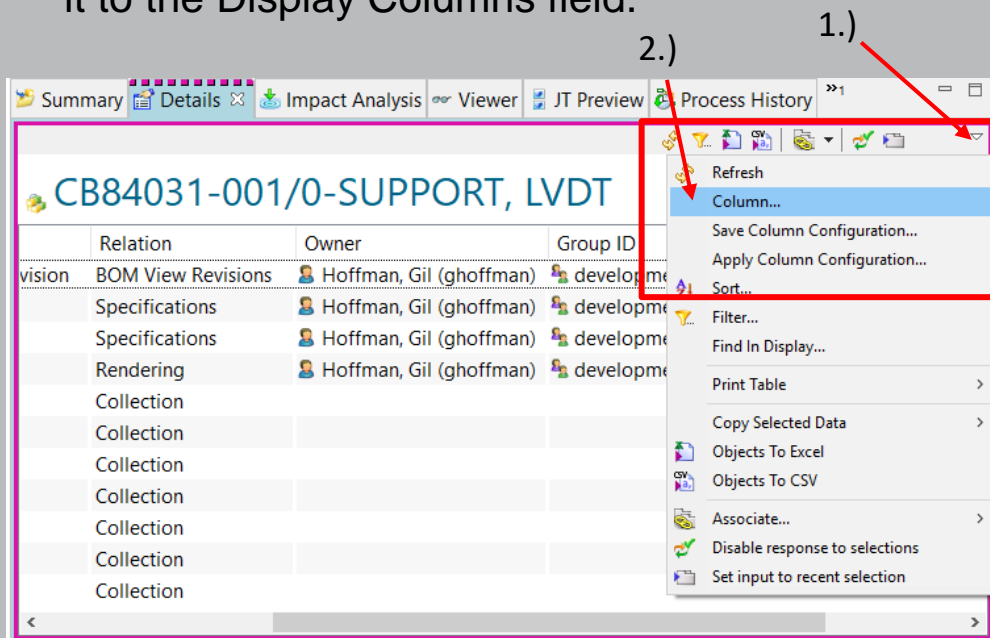
Windows → Reset Perspective.

ADD OR REMOVE COLUMNS

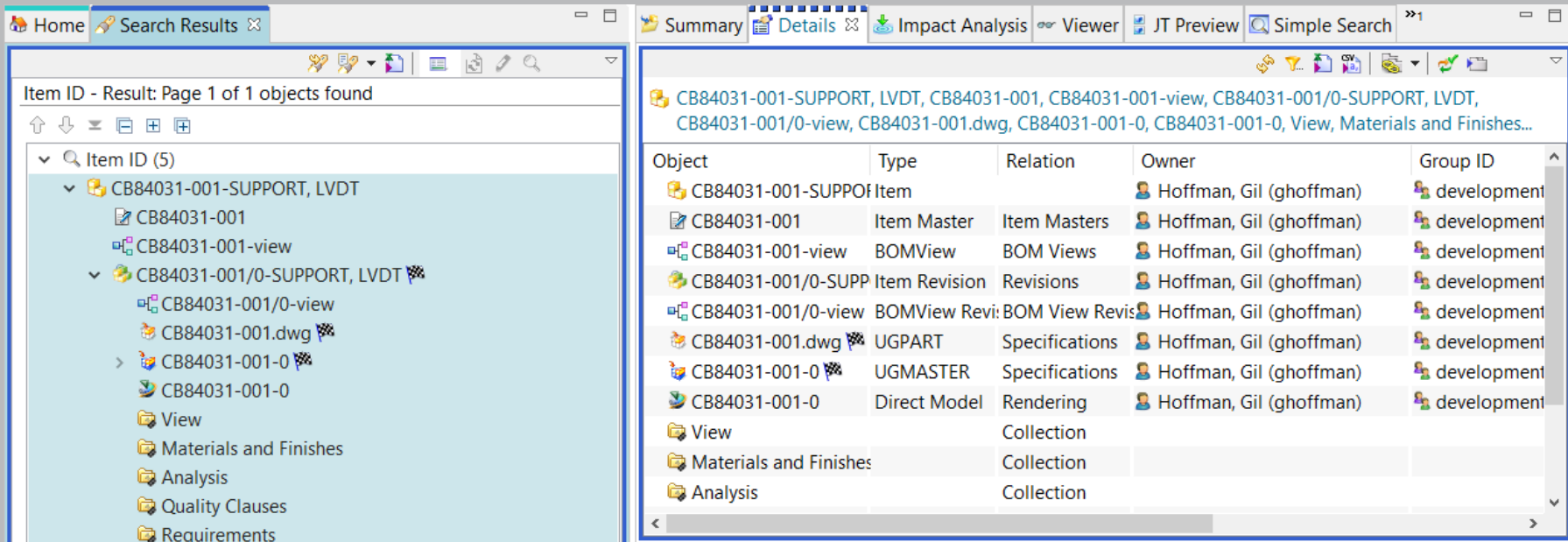You can change what data is visible by adding or removing columns for any tab in the Data Pane.

To Add Columns

Click the **drop-down arrow** on the right of the tab and select **Column**. When the Column Management window appears, select the **Property** you want to make visible and then add it to the Display Columns field.
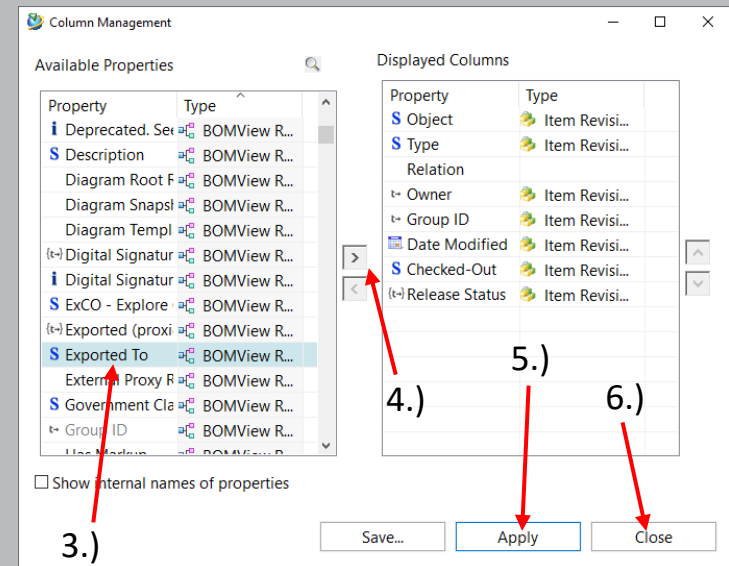
ADD OR REMOVE COLUMNS (CONT.)

You can change what data is visible by adding or removing columns for any tab in the Data Pane.

To Remove Columns

Click the **drop-down** arrow on the right of the tab and select **Column**. When the Column Management window appears, select the **Property** you want to remove from the Display Columns field and click the **left** arrow.
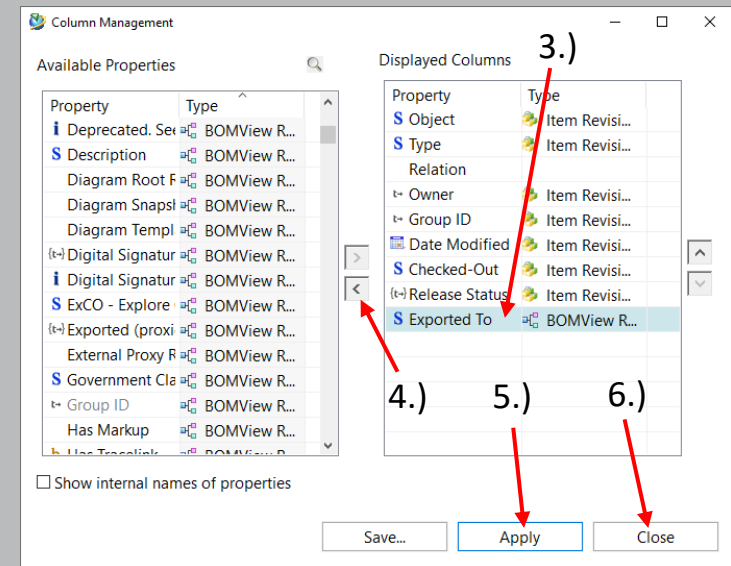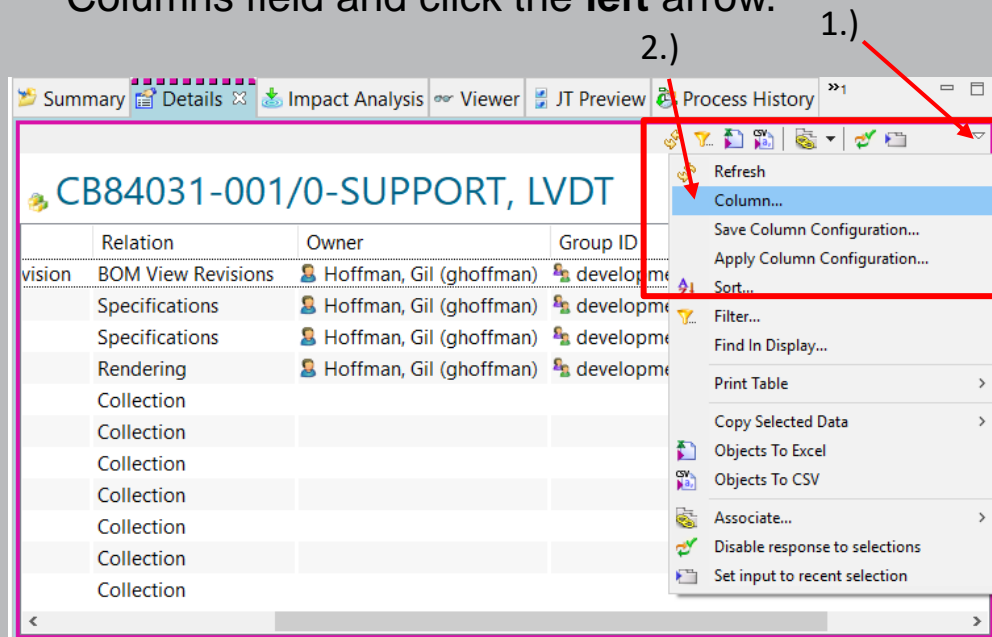
EXPAND ITEMS AND SHOW DETAILS

To see details about an entire Item structure, select all the objects in the Search Results. The details will display in the upper portion of the Details tab.

Remember: The Group ID **must** be the same for the entire structure—Item and all Item Revisions. You **DO NOT** want a new revision owned by a Different Group ID. If necessary, a Group Admin can change all Group IDs using a Change Ownership Process.
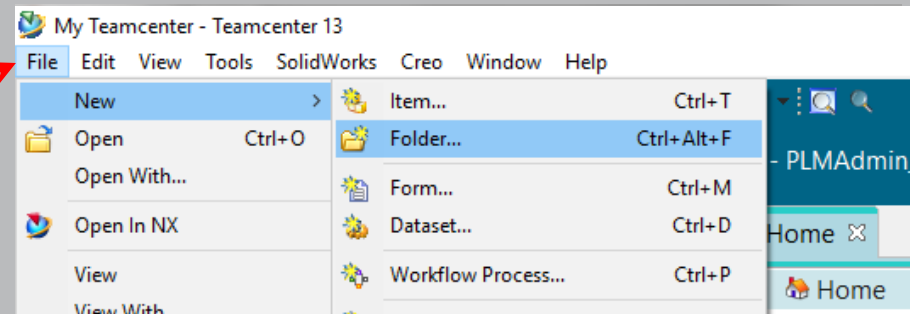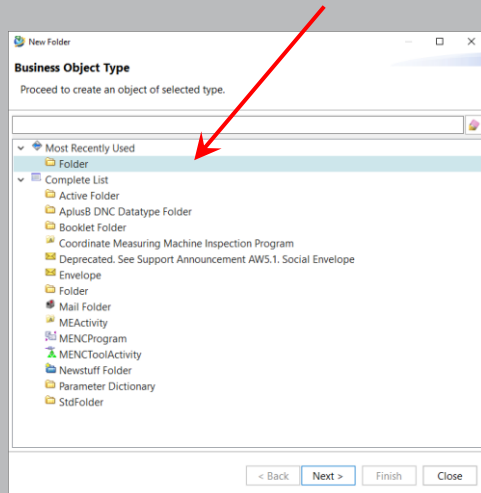
FOLDERS AND DATA

As a Teamcenter user, you will need to create folders, search for data, and edit files. Follow these steps to create a folder.
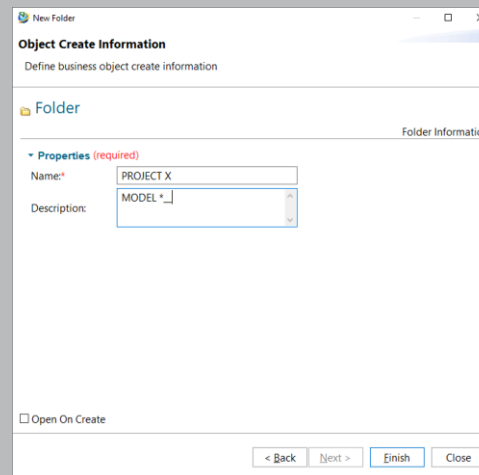
To Create a Folder:

1. Select your **Home** folder, then from the toolbar, select **File → New → Folder.**

2. When the Business Object Type window opens, select **Folder → Next.**

3. When the Object Create Information window opens, enter a **Name** and **Description.**

4. Click **Finish** and **Cancel**. Notice that the folder was created in the Home folder.

DATA SEARCH

As with any software, there are several ways to perform various tasks. The following screens outline two ways to search for Items.

- Search using the Search tab
- Search using Item ID

SEARCH USING SEARCH TAB

Using the Search tab expands your search options, allowing you to perform more comprehensive searches.

To Search:

1. Click the **Search** icon to open the Search tab.

2. Enter the **Item ID**. Adding an **asterisk (*)** will enable a wildcard search.

3. Click the green **Search** icon to execute the search.

4. The search results will appear in the Search Results tab.
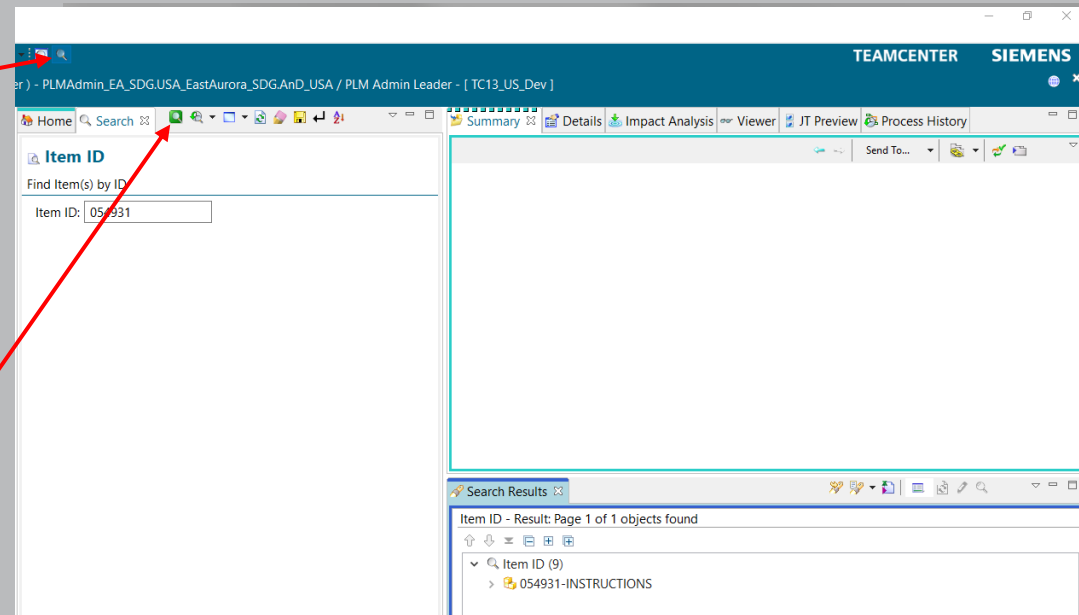
CHANGE SEARCH TYPE

You can also change your search *type* from General to Item or Remote.
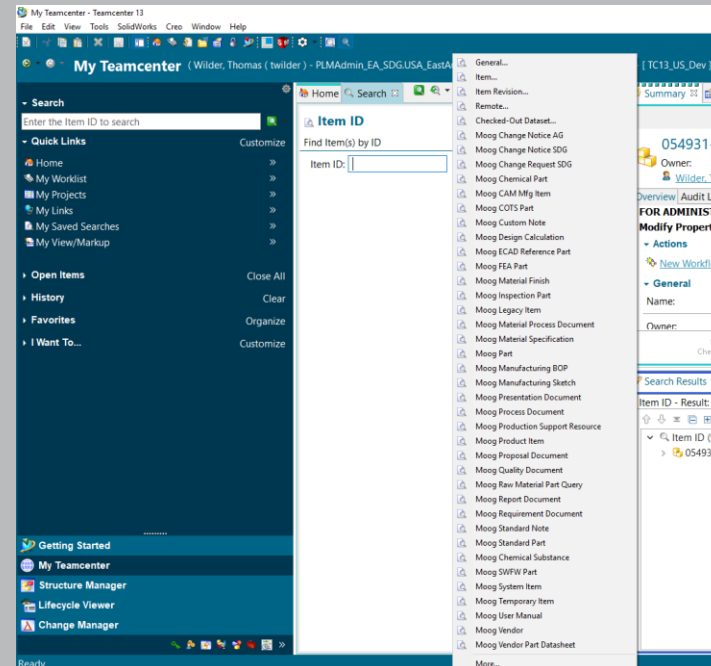
- **General**—searches everything.

- **Item and Item Revision**—searches Items and is used the majority of the time.

- **Remote**—searches Published Items for Importing from another Teamcenter Site.

To Change Search Type:

Click the **drop-down** arrow on the **Search** tab and select a **Type.**

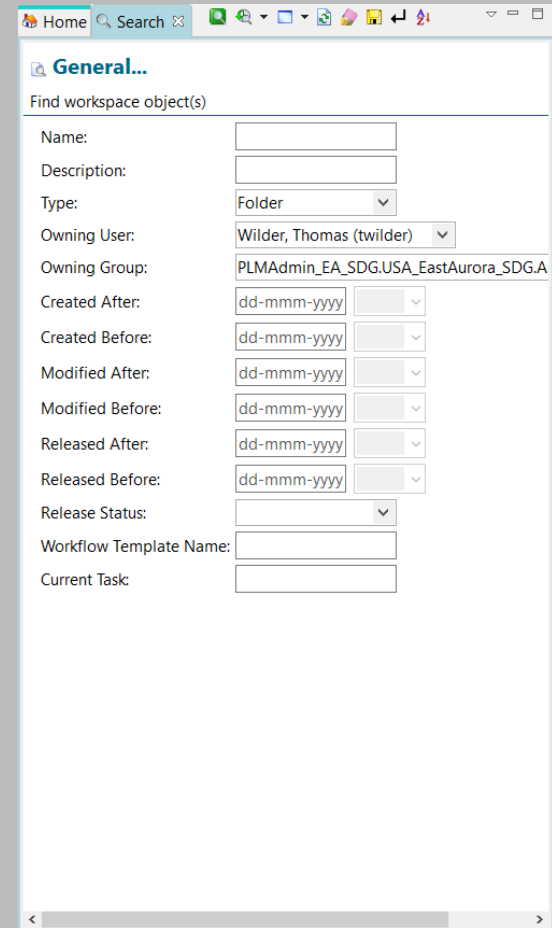**Tip:** To save a search, select **More** from the drop-down and follow the prompts.

GENERAL SEARCH—FOLDERS

After selecting General as the type, use the Search tab to search for folders.

To Search for a Folder:

1. Clear all search fields using the eraser icon.

2. Enter known search criteria in the various fields.

3. From the **Type** drop-down, select **Folder**.

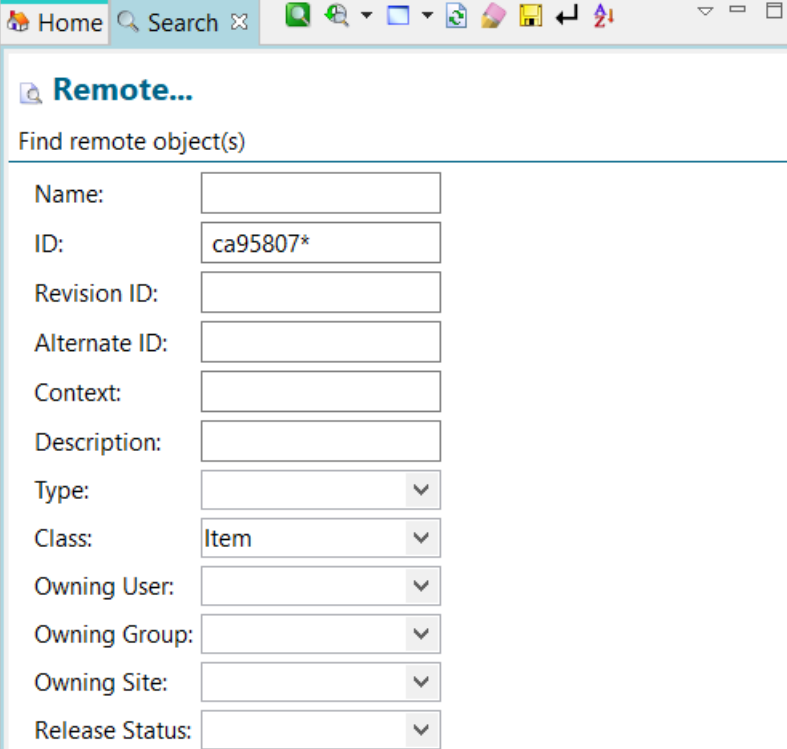4. Execute the search using the green **Search** icon.

Tip: You can Copy/Paste a folder to your Home area. If you cannot find a folder, choose "CM Context" as the Type; it may have been created in error as this format.

REMOTE SEARCH

Remote searches look for published Items to be imported from other sites. Remember to pick Remote as the search type from the drop-down.

To Perform Remote Search:

1. Clear all search fields using the eraser icon.

2. Enter **ID***.

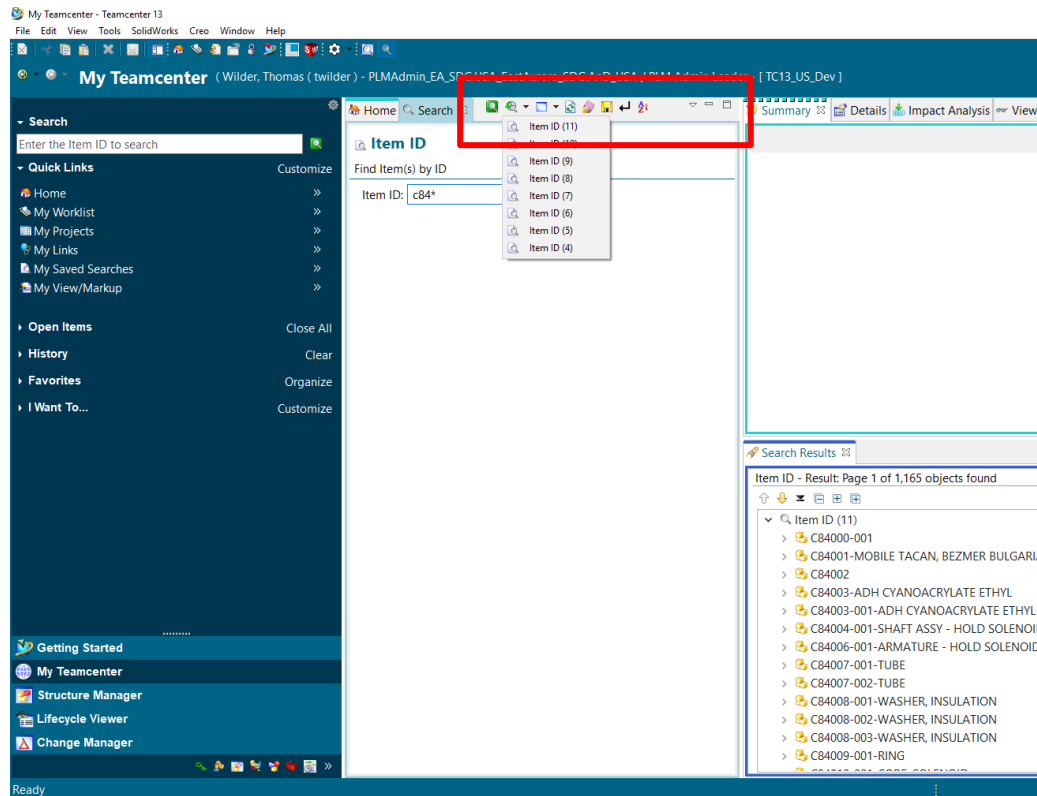3. Execute the search using the green **Search** icon.

Tip: Items can be imported from another Teamcenter site. Instructions are available in the Teamcenter Help Library.

SEARCH FEATURES

When using Teamcenter, explore the various search features by clicking the icons in the Search tab.

- Previous Search

- Save Search
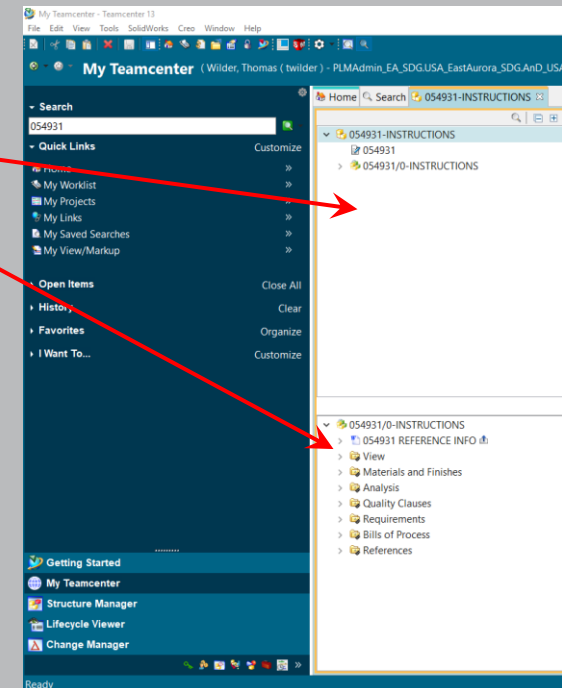
- Latest Search

ITEM SEARCH

If you know the Item ID, use it to perform a Quick Search.

To Search an Item:

1. Enter the ID in the Search field and click the green **Search** icon**.**

2. The Search Tab will open in the Component Pane and display search results.

The top window displays Item and Revisions, while the bottom window displays an expanded view of the Latest Item Revision.
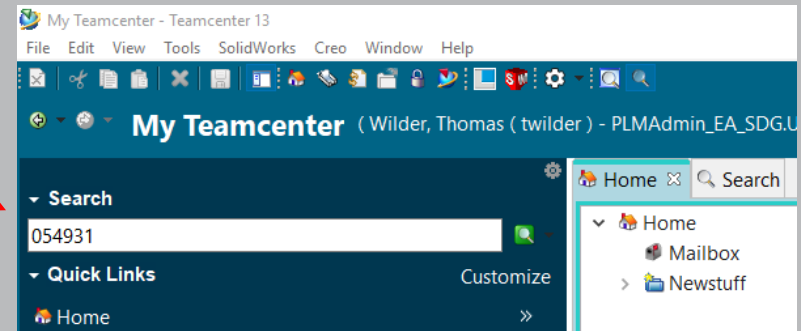
MOVING TABS

You can move tabs in Teamcenter to adjust your view. For example, to move the Search Results tab, click the tab and drag it to the new location.

Search Results but you can't see all of it without scrolling. Drag Search Results Tab to the side of the Search Tab.

RESET WINDOWS

TO RESET WINDOWS WITH ALL THE TABS:
Select the "X" and then select "HOME"

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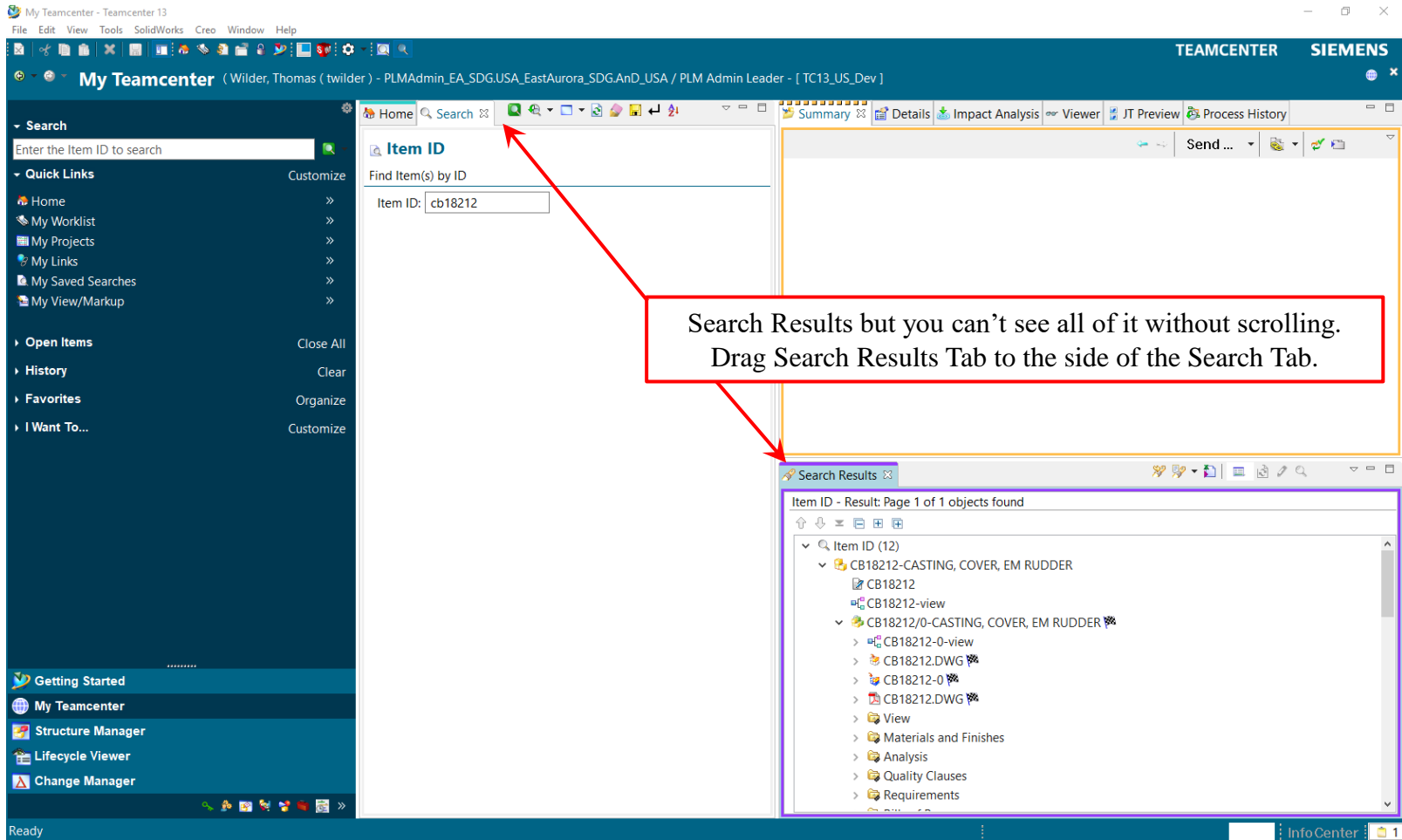
EDIT PROPERTIES

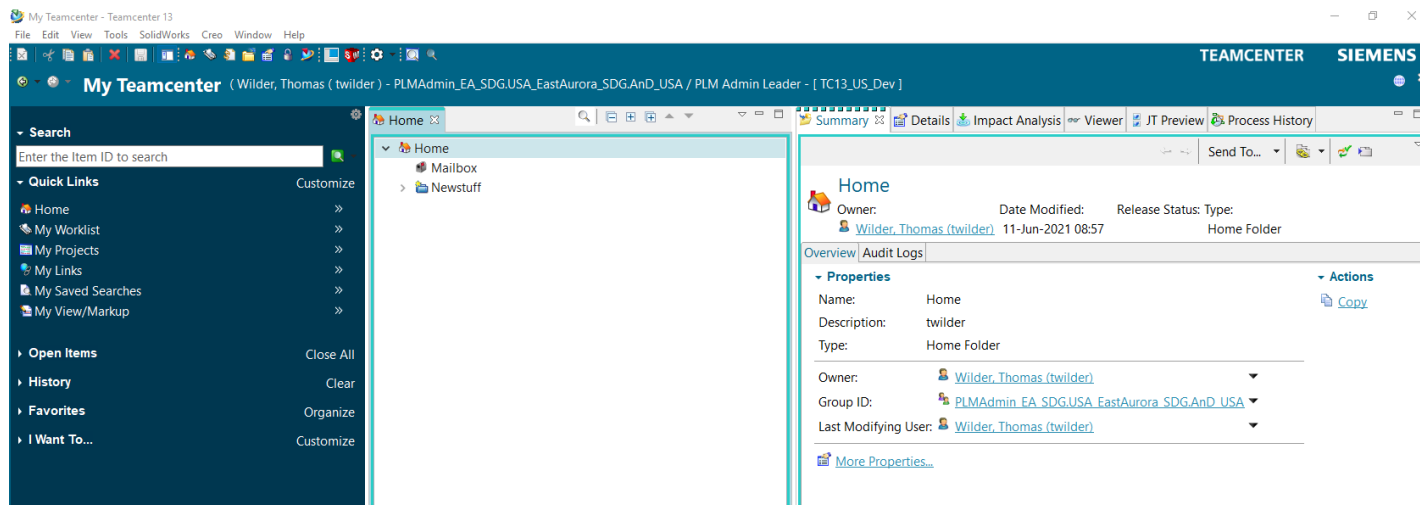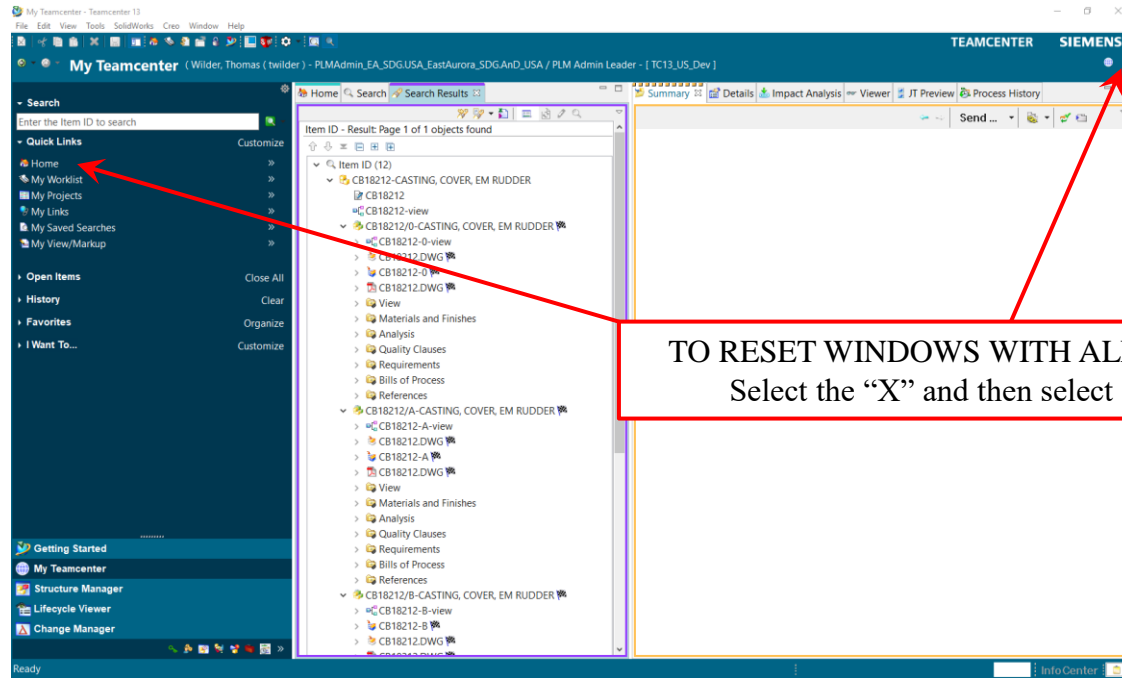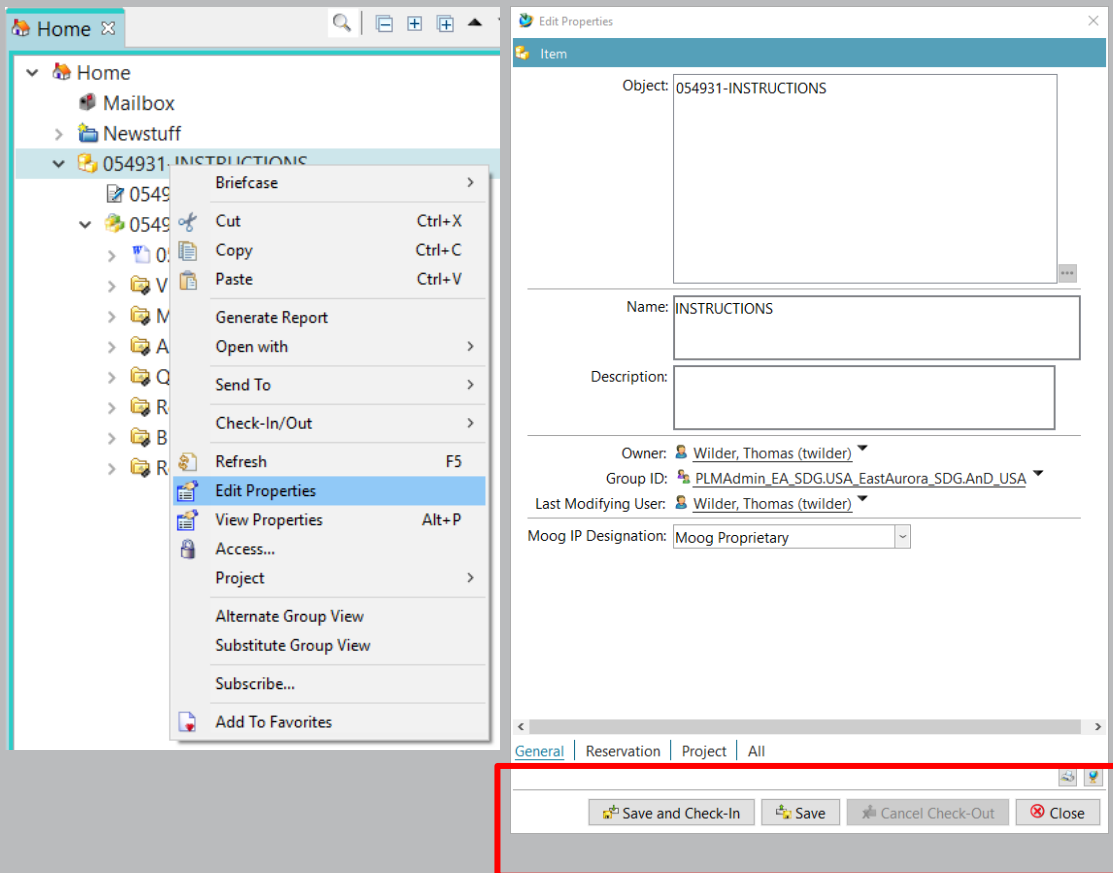You may need to edit properties associated with an Item. Follow the steps below to edit properties. **Never change an Item ID.**

To Edit Properties:
1. Select **Item.**
2. Right-Click → **Edit Properties**.
3. In the Edit Properties window, change **Name** (or description).
4. Click **Save** and **Check-In**.

Tip: It is recommended to do a "Save As" to a New Item. Do NOT change the Item ID.

RULES TO LIVE BY

When editing data or typing information into Teamcenter, use the following best practices to help keep data and information consistent.

- Use upper-case letters.

- Follow this naming convention for parts:

  Item Number.Revision.dwg1

  Example: A12345-001 (Part)

  A12345-001.0.dwg1 (Drawing)

- Use the MBS/SAP noun name as the Part name.
  - END CAP, BODY, MOTOR CAP

- Clean out your temporary files monthly at **C:\temp**.

SUPPORT

- If you need system support with Teamcenter, you can always put in a Help Desk request.

- If it is process-specific help, ask a trusted resource to direct you to the correct contact. There are specific contacts based on the type of question or support needed.

CONCLUSION

CONGRATULATIONS!

You completed Teamcenter Introduction to Objects and Relationships. Close the course by clicking the **X** in the top right of the session window.

If you would like to learn more about Teamcenter, complete additional training modules available through the Moog Learning Center.