Establish the EtherNet/IP Connection

In N174 switches were used to connect the computers and EtherNet/IP modules via Ethernet cables.

(If a computer and EtherNet/IP module are connected directly then an Ethernet crossover cable must be used)

The address configuration that should be used for the automation equipment in N174 is as follows,

Switch 4 (or Hub)
Host 192.168.0.70 Desktop Computer
Host 192.168.0.71 Logix Controller (also a computer)
Host 192.168.0.80 Desktop Computer
Host 192.168.0.81 Logix Controller (also a computer)

Switch 3 (or Hub)
Host 192.168.0.60 Desktop Computer
Host 192.168.0.61 Logix Controller (also a computer)
Host 192.168.0.50 Desktop Computer
Host 192.168.0.51 Logix Controller (also a computer)

Switch 2
Host 192.168.0.40 Desktop Computer
Host 192.168.0.41 Logix Controller (also a computer)
Host 192.168.0.30 Desktop Computer
Host 192.168.0.31 Logix Controller (also a computer)

Switch 1
Host 192.168.0.20 Desktop Computer
Host 192.168.0.21 Logix Controller (also a computer)
Host 192.168.0.10 Desktop Computer
Host 192.168.0.11 Logix Controller (also a computer)
Examine the IP address in the desktop computer on your bench. This will probably have been set earlier. If not, set it 10X your bench number for the host field. Like 192.168.0.50 for bench 50.

Determine the MAC address for your EtherNet/IP module (similar to 00:00:BC:33:E6:84) by either,

a) turn on the chassis power and observe the MAC address that appears on EtherNet/IP module, or

b) remove the InterNet/IP module from the chassis. Record the MAC address on the edge of the internal green printed circuit board.
Launch the BOOTP/DHCP program from the Rockwell Software menu.

The EtherNet/IP module screen will display BOOTP followed by the MAC code(s). If other chassis are turned on many MAC codes may be displayed.
In the Tools menu select Network Settings.

Enter 255 255 255 0 into the Subnet Mask.

Click OK.
Double-Click on a line that contains the MAC address for the EtherNet/IP module in your chassis.
Enter an IP address for the EtherNet/IP module. Use 10X your bench number plus 1. For bench 5 use 192.168.0.51 (not 192.188.44.3 as shown below).

Click OK.
The Relationship list displays the MAC and IP codes.
Select Exit in the File menu and when prompted give the file a name and save it in on the computer desktop.

Note: whenever the chassis power is turned off the settings in the Internet/IP module will be cleared.
Launch RSLinx Classic

Click on RSWho to see that the AB_ETH-1 Ethernet driver is running. If the driver is not present then add one in the same way that the RS232 driver was added.

Open the Communications menu and select Configure Drivers. Use the Available Driver Types menu and select Ethernet/IP Driver. Click on Add New.

Enter a name for the driver or use the default name. Click OK to open the configure screen.

Click OK on Browse Local Subnet.
Right-click on the driver to see the drivers (the RS-232 connection was established earlier).