Tutorial: SysMLv2

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In this tutorial, we will give you a SysMLv1 model (BDD, IBD and Requirement Diagram) and we will ask you to generate the equivalent SysMLv2 model.

SysMLv2, Xtend Generation

Objectives:

- Define Mapping between SysMLv1 and SysMLv2 elements
- Design in SysMLv2 textual editor and graphical plant uml editor
- Code an xtend template to generate SysMLv2 file
- Install and Manipulate SysON to design the graphical representation from the generated textual form

Exercises:

In the git repository, Import the SysMLv1 Project named ConsumerProducer

1) Define in a table the mapping between the SysMLv1 concepts used in this example and the corresponding SysMLv2 concepts

2) Design (in the textual editor) the equivalent SysMLv2 file (consumerProducer.sysml)

3) Implement an Xtend based Code generator that generated the sysml2 file from the sysml1 file

4) Reproduce the SysON graphical represented by importing the generated sysml2 file

5) We would like to create a DSML (Domain Specific Modeling Language) where the user manipulate directly the "LocalCloud", "Producer", "Consumer", "In" and "Out" Port. Define the SysMLv2 library for this DSL called ServiceArchitectureLibrary

6) Design the same model using this library (and not the predefined SysMLv2 Defintions like "Part" and "Port" Definition)