

Capella SysML Bridge

User Guide

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# Installation

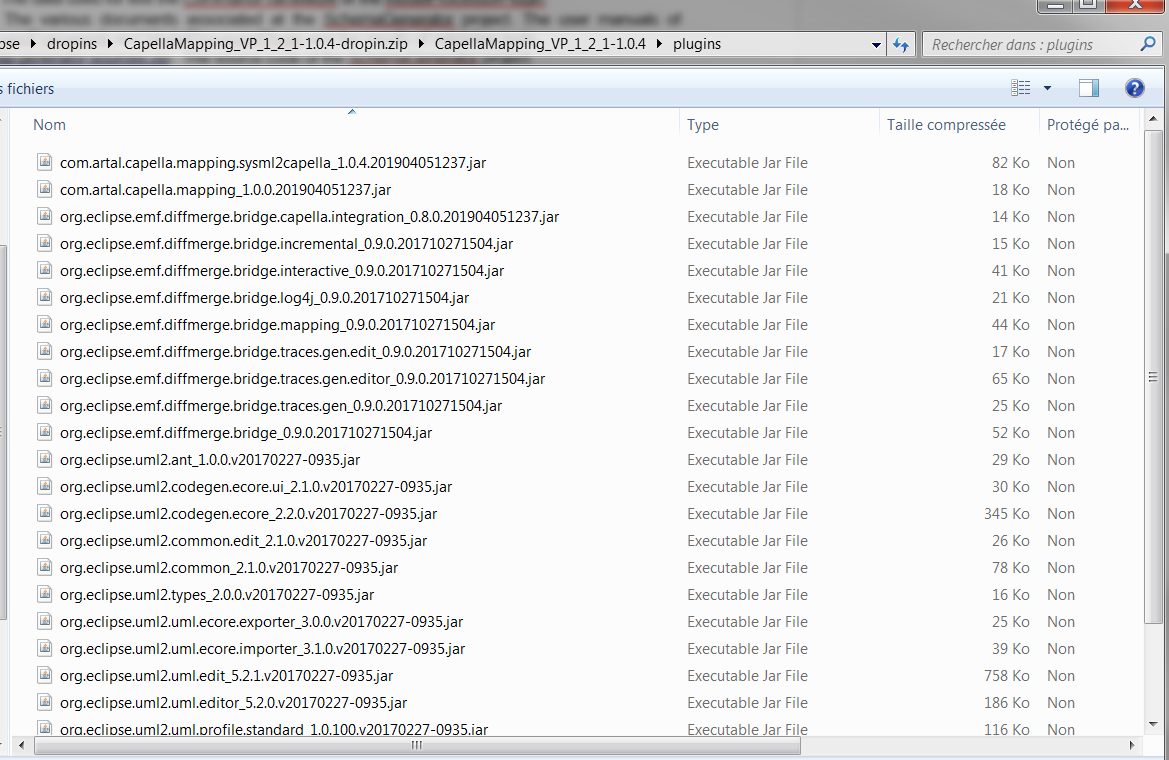
## Prerequisite

**Capella 1.2.1** are needed to execute Capella SysML Bridge.

## Delivrable

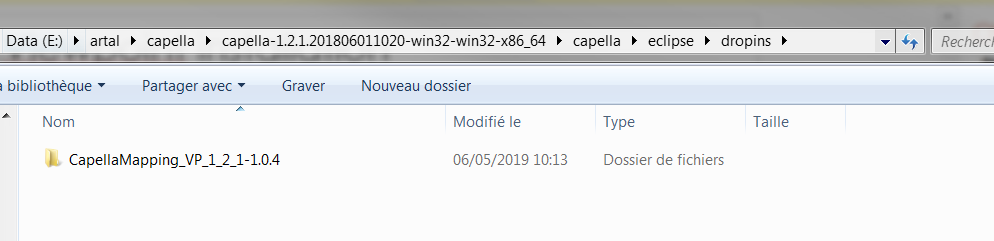
The deliverable is a zip file “*CapellaMapping\_VP\_1\_2\_1-<version>-dropin.zip”* containing the viewpoint “*CapellaMapping\_VP\_1\_2\_1-<version>”*

The viewpoint contains all the plugins to add for use the Capella SysML Bridge.

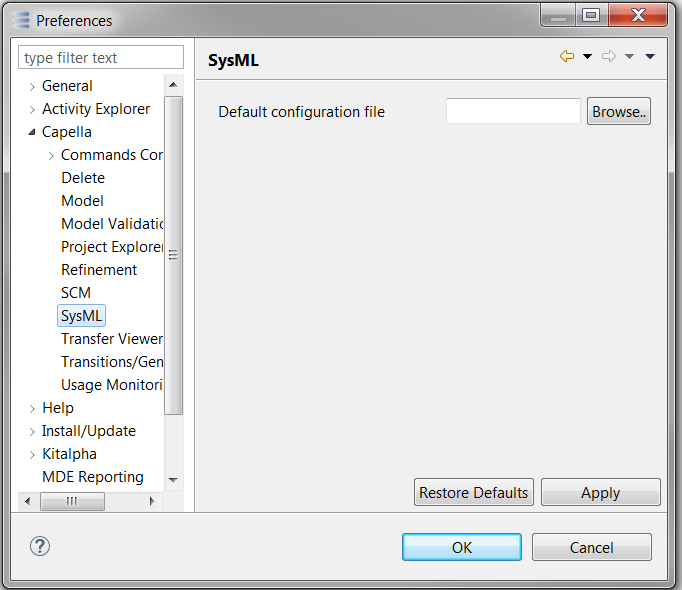


## Install CapellaMapping\_VP\_1\_2\_1-1.0.4 viewpoint

* Unzip the “*CapellaMapping\_VP\_1\_2\_1-<version>-dropin.zip”* and copy the “*CapellaMapping\_VP\_1\_2\_1-<version>”* viewpoint in the Capella 1.2.1 **dropins** folder.



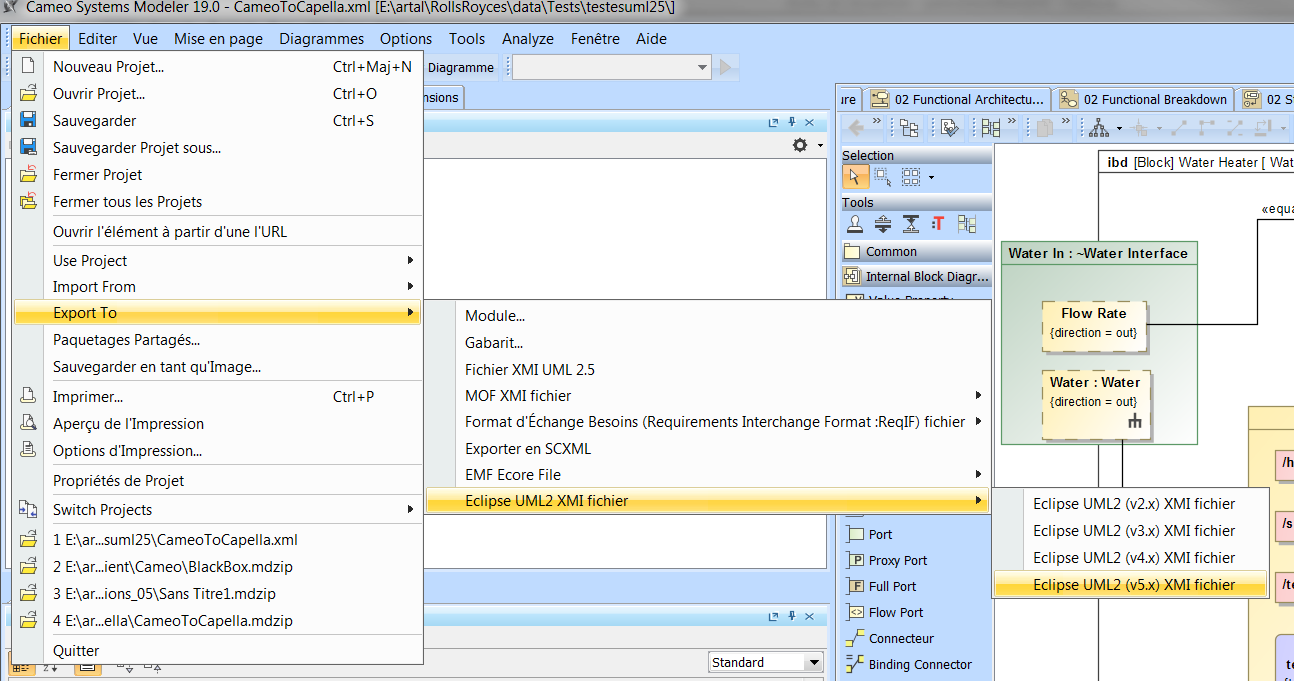
* Open Capella 1.2.1.
* Open the “Window -> Preferences -> Capella -> SysML” wizard to check the Capella Bridge is correctly installed.



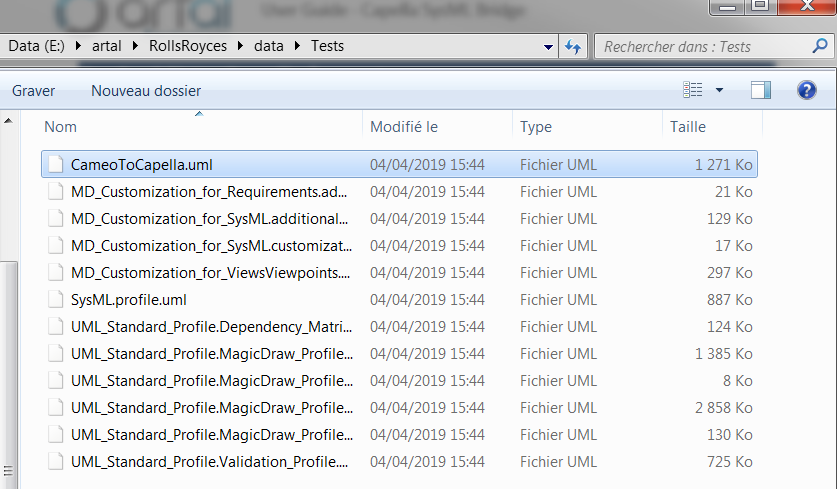
# SysML to Capella import

## Supported input data

* The supported input data shall be exported from Cameo Systems Modeler in the *Eclipse UML2 (v5.x) XMI file* format.

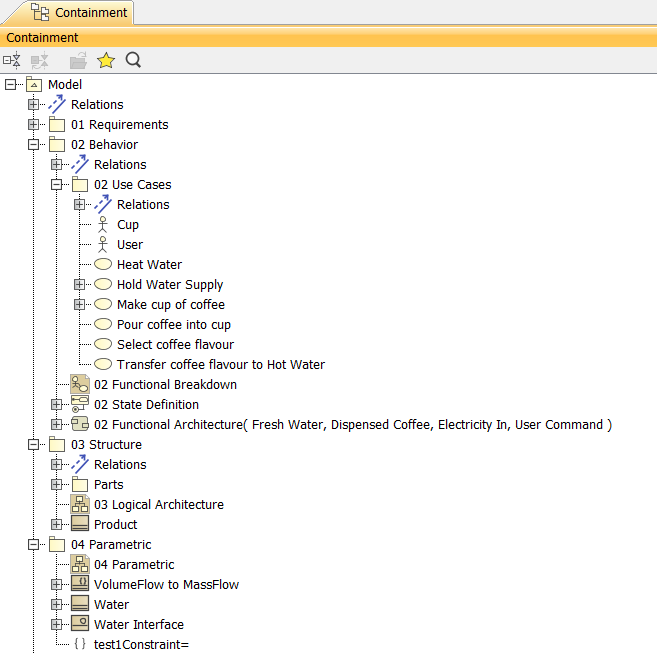


* Among the exported files, the supported input data is the *<Project Name>.uml* file.



## Configuration

* The Cameo System Modeler user can build his project with a personal structure.



* Capella Bridge needs a configuration file to read the personal structure.

This configuration file is a XML file with the following structure:

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<configurations>

<useCasesPath path=*"02 Behavior/02 Use Cases"* />

<activitiesPath path=*"02 Behavior/02 Functional Architecture"* />

<partPath path=*"03 Structure/Parts"* />

<productPath path=*"03 Structure/Product"* />

<parametricPath path=*"04 Parametric"* />

</configurations>

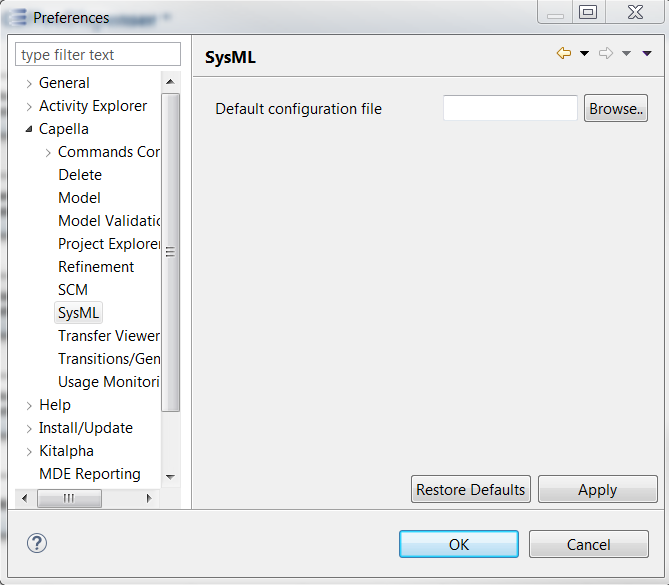
1. **Use cases path** defines the Cameo packages containing the Actors, Capabilities and Associations (between Actors and Capabilities) to transform to Capella LogicalActor and CapabilityRealization elements.
2. **Activities path** defines the Cameo packages containing the Functional Architecture to transform to Capella LogicalFunction breakdown structure.
3. **Part path** defines the Cameo packages containing the Blocks to transform to Capella LogicalComponent elements.
4. **Product path** defines the Cameo block package containing the root block.
5. **Parametric path** defines the Cameo package containing the Blocks to transform to ExchangeItem and Class Capella elements.

## Execution

**Prerequisite:** Before to launch the mapping, the Capella user shall create an empty Capella poject.

### Set the default XML configuration file.

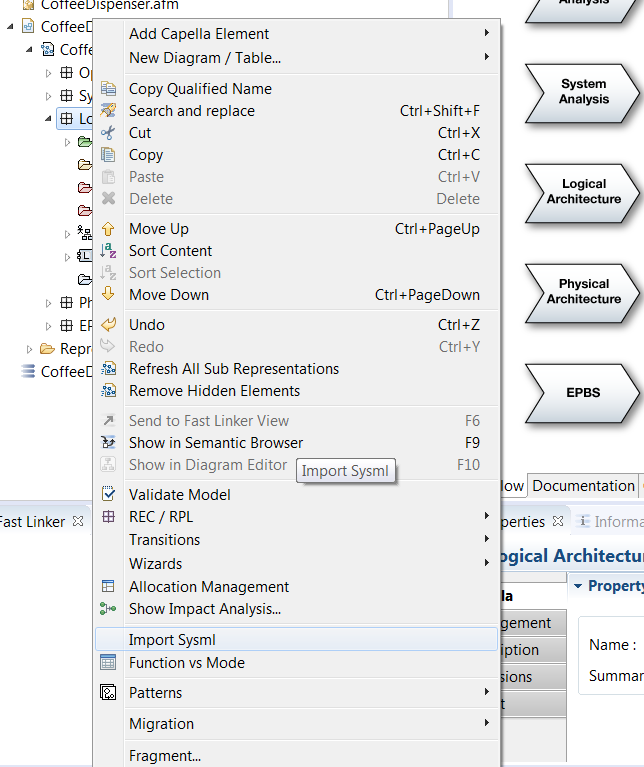
* Select the “Window -> Preferences -> Capella -> SysML” preference to display the following wizard.



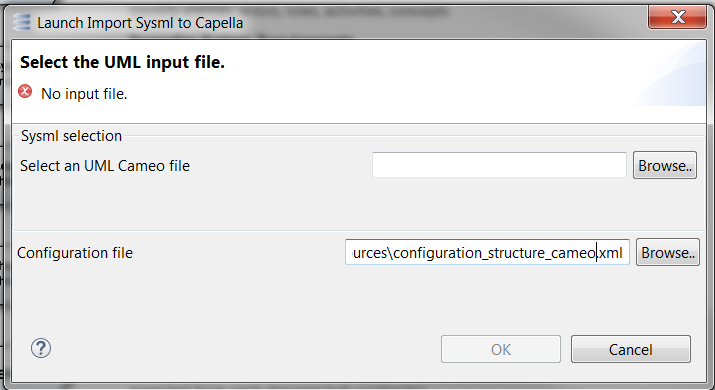
* Set the XML configuration file in the “Default configuration file” field, and click on “OK” button. In this way, this configuration file is automatically set in the import SysML launcher.

### Launch the SysML to Capella Import.

* Right-click on the Logical Architecture node in the Capella Project Explorer and the following menu displayed.

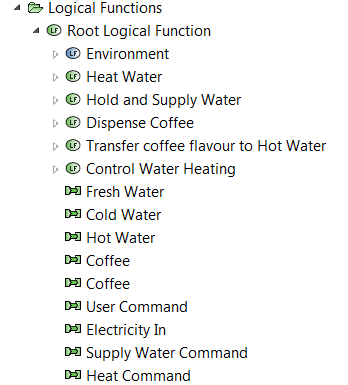


* To launch the SysML to Capella import, click on the “Import Sysml” action. The following wizard is displayed:

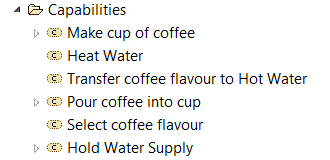


* Select, in the “Select an UML Cameo file” field, the UML input file and click on the “OK” button.
* In the Capella Package Explorer, under the Logical Architecture node, the following datas are imported:

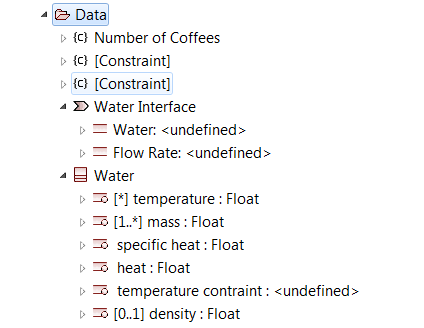
The Logical Functions breakdown structure.



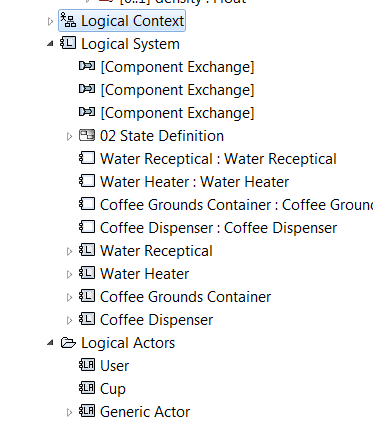
The Capabilities



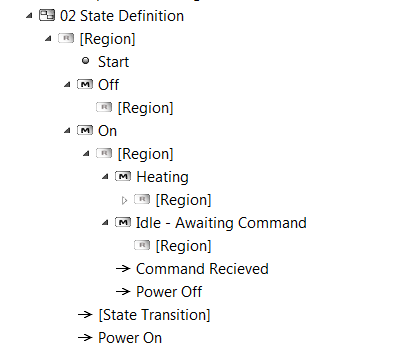
The exchange Items, the classes and the constraints



The Logical Sytem breakdown structure.



The State Definition structure



# Capella to SysML export

## Supported output

## Configuration

## Execution

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