Software
Product
Description

DESCRIPTION

The PrintServer® Client Software is a layered product that enables suitably configured ULTRIX Version 3.0 or ULTRIX Workstation systems within a DECnet Ethernet network to access a PrintServer.

The Client software consists of the following components:

- A print daemon to process print requests from one or more PrintServer printer queues.

- The distribution software to transmit the request and associated data over the Ethernet to a remote PrintServer via DECnet.

- Translators to convert ANSI Text and Sixel Graphics, ReGIS, and Tektronix® 4010/4014 files into the PostScript® language.

- A series of PostScript tools for creator software support. These include a PostScript error handler.

The PrintServer Client software must be installed on each system that will be providing distributed printing services to its users via a PrintServer.

A system running the PrintServer Client software can transmit print requests to any PrintServer on the network that is defined in its network database. A maximum of 16 clients can simultaneously access a PrintServer with only one client active at one time.

VAX PrintServer Supporting Host Software is a companion product to this software. Refer to SPD 27.68.03 for a description of that product.

Features

The ULTRIX-DECnet PrintServer client expands the ULTRIX-32 lpr command options to access the printing features of the DIGITAL's family of network printers. These new option flags in the lpr command are as follows:

®PostScript is a registered trademark of Adobe Systems Inc.

®Tektronix is a registered trademark of Tektronix Inc.

®PrintServer is a registered trademark of Digital Equipment Corporation.

- -D data_type - Specifies the type of data in the print job being sent to the printer. If the data_type is other than PostScript, the print daemon will call one of the supplied translation filters (ANSI text and Sixel Graphics, ReGIS, or Tektronix) to convert the data to PostScript prior to sending it to the PrintServer.

  In addition for data_type ASCII, ln03rof (fast ASCII to PostScript) translation filter is used. The ln03rof(4) filter is supplied with ULTRIX-32 base system.

- -I input_tray - Selects the printer input tray that will supply the paper or media for this job.

- -o output_Tray - Selects the printer output tray where the printed output will be deposited.

- -M messages - Specifies the disposition of messages generated by the print job.

- -Z page_limit - Specifies the first and last logical pages to be printed for the job.

- -O page_orientation - Specifies the orientation of printed output on the page (portrait or landscape). This option is ignored when data_type is PostScript unless Number_Up is specified.

- -F page_size - Specifies the size of the logical pages being printed. This option is ignored if data_type is PostScript.

- -S sheet_size - Specifies the physical size of the sheets to be printed. This option will cause the appropriate input tray to be selected.

- -X sheet_count - Specifies the number of times each sheet is to be printed at the PrintServer.

- -L layup_definition - Specifies the name of a file that contains all of the page layup features (Borders, Margins, Margin Alternation, Pages per Sheet, First Page, Page Order and Page Grid) except Number_Up.

- -N number_up - Specifies the maximum number of pages that can be printed on one side of a sheet.

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Table 1: New lpr Command Line Options - Compatible with LPS_V3.0

VMS_Parameter	New_ULTRIX _Flag	Valid_arguments
DATA_TYPE	-D	ansi, ascii, regis, TEK4010/4014, postscript
	-I	top, middle, bottom, (lcit)
OUTPUT_TRAY	-o	top, side, face-up, upper, lower, lcos
PAGE_ ORIENTATION	-O	portrait, landscape
SHEET_SIZE	-S	a, (letter), a3, a4, a5, b, (ledger), b4, b5, executive, legal
PAGE_SIZE	-F	as <SHEET_SIZE>
PAGE_LIMIT	-Z	[lowlim,][uplim] [1-10000]
SHEET_COUNT	-X	num [1-10000]
MESSAGE	-M	ignore, keep
NUMBER_UP	-N	num [1-100]
LAYUP_ DEFINITION	-L	filename

The print daemon also supplies accounting information, the number of sheets printed, for each print job.

Translators

Translator software allows you to print documents on the PrintServer with graphic protocols other than PostScript, the native language of the PrintServer, by translating the designated protocol into PostScript. The translators are invoked by the print daemon at print time through switches.

The translators provided convert the following data types into PostScript:

- ANSI text and Sixel graphics compatible with the LN03 excluding support for font cartridges
- ReGIS compatible with the VT240
- Tektronix 4010/4014 compatible with VT240

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

PostScript Tools

The tools consist of the following:

A PostScript error handler which prints the last partial page of output as well as information to help identify the error. This information includes the error name, the Post-Script operator that encountered the error, the operand stack, and the graphics state of the machine at the time of the error.

INSTALLATION

Only experienced customers hould attempt installation of this product. DIGITAL recommends that all other custom-ers purchase DIGITAL's Installation Services which pro-vide for the installation of the software product by an experienced DIGITAL Software Specialist.

Customer Responsibilities

Before installation of the software, the customer must:

- Previously have installed all requisite software and hardware (as specified in the System Support Adden-dum SSA 30.87.00-x)
- Obtain, install and demonstrate as operational any equipment and facilities necessary to interface to DIGITAL's communication equipment
- DIGITAL and the customer, all hardware, communica-tion facilities and terminals that are to be used during installation
- Supply to DIGITAL all of the information necessary for installation of the software as described in the PrintServer Site Preparation Guide

Installation of a new system where no hardware or soft-ware exists will consist of the following:

- Verification that the installation information in the PrintServer Site Preparation Guide is complete
- Verification that a complete set of PrintServer Client Software media and documentation has been re-ceived
- Verification that all hardware and software prerequi-sites have been met and the equipment is operational
- Installation of the PrintServer Client Software on one system
- The optional establishment of print queues for the three supplied translators and PostScript on the PrintServer Client system
- Modification of the databases to add the PrintServer node name and address
- Verification that the PrintServer Client Software has been correctly installed by running the Installation Verification Program

Should a DIGITAL Specialist be required to modify the previously installed software parameters, a time and ma-terials charge will apply.

HARDWARE REQUIREMENTS

VAX, MicroVAX or VAXstation configuration as specified in the System Support Addendum (SSA 30.87.00-x).

SOFTWARE REQUIREMENTS*

ULTRIX-32 Operating System
DECnet-ULTRIX

VMS Operating System
VAX PrintServer Supporting Host Software

*   Refer to the System Support Addendum for availability and required versions of prerequisite software (SSA 30.87.00-x).

ORDERING INFORMATION

Software Licenses: QL-VVLA9-**
Software Media: QA-VVLA9-H*
Software Documentation: QA-VVLAA-GZ
Software Product Services: QT-VVLA*-**

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

SOFTWARE LICENSING

The license to use this software is included with a PrintServer. The license gives you 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 a local area network that requires access to a PrintServer.

This software is furnished under the licensing provisions of DIGITAL's Standard Terms and Conditions. For more information about DIGITAL's licensing terms and policies, contact your local DIGITAL office.

SOFTWARE PRODUCT SERVICES

A variety of service options are available. For more information on these or other services, please contact your local DIGITAL office.

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 of this SPD.

System Support Addendum

PRODUCT NAME: **PrintServer DECnet Client Software for ULTRIX,** Version 1.0

HARDWARE REQUIREMENTS

Processor Support

VAX: VAX 6210, VAX 6220, VAX 8200, VAX 8250, VAX 8300, VAX 8350, VAX 8500[1], VAX 8530[1], VAX 8550[1], VAX 8600[2], [3], VAX 8650

VAX 11/750, VAX 11/780, VAX 11/785

MicroVAX: MicroVAX II, MicroVAX 2000, MicroVAX 3300/3400, MicroVAX 3500/3600

VAXserver: VAXserver 3300/3400[4], VAXserver 3500/3600/3602, VAXserver 6210/6220

NOTES:

[1] Console software for the VAX 8550, 8700, and 8800 must be at version 4.0 or greater.

[2] The VAX 8600 CPU must be at hardware Revision Level K or greater.

[3] Console software for the VAX 8600/8650 must be at version 2.0 or greater.

[4] The MicroVAX 3300/3400 provides by default a DDSI Bus Interface for RF disk support and Ethernet interface DELQA/DESQA by default which are supported by ULTRIX device drivers.

The PrintServer Client software runs on the following VAX hardware:

Any valid VAX minimum system configuration with:

* Minimum of 6 megabytes of memory

* Ethernet Controller Interface

* 1600 BPI MagTape or TK50 tape drive

* System Disk

Any valid MicroVAX or VAXstation system configuration with:

* Minimum of 6 megabytes of memory

* Ethernet Controller Interface

* A TK50 tape drive

* RD54 system disk or 2-RD53s

The PrintServer Client software requires that a minimum of one PrintServer is connected to the Ethernet physical channel with a transceiver cable and either an Ethernet transceiver (H4000) or the Local Network Interconnect (DELNI) or the ThinWire Ethernet Station Adapter (DESTA). (Note that the PrintServer cannot be botted over a gateway.)

Space Requirements:

SUBSET	root	KILOBYTES USED usr	TOTAL
LPSCLI010	17	1150	1167
LPSMAN010	1	50	51

These counts refer to the disk space required on the system disk. The sizes are approximations; actual sizes may vary depending on the user's system environment, configuration and software options selected.

OPTIONAL HARDWARE

Additional PrintServers may be connected to the Ethernet physical channel.

SOFTWARE REQUIREMENTS

ULTRIX-32 Operating System V3.0
DECnet-ULTRIX V3.0
VMS PrintServer Supporting Host Software V2.0 or V2.1
VMS Operating System V4.7 or V5.0

VAX PrintServer Supporting Host Software at a minimum of V2.0 installed on one VAX system on the same Ethernet.

OPTIONAL SOFTWARE

None

GROWTH CONSIDERATIONS

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

DISTRIBUTION MEDIA

Tape: 9-track 1600 BPI Magtape (PE), TK50 Streaming
        Tape

ORDERING INFORMATION

Software Licenses: QL-VVLA9-**
Software Media: QA-VVLA9-H*
Software Documentation: QA-VVLAA-GZ
Software Product Services: QT-VVLA*-**

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

The above information is valid at the time of release.
Please contact your local DIGITAL office for the most
up-to-date information.