Altair® HyperWorks®

2022.2

PDM Live Connection

Using PDM live connection, on-demand downloading of datasets from external PDM systems such as Teamcenter is possible

In the traditional model build and assembly workflow, you were forced to download an entire BOM along with its CAD/FE representations. With PDM live connections, you are able to just download what you need while maintaining the entire BOM view.

Note: Currently, only the Teamcenter repository is supported.

Register a PDM Repository

In order to use PDM live functionality, you need to register a Teamcenter repository first.

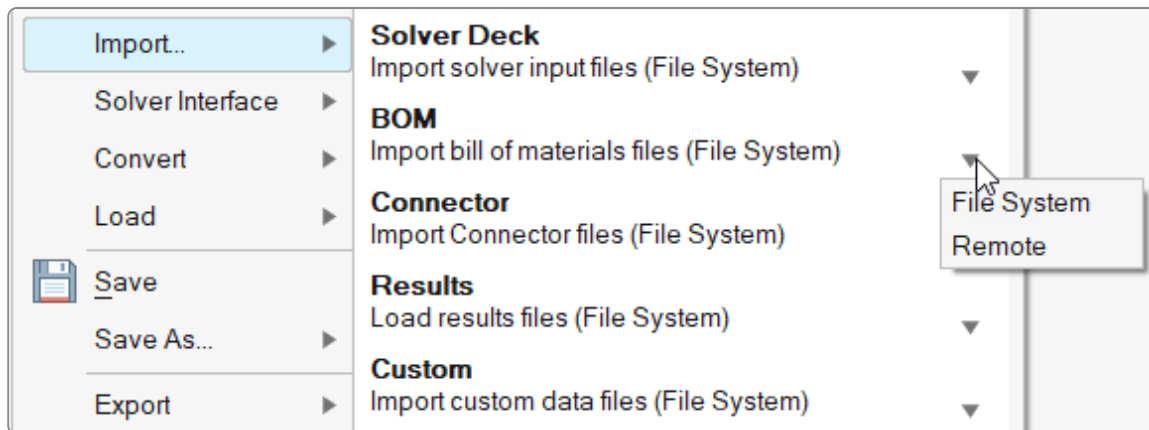1. Go to **File** > (and then) **Import** > (and then) **BOM** > (and then) **Remote**.

Figure 1.

The **Explore** dialog opens.

2. Click **Manage Repositories** to add a new repository.

3. Select the registry type.

4. Click **Register**.

5. Enter the repository details in the Value column.

6. Click **Apply**.

7. **Optional:** To make any changes, click **Reset** to clear your information or **Discard** to cancel and hide the Repository Details panel.

8. Click **OK** to register your repository.

Download a BOM Only

Downloading a BOM from Teamcenter is enhanced to offer two types of downloads.

- Download an entire BOM with all associated datasets.

- Download just the BOM. This will not download any associated datasets and is controlled by an option in the **Explore** dialogue.

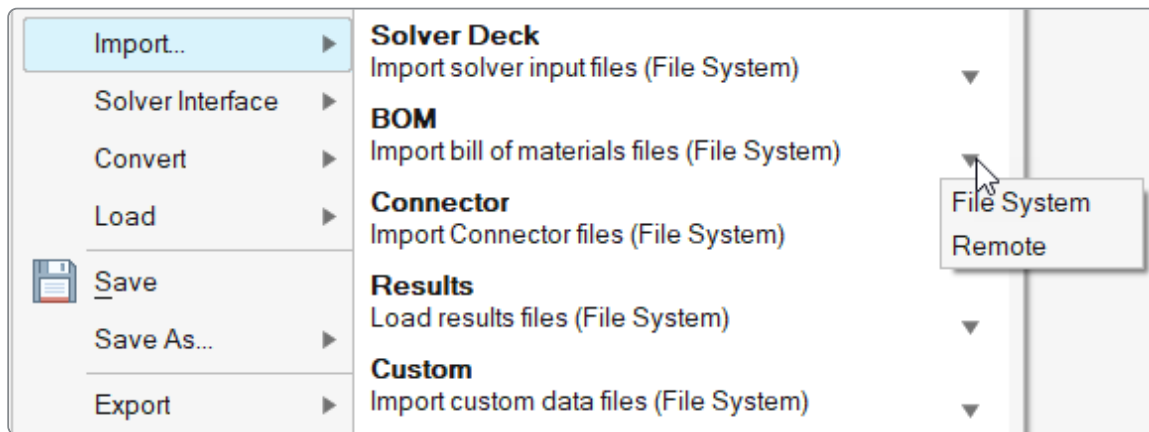1. Go to **File** > (and then) **Import** > (and then) **BOM** > (and then) **Remote**.

Figure 2.

The **Explore** dialog opens.

2. Click the Teamcenter repository or add a new one.

3. Click **Login**.

4. Select the type of item to search for.

5. Enter text to search for in the Query field and select which attribute to search for from the By list.

   The items displayed in the Type field as well as the attributes in the By list are configurable and can be modified based on a particular Teamcenter installation or individual search needs. Default values are provided in the `pdmsysconfig.xml` file located on each HyperWorks client in the `%USER_PROFILE%\.Altair\hwe\pdmconnector\config` folder. Contact your Altair account manager for more details on configuration.

6. Select the **Latest only** option to retrieve only the latest version of items found by the query.

7. Click **Simple query**.
   Items matching the query criteria are returned.

8. Select the desired item(s) or file(s) to review its properties

   You can browse the item structure and view individual files associated to item revisions by expanding or collapsing items in the tree or by selecting **Expand all** from the context menu.

   You can also view additional properties of the selected item revision by selecting **More Properties** from the context menu.

9. Select a temporary folder to retrieve the files in the Select output directory field.

   Selecting an item revision results in all files associated with the selected item revision and all files associated with the selected item's children being retrieved. You can retrieve only specific file types by choosing from the list in the Download file types field. Selecting individual files results in those files being retrieved.

10. Uncheck the **Download datasets** option.

    This ensures only the BOM gets downloaded.

11. Click **Open**.

    Just the PLMXML BOM file is downloaded.

Load the Representations from PDM

Once the BOM is downloaded, you can load the available representations from the PDM system directly.

1. After loading the BOM, right-click on the top-level assembly in the Part Browser and select **Representations** > (and then) **Load** > (and then) **From PDM**.
   The **Change Representation** dialogue opens with the PDM tab.

2. Select the representation to load and click **OK**.
   It will download the representation from PDM system and load it in session.

Upload the Representations to PDM

The representations can be uploaded back to the PDM system via the Save Representation option where you must select **Save to PDM**. It is also possible to upload the representations while sending the parts to Batchmesher. Selecting **Save to PDM** in the **Create Representations** dialogue uploads the created representations back to the PDM system after completion of the Batchmesher process.

   Note: In order to access the newly uploaded representation in the current session from Load Representations, you have to re-download the BOM.