

QuickBuilder's Expanded Features Make Programming Even Easier

36



Control Technology Corporation, Hopkinton, MA • 800.282.5008 • www.ctc-control.com

The latest version of QuickBuilder (released in May 2009) has some handy new features you'll want to learn about.

The Editor. If you've worked with QuickBuilder in the past, you're familiar with the Project Window. It provides a graphic view of your program and allows you to view any given step in the QS4 Code Editor (example below).

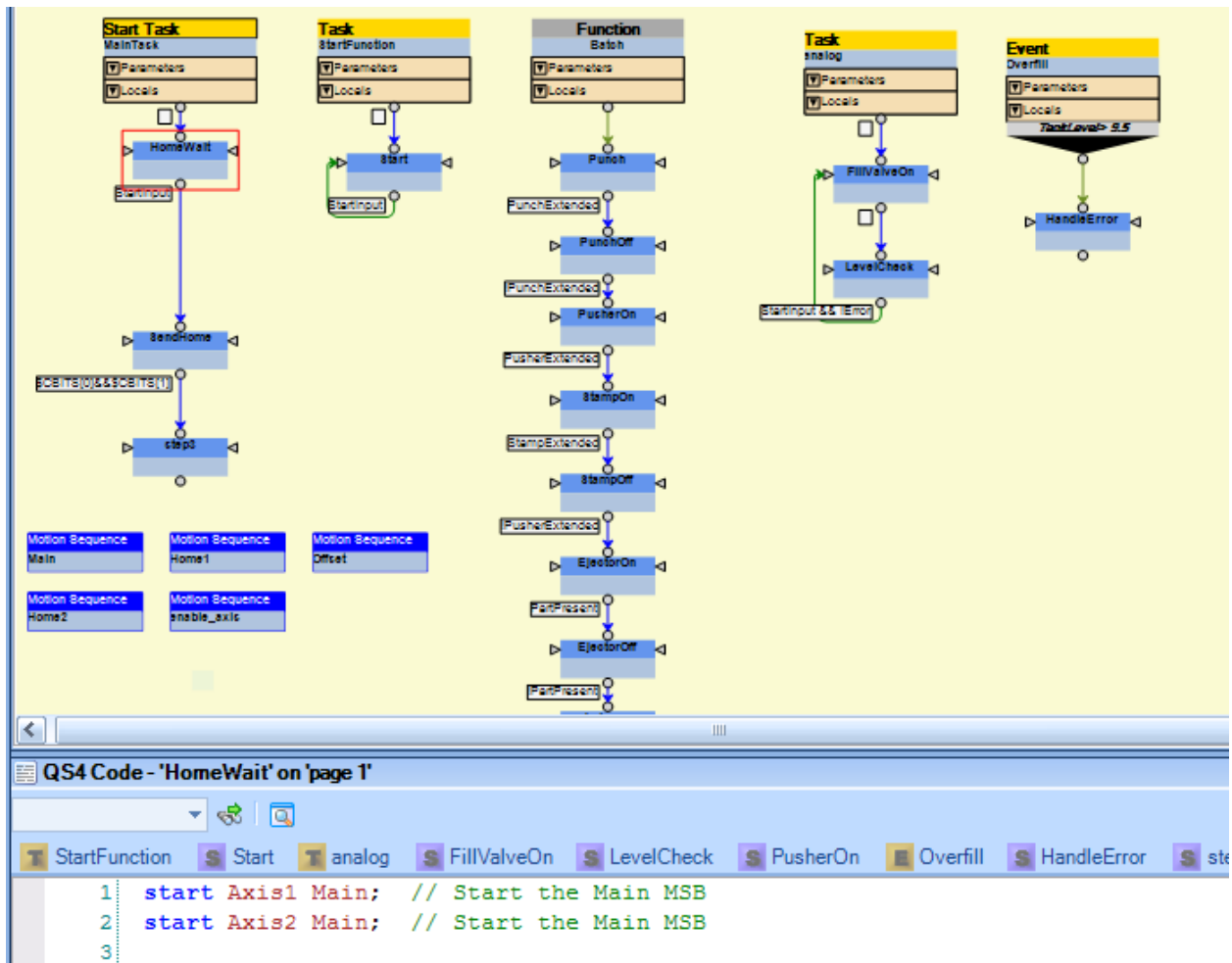


Figure 1: QuickBuilder's project window

The new version of QuickBuilder gives you the ability to view the code from two different tasks at the same time with the new Editor Window. The Editor Window allows you to see one Task in the Full screen, or two tasks using the Split Screen Option.

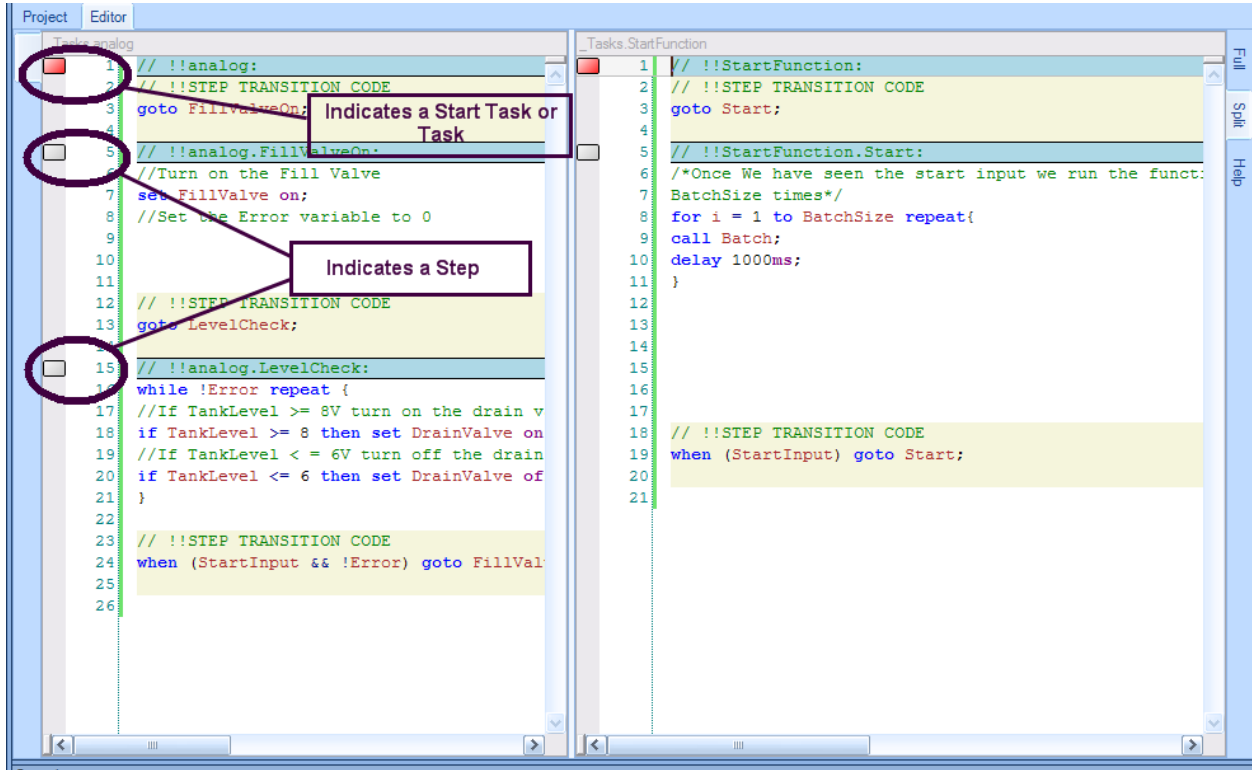


Figure 2: QuickBuilder's new split-screen option

You can even add steps while in the Editor by issuing a right click in the Editor Step. Selecting Add Step inserts a new step below the step you have selected.

```
7 // !!MainTask.HomeWait:
1 start Axis1 Main; // Start the Main MSB
2 start Axis2 Main; // Start the Main MSB
3
4
5
6
7 // !!STEP TRANSITION CODE
8 when (StartInput) goto SendHome;
9
10 // !!MainTask.SendHome:
11 $CBITS[0] = 0; // clear the homed bits
12 $CBITS[1] = 0;
13 Axis1.GoHome = 0; // Tell the Axis 1 Main MSB to start homing Axis 1
14 Axis2.GoHome = 0; // Tell the Axis 2 Main MSB to start homing Axis 2
15
16 // !!STEP TRANSITION CODE
17 when ($CBITS[0] && $CBITS[1]) goto step3;
```

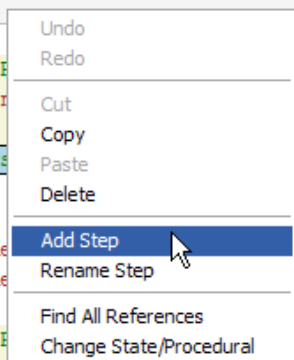


Figure 3: Adding a step is as easy as a right-click

You can create code in the new step and rename it as desired. In Figure 4 you can see `step1` was added and then coded with three statements.

```
10 // !!MainTask.HomeWait: <Procedural>
11 start Axis1 Main; // Start the Main MSB
12 start Axis2 Main; // Start the Main MSB
13
14
15
16
17 // !!STEP TRANSITION CODE
18 when (StartInput) goto SendHome;
19
20 // !!MainTask.step1: !![QuickBuild
21 set StatusLight on;
22 set Actuator off;
23 delay 500 ms;
24
25 // !!MainTask.SendHome: <Procedural>
26 $CBITS[0] = 0; // clear the homed bits
27 $CBITS[1] = 0;
28 Axis1.GoHome = 0; // Tell the Axis 1 Main MSB to start homing Axis 1
```

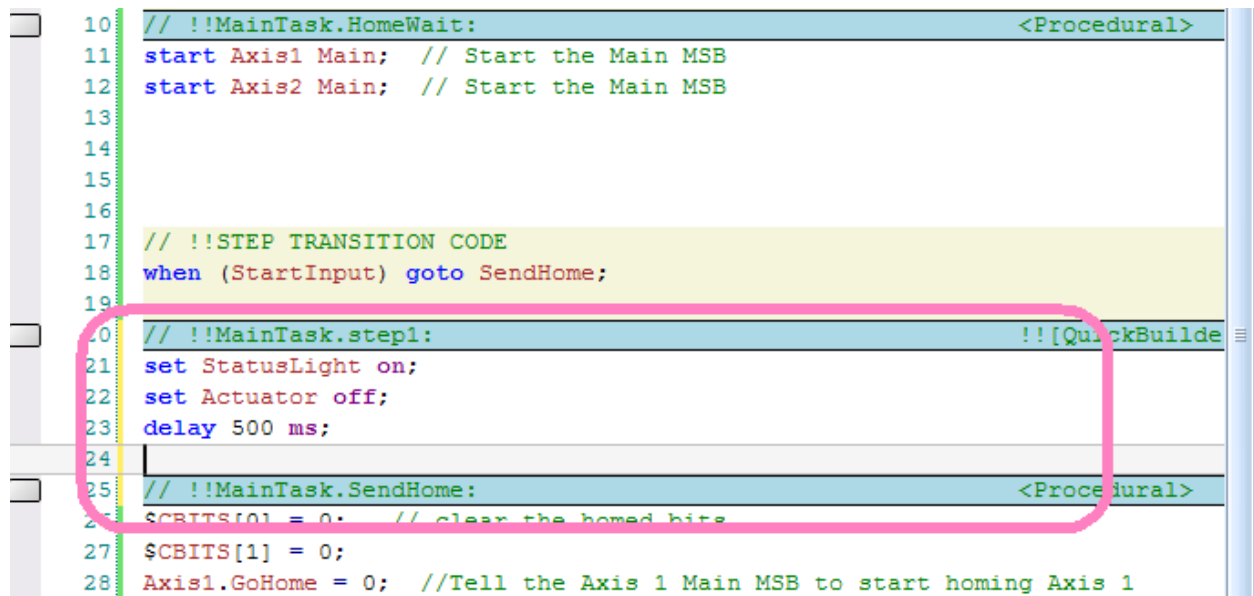


Figure 4: Creating code in a new step

If you return to the Project Window you will see the step has also been added graphically. Notice `step1` has been graphically inserted between `HomeWait` and `SendHome`.

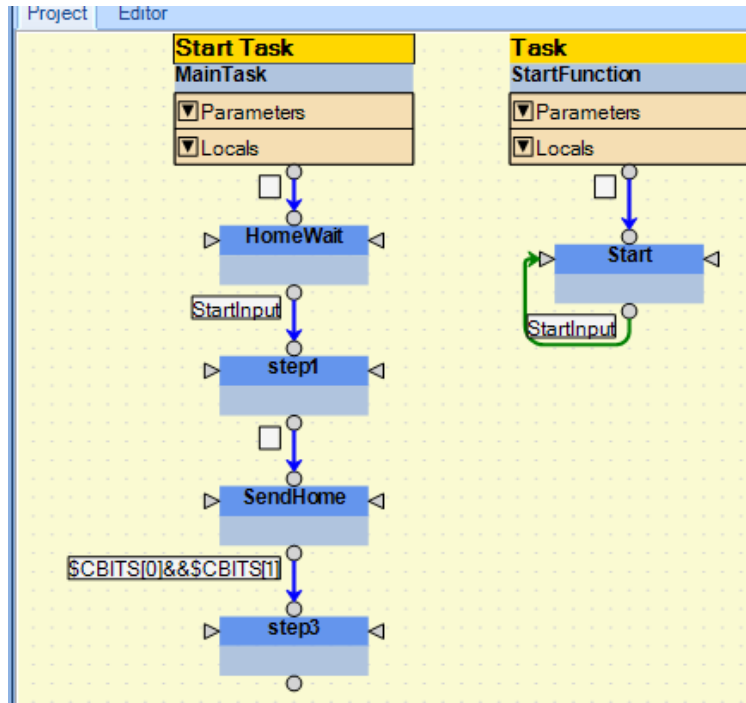


Figure 4: Viewing your new code in the Project Window

Online View of Resource Values. Another new QuickBuilder feature is the ability to view “online” values of any given resource using the Editor-Online feature.

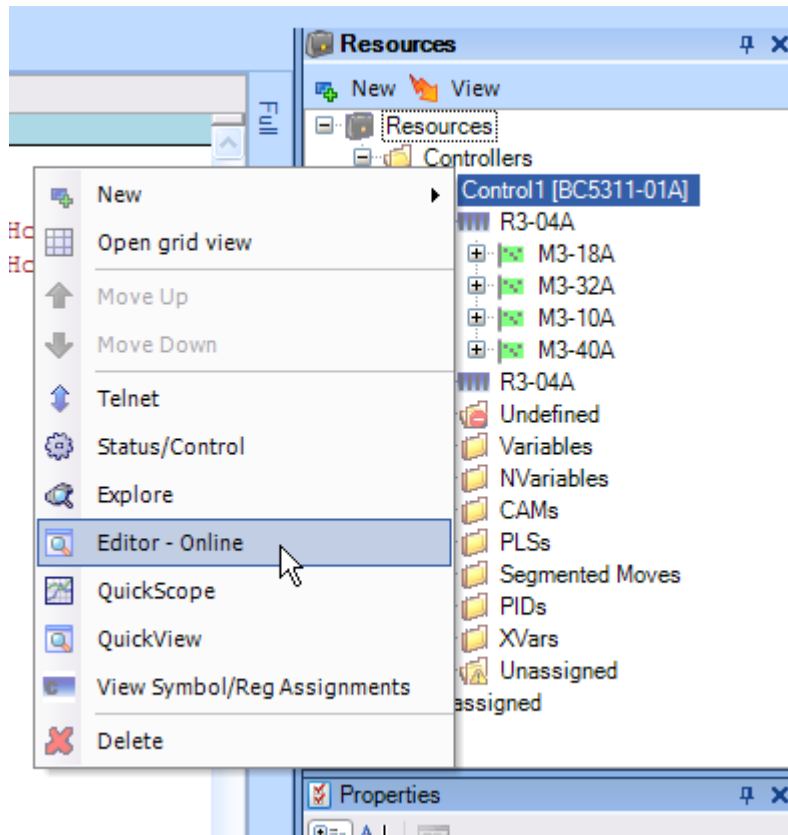


Figure 5: Using the Editor-Online feature

Once you are Online you will see the Editor highlighted in green.

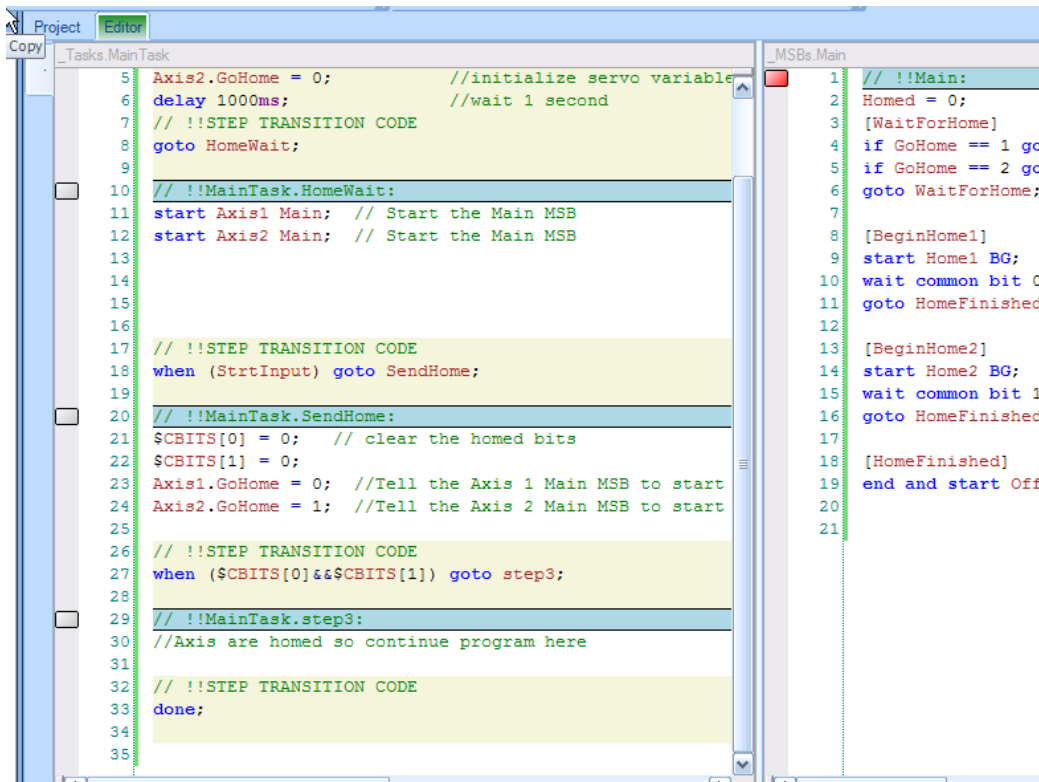


Figure 6: Accessing the Editor-Online feature

The new feature allows you to mouse over any resource and see its value. The value is shown within the curly brackets { }. This also shows you details about the resource, such as type and location.

If you mouse over a resource while the Editor is not online you will still see the resource details, but the value reports back as {?}. Below you can see the value of Pos2, which is a read/write float variable. This value is a snapshot of the resource taken at the time you mouse over it. If you want to update it, simply move the mouse away and then back over the resource.

```

:3 Axis1.GoHome = 0; //Tell the Axis 1 Main MSB to
:4 Axis2.GoHome = 1; //Tell the Axis 2 Main MSB to
:5 repeat {
:6 Pos1 = Axis1.fpos;
:7 Pos2 = Axis2.fpos;
:8 {2531.69612024911} - (var, float) [ReadWrite] , Register - 36102 0
:9 until ($CBITS[0]&&$CBITS[1]);

```

Figure 6: Accessing the Editor-Online feature

As always, CTC's technical support staff is available to assist you as you develop your QuickBuilder code and learn to use these new features. Online technical resources can be found on the CTC website: <http://www.ctc-control.com/customer/techinfo/idxdocsw.asp#uguides>.