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# Papyrus Guidelines



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ONF TR-515



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## Document History

Version	Date	Description of Change
1.0	March 13, 2015	Initial version
1.1	Nov. 30, 2015	Version 1.1
1.2	Sept. 20, 2016	Version 1.2 (Copy of IISOMI 515 Papyrus Guidelines v1.2)

## Summary

This Technical Recommendation defines the guidelines that have to be taken into account during the creation of a protocol-neutral UML (Unified Modeling Language) information model using the Open Source UML tool Papyrus.

The Guidelines are not specific to any SDO, technology or management protocol.

Earlier versions of the Papyrus Guidelines (up to v1.1) have been defined solely by the IMP team of the ONF. This version, i.e., v1.2, has been progressed in IISOMI (Informal Inter-SDO Open Model Initiative) in collaboration with various SDOs, including ONF. A snapshot of the IISOMI 515 Papyrus Guidelines document v1.2 is imported to this Technical Recommendation and published as ONF TR-515.

## Documentation Overview

This document is part of a series of ONF Technical Recommendations. The location of this document within the documentation architecture is shown in the figure below:

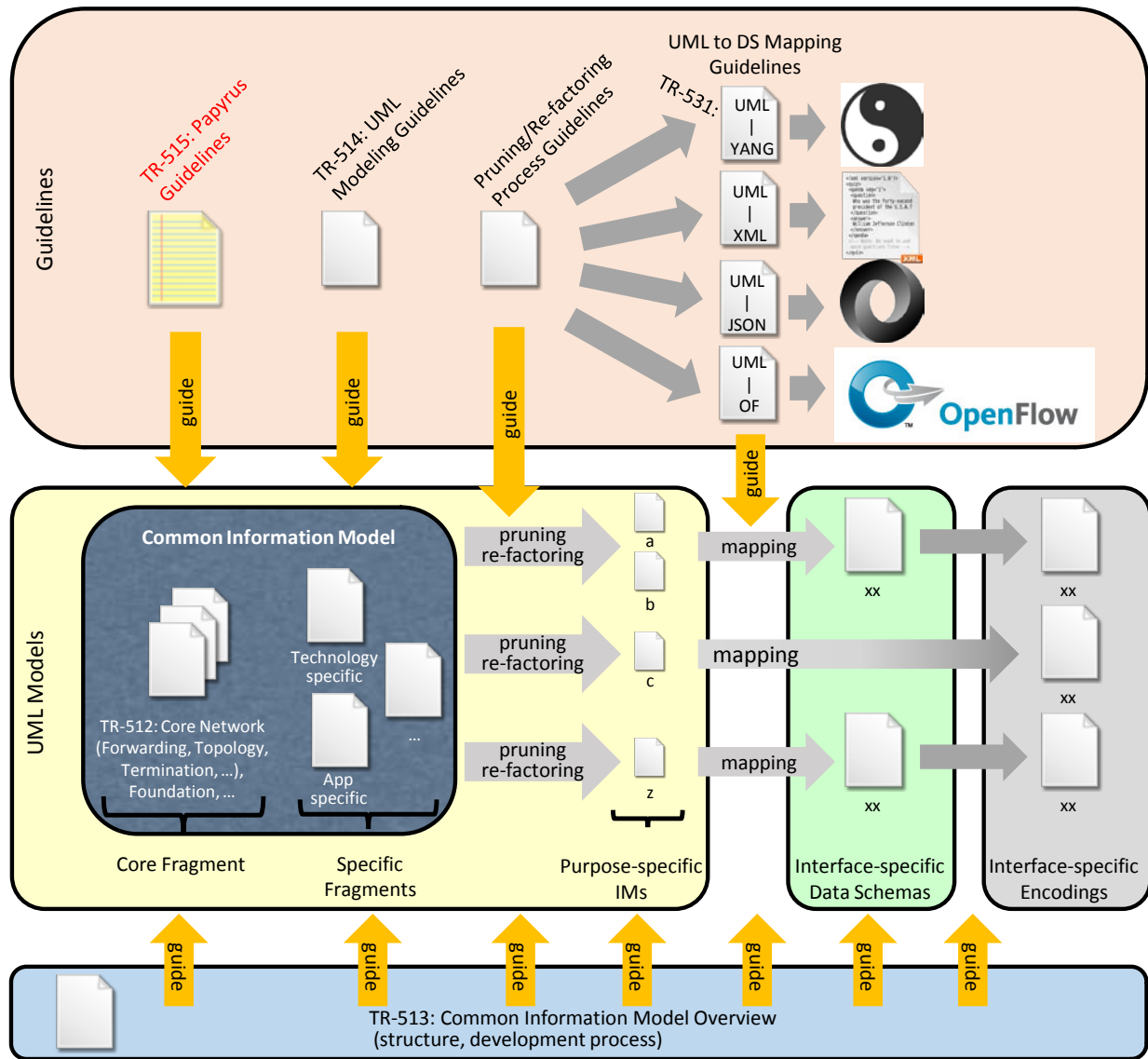
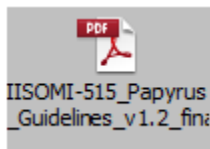


Figure 1: Specification Architecture (incl. ONF TR references)

## Imported Document



## References

- [1] IISOMI Papyrus Guidelines Version 1.2, Sept. 20, 2016.

## ONF specific enhancements

### Enhancement of Section 7.6 “Constructing Modeling Environment for a new Model”

Section 7.6 of the IISOMI Papyrus Guidelines [1] does not import the CoreModel into the modeling environment since the CoreModel has not been provided to IISOMI so far. Following is the enhanced section 7.6; incl. the CoreModel import.

### 7.6 Constructing Modeling Environment for a new Model

This section describes the prerequisites that have to be configured in order to define a new model. The following steps need to be executed:

1. Download CoreModel from Github
2. Download CommonDataTypes from Github (\* not yet on Github at time of publication)
3. Download StyleSheets from Github (\* not yet on Github at time of publication)
4. Download OpenModelProfile from Github
5. Create a new project
6. Copy downloaded CoreModel into new project
7. Copy downloaded CommonDataTypes into new project
8. Copy downloaded StyleSheets into new project
9. Copy downloaded OpenModel Profile into new project
10. Create a new model
11. Assign the OpenModel Profile to the new model
12. Load the UML Primitive Types into the new model
13. Load the CoreModel and the CommonDataTypes library into the new model
14. Add the style sheets to the new model

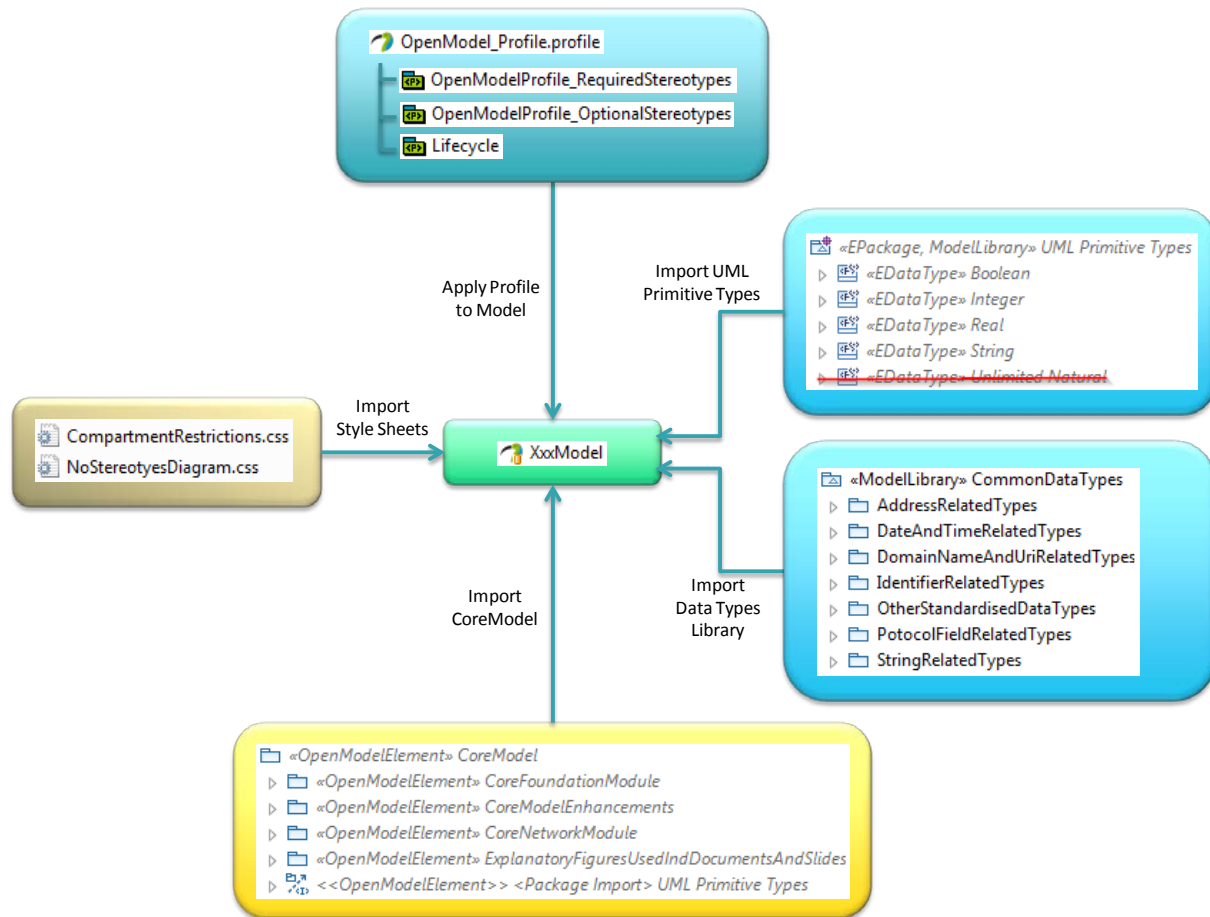




Figure 7-13: Building Modeling Infrastructure

1. Download CoreModel from Github  
See section 6.3: Steps 0 - 3.
2. Download CommonDataTypes from Github  
See section 6.3: Steps 0 - 3.
3. Download StyleSheets from Github  
See section 6.3: Steps 0 - 3.
4. Download OpenModelProfile from Github  
See section 6.3: Steps 0 - 3.

After step 4 the  Project Explorer  should have this state:

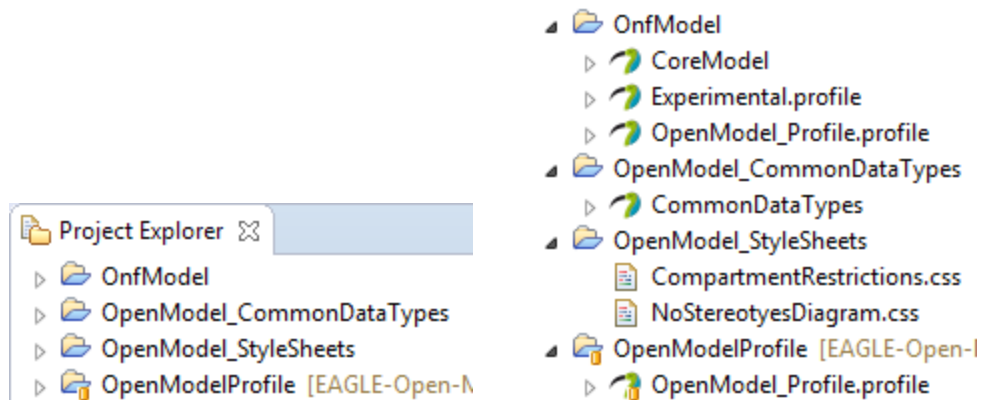


Figure 7-14: Downloaded General Files

5. Create a new project

Right click in the Project Explorer area and select *New*, Project... :

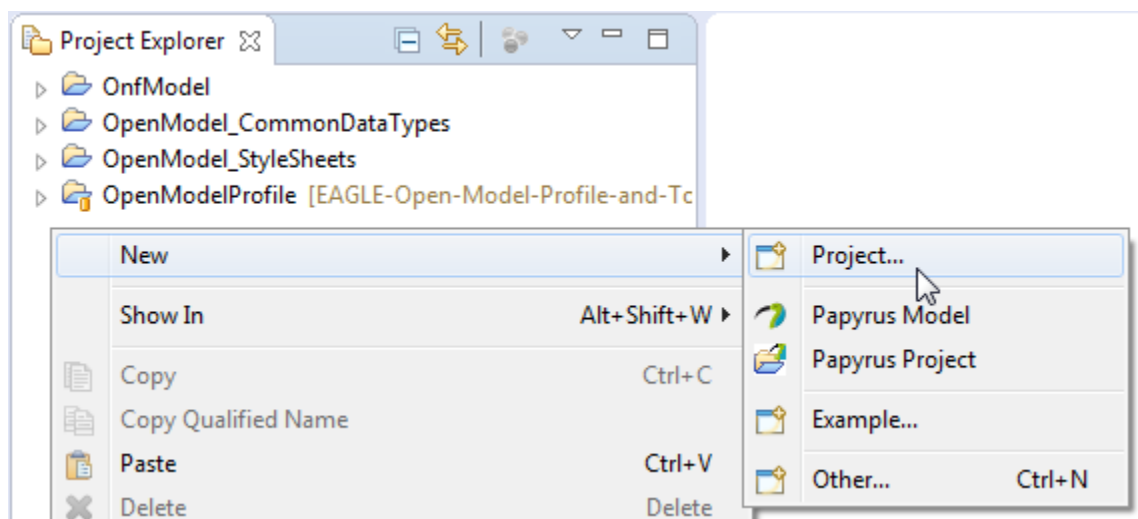


Figure 7-15: Creating a new Project (1)

Select *General*, Project :

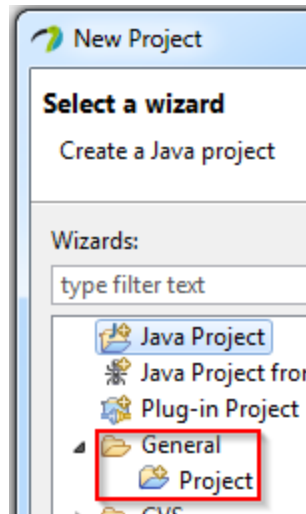


Figure 7-16: Creating a new Project (2)

Click **Next >**, enter the project name and click **Finish**  
 → XxxModel.

- Copy downloaded CoreModel into new project  
 Drag&drop (i.e., copy) the CoreModel from the OnfModel project into the new created model:

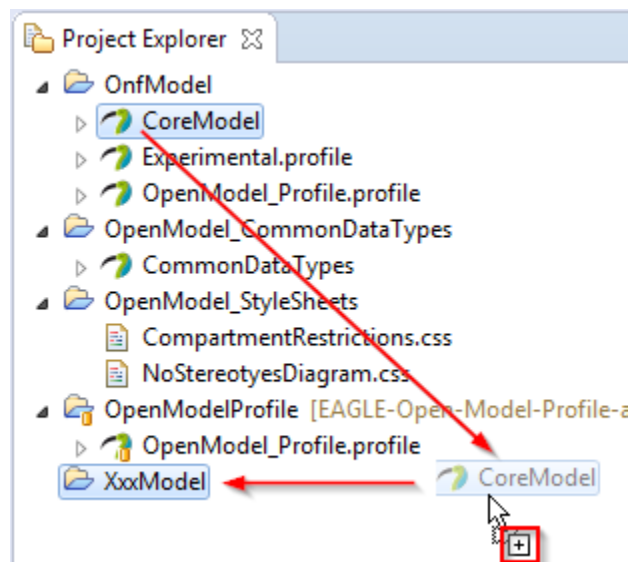


Figure 7-17: Copy CoreModel into new Project (1)

Ensure you select  **Copy files**:



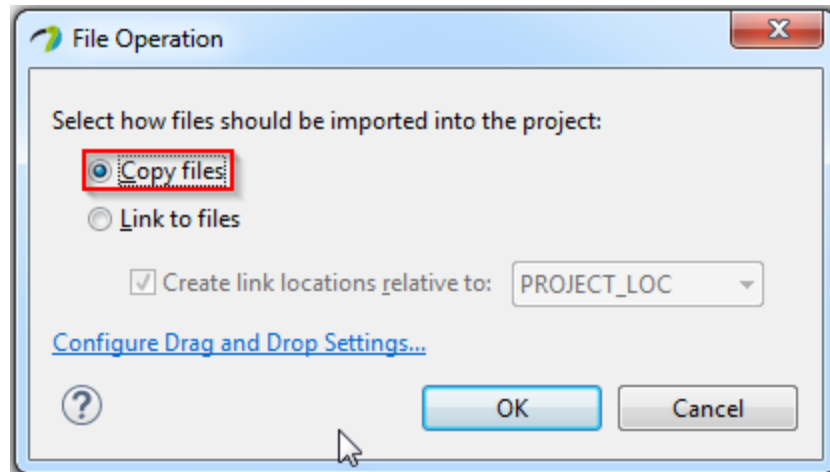




Figure 7-18: Copy CoreModel into new Project (2)

7. Copy downloaded CommonDataTypes into new project  
Similar to instructions in step 6.
8. Copy downloaded StyleSheets into new project  
Similar to instructions in step 6.
9. Copy downloaded OpenModel Profile into new project  
Similar to instructions in step 6.

After step 9 the  Project Explorer  should have this state:

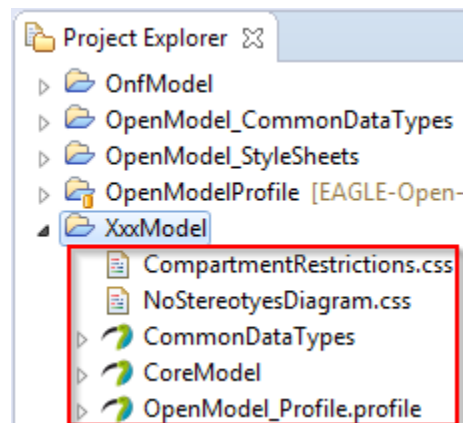


Figure 7-19: Copied General Files

10. Create a new model

Right click on the  and select *New*,  Papyrus Model:

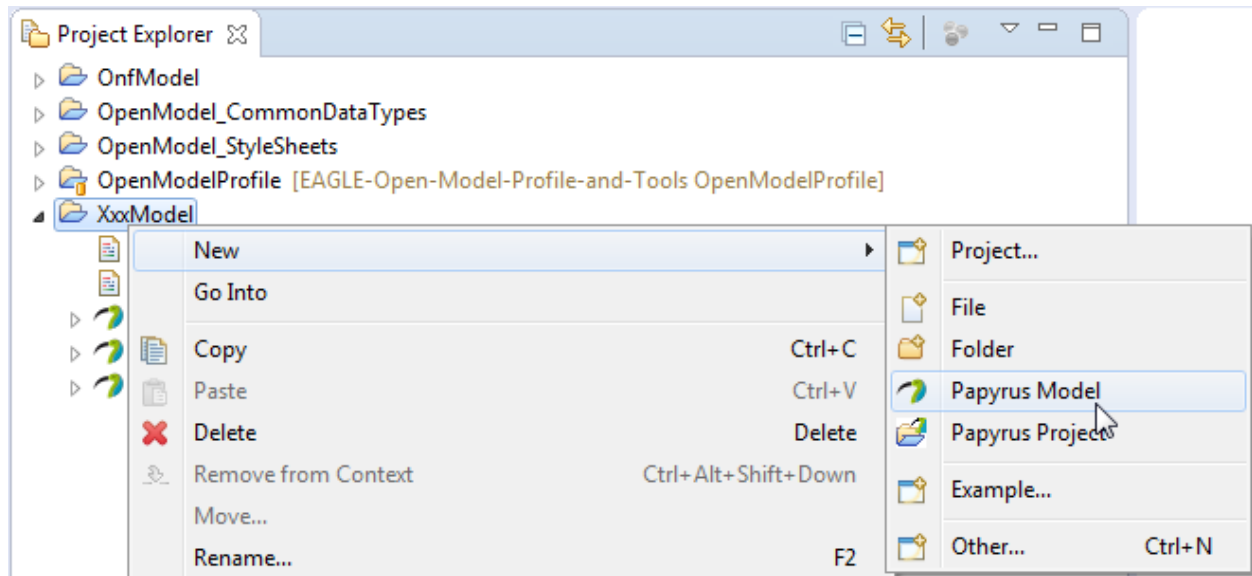


Figure 7-20: Creating a new Model (1)

Select *UML*:

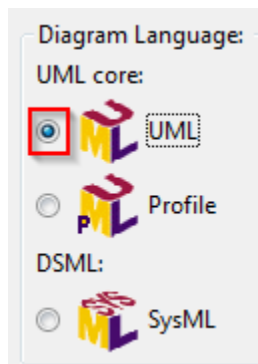


Figure 7-21: Creating a new Model (2)

Click  , enter the model file name, click  and enter the Root model element name, check the UML primitive types and choose the OpenModel\_Profile:

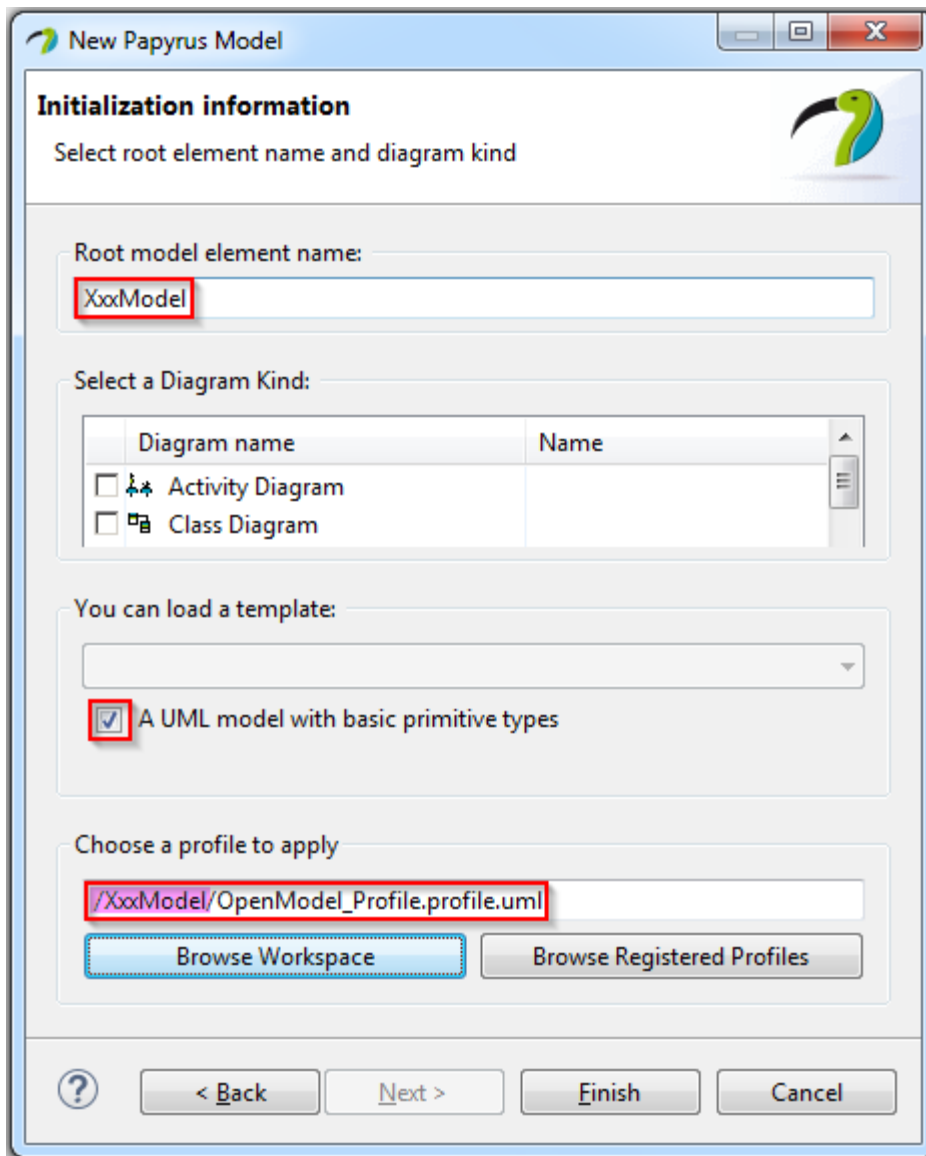









Figure 7-22: Creating a new Model (3)

Click   
 →  XxxModel .

11. Assign the OpenModel Profile to the new model  
 Already done in step 10.
12. Load the UML Primitive Types into the new model  
 Already done in step 10.
13. Load the CoreModel and the CommonDataTypes library into the new model  
 Right-click on the model package  XxxModel then via  Import and  
 Import Package From User Model select  XxxModel /  CoreModel.uml for the

CoreModel and XxxModel / CommonDataTypes.uml for the CommonDataTypes library:

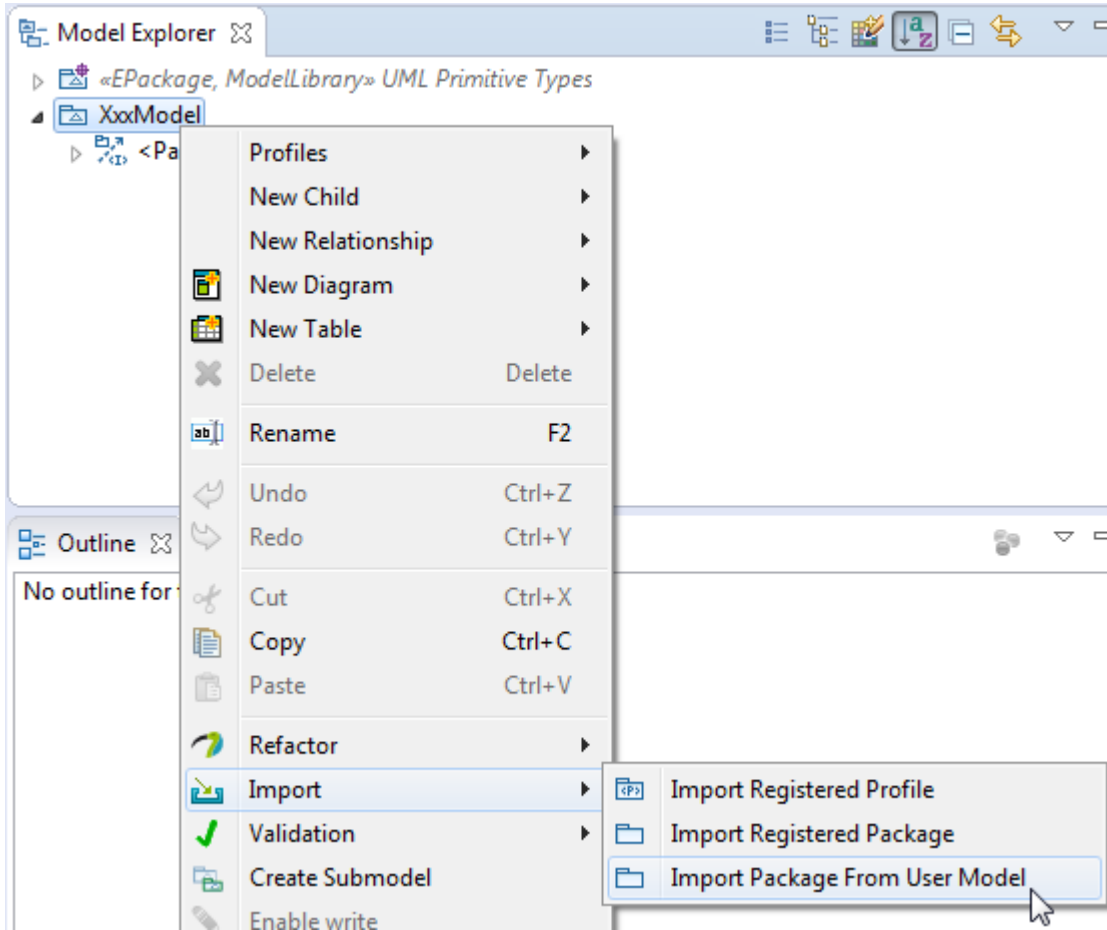


Figure 7-23: Loading CoreModel and CommonDataTypes Library (1)

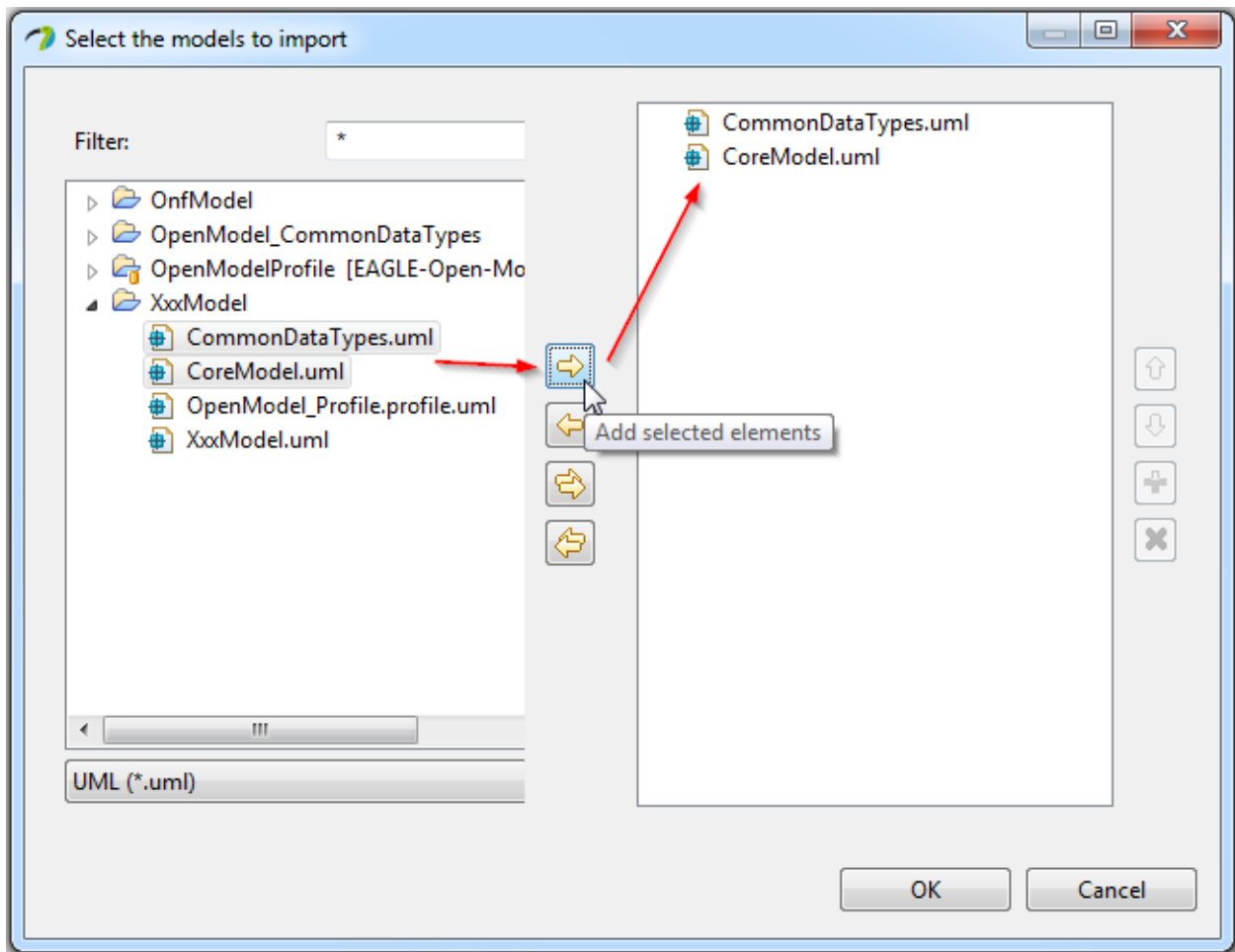


Figure 7-24: Loading CoreModel and CommonDataTypes Library (2)

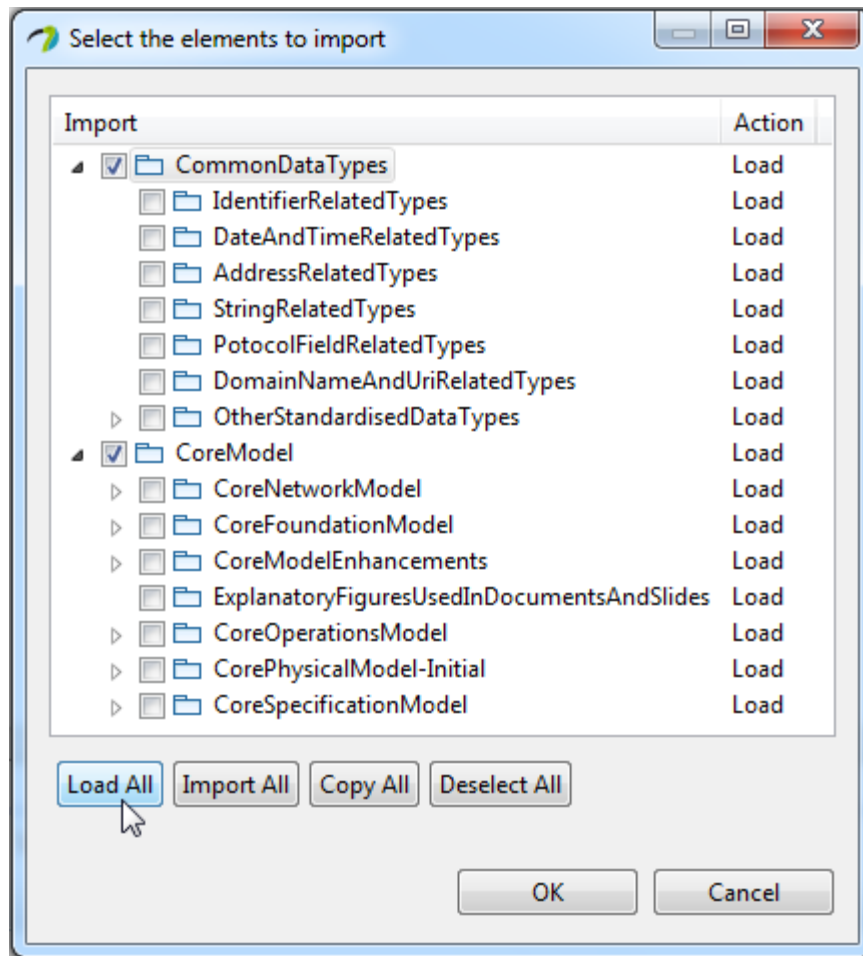


Figure 7-25: Loading CoreModel and CommonDataTypes Library (3)

It is possible to **Load All** or just a subset of the UML artifacts. This is based on the requirements of the new model.

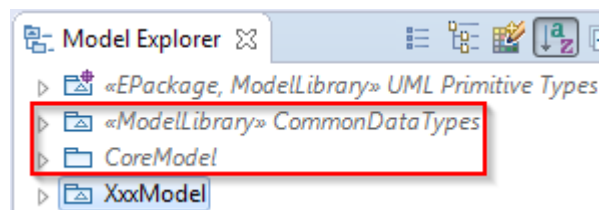
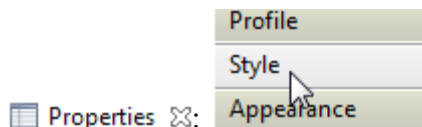


Figure 7-26: Loading Core Model and CommonDataTypes Library (4)

The designer of the XxxModel can now develop the model using the Core Model and the Common Data Types.

#### 14. Add the style sheets to the new model

Select any class diagram that was created in the XxxModel, go to the *Style* tab of the



and click left on the of the *Model style sheets* box:

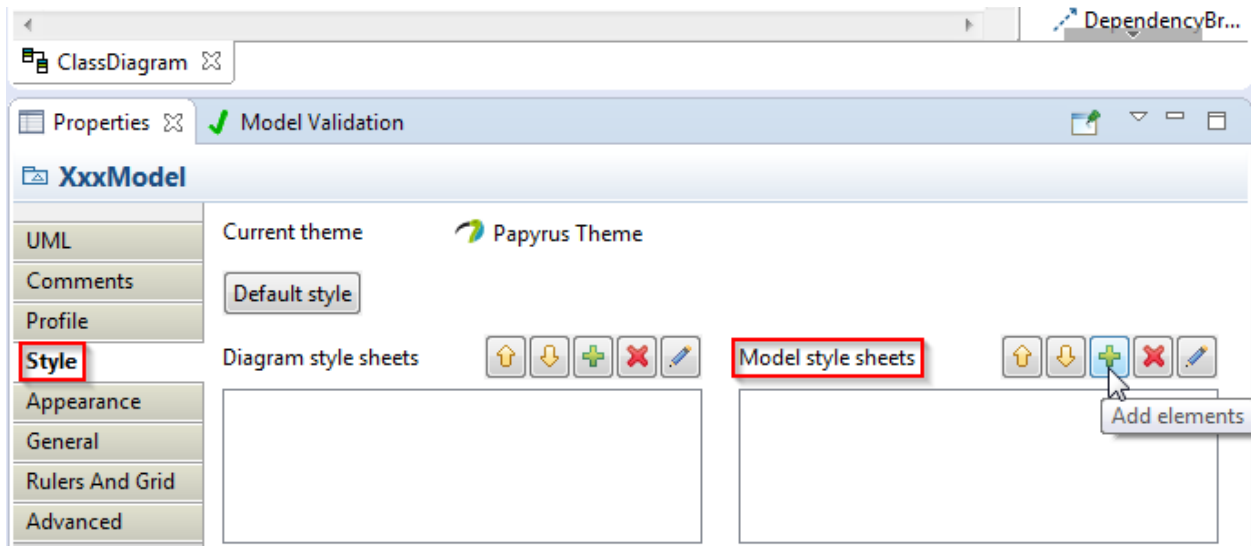


Figure 7-27: Adding Style Sheets (1)

Click left on the in the opening *Model style sheets* window and select *StyleSheetReference*:

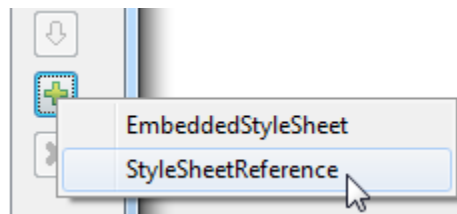


Figure 7-28: Adding Style Sheets (2)

Click and select the first style sheet contained in the XxxModel:

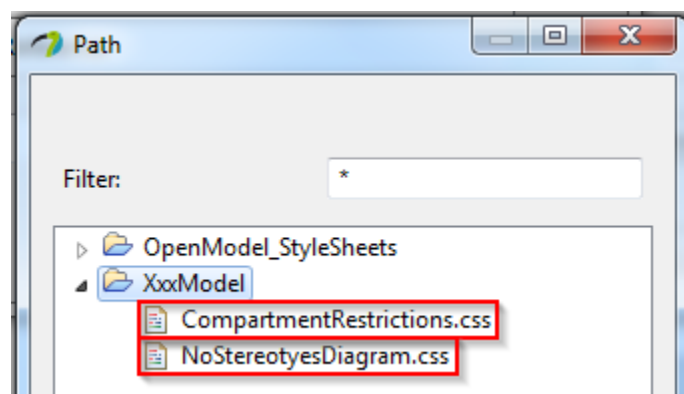


Figure 7-29: Adding Style Sheets (3)

The style sheets have to be added one after another. The resulting state is shown below:

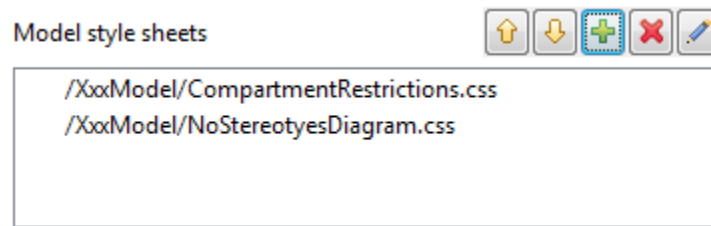


Figure 7-30: Adding Style Sheets (4)