Integration with Mathematica

Cameo Simulation Toolkit supports Mathematica®, a Mathematical computation engine, to analyze and solve Mathematica®l expressions. Once you have installed Mathematica®, you can specify it as the language of opaque expressions.

First, you must install Mathematica® on your local machine, and then set up your system to allow Cameo Simulation Toolkit to use the installed Mathematica®.

To use Mathematica® on a 64-bit version of Microsoft Windows and Linux

1. On the MagicDraw main menu, select Tools > Integrations. The Integrations dialog opens.

N Integrations		×		
Integrate with 3rd par Select a 3rd party applic Integration to start or re	ation and click Integrate/Remove			
You may integrate MagicDraw with these applications:				
Integration	Requirements	Status		
🔆 Mathematica	Mathematica 9 (or later)	Not Integrated		
🗯 Maple	Maple 17	Not Integrated		
🔺 MATLAB	MATLAB R2012a (or later)	Integrated		
Integrate/Remove Integration Close Help				

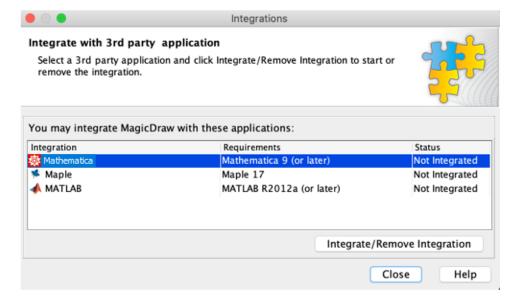
2. From the list, select Mathematica and click Integrate/Remove Integration. The Mathematica directory selection dialog opens.

🔀 Mathematica directory selection	×
Mathematica directory selection Please specify Mathematica home directory. Cameo Simulation Toolkit will add the required paths to environment property.	*
Select Mathematica home directory (Example Ci\Program Files\Wolfram Research\Mathematica\9.0) C:\Program Files\wolfram research\mathematica\9.0 OK	Browse

- 3. Browse for the home directory of Mathematica®.
- 4. Click **OK** and restart MagicDraw.

To use Mathematica® on Mac OSX

1. From the main menu, click Tools > Integrations. The Integrations dialog opens.



2. From the list, select Mathematica and click Integrate/Remove Integration. The Mathematica directory selection dialog opens.

	Mathematica directory selection	
Mathematica directory select Please specify Mathematica hor	ion e directory. Cameo Simulation Toolkit will add the required paths to environment property.	X
Select Mathematica home dir (Example /Applications/Mathematic		Browse
	ОК	Cancel

- 3. Specify the directory where you have installed Mathematica® and click OK.
- 4. Restart the modeling tool.

Information

(Only for integration with Mathematica Version 12.3) After completing the steps above using the Integration dialog, you must change JAVA_H OME to JDK 11 by following the steps below:

- 1. Download JDK 11 (11.0.12 recommended) according to your operating system from https://www.oracle.com/java/technologies /downloads/#java11. Alternatively, you can use the bundled java from Mathematica 12.3 (JDK 11.0.10) in the [Mathematica installation dir]\SystemFiles\Java\Windows-x86-64 directory.
- 2. Open the property file of the modeling tool, [Modeling Tool dir]/bin/[Modeling Tool].properties, with a text editor, e.g., magicdraw. properties.
- 3. Change JAVA_HOME to the JDK 11 directory and save the file, for example:

JAVA_HOME=C\:\\Program Files\\AdoptOpenJDK\\jdk-11.0.12

4. Restart the modeling tool.