

Capella to Enterprise Architect Extension User Guide

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1. Introduction	1
2. Procedure installation	2
2.1. Product description	2
2.2. Dropin installation	4
2.3. UpdateSite installation	5
2.4. Launch Capella	8
3. Export from Capella	10
3.1. Pre-requisite	10
3.2. Launch the Export model.....	11
4. Import to Enterprise Architect	15
4.1. Create a new Enterprise Architect Project.	15
4.2. Import Enterprise Architect model	16
4.3. Inspect Import results.....	17
5. Transformation rules	20

This document constitutes the user guide of the Capella to Enterprise Architect extension.

The extension allows to transform a Capella model to an Enterprise Architect model. This manual is composed to three sections:

- : description of the extension installation
- : description of the capella extension
- : description of the procedures to import the Capella exported model to Enterprise Architect.

The product is delivered as a ZIP archive: $X.Y.Z$, where $X.Y.Z$ the version of the current extension.

The ZIP archive contains the extension products for the both $X.Y.Z$ versions

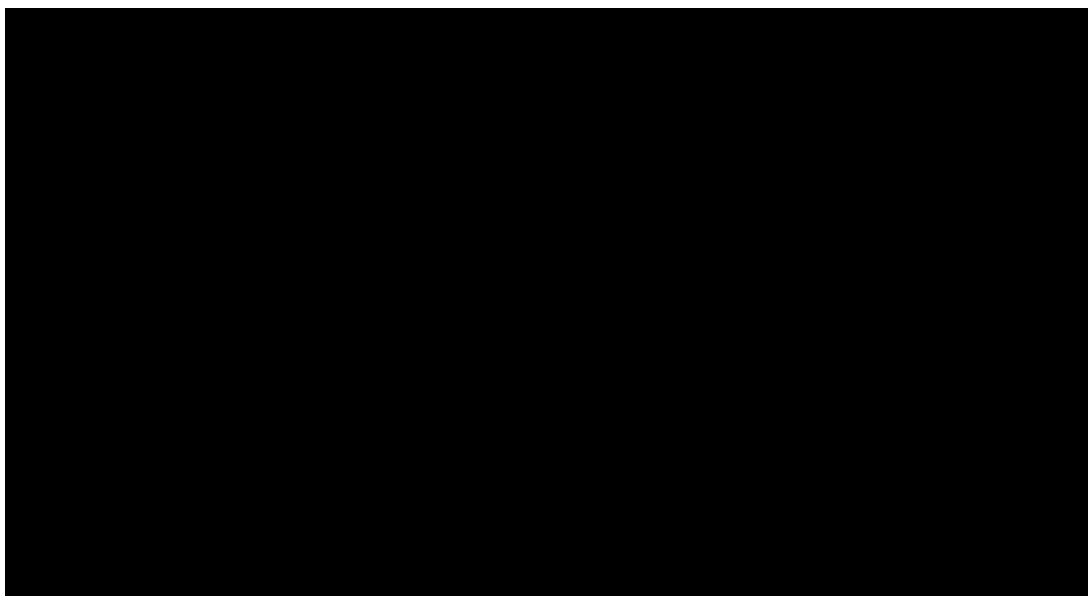


Figure 1. Compatible Capella versions.

For each capella version, a $X.Y.Z$ and an $X.Y.Z$ are delivered.

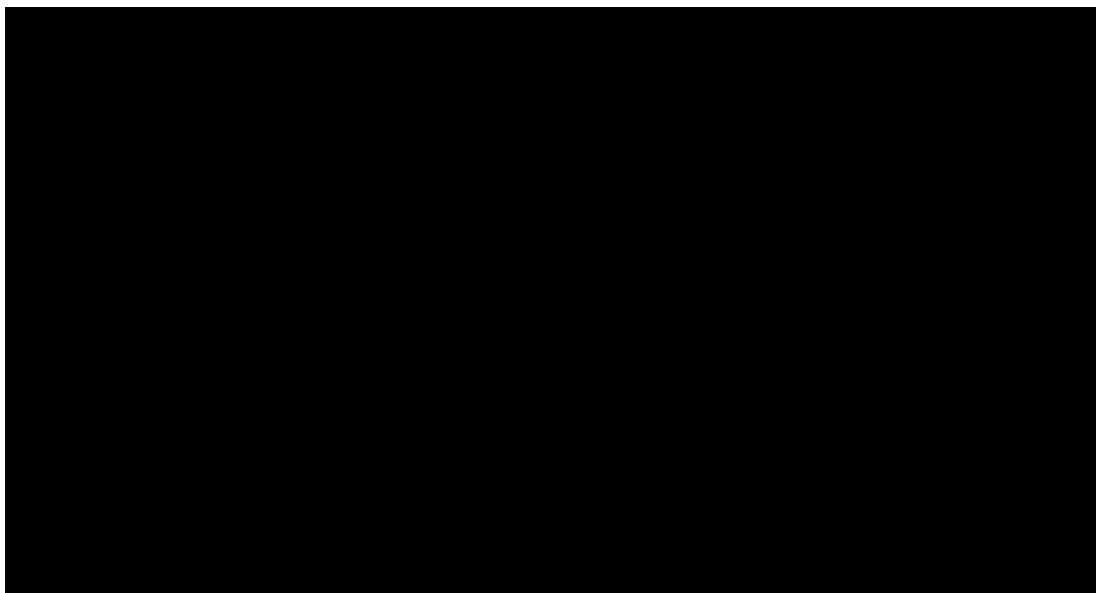


Figure 2. Dropins and Update-site are delivered.

A dropin is delivered as ZIP archive: $X.Y.Z$, where $X.Y.Z$ the version of the current extension.

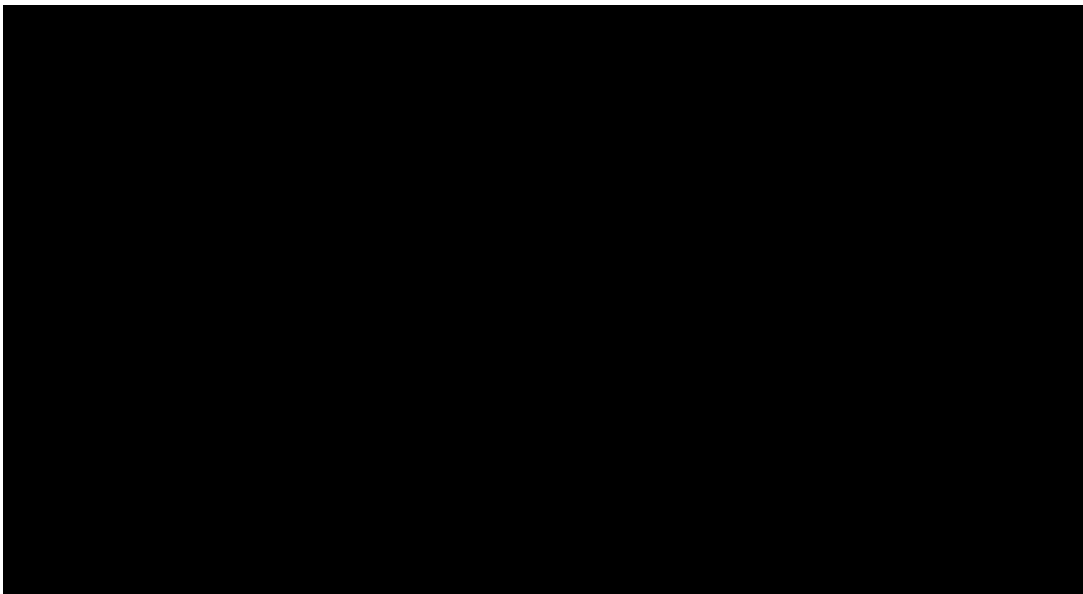


Figure 3. Dropin delivery.

An update site is delivered as ZIP archive: , where X.Y.Z the
version of the current extension.

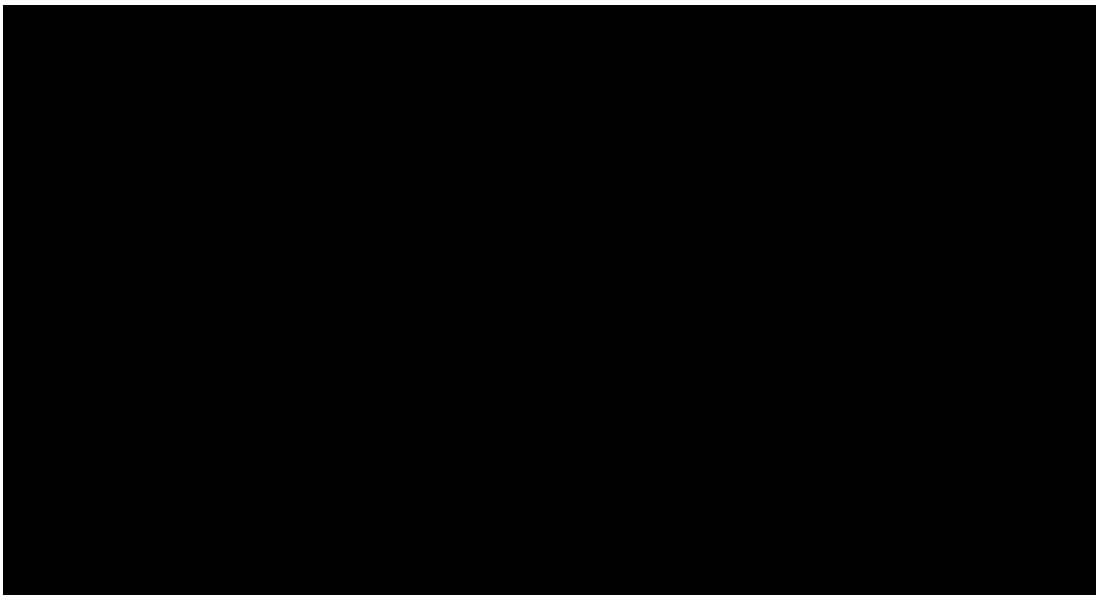


Figure 4. Update-site delivery.

Extract Delivery_CapellaEABridge_X.Y.Z.zip archive.

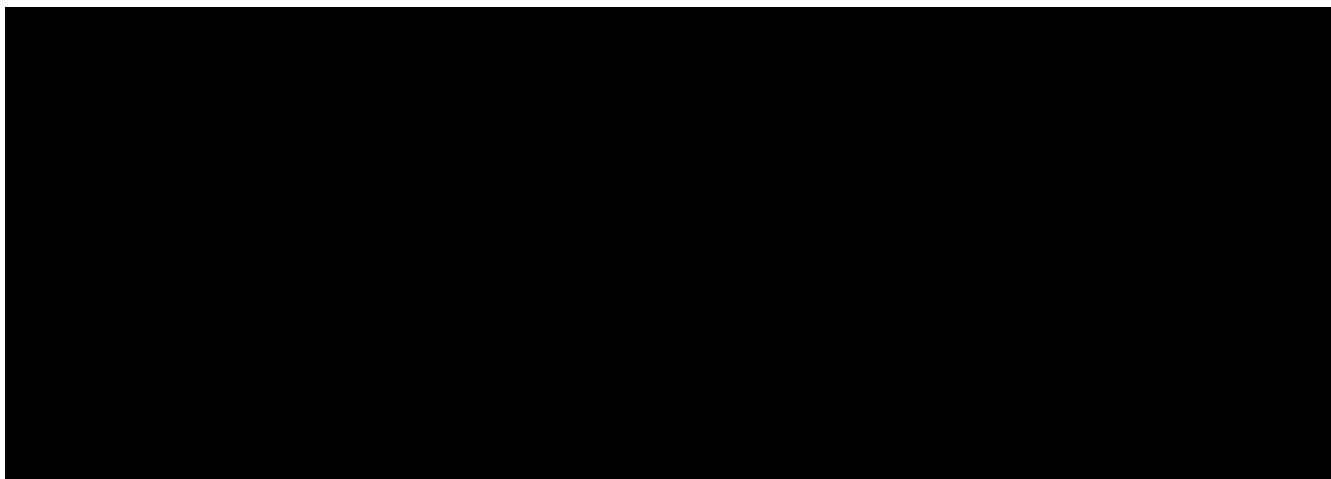


Figure 5. Delivery Extraction.

Open the dropin directory.

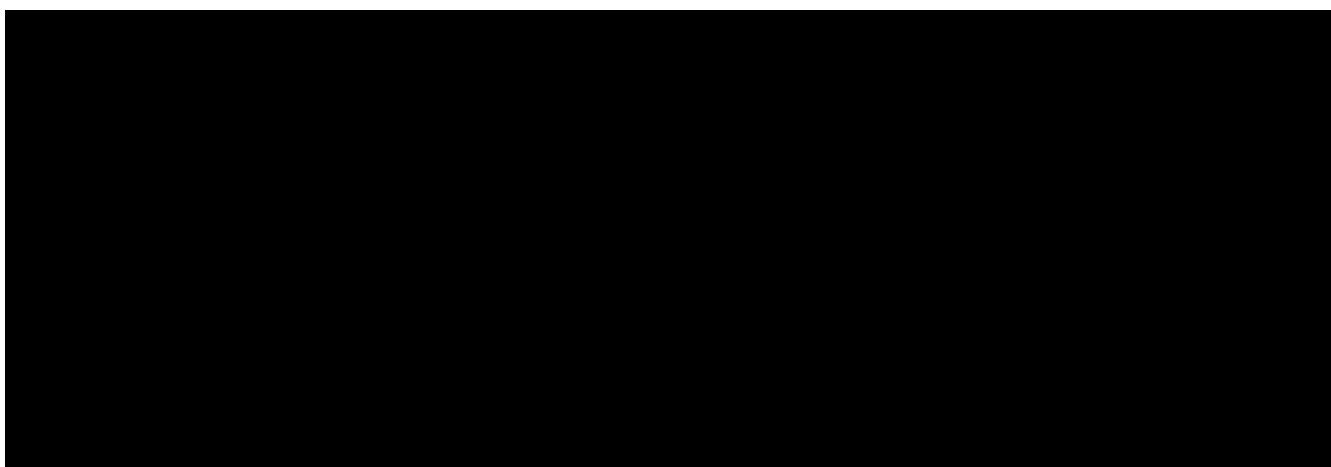


Figure 6. Dropin to copied

Copy/paste and extract the CapellaEABridge_X.Y.Z-dropins.zip into the dropins directory of the Capella_X.Y.Z installation.

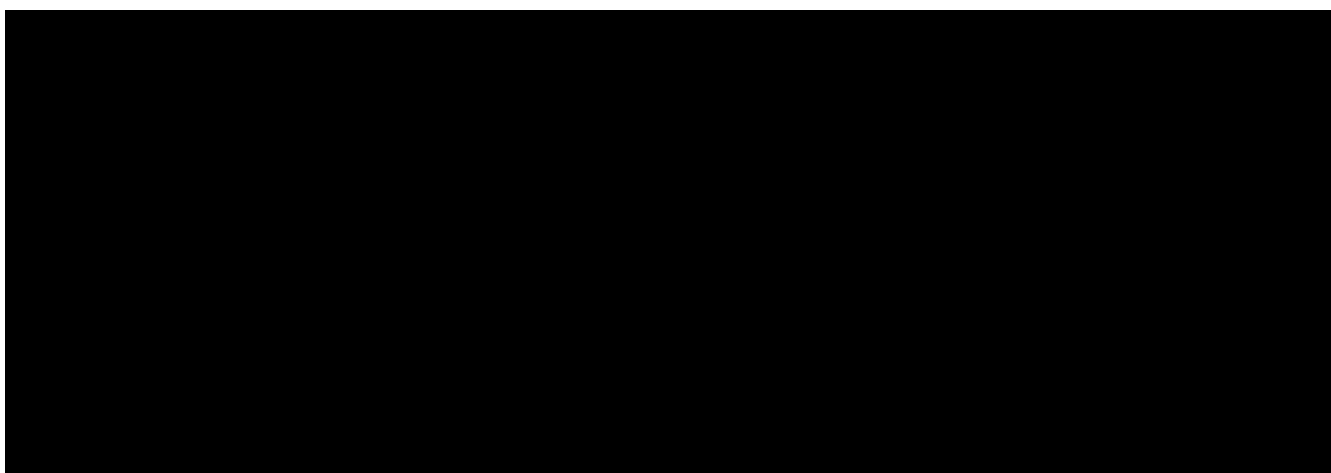


Figure 7. Extract dropin.

After, the CapellaEABridge_X.Y.Z-dropins.zip archive can be remove of the dropins directory.

Extract Delivery_CapellaEABridge_X.Y.Z.zip archive.

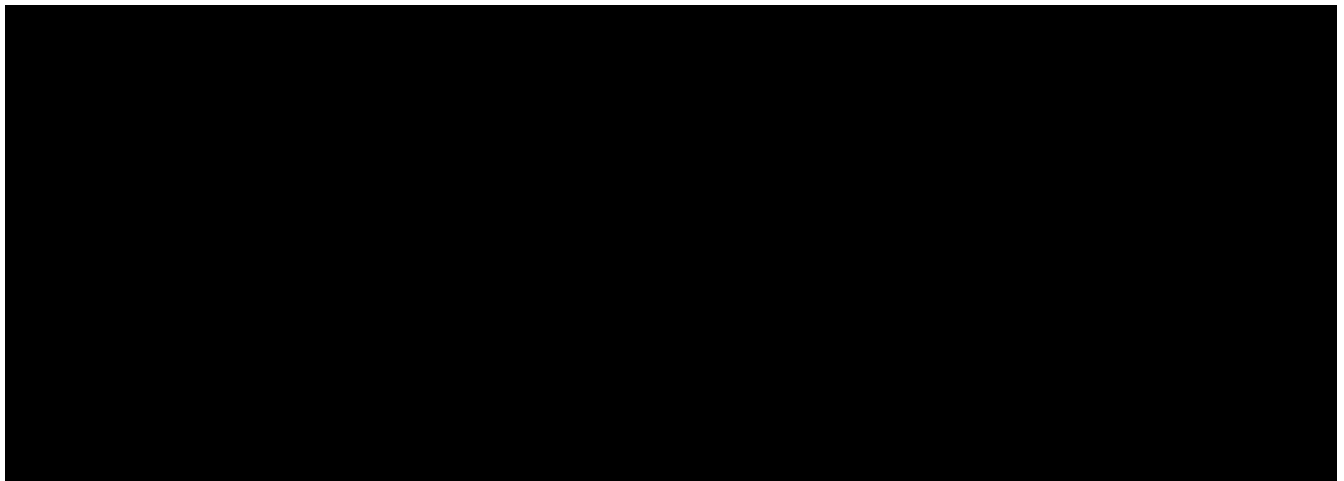


Figure 8. Delivery Extraction.

Launch Capella_X.Y.Z.

In the Capella "Help" menu, select "Install New Software...".

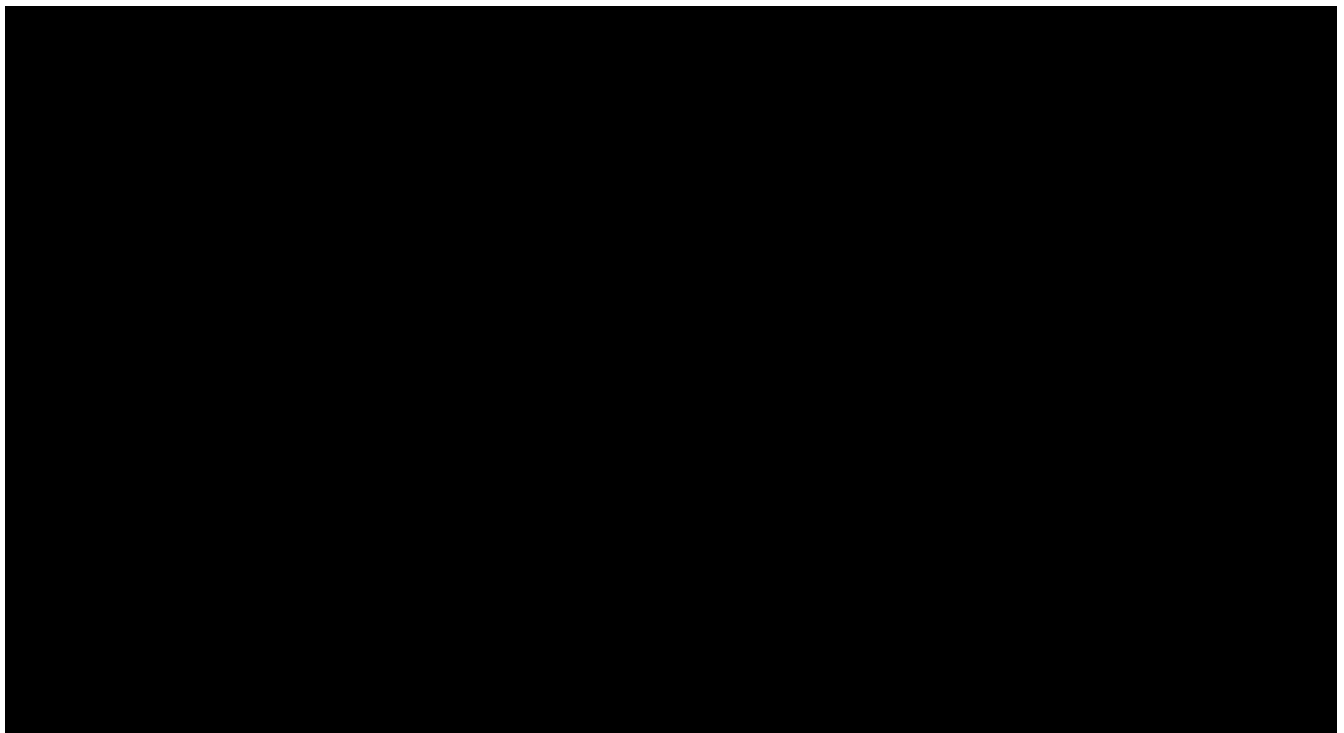


Figure 9. Menu to install new update site.

In the opened wizard, select the "Add..." button and choose the CapellaEABridge_X.Y.Z_updatesite.zip update site archive. Set CapellaEABridge in the Field "Name".

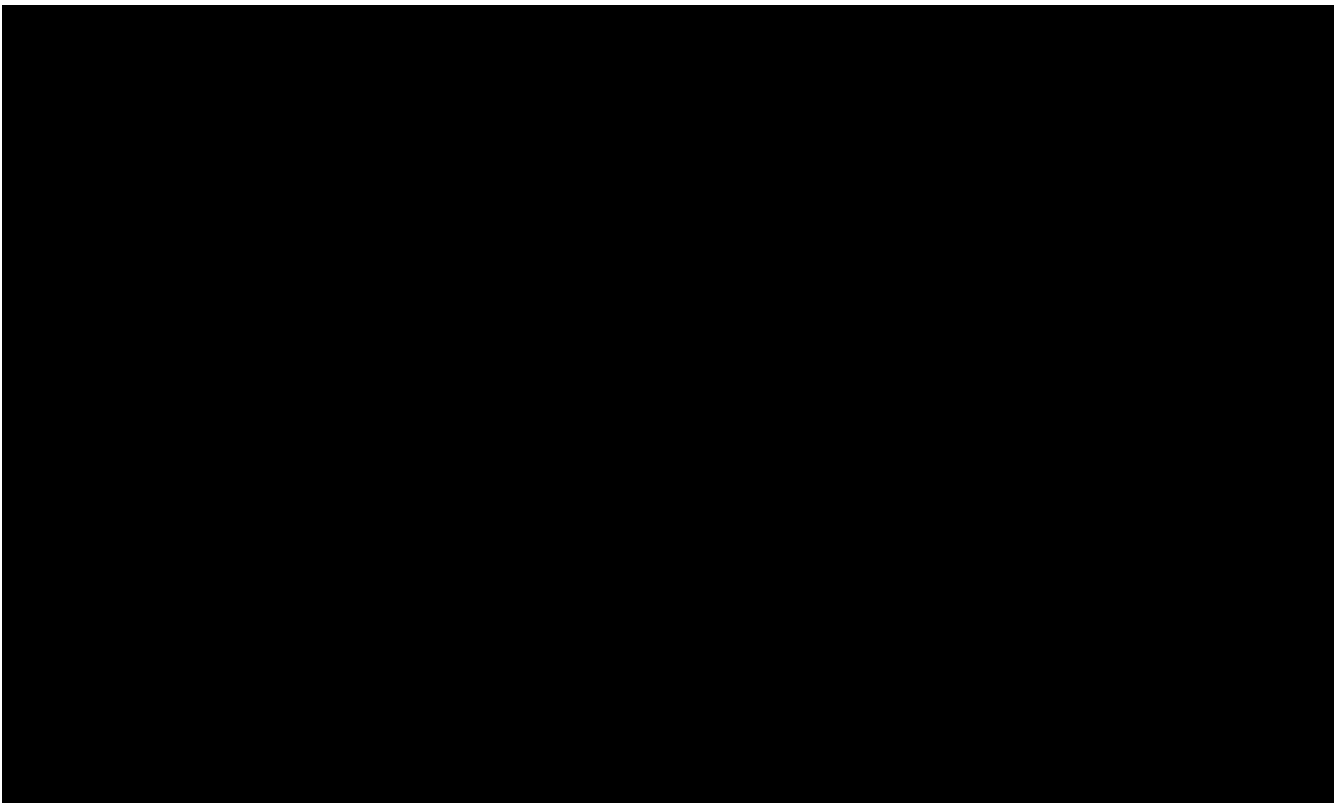


Figure 10. Add CapellaEABridge repository.

Select the CapellaEABridge feature and click on "Next" button.

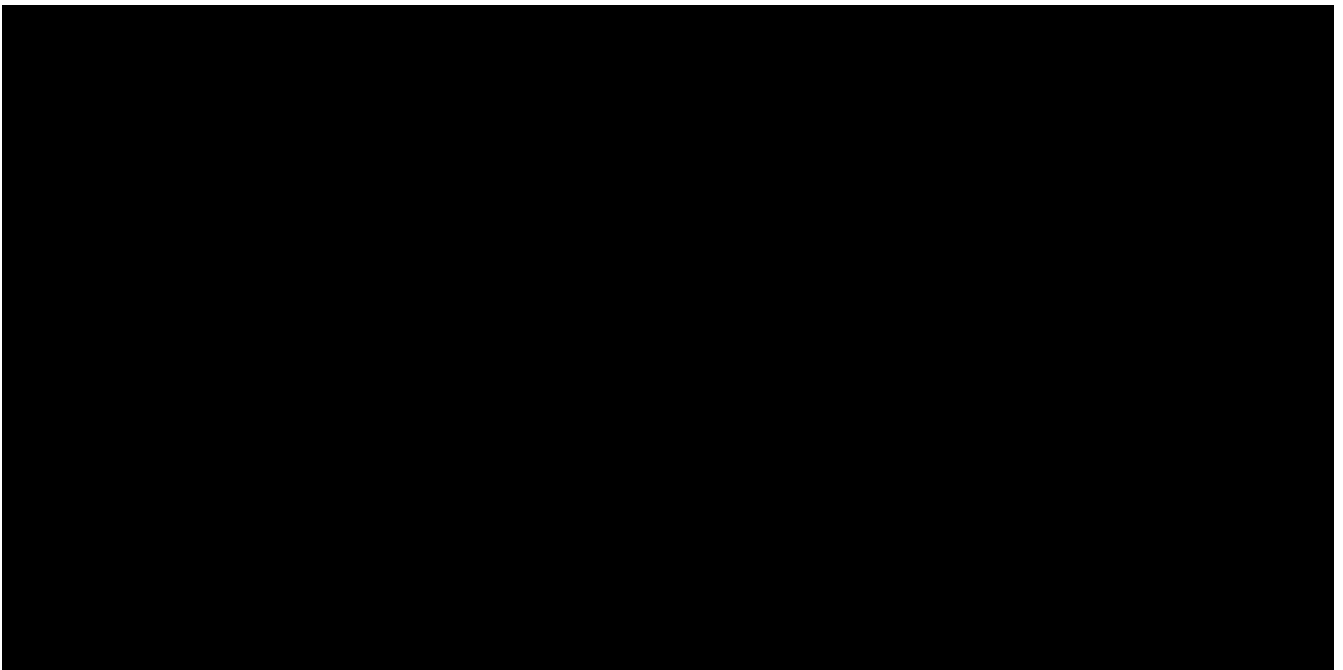


Figure 11. Select the new feature.

Click again on the "Next" button.

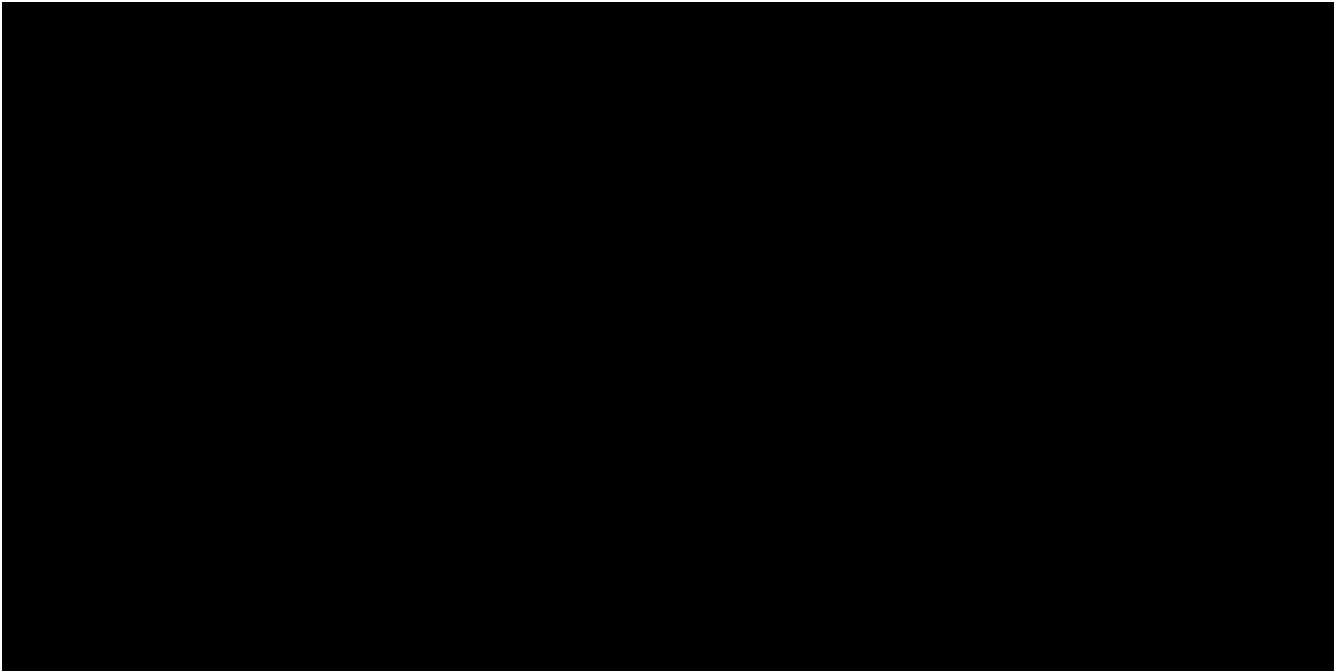


Figure 12. Review the items to be installed.

Accept the terms of the licence agreement and click on the "Finish" button.

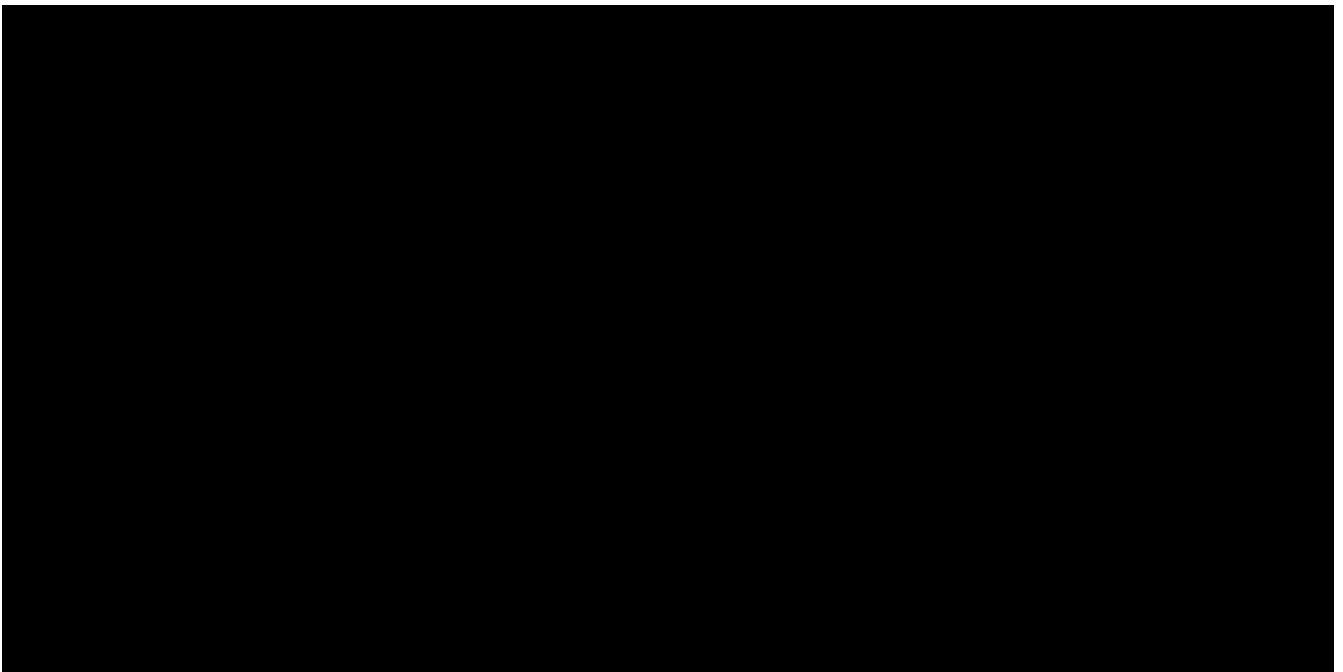


Figure 13. Accept license agreement.

After the CapellaEABridge udapte site installation, close Capella_X.Y.Z.

After installation procedure, launch Capella.

Check in the plugins installation CapellaEABridge is correctly installed.

In the Capella "Help" menu, select "About Capella".

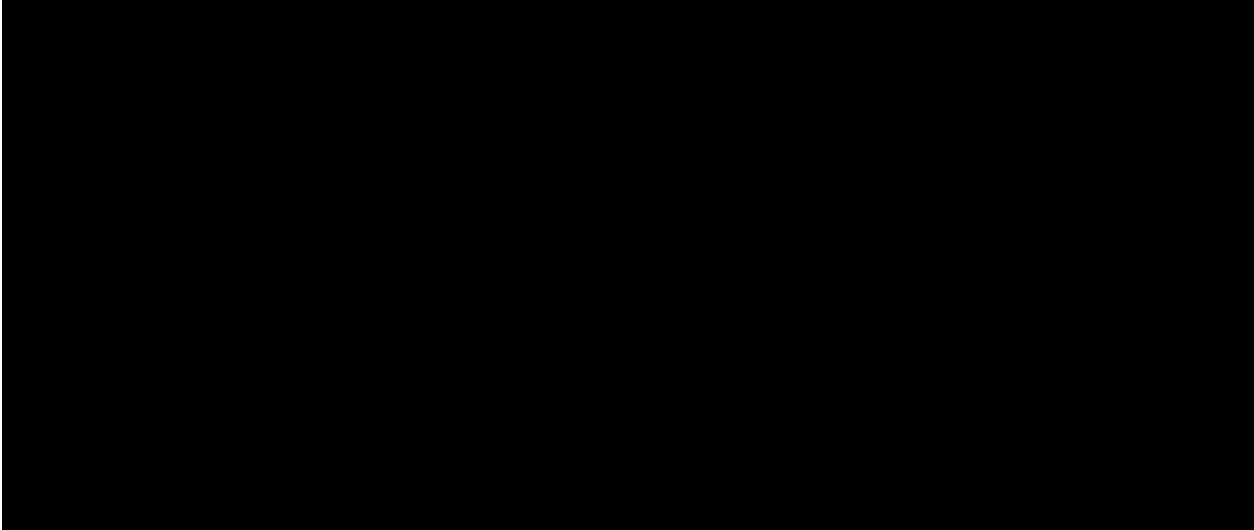


Figure 14. About Capella.

In the opened wizard, select "Installation details" button.

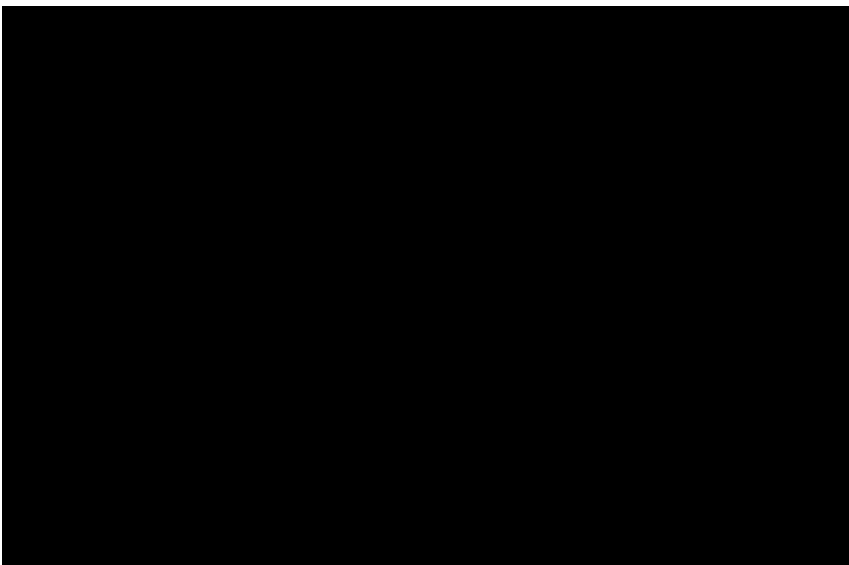


Figure 15. Installation details.

Check the Capella to Enterprise Architecture feature exists.

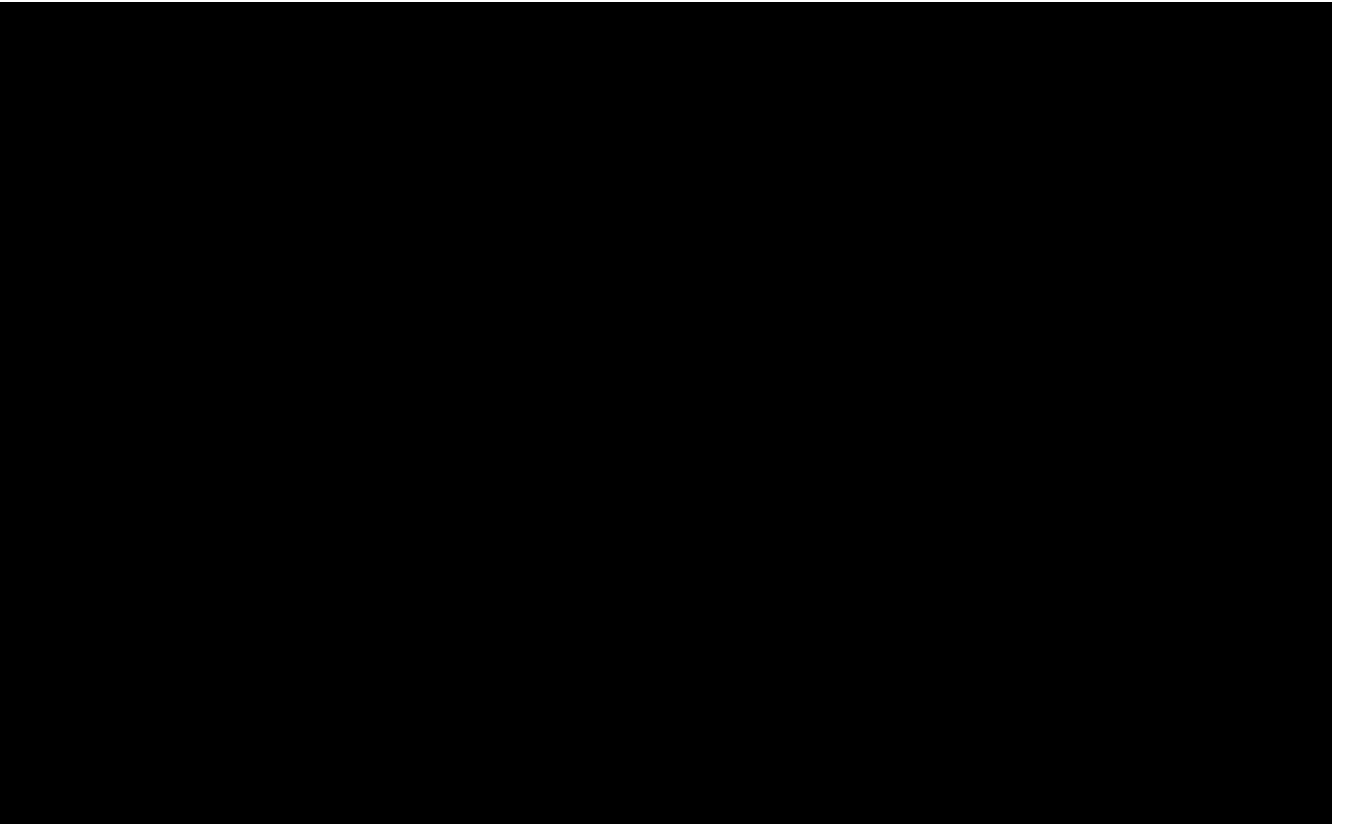


Figure 16. Capella to Enterprise feature.

- A Capella Project: The goal of the Capella to Enterprise Architect is to transform a existing capella project to a new EA model persisted in a XMI/UML file.

In the following sections, the descriptions.

Capella project is used to illustrate the

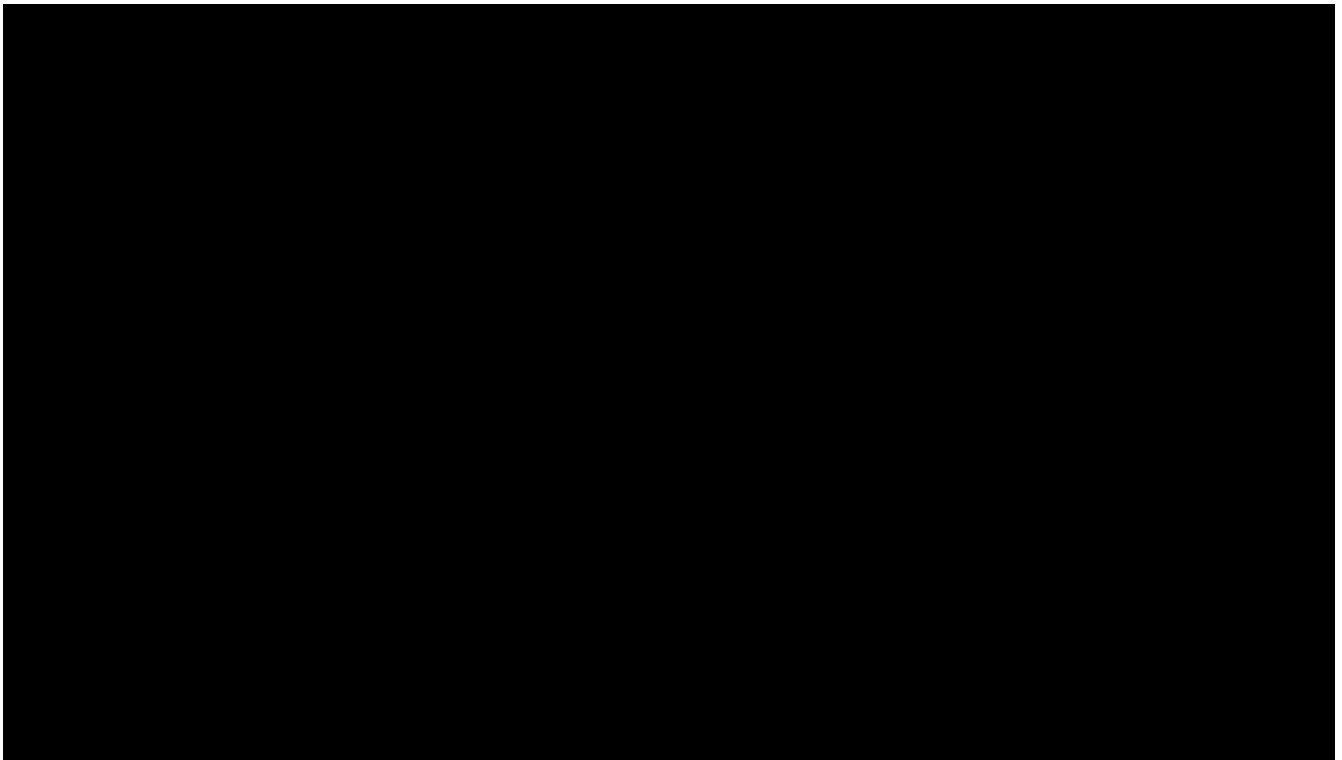


Figure 17. Capella project example.

Right click on a Capella Element, and select the "Exports" menu.

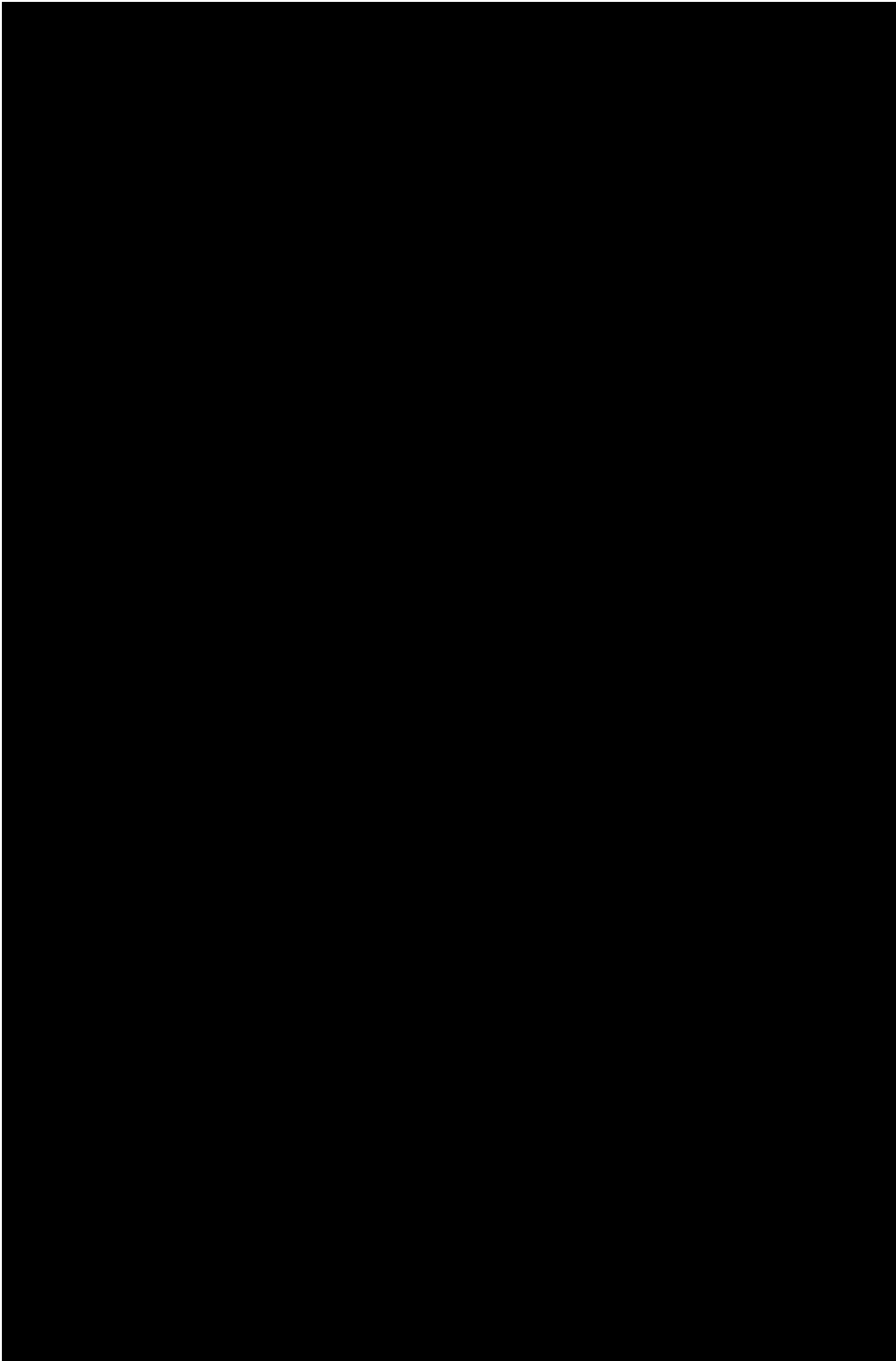


Figure 18. Exports menu

A wizard is opened. This wizard shall be filled with:

- A type of transformation.

- A target path file.
- Select a predefined alternative algorithm.

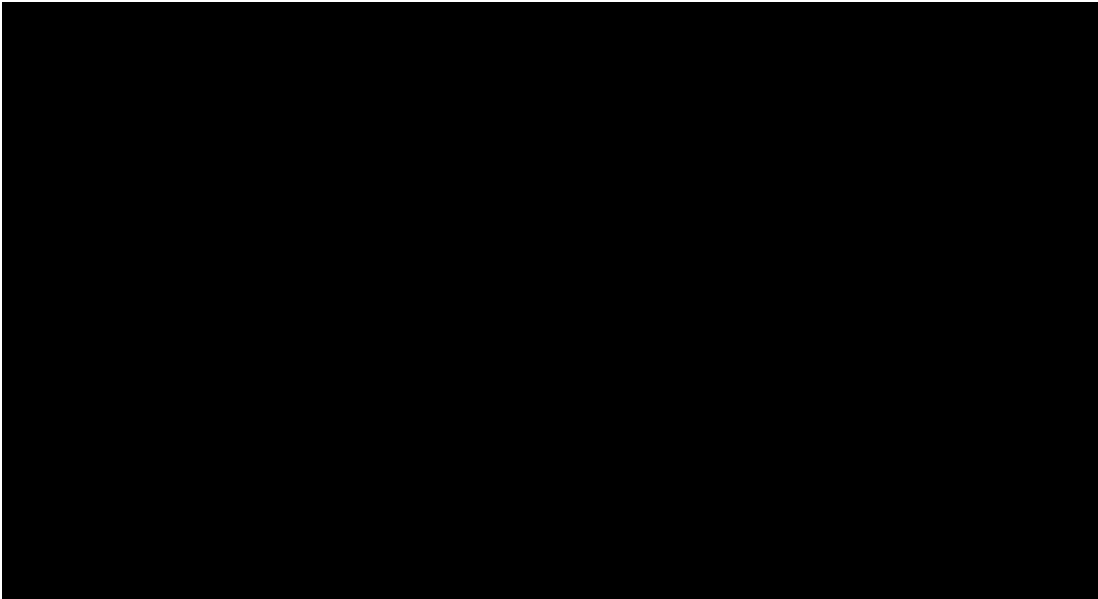


Figure 19. Export wizard.

Select a type of transformation: The field proposes the "Capella to Enterprise Architect" type.

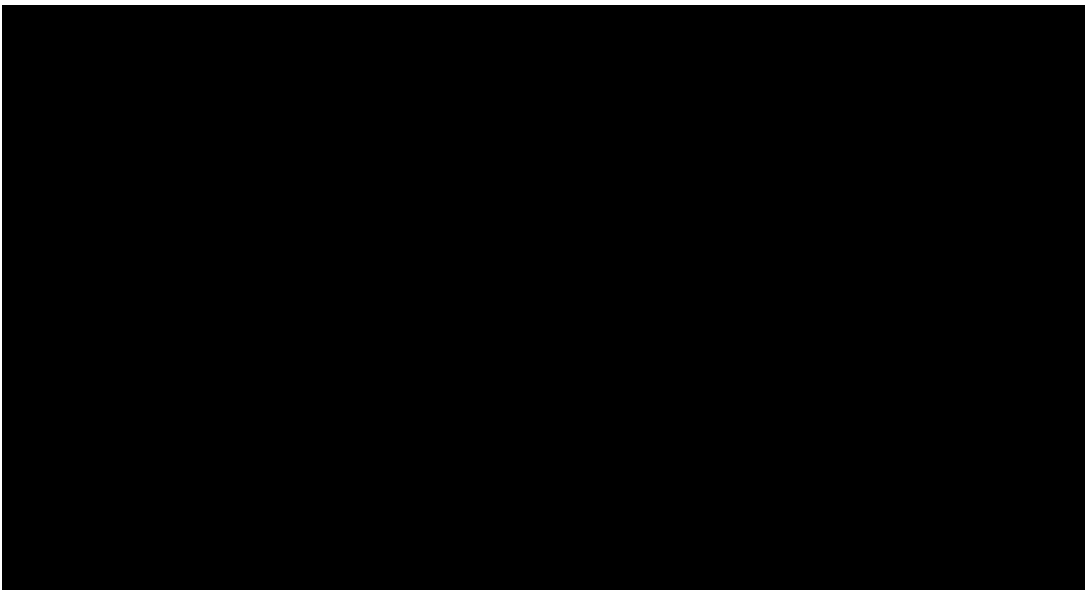


Figure 20. Type of transformation.

Select a target file. Set the target path or click on the "Browse.." button. A file selection wizard is opened. All the existing xml file are displayed.



Figure 21. Selection output file.

Select an existing xml file, or set a new file name. Click on "Open" button.

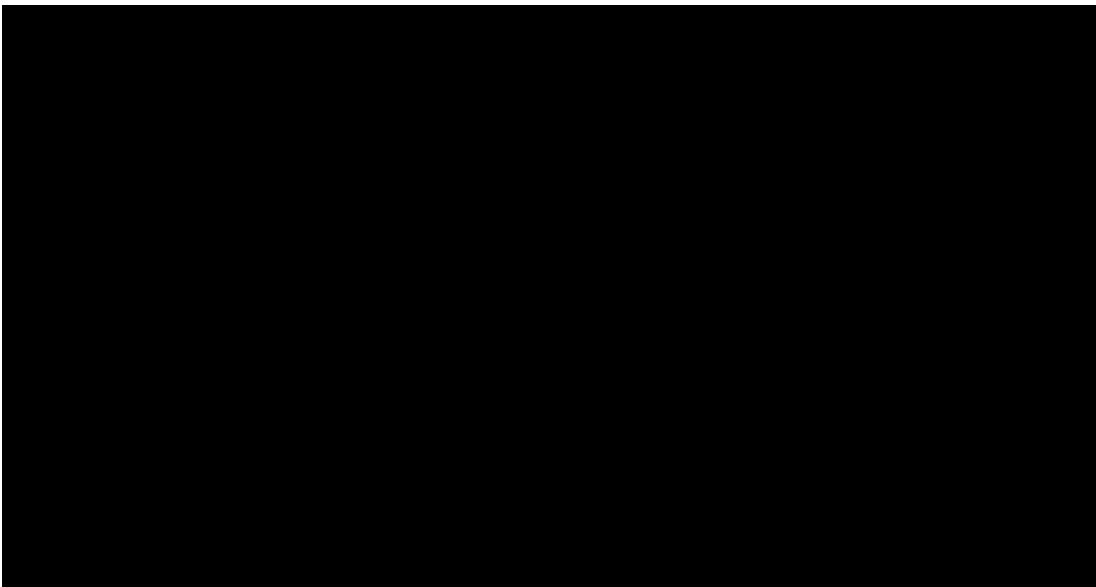


Figure 22. Export wizard.

Select a predefined alternative algorithm.

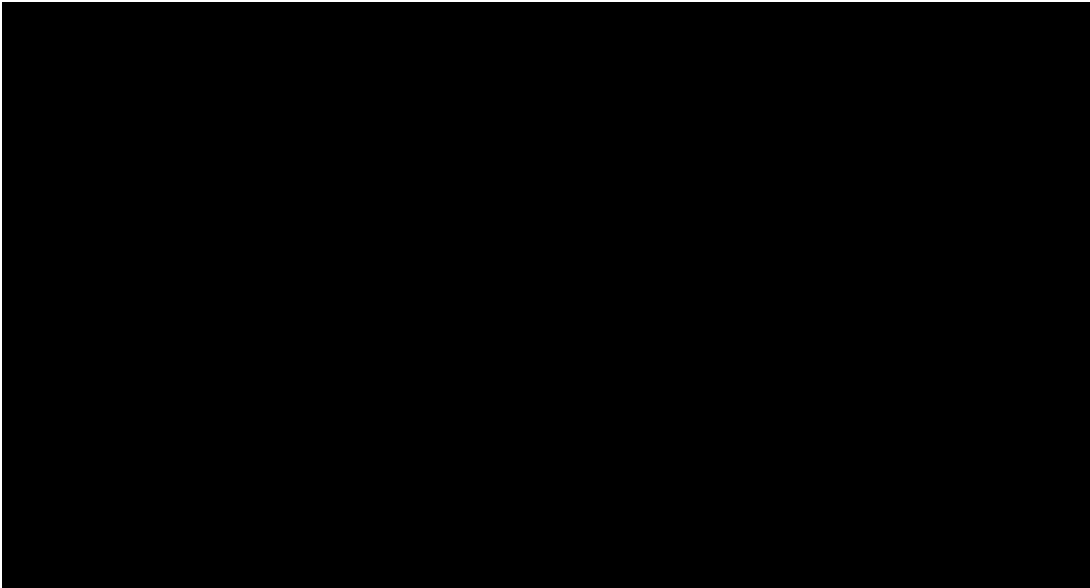


Figure 23. Algorithm selection.

The OK button is available only when the three fields are filled.

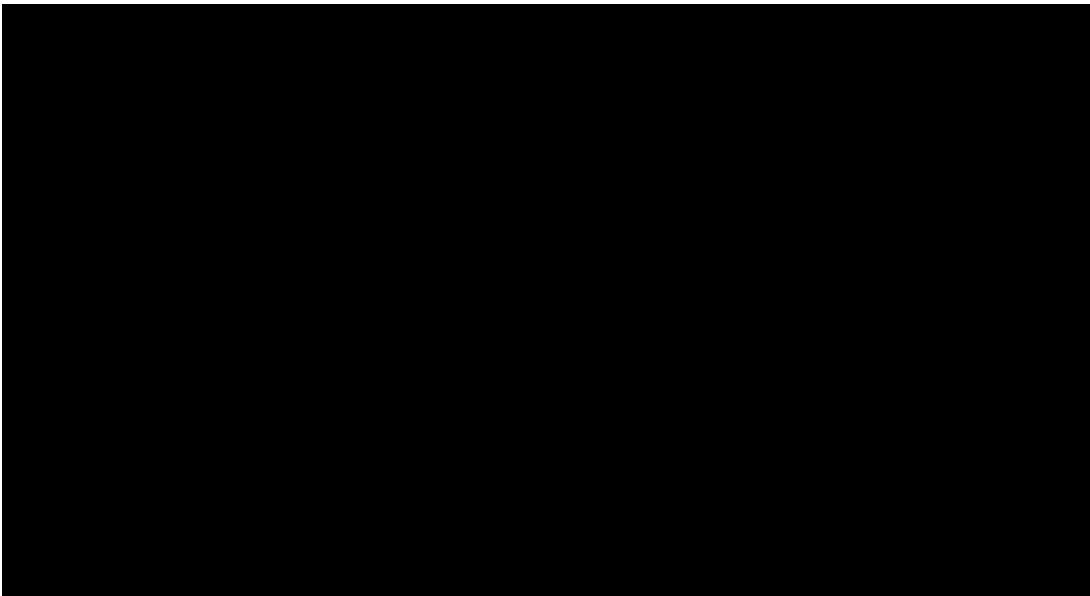


Figure 24. filled Exports wizard

Click on the "OK" button.

The Enterprise Architect is built and persisted in the generated output xml file.

Start Enterprise Architect. Click on the "New File" menu.

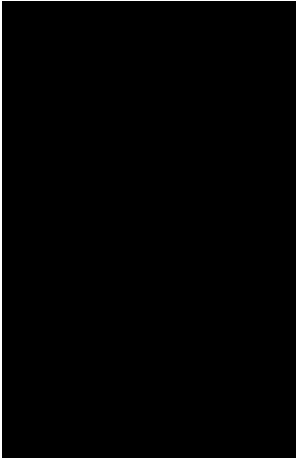


Figure 25. New project...

In the displayed standard Windows file browser dialog, locate a suitable folder for your project and, in the "File name" field, type in a distinctive name. Click on the "Save" button.

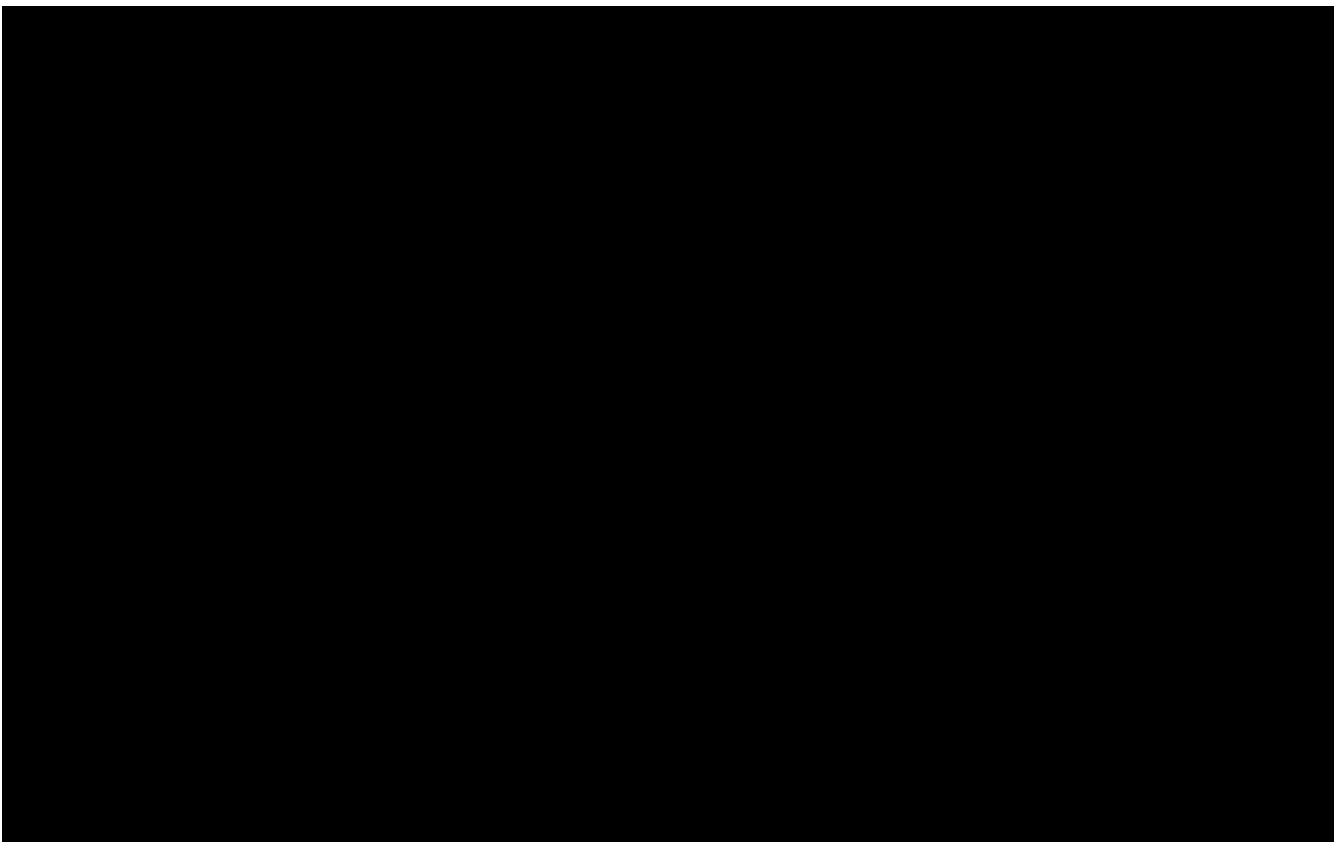


Figure 26. Create a new project.

In the "Browser" explorer, select the "Model" node.

In the Enterprise Architect Ribbon, select "Publish → Model Exchange → Import XMI → Import Package from XMI" menu.

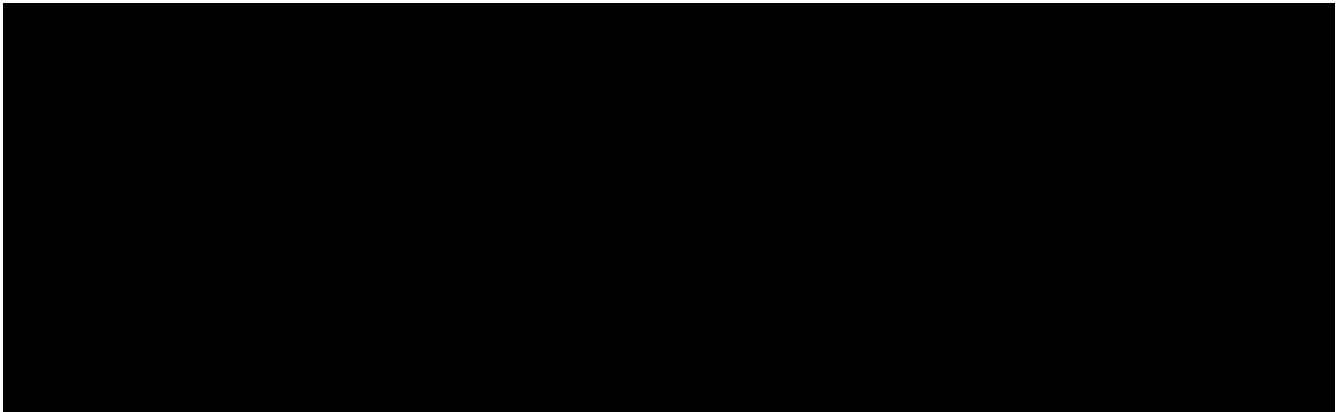


Figure 27. Import XML file.

In the displayed "Import Package from XMI" dialog:

- field: type the directory path and filename from which to import the XMI file.
- checkbox: Select this checkbox to open the "Create Baseline" dialog, through which to baseline the imported Package once the import is complete.
- button: Click on this button to start the import
- button: Click on this button to close the dialog.

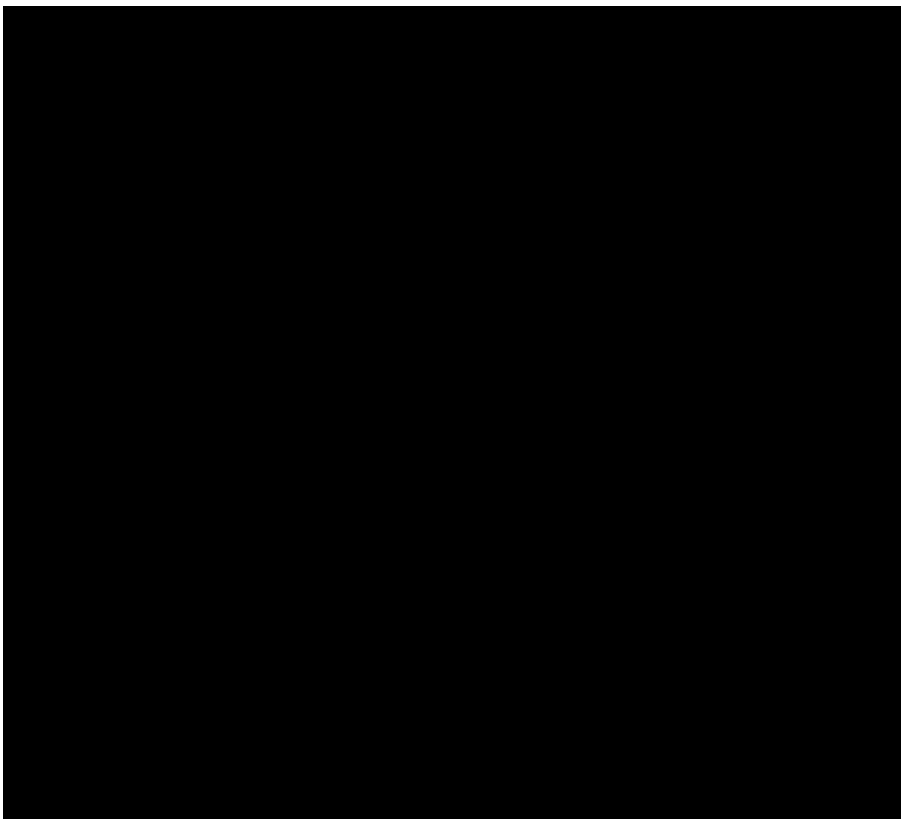


Figure 28. Import XML wizard.



Figure 29. New Baseline.

In the "Browser" explorer, the imported data are displayed. Under the "Model" node, "Import Capella" package is created. This package contains all imported datas from Capella.

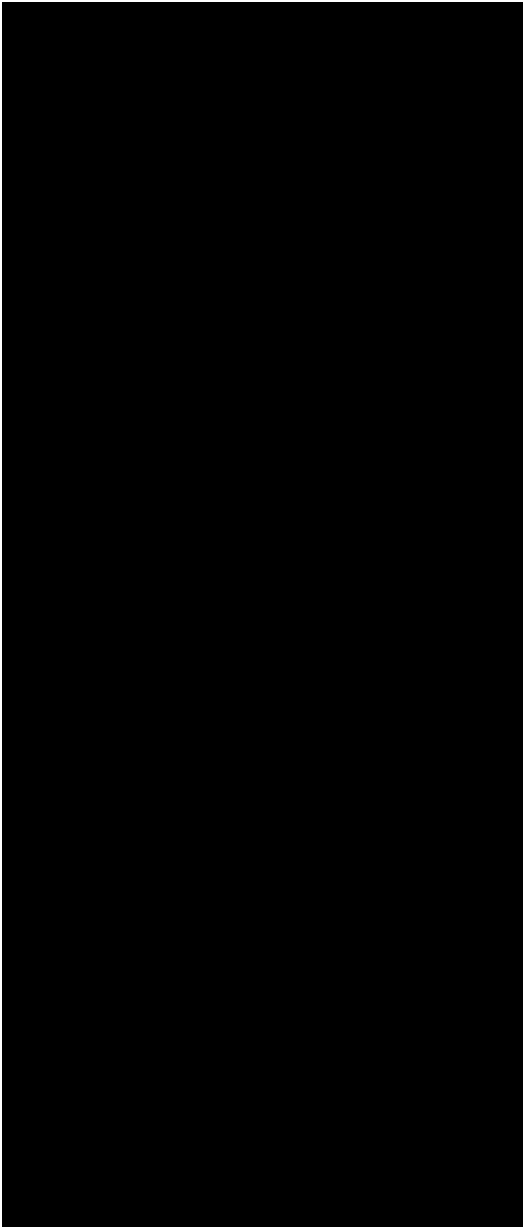


Figure 30. EA model.

Create a Component diagram and drag and drop all components inside.

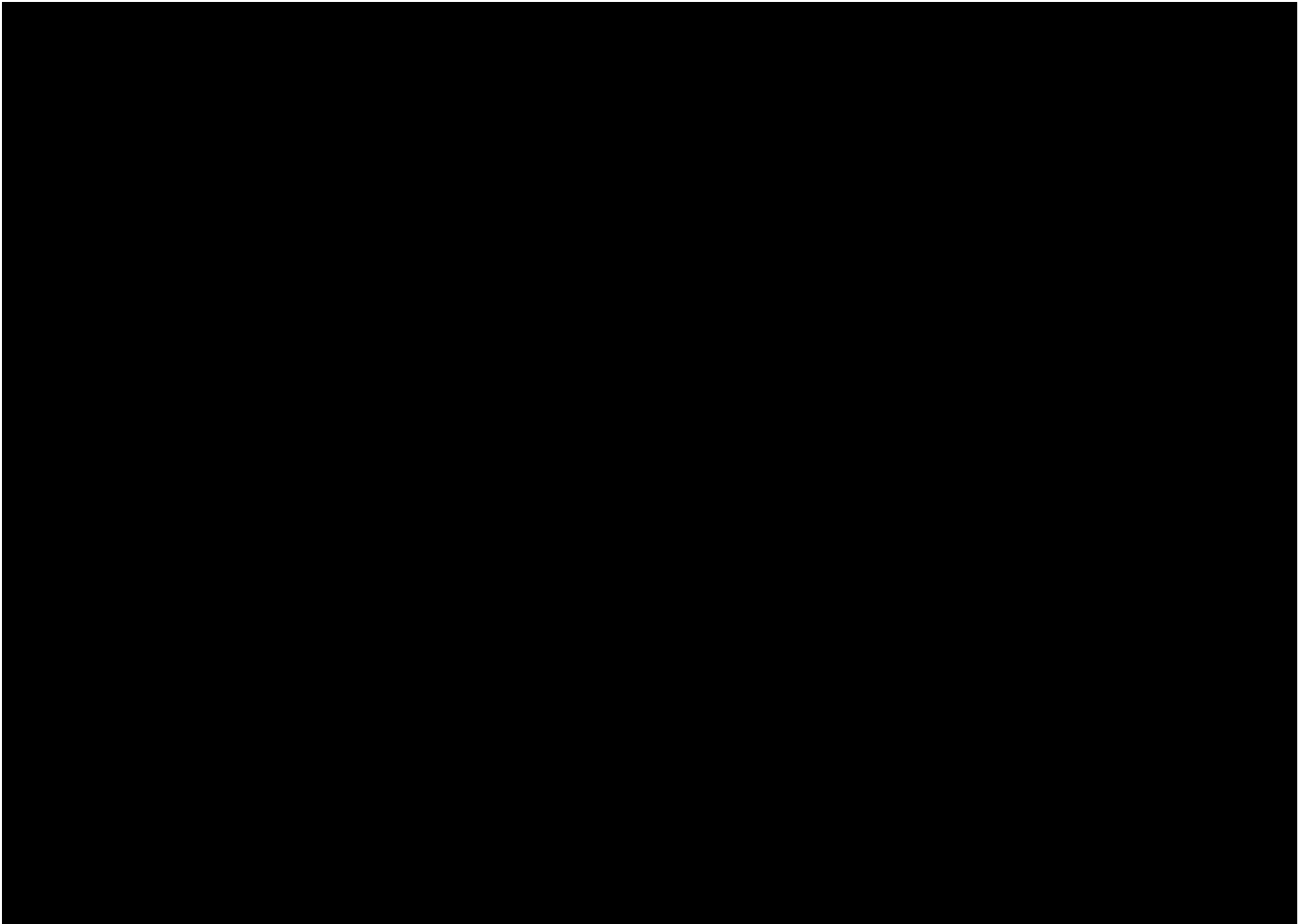


Figure 31. Component diagram.

Create a Class diagram and drag and drop all others elements.

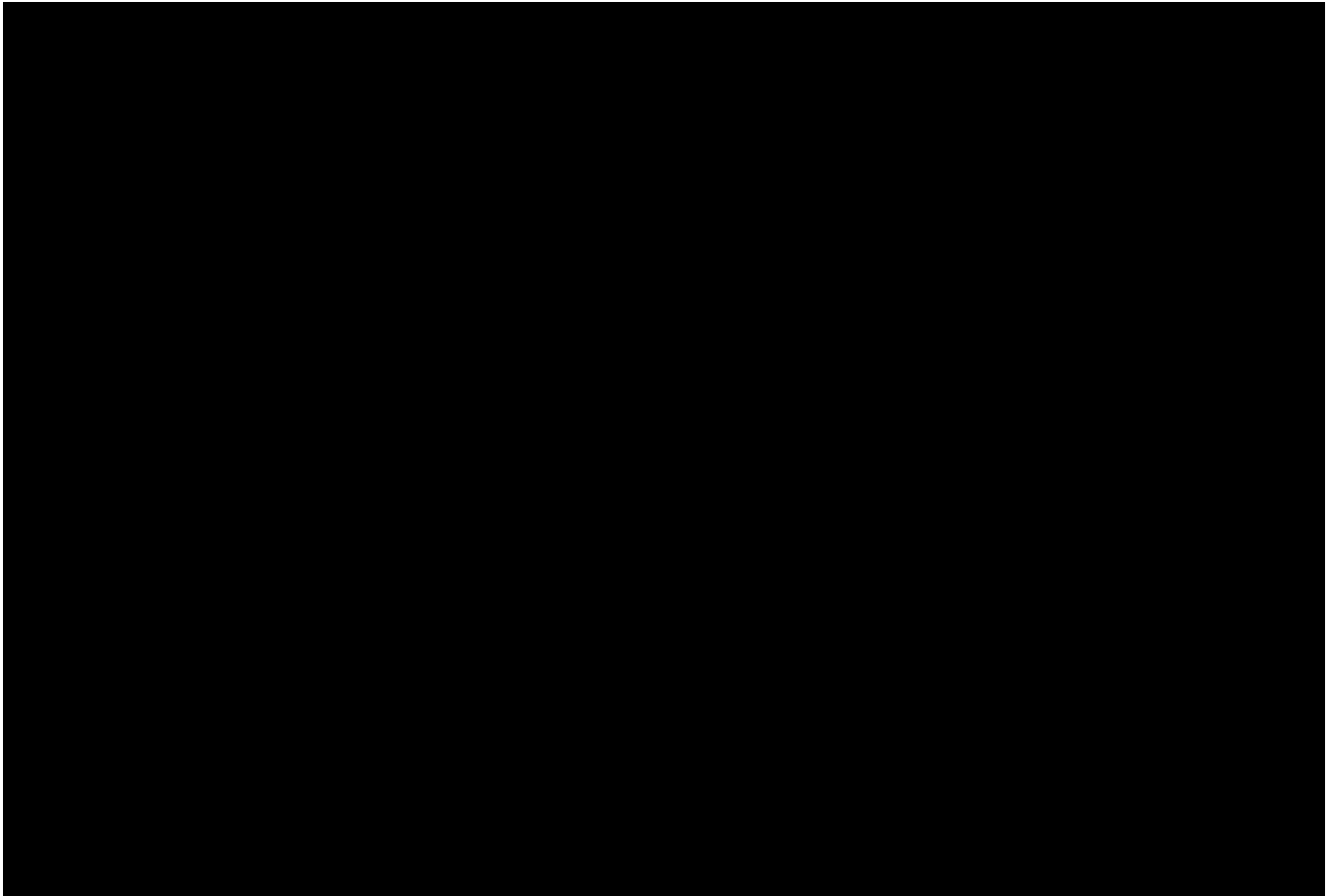


Figure 32. Class diagram.

Table 1. Table Transformation rules

image::CAPUML_Actor.JPG[CAPUML_Actor.JPG]	Logical actor	Actor	image::EA_Actor.JPG[EA_Actor.JPG]
image::CAPUML_LogicalComponent.JPG[CAPUML_LogicalComponent.JPG]	Logical component	Component	image::EA_Component.JPG[EA_Component.JPG]
image::CAPUML_SubComponent.JPG[CAPUML_SubComponent.JPG]	Breakdown of logical component	Component aggregation	image::EA_Component_aggr.JPG[EA_Component_aggr.JPG]
image::CAPUML_ComponentPort.JPG[CAPUML_ComponentPort.JPG]	Component port	Simple port of the component	image::EA_Port.JPG[EA_Port.JPG]
image::CAPUML_Exchange.JPG[CAPUML_Exchange.JPG]	Component Exchange	Connector with assembly kind	image::EA_Connector.JPG[EA_Connector.JPG]

image::CAPUML_EventComponentExchange.JPG[CAPUML_EventComponentExchange.JPG]	Event exchange item	Signal	image::EA_Signal.JPG[EA_Signal.JPG]
image::CAPUML_EventEIE.JPG[CAPUML_EventEIE.JPG]	Event exchange item element	Attribute of class	image::EA_SignalAttr.JPG[EA_SignalAttr.JPG]
image::CAPUML_OperationEI.JPG[CAPUML_OperationEI.JPG]	Operation exchange item	Operation of an interface	image::EA_Operation.JPG[EA_Operation.JPG]
image::CAPUML_Event.JPG[CAPUML_Event.JPG]	Operation exchange item element	parameter.return value of an operation in an interface	image::EA_OperationParam.JPG[EA_OperationParam.JPG]
image::CAPUML_Interface.JPG[CAPUML_Interface.JPG]	Interface	Interface	image::EA_Interface.JPG[EA_Interface.JPG]
image::CAPUML_Description.JPG[CAPUML_Description.JPG]	Description of an element	Comment	image::EA_Notes.JPG[EA_Notes.JPG]
image::CAPUML_Share.JPG[CAPUML_Share.JPG]	Share data exchange item	Class of stereotype [entity]	image::EA_Entity.JPG[EA_Entity.JPG]
image::CAPUML_ShareElement.JPG[CAPUML_ShareElement.JPG]	Share data exchange item element	Attribute of class	image::EA_EntityElement.JPG[EA_EntityElement.JPG]
image::CAPUML_Enumeration.JPG[CAPUML_Enumeration.JPG]	Enumeration	data type "enumeration"	image::EA_Enumeration.JPG[EA_Enumeration.JPG]
image::CAPUML_Class.JPG[CAPUML_Class.JPG]	Class, data type	Datatype	image::EA_datatype.JPG[EA_datatype.JPG]