Software Product Description

PRODUCT NAME: DECprint Printing Services for VMS, Version 4.0 **SPD 32.41.00**

DESCRIPTION

DECprint Printing Services for VMS[1] is a layered product required by suitably configured VMS systems to access Digital PostScript® [2] based print devices.

DECprint Printing Services software consists of the following components:

- A print symbiont that processes print requests from the host on which it resides.
- 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, HP PCL level IV, Tektronix® 4010/4014, and DDIF Bitonal Image files into the PostScript language.
- A collection of optional ALL-IN-1 Scripts and a WPS-PLUS Printer Table file that enhance compatibility between ALL-IN-1, WPS-PLUS, and Digital PostScript printers. ALL-IN-1/WPS-PLUS users can access the many unique features of these printers, such as duplex printing on the PrintServer 20. PrintServer performance is greatly improved for ALL-IN-1 multiple selection and print operations. Support for LN03 font cartridge emulation is also included.
- A series of PostScript tools for creator software support. These include a PostScript error handler and Font Encoding Vectors for the ISO Latin Alphabet Number 1 (ISO 8859/1) and Digital Multinational Character Set for all of the built-in PostScript fonts except the Symbol font.

DECprint Printing Services software must be installed on each system that provides distributed print services to its users.

[1] Replaces VAX ScriptPrinter Software which supported LN03R and LN03Q and VAX PrintServer Client Software for VMS which supported the PrintServer 20, PrintServer 40 and PrintServer 40 Plus.

[2] Note: 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.

LN03 Image Printers are direct-connected to specific workstation configurations only. Refer to the LN03 Image Support Software Software Product Description (SPD 31.52.xx) for LN03 Image Printer requirements.

A system running DECprint Printing Services software can transmit print requests to any PrintServer on the network that is defined in its network database. A system running DECprint Printing Services software can transmit print requests to any desktop PostScript printer in the local area network that is connected to a LAT based terminal server.

Note: VAX PrintServer Supporting Host Software (SPD 27.68.xx) is a companion product to this software for PrintServer device operation.

Features

Print Symbiont

All VMS systems require the installation of this software product to process print requests to the supported printers.

The /PARAMETERS qualifier in the PRINT command passes printer specific parameters to the print symbiont for processing. Not all parameters are supported on all print devices. These parameters are as follows:

- Data_Type - Specifies the type of data in the print job. If necessary, the print symbiont uses a translator to convert the data to PostScript data syntax.
- Messages - Specifies the disposition of messages generated by the print job as either saved in a log file or printed at the end of the job.
- 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.
- Number_Up - Specifies the maximum number of pages that should be printed on a sheet.
- Page_Limit - Specifies the first and last pages of the job to be printed.

- Page_Orientation - Specifies the orientation of printed output on the page (portrait or landscape).
- Page_Size - Specifies the size of the logical pages being printed.
- Sheet_Size - Specifies the physical size of the sheets to be printed.
- Sheet_Count - Specifies the number of times each sheet is to be printed (uncollated copies only).
- Input_Tray - Selects the printer input tray that will supply the paper or media for this job.
- Output_Tray - Selects the printer output tray where the printed output will be deposited.
- Sides - Selects whether the layout of a page is simple, duplex or tumble.
- Fonts_Used - Specifies the soft font module(s) to be loaded before the LN03 ANSI file containing font selection commands is submitted to the ANSI Translator.
- Tab - Selects emulation of the LN03 Set Terminal/Tab command.

The /SETUP qualifier may be used to send specified modules from a device control library to the printer. These modules may be encoded in either ANSI or PostScript.

The print symbiont also supplies accounting information for each print job as follows: sheets of paper printed, the number of RMS Gets, and the number of QIO Writes.

LN03 Emulation Features

LN03 Emulation has two major components. The LN03 Font Cartridge Emulation uses the Fonts_Used parameter to specify the soft font module(s) to be loaded before the LN03 ANSI file containing font selection commands is submitted to the ANSI translator.

The PRTSMB Emulation is the second component of the LN03 Emulation. For ANSI jobs only, enhancements to support more complete LN03 emulation via the ANSI Translator and VMS PRTSMB (the standard VMS print symbiont) functions include the following:

- Margins, as specified by DEFINE/FORM/MARGIN
- Page setup, as specified by DEFINE/FORM/PAGE_SETUP
- Wrap and truncate, as specified by options to DEFINE/FORM
- Page headers, as specified by PRINT/HEADER
- Double spacing, as specified by PRINT/SPACE

Translators

Translator software allows users to print documents with graphic protocols other than the native language of the printer by translating the designated protocol into PostScript. The translators are invoked by the print symbiont at print time through the /PARAMETERS switch of the PRINT command or by submission to a translator-specific queue.

The translators provided convert the following data types into PostScript:

Note: 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.

ANSI text and Sixel graphics are compatible with the LN03. Documents containing LN03 font cartridge commands will be properly translated if the system also has the appropriate optional LN03 Soft Font kit installed, and the appropriate Fonts_Used parameter is provided, or by submitting to a queue associated with that parameter.

Note: The ScriptPrinter and DEClaser devices contain less PostScript virtual memory than the PrintServers. Files utilizing LN03 downline loadable font storage may experience differences in output between a PrintServer, the ScriptPrinter, and the DEClaser.

- ReGIS
- Tektronix 4010/4014
- DDIF (Bitonal Image subset only)
- HP PCL® Level IV

PostScript Tools

PostScript 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 PostScript operator that encountered the error, the operand stack, and the graphics state of the machine at the time of the error.
- Font Encoding vectors for the ISO Latin Alphabet Number 1 (ISO 8859/1) and Digital Multinational Character Set are provided for all of the built-in fonts.

INSTALLATION

Only customers with knowledge of VMS generic and execution print queues in clustered and non-clustered environments and, if operating in a DECserver environment, knowledge of DECserver management, should attempt installation of this software product.

Digital recommends that all other customers purchase Digital Installation Services. These services provide for the installation of the software product and Digital PostScript Printer hardware by an experienced Digital Specialist.

Customer Responsibilities

Before installation of the software, the customer must:

- Previously have installed all prerequisite software and hardware.
- Obtain, install, and demonstrate as operational any equipment and facilities necessary to interface to Digital's communication equipment.
- Make available for a reasonable period of time, as mutually agreed upon by Digital and the customer, all hardware, communication facilities and terminals that are to be used during installation.

Installation of DECprint Printing Services software will consist of the following:

- Verification that a complete set of DECprint Printing Services software media and documentation has been received.
- Verification that all hardware and software prerequisites have been met and the equipment is operational.
- Installation of DECprint Printing Services software on one system.
- Verification that DECprint Printing Services software has been correctly installed by running the Installation Verification Procedure.
- Modification of the DECnet databases to add the PrintServer node name and address.
- Modification of the VMS start-up files to automate the start-up of print queues.

Should a Digital specialist be required to modify the previously installed software parameters, a separate time and materials charge will apply.

HARDWARE REQUIREMENTS

VAX, MicroVAX, VAXserver or VAXstation configuration as specified in the System Support Addendum (SSA 27.84.03-x) and at least one of the supported printers.

SOFTWARE REQUIREMENTS*

VMS Operating System

Desktop-VMS

For LN03Q Configurations only:

LN03 Image Support Software (License is included with the purchase of LN03Q)

For PrintServer Configuration only:

DECnet-VAX

VAX PrintServer Supporting Host Software

* Refer to the System Support Addendum (SSA 27.84.03-x) for availability and required versions of prerequisite/optional software.

ORDERING INFORMATION

Software Licenses: QL-YNCA*-**
Software Media: QA-YNCA*-**
Software Documentation: QA-YNCAA-GZ
Software Product Services: QT-YNCA*-**

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

SOFTWARE LICENSING

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

This license permits execution of the DECprint Printing Services for VMS V4.0 software on any processor (i.e., VAX computer) or VAXcluster within a LAN for purposes of controlling:

a. One identified Digital PostScript printer (each license permits the execution of the software for one printer only) and

b. Any Digital PostScript printer (model numbers LN03R, LN03Q, LPS20, LPS40, LPS40+) purchased by licensee prior to February 1, 1991.

The license to use this software is included with the printers listed in the SSA.

SOFTWARE PRODUCT SERVICES

A variety of service options are available from Digital. For more information, 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.

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