



**Connectware™**

# RealPort on Microsoft Windows NT

Setup Guide

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## Purpose

Use this guide for the following:

- An introduction to RealPort, how to install, configure and use RealPort and, how to troubleshoot should you encounter a problem
- Configuration examples
- Administration procedures

## Audience

This manual is intended for the person responsible for configuring and administering RealPort. This person should have experience configuring network devices and be familiar with networking concepts.

## Conventions

Following are the conventions used in this document:

### *Special Fonts*

A special font is used for any input you need to enter. For example,

```
set config
```

### *Square Brackets*

Optional parameters are displayed within square brackets. For example,

```
set config [dhcp=on]
```

**Note:** The square brackets themselves are not actually part of the command, and should not be entered.

### *Italics*

Variables are displayed in italics. For example,

```
set config ip=ip-address
```

**Note:** Substitute an appropriate IP address for *ip-address* in the above command.

### *Vertical Bar*

A vertical bar character (|) is used to denote a choice (logical "or"). For example,

```
set flow=on|off
```

**Note:** The above command would be entered as either:

```
set flow=on or set flow=off
```



***In This Chapter***

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## About RealPort

RealPort software can be installed on one or more host servers to provide local serial port functionality. RealPort can be used to provide standard system COM or TTY interfaces to control baud rate, parity, stop bits, and flow control of local serial ports. Any system utility or user application that works with a locally attached serial port should work with a Digi RealPort port.

Digi's RealPort software works with all the Digi One RealPort, PortServer and EtherLite products.

## Requirements

- The RealPort driver for Microsoft Windows NT requires between one and two MB of memory on the Windows NT system.
- The Windows NT RealPort driver requires a 10-pin RJ-45 cable to connect devices to Digi One RealPort or PortServer ports.

## Limitations

- Version 1.0.2 of the RealPort driver is the only version that supports Windows NT systems. You can access this driver at the Digi Web site: [www.digi.com](http://www.digi.com).
- Only TAPI-compliant applications or those written to COM 32 API (application programming interface) standards can use intelligent ports, which means only these applications can use RealPort ports.

## Key Concept: About Port Mapping Offsets

The number of local ports on the Windows NT host offsets the port number on the Digi device. For example, if you have two local COM ports, Port 1 of the Digi device is seen by the RealPort service as COM 3. Once the RealPort driver has been installed, you can modify the COM port numbering scheme.

## **Related Documentation**

### **PortServer Documentation**

- PortServer Configuration and Reference Guide
- Digi One TS/PortServer Cable Guide

### **PortServer II Documentation**

- PortServer II Hardware Installation Guide
- PortServer II Command Reference
- PortServer II Configuration and Administration Guide
- Digi One TS/PortServer Cable Guide
- Digi Port Authority--Remote Device Monitor Setup Guide

### **PortServer TS 8/16 Documentation**

- PortServer TS 8/16 Hardware Installation Guide
- PortServer TS 8/16 Command Reference
- PortServer TS 8/16 Configuration and Administration Guide
- Digi One TS/PortServer Cable Guide
- Digi Port Authority--Remote Device Monitor Setup Guide

### **Digi One TS/PortServer TS 2/4 Documentation**

- Digi One TS/PortServer TS 2/4 Quick Reference Card
- Digi One TS/PortServer TS 2/4 Hardware Installation Guide
- Digi One TS/PortServer TS 2/4 Command Reference
- Digi One TS/PortServer TS 2/4 Configuration and Administration Guide
- Digi One TS/PortServer Cable Guide
- Digi Port Authority--Remote Device Monitor Setup Guide

### **Etherlite Documentation**

- Etherlite Cable Guide

## Configuring Digi One TS and PortServer

To configure Digi One TS, PortServer TS 2/4, PortServer TS 8/16, PortServer II, and PortServer for RealPort, you must do the following:

- Configure the device with an IP address.
- Configure ports for RealPort.

See "Related Documentation" on page 1-3 for device-specific configuration information.

## Configuring Etherlite

To configure Etherlite for RealPort, you must configure an IP address for the device. The recommend way to do this is during Windows NT RealPort driver installation. This method is described in the following discussions:

- "Installing the Driver: CD" on page 2-2
- "Installing the Driver: Download" on page 2-3

Other methods are also available. See "Related Documentation" on page 1-3 for information on additional configuration methods.

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## Master Setup Process

Use this topic to identify all the tasks required to complete RealPort setup.

### *Procedure*

1. Install and configure the RealPort driver. See the following:
  - "Installing the Driver: CD" on page 2-2
  - "Installing the Driver: Download" on page 2-3.
2. Configure the Digi One RealPort or PortServer for RealPort. (This step is accomplished during driver installation for Etherlite units.) See "Related Documentation" on page 1-3 for information on where to located-device specific configuration information.
3. Reboot the system to make RealPort ports available to the operating system.
4. Configure peripherals on the RealPort ports. See the following:
  - "Configuring a Printer" on page 2-4
  - "Configuring a Modem" on page 2-4

## Installing the Driver: CD

Use this procedure to install the Windows NT 4.0 RealPort driver from the Digi CD. This procedure assumes that you have already started the Digi CD front-end menu program.

### *Procedure*

1. Choose an operating system.
2. Choose a hardware product.
3. Choose RealPort.
4. Choose Install Software.
5. Follow the prompts.
6. If you are using an Etherlite unit that has not been assigned an IP address, do the following to assign an address:
  - a. Press the DgIPServ button.
  - b. Use the wizard and the associated help text to assign an IP address to the Etherlite unit.
  - c. When you finish, return to the Add Digi RealPort wizard.
7. Use the Add Digi RealPort wizard and the associated help text to configure the RealPort driver with the IP address and TCP port number used by the Digi One RealPort, PortServer, or Etherlite. For Etherlite units, this is the IP address assigned in the previous step.
8. Follow the prompts to complete configuration of the RealPort driver.

## Installing the Driver: Download

Use this procedure when to install the Windows NT 4.0 RealPort driver after you download it from the Digi web site.

1. From the Start menu, choose Settings > Control Panel > Network > Services.
2. Choose Add > Have Disk....
3. Type in the path to where the RealPort files are stored and then choose OK.
4. Choose Digi RealPort Service and then OK.

The files are installed and the configuration wizard is started.

5. If you are using an Etherlite unit that has not been assigned IP settings, do the following to assign the settings:
  - a. Press the DgIPServ button.
  - b. Use the wizard and the associated help text to assign IP settings to the Etherlite unit.
  - c. When you finish, return to the Add Digi RealPort wizard.
6. Use the Add Digi RealPort wizard and the associated help text to configure the RealPort driver with the IP address and TCP port number used by the Digi One RealPort, PortServer, or Etherlite.
7. Follow the prompts to complete configuration of the RealPort driver.

## Accessing and Changing the RealPort Configuration

Use these procedures to access and/or change the RealPort configuration. Configuration changes might include adding or subtracting Digi devices, adding or subtracting ports, or changing port attributes.

### *Procedure*

1. From the Start menu, choose Settings > Control Panel > Network > Services.
2. Choose the Digi RealPort Service and then Properties.
3. Choose a Digi device and then Properties.
4. When the RealPort Properties page appears, use the help text to guide you through configuration procedures.

## Configuring a Printer

Use this procedure to configure a printer on a Microsoft Windows NT system that is running RealPort.

**Note:** This procedure requires you to restart the computer. Therefore, you might want to print this topic to avoid having to relocate it when the system restarts.

### *Procedure*

1. From the Start menu, choose Settings > Printers > Add Printer.
2. From the Add Printer Wizard, choose My Computer > Next.
3. From the list of available ports, choose LPT1 (temporarily, until RealPort ports are added) and then Next.
4. Use the Add Printer Wizard to install and configure a printer driver.  
**Note:** Do not print a test page.
5. When the new printer is displayed in the Printers menu, choose the new printer and then File > Properties.
6. Choose the Ports tab and then Add Port... > Local Port > New Port.
7. Type in a Digi port name followed by a colon (example: COM18 :) and then choose OK.
8. When the Ports list appears, choose the new Digi port and then Add.
9. Choose the Digi port in the COM Port field and then OK.
10. When you are prompted to reboot your system, choose Don't Restart Now.
11. Choose the Digi port and then Settings.
12. Set the Baud Rate, Data Bits, Parity, Stop Bits, and Flow Control to match your printer configuration.
13. Choose OK and then exit the printer configuration.
14. Reboot your system and then return to the Printer menu.
15. Choose the printer and then File > Properties > Ports.
16. Choose the Digi port from the list and then OK.

## Configuring a Modem

Use this procedure to configure a modem on a Digi port on a Microsoft Windows NT system.

### *Procedure*

1. From the Start Menu, choose Settings > Control Panel > Modems.
2. Choose Add > Next (which will autodetect the modem). If the Windows NT system does not autodetect the proper modem, select the modem.
3. Follow the Windows NT 4.0 prompts to install and set up the modem on a Digi port.

## Starting and Stopping the RealPort Service

Use this procedure to start or stop RealPort service on Microsoft Windows NT.

### *Procedure*

1. From the Start menu, choose Settings > Control Panel > Devices > Digi RealPort.
2. Choose Stop or Start.

## Upgrading Etherlite Firmware

Use this procedure to upgrade the firmware on a Digi RealPort EtherLite module.

### *Procedure*

1. Download the latest firmware upgrade from the Digi website at support.digi.com.
2. Create and name a folder, for example *ELupgrade*, and extract the compressed firmware upgrade files to the folder.
3. Locate and execute the DgIPserv utility. The utility was installed with the RealPort driver and can be found in the default directory location at c:\WINNT\system32.
4. Choose Update Firmware > Next and browse to the location of the extracted firmware files.
5. Change the Files of type from EtherLite Firmware \*.prm to EtherLite Firmware \*.bin and choose the appropriate \*.bin file where \* represents the EtherLite firmware part number.
6. Follow the prompts by entering the EtherLite's MAC address and it's current IP settings.
7. Recycle the power and choose Finish. A message will appear confirming a successful upgrade to the firmware.
8. Reboot your system.

**Note:** To verify the firmware update, use the Digi Verlog.exe utility found on the Digi website. It will list the EtherLite model, its firmware version, and related information.

## Removing the Driver

Use this procedure to remove RealPort from your system.

### *Procedure*

1. From the Start menu, choose Settings > Control Panel > Network > Services.
2. Choose Digi RealPort Service and then Remove.
3. Follow the prompts to complete removal.

