

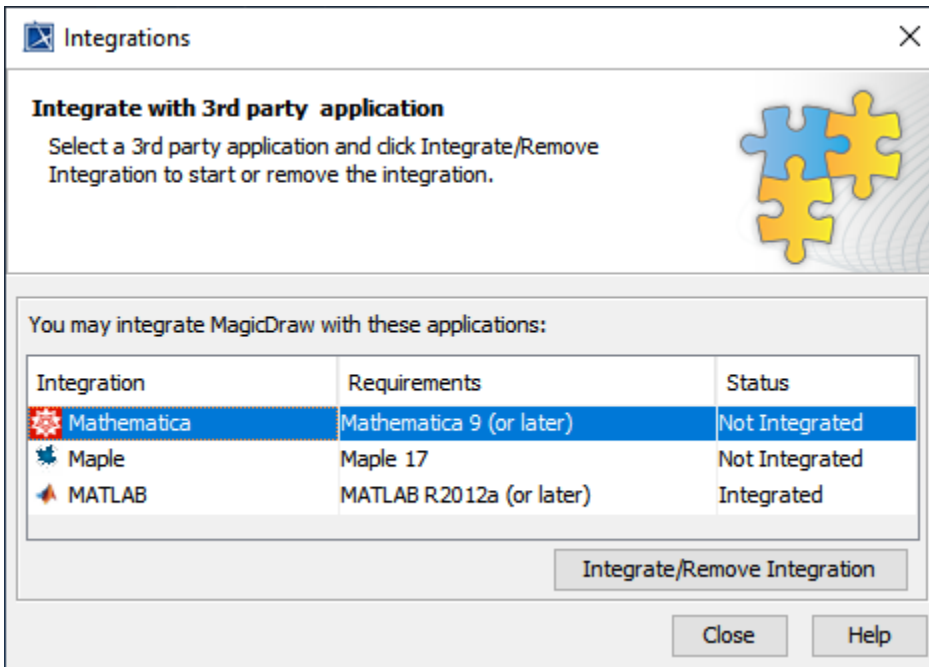
# Integration with Mathematica

Magic Model Analyst supports Mathematica®, a Mathematical computation engine, to analyze and solve Mathematica® expressions. Once you have installed Mathematica®, you can specify it as the language of opaque expressions.

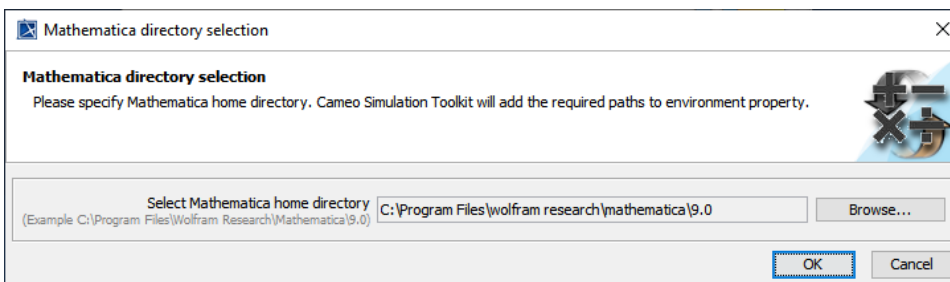
First, you must install Mathematica® on your local machine, and then set up your system to allow Magic Model Analyst to use the installed Mathematica®.

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.



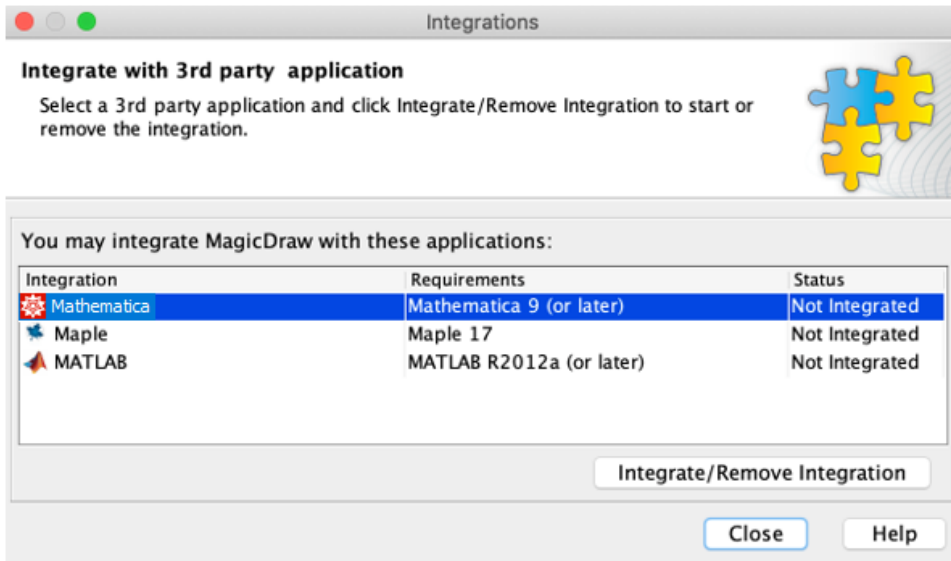
2. From the list, select **Mathematica** and click **Integrate/Remove Integration**. The **Mathematica directory selection** dialog opens.



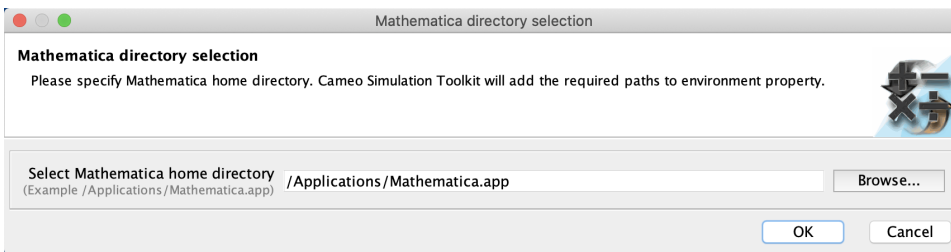
3. Browse for the home directory of Mathematica®.
4. Click **OK** and restart MagicDraw.

To use Mathematica® on Mac OSX

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



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



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



#### Information

(Only for integration with Mathematica **Version 12.3** or later) After completing the steps above using the **Integration** dialog, you must change **JAVA\_HOME** to **JDK 11** by following the steps below:

- 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 or later, in the *[Mathematica installation dir]\SystemFiles\Java\Windows-x86-64* directory.
- Open the *<install\_root>/bin/<modeling\_tool\_name>.properties* file (e.g., *magicdraw.properties*) with a text editor.
- Change **JAVA\_HOME** to the **JDK 11** directory and save the file, for example:

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

- Restart the modeling tool.