

# HP DECprint Supervisor (DCPS) for OpenVMS

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## Software Installation Guide

May 2009

This guide describes how to install the DECprint Supervisor software.

<b>Revision/Update Information:</b>	This manual supersedes the <i>DCPS Software Installation Guide V2.5</i> .
<b>Software Version:</b>	HP DECprint Supervisor (DCPS) for OpenVMS, Version 2.7
<b>Operating System:</b>	OpenVMS I64 Version 8.2-1, 8.3 or 8.3-1H1 OpenVMS Alpha Version 6.2, 7.3-2, 8.2 or 8.3 OpenVMS VAX Version 5.5-2, 6.2 or 7.3

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**Palo Alto, California**

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# Preface

## Intended Audience

This manual is for system managers responsible for installing the DECprint Supervisor (DCPS) for OpenVMS printing software. To install the printing software, it is necessary to have some experience with:

- OpenVMS DCL command language and system management procedures
- Procedures and commands in the *DCPS System Manager's Guide*
- PCSI utility for installing OpenVMS software
- Network addressing and protocols at your site

## Document Structure

This manual contains the following chapters and appendices:

- Chapter 1 describes what must be done before installing the software.
- Chapter 2 describes how to install the software with PCSI.
- Appendix A shows a sample installation.
- Appendix B describes how to install the software with VMSINSTAL.  
Appendix C lists the files installed by DCPS on your system.

## Related Documents

The primary source of information about DCPS is the following set of software manuals:

**Table 1 DECprint Supervisor Documentation**

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<i>Software Installation Guide</i>	Describes how to install DCPS.
<i>System Manager's Guide</i>	Describes how system managers, data center operators and application programmers can create and manage DCPS print queues and solve printing problems.
<i>User's Guide</i>	Describes how to use DCPS to print to PostScript® printers.
<i>Software Product Description (SPD 44.15.xx)</i>	Contains the full list of printers supported by DCPS and additional information about the features and requirements of DCPS V2.7.

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For additional information about HP OpenVMS products and services, see the HP OpenVMS Systems website:

<http://www.hp.com/go/openvms>

## Reader's Comments

HP welcomes your comments on this manual. Please send comments to:

[openvmsdoc@hp.com](mailto:openvmsdoc@hp.com)

## How to Order Additional Documentation

For information about how to order additional documentation, see the HP OpenVMS Systems Documentation Ordering page:

<http://www.hp.com/go/openvms/doc/order>

## Conventions

The following conventions may be used in this manual:

Ctrl/ <i>x</i>	A sequence such as Ctrl/ <i>x</i> indicates that you must hold down the key labeled Ctrl while you press another key or a pointing device button.
PF1 <i>x</i>	A sequence such as PF1 <i>x</i> indicates that you must first press and release the key labeled PF1 and then press and release another key or a pointing device button.
<span style="border: 1px solid black; padding: 2px;">Return</span>	<p>In examples, a key name enclosed in a box indicates that you press a key on the keyboard. (In text, a key name is not enclosed in a box.)</p> <p>In the HTML version of this document, this convention appears as brackets, rather than a box.</p>
...	<p>A horizontal ellipsis in examples indicates one of the following possibilities:</p> <ul style="list-style-type: none"><li>• Additional optional arguments in a statement have been omitted.</li><li>• The preceding item or items can be repeated one or more times.</li><li>• Additional parameters, values, or other information can be entered.</li></ul>
.	A vertical ellipsis indicates the omission of items from a code example or command format; the items are omitted because they are not important to the topic being discussed.
( )	In command format descriptions, parentheses indicate that you must enclose choices in parentheses if you specify more than one.
[ ]	In command format descriptions, brackets indicate optional choices. You can choose one or more items or no items. Do not type the brackets on the command line. However, you must include the brackets in the syntax for OpenVMS directory specifications and for a substring specification in an assignment statement.
	In command format descriptions, vertical bars separate choices within brackets or braces. Within brackets, the choices are optional; within braces, at least one choice is required. Do not type the vertical bars on the command line.
{ }	In command format descriptions, braces indicate required choices; you must choose at least one of the items listed. Do not type the braces on the command line.

<b>bold type</b>	Bold type represents the introduction of a new term. It also represents the name of an argument, an attribute, or a reason.
<i>italic type</i>	Italic type indicates important information, complete titles of manuals, or variables. Variables include information that varies in system output (Internal error <i>number</i> ), in command lines ( <i>/PRODUCER=name</i> ), and in command parameters in text (where <i>dd</i> represents the predefined code for the device type).
Example	This typeface indicates code examples, command examples, and interactive screen displays. In text, this type also identifies URLs, UNIX commands and pathnames, PC-based commands and folders and certain elements of the C programming language.
UPPERCASE TYPE	Uppercase type indicates a command, the name of a routine, the name of a file, or the abbreviation for a system privilege.
-	A hyphen at the end of a command format description, command line, or code line indicates that the command or statement continues on the following line.
numbers	All numbers in text are assumed to be decimal unless otherwise noted. Nondecimal radices—binary, octal, or hexadecimal—are explicitly indicated.



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## Before Installing the Software

### 1.1 Operating System Version

The following are the supported versions of the OpenVMS operating system:

- OpenVMS I64 V8.2-1, V8.3 and V8.3-1H1
- OpenVMS Alpha V6.2\*, V7.3-2\*, V8.2 and V8.3
- OpenVMS VAX V5.5-2\*, V6.2\* and V7.3

For a current list of supported OpenVMS versions, visit the following address:

[http://h71000.www7.hp.com/openvms/openvms\\_supportchart.html](http://h71000.www7.hp.com/openvms/openvms_supportchart.html)

Although the DCPS V2.7 PCSI kit will install and run on OpenVMS V6.2 and later, and the DCPS V2.7 VMSINSTAL kit will install and run on OpenVMS VAX V5.5-2 and later, customers running OpenVMS versions that are not supported do so at their own risk.

If you are running an older version of OpenVMS under a Prior Version support contract, such as OpenVMS VAX V5.5-2, contact HP for a DCPS VMSINSTAL kit. (See Section 1.3.2 for more information about PCSI software requirements.)

### 1.2 Disk Space

Depending on whether DCPS is installed on an I64, Alpha or VAX processor, disk space requirements may vary. Table 1–1 lists the disk space requirements.

**Table 1–1 Disk Space Requirements**

Disk space required for . . .	I64 system	Alpha system	VAX system
Installation	11,000 blocks	7,700 blocks	7,200 blocks
Permanent use	10,500 blocks	7,200 blocks	6,700 blocks

These disk space requirements are approximate, and depend on your system environment, disk cluster size, configuration and software options.

### 1.3 Related Software

DECprint Supervisor works with other software to create a fully functional printing system. Before installing DECprint Supervisor, make sure the other application and printing software is compatible.

The following sections detail the software you need. Refer to the DECprint Supervisor Software Product Description (SPD) for specific version requirements.

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\* With Prior Version Support or Extended Engineering Support

### 1.3.1 USB Patch kits

You must install one of the following USB patch kits before installing DCPS V2.7 or later:

**Table 1–2 USB Patch Kits**

OpenVMS Version	Patch Kit
OpenVMS I64 V8.3	VMS83I_USB-V0200
OpenVMS I64 V8.3-1H1	VMS831H1I_USB-V0100
OpenVMS Alpha V8.3	VMS83A_USB-V0100

You can obtain these patch kits (or an update to them):

- From an HP Customer Support Center
- From the HP IT Resource Center (ITRC) at the following URL:

<http://www.itrc.hp.com>

These patch kits are expected to be included in a future version of OpenVMS.

### 1.3.2 PCSI Utility

DCPS is installed with the PCSI utility via the PRODUCT command. For a complete description of the PCSI utility and the use of the PRODUCT command, refer to the *HP OpenVMS System Manager's Manual* and the *HP OpenVMS System Management Utilities Reference Manual* or online help.

If you are running older versions of OpenVMS, you may be required to install a PCSI patch kit before installing DCPS. See Table 1–3 to determine whether you need to install a PCSI patch. The patch will upgrade PCSI on your system.

**Table 1–3 PCSI Patch Kits**

OpenVMS Version	PCSI Patch Kit
I64 V8.2 and later	not required
Alpha V6.2 through V7.1-2	DEC-AXPVMS-VMS62TO71U2_PCSI-V0200-4
Alpha V7.2 and later	not required
VAX V5.5-2	not available; contact HP for a DCPS VMSINSTAL kit
VAX V6.2 through V7.1	DEC-VAXVMS-VMS62TO71_PCSI-V0200-4
VAX V7.2	DEC-VAXVMS-VMS72_PCSI-V0101-4
VAX V7.3	not required

You can obtain these patch kits:

- From an HP Customer Support Center
- From the HP IT Resource Center (ITRC) at <http://www.itrc.hp.com>

### 1.3.3 TCP/IP Networks

TCP/IP connections to PrintServer printers using Common Printer Access Protocol (CPAP), and connections to other printers using the Raw TCP/IP socket or LPD protocols, require one of the following:

- HP TCP/IP Services for OpenVMS
- Process Software MultiNet for OpenVMS
- Process Software TCPware for OpenVMS

### 1.3.4 C Run-Time Library

DCPS requires that the C run-time library is installed on your system. This library is included with the OpenVMS operating system starting with OpenVMS V6.1, and in the DEC C/C++ Run-Time Components kit. Therefore:

- To run on any OpenVMS V6.1 or later system, no installation of the DEC C Run-Time Library is required.
- To run on OpenVMS VAX V5.5-2 systems, the DEC C/C++ Run-Time Components kit must be installed before installing DCPS.

To determine if the DEC C run-time library exists on your system, check for the existence of the file `SYSS$STARTUP:CRT$STARTUP.COM`. If this file exists, the DEC C/C++ Run-Time Components kit has already been installed. If it does not, you must install the DEC C/C++ Run-Time Components kit before installing DECprint Supervisor.

The DEC C/C++ Run-Time Components kit is included on the OpenVMS VAX Software Product Library CD-ROM in the Compaq C directory. The saveset name is AACRT060.A. Please refer to the DEC C/C++ Run-Time Components documentation for information about installing the kit, starting with *Read Before Installing or Using DEC C/C++ Run-Time Components Version 6.0 for OpenVMS VAX Systems*.

### 1.3.5 PrintServer Software

To print to a DIGITAL PrintServer printer, the printing environment must contain a supporting host system running the PrintServer software product.

### 1.3.6 AppleTalk Networks

One of the network protocols used by DCPS is AppleTalk, provided on OpenVMS Alpha and VAX systems by the layered product *PATHWORKS for OpenVMS (Macintosh)*. Although this product is retired and no longer supported, DCPS has continued to work with AppleTalk queues.

However, changes made to OpenVMS in V8.2 prevent the AppleTalk protocol from being started. Therefore, DCPS does not work with AppleTalk queues starting with OpenVMS V8.2.

### 1.3.7 DDIF Printing

To print DDIF encoded bitonal images, DCPS requires that either DECwindows or DECimage Application Services (DAS) be installed on your system. DAS is only available on OpenVMS VAX systems.

### 1.3.8 DEC Image Print-PLUS (ICPS)

DCPS V1.1 and later versions cannot coexist with ICPS V1.x software. Installing DCPS replaces the image SYSS\$LIBRARY:TRN\$DDIF\_IMAGE.EXE. This new image is not compatible with the ICPS software.

## 1.4 Mismatched Components

All DCPS executable components attempt to ensure they are a matched set. If a mismatch occurs, DCPS reports an error when the queue starts. This error occurs when a component of a prior (incompatible) software version exists in the SYSS\$SPECIFIC area and newer components are installed in the SYSS\$COMMON area. The error that occurs depends on which versions of which components are executing, but the following message will be among those received:

```
%%%%%%%%%% OPCOM 13-FEB-1995 21:38:08.66 %%%%%%%%%%%  
Message from user QUEUE_MANAGE on DAHLIA  
%QMAN-E-SYMDEL, unexpected symbiont process termination
```

The DCPS installation procedure checks for DCPS files in the SYSS\$SPECIFIC area and warns you of their existence.

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## Installing the Software

This chapter describes how to install DECprint Supervisor software using the PCSI utility). For a complete description of the PCSI utility and the use of the PRODUCT command, refer to the *HP OpenVMS System Manager's Manual* and the *HP OpenVMS System Management Utilities Reference Manual* or online help.

### 2.1 Overview

Follow these steps to install the DECprint Supervisor (DCPS) for OpenVMS software:

1. Review all release notes. You can extract the release notes in text format from the PCSI kit with the command:

```
$ PRODUCT EXTRACT RELEASE NOTES DCPS -
_ $ [/SOURCE=device:[directory]] -
_ $ [/DESTINATION=device:[directory]]
```

You can extract the release notes in PostScript format with the command:

```
$ PRODUCT EXTRACT FILE DCPS /SELECT=DCPS027_RELEASE_NOTES.PS -
_ $ [/SOURCE=device:[directory]] -
_ $ [/DESTINATION=device:[directory]]
```

2. Stop each DCPS queue using STOP /QUEUE /NEXT or STOP /QUEUE /RESET commands if:
  - You have existing running DCPS queues and do not want the DCPS installation procedure to automatically stop them.
  - You have DCPS executables in the SYSSSPECIFIC system areas.\*
  - You need to apply OpenVMS or other patches that impact DCPS.
3. Remove any DCPS executable files from the SYSSSPECIFIC system areas.\*
4. Apply OpenVMS or other patches that impact DCPS, as determined from the DCPS release notes or other sources. If the patches require that you reboot your system, do so after applying the patches.
5. Install DCPS.
6. Create or update DCPSSSTARTUP.COM, as described in the *DCPS System Manager's Guide*. For example, add queue definitions to the file and set the value of the DCPSSMAX\_STREAMS logical following the examples provided in the procedure.

---

\* The installation procedure checks for such files.

7. Start your DCPS print queues by invoking DCPS\$STARTUP.COM. The DCPS installation procedure restarted DCPS queues that it stopped, unless the installation failed. If you changed your DCPS environment or DCPS\$STARTUP.COM after the DCPS installation procedure automatically restarted some queues, you may need to stop all DCPS queues and restart them before your changes will take effect.

## 2.2 PCSI Conventions

PCSI will ask questions during the installation. Questions may be followed by default responses enclosed in brackets ([ ]). Enter your response followed by `Return`.

Press `Return` to enter the default response. If you are not sure of the response, enter a question mark (?). PCSI displays explanatory text and repeats the prompt.

Messages specific to the installation of DECprint Supervisor software are listed in Section B.4.

## 2.3 Installing the Software

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### Note

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This section does not reproduce all of the text you may see on your screen during the installation of the DCPS software. A sample PCSI installation is shown in Appendix A.

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To install the software, use the following procedure:

1. **Invoke the PCSI utility.**

Enter the following command:

```
$ PRODUCT INSTALL DCPS [/SOURCE=device:[directory]]
```

where *device* and *directory* specify the location of the DCPS PCSI kit.

Do not specify an alternate destination by using the /DESTINATION qualifier or defining the logical name PCSISDESTINATION. DCPS needs to be installed in the cluster common area of your system disk and will be installed there regardless of the alternate destination you specify.

2. **Select the DCPS kit.**

If more than one DCPS PCSI kit exists in the source directory, you will be prompted to choose one. For example:

```
1 - HP AXPVMS DCPS V2.4           Layered Product
2 - HP AXPVMS DCPS V2.7           Layered Product
3 - HP I64VMS DCPS V2.7           Layered Product
4 - HP VAXVMS DCPS V2.7           Layered Product
5 - All products listed above
6 - Exit
```

Choose one or more items from the menu separated by commas:

Choose the kit with the correct DCPS version and for the architecture on which you are installing DCPS.

3. **Announce products to be installed.**

PCSI then announces the products to be installed. For example:

```
The following product has been selected:  
HP AXPVMS DCPS V2.7                               Layered Product [Installed]
```

Do you want to continue? [YES]

If this is the DCPS kit you want to install, press .

#### 4. Check for alternate destination.

If DCPS has already been installed on your system using PCSI and you specified an alternate destination, you will see these messages:

```
%PCSIUI-W-DESTQUAL, destination qualifier will be ignored for this product
```

- \* When reinstalling a product you cannot specify a destination.
- \* To change the product's destination, remove the product then
- \* install it to a new location. If you continue this operation,
- \* the product will be reinstalled in its current location.

Do you want to continue? [YES]

Since DCPS is always installed in SYSSCOMMON on your system disk, press  to continue the installation.

#### 5. Start the installation.

PCSI then starts the installation, displaying messages such as:

```
Configuration phase starting ...
```

You will be asked to choose options, if any, for each selected product and for any products that may be installed to satisfy software dependency requirements.

```
HP AXPVMS DCPS V2.7: HP DECprint Supervisor for OpenVMS
```

```
© Copyright 2009 Hewlett-Packard Development Company, L.P.
```

#### 6. Check for sufficient disk space.

PCSI checks to see if the amount of disk space required for the installation is available. If the space is not available, a message indicates the amount of disk space that is required, and the installation is aborted. You must allocate sufficient disk space and then start the PCSI procedure again.

If there is sufficient disk space, the installation procedure continues.

#### 7. Make sure the queue manager is running.

The installation procedure checks to see if the queue manager is running on your system.

If the queue manager is not running, the Installation Verification Procedure (IVP) does not run, and the following messages are displayed on your screen:

```
The queue manager is not running. The IVP will not be run.
```

The queue manager must be running if you want the installation to run the IVP.

#### 8. Check for software prerequisites.

The DCPS installation begins by checking for software prerequisites such as ECOs required for this release:

```
Examining system environment ...
```

If prerequisite software is not found on your system, you will see messages such as the following:

```
DCPS V2.7 requires that a Foo Bar patch kit be installed on your system.  
Please install ECO patch kit FOO_BAR Vn.n or later,  
and then re-run this installation.
```

The installation will then abort.

**9. Check for running DCPS queues.**

The DCPS installation continues by looking for DCPS queues on your system. If no DCPS print queues are running, skip the next two steps.

**10. Choose whether to display queues to be stopped.**

If DCPS print queues are running, one of the following messages are displayed.

- If the queues are all running on the current system:

```
You should stop all running DCPS queues on this system (node-name).  
Do you want to see a list of queues that will be stopped? [NO]
```

- If there are also queues running on systems that use the current system's system disk:

```
You should stop all running DCPS queues affected by this  
installation. This includes queues on these systems:
```

```
node-name  
.  
.  
.  
node-name
```

If you want to see a list of DCPS queues that will be stopped by the installation procedure, enter YES and press `[Return]`. Otherwise, press `[Return]`.

**11. Choose which queues to stop.**

Since the DCPS installation installs a new version of software in the cluster common directory on the current system, you should stop all DCPS queues running on systems that use the current system disk. This choice is the default.

Depending on your environment, you are given a number of choices when deciding what queues to stop during the installation. The choices include:

- Stop the *n* DCPS queues on this system  
This choice is the default if running DCPS queues are found on your system.
- Stop the *n* DCPS queues affected by this installation  
This choice is the default if running DCPS queues are found both on the current system and others that use the current system disk.
- Continue installation (there are no running queues on this system)  
This choice is the default if no running DCPS queues are found that would be affected by the installation.
- Stop the *n* DCPS queues in the cluster

There is no need to stop queues in the cluster not affected by the installation, but this option is offered for convenience. (This is the DCPS V2.4 installation behavior.)

- Do not stop any queues (not recommended)

This is not recommended because unpredictable results may occur. Running queues are still running the old DCPS software until the queues are stopped, but, for example, device control libraries are updated by the installation and may be incompatible with the old software. If you choose this option, queues should be stopped and restarted as soon as possible after the installation completes.

Choices are presented in a numbered list similar to the following:

Choose from the following options:

- 1 - Stop the *n* DCPS queues on this system
- 2 - Stop the *n* DCPS queues in the cluster
- 3 - Do not stop any queues (not recommended)

Enter option: [1]

Make your choice and press `Return`.

If you previously chose to display a list of queues that would be stopped, that list is now displayed:

Queue	Status	Node	Device
-----	-----	----	-----
<i>queue-name</i>	<i>status</i>	<i>node</i>	" <i>protocol/host:port</i> "
.			
.			
<i>queue-name</i>	<i>status</i>	<i>node</i>	" <i>protocol/host:port</i> "

## 12. Choose to continue the installation.

After making your choice, one of the following messages is displayed.

- If queues are being stopped:

Do you want to stop the queues and continue the installation? [YES]

- If queues are not being stopped:

Do you want to continue the installation? [YES]

Press `Return` to continue or enter NO and press `Return` to abort the installation. If you continue, and queues are being stopped, the following messages are displayed:

If the installation fails, DCPS queues may need to be restarted manually.

Stopping DCPS queues ...

## 13. Check for files in SYSSSPECIFIC.

DCPS requires all its files to be installed in SYSSCOMMON. Although files can be put in SYSSSPECIFIC for debugging or testing purposes, it is not supported.

If DCPS images are found in SYSSSPECIFIC, messages similar to the following are displayed:

This system contains DCPS images in SYS\$SPECIFIC:

```
disk:[SYSn.SYSEXE]DCPS$SMB.EXE;n
```

The existence of DCPS files in SYS\$SPECIFIC is not supported.

If these files remain, they will be used instead of the DCPS product files you are installing now, and the IVP may test the wrong or mismatched DCPS components. These files can cause unpredictable DCPS behavior on your system.

Do you want to continue the installation? [NO]

You should choose to abort the installation by pressing `[Return]`. If you are sure you want to continue, enter YES and press `[Return]` and the installation will continue.

#### 14. Specify location for Layup files.

Next, the installation procedure looks for a definition of the logical name DCPS\$LAYUP in the system table in executive mode. This logical name points to the location of DCPS layup files. The default location is SYS\$COMMON:[SYSHLP.EXAMPLES.DCPS].

Although the installation procedure will put new versions of layup files into your site-specific directory if it is already defined, it will not prompt for a new location. If you want your layup files to be in a different directory, usually done so that non-privileged users can modify them, you should manually copy them after the installation is complete and modify the value of DCPS\$LAYUP at the bottom of the SYS\$STARTUP:DCPS\$REQUIRED.COM command procedure.

- If a definition exists and it is the default location, no messages are displayed.
- If a definition exists and it is a site-specific one, a message showing its value is displayed:

```
Layup files will be copied to disk:[directory].
```

- If no definition exists, the default location is used.

If files cannot be copied to your site-specific DCPS\$LAYUP directory (for example, if the directory does not exist) messages similar to the following will be displayed:

```
There is a problem with your definition of DCPS$LAYUP.  
Layup files will not be copied to DISK$INVALID:[WOOPS].
```

#### 15. Specify location for spool directory.

If DCPS V2.5 or later has already been installed, and the startup procedure has been run, the spool directory location has already been specified and this step is skipped.

The DCPS spool directory is used to store temporary spool files for LPD jobs when the DCPSS\$POOL or DCPSS\$queue-name\_SPOOL logical name is defined. (See the *DCPS System Manager's Guide* for more information about DCPS LPD spooling.)

You should specify a device or device and directory that is not on a system disk and that is available to all systems for which DCPS spooling is used. You are asked for a location for the directory, which is always called [DCPSS\$POOL]:



This step occurs in between the 90% and 100% done messages.

**19. Verify successful installation.**

The IVP verifies that the software was installed properly. If the system queue manager is running, the IVP runs automatically and the installation procedure performs the following:

1. Creates a temporary print queue
2. Queues the test files in [SYSTEST.DCPS] to the temporary print queue DCPS\$IVP\_TEST
3. Displays messages similar to the following:

```
%PCSI-I-IVPEXECUTE, executing test procedure for HP AXPVMS DCPS V2.7 ...
Job DCPS$IVP_POST (queue DCPS$IVP_TEST, entry n started on DCPS$IVP_TEST
%DCPS-I-JOBSTART, Job DCPS$IVP_POST (queue DCPS$IVP_TEST, entry n)
    started on DCPS$IVP_TEST
    .
    .
    .
Job DCPS$IVP_LIST (queue DCPS$IVP_TEST, entry 49) completed
```

---

**Note**

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The IVP does not produce any hardcopy output.

---

The IVP procedure automatically deletes the temporary queue when the IVP completes. You can print the IVP test files to a real printer later. (Refer to the *DCPS System Manager's Guide*.)

You can also manually invoke the IVP after the installation by entering:

```
  $ @SYSTEST:DCPS$IVP
```

PCSI issues an informational message when the IVP is completed:

```
%PCSI-I-IVPSUCCESS, test procedure completed successfully
```

**20. Create queues and customize your environment.**

Refer to the *DCPS System Manager's Guide* for instructions on how to create print queues and customize your printing environment.

## Sample Installation Session

Example A-1 shows a sample installation of the DECprint Supervisor software on an OpenVMS I64 system with no previous DCPS queues running. Example A-2 shows a sample installation on an OpenVMS Alpha system in a cluster with running DCPS queues.

### Example A-1 Sample New Installation on an OpenVMS I64 System

```
$ PRODUCT INSTALL DCPS /SOURCE=DQA0:[DCPS027.KIT]
  1 - HP AXPVMS DCPS V2.7           Layered Product
  2 - HP I64VMS DCPS V2.7           Layered Product
  3 - HP VAXVMS DCPS V2.7           Layered Product
  4 - All products listed above
  5 - Exit

Choose one or more items from the menu separated by commas: 2

The following product has been selected:
  HP I64VMS DCPS V2.7           Layered Product

Do you want to continue? [YES] 
Configuration phase starting ...

You will be asked to choose options, if any, for each selected product and for
any products that may be installed to satisfy software dependency requirements.

HP I64VMS DCPS V2.7: HP DECprint Supervisor for OpenVMS

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Examining system environment ...

* This product does not have any configuration options.

Execution phase starting ...

Do you want to continue? [YES] 

The following product will be installed to destination:
  HP I64VMS DCPS V2.7           DISK$SYS_SARAH:[VMS$COMMON.]

Portion done: 0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%

The following product has been installed:
  HP I64VMS DCPS V2.7           Layered Product

%PCSI-I-IVPEXECUTE, executing test procedure for HP I64VMS DCPS V2.7 ...
%DCPS-I-JOBSTART, Job DCPS$IVP_POST (queue DCPS$IVP_TEST, entry 150)
  started on DCPS$IVP_TEST

Job DCPS$IVP_POST (queue DCPS$IVP_TEST, entry 150) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_ANSI (queue DCPS$IVP_TEST, entry 151)
  started on DCPS$IVP_TEST
```

Cont'd on next page

### Example A-1 (Cont.) Sample New Installation on an OpenVMS I64 System

```
Job DCPS$IVP_ANSI (queue DCPS$IVP_TEST, entry 151) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_REGIS (queue DCPS$IVP_TEST, entry 152)
  started on DCPS$IVP_TEST

Job DCPS$IVP_REGIS (queue DCPS$IVP_TEST, entry 152) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_TEK4014 (queue DCPS$IVP_TEST, entry 153)
  started on DCPS$IVP_TEST

Job DCPS$IVP_TEK4014 (queue DCPS$IVP_TEST, entry 153) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_PCL (queue DCPS$IVP_TEST, entry 154)
  started on DCPS$IVP_TEST

Job DCPS$IVP_PCL (queue DCPS$IVP_TEST, entry 154) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_PROPRINTER (queue DCPS$IVP_TEST, entry 155)
  started on DCPS$IVP_TEST

Job DCPS$IVP_PROPRINTER (queue DCPS$IVP_TEST, entry 155) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_LIST (queue DCPS$IVP_TEST, entry 156)
  started on DCPS$IVP_TEST

Job DCPS$IVP_LIST (queue DCPS$IVP_TEST, entry 156) completed
%PCSI-I-IVPSUCCESS, test procedure completed successfully

HP I64VMS DCPS V2.7: HP DECprint Supervisor for OpenVMS

    DCPS Release Notes (text and PostScript) have been provided in SYS$HELP
```

### Example A-2 Sample Upgrade Installation on an OpenVMS Alpha System

```
$ PRODUCT INSTALL DCPS /SOURCE=DQA0:[DCPS027.KIT]
```

```
 1 - HP AXPVMS DCPS V2.7           Layered Product
 2 - HP I64VMS DCPS V2.7           Layered Product
 3 - HP VAXVMS DCPS V2.7           Layered Product
 4 - All products listed above
 5 - Exit
```

Choose one or more items from the menu separated by commas: 1

The following product has been selected:

```
  HP AXPVMS DCPS V2.7           Layered Product
```

Do you want to continue? [YES]

The following product will be installed to destination:

```
  HP AXPVMS DCPS V2.7           DISK$SYS_JULIE:[VMS$COMMON.]
```

The following product will be removed from destination:

```
  HP AXPVMS DCPS V2.5           DISK$SYS_JULIE:[VMS$COMMON.]
```

Configuration phase starting ...

You will be asked to choose options, if any, for each selected product and for any products that may be installed to satisfy software dependency requirements.

HP AXPVMS DCPS V2.7: HP DECprint Supervisor for OpenVMS

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Examining system environment ...

You should stop all running DCPS queues on this system (JULIE).

Do you want to see a list of queues that will be stopped? [NO] **Y**

Choose from the following options:

Cont'd on next page

## Example A-2 (Cont.) Sample Upgrade Installation on an OpenVMS Alpha System

- 1 - Stop the 15 DCPS queues on this system
- 2 - Stop the 171 DCPS queues in the cluster
- 3 - Do not stop any queues (not recommended)

Enter option: [1]

Queue	Status	Node	Device
-----	-----	----	-----
HP1320_LPD	Idle	JULIE	"IP_LPD/lj1320"
HP1320_RAW	Idle	JULIE	"IP_RawTCP/lj1320:9100"
HP2430_LPD	Idle	JULIE	"IP_LPD/lj2430"
HP2430_LPDREMOTE	Idle	JULIE	"IP_LPD/unixsystem:hp2430_raw"
HP3800_LPD	Idle	JULIE	"IP_LPD/clj3800"
HP3800_RAW	Idle	JULIE	"IP_RawTCP/clj3800:9100"
HP4600_LPD	Idle	JULIE	"IP_LPD/dcpshp4600"
HP4600_RAW	Idle	JULIE	"IP_RawTCP/dcpshp4600:9100"
HP4700_RAW	Idle	JULIE	"IP_RawTCP/clj4700:9100"
HP5200_LPD	Idle	JULIE	"IP_LPD/lj5200"
HP5200_RAW	Idle	JULIE	"IP_RawTCP/lj5200:9100"
HP9000MFP_RAW	Idle	JULIE	"IP_RawTCP/hp03026.zko.dec.com:9100"
HP9000_POD	Idle	JULIE	"IP_RawTCP/hp34hp312.zko.dec.com:9100"
LN28_LPD	Idle	JULIE	"IP_RawTCP/ln28:9100"
LN32_LAT	Idle	JULIE	"serial/DCPS_LN32"

Do you want to stop the queues and continue the installation? [YES]

If the installation fails, DCPS queues may need to be restarted manually.

Stopping DCPS queues ...

DCPS, when so configured, will store temporary spool files in directory [DCPS\$SPOOL]. By default, this directory is created in SYS\$COMMON. It is recommended that you choose a non-system disk for this directory.

Enter location for DCPS spool directory: [SYS\$COMMON] DISK\$HELPER

The following DCPS spool directory will be created:

DISK\$HELPER:[DCPS\$SPOOL]

Is this correct? [YES]

\* This product does not have any configuration options.

Execution phase starting ...

The following product will be installed to destination:

HP AXPVMS DCPS V2.7 DISK\$SYS JULIE:[VMS\$COMMON.]

The following product will be removed from destination:

HP AXPVMS DCPS V2.5 DISK\$SYS\_ROUTE2:[VMS\$COMMON.]

Portion done: 0%...10%...20%...30%...40%...50%...60%...70%...80%...90%

Starting DCPS queues ...

...100%

The following product has been installed:

HP AXPVMS DCPS V2.7 Layered Product

The following product has been removed:

HP AXPVMS DCPS V2.5 Layered Product

%PCSI-I-IVPEXECUTE, executing test procedure for HP AXPVMS DCPS V2.7 ...

%DCPS-I-JOBSTART, Job DCPS\$IVP\_POST (queue DCPS\$IVP\_TEST, entry 157)

started on DCPS\$IVP\_TEST

Cont'd on next page

## Example A-2 (Cont.) Sample Upgrade Installation on an OpenVMS Alpha System

```
Job DCPS$IVP_POST (queue DCPS$IVP_TEST, entry 157) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_ANSI (queue DCPS$IVP_TEST, entry 158)
  started on DCPS$IVP_TEST

Job DCPS$IVP_ANSI (queue DCPS$IVP_TEST, entry 158) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_REGIS (queue DCPS$IVP_TEST, entry 159)
  started on DCPS$IVP_TEST

Job DCPS$IVP_REGIS (queue DCPS$IVP_TEST, entry 159) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_TEK4014 (queue DCPS$IVP_TEST, entry 160)
  started on DCPS$IVP_TEST

Job DCPS$IVP_TEK4014 (queue DCPS$IVP_TEST, entry 160) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_PCL (queue DCPS$IVP_TEST, entry 161)
  started on DCPS$IVP_TEST

Job DCPS$IVP_PCL (queue DCPS$IVP_TEST, entry 161) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_PROPRINTER (queue DCPS$IVP_TEST, entry 162)
  started on DCPS$IVP_TEST

Job DCPS$IVP_PROPRINTER (queue DCPS$IVP_TEST, entry 162) completed
%DCPS-I-JOBSTART, Job DCPS$IVP_LIST (queue DCPS$IVP_TEST, entry 163)
  started on DCPS$IVP_TEST

Job DCPS$IVP_LIST (queue DCPS$IVP_TEST, entry 163) completed
%PCSI-I-IVPSUCCESS, test procedure completed successfully

HP AXPVMS DCPS V2.7: HP DECprint Supervisor for OpenVMS

  DCPS Release Notes (text and PostScript) have been provided in SYS$HELP
```

---

## Installing the Software with VMSINSTAL

This appendix describes how to install DECprint Supervisor software using the VMSINSTAL utility. VMSINSTAL is used to install DCPS on systems running versions of OpenVMS older than V6.2. If you are not familiar with the VMSINSTAL utility, refer to the *HP OpenVMS System Manager's Manual*.

### B.1 Overview

Follow the steps in Section 2.1 to prepare for the DCPS installation.

### B.2 VMSINSTAL Conventions

VMSINSTAL will prompt you for site-specific information. Questions are preceded by an asterisk (\*) and may be followed by default responses enclosed in brackets ([ ]). Enter your response followed by `[Return]`.

Press `[Return]` to enter the default response. If you are not sure of the response, enter a question mark (?). VMSINSTAL displays explanatory text and repeats the prompt.

Messages specific to the installation of DECprint Supervisor software are listed in Section B.4.

### B.3 Installing the Software

---

#### Note

---

This section does not reproduce all of the text you may see on your screen during the installation of the DCPS software. Sample VMSINSTAL installation scripts are shown in Section B.5.

---

To install the software, use the following procedure:

1. **Invoke the VMSINSTAL procedure.**

Enter the following command:

```
$ @SYS$UPDATE:VMSINSTAL DCPSpppnnn device-id [OPTIONS N]
```

You supply the following information:

- `DCPSpppnnn` is the save set name, with `ppp` designating the platform (AXP [Alpha] or VAX) and `nnn` designating the version (for example, 027 for V2.7).
- `device-id` is the name of the device on which you want to mount the media, such as DQA0:.

- `OPTIONS N` allows you to request release notes. If you do not include the `OPTIONS N` parameter, `VMSINSTAL` does not ask you about the release notes. Review the release notes before proceeding with the installation. If you are restarting the installation and have already reviewed the release notes, you do not need to specify `OPTIONS N`.

First, `VMSINSTAL` displays a banner line with the date and time, and instructions for running the dialog. You may receive one or more of the following warning messages when `VMSINSTAL` starts up. Exit from the procedure, correct the cause of the warning message, and start the `VMSINSTAL` procedure again.

- If you are not currently logged in to the `SYSTEM` account, the following message is displayed:

```
%VMSINSTAL-W-NOTSYSTEM, You are not logged in to the SYSTEM account.
```

- If processes are running while `VMSINSTAL` is running, the following message is displayed:

```
%VMSINSTAL-W-ACTIVE, The following processes are still active:
    process-name
```

Other processes may cause the installation of `HELP` to fail. When any of these messages are displayed, the following question is displayed to allow you to terminate `VMSINSTAL` and correct the situation:

```
* Do you want to continue anyway [NO]?
```

Enter `YES` to continue. If you answer `NO`, the `VMSINSTAL` procedure is terminated immediately.

You can enter a question mark (?) at this time to display advice from the `VMSINSTAL` software. For example:

```
The above conditions may cause VMSINSTAL to function improperly.
In particular, problems may occur with file ownership if you are not
logged into the SYSTEM account.
```

## 2. **Ensure that existing software is saved.**

`VMSINSTAL` then asks the following question:

```
* Are you satisfied with the backup of your system disk [YES]?
```

Enter `YES` to continue, or enter `NO` to exit `VMSINSTAL` to make a backup and run `VMSINSTAL` again.

If you enter a question mark (?) in response to this question, `VMSINSTAL` displays the following explanation:

```
VMSINSTAL attempts to ensure that a power failure or system crash
will not corrupt your system disk. However, for absolute safety we
recommend that you back it up before installing new products. Please
see the documentation for more information on crashes during
installation.
```

## 3. **Confirm that distribution media is loaded.**

`VMSINSTAL` asks for confirmation that the distribution media has been mounted.

```
Please mount the first volume of the set on device-id:
* Are you ready?
```

## 4. **Announce products to be installed.**

VMSINSTAL then announces the products to be installed where *ppp* designates the platform and *n.n* designates the version.

The following products will be processed:

DCPS*ppp Vn.n*

Beginning installation of DCPS*ppp Vn.n* at 13:45

%VMSINSTAL-I-RESTORE, Restoring product saveset A

## 5. Obtain the release notes.

If you specified OPTIONS N in the VMSINSTAL command line, the following Release Notes options are displayed:

Release notes included with this kit are always copied to SYS\$HELP.

Additional Release Notes Options:

Release Notes Options:

- (1) Display release notes
- (2) Print release notes
- (3) Both 1 and 2
- (4) None of the above

After you enter the release note option, VMSINSTAL asks whether you want to continue the installation procedure:

Do you want to continue the installation [NO]?

If you did not include the OPTIONS N portion of the VMSINSTAL command line, VMSINSTAL does not display this question. Instead, the following message is displayed:

%VMSINSTAL-I-REMOVED, Product's release notes have been moved to SYS\$HELP

## 6. Check for active DCPS queues.

If DCPS print queues are active while VMSINSTAL is running, messages similar to the following are displayed:

%DCPSVAX-W-QUEACTIVE, The following DCPS queues are still active:

Queue	Device	Status
-----	-----	-----
LN09	DAN::LTA9000:	IDLE
LN17	DAN::"AppleTalk/Dan's LN17+ps"	IDLE
LN40	DAN::"IP_RawTCP/ln40:6869"	IDLE
LPS32	DAN::"IP_CPAP/lps32.office.genicom.com"	IDLE

%DCPSVAX-I-NUMQUEUES, 4 existing DCPS queues, with 4 active

Previously installed DCPS queues are still running. Continuing this installation without entering STOP/QUEUE/RESET for each such queue can cause inconsistent behavior among queues and can cause the IVP to fail.

Note that if you choose to have this installation procedure automatically stop such queues, and the installation subsequently aborts, this procedure will not automatically restart them.

\* Do you want these queues automatically stopped and restarted [YES]?

If you do not want the installation procedure to automatically stop them, you are given the options of aborting the installation or continuing with the queues active. Continuing is **not** recommended.

## 7. Check for sufficient disk space.

VMSINSTAL checks to see if the amount of disk space required for the installation is available. If the space is not available, a message indicates the amount of disk space that is required, and the installation is aborted. You must allocate sufficient disk space and then start the VMSINSTAL procedure again. However, if you have already provided enough disk space, the installation procedure continues.

#### 8. Purge extraneous versions of files.

VMSINSTAL asks if you want to purge any files that are being replaced.

\* Do you want to purge files replaced by this installation [YES]?

Enter YES if you want to save disk space or NO if you think the files may still be of use.

If you enter a question mark (?) in response to this query, the following message is displayed:

During this installation, new files will be provided to replace existing versions. You may purge these older versions to save disk space, or keep them if you feel they may be of use. Purging is recommended.

#### 9. Define DCPS\$LAYUP.

Next, the installation procedure looks for a definition of the logical name DCPS\$LAYUP in the system table in executive mode.

- If a definition exists, the following message is displayed:

```
%DCPSppp-I-LAYUPDEF, DCPS$LAYUP is already defined
-DCPSppp-I-LAYUPDEF, This installation will use its value
```

- If a definition does not exist, the procedure asks you for a definition. Press  to select the default, SYSSYSROOT:[SYSHLP.EXAMPLES.DCPS], or enter a directory specification where the system layup definition files should be stored.

\* Full definition for DCPS\$LAYUP [SYSSYSROOT:[SYSHLP.EXAMPLES.DCPS]]:

The procedure will validate the definition you provide. If you do not accept the default location and the specified directory does not exist, the procedure will ask you if you want to create it:

```
DISK$USER:[MY-LAYUP-DIR] does not exist.
```

\* Create it? [N]?

If you answer NO, the procedure will ask again for a definition.

#### 10. Create directories.

VMSINSTAL then attempts to create several directories. If they already exist, it displays additional messages indicating this:

```
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
  VMI$ROOT:[SYSTEST.DCPS].
%CREATE-I-EXISTS, VMI$ROOT:[SYSTEST.DCPS] already exists
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
  VMI$ROOT:[SYSHLP.EXAMPLES.DCPS].
%CREATE-I-EXISTS, VMI$ROOT:[SYSHLP.EXAMPLES.DCPS] already exists
```

#### 11. Make sure the queue manager is running.

VMSINSTAL checks to see if the queue manager is running on your system.

If the queue manager is not present, the Installation Verification Procedure (IVP) does not run, and the following messages are displayed on your screen:

```
%DCPSppp-I-NOQUEMGR, System queue manager is not running
-DCPSppp-I-NOQUEMGR, IVP will NOT run. Installation continuing ...
```

The queue manager must be running if you want the installation to run the IVP.

## 12. Stop queues.

At this point, VMSINSTAL displays the following message on your screen:

```
%DCPSppp-I-NOQUEST, No further questions will be asked.
```

VMSINSTAL stops active DCPS queues, if any and if desired.

```
%DCPSppp-I-STOPQUEUES, Stopping queues previously reported as active.
```

## 13. Restore the remaining save sets. As it restores each save set, VMSINSTAL reports on its progress:

```
VMSINSTAL-I-RESTORE, Restoring product saveset B ...
VMSINSTAL-I-RESTORE, Restoring product saveset C ...
```

This operation may require up to 10 minutes to complete.

When all the save sets have been restored, VMSINSTAL instructs you to perform postinstallation procedures. Refer to the *DCPS System Manager's Guide* for full instructions.

Next, VMSINSTAL moves the files from the temporary locations used during installation to their permanent directories.

```
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target
directories...
```

## 14. Verify a successful software loading procedure.

The IVP verifies that the software was loaded properly. If the system queue manager is running, the IVP runs automatically and VMSINSTAL performs the following:

1. Creates a temporary print queue
2. Queues the test files in [SYSTEST.DCPS] to the temporary print queue DCPS\$IVP\_TEST
3. Displays messages similar to the following:

```
Job DCPS$IVP_POST (queue DCPS$IVP_TEST, entry 43)
  started on DCPS$IVP_TEST
%DCPS-I-JOBSTART, Job DCPS$IVP_POST (queue DCPS$IVP_TEST, entry 43)
  started on DCPS$IVP_TEST

Job DCPS$IVP_POST (queue DCPS$IVP_TEST, entry 43) completed
Job DCPS$IVP_ANSI (queue DCPS$IVP_TEST, entry 44)
  started on DCPS$IVP_TEST
%DCPS-I-JOBSTART, Job DCPS$IVP_ANSI (queue DCPS$IVP_TEST, entry 44)
  started on DCPS$IVP_TEST

Job DCPS$IVP_ANSI (queue DCPS$IVP_TEST, entry 44) completed
Job DCPS$IVP_REGIS (queue DCPS$IVP_TEST, entry 45)
  started on DCPS$IVP_TEST
%DCPS-I-JOBSTART, Job DCPS$IVP_REGIS (queue DCPS$IVP_TEST, entry 45)
  started on DCPS$IVP_TEST
```

```

Job DCPS$IVP_REGIS (queue DCPS$IVP_TEST, entry 45) completed
Job DCPS$IVP_TEK4014 (queue DCPS$IVP_TEST, entry 46)
  started on DCPS$IVP_TEST
%DCPS-I-JOBSTART, Job DCPS$IVP_TEK4014 (queue DCPS$IVP_TEST, entry 46)
  started on DCPS$IVP_TEST

Job DCPS$IVP_TEK4014 (queue DCPS$IVP_TEST, entry 46) completed
Job DCPS$IVP_PCL (queue DCPS$IVP_TEST, entry 47)
  started on DCPS$IVP_TEST
%DCPS-I-JOBSTART, Job DCPS$IVP_PCL (queue DCPS$IVP_TEST, entry 47)
  started on DCPS$IVP_TEST

Job DCPS$IVP_PCL (queue DCPS$IVP_TEST, entry 47) completed
Job DCPS$IVP_PROPRINTER (queue DCPS$IVP_TEST, entry 48)
  started on DCPS$IVP_TEST
%DCPS-I-JOBSTART, Job DCPS$IVP_PROPRINTER (queue DCPS$IVP_TEST, entry 48)
  started on DCPS$IVP_TEST

Job DCPS$IVP_PROPRINTER (queue DCPS$IVP_TEST, entry 48) completed
Job DCPS$IVP_LIST (queue DCPS$IVP_TEST, entry 49)
  started on DCPS$IVP_TEST
%DCPS-I-JOBSTART, Job DCPS$IVP_LIST (queue DCPS$IVP_TEST, entry 49)
  started on DCPS$IVP_TEST

Job DCPS$IVP_LIST (queue DCPS$IVP_TEST, entry 49) completed

```

---

**Note**

---

The IVP does not produce any hardcopy output.

---

The IVP procedure automatically deletes the temporary queue when the IVP completes. You can print the IVP test files to a real printer later. (Refer to the *DCPS System Manager's Guide*.)

You can also manually invoke the IVP after the installation by entering:

```
$ @SYS$TEST:DCPS$IVP
```

VMSINSTAL issues an informational message when the IVP is completed:

```
      IVP successful for OpenVMS DECprint Supervisor Software
```

**15. Restart queues.**

VMSINSTAL restarts previously stopped queues if the installation is successful and issues its final messages:

```
%DCPSppp-I-STARTQUEUEES, Restarting queues previously reported as active.
      Installation of DCPSppp Vn.n completed at 14:04
      VMSINSTAL procedure done at 14:08
$
```

**16. Where to go from here.**

Refer to the *DCPS System Manager's Guide* for instructions on how to create print queues and customize your printing environment.

## B.4 System Messages

This appendix describes DECprint Supervisor installation messages.

### B.4.1 System Message Overview

DCPS system messages have one of the following formats:

*%fac-s-ident, text*

*-fac-s-ident, text*

<b>Code</b>	<b>Meaning</b>
<i>%</i>	The prefix for all primary messages
<i>-</i>	The prefix for all continuation messages
<i>fac</i>	The facility code, which should be DCPS
<i>s</i>	The severity level of the message
<i>ident</i>	An abbreviation of the message text
<i>text</i>	The expanded text of the message

The severity levels of DECprint Supervisor system messages are defined as follows:

Code	Meaning
S	Success — successful completion of the request
I	Informational — may require user action
W	Warning — request may not have completed and may require user action
E	Error — system encountered an error that may be recoverable
F	Fatal — system encountered a fatal error and cannot continue processing this request

## B.4.2 DCPS Installation Messages

The following DCPS message descriptions are alphabetized by the *ident* portion of the message. The message severity level and text are also shown, while the prefix and facility designation (DCPS*ppp*) are omitted. If you receive a message from a facility other than DCPS, refer to the *HP OpenVMS System Messages: Companion Guide for Help Message Users* for the message description or use the online help message utility with the command HELP /MESSAGE.

E-BADSPEC, File spec LPSS\$SINGLEHOLES.LUP cannot be parsed

**Explanation:** The current definition of the logical name DCPS\$LAYUP is invalid, possibly because of an incorrect answer given to the question about the location of layup files in an earlier DCPS installation. (DCPS V1.6 and later now validate such responses; see the Release Notes for more information.)

**User Action:** Deassign the logical name with the command:

```
$ DEASSIGN /EXECUTIVE_MODE /SYSTEM DCPS$LAYUP
```

Then start the DCPS installation again and you will be prompted for the location for the layup files.

E-BADVMSVER, This product requires OpenVMS version *version* or later to install

**Explanation:** The DCPS software requires a later version of the OpenVMS operating system.

**User Action:** Upgrade your operating system to the correct version.

I-ESTTIME, This installation will take between 1 and 10 minutes,

I-ESTTIME, excluding time needed to stop and restart active queues.

**Explanation:** This informational message estimates the time it will take to install the software.

**User Action:** No action is required.

W-HIDES, If these files remain, they will be used instead of the

W-HIDES, DCPS product files you are installing now, and the IVP

**Explanation:** DCPS warns you that the existing DCPS files in SYSS\$SPECIFIC directories will be used instead of the latest ones.

**User Action:** Remove or rename the listed DCPS files from the SYSS\$SPECIFIC directories.

E-INVDIRSPE, invalid directory specification

**Explanation:** The syntax of the directory specified is not correct.

**User Action:** Specify a directory with correct syntax.

I-LAYUPDEF, DCPS\$LAYUP is already defined.

I-LAYUPDEF, This installation will use its value.

**Explanation:** The installation uses the existing logical name for DCPS\$LAYUP.

**User Action:** No action is required.

I-NOHELP, There is no help in this install procedure.

I-NOHELP, Please refer to the Software Installation Guide.

**Explanation:** This informational messages states that no help is available.

**User Action:** Refer to the *DCPS Software Installation Guide* for more information.

I-NOQUEMGR, System queue manager is not running.

I-NOQUEMGR, IVP will NOT be run. Installation continuing.

**Explanation:** The queue manager is not running on your system. The installation will continue, but the Installation Verification Procedure cannot run.

**User Action:** After the installation, start the queue manager and then manually invoke the IVP (@SYS\$TEST:DCPS\$IVP).

I-NOQUEST, No further questions will be asked

**Explanation:** The VMSINSTAL procedure will continue from this point without requiring further input from you.

**User Action:** No action is required.

W-NORSTRT, Automatically stopped queues have not been restarted

**Explanation:** VMSINSTAL has not restarted queues that it automatically stopped.

**User Action:** Resolve the problem that caused the installation to terminate abnormally, and then manually restart the queues that the DCPS installation procedure previously listed as active.

E-NOSUCHDEV, no such device available

**Explanation:** The device specified does not exist.

**User Action:** Specify a device that exists on your system.

E-NO\_DECC\_RTL, DEC C run-time library is not installed.

**Explanation:** There is no DEC C run-time library on your system.

**User Action:** Install the DEC C/C++ Run-Time Components kit.

E-NO\_QUEMAN, This product requires the queue management facility to install.

**Explanation:** The queue manager could not be found. The installation procedure is aborted.

**User Action:** Start the queue manager. For information refer to the *HP OpenVMS System Management Utilities Reference Manual*.

E-NO\_SPACE, This product requires *number* blocks of disk space to install.

**Explanation:** There are not enough free disk blocks to install this software. The installation procedure terminates.

**User Action:** Ensure that you have at least the specified number of free disk blocks and restart the installation.

I-NUMQUEUES, *existing-number* existing DCPS queues, with *active-number* active.

**Explanation:** This message informs you of the number of DCPS queues you have and how many of them are active (that is, not stopped).

**User Action:** No action is required.

W-PURGW, Purging files may leave running queues with no image file and the IVP may fail.

**Explanation:** Purging DCPS files while multistream DCPS symbionts are still active can cause problems.

**User Action:** Avoid purging existing files, or stop all active queues before proceeding with the installation.

I-QSCANNING, Looking for existing DCPS print queues...

**Explanation:** This informational message tells you that the installation procedure is checking for print queues that already exist.

**User Action:** No action is required.

W-QUEACTIVE, The following queues are still active:

**Explanation:** The installation procedure found some DCPS queues still active, as listed in subsequent lines. If you do not stop the active queues, the installation may fail or interfere with jobs that are currently printing.

**User Action:** When subsequently asked, allow VMSINSTAL to automatically stop the queues, or manually stop them yourself and restart the installation procedure. If some of the queues are not in an idle state, you may wish to wait until all jobs have finished printing.

I-STARTQUEUES, Restarting queues previously reported as active

**Explanation:** VMSINSTAL is currently restarting all queues it had previously reported as active.

**Explanation:** No action is required.

I-STOPQUEUES, Stopping queues previously reported as active

**Explanation:** VMSINSTAL is currently stopping all queues it had previously reported as active.

**User Action:** No action is required.

W-SYSPF, This system contains DCPS images in SYSSSPECIFIC areas:

**Explanation:** Your system has one or more DCPS executable images in a SYSSSPECIFIC directory, as listed in subsequent lines. The new images that you are about to install will not be used because of the presence of the SYSSSPECIFIC versions.

**User Action:** Delete or rename the DCPS files in the SYSSSPECIFIC directories, so that new ones in SYSSCOMMON will be used.

F-WRONGARCH, This product will only install on OpenVMS *platform*.

**Explanation:** You have attempted to install the kit on the wrong platform.

**User Action:** Install the kit on either an Alpha or VAX platform, as indicated by the message, or use a different kit for the current platform.

## B.5 Sample VMSINSTAL Installation Session

Example B-1 shows a sample upgrade of the DECprint Supervisor software on an OpenVMS VAX system.

### Example B-1 Sample Upgrade on an OpenVMS VAX System

```
$ @SYS$UPDATE:VMSINSTAL DCPSVAX CDROM: OPTIONS N
```

```
OpenVMS VAX Software Product Installation Procedure V7.3
```

```
It is 13-MAR-2009 at 12:24.
```

```
Enter a question mark (?) at any time for help.
```

```
* Are you satisfied with the backup of your system disk [YES]?
```

```
The following products will be processed:
```

```
DCPSVAX V2.7
```

```
Beginning installation of DCPSVAX V2.7 at 12:24
```

```
%VMSINSTAL-I-RESTORE, Restoring product save set A ...
```

```
Release notes included with this kit are always copied to SYS$HELP.
```

```
Additional Release Notes Options:
```

1. Display release notes
2. Print release notes
3. Both 1 and 2
4. None of the above

```
* Select option [2]: 4
```

```
* Do you want to continue the installation [NO]? Y
```

```
%VMSINSTAL-I-REMOVED, Product's release notes have been moved to SYS$HELP.
```

```
-----  
HP DECprint Supervisor (DCPS) for OpenVMS  
V2.7 Installation Procedure
```

```
-----  
© Copyright 1992-2009 Hewlett-Packard Development Company, L.P.
```

```
Proprietary computer software. Valid license from HP required for  
possession, use or copying. Consistent with FAR 12.211 and 12.212,  
Commercial Computer Software, Computer Software Documentation, and  
Technical Data for Commercial Items are licensed to the U.S.  
Government under vendor's standard commercial license.  
-----
```

```
%DCPSVAX-W-QUEACTIVE, The following DCPS queues are still active:
```

Queue	Device	Status
-----	-----	-----
LN09	DAN::LTA9000:	IDLE
LN17	DAN::"AppleTalk/Dan's LN17+ps"	IDLE
LN40	DAN::"IP_RawTCP/ln40:6869"	IDLE

Cont'd on next page

## Example B-1 (Cont.) Sample Upgrade on an OpenVMS VAX System

%DCPSVAX-I-NUMQUEUES, 4 existing DCPS queues, with 3 active

Previously installed DCPS queues are still running.  
Continuing this installation without entering  
STOP/QUEUE/RESET for each such queue can cause  
inconsistent behavior among queues and can cause  
the IVP to fail.

Note that if you choose to have this installation  
procedure automatically stop such queues, and the  
installation subsequently aborts, this procedure  
will not automatically restart them.

\* Do you want these queues automatically stopped and restarted [YES]?

\* Do you want to purge files replaced by this installation [YES]?

%DCPSVAX-I-LAYUPDEF, DCPS\$LAYUP is already defined

-DCPSVAX-I-LAYUPDEF, This installation will use its value

%VMSINSTAL-I-SYSDIR, This product creates system disk directory

VMI\$ROOT:[SYSTEST.DCPS].

%CREATE-I-EXISTS, VMI\$ROOT:[SYSTEST.DCPS] already exists

%VMSINSTAL-I-SYSDIR, This product creates system disk directory

VMI\$ROOT:[SYSHLP.EXAMPLES.DCPS].

%CREATE-I-EXISTS, VMI\$ROOT:[SYSHLP.EXAMPLES.DCPS] already exists

%DCPSVAX-I-ESTTIME, This installation will take between 1 and 10 minutes,

-DCPSVAX-I-ESTTIME, excluding time needed to stop and restart active queues.

%DCPSVAX-I-NOQUEST, No further questions will be asked.

%DCPSVAX-I-STOPQUEUES, Stopping queues previously reported as active.

%VMSINSTAL-I-RESTORE, Restoring product save set B ...

%VMSINSTAL-I-RESTORE, Restoring product save set C ...

Software installer:

Starting with DCPS V2.0, the need for DCPS-OPEN and DCPS-PLUS  
licenses has been eliminated. The right to use all features of  
DCPS is now included with the OpenVMS operating system license.

Please remember to copy SYS\$STARTUP:DCPS\$STARTUP.TEMPLATE to  
SYS\$STARTUP:DCPS\$STARTUP.COM. Then edit the resulting copy,  
following the instructions contained within it, to define  
your DCPS environment and queue characteristics. When done,  
execute the file to establish and start the DCPS queues.  
Also remember to edit SYS\$MANAGER:SYSTARTUP\_VMS.COM so that  
DCPS\$STARTUP.COM is automatically run at system startup time.

DCPS\$STARTUP.COM should be executed after all printer devices  
and interconnects are running. Below is a summary list:

printers via TCP/IP:	after TCP is started
printers via LAT:	after LAT devices are created
printers via AppleTalk:	after the AppleTalk driver is loaded
PrintServers via DECnet:	after DECnet is started

If you are converting CPS queues to DCPS, you may want to run  
the utility SYS\$STARTUP:CPS\_TO\_DCPS\_STARTUP.COM instead of  
editing the startup template. This utility will read your  
CPS startup file, change the queue definitions to use DCPS\$SMB  
and its library and logical names, and write out a new DCPS  
startup file.

%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

%DCPS-I-IVP, Beginning IVP...

Cont'd on next page

## Example B-1 (Cont.) Sample Upgrade on an OpenVMS VAX System

-----  
HP DECprint Supervisor (DCPS) for OpenVMS  
V2.7 Installation Procedure  
-----

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-----

IVP using Version V2.7 of DECprint Supervisor

Job DCPS\$IVP\_POST (queue DCPS\$IVP\_TEST, entry 43) started on DCPS\$IVP\_TEST  
%DCPS-I-JOBSTART, Job DCPS\$IVP\_POST (queue DCPS\$IVP\_TEST, entry 43)  
started on DCPS\$IVP\_TEST

Job DCPS\$IVP\_POST (queue DCPS\$IVP\_TEST, entry 43) completed  
Job DCPS\$IVP\_ANSI (queue DCPS\$IVP\_TEST, entry 44) started on DCPS\$IVP\_TEST  
%DCPS-I-JOBSTART, Job DCPS\$IVP\_ANSI (queue DCPS\$IVP\_TEST, entry 44)  
started on DCPS\$IVP\_TEST

Job DCPS\$IVP\_ANSI (queue DCPS\$IVP\_TEST, entry 44) completed  
Job DCPS\$IVP\_REGIS (queue DCPS\$IVP\_TEST, entry 45) started on DCPS\$IVP\_TEST  
%DCPS-I-JOBSTART, Job DCPS\$IVP\_REGIS (queue DCPS\$IVP\_TEST, entry 45)  
started on DCPS\$IVP\_TEST

Job DCPS\$IVP\_REGIS (queue DCPS\$IVP\_TEST, entry 45) completed  
Job DCPS\$IVP\_TEK4014 (queue DCPS\$IVP\_TEST, entry 46) started on DCPS\$IVP\_TEST  
%DCPS-I-JOBSTART, Job DCPS\$IVP\_TEK4014 (queue DCPS\$IVP\_TEST, entry 46)  
started on DCPS\$IVP\_TEST

Job DCPS\$IVP\_TEK4014 (queue DCPS\$IVP\_TEST, entry 46) completed  
Job DCPS\$IVP\_PCL (queue DCPS\$IVP\_TEST, entry 47) started on DCPS\$IVP\_TEST  
%DCPS-I-JOBSTART, Job DCPS\$IVP\_PCL (queue DCPS\$IVP\_TEST, entry 47)  
started on DCPS\$IVP\_TEST

Job DCPS\$IVP\_PCL (queue DCPS\$IVP\_TEST, entry 47) completed  
Job DCPS\$IVP\_PROPRINTER (queue DCPS\$IVP\_TEST, entry 48) started on DCPS\$IVP\_TEST  
%DCPS-I-JOBSTART, Job DCPS\$IVP\_PROPRINTER (queue DCPS\$IVP\_TEST, entry 48)  
started on DCPS\$IVP\_TEST

Job DCPS\$IVP\_PROPRINTER (queue DCPS\$IVP\_TEST, entry 48) completed  
Job DCPS\$IVP\_LIST (queue DCPS\$IVP\_TEST, entry 49) started on DCPS\$IVP\_TEST  
%DCPS-I-JOBSTART, Job DCPS\$IVP\_LIST (queue DCPS\$IVP\_TEST, entry 49)  
started on DCPS\$IVP\_TEST

Job DCPS\$IVP\_LIST (queue DCPS\$IVP\_TEST, entry 49) completed

IVP successful for DECprint Supervisor V2.7

%DCPSVAX-I-STARTQUEUES, Restarting queues previously reported as active.

Installation of DCPSVAX V2.7 completed at 12:27

VMSINSTAL procedure done at 12:27

\$



# C

## Files Installed by DCPS

Table C-1 lists the files installed by DCPS on your system. Unless noted in the “Architecture” column, all files are installed on all architectures (Alpha, I64 and VAX).

**Table C-1 Files Installed by DCPS**

Directory	File	Architecture	
DCPS\$LAYUP:	COLOR-PRINTER-FULL-PAGE.LUP		
	COLORWRITER-2000-FULL-PAGE.LUP		
	FULL-A4-LANDSCAPE.LUP		
	LPS\$DOUBLEHOLES.LUP		
	LPS\$HOLES.LUP		
	LPS\$NUP.LUP		
	LPS\$SINGLEHOLES.LUP		
	PROPRINTER-FULL-PAGE.LUP		
	[SYSS\$STARTUP]	CPS_TO_DCPS_STARTUP.COM	
		DCPS\$EXECUTION_QUEUE.COM	
	DCPS\$GENERIC_QUEUE.COM		
	DCPS\$GET_VERSION.COM		
	DCPS\$REQUIRED.COM		
	DCPS\$STARTUP.TEMPLATE		
[SYSEXE]	DCPSS\$SMB.EXE		
[SYSHLP.EXAMPLES.DCPS]	CONFIDENTIAL.PS		
	DCPSS\$COMMON-PORT-SETTINGS.COM		
	DCPSS\$CONFIG-PRINTER-PORT.COM		
	DCPSS\$DELETE-LPS-CLIENT.COM	VAX	
	DCPSS\$DS100-PORT-SETTINGS.COM		
	DCPSS\$DS200-PORT-SETTINGS.COM		
	DCPSS\$DS500-PORT-SETTINGS.COM		
	DCPSS\$GET-DS100-PORT-GROUPS.COM		
	DCPSS\$SAVE-DS500-PORT.COM		
	DCPSS\$SET-DS-GROUPS.COM		
	DCPSS\$SET-DS100-GROUPS.COM		
	DCW1000_CONFIG.PS		

**Table C-1 (Cont.) Files Installed by DCPS**

Directory	File	Architecture
	DCW1000_DEVPARAM.PS	
	DCW1000_NOSTRTPG.PS	
	DCW1000_PRNTCNFG.PS	
	DCW1000_PSCRIPT.PS	
	DCW1000_STARTPG.PS	
	DL3500_SEND_FAX_PS.PS	
	DL3500_SEND_FAX_PS_SENDPS.PS	
	DL3500_SEND_FAX_TEXT.PS	
	DL3500_SEND_FAX_TEXT_SENDPS.PS	
	FAX_3500_PRINTME.PS	
	FONT_DOWNLOADER.COM	
	IGNORE-A-SIZE.PS	
	INSTALL-PS-SUPPLEMENT.COM	
	LPS\$SET_PRINTER_NAME.PS	
	LPS\$SET_TIMEOUT.PS	
	LPS\$STATUSDICT.PS	
	LPS_ANSI_PROLOGUE.PS	
	NETPRINT.TXT	
	NETPRINT.ZIP	
	PS_SUPPLEMENT.PS	
	UNSOLICITED-PJL-FIX.COM	
	UPDATE-ANSI-PROLOGUE.COM	
[SYSHLP]	DCPS\$HELP.HLP	
	DCPS027.RELEASE_NOTES	
	DCPS027_RELEASE_NOTES.PS	
[SYSLIB]	DCPS\$BE_APPLETALK.EXE	Alpha, VAX
	DCPS\$BE_CPAP.EXE	
	DCPS\$BE_SERIAL.EXE	
	DCPS\$DEVCTL.TLB	
	DCPS\$FILE_EXTENSION_DATA_TYPE.DAT_DEFAULT	
	DCPS\$MBSHR.EXE	
	DCPS\$TRNPRC.EXE	
	TRN\$ANSI_PS.EXE	
	TRN\$DDIF_IMAGE.EXE	
	TRN\$DDIF_PS.EXE	
	TRN\$LIST_PS.EXE	
	TRN\$PCL_PS.EXE	
	TRN\$PROPRINTER_PS.EXE	

**Table C-1 (Cont.) Files Installed by DCPS**

<b>Directory</b>	<b>File</b>	<b>Architecture</b>
	TRN\$REGIS_PS.EXE	
	TRN\$TEK4014_PS.EXE	
[SYSMMSG]	DCPS\$MSG.EXE	
[SYSTEST.DCPS]	DCPS\$IVP_ANSI.DAT	
	DCPS\$IVP_LIST.DAT	
	DCPS\$IVP_PCL.DAT	
	DCPS\$IVP_POST.DAT	
	DCPS\$IVP_PROPRINTER.DAT	
	DCPS\$IVP_REGIS.DAT	
	DCPS\$IVP_TEK4014.DAT	
[SYSTEST]	DCPS\$IVP.COM	



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