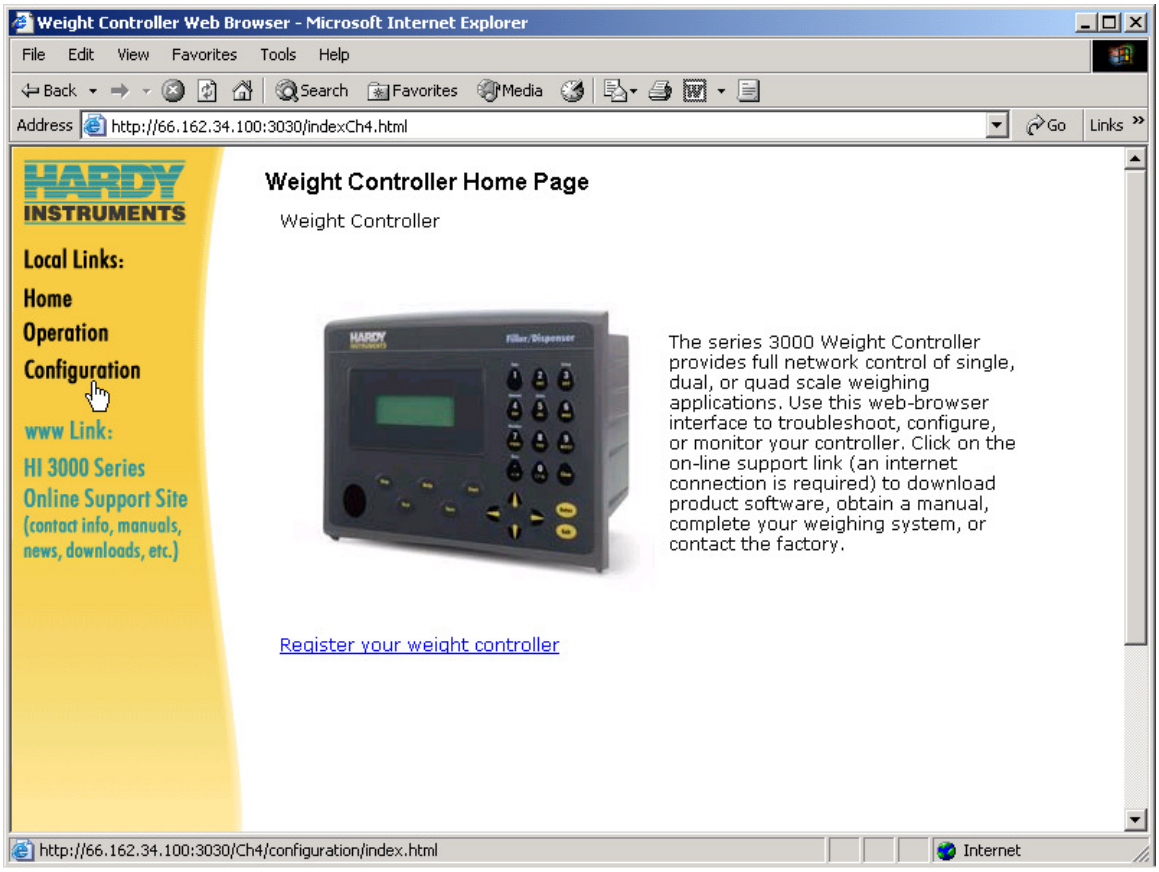
TECHNICAL NOTE

Mapping example for HI 3030 DeviceNet.

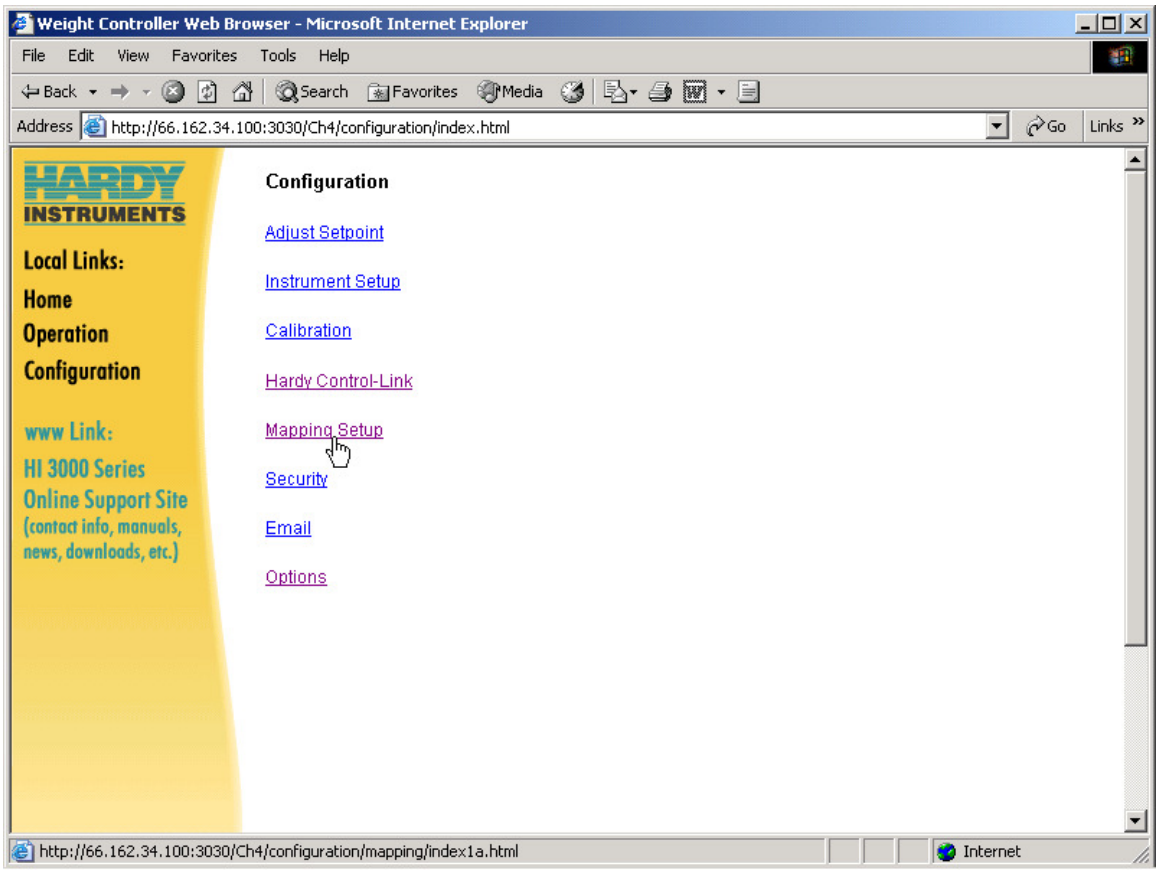
Gross weight as floating point data into the device net output table to be transferred to the plc.

For our example, we are going to have the Gross weight mapped into word 1 of our device net output table.

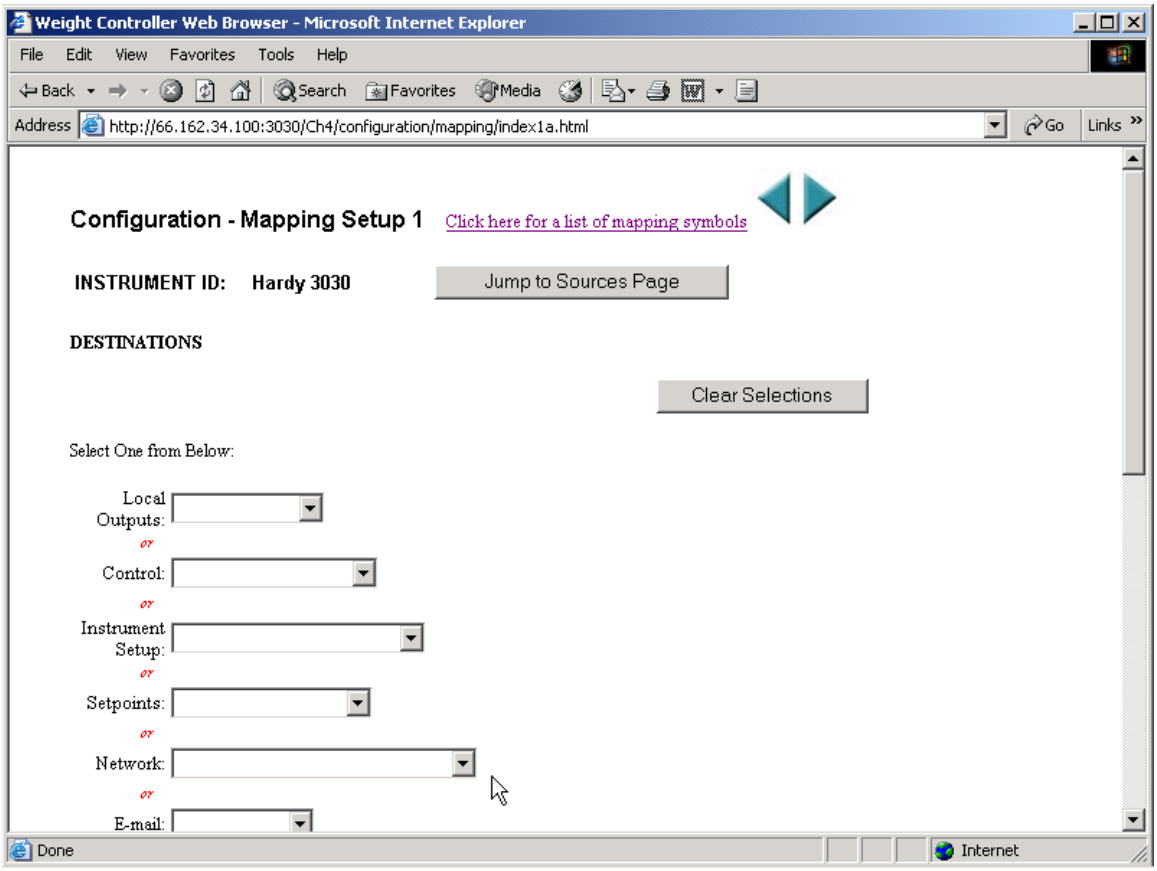
First step would be to access the HI 3030 browser. This shows the home page of the units' browser. You would then click on the link to Configuration.



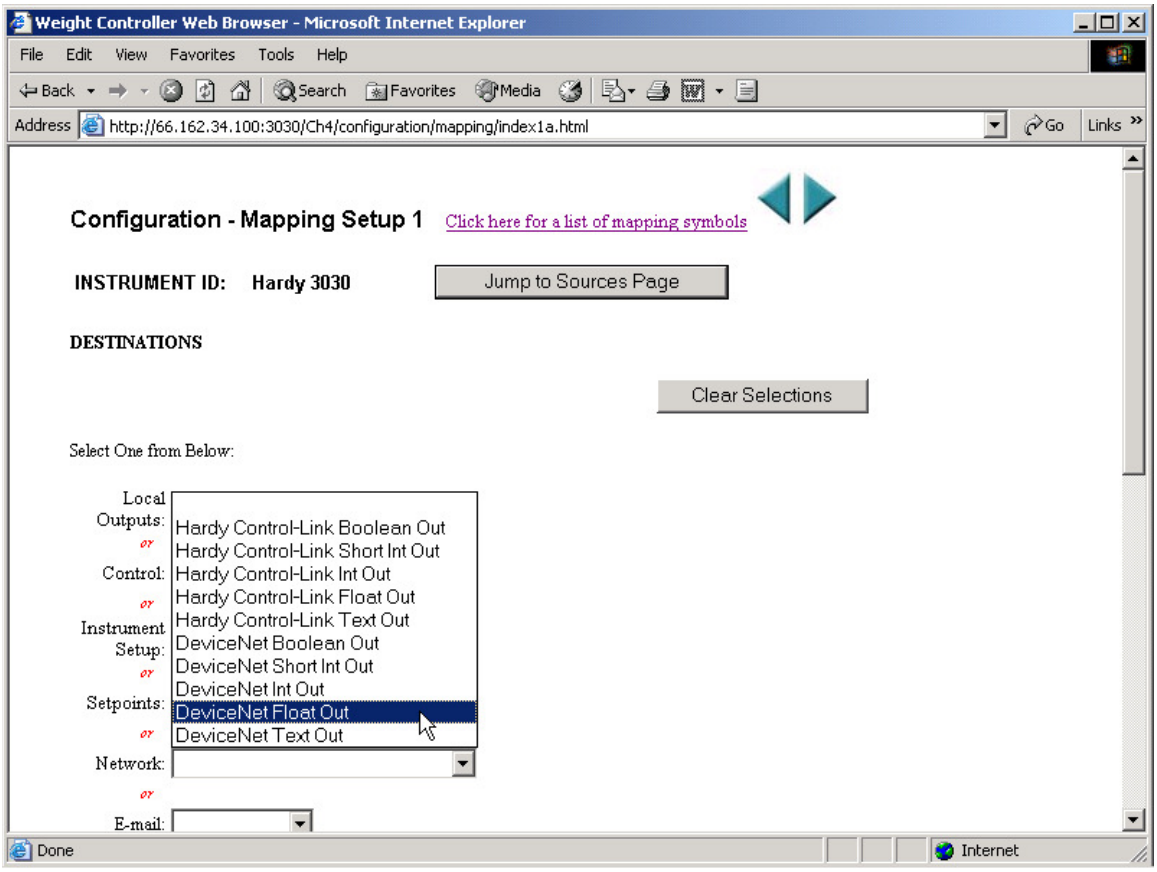
On the Configuration page, you would select the link to Mapping Setup.



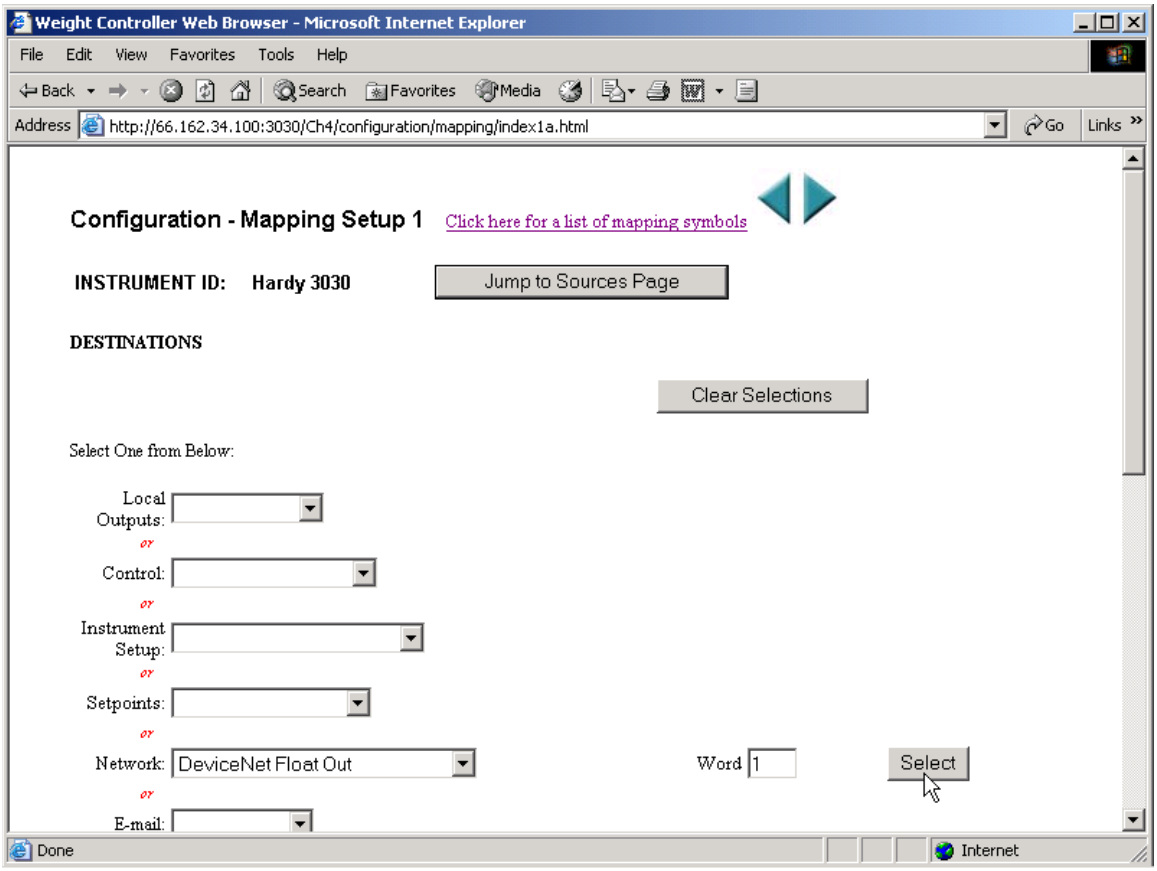
On the mapping page, you would select the pull down menu for Network.



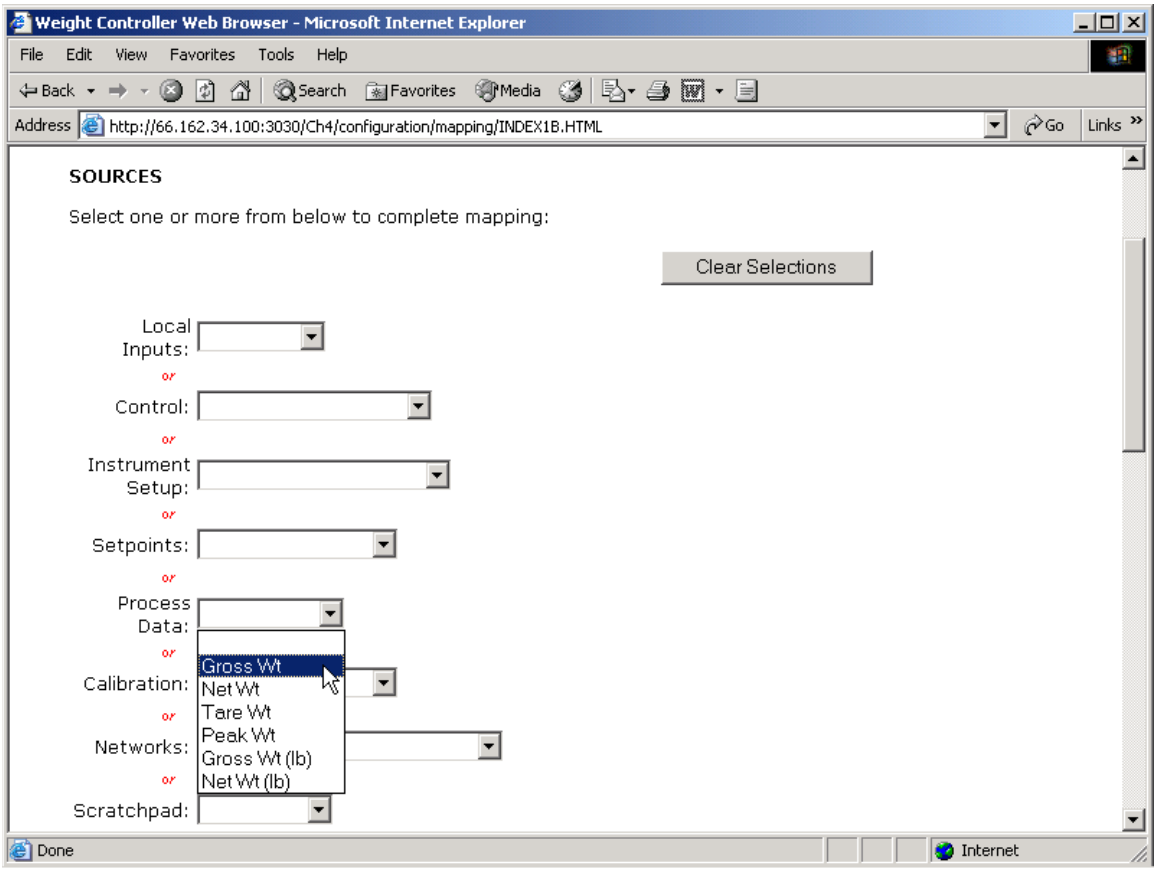
In the network selections you would highlight the Device Net Float Out. There are several other selections for output tables and the data type you would want within each table. Some of these tables will not be available if the option is not enabled in your unit.



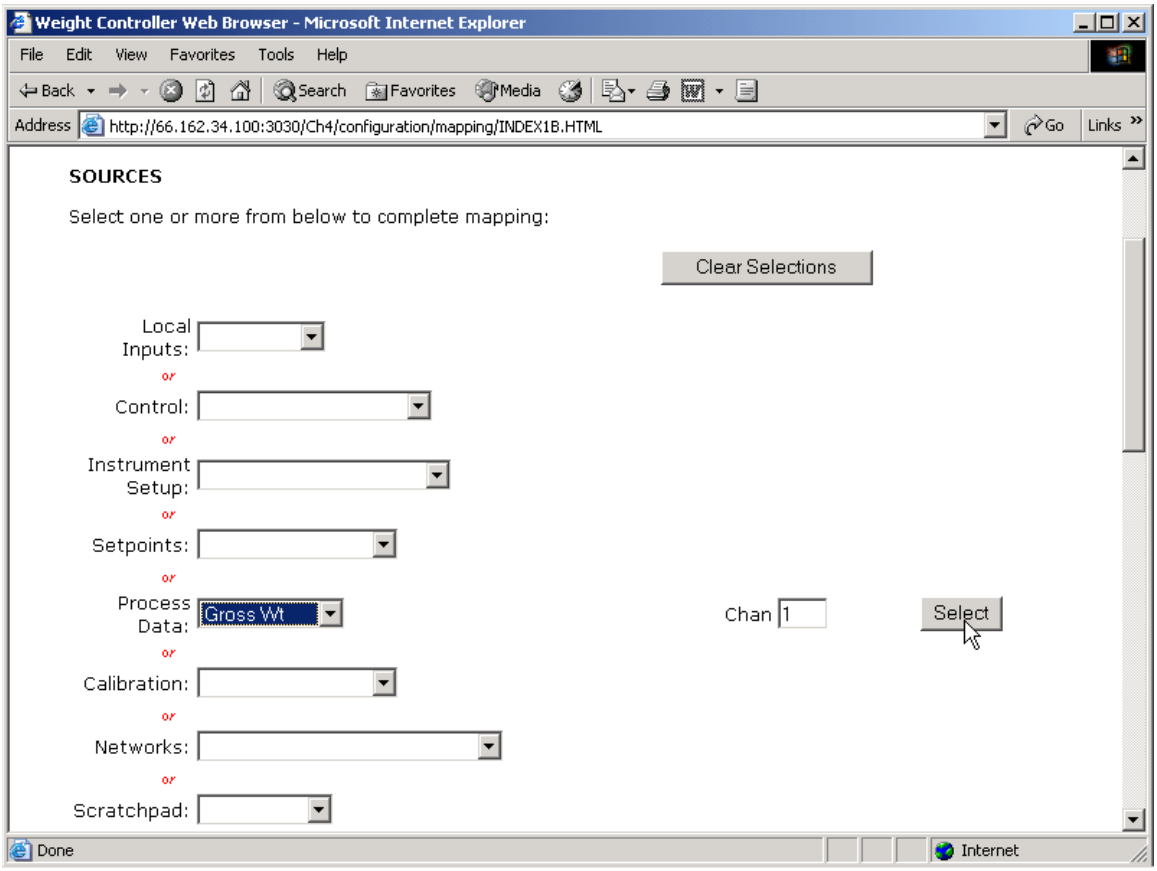
Once the DeviceNet Float Out was selected, the page will open a pull down for the word location you want the data to go to within the Device Net table. Once you have selected the word location, click on "Select".



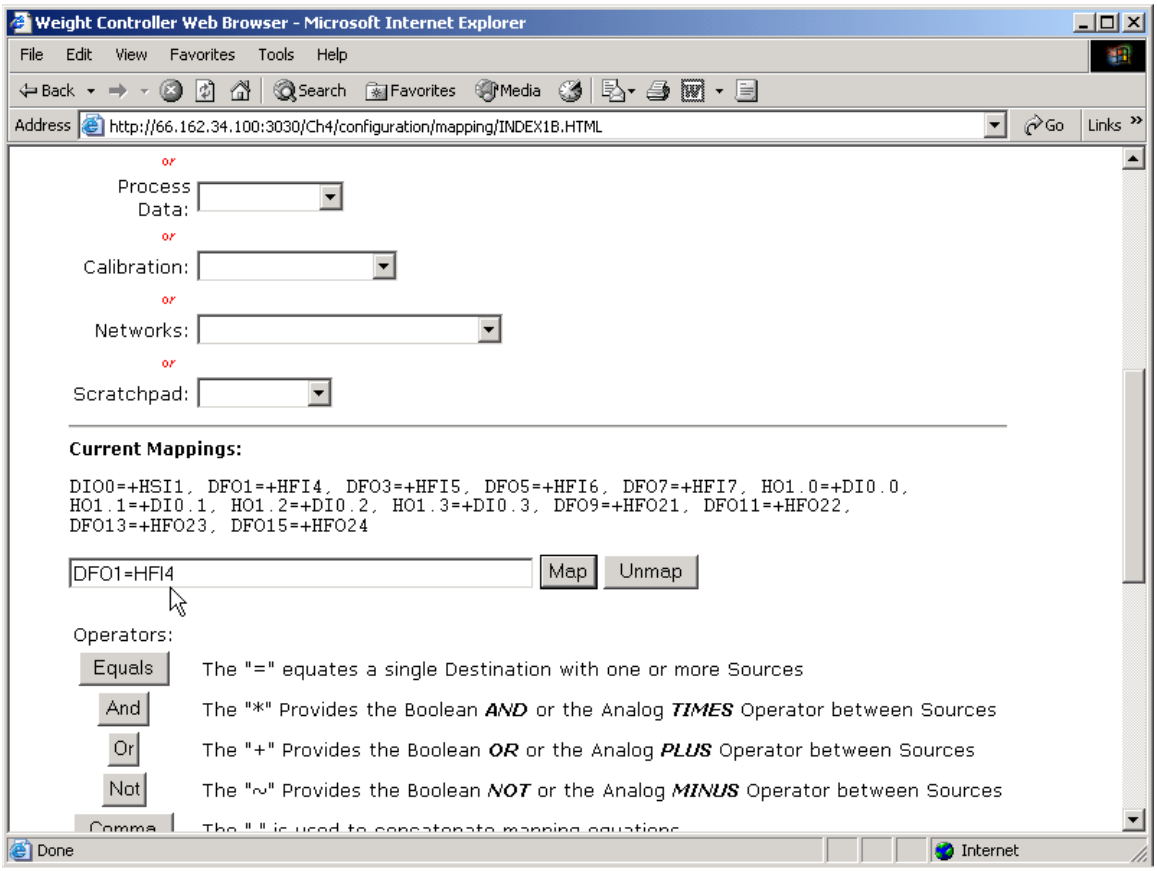
Once you have made a selection on the Destination page, click on "Jump to Source Page" and it will bring you to the source page shown here. In our example we are trying to map the Gross weight to the output, so we will select from the "Process Data" pull down menu. Here we select the Gross Wt.



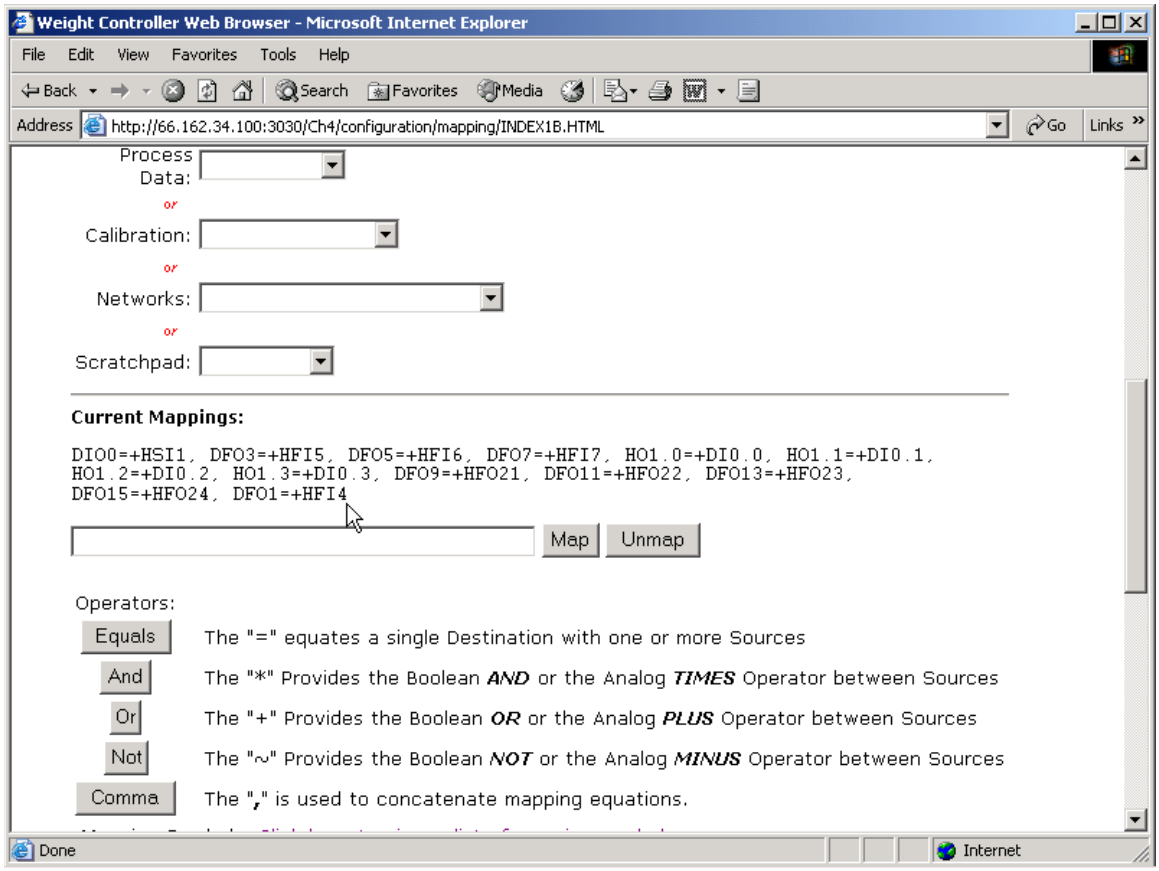
Since we have a multiple scale unit, we need to now select which scale channel we want the gross weight from. In our example we will select channel 1, the click on "Select".



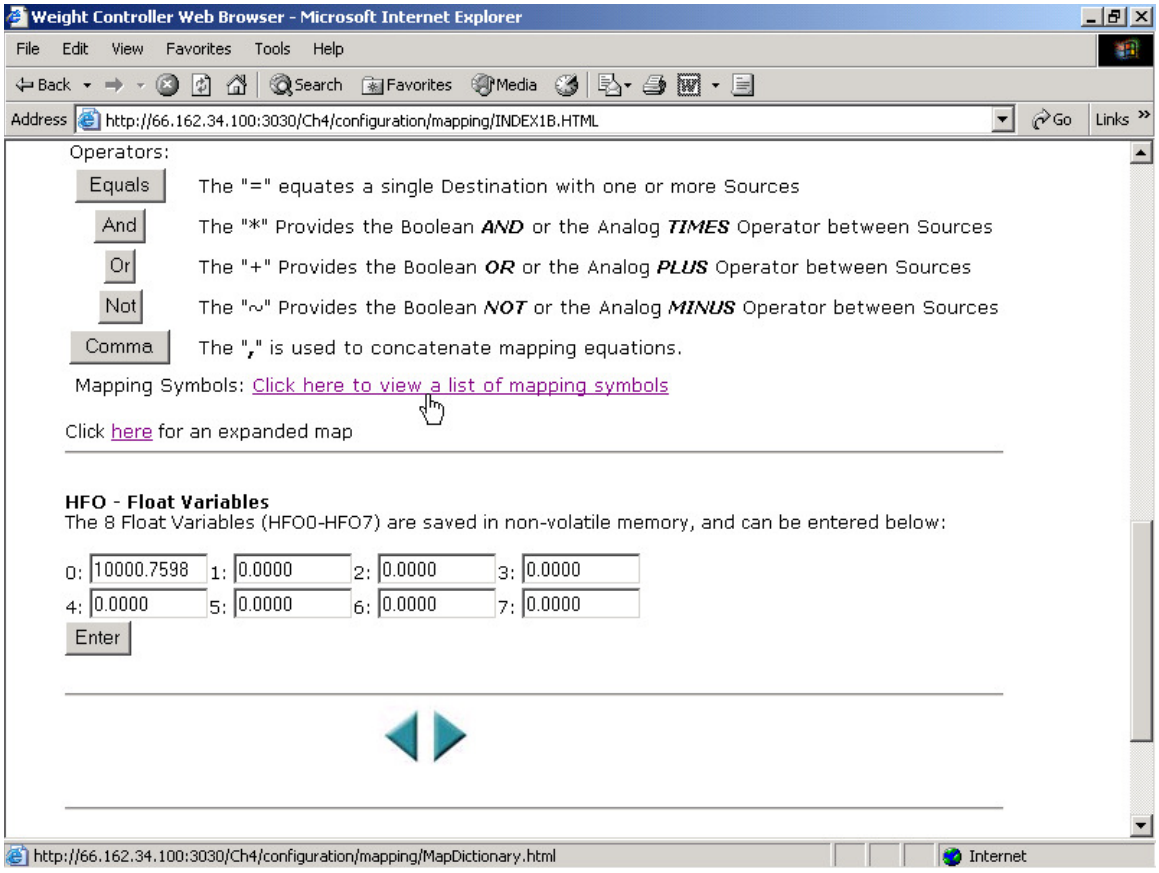
Once the selection has been made, if you scroll down further on the screen, you will notice a window next to the "Map" button. This is where the selection we made are put ready for mapping. (You will notice that the selections are using mnemonics and you can see a list of these if desired.) If there were more to add to this equation, it could be added to using the operators shown at the lower portion of the screen to make a more complex mapping. Once you have the equation you want, you would click on the "Map" button. This will save the equation to the unit.



Here we show the equation has been added to the current mapping of the unit. This is where all mapping equations will show up. Now the unit is placing the Gross weight from channel 1 into word 1 of the Device Net output table. Once you have this mapped, you would be able to read the Gross weight in the PLC. At this time, you could then return to the Destination page and add additional mapping by following the same steps.
NOTE: If the Destination (left side of equation) is the same as one that is already mapped, it will overwrite the original one.
WARNING: It is possible to overwrite part or all of another mapping if care is not taken to insure otherwise. Most common is to map a float value (two word length) and then map something into the next word (second word of float value).



Towards the bottom of the page, there is a link to a list of mapping symbols. This will open a window showing the mnemonics of the maps. You will also notice there is a link here for an expanded map. This attempts to put all the mapping equations into English terms.



Here is the window showing the mnemonics of the maps.