

# Importing Blocks and their properties

Lets say, we need to import the engine structure including Blocks, their Part and Value Properties. Firstly, open an existing or create new project. In this case, we create new project. Next, do the following:

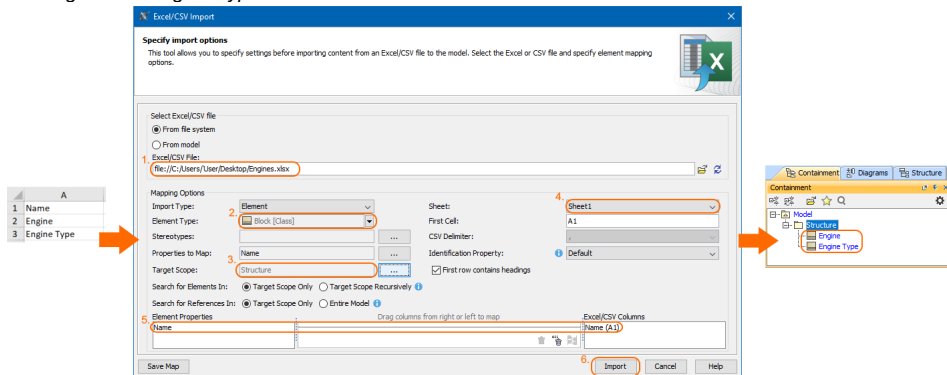
1. [Import Blocks](#)
2. [Save properties Import Maps](#)
3. [Create Map Group](#)
4. [Import Map Group](#)

## Importing Blocks

To import Block properties, the an *Engine* and *Engine Type* Blocks must be created in the model. In this case, we import those blocks. For this, in the top-left corner of the modeling tool, click the **File > Import From > Excel/CSV File > Import Using New Map**. In the [Excel/CSV Import dialog](#) specify the following options:

1. Select the Excel file which contains the spreadsheet with the structure. In this case, the *Engine* Excel file is selected.
2. Select Block as **Element Type** option value.
3. Specify the location of imported elements in the [Containment Tree](#) by selecting the **Target Scope** option value. In this case, the *Structure Package* is selected.
4. Specify the Excel file sheet in which the table is prepared to import. In this case, the table is in the Sheet 1.
5. Create mapping between element property Name and excel table cell Name.
6. Click **Import**.

The *Engine* and *Engine Type* Blocks are created in the model.



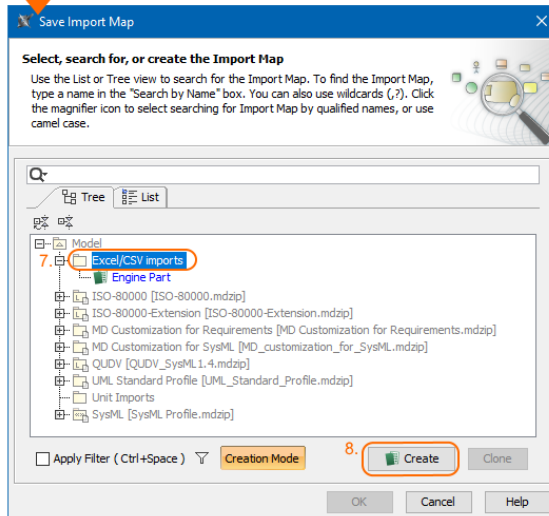
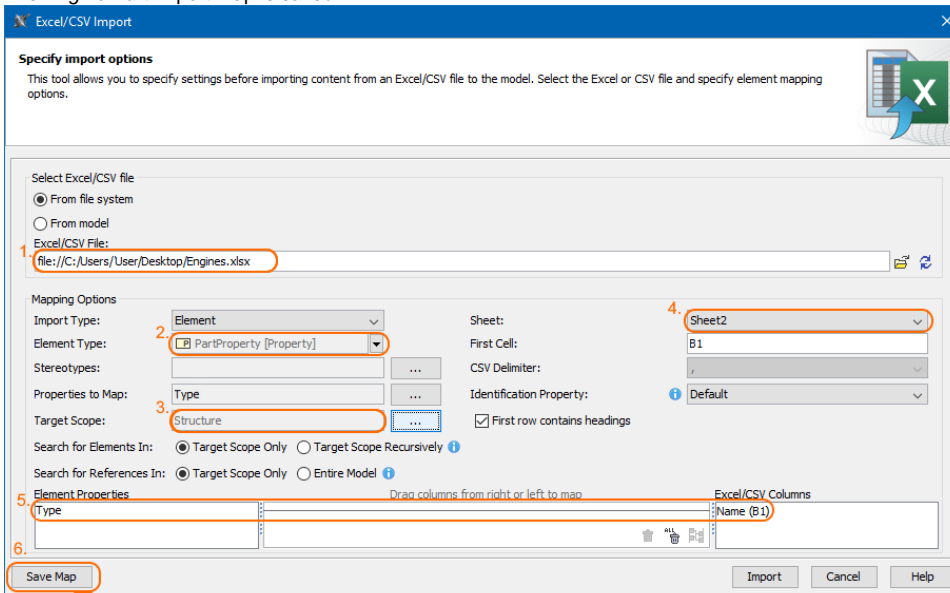
## Saving properties Import Maps

After the Blocks are imported, their all properties can be imported at once by creating a Map Group which consists of 3 Import Maps: *Engine Parts*, *Engine Value Properties*, *Engine Type Value Properties*. Follow the procedures below to save Import Maps.

The *Engine* Block is decomposed to *Engine Type* Part Property. Let's create an Import Map for the Part Property. In the top-left corner of the modeling tool, click the **File > Import From > Excel/CSV File > Import Using New Map**. In the [Excel/CSV Import dialog](#) specify the following options:

1. Select the Excel file which contains the spreadsheet with the structure. In this case, the *Engine* Excel file is selected.
2. Select Part Property as **Element Type** option value.
3. Select the *Engine* Block as the **Target Scope** option value.
4. Specify the Excel file sheet in which the table is prepared to import. In this case, the table is in the Sheet 2.
5. Create mapping between element property Name and excel table cell Name.
6. Click **Save Map**.
7. In the **Save Import Map** dialog, select a location wherein to save the Import Map. We highly recommend select the *Excel/CSV Imports Package*.

- Click the **Create** button. In the opened Specification window, type the Import Map name - in this case - *Engine Part*. Click **OK** > **Close**. The *Engine Part* Import Map is saved.



The *Engine* Block contains *serialNum* and *year* Value Properties. To save this Import Map, in the already opened **Excel/CSV Import** dialog specify options:

- Select the Excel file which contains the spreadsheet with value properties. In this case, the *Engine* Excel file is selected.
- Select Value Property as **Element Type** option value.
- Select Name and Type properties as **Properties to Map** option value.
- Select the *Engine* Block as the **Target Scope** option value.
- Specify the Excel file sheet in which the table is prepared to import. In this case, the table is in the Sheet 3.
- Create mapping between element property Name, Type and excel table cell Name, Type.
- Select to search for references in entire model, to set types for Value Properties.
- Click **Save Map**.
- In the **Save Import Map** dialog, select a location wherein to save the Import Map. We highly recommend select the *Excel/CSV Imports* Package.
- Click the **Create** button. In the opened Specification window, type the Import Map name - in this case - *Engine Value Properties*. Click **OK** > **Close**

The *Engine Value Properties* Import Map is saved.

Also, the *Engine Type* Block contains *make*, *model*, *hp*, and *fuel* Value Properties. To save this Import Map, in the already opened **Excel/CSV Import** dialog specify options:

- Select the Excel file which contains the spreadsheet with value properties. In this case, the *Engine* Excel file is selected.
- Select Value Property as **Element Type** option value.
- Select Name and Type properties as **Properties to Map** option value.
- Select the *Engine Type* Block as the **Target Scope** option value.
- Specify the Excel file sheet in which the table is prepared to import. In this case, the table is in the Sheet 4.
- Create mapping between element property Name and excel table cell Name.
- Select to search for references in entire model, to set types for Value Properties.
- Click **Save Map**.

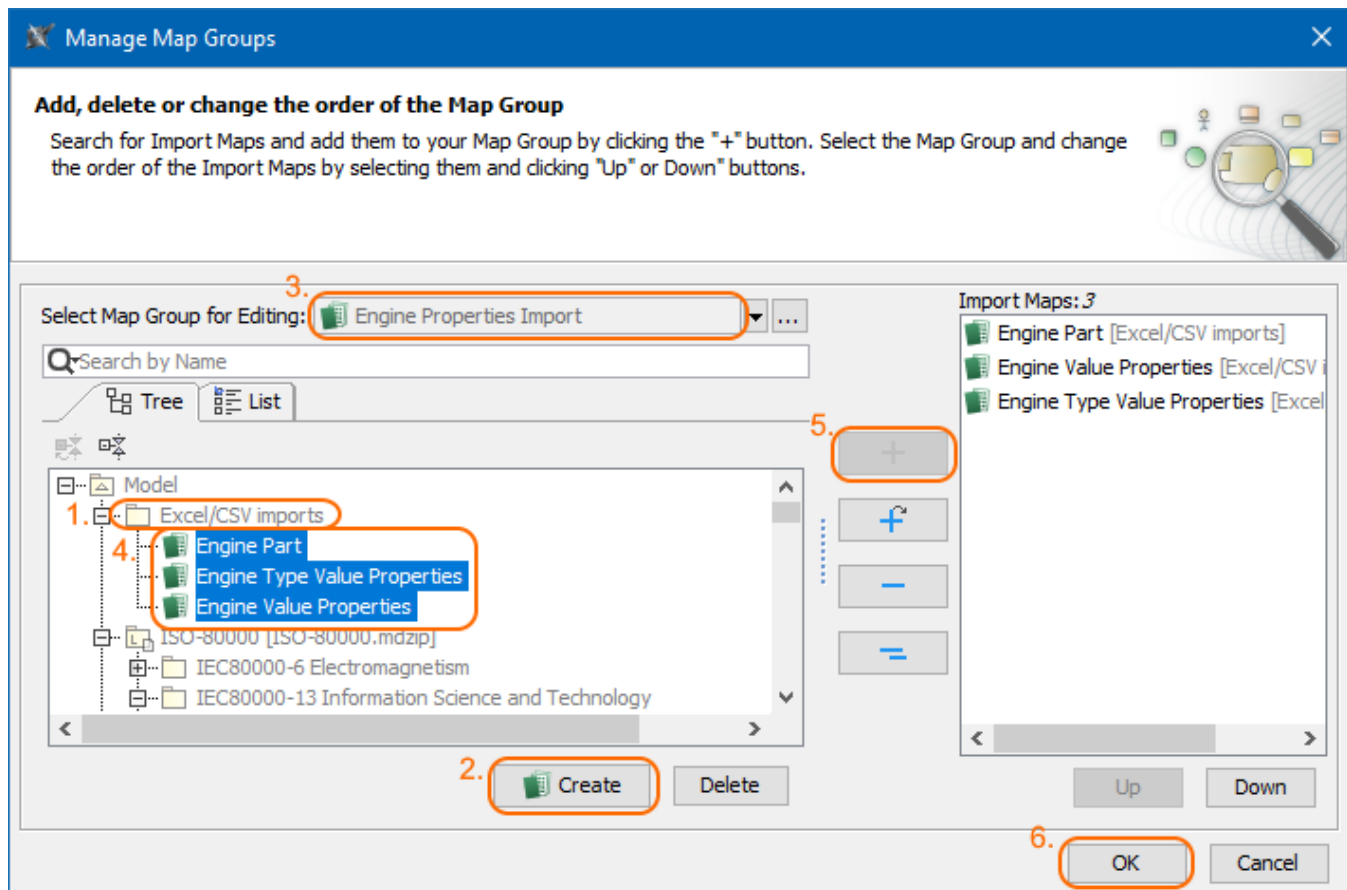
9. In the **Save Import Map** dialog, select a location wherein to save the Import Map. We highly recommend select the *Excel/CSV Imports Package*.
10. Click the **Create** button. In the opened Specification window, type the Import Map name - in this case - *Engine Type Value Properties*. Click **OK** > **Close**.

The *Engine Type Value Properties* Import Map is saved.

## Creating Map Group

After, the properties Import Maps are prepared, let's create the *Engine Properties Import Map Group* and add the following Import Maps: *Engine Parts*, *Engine Value Properties*, *Engine Type Value Properties*. For this, in the top-left corner of the modeling tool, click the **File** > **Import From** > **Excel/CSV File** > **Manage Map Groups**. In the **Manage Map Groups** dialog, do the following:

1. In the **Tree** tab, select the *Excel/CSV imports* Package as the owner for the new Map Group.
2. Click the **Create** button.
3. In the Specification window, type the name *Engine Properties Import* for the new Map Group and click **Close**. The newly created Map Group is selected as the **Select Map Group for Editing** option value.
4. Press Ctrl and in the Tree tab, select the *Engine Parts*, *Engine Value Properties*, *Engine Type Value Properties* Import Maps.
5. Click **+** to add them to the *Engine Properties Import* Map.
6. Click **OK**.



## Importing Map Group

Finally, import an *Engine Properties Import Map Group*. For this, in the top-left corner of the modeling tool, click the **File** > **Import From** > **Excel/CSV File** > **Import Using Existing Map Group**. In the **Select Map Group** dialog, select the *Engine Properties Import* Map Group and click **OK**. All properties are created for the *Engine* and *Engine Type* Blocks at once.

