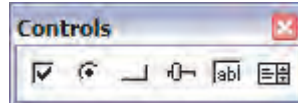


SCRIPTED CONTROLS

Scripted controls use scripts to manage their behavior and can be customized by editing the Visual Basic script used by the control. Scripted controls include the following objects (from left to right as shown in image):

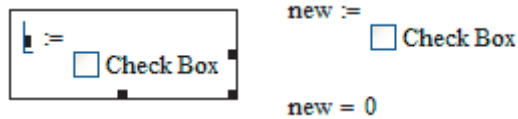
- Check box
- Radio button
- Push button
- Slider
- Text box
- List box



BUTTON CONTROLS

The button class consists of the first three controls listed. You can insert a button control by first selecting the icon and then assigning a variable name to it.

When evaluated, the variable will assume the value of 1 if checked and a value of 0 if unchecked.



In the examples below, we have used a checkbox in evaluating the function.

$new :=$ Check here to include nonlinear terms

$new = 0$

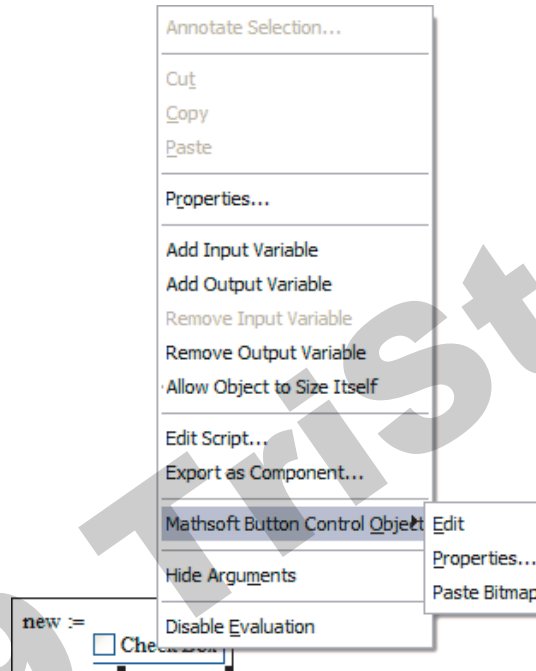
$f(x) := x + 5 + new \cdot x^4$
 $f(32) = 37$

$new :=$ Check here to include nonlinear terms

$new = 1$

$f(x) := x + 5 + new \cdot x^4$
 $f(32) = 1048613$

Right-click on the control to bring up a menu of options for that control. Select Mathsoft Button Control Object > Properties to open the control properties dialog box.



From there, you change the description displayed in the worksheet as well as other general properties including font, size, and style.

In this example, "Check Box" has been renamed to "Modified" and the font size has been changed.

$new :=$ Modified

Here, the argument has been hidden.

Modified

Below is the default script for the check box control. The script is comprised of four events:

1. **Start:** The start event is executed when the checkbox is calculated.
2. **Exec:** The exec event is executed after the start event. Inputs and outputs are processed, returning the state of the checkbox.
3. **Stop:** The stop event is executed after the exec event. It tells the script that the current computation has stopped.
4. **Click:** In the click event, the check box is re-executed after the user has changed the selection.

