

PortAssist Manager Users Guide

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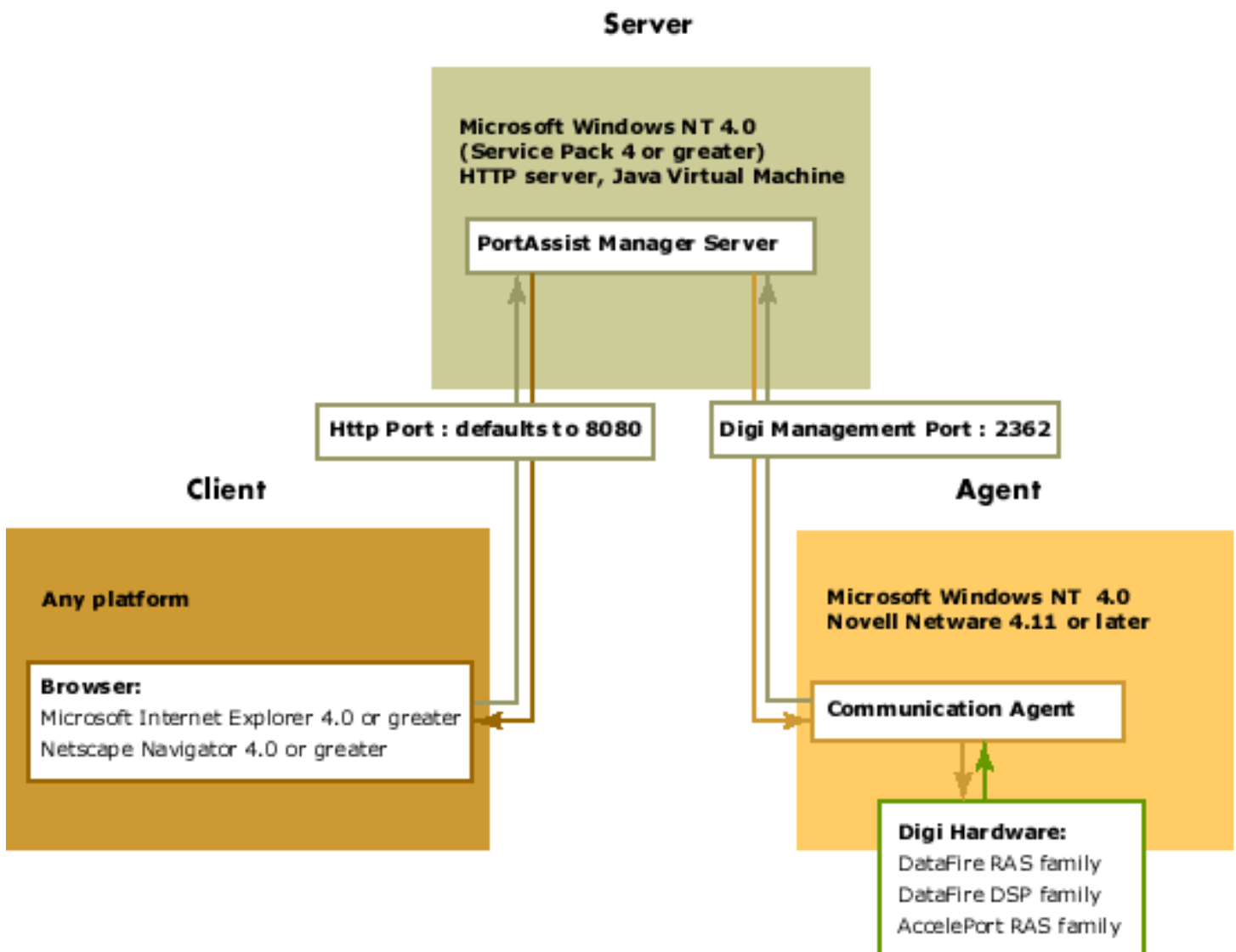
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PortAssist Manager Architecture

PortAssist Manager consists of the following components:

- One or more systems with Digi adapters that are managed by the PortAssist Manager. These can be Windows NT 4.0 systems and Novell NetWare 4.11, 4.2, or 5.x systems.
- A system running the PortAssist Manager application, which can be one of the systems that host a Digi adapter or any other system that meets installation requirements. See [Installation Requirements](#) for more information.
- Systems on which users perform PortAssist Manager tasks, which can be one of the systems hosting a managed Digi adapter, the system running the PortAssist Manager or another system that meets installation requirements. The following figure depicts PortAssist architecture.

Component Architecture of PortAssist Manager



Installation Requirements

Use this information to become aware of what you need to do before you install PortAssist Manager.

Server

The system that will run PortAssist Manager must meet the following requirements:

- Installation of Windows NT 4.0 with Service Pack 4 or greater
- Installation of Java 1.1 or greater Virtual Machine. You can download a copy from:
<http://www.portassist.com/jvm>
- At least 10 MB of free disk space

Client System

Systems used for monitoring Digi adapters must meet the following requirements:

- A connection to the network on which the server hosting the Digi adapters and the server running the PortAssist Manager reside
- Installation of either Internet Explorer 4.0 (or later) or Netscape Navigator 4.0 (or later). Both browsers must be set to accept cookies. The warning associated with receipt of cookies should be turned off as well.

Agent

Digi drivers with the communication agent that will be monitored by PortAssist Manager must be using driver release F or greater.

About UDP and HTTP Ports

The agent on the Digi driver, PortAssist Manager, and the client browser use IP protocol ports to communicate.

The default UDP port for communication between the agent and PortAssist Manager is 2362, which is assigned to Digi by the Internet Assigned Number Authority (IANA). Although you can change this port number, you should never need to. If another application uses it, it is best to reconfigure the application to use another UDP port, one that has not been assigned by the IANA. For more information if you do need to change the port number, go to [Changing the UDP Port](#) on Windows NT 4.0 or [Changing the UDP Port](#) on NetWare.

The default HTTP port for communication between PortAssist Manager and the client browser is 8080, which is the standard fallback port for HTTP servers. You may want to reconfigure this port for one of the following reasons:

- No primary HTTP server uses port 80, the well-known port for HTTP servers, and you want to simplify the URL required to access PortAssist Manager. (If you use port 80, users do not have to specify the port when they enter the URL.)
- A secondary HTTP server already uses port 8080.

If you do need to reconfigure the HTTP port, go to [Reconfiguring the HTTP Port](#).

Master Setup Process

Use this information to direct you to the major tasks required to install PortAssist Manager on a Windows NT 4.0 system and then start and configure PortAssist Manager.

Setup Steps

1. Understand key concepts. See [PortAssist Manager Architecture](#).
 2. Ensure that installation requirements are met. See [Installation Requirements](#).
 3. Install the PortAssist Manager on a Windows NT 4.0 system and complete an initial configuration. See [Installation and Configuration](#).
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Installing and Configuring: Windows NT 4.0

Use these procedures if you are installing, configuring, and starting the PortAssist Manager server on a Windows NT 4.0 system for the first time. Before you begin these procedures you should have downloaded PortAssist Manager from the PortAssist Manager web site (www.portassist.com) and ensured that your Windows NT 4.0 system meets the [installation requirements](#).

If you need to reconfigure the PortAssist Manager HTTP port, go to [Reconfiguring the HTTP Port](#).

If you need to upgrade PortAssist Manager, go to [Upgrading PortAssist Manager](#).

If you need to uninstall PortAssist Manager, go to [Uninstalling PortAssist Manager](#).

Procedures

Installation

1. Navigate to the folder with the PortAssist Manager software.
2. Choose setup.exe.
3. Choose which Java Virtual Machine (JVM) to use and then OK. You will be prompted for this.

Note: If the installation program cannot find a supported JVM, you will be prompted to locate a path to this software. You can download a JVM from

<http://www.portassist.com/jvm>

4. The Digi Java Setup screen appears. Choose Next.
5. Choose the destination directory, which should be:

c:\\Program Files\\PortAssist Manager

and then Next.

6. Specify a port (default is 8080) and choose Next.

Note: Some ports are not allowed, such as those with numbers outside the range of 1024 to 65535 except 80.

7. Follow the prompts to complete installation. When the installation is complete, PortAssist Manager will be automatically started as a Windows NT service.

Configuration

You now need to complete initial configuration, which involves assigning an administrator password, configuring a list of users, and configuring a list of systems to manage. To complete these tasks, do the following:

1. Access PortAssist Manager by choosing one of the following:

- Using one of the supported browsers, access the system that is running PortAssist Manager: http://system_name:8080.

Note: If you reconfigured the PortAssist Manager HTTP port to port 80, which is the HTTP protocol default, specifying the port number is not required.

- From the Start menu on the server, choose Programs > Digi PortAssist Manager > Launch PortAssist Manager.

2. Choose Launch and logon to PortAssist Manager.

Note: The administrator user name is admin. You cannot change this username, but you must specify (and then remember) an administrator password.

3. On the User Configuration screen, add users by entering their usernames and passwords and choosing Add. Go to [Adding and Deleting Users](#) for more information. Use the online help to assist you further.
4. On the System Setup screen, configure a list of systems for PortAssist Manager to manage. See [Adding and Deleting Systems](#) for more information. Use the online help to assist you further.
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Reconfiguring the HTTP Port

Use this procedure to reconfigure the PortAssist Manager HTTP port. The default port is 8080. You will want to change this port if it is already in use on your system. You may also want to change it to port 80 to simplify access by browsers.

Note: PortAssist Manager functions as a Windows NT service.

Procedure

1. From the Start menu, choose Programs > Digi PortAssist Manager > PortAssist Manager Setup.
2. Select which Java Virtual Machine (JVM) to use.
3. Choose Configure > OK.
4. Specify a new port and choose Next.

Note: Some ports are not allowed, such as those with numbers outside the range of 1024 to 65535 except 80.

5. Once the port has been configured and the service has been restarted, choose Finish.
6. From the Start menu, choose Programs > Digi PortAssist Manager > Launch PortAssist Manager.

Note: If you launch PortAssist Manager from your browser, the URL is:

<http://<servername>:<port number>>

Upgrading PortAssist Manager

Use this procedure to upgrade a previously-installed version of PortAssist Manager.

Procedure

1. Choose Start > Programs > Digi PortAssist Manager > PortAssist Manager Setup.
2. Select which Java Virtual Machine (JVM) to use.
3. Choose Upgrade > OK.

The previously installed version of PortAssist Manager is automatically upgraded

Uninstalling PortAssist Manager

Use this procedure to uninstall PortAssist Manager on a Windows NT 4.0 system.

Procedure

1. Choose Start > Programs > Digi PortAssist Manager > PortAssist Manager Setup.
 2. Select which JVM to use.
 3. Choose Remove > OK.
-

Restarting PortAssist Manager

Use this procedure to restart the PortAssist Manager on a Windows NT 4.0 system.

Procedure

Choose Start > Programs > Digi PortAssist Manager > Launch PortAssist Manager Server.

Note: If you are not on the server where PortAssist Manager is located, go to"

`http:// <system name>:<HTTP port number>`

Adding and Deleting Users

Use this procedure to add and delete users. Doing this procedure requires Administrator privileges.

Procedure

1. Log on to PortAssist Manager.

Note: User names are not case sensitive, but passwords are.

2. Choose Setup > User Setup.
3. To delete a user, choose Delete in the appropriate row.

To add a user, provide the required information and choose Add. Use the online help for information on configuration fields.

Adding and Deleting Managed Systems

Use this procedure to add and delete managed systems. You must have administrator or advanced privileges to add or delete systems.

Procedure

1. Launch and log on to PortAssist Manager.
2. From Network View or any other screen, choose Setup > System List.
3. To delete a system, choose Delete associated with the system.

To add a system, do the following:

1. Provide a display name for the system. This name must be 32 or fewer characters.
2. Specify a valid DNS name or IP address for the system.
3. Assign a UDP port number (agent number) for PortAssist Manager to use when communicating with the PortAssist agent on the managed system. You will need only to change the default port number if it is in use already for the server or for the system with the adapters. Go to [Changing the UDP Port](#) for Windows NT or [Changing the UDP Port](#) on NetWare for more information on changing the UDP port.

Note: If you change the UDP port number here, you must also change it in the driver configuration. See the user documentation for the drivers for more information on how to change the driver configuration.

4. Choose Add.
5. If Yes appears in the System Located column, the system is now added to Port Assist Manager. Choose Exit Setup to return to Network View.

If Retry appears in the System Located column, this means that PortAssist Manager cannot find the DNS name. Go to the next step.

6. Choose Retry.
7. If Yes now appears in the System Located column, your system is now added to PortAssist Manager. Choose Exit Setup to return to Network View.

If Retry appears again, your DNS name is not valid. Choose Delete to delete the system.

8. Create an IP address with the correct format for your system and choose Add again.
 9. Yes should now appear. Choose Exit Setup to return to Network View.
-

Changing the UDP Port

Use these procedures to change the UDP port used by the managed adapter's communication agent to communicate with PortAssist Manager. The default UDP is 2362, which was assigned to Digi by the Internet Assigned Number Authority (IANA). Although you can change this port number, you should never have to. If another application uses it, the best way to resolve the problem is to reconfigure the application to use another UDP port, one that has not been assigned by the IANA.

Note: When you change the UDP port that the agent uses, you must also change the port that PortAssist Manager uses to communicate with the agent. Use the PortAssist Manager System Setup screen for this purpose.

Procedures

On Windows NT 4.0

1. From the Windows NT 4.0 Start menu, choose Settings > Control Panel > Network > Services.
2. Choose Digi PortAssist Manager Communication Agent > Properties.
3. Change the UDP port number as required and choose OK.

The UDP port number on Windows NT 4.0 is changed.

On PortAssist Manager

You now need to change the port that PortAssist Manager uses to communicate with the agent. To do this:

1. Launch and log on to PortAssist Manager.
2. From the network View screen, choose Setup > System Setup.
3. Find the old entry in the list and choose Delete.
4. Add the entry with the new number.

In the System Setup screen, enter the display name (same name), the DNS number or IP address (same number) and the Agent Port Number (different number) for your new entry and choose Add.

5. Choose Exit Setup for the change to take place.
-

Loading the PortAssist Agent

Use this procedure to edit the autoexec.ncf file to ensure that the PortAssist agent is automatically loaded on the server each time the server is initialized.

Requirements

The drivers for the Digi adapters to be monitored by PortAssist Manager must have already been installed.

Procedure

1. From the NetWare server console, enter:

```
load edit sys:system\autoexec.ncf
```

The autoexec.ncf file is displayed.

2. Navigate to the end of the file.
3. Add the following line:

```
load digipama.
```

4. Press Esc, choose Yes, and press Esc again.
5. Restart the server to load the PortAssist Manager agent.
6. Verify that the PortAssist Manager agent is installed by entering:

```
modules digipama
```

If the agent has been properly loaded, an information screen will appear.

Changing the UDP Port

Use this procedure to change the UDP port used by the managed adapter's communication agent to communicate with PortAssist Manager. The default UDP is 2362, which was assigned to Digi by the Internet Assigned Number Authority (IANA). Although you can change this port number, you should never have to. If another application uses it, the best way resolve the conflict is to reconfigure the application to use another UDP port, one that has not been assigned by the IANA.

Procedures

On NetWare

Enter:

```
load digipama port-num
```

where *port-num* is a UDP port.

Example: `load digipama 6161`

On PortAssist Manager

You now need to change the port that PortAssist Manager uses to communicate with the agent. To do this:

1. Launch and log on to PortAssist Manager.
2. From the network View screen, choose Setup > System Setup.
3. Find the old entry in the list and choose Delete.
4. Add the entry with the new number.

In the System Setup screen, enter the display name (same name), the DNS number or IP address (same number) and the Agent Port Number (different number) for your new entry and choose Add.

5. Choose Exit Setup for the change to take place.
-

Busying Out a Channel

Use this procedure to busy out a channel, which means that the channel has been configured to not accept incoming calls. You use busy out to take a channel that is not working out of commission. When you do this, you can continue to use your adapter though it is only partially functioning.

Procedure

1. Access the busy out function from one of the following screens:

Adapter	Screen
DataFire RAS PT1 or PT2 (Channelized T1 and PRI for DataFire RAS PTE configurations only)	Line Summary screen
Acceleport RAS 4/8	Modem Summary screen

2. Choose Busy Out in the Busy Out field associated with the channel you want to busy out.
3. Choose which type of Busy Out procedure is most appropriate. Busy Out means that the connection will be busied out immediately, and if there is a connection active, it will be dropped. Delayed Busy Out means the connection will be busied out as soon as the channel is free.
4. Choose OK.

Clear appears in the Busy Out field associated with the channel you busied out. In the case of a delayed busy out, Outbound/Delayed Busy Out also appears in the State field. When you no longer want a busy out condition, choose Clear and the word, Busy Out will appear again. See [Clearing a Busied-Out Channel](#) for more information.

Clearing a Busied-Out Channel

Use this procedure to clear a modem or B channel that previously has been busied out. That is, it enables the channel to handle traffic again.

1. Access the clearing function from the Line Summary screen.

Adapter	Screen
DataFire RAS PT1 or PT2 (Channelized T1 and PRI for the DataFire RAS PTE configurations only)	Line Summary screen
Acceleport RAS 4/8	Modem Summary screen

2. Choose the Clear option associated with the busied-out channel you want to clear.
3. At the prompt, choose OK.

The Clear option will change to Busy Out and the State field will return to Idle on the Line Summary or Modem Summary screen. See [Busying Out a Channel](#) for more information about this function.

Blue alarm appears

A DataFire RAS PTE is alarming. This alarm is also referred to as Alarm Indication Signal (AIS).

Cause	Resolution
The telephone company is testing the line.	If this condition persists, call the telephone company.

Gray alarm appears

A DataFire RAS B4STU is alarming. This alarm indicates a line error condition. In PortAssist Manager, go to the Line Summary screen for the DataFire RAS B4STU. In the Error Status field, a message or several messages appear. Following are the possible messages:

No switch defined

Cause	Resolution
Your adapter configuration has been improperly configured.	Try reconfiguring your adapter correctly.

TEI Unassigned

Cause	Resolution
The switch is busy, a connection is not available yet, or you have specified an incorrect switch type in the adapter configuration.	Check the switches.

Layer 1 not active

Cause	Resolution
Something is wrong with the physical connection.	Try reconfiguring your adapter correctly.

Unknown error

Cause	Resolution
The switch type and SPIDs probably are not accurate.	Check the configuration to ensure that the switch type and SPIDs are accurate.

SPID x rejected

Cause	Resolution
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The problems are probably in the driver configuration

Do the following:

1. Check that you configured the correct switch type during the driver configuration. (Switch configuration is meant to describe the software used by the switch.)
2. Check that the SPIDs (typically used only in the United States) entered during the Digi driver configuration are correct (no apaces, no dashes, just one long number).

You might need to reconfirm the address information with your ISDN service provider.

Red Alarm appears

A DataFire RAS PTE is alarming. This alarm is also referred to as Loss of Signal or Loss of Alignment (LFA).

Cause	Resolution
This indicates a loss-of-signal or out-of-frame condition.	Do the following. <ol style="list-style-type: none"><li data-bbox="873 380 1495 457">1. Ensure that the cable is plugged in and configured correctly.<li data-bbox="873 474 1495 594">2. Ensure that the driver is configured for the line encoding used by the telephone company.<li data-bbox="873 611 1495 688">3. If the problem is still not resolved, call the telephone company.

Yellow Alarm appears

A Data Fire RAS PTE is alarming. This alarm is also referred to as Remote Alarm Indicator (RAI).



Cause	Resolution
This usually indicates that the telephone company is testing the line.	If this condition persists, call the telephone company.
It might also indicate that the driver's long-haul/short-haul configuration is wrong.	Do the following: <ol style="list-style-type: none"><li data-bbox="873 491 1463 615">1. Call the telephone company and ask them to confirm the distance to the nearest repeater.<li data-bbox="873 632 1503 709">2. After obtaining the information, ensure that the drive's configuration is correct.

Message: Agent not responding

Use this information to direct you to the correct troubleshooting procedure if the message, Agent not responding, appears in Network View in PortAssist Manager. It is important to know whether the system has an active outbound call or not.

Does your system have an active outbound call?

Note: The system refers to the one that is not responding and is identified by an IP address or DNS name during PortAssist Manager configuration.

Yes 	No 
Go to If the system has an active outbound call.	Go to If the system does NOT have an outbound call.

Message: System not located

Use this troubleshooting procedure so that PortAssist Manager can locate the system.

Note: This message appears next to the system name in the Network View or System View screens. .

Cause	Resolution
The DNS name specified in System Setup does not appear on the DNS Server.	Go to Adding and Deleting Systems for information on how to add the DNS name to the system.

PortAssist Manager does not start

When you try to access PortAssist Manager from your browser, it cannot be displayed.

Use this troubleshooting procedure to start PortAssist Manager after installation if it does not start automatically or at any other time when it does not start.

Cause	Resolution
The PortAssist Manager server does not work.	<p>The PortAssist Manager server runs as a service and it needs to be started. Do the following.</p> <ol style="list-style-type: none"><li data-bbox="792 491 1143 531">1. Reboot your system. <p>Note: The system you should reboot is the one that has PortAssist Manager installed on it.</p> <ol style="list-style-type: none"><li data-bbox="792 699 1455 821">2. If rebooting your system does not work, choose Start > Settings > Control Panel > Services.<li data-bbox="792 837 1382 919">3. From the list of servers, choose Digi PortAssist Manager server.<li data-bbox="792 936 1036 976">4. Choose Start. <p>PortAssist Manager should now start.</p>
You might be pointing to the wrong HTTP port	Ensure you are pointing to the correct HTTP port.

If the system has an active outbound call

Use this troubleshooting procedure to get the PortAssist Manager adapter to work when the following message appears on the network screen of PortAssist Manager:

Agent not responding

This problem happens only when a PAM server and a second server with Digi adapters are configured to allow dialout calls. The system you are dialing out from will appear as if it is not responding.

Cause	Resolution
The UDP traffic from the second server cannot be routed to the PortAssist Manager server.	Do the following. <ol style="list-style-type: none"><li data-bbox="792 604 1523 688">1. Go to My Computer and choose Dialup Networking > Phonebook entry-to-dial.<li data-bbox="792 699 1523 783">2. When the phonebook entries appear, choose the phone entry with which you are working.<li data-bbox="792 793 1523 877">3. Choose More > Edit entry and modem properties.<li data-bbox="792 888 1523 972">4. In the Edit Phonebook Entry window, choose server.<li data-bbox="792 982 1523 1066">5. In Network protocols, choose TCP/IP Settings.<li data-bbox="792 1077 1523 1161">6. In PPP TCP/IP Settings, uncheck Use default gateway on remote network.<li data-bbox="792 1171 1523 1213">7. Choose OK.

If the system does NOT have an active outbound call

Use this troubleshooting procedure to get the PortAssist server to receive communication from the PAM communication agent when the following message appears on the network screen of PortAssist Manager:



Agent not responding

Note: Be sure that the system does not have an active outbound call at this time before going through the following procedure.



Procedure

1. Ensure that your system is powered on and reboot. Does the message, Agent not responding, still appear?

Note: The system you should reboot is the one that is not responding and is identified by an IP address or DNS name during PortAssist Manager configuration.

Yes 	No 
Continue with the next step.	Your driver should work OK now.

2. Ensure that your adapter is installed correctly and is using driver release F or greater. Does the message, Agent not responding, still appear?



Yes 	No 
Continue with the next step.	Your driver should work OK now. If it doesn't, call your network administrator.

3. You need to verify the network to ensure there is no network or routing problem. Ping your system from the DOS prompt by entering:

`ping ip address`

where *ip address* is the complete IP address of the server

Do you get a response?

Yes 	No 
Continue with the next step.	The system is not accessible. Call your network administrator and say that you have a network or routing problem.

4. The Communication Agent, which is run as a service, does not work and needs to be started. To start the Communication agent, do the following.
 - . If rebooting your system does not work, choose Start > Settings > Control Panel >

Services.

B. From the list of servers, choose Digi PortAssist Manager Communication Agent.

C. Choose Start.

Does the message, Agent not responding, still appear?

Yes ▼	No ▼
Call your network administrator.	Your driver should now work.
