

Contract CAD Services

BASIC

TEAMCENTER TRAINING

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Training Lessons and Discussion Topics

Fundamentals for Product Data Management

Lesson 1: What is PDM?

Lesson 2: Teamcenter Basic Training

- a. Start Teamcenter Engineering
- b. Identify Key Areas of the Portal Interface
- c. Modify Properties Columns in Navigator
- d. Items and Item Revisions
- e. Execute searches to find Items and view Datasets
- f. Use of PSE to for BOM view and Reports

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Lesson 1: What is PDM?

Definitions of Product Data Management (PDM)

- Product Data Management (PDM) is focused on information relative to core operations of a product-based company. PDM is one element of a larger evolving field of Product Lifecycle Management (PLM).
- Within PDM the focus is on managing and tracking the creation, change and archive of all information related to a product. The information being stored and managed (on one or more file servers) will include engineering data such as; CAD models, drawings and their associated documents.
- "Associated documents" is a collector term for: requirements, specifications, manufacturing plans, assembly plans, test plans, test procedures and results.

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Lesson 1: What is PDM? Continued...

TCE-PDM Benefits

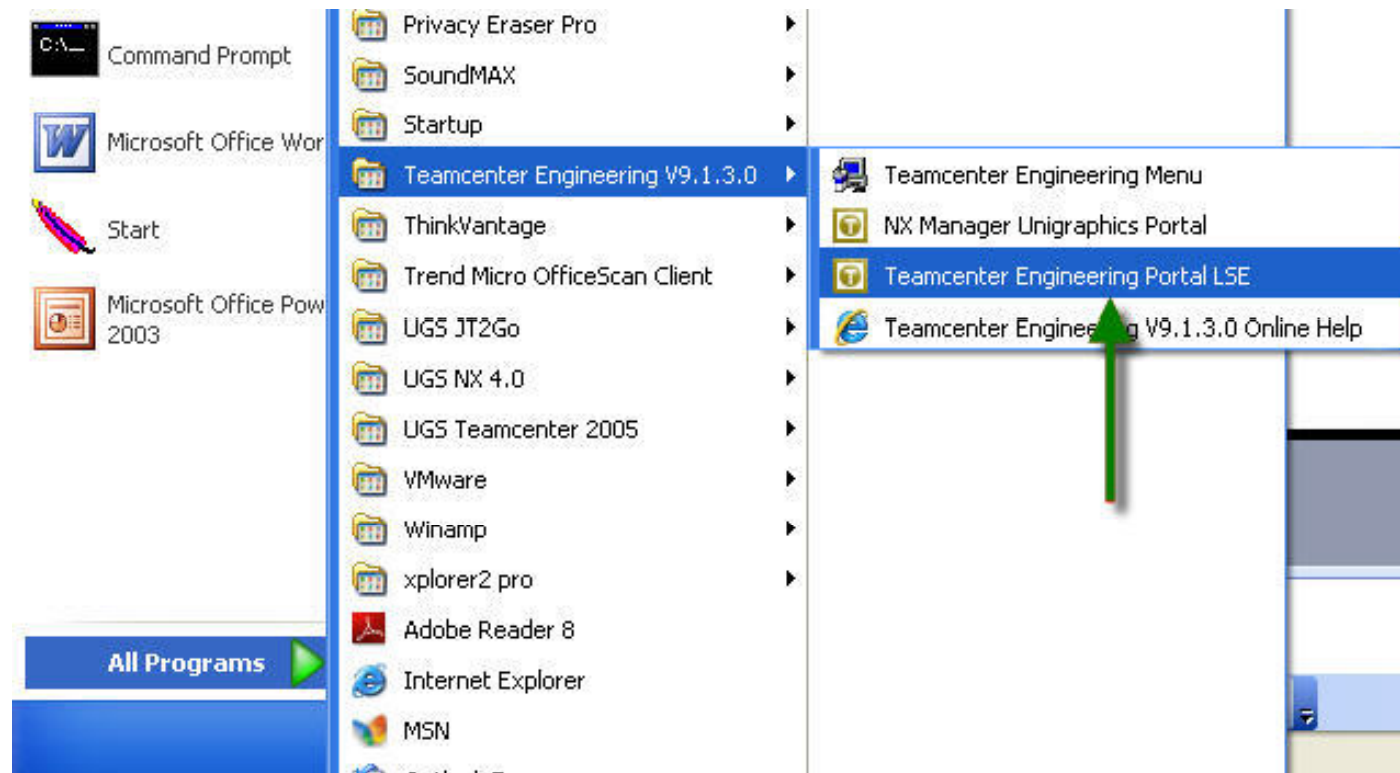
- Reduces duplicate data.
- Simplifies finding data and distributing data to those who need it.
- Allows quick, lightweight viewing of models, which is especially useful for verification when reviewing changes.
- Provides revision control and maintains history of a product's development evolution.
- Manages assemblies and relationships between parts.
- Easily builds a Bills of Material (BOM).
- Establishes relationships between requirements, specifications, and parts.
- Provides access control and vaulting to ensure integrity of data.

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Lesson 2a: Start Teamcenter Engineering

Step 1: Click Start menu

Step 2: Left Mouse button click on Portal LSE as shown below



2 Lesson 2a: Start Teamcenter Engineering

Step 3: Click on My Navigator

Step 4: Enter in UserID (*marked fields are mandatory)

Step 5: Enter in your password

Step 6: Select database (in case you have more than 1 available, pdp1 = production)

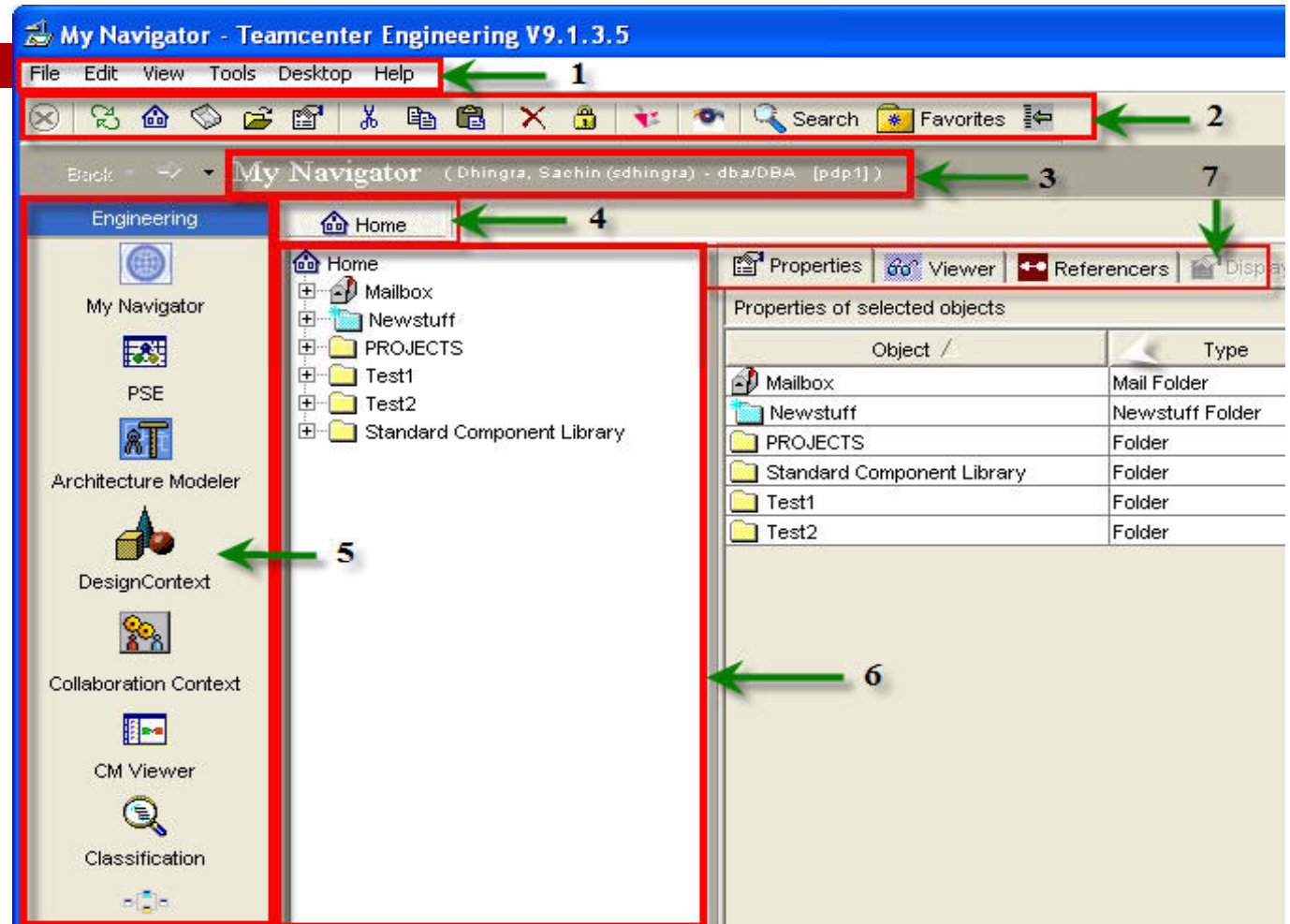
Step 7: Click LMB on the Login button



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Lesson 2b: Key Areas of the Portal Interface

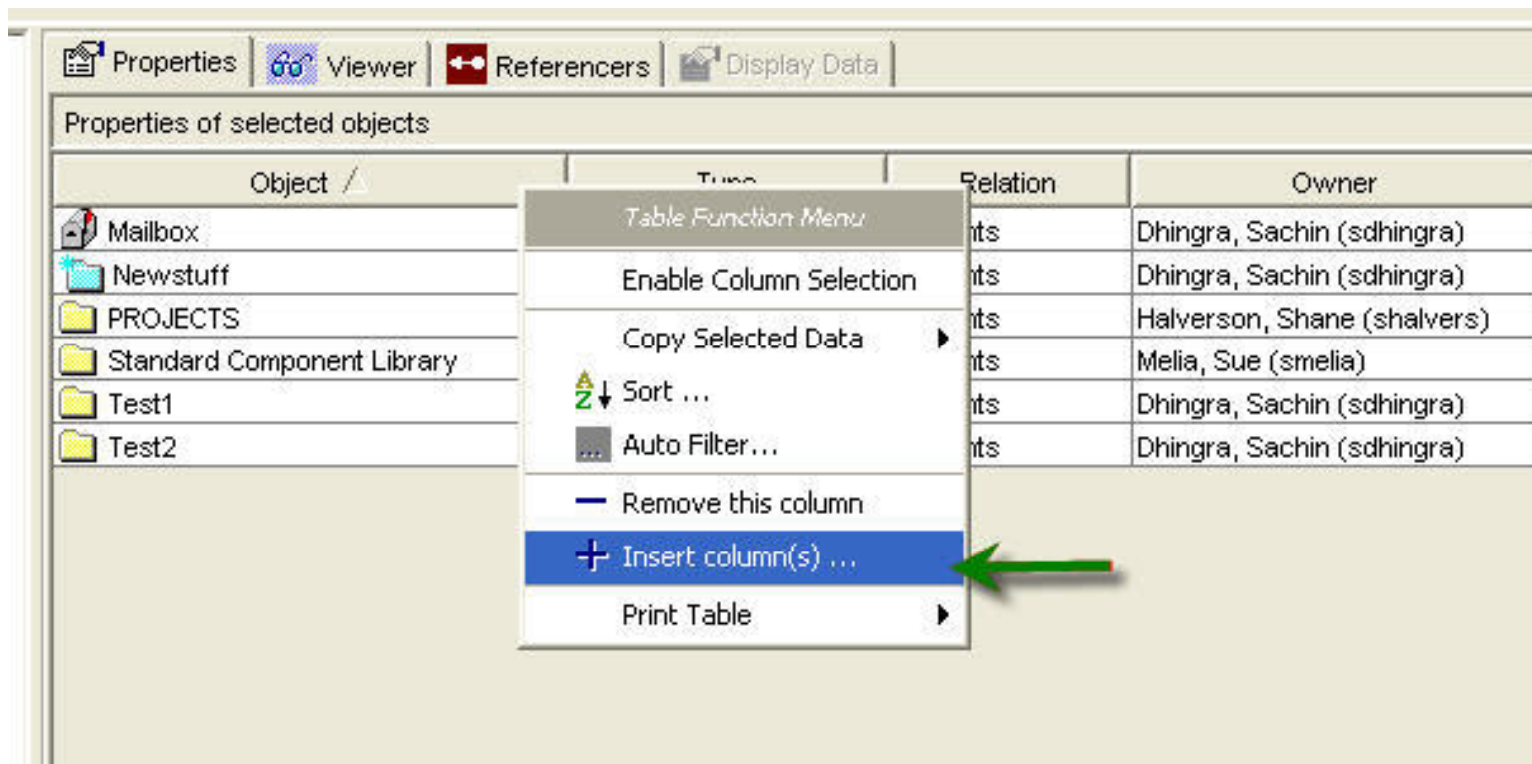
1. Menu Bar
2. Tool Bar (Standard)
3. Current Application with Username, Role, Group, DB information
4. Home Tab
5. Engineering Application Navigator
6. Home Folder Navigator
7. Sub Tabs for Properties, Viewer, etc



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Lesson 2c: Modify Properties Columns in Navigator

To add a Column to the properties viewer, click the Right Mouse Button (RMB) on the column name in the properties window

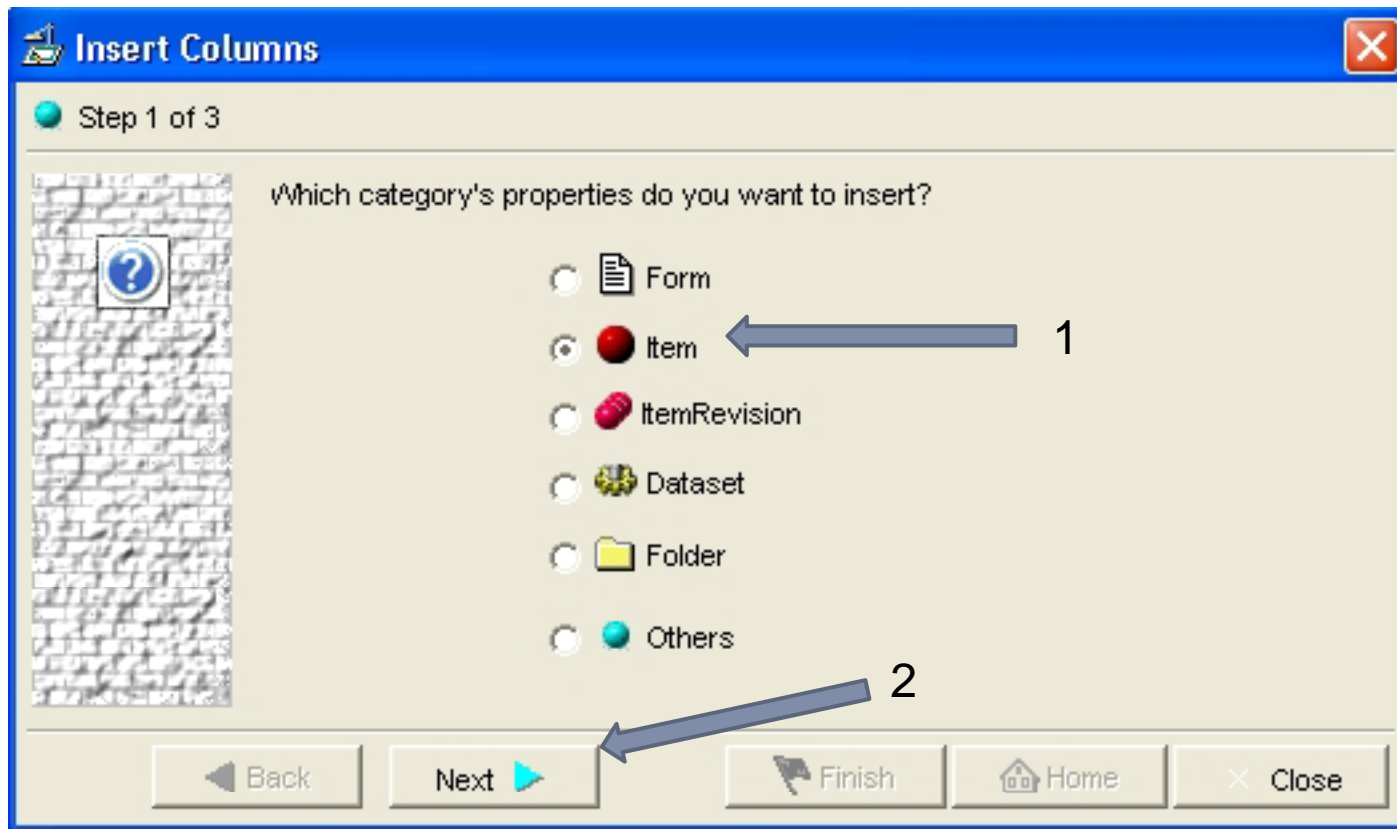


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Lesson 2b: Key Areas of the Portal Interface

Step 1: Select item or any other option based on your requirement

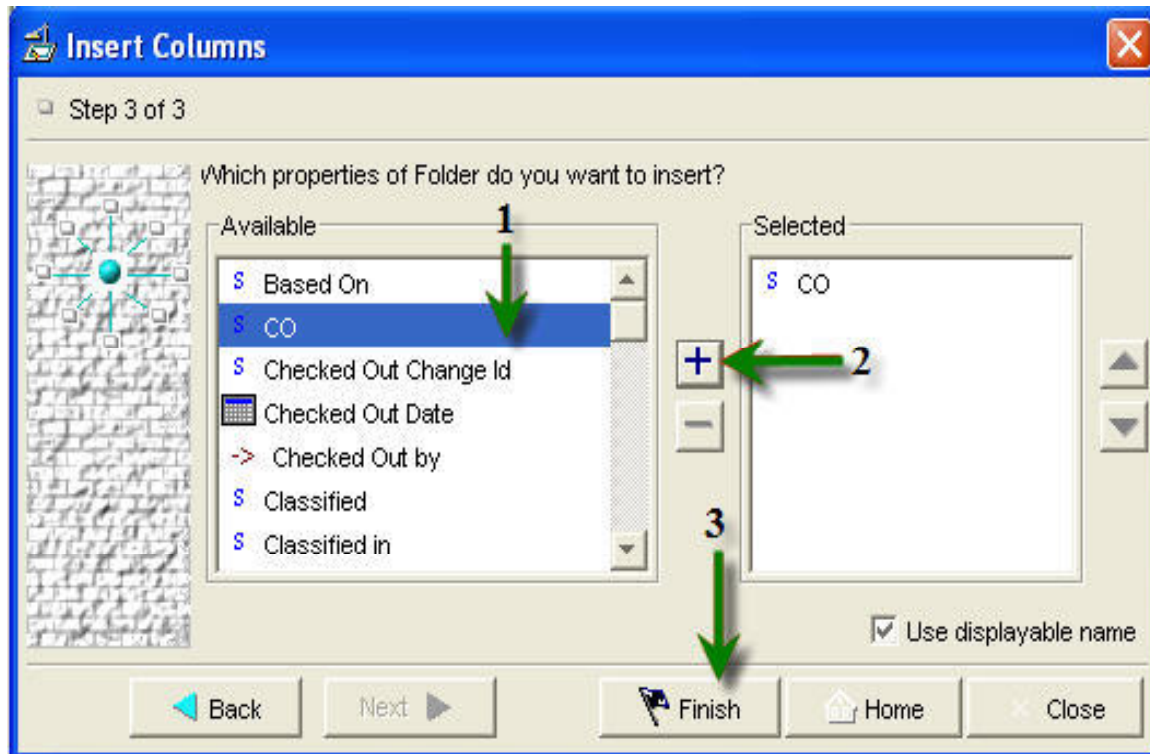
Step 2: Click next



2

Lesson 2c: Modify Properties Columns in Navigator

You will see a list of attributes that can be added as columns in the 'Properties' window. Add them into the selected box as demonstrated below.



Example:

Step 1: Select CO (Checked Out)

Step 2: Click on '+' to add the CO in the selected list

Step 3: Click Finish

2

Lesson 2c: Modify Properties Columns in Navigator

Notice: The column 'CO' was added to the Properties window

The screenshot shows the Teamcenter Navigator interface. On the left is a tree view of a project structure. On the right is the Properties window for the selected item '1495-1002/A-HULL'. The Properties window has tabs for Properties, Viewer, Referencers, and Display Data. Below the tabs is a table with the following data:

Name	CO	Date Modified	Last Modifying User
1495-1002/A		12-Feb-2007 10:26	Paige, Mike
1495-1002-A		15-Dec-2007 03:16	infodba
1495-1002-A	✓	23-Jan-2008 15:47	Paige, Mike
1495-1002/A-view	✓	18-Apr-2007 17:01	Paige, Mike
43DAHull-mfg	✓	25-Sep-2007 08:31	Fry, Joel

2

Lesson 2d: Items in TcE

What are the items?

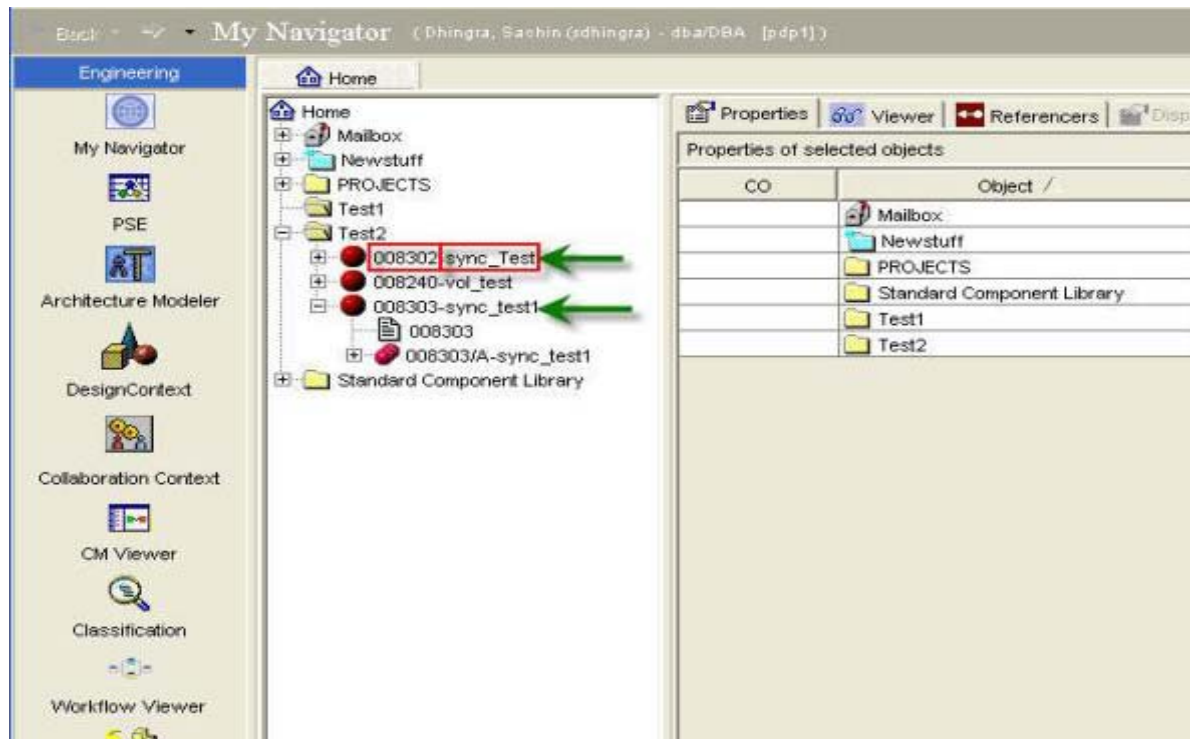
- Fundamental objects used to manage information in TCE.
- Items are generally used for data that is configuration or revision-controlled.
- Each Item has a label from three separate fields of information:
 - **Item ID** - a *unique* identifier for that Item; no two Items can have the same. Generally you can think of Item ID as a "Part Number"
 - **Item Name** - a noun or noun phrase for logical names like Bolt, Hinge, Door, Seat, Engine
 - **Item Descriptions** – modifiers that add more information about the item
- Company standards dictate conventions for Item IDs, Item Names & Descriptions that are used

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Lesson 2d: Items in TcE

Arrows below show the Items (Single Red Ball icon) in both an unexpanded and expanded view.

The text in the Red Boxes shows the Item ID and Item Name (008302 = ID)& sync Test = Name)



2

Lesson 2d: Items Revisions in TcE

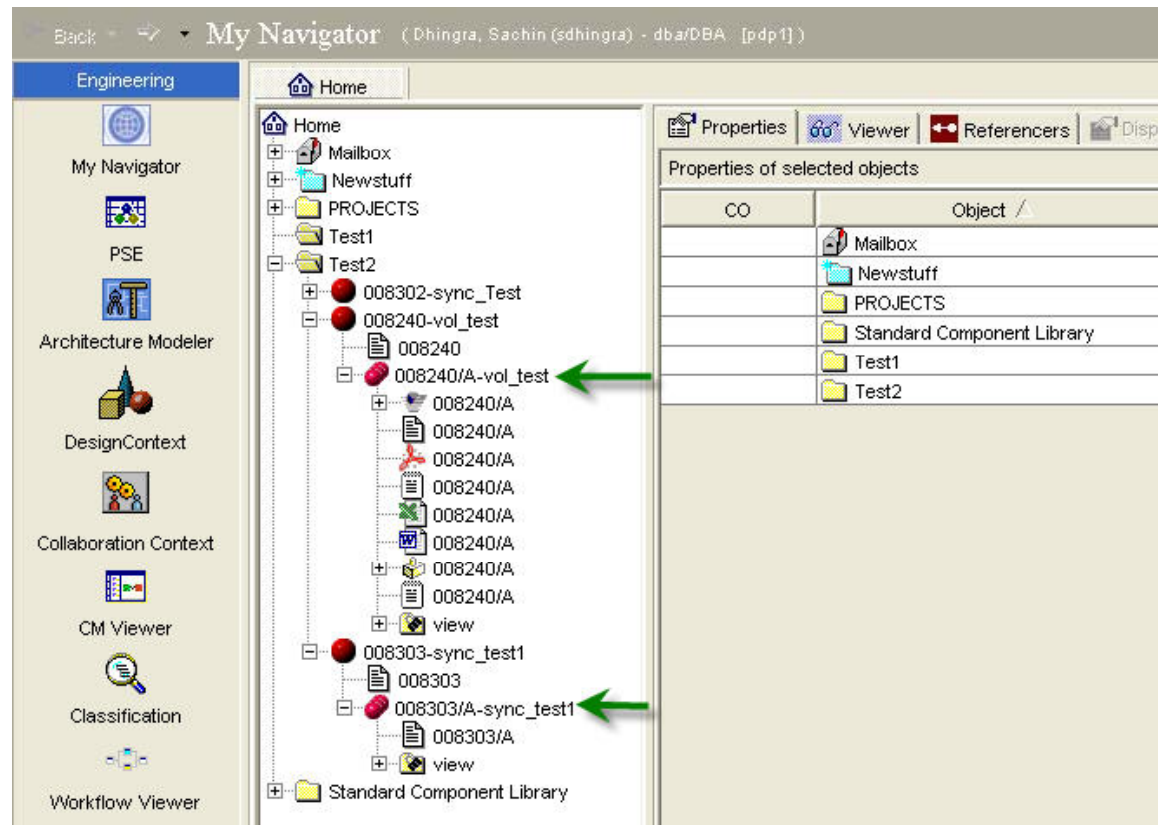
What are item revisions?

- Item Revisions are used to manage changes (revisions) to Items.
- Item Revision labels are similar to Item labels. The main difference is that there is an *Revision Identifier* appended to the Item ID.
- “Containers” for many different types of *Data Sets* (e.g. CAD Models, Drawings, Specifications, Test Reports, etc.)

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Lesson 2d: Items Revisions in TcE

Arrows below show the Item Revisions. When the Item Revisions are expanded you can see the various forms of *Data Sets* that are attached.

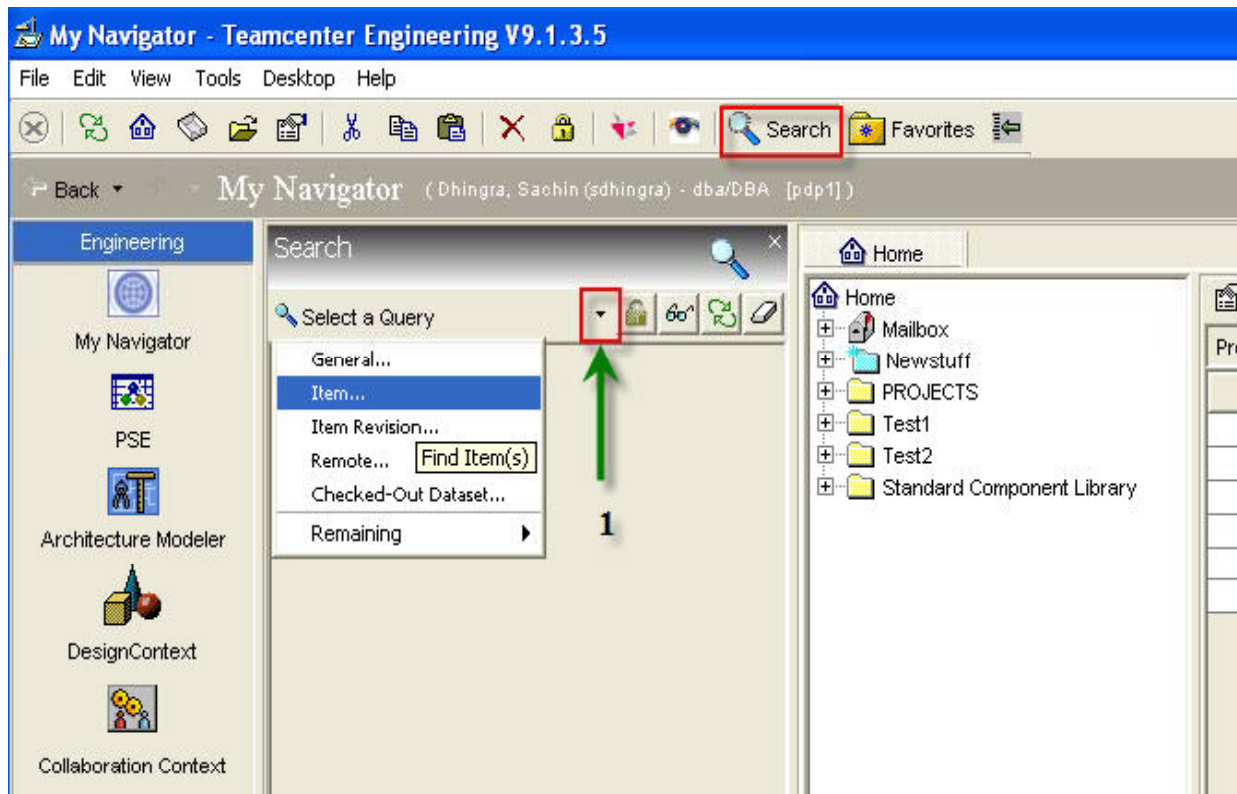


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Lesson 2e: Execute Searches to Find Item Objects

Step 1: Click on the 'Search' button

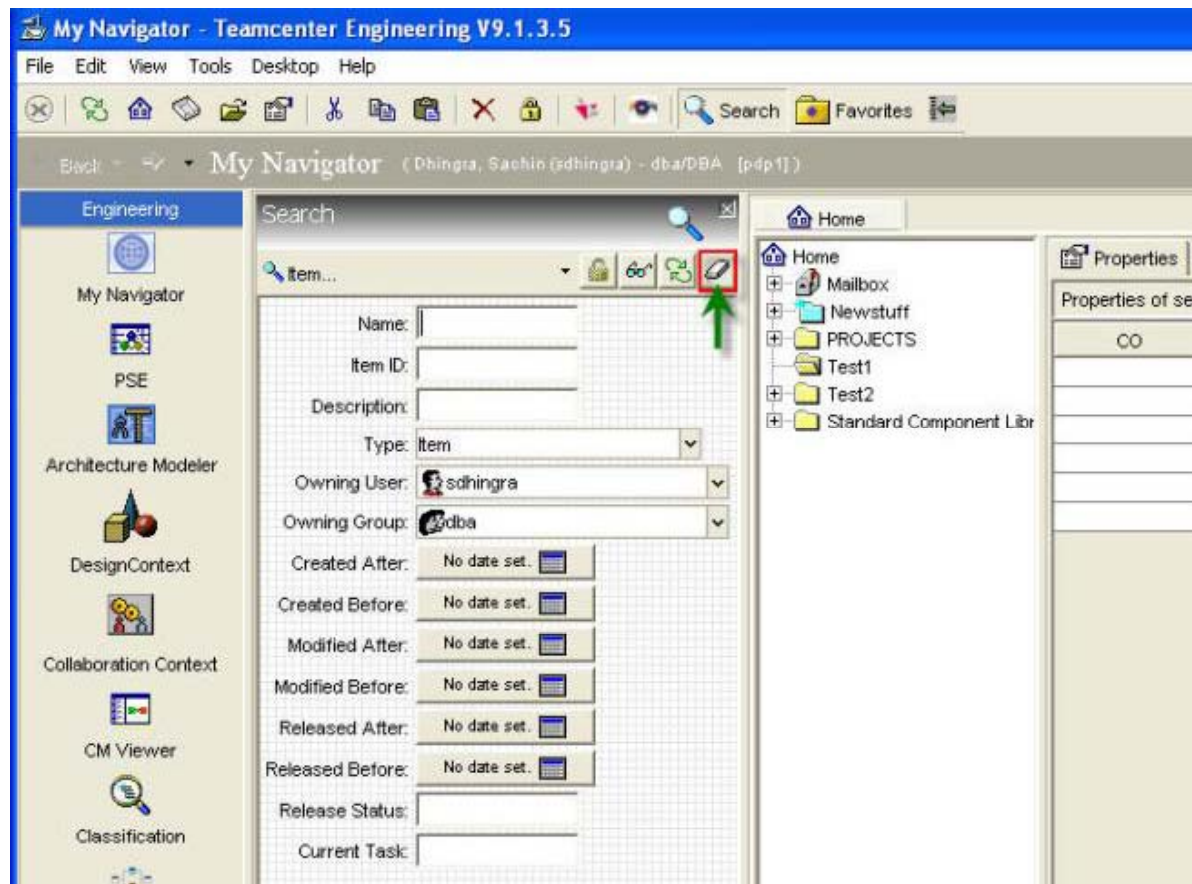
Step 2: Click on the pull down arrow box to select item type search criteria



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Lesson 2e: Execute Searches to Find Item Objects

Step 3: Click on the 'Erase' to erase the default information in the search criteria attributes

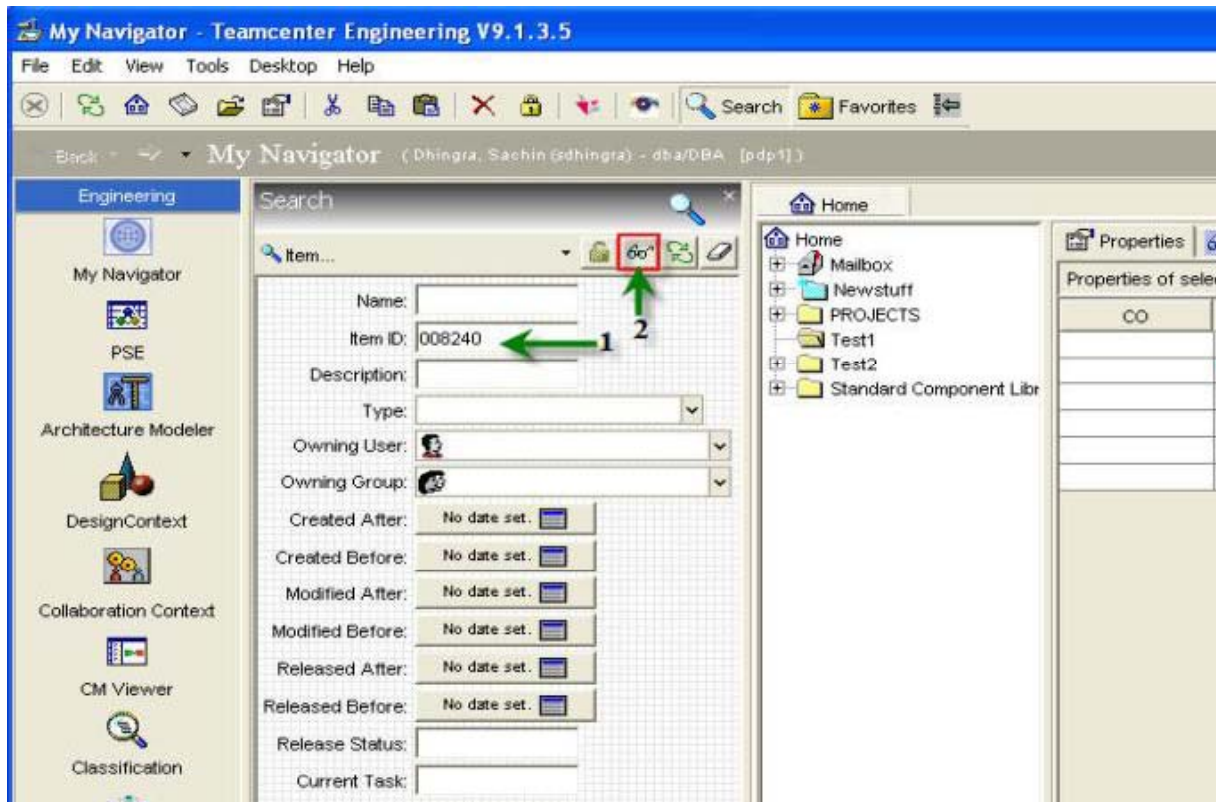


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Lesson 2e: Execute Searches to Find Item Objects

Step 3: Type the item ID which you want to search (Note: For boat assemblies use *-0000)

Step 4: Click on the 'Spectacles' button shown below to execute the search



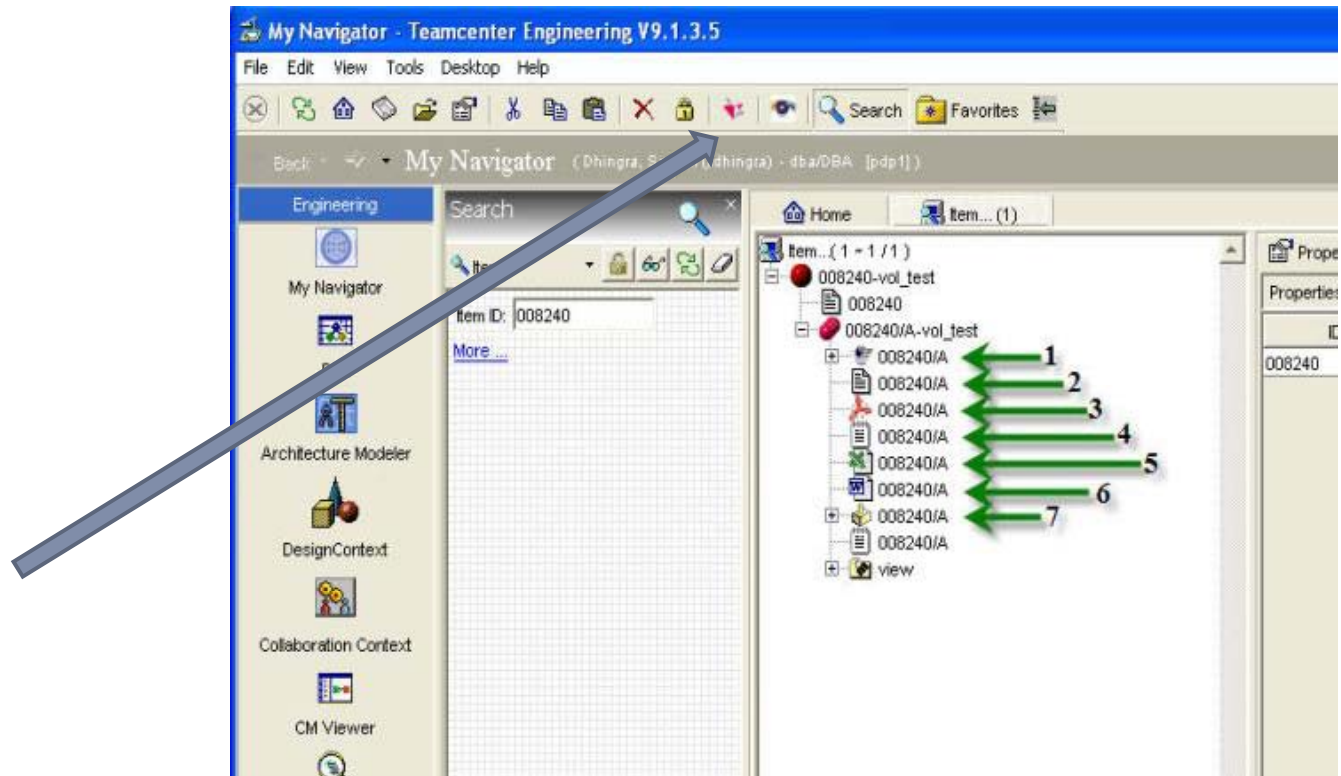
2

Lesson 2e: View File and Form Data Associated with Items

Expand the searched Item and understand the different attachments in the Item Revision

1. Jt/VisView model dataset
2. Item Revision Master Form
3. PDF dataset
4. Text dataset
5. MSEXcel dataset
6. MSWord dataset
7. UGMaster dataset

Note: 1st open Team Center then you click the NX5 icon

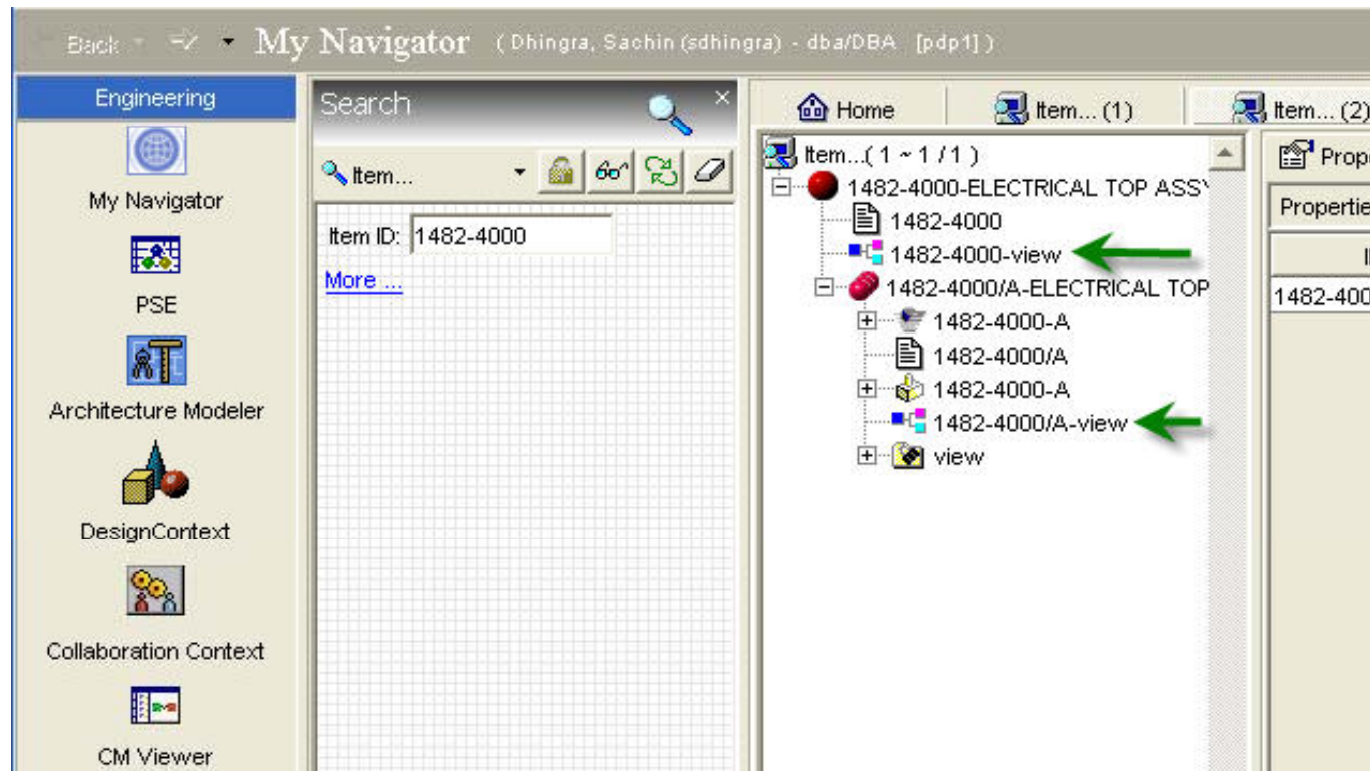


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Lesson 2e: Identify an Item as an Assembly

Search for 1482-4000 (an assembly) as in previous step and expand the Item

Familiarize yourself with the BOM View Revision (BVR)



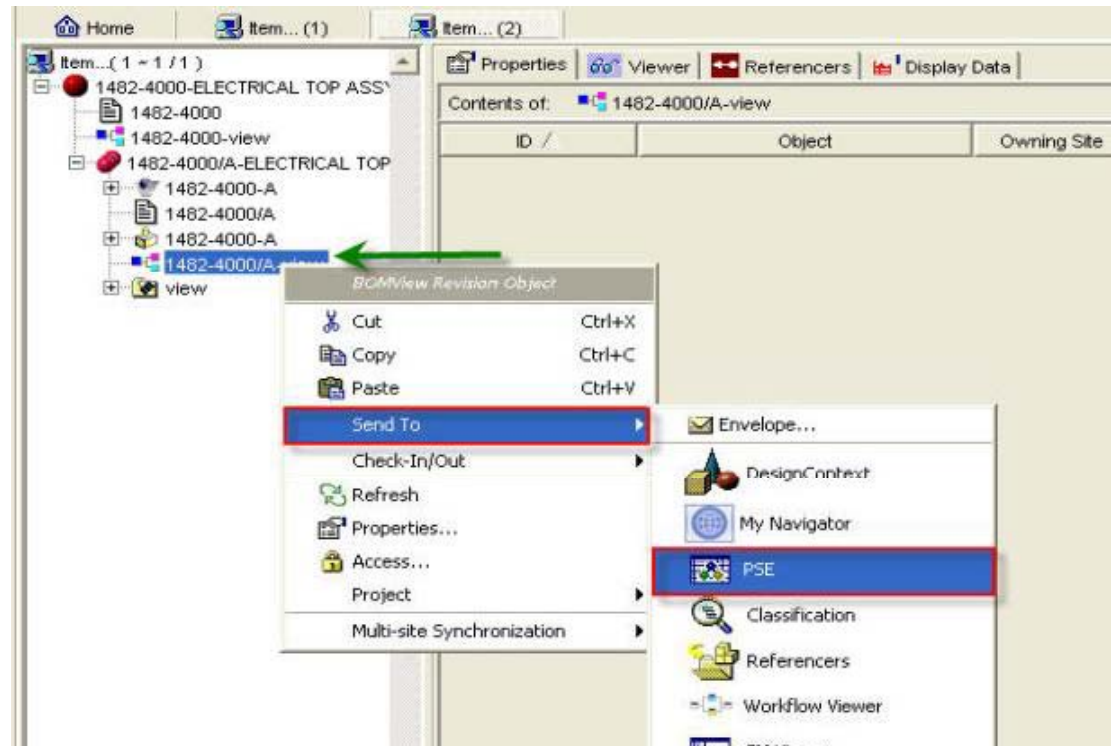
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Lesson 2f: View Product Structure

Select the BOM View Revision and click RMB.

Select “Send To” to view various options

Select PSE (Product Structure Editor) to view the assembly structure.

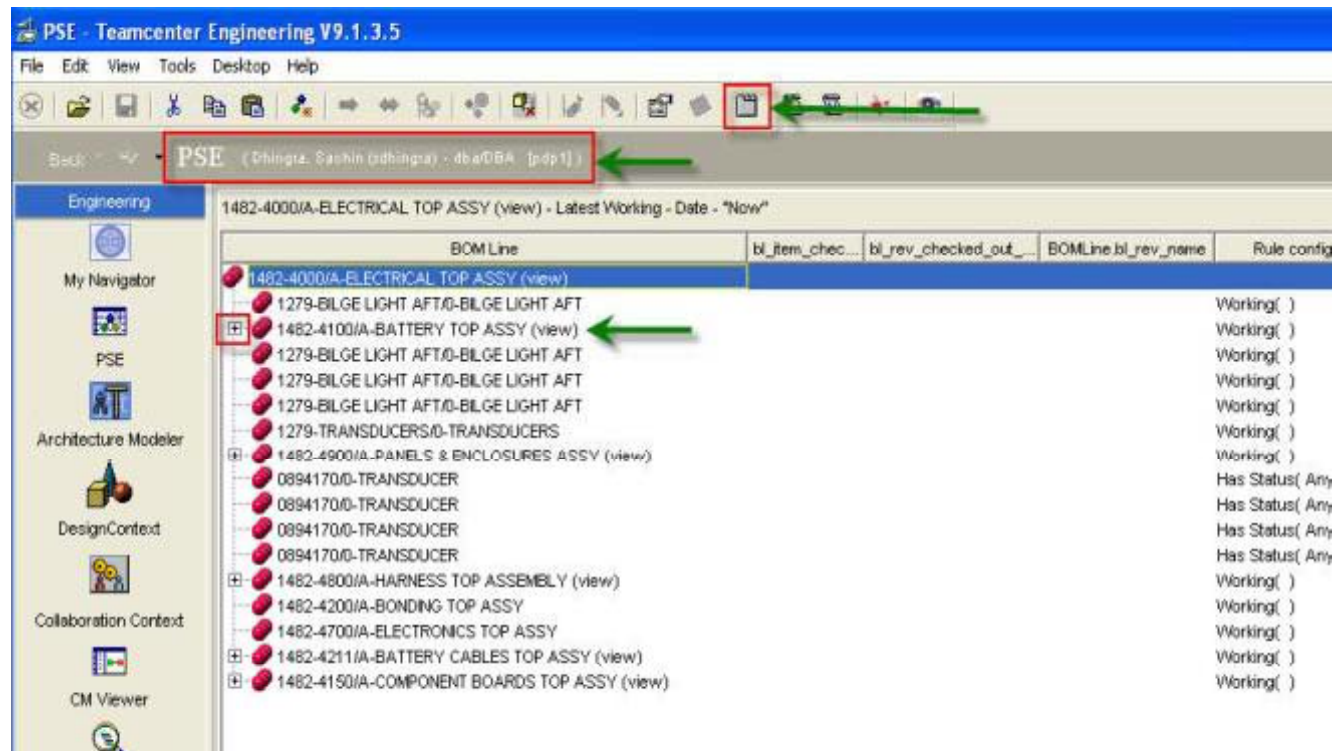


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Lesson 2f: View Product Structure

Familiarize yourself with the Show/Hide button, and the representation of the Assembly shown in the in the BOM view.

The '+' symbol in the assembly shows that the item is a sub-assembly and has additional components or assemblies.



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Lesson 2f: Generate Reports

Click RMB on the Column name and select the Print Table to view various sub option.

Click on the 'HTML/Text' to generate a report

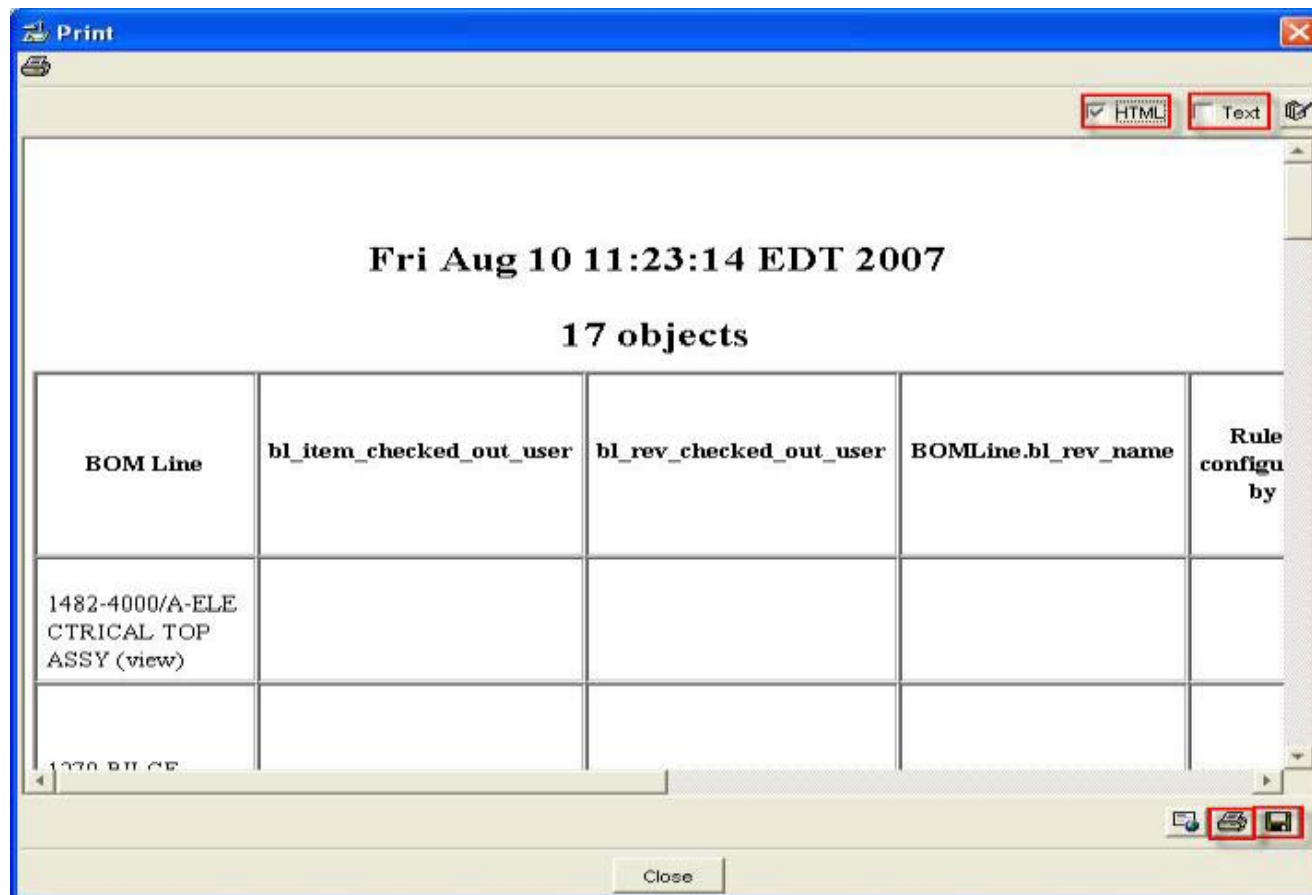
The screenshot shows a table titled "1482-4000/A-ELECTRICAL TOP ASSY (view) - Latest Working - Date - "Now"". The table has columns for "BOM Line", "Part Number", "Description", "Quantity", "Unit", "Rev", "Status", and "Rule". A context menu is open over the "BOM Line" header, showing options: "Table Function Menu", "Enable Column Selection", "Copy Selected Data", "Remove this column", "Insert column(s) ...", "Print Table", and "Restore Default Order". The "Print Table" option is selected, and a sub-menu is open showing "HTML / Text" and "Graphics".

BOM Line	Part Number	Description	Quantity	Unit	Rev	Status	Rule
1482-4000/A-ELECTRICAL TOP ASSY (view)						Working()	
1279-BILGE LIGHT AFT/0-BILGE LIGHT AFT						Working()	
1482-4100/A-BATTERY TOP ASSY (view)						Working()	
1279-BILGE LIGHT AFT/0-BILGE LIGHT AFT						Working()	
1279-BILGE LIGHT AFT/0-BILGE LIGHT AFT						Working()	
1279-BILGE LIGHT AFT/0-BILGE LIGHT AFT						Working()	
1279-TRANSDUCERS/0-TRANSDUCERS						Working()	
1482-4900/A-PANELS & ENCLOSURES ASSY (view)						Working()	
0894170/0-TRANSDUCER						Has Status(A	
0894170/0-TRANSDUCER						Has Status(A	
0894170/0-TRANSDUCER						Has Status(A	
0894170/0-TRANSDUCER						Has Status(A	

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Lesson 2f: Generate Reports

You can view the report and save with the HTML or Text option.



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