

D0-DEVNETS and Allen-Bradley Set up

In This Appendix. . . .

— Setup D0-DEVNETS with Allen-Bradley RSNetwork[™]

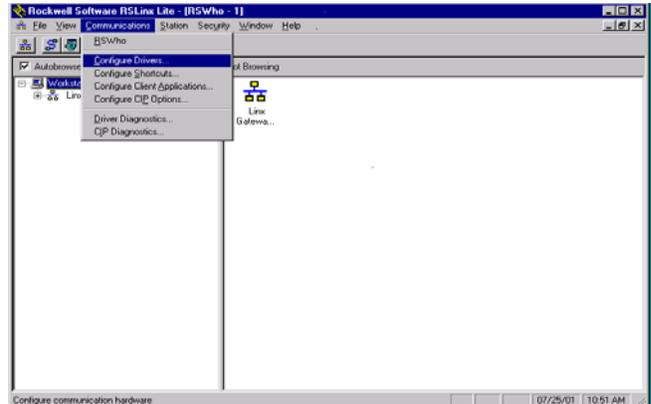
Setup D0-DEVNETS with Allen-Bradley RSNetWorx™

For those who are using the D0-DEVNETS as a slave with an Allen-Bradley PLC, the examples on the following pages will step you through the process of setting up your Allen-Bradley DeviceNet network using RSNetWorx™.

RSLinx

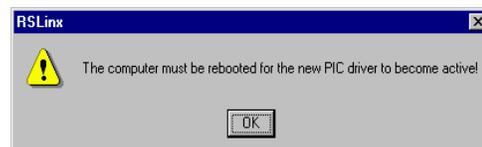
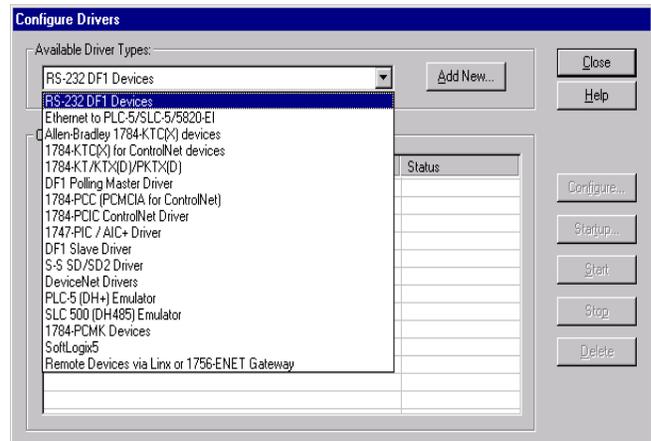
Begin by opening your RSLinx to configure the DeviceNet driver.

1. Click on **Communications**.
2. Click on **Configure Drivers**.



3. Click on the down arrowhead, ▼, and select a driver from the drop-down list.
4. Click **Add New**.

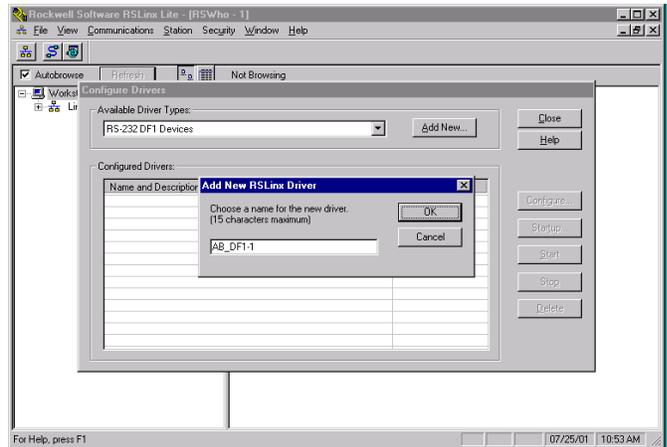
A DF1 driver is selected in this example.



Note: Selecting a new driver may prompt you to reboot or to restart your computer.

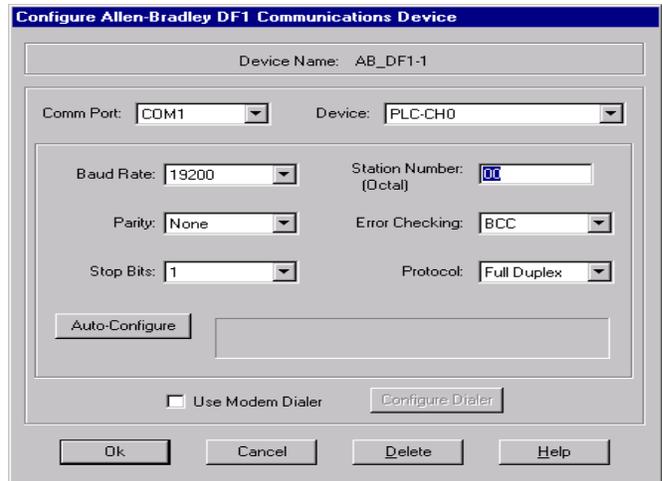


5. Click **OK** in the pop-up window.



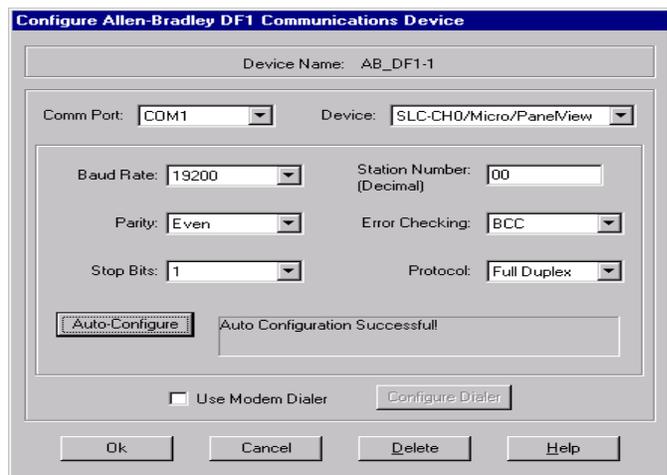
This window will appear.

6. Click on **Auto-Configure** to setup the communication parameters.

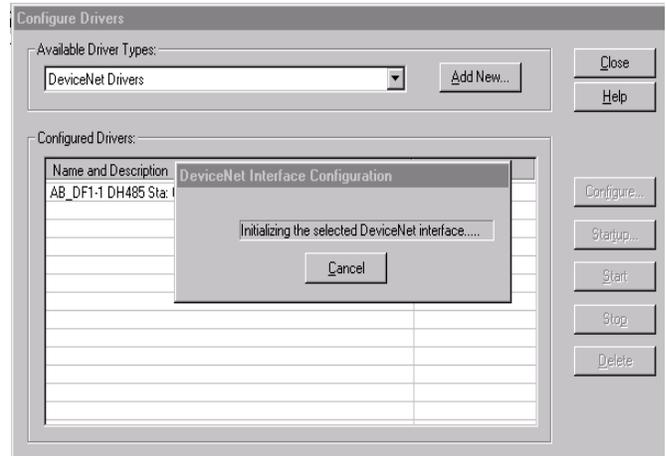


Auto Configuration Successful will appear.

7. Click **OK**.



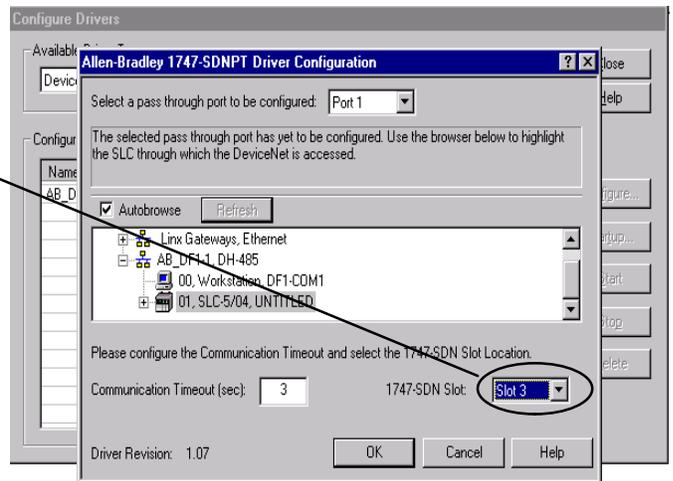
The DeviceNet Interface Configuration window will appear briefly.



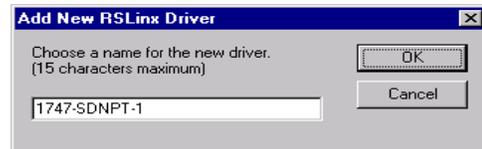
This window will appear for you to setup the pass through port.

Be sure that you select the proper slot where the scanner module is located.

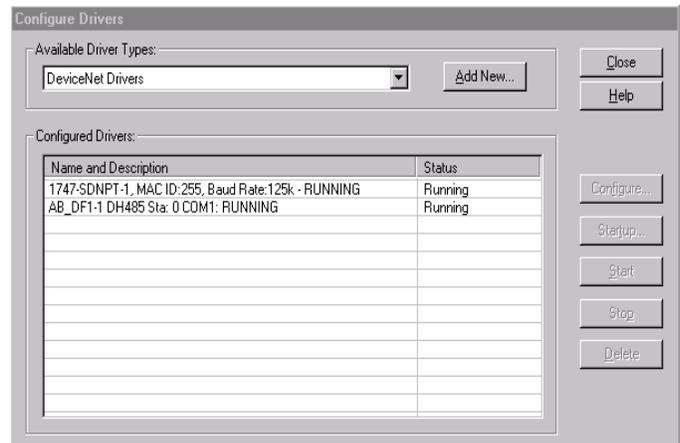
If this does not match, you will need to reconfigure the I/O in RSLogix.



11. Type in a name for the driver, then click **OK**.



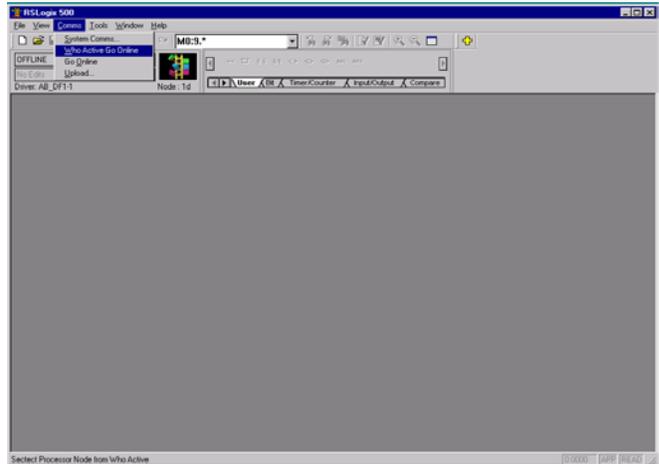
This window will appear indicating that both drivers are Running.



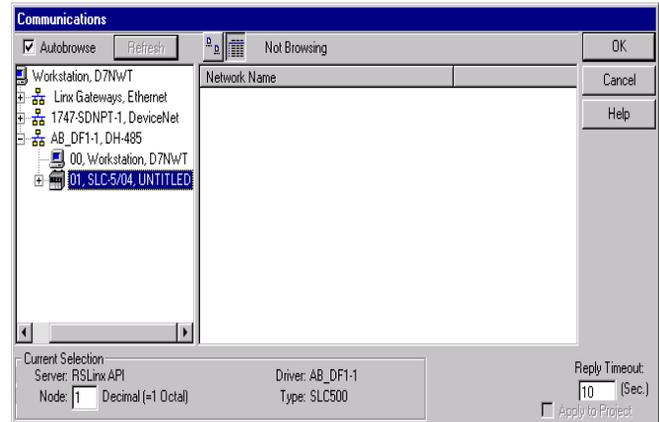
RSLogix

You are ready to connect to the PLC using your RSLogix software.

1. Click on **Communications** and select **Who Active Go Online**.

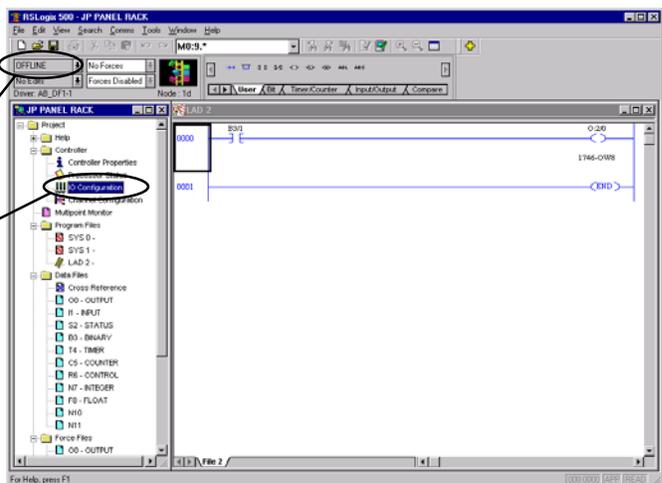


2. When this window appears, select the PLC to connect to.
3. Click **OK**.



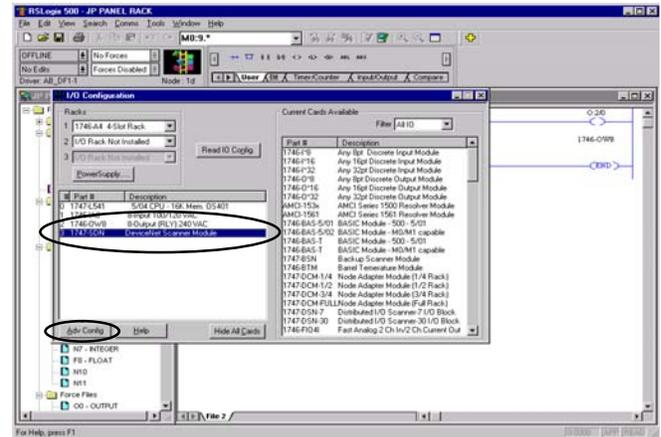
This window will appear with the relay ladder program. You now want to configure the I/O. This must be done **OFFLINE** in order to change the configuration.

4. Select **I/O Configuration**.



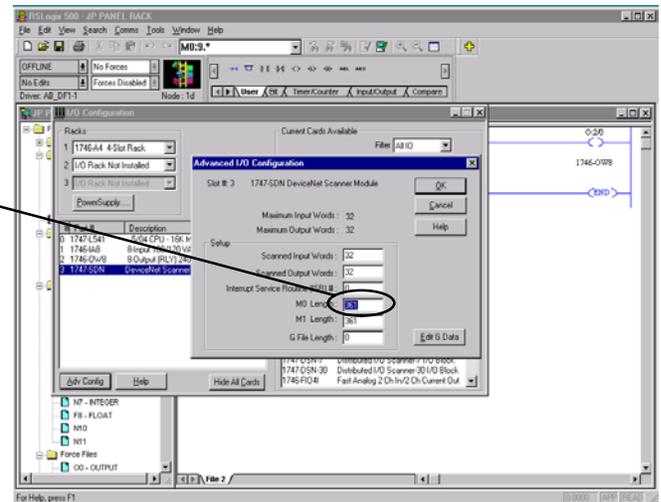
The I/O Configuration window will come into view. When you select the scanner module, verify that it is in the correct slot.

5. Click **Adv Config**.



The **Advanced I/O Configuration** window will appear. The **M0** and **M1** Lengths will show the default of 256. Change this to 361.

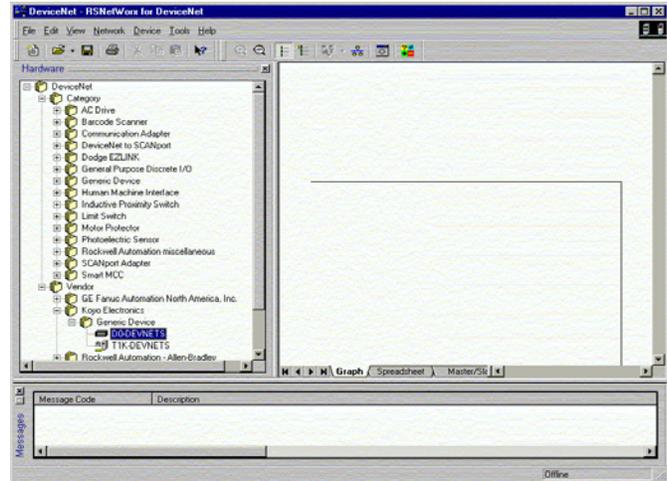
6. Click **OK**.



Configure D0-DEVNETS with RSNetWorx

You are now ready to configure the D0-DEVNETS installed in your DL05. First, open RSNetWorx. Look for Koyo Electronics in the hardware tree listed under **Vendor**. Click on the + to show the devices for Koyo. The following example shows two devices, D0-DEVNETS and T1K-DEVNETS.

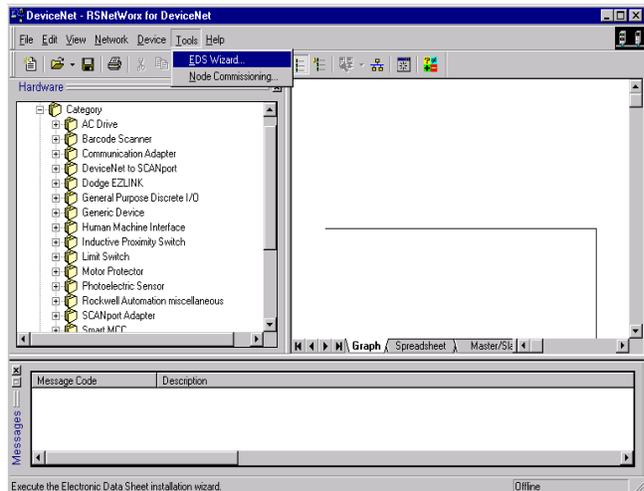
RSNetWorx opened.



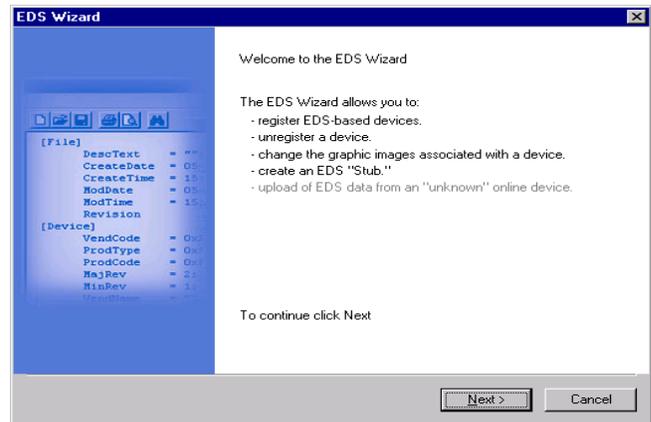
Using the EDS file

If you do not see your device listed, it will need to be added from the EDS file (refer to page 2-7). The following example will guide you through the procedure of installing the device from the EDS file.

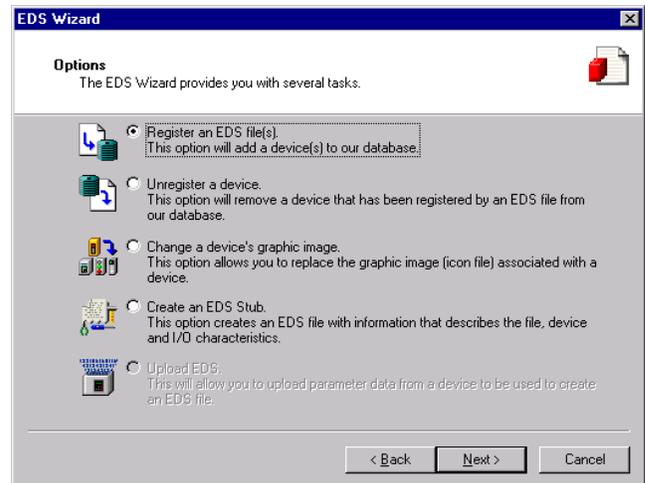
Click **Tools** and select **EDS Wizard...**



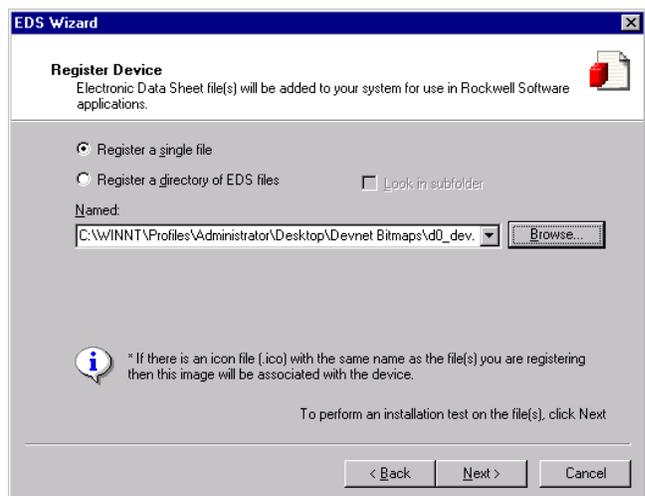
The EDS Wizard will open. Simply follow the instructions to register the device.



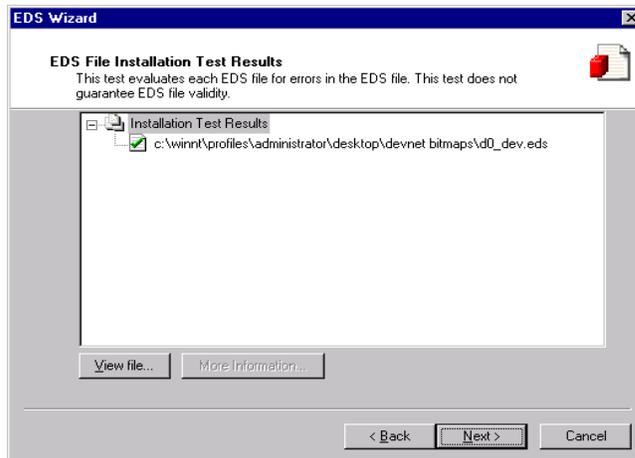
Register the EDS file.



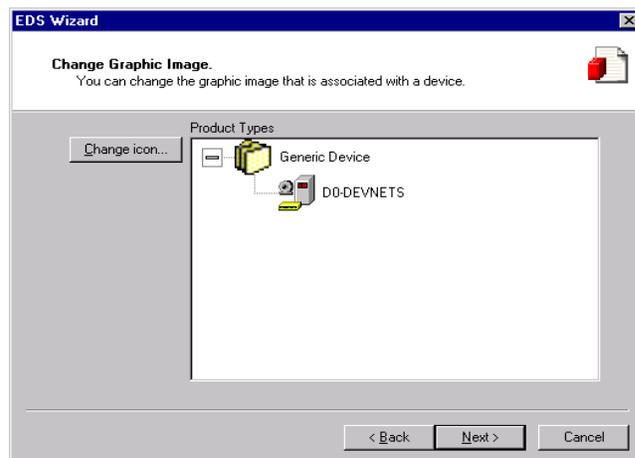
Enter the path for the EDS file.



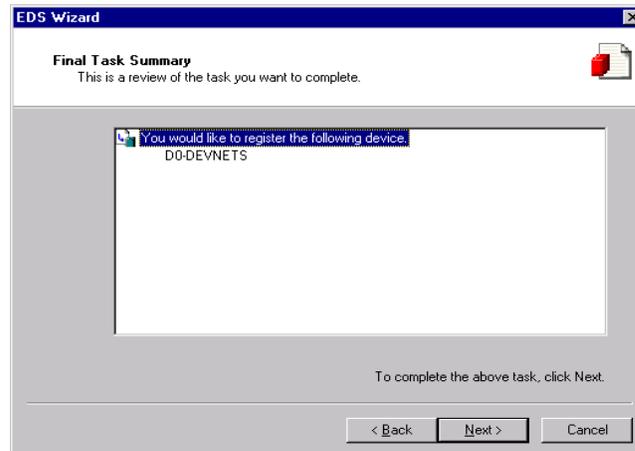
EDS file installation results.



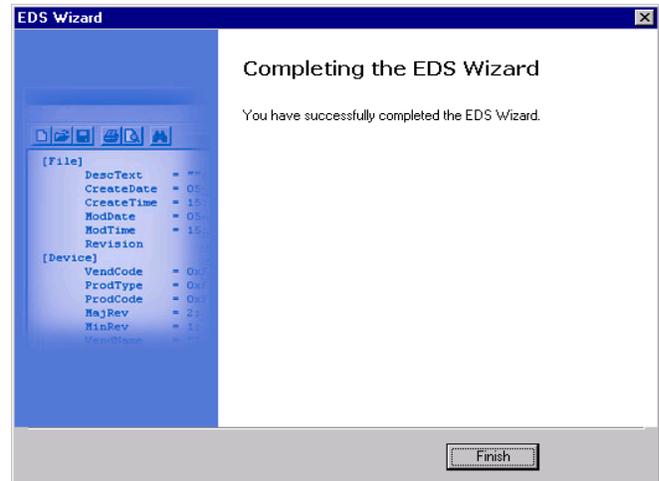
Change the icon image for your device, if you desire to.



Review what you have done.



EDS Wizard complete.

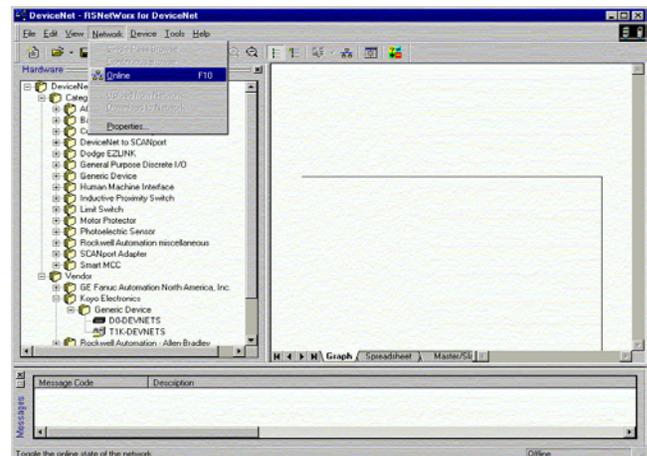


Go on line

You will want to go on line with the network now.

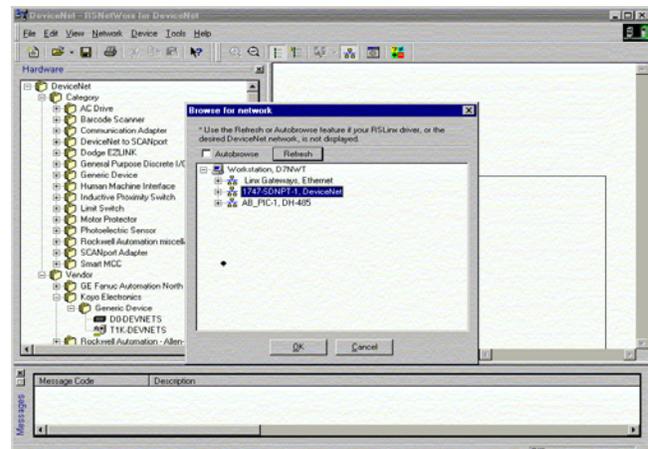
In the main RSNetwork window,

1. Click on **Network** to select **Online**.



2. Select your network from the pop-up window.

3. Click **OK**.

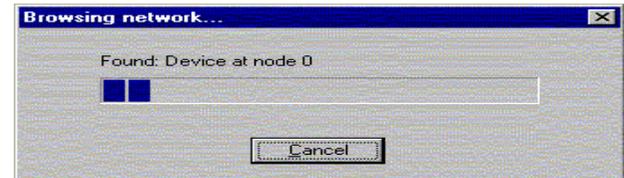


This message will appear.

4. Click **OK**.

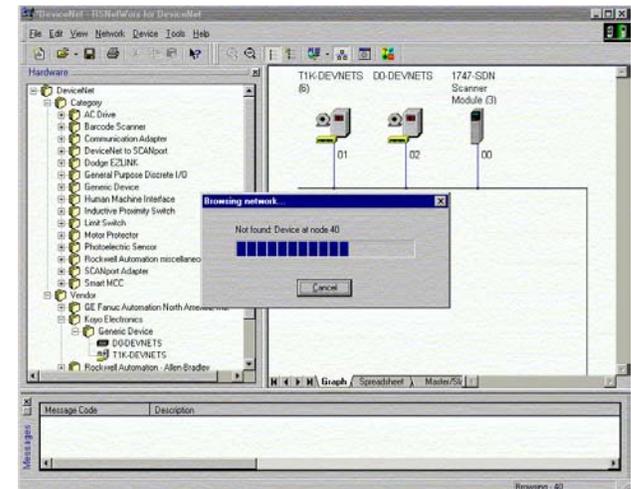


Browsing network message.



Once the nodes are found, each node icon will appear on the RSNetwork window.

After all of the nodes have been found, browse can be cancelled.



Set up I/O parameters

Now you can set up the I/O parameters for the devices. The scanner needs to be configured first. This is done by accessing the scanner properties.

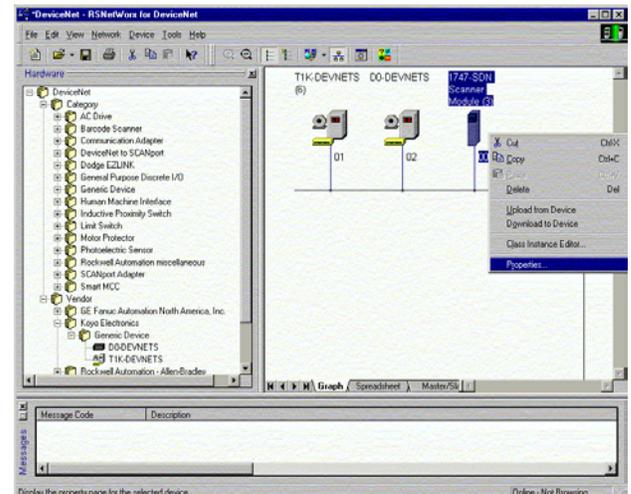
1. Select the scanner module.

This can be done in two different ways.

2. Click on the scanner name, then right click the mouse,

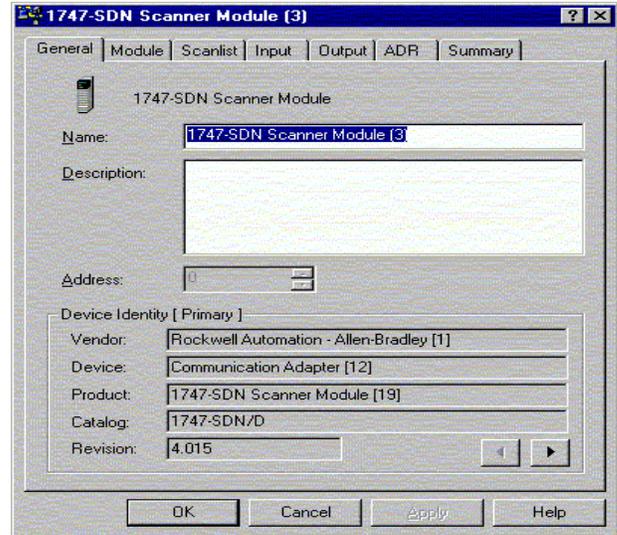
or

3. Click on **Device**, then click on properties in the pop-up window.



The properties window will appear.

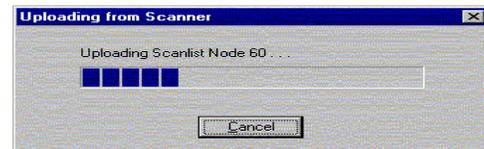
4. Click **Module**.



5. Click **Upload**.



Uploading network information.



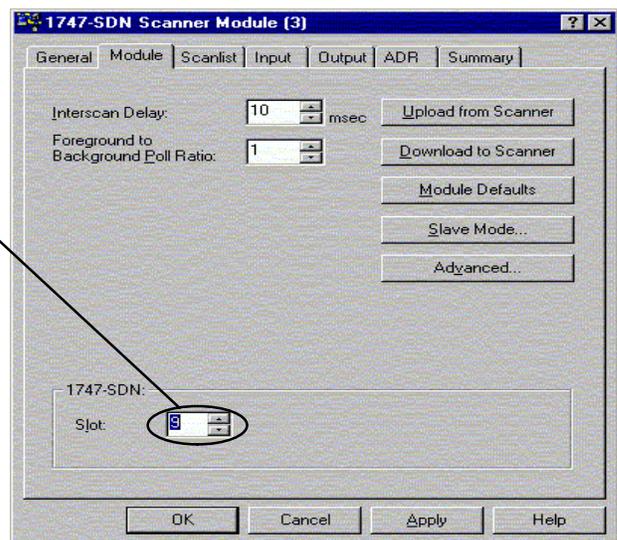
Note: Do not cancel. The entire network data must be allowed to upload.



The data appears.

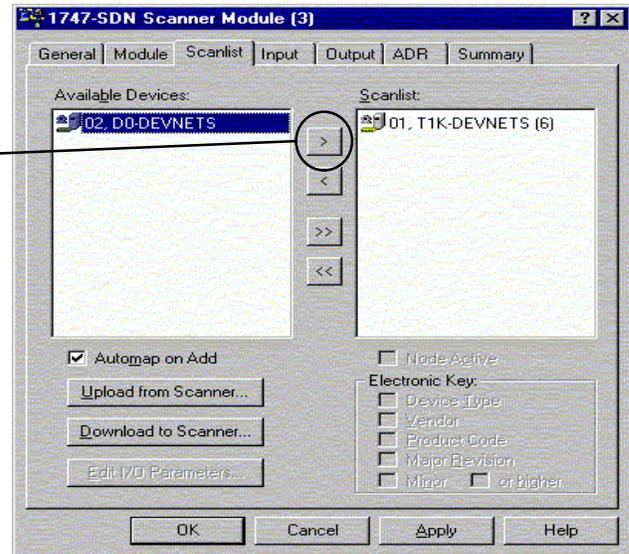
6. Select the correct slot number which the DeviceNet scanner module is residing.

7. Click **Scanlist**.



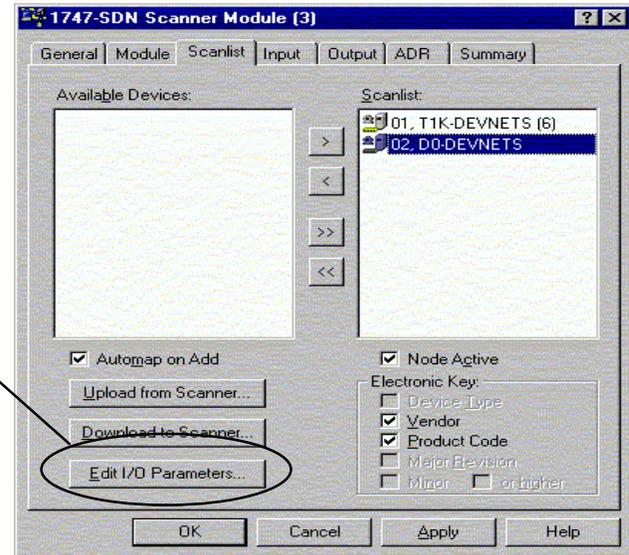
If the node that you want is not in the Scanlist, it needs to be moved to the list.

8. Highlight D0-DEVNETS
9. Click the right arrow.



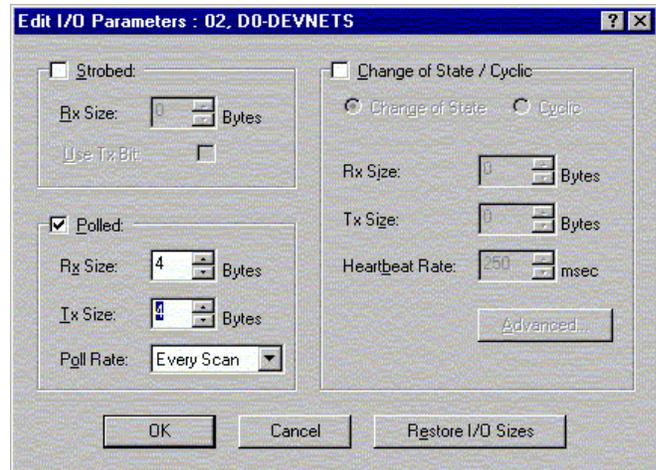
Now that D0-DEVNETS is in the list, be sure that it is selected.

10. Click **Edit I/O Parameters**.

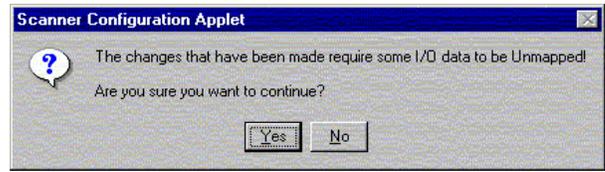


11. Set the **Rx Size** and the **Tx Size** to match the polled data size for the number of I/O bytes (refer to tables in Appendix C).
12. Click **OK**.

Refer to page G-18 (Set Class Instance Attribute) if the total number of Rx and Tx bytes are not known.



This window will appear.
13. Click **Yes**.



Map the nodes

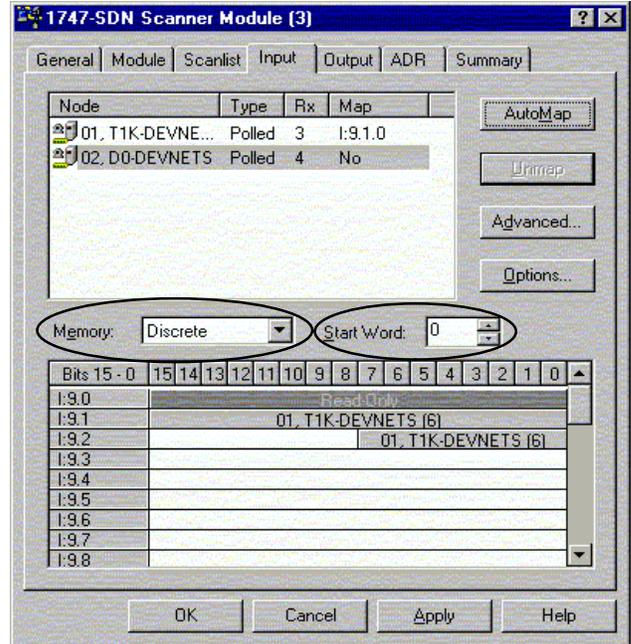
Map each node.

1. Click the **Input** tab in the properties window.

Be sure that D0-DEVNETS is selected.

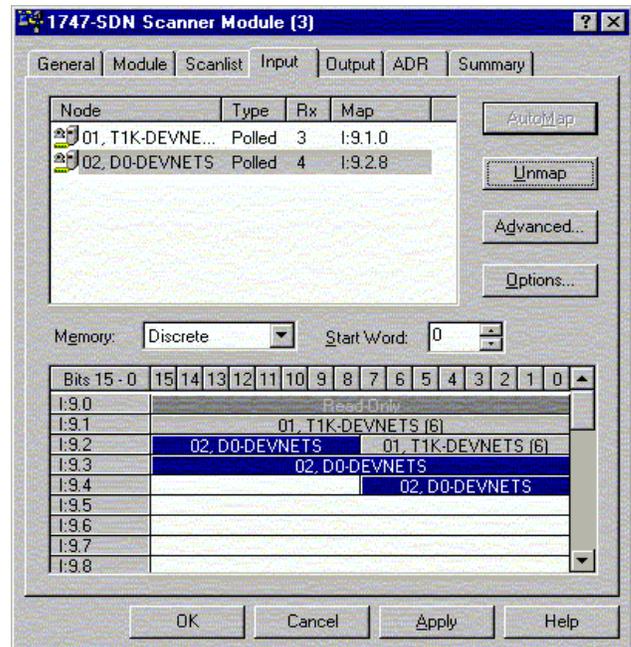
2. Select **Discrete** for **Memory**, and **0** for **Start Word**.
3. Click **AutoMap**.

NOTE: M file is used with explicit messaging.



Appendix G
Allen-Bradley Setup

At the completion of the input AutoMapping, the window will look like this example. The D0-DEVNETS node is now shown.



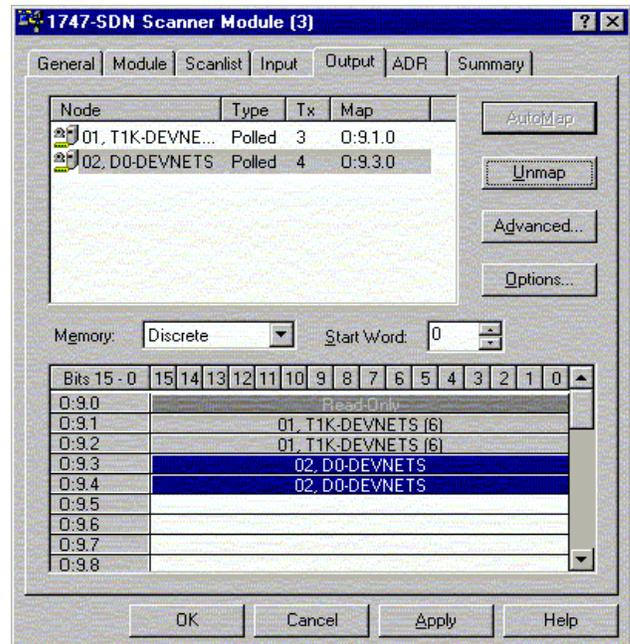
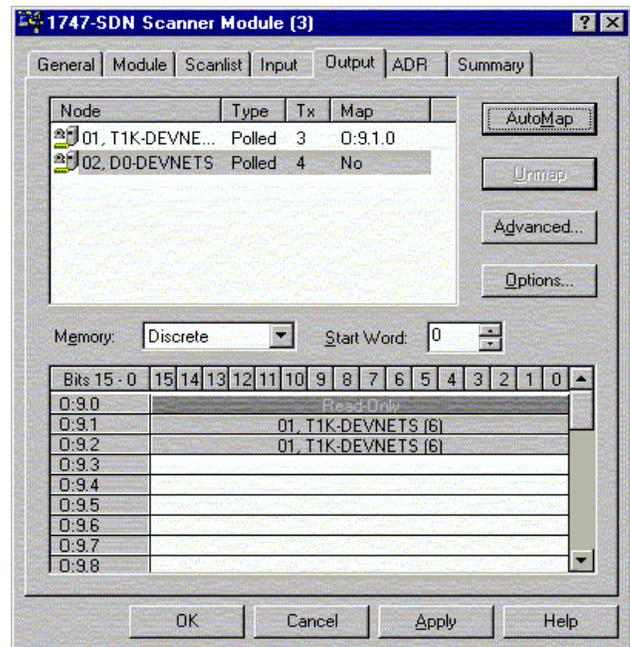
Now, map the outputs just the way you mapped the inputs. This time:

1. Click the **Output** tab in the properties window.

Be sure that D0-DEVNETS is selected.

2. Select **Discrete** for **Memory**, and **0** for **Start Word**.
3. Click **AutoMap**.

At the completion of the output AutoMapping, the window will appear like this example. The D0-DEVNETS node is now shown.

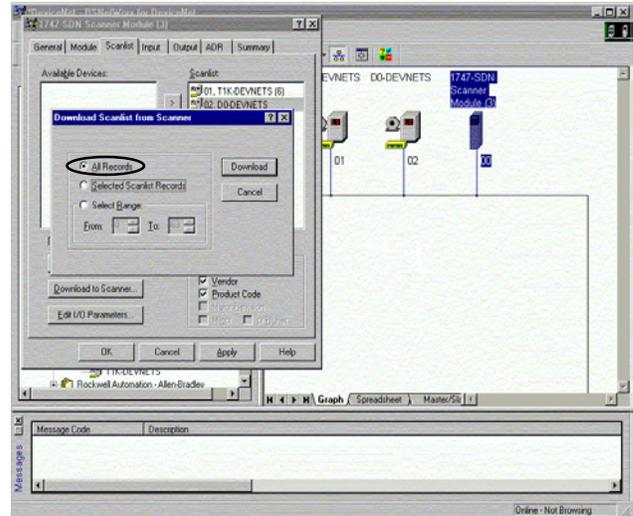


Download the scanlist to the scanner.

1. Select the **Scanlist** tab in the properties window.
2. Select **Download to Scanner**.

In the pop-up window:

3. Check **All Records**, then
4. Click **Download**.

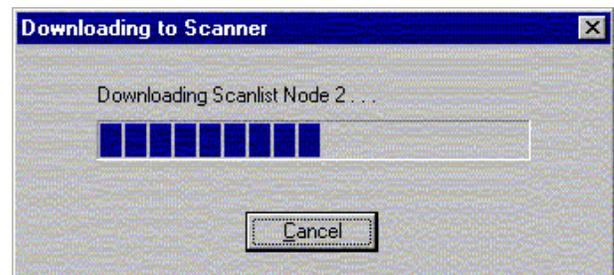


Note: Verify that the processor is in program mode before downloading the scanlist.

This is an error message that may appear.



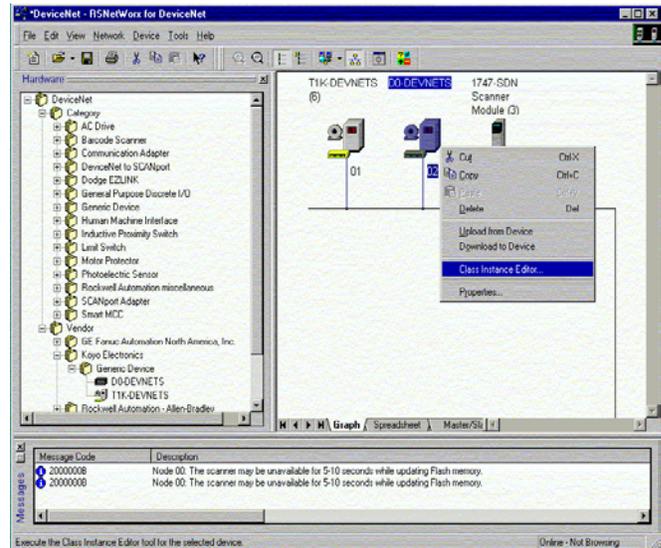
When the download indication ends, download is complete.



Set Class Instance Attribute

Use the Service Class Instance Attribute Editor to set the I/O to read and write to the DL05/06.

1. Select the D0-DEVNETS node.
2. Select **Device**
or,
3. Right click on the node symbol in the RSNetWorx window.
4. Select **Class Instance Editor** in the pop-up window.



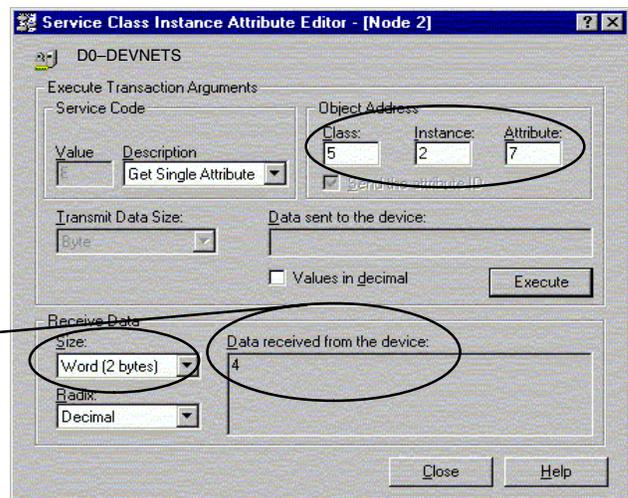
5. Setup input attributes in this window.

Object Address must be set to: **Class = 5, Instance = 2, Attribute = 7**

Size = Word (2 bytes).

6. Click **Execute**

Read the data here.



Setup output attributes in this window.

Object Address must be set to:

Class = 5, Instance = 2, Attribute = 8

Size = Word (2 bytes).

7. Click **Execute**

Read the data here.

