# Allen-Bradley MicroLogix 1400

Restore / Upload

EthernetIP Connection

Warning: if prompted by RSLogix to upgrade the firmware NEVER answer yes. The equipment will likely be rendered into an unusable state and require some time to restore.

Observe proper safety precautions. If working on a production line at a very minimum the line should be halted. Use caution when restarting a line.

Ethernet Cable
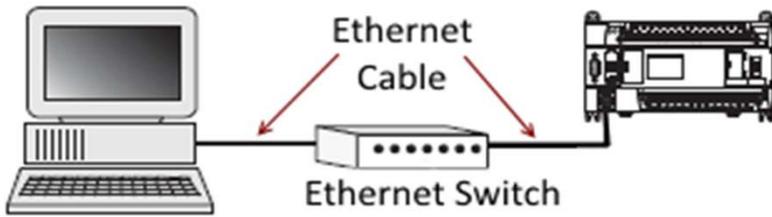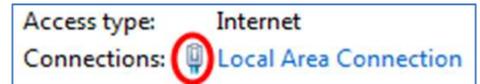
Ethernet Switch

Cable: **Standard Ethernet**

1

Connect one end of an Ethernet cable to the computer which will transfer files. The other end of the cable should be inserted into a free jack on the Ethernet switch which the PLC is connected to.

2

On the computer open the control panel and go to **Network and Sharing Center.** Find the **Local Area Connection** hyperlink associated with the **WIRED** internet con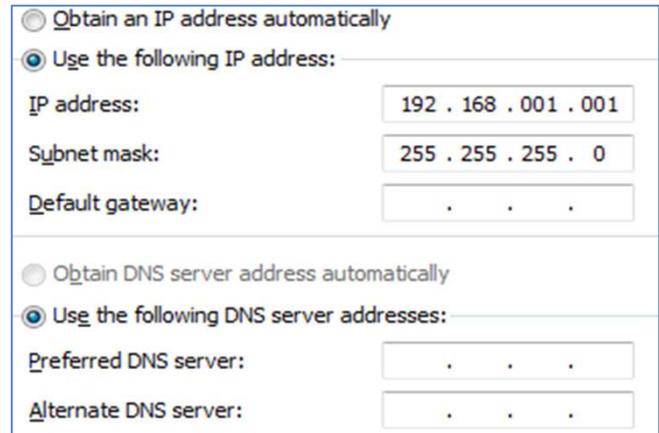nection. Refer to the graphic at right. Click the hyperlink. **The Local Area Connection Status** dialog appears, click on **Properties**. Click on the **Internet Protocol Version 4 (TCP/IPv4)** so it is highlighted. Click on **Properties**. Select the radio button "Use the following IP address:".

Now you will enter an IP address for the laptop to use in order to communicate over Ethernet with the PLC. You can choose any IP number that is not already in use on your network. In our case the network size is limited to the equipment connected in the cabinet. However, the number you choose MUST match the three left most numbers of the cabinet equipment AN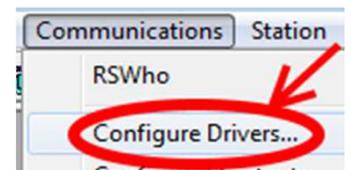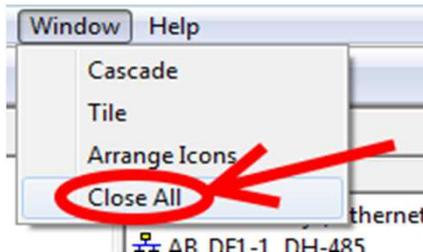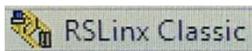D it must be unique on the netwrok to which it is connected. For instance, in the example at right the PLC may be at 192.168.1.231 and the HMI at 192.168.1.097. So our selection of 192.168.1.1 is not already in use on the network.

Set the subnet mask entry to 255.255.255.0. You can leave the DNS information blank, Press **OK**, **Close**, and **Close** again. You can close the Network Share Center window.

Access type: Internet
Connections: Local Area Connection

Properties

☑ Internet Protocol Version 4 (TCP/IPv4)

Properties

○ Obtain an IP address automatically
● Use the following IP address:
IP address: 192 . 168 . 001 . 001
Subnet mask: 255 . 255 . 255 . 0
Default gateway: . . .

○ Obtain DNS server address automatically
● Use the following DNS server addresses:
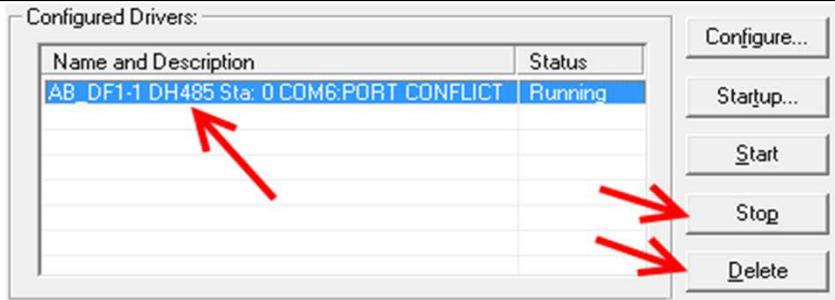Preferred DNS server: . . .
Alternate DNS server: . . .

3

Launch the RSLinx Classic program. In RSLinx select menu item **Window|Close All** and and then **Communications|Configure Drivers.**

RSLinx Classic

Window | Help
Cascade
Tile
Arrange Icons
Close All
thernet
AB DF1-1 DH-485

Communications | Station
RSWho
Configure Drivers...

Sheet 2 of 4

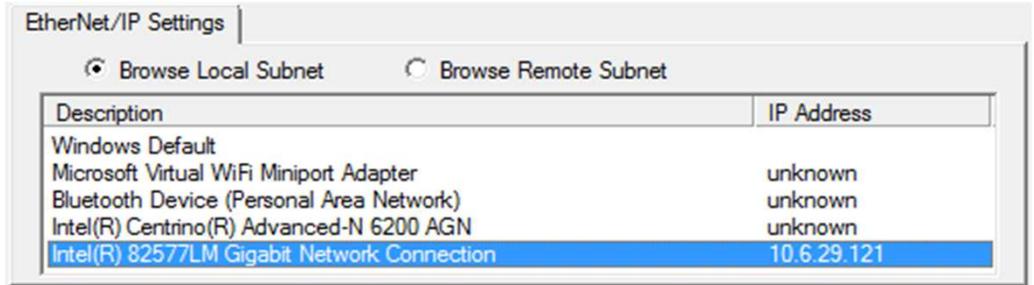| 4	In the Configure Drivers, Name and Description list box there may be several drivers currently running. For each item listed, select the item, click **Stop**, select the item again, and click **Delete**.

Configured Drivers:

Name and Description	Status
AB_DF1-1 DH485 Sta: 0 COM6:PORT CONFLICT	Running

Configure...
Startup...
Start
Stop
Delete

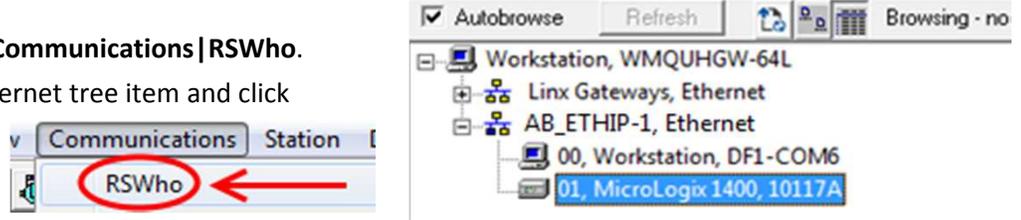| 5	Still in the Configure Drivers window click the drop down box labeled Available Driver Types and select **Ethernet/IP Driver**. Then click Add **New** and then **OK**. Use the default driver name.

Available Driver Types:

1784-U2DHP for DH+ devices
RS-232 DF1 devices
Ethernet devices
EtherNet/IP Driver
1784-PKTXID)/PCMK for DH+ /

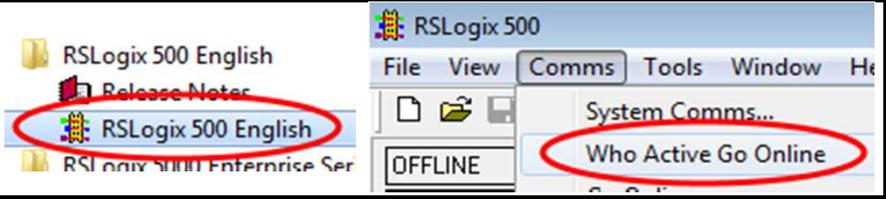| 6	This screen ask that you select the Ethernet adaptor on the laptop that will communicate with the PLC (the wired connection). This will be the same IP address you entered in step 2. Click **OK** then **Close**.

EtherNet/IP Settings

○ Browse Local Subnet   ○ Browse Remote Subnet

Description	IP Address
Windows Default	
Microsoft Virtual WiFi Miniport Adapter	unknown
Bluetooth Device (Personal Area Network)	unknown
Intel(R) Centrino(R) Advanced-N 6200 AGN	unknown
Intel(R) 82577LM Gigabit Network Connection	10.6.29.121

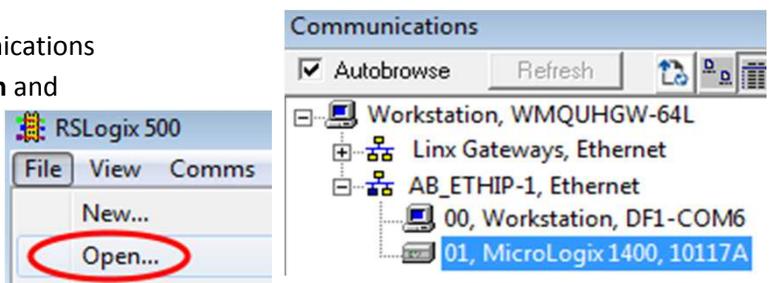| 7	In RSLinx select menu item **Communications|RSWho**. Expand the AB_ETHIP-1, Ethernet tree item and click on the MicroLogix 1400 branch.

☑ Autobrowse   Refresh   Browsing - no

🖥 Workstation, WMQUHGW-64L
  ⊞ 📶 Linx Gateways, Ethernet
  ⊟ 📶 AB_ETHIP-1, Ethernet
      🖥 00, Workstation, DF1-COM6
      01, MicroLogix 1400, 10117A

Communications | Station
RSWho

8	Launch the RSLogix 500 application. In the RSLogix application select menu item **Comms|Who Active Go Online**.

📁 RSLogix 500 English
📕 Release Notes
🚦 RSLogix 500 English
📁 RSLogix 500 Enterprise Ser

🚦 RSLogix 500
File View Comms Tools Window He
System Comms...
OFFLINE   Who Active Go Online

| 9	Select the MicroLogix 1400 branch in the Communications dialog. In RSLogix 500 select menu item **File|Open** and select the file you wish to upload. After the PLC application opens select menu item **Comms|Who Active Go Online**. Select the MictoLogix and click **OK**.

Communications

☑ Autobrowse   Refresh

🖥 Workstation, WMQUHGW-64L
  ⊞ 📶 Linx Gateways, Ethernet
  ⊟ 📶 AB_ETHIP-1, Ethernet
      🖥 00, Workstation, DF1-COM6
      01, MicroLogix 1400, 10117A

🚦 RSLogix 500
File View Comms
New...
Open...

| 10	In RSLogix select menu item Comms|Upload. The Going Online Programming State dialog will appear. Click Cancel. Next the 'in progress' dialog will appear. Wait for the transfer to finish.

11

When the file has finished uploading select menu item **Comms|Go Online**. Answer Yes to any prompt such as 'Do you want to go online?' Once online you should see the ladder diagram currently executing and the ladder graphic should be annimated.
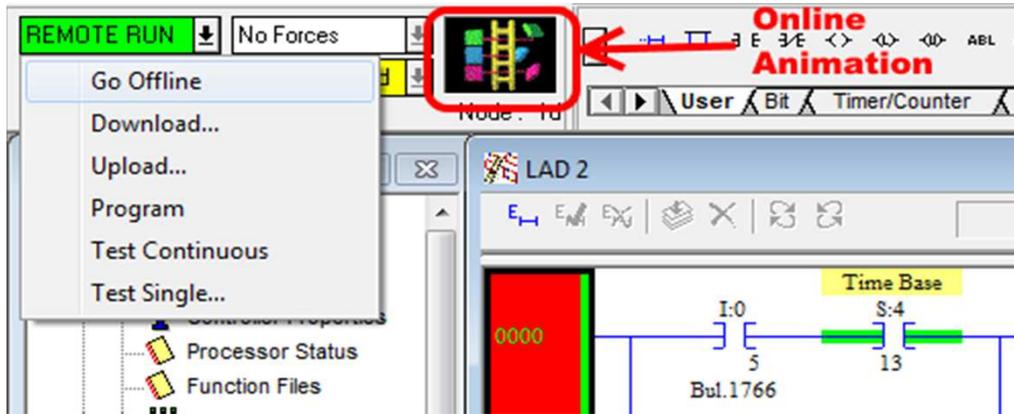
12

Select the menu item **Comms|Go Offline**. When asked if you would like to save the changes click on **No**. Select **Cancel** when presented with the Going to Offline Programming State dialog.
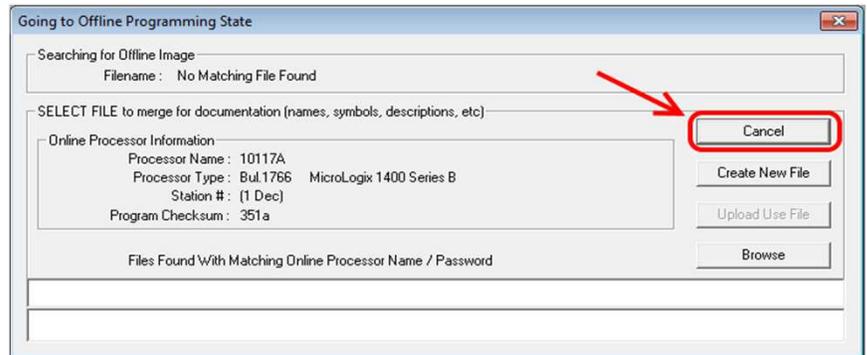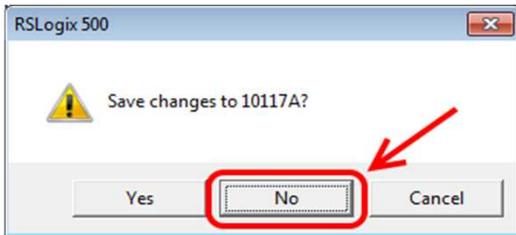
13

In RSLogix 500 select menu item File|Exit. Likewise in RSLinx Classic. Disconnect the communications cable from the PLC and secure the enclosure. Follow applicable safety procedures to bring the equipment back to it's online running condition.

Return this procedure, cable, and the laptop to the vending locker in the maintenance area.

Controller Status Indicators

LED	Color	Indicates
POWER	off	No input power, or power error condition
	green	Power on
RUN	off	Not executing the user program
	green	Executing the user program in run mode
	green flashing	Memory module transfer occurring
FAULT	off	No fault detected
	red flashing	Application fault detected
	red	Controller hardware faulted
FORCE	off	No forces installed
	amber	Forces installed
	amber flashing	Forces installed in force files but forcing is disabled.

Sheet 4 of 4