

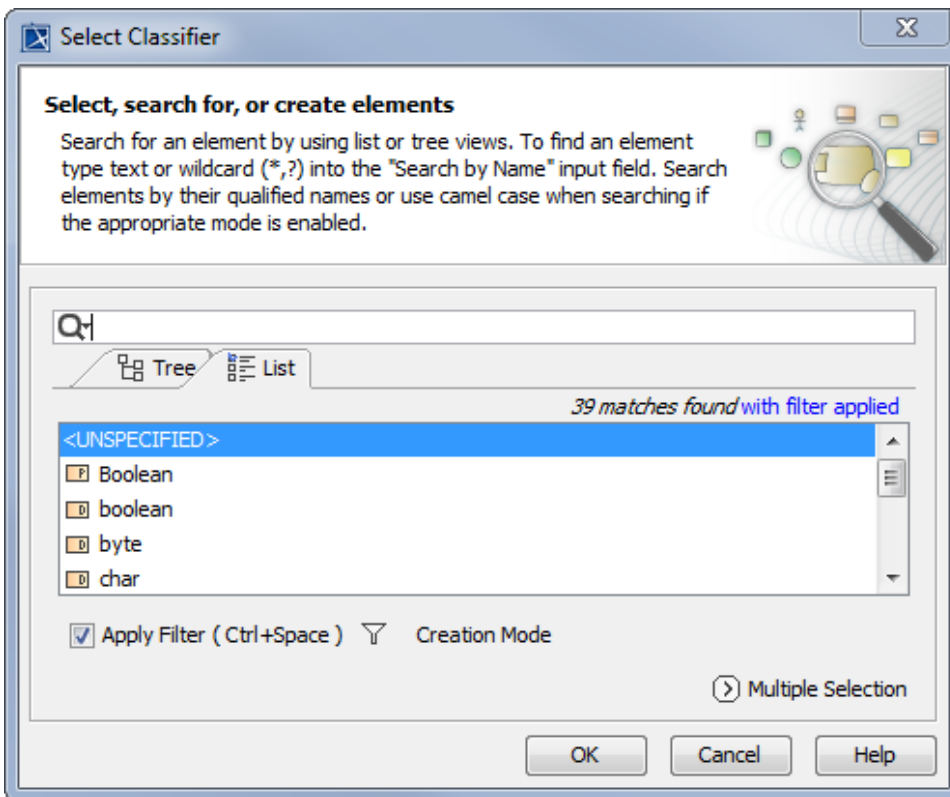
Executing the Stopwatch instance specification

In the previous section, we have shown you how to execute the Stopwatch model from the Stopwatch Class. You can also use Magic Model Analyst to execute the model from an InstanceSpecification. With this feature, you can specify values to the slots of an InstanceSpecification. These values will be used as the input values for the execution such as using a ReadStructuralFeatureAction to read the values.

In this tutorial, our Stopwatch contains only one value property, which is time. The time value will always reset to zero whenever the system enters the ready State. If we create an InstanceSpecification of Stopwatch and use it for model execution, the result will be the same as the model execution of the Stopwatch Class.

To create an InstanceSpecification of Stopwatch

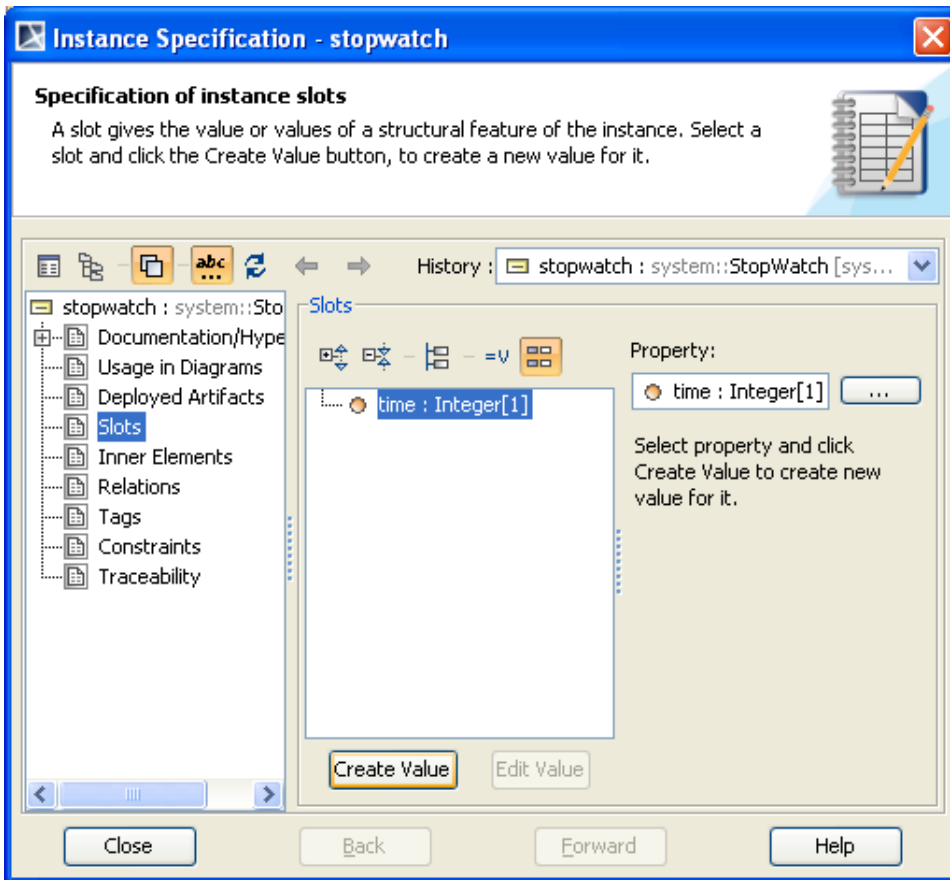
1. Open a **System** Class diagram.
2. Click **Instance** on the **Class Diagram** toolbar and click the **System** Class diagram. A new InstanceSpecification will be created and the **Select Classifier** dialog will open.



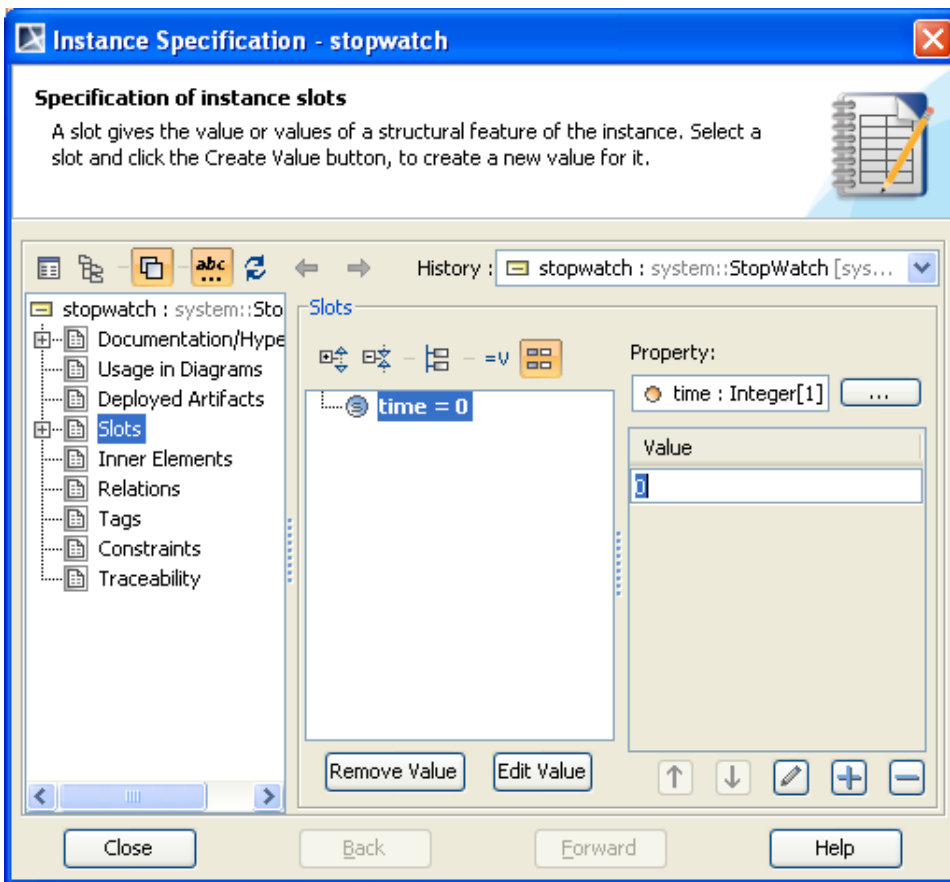
3. Select the **StopWatch** Class and click **OK**.
4. On the Class diagram, name the created InstanceSpecification "*stopwatch*". Now we will need to create values and assign them to the slots.

To create values and assign them to the slots

1. Right-click the symbol of the stopwatch InstanceSpecification and select **Specification** to open the Specification window of the **stopwatch** InstanceSpecification.
2. Select the **Slots** node on the left-hand side of the dialog.
3. Select the Structural Feature of the slot to which the values will be applied. In this case, select **time:Integer[1]**.



4. Click the **Create Value** button. A new integer value will be created for the slot. If an Integer value is selected, a zero will be created by default. You can modify this value by typing a new value into the **Value** box.



5. Click **Close** to close the Specification window.

To start executing the stopwatch InstanceSpecification, right-click it either on the **System** Class diagram or in the containment browser and click **Execute**. A simulation session will be created in the **Sessions** tab of the Simulation window to execute this instance. The steps to run the execution are the same as those to execute the **StopWatch** Class.

