



# Software Product Description

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**PRODUCT NAME:** Compaq PrintServer Software Version 5.2  
**SPD 48.09.09**

## OVERVIEW

*Compaq PrintServer Software* provides printing services across a wide range of operating environments to DIGITAL's *PrintServer* printers. This Software Product Description (SPD) summarizes the functions of the software; however, the feature set for each platform may vary. These exceptions are noted throughout the SPD. The platforms supported at the release of this document are:

- OpenVMS Alpha and VAX
- Tru64 UNIX
- HP-UX®
- IBM®
- NetWare®
- Sun® Solaris
- SunOS

This SPD documents *PrintServer Software, V5.2*, features for the HP-UX, IBM-AIX, NetWare, OpenVMS, Tru64 Unix, Sun Solaris and SunOS operating environments. Versions of *PrintServer Software* earlier than V5.1 may not support all *PrintServer* printers. See the SPD for the software version that you plan to use for a list of supported printers.

## DESCRIPTION

*Compaq PrintServer Software* is a layered product that enables one or both of the following:

- Suitably configured systems to communicate in an Ethernet network to a *PrintServer 17*, *PrintServer 17/600*, *PrintServer 20*, *turbo PrintServer 20*, *PrintServer 32*, *PrintServer 32 plus*, or *PrintServer 40 plus* printer. Users in an Ethernet network can communicate with, print to, monitor, and gather accounting information from any of these *PrintServer* printers. These are called the supporting host services.
- Suitably configured systems in an Ethernet local area network (LAN) to initialize (boot) and provide support functions for the *PrintServer 17*, *PrintServer 17/600*, *PrintServer 20*, *turbo PrintServer 20*, *PrintServer 32*, *PrintServer 32 plus*, and *PrintServer 40 plus*. Users in an Ethernet LAN can initialize (boot) and provide print client services to any of these *PrintServer* printers.

In general, there are two primary components included in *PrintServer Software*: print client software and supporting host software.

### Print Client Software

Print client software consists of the following components:

- Print filters or interface programs to process requests from one or more printer queues.
- Network software to transmit print requests and associated data over the Ethernet network to a remote *PrintServer* printer. The OpenVMS client supports

both DECnet and TCP/IP protocols. All other UNIX and NetWare clients support only TCP/IP.

- Translators that automatically convert file formats into the PostScript® page description language.
- Event logging that captures error and status information and delivers it to specified users and/or operators.
- Print client and local accounting for tracking printer usage.
- Online help or manual pages providing help for the user.
- Installation scripts and/or instructions.

The print client software must reside on each system or file server that prints directly or provides distributed printing services for other systems (remote spooling) to DIGITAL's PrintServer printers. A system running the print client software can transmit print requests to any suitably configured PrintServer printer defined in the system's network database.

The maximum number of print clients that can be connected to a PrintServer is as follows.

- PrintServer 20 series - 16 simultaneous client connections
- PrintServer 32 series - 16 simultaneous client connections
- PrintServer 40 *plus* - 16 simultaneous client connections
- PrintServer 17 series - depends on amount of memory in the printer

### Supporting Host Software

Supporting host software consists of the following components:

- PostScript and PCL interpreters.
- Printer Status Manager (PRISM).
- A primary boot system image file that is downloaded into the PrintServer printer when the printer is powered on or remotely triggered.
- A management client that loads the secondary boot files and printer configuration files and provides for the capture and storage of centralized accounting and event log information from the printer.
- A remote management utility that allows remote monitoring and managing of a PrintServer printer from a terminal, workstation, or PC on either a print client or supporting host system.

- PrintServer system software that provides communications services, remote management services, and PostScript and PCL interpreters. The interpreters process PostScript and PCL commands and generate imaging data for the printer controller.

If multiple PrintServer printers reside on the same LAN, one or more supporting hosts can be used to load and/or manage them. A single supporting host can service any number of PrintServer printers; conversely, a number of supporting hosts can service a single printer to provide a high degree of fault tolerance.

### Print Client Features

The print client features described in this SPD are available for the following platforms: HP-UX, IBM-AIX, NetWare, Tru64 Unix, Solaris and SunOS. In a NetWare operating environment, the print client requires bindery emulation to be enabled for all NetWare 4.nn servers that are to be used with this software. Bindery emulation is enabled by default in some 4.nn installations.

In an OpenVMS operating environment, the print client software is provided through DECprint Supervisor (DCPS) for OpenVMS. The media and documentation for DECprint Supervisor for OpenVMS are available separately. Refer to the Software Product Description (SPD 44.15.nn) for more information on DECprint Supervisor for OpenVMS.

### Printer Interface

PrintServer Software provides an interface to your operating system. The interface transmits print requests over the Ethernet network to the printer and relays system messages from the printer to the spooling system and/or requesting user.

PrintServer Software allows users to print non-PostScript documents (with the exception of PCL5) by translating the text into PostScript. Translation can be requested explicitly on the command line or performed automatically when the document is printed. PCL5 files are sent directly to the PrintServer 17 family of printers, *turbo* PrintServer 20, and PrintServer 32 *plus* printers without translation. ASCII translation is provided for all operating environments. ANSI translation is provided for the OpenVMS and Tru64 Unix operating environments.

The NetWare operating environment provides a PrintServer-specific Printer Description File (PDF) containing modes and functions to select various PrintServer features and options.

The following table illustrates the more popular print options provided:

This Feature	Selects
data type	The type of data in the print job.
input tray	The printer input tray that supplies the paper or other media for this job.
sides	Simplex (one-sided) or duplex (two-sided) printing.
number up	The number of page images to be printed per side of paper.
output tray	The printer output tray.
sheet size	The physical size of the sheets to be printed. This option also selects the appropriate input tray.
sheet count	The number of copies of each sheet to be printed.

To print ASCII text in NetWare and UNIX environments, you can use the following features:

This feature	does the following
tab width	Expands the tab characters to use spaces. The default tab width is 8 spaces.
indent	Selects the number of spaces to indent horizontally on each page.
literal	Prints the file exactly as it appears, including nonprinting characters imaged in a printable manner.
cwidth	Prints output using a page width of x column characters. The default is an 80-column page width.
rlength	Prints job using a page length of x lines. The default is a 66-line page length.

Many of the options above are supported through applications with native support in some operating systems.

In UNIX environments, the output can be directed not only to a print queue, but also to a file for printing later on a PostScript printer.

## Supporting Host Features

The supporting host features are described below:

### PostScript

PostScript is a device-independent, page description language that describes the appearance of text, images, and graphic material on the printed page.

The PostScript language's page description capabilities include the following features, which can be used in any combination:

- Arbitrary shapes constructed from straight lines, arcs, and cubic curves. Such shapes can self-intersect and contain disconnected sections and holes.
- Painting primitives that permit a shape to be outlined with lines of any thickness, filled with any gray shade, or used as a clipping path to crop any other graphics.
- Text fully integrated with graphics. Text characters are treated as graphical shapes that can be operated on by any PostScript graphics operator.
- Sampled images derived from natural sources or generated synthetically. The PostScript graphics model allows sampled images at any resolution and with a variety of dynamic ranges, and it provides a number of facilities to control the rendering of images on the PrintServer printer.
- A general coordinate system facility that supports all combinations of linear transformations including translation, scaling, rotation, reflection, and skewing. These transformations apply uniformly to all elements of a page description, including text, graphical shapes, and sampled images.
- A rendering algorithm, DECimage Plus, that enhances the quality of natural (halftone) images when printed on laser printers.

PostScript Level 2 extends the functional range of the PostScript language by adding new features designed to more conveniently and efficiently describe the appearance of the page. PostScript Level 2 features include:

- Form and pattern caching, which drastically reduces print times where repetitive elements, such as corporate logos or accent bars, are printed on successive pages.
- ATM font rendering, which provides higher quality and is notably faster than the rendering mechanism in PostScript Level 1.
- Data-compression and decompression filters for several industry-standard formats (i.e. CCITT Group 3 and Group 4), which enable much faster data transmission times and reduces storage requirements for PostScript files.

- Improved printer-based memory management, which facilitates the printing of complex pages in less time.

PostScript Level 2 is provided for the PrintServer 17 family of printers, *turbo* PrintServer 20 (with firmware version 3.7 and a minimum of 16 MB of memory), and PrintServer 32 *plus* printers. (PostScript Level 2 is provided for the *turbo* PrintServer 20 and the PrintServer 32 *plus* printers for those platforms that offer the V5.1 version of PrintServer software). PostScript Level 1 is provided for all other DIGITAL PrintServer printers.

### **PCL5**

PCL5 interpretation is provided for the PrintServer 17 (with at least 12 MB memory), PrintServer 17/600, *turbo* PrintServer 20, and PrintServer 32 *plus* printers in HP-UX, IBM-AIX, NetWare, OpenVMS, Tru64 UNIX, Solaris and SunOS operating environments. [Note: PrintServer 17/600 PostScript Level 2 printers that use SNMP and PCL5 require 20 MB memory.]

The PCL5 interpreter supports HP LaserJet IIIsi emulation as described in the HP PCL5 Printer Language Technical Reference Manual and as implemented in the HP LaserJet IIIsi printer. PCL5 files are passed directly to the PCL5 interpreter in the printer and processed for printing (versus being translated on the host system). PCL5 supports interpretation and the printing of both 300 and 600 dpi files.

PrintServer Software allows users to print PCL5 documents on PrintServer 17, PrintServer 17/600, *turbo* PrintServer 20, and PrintServer 32 *plus* printers. Interpretation is performed in the printer (versus being translated on the host system) when the document is printed.

Resident scaleable typefaces include:

- Univers® Medium
- Univers Medium Italic
- Univers Bold
- Univers Bold Italic
- Times® Medium
- Times Medium Italic
- Times Bold
- Times Bold Italic
- Univers Condensed®
- Univers Condensed Italic
- Univers Condensed Bold
- Univers Condensed Bold Italic
- ITC Zapf Dingbats®

Bitmap font support includes:

- Courier® 10 pitch 12 point (italic, bold)
- Courier 12 pitch 10 point (italic, bold)
- Line Printer 16.66 pitch 8.5 point (landscape, portrait)

### **Image Printing**

An image PDL is provided for the *turbo* PrintServer 20 and PrintServer 32 printers in an OpenVMS operating environment. (Image printing for PostScript Level 2 printers is handled by the PostScript Level 2 interpreter.) The image PDL greatly reduces the printing time on PostScript Level 1 printers for Digital Document Interchange Format (DDIF) compressed bitonal image files, such as those created by certain scanning devices. The use of the image PDL passes files directly to the image decompression chip in the printer, bypassing and eliminating conversion to PostScript.

The image PDL provides the following features:

- Uses the printer's hardware decompression capability for faster printing
- Automatically rotates and crops images to fit paper size and orientation
- Automatically scales 200 dpi A-size images to 300 dpi A-size images
- Supports CCITT compression standards: CCITT G42D, CCITT G31D, and CCITT G32D
- Supports different media sizes, depending on the PrintServer printer

### **Remote Management Services**

A management facility enables the remote management and monitoring of the PrintServer printers. There are two levels of command:

- Unprivileged - Anyone may use these commands.
- Privileged - You must enter a password to use these commands.

Unprivileged commands include:

<b>Command</b>	<b>Function</b>
configuration	Displays the PrintServer configuration
exit	Exits the utility
help	Provides help on commands
jobs	Shows the jobs printing to the printer
netstat	Shows the current status of the Internet subsystem

Command	Function
permissions	Shows the current network access control restrictions
privs	Enters privileged mode
showq	Same function as "jobs"
status	Shows the status of PrintServer system components
versions	Displays the version numbers of each system component
?	Displays a list of commands available in current mode

Privileged commands include:

Command	Function
abort	Aborts the specified job
accept	Enables job acceptance
continuous	Continuously prints jobs
exit	Exits privileged mode
newfile	Creates a new accounting or event log file or both
next	Causes the next job to print from single job mode
reconfigure	Causes the PrintServer printer to reload its configuration parameters
reject	Disables job acceptance
repeat	Sets the repeat interval for the next command
single	Enables single job mode, causing the printer to pause between print jobs
reboot	Remotely reboots the PrintServer printer

The remote management facility is available in the following styles:

- GUI interface for Motif platforms
- A command-line interface for character-cell terminals

The PrintServer 17, PrintServer 17/600, PrintServer 20, *turbo* PrintServer 20, PrintServer 32, and PrintServer 32 *plus* printers have front panels with a 2 x 24 character LCD display that provides system status information. Front panel status messages can be displayed in English, French, German, Dutch, Swedish, Portuguese, Spanish, Italian, or Norwegian.

### **PRISM**

The Printer Status Manager (PRISM) allows you to monitor all supported PrintServer printers on your network. PRISM displays the current status of the printers, such as printing, processing, out of paper, or jammed. This saves you from having to check the front panel of each printer or the remote console facility for printer status. PRISM enables you to:

- Select the printers you wish to monitor
- Group the printers by floor, building, printer type, etc.
- Identify problems at a glance using colors to indicate problem severity
- Determine printer status

### **Simple Network Management Protocol**

SNMP allows network managers to integrate PrintServer printers into SNMP-based network management programs. PrintServer Software supports an SNMP agent for all PrintServer printers, except the PrintServer 40 series, PrintServer 20, and Printserver 17 with 8 MB of memory. The agent supports MIB-II.

### **Centralized Event Logging**

PrintServer Software logs events ranging from successful completion of jobs to hardware errors. Events can be recorded in an event log file on a management client system. Management clients on multiple systems can simultaneously receive event logging data from a single PrintServer printer. These events are also displayed on remote management terminals and the PrintServer 40 local console. A subset of event messages is displayed on the remote console and front panel of the PrintServer 17, PrintServer 17/600, PrintServer 20, *turbo* PrintServer 20, PrintServer 32, and PrintServer 32 *plus* printers.

### **Centralized Accounting**

Similar to event logging, accounting information is sent to any management client that requests accounting data upon connecting to a PrintServer printer. PrintServer Software contains its own accounting utility, providing the system manager with a convenient way to analyze and report printer usage or cross-charge users and departments for printer usage.

The accounting utility prepares usage reports for a specific PrintServer printer on a per-user and per-host basis. Accounting information includes user name, originating host, total number of sheets and sides printed, sheet size, and printer CPU time. The utility allows the system manager to assign cost to the number of sheets printed, the number of sides printed, and/or CPU time used. The utility also allows for reporting to begin from

a specific date. In addition, data is stored in a specific format to allow third-party applications to read and/or manipulate information.

### **Controlled Access to a PrintServer Printer**

PrintServer Software provides a convenient way to control network access to a PrintServer printer. Access to the printer is specified in the printer configuration file by either "allowing" or "denying" access by a client host. The "allow" option allows specified DECnet area numbers or node addresses and Internet host addresses, networks, or subnetwork numbers to communicate with the PrintServer printer. The "deny" option prohibits nodes, areas, hosts, networks, and subnetworks from communicating with the printer.

### **Downloading the PrintServer Image**

A PrintServer printer is booted in two phases: the primary boot and the secondary boot. During the primary boot, a supporting host downloads the system image upon receipt of a MOP, bootp, or uniboot protocol load request by the printer. If multiple supporting hosts are designated to boot the printer, the first system to respond to the printer load request provides the primary boot. Once the primary boot has been completed, a management client connects to the printer to perform the secondary boot.

The secondary boot involves downloading configuration and setup files and system process image files.

PrintServer 40 *plus* printers require the MOP protocol to boot. MOP is available on Compaq's OpenVMS operating system. All other PrintServer printers accept MOP or bootp.

*Turbo* PrintServer 20 printers require controller firmware V3.1 or higher when booted by HP-UX, IBM-AIX and Solaris systems, or if the printer is booted by bootp and accessed by DECnet systems.

PrintServer 20 printers must be booted by an OpenVMS, Tru64 UNIX or SunOS system.

In a NetWare operating environment, *turbo* PrintServer 20 and PrintServer 32 series printers with PostScript Level 1 require boot firmware V3.6 or higher. PrintServer 17 printers require boot firmware V2.1 or higher. *Turbo* PrintServer 20 and PrintServer 32 series printers with PostScript Level 2 and the memory option board require boot firmware V3.7. Firmware upgrade kits are available.

### **PrintServer System and Imaging Components**

PrintServer Software and process image components are the software elements that are downloaded to, and run within, a PrintServer printer. This software consists of the following parts:

- Communications software that accepts print and/or control data from Internet or DECnet client hosts and passes print data to the imaging software (PostScript or PCL5 interpreters). This software also passes system messages from the imaging software to the appropriate print client and/or management client and provides remote management services.
- Imaging software that interprets data from the communications software builds the corresponding bitmaps, and sends those bitmaps to the print engine to be converted to printed output.

The imaging software also passes any system messages from the print engine or interpreter to the communications software, which passes these messages to the appropriate print, remote management, and/or management clients running on client hosts.

The imaging software includes an interpreter based on the Adobe® PostScript Page Description Language and resident typefaces. The PostScript Level 1 interpreter includes 29 resident typefaces. The PostScript Level 2 interpreter includes either 29 or 43 resident typefaces, depending on the memory configuration of the printer. PostScript Level 2 support is provided for the PrintServer 17 family of printers, *turbo* PrintServer 20, and PrintServer 32 *plus* printers in HP-UX, IBM-AIX, NetWare, OpenVMS, Tru64 UNIX, Solaris and SunOS operating environments at this time. The resident typefaces are documented below.

Typefaces for PostScript Level 1 printers include:

- Courier (regular, Bold, Oblique, Bold Oblique)
- Helvetica® (regular, Bold, Oblique, Bold Oblique)
- ITC Avant Garde Gothic® (Book, Book Oblique, Demi, Demi Oblique)
- ITC Lubalin Graph® (Book, Book Oblique, Demi, Demi Oblique)
- ITC Souvenir® (Demi, Demi Italic, Light, Light Italic)
- New Century Schoolbook (Roman, Bold, Italic, Bold Italic)
- Times® (Roman, Bold, Italic, Bold Italic)
- Symbol

The PrintServer 17 with 12 MB memory, the PrintServer 17/600 with 16 MB of memory, the *turbo* PrintServer 20 (with at least 16 MB of memory), and the PrintServer 32 *plus* (with at least 16 MB of memory) also include the following PostScript Level 2 typefaces:

- ITC Bookman® (Demi, Demi Italic, Light, Light Italic)
- Helvetica Narrow (Regular, Bold, Oblique, Bold Oblique)
- Palatino® (Roman, Bold, Italic, Bold Italic)
- ITC Zapf® Chancery Medium Italic

- Zapf Dingbats

### PostScript Compatibility Module

At boot time, a PostScript compatibility module is automatically loaded into the PrintServer printer. This file allows the correct emulation and printing of PostScript extensions found in other PostScript devices (e.g. Apple® LaserWriter®).

### Feature Summary

The following table summarizes the PrintServer Software features by computing platform.

**Table 1**  
**Summary of PrintServer Software Features**

Feature	OpenVMS	Tru64UNIX	Solaris, SunOS	HP-UX	IBM-AIX	NetWare
Access Restrictions	Yes	Yes	Yes	Yes	Yes	Yes
Accounting	Yes	Yes	Yes	Yes	Yes	Yes
ANSI translation	Yes	No	No	No	No	No
ASCII translation	Yes	Yes	Yes	Yes	Yes	Yes
Auto Data Sensing	Yes <sup>3</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>
Copies	Yes	Yes	Yes	Yes	Yes	Yes
Event Logging	Yes	Yes	Yes	Yes	Yes	Yes
Form Length/Width Ctrl	Yes <sup>3</sup>	Yes	Yes	Yes	Yes	Yes
Green-Bar emulation	Yes <sup>3</sup>	No	No	No	No	No
Header/Banner Page	Yes	Yes	Yes	Yes	Yes	Yes
Image/DDIF Translation <sup>5</sup>	Yes <sup>3,6</sup>	No	No	No	No	No
Input Tray Failover <sup>6</sup>	Yes	Yes	Yes	Yes	Yes	Yes
Input Tray Selection	Yes	Yes	Yes	Yes	Yes	Yes
Job Status Messages	Yes	Yes	Yes	Yes	Yes	Yes
Layup	Yes <sup>3</sup>	No	No	No	No	No
Literal	Yes	Yes	Yes	Yes	Yes	Yes
LPD	Yes	Yes	Yes	Yes	Yes	Yes
Margins/Indentation	Yes	Yes	Yes	Yes	Yes	Yes
Number Up	Yes <sup>3</sup>	Yes	Yes	Yes	Yes	Yes
On-line Help	Yes	Yes	Yes	Yes	Yes	No
Output Tray Selection	Yes	Yes	Yes	Yes	Yes	Yes
Page Limit	Yes <sup>3</sup>	No	No	No	No	No
Page Orientation	Yes	Yes	Yes	Yes	Yes	Yes
Page Size	Yes	Yes	Yes	Yes	Yes	Yes
PCL5 <sup>6</sup>	Yes	Yes	Yes	Yes	Yes	Yes
PostScript Level 1 <sup>4</sup>	Yes	Yes	Yes	Yes	Yes	Yes
PostScript Level 2 <sup>6</sup>	Yes	Yes	Yes	Yes	Yes	Yes
Printer Status Messages	Yes	Yes	Yes	Yes	Yes	Yes
PRISM	Yes	Yes	Yes	Yes	Yes	Yes
ProPrinter emulation	Yes <sup>3</sup>	No	No	No	No	No
Remote Mgmt Console	Yes	Yes	Yes	Yes	Yes	Yes
Resource Loading <sup>2</sup>	Yes	Yes	Yes	Yes	Yes	Yes
Sheet Count	Yes	Yes	Yes	Yes	Yes	Yes

<sup>1</sup>Auto Data Sensing for ASCII, PCL5, and PostScript

<sup>2</sup>Support for downloading of forms, signatures, letterhead, etc.

<sup>3</sup>DECprint Supervisor for OpenVMS - PLUS License is required

<sup>4</sup>*turbo* PrintServer 20 and PrintServer 32 only

<sup>5</sup>Through PrintServer hardware decompression chip

<sup>6</sup>PrintServer 17, 17/600, PrintServer 32 *plus* only

**Table 1 (Cont.)**  
**Summary of PrintServer Software Features**

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<b>Feature</b>	<b>OpenVMS</b>	<b>Tru64UNIX</b>	<b>Solaris, SunOS</b>	<b>HP-UX</b>	<b>IBM-AIX</b>	<b>NetWare</b>
Sheet Size	Yes <sup>3</sup>	Yes	Yes	Yes	Yes	Yes
Sides	Yes	Yes	Yes	Yes	Yes	Yes
SNMP-MIB2	Yes	Yes	Yes	Yes	Yes	Yes
Tab Width	Yes	Yes	Yes	Yes	Yes	Yes

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<sup>3</sup>DECprint Supervisor for OpenVMS - PLUS License is required

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**INSTALLATION**

*PrintServer Software* is classified as customer installable. Software consulting services are available for those customers who desire installation, parrotting, or any special customization of the software, or installation of the PrintServer printer.

PrintServer Software can be installed on those processors listed above that meet the following criteria:

- Ethernet controller interface
- TK50 or TK70 tape drive, CD-ROM drive, QIC cartridge tape drive, DAT tape drive, or 3.5" floppy drive
- System disk

The PrintServer Software requires a minimum of one PrintServer printer (PrintServer 17, PrintServer 17/600, PrintServer 20, *turbo* PrintServer 20, PrintServer 32, PrintServer 32 *plus*, or PrintServer 40 *plus*) to be connected to the Ethernet physical channel.

PrintServer 20, *turbo* PrintServer 20, PrintServer 32, PrintServer 32 *plus*, and PrintServer 40 *plus* printers require a transceiver cable and an Ethernet transceiver (H4005), Local Network Interconnect (DELNI), or Thin-Wire Ethernet Station Adapter (DECXM-AA).

PrintServer 17 and PrintServer 17/600 printers allow for direct connection to ThickWire and ThinWire Ethernet interfaces. With the optional communications card, the PrintServer 17 and PrintServer 17/600 printers can be connected directly to ThinWire (10base2) or Twisted Pair (10baseT) Ethernet. Please note that although both Ethernet cards (Thick/ThinWire and Thin/Twisted Pair) have two interfaces, only one is active at a time.

**Disk Space Requirements:**

Platform	For Installation	Permanent Use
HP-UX	15.0 MB	15.0 MB
IBM-AIX	15.0 MB	15.0 MB
NetWare	12.0 MB	12.0 MB
OpenVMS	11.5 MB <sup>1</sup>	11.0 MB <sup>1</sup>
Tru64 UNIX	15.0 MB	15.0 MB
Solaris	15.0 MB	15.0 MB
SunOS	15.0 MB	15.0 MB

<sup>1</sup>supporting host software only

At least one PrintServer printer must be installed. The following printers are supported by this software product:

- PrintServer 17
- PrintServer 17/600
- PrintServer 20
- *turbo* PrintServer 20
- PrintServer 32
- PrintServer 32 *plus*
- PrintServer 40 *plus*

These counts represent the maximum storage required; actual storage requirements vary depending on the local system environment, configuration, and software options selected.

**Table 2**  
**Summary of PrintServer Software Features—January 2000**

<b>Printer</b>	<b>Memory</b>	<b>PostScript Level 1</b>	<b>PostScript Level 2</b>	<b>PCL5 Fonts</b>	<b>SNMP- MIB2</b>	<b>Image Printing</b>	<b>LPD</b>
PrintServer 17	8 MB <sup>1</sup>	No	Yes	No	No	No	Yes
	12 MB	No	Yes	Yes	Yes	No	Yes
	16 MB	No	Yes	Yes	Yes	No	Yes
	20 MB	No	Yes	Yes	Yes	No	Yes
	24 MB	No	Yes	Yes	Yes	No	Yes
PrintServer 17/600	32 MB	No	Yes	Yes	Yes	No	Yes
	16 MB <sup>1</sup>	No	Yes	Yes <sup>2</sup>	Yes <sup>3</sup>	No	Yes
	20 MB <sup>4</sup>		Yes	Yes	Yes	No	Yes
	24 MB		Yes	Yes	Yes	No	Yes
PrintServer 32	32 MB		Yes	Yes	Yes	No	Yes
	12 MB	Yes	No	No	Yes	Yes	Yes
	16 MB	No	Yes	Yes	Yes	No	Yes
	20 MB	No	Yes	Yes	Yes	No	Yes
	24 MB	No	Yes	Yes	Yes	No	Yes
PrintServer 20	32 MB	No	Yes	Yes	Yes	No	Yes
	12 MB	Yes	No	No	No	No	Yes
<i>turbo</i> PrintServer 20	12 MB	Yes	No	No	Yes	Yes	Yes
	16 MB	No	Yes	Yes	Yes	No	Yes
	20 MB	No	Yes	Yes	Yes	No	Yes
	24 MB	No	Yes	Yes	Yes	No	Yes
	32 MB	No	Yes	Yes	Yes	No	Yes
PrintServer 40 <i>plus</i>	8 MB	Yes	No	No	No	No	No

<sup>1</sup>Does not support full client connections

<sup>2</sup>Without SNMP support

<sup>3</sup>Without support for PCL and fonts

<sup>4</sup>Minimum memory required for A4 paper

**SOFTWARE REQUIREMENTS**

Vendor	Required Software and Version
Compaq	OpenVMS Alpha, V6.1 through 7.2-1 OpenVMS VAX, V5.5-2 through 7.2 DECprint Supervisor for OpenVMS, V1.1 and higher
Compaq	Tru64 UNIX, V2.0, 2.1, 3.0, 3.2 and 4.0B
HP	HP-UX, V9.05 and 10.20
IBM	IBM-AIX, V3.2 and 4.2.1
Novell®	NetWare, V3.11, 3.12, 4.0, 4.01, 4.02 and 4.1 (Bindery Emulation Mode enabled for V4.nn)
Sun	Solaris/SPARC V2.3, 2.4 and 2.5.1 Solaris/INTEL V2.4
Sun	SunOS, V4.1.2, 4.1.3 and 4.1.4

**SOFTWARE LICENSING**

This software is furnished only under a license. For more information about Compaq's licensing terms and policies, contact your local Compaq office.

**Binary License**

A license to use the binary format of the PrintServer Software is included with each PrintServer printer. This license gives users the right to:

- Use the print client and remote management facility on a single CPU and copy this software for use on any CPU on the LAN that requires access to a PrintServer printer.
- Use the booting components of the supporting host software on a single CPU and copy this software on one additional CPU (for backup purposes) on the LAN.

**Update License**

Non-service customers must purchase an update license prior to purchasing media and documentation for a new version of this software. The update license grants the rights to purchase, install, and execute this software.

**License Management Facility Non-Support**

PrintServer Software license applies to the PrintServer printer on which the software runs, not to service host node machines in the network.

This product does not provide support for Compaq's License Management Facility. A Product Authorization Key (PAK) is not required for installation or use of this version of the product.

**OPTIONAL SOFTWARE****Distributed Queueing Services (DQS)**

Certain versions of this product depend upon a specific version of the operating system. Please refer to the SPD of the product in question to determine which version you need.

**GROWTH CONSIDERATIONS**

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

**DISTRIBUTION MEDIA**

Depending on your operating system, PrintServer Software may be available on the following media.

- CD-ROM
- DAT streaming tape
- QIC24 streaming tape
- TK50 streaming tape
- 720K 3.5" diskette
- 1.44 MB 3.5" diskette

This product is also available as part of the Software Products Libraries (software consolidations on CDROM) for OpenVMS Alpha, OpenVMS VAX, and Tru64 UNIX.

**ORDERING INFORMATION**

A license for the PrintServer Software is included with each DIGITAL PrintServer printer.

PrintServer SW License	QL-0V9A9-AA
PrintServer SW Update License	QL-0V9A9-RA

Platform	Format	Part Number
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### Media and Documentation Kits

Platform	Format	Part Number
HP-UX	CD-ROM	QA-0V9AD-H8
	DAT	QA-0V9AD-HP
IBM-AIX	QIC	QA-0V9AE-HP
	3.5" Diskette	QA-0V9AE-HB
NetWare	3.5" Diskette	QA-0V9AG-HC
OpenVMS	CD-ROM	QA-0V9AA-H8
	TK50	QA-0V9AA-H5
Tru64 UNIX	CD-ROM	QA-0V9AJ-H8
Solaris	CDROM	QA-0V9AK-H8
	QIC	QA-0V9AK-HP
SunOS	CD-ROM	QA-0V9AC-H8
	QIC	QA-0V9AC-HP

### Documentation-only Kits

Description	Part Number
Documentation for HP-UX:	QA-0V9AD-GZ
Documentation for IBM-AIX:	QA-0V9AE-GZ
Documentation for Tru64 UNIX:	QA-0V9AJ-GZ
Documentation for OpenVMS:	QA-0V9AA-GZ
Documentation for Solaris:	QA-0V9AK-GZ
Documentation for SunOS:	QA-0V9AC-GZ

### Service offerings

Service Offering	Part Number
PrintServer SW Product Services	QT-0V9**.*

\* Denotes variant fields. For additional information on available licenses and media, refer to the appropriate price book.

### SOFTWARE PRODUCT SERVICES

A variety of consulting service options are available. For more information, please contact your local Compaq office.

### YEAR 2000 READINESS

This product is capable of accurately processing, providing, and/or receiving date data from, into and between the twentieth and the twenty-first centuries, and the years 1999 and 2000, including leap year calculations, when used in accordance with the associated product documentation and provided that all hardware, firmware and software used in combination with the product properly exchange accurate date data with the product.

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