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## Digi One Single Port, IA, and PE Software Installation Guide

### Introduction

The following software installation guide is for the Digi One Single Port device server line including the Digi One Single Port, the Digi One IA (Industrial Automation) and the Digi One PE (Powered Ethernet). The software installation procedures are the same for all three device servers.

**Note:** Not all powered ethernet hubs are compatible with the Digi One PE. Please refer to the Digi website for hubs that are compatible at <http://www.digi.com/>.

Digi One Single Port device servers provide a simple, compact, cost-effective solution, for connecting serial devices to Ethernet networks. They can connect terminals, printers, modems, access controllers, tooling machines, alarm systems, or any other serial device to Ethernet networks running the TCP/IP protocols. Configuration of serial ports and management and control of serial devices is provided by the Digi Administrator software running on supported Microsoft systems. Supported TCP/IP protocols include: IP, ARP, RARP, ICMP, Telnet, and Extended Telnet RFC 2217.

### Overview of the Installation Procedure

The Digi One Single Port device servers install on any Ethernet network. However, care should be taken to follow the installation procedures outlined in this documentation as these devices are not Plug and Play. The sequence of procedures in the installation is important for the proper functioning of the device server.

Below are the main steps involved in setting up the device servers.

- Set up the hardware as outlined on this installation card.
- Install the DGRARP software on your Microsoft operating system.
- Install the Administrator software package using Customize.

- Assign an IP address to the device server.
- Configure the serial port for the device server.

### Supported Operating Systems

Digi One Single Port products support the following Microsoft operating systems:

- Microsoft Windows 2000
- Microsoft Windows NT 4.0
- Microsoft Windows 95/98/Me

### Installing DGRARP Protocol

You need not install the DGRARP driver if your system already has a RARP server installed. If a RARP server is already installed, proceed to the section titled Installing the Digi Administrator Software.

**Note:** To install the DGRARP driver, use the procedures listed below or use the installation procedure from the Digi Access Resource CD.

#### Microsoft Windows 95/98/Me

**Note:** The installation screens might differ slightly among these three operating systems.

1. Go to Start > Settings > Control Panel > Network.
2. Choose Add > Protocol > Add > Have Disk.
3. Choose Browse and browse to the Digi installation CDROM.
4. Choose software > windows > w9598 > dgrarp > vdgrarp.inf > OK.
5. From Install from Disk, choose OK.  
The Digi RARP driver will be listed on your Select Network Protocol screen.
6. Choose OK > OK to finish the installation.  
Windows will automatically install files from the network or prompt you for the Windows installation CDROM.
7. Reboot the system when prompted.

#### Microsoft Windows NT 4.0

1. Go to Start > Settings > Control Panel > Network.
2. From the Network screen, choose Protocols, then Add > choose Have Disk.
3. Enter the path to the Digi installation CDROM:  
The path is: d:\software\windows\nt\dgrarp  
where d is the letter for the CDROM drive.

4. After the files are copied, the system displays NDIS 3.0 DGRarp driver's name under the Services tab. Choose OK.  
The system will automatically install system files or request the Windows NT installation CDROM.
5. Reboot the system if prompted.

### Microsoft Windows 2000

1. Go to Start > Settings > Control Panel > Network and Dial-up Connections.
2. Choose Local Area Connection > Properties.
3. Choose Install > highlight Protocol > Add > Have Disk.
4. Choose Browse and browse to the Digi installation CDROM.
5. Choose software > windows > w2k > dgrarp > dgrarp.inf and follow the prompts.
6. Choose OK at the Select Network Protocol screen. DGRARP Protocol driver should be highlighted.  
Windows will install files.
7. Follow the prompts to finish the installation procedure.

### Installing the Administrator Software

1. Start the Digi Access Resource CD front end program.
2. Choose your Operating System > Hardware > Software > Install Software.
3. Choose to install the Digi Administrator program by choosing OK.
4. Follow the prompts. You might be prompted to install Sun Java VM (virtual machine) unless it is already installed on your system.  
Sun Java VM is needed by the Digi software driver.
5. At the Choose Install Set screen, choose Customize.
6. Both RemoteCom and the DGRARP server boxes should be checked.
7. Choose Install.
8. Reboot your system if prompted.

### Setting up the Hardware

Do the following to set up the device server hardware:

1. Plug the serial device into the device server serial port.
2. Connect the device server to the network using an Ethernet cable.
3. Connect the power supply cable to the device server. (This is not necessary with the Powered Ethernet unit.)

### Assigning an IP Address with DGRARP

1. Start the Digi Administrator software program.
2. From the menu choose Admin > DGRARP Server > View.
3. Enter the IP address you want to assign the Digi One device server beside its corresponding MAC (Media Access Control) address. Choose Enter after the IP address cell is filled.  
The MAC address for the Digi One device server is located on the underside of the unit.
4. Choose Start to start the DGRARP server.  
If Stop is the only option, choose Stop, then Start.
5. Unplug the power cable to the device server and then plug it back in again. The Link and Diag lights on the Digi device should flash momentarily and then stop.
6. To confirm the device server is connected to the network, ping the device's new IP address:  
Example: ping 190.191.2.104

### Configuring the Port

1. From the Administrator program choose Admin > DGRARP Server > View. Confirm the DGRARP server is started.  
If the DGRARP server isn't, choose Start.
2. From the menu choose RemoteCom > Add > choose a new COM port > choose the port > OK.
3. Choose Virtual COM > OK.
4. Assign a new IP address to replace the default IP address.
5. Choose Telnet (RFC 2217) and enter 23 for the Telnet Port > OK.
6. From the RemoteCom menu, choose Service > Start.  
**Note:** If the only option is Stop, choose Stop, then reopen the window and choose Start. The serial port is configured.
7. Reboot the system if prompted.

### Using Telnet

Users can also configure the Digi One serial port from a telnet session. Users should reference the RFC 2217 documentation titled **Telnet Com Port Control Option**.