Applying PLE

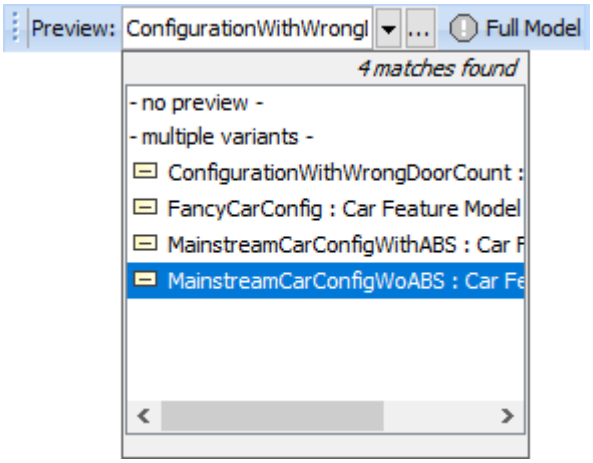
Once variation points are specified, you have the functions that make use of variant specifications.

There are two functions:

- Variant highlight
- Variant realization

Variant highlight

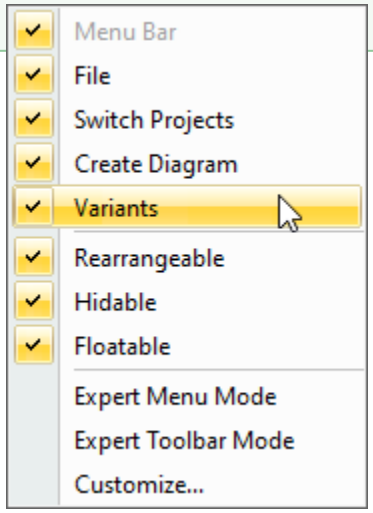
You can highlight a particular variant in the diagrams. Use the drop-down menu in the **Variants** toolbar. The drop-down menu contains all the configurations that you have created (see Defining Configurations).



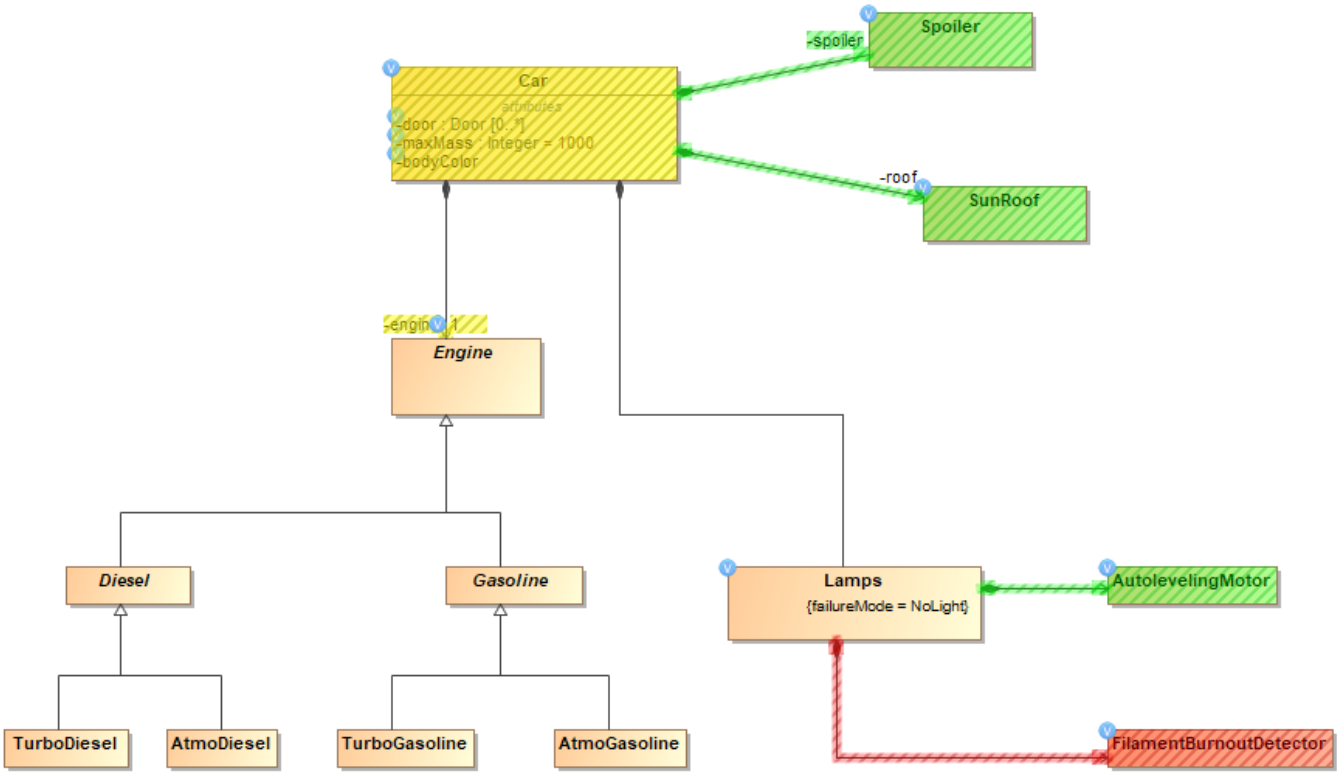
Drop-down menu with multiple configurations defined in the model

Tip

If the drop-down menu is not visible in the **Variants** toolbar, switch it on by right-clicking the empty space on the toolbar and selecting **Variants**.



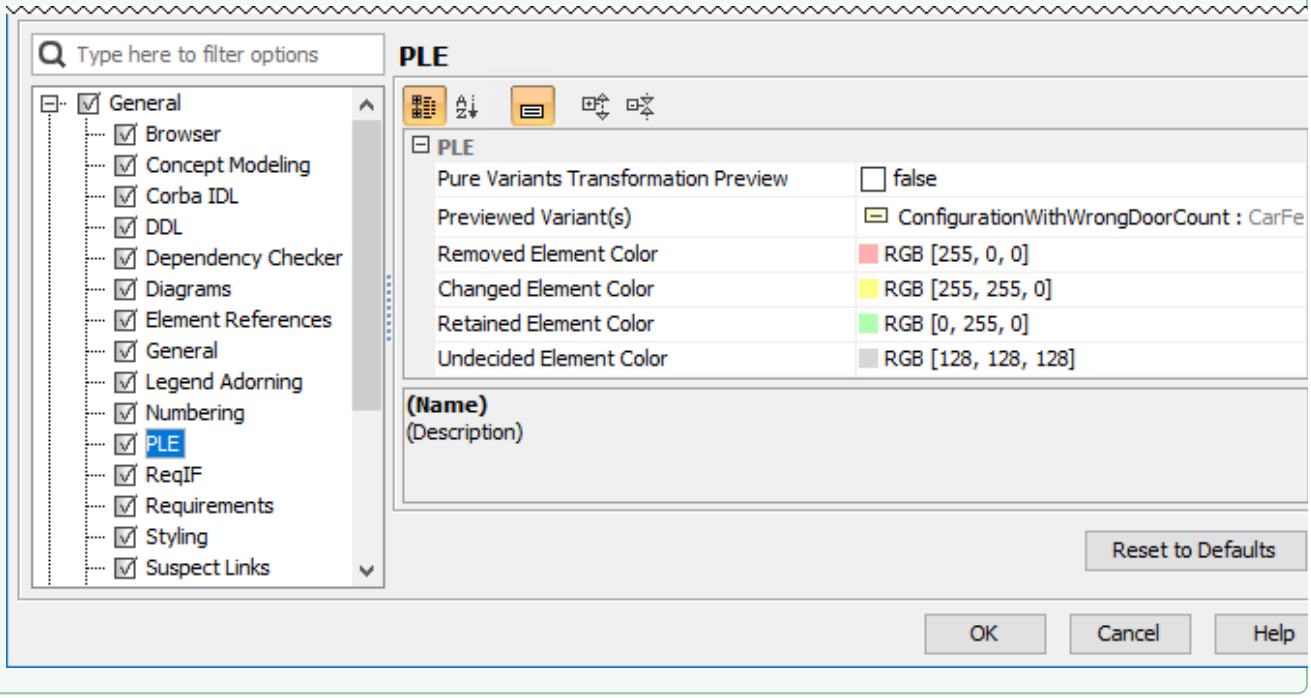
Once you select one configuration, variable elements (the ones with variation points) will be colored in red/green/yellow on the diagram depending on whether element exists (green), does not exist (red), or is changed (yellow) in the selected configuration.



Variable elements highlighted in a diagram

Tip

You can change the colors used to mark variable elements in the **Project Options** dialog (**Options** > **Project** > **General** > **PLE**) at any time.

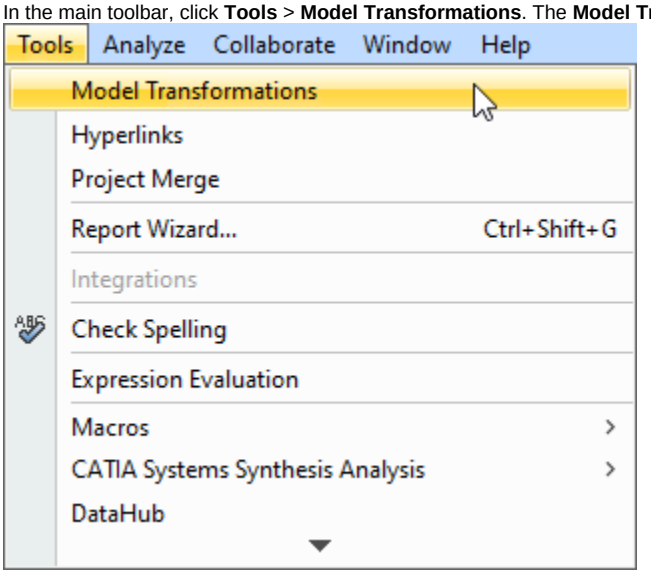


Variant realization

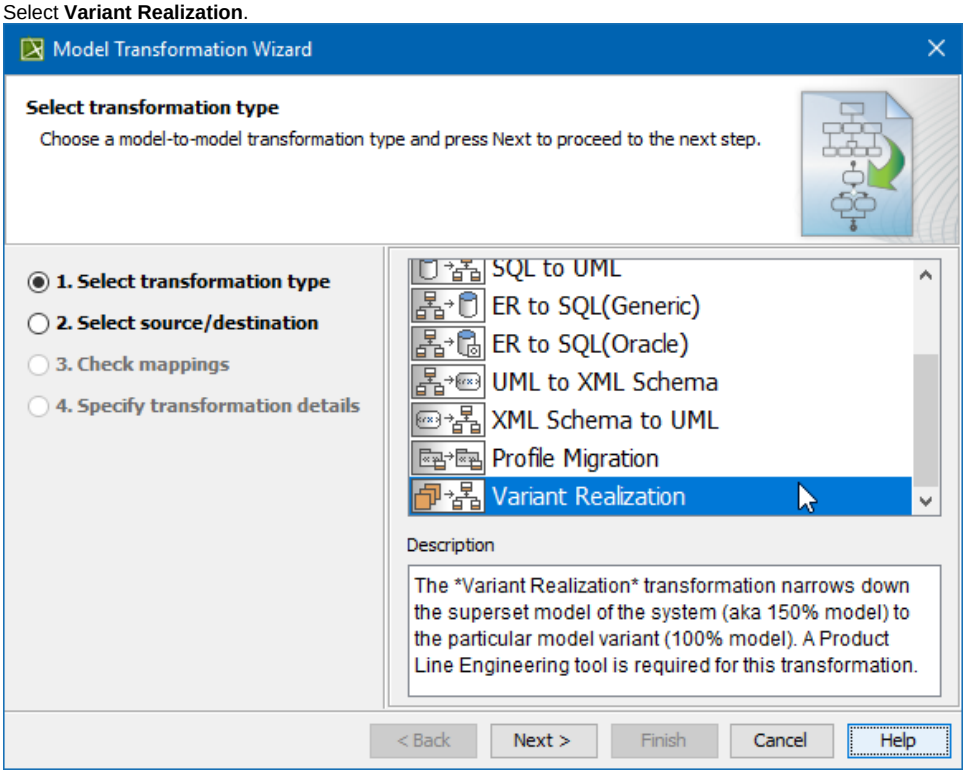
You can change your model to the particular variant. This is done through the Variant Realization transformation.

To change the model to the particular variant

1. In the main toolbar, click **Tools** > **Model Transformations**. The **Model Transformation Wizard** opens.



2. Select **Variant Realization**.



3. Select the scope of the transformation: the entire model or some packages,
4. Click **Next** (skip Step 3 of the wizard – it is not relevant for this transformation type).
5. Select the specific configuration to realize.
6. Click **Finish**.

The model is changed (elements modified/removed) to a particular variant of the system according to what variation points stipulate. After realizing a variant, you can do anything that you do with ordinary system models: analyze, simulate, report, publish, etc.

Be careful NOT to overwrite your initial project (which contains 150% model):

- If you are working with local files, use the **Save As** action to save the system model variant into a different project file.
- If you are working on a server project, you can use **Commit to Branch** (**Collaborate** > **Commit to Branch**) action to store your variant model in a branch (while the 150% model is kept in the trunk).