ComMA Installation Manual

Introduction

This manual explains the installation process for the ComMA framework (**Com**ponent **M**odeling and **A**nalysis). ComMA provides several domain-specific languages for defining and analyzing component interface models. This manual is not a language documentation that explains the syntax and semantics of the languages. The users are referred to the ComMA help available after the framework is installed.

Prerequisites

Before installing ComMA, install Graphviz (Graph Visualization Software) version 2.38. A copy of this version is available on <u>http://comma.esi.nl/Home_files/graphviz-2.38.7z</u>. Unzip the folder graphviz-2.38 and place it on a suitable location.

Set the value of the environment variable GRAPHVIZ_DOT to the full path to *dot.exe* (located in the *bin* folder of the graphviz folder), i.e., set it to *<path>/bin/dot.exe*.

As a check, the command "%GRAPHVIZ_DOT%" -V, in the Command window, should give *dot - graphviz version 2.38.0 (20140413.2041)*

Installation of ComMA

After completing the previous step, ComMA can be installed. The appendix explains a possibility to install Eclipse first and then install ComMA from its Eclipse update site. The easier option is to use the Eclipse product that includes ComMA:

- Download a zip file with the standalone version from:<u>http://comma.esi.nl/standard/standalone/latest/ComMA-download.php</u> This requires a user name and password that will be provided separately. For the Philips version use <u>http://comma.esi.nl/standalone/latest/ComMA-download.php</u> (this requires different credentials).
- Create a folder "ComMA" high in the folder hierarchy (a deeply nested folder might give problems with long paths). Extract the zip file to folder "ComMA". This may take some time because Java is included.
- Test it by executing ComMA.exe in folder ComMA, e.g. launching it with the default workspace.

Using Example Projects

ComMA installation includes a number of example projects. In a running Eclipse, select *File/New/Example...* The available examples will be under the folder *ComMA Examples*. There are three examples in the figure below but the actual number can vary with different ComMA versions. Select an example and follow the wizard to install it.

New Example		\times
Select a wizard		Ŷ
Wizards:		
type filter text		
✓ ➢ ComMA Examples		
🧶 Camera Example		
Imaging Component Example		
Records Example		
V 🗁 XML		

Displaying ComMA Help

Select menu *Help/Help Contents* and wait until the Eclipse Help window appears. *ComMA User Guide* is available from the navigation pane on the left. The user guide contains:

- an overview of the framework and the available languages;
- instructions how to create ComMA models;
- instructions how to use ComMA editors and the available code assists and formatting;
- language documentation;
- description of generation tasks and how to specify and execute them.

For new users, the section "Getting Started" is a good starting point.

Displaying PlantUML View

ComMA supports generation of UML diagrams from models and their visualization with the tool PlantUML. In Eclipse environment, UML diagrams are shown in the PlantUML view. If this view is not shown follow the steps below.

• From the menu Window/Show View choose Other ...



 In the dialog find the PlantUML folder, open it and select PlantUML. Click Ok button. The PlantUML view will now be available.