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# Function Block (FB) Workbench (FBench) User's Guide

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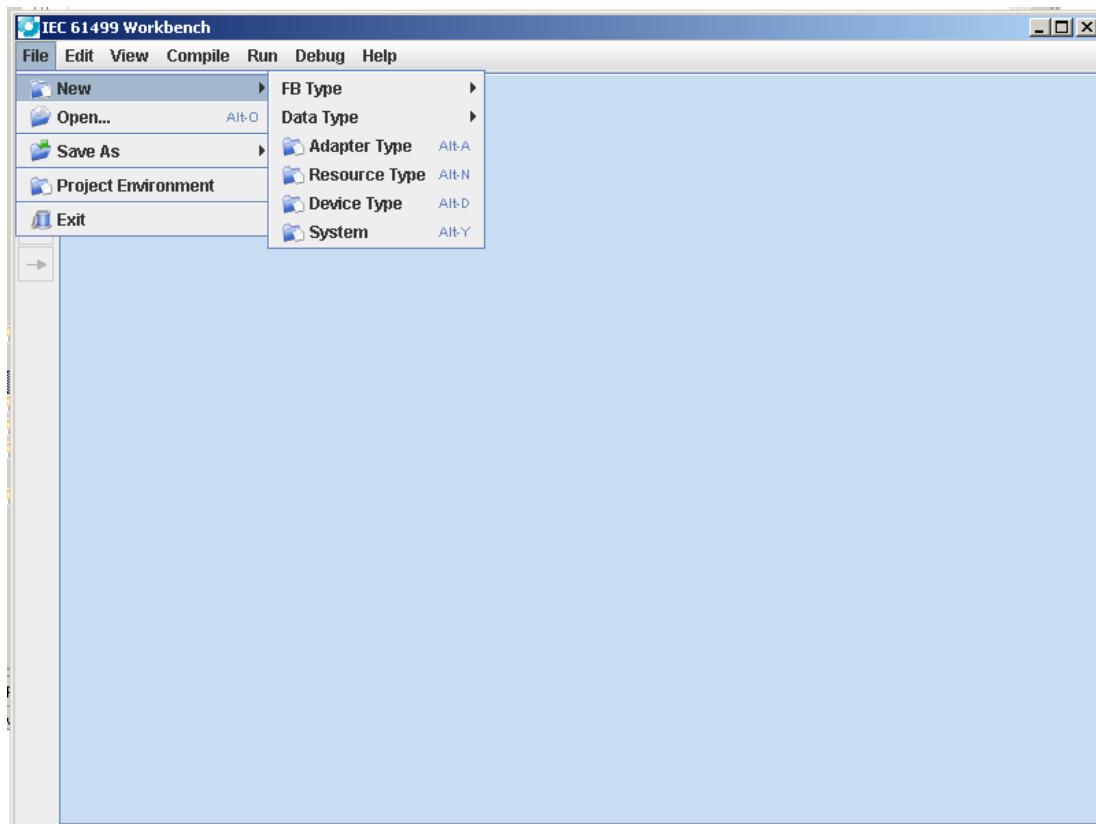
## How to create a new file from a template

The templates the workbench currently supports are

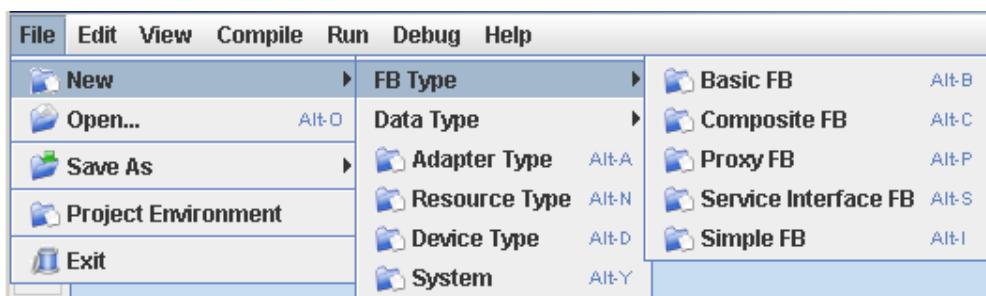
- Basic, Composite, Proxy, Service Interface, Simple FB
- Adaptor, Resource, Device Type
- System

1.) Open the OOONEIDA Workbench -- see here

2.) From Menu File -> New



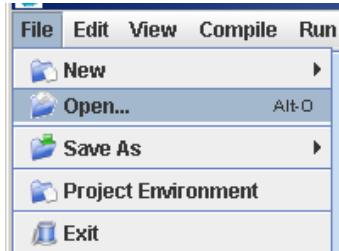
3.) Choose the desired template



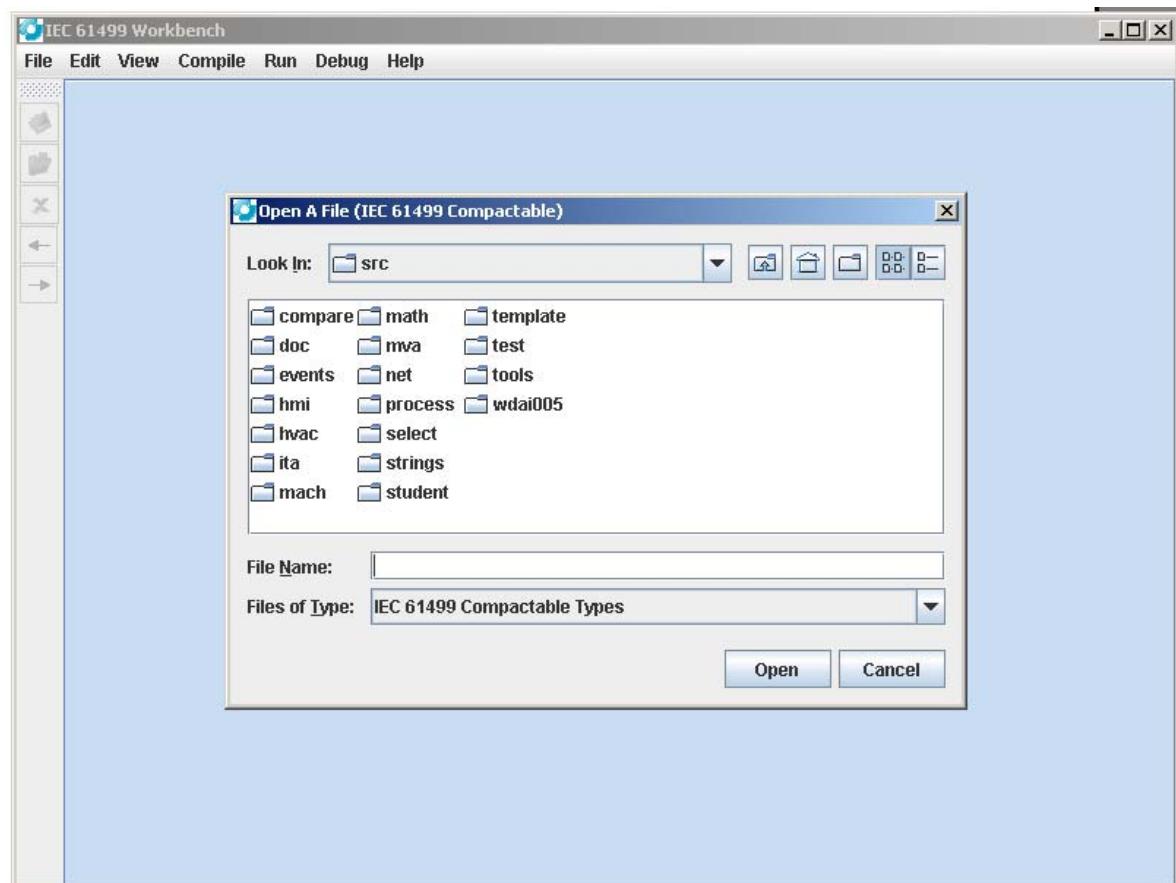
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## How to open existing file

1.) Menu File -> Open



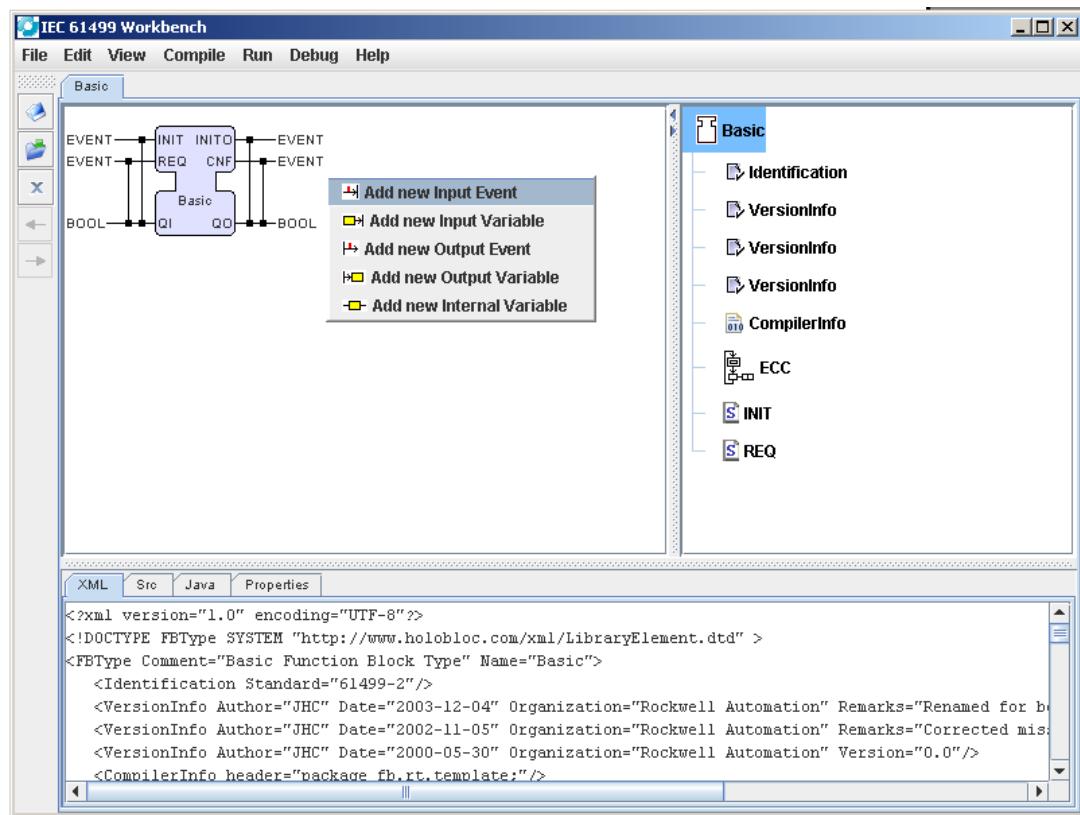
2.) Choose the file using the dialog that pops up



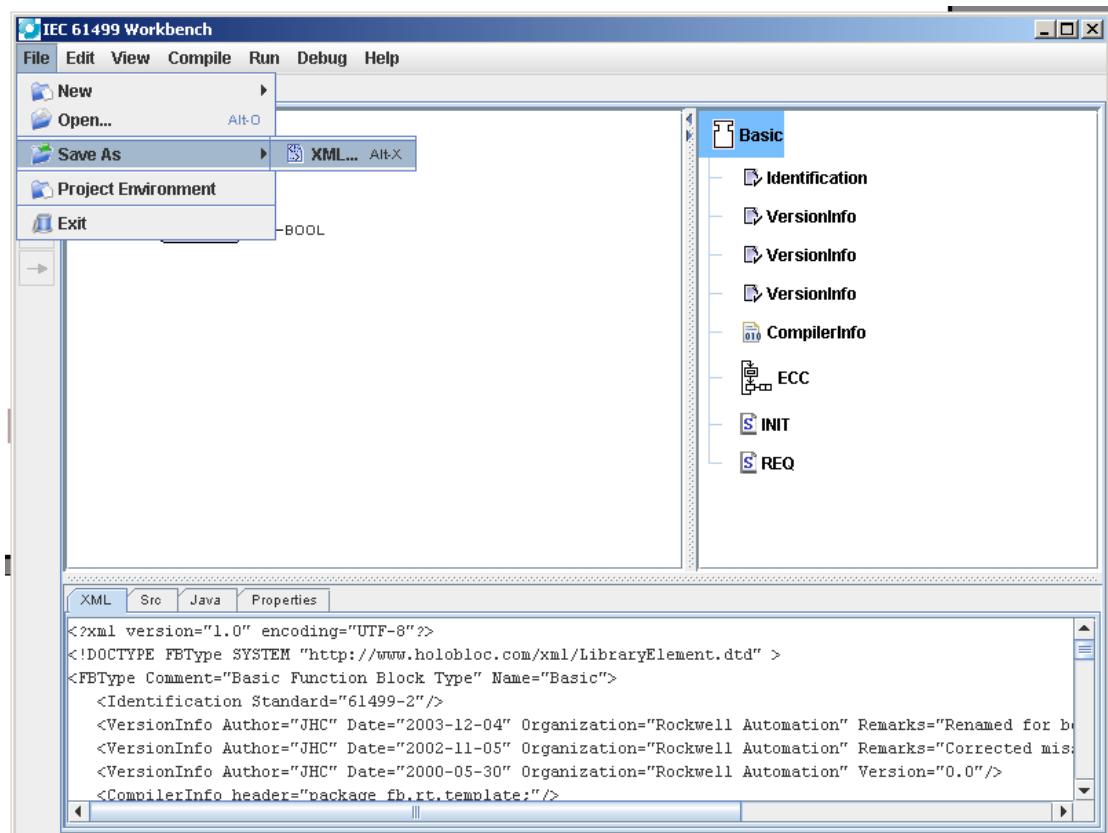
# How to Edit Function Block Interface

1.) Open the function block you want to edit, follow the “How to open existing file” instructions if in doubt.

3.) Right click on the graphical view panel and choose the desired option

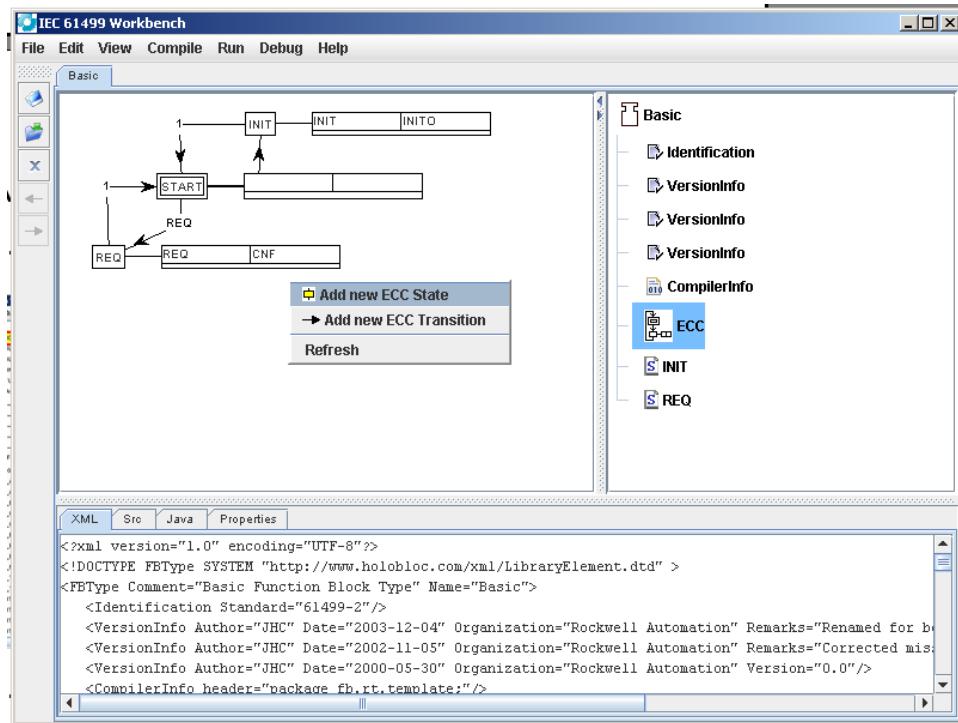


4.) Menu File -> Save As -> XML to save



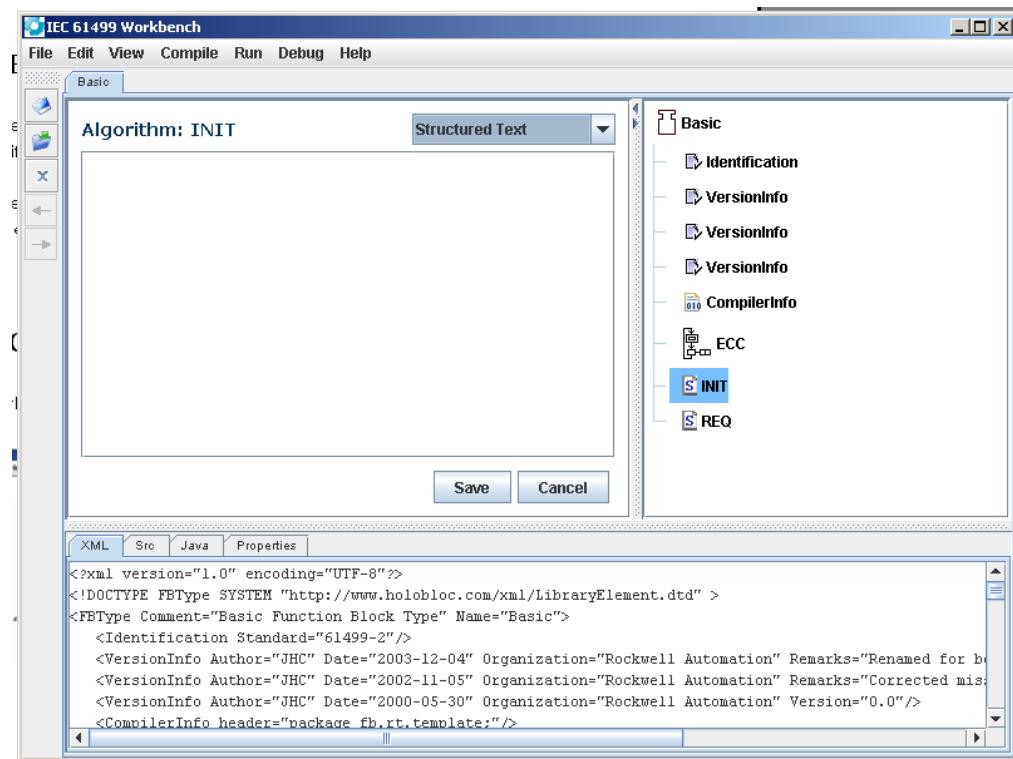
## How to Edit ECC

- 1.) Open the function block you want to edit, follow the “How to open existing file” instructions if in doubt.
- 2.) Navigate to the ECC selection in the tree to the right, and right click on the graphical view panel and choose the acceptable option



## How to Edit Algorithm

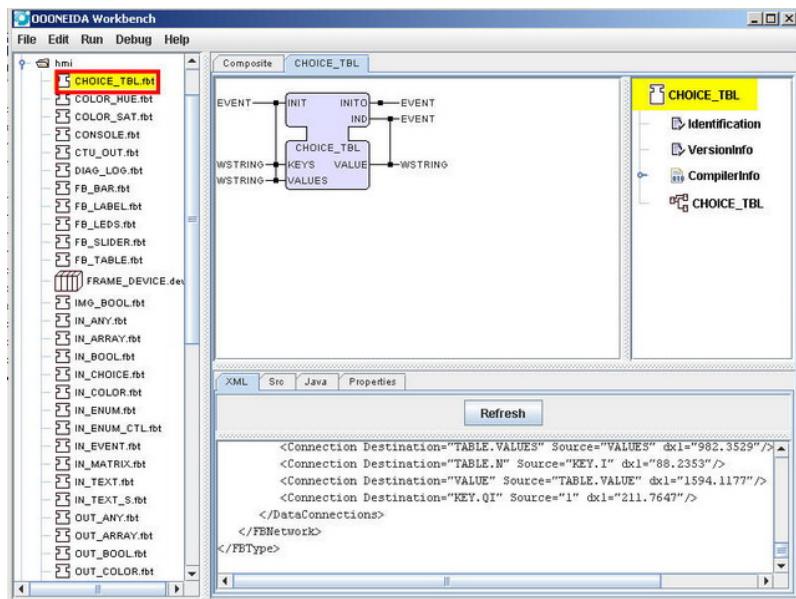
- 1.) Open the function block you want to edit, follow the “How to open existing file” instructions if in doubt.
- 2.) Navigate to the algorithm selection in the tree to the right, the S indicates structured text in this particular case



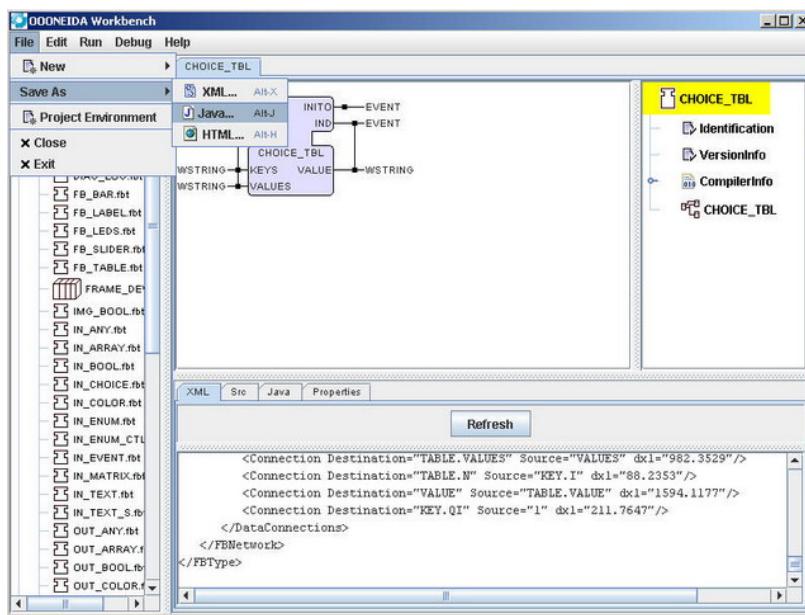
- 3.) Edit the algorithm from the main graphical display area, and press on Save to save changes and Cancel to remove changes

# How to Compile Function Blocks:

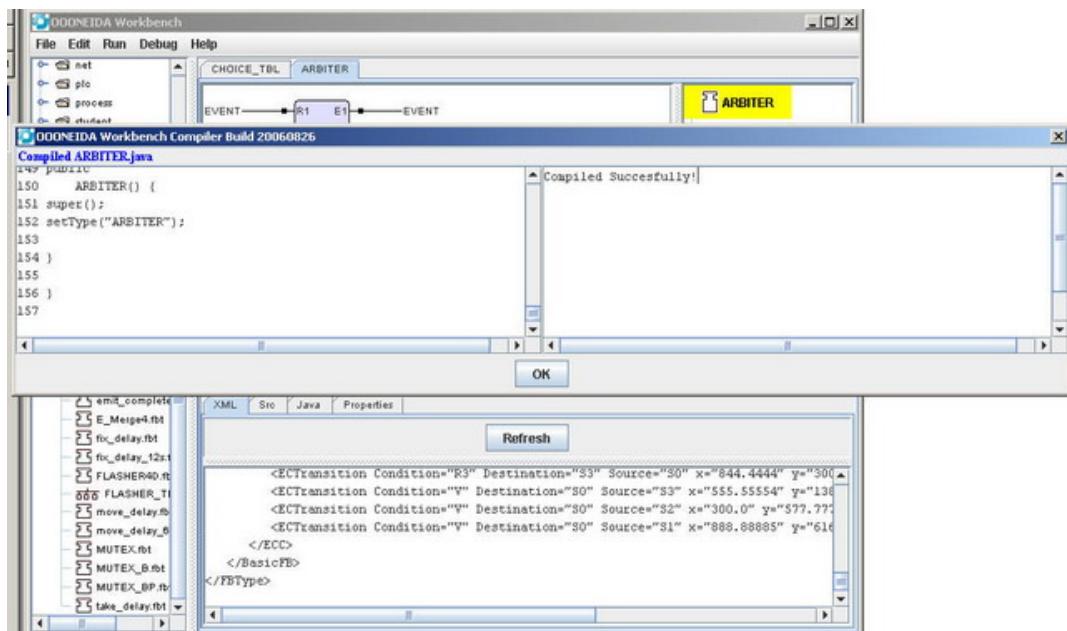
- 1.) Choose the function block you want to compile and open it



- 2.) Choose "Save as Java File"

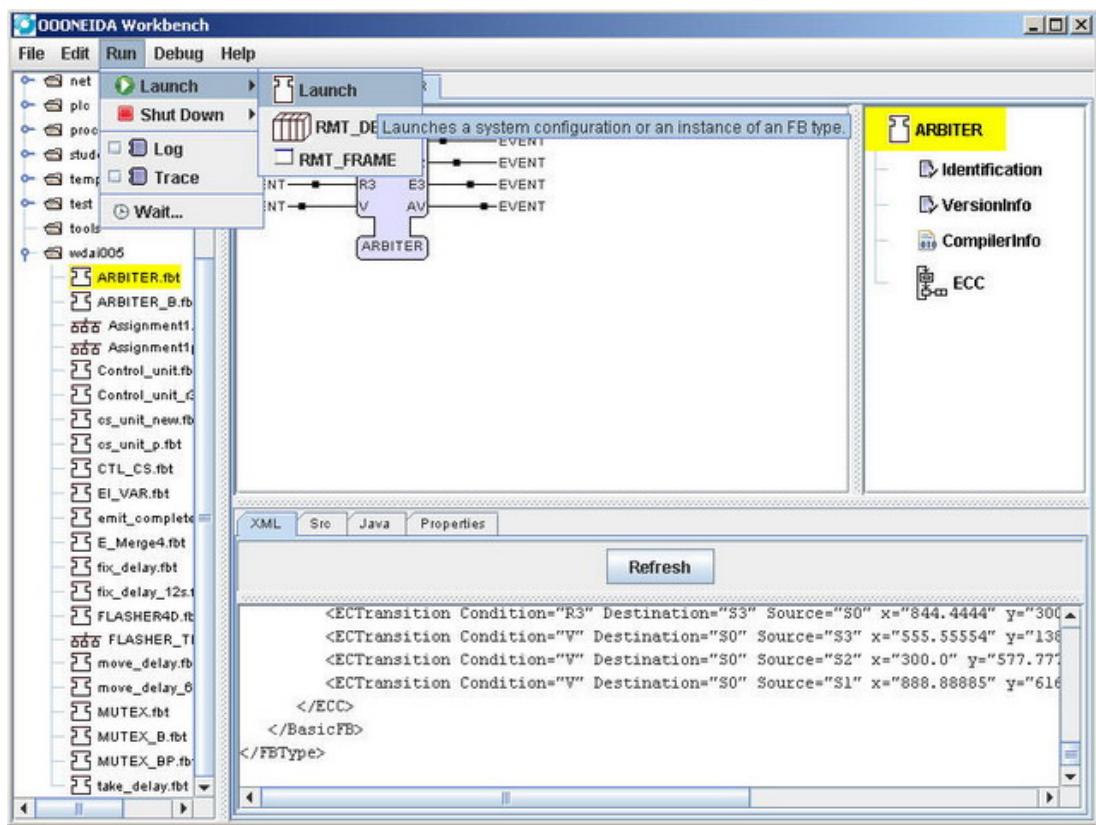


- 3.) Compilation will be complete, and the FB is now ready to be launched



# How to Launch Function Blocks

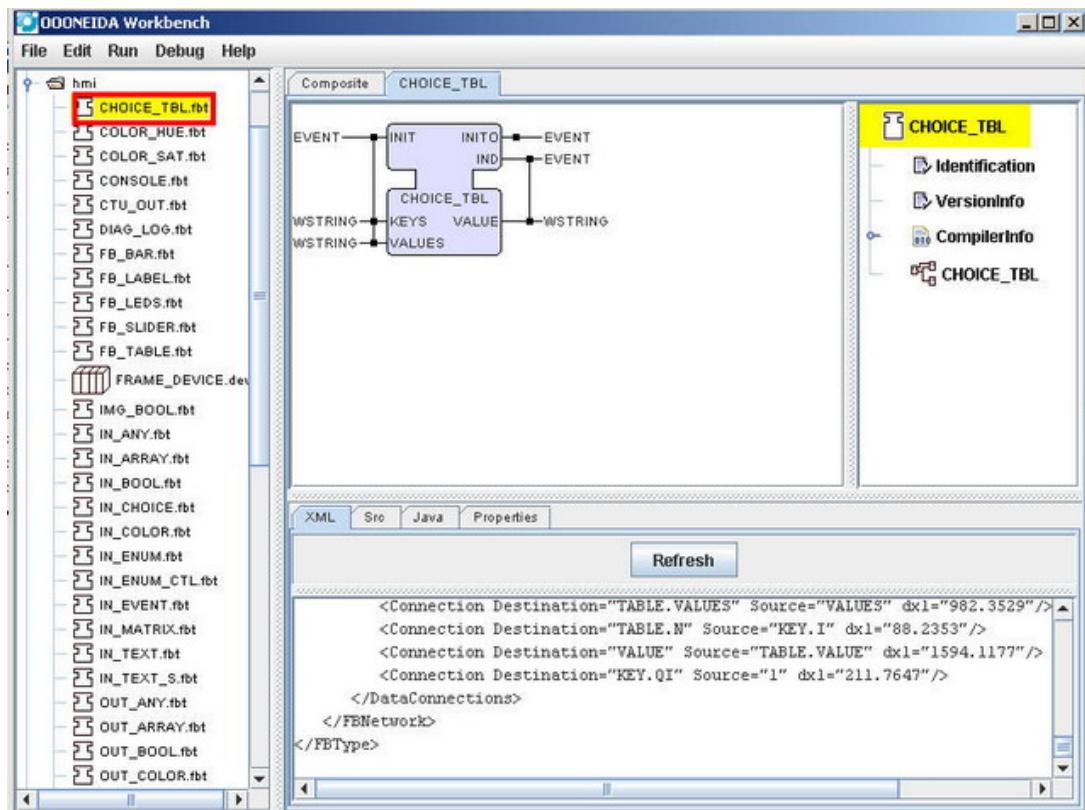
- 1.) You must first compile a function block before it can be launched
- 2.) Choose "Launch" from the Run menu



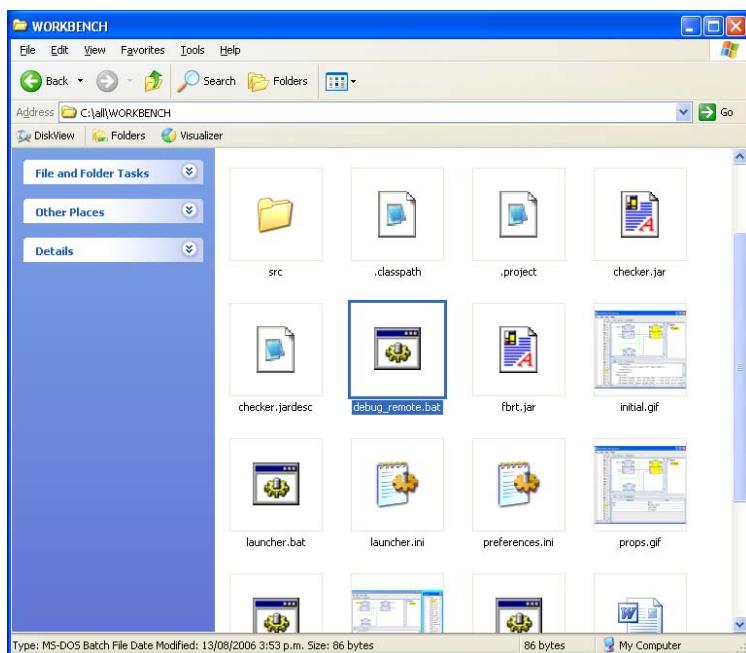
- 3.) Your function block is now launched

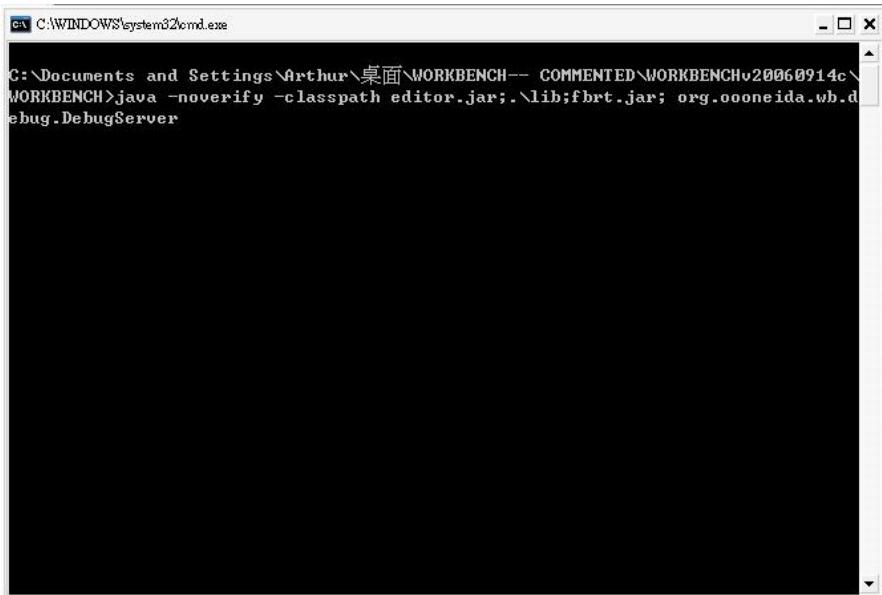
# How to Launch Function Blocks For debugging

- 1.) Choose the function block you want to Debug and double click

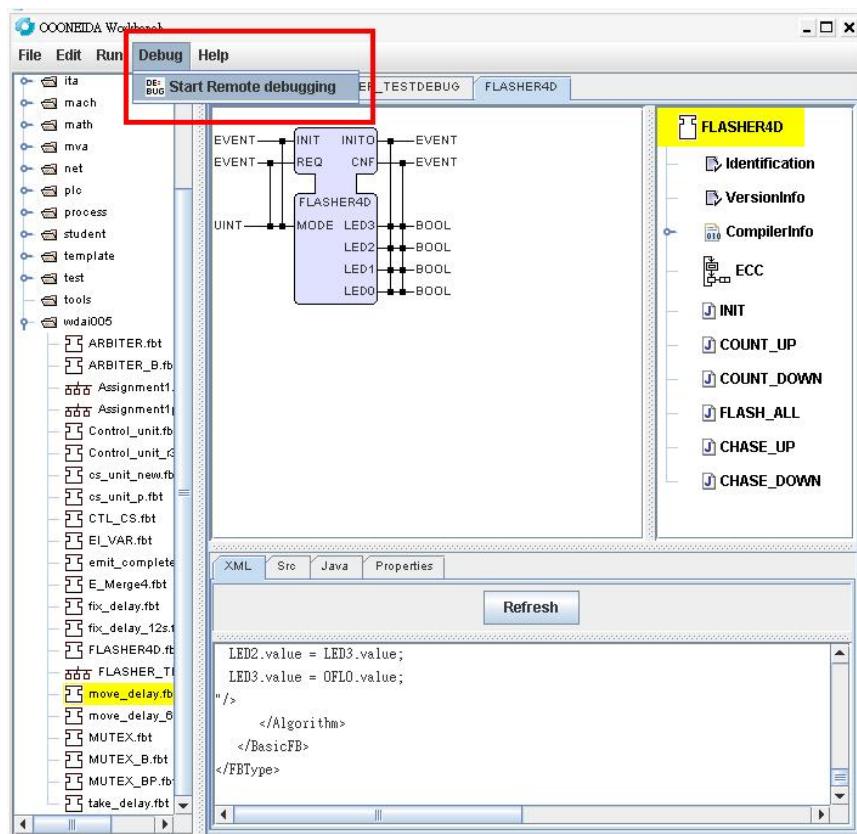


- 2.) Run the Remote Debugger



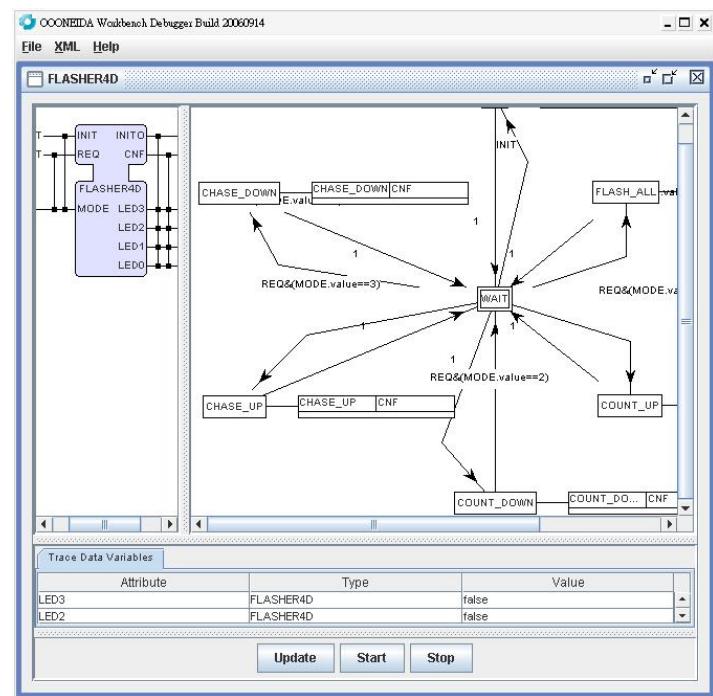


- 3.) You must then Launch the Function Block
- 4.) You can then choose the "Debug" function from the toolbar

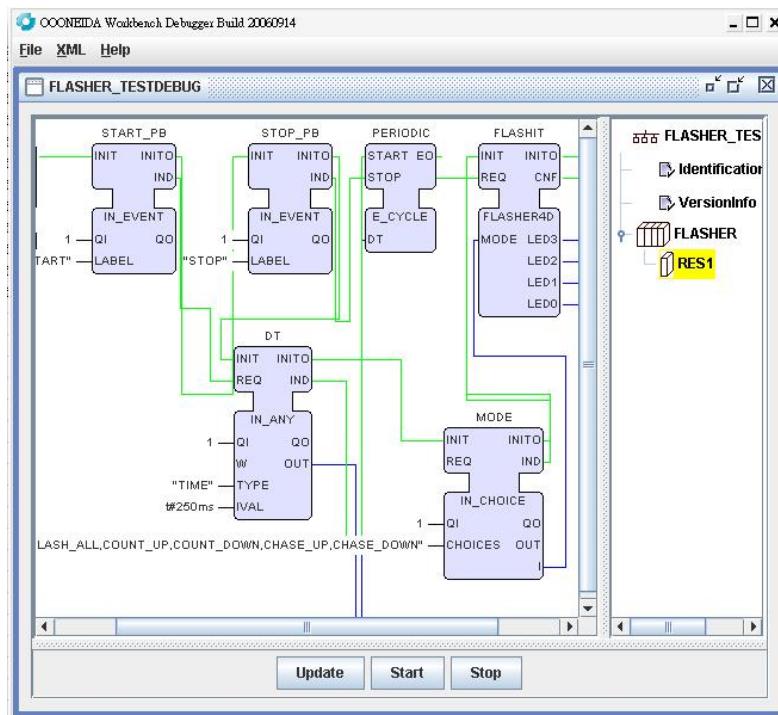


- 5.) This will bring up the Debug Panel:

## Basic Function Block Debug View:



## Composite Function Block/System Configuration Debug View



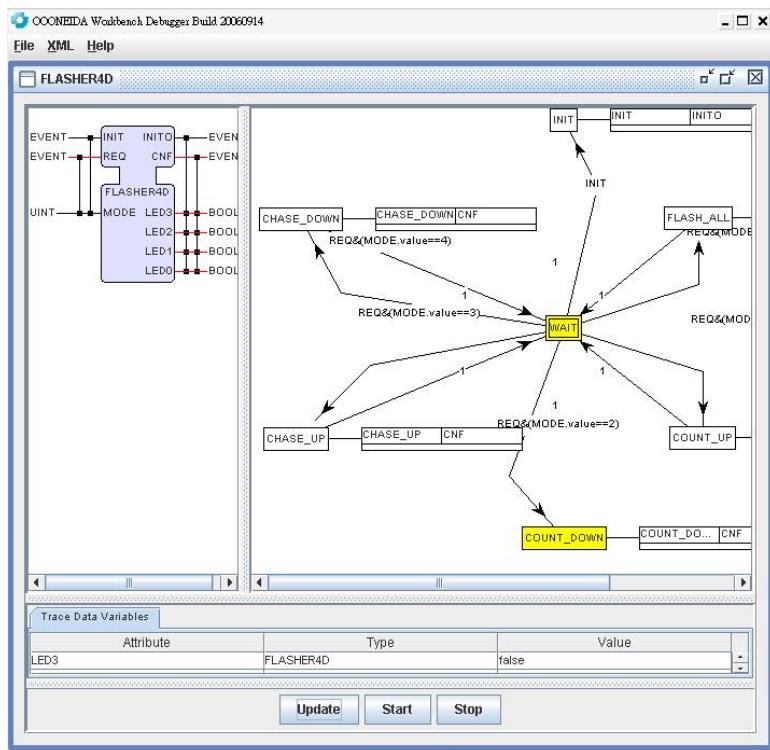
6.) As you can see, the ECC can be seen for each function block, or function block network if it is a system configuration.

There are two types of debugging. You can either manually click the "Update" button to manually update each state or click

the automatic update which will automatically update every millisecond. As can be seen below, the active states/function

blocks will light up in yellow.

## Basic Function Block Debugging:



Composite      Function      Block/System      Configuration  
Debugging:

