Help on Network Printing Software for Windows

Digital Network Printing Software provides support for printing directly to networked Digital printers from Windows NT[™] and Windows 95[™] systems. To learn more, pick the Digital printer type you have:





Desktop Printer

PrintServer Printer

Desktop Printer Contents

Expand

What the Network Printing Software for Windows Will Do for You Setting Up Printers to Print on the Network Printing for Power Users Managing Desktop Printers Troubleshooting Copyright

Desktop Printer Contents

What the Network Printing Software for Windows Will Do for You

Seeing Print Job Status Special Feature from Digital to Eliminate Printer-Specific Forms Printing to a Desktop Printer in Different Environments About Digital Desktop Printers Licensing Information Warranty and Services Information

Setting Up Printers to Print on the Network

Prerequisites

Supported Printers

Valid Drivers

Creating Ports

Getting the Printer's Hardware Address: DEClaser 3500/5100 Series Ethernet Card

Changing the IP Address of a DEClaser 3500/5100 Series Ethernet Card

Getting the Printer's Hardware Address: RapidPrint Network Server

Changing the IP Address of the RapidPrint Server

Arp and Ping Commands

Installing a Network Interface Card

Default Status and Configuration Report

Revised Status and Configuration Report

Printing for Power Users

Printing from Applications Printing PostScript Files Printing Text Files Using Printer Forms when Printing Files Special Features from Digital to Eliminate Printer-Specific Forms Printing from Other Operating Systems

Managing Desktop Printers

Setting Up Client/Server Printing for Digital Desktop Printers Managing Ports Configuring Existing Ports Event Logging

Debugging Tools

Troubleshooting

Copyright

PrintServer Printer Contents

Expand

What the Network Printing Software for Windows Will Do for YouSetting Up Printers to Print on the NetworkPrinting for Power UsersManaging PrintServer PrintersTroubleshootingError Messages Received Through Event Viewer

Copyright

PrintServer Printer Contents

Collapse

What the Network Printing Software for Windows Will Do for YouSeeing Print Job Status and Error MessagesPrinting to a PrintServer Printer in Different EnvironmentsSpecial Feature from Digital to Eliminate Printer-Specific FormsAbout Digital PrintServer PrintersLicensing InformationWarranty and Services Information

Setting Up Printers to Print on the Network

Prerequisites

Supported Printers

Valid Drivers

Creating Ports

Changing the address of a PrintServer Printer

Loading the PrintServer Software onto the Printer

Things to Remember About Loading the PrintServer Software onto the Printer

Configuring the Printer

Getting the Printer's Ethernet Address

Printing for Power Users

Printing from Applications Printing PostScript Files Printing Text Files Using Printer Forms when Printing Files Special Features from Digital to Eliminate Printer-Specific Forms Printing from Other Operating Systems

Managing PrintServer Printers

 Setting Up Client/Server Printing for PrintServer Printers

 Managing Ports

 Configuring Existing Ports

 Event Logging

 Debugging Tools

 Network Management with SNMP

 Setting PrintServer Printer Tray Defaults

 Overriding PrintServer Printer Input and Output Tray Defaults

 Returning to PrintServer Printer Default Tray Settings

 Troubleshooting

 Error Messages Received Through Event Viewer

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Glossary

Select a term from the list below to learn more about its meaning: Administrators Banner page Bidirectional Bubble DECnet protocol Driver directory <u> Exitserver</u> Internet address Network address <u> PCL</u> <u> Port</u> PostScript PrintServer printer PostScript Printer Description (PPD) file Server loop ■ <u>TCP/IP protocol</u> ■ <u>Trace file</u>

Administrators

A privileged account on the Windows NT operating system belonging to the Administrators group. Administrators can fully administer the Windows NT operating system. Accounts can be placed into groups using the User Manager.

Banner page

The banner page is printed before a document. It has a distinctive design and contains information about the document.

Bidirectional

Ability to carry on two-way communication. Digital PrintServer printers provide bidirectional communication between the printer and users. The PrintServer printer relays informational messages and error messages back to you so you know when your print job started, when it completed, and whether there is a problem during printing. This unique feature lets you know if there is a paper jam, not enough paper to print your job, or any other problem so that you can fix it without finding out hours later that the problem held up your job and everyone else's.

Bubble

This debugging tool runs in memory and can consume all available dynamic memory if it is not monitored carefully.

DECnet protocol

A networking transport, originally developed by Digital Equipment Corporation, now a de facto, worldwide, open standard.

DECnet is a robust technology, and has matured over the past several decades to the extent that it is now supported on systems with diverse hardware architectures, and offered for sale by many vendors, including Digital.

Digital PrintServer printers can communicate using TCP/IP protocol or DECnet protocol.

Driver directory

The driver directory is the area where Windows NT stores files for printer drivers The directory is **winnt\system32\spool\drivers\xxx**, where **xxx** is:

- w32x86 for Intel architecture
- **w32alpha** for Alpha AXP architecture
- w32mips for MIPS architecture
- **w32ppc** for PowerPC

Exitserver

Exiting the server loop requires the PostScript exitserver operator.

Taken from PostScript Language Program Design by Adobe Systems, Inc.:

"The exitserver operator is a specialized and environment-dependent system operator available in most devices that support batch PostScript jobs (it is not part of the standard language definition). Its purpose is to exit the <u>server loop</u>. The exitserver operator requires a password, and will result in an "invalidpassword" error if the incorrect password is given.

Since the job server loop is generally responsible for cleaning up the state of the interpreter between jobs, any changes that are made outside the server loop by using the exitserver operator will remain as part of the permanent state of the interpreter for all subsequent jobs."

To reset the state of the PrintServer printer's interpreter, turn the PrintServer off and then back on again.

See <u>PostScript Language Program Design</u> by Adobe Systems, Inc. (published by Addison Wesley Publications, 1988) for more information.

Internet address

Or IP address. The address by which a device is known on the network -- the local area network, or a larger, wide-area network. Computer systems communicate with network devices through internet addresses.

Network address

The physical, Ethernet address used by the hardware to communicate on the network.

PCL page description language

Hewlett Packard's proprietary page control language (PCL) . Several Digital laser printers offer PCL support; support for PCL will be available through Network Printing Software for Windows in a later release.

Port

A virtual connector through which the print spooler communicates with a printer.

PostScript page description language

A means of describing a document so that it can be printed. PostScript was developed by Adobe Systems, Incorporated, and is used to drive a wide range of devices, including Digital's PrintServer printers.

PostScript Printer Description (PPD) file

A text file that follows certain PostScript standards as outlined by Adobe Systems, Inc. This file acts as a formatted table of information. Using the information in the PPD, applications and components can access all printer features – output trays, image enhancement operators, duplex capabilities, and others – in a controlled way.

If you install or use PPD files that are inappropriate for your printer, the spooling system may generate PostScript code that produces errors in the printer, or the file fails to print, or the file prints with different formatting than you anticipated.

PrintServer printer

Digital Equipment Corporation's PrintServer printers are a family of fully <u>bidirectional</u>, highspeed, high-capacity printers that connect directly to the Ethernet and offer powerful remote management capabilities.

Server loop

Taken from <u>PostScript Language Program Design</u> by Adobe Systems, Inc.:

"The execution stack starts out with a procedure that is an infinite loop. The interpreter is always busy executing this loop, even when the interpreter is in an idle state. This loop is known as the server loop, and each time around the loop it checks to see if there is a new job to execute (if one of the communications ports has become active).

When a new job is discovered, a file object representing the standard input file is opened and placed on the execution stack. This file object is executed until the end-of-file indication is reached, at which point it is popped off the execution stack, and the interpreter reenters the server loop.

The primary task of the server loop is to isolate one batch job from another."

See <u>PostScript Language Program Design</u> by Adobe Systems, Inc. (published by Addison Wesley Publications, 1988) for more information.

Trace file

A trace file stores messages to use in debugging. To view the trace file, copy the file to a temporary filename; you cannot view the trace file itself while it is writing messages.

TCP/IP protocol

A networking transport that provides communication across any set of interconnected networks, between computers with diverse hardware architectures, using almost any packet-switched network hardware.

Digital PrintServer printers can communicate using TCP/IP protocol or DECnet protocol.

Add Port -- Digital Network Port Dialog

Creates a new port for printing to a Digital network printer.

Choose one of the following buttons for more information about the dialog box:

Port Type
Port Name
TCP/IP
DECnet
TCP/IP Address
DECnet Address
Options Button

Port Type

Select the port type from the list. The port type by default is "Other PrintServer Printer", but even if you want to add a port for a PrintServer printer, you should specify which particular model you have to take full advantage of the features offered in this software. You cannot soft load a PrintServer if you do not specify which model it is in the port type.

If you have a desktop printer connected to the network with a Network Interface Card over TCP/IP, you should select "DEClaser 3500 or 5100 Network Card". If your printer uses a RapidPrint network server over TCP/IP, select the "Digital RapidPrint Server" port type.

Port Name

Specifies the name of the <u>port</u>. Enter a descriptive name for the port that describes the properties you will set for the port. Another way to name the port is to name it by its location or use; for example "ThirdFloor" or "Accounting".

A port name must conform to the following rules:

- The name must be 1 to 50 characters long
- The name must not contain a backslash (\)
- The name must not be the same as an existing port name. Two port names that differ only in the case of the letters are considered the same.
- Enter a name for the port.

TCP/IP

Selects the <u>TCP/IP protocol</u> for communicating with the printer.
 Choose this button to use the TCP/IP protocol with the printer.

DECnet

Selects the <u>DECnet protocol</u> for communicating with the PrintServer printer.

You **cannot print** to a Digital desktop printer via DECnet.

You **cannot soft load** a PrintServer printer via DECnet. Choose this button to use the DECnet protocol with the printer. Þ

TCP/IP Address

Specifies the printer's address.
 For TCP/IP protocol, enter the TCP/IP address of the printer. Use the form nnn.nnn.nnn, where nnn = 0 through 255.

DECnet Address

Specifies the printer's address. For DECnet protocol For DECnet protocol, enter the DECnet address of the printer. Use the form AREA.NODE, where AREA = 0 through 62 and NODE = 0 through 1024.

Options Button

Displays an Options dialog box. To set available options for the port, or to configure the remote device, choose the Options button.

See Also

PrintServer Printer Port Options Dialog DEClaser 3500 or 5100 Network Card Port Options Dialog RapidPrint Server Port Options Dialog

Configure Port -- Digital Network Port Dialog

Configures an existing port for printing to a Digital network printer.

Choose one of the following buttons for more information about the dialog box:

Port Type
 Port Name
 TCP/IP
 DECnet
 TCP/IP Address
 DECnet Address
 Options Button

Port Name

Displays the name of the port being configured. It is not possible to change the name of an existing port.
PrintServer Printer Port Options Dialog

The Digital PrintServer Printer Port Options dialog allows you to control advanced features of the printer. It lets you select input and output trays at the port level through a simple dialog.

By creating several ports to the same PrintServer printer, each with different input or output tray selections, you can have diverse needs met simultaneously by one printer. For example, print letters from your word processor with paper from the large capacity input tray, and direct them to the upper output tray. On another port, print spreadsheets on ledger sized paper in input tray #2. And on still another port, print presentation graphics using transparencies in input tray #1 and direct them to the side output.

Choose one of the following buttons for more information about the dialog box and how to control the look of your print job:

🛨 Print Banner Page

Banner Page from Input Tray Number

Document from Input Tray Number

Print to Output Tray Number

<u>Tray Number Hints Button</u>

Configure Button

Logging Button

Print Banner Page

In addition to the separator pages available through the Printers Folder, , you can print PostScript <u>banner</u> pages that contain more information, such as WHO printed each print job, so you can find your print jobs easily. If you are printing from a PrintServer printer, make sure you enter which tray number you want to use for the banner page in the <u>Banner</u> <u>Page from Input Tray Number</u> field.

Choose the Print Banner Page check box to print banner pages.

You can only print banner pages from printer ports that print PostScript files. You cannot print banner pages from printer ports that print <u>PCL</u> files. (Digital desktop network printers are capable of printing both PostScript and PCL files.) You cannot print both banner pages and PCL files from the same queue.

Banner Page from Input Tray Number

You can print <u>banner</u> pages from a different tray than the print job's paper tray. HINT: To make print job separation easy, consider loading one input tray with colored paper and using it as the input tray for the banner page only. Use a different input tray for the print job itself.

Enter a number in the field depending on the PrintServer printer type and the desired input tray. Valid choices are 1, 2, 3, and 99. No error checking is performed; if you enter an invalid number, the banner page will print from the default input tray.

Note: Make sure you choose the Print Banner Page check box to print banner pages.

See Also <u>Tray Number Hints Button</u>

Document from Input Tray Number

You can select the input tray to use when printing from this printer port and override the printer's default input tray.

Enter a number in the field depending on the PrintServer printer type and the desired input tray. Valid choices are 1, 2, 3, and 99. No error checking is performed; if you enter an invalid number, jobs will print from the default input tray.

This option is useful if you print jobs that require special paper or a different input media.

See Also

Tray Number Hints Button

Print to Output Tray Number

You can select the output tray in which you want your completed print job delivered and override the printer's default output tray.

Enter a number in this field depending on the PrintServer printer type and the desired output tray. Valid choices are 1 through 99. No error checking is performed; if you enter an invalid number, jobs will be delivered to the default output tray.

This option is helpful if you share a PrintServer printer with another department and want to separate completed print jobs. Use this option if you have a PrintServer printer with a mailbox stacker and want to deliver confidential material to a locked mailbox.

See Also

Tray Number Hints Button

Tray Number Hints Button

The tray number hints button unfolds to display two tables to help you select the tray numbers to enter in the PrintServer Printer Options dialog box:

		PrintServer 17	PrintServer 20	PrintServer 32	PrintServer 40
Input	1	Тор	Тор	Тор	Тор
Tray	2	Bottom	Middle	Middle	Middle
Numb er	3	Large Capacity	Large Capacity	Large Capacity	Large Capacity
	99	Envelope	Not Applicable	Not Applicable	Not Applicable
Outpu t	1	Тор	Lower	Lower	Side (face- down)
Tray	2	Side (face- up)	Side (face- up)	Side (face- up)	Side (face- up)
Numb er	3	Not Applicable	Upper	Upper	Тор
	4-99	Not Applicable	Not Applicable	Mailbox (4- 23)	Not Applicable

Input Tray Number:

The first table shows the trays available when printing a banner page or the body of your print job. Find your PrintServer model (listed across the top of the screen) and decide which tray you will use. Enter the corresponding number (1, 2, 3, or 99) in the Options dialog box.

Output Tray Number:

The second table shows the output trays where your print job can be delivered. Enter the corresponding number (1 through 99) in the Options dialog box.

No error checking is performed. If you enter a number that does not correspond to the tray choices available in the printer, the default tray will be used instead.

Configure Button

Network Printing Software for Windows is capable of remotely configuring characteristics of PrintServer printers. If you choose to configure a PrintServer printer, you have to soft-load, or boot, it first.

Choose this button to display the <u>Configure PrintServer Dialog</u> box.

Logging Button

Network Printing Software for Windows is capable of recording detailed information in the system event log and recording debugging traces to a file.
 Choose this button to display the Logging Options Dialog box.

DEClaser 3500 or 5100 Network Card Port Options Dialog

The options dialog for the DEClaser Network Interface Card lets you take advantage of the capabilities of Network Printing Software for Windows. The Network Interface Card is a multi-protocol network interface card for the DEClaser 5100 and DEClaser 3500 printers. Network Printing Software for Windows communicates with the card via the TCP/IP protocol.

Choose one of the following buttons for more information about the dialog box and how to control the look of your print job:

Print Banner Page

Configure Button

Logging Button

Configure Button

Network Printing Software for Windows is capable of remotely configuring characteristics of the DEClaser Network Interface Card. Choose this button to display the <u>Configure DEClaser Printer Dialog</u> box.

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RapidPrint Server Port Options Dialog

The options dialog for RapidPrint lets you take advantage of the capabilities of Network Printing Software for Windows. RapidPrint is a multi-protocol network interface for the DECcolorwriter 1000 printer and other peripherals. Network Printing Software for Windows communicates with RapidPrint via the TCP/IP protocol.

Choose one of the following buttons for more information about the dialog box and how to control the look of your print job:

Print Banner Page

- Parallel
- <u>Serial</u>
- Other
- Configure Button
- Logging Button

Configure Button

Network Printing Software for Windows is capable of remotely configuring characteristics of the RapidPrint network server. Choose this button to display the <u>Configure RapidPrint Dialog</u> box.

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Parallel

Selects the parallel port for communicating with the printer.Choose this field to use the parallel port with the printer.

Serial

Selects the serial port for communicating with the printer.Choose this field to use the serial port with the printer.

Other

Lets you enter a TCP/IP port address. Choose this field to make the TCP/IP Port field active. Be sure to enter the correct TCP/IP address.

Logging Options Dialog

Controls the amount of information recorded in debugging traces and in a Windows NT event log. All PrintServer printer models record detailed bidirectional message information; DEClaser 5100, DEClaser 3500, and DECcolorwriter 1000 printers record minimal information.

Choose one of the following buttons for more information about the dialog box:

Trace File

Trace Window

Trace File Name

Log Level

Trace File

Debugging traces detail ALL activity seen by this system with respect to ALL Digital network printers. If you are unable to print, debugging traces are useful in diagnosing problems. However, debugging trace information is typically useful only to a network or system administrator, and only when a problem is being diagnosed.
 Choose the File check box to enable writing debugging traces to a file.

Trace Window

Debugging traces detail ALL activity seen by this system with respect to ALL Digital network printers. If you are unable to print, debugging traces are useful in diagnosing problems. However, debugging trace information is typically useful only to a network or system administrator, and only when a problem is being diagnosed.

Choose the Window check box to enable writing debugging traces to a window.

The messages in the trace window are stored in virtual memory and can eventually consume all available virtual memory. The Clear button erases the contents of the window and releases the associated memory. If you enable Trace File, all the same messages are written to the file.

Trace File Name

If you have enabled writing debugging traces to a file, you must enter a valid file name in this field to indicate where the traces should be written.
Enter the full path name for the file you wish to create.

Log Level

Log level lets you control the amount of detail in information written to the operating system event log.

Enter a number between 0 and 3 in this field. Zero represents the least detail – only fatal errors are written to the event log. Three represents the most detail – everything, including retry messages, are written to the event log.

The highest level (3) can be useful at times, but consumes disk space. Choose a logging level to match your needs and disk resources.

Configure PrintServer Dialog

Controls network settings of the PrintServer printer.

Choose one of the following buttons for more information about the dialog box: <u>Enable SoftLoad and Configuration</u>

- Ethernet Hardware Address
- Printer Name
- TCP/IP Address
- IP Subnet Mask
- Default IP Gateway
- DECnet Address
- Enable SNMP Service
- SNMP Details
- Printer Front Panel Language
- Options

Enable SoftLoad and Configuration

Choose this checkbox to load the PrintServer printer with PostScript software images, fonts, and configure the printer with default paper trays, special network features, and more.

If you did not install the PrintServer load files onto your system when you installed the Network Printing Software for Windows, you won't be able to load the files from the host PC system onto the PrintServer printer.

You cannot select any other field in this dialog box until you turn this check box on.

You **cannot load** a PrintServer printer over the DECnet protocol.

Note: When you finish adding or changing the PrintServer configure options, you must turn the PrintServer printer off and on again to soft-load the printer.

Ethernet Hardware Address

Enter the Ethernet address to associate the hardware with its internet address, which you entered in the Add Port Dialog box. Do not arbitrarily change this field later or the PrintServer printer will not operate.

Enter the Ethernet address of the PrintServer. The printer's hardware address displays on the front panel at power up, or it prints on the printer's power up page. Use the form xx-xx-xx-xx-xx, where x = 0 through 9, or A through Z (upper- or lowercase).

The hardware addresses of PrintServer printers usually begin with 08-00-2B.

Printer Name

The printer name is the printer's port name. You cannot edit this field.

Enable SNMP Service

• Select this option to use Simple Network Management Protocol features. If you choose this capability, the SNMP Details buttons is activated.

SNMP Details

Choose this button to display the <u>SNMP Service Configuration Dialog</u> box.

Printer Front Panel Language

• Select a language in which to display PrintServer messages on the front panel. English is the default.

Other choices are: Dutch, French, German, Italian, Norwegian, Portuguese, Spanish, and Swedish.

Options

Choose this button to display the <u>Configure PrintServer Options Dialog</u> box.

PrintServer SNMP Service Configuration Dialog

Specifies some general printer information and parameters for SNMP services. When you choose the OK button in this dialog box, the SNMP service will be configured and ready to load onto the printer.

Although it is not necessary to restart the computer, you must reload the PrintServer printer to change its SNMP configuration. To reload the PrintServer printer, you must power off/on the printer for these changes to take effect.

Choose one of the following buttons for more information about the dialog box:

- PrintServer Contact
- PrintServer Physical Location
- Access...

Send SNMP Traps from PrintServer to...

If SNMP is enabled, trap messages are automatically sent by the printer's SNMP agent to hosts on the network that you define in this area of the dialog. These hosts are identified by their combination of community name and IP addresses.

- Community Names
- TCP/IP Addresses
- Add...
- Remove

Note: The management information base (MIB) supported by Network Printing Software for Windows' SNMP agent is MIB-II. See <u>Network Management with SNMP</u> for more information.

PrintServer Contact

Enter the name of the key contact person for this printer. Do not use the pound-sign character (#). This character is used in the Network
 Printing Software for Windows configuration file to denote comments.

PrintServer Physical Location

• Enter the location of the PrintServer printer: building and floor, office number, or other identifier.

Do not use the pound-sign character (#). This character is used in the Network Printing Software for Windows configuration file to denote comments.

Community Names

Enter the community name(s).

Do not use the pound-sign character (#). This character is used in the Network Printing Software for Windows configuration file to denote comments.

A community name must be less than 64 characters, but only about 20 characters are displayed in the community name field, so keep naming concise.

A community name needs at least one IP address associated with it. However, the same IP address can be associated with several different community names.

TCP/IP Addresses

Enter the IP address. Use the form nnn.nnn.nnn, where nnn = 0 through 255. You need at least one IP address for each community name.

The address "0.0.0.0" is not valid for a trap host address, but is valid for access control.

The address "255.255.255.255" is not valid.

Access...

• Choose this button to display the <u>PrintServer SNMP Access Control Configuration</u> <u>Dialog</u>.

Add...

Choose this button to display the <u>Add Dialog</u>.

Remove

• This button appears beside the community names list and beside the TCP/IP addresses list.

If you highlight a community name and choose the Remove button beside the community name list, you will remove that community name and all the addresses associated with it.

If you highlight a TCP/IP address and choose the Remove button beside the address list, you will remove that address from the community name it is associated with.
PrintServer SNMP Access Control Configuration Dialog

Controls whether the printer can be remotely managed through SNMP requests by certain management hosts, and whether to send an authentication trap when an unauthorized host requests information.

SNMP configuration occurs ONLY when the printer is booted (loaded) with these changes. To reload the PrintServer printer, you must power off/on the printer for these changes to take effect.

Choose one of the following buttons for information about this dialog box:

Accept SNMP Requests from...

By default, the community name "Public", with IP address of "0.0.0.0", and "Read" access is set until you change this. The wildcard address of "0.0.0.0" allows **all hosts** to read SNMP values in the printer. If you want to restrict this public access, you may get a data redundancy warning if you set specific hosts to the same access as the Public community without first removing the Public community.

- Community Names
- TCP/IP Addresses
- <u>Add...</u>
- Remove

Send Authentication Traps

Note: The management information base (MIB) supported by Network Printing Software for Windows' SNMP agent is MIB-II. See <u>Network Management with SNMP</u> for more information.

Any Host

Check the box to allow SNMP requests from any TCP/IP address, regardless of whether it is in a community.

Send Authentication Traps

• Check the box to send authentication traps to the community names/IP addresses defined in the PrintServer SNMP Service Configuration dialog if an unauthorized host requests SNMP information from the printer.

Access

• Set the access level hosts have to send SNMP requests to the PrintServer to Read or Read/Write access.

Add SNMP Information Dialog

Adds host SNMP information. This dialog is used to control which management hosts are authorized to send SNMP requests to the PrintServer printer and whether a host can receive SNMP traps. For more on each field, see:

Community Names

TCP/IP Addresses

These fields are displayed when you select Add from the Access Control Configuration dialog and are used to add management host information:

Any TCP/IP Address

Access

Configure PrintServer Port Options Dialog

Controls the printer's default input and output trays and other related settings. Set these defaults **once** when you set up the PrintServer to soft load. If you want to alter tray settings for different ports, use the Configure PrintServer dialog to override input and output trays. If you decide to permanently change the printer's settings, you must turn off/on the printer after new default settings are made.

Note: Do not arbitrarily change the page and device default settings. Port settings for this printer that were set on other systems may work incorrectly if you change the printer's default trays and soft load the printer.

Choose one of the following buttons for more information about the dialog box: Page Defaults...

Device Defaults...

Accounting

The accounting field specifies whether the Windows NT server will receive centralized accounting messages from the PrintServer printer and record them in a file. Accounting data includes the PC printing the job, number of pages per job, printer to network connect time, etc.

on = Send accounting data to Windows NT server, but do not stop printing if that server is unavailable.

off = Do not send accounting data.

reliable = Stop printing until the Windows NT server is available to receive accounting data.

Event Logging

Controls whether the Windows NT Event Viewer will track events related to the PrintServer printer's status. Possible options are either on or off. If you choose Off here, the log level set in the Logging Options Dialog will be ignored.

Page Defaults

Choose this button to display the <u>Configure PrintServer Page Defaults Dialog</u> box.

Device Defaults

Choose this button to display the <u>Configure PrintServer Device Defaults Dialog</u> box.

TCP/IP Access Control

Select the checkbox to allow access to ALL known TCP/IP addresses. Eliminate the "x" inside the box if you want to control access to the PrintServer printer from specific IP addresses. If you turn off access to all addresses, then you can edit the other fields in this dialog.

• Choose this button to display the Allow dialog box where you can enter the network addresses of workstations and servers that you want to allow to print to your PrintServer printer.

Deny

• Choose this button to display the Deny dialog box where you can enter the network addresses of workstations and servers that you do not want to allow to print to your PrintServer printer.

DECnet Access Control

• Select the checkbox to allow access to ALL known DECnet addresses.

Configure PrintServer Page Defaults Dialog

Controls the PrintServer printer's default page settings. Set these defaults **once** when you set up the PrintServer to soft load **in the printer**. Jobs from **every** system default to this page selection. If you want to alter tray settings for different ports, use the Configure PrintServer dialog to override input and output tray defaults.

If you decide to permanently change the printer's settings, you must turn off/on the PrintServer after new default settings are made.

Note: Do not arbitrarily change the page and device default settings. Port settings for this printer that were set on other systems may work incorrectly if you change the printer's default trays and soft load the printer.

Choose a button for more information about the dialog box: <u>Page Size</u>

Be sure the Page Size setting in this dialog box matches the actual paper contained in the printer's input tray. Specify the printer's default Input Tray in the <u>Device Defaults dialog</u> <u>box</u>.

Page Size

• Select a default paper size for the printer. This paper size will be drawn from the appropriate tray in the printer, if that tray is present. The default setting is Letter size.

On PrintServer 17/600 and PrintServer 32 plus printers, default paper size supersedes the default input tray selection. If the printer finds the specified paper size, it ignores the input tray selection. If the printer cannot find the specified paper size, it will use the default input tray.

Configure PrintServer Device Defaults Dialog

Controls the PrintServer printer's default input and output trays and other related settings **in the printer**. Jobs from **every** system default to this tray selection. Set these defaults **once** when you set up the PrintServer to soft load. If you want to alter tray settings for different ports, use the PrintServer Printer Port Options dialog to override input and output trays just for that port.

If you decide to permanently change the printer's settings, you must turn off/on the PrintServer after new default settings are made.

Note: Do not arbitrarily change the page and device default settings. Port settings for this printer that were set on other systems may work incorrectly if you change the printer's default trays and soft load the printer.

Choose one of the following buttons for more information about the dialog box:

- Input Tray
- Output Tray
- Mailbox Number
- Job Timeout
- Offset Stacking
- DECimage

Be sure the Input Tray setting in this dialog box matches the printer's actual input tray. The input tray should hold paper that is the same as specified in the Page Size, which is set in the <u>Page Defaults dialog box</u>

Input Tray

Select the printer's default input tray. The software displays only input trays available on your printer.

Output Tray

Select the printer's output tray. The software displays only output trays available on your printer.

Mailbox Number

A mailbox is an option offered for PrintServer 32 printers. Mailboxes provide confidential storage for printed files until the owner collects the paper. Enter the mailbox number for the printer:

Valid mailbox numbers for PrintServer 32 printers include 4 through 23.

Job Timeout

Job timeout is the amount of idle time between the time data is sent to the printer and the time that data actually prints. If there is no activity during the duration specified in the Job Timeout field, the PrintServer printer will ignore the print job and take the next print request.

• Enter a timeout period number. The default is "no limit". Digital strongly recommends retaining the default for Job Timeout. If you do enter a new timeout, this number must be greater than or equal to 15 minutes.

The PostScript timeout default is "infinite". This means that print jobs will be allowed to complete no matter how long they take. Digital strongly recommends retaining the default value for PostScript job timeout.

If you choose a lower value for the PostScript job timeout default, complex pages and long jobs may be disallowed, or it may be difficult for users to send a print job and get to the printer in time to manually feed paper or envelopes. Conversely, setting a lower value can be a good way to control access to a busy printer. An administrator may want to restrict access to the PrintServer printer if a particular system continually pauses the printer.

Offset Stacking

Offset stacking (also called job jogging) separates print jobs by putting them in the output tray slightly offset from each other. This makes it easier to find the beginning and ending of different print jobs.

• Select the check box to turn on job separationby offset stacking (or jogging). This is the default setting.

Deselect the check box to turn off offset stacking.

DECimage

DECimage enhances the apparent resolution of bitonal images, so that images you print may look sharper and clearer. Some PrintServer printer models have a full range of DECimage options; some models simply offer the option turned off or on.

Select one of the DECimage options to change the standard image quality.

"Contrast" changes image quality that appears too flat or washed out.

"Sharpness" controls emphasis on edge detail. Setting the sharpness too high can cause an image to print harsh and unnatural; but, setting sharpness too low can make an image print too blurry.

Configure DEClaser Printer Dialog

Controls network settings of the DEClaser Network Interface Cards.

Choose one of the following buttons for more information about the dialog box: <u>Internet Protocol</u> <u>Send Details to Device</u>

Internet Protocol Button

Select this button to change the internet address of the RapidPrint server or the Network Interface Card to a different subnet. This is only possible as long as a gateway exists between the host system's network and the network of the RapidPrint server or the DEClaser 5100 or DEClaser 3500 printers with the Network Interface Card.

Choose this button to display the <u>Internet Protocol Details Dialog</u> box.

Send Details to Device Button

Select this button to permanently change the RapidPrint server or the Network Interface Card with the new settings you specified. You must select this button to save any subnet mask or other network address settings and serial port settings; otherwise, any changes you make are not saved.

Choose this button to display the <u>Send Details Message Box</u>.

Configure RapidPrint Server Dialog

Controls network settings of the RapidPrint server.

Choose one of the following buttons for more information about the dialog box: <u>Internet Protocol</u> <u>Serial Port</u> <u>Send Details to Device</u>

Serial Port Button

Select this button to change the RapidPrint server's serial port settings. Choose this button to display the <u>Serial Port Details Dialog</u> box.

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Internet Protocol Details Dialog

Controls the Internet (IP) address of the printer or RapidPrint server and its default network gateway. Also controls the subnet mask address.

Note: Network Printing Software for Windows does not perform error checking on individual fields. An error message is displayed if any of the following conditions occurs:

- The Internet protocol address, subnet mask, or gateway address format is incorrect.
- The specified gateway is not in the same subnet as the Internet protocol address.

Choose one of the following buttons for more information about the dialog box:

- TCP/IP Address
- Subnet Mask
- Gateway Address
TCP/IP Address

The current address of the device is displayed by default. This is the same address as is displayed in the Add Port or Configure Port dialog. After successfully changing the address of the device, the address of the port is automatically updated to reflect the change.
Enter the IP address of the device. Use the form nnn.nnn.nnn, where nnn = 0 through 255.

Subnet Mask

The network mask is usually set by a network administrator on a site-wide basis. If you do not know your site's network mask, see your network administrator. **Do not** use a different address or you will have inconsistent and/or unexpected results. Network Printing Software for Windows does not verify to see if the subnet mask is a valid one for your network environment.

Enter the TCP/IP subnet mask if the printer or RapidPrint server is in a different subnet than the host system. By default, no subnet mask address is displayed. Use the form nnn.nnn.nxxx, where nnn = 255, 254, 252, 248, 240, 224, 192, 128, or 0, and xxx = 254, 252, 248,240, 224, 192, 128, 0.

From left to right, any value other than 255 must be followed by ZERO only. These addresses are valid: 255.255.255.0 or 255.0.00 or 255.128.0.0. These addresses are NOT valid: 255.128.255.0, 255.0.255.0.

Gateway Address

To allow users from other subnets to print to this printer, enter the gateway address of the default network gateway between the printer or the RapidPrint server and other network areas. Contact your network administrator for details.

• Enter the TCP/IP address of the default network gateway between the printer or the RapidPrint server and other network areas. Use the form nnn.nnn.nnn, where nnn = 0 through 255.

Serial Port Details Dialog

Controls the serial port settings of the RapidPrint server.

Choose one of the following buttons for more information about the dialog box:

Baud Rate

Data Bits

Parity

Xon/Xoff
Hardware

Baud Rate

• Enter the baud rate of the serial port. Choices range between 1200 and 38400. The factory default is 19200.

Data Bits

• Enter the data rate of the serial port. Choices are 7 or 8. The factory default is 8. Note that you will get an error message if you choose 7 and set the parity to "none".

Parity

• Enter the parity of the serial port. Choices are none, odd, even. The factory default is none. Note that you will get an error message if you choose none and set the baud rate to 8.

Stop bits

Enter the stop bits of the serial port. Choices are 1 or 2. The factory default is 1.

Xon/Xoff

• Check the box to set software flow control on. If the cable to the printer is a "4-wire" cable, then you generally have to select Xon/Xoff flow control and may have to uncheck the hardware flow control box.

Both flow control settings are set on by default, so that the flow control wires in the printer cable and the software protocol can work together. If neither flow control box is checked, the serial port will not operate correctly.

Hardware

Check the box to set hardware flow control on. If the printer is not capable of, or configured for, Xon / Xoff flow control, you usually have to select hardware flow control and uncheck the Xon / Xoff flow control box.

Both flow control settings are set on by default, so that the flow control wires in the printer cable and the software protocol can work together. If neither flow control box is checked, the serial port will not operate correctly.

Defaults Button

Choose this button to reset all details to the factory default.

These are the Serial Port factory defaults: Baud Rate = 19200 Data Rate = 8 Parity = none Stop Bits = 1 Flow Control, Xon/Xoff = on Flow Control, Hardware = on

Send Details to Device Message Box

This is a message box that presents the internet protocol and serial details you set. You must select "Yes" to commit the changes and program the printer with the new network settings. You may select "No" to cancel all the settings you made and leave the device unchanged.

The internet protocol details and serial details are presented. (Serial details do not apply to the DEClaser Network Interface Card.) Other characteristics will be programmed to default values. Click here to see what the default values are for the other characteristics.

Other characteristics will be programmed to default values

When sending IP and serial details to the device, the characteristics listed below are set to the listed default values. Network Printing Software for Windows will not set any of these characteristics to other values. Through other means, any of these characteristics may have been changed from these values. Sending details erases any such prior changes.

Characteristic	Default Value	
L	P Details:	
Forward Broadcast	No	
Trailers	No	
Base Port Number	10000	
Keep Alive	Yes	
Maximum Transmission Unit	1500	
Broadcast	No	
System Description	Digital™ RapidPrint Interface or Digital DEClaser™ Network Interface Card	
System Object Identifier	1.3.6.1.4.1.24	
Network	Ethernet	
Serial In or Out	Out	
<u>Se</u>	rial Details:	
Stop bits	1	
<u>Ot</u>	her Details:	
Start of Job data	None	
End of Job Data	None	
Version	0	
Protocols	Novell & TCP/IP enabled; all others disabled	

Digital Network Printing Software Event Help

Provides specific, detailed help information for Event Viewer messages generated by Network Printing Software for Windows.

Enter the Event ID from the Windows NT Event Viewer. This example shows two different

events with Event IDs of 20002 and 20001.

Event Viewer - Application Log				
Log ⊻iew	<u>O</u> ptions	<u>H</u> elp		
Date	Time	Source	Category	Event
12/2/94	4:35:04 PM	Digital Network Printing	None	20002
12/2/94	4:34:41 PM	Digital Network Printing	None	20001

Click on the OK button and help providing more information about the event -- why it occurred and action to take to resolve a problem, if any -- will be displayed.

Setting Up Printers to Print on the Network

The basic steps for setting up a printer include:

- Installing the Ethernet card or RapidPrint Network Server
 - Creating and configuring the printer

For detailed instructions, choose the scenario that matches your situation: <u>Scenario 1:</u> Printing to a brand new printer, or to a printer not connected to any network <u>Scenario 2:</u> Printing to an "established" printer that is on another network with an IP address

The basic tasks for maintaining the printing environment include: <u>Scenario 3</u>: Changing the printer's address <u>Scenario 4</u>: Setting up additional ports

For information on required hardware and software, see the <u>Prerequisites</u> section.

Setting Up Printers to Print on the Network

The basic steps for setting up a printer include:

- Ensuring that the printer is physically connected to the network.
- Creating the printer
- Loading the PrintServer software
- Configuring the printer

For detailed instructions, choose the scenario that matches your situation: <u>Scenario 1</u>:

Printing to a brand new printer, or to a printer not connected to any network <u>Scenario 2</u>:

Printing to an "established" printer that is on another network with an IP address

The basic tasks for maintaining the printing environment include: <u>Scenario 3:</u> Changing the printer's address <u>Scenario 4:</u> Setting up additional ports

For information on required hardware and software, see the <u>Prerequisites</u> section.

Prerequisites

To successfully install and use Network Printing Software for Windows, you need the following:

- 1. An Intel, Alpha AXP, PowerPC, or MIPS system with the Windows NT operating system installed.
- 2. Additional disk space for the PrintServer software files and other printer management software.
- 3. A mouse and keyboard.
- 4. TCP/IP protocol, installed and operational.
- 5. A supported Digital printer.

Note: This product will work properly only on **Windows NT** Final Release systems.

Supported Printers

The following Digital printers are supported by this release of Network Printing Software for Windows: DEClaser 3500 with Network Interface Card via TCp/IP DEClaser 5100 with Network Interface Card via TCP/IP DECcolorwriter 1000 with RapidPrint Network Interface via TCP/IP PrintServer 17 PrintServer 17/600 PrintServer 20 * turbo PrintServer 20 PrintServer 32 PrintServer 32 plus PrintServer 40 Plus* PrintServer 20 Kanji** turbo PrintServer 20 Kanji** PrintServer 32 Kanji** PrintServer 40 Plus Kanji*

 \ast You can load the PrintServer software onto these printers **only** from OpenVMS or ULTRIX systems.

** You **cannot** load the PrintServer software onto these printers from Windows systems. You **can** load the PrintServer software onto these printers from OpenVMS, ULTRIX, OSF/1 and other systems.

For more information about desktop printers, see <u>About Digital Desktop Printers</u>. For more information about PrintServer printers, see <u>About Digital PrintServer Printers</u>.

Creating Ports

Installation/Maint. Tasks

Before you can create a printer associated with a physical <u>PrintServer printer</u> or another Digital network printer, you must create a <u>port</u>. Ports represent communication channels to printers.

Each printer must have its own port. But you can create several ports for each printer, to take advantage of different printer settings (paper trays, two-sided printing, etc.) available through Network Printing Software for Windows.

Note:

- You must be logged on as a member of the <u>Administrators</u> group to create a port.
- 1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.
- 2. Select the Add Printer icon.
- 3. In the Add Printer Wizard, select the My Computer radio button and click on the Next> button.
- 4. Click on the Add Port button and choose Digital Network Port from the Available Printer Ports list.
- 5. In the Add Port Digital Network Port dialog box, type the information for your printer. You must select a port type and enter a port name and a TCP/IP address. For more information about specific fields, choose the Help button.
- 6. In the Add Port Digital Network Port dialog box, choose OK. In the Add Printer Wizard dialog, click on the Next> button.
- Choose Digital from the Manufacturers list. Select the name and model of your Digital printer from the Printers list. Certain Digital printers use the Digital Network Printing Software; <u>click here for a list of</u> <u>those printer drivers</u>. After you select the printer, click on the Next> button.
- 8. Enter a name for the printer. By default the name is the printer driver. Click on the Next> button.
- 9. Digital recommends using Network Printing Software for Windows by installing it on every system on the local network, rather than sharing printing services. When you have completed the wizard dialogs, select the Finish button.

See Also: Add Port Dialog

Changing the address of a PrintServer Printer

Installation/Maint. Tasks

If:

- The PrintServer printer's TCP/IP address has been set, and
- The internet address is valid, and
- The PrintServer Software is loaded on the PrintServer printer...

...then you can change the printer's network address, subnet mask, or gateway.

Note:

• You can change the printer's subnet mask only if a gateway exists between the printer's network and the host Windows NT system's network. The gateway **must be** in the same subnet as the printer's internet address. The gateway address is not verified to determine if it is a gateway. See your network administrator for more information.

If another system is also loading the PrintServer software to the printer, you must change the printer's IP address on that system as well as your own.

• If you change a printer's address to a different subnet than the Windows NT system that loads the PrintServer software, a network router must be set up to pass TCP/IP broadcast messages between the printer and the Windows NT system. See your network administrator for more information.

To Change the Address of a PrintServer Printer:

1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.

- 2. Select the icon representing the PrintServer printer.
- 3. From the File menu, select Properties.
- 4. Click on the Ports tab.
- 5. Click on the Configure Port... button.
- 6. In the Configure Port -- Digital Network Port Dialog, make sure the port type selected is specific to your PrintServer printer. (You cannot configure a generic PrintServer port, that is, "Other PrintServer Printer via TCP/IP or DECnet".) Select the Options button.
- 7. In the PrintServer Printer Options dialog box, select the Configure button.
- 8. In the Configure PrintServer dialog box, change the Ethernet address, subnet mask, default gateway, and other information for your printer. For help on specific fields, choose the Help button.

See Also: Configure Port Dialog

Getting the Printer's Hardware Address: DEClaser 3500/5100 Series Ethernet Card

Installation/Maint. Tasks

Take the following steps to get the hardware address of the printer's Ethernet card. You must associate the Ethernet card's hardware address, or network address, with an internet address so that the printer will accept print jobs over the network.

- 1. Plug in the DEClaser printer and plug in network connections. Be sure the jumper for ThinWire Ethernet (the default) is correct. See the Ethernet card installation guide for information specific to network connections.
- 2. Power on the DEClaser printer. The Status and Configuration Report prints as part of the printer's warm up cycle. See <u>Sample Default Status and Configuration Report</u> for a sample of the default report. Copy the network address from the Network Address line on the report. Check the bottom half of the Status and Configuration Report to see if the network configuration is active.

Note:

• If the TCP/IP field is active and the internet address is valid, the DEClaser printer is already configured to operate on a network.

• The Ethernet card's internet address must be in the same network subnet as the host Windows NT system. See your network administrator for details.

3. If you want to:

-- Change the printer's <u>internet address</u> to be on a different subnet from the host Windows NT system, or

-- If the printer does not have a subnet and gateway defined...

- ...go to Changing the IP Address of the Ethernet Card
- 4. If the TCP/IP field is inactive, use the <u>arp and ping commands</u> to associate the printer's internet address with its Ethernet address.

Changing the IP Address of a DEClaser 3500/5100 Series Ethernet Card

Installation/Maint. Tasks

Follow these steps to change the printer's internet address. This is only possible if a gateway exists between the printer's network and the host Windows NT system's network.

Note: The gateway must be in the same subnet as the printer's IP address. The gateway address is not verified to determine if it is a gateway; see your network administrator for more information.

To Change the IP Address:

- 1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.
- 2. Select the icon representing the DEClaser printer.
- 3. From the File menu, select Properties.
- 4. Click on the Ports tab.
- 5. Click on the Configure Port... button.
- 6. In the Configure Port -- Digital Network Port Dialog, choose the port for the DEClaser 3500/5100 series Ethernet card. Select the Options button.
- 7. In the Ethernet Card Options dialog box, select the Configure button.
- 8. In the Configure dialog box:

Click on the Internet Protocol Details... button to change the printer's network address. Click on the Serial Port... button to change serial port settings.

Click on the Send Details to Device button to permanently program the new address. For more information about specific fields, choose the Help button.

See Also: Configure DEClaser Printer Dialog

Sample Default Status and Configuration Report

Installation/Maint. Tasks

Unit Serial No: 180105	Version: 01.00 E15		
Network Address: 00:40:af:15:fc:48			
Network Topology: Ethernet	Connector: Thinnet		
Network Speed: 10 Mega Bits			
AppleTalk Network Information			
Frame Type: 802.2 SNAP On 802.3			
Protocol Address: Net Number 32	Node Number 102 Socket Number 111		
AppleTalk Zone: Default Zone			
DEC LAT Network Information			
Frame Type: Ethernet II			
Protocol Address			
***************************************	***************************************		
*****	***		
Novell inactive			
AppleTalk Connection Information			
AppleTalk Printer Name: DEClaser 5100			
TCP/IP inactive			
DEC LAT Connection Information			
Node name: LAT 0040af15fc48			
Port name: Port_1			

Sample Revised Status and Configuration Report <u>Installation/Maint. Tasks</u>

Version: 01.00 E15		
Connector: Thinnet		
Node Number 102 Socket Number 111		
Subnet Mask: 255.0.0.0		

Novell inactive AppleTalk Connection Information AppleTalk Printer Name: DEClaser 5100 TCP/IP Connection Information Port Number: 10001 DEC LAT Connection Information Node name: LAT_0040af15fc48 Port name: Port_1

Getting the Printer's Hardware Address: RapidPrint Network

Installation/Maint. Tasks

Follow these steps to set up a RapidPrint network interface via TCP/IP. With this release of Network Printing Software for Windows, the DECcolorwriter 1000 printer and other parallel printers can operate on the network with RapidPrint.

- 1. Plug in the RapidPrint server and plug in network connections. Be sure the network connections are correct. See the RapidPrint installation guide for information specific to network connections.
- 2. Power on the RapidPrint server. The Status and Configuration Report prints as part of the printer's warm up cycle See <u>Sample Default Status and Configuration Report</u> for a sample of the default report. Copy the network address from the Network Address line on the report. Check the bottom half of the report to see if the network configuration is active.
- **Note:** If the TCP/IP field is active and the internet address is valid, RapidPrint is already configured to operate on a network.

If the TCP/IP connection has been set and the internet address is valid, you can change RapidPrint's <u>internet address</u> to be on a different subnet from the host Windows NT system. Go to <u>Changing the IP Address of the RapidPrint Server</u>.

3. If the TCP/IP field is inactive, use the <u>arp and ping commands</u> to associate the printer's internet address with its Ethernet address.

Note: The RapidPrint server's internet address must be in the same network subnet as the host Windows NT system to perform the initial set up. See your network administrator for details.

Changing the IP Address of the RapidPrint Server <u>Installation/Maint. Tasks</u>

Follow these steps to change the RapidPrint server's internet address to a different subnet. This is only possible if a gateway exists between the RapidPrint server's network and the host Windows NT system's network.

Note: The gateway MUST BE in the same subnet as the RapidPrint server's IP address. The gateway address is not verified to determine if it is a gateway; see your network administrator for more information.

To Change the IP Address:

- 1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.
- 2. Select the icon representing your printer.
- 3. From the File menu, select Properties.
- 4. Click on the Ports tab.
- 5. Click on the Configure Port... button.
- 6. In the Configure Port -- Digital Network Port Dialog, choose the port for the RapidPrint server. Select the Options button.
- 7. In the RapidPrint Server Options dialog box, select the Configure button.
- 8. In the Configure RapidPrint dialog box:

Click on the Internet Protocol Details... button to change the printer's network address. Click on the Serial Port... button to change serial port settings.

Click on the Send Details to Device button to permanently program the new address. For more information about specific fields, choose the Help button.

See Also:

Configure RapidPrint Dialog

Scenario 1: Printing to a brand new printer, or to a printer not connected to any network (Desktop printers)

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To set up a brand new printer or a printer that is not connected to any network, take the following steps.

- 1. Install the <u>Ethernet card</u> (DEClaser 3500 or 5100 printer) or RapidPrint Network Server (DECcolorwriter 1000 or other parallel printer)
- 2. Get the printer's hardware address: <u>DEClaser 3500/5100 Series Ethernet Card</u> <u>RapidPrint Network Server</u>
- 3. Create a printer: Create a port
- 4. Use the <u>arp and ping commands</u> to associate the printer's internet address with its Ethernet address.

<u>Scenario 2</u> <u>Scenario 3</u> <u>Scenario 4</u>

Scenario 1: Printing to a brand new printer, or to a printer not connected to any network (PrintServer printers)

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To set up a brand new printer or a printer that is not connected to any network, take the following steps.

- 1. Ensure that the printer is physically connected to the network.
- 2. <u>Get the printer's Ethernet address</u>
- 3. Create a printer:
 - a. <u>Create a port</u>
 - b. Load the PrintServer software onto the printer
- 4. <u>Configure the printer</u>
- 5. Power cycle the printer

Scenario 2 Scenario 3 Scenario 4

Loading the PrintServer Software onto the Printer <u>Installation/Maint. Tasks</u>

Software loaded into the PrintServer printer's CPU lets the printer interpret and print PostScript files, use a variety of fonts, relay warning and error messages, and provide other features.

Things to Remember About Loading the PrintServer Software onto the Printer

How to Load the PrintServer Software onto the Printer

- 1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.
- 2. Select the icon representing your printer.
- 3. From the File menu, select Properties.
- 4. Click on the Ports tab.
- 5. Click on the Configure Port... button.
- 6. In the Configure Port -- Digital Network Port Dialog, choose the port for your printer. Click on the Options button.
- 7. In the Port Options dialog box, click on the Configure... button.
- 8. In the Configure PrintServer dialog box, click on the Enable Soft-Loading and Configuration checkbox.

A message box appears. To load the PrintServer software onto the printer, click on OK.

Enter the printer's Ethernet address (the address displayed as the PrintServer printer went through its warmup cycle). Type the Ethernet address carefully; if you make a mistake, you will not know until you have completed the entire process.

Complete the remaining information for your PrintServer printer. For information about specific fields, choose the Help button.

Note: Existing printer configurations will not be deleted or ignored.

Arp command

Use the **arp** command to associate the printer's internet address with its Ethernet address. Bring up a command prompt from the Program Main group.

arp -s [internet name or internet address] [Ethernet address]

If the printer's internet address has a name registered in the DNS (Domain Name Service) or the hosts file, then you can use the name rather than the numeric address; see your network administrator for this information.

The network address is the physical address of the Ethernet card or RapidPrint server and is displayed on the second line of the Status and Configuration report. Make sure to replace the colons separating numbers with hyphens. Some examples follow.

Note: Substitute a valid internet address on your system in place of the example address given here.

C:> arp -s myprinter 00-40-af-15-fc-48 You can specify a network address rather than a name. For example: C:> arp -s 16.34.160.97 00-40-af-15-fc-48 The system echoes to notify you of the change made. For example: C:> arp -s myprinter 00-40-af-15-fc-48 MYPRINTER mapped to Ethernet address 00-40-AF-15-FC-48

Note: The arp command is not case sensitive. See <u>Help on Windows NT Command</u> <u>Reference</u> for additional information on the arp command.

Ping command

Use the **ping** command to verify the connection between the Ethernet card or RapidPrint server and the Windows NT system.

Note: Be sure that you entered the correct internet address before using the ping command! If you made an error, enter the arp command again. If you ping to the wrong internet address, you will have to reset the Ethernet card or RapidPrint server.

The command is in the form

ping [printer's internet name or internet address]. For example:

C:> ping myprinter

The system echoes a reply similar to this:

Pinging MYPRINTER 00-40-AF-15-FC-48 MYPRINTER replied to 0 of 4 pings See <u>Help on Windows NT Command Reference</u> for additional information on the ping command.

For a printer using a DEClaser 3500/5100 Series Ethernet card:

Power cycle the DEClaser printer. After the printer warms up, it will print out a new Status and Configuration Report. <u>See Sample Revised Status and Configuration Report</u> for a sample of a revised report with TCP/IP connection information.

The DEClaser printer is now configured to operate on a network in the same subnet as the host Windows NT system. If you want to change the printer's address to place it on a different subnet, go to <u>Changing the IP Address of the Ethernet Card</u>.

For a printer using the RapidPrint Network Server:

Power cycle RapidPrint (unplug it). After RapidPrint warms up, the printer attached to it will print out a new Status and Configuration Report. <u>See Sample Revised Status and</u> <u>Configuration Report</u> for a sample of a revised report with TCP/IP connection information.

RapidPrint is now configured to operate on a network in the same subnet as the host Windows NT system. The printer that is attached to it can now be reached over the network. If you want to change the address of the RapidPrint server to place it on a different subnet, go to <u>Changing the IP Address of the RapidPrint Server</u>.

Configuring the Printer <u>Installation/Maint. Tasks</u>

You configure the PrintServer printer to specify network settings, choose a front panel language default, select event logging options, and set device and page defaults for the PrintServer printer.

- 1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.
- 2. Select the icon representing the printer.
- 3. From the File menu, select Properties.
- 4. Click on the Ports tab.
- 5. Click on the Configure Port... button.
- 6. In the Configure Port -- Digital Network Port Dialog, enter the network information for the printer. (NOTE: Be sure that the Port Type selected matches your PrintServer printer.) Click on the Options... button.
- 7. In the Printer Options dialog box, enter the banner page, tray, and data type selections. Click on the Configure... button.
- 8. In the Configure PrintServer dialog box, select the Enable Soft-Loading and Configuration checkbox to load the PrintServer internal software and other supporting files from your operating system media onto the PrintServer printer.

Modify the remaining fields to reflect the options you want. If you have questions about a field in the dialog box, choose the Help button.

9. To load (or reboot) the PrintServer printer with the new settings, you must turn off/on the printer to load the internal software.

Installing a Network Interface Card Installation/Maint. Tasks

To install the network interface card (NIC) you need a Phillips screwdriver. The installation takes approximately 15 --- 30 minutes.

Preparing the Printer

- 1. Turn off the printer and remove the power cord from the printer.
- 2. Position the printer so that you can see its back. Remove the power cord.
- 3. Press the tabs at the left and right of the panel and drop the panel down.

Click here 🛨 for picture.

4. Touch the metal assembly chassis to discharge static electricity.

Click here 🖽 for picture.

5. Unscrew the captive screws at the left and right of the assembly.

Click here 🛨 for picture.

6. Pull the handle to slide the assembly from the printer. Place the assembly on a flat surface.

Click here 🖿 for picture.

7. The NIC must be installed in the option port on the right side. Use the Phillips screwdriver to remove the plate from the option port.

Click here 🛨 for picture.

The default operation of the Network Interface Card is to operate EtherTalk, TCP/IP, and NetWare protocols.

Installing the NIC Into the Printer

1. Remove the NIC and its screws from its shipping bag, if you have not already done so.

Click here 🖿 for picture.

2. Insert the face plate of the NIC through the option port so that the face plate is on the inside of the port.

Click here 🖃 for picture.

3. Line up the connector on the NIC with its mate on the assembly's circuit board.

Click here 🖽 for picture.

4. Press down on the NIC to insert the connector.

Click here 🛨 for picture.

5. Use the supplied screws to attach the face plate of the NIC to the option port of the assembly.

Click here 🖿 for picture.

6. Slide the assembly back into the printer. Press firmly and evenly on each side of the assembly to seat it.

Click here 🖽 for picture.

7. Screw in the captive screws and close the back panel.

Click here 🖽 for picture.

8. Plug in the power cord.

9. Turn on the power and wait for the printer to warm up. It prints the power-up status report (if you did not disable this option), and then prints the network status report.

- 10. Check the network status report. Record the serial number and Ethernet address or save the status report. You need this information when you configure the printer for your network.
- 11. Plug in the network cable.

Getting the Printer's Ethernet Address <u>Installation/Maint. Tasks</u>

To get the printer's Ethernet address, take the following steps.

- 1. Power on the PrintServer printer. The PrintServer's front panel displays the first warm-up cycle -- the countdown hardware test.
- NOTE: Test 5 is a memory test, and might take several minutes, depending upon the amount of memory in your printer.
- 2. The Ethernet hardware address is displayed next. It will look something like this: 08-00-2B-xx-xx-xx

If the PrintServer software is loaded on your printer, the following printer actions will occur:

- 3. The copyright notice is displayed after all images are loaded.
- 4. Next, the PostScript start up page prints.
- 5. The word "Processing" displays while the PrintServer printer readies itself to accept print jobs.
- 6. When the PrintServer is finished with its warm-up, "Ready" displays on the front panel.

If steps 3 through 6 do not occur, one of the following conditions is present:

The PrintServer software is not loaded onto the Windows NT system.

Choose the "Complete Installation (Print and Configure)" option when you install the Digital Network Printing Software. If you have already installed the software, go to <u>Loading</u> the PrintServer Software onto the Printer.

You typed in the wrong hardware address.

Get the correct address and enter it in the Configure PrintServer dialog box. Go to <u>Changing the Address of a PrintServer Printer</u>.

The PrintServer software is not loaded onto the PrintServer printer.

Go to <u>Loading the PrintServer Software onto the Printer</u>. Then go to <u>Configuring the</u> <u>Printer</u> to customize the printer for your environment.

The network router between the Windows NT system and the PrintServer printer is not passing TCP/IP broadcast messages between them.

See your network administrator to correct this condition.

Scenario 2: Printing to an "established" printer that is on another network with an IP address

+

1. <u>Create a port</u>

Scenario 1 Scenario 3 Scenario 4
Scenario 2: Printing to an "established" printer that is on another network with an IP address

+

1. <u>Create a port</u>

Scenario 1 Scenario 3 Scenario 4

Scenario 3: Changing the desktop printer's address

Use this procedure to change the desktop printer's internet address.

1. Change the printer's address:

DEClaser 3500/5100 Series Ethernet Card

RapidPrint Network Server

<u>Scenario 1</u> <u>Scenario 2</u> <u>Scenario 4</u>

Scenario 3: Changing the PrintServer printer's address

Use this procedure to change the PrintServer printer's network address, subnet mask, or default gateway router.

- 1. Get the printer's Ethernet address
- 2. Find out if the PrintServer software is being loaded from a system other than your Windows NT system.

If the PrintServer software is being loaded **only** from another system, change the printer's address from that system.

If the PrintServer software is being loaded from **both** another system and your Windows NT system:

-- Change the printer's address on the other system.

-- <u>Change the printer's address</u> from your Windows NT system.

If the PrintServer software is being loaded **only** from another system, but you want to load the software from your Windows NT system as well:

-- Change the printer's address on the other system.

-- Load the PrintServer software onto the printer from your Windows NT system.

Scenario 1 Scenario 2 Scenario 4

Scenario 4: Setting up additional ports for desktop printers

Use this procedure to create new printer ports or to set up a printer port with different printing parameters than the default port.

1. Create a port

Scenario 1 Scenario 2 Scenario 3

Scenario 4: Setting up additional ports for PrintServer printers

Use this procedure to create new printer ports or to set up a printer port with different printing parameters than the default port.

1. Create a port

Scenario 1 Scenario 2 Scenario 3

Things to Remember About Loading the PrintServer Software onto the Printer

At least one system must load the PrintServer software onto the PrintServer printer. If the printer is printing, the PrintServer software has already been loaded from another system. You **do not** have to load the PrintServer software from your Windows NT system. If you do choose to load the PrintServer software from your Windows NT system, that system becomes the **primary** PrintServer-software-loading system. (A Windows NT system will respond faster than other systems to a request to load the PrintServer software. For example, if a Windows NT system and a system running OSF/1 are in competition to load the PrintServer software, the Windows NT system will always win.)

If the PrintServer software is loaded from more than one system:

-- Keep a list of the systems that load the PrintServer software onto that printer. If you move the printer and need to change its hardware address, you must change the address on every system that loads the PrintServer software onto the printer.

-- Be sure that you customize the PrintServer software loading options to be identical on all the systems that load the PrintServer software onto the printer. Then the printer will behave consistently, regardless of which system loads the PrintServer software.





















Valid Drivers

Select one of the following drivers in the Driver field of the Printer Properties dialog box: **Digital DEClaser 3500** Digital DEClaser 5100 Digital DECcolorwriter 1000 39 fonts Digital DECcolorwriter 1000 17 fonts **Digital PrintServer 17** Digital PrintServer 17 Level2 12 mb Digital PrintServer 17/600 Digital PrintServer 17 Level2 8 mg **Digital PrintServer 20** Digital turbo PrintServer 20 Digital turbo PrintServer 20/Japanese Digital PrintServer 32/Japanese Digital PrintServer 32 Digital PrintServer 32 plus **Digital PrintServer 40 Plus** Digital PrintServer 40 Plus/Japanese

A PostScript language error occurred on port xxx: xxx

Logging level: 1

Type: Warning

The PostScript document sent to the printer had an error in it. This could be caused by one of these conditions:

- The <u>PostScript Printer Description (PPD)</u> file for the printer is incorrect. Check that the PPD file is correct.
- Your application generated an incorrect <u>PostScript</u> document. Check to see that you are using the latest release of the application. Contact the software manufacturer for more information.

Bad registry type for xxx xxx.

Logging level: 0

Type: Error

One of the fields in the registry had an unexpected type. The message lists the expected type and the name of the field.

This error should not occur unless the registry has been modified by hand. It can be fixed by editing the registry to set the type of the named field to the expected type.

NOTE: Do not use REGEDT-32 unless you know what you are doing. You might have to reinstall the Windows NT operating system if you incorrectly modify the registry.

Bad registry value for xxx xxx.

Logging level: 0

Type: Error

One of the fields in the registry had an unexpected value. The message lists the type and the name of the field.

This error should not occur unless the registry has been modified by hand. It can be fixed by editing the registry to set the value of the named field to an acceptable value.

NOTE: Do not use REGEDT-32 unless you know what you are doing. You might have to reinstall the Windows NT operating system if you incorrectly modify the registry.

Couldn't find entry for port xxx.

Logging level: 0

Type: Error

The definition of a port could not be found in the registry. If this error occurs, please contact Digital.

Data received via port xxx: xxx

Logging level: 3

Type: Informational

The PostScript document being printed wrote data back to the system. The data is displayed in the message.

Internal error in file xxx at line xxx. Last error = xxx.

Logging level: 0 Type: Error An internal error occurred in the software. If this error occurs, please contact Digital.

Job xxx finished on port xxx.

Logging level: 2

Type: Informational

The printing job named in the message finished printing. This message can help to determine what activity was taking place on the system at a given time.

Job xxx started on port xxx.

Logging level: 2

Type: Informational

The printing job named in the message started printing. This message can help to determine what activity was taking place on the system at a given time.

Out-of-paper message received via port xxx: xxx

Logging level: 3

Type: Warning

The printer is out of paper. The specific message sent by the printer is included, and details which paper source is empty. Add paper to continue printing. See <u>Adding Paper</u> for instructions.

Received an unrecognizable message: *xxx*

Logging level: 0

Type: Warning

The printer sent a message to the back to the system that could not be interpreted. If this error occurs, please contact Digital.

A new input or output tray has been selected

Logging level: 1 Type: Informational

A new paper tray was selected that is different than the one used for the previous job. This message is informational only and does not require any action.

Active

Logging level: 3 Type: Informational The printer is receiving your file and compiling it.

Add toner and clean components

Logging level: 1 Type: Informational See the <u>PrintServer Toner Kit Guide</u> for information.

BAD MESSAGE CODE

Logging level: 1

Type: Warning

A software error occurred in which the message data being sent to your system from the PrintServer printer may have been garbled in the transmission. If this recurs, please contact Digital.

Call Customer Services to correct error

Logging level: 1 Type: Error Contact Digital's customer services for more information.

Charge wire cleaning in progress

Logging level: 1 Type: Informational No action is required. The printer will resume printing when the cleaning is finished.

Check toner cartridge installation

Logging level: 2 Type: Warning See the <u>PrintServer Toner Kit Guide</u> for information.

Check: xxx cartridge installation

Logging level: 1

Type: Warning

Check to see that the toner/developer cartridge is installed properly. See the <u>PrintServer</u> <u>Toner Kit Guide</u> for information.

Cleaning unit absent or improperly seated

Logging level: 1 Type: Warning See the <u>PrintServer Cleaning Kit Guide</u> for information.
Cleaning unit full – needs replacement

Logging level: 1 Type: Warning See the <u>PrintServer Cleaning Kit Guide</u> for information.

Cleaning unit is nearly full

Logging level: 1 Type: Informational See the <u>PrintServer Cleaning Kit Guide</u> for information.

Communication with print engine lost – reboot PrintServer

Logging level: 1

Type: Error

Power cycle the PrintServer printer. Turn off the power, wait several seconds, and turn on the power to the PrintServer printer.

Controller ident message never received

Logging level: 3

Type: Error

A software error occurred in which the communications protocol handshaking between your Windows NT operating system and the PrintServer printer may have been lost or garbled in transmission.

Please contact Digital.

Customer Services maintenance 1 required – Call Customer Services

Logging level: 1 Type: Informational Contact Digital's customer services for more information.

Customer Services maintenance 2 required – Call Customer Services

Logging level: 1 Type: Informational Contact Digital's customer services for more information.

Customer Services maintenance required – Call Customer Services

Logging level: 1 Type: Informational Contact Digital's customer services for more information.

Developer unit absent or improperly seated

Logging level: 1

Type: Warning

Make sure the developer unit is in place correctly. Contact Digital customer services for more information.

You cannot print until you've fixed the problem.

Document finished. Ready for next document

Logging level: 3 Type: Informational Your document should be in the output tray of your printer.

Document has been printed

Logging level: 3 Type: Informational Your document should be in the output tray of your printer.

Duplex user maintenance, perform: *xxx* **duplex maintenance**

Logging level: 1 Type: Warning See your printer's Operator's Guide for more information.

Duplexer cover is open

Logging level: 1

Type: Warning

Close the duplexer cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

You cannot print until you've fixed the problem.

Duplexer paper path is not properly seated

Logging level: 1

Type: Warning

Correct the duplexer paper path. See your printer or see your printer's Operator's Guide for more information.

You cannot print until you've fixed the problem.

Duplexer unit error

Logging level: 1

Type: Error

There is a fatal error in the duplexer mechanism. Contact Digital customer services for more information.

Duplexer unit is jammed

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Your job will finish printing without losing pages when the jam is fixed.

Engine command buffer overflow – reboot PrintServer

Logging level: 1

Type: Error

Power cycle the PrintServer printer. Turn off the power, wait several seconds, and turn on the power to the PrintServer printer.

Exitserver has been executed – permanent state may be changed

Logging level: 0 Type: Warning

The PostScript file was printed, but persistent PostScript system parameters may have been altered when the PostScript <u>exitserver</u> operator was executed.

Face down stacker cover is open

Logging level: 1

Type: Warning

Close the stacker cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

You cannot print until you've fixed the problem.

Face down stacker is full

Logging level: 1

Type: Warning

The face down stacker is full with completed print jobs. Remove the completed jobs so the printer can continue printing.

Face down stacker is jammed

Logging level: 1

Type: Warning

Your job will not print. Fix the jam in the face down stacker. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Your job will finish printing without losing pages when the jam is fixed.

Face down stacker unit error

Logging level: 1

Type: Error

There is a fatal error in the face down stacker mechanism. Contact Digital customer services for more information.

Function is not implemented

Logging level: 3

Type: Error

The PrintServer printer was asked via software to perform a function that is not implemented. The printer was unable to meet the request and logged the occurrence with this message. This is a highly unlikely occurrence, and it if recurs, please contact Digital.

Fuser unit absent or improperly seated

Logging level: 1 Type: Warning Make sure the fusing unit is installed correctly. Contact Digital customer services.

General user maintenance, perform: xxx maintenance

Logging level: 1

Type: Warning

You need to perform general user maintenance soon. Your printer will not print jobs until the maintenance is performed. See the <u>PrintServer Supplies Kit Guide</u> for instructions.

Idle

Logging level: 3 Type: Informational There are no jobs printing on your printer now.

Incorrect media in LCIT

Logging level: 1

Type: Warning

The paper or other media is the wrong size for the lower capacity input tray (LCIT).

Your printer will not print until you reset the size control wheel on the LCIT. Remove the paper, reset the size guide to match the size of the paper you are using, replace the paper, close the door. See your printer's Operator's Guide for more information.

Incorrect media in lower paper tray

Logging level: 1

Type: Warning

The paper or other media is the wrong size for the lower paper tray.

Your printer will not print until you print from an input tray that matches the size of the paper, or replace the media in the lower paper tray with the correct size for the tray. See your printer's Operator's Guide for more information.

Incorrect media in upper paper tray

Logging level: 1

Type: Warning

The paper or other media is the wrong size for the upper paper tray.

Your printer will not print until you print from an input tray that matches the size of the paper, or replace the media in the upper paper tray with the correct size for the tray. See your printer's Operator's Guide for more information.

Job xxx Aborted by Server Management

Logging level: 1

Type: Informational

The specified job was canceled because a privileged user or system manager canceled it remotely via the PrintServer printer's remote console utility.

Job xxx Aborted

Logging level: 3

Type: Error

The specified job was terminated for one of the following reasons. Take the actions recommended for the appropriate problem:

- You deleted an active job on the printer.
- PostScript requested that the job be aborted due to a printer or internal error. In this case, another error message provides specific information about the required action.
- The symbiont process stopped. In this case, contact Digital and give a description of your DECprint Supervisor configuration and the circumstances under which this error occurred.
- An internal error occurred in the job controller.

Job acceptance is disabled – job rejected

Logging level: 3

Type: Warning

You submitted a print job to a PrintServer printer that cannot accept jobs. Enable job acceptance on that PrintServer.

Job acceptance is enabled via remote management or via the printer's management daemon. Refer to the <u>PrintServer Supporting Host Software Management Guide</u> for more information.

LCOS paper shelf is missing or misaligned

Logging level: 1

Type: Warning

Your printer will not print until this problem is fixed. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Large capacity stacker cover is open

Logging level: 1

Type: Warning

Close the stacker cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

You cannot print until you've fixed the problem.

Large capacity stacker is full

Logging level: 1

Type: Warning

The large capacity stacker is full with completed print jobs. Remove the completed jobs so the printer can continue printing.

Large capacity stacker is jammed

Logging level: 1

Type: Warning

Your job will not print. Fix the jam in the large capacity stacker. See instructions on the label of your printer or see your printer's Operator's Guide for more information. Your job will finish printing without losing pages when the jam is fixed.

Large capacity stacker unit error

Logging level: 1

Type: Error

There is a fatal error in the large capacity stacker mechanism. Contact Digital customer services for more information.
Large capacity tray cover is open

Logging level: 1

Type: Warning

Close the tray cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

You cannot print until you've fixed the problem.

Lower output tray full

Logging level: 1

Type: Warning

The lower output tray is full with completed print jobs. Remove the completed jobs so the printer can continue printing.

Lower paper tray is missing or misaligned

Logging level: 1

Type: Warning

Your printer will not print until this problem is fixed. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Mailbox stacker unit error

Logging level: 1

Type: Error

There is a fatal error in the mailbox stacker mechanism. Contact Digital customer services for more information.

Manual feed mode, insert media

Logging level: 3

Type: Informational

Digital's PrintServer 17 has a manual feed mode. This mode was set "True" prior to the submission of the print job. You should either:

- Insert the paper into the manual feed slot

- Delete your job

- Change the PrintServer printer's mode to one of the valid input trays and reprint your job Refer to the PrintServer 17 printer documentation for more information on manual feed mode.

Media differs from LCOS setting – going to top tray

Logging level: 1 Type: Warning The paper or other media is the wrong size for the setting on the lower capacity output stacker (LCOS).

See your printer's Operator's Guide for more information.

Media incompatible with duplexer or output device

Logging level: 1

Type: Warning

The paper or other media is the wrong size for the duplexer or output tray.

Your printer will not print until you select a paper size that can be handled by the duplexer or the output tray you are using.

See your printer's Operator's Guide for more information.

Media too small for LCOS – going to top output tray

Logging level: 1

Type: Warning

The paper or other media is the wrong size for the setting on the lower capacity output stacker (LCOS). The printer will send your completed print job to the top output tray instead because it will handle the larger size paper. Change the paper guide setting on the LCOS to fix this problem.

See your printer's Operator's Guide for more information.

OPC drum absent or improperly seated

Logging level: 1 Type: Warning

You might see this message if you have a PrintServer 32, a PrintServer 40, or a turbo PrintServer 20. See the <u>PrintServer OPC Drum Kit Guide</u> for information.

OPC drum needs replacement

Logging level: 1

Type: Warning

You might see this message if you have a PrintServer 32, a PrintServer 40, or a turbo PrintServer 20. See the <u>PrintServer OPC Drum Kit Guide</u> for information.

Operating System error detected – **error was:** *xxx*

Logging level: 0

Type: Error

Power cycle the PrintServer printer. Turn off the power, wait several seconds, and turn on the power to the PrintServer printer.

Optional feeder is unavailable, install optional feeder

Logging level: 2

Type: Warning

You tried to use an input device that is not installed. Install the optional feeder or change the input device you specified.

Optional output device cover is open

Logging level: 3

Type: Warning

Close the device cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

You cannot print until you've fixed the problem.

Optional output device tray xxx full

Logging level: 2

Type: Warning

The specified output tray is full with completed print jobs. Remove the completed jobs so the printer can continue printing.

Optional output device tray full

Logging level: 2

Type: Warning

The output tray is full with completed print jobs. Remove the completed jobs so the printer can continue printing.

Output being delivered to lower tray

Logging level: 3 Type: Informational Requires no action. The printed pages are being sent to the lower output tray.

Output being delivered to upper tray

Logging level: 3 Type: Informational Requires no action. The printed pages are being sent to the upper output tray.

Paper Jam – Clear top output tray

Logging level: 3

Type: Warning

Your job will not continue to print. Fix the jam in the top output tray. See instructions on the label of your printer or see your printer's Operator's Guide for more information. Your job will finish printing without losing pages when the jam is fixed.

Paper Jam – Open side door to clear paper path

Logging level: 3

Type: Warning

Your job will not continue to print. Fix the jam in the paper path. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Paper Jam – Optional input device

Logging level: 3

Type: Warning

Your job will not continue to print. Fix the jam in the input device area. See instructions on the label of your printer or see your printer's Operator's Guide for more information. Your job will finish printing without losing pages when the jam is fixed.

Paper Jam – Optional output device

Logging level: 3

Type: Warning

Your job will not continue to print. Fix the jam in the output device area. See instructions on the label of your printer or see your printer's Operator's Guide for more information. Your job will finish printing without losing pages when the jam is fixed.

Paper feed slot paper jam, clear cassette area

Logging level: 3

Type: Warning

Your job will not continue to print. Fix the jam in the paper cassette. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Paper jam first occurred at the optional output device

Logging level: 2

Type: Warning

Your job will not continue to print. Fix the jam starting at the output device. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred due to cover open

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start by closing the open cover first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred due to engine fault

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Cabinet

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the cabinet area first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Duplexer Feedpath

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the duplexer paper path first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Duplexer Transport Area

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the duplexer transport area first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Eject Area

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the paper eject area first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Fuser Area

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the toner fusing area first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in LCIT Feedpath

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the LCIT paper path first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Lower Feedpath

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the lower feed path first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Lower Transport Area

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the lower transport area first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Main Transport Area

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the main transport area first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Upper Feedpath

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the upper feed path area first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.

Paper jam first occurred in Upper Transport Area

Logging level: 1

Type: Warning

Your job will not continue to print. Fix the jam. Start at the upper transport area first. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Close all the printer doors and see if another error occurs. Refer to LED display on the printer to see where the jam is located.
Paper output cover is open

Logging level: 1

Type: Warning

Close the output cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

You cannot print until you've fixed the problem.

Pending Job xxx Aborted

Logging level: 3 Type: Informational The pending print job was terminated by you before it started to print.

Perform user maintenance

Logging level: 1

Type: Informational

Please clear paper jam caused by DPX feed path

Logging level: 1

Type: Warning

Fix the paper jam in the DPX feed path. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Please clear paper jam caused by DPX transport station

Logging level: 1

Type: Warning

Fix the paper jam in the lower portion of the printer. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Please clear paper jam caused by fatal engine error

Logging level: 1

Type: Warning

Fix the paper jam. Refer to LED display on the printer to see where the jam is located. Clear the jam location shown there then close all the doors on the printer. If you cannot locate the jam, check the Event Viewer on your Windows NT system and see if you are also logging any hardware or software errors. If all else fails, contact Digital customer services for more information.

Please clear paper jam caused by fusing unit

Logging level: 1

Type: Warning

Fix the paper jam in the fusing unit of the printer. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Please clear paper jam caused by lower transport station

Logging level: 1

Type: Warning

Fix the paper jam in the lower transport station. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Please clear paper jam caused by main transport station

Logging level: 1

Type: Warning

Fix the paper jam in the main transport station. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Please clear paper jam caused by opened cover

Logging level: 1

Type: Warning

Fix the paper jam and close the open cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Please clear paper jam caused by optional output device

Logging level: 2

Type: Warning

Fix the paper jam. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Please clear paper jam caused by table unit

Logging level: 1

Type: Warning

The turbo PrintServer 20 and PrintServer 32 printers have a lower section in the cabinet called the table unit, where the duplexer mechanism is located. Open the lower door on the front of the printer and follow the jam clearance instructions on the label.

Please clear paper jam caused by upper transport station

Logging level: 1

Type: Warning

Fix the paper jam in the upper transport station. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Please reboot the PrintServer – FATAL ERROR

Logging level: 0

Type: Error

Power cycle the PrintServer printer. Turn off the power, wait several seconds, and turn on the power to the PrintServer printer.

PostScript fatal error at PC xxx

Logging level: 1

Type: Warning

This error indicates a software error in the Adobe PostScript interpreter. Since it is a warning, it is likely your job completed and you are not likely to experience any side effects in subsequent print jobs.

However, if this error continues with any marked frequency, contact Digital customer services. Digital will work with Adobe to identify and resolve your problem.

PostScript controller state is inconsistent

Logging level: 1

Type: Warning

This error indicates a software error in the Adobe PostScript interpreter. Since it is a warning, it is likely your job completed and you are not likely to experience any side effects in subsequent print jobs.

However, if this error continues with any marked frequency, contact Digital customer services. Digital will work with Adobe to identify and resolve your problem.

PostScript quit operator has been executed

Logging level: 1

Type: Warning

This is an informational message indicating a change in the state of the PostScript code. No user action is required.

Print Engine 100,000 page maintenance required

Logging level: 1

Type: Informational

Print Engine 200,000 page maintenance required

Logging level: 1

Type: Informational

Print Engine 50,000 page maintenance required

Logging level: 1

Type: Informational

Print Engine cover is open

Logging level: 1

Type: Warning

Close the cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

You cannot print until you've fixed the problem.

Print Engine driving unit error

Logging level: 1

Type: Error

There is a fatal error in the driving unit mechanism. Contact Digital customer services for more information.

Print Engine error has been corrected

Logging level: 1

Type: Success

You successfully corrected the print engine error. The printer can print jobs after it completes a warmup.

Print Engine fusing error

Logging level: 1

Type: Error

There is a fatal error in the fusing mechanism. Contact Digital customer services for more information.

Print Engine fusing unit setting is incorrect

Logging level: 1 Type: Warning Make sure the fusing unit setting is correct. Contact Digital customer services.

Print Engine hardware error 134 – Re-insert main charger

Logging level: 1

Type: Warning

Re-insert the main charger. If there is still a hardware error, contact Digital customer services for more information.

Print Engine hardware error: xxx

Logging level: 1

Type: Error

There is a fatal error in the printer hardware. Contact Digital customer services for more information.

Print Engine has gone off line

Logging level: 1

Type: Warning

This is an informational message indicating a change in your PrintServer printer's state. It went off line because someone pressed the PAUSE button on the front panel. To put it back on line, press the RESUME button on the printer's front panel.

Print Engine has gone online

Logging level: 1 Type: Informational Jobs may be printed after the printer is back online and completes its warmup.

Print Engine is in warmup state

Logging level: 1 Type: Informational The printer will be ready to print after it has completed its warmup.

Print Engine is not ready

Logging level: 1

Type: Warning

This is an informational message indicating a change in your PrintServer printer's state. This message is usually followed by a message (although sometimes it is preceded by a message) that tells you WHY it is not ready. Usually the printer returns to ready state on its own (for instance, it might have been interrupted while warming up).

Print Engine large capacity paper tray is jammed

Logging level: 1

Type: Warning

See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Print Engine lower paper tray is jammed

Logging level: 1

Type: Warning

See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Print Engine oil supply low

Logging level: 1

Type: Informational

This message is displayed only for a PrintServer 40. Contact Digital customer services for more information.

Print Engine optical unit error

Logging level: 1

Type: Error

There is a fatal error in the optical unit mechanism. Contact Digital customer services for more information.

Print Engine paper eject section is jammed

Logging level: 1

Type: Warning

This is a printer message indicating that your printer has a paper jam in the paper eject section. Clear the paper jam.
Print Engine paper feed unit error

Logging level: 1

Type: Error

There is a fatal error in the paper feed mechanism. Contact Digital customer services for more information.

Print Engine power supply unit error

Logging level: 1

Type: Error

There is a fatal error in the power supply mechanism. Contact Digital customer services for more information.

Print Engine ready

Logging level: 1

Type: Success

The printer is finished with its warmup and will begin printing when someone sends a job to it.

Print Engine toner cartridge setting is incorrect

Logging level: 1 Type: Warning See the <u>PrintServer Toner Kit Guide</u> for information.

Print Engine toner supply is exhausted

Logging level: 1

Type: Warning

Replace the toner cartridge and cleaning pad. See the <u>PrintServer Toner Kit Guide</u> for information.

Print Engine toner supply low

Logging level: 1 Type: Informational See the <u>PrintServer Toner Kit Guide</u> for information.

Print Engine transport path setting is incorrect

Logging level: 1 Type: Warning Fix the transport path setting. See instructions on the label of your printer. You cannot print until you've fixed the problem.

Print Engine transport section is jammed

Logging level: 1

Type: Warning

This is a printer message indicating that the printer has a paper jam in the transport section. Clear the paper jam at the printer.

Your job will finish printing without losing pages when the jam is fixed.

Print Engine unknown error status: xxx, xxx

Logging level: 1

Type: Error

There is a hardware error in the printer. Refer to the printer operator's guide or call Digital customer services. Contact Digital customer services for more information.

Print Engine upper paper tray is jammed

Logging level: 1

Type: Warning

See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Your job will finish printing without losing pages when the jam is fixed.

Print engine not responding to inquiry

Logging level: 3

Type: Error

This message indicates a possibly serious hardware or software error. If the printer appears to be in an unusable state after this message is displayed, turn the power off and turn the power back on again.

If the problem persists, contact Digital customer services.

Print engine paper jam

Logging level: 3

Type: Warning

See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Your job will finish printing without losing pages when the jam is fixed.

Print engine side cover is open

Logging level: 1

Type: Warning

Close the side cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

You cannot print until you've fixed the problem.

PrintServer is currently disabled and cannot accept jobs

Logging level: 1

Type: Warning

You submitted a print job to a PrintServer printer that cannot accept jobs. Enable job acceptance on that PrintServer.

Job acceptance is enabled via remote management or via the printer's management daemon. Refer to the <u>PrintServer Supporting Host Software Management Guide</u> for more information.

Printer requires service: code = *xxx xxx*

Logging level: 1 Type: Warning Contact Digital customer services for more information.

Problem Unknown

Logging level: 0

Type: Error

This message indicates a possibly serious hardware or software error. If the printer appears to be in an unusable state after this message is displayed, turn the power off and turn it on again.

If the problem persists, contact Digital customer services.

Replace OPC drum

Logging level: 1

Type: Informational

You might see this message if you have a PrintServer 32, a PrintServer 40, or a turbo PrintServer 20. See the <u>PrintServer OPC Drum Kit Guide</u> for information.

Rest of Job (to EOJ) will be ignored

Logging level: 1

Type: Error

A PostScript language error has caused the PostScript interpreter to abort the printing job. Details of the error's cause appear in a preceding message. This error is usually caused by incorrect PostScript syntax in the submitted job from either an application error or driver error, or incorrect hand-created PostScript code.

The job will be flushed, that is, no more pages of this job will be printed. You must resubmit the job after you fix the PostScript syntax problem. See the Event Viewer for details on the cause of your specific error.

The printer will resume and print the **next** job in sequence.

Side output tray full

Logging level: 1

Type: Warning

The side output tray is full with completed print jobs. Remove the completed jobs so the printer can continue printing.

Side tray not correctly positioned

Logging level: 1

Type: Warning

Your printer will not print until this problem is fixed. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

See also: Adding Paper to Your Printer

Successful completion

Logging level: 3 Type: Success The print job was completed.

Toner low or not distributed properly – replace toner cartridge

Logging level: 2 Type: Warning See the <u>PrintServer Toner Kit Guide</u> for information.

Toner low or not distributed properly – **replace:** *xxx*

Logging level: 1 Type: Warning See the <u>PrintServer Toner Kit Guide</u> for information.

Unable to open Event Log file xxx

Logging level: 3

Type: Error

The supporting host system for this PrintServer printer either has a full disk or file protection problems. The printer's supporting host daemon cannot open or write to the file. Refer to the <u>PrintServer Supporting Host Software Management Guide</u> for more information.

Unavailable paper destination selected

Logging level: 1

Type: Warning

You selected a non-existent paper output path. Your printer will not print until this problem is fixed. Select another output tray.

See your printer's Operator's Guide for more information.

Upper access door paper jam, open top cover

Logging level: 3

Type: Warning

See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Your job will finish printing without losing pages when the jam is fixed.

Upper output tray full

Logging level: 1

Type: Warning

The upper output tray is full with completed print jobs. Remove the completed jobs so the printer can continue printing.

Upper paper tray is missing or misaligned

Logging level: 1

Type: Warning

Your printer will not print until this problem is fixed. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

See also: Adding Paper to Your Printer

Upper unit cover open, close top cover

Logging level: 3

Type: Warning

Close the upper unit cover. See instructions on the label of your printer or see your printer's Operator's Guide for more information.

Your job will finish printing when the cover is closed.

Valid password presented to PrintServer

Logging level: 0

Type: Success

This is an informational message. Using the PostScript <u>exitserver</u> operator, someone sent the PrintServer printer a password to exit the <u>server loop</u> and may have **persistently changed the state of the printer.** This might cause problems: future jobs may print differently than you expect. or valid jobs may fail.

This persistent state change can be erased simply by power cycling the PrintServer printer. Most of the time this is a harmless message triggered by the permanent loading of a font or other printer resource.

WARNING: Exiting the server loop and making permanent changes to state is a powerful PostScript feature, but must be performed only by a person with PostScript expertise. Otherwise, the state change may leave the printer in an unstable and useless state.

See the <u>PrintServer Supporting Host Software Management Guide</u> for more information about permanent loading of PostScript resources outside the server loop.

Adding Paper to Your Printer

What the Network Printing Software for Windows Will Do for You

No other vendor provides network printing capability with the same built-in features as Digital's Network Printing Software for Windows. With this software, you will:

- Have a printing system that improves print quality.
- Print files faster.
- Print to any Digital printer **anywhere** on the network.

Create a PostScript file that reads the defaults of the Digital printer where it is printed and prints it the way you expected, making better use of a shared pool of printers.

- See real-time status of your print job.
- Select how you want your file to be printed --
 - Which paper trays to use.
 - Whether to print duplex (double-sided) or simplex (single-sided).
 - And more!
- Select how you want to set up your printer ---
 - Whether to have a banner page to separate print jobs.
 - Which paper trays to use by default.
 - How to track printer usage.
 - And more!

See also:

Seeing Print Job Status and Error Messages

Printing to a PrintServer Printer in Different Environments

Special Feature from Digital to Eliminate Printer-Specific Forms

About Digital PrintServer Printers

Licensing Information for Network Printing Software for Windows

Warranty and Service Information

What the Network Printing Software for Windows Will Do for You

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See real-time status of your print job. +

+ Select how you want your job to be printed --

- Which paper trays to use. _
- Whether to print duplex (double-sided) or simplex (single-sided). +
 - Select how you want to set up your printer --
 - Whether to have a banner page to separate print jobs. -
 - Which paper trays to use by default. -
 - How to track printer usage. -
 - _ And more!

See also:

Seeing Print Job Status

Special Feature from Digital to Eliminate Printer-Specific Forms

Printing to a Desktop Printer in Different Environments

About Digital Desktop Printers

Licensing Information for Network Printing Software for Windows

Warranty and Service Information
Seeing Print Job Status and Error Messages

Network Printing Software for Windows lets you take advantage of both your network and the built-in capability of Digital PrintServer printers to communicate print job and printer status in real time. These status messages and error handling features make your workday more efficient.

After the software is installed and your printer is set up to print, try these tests to get a sample of Digital printers working with your Windows NT system:

Send a file to the printer and watch its progress. When the status line reads "Printing Complete", your print job is ready to be picked up.

Send a large file to the printer and delete it as it is printing. The print job will be deleted. Then you can print other files successfully without any side effects to your system, the printer, or the network.

Send a file to a PrintServer printer; rush to the printer and open a cover. Check the print queue; the status line should read "Cover Open". So, you can tell if your print job is delayed and why.

Close the cover and the printer will resume printing your file at the point at which it was interrupted. No pages will be missing!

Seeing Print Job Status

Network Printing Software for Windows lets you see your print job status in real time.

After the software is installed and your printer is set up to print, try these tests to get a sample of Digital printers working with your Windows NT system:

Send a file to the printer and watch its progress in the print queue. When the status line reads "Printing Complete", your print job is ready to be picked up.

Send a large file to the printer and delete it as it is printing. The print job will be deleted. Then you can print other files successfully without any side effects to your system, the printer, or the network.

Printing to a Single PrintServer Printer from Multiple System Environments

Network Printing Software for Windows supports many different operating environments. A direct printing environment (click here

to see a graphical depiction) is one where several workstations or Windows NT servers communicate with a Digital network printer over TCP/IP without any intervening servers. Workstations and servers alike receive print and job status directly from the network printer.

A client-server printing environment (click here

to see a graphical depiction) is one where several workstations are networked to a Windows NT server.

A mixed operating system client-server printing environment (click here to see a graphical depiction) is one where workstations running different operating systems are networked to a Windows NT server. A Windows NT server can connect to MS-DOS systems running Windows for Workgroups 3.11 and from OS/2 systems running IBM's LANserver software. Also, a Windows NT Advanced Server system can connect to a Macintosh system.

In any client-server environment, the server communicates directly with a Digital network printer; it routes print jobs from client workstations to the printer and sends individual print job status back to the client workstations that originated the print job. You can find out if toner ran out part way through your print job, or if the printer jammed so that you can fix the problem and receive your completed job -- without any pages missing!

Different network protocols can exist between the workstation and server machines, but the server communicates with the printer over TCP/IP.







Printing to a Single Desktop Printer from Multiple System Environments

Network Printing Software for Windows supports many different operating environments. A direct printing environment (click here

to see a graphical depiction) is one where several workstations or Windows NT servers communicate with a Digital network printer over TCP/IP without any intervening servers. Workstations and servers alike receive job status directly from the network printer.

A client-server printing environment (click here

to see a graphical depiction) is one where several workstations are networked to a Windows NT server.

A mixed operating system client-server printing environment (click here to see a graphical depiction) is one where workstations running different operating systems are networked to a Windows NT server. A Windows NT server can connect to MS-DOS systems running Windows for Workgroups 3.11 and from OS/2 systems running IBM's LANserver software. Also, a Windows NT Advanced Server system can connect to a Macintosh system.

In any client-server environment, the server communicates directly with a Digital network printer; it routes print jobs from client workstations to the printer and sends individual print job status back to the client workstations that originated the print job. The print queue will display messages such as "Printing Started" and "Printing Completed" so that you know when your job is finished. Different network protocols can exist between the workstation and server machines, but the server communicates with the printer over TCP/IP.







About Digital PrintServer Printers

Network Printing Software for Windows, V5.1-11MS provides the capability to print directly to Digital PrintServer printers from Windows[™] systems, and to load PrintServer software onto your Windows system so you can configure and manage your PrintServer printer to take advantage of the special features built into it.

The printers supported include:

PrintServer 17	PrintServer 17/600
PrintServer 20	turbo PrintServer 20
PrintServer 32	PrintServer 32 plus
PrintServer 40 Plus*	PrintServer 20 Kanji*
PrintServer 32 Kanji*	turbo PrintServer 20 Kanji*

PrintServer 40 Plus Kanji*

* You CANNOT load the PrintServer software onto these printers from Windows systems.

A few of the special capabilities of a Digital PrintServer printer are:

- **Authentication, remote management**
- Print job status
- + Network protocols.
- Predictable job completion
- Adobe PostScript standard
- Works on many platforms

Authentication, remote management

Two new features in V5.1-11MS of Network Printing Software for Windows let you monitor and manage any PrintServer printer on your TCP/IP network. PRISM, Digital's Printer Status Manager, lets you monitor the status of PrintServer printers by providing notification of printers that need attention or need supplies, so that you can keep all your printers accessible and available to users. Digital's Remote Console lets you manage PrintServer printers (if you have the printer's password) so that you can make operational changes to the printer and keep it running efficiently.

Print job status

The PrintServer printer supplies detailed print job status visible through the Windows NT Event Viewer: when your print job started, finished, and what happened during the job (if the PrintServer printer ran out of paper, is running low on toner, or is jammed). You receive all this information without ever leaving your chair, even if the PrintServer printer is in another building. Or on another continent.

Network protocols

Your Digital PrintServer printer has a real network address. It is a host on your <u>TCP/IP</u> <u>protocol</u> network and an end node on your <u>DECnet protocol</u> network.

Predictable job completion

Your PrintServer printer **automatically reprints** any pages that are lost if the printer runs out of paper or toner, if a mechanical problem occurs, if a door is open, or if a paper jam occurs. It will not duplicate pages that have been successfully delivered.

Adobe PostScript standard

Digital's PrintServer printers offer a <u>PostScript</u> Level 1 and Level 2 page description language interpreter. Digital and Adobe have worked closely to ensure that your PrintServer printer conforms perfectly to the Adobe PostScript standard outlined in Adobe's <u>PostScript</u> <u>Language Reference Manual, 2nd Edition</u> (the "red book").

Works on Many Platforms

A single PrintServer printer can be shared among a large number of different operating system platforms, on both <u>TCP/IP protocol</u> and <u>DECnet protocol</u> **simultaneously** (where available). The list of network transports and printing platforms is growing continuously. Platforms currently supported include:

- Windows NT
- Windows 95
- SunOS
- HP-UX
- IBM-AIX
- SCO UNIX
- SCO UNIX/DECadvantage
- Novell NetWare
- Sun Solaris
- Silicon Graphics IRIX
- AT&T Unison
- OSF/1 AXP
- OpenVMS VAX and Alpha
- ULTRIX

Contact your Digital Sales representative for more information on printing from these environments to your PrintServer printer.

About Digital Desktop Printers

Network Printing Software for Windows, V5.1-11MS provides support for printing directly to networked Digital desktop printers from Windows NT[™] systems, including:

DEClaser 3500 with Network Interface Card via TCP/IP DEClaser 5100 with Network Interface Card via TCP/IP DECcolorwriter 1000 with RapidPrint network server via TCP/IP

Both the Network Interface Card and the RapidPrint network server can communicate with these network protocols:

TCP/IP Novell EtherTalk LAT **DEClaser 3500** -- a 12-page per minute laser printer suitable for small to medium group usage of up to 10 employees. It prints at 600 x 600 dots per inch and supports PostScript Level 2, PCL5e, ANSI, and ASCII. The DEClaser 3500 has 53 resident fonts and provides a special feature, called DECimage, which increases PostScript resolution with 256 levels of gray.

The DEClaser 3500 printer comes standard with three interfaces: serial, parallel, and the Network Interface Card. All three interfaces are available simultaneously. That means you can use one printer to support PCs, Macintosh systems, UNIX workstations, PC LANs, and Digital and IBM terminal networks.

DEClaser 5100 -- a 8-page per minute laser printer suitable for small to medium group usage of up to 10 employees. Its standard print setting is 600 x 600 dots per inch, but 1200 x 1200 dpi is also available. It supports PostScript Level 2, PCL5e, and ASCII. The DEClaser 5100 has 73 scaleable PostScript fonts and 47 PCL fonts, and provides a special feature, called DECimage, which increases PostScript resolution with 256 levels of gray.

The DEClaser 5100 printer comes standard with three interfaces: serial, parallel, and AppleTalk. All three interfaces are available simultaneously. That means you can use one printer to support PCs, Macintosh systems, UNIX workstations, PC LANs, and Digital and IBM terminal networks.

DECcolorwriter 1000 is a fast 2-page per minute, 600 x 300 dots per inch thermal wax printer. It uses the Pantone standard color system, and supports PostScript Level 2, HP-GL, and PCL5. It has 17 resident fonts and up to 39 optional fonts.

Warranty and Services Information

Software Warranty

Warranty for this software product is provided by Digital with the purchase of a license for the product as defined in the Software Warranty Addendum included with the Software Product Description (SPD) for this product.

For More Information ...

For more information on licensing, Software Product Descriptions (SPD), and other topics:

Telephone...

In the US, call the Digital Components and Peripherals Customer Support Center at 1-800-354-9000.

In Europe, call the following toll-free numbers:

Austria	0660.6214
Belgium	0800.1.5246
Denmark	8001.0108
Finland	08001.13395
France	05.42.34.63
Germany	0130.82.1996
Italy	1678.700.61
Ireland	1800.55.3352
Israel	177.330.6901
Luxembourg	0800.2898
Netherlands	06.022.2142
Norway	8001.1240
Sweden	02.0797.338
Switzerland	155.2390
UK	0800.96.2769

If a toll free number is not available for your country, call 33-92 95 50 60.

Internet mail...

Europe	vhc_support@ulysse.enet.dec.com
U.S. and other	printers@digital.com
countries	

Licensing Information

Network Printing Software for Windows, V5.1-11MS, is furnished under the licensing provisions of Digital Equipment Corporation's Standard Terms and Conditions.

The license to use this software is included with each PrintServer, DEClaser, or DECcolorwriter printer.

This license give users the right to:

Use the software on a single CPU or equipment configuration and the right to copy this software for use on any CPU or equipment configuration on the local area network that requires access to a PrintServer, DEClaser, or DECcolorwriter printer.

See Also Warranty and Services Information

Printing for Power Users

Network Printing Software for Windows allows you to print directly to Digital network printers. You can print documents to your network printers just as you would to any PostScript printer.

Printing to a network printer differs from printing to a physically connected printer. You can print from the command prompt to a serial-line printer by specifying the copy command and a port name, such as LPT1. However, you cannot use the same method to print to a network printer.

These topics describe the typical ways to print documents: Printing from Applications Printing PostScript Files Printing Text Files

Refer to the following topics to perform advanced operations: Printing from Other Operating Systems Using Printer Forms when Printing Files

Printing from Applications

Printing from applications to a Digital network printer is done exactly as it is with any other type of printer. Use the Print Setup menu item from within your application to select the desired printer and options, and use the Print menu item to print documents.

If you decide to use the Print to File option from your application, and set up your Job Defaults to the NoTraySelection tray and the PrintDefaultLetter form. This way, you can print the PostScript file on any shared Digital network printer.

Note: The NoTraySelection is not available for DEClaser 3500 printers and DECcolorwriter 1000 printers through RapidPrint.

Printing PostScript Files

You can print <u>PostScript</u> files from the command prompt. PostScript files may be created by printing from an application to a file, or by an application on another system.

Note: This technique applies only to PostScript files. Text files are handled differently. See <u>Printing Text Files</u>.

To Print PostScript Files from the Command Prompt:

- 1. Share your network printer on the network.
- 2. Use the Windows NT **net use** command to connect the shared printer to a device. For example,

NET USE LPT2: \\computer-name\printer-share-name

3. Use the **print** command to print the PostScript file to the device.

or

- 1. Share your network printer on the network.
- 2. Use the **print** command to print the PostScript file to the device. For example, PRINT /D:\\ computer-name\printer-share-name filename

See Also: <u>Printing Text Files</u> <u>Help on Windows NT Commands</u>

Printing Text Files

You can print text files to a network printer. The name "text file" is somewhat misleading: any file that can be viewed with the Notepad can be printed as a text file. This includes .ini files, command files, and some data files.

To Print Text Files:

1. Use Notepad to display the file.

2. Use Notepad's Print Options menu item to select the desired printer and options.

3. Use Notepad's Print menu item to print the file.

See Also: <u>Printing PostScript Files</u> <u>Help on Notepad</u>

Using Printer Forms when Printing Files

The most efficient way to print is to use pre-defined forms as defaults. When you do this, you override the default settings of the networked printer. See Help for specific help creating a map between forms (paper sizes) and paper trays, and selecting a global default for all print jobs you send from your PC.

When you select to "print to a file" from your application, your system reads your default printer and the form and tray settings you specified through your printer's setup. Then it adds PostScript code with that information to the beginning of the PostScript file created by your application. Although the PostScript file may be printed on other PostScript printers without an error, some of the customization is misinterpreted by the printer where your file is printed.

See also:

Special Feature from Digital to Eliminate Printer-Specific Forms

Special Feature from Digital to Eliminate Printer-Specific Forms

A special feature offered with V5.1-11MS of Network Printing Software for Windows is new tray selections to use with supported network Digital printers to eliminate printer-specific PostScript code.

The best way to "print to a file" to create a PostScript file that you can give to other people to print on their own printers is to select the "NoTraySelection" tray when you are setting up a default form for your print jobs.

The new tray settings let you:

Better use a pool of shared network printers by setting up PostScript files so they can be printed correctly by any of the printers.

Confidently share PostScript files with other people at remote sites -- whatever they print will be the way you expected the file to print.

Specify specific input trays on your printer.

If you select the "ForcePrinterDefault" tray when creating a PostScript file, the destination printer will use its own default printer tray. You won't be able to override the input tray for the print job.

Note: The NoTraySelection is not available for DEClaser 3500 printers and DECcolorwriter 1000 printers through RapidPrint.

See also:

Using Printer Forms when Printing Files

Managing PrintServer Printers

Managing a Digital network printer from your Windows NT system is almost identical to managing any other <u>PostScript</u> printer. For the most part, you will use standard Printers Folder interfaces to create printers, pause printers, resume printers, control access to printers, share printers on the network, and monitor printers. Some tasks are specific to network printers, for example, configuring the address of the printer so that users on the network can print to the printer.

You **must be logged on as an Administrator** to perform these tasks. Power users can see how the printer is configured, but can't change anything.

These topics describe typical print management tasks:

E Setting Up Client/Server Printing

Managing Ports

Event Logging

Debugging Tools

Network Management with SNMP

For information about PrintServer printer tray defaults, see one of these topics:
Setting PrintServer Printer Tray Defaults
Overriding PrintServer Printer Input and Output Tray Defaults
Returning to PrintServer Printer Default Tray Settings

See Also:

Help for information on general print problems. To get to the help, click on the Start button and then click on Help.

Setting Up Client/Server Printing for PrintServer Printers

Using Network Printing Software for Windows allows you to print directly from any of your systems running Windows NT to any of your Digital network printers. However, you may still want to use two systems running Windows NT in a client/server relationship to print your documents.

Digital recommends using Network Printing Software for Windows by installing it on every system on the local network, rather than sharing printing services.

When sharing print services, one Windows NT system is used as a print server and has Network Printing Software for Windows installed. Network printers are directed by this system, and are shared on the network. Other systems running the Windows NT operating system act as print clients, connecting to the network share created on the server system.

See Also: <u>Licensing Information</u> <u>Printing to a PrintServer Printer in Different Environments</u> <u>Printing from Other Operating Systems</u>

Managing Ports

The Windows NT print system communicates with the network printer through a <u>port</u>. You can configure more than one port connected to the same network printer. This is particularly useful if you want to set different default settings for all jobs printed to that port. For example, one port can be set up so that there are <u>banner pages</u> between print jobs that are printed on blue paper that is in the top tray. Another port to the same printer can be set up without banner pages between jobs.

When you first set up the network printing environment, you will probably need to create several new ports.

Later, if you need to alter the port settings for a Digital network printer, you can easily configure the existing port to new settings.

See Also: <u>Creating Ports</u> <u>Configuring Existing Ports</u>
Configuring Existing Ports

If the address of a network printer changes, or if you want to change the options associated with a printer, you need to configure the port for the network.

Note: You must be a logged in as a member of the <u>Administrators</u> group in order to configure ports.

To modify a network port, follow these directions:

- 1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.
- 2. Select the icon representing the Digital network printer.
- 3. Select Properties from the File menu.

or

Click with the mouse's right-side button.

- 4. Click on the Ports tab.
- 5. Click on the Configure Port... button.
- 6. Modify the fields in the Configure Port -- Digital Network Port Dialog or one of its subsidiary dialogs. If you have questions about a field in the dialog box, choose the Help button.
- 7. Choose the OK button in the Configure Port -- Digital Network Port Dialog.

Event Logging

Events that occur in the Windows NT operating system are logged in an event log that can be viewed with the Event Viewer. Because PrintServer printers operate over the network <u>bidirectionally</u>, they can return messages to the Windows NT operating system. A limited number of messages pertain to the other network printers, but primarily, the event log messages are sent by PrintServer printers. Where appropriate, these messages are logged in the event log.

The logging level of these messages can be controlled. See <u>Debugging Tools</u>.

The event log messages can be viewed in the Event Viewer by selecting the application log. The source name is "PrintServer Software".

See Also: <u>Digital Network Printing Software Event Help</u> <u>Help on Event Viewer</u>

Debugging Tools

Network Printing Software for Windows supports a powerful debugging tool, PrintServer Port Monitor, that can be used by end users and support personnel to get detailed information about printer and operating system states. (Only Administrator accounts can set the logging options.) The debugging tool is used primarily for PrintServer printers and can be used to write information dynamically to the screen and/or to write the same data to a file. **Trace** can be run for long periods of time and writes all information to a file. **Window** runs in memory and writes the same information to the screen.

Since the Window debugging utility runs in memory, it can consume all available dynamic memory if it is not monitored carefully. The Logging Options dialog box provides a Clear button to flush all logged messages and clear memory. If you enable Trace, all the same messages are logged to a file and you can see the log information at any time.

To access the Logging Options dialog box, use the following procedure:

- 1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.
- 2. Select the icon representing the Digital network printer.
- 3. Select Properties from the File menu.

or

Click with the mouse's right-side button.

- 4. Click on the Ports tab.
- 5. Click on the Configure Port... button to change the address of the current port.
- 6. From the Configure Port dialog box, select Options.
- 7. From the Digital Network Printers dialog box, select Logging.

See Also:

Logging Options Dialog

Network Management with SNMP

SNMP, the Simple Network Management Protocol, is an Internet-standard protocol used by many network management applications to monitor network nodes. Network Printing Software for Windows provides an SNMP MIB-II agent so that you can allow the printer to be monitored by your network management applications.

Hardware Prerequisites

SNMP is not available for PrintServer 40 series or PrintServer 20 printers.

Printer	Memory Needed in Printer for SNMP
PrintServer 17	12 MB or more
PrintServer 17/600	20 MB or more is ideal. With 16 MB, limited resident fonts and no PCL5 support are the tradeoffs for SNMP support.
turbo PrintServer 20	16 MB or more is ideal. With 12 MB, you must choose between the image interpreter and SNMP.
PrintServer 32	16 MB or more is ideal. With 12 MB, you must choose between the image interpreter and SNMP.
PrintServer 32 plus	16 MB or more.

Features

Access to the printer's SNMP agent is controlled through the community definitions. You can determine which hosts can access the printer, by defining up to 16 combinations of community name-TCP/IP address-access level (read only or read/write).

You can configure the printer's SNMP agent to send trap messages to as many as 16 community name-TCP/IP address combinations.

The SNMP configuration occurs only when the printer is loaded, or rebooted.

These MIB-II objects are not supported by the SNMP agent in V5.1-11MS of Network Printing Software for Windows:

ipForwDatagrams	ipInDiscards
ipOutDiscards	ipRoutingDiscards
ipRouteAge	icmpInDestUnreachs
icmpInTimeExcds	icmpInParmProbs
icmpInSrcQuenchs	icmpInRedirects
icmpInEchos	icmpInEchoReps
icmpInTimestamps	icmpInTimestampReps
icmpInAddrMasks	icmpInAddrMaskReps
icmpOutErrors	icmpOutDestUnreachs
icmpOutTimeExcds	icmpOutParmProbs
icmpOutSrcQuenchs	icmpOutRedirects
icmpOutEchos	icmpOutEchoReps

icmpOutTimestamps	icmpOutTimestampRe ps
icmpOutAddrMasks	icmpOutAddrMaskRep s
tcpAttemptFails	tcpEstabResets
egp group objects	

Setting PrintServer Printer Tray Defaults

There are two ways to set the PrintServer printer's default tray settings. Digital suggests using the Page and Device Defaults dialogs in Network Printing Software for Windows rather than exiting the PostScript server loop.

Using the PrintServer Printer's Page and Device Defaults to Set Default Trays

Note: You must soft load the PrintServer Software onto the printer to set the PrintServer printer defaults.

For PrintServer printers, you can set tray defaults through the Configure PrintServer dialog's Page Defaults and Device Defaults fields. To get to those dialog boxes, follow these steps:

- 1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.
- 2. Select the icon representing the Digital network printer.
- 3. Select Properties from the File menu.
- 4. Click on the Ports tab.
- 5. Click on the Configure Port button.
- 6. From the Configure Port dialog box, select Options.
- 7. From the Digital Network Printers dialog box, select Configure.
- 8. From the Configure PrintServer dialog, select Device Defaults.
- 9. Set the fields in the Device Defaults dialog to correspond to the physical trays and other options on your PrintServer printer.
- 10.Go back to the Configure PrintServer dialog and select Page Defaults.
- 11.Set the fields in the Page Defaults dialog to correspond to the paper used in the physical trays that you selected as defaults in the Device Defaults.

For example, if you select the input tray for your PrintServer 32 to be Large Capacity Input Tray and Letter size paper (8-1/2 inches x 11 inches) will usually be contained in the tray, then set the Page Default to Letter. If the page size does not match the paper held in the tray, then print jobs will not print correctly.

Exiting the PostScript Server Loop to Set Default Trays

You can also change the printer's default tray settings by submitting a PostScript print job that uses the <u>exitserver</u> operator to exit the <u>server loop</u> and makes a persistent change to the state of the printer. This persistent state change can be erased simply by powering off the PrintServer printer, then, then turning it on.

WARNING: Exiting the server loop and making persistent changes to the printer's state is a powerful PostScript feature, but must be performed only by a person with <u>PostScript</u> expertise.

See Also: <u>Overriding PrintServer Printer Input and Output Tray Defaults</u> <u>Returning to PrintServer Printer Default Tray Settings</u>

Overriding PrintServer Printer Input and Output Tray Defaults

Network Printing Software for Windows allows you to override PrintServer input and output default trays through a simple dialog box to tailor the print jobs users print through this port.

You may want to override the default tray settings if the PrintServer printer trays are always set to print on standard U.S. letter size paper. If many users need to print files on A4 size paper, create a port that specifically meets their needs to print A4 paper. That way, users do not have to rely on their default print job settings and can simply send the file to the port to print on A4 paper.

Note: Changes you make to the default tray settings of the port affect only the jobs users print through this port.

To override PrintServer printer tray default settings:

1. First, add a port. See <u>Adding Ports</u>.

- 2. In the Add Port dialog box, make sure the port type selected is specific to your PrintServer printer. You cannot configure a generic PrintServer port ("PrintServer Printer via TCP/IP".) Select the Options button.
- 3. Choose the Options button and see the <u>PrintServer Printer Options Dialog</u> for more information about these fields that customize tray settings for your print jobs.

See Also:

<u>Returning to PrintServer Printer Default Tray Settings</u> <u>Digital Network Printer Options Dialog</u> <u>Setting PrintServer Printer Tray Defaults</u>

Returning to PrintServer Printer Default Tray Settings

When you select new options for the Digital PrintServer printer through the Digital Network Printer Options dialog box, you **override the default tray settings.**

To **return** to the default tray settings for the PrintServer printer, click on the appropriate boxes in the Digital PrintServer Printer Options dialog box and eliminate the "X" in the box.

Note: Changes you make to the port's tray settings affect only the jobs users print through this port.

See Also: <u>Setting PrintServer Printer Tray Defaults</u> <u>Overriding PrintServer Printer Input and Output Tray Defaults</u>

Printing from Other Operating Systems

Network Printing Software for Windows provides support for printing directly to network printers from Windows NT systems on DECnet protocol and TCP/IP protocol networks.

You can also use your Windows NT system to print files on your printer from MS-DOS or from a Macintosh system.

Printing from Windows for Workgroups

Printing from OS/2 Systems

Printing from Macintosh Systems

Printing from Windows for Workgroups

Systems operating under Windows for Workgroups can connect "out of the box" to the print services offered by Windows NT.

Printing from OS/2 Systems

Systems operating under IBM's OS/2 operating system require IBM's LANserver application to connect to the Windows NT operating system on the network. After LANserver is installed, you can use your Windows NT system to print files from an OS/2 system to a Digital network printer using Network Printing Software for Windows.

Printing from Macintosh Systems

For Macintosh systems to connect to base Windows NT, you need to purchase the NT Advanced Server (NTAS) variant of the Windows NT operating system family. After you install NTAS, you can use your Windows NT system to print files from a Macintosh system to a Digital network printer using Network Printing Software for Windows.

Managing Digital Desktop Printers

Managing a Digital network printer from your Windows NT system is almost identical to managing any other <u>PostScript</u> printer. For the most part, you will use standard Printers Folder interfaces to create printers, pause printers, resume printers, control access to printers, share printers on the network, and monitor printers. Some tasks are specific to network printers, for example, configuring the address of the printer so that users on the network can print to the printer.

You **must be logged on as an Administrator** to perform these tasks. Power users can see how the printer is configured, but can't change anything.

These topics describe typical print management tasks: Setting Up Client/Server Printing Managing Ports Debugging Tools

Setting Up Client/Server Printing for Digital Desktop Printers

Using Network Printing Software for Windows allows you to print directly from any of your systems running Windows NT to any of your Digital network printers. However, you may still want to use two systems running Windows NT in a client/server relationship to print your documents.

Digital recommends using Network Printing Software for Windows **by installing it on every system on the local network**, rather than sharing printing services.

When sharing print services, one Windows NT system is used as a print server and has Network Printing Software for Windows installed. Network printers are directed by this system, and are shared on the network. Other systems running the Windows NT operating system act as print clients, connecting to the network share created on the server system.

See Also: <u>Licensing Information</u> <u>Printing to a Desktop Printer in Different Environments</u> <u>Printing from Other Operating Systems</u>

Troubleshooting

If printing to a Digital network printer is not working as you expect, there may be something wrong. See the Event Viewer for a log of events to narrow down the problem. Enter the event ID number in the <u>Digital Network Printing Software Event Help</u> for detailed information about the messages displayed in the Event Viewer.

If this is your first time troubleshooting Network Printing Software for Windows, consult <u>General Tips</u> first.

Select a symptom from the list below to troubleshoot your system.

Nothing is printed

Banner page is printed, but document isn't printed

Banner page information is incorrect

Only part of the document is printed

Information in the Printers Folder is incorrect

The printer's IP address is not valid on your network

Event log messages give unknown user name and/or printer name

A printer connected to a RapidPrint network server does not print properly

The PrintServer printer's front panel displays a "? 54" message

<u>The PrintServer printer doesn't appear to soft load</u>

Default tray settings don't appear to work

The Status page for a RapidPrint network server does not print

If you know that you need to reset a DEClaser or a RapidPrint to factory defaults, see:

Resetting Factory Defaults on a DEClaser 3500 Printer's Network Interface Card

Resetting Factory Defaults on a DEClaser 5100 Printer's Network Interface Card

Resetting Factory Defaults on a RapidPrint Network Server

See Also

Help on Troubleshooting Printers

General Troubleshooting Tips

- Follow these tips to make troubleshooting easier:
 Set the logging level in the Logging Options Dialog to the maximum value to get the most detailed information possible in the Event Viewer.
- Turn on banner pages to determine if they can print properly.

Symptom: Nothing is printed

There are a number of possibilities for why nothing prints. If you do not have <u>banner</u> pages enabled, enable them now, since they may help to narrow the causes of the problem. Enable the banner pages in the port's Options dialog box.

Select the description of your situation:

The document remains in the print queue with a status of Printing, and nothing happens The document appears to print successfully, but nothing is printed

The banner page is printed, but the document isn't printed

Symptom: The document remains in the print queue with a status of Printing, and nothing happens

The communication to the printer must be checked:

The printer is busy printing one or more jobs from other systems

<u>Check that your system can communicate with the printer</u>
 <u>Check that the network protocol is started</u>

Check to see the network address is correct

Check that the network protocol is started

- 1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.
- 2. Select the icon representing the PrintServer printer.
- 3. Select Properties from the File menu.
- 4. Click on the Ports tab.
- 5. Click on the Configure Port button.
- 6. In the Configure Port -- Digital Network Port Dialog, make sure the port type selected is specific to your printer. In the Configure Port -- Digital Network Port Dialog, check that the correct network protocol is selected.
- 7. Make sure the correct network driver is loaded. Double click the Network icon in the Control Panel.
- 8. Select the Configuration page and check that the TCP/IP protocol is installed (it will be listed on the dialog box if it is). If the protocol is not listed, select the Add-Protocol button and select Microsoft TCP/IP to install it from the operating system media.
- 9. If TCP/IP is installed, select Properties and make sure the IP address is valid for your network and the correct one for your system.

See Also:

Help for information on general print problems. To get to the help, click on the Start button and then click on Help.

Check that your system can communicate with the printer

Once the proper network protocol is started, there may still be reasons why your system cannot communicate with the printer.

Network Printing Software for Windows may be attempting retries to the printer. Check the Event Viewer for messages about retrying communications to the printer. The software will retry once a minute for 30 minutes before it stops trying. If the logging level is set high enough, you will get a message for each retry. Lower levels of logging will only log the last message indicating failure. Set the logging level in the Logging Options Dialog. You must restart your system for the logging level change to take place.

If Network Printing Software for Windows is retrying, it indicates that it cannot reach the printer for some reason. Check that your system can reach the printer. Depending on the network protocol of the printer port, see:

Checking PrintServer printer connectivity over TCP/IP Protocol

Checking DEClaser printer connectivity over TCP/IP Protocol

Checking RapidPrint connectivity over TCP/IP Protocol

If you do have basic connectivity to the printer, your Windows NT system may still not be able to communicate with your printer. For example, there may be network bridges that pass the ping packets, but not the print protocol packets needed to print on the printer. Check with your network administrator about possible network problems.

The printer is busy printing one or more jobs from other systems

Check to see that the network protocol is started, and check to be sure your printer is connected over either a TCP/IP or DECnet network. If the print queue gives the status of your print job as"printing" but nothing is happening, then your printer may be busy printing another job sent to it from another system. (To see the printer's print queue, select your printer in the Printers Folder and select Open from the File menu.)

Wait several minutes until the other print job is complete (the printer might be busy loading fonts or printing pages from that job). Then your job should start printing.

Check to see the port's network address is correct

Check the Add Port dialog box to be sure you entered the correct TCP/IP address for the printer port. (Check this address against the TCP/IP network database for your site.)

If you entered the incorrect network address, your job will retry that address for 30 minutes before failing. To correct the address:

1. Choose Start from the taskbar. Choose "Settings, printers" to get to the Printers Folder.

- 2. Select the icon representing the Digital network printer.
- 3. Select Properties from the File menu.
- 4. Click on the Ports tab.
- 5. Click on the Configure Port button.
- 6. In the Configure Port -- Digital Network Port Dialog, make sure the port type selected is specific to your printer.
- 7. Make sure the network address is correct.

The subsequent print job will be directed to the new network address, however the current job will continue to retry at the old address for 30 minutes until it fails. Delete and resubmit the current print job, or restart your Windows NT system.

If the printer's name and address are in the system's hosts file or in a network database, it is more difficult to incorrectly enter the TCP/IP address since Network Printing Software for Windows checks the hosts file to compare names and addresses and notifies you of any discrepancies.

See Also Configure Port dialog

Checking PrintServer printer connectivity over TCP/IP protocol

You use the **ping** command to determine whether your system has a route to another TCP/IP host.

At a Windows NT command prompt, enter the **ping** command. Give the TCP/IP name of your printer as an argument on the command line. **Ping** will try to send packets to the printer, which the printer will try to return.

```
C:> ping lps32a
Pinging host lps32a.widget.com (lps32a) : 17.123.145.14
Ping succeeded: 64 bytes
  time = 141 ms TTL = 29
  time = 32 ms TTL = 29
  time = <10 ms TTL = 29
  time = <10 ms TTL = 29
Host lps32a.widget.com replied to all 4 of the 4 pings</pre>
```

In this example, the host lps32a returned all 4 packets successfully. This means that your system and your printer can successfully communicate over the TCP/IP network.

If the name of your printer is not known to the system, **ping** can tell you that:

```
C:> ping lps32z
Bad IP address lps32z
```

Alternatively, you can specify a network address rather than a name.

For example:

```
C:> ping 12.123.123.1
```

Note: Substitute a valid network address on your system in place of the address given above.

If your printer is not reachable from your system, **ping** will display the failure. For example:

```
C:> ping lps32b
Pinging host lps32b.widget.com (lps32b) : 17.123.145.15
Ping: Request timed out.
Ping: Request timed out.
Ping: Request timed out.
Ping: Request timed out.
```

If you cannot **ping** the printer, but you know it is working, and you know the physical cabling between your Windows NT system and the printer is correct, then there might be a couple of other causes:

1. Check to see the port's network address is correct.

2. The TCP/IP network topology might be set up so that your Windows NT system is in one subnet and the printer is in a different subnet. You must configure your PrintServer printer so it recognizes the subnet router between the two subnets. Also you must

configure your Windows NT system so it recognizes the subnet router. See <u>Configuring</u> your system and your network printer for TCP/IP router access.

Configuring your system and your network printer for TCP/IP router access

Note: If the terms "subnet" and "subnet router" are not meaningful to you, contact your network administrator to correctly configure your TCP/IP router access. Do not attempt to configure it yourself.

To configure your Windows NT system to recognize a subnet router:

1. In the Networks control panel, select TCP/IP Configuration.

2. In the Default Gateway field, enter the subnet router address of the router between your system and the PrintServer printer.

To configure your PrintServer printer to recognize the gateway router between it and the host Windows NT system, see <u>Changing the Address of a PrintServer Printer</u>.

To configure your DEClaser printer to recognize the gateway router between it and the host Windows NT system, see <u>Changing the IP Address of a DEClaser 3500/5100 Series Ethernet</u> <u>Card</u>.

To configure your RapidPrint server to recognize the gateway router between it and the host Windows NT system, see <u>Changing the IP Address of the RapidPrint Server</u>

Checking DEClaser printer connectivity over TCP/IP protocol

You use the **ping** command to determine whether your system has a route to another TCP/IP host.

At a Windows NT command prompt, enter the **ping** command. Give the TCP/IP name of your printer as an argument on the command line. **Ping** will try to send packets to the printer, which the printer will try to return.

```
C:> ping lps32a
Pinging host lps32a.widget.com (lps32a) : 17.123.145.14
Ping succeeded: 64 bytes
  time = 141 ms TTL = 29
  time = 32 ms TTL = 29
  time = <10 ms TTL = 29
  time = <10 ms TTL = 29
Host lps32a.widget.com replied to all 4 of the 4 pings</pre>
```

In this example, the host lps32a returned all 4 packets successfully. This means that your system and your printer can successfully communicate over the TCP/IP network.

If the name of your printer is not known to the system, **ping** can tell you that:

```
C:> ping lps32z
Bad IP address lps32z
```

Alternatively, you can specify a network address rather than a name.

For example:

```
C:> ping 12.123.123.1
```

Note: Substitute a valid network address on your system in place of the address given above.

If your printer is not reachable from your system, **ping** will display the failure. For example:

```
C:> ping lps32b
Pinging host lps32b.widget.com (lps32b) : 17.123.145.15
Ping: Request timed out.
Ping: Request timed out.
Ping: Request timed out.
Ping: Request timed out.
```

If you cannot **ping** the printer, but you know it is working, and you know the physical cabling between your Windows NT system and the printer is correct, then there might be some other causes:

- 1. Check to see the port's network address is correct.
- 2. Check to make sure the printer's internet address is a valid one on your network. Power cycle the DEClaser printer to make it print a Status and Configuration Report. See your network administrator for a valid internet address for the printer and compare it to the

address on the Status and Configuration Report. (See <u>Sample Default Status and</u> <u>Configuration Report</u> for a sample of the default report. The top half of the report gives network information; the bottom half of the report notes whether the network configuration is active.)

If it is not a valid internet address, you must reset the Network Interface Card. See <u>Resetting Factory Defaults on a DEClaser 3500 Printer's Network Interface Card</u> or <u>Resetting Factory Defaults on a DEClaser 5100 Printer's Network Interface Card</u> for more information. After you reset the card, go through the procedure to set up the Network Interface Card on your network. See Scenario #1 in the desktop printer's <u>Setting Up</u> <u>Printers to Print on the Network</u>.

3. The TCP/IP network topology might be set up so that your Windows NT system is in one subnet and the printer is in a different subnet. You must configure your printer so it recognizes the subnet router between the two subnets. Also, you must configure your Windows NT system so it recognizes the subnet router. See <u>Configuring your system and your network printer for TCP/IP router access</u>.

See also

<u>Getting the Printer's Hardware Address:</u> DEClaser 3500/5100 Series Ethernet Card Configure Port Dialog

Resetting Factory Defaults on a DEClaser 3500 Printer's Network Interface Card

If you erred and mistyped either the NETWORK ADDRESS or the HARDWARE ADDRESS of the Network Interface Card when you configured a Digital DEClaser 3500, you must reset the card to its factory defaults and configure the Network Interface Card again.

Follow this procedure to reset the card to its factory defaults:

- 1. Turn printer off.
- 2. Remove controller board (presuming it is in the printer already).
- 3. Remove the Network Interface Card (NIC) and change jumper 6 from OFF to ON.
- 4. Put the NIC back into controller, then put controller into the printer.
- 5. Power on the printer. Wait for the little green LED to signal 3 quick lights, then a long pause. This pattern will repeat about 30 seconds later.
- 6. Once you have seen the pattern repeat, power down the printer.
- 7. Remove the controller board. Remove the Network Interface Card. Change jumper 6 back to the OFF position. Put the NIC and the controller board back into the printer.
- 8. Power on the printer. A new test page will print and indicate that all settings are set to the factory default state.

Now, follow the <u>arp and ping instructions</u> to associate the correct network address and hardware address of the Network Interface Card.

Resetting Factory Defaults on a DEClaser 5100 Printer's Network Interface Card

If you erred and mistyped either the NETWORK ADDRESS or the HARDWARE ADDRESS of the Network Interface Card when you configured a Digital DEClaser 5100, you must reset the card to its factory defaults and configure the Network Interface Card again.

You must use the software utility that was shipped with the Network Interface Card to change the address. This software is only available on Macintosh or Novell systems.

Checking RapidPrint connectivity over TCP/IP protocol

You use the **ping** command to determine whether your system has a route to another TCP/IP host.

At a Windows NT command prompt, enter the **ping** command. Give the TCP/IP name of your RapidPrint server as an argument on the command line. **Ping** will try to send packets to the printer, which RapidPrint will try to return.

```
C:> ping lps32a
Pinging host lps32a.widget.com (lps32a) : 17.123.145.14
Ping succeeded: 64 bytes
  time = 141 ms TTL = 29
  time = 32 ms TTL = 29
  time = <10 ms TTL = 29
  time = <10 ms TTL = 29
Host lps32a.widget.com replied to all 4 of the 4 pings</pre>
```

In this example, the host lps32a returned all 4 packets successfully. This means that your system and your printer can successfully communicate over the TCP/IP network.

If the name of your RapidPrint server is not known to the system, **ping** can tell you that:

```
C:> ping lps32z
Bad IP address lps32z
```

Alternatively, you can specify a network address rather than a name.

For example:

```
C:> ping 12.123.123.1
```

Note: Substitute a valid network address on your system in place of the address given above.

If your printer is not reachable from your system, **ping** will display the failure. For example:

```
C:> ping lps32b
Pinging host lps32b.widget.com (lps32b) : 17.123.145.15
Ping: Request timed out.
Ping: Request timed out.
Ping: Request timed out.
Ping: Request timed out.
```

If you cannot **ping** the printer, but you know it is working, and you know the physical cabling between your Windows NT system and the printer is correct, then there might be some other causes:

- 1. Check to see the port's network address is correct.
- 2. Check to make sure RapidPrint's internet address is a valid one on your network. Power cycle the RapidPrint server to make it print a Status and Configuration Report. See your network administrator for a valid internet address for the RapidPrint server and compare

it to the address on the Status and Configuration Report. (See <u>Sample Default Status and</u> <u>Configuration Report</u> for a sample of the default report. The top half of the report gives network information; the bottom half of the report notes whether the network configuration is active.)

If it is not a valid internet address, you must reset RapidPrint. See <u>Resetting Factory</u> <u>Defaults of a RapidPrint Network Server</u> for more information. After you reset the server, go through the procedure to set up RapidPrint on your network. See Scenario #1 in the desktop printer's <u>Setting Up Printers to Print on the Network</u>.

3. The TCP/IP network topology might be set up so that your Windows NT system is in one subnet and RapidPrint is in a different subnet. You must configure your RapidPrint server so it recognizes the subnet router between the two subnets. Also, you must configure your Windows NT system so it recognizes the subnet router. See <u>Configuring your system and your network printer for TCP/IP router access</u>.

See also

<u>Getting the Printer's Hardware Address:</u> RapidPrint Network Server Configure Port Dialog

Resetting Factory Defaults of a RapidPrint Network Server

If you erred and mistyped either the NETWORK ADDRESS or the HARDWARE ADDRESS of the RapidPrint network server, you must reset RapidPrint to its factory defaults and configure it again.

If you CANNOT access RapidPrint through a Novell NetWare system...

Follow these steps to open the plastic unit and change the jumpers:

- 1. Unplug the power cord BEFORE opening the RapidPrint unit.
- 2. Hold the side of the unit against your body. Grab the side farthest away from your body and press the bottom half of the unit inward toward you. Pull the two halves apart.
- 3. Locate the area of the jumpers on the board. The jumpers for factory defaults are near the upper left corner of the board.

Click here 🖪 for a picture of the entire board (the area outlined in red contains the jumpers used to set factory defaults). Click here

If or a detailed picture of the jumpers used to set factory defaults.

- 4. Move the JP6 jumper to the setting marked FAC.
- 5. Connect power to the RapidPrint box and wait until the unit has completed its initialization. Initialization is complete when the LED continuously blinks three times and pauses.
- 6. Remove power from the RapidPrint box again.
- 7. Move JP6 to the NO position.
- 8. Replace the cover and connect power to the unit.
- 9. The RapidPrint box is now set to the factory defaults. The default is NO.
- 10. Reassemble the unit by putting the top cover of the unit back in place by snapping the two plastic pieces together. Make sure you line up the back panel, which contains the connection into its slots on the bottom and top units.

Now, follow the <u>arp and ping instructions</u> to associate the correct network address with the RapidPrint server's hardware address.

If you have a Macintosh or Novell system with the Npmanage Utility...

NPmanage is a program that allows you to configure and manage your RapidPrint network interface box from a NetWare system. Among many things, the utility allows you to set the unit to its factory defaults. From the Diagnostics and Utilities menu, go to the General Setup Print Server Configuration, and choose to reset the unit to factory defaults.

Then power cycle the RapidPrint for the changes to take effect.

Now, follow the <u>arp and ping instructions</u> to associate the correct network address with the RapidPrint server's hardware address.





Symptom: The document appears to print successfully, but nothing is printed

Although the cause of a print failure is logged at level 1, set the logging level to 3 to provide more information about the problem. Set the logging level in the <u>Logging Options</u> <u>Dialog</u>. Here are some possible causes and actions:

- 1. <u>A PostScript error may have occurred</u>.
- 2. Your system may not be able to communicate properly with the printer. Check the Event Viewer.
- 3. If you are sharing the printer with other systems, check the set up.

See Also <u>Help on Event Viewer</u>

A PostScript error may have occurred

If you think a PostScript error has occurred, set your logging level to 1 or greater to log PostScript errors. Set the logging level in the <u>Logging Options Dialog</u>.

Here are some possible causes and actions:

- 1. Double-check that the printer driver matches the model of the printer. Select your printer in the Printers Folder, then select Properties from the File menu. Select the Detail page. Make sure that the driver listed in the Driver field matches the printer model.
- 2. If you are printing a previously generated PostScript file, it may not have been created for the proper model of printer.
- 3. There might be a problem with the PostScript code the application produced. Report the problem to the application developers.
Symptom: Banner page is printed, but document isn't printed

Most likely, this is because of a <u>PostScript error</u> in the document.

Symptom: Banner page information is incorrect

If the system name and/or the print destination on the banner page are incorrect:

- 1. Check the port's Options dialog box to make sure the information is specified correctly.
- 2. If the information in the dialog box is correct, you are probably sharing print services with another system and the configuration is incorrect. To efficiently use a shared printer, use the Network Printing Software for Windows on every system.

Symptom: Only part of the document is printed

Most likely, this is because of a <u>PostScript error</u> in the document.

Symptom: Properties information for the printer is incorrect

If the system name and/or the print destination in the print queue is incorrect:

- 1. Check the port's Options dialog box to make sure the information is specified correctly.
- 2. If the information in the dialog box is correct, you are probably sharing print services with another system and the configuration is incorrect. To efficiently use a shared printer, use the Network Printing Software for Windows on every system.

The printer's IP address is not valid on your network

PrintServer printer

Get the correct IP address from your network administrator. Then go to <u>Changing the</u> <u>Address of a PrintServer Printer</u> and doublecheck the TCP/IP Address field on the Configure Port dialog (doublecheck every port address to this PrintServer printer). If the IP address is incorrect, you need to change the IP address in this dialog.

DEClaser 5100 or 3500 Network Interface Card

The DEClaser printer prints a Status and Configuration Report after the printer is turned on. The printer's <u>internet address</u> is printed on the report.

If the internet address in the printer's memory is not valid (for example, a second-hand DEClaser printer has the original owner's internet address) for your network, you must reset the Network Interface Card. See <u>Resetting Factory Defaults on a DEClaser 3500</u> <u>Printer's Network Interface Card</u> or <u>Resetting Factory Defaults on a DEClaser 5100 Printer's Network Interface Card</u> for more information.

After you reset the card, go through the procedure to set up the Network Interface Card on your network. See Scenario #1 in the desktop printer's <u>Setting Up Printers to Print on the Network</u>.

RapidPrint

The printer attached to the RapidPrint server prints a Status and Configuration Report after RapidPrint is powered on. RapidPrint's <u>internet address</u> is printed on the report.

If the internet address in RapidPrint's memory is not valid for your network, you must reset the RapidPrint server. See <u>Resetting Factory Defaults of a RapidPrint Network Server</u>for more information.

After you reset RapidPrint, go through the procedure to set up RapidPrint on your network. See Scenario #1 in the desktop printer's <u>Setting Up Printers to Print on the Network</u>.

Symptom: Event log messages give unknown user name and/or printer name

If the user name and/or the print destination in the event log messages are incorrect:

- 1. Check the port's Options dialog box to make sure the information is specified correctly.
- 2. If the information in the dialog box is correct, you are probably sharing print services with another system and the configuration is incorrect. To efficiently use a shared printer, use the Network Printing Software for Windows on every system.

Registry Entries

Normally, the registry needs no manual intervention. Modifying values in the registry should be done only under very unusual circumstances. Be sure that you understand what you are modifying and why. Editing the registry is only for very advanced users.

Warning: Modifying the registry incorrectly can leave your system in an unusable state, and may require re-installing Network Printing Software for Windows, and potentially, the Windows NT operating system.

When modifying the registry, take care to get the case and spelling of entries correct. In particular, some multi-word names have spaces in them, and some do not. These differences matter, and must be correct in order for the software to work correctly.

There are a number of types of entries in the registry that are modified for, or by, Network Printing Software for Windows:

Print System Entries

Event Viewer Entries

Print System Registry Entries

These entries are the crucial link between Windows NT and Network Printing Software for Windows. They tell the printing system all it needs to know about Digital printers. These entries are found in:

HKEY_LOCAL_MACHINE\SYSTEM \CurrentControlSet \Control \Print \Monitors \Digital Network Port

Driver REG_SZ

Contains the file name of the dll to invoke for this kind of port. The value must be **decpsmon.dll**.

Options <u>Sub-key</u>

Contains the options that apply to all Digital printer ports on the system.

Ports <u>Sub-key</u>

Contains a sub-key for each Digital printer port on the system.

Monitor Options Sub-key

These entries control the options that apply uniformly to all Digital printer ports on the system. These entries are found in:

HKEY_LOCAL_MACHINE\SYSTEM \CurrentControlSet \Control \Print \Monitors \Digital Network Port \Options

Bubble REG_SZ

A Boolean flag indicating whether to display a window full of tracing information. Valid values are "True" and "False".

Logging Level REG_DWORD

A number indicating the detail desired in Event Viewer messages. A smaller number logs fewer events, a larger number logs more. Valid values are 0x0, 0x1, 0x2, 0x3.

Trace REG_SZ

A Boolean flag indicating whether internal traces should be written to a file. Valid values are "True" and "False".

Trace File REG_SZ

A file into which internal traces will be written. Any file name is a valid value. The drive and directory must already exist.

Port Sub-keys

These entries define each port. They are found in:

HKEY_LOCAL_MACHINE\SYSTEM \CurrentControlSet \Control \Print \Monitors \Digital Network Port \Ports \portname

Not all of these values need to be present for the software to work. If a certain feature is not being used, some registry entries pertaining to that feature may not be present. For example, if a port is being used with the TCP/IP protocol, the entries concerning DECnet protocol may be missing. This is not a problem.

Protocol REG_DWORD

A number indicating which network protocol is currently used by this port. Valid values are 0x1 for DECnet protocol and 0x2 for TCP/IP protocol.

DECnet Address REG_SZ

The DECnet address of the printer, in "area.node" format.

TCP/IP Address REG_SZ

The TCP/IP address of the printer, in three-dot format.

Banner REG_SZ

A Boolean flag indicating whether or not to print a banner page on this port. Valid values are "True" and "False".

Set Banner Tray REG_SZ

A Boolean flag indicating whether or not to select an input tray for the banner page on this port. Valid values are "True" and "False".

Banner Tray Number REG_DWORD

The number of the input tray to use for the banner page. Only used if **Set Banner Tray** is true. Valid values depend on the particular model of PrintServer printer in use.

Set Output Tray REG_SZ

A Boolean flag indicating whether or not to select an output tray for the entire print job. Valid values are "True" and "False".

Output Tray Number REG_DWORD

The number of the output tray to use for the print job. Only used if **Set Output Tray** is true. Valid values depend on the particular model of PrintServer printer in use.

Set Input Tray REG_SZ

A Boolean flag indicating whether or not to select an input tray for the document. Valid values are "True" and "False".

Input Tray Number REG_DWORD

The number of the input tray to use for the document. Only used if **Set Input Tray** is true. Valid values depend on the particular model of PrintServer printer in use.

Informational Registry Entries

These entries are almost all purely informational: they serve to record what software has been installed on your system. They are found in:

HKEY_LOCAL_MACHINE\SOFTWARE \DigitalEquipmentCorporation \PrintServer Software \CurrentVersion

Description REG_SZ

A brief description of the software.

InstallDate REG_DWORD

The time the software was installed, as a count of the number of seconds since January 1, 1970.

Software Type REG_SZ

A description of the type of software this is.

Title REG_SZ

The name of the software.

Version REG_SZ

The version of the software currently installed on the system. This value is used by the installation procedure to determine if the system needs to be restarted.

Event Viewer Registry Entries

These entries are for use by the Event Viewer, and allow it to properly interpret events recorded by Network Printing Software for Windows.

HKEY_LOCAL_MACHINE\SYSTEM \CurrentControlSet \Services \EventLog \Application \PrintServer Software

These values are created by Network Printing Software for Windows when it is first run. If they are missing from your registry, be sure that the system has booted since the software was installed.

EventMessageFileREG_EXPAND_SZ

This entry tells the Event Viewer where it can find the catalog of message text that allows it to display fully-formed messages. Network Printing Software for Windows uses its executable dll as its message file, so the proper value here is "%SystemRoot%\System32\ decpsmon.dll".

TypesSupported REG_DWORD

This entry tells the Event Viewer which types of messages are supported by this message catalog. The proper value is 0x7.

Installed Files

The following files are always installed into the **winnt\system32** directory:

decpsmon.dll Executable code and Event Viewer messages decpsmon.hlp Help file

The following files are installed into the <u>driver directory</u> from the Windows NT distribution media if the PostScript driver is not already installed:

pscript.dll	PostScript driver executable
pscrptui.dll	PostScript driver user interface
pscript.hlp	PostScript driver help file

The following files are installed into the <u>driver directory</u> if the associated printer model is being installed:

dc3500_2.ppd	Digital DEClaser 3500
dc5100n2.ppd	Digital DEClaser 5100
dclf02_2.ppd	Digital DECcolorwriter 1000 17 fonts
dclf02f2.ppd	Digital DECcolorwriter 1000 39 fonts
dclps172.ppd	Digital PrintServer 17
dcps1762.ppd	Digital PrintServer 17/600
dcps17L2.ppd	Digital PrintServer 17 Level 2 8 MB
dcps1732.ppd	Digital PrintServer 17 Level 2 12 MB
dclps202.ppd	Digital PrintServer 20
dctps202.ppd	Digital turbo PrintServer 20
dckps202.ppd	Digital turbo PrintServer 20/Japanese
dcps2021.ppd	Digital turbo PrintServer 20, Level 2, 16 MB
dclps322.ppd	Digital PrintServer 32
dckps322.ppd	Digital PrintServer 32/Japanese
dcps3221.ppd	Digital PrintServer 32 plus
dclps402.ppd	Digital PrintServer 40 Plus
dckps402.ppd	Digital PrintServer 40 Plus/Japanese

Symptom: A printer connected to a RapidPrint network server does not print properly

If the printer attached to a RapidPrint server will not print, prints fonts other than those specified in the source file, or behaves other than expected, you need to modify those settings to match the settings for the printer attached to RapidPrint.

Symptom: The PrintServer printer's front panel displays a "? 54" message

If you turned the printer off and then on again to load the PrintServer software files and configure the printer, but its front panel displays the "? 54" message, then the PrintServer printer cannot find the soft load files on the host system and cannot complete the soft load process.

See the checklist in <u>The PrintServer printer doesn't appear to soft load</u>.

Symptom: The PrintServer printer doesn't appear to soft load

If you are unsure whether the PrintServer printer is properly loading from your Windows NT system, go to the printer and turn it off/on. Watch the front panel and see if it completes Steps 1 through 6 in <u>Getting the Printer's Ethernet Address</u>. If Steps 3 through 6 do not occur, the printer is not soft-loading.

There may be several reasons that the printer is not soft-loading:

Make sure the PrintServer is connected to the network.

Make sure the host system is connected to the network.

Make sure all the network cables are in good condition.

Power cycle the PrintServer printer.

You may have typed in the wrong hardware address.

Get the correct address (see Steps #1 and #2 in <u>Getting the Printer's Ethernet Address</u>). Then go to <u>Changing the Address of a PrintServer Printer</u> and change the Ethernet Hardware

address field on the Configure PrintServer dialog.

You may have typed in the wrong internet address.

Get the correct IP address from your network administrator. Then go to <u>Changing the</u> <u>Address of a PrintServer Printer</u> and doublecheck the TCP/IP Address field on the Configure Port dialog (doublecheck every port address to this PrintServer printer). If the IP address is incorrect, you need to change the IP address in this dialog.

The PrintServer software may not be loaded onto the Windows NT system.

Or, if the PrintServer files are on the host system, they were not transferred to the PrintServer printer.

Check to see if the directory containing the PrintServer printer soft-load files, \WIN32APP\ DECPSMON, is on your system.

If the directory exists and there are files in the directory, then the PrintServer files are loaded on your system.

Now, complete the process by loading the PrintServer files onto the printer. Check off the Enable Soft-Loading and Configuration checkbox in the Configure Printer Dialog. See <u>Configuring the Printer</u> for complete instructions.

If the directory does not exist, the soft-load files are not located on your system.

You must load them onto the Windows NT system, configure the printer, and enable soft-loading to transfer the PrintServer files from the host system onto the PrintServer printer.

Choose the "Install Files for Network Printing and Loading" option when you install the Digital Network Printing Software. Then, once you have installed the software, go to <u>Configuring the Printer</u> for complete instructions.

The network router between the Windows NT system and the PrintServer printer is not passing TCP/IP broadcast messages between them.

See your network administrator to correct this condition.

Check your network hardware: some types of hardware (bridges, for example) may be configured to filter broadcast packets.

To solve this problem, soft-load the PrintServer printer from a host system that is on the same side of the bridge as the printer, or have your network administrator disable bootp packet filtering on that bridge.

Symptom: Default tray settings don't appear to work

Selecting the top tray as default tray has no effect when soft-loading a PrintServer 17 printer. The printer continues to use the bottom tray as its default input tray. The printer was engineered to behave this way.

Symptom: The Status page for a RapidPrint network server does not print

After you configure the RapidPrint network server through Network Printing Software for Windows, the printer attached to RapidPrint may not print the status pages on subsequent power-ups. (See <u>Sample Default Status and Configuration Report</u> for a sample of the default report. The top half of the report gives network information; the bottom half of the report notes whether the network configuration is active.)

To see the new settings you made while configuring the port to communicate with the RapidPrint server, you must enable the status page. Hardwire a Macintosh or Novell system to the RapidPrint network server and use the software utility that was shipped with RapidPrint.