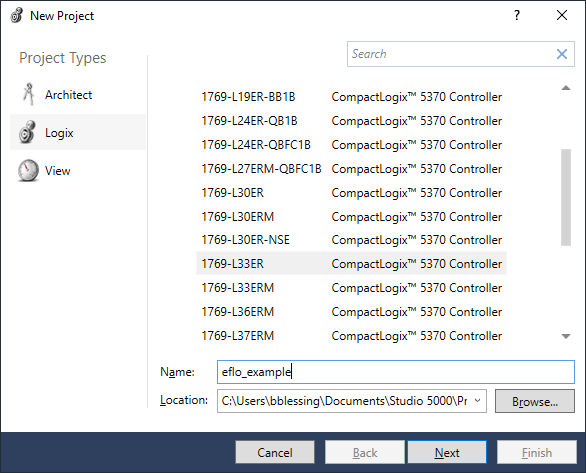
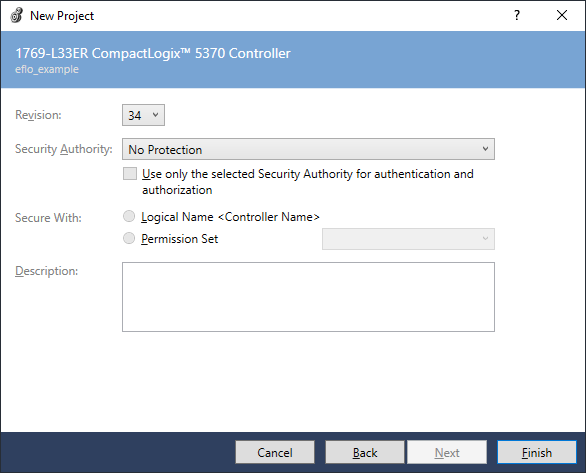
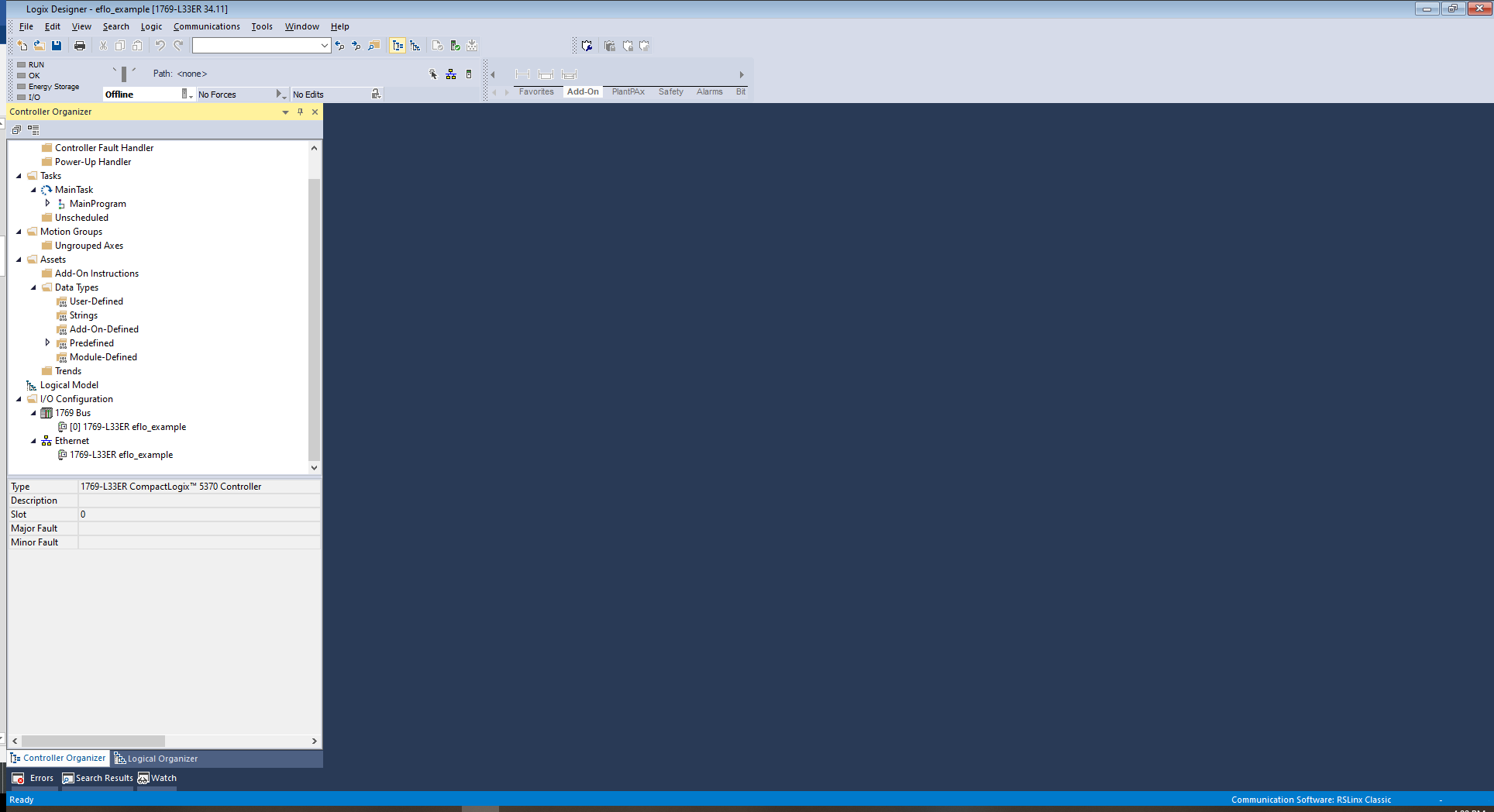
Start Studio 5000 and you’ll see the following dialog. You’ll want to create a new project, and for this example I chose eflo\_example. The 1769-L33ER PLC under CompactLogix 5370 Controller is what I chose for the Logix type.

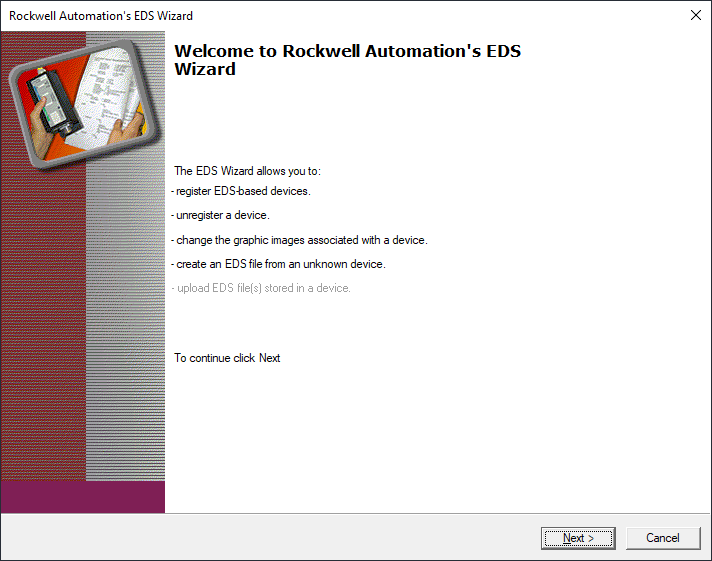


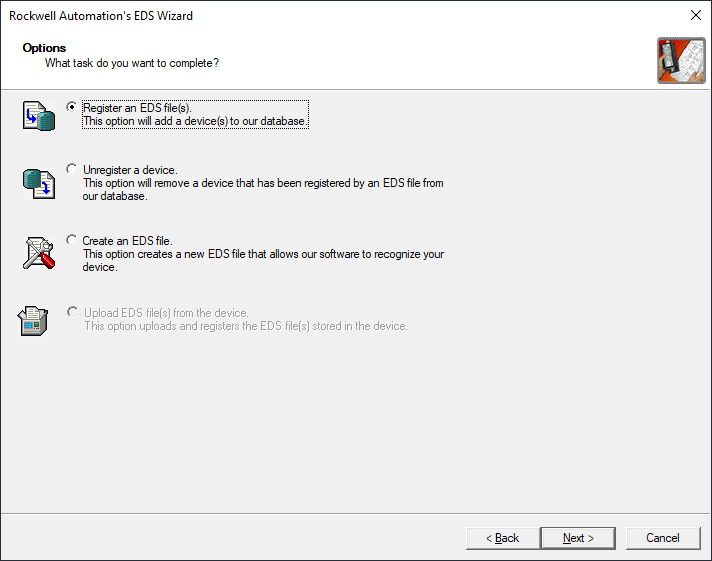
Just click next and then Finish on the next screen as seen below.

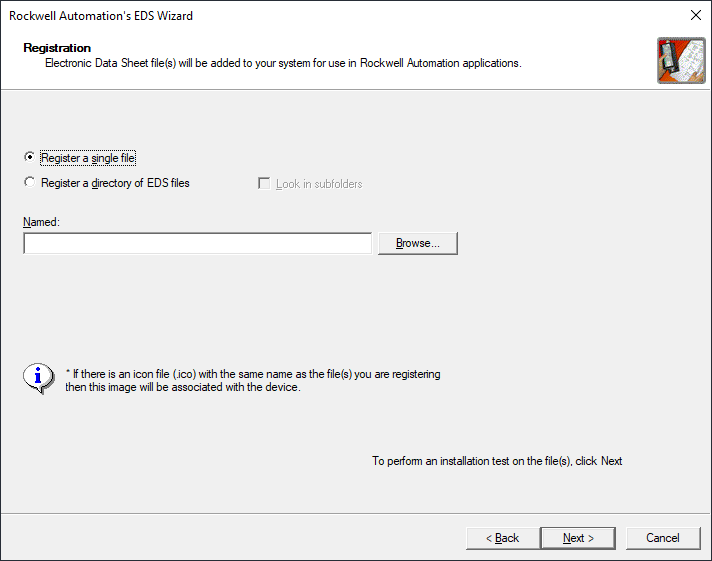


You should see the following screen. From here you’ll want to load your EDS. Go to Tools->EDS Hardware Installation Tool and you’ll see the following. You’ll want to register “Register an EDS file”. Then “Register a single file”, browsing to select your file. Once done you’ll just keep clicking next through the options, and then finally Finish.

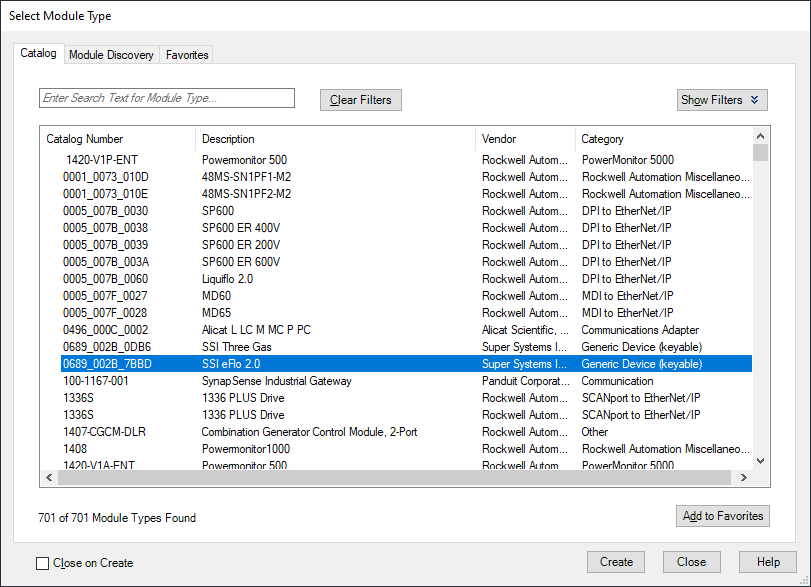


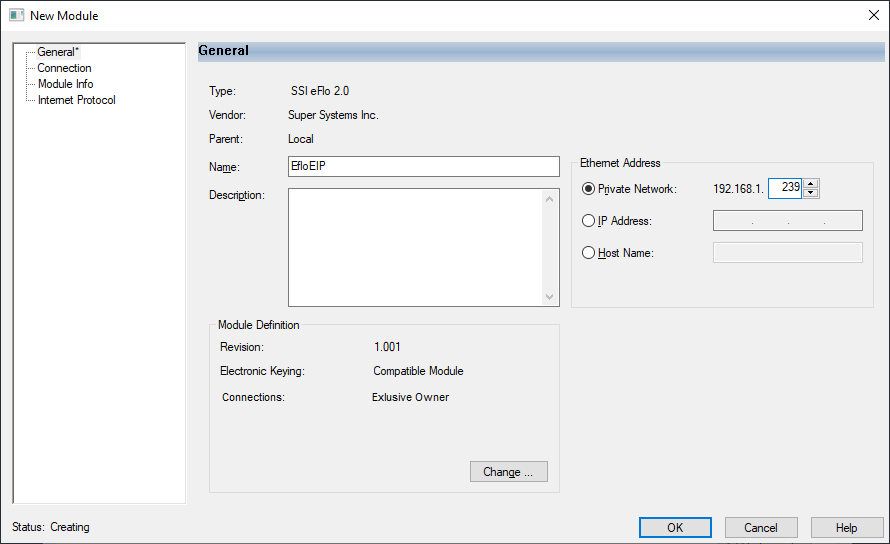


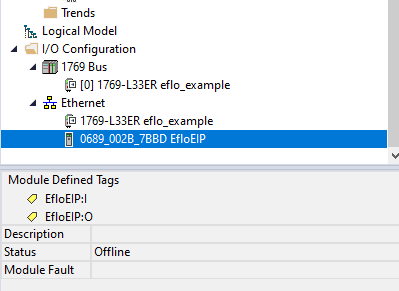




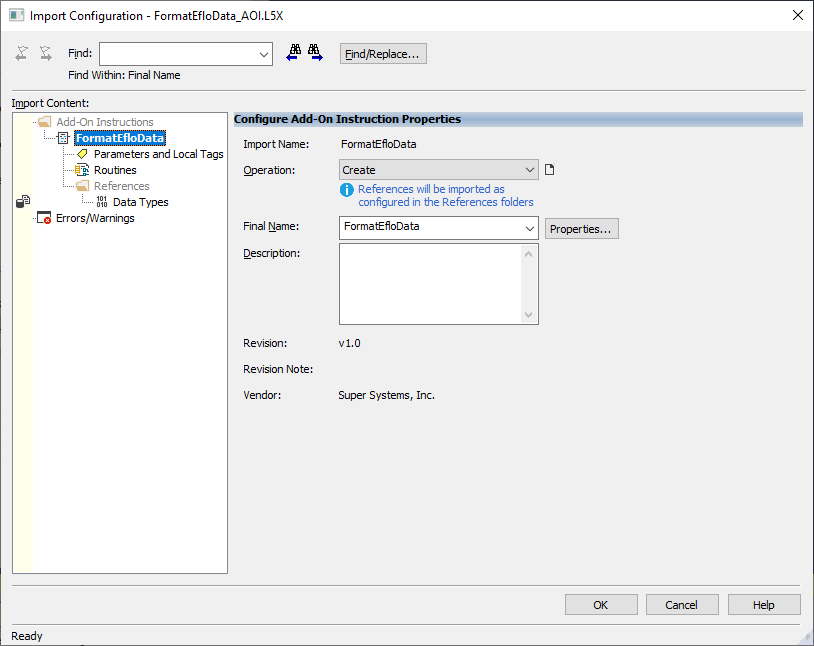
Under I/O configuration under the Controller Organizer, right-click Ethernet and click “New Module”. If your EDS is correct it’ll show up as the SSI eFlo 2.0 below. Select it and click “Create”. Type in a meaningful name – for this example we’ll choose EfloEIP, but we should remember this name later – and set the IP address. Note that this is identifying the device that the PLC will be talking to. Click Ok and then Close, noting that the new module is present.



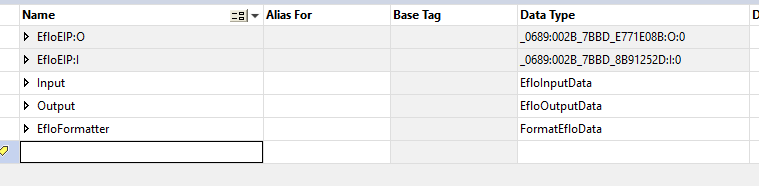


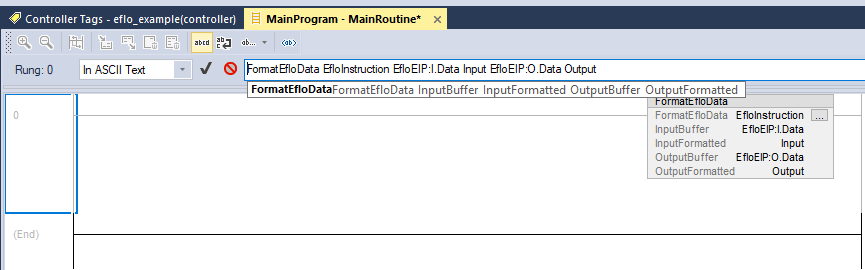


From here you’ll load the FormatEfloData\_AOI.L5X file by clicking File -> Import Component -> Add-On Instruction and browsing to select the file. Click Ok on the following screen that pops up. Under Controller Organizer -> Assets -> Data Types -> User-Defined you’ll two items: EfloInputData and EfloOutputData. You’ll also see FormatEfloData under Add-on Instructions directly above.



Double click Controller Tags under Controller eflo\_example and you should see two tags: EfloEIP:O and EfloEIP:I. These represent the output and input data from the Ethernet/IP connection, and are simple SINT arrays. Create three new tags called Input, Output, and EfloFormatter. The data types respectively will be: EfloInputData, EfloOutputData, and FormatEfloData. From here, go to Controller Organizer -> Tasks -> Main Task -> Main Program -> Main Routine and double click Main Routine. Rung 0 will have already been created, and now we’ll edit it by double clicking it and typing in a command (see below). What is going on is that we’re copying the controller input data from the EfloEIP:I.Data array, which is simply an array of bytes, into our much better formatted user-defined type Input, which is an array of short integers. At the same time, the Output array is being copied to the EfloEIP:O.Data array. Note that these default controller tags are named after what we named the New Module above: EfloEIP.





Click Communications->Who Active. Find the PLC that you’re using, select it, and click Download. This loads the PLC with the project and starts the communication process with the device we’re trying to test. Click Download again and work through the various screens that pop-up.

Once complete, and assuming no errors, you can view the configuration/input/output data by double-clicking Controller Tags and then switching over to “Monitor Tags” at the bottom, see below. That’s all that is needed at this point to test everything out. For example, you can write, say, 30 to Output.BC\_SETPOINT and then watch it show up in Input.BC\_SETPOINT.

