

Importing ENOVIA Effectivity Expressions as Variation Points

Prerequisites

1. The Product Line Engineering plugin is installed into your modeling tool.
2. The 3DEXPERIENCE ENOVIA Model Definition Integration plugin is installed into your modeling tool.
3. DataHub is installed into your modeling tool.

Requirements from the TRM application on the 3DEXPERIENCE platform can be imported/synchronized into the modeling tools using [Cameo DataHub](#).

DataHub can also import the effectivity markings of the requirements as equivalent variation points in the modeling tools. The MagicDraw PLE mechanisms (variant highlight, variant realization transformation) can then be applied to these variable requirements.

 The effectivity import is unidirectional. You can import from the 3DEXPERIENCE platform to the modeling tools.

Before starting the ENOVIA effectivity expressions import:

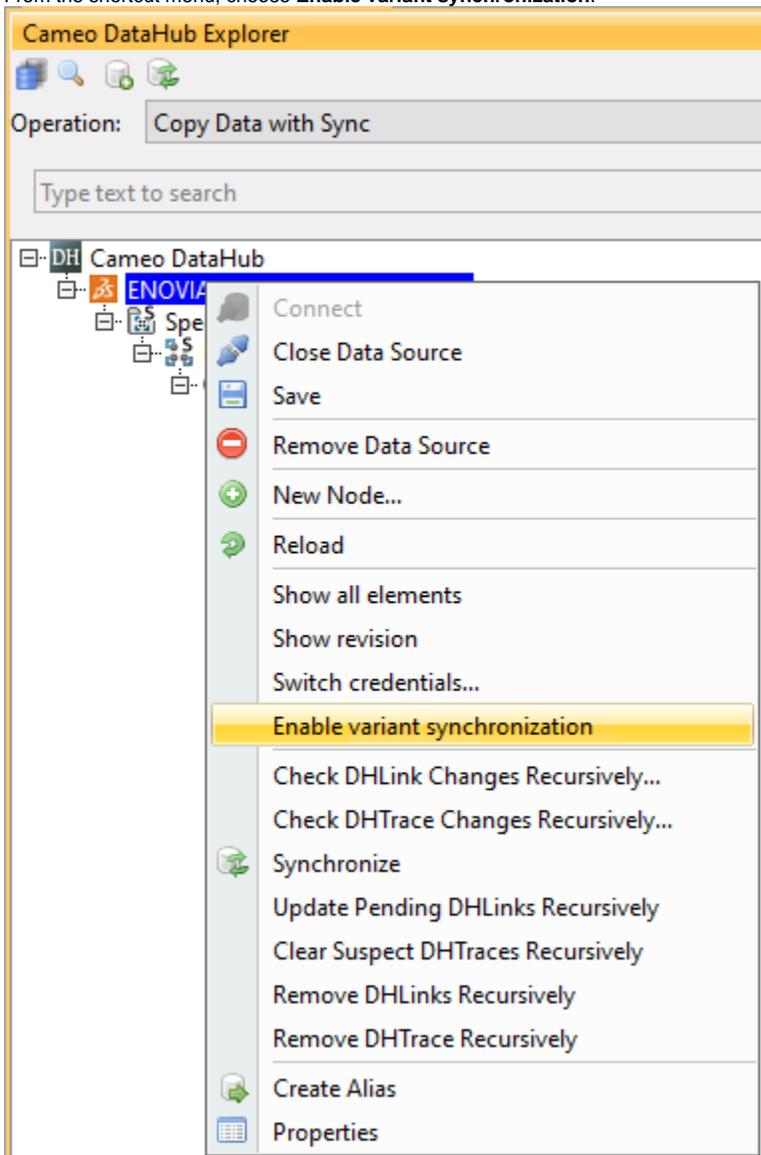
- The Model Version variability and configurations have to be imported into your modeling tool project beforehand. [Learn more >>](#)
- There are requirements in your Requirement app on the 3DEXPERIENCE platform and they have Effectivity Expressions defined.
- The Data Source for ENOVIA Traceable Requirements Management must be added. [Learn more about adding the Data Source for ENOVIA Traceable Requirements Management >>](#)

When the Data Source is added, you need to enable the variant synchronization to be able to import requirements.

To enable the variant synchronization

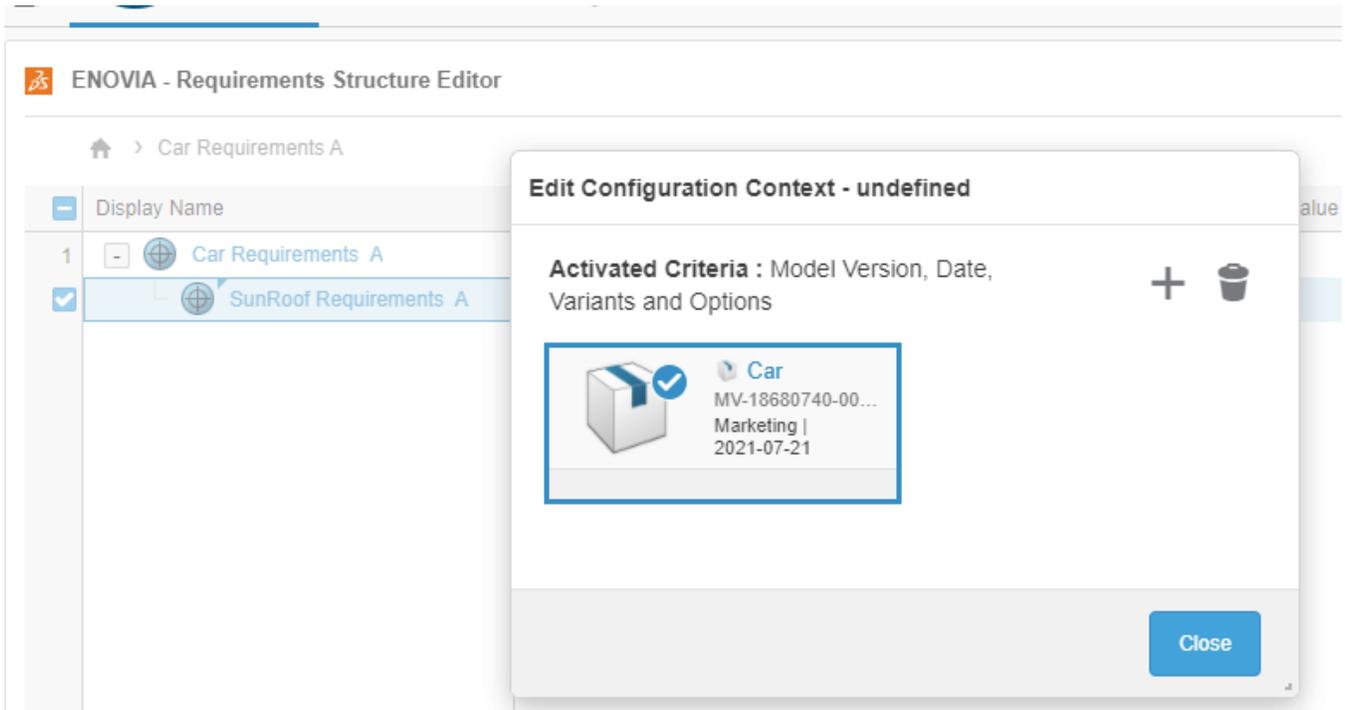
1. In the Cameo DataHub Explorer tab, right-click the Enovia TRM data source.

2. From the shortcut menu, choose **Enable variant synchronization**.



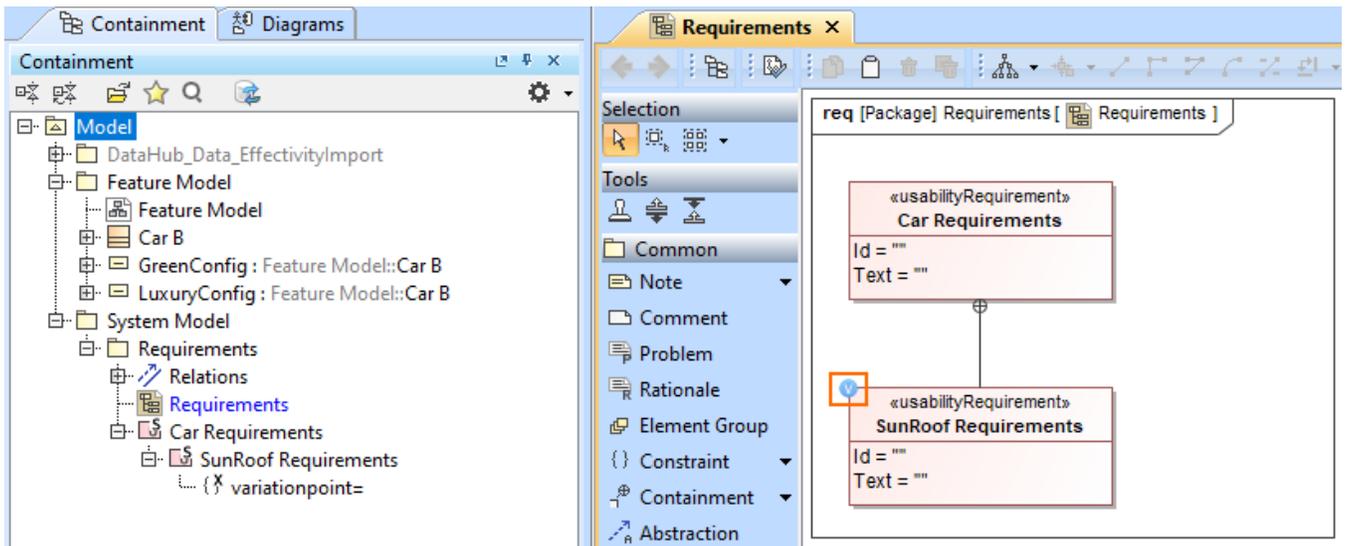
Now you can import requirements into your project. [Learn more about requirements import >>](#)

For successful requirement variability data import, the imported requirements must have the same Model Version in the configuration context for which variability and configuration data has been imported.



The requirement configuration context in the 3DEXPERIENCE platform

When requirements with effectivity data are imported into the modeling tool, they are decorated with equivalent variation points. This is indicated with Variation Point icon adornment.



The requirements imported from DataHub are adorned with a Variation Point icon

The effectivity expression data, consisting of the selected variants and options, is converted into the variation point expression. This expression is visible (but not editable) in the Expression field of the variation point. The language of the expression is set to "3DEXPERIENCE Effectivity" (see the following image).

Car Requirements A

Display Name	Revision	Type	Covers	Refined Into	Parameter Value	State	Priority	Difficulty	Importance	Classification
1 Car Requirements A	A	Requirement				In Work				
☑ SunRoof Requirements A	A	Requirement				In Work	Low	Low	Least Important	Functional

Edit Variants and Options - undefined

Configuration context: Car

Type to add Variant/Option Search Variants / Options

<input type="checkbox"/>	<input type="checkbox"/>	Description	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	InteriorOptions			
<input type="checkbox"/>	SunRoof		✓	<input type="checkbox"/>
<input type="checkbox"/>	BodyColor			
<input type="checkbox"/>	CayenneRed		✓	<input type="checkbox"/>

Variant/Option Expression

Car: InteriorOptions{SunRoof} AND BodyColor{CayenneRed}

Expression in the Requirement app

Specification of ExistenceVariationPoint variationpoint

Specification of ExistenceVariationPoint properties
Specify properties of the selected ExistenceVariationPoint in the properties specification table. Choose the Expert or All options from the Properties drop-down list to see more properties.

variationpoint

- variationpoint=
- Navigation/Hyperlin
- Feature Impacts
 - FeatureImpact[Sy
 - FeatureImpact[Sy
- ExistenceVariationPoint
 - Name: variationpoint
 - Expression: 3DEXPERIENCE Effectivity
 - FeatureImpact[System Model::Requirements::Car

Properties: Expert

Expression

Language: 3DEXPERIENCE Effectivity

Body: AND(SunRoof, BodyColorIsCayenneRed)

Same expression in the modeling tool.

OK Cancel