

# Software Product Description

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**PRODUCT NAME:** DECprint Supervisor for Xerox Printers for OpenVMS Alpha, Version 1.0  
**SPD 54.74.00**

## DESCRIPTION

DECprint Supervisor for Xerox Printers (DSX) for OpenVMS Alpha is a layered software product that runs on OpenVMS Alpha systems and provides access to Xerox Laser Printing Systems (LPS). DSX provides the interface between Xerox printers and the OpenVMS printing and queuing system. DSX uses the OpenVMS PRINT commands, with which OpenVMS customers are familiar.

DSX software provides access to the advanced functions and high-speed printing that Xerox LPS printers are known for. The DSX software is well suited for printing:

- High-speed, high-quality cut sheet documents
- High-quality complex documents with a mix of text, graphics, and images
- One- and two-sided documents on a demand-print basis
- Black or black and highlight color documents
- Insurance policies, benefit summaries, phone bills, credit card bills, invoices, and other high-volume, time-critical print jobs

### *Supported Data Types*

DSX supports four data streams:

- ASCII text
- Line Conditioned Data Stream (LCDS)
- Metacode (in 512-byte blocks)
- Image

You can combine these data streams to produce complex documents for any printing requirement.

### *Printing Resolution*

All supported printers print at 300 x 300 dpi for extremely high-quality text, graphics, and images. Highlight color provides one additional color (green, blue, red, or others) to add interest and attract the eye to specific information.

### *Popular User Interface*

DSX supports printing of complex pages, forms, and graphics through standard OpenVMS interfaces, such as the PRINT command and the DECwindows Print Widget. In addition, all features accessible through the command line are accessible through the standard OpenVMS print API.

### *Components*

DSX consists of the OpenVMS print symbiont, support software utilities, and interface software for the shared disk interface.

- The print supervisor allows you to print documents and reports efficiently and reliably on Xerox printers connected to the OpenVMS system through a SCSI bus interconnect.
- The Management and Diagnostic utility allows you to manage the LPS print resources and to troubleshoot the host-to-printer interconnect.
- Driver software communicates with the printer through a SCSI channel to a shared disk subsystem.
- Device control modules provide access through JDLs, JDEs, and DJDEs to functions in the Xerox printers.
- The included Xerox LPS print resources, such as forms and print job libraries, allow you to install and print documents with minimal familiarity with Xerox LPS internals.

The following components help you install and use DSX software:

- Installation procedure
- Installation verification procedure

- Startup procedures
- Example procedures and commands
- On-line help
- Documentation for users, printer operators, and system managers

### Features

DSX software supports the following:

- The DCL PRINT command and qualifiers
- Simplex and duplex printing
- Portrait and landscape printing
- Highlight color on printers so equipped
- Page imposition (number up) of up to four page images per sheet
- Offset stacking of print sets
- Forms
- JDLS, JDEs, and DJDEs from the command line or through device control library and the DEFINE/FORM command
- Communication through a shared disk on a dedicated SCSI channel providing high-speed transfer (5 MB per sec) of print jobs to the printer and printing at the rated speed of the Xerox LPS printer
- Downloading of printer resources from the OpenVMS system to the printer using the Management and Diagnostic utility
- Uploading printer resources from the printer to the OpenVMS system using the Management and Diagnostic Utility for the purposes of modifying or backing up the resources.

## INSTALLATION

You can install DSX software if you are familiar with the OpenVMS printing system and Xerox printers and have system management privileges.

Installation of the DECprint Supervisor for Xerox Printers for OpenVMS Alpha software and shared disk system consists of the following steps:

1. Using the Alpha system's SCSI cable, connect the the SCSI channel adapter in the Alpha system to the shared disk system.
2. Using the printer's SCSI cable, connect the SCSI controller in the Xerox printer to the shared disk system.
3. Verify that you have met all the prerequisite software and hardware requirements.

4. Verify that you have received all DSX software.
5. Install the DSX software on one system.
6. Verify the installation by running the Installation Verification Procedure.
7. Modify the OpenVMS startup files to automatically start the print queues.

If you are unsure of how to make these connections, Digital recommends purchasing Digital Installation Services. These services include installing the software and connecting the shared disk enclosure to both the OpenVMS system and the Xerox printer.

Before Digital Installation Services installs the software and shared disk interface, you must:

- Obtain and install the printer and demonstrate that the Xerox printer is operational.
- Acquire and install, if necessary, a dedicated SCSI channel adapter for the OpenVMS Alpha system.
- Acquire and install, if necessary, a SCSI controller in the Xerox LPS printer.
- Make available for a reasonable period of time, as mutually agreed upon by Digital and the customer, all hardware, including the Xerox printer that is to be used during the installation.

## HARDWARE REQUIREMENTS

The following hardware is required:

- A shared disk subsystem, used as the communication channel between the OpenVMS Alpha system and the Xerox DDI.
- A SCSI channel adaptor for the OpenVMS Alpha system.
- A SCSI cable between the OpenVMS Alpha system and the disk subsystem.
- A SCSI controller for the Xerox printer.
- A SCSI cable between the disk subsystem and the Xerox printer.

### Processors Supported

DSX requires one of the following processors with a dedicated SCSI channel and one of the supported printers. If additional printers are attached, an additional SCSI channel dedicated to the printer must be added to the system.

DEC 2000 Model 300 Server  
 DEC 2000 Model 500 Server  
 DEC 3000 Model 300 Workstation  
 DEC 3000 Model 300L Workstation  
 DEC 3000 Model 300X Workstation

DEC 3000 Model 300LX Workstation  
 DEC 3000 Model 400 Workstation  
 DEC 3000 Model 400 Server  
 DEC 3000 Model 500 Workstation  
 DEC 3000 Model 500 Workstation  
 DEC 3000 Model 500x Workstation  
 DEC 3000 Model 600 Workstation  
 DEC 3000 Model 600s Workstation  
 DEC 3000 Model 700 Workstation  
 DEC 3000 Model 800 Workstation  
 DEC 3000 Model 800s Workstation  
 DEC 3000 Model 900 Workstation  
 DEC 4000 Model 600 Departmental Server  
 DEC 4000 Model 700 Departmental Server  
 DEC 7000 Model 600 Enterprise Server  
 DEC 7000 Model 700 Enterprise Server  
 DEC 10000 Model 600 Enterprise Server

AlphaStation 200 4/100 Workstation  
 AlphaStation 200 4/166 Workstation  
 AlphaStation 200 4/233 Workstation  
 AlphaServer 400 4/166 System  
 AlphaStation 400 4/233 Workstation  
 AlphaServer 1000 4/200 System  
 AlphaServer 2000 4/200 System  
 AlphaServer 2000 4/275 System  
 AlphaServer 2100 4/200 System  
 AlphaServer 2100 4/275 System  
 AlphaServer 8200 5/300 System  
 AlphaServer 8400 5/300 System

#### Processor Restrictions

You need a dedicated SCSI channel for each printer attached to the system.

Pick the appropriate SCSI controller from the list below for each printer attached to your system:

- For PCI-based systems, including AlphaStations and AlphaServers:  
KZPAA-AA PCI fast SCSI-2 controller
- For EISA-based systems, including DEC 2000/3000 systems:  
PB2HA-SA EISA based fast SCSI-2 controller
- For turbo channel-based systems, including DEC 3000 systems:  
PMAZC-AA turboChannel fast SCSI-2 controller
- For XMI-based systems, including DEC 7000 and DEC 10000 systems:  
KZMSA-AB XMI fast SCSI-2 controller

You also need to order one of the following for each printer attached to your system:

- BA353-AA Storgeworks table-top cabinet
- RZ26L-VA 1.0 GB SCSI-2 disk drive
- BN21H-1E 1.5M SCSI-2 cable

If the Xerox printer is going to be more than 10 feet from the OpenVMS Alpha system, order a SCSI extender. This consists of two signal converters and a cable.

- DWZZB-AA SCSI signal converter (two are needed)
- BN21L-15 15M 68-pin SCSI P cable

#### Xerox Printers Supported

The following Xerox Laser Printing System printers are supported:

4250/MRP black and white printer with XDDI software

4850 highlight color printer, release 5.0

4090 black and white printer model 3 with XDDI software

4890 highlight color printer, release 5.0

4135 black and white printer, release 3.6s

4635 black and white printer, release 3.0

These Xerox printers are high-speed, high-volume printers capable of printing from 50 to 135 pages per minute with volumes up to 2 million pages per month. The 4850 and 4890 are highlight color printers, which print black and one additional color. In addition, the following Xerox parts are needed on the Xerox printer:

- product code 9FK, 10 ft SCSI cable
- product code 6HC, SCSI controller for 4890 and 4635 printers
- product code 6HP SCSI controller for 4850, 4135, 4090 and 4250/MRP printers

#### Disk Space Requirements (Block Cluster Size = 1)

DSX for OpenVMS Alpha Systems requires the following amount of free space on the system disk:

Disk space required for installation: 10500 blocks

Disk space required for permanent use: 8700 blocks

The sizes are approximate; actual sizes may vary depending on your system environment, configuration, and software options.

**SOFTWARE REQUIREMENTS**

For all systems:

OpenVMS Alpha Operating System, V6.1 or later

*Optional Software*

Distributed Queueing System, (DQS) Version 1.3 for OpenVMS is recommended when the system that DSX is running on is dedicated to driving one or more Xerox printers. This allows networked OpenVMS systems with DQS to transparently send print jobs to the system with DSX installed. See SPD 28.80 for more details.

DEC TCP/IP for OpenVMS Alpha (formerly called UCX) is recommended when systems running Digital UNIX (formerly called OSF/1) need to print to a Xerox printer. TCP/IP runs in the OpenVMS system, receives print jobs from Digital UNIX systems using the "lpd" protocol, and forwards them on to the OpenVMS queueing system. See SPD 46.46.xx for more details.

**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 authorized Digital distributor or reseller or your local Digital sales office.

DSX is licensed on a concurrent use basis. Each concurrent use license allows you to use DSX with one Xerox printer. You need one concurrent use license for each printer being driven by DSX at the same time. Thus if you are driving two Xerox printers from an OpenVMS system, you will need two concurrent use licenses loaded on your system.

**DISTRIBUTION MEDIA**

CD-ROM

**ORDERING INFORMATION**

Component	Part Number
Software License:	QL-3Q0AA-3B
Software Media (CD-ROM):	QA-3Q0AB-H8
Software Documentation:	QA-3Q0AA-GZ
Software product Services:	QT-3Q0A*-**

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

**SOFTWARE PRODUCT SERVICES**

A variety of service options are available from Digital. For more information contact your distributor, reseller or the local Digital Sales Office.

**SOFTWARE WARRANTY**

Warranty for this software is provided by Digital with the purchase of a license for the product as defined in the Software Warranty Addendum of this SPD only when the product is used to drive a Xerox printer as listed in this SPD.

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