



PlantScape Controller Implementation

Lesson 3

Configuring Your Server

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Notes

Introduction

The purpose of this Lesson is to prepare you to be able to verify that the PlantScape server is configured properly. After you complete this Lesson you should be able to identify the procedures to verify ControlNet communication software and to verify server ControlNet and IP addresses.

Objectives

- ❶ Gain knowledge required to verify Control Net driver configuration in RSLinx
- ❷ Gain knowledge required to verify the server's Ethernet configuration and IP addresses
- ❸ For this class, configure a Station and an Operator profile on the server connected to the controller, along with the appropriate Hosts file to log efficiently into that server



Verifying ControlNet Communication Software & Server Address

➤ Open RSLinx

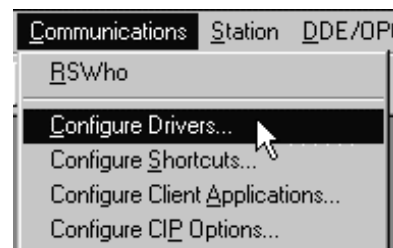
- From the lower-left corner of your Windows NT 4.0 Desktop, click



- **Start**
 - **Programs**
 - **Rockwell Software**
 - **RSLinx**
 - **RSLinx**

➤ Verifying ControlNet communication software

- From the Communications Menu, click **Configure Drivers**



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Notes

Before you begin

After successfully logging on to your Server for the first time, make sure that your Server has a valid ControlNet address. The Server uses ControlNet to communicate with the PlantScape Hybrid Controller. Each device (i.e., controller, server, or I/O rack) on a particular ControlNet must have a unique address.

Be sure that your communication software is configured correctly. RSLinx software (which is installed as a part of PlantScape server) is used to select and configure the proper driver for the server's PCIC card and to set the server's CNet address.

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➤ Verifying ControlNet communication software ...continued

- In the listing of Configured Drivers, locate the line starting with “AB_PCIC-1 CNet...” ➡

Configured Drivers:		
Name and Description		Status
AB_PCIC-1 CNet Node: 24 OSN: 000938f1 Slot:	RUNNING	Running

- Status column should say “Running”.

If it...

reads “**RUNNING**”...

does not read “**RUNNING**”...

Then...

your RSLinx communication software has been configured correctly on your system.

you may have a problem requiring assistance from Honeywell’s Technical Assistance Center (TAC).

Note: If the status is not “**RUNNING**” in class, check with your course manager.

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Notes

Verifying ControlNet communication software

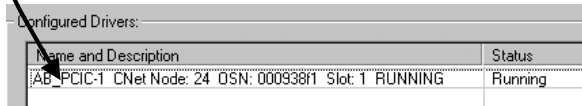


During this Unit, do NOT save any changes if requested to do so during this, or any other step while in RSLinx!

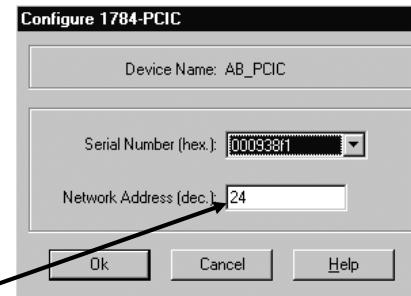
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➤ **Verifying ControlNet server address**

- From the Configured Drivers Window, double-click the line that starts “PCIC CNet...”



Name and Description	Status
AB_PCIC-1 CNet Node: 24 OSN: 000938f1 Slot: 1 RUNNING	Running



Configure 1784-PCIC

Device Name: AB_PCIC

Serial Number (hex.): 000938f1

Network Address (dec.): 24

Ok Cancel Help

- Observe the Net Address

If...

it is set to **24**

it is not ...

Then...

your RSLinx communication software has been configured correctly on your system.

you may have a problem requiring assistance from Honeywell’s Technical Assistance Center (TAC)

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Verifying ControlNet server address

A ControlNet address is also referred to as a Net Address.

CNet address 1 is the “keeper” of the CNet communication configuration settings. This address and configuration must be assigned to a Hybrid controller. Setting the controller address will be covered later in the course.



➤ **Verifying ControlNet server address ...continued**

- From the data displayed on your screen, record the:

– **Net Address** _____



Reminder - in the following steps do not save any changes if prompted to do so.

- Click **OK** to close the **Configure 1784- PCIC Device** screen
- Click **Close** to close the **Configure Drivers** screen
- From File Menu, click **Exit** to close the **Rockwell Software RS Linx** screen.

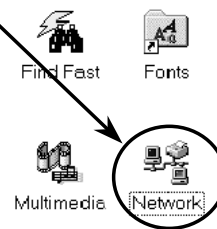
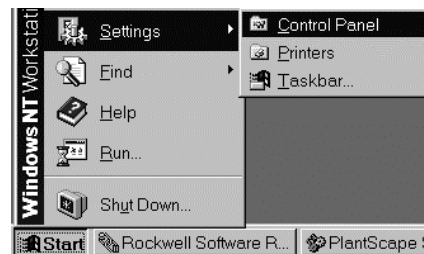
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➤ Verifying adapter and IP address

- From the lower-left corner of your Windows NT 4.0 Desktop, click:
 - **Start**
 - **Settings**
 - **Control Panel**
- Double-click the **Network** Icon to access the Network screen.



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Background

The PlantScape Server uses Ethernet hardware and the TCP/IP protocol to communicate with remote user stations. Even if your system does not have a remote user station, an adapter must be installed and a TCP/IP Address must be configured before PlantScape points can be built.

If your Server doesn't have an Ethernet card installed, your system can be configured to use a Loopback Adapter. This is software that causes the Server to act like an Ethernet card is installed. If your Server must communicate with other computers, you will need a real adapter.

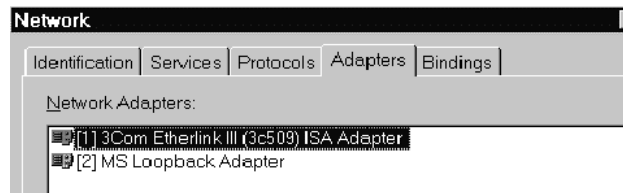


If your system (server and remote stations) will be attached to an existing network, for example your company's LAN, you must get permission from the Network Administrator who controls the other network. The Network Administrator will be able to tell you what IP Addresses to use.



➤ **Verifying adapter and IP address ...continued**

- Click the **Adapters** tab
- Observe the displayed Network Adapters list



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Verifying adapter

If your system will include remote user stations, or if your Server will need to communicate with other computers over an Ethernet network, you must have a configured physical Ethernet adapter. If you purchased an Ethernet adapter from Honeywell at the same time as you ordered your Server, your adapter should be configured for you. If you plan to purchase the Ethernet adapter later, or if you order it from someone other than Honeywell, you will need to configure the adapter yourself.

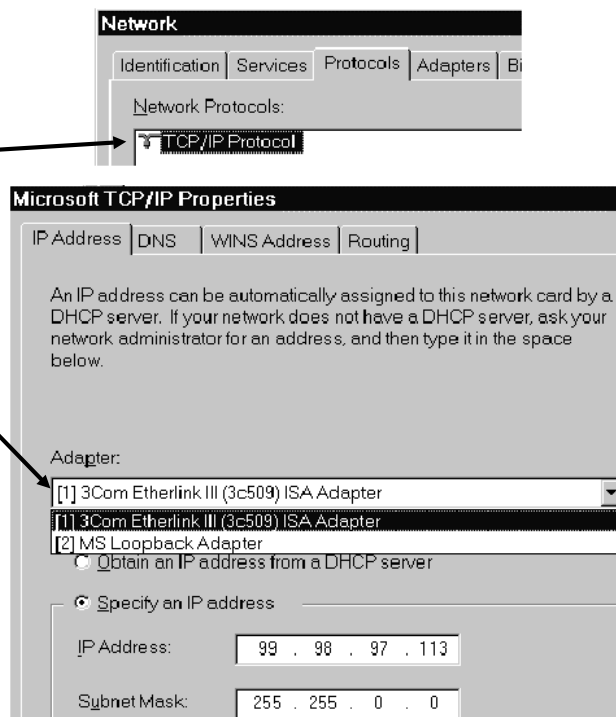


In this example, there are two adapters configured. The first one is for a real, physical Ethernet connection. The second one is for a Loopback Adapter.



➤ **Verifying adapter and IP address ...continued**

- From the **Network** screen, click the **Protocols** tab
- Double-click **TCP/IP Protocol**. The TCP/IP Protocol will appear in the window.
- On the IP Address tab, under the word **Adapter**, make sure your real, physical Ethernet adapter is selected



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If your system will talk to other computers (such as remote stations), you should find your IP address at this time. If you don't plan to connect to other computers, skip this section.



➤ **Verifying adapter and IP address ...continued**

- Record your Ethernet **IP Address** and **Subnet Mask**. You will need this information when you connect other computers to your server in the future.
 - Ethernet IP Address ____ . ____ . ____ . ____
 - Subnet Mask ____ . ____ . ____ . ____

➤ **Closing the network configuration tools**



Reminder - in the following steps **DO NOT** save any changes if prompted to do so.

- Click **Cancel** to close the Microsoft TCP/IP Properties window.
- Click **Cancel** to close the Network program screen.
- From File Menu, click **Close** to close the Control Panel.

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➤ **Configuration For Class -- Starting PlantScape Services, Adding Stations and Operator Profiles**

- **Configure Hosts File**

- Open `\Winnt\system32\drivers\etc\Hosts` in **Notepad**
- Add an entry for the server that is connected, through Control Net cable, to your assigned C200 controller (Localhost is already included. If you are sitting at the server no edit is required.)

- **Start PlantScape Services**

- On the server referenced above, open **Control Panel -- Services**
- Scroll down to the six PlantScape services and change their **Startup Type** properties from **Disabled** to **Automatic**
- Reboot the server
- Allow about one minute after bootup and verify the PlantScape services are running

- **Share the Honeywell directory**

- On the server referenced above, share the Honeywell directory using share name **Honeywel** (This allows configuration work to be downloaded to the connected server.)

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*** Station #**

From this point onward, the # sign will designate your team number. See your course manager for details.



➤ **Configuration For Class -- Adding Stations and Operator Profiles** (*Continued*)

- **Configure Stations for use in Class**

- Open Quick Builder using Existing Project:
Honeywell\client\qckbld\training_300_srv1.qdb
- Configure the project to load to the server connected to the C200
(Same server referenced in previous class configuration steps)
- Configure Station # for a one second update rate *
- Download Station # -- **Do not load the entire project!**

- **Configure Operator Profile**

- Connect your Station to the server to which you loaded in the previous step. Use station number #
- Use password **mngr** to acquire manager level access
- Configure operator number **2#** for **manager** access level

Note: **Remember this ID and Password!** This profile is required for Control Builder read\write access login.

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This completes....

PlantScape Controller Implementation

Lesson 3

Setting Up & Configuring Your Server

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