

Adding a Macro and editing Macro information

You can add a new macro and enter all necessary information about it by following the steps described in Opening Macro Information Dialog and Adding a Macro and Its Information below.

On this page

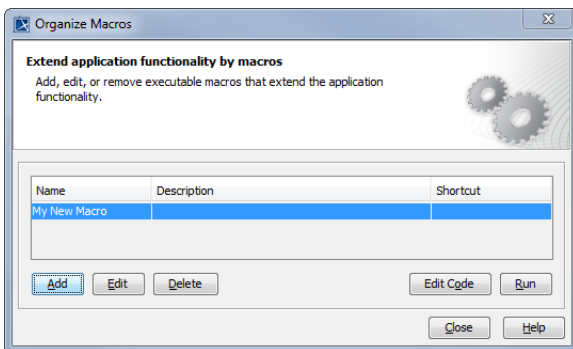
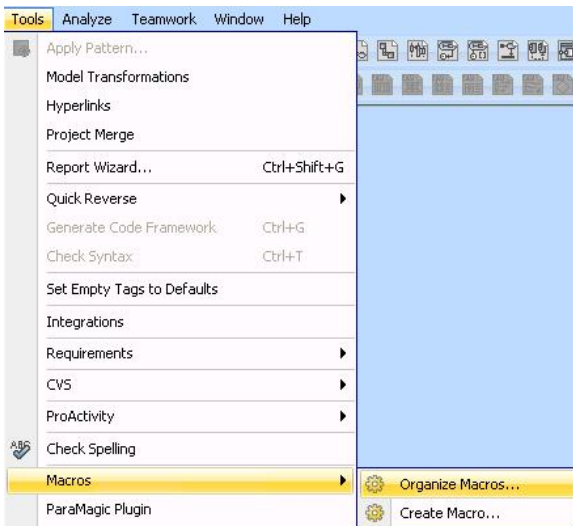
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Opening Macro Information Dialog

You can add or modify macro information such as the macro name and description, in the **Macro Information** dialog. To open the **Macro Information** dialog, you need to open the **Organize Macros** dialog first.

To open the **Organize Macros** dialog

- Click **Tools > Macros > Organize Macros** on the main menu. The **Organize Macros** dialog will open, see figures below.

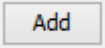
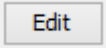


To open the **Macro Information** dialog

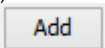
1. Click **Tools > Macros > Organize Macros** on the main menu to open the **Organize Macros** dialog, see above figure.

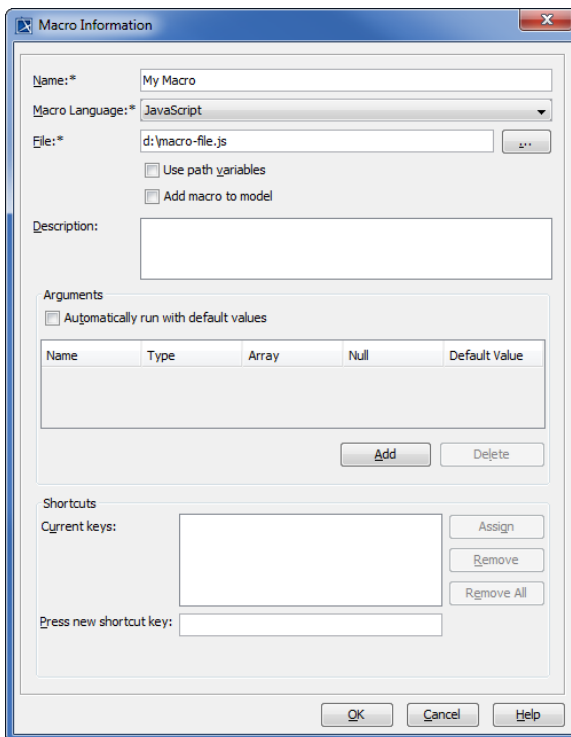
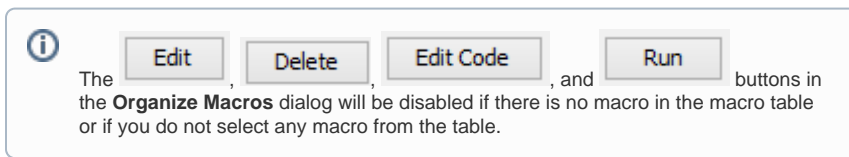
2. Click . The **Macro Information** dialog will open.

Adding a Macro and Its Information






Use the  or  button in the **Organize Macros** dialog to add or edit a macro and its information in the **Macro Information** dialog. You can also press the mnemonic keys to add or edit a macro, see [Macro Information Dialog Mnemonic Keys](#).


To add a macro and enter macro information in the **Macro Information** dialog

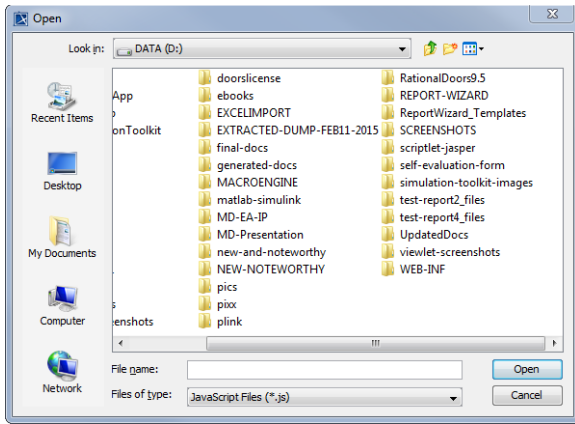
1. Open the **Organize Macros** dialog (click **Tools > Macros > Organize Macros** on the main menu).
2. Click . The **Macro Information** dialog will open, see figure below.



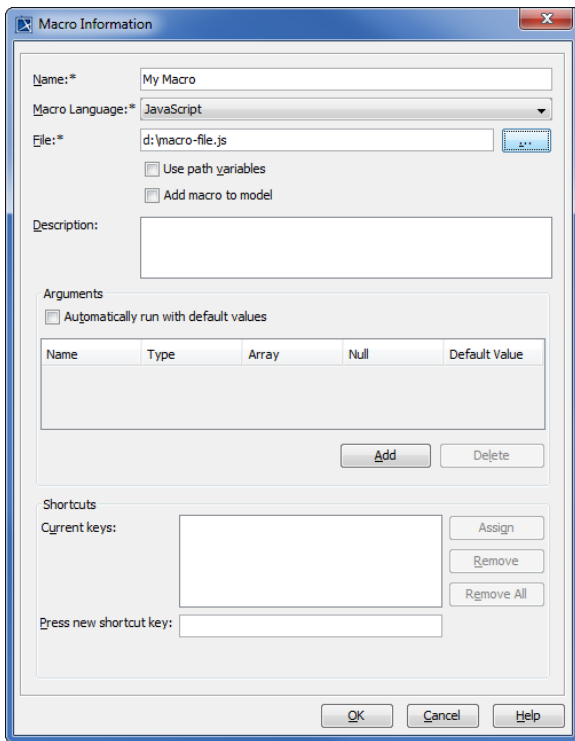
The **Macro Information** dialog box contains the following fields and controls:

- Name:** Text box with "My Macro".
- Macro Language:** Dropdown menu showing "JavaScript".
- File:** Text box with "d:\macro-file.js" and a browse button (...).
- ☐ Use path variables
- ☐ Add macro to model
- Description:** Text area.
- Arguments:**
 - ☐ Automatically run with default values
 - Table with columns: Name, Type, Array, Null, Default Value.
 -  
- Shortcuts:**
 - Current keys: Text box.
 -   
 - Press new shortcut key: Text box.
- Buttons:** OK, Cancel, Help.

3. Type the macro name in the **Name** box.
4. The default macro language you have previously selected (see [Selecting a Default Macro Language](#)) will appear in the **Macro Language** box.
5. Click the  button, to locate a macro file. The **Open file** dialog will open, see figure below.
6. Select the file and its type (there are 5 types of file filter: *.bsh, *.groovy, *.rb, *.js, or *.py), see figure below.



7. Click **Open**, see figure above. The selected pathname will appear in the **File** box in the **Macro Information** dialog, see figure below.



8. Select either (i) the **Use path variables** check box or (ii) the **Add macro to model** check box.



- If you have specified the file or network path in the **Environment Options** dialog by clicking **Options > Environment > Path Variables** and selected the ☒ **Use path variables** check box in **Macro Information** dialog, the <Path Variable name> will show in front of the file pathname. This field is the [Required] field, for example, <mypath>/<macro_name>.js.
- If you select the ☒ **Use path variables** check box, the full pathname will not be saved.
- If you select the ☐ **Add macro to model** check box, your source code will be imported from the file to the model. The location to keep the model is Data::MacroEngine.
- You can open the **Macro Information** by using Ctrl+Alt+m as a shortcut key.

9. Type the macro description in the **Description** box, see figure above.



A macro name must be unique and cannot be duplicated.

10. The function of the ☒ **Automatically run with default values** check box is to allow you to run the default values automatically. If you select the check box, the system will not open a dialog to prompt you to input the value.



If you select the ☒ **Automatically run with default values** check box, you need to enter the valid default value of each parameter.

11. Click **Add** to specify the arguments of the macro. The arguments specified in the **Arguments** table will be the global variables of a specific macro.

- **Name** column contains the name of a parameter
- **Type** column contains the type of a parameter
- **Array** check box is to identify if an array is the parameter
- **Null** check box is to identify if null is the parameter value
- **Default Value** column contains an initial value to run the macro



- A parameter type can be a String, Integer, Long, Double, Date, or ElementPath.
- If the **Null** check box is selected, you cannot enter the default value of that particular parameter.
- An empty value in the **Default Value** column does not necessarily mean a null value, for example an empty string value is an empty string.
- If you input an invalid default value or you do not enter the argument name, the system will display the following error message when you run the script:
The following argument(s) are invalid: <List of the invalid argument>.

12. Type a keyboard shortcut that will be used to run the macro in the

Press new shortcut key:

box and click

Assign

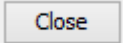
. The newly assigned keyboard shortcut will appear in the Current keys box.

13. Click **OK**. The **Organize Macros** dialog will open, showing the newly added macro name, description, and keyboard shortcut.



- Macro names, filenames, and languages are required.
- Macro description and keyboard shortcuts are optional.
- If any of the required fields are not entered or duplicate macro name is entered, the following message will open: **The following field(s) are invalid: <List of the problems>**.
- If the ☒ Automatically run with default values check box is selected and at least one value is empty or not valid, then the following error message will open: **The following value(s) are invalid. <List of the invalid value>**
- If the ☒ Automatically run with default values check box is selected, all variables must have valid values or are set to null.

Close

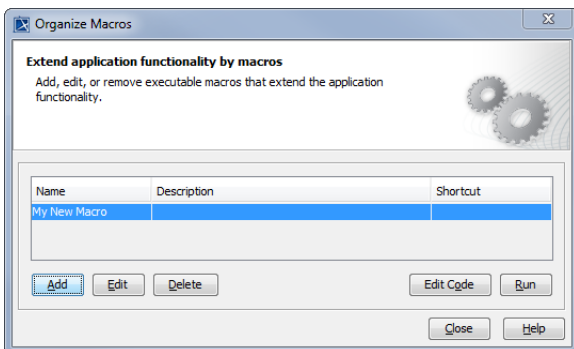
14. Click  to close the **Organize Macros** dialog.

Editing Macro Information

You can see macro information such as names and descriptions, as well as the macro keyboard shortcuts in the **Organize Macros** dialog.

To edit macro information

1. Click **Tools > Macros > Organize Macros**. The **Organize Macros** dialog will open, see figure below.

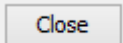


2. Select a macro from the table and either click **Edit** or press **Alt + E**. The **Macro Information** dialog will open.

3. Edit the macro information.

4. Click **OK** to save it. You will see the altered information in the **Organize Macros** dialog.

Close

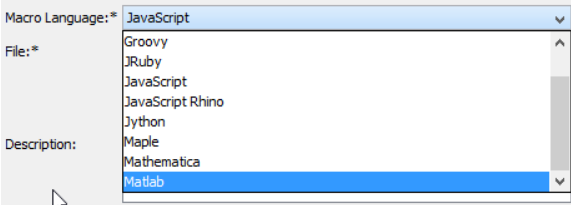


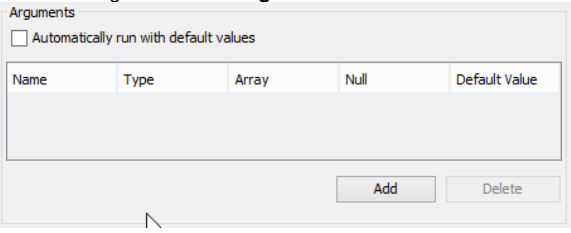
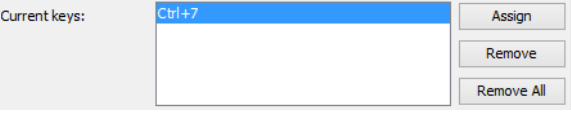
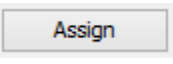
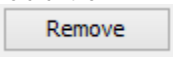
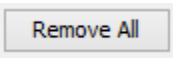

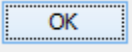
5. Click .

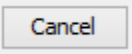
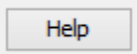
Macro Information Dialog Mnemonic Keys

Macro Engine provides mnemonic keys for you to perform some operations, for example, highlight a textbox and click a specific button in the **Macro Information** dialog. The table below lists the **Macro Information** dialog mnemonic keys and their function.

Table listing of Macro Information Dialog Mnemonic Keys

Mnemonic keys	Function
Alt + N	To place the pointer in the Name:* <input type="text" value="is-macro"/> box.

Alt + M	<p>To highlight the</p>  <p>box.</p>
Alt + F	<p>To place the pointer in the</p>  <p>box.</p>
Alt + .	To open the File dialog.
Alt + D	<p>To place the pointer in the</p>  <p>box.</p>
Alt + A	<p>To add an argument in the Arguments</p>  <p>area.</p>
Alt + I	To delete an argument in the Arguments area.
Alt + U	<p>To highlight the Current keys</p>  <p>box.</p>
Alt + G	<p>To click the</p>  <p>button.</p>
Alt + R	<p>To click the</p>  <p>button.</p>
Alt + E	<p>To click the</p>  <p>button.</p>
Alt + P	<p>To place the pointer in the</p>  <p>box.</p>
Alt + O	<p>To click the</p>  <p>button.</p>

Alt + C	To click the  button.
Alt + H	To click the  button.