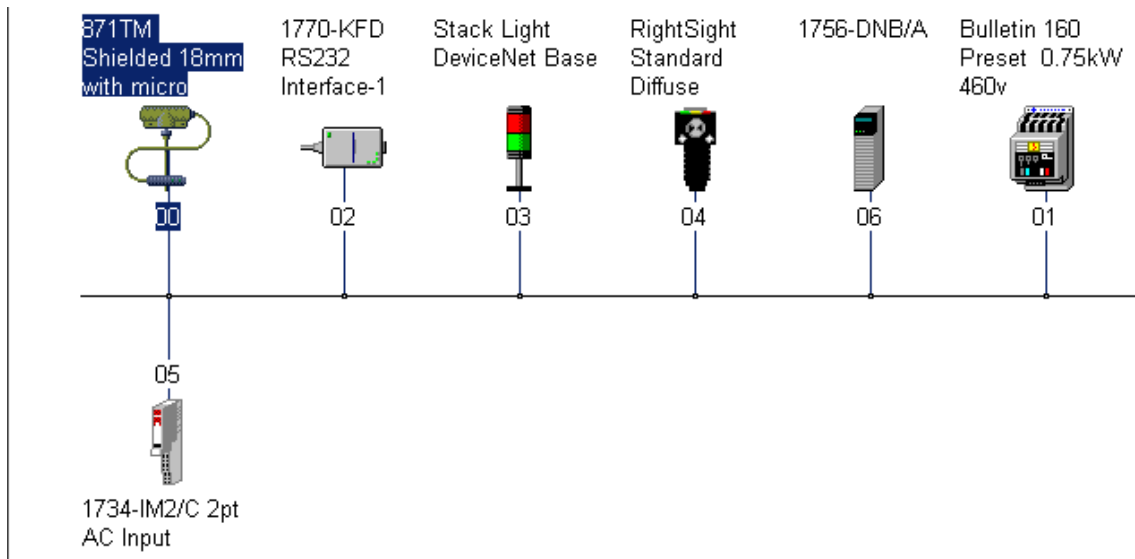


Module 4



Lab Exercise 11

RSNetWorx Working Offline

Downloading DeviceNet Configuration File

Lesson Objective

By the end of this session, students should be able to:

1. Set-up Configuration File (*.dnt) with RSNetWorx for DeviceNet Offline .
2. Change Node Addresses Offline

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Introduction:

Lab Exercise 11 will cover setting-up a DeviceNet Configuration File Offline using RSNetWorx for DeviceNet software

Equipment Required:

Computer with RSNetWorx for DeviceNet software

RSNetWorx for DeviceNet Software

1. Open the RSNetWorx for DeviceNet software

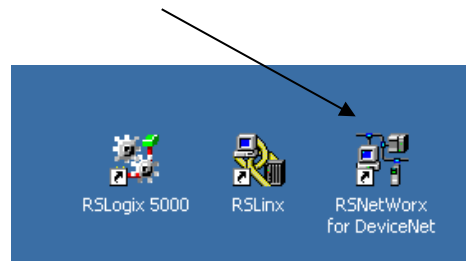


Figure 1-A

- Start a new DeviceNet Configuration File.

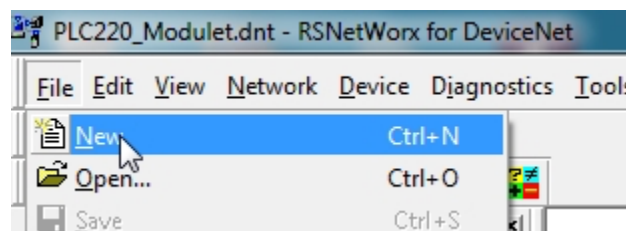


Figure 2-A

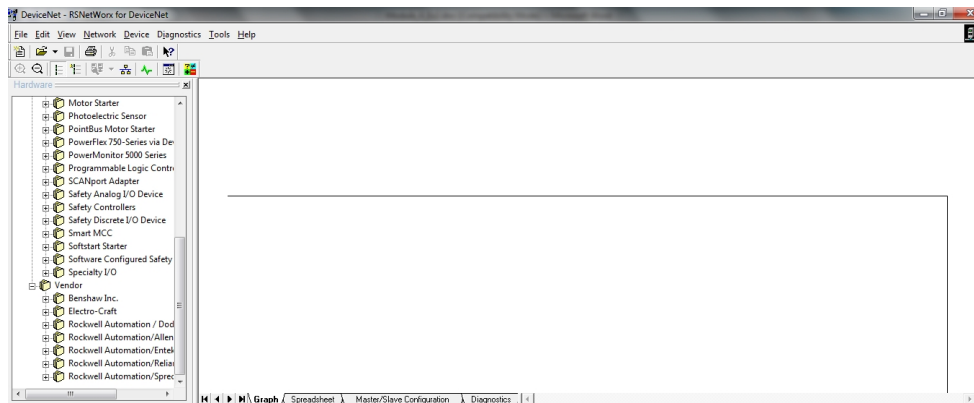


Figure 3-A
Window for New DeviceNet Configuration File

- The left side window contains available DeviceNet components divided into Categories (folders) base on device function.
- Does not need to be Allen Bradley / Rockwell devices

Note: Devices assigned to a Network Configuration File from Hardware window require registered EDS (Electronic Data Sheet) files in RSNetWorx

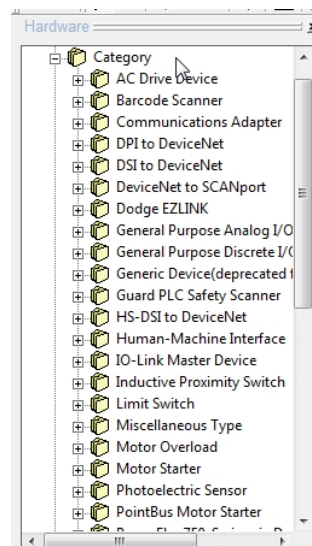


Figure 4-A
Hardware Window - Categories

- Click the + sign to the left of a Category Folder to view components.

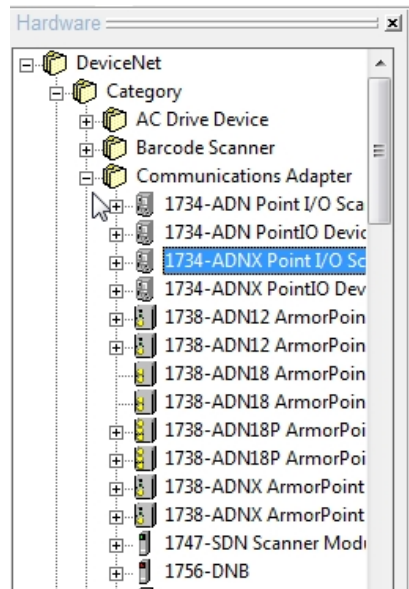


Figure 5-A
Category Devices

5. Click the + sign to the left of a component to view available Revisions.

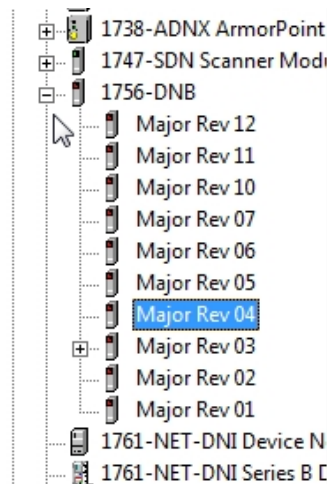


Figure 6-A
Device Revisions

6. Device Components can be searched for by using the Find Hardware utility

Right click in the Hardware window to show Find Hardware Utility.

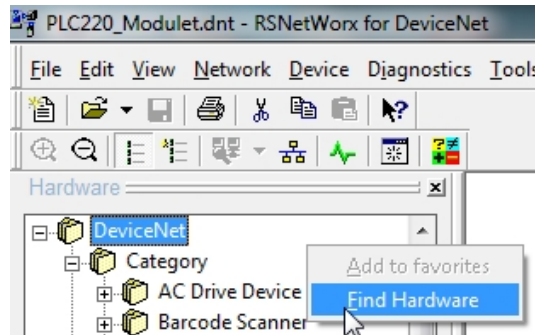


Figure 7-A
Find Hardware Utility

7. Click Find Hardware to show Find Hardware window.

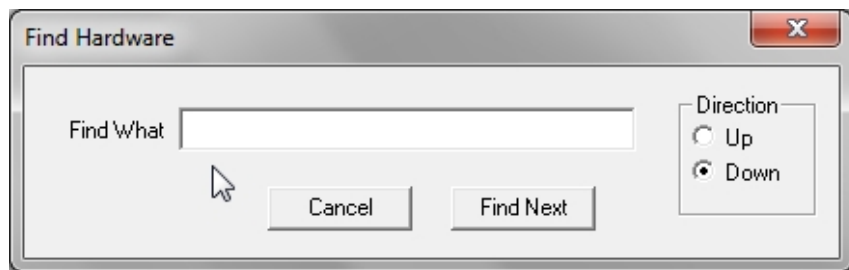


Figure 8-A
Find Hardware Window

8. Type in a description or part number in the Find What box for the component to Find
Example: Stack Light

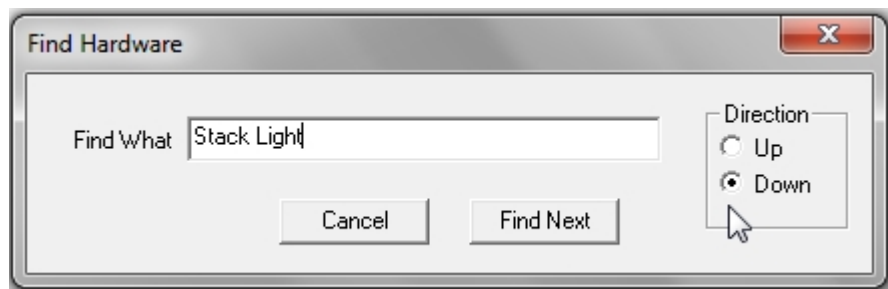


Figure 8-A. Finding the Stack Light.

Choose a Direction (Up or Down) to search the Hardware Categories

Note: The Search starts at the cursor location in the Hardware window
The Search does not wrap.

9. Click the Find Next to initiate Search

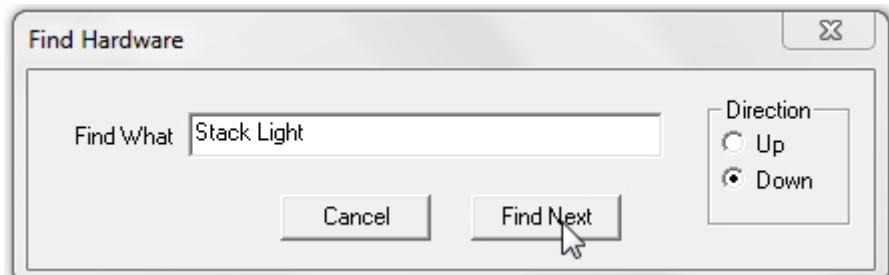


Figure 9-A. Find the next instance.

10. If a component is found, the component will have a grey highlight in the Hardware window

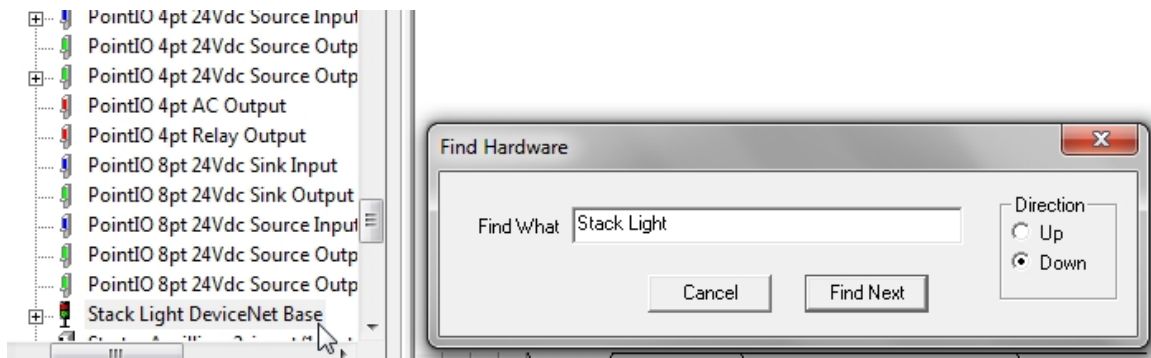


Figure 10-A
Stack Light Found Using Find Hardware Utility

11. When Search is Successful - Click the Red X to close Find Hardware window

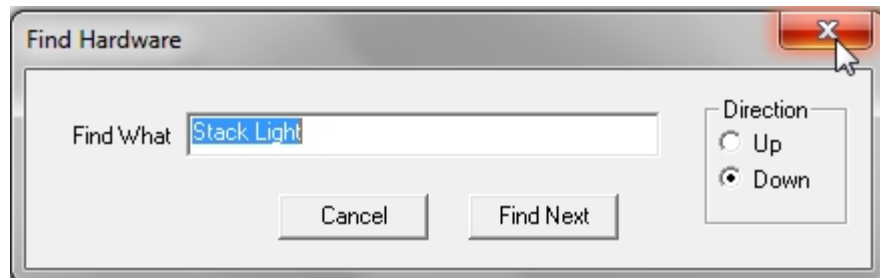


Figure 11-A. Search in a downward motion.

12. If a device has more than one Major Revision – click the + sign to the left of the device icon to choose required Major Revision (Rev)

Note: If there is no + sign the device has only one major revision registered in RSNWorx for DeviceNet.

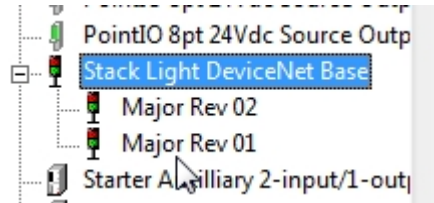


Figure 12-A
Device Major Rev

13. Click on the device or its required Major Rev to add it to the network layout window

Note; If there are multiple Major Revs for a device and one is not specifically selected the latest Major Rev will be assigned to the device.



Figure 13-A
Network Window – Device Added

Note: The device will be assign the next available Node Address on the network

Example: The Stack Light is the first component added to the network – the Stack Light is assigned a Node Address 00.

14. To change the Node (MAC) Address (ID) – right click the device icon and choose Properties from the context menu

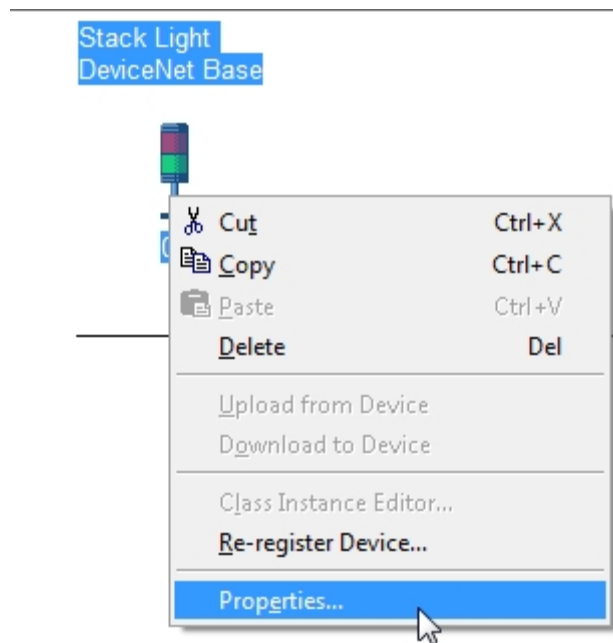


Figure 14-A
Stack Light Properties

15. From the General Tab – Address Spin box shows current device Address (Node)

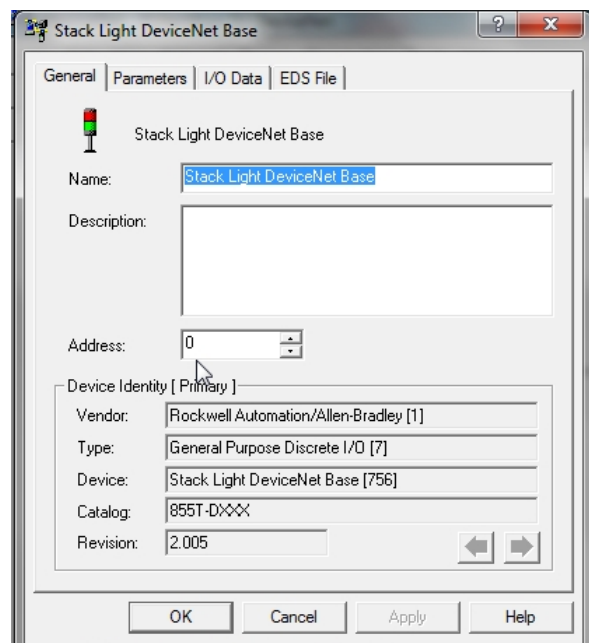


Figure 15-A
View Device Address

Note: Device Revision information also shown on General tab

16. Modify Address to required network node.

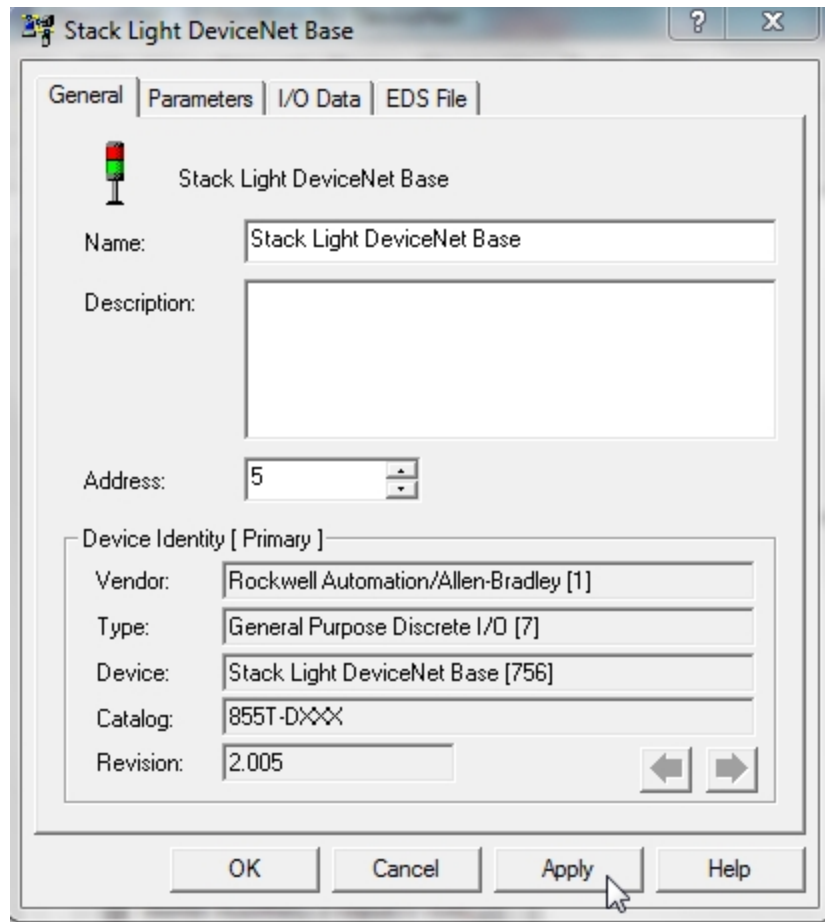


Figure 16-A

Modify Device Address

Click the Apply or OK button to accept the change

17. From the Network layout window - Component now has different Address assigned

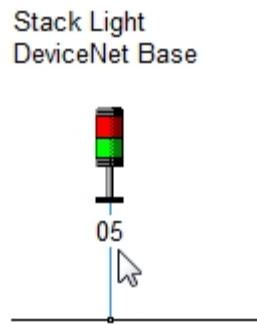


Figure 17-A
Stack Light – Node (Address) 05

18. An alternate way of modifying the device's address to double click the node Address number below the device icon on the Network Layout window

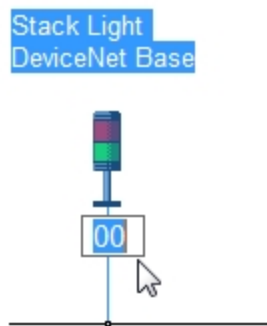


Figure 18-A
Modifying Device Address

19. Type the new / required address in the entry box.

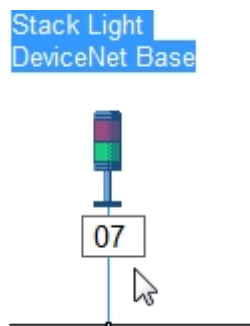


Figure 19-A
Assigning a New Device Address

20. Press Enter key on keyboard or click white space on Network Layout window to assign modified address setting

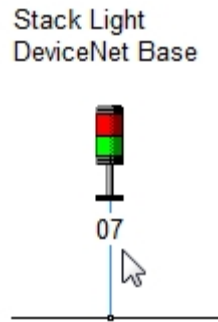


Figure 20-A
New Device Address Assigned

Create on Offline Network Configuration

Use the follow component information to create a DeviceNet Network Configuration offline

- Node 01 1756-DNB Module Major Rev 7
- Node 03 RightSight Standard Diffuse Photoeye
- Node 06 Stack Light DeviceNet Base Major Rev 2
- Node 02 PowerFlex 4 1P 110V .25HP Major Rev 4

Figure 21-A shows the completed Network Configuration

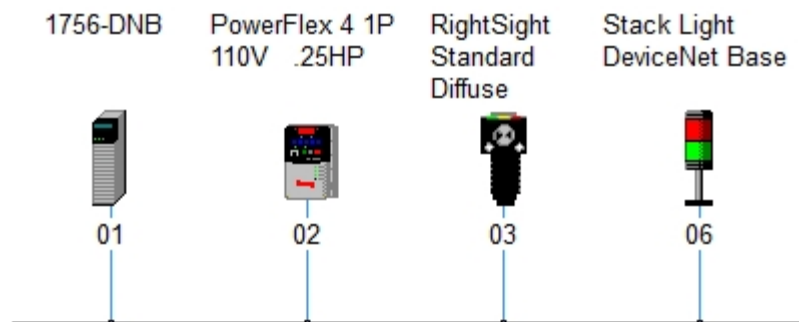
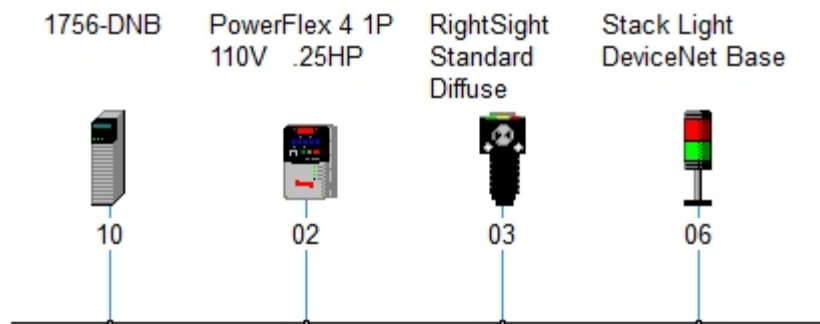


Figure 21-A

Save the Network Configuration File as: PLC220_Module4_Offline_EX3.dnt

Review Questions

1. T F All Network Devices require a registered EDS file.
2. Which software is used to build a DeviceNet Configuration File
 - a) RSLogix 5000
 - b) Studio 5000
 - c) RSLinx
 - d) RSNetWorx for DeviceNet



3. Which device in the above network configuration is node 10:
 - a) 1756-DNB
 - b) PowerFlex 4 VFD
 - c) RightSight photoeye
 - d) Stack Light
4. T F A 1756-DNB module must be Node 01 on a DeviceNet Network

5. A 1756-DNB module is what Category of DeviceNet component?
 - a) General Purpose Discrete I/O
 - b) Communication Adapter
 - c) DeviceNet processor
 - d) DeviceNet to SCANport
 - e) Interface I/O

6. T F All Hardware devices listed in RSNetworx for Devicenet are Allen Bradley devices

Review Question Answers

- 1) T
- 2) d
- 3) a
- 4) F
- 5) b
- 6) F

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