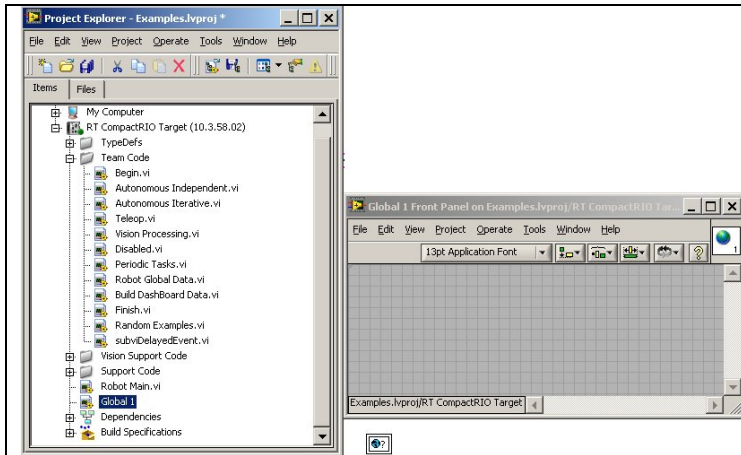


Create & Use Global Variables



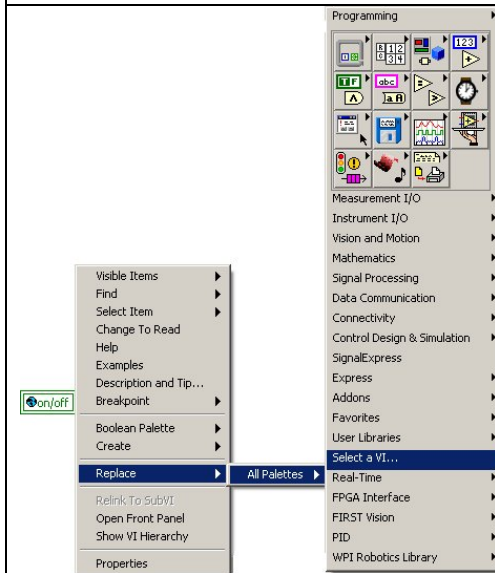
Add a Global variable

On the Block Diagram right-click for the Functions palette and place a new global on the Block diagram.

Programming->Structures->Glob

A new file (*Global 1*) will appear on your Project Explorer. Move it to Team Code.

Double click on the new global variable and you'll get the front panel associated with it (*Global 1*). Save *Global 1* to keep it.

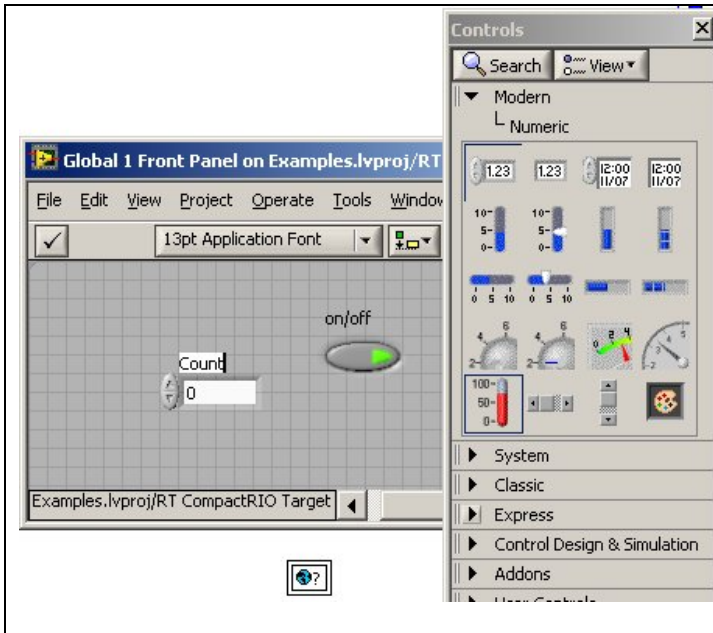


If you want to associate your new global with an existing set of globals, such as Robot Global Data, then right-click on the new global:

Replace->All Palettes->Select a VI

Navigate to *Robot Global Data* or other existing global file and select it.

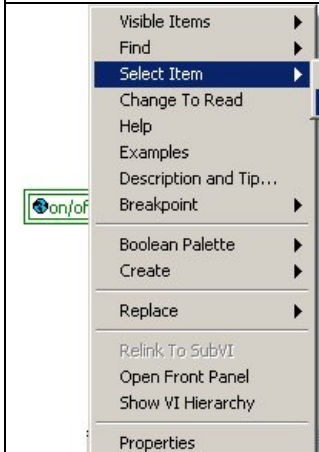
Your new global will default to one of the existing global variables.



To add new variables:

Add the type of control you want the global to be: numeric, Boolean, string, etc. Right-click on the global Front Panel, select and place your control. Give it a meaningful name.

Add any more globals you want to this front panel and they also can be selected from.

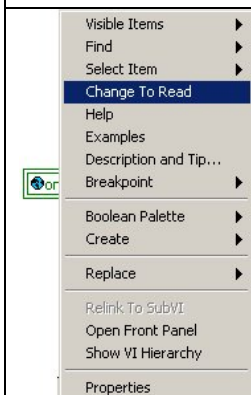


Assign your new variable:

Right-click on the global variable and
Select Item->variable

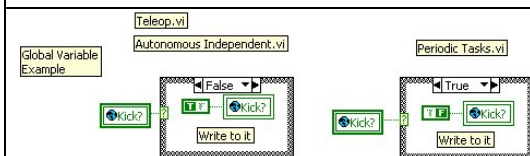
Now it's ready to be used where you need it.

If you want to use any global variables contained in Global 1 you just copy the existing one and paste it elsewhere.



A global can be either a Write or a Read variable and that is set with a right-click and selecting the opposite if a change is necessary.

Be very careful to write to a global variable from only one location at a time. They can be safely read in multiple places though.



Block Writes to global variables

Use logic that prevents the global from being written to from multiple places at the same time. Otherwise, it will become unpredictable. Be very careful using global clusters that take some time to update to Block reads until an update write has completed.

If possible, design your code to write only from a single location.
