



Connectware™

RealPort
on
Windows 2000
Setup Guide

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About This Guide

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
```


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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 requires between one and two MB of memory on the Microsoft Windows 2000 system.
- The Windows 2000 RealPort driver requires a 10-pin RJ-45 cable to connect devices to PortServer ports. This requirement does not apply to Etherlite units.

Limitations

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/2000 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 recommended way to do this is during Windows NT RealPort driver installation. This method is described in "Installing the Driver" on page 2-2

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. Configure the Digi One RealPort or PortServer for RealPort. See something something
This step is not required if you have an Etherlite module because configuration, which consists of assigning an IP address to the unit can be accomplished during RealPort driver installation. See "Digi One TS/PortServer TS 2/4 Documentation" on page 1-3 and "Configuring Etherlite" on page 1-4.
2. Install and configure the RealPort driver.
 - If this is a new driver, see "Installing the Driver" on page 2-2.
 - If this is a driver upgrade, see "Upgrading the RealPort Driver" on page 2-3.
3. Configure peripherals on RealPort ports. See the following:
 - "Configuring a Printer" on page 2-4
 - "Configuring a Modem" on page 2-4

Installing the Driver

Use these procedures to install a RealPort driver on a Microsoft Windows 2000 system.

1. From the Start menu, choose Settings > Control Panel > Add/Remove Hardware > Next.
2. Choose Add/Troubleshoot a device > Next.
The system searches for the device. When it determines that it cannot find the device, it displays a list of devices.
3. Choose Add a new device > Next.
4. Choose No, I want to select the hardware from a list > Next.
5. Choose Multi-port serial adapters > Next.
6. Select Have Disk.
7. Select Browse, point the system to the appropriate driver location and follow the installation and configuration procedure.
8. Select the RealPort driver and Next > Next.
9. If the Digital Signatures Not Found screen appears, choose Yes.
10. 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.
11. 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.
12. Follow the prompts to complete configuration of the RealPort driver.

Upgrading the RealPort Driver

Use this procedure to upgrade a Digi RealPort device driver that is installed in your system. Digi drivers may be delivered on a CD-ROM or downloaded from the Digi Support Web (<http://support.digi.com>).

Note: Digi drivers for Microsoft Windows 2000 may be either signed or unsigned.

Procedure

1. From the Windows Desktop, right-click My Computer, then choose Properties > Hardware > Device Manager.
2. Choose Multi-port serial adapters from the list of devices.
3. Choose a Digi device from the list, then right-click and choose Properties.
4. On the properties page, choose the Driver tab, then choose Update Driver. Do **not** uninstall the old driver. The Windows Upgrade Device Driver Wizard appears.
5. Choose Next. On the Install Hardware Device Drivers page, choose Display a list of known drivers for this device... > Next.
6. On the Select a Device Driver page, choose the correct Digi device and then Have Disk.
7. Choose Browse to point to the appropriate driver location. The wizard should display the driver's .inf file at that location. Choose Open.
8. To install the new driver, choose OK > Next > Next.
9. If Windows displays a "Digital Signature Not Found" message, explaining that the driver is not signed, choose Yes to continue through the message.
10. Choose Finish to complete the wizard, then choose Close to close the Properties page.
11. When prompted to restart your system, do so.

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. Right click My Computer.
2. Choose Properties > Hardware > Device Manager.
3. Locate Multi-port Serial Adapters and expand the list if necessary.
4. Choose a terminal server, right click and then choose Properties > Advanced.
5. Use the Digi device's Properties utility and the online help for aid in making configuration changes.

Configuring a Printer

Use this procedure to configure a printer on a Microsoft Windows 2000 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 Next > select Local printer or Network printer.
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 right-click > select 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 reaccess 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.

Procedure

1. From the Start Menu, choose Settings > Control Panel > Phone and Modem Options > Modems Options.
2. Choose the Modem tab and then Add.
The system autodetects the modem.
3. If the Windows 2000 system does not autodetect the proper modem, select the modem.
4. Follow the Windows 2000 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 2000.

Procedure

1. Right-click on My Computer, choose Properties > Hardware tab > Device Manager.
Expand the Multi-port Serial Adapters list if necessary and select the terminal server.
2. Right-click and choose Disable.

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 <http://support.digi.com>.
2. Create and name a folder 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. Highlight My Computer and right-click > choose Properties > select Hardware tab.
2. Choose Device Manager > select Digi PortServer > highlight and right-click > select Uninstall.

