F2–DEVNETS–1 and RSNetWorx™ Setup

D

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— Setup F2–DEVNETS–1 with **RSNetWorx**™

Setup F2–DEVNETS–1 with RSNetWorx™

For those who are using the F2–DEVNETS–1 as a slave with an Allen–Bradley PLC, the examples on the following pages have worked for us, and will be a guide for you. These steps should help you through the process of setting up your Allen–Bradley DeviceNet network using RSNetWorx™. If you encounter any difficulties with the setup process, please contact your local Rockwell International representative.
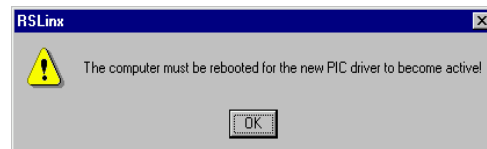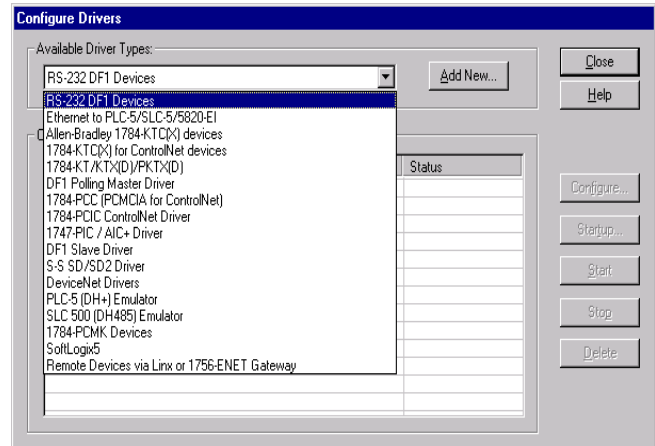
RSLinx

Begin by opening your RSLinx to configure the DeviceNet driver.

1. Click on **Communications.**

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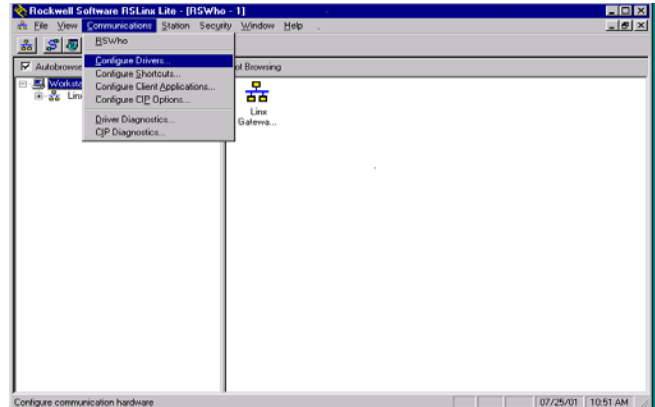
3. Click on the down arrowhead,▼, and select a driver from the drop–down list.
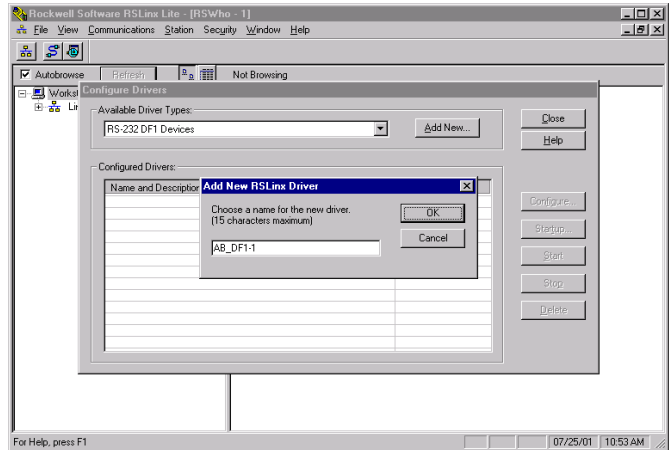
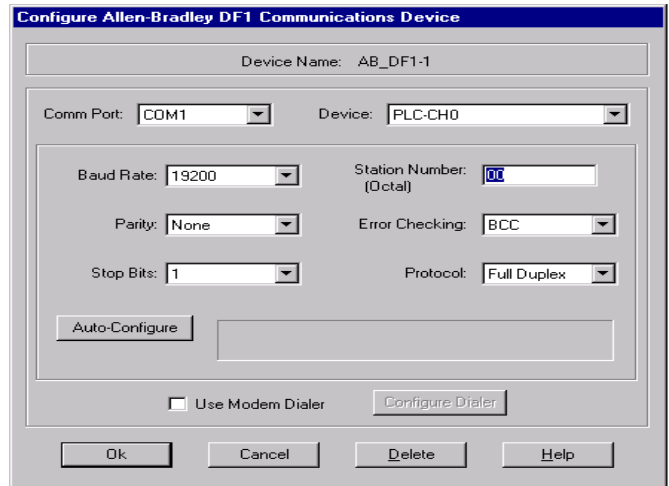4. Click **Add New.**

A DF1 driver is selected in this example.

Note: Selecting a new driver may prompt you to reboot or to restart your computer.
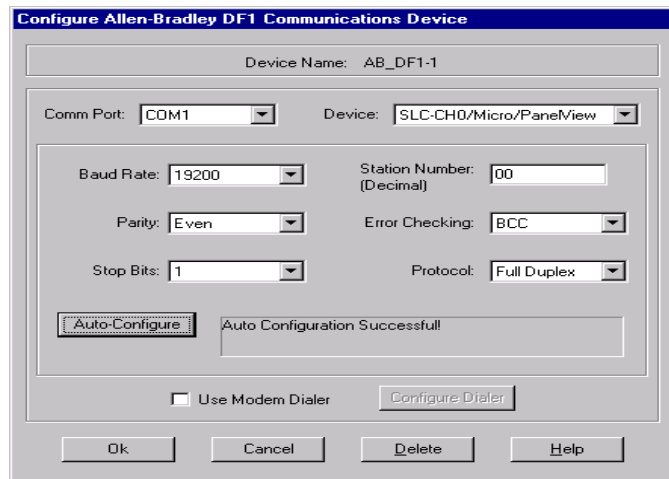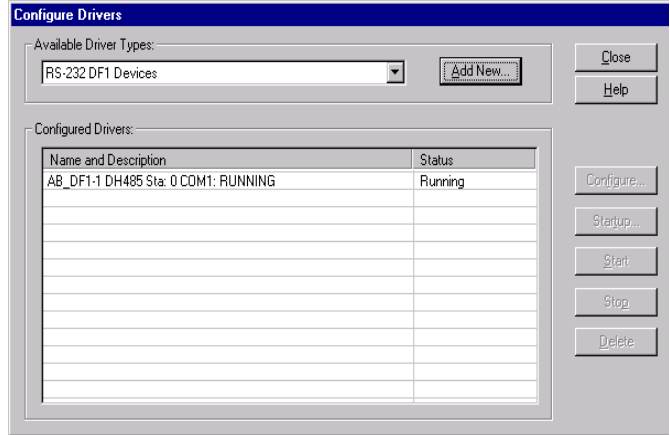
5. Click **OK** in the pop–up window.

This window will appear.

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

Auto Configuration Successfull will appear.
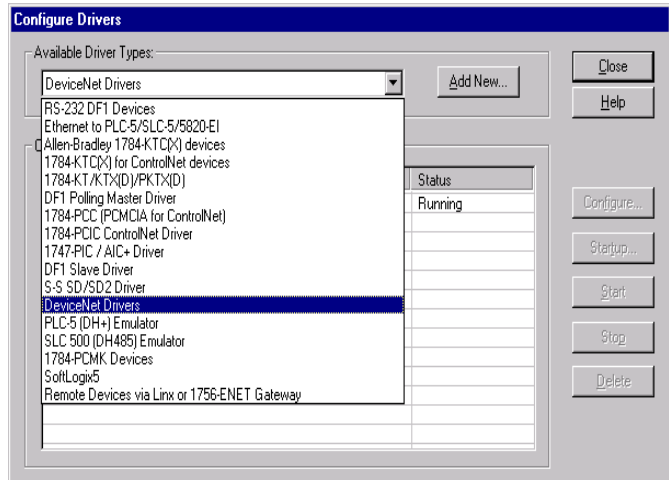
7. Click **OK**.

The Configure Drivers window will now appear showing the **Status** as Running.
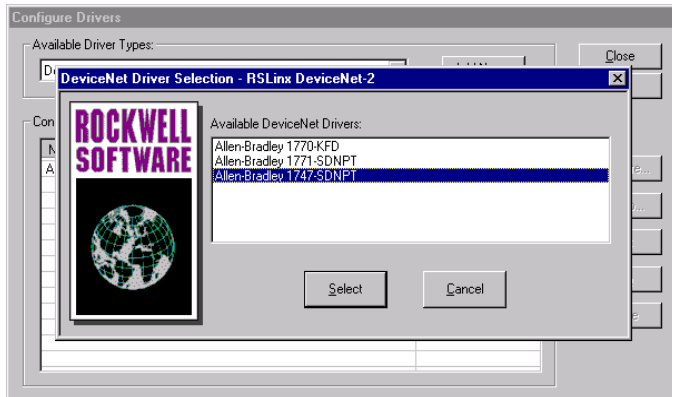

The next step is to add a DeviceNet driver.

8. Click on the down arrowhead, ▼, and select your choice of drivers from the drop–down list.
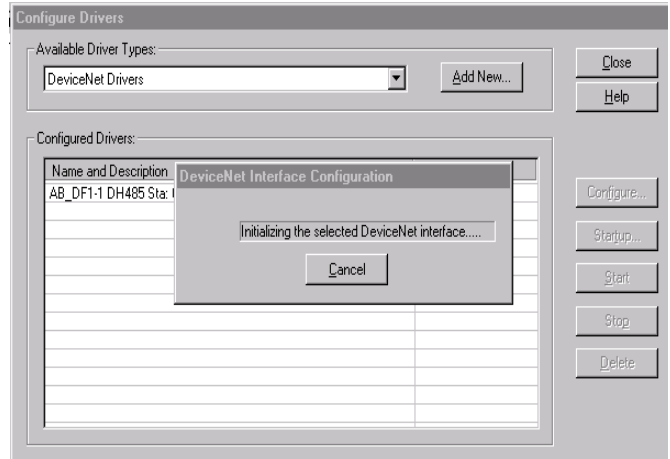
9. Click on **Add New**.

This window will appear.

10. Select the proper driver, then click **Select**.
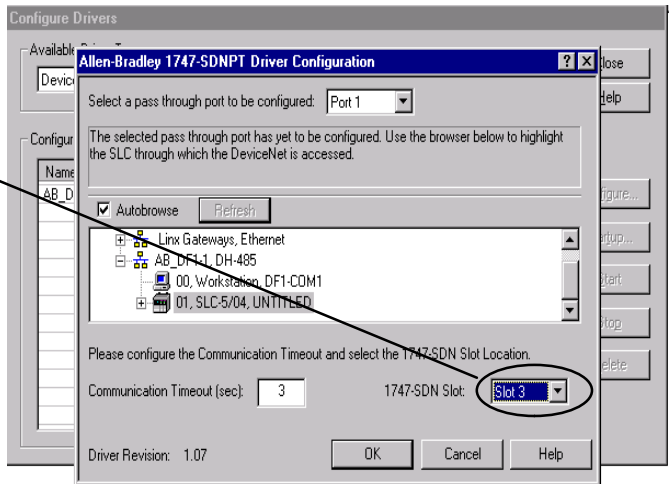
Appendix D
RSNetWorx Setup

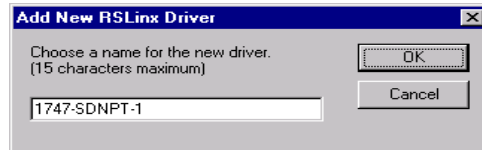The DeviceNet Interface Configuration window will appear briefly.

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

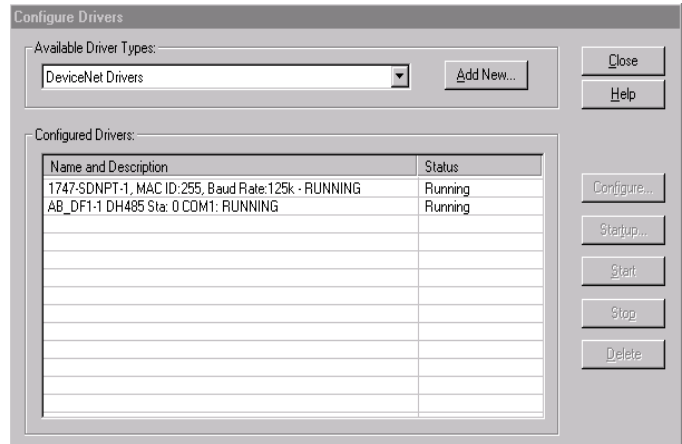Be sure that you select the proper slot where the scanner module is located.

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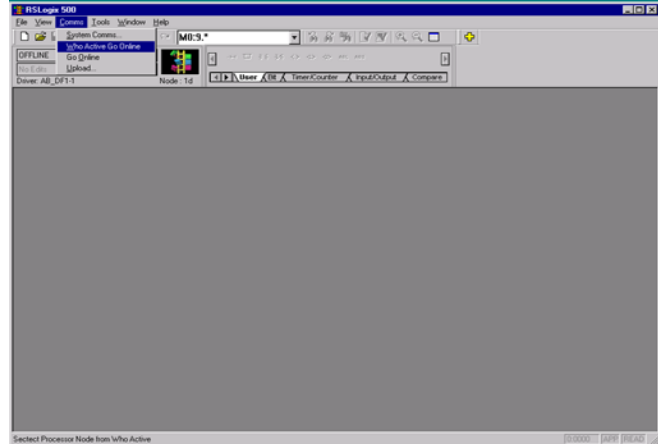

11. Type in a name for the driver, then click **OK**.

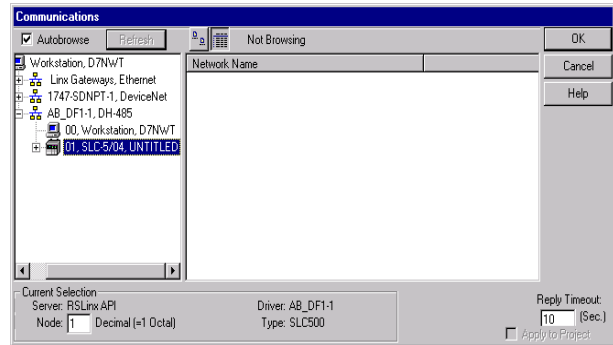This window will appear indicating that both drivers are Running.

RSLogix   You are ready to connect to the PLC using your RSLogix software.
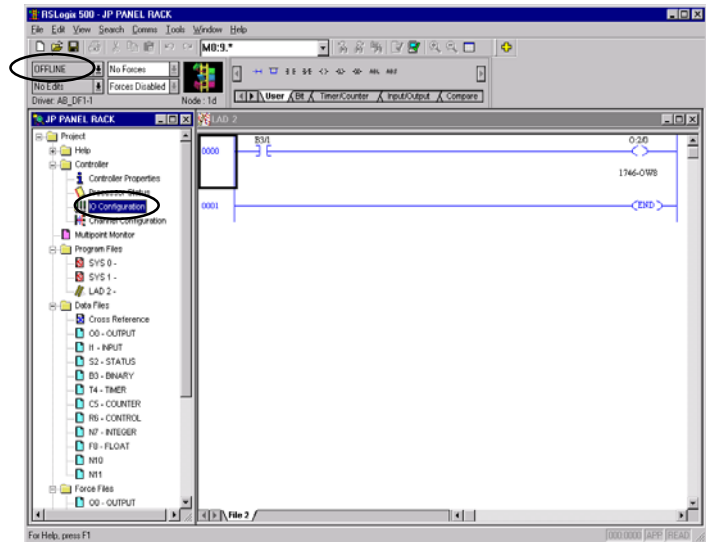
1. Click on **Communications** and select **W**ho Active Go Online.

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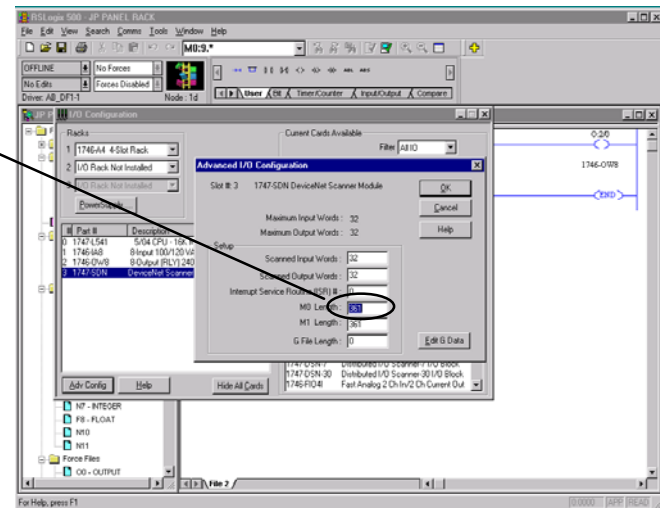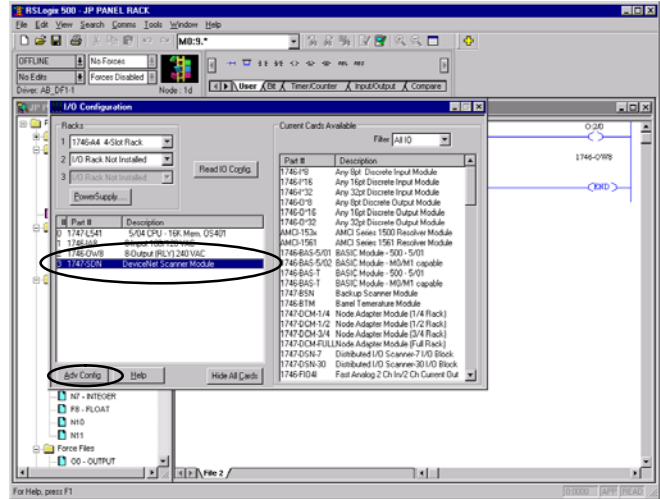
4. Select **I/O Configuration**.

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.
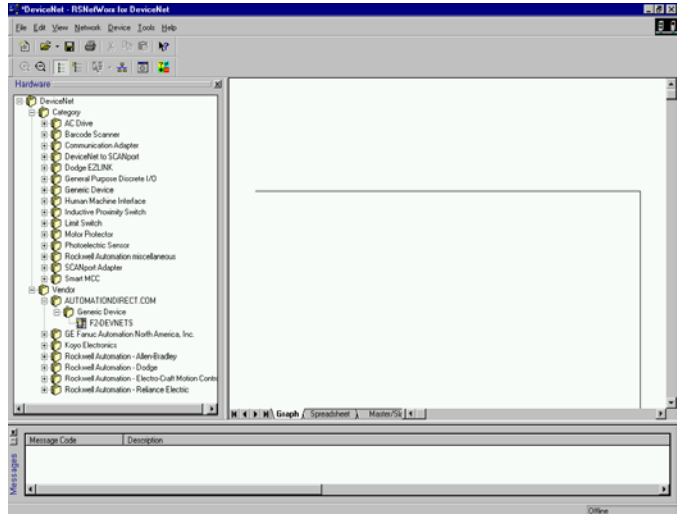
6. Click **OK**.

Configure F2–DEVNETS–1 with RSNetWorx

You are now ready to configure the F2–DEVNETS–1. First, open RSNetWorx. Look for AUTOMATIONDIRECT.COM in the hardware tree listed under **Vendor**. Click on the + to show the devices for AUTOMATIONDIRECT.COM. The following example shows the F2–DEVNETS–1 as an F2–DEVNETS.
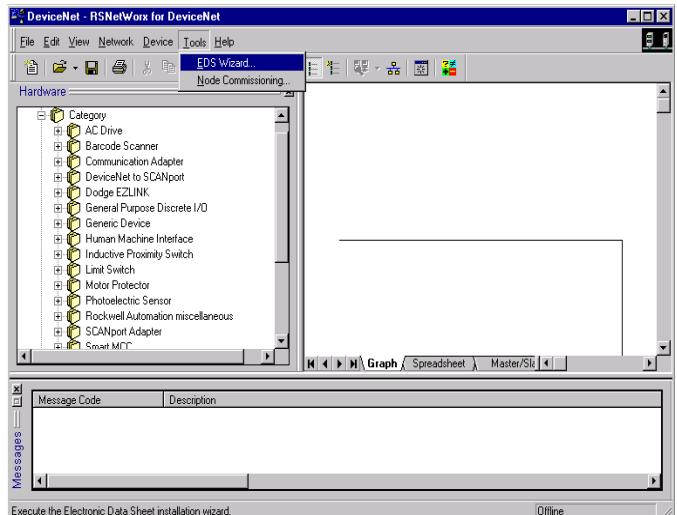
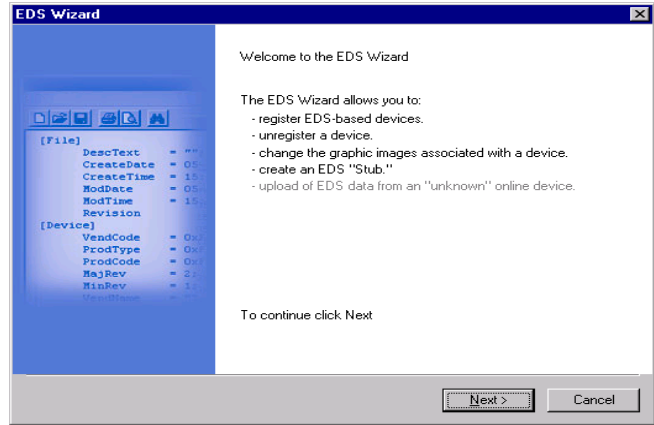RSNetWorx opened.

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 2–4). The following example will guide you through the procedure of installing the device from the EDS file.

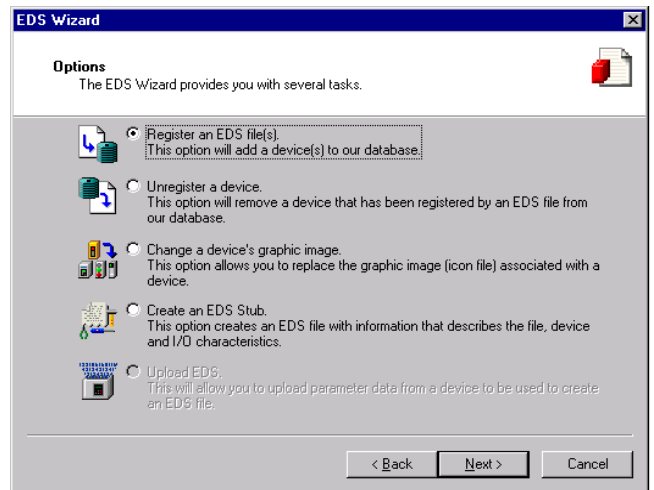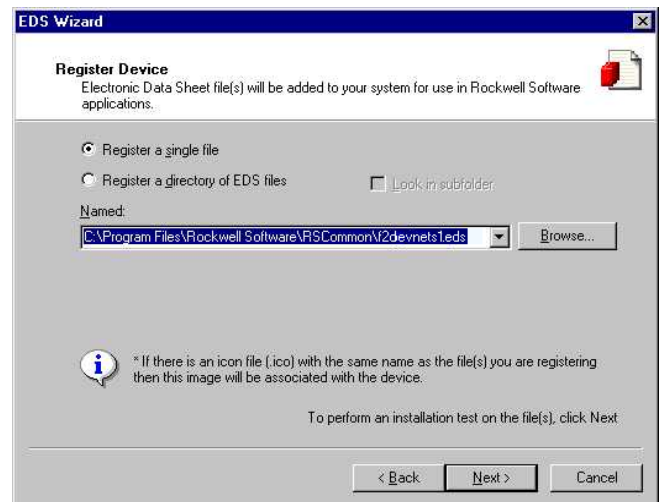Click **Tools** and select **EDS Wizard...**.

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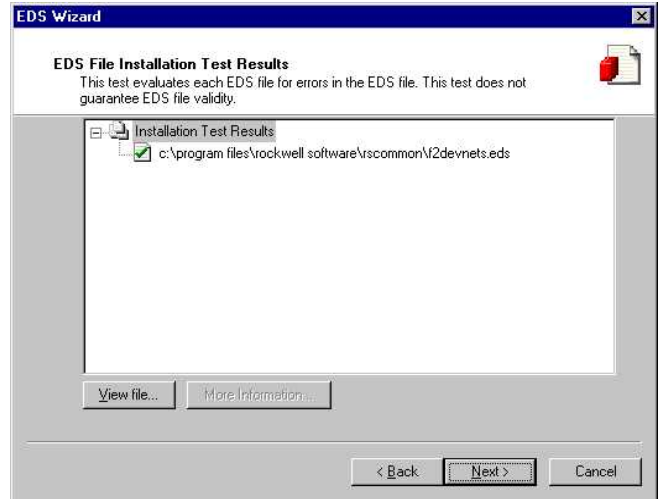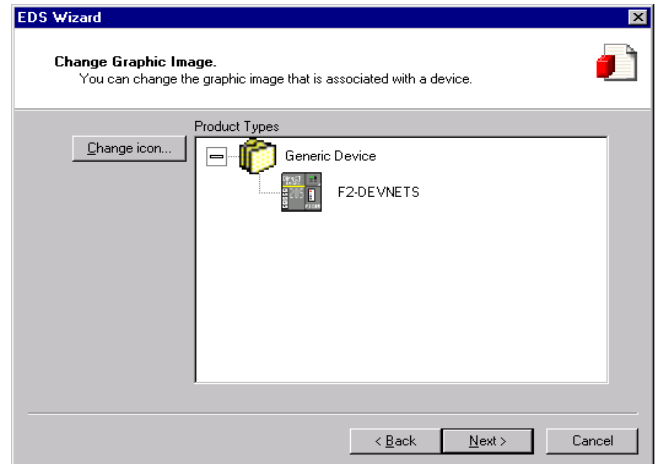

Register the EDS file.

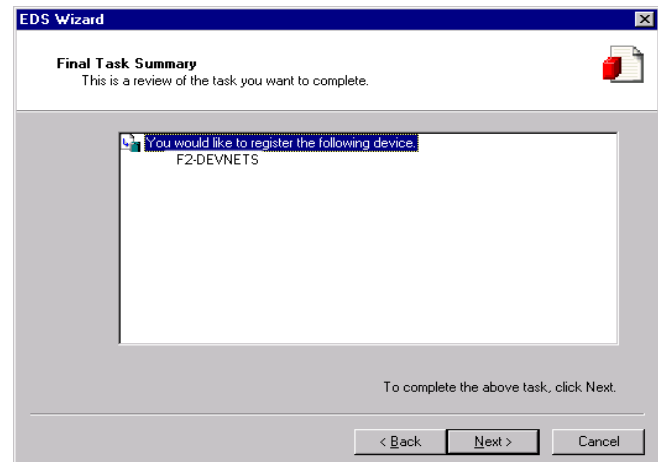

Enter the path for the EDS file.

EDS file installation results.

You can change the icon image for your device in this window.

Review what you have done.
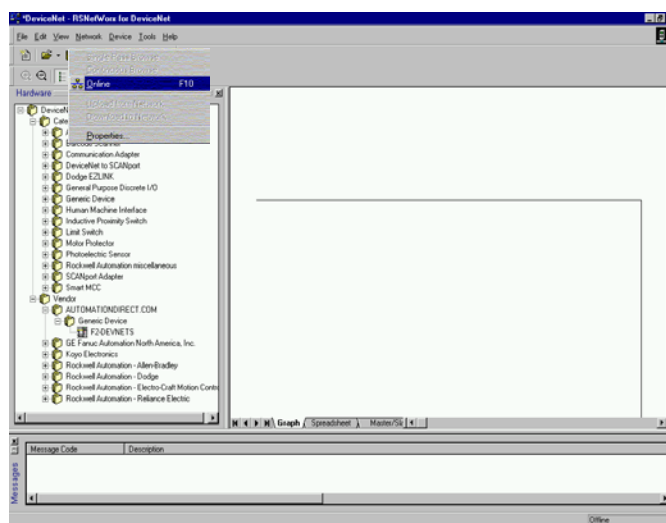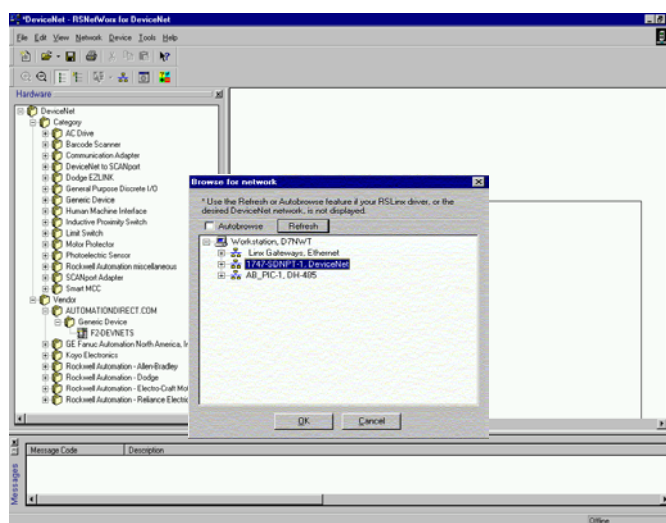
EDS Wizard complete.

Go on line

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

In the main RSNetWorx window,

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

2. Select your network from the pop–up window.
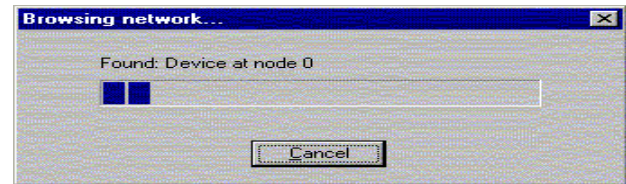
3. Click **OK**.
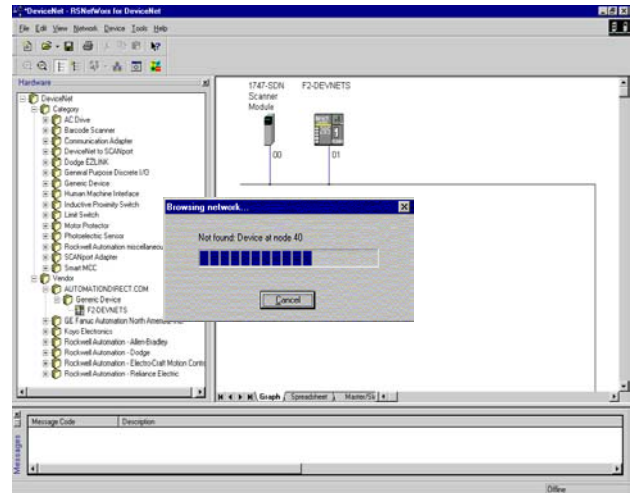
This message will appear.

4. Click **OK**.

Browsing network message.

Once the nodes are found, each node icon will appear on the RSNetWorx 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 paramerters for the devices. The scanner needs to be configured first. This is done by accessing the scanner properties.

1. Selecting the scanner module can be done in two different ways. Either click on the scanner name and right click the mouse or click on **Device** then click on **P**roperties in the pop–up window.
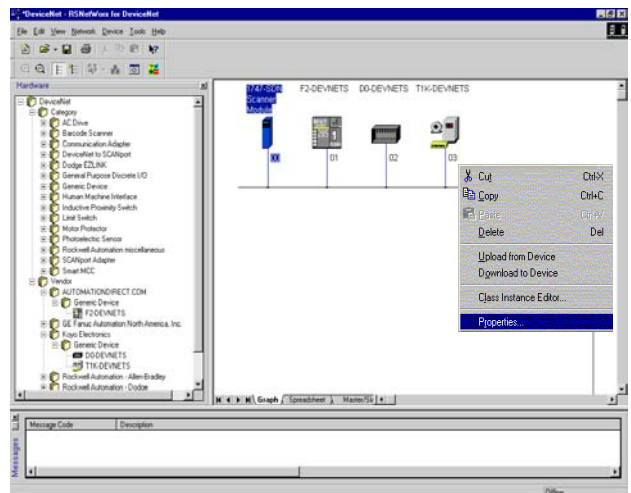
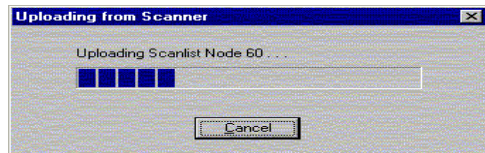The properties window will appear.

2. Click **Module**.
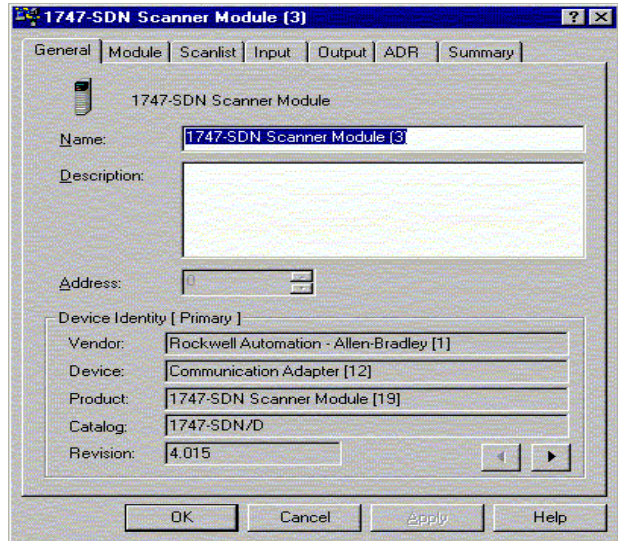
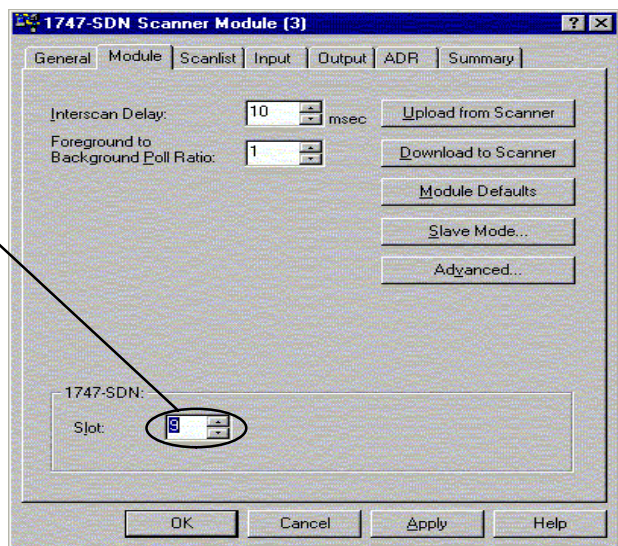3. Click **Upload**.

Uploading network information.

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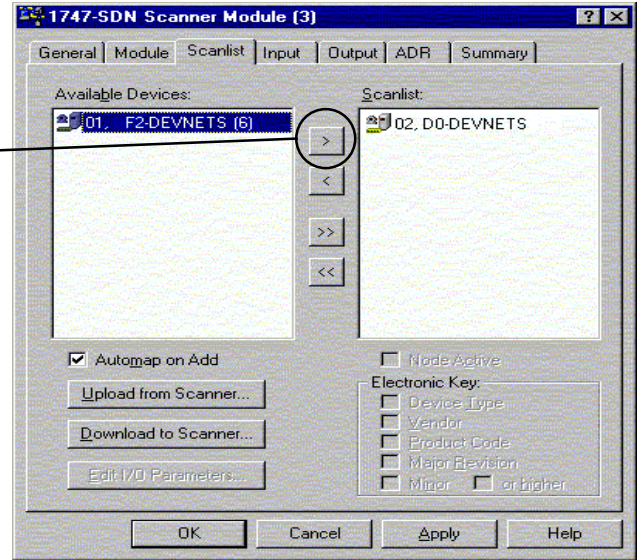
The data appears.

4. Select the correct slot number which the DeviceNet scanner module is residing.
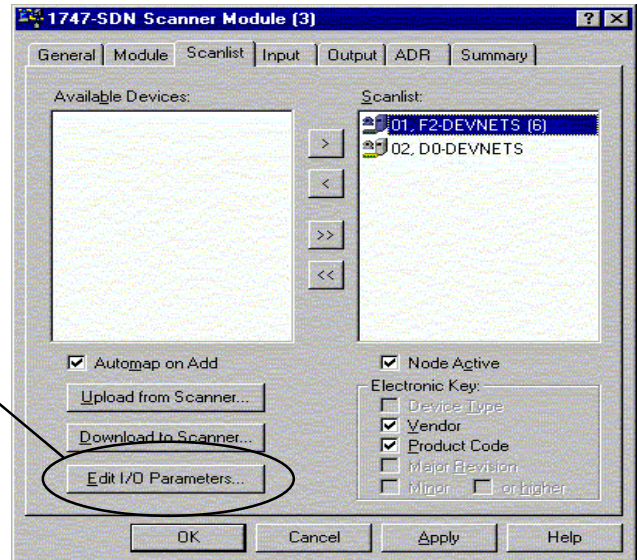
5. Click **Scanlist**.

RSNetWorx™ Setup

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

6. Highlight F2–DEVNETS

7. Click the right arrow.

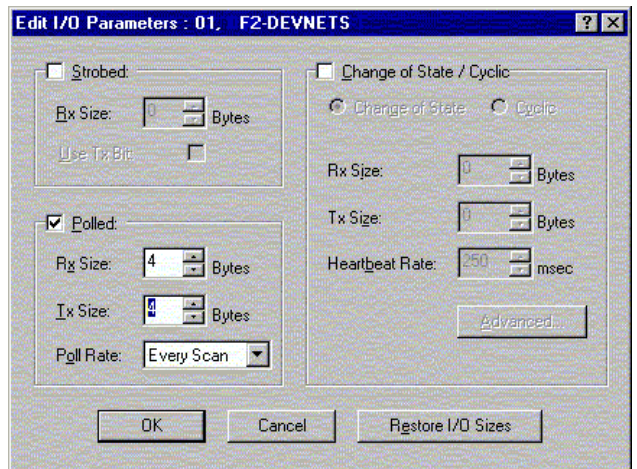Now that F2–DEVNETS is in the list, be sure that it is selected.

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

9. 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).

10. Click **OK**.

Refer to page D–18 (**Service Class Instance Attribute**) if the total number of Rx and Tx bytes are not known.

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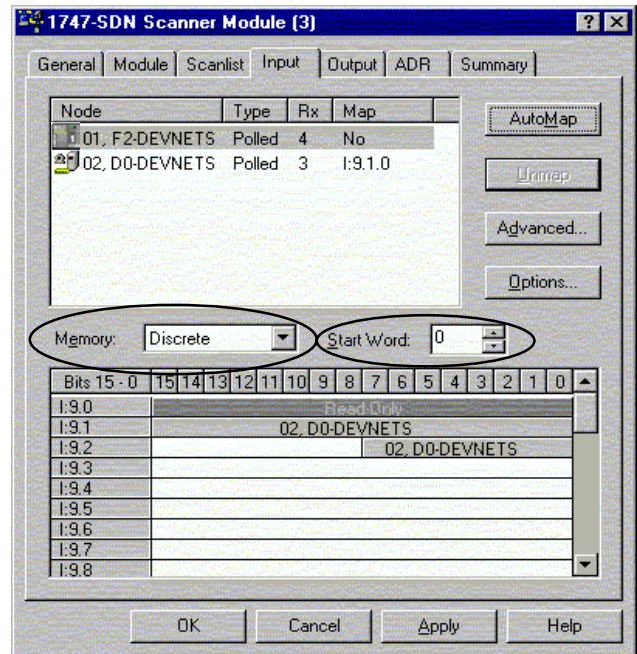
11. Click **Yes**.

Map the nodes

Map each node.

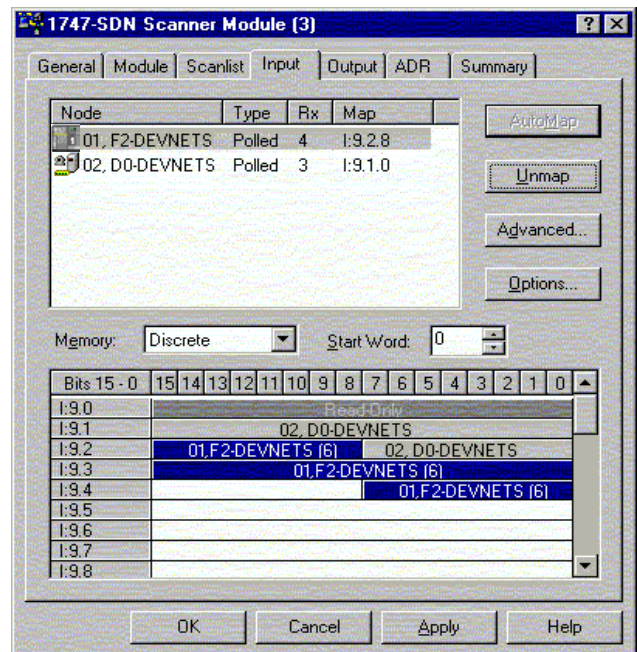1. Click the **Input** tab in the properties window.

   Be sure that F2–DEVNETS is selected.

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

3. Click **AutoMap**.

   NOTE: M file is used with explicit messaging.

At the completion of the input AutoMapping, the window will look like this example. The F2–DEVNETS node is now shown.
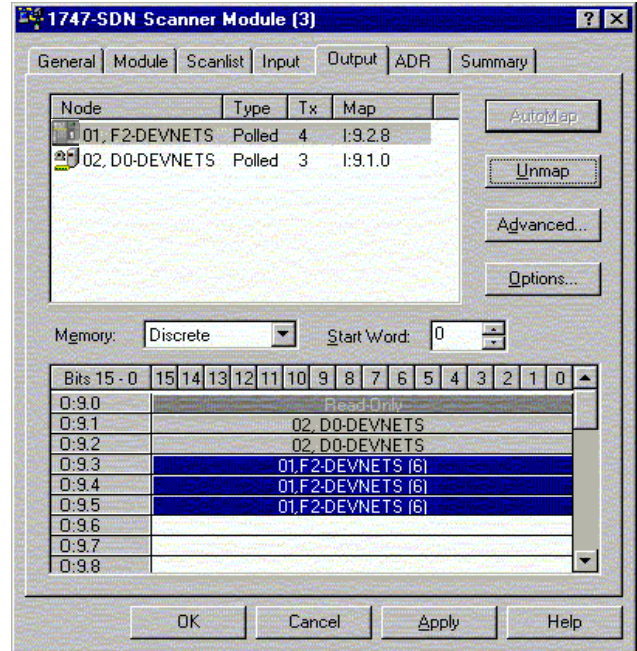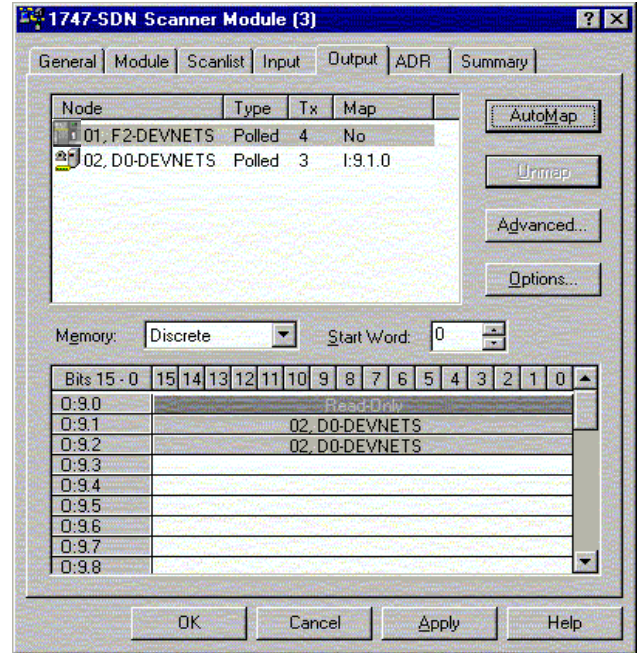
Now, map the outputs just the way you mapped the inputs. This time:

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

Be sure that F2–DEVNETS is selected.

2. Select **Discrete** for **M**emory, and **0** for **S**tart Word.

3. Click **AutoM**ap.

At the completion of the output AutoMapping, the window will appear like this example. The F2–DEVNETS node is now shown.
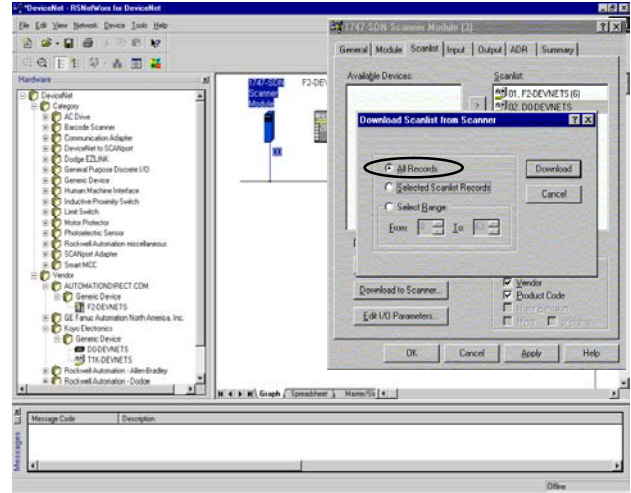
Download the scanlist to the scanner.

1. Select the **Scanlist** tab in the properties window.

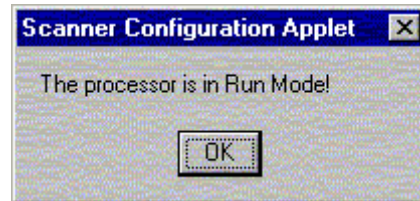2. Select **Download to Scanner**.

In the pop–up window:

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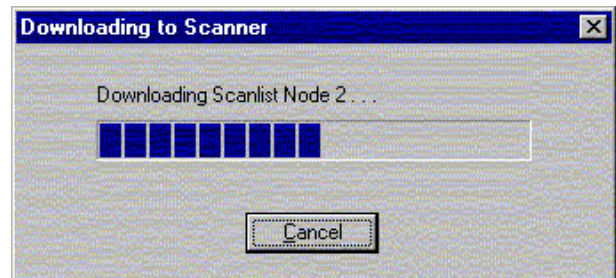
4. Click **Download**.

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.

Service Class Instance Attribute

Use the Service Class Instance Attribute Editor to set the I/O to read and write to the F2 –DEVNETS.

1. Select the F2–DEVNETS node. Either click on
   Device
   or right click on the node symbol in theRSNetWorx window.

2. Select **Class Instance Editor** in the pop–up window.
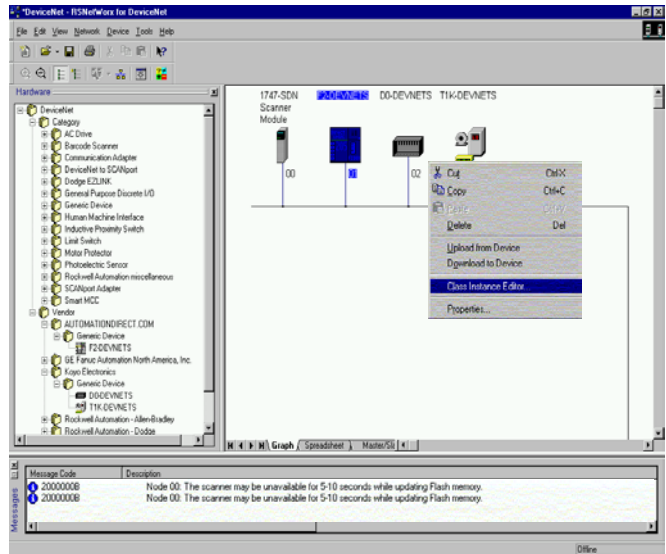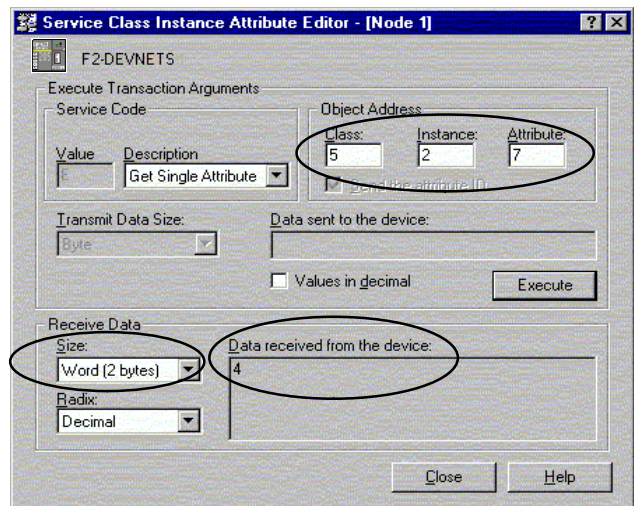

3. Setup input attributes in this window.

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

   Size = Word (2 bytes).

4. Click on **Execute**.
   Read the data here.

5. Setup output attributes in this window.

Object Address must be set to:

Class = 5, **Instance** = 2, **Attribute** = 8

<u>**Size**</u> = Word (2 bytes).

6. Click on **Execute**. Read the data here.

F2–DEVNETS–1 DeviceNet
Base Controller, 1st Edition