Samples of using date time
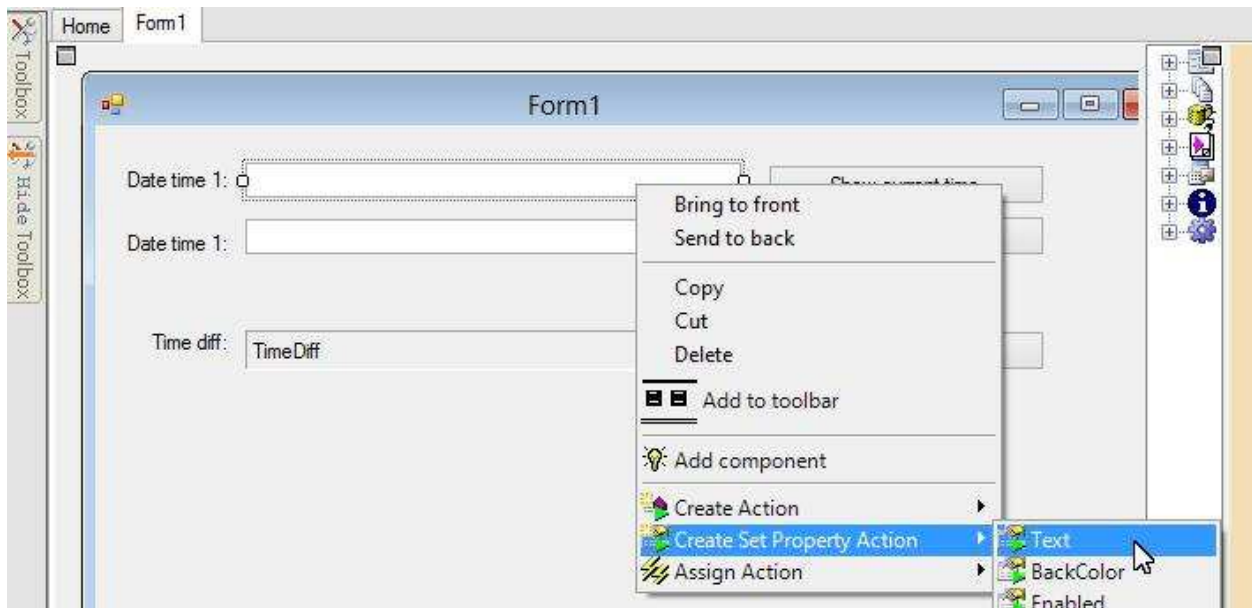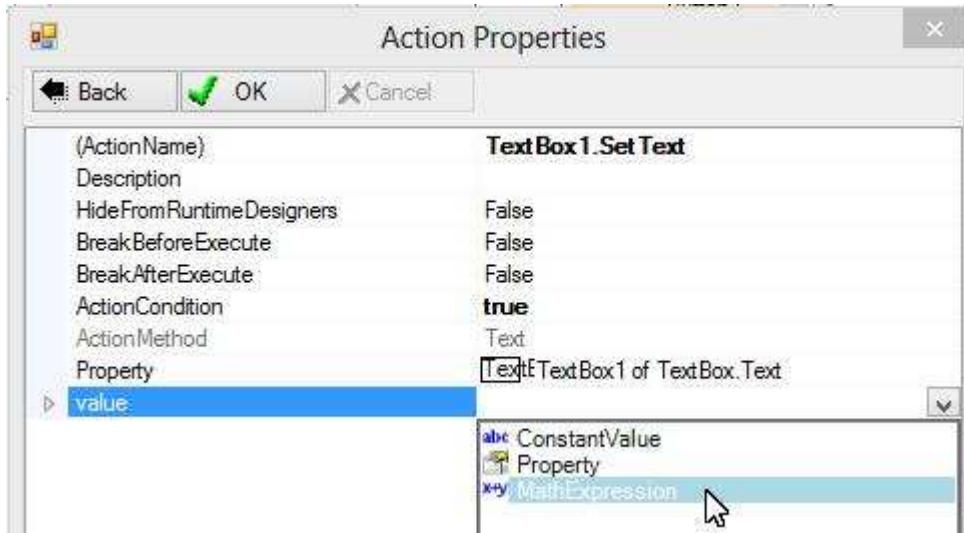
Contents

This sample application demonstrates some ways of using date times.
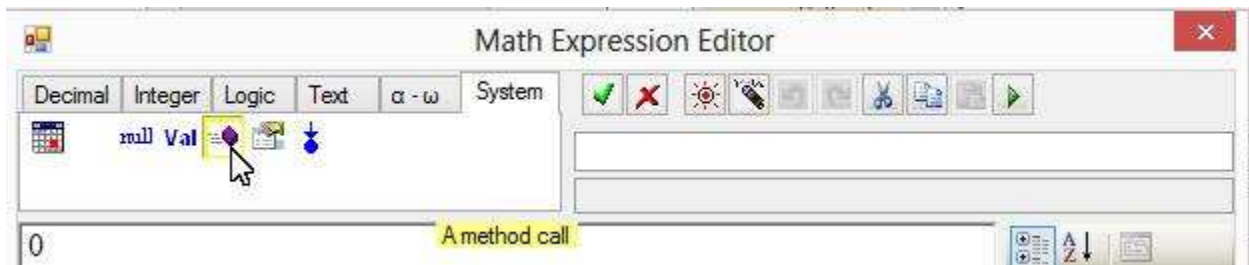
Convert date time to string

Suppose we want to display current time in a text box. Right-click the text box; choose "Create Set Property Action"; choose "Text" property:

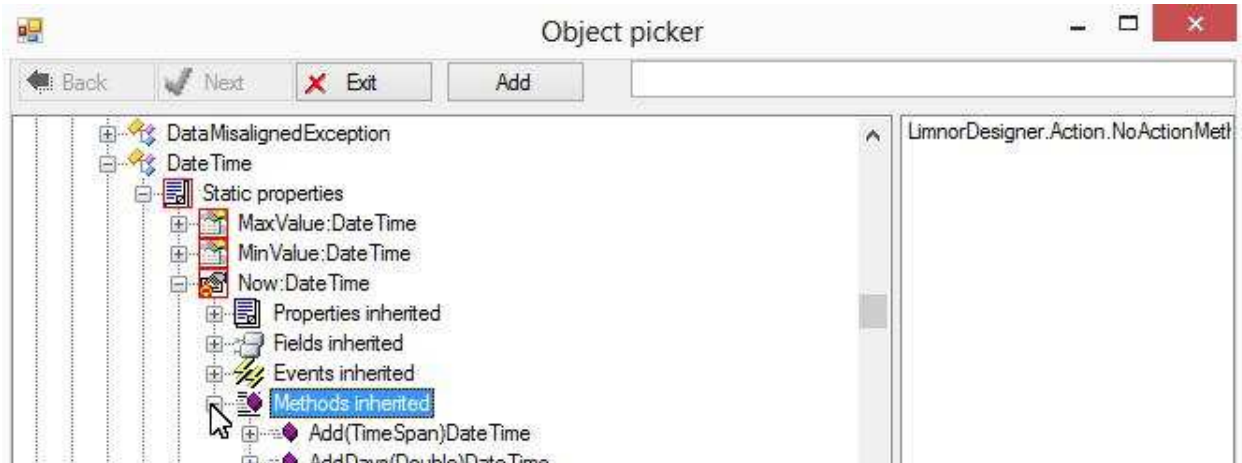Select "Math Expression" for the "value" of this action:

Select the Method icon to convert the current time to string:

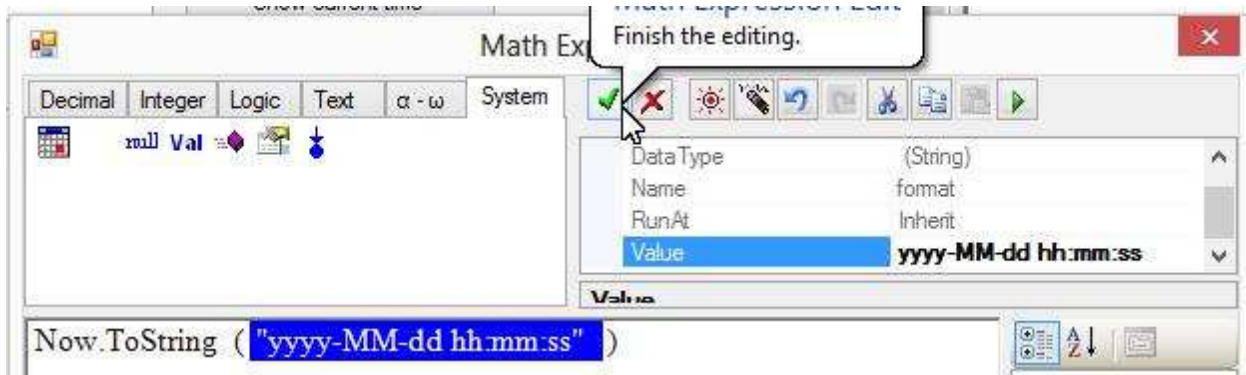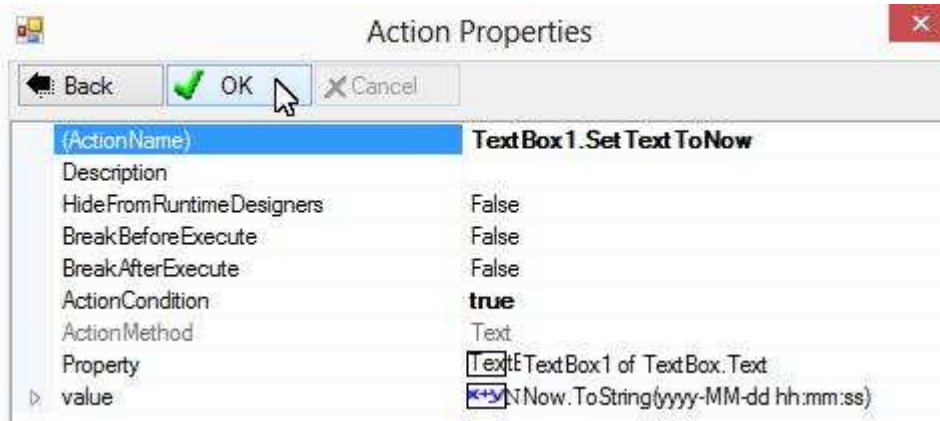Find the property Now of the DateTime class and expand its Methods:

Select method ToString(String) and click Next:

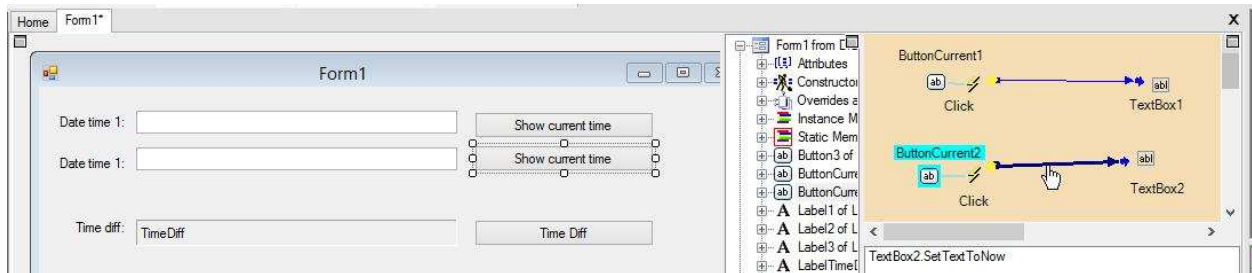Select the method parameter and set it to "yyyy-MM-dd hh:mm:ss":

Name this action as TextBox1.SetTextToNow:

Assign this action to a button.
We create another action to show current time on the second text box and assign the action to another button.
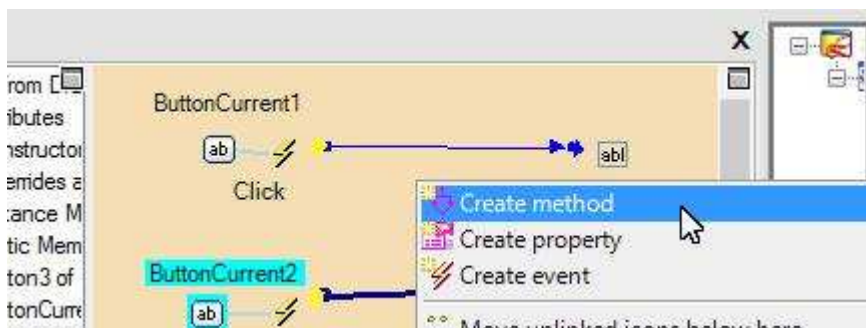

Convert string to date time

If we want to do date time calculations then we must obtain date time instances. The Now property of the DateTime class is an instance of data time.
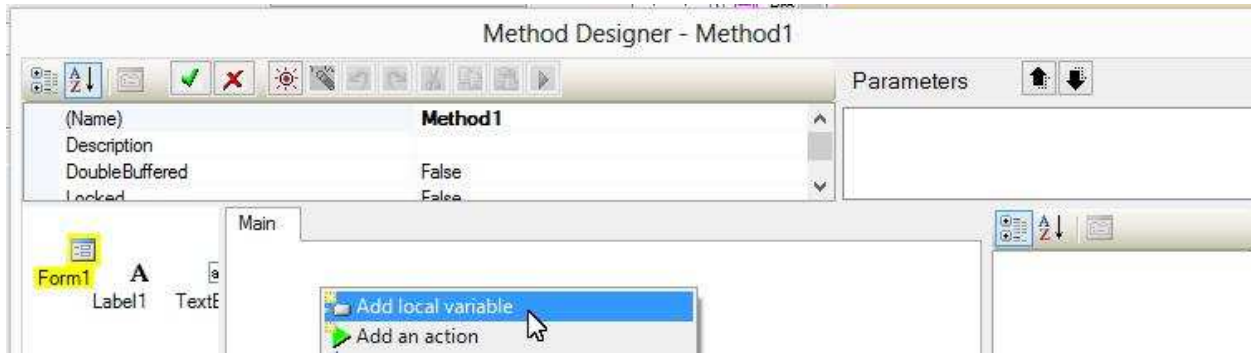One way to obtain date time instances is to convert a string to a date time.
In previous section we converted a date time instance to a string. In this section we'll convert a string back to a date time instance. The Parse method of the DateTime class can be used to do it.
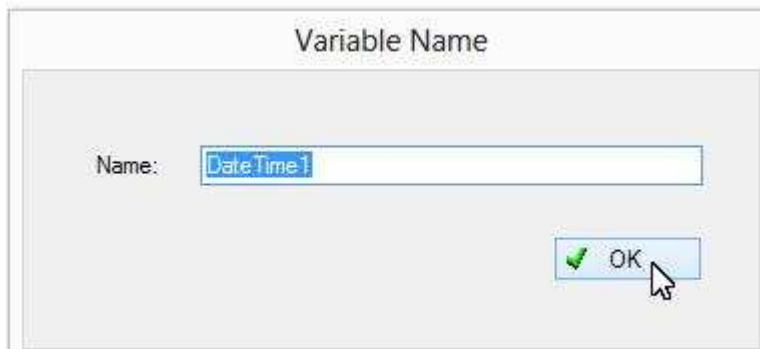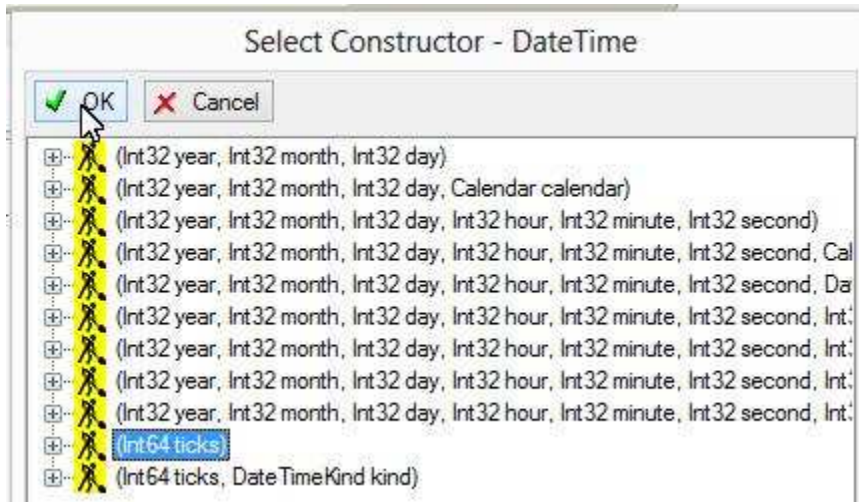Create a new method:

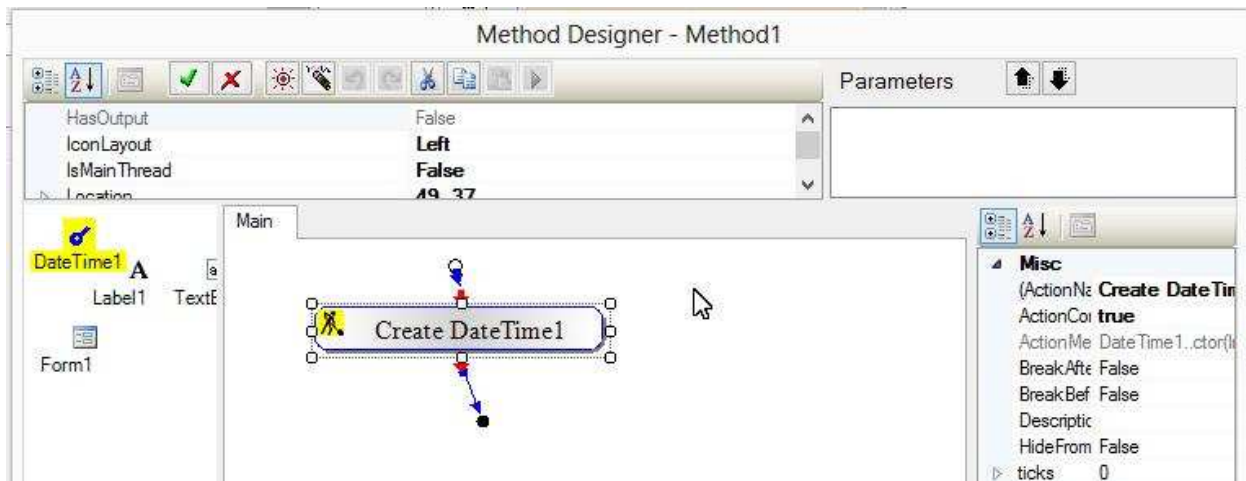Create a DateTime local variable in the method:

Select the DateTime class as the variable data type:

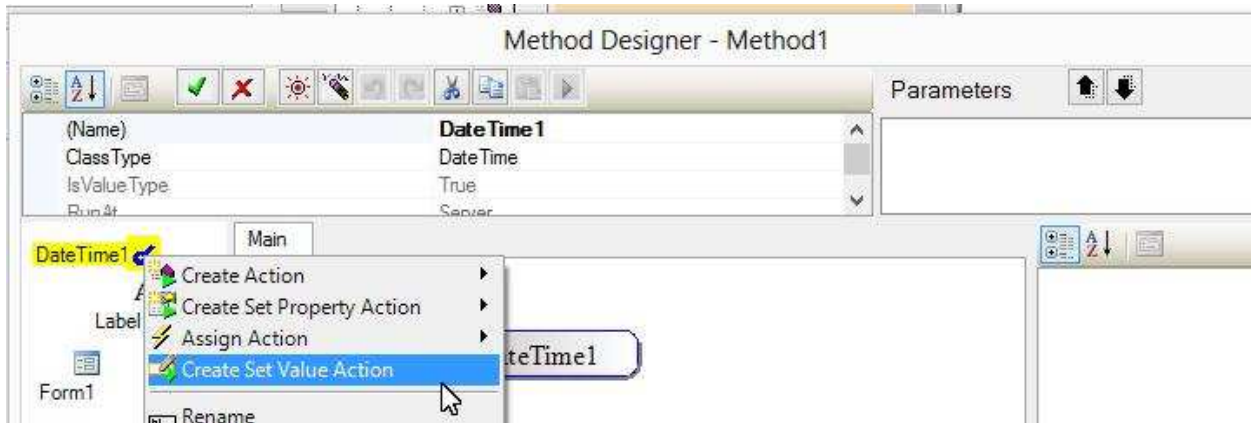Select one constructor. For simplicity, choose the one with ticks:

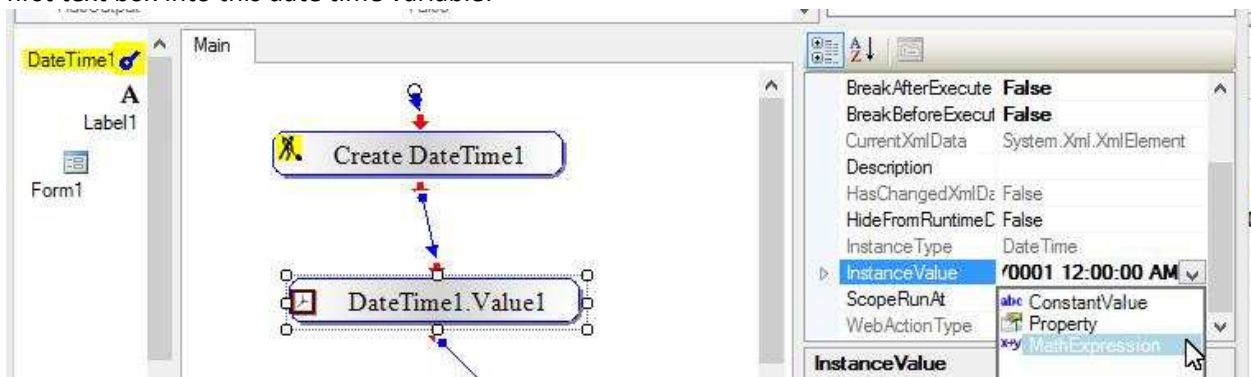A constructor action appears and a variable, DateTime1, appears:

Note that if you choose a different constructor then you need to make sure all parameters are valid values.
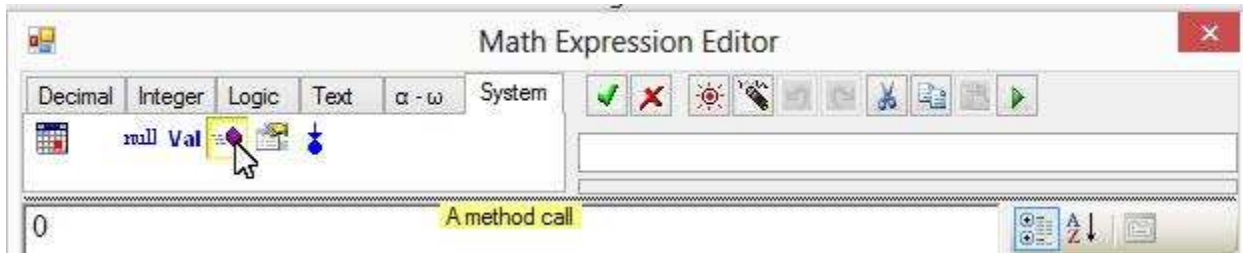
Right-click the newly created date time variable; choose "Create Set Value Action":

A new set value action appears. Link it to the constructor action. Set its InstanceValue property to "Math Expression" because we want to use the Parse method of the DateTime class to parse the text of the first text box into this date time variable:
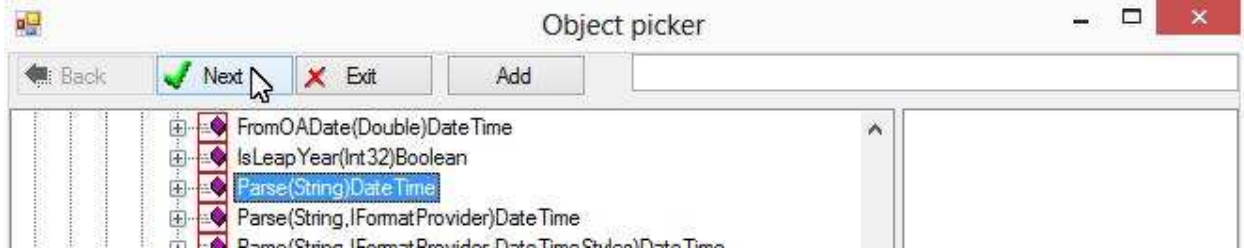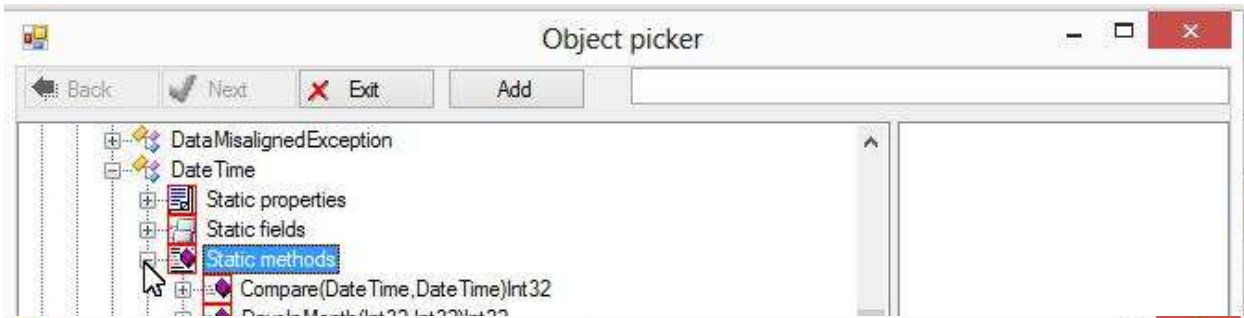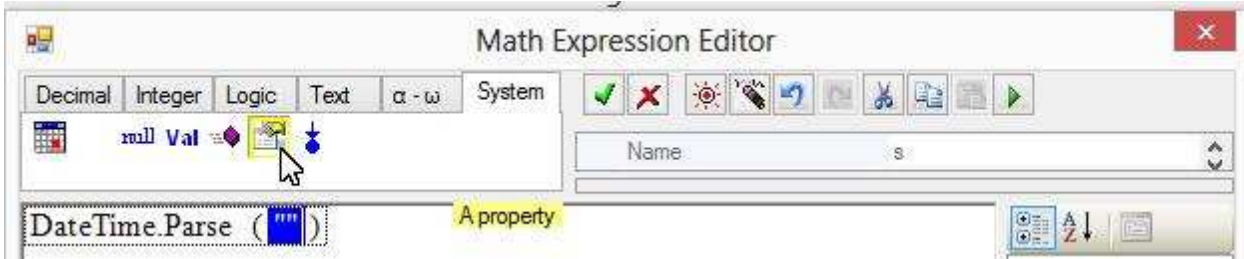

Select the Method icon:

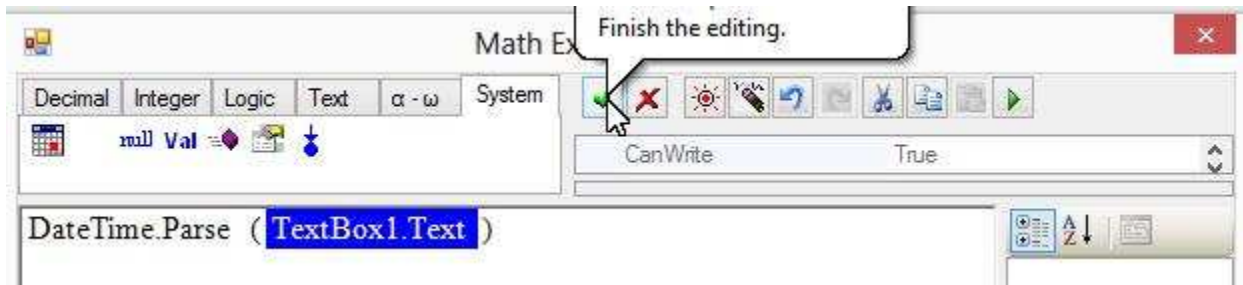Find the DateTime class and select its "Parse (String)" Method:
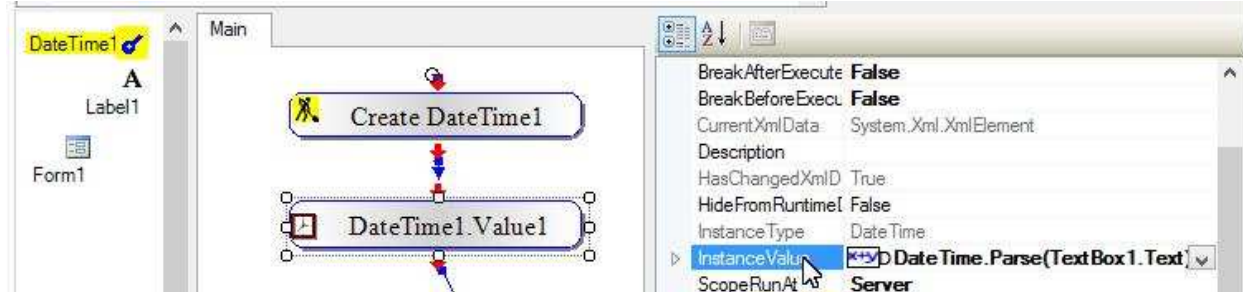
Select the parameter and click the Property icon:

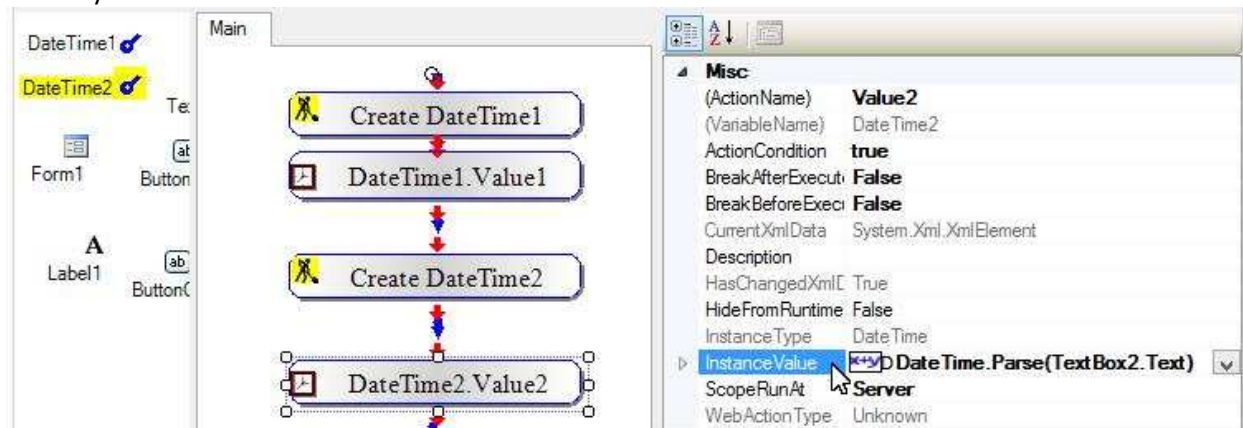Select the Text property of the first text box:

This expression converts the text of the first text box into a date time instance:

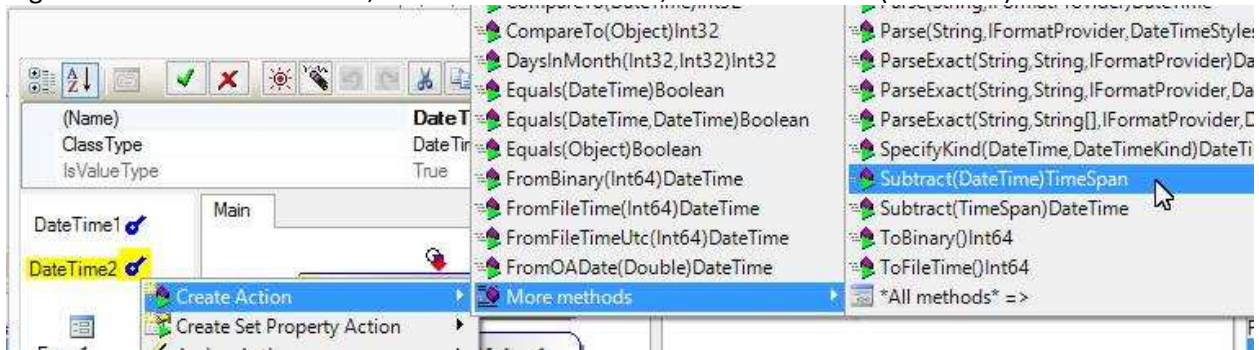This action converts text of the first text box into a date time and assigns it to a local variable DateTime1:

We may create another date time variable and convert the text of the second text box into it:
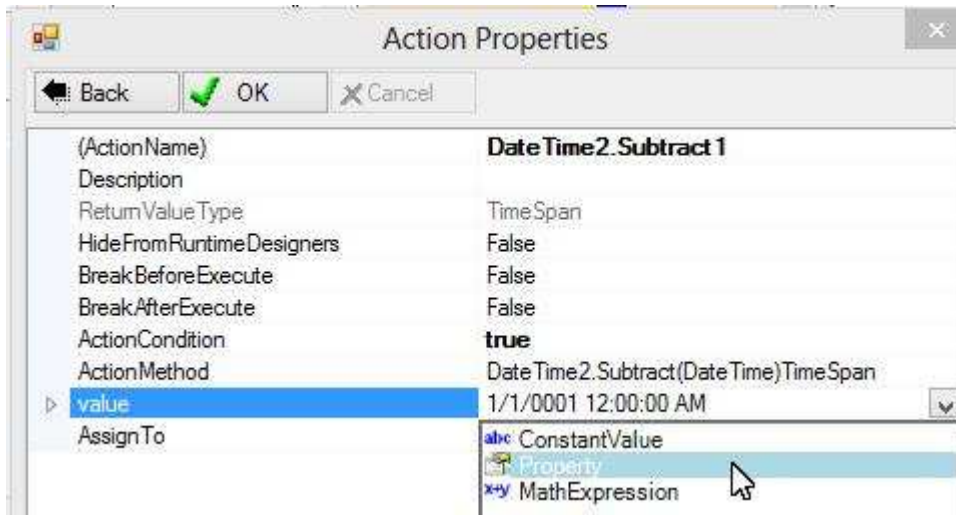

Calculate time difference

The date time calculation we want to do is to find the time difference, in seconds, of the two date times displayed in the two text boxes.

Right-click variable DateTime2; choose "Create Action"; choose "Subtract(DateTime)" method:
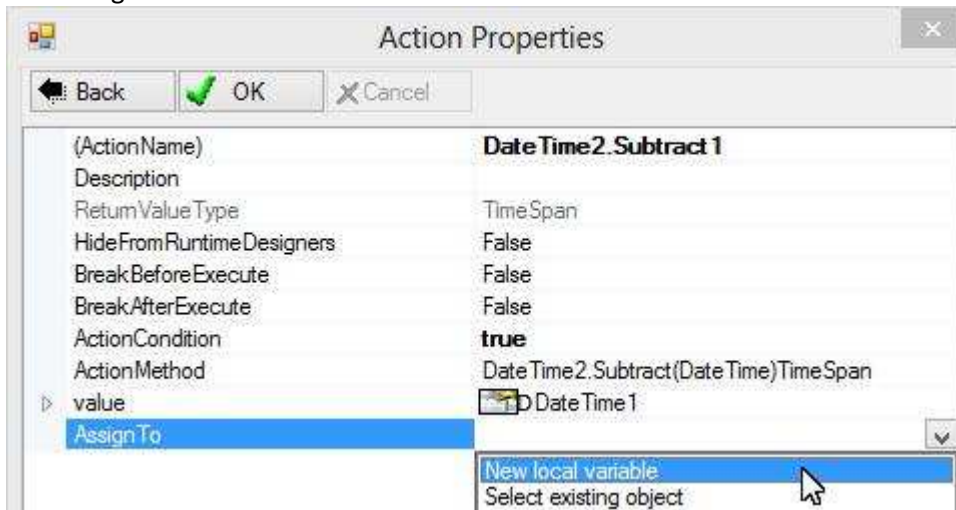
Choose "Property" for the "value" of this action because we want to use variable DateTime1 for the "value":
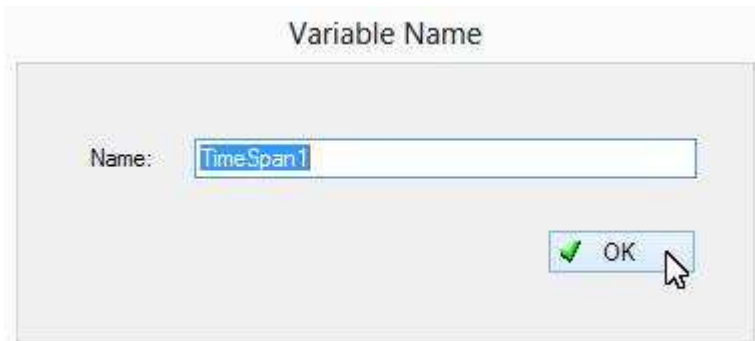

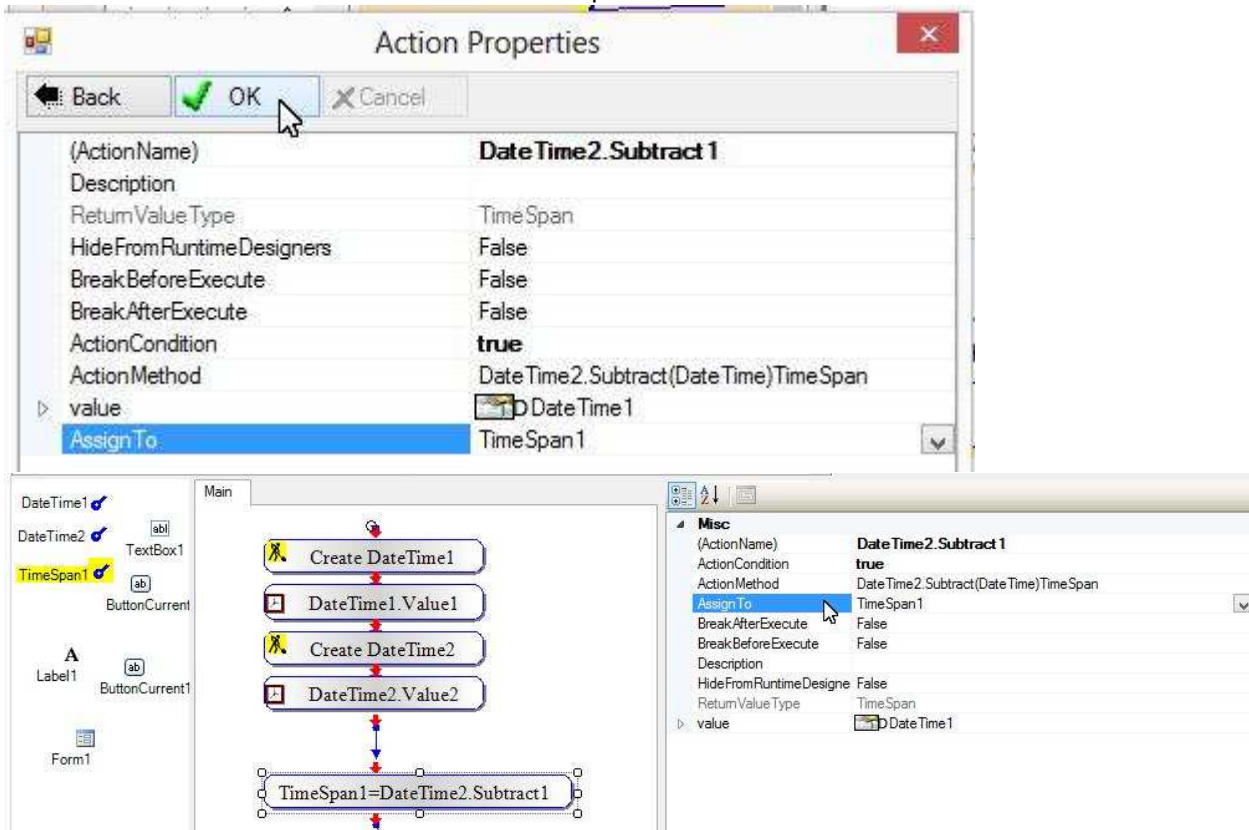Select variable DateTime1 and click Next:

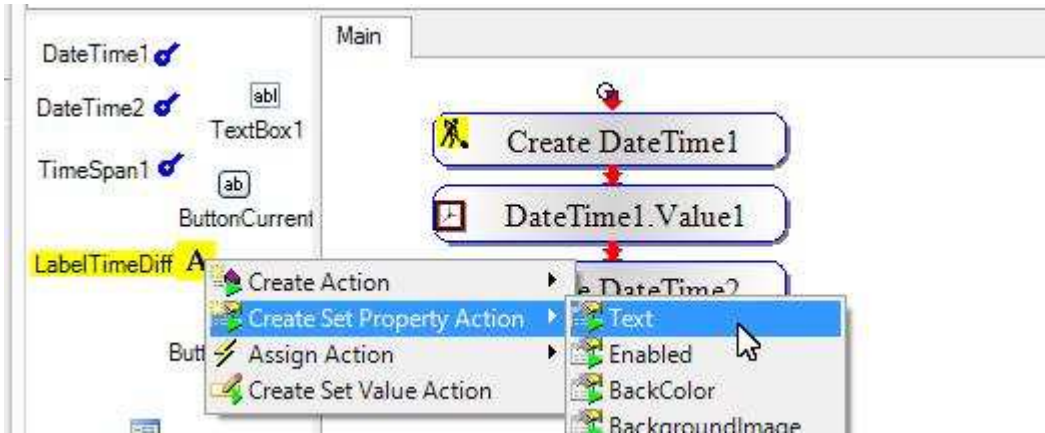For "AssignTo" of this action choose "New local variable":

This action calculates the difference between local variables DateTime1 and DateTime2 and stores the difference into a new local variable named TimeSpan1:
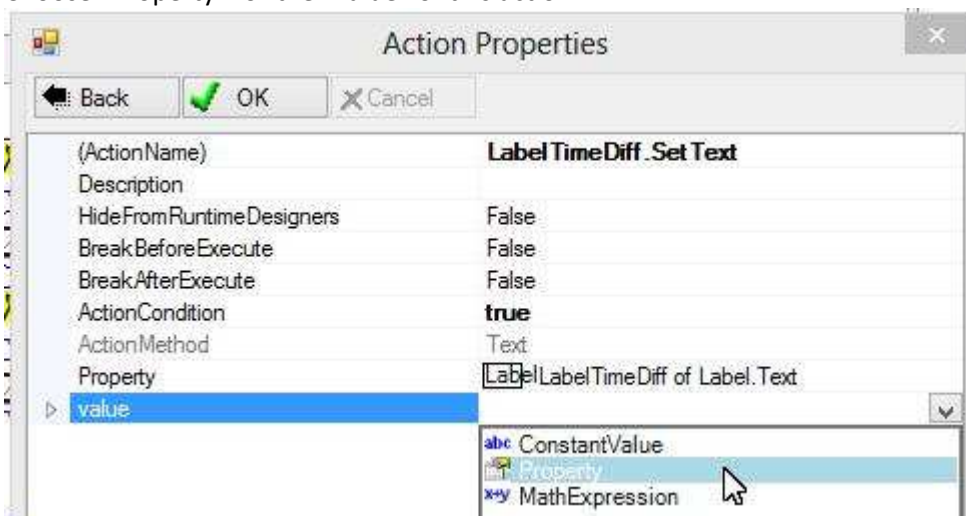
TimeSpan1 is a TimeSpan instance. It represents a time span in various units: days, hours, minutes, seconds, etc.
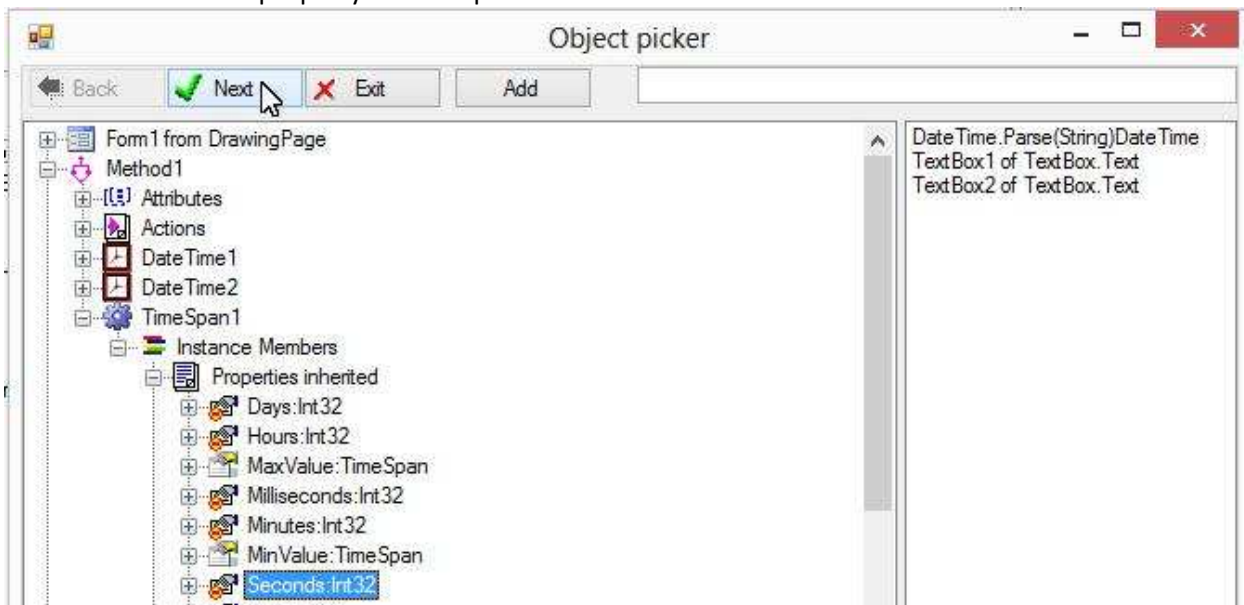
Suppose we want to show the time span in seconds in a label. Right-click the lable; choose "Create Set Property Action"; choose "Text" property:
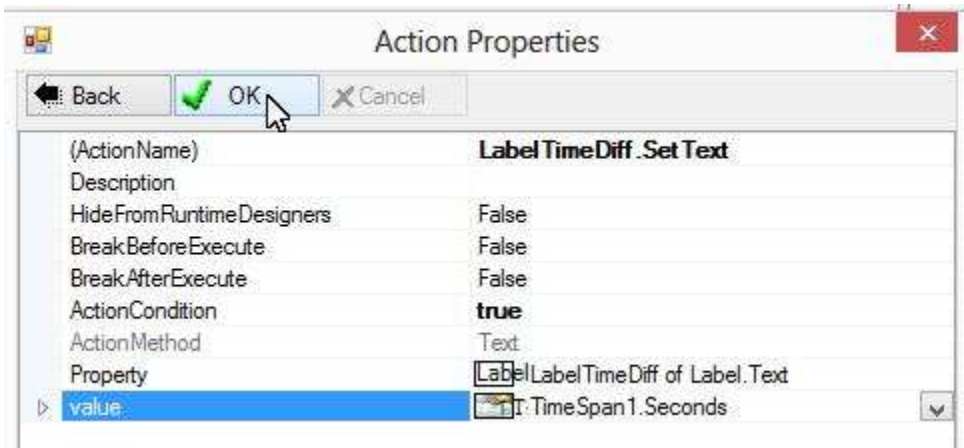
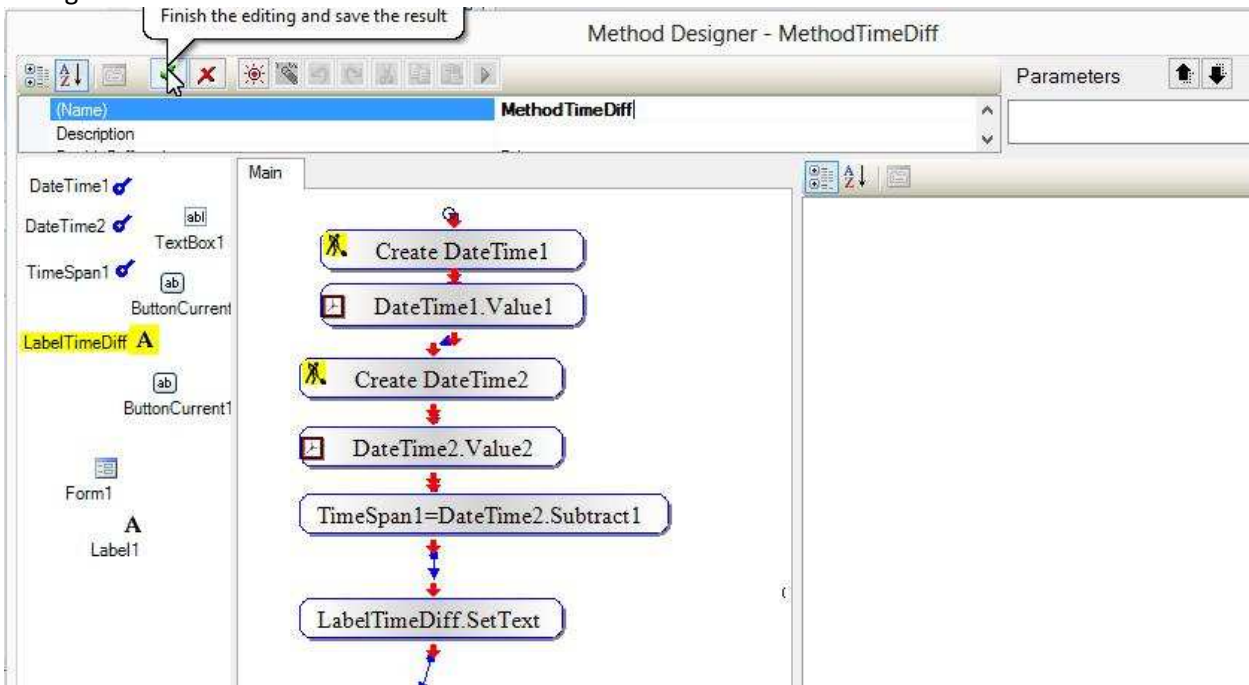Choose "Property" for the "value" of this action:

Select the "Seconds" property of TimeSpan1:

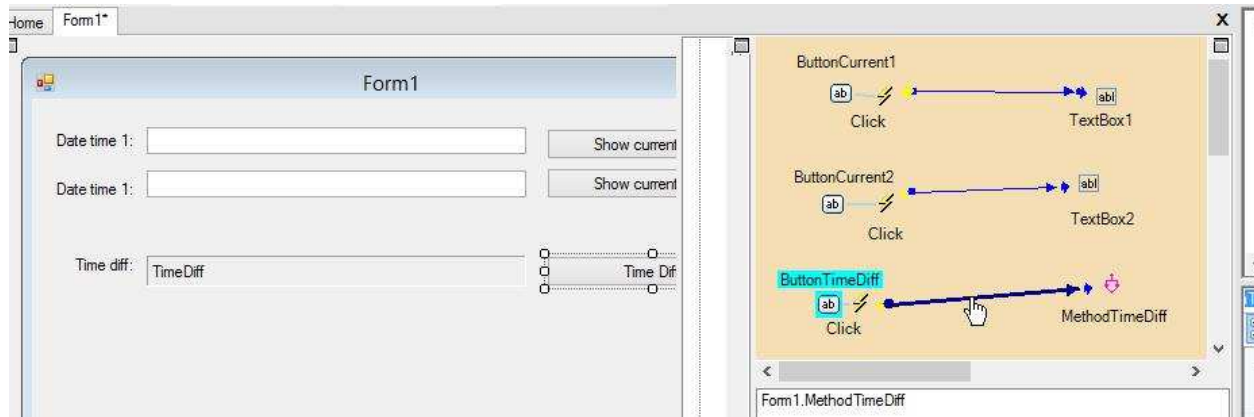This action shows the time span, in seconds, in the label:

Change this method name to "MethodTimeDiff".

This method converts the text of the first text box into DateTime1; converts the text of the second text box into DateTime2; subtracts DateTime1 from DateTime2 and stores the result into TimeSpan1; shows the Seconds property of TimeSpan1 in a label.

Test

Use the method MethodTimeDiff to create an action. Assign the action to a button:

Run the application. Click the first button. Wait for a few seconds. Click the second button. Then click button "Time Diff". The label shows the time difference, in seconds.

Feedback

Please send your feedback to support@limnor.com