

Recording Macros

Macro Engine has the capability to record changes in a model. It uses opaque objects to generate macros and record them. This capability is especially useful when you want to redo some of your repetitive tasks.

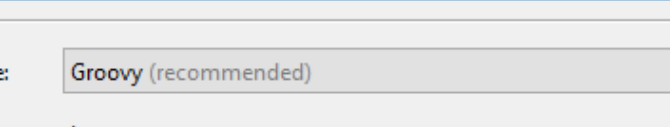
The following is a list of actions that you can record:

- Creating UML, Stereotype, and DSL elements
- Creating relationships between UML, Stereotype, or DSL elements

 You cannot move the element defined as a record scope during recording.

To record a macro

1. Click **Tools > Macros > Record Macro** on the main menu. The **Record Macro** dialog opens.
2. Select a macro language in the **Language** box (you will see the default macro language that you have previously selected (see [Selecting a Default Macro Language](#))).
3. Select the ☐ **Define record scope** check box and click the **Model Scope** button to define the scope. The generated macros will later record the changes in the element using a relative path that refers to the defined scope.



Record Macro


Language: Groovy (recommended)

☒ Define record scope

Model scope: Property

Note: The recording macro feature is still in beta.
This is snapshots of the ongoing Macro Engine development process. As such there are still known issues which can cause incomplete recording and playback (Not for production).

Start Stop Cancel

4. Click  to start recording.
5. Work with the model in the scope you have defined.

6. Click to stop recording. The **Record Macro** dialog will close and the **Create Macro** dialog will open.

```
Create Macro
Macro Language: Groovy (recommended)
1 import com.nomagic.magicdraw.automaton.AutomatonMacroAPI;
2 import com.nomagic.magicdraw.core.Application;
3 import com.nomagic.magicdraw.openapi.uml.SessionManager;
4 import com.nomagic.uml2.ext.magicdraw.classes.mdkernel.VisibilityKindEnum;
5
6 try
7 {
8     SessionManager.getInstance().createSession("Automaton_Macro_Script_Execute");
9     def ele0 = AutomatonMacroAPI.getSelectedElementFromContainmentTree();
10    def ele1 = AutomatonMacroAPI.createElement("InstanceValue");
11    ele1.setVisibility(VisibilityKindEnum.getByByteName("public"));
12    ele2 = ele0._getOwner()._getOwner()._getOwner()._getOwner()._getChild("vehicle.wheel.brake");
13    ele1.setInstance(ele2);
14    ele1.setOwner(ele0);
15    ele0.setDefault_Value(ele1);
16 }
17 finally
18 {
19     SessionManager.getInstance().closeSession();
20 }
21
```

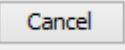
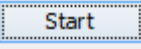
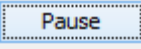
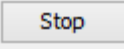
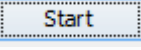
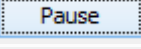
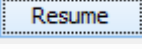
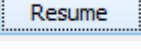
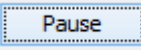
7. Click either

Save

or

Run



- If you do not open a project, the menu **Tools > Macros > Record Macro** will be disabled.
- You can select a record scope only before you start recording
- You cannot change a record scope during recording.
- If you do not define a record scope, the model **Data** will become the record scope.
- If you click the  button, the **Record Macro** dialog will be closed.
- If you click the  button, it will be changed to  and the  button will enabled.
- You cannot alter the **Language**, ☐ **Define record scope**, or **Model Scope** options after you click the  button.
- If you click the  button, the recording will pause and the button will be changed to .
- If you click the  button, the following things will happen:
 - the recording will continue
 - the button will be changed to .
- The recording mechanism of Macro Engine can generate code for Beanshell, Groovy, Javascript (Nashorn and Rhino), and Jython. However, to ensure the best performance experience, it is strongly suggested that you use the recommended language (Groovy).