HP DECprint Supervisor (DCPS) for OpenVMS

Release Notes

November 2005

This manual contains information about the current release of DCPS.

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Preface

Intended Audience

These release notes describe new features, bug fixes, usage hints, restrictions and other useful information for this release of DECprint Supervisor. System managers and users should review this document for new information about installing and using this release of DCPS.

Document Structure

These release notes contain the following chapters and appendices:

- Chapter 1 describes changes included in DCPS V2.5.

- Chapter 2 provides information about using DCPS with specific printers.

- Chapter 3 identifies current restrictions that exist with DCPS V2.5.

- Chapter 4 contains information about OpenVMS operating system problems that are known to impact DCPS.

- Appendix A lists commonly-used port numbers used when setting up IP printers.

Related Documents

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

Table 1   DECprint Supervisor Documentation

Software Installation Guide	Describes how to install DCPS.
System Manager's Guide	Describes how system managers, data center operators and application programmers can create and manage DCPS print queues and solve printing problems.
User's Guide	Describes how to use DCPS to print to PostScript® printers.
Software Product Description (SPD 44.15.xx)	Contains the full list of printers supported by DCPS and additional information about the features and requirements of DCPS V2.5.

For additional information about HP OpenVMS products and services, visit the following World Wide Web address:

```
http://www.hp.com/go/openvms/
```

Reader's Comments

HP welcomes your comments on this manual. Please send comments to either of the following addresses:

Internet	**openvmsdoc@hp.com**
Mail	Hewlett-Packard Company OSSG Documentation Group, ZKO3-4/U08 110 Spit Brook Road Nashua NH 03062-2698

How to Order Additional Documentation

For information about how to order additional documentation, visit the following World Wide Web address:

```
http://www.hp.com/go/openvms/doc/order/
```

Part numbers for DCPS-related documentation are listed in the *Ordering Additional Documentation* appendix of the *Software Installation Guide*, *System Manager's Guide* and *User's Guide*.

Conventions

The following conventions are used in this manual:

Ctrl/*x*	A sequence such as Ctrl/*x* indicates that you must hold down the key labeled Ctrl while you press another key or a pointing device button.
Return	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.)
	In the HTML version of this document, this convention appears as brackets, rather than a box.
. . .	A horizontal ellipsis in examples indicates one of the following possibilities:
	• Additional optional arguments in a statement have been omitted.
	• The preceding item or items can be repeated one or more times.
	• Additional parameters, values, or other information can be entered.
( )	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.
bold text	This typeface represents the introduction of a new term. It also represents the name of an argument, an attribute or a reason.
italic text	Italic text indicates important information, complete titles of manuals or variables. Variables include information that varies in system output (Internal error *number*), in command lines (/PRODUCER=*name*) and in command parameters in text (where *dd* represents the predefined code for the device type).
UPPERCASE TEXT	Uppercase text indicates a command, the name of a routine, the name of a file, or the abbreviation for a system privilege.
`Monospace text`	Monospace type indicates code examples and interactive screen displays.
-	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 radixes—binary, octal or hexadecimal—are explicitly indicated.

1

DCPS Version 2.5 Information

This section describes changes included in DCPS V2.5. You can find more information for several of these changes elsewhere in these release notes.

1.1 DCPS Version 2.5 Changes

1.1.1 New Printers Supported

DCPS V2.5 adds support for the following printers:

HP Color LaserJet 3000
HP Color LaserJet 3800
HP Color LaserJet 4610
HP Color LaserJet 4700
HP Color LaserJet 4730 MFP
HP LaserJet 1300
HP LaserJet 1320
HP LaserJet 4240
HP LaserJet 5200
Xerox DocuPrint N4525

1.1.2 Enhanced LPD Support

DCPS now works with remote LPD queues and with more printers that support LPD.

1.1.2.1 Spooling Overview

Remote LPD queues, and many LPD printers, require the size of the job to be known before the job is sent. DCPS can now produce a temporary spool file so the size can be determined. By default, DCPS LPD jobs will use the pre-V2.5 behavior, so specific action must be taken to send DCPS LPD jobs to remote LPD queues or LPD printers that require it. Spooling can be specified for the whole system or for individual queues by defining logical names.

Because spooling requires an extra step to create the temporary spool file, you should enable spooling only for printers that require it. Common reasons to use spooling are:

- You are printing to a remote LPD queue on another system.

- Your printer does not print anything when using DCPS LPD without spooling.

- Your printer is a larger multi-function device that does not work with DCPS when using the Raw TCP protocol, or LPD protocol without spooling. These devices often have their own internal queues that accept jobs for later printing.

1.1.2.2 Enabling Spooling

To enable spooling, define one of the following logical names. Neither of these logical names are defined by default.

- **DCPS$SPOOL**

  When defined, all LPD jobs from all queues will create a temporary spool file before being sent to the printer or remote queue.

- **DCPS$*queue-name*_SPOOL**

  When defined, LPD jobs from this queue will create a temporary spool file before being sent to the printer or remote queue.

To specify where temporary spool files will be created, the following logical name is used. This logical name is always defined.

- **DCPS$SPOOL_DIRECTORY**

  Spool files will be created in this directory and deleted after being sent to the printer or remote queue. Print jobs are not spooled unless spooling is enabled with one of the two logical names above.

  You will be asked for the location for your DCPS spool directory when installing DCPS if it is not already defined. The default location is SYS$COMMON:[DCPS$SPOOL], but you should specify a location on a non-system disk that is available to all queues for which spooling is enabled. This directory is protected such that only the DCPS print symbiont process and privileged users can view the spool files.

1.1.2.3 Spooling Errors

Error messages you can receive while using spooling are:

Table 1–1 Spool File Error Messages

Error Message	Description
SPOOLBADDEVICE	Error in DCPS$SPOOL_DIRECTORY device name
SPOOLBADDIR	DCPS$SPOOL_DIRECTORY directory not found
SPOOLERROR	Error creating spool file in DCPS$SPOOL_DIRECTORY
SPOOLFILENOOPEN	Error opening spool file
SPOOLNOLOGICAL	Logical name DCPS$SPOOL_DIRECTORY is undefined
SPOOLNOPRIV	No privilege to write to DCPS$SPOOL_DIRECTORY
SPOOLNOWRITE	DCPS$SPOOL_DIRECTORY device is write-locked

1.1.3 Improved Installation Procedure

When installing DCPS V2.4 with the POLYCENTER Software Installation Utility (PCSI), the installation procedure required all DCPS queues in the cluster to be stopped before proceeding with the installation. Now, you are given choices including stopping only the queues that will be affected by the installation.

1.1.4 Flag Page Improvement

DCPS separator pages display information about the printer in the lower right-hand corner of the page: the product name and, if different, the printer name. (The product name cannot be customized, but the printer name can be changed for each printer.)

Now, the printer name is displayed in parentheses to differentiate it from the product name.

1.2 DCPS Version 2.5 Fixes

The following problems are fixed in DCPS V2.5.

1.2.1 Problems Starting Queues and Deleting Jobs

In DCPS V2.3 and V2.4, problems might arise when a Raw TCP job was in Starting state:

- If the job was aborted with a DELETE /ENTRY command, DCPS would take a long time to delete the job.

- If the queue was stopped with a STOP /QUEUE /RESET command, starting this or other queues would then sometimes fail with the following error:

```
%DCPS-F-STREAMUSE, Request 4 for Stream Id n ignored.
Not consistent with symbiont state
```

Now, starting jobs will abort quickly when requested, and stopping the queue will not cause the STREAMUSE error when subsequently starting queues.

1.2.2 Job Fails when Selecting Trays

In DCPS V2.4, requesting a tray by specifying the INPUT_TRAY parameter could result in the job failing with a INTRAYNOTAVL error message. For example, specifying /PARAMETERS=INPUT_TRAY=TRAY_2 when printing to an HP LaserJet 8150 printer would result in the following error messages:

```
%DCPS-E-INTRAYNOTAVL, No tray_2 tray is installed on HP LaserJet 8150
-DCPS-I-JOB_ID, for job MYJOB (queue HP8150_RAW, entry 245) on HP8150_RAW

%DCPS-E-FLUSHING, Rest of Job (to EOJ) will be ignored
-DCPS-I-JOB_ID, for job MYJOB (queue HP8150_RAW, entry 245) on HP8150_RAW
```

This problem would occur when selecting trays on the following printers:

HP LaserJet 2100
HP LaserJet 2200
HP LaserJet 8000
HP LaserJet 8100
HP LaserJet 8150

1.2.3 Stapling Error

If the LaserJet 9000 printer was set to staple jobs by default, the DCPS STAPLE=NONE parameter would have no effect and DCPS jobs would always be stapled. Now, overriding the printer's default staple setting by specifying STAPLE=NONE correctly produces a non-stapled job.

This problem was fixed for other printers in DCPS V2.4, but the problem remained for the LaserJet 9000 printer.

1.2.4 LPD Jobs Fail with PostScript Error

If the logical name DCPS$*queue-name*_PRODUCT_NAME was not defined for an LPD queue, print jobs could fail with a PostScript "checkconfiguration" error. As with any PostScript error with LPD jobs, if PostScript error reporting was not enabled on the printer, the job would fail with no error indicated.

Now, if the logical name is not defined, DCPS assumes it is an "unrecognized" printer and the job will not fail with this error.

1.2.5 AppleTalk File Omitted from Kit

The AppleTalk file DCPS$BE_APPLETALK.EXE was inadvertently omitted from the DCPS V2.4 PCSI kit for OpenVMS Alpha and VAX. This file is now included in the DCPS V2.5 kit.

1.2.6 Performance on Integrity Systems

When running on OpenVMS I64, DCPS V2.4 symbiont processes could use large amounts of CPU time when printing. Performance in V2.5 has been greatly improved.

1.2.7 Incorrect OLDSETUP Message During Startup

When starting DCPS in "setup" mode, it was possible to incorrectly receive a message indicating your startup command procedure was newer than your setup file. The following message could be displayed even if the startup file had not been changed since the setup file had been created:

```
%DCPS-W-OLDSETUP, setup file older than startup file
```

The result was that a new setup file was created and the commands to start queues in DCPS$STARTUP were executed. Although all queues were correctly started, this caused a slower startup compared to the desired behavior of using information in the setup file. This check is now handled correctly.

2

Printer-Specific Information

This chapter provides information about using DCPS with specific printers. The *DCPS System Manager's Guide* and *DCPS User's Guide* contain additional printer-specific information.

2.1 Printer Firmware

Your printer's firmware version is displayed as "Firmware Datecode" on the printed configuration page, the printer's web page and the WebJetAdmin printer management utility.

Printer firmware and instructions for downloading it to your printer can be obtained from the HP web page. Choose *Printing and Multifunction* and then *Support and Drivers*.

2.1.1 Printers Fail with Service Error

When printing certain PostScript files, some HP printers fail with a 49.4C02 service error. This problem has been fixed in printer firmware. Table 2–1 shows which printers have this problem and in which firmware version the problem is fixed. Your printer must be running this version of firmware at a minimum to avoid this problem.

Table 2–1   Firmware with Service Error Fix

Printer	Firmware Version
HP Color LaserJet 4650	20050524 07.003.3
HP Color LaserJet 5550	20050524 07.007.3
HP LaserJet 4250	20050831 08.009.3
HP LaserJet 4350	20050831 08.009.3
HP LaserJet 9050	20050617 08.102.2
HP LaserJet 9055 MFP	20050601 07.004.0
HP LaserJet 9065 MFP	20050601 07.004.0

2.1.2 Problems Starting Queues

Some HP printers do not respond to the DCPS synchronization request at the beginning of a job. Therefore, you must upgrade the printer's firmware to at least the version shown in Table 2–2 or define the logical name DCPS$*queue-name*_NO_SYNC before queues to these printers are started, or DCPS jobs will not start. See Section 3.3 in these Release Notes or the *DCPS System Manager's Guide* for more information.

It is also recommended that the printer's personality setting be set to PS (PostScript). Setting the printer's personality to PS (PostScript) alone will not solve the problem for these printers. This problem is resolved in the following versions of printer firmware:

Table 2–2 Minimum Recommended Firmware

Printer	Firmware
HP Color LaserJet 5500	20030605 04.016.2
HP LaserJet 2300	20030530 04.047.2
HP LaserJet 4200	20030530 04.016.1
HP LaserJet 4300	20030530 04.016.1

This restriction is still in effect for the HP Color LaserJet 2500 printer.

3
DCPS Restrictions

This chapter identifies the current restrictions that exist with DCPS. See the *DCPS System Manager's Guide* and *DCPS User's Guide* for printer-specific restrictions.

3.1 AppleTalk on OpenVMS V8.2 and Later Systems

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.

Starting a DCPS queue that executes on an OpenVMS V8.2 and later system will fail with the following operator message:

```
%DCPS-F-CANNOTSTART, cannot start queue queue_name
%DCPS-F-TRANSPORTNOTSUP, transport not supported - AppleTalk
%SYSTEM-F-IVPARAM, invalid parameter specified
```

To avoid this problem in an OpenVMS cluster, change the node on which the queue executes to one running an OpenVMS version earlier than V8.2, if possible.

3.2 Printers with Auto-Sensing Features

Many printers can sense the data type of a print job. Such printers allow you to specify how and whether the auto-sensing feature is enabled, per interconnect channel, through the front panel or printer management software.

For most printers that offer this feature, the DCPS software works properly when the printer is set to "PostScript" mode or to "Auto-Sensing" mode. You must set such printers to operate in one of these modes before starting the DCPS queues. The DCPS software does not operate properly if the printer is set to "PCL" mode.

See Chapter 2 and the *DCPS System Manager's Guide* for additional information.

3.3 Job Remains in Starting State for Raw TCP/IP or LAT Queue

Most printers respond to the PostScript synchronization command at the beginning of a DCPS job, but some do not. If all jobs to a queue remain in the Starting state, you may need to take one of the following steps:

• Change Printer Language Setting

Often, setting the printer's language-sensing mode to PostScript, instead of auto-sensing between PostScript and PCL, will solve the problem. Refer to your printer documentation for instructions on changing the language for the appropriate port. This is the preferred method for avoiding the problem.

- Define NO_SYNC Logical Name

  If the problem is not solved by changing the printer setting, you can tell DCPS to skip the PostScript synchronization command by defining the logical name DCPS$*queue-name*_NO_SYNC and restarting the queue. This works with printers that use Raw TCP/IP or LAT connections on built-in Network Interface Cards (NICs). It has no effect when using printers connected with other interconnects.

3.4 Job Remains in Starting State for Raw TCP/IP Queue

If you set up a DCPS queue that uses a Raw TCP/IP connection and specify an incorrect TCP port number for the printer, any print jobs that you submit to the queue will remain in a starting state. DCPS cannot determine that you have provided an incorrect port number, because the network failure that it receives is no different than if the printer had been busy or offline.

Note that a print job in a Raw TCP/IP queue may remain in a starting state for other reasons as well.

Check the documentation for your printer, network interface card, print server, or terminal server to determine the correct TCP port number to use. The TCP port number may also be listed in Table A–1.

3.5 Connection Terminations for Raw TCP/IP Queue

You may get CONTERMINATED errors for long print jobs when using Raw TCP/IP connections, especially with printers that have large memory or disks for spooling data, such as the HP Color LaserJet 9500 and LaserJet 9055 MFP and 9065 MFP printers.

For jobs that consist of a single file or that only use the native PostScript capability of the printer, these errors are most likely to occur at the end of the job, with job trailer pages (if specified) and print job accounting (if enabled) being lost. For other jobs, these errors may occur in the middle of the job, with subsequent documents as well as the trailer pages and accounting information being lost. DCPS requeues the terminated jobs, placing them in a Holding state so that you can reprint them once you resolve the termination problem.

Some network devices, including HP JetDirect cards, drop a TCP/IP connection if they do not receive any input from the host system within a specified amount of time. This is a feature meant to prevent host software from monopolizing the device. DCPS, however, waits for the printer to acknowledge that previous documents are printed before switching from PostScript to some other native printer language and also before printing a trailer page and gathering accounting information. Even though the printer may be busy, the NIC may not receive any more input from DCPS before the timeout is reached.

If your NIC allows you to alter the TCP/IP idle timeout value, you can work around this problem by disabling or increasing the timeout. Check your NIC documentation to determine if and how this is possible. (Recent HP printers call this setting the TCP/IP "idle timeout".) Then release any requeued jobs for which desired output was lost, and delete the other requeued jobs.

Note that it is the length of a job in time (versus size) that is important. For example, a small PostScript program can take a long time to print. Therefore, it is difficult to predict how large a timeout is adequate.

3.6 NOT_READY Warnings for Unavailable Raw TCP/IP Printer

If a job is queued to a printer that uses a Raw TCP/IP connection, and the printer is busy or offline, you will get NOT_READY warning messages for the printer.

If you believe or determine that the printer is busy, you can ignore these messages. DCPS cannot differentiate between the printer being busy, offline or otherwise unavailable.

3.7 Translators Do Not Generate Color PostScript

The translators provided with DCPS (for example, ReGIS) do not generate color PostScript commands, even if your source file contains color information. The colors are instead translated to various shades of gray.

3.8 Job Trailer Page Jogs with PostScript Level 2 Printers

When job jogging is enabled on PostScript Level 2 printers, jogging occurs between the body of a job and its trailer page (if any).

3.9 Unable to Perform ANSI Tray Selection for Certain Printers

An attempt to print an ANSI file containing a tray selection escape sequence might fail, depending on which printer you are using. If so, the job might abort with a PostScript configuration error, with the offending command being "setpapertray".

Also, some printers, such as the Compaq Laser Printer LN16 and GENICOM microLaser 170, have input trays with PostScript tray numbers of 0. The ANSI escape sequence DECASFC is used to select trays, but a value of 0 means "no tray change" and selecting tray 0 is therefore not possible. For example, an ANSI escape sequence of

```
<CSI>0!v
```

does not select tray 0, but rather indicates no change of tray.

A workaround to this problem is to create and subsequently invoke a setup module that redefines the settoptray, setbottomtray, setlcittray and setmanualfeedtray PostScript commands within the TRN$XLATE_DICT dictionary.

For example, for a Compaq Laser Printer LN16, DIGITAL Laser Printer LN15 or LN15+, or GENICOM microLaser 170, you should create a setup module that contains the following definitions for settoptray, setbottomtray and setmanualfeedtray:

```
TRN$XLATE_DICT begin
  /settoptray        { statusdict begin 0 setpapertray end } def
  /setbottomtray     { statusdict begin 1 setpapertray end } def
  /setmanualfeedtray { statusdict begin 3 setpapertray end } def
end
```

For an HP LaserJet 4M Plus, you should create a setup module that contains:

```
TRN$XLATE_DICT begin
  /settoptray    { statusdict begin 3 setpapertray end } def
  /setbottomtray { statusdict begin 0 setpapertray end } def
  /setlcittray   { statusdict begin 1 setpapertray end } def
end
```

PostScript tray numbers are documented in the *DCPS User's Guide*.

3.10 Some Printers Do Not Send Status Messages to the Host

Because of their internal architecture, some PostScript printers report status information only to the printer console and not to the host system with which they are communicating. As a result, DCPS is not aware of some status conditions (for example, paper out, paper jam, page too complex and cover open) and cannot report them to you. Instead, the DCPS queue will enter the Stalled state if DCPS subsequently attempts to communicate with the printer. This subsequent attempt may come during the same job that first experienced the problem or in a later one.

The following is a list of some of the printers which exhibit this behavior:

- DEClaser 5100 printer
- LN17ps printer
- some HP LaserJet III and IV printers (but not the HP LaserJet III with the HP PostScript-Plus Level 2 cartridge or the HP LaserJet IIISi if jam recovery is disabled)

3.11 Printer Name Is Not Always Printed Correctly

When multinational characters are used in the PostScript "printername", the printer name printed on the bottom of separation pages may be printed in the wrong character set.

3.12 DDIF Printing Requires DECwindows Software or DECimage Application Services

To print DDIF encoded bitonal images, DCPS requires that either DECwindows software or Version 3.1 of DECimage Application Services (DAS) be installed on your system. DAS is only available on OpenVMS VAX systems.

3.13 Compatibility of NUMBER_UP and PostScript Drivers

PostScript files created with the LaserWriter 8.0 or 8.1.1 driver or the Adobe® 2.1.1 Windows® driver, in conjunction with the user application, may produce PostScript files that do not print as expected with NUMBER_UP greater than 1.

Symptoms include pages being clipped, printed outside of the NUMBER_UP page spots, or being improperly scaled.

3.14 LIST Translator Ignores PAGE_SIZE Parameter

The LIST translator ignores the PAGE_SIZE parameter when formatting pages. It creates pages with maximum content at a size adequate for both A (Letter) and A4 paper:

PORTRAIT ORIENTATION: 80 columns, 70 lines
LANDSCAPE ORIENTATION: 150 columns, 66 lines

It is still possible to use PAGE_SIZE and SHEET_SIZE parameters together to scale the logical page onto a different size sheet.

3.15 Embedded PJL Commands Discarded; Avoid Binary Mode

Drivers that create files for PJL printers, such as those for the DEClaser 5100 and the HP LaserJet IV family, include printer control commands in HP Printer Job Language (PJL). DCPS filters out and discards that data. Therefore, printer options selected by such drivers do not affect the print job.

When using these drivers, do NOT select binary mode. It will insert additional commands into the file that can cause incorrect behavior when printing via DCPS. The exact form of behavior depends on which printer is actually connected to the queue and whether or not the job passes through a DCPS translator.

3.16 Avoid STOP /QUEUE /RESET Usage for PrintServer Printer Which Is Rejecting Connections

If you issue a STOP /QUEUE /RESET command for a queue to a DIGITAL PrintServer printer while there is a job in the "Starting" state and while the printer is rejecting connections (because, for example, the PrintServer is powered off or is booting), the queue will stop. Occasionally the symbiont process will not terminate. Avoid issuing this command until the PrintServer printer becomes available. If the job is in the "Starting" state and also in the PrintServer printer's job queue, a STOP /QUEUE /RESET will execute correctly.

3.17 No Job Trailer Page on DELETE /ENTRY

If you issue a DELETE /ENTRY command when the printer is printing the job trailer page, it is possible to delete the printing of this page. Also, if you issue a DELETE /ENTRY command for a job printing on a PrintServer printer after all the data for the file is sent, it is possible that the job trailer page will not print.

3.18 Problems with PostScript Files When Printing with /COPIES

When you use the /COPIES qualifier with a PostScript file, DCPS surrounds each file with a PostScript "save" and "restore" to avoid exhausting virtual memory in the printer.

However, there are infrequent cases when the print job aborts with an invalid restore error message. If this occurs, use the /JOB_COUNT qualifier instead of /COPIES.

3.19 Problems Using PAGE_LIMIT with /JOB_COUNT

If you use the PAGE_LIMIT parameter with the /JOB_COUNT qualifier, you may get undesired results. In particular, if your intent is to suppress some initial pages of your job, DCPS will suppress them for the first copy of the job but print all pages of subsequent job copies. If your intent is to suppress some of the trailing pages of your job, DCPS will suppress them for the first copy of the job and omit subsequent job copies.

If you want multiple copies of your job with some pages suppressed, issue the PRINT command the desired number of times rather than using the /JOB_COUNT qualifier.

3.20 Setting I/O Buffers Too Small May Produce OPCOM Errors

If the size of the I/O buffers (set by the SYSGEN parameter MAXBUF) is too small, the print queue will be stopped and the following message will be displayed to OPCOM:

```
%SYSTEM-E-EXQUOTA, process quota exceeded
```

If this error occurs, increase the value of the SYSGEN parameter MAXBUF.

4

Other Restrictions that Affect DCPS

This chapter contains information about other problems that are known to impact DCPS and patch kits (ECOs) that address some of these problems. Patch kits for supported versions of OpenVMS are listed, although there may be kits available for other versions.

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 `http://www.itrc.hp.com`

4.1 DCPS Processes Consume CPU after Time Change

In certain situations, DCPS symbiont processes can consume excessive CPU time. For example, when the time is moved forward at the Standard Time/Daylight Savings Time adjustment, multithreaded processes such as DCPS went into a tight CPU loop. Stopping and restarting the processes resolved the problem.

This problem can happen again at the next Standard Time/Daylight Savings Time adjustment unless the following patch is applied:

- VMS732_TDF-V0200, for OpenVMS Alpha V7.3-2 systems
- VMS73_TDF-V0500, for OpenVMS Alpha V7.3-1 systems
- VMS73_TDF-V0100, for OpenVMS Alpha V7.3 systems

If DTSS is used to synchronize time, the following DECnet patch should also be applied:

- AXP_DNVOSIECO01-V732, for OpenVMS Alpha V7.3-2 systems
- AXP_DNVOSIECO03-V731, for OpenVMS Alpha V7.3-1 systems
- AXP_DNVOSIECO04-V73, for OpenVMS Alpha V7.3 systems
- VAX_DNVOSIECO04-V73, for OpenVMS VAX V7.3 systems

4.2 Starting Queue Causes Invalid Device Name Error

When initializing and starting an autostart DCPS queue that uses the Raw TCP protocol, the queue manager can fail with an "invalid device name" error.

```
%%%%%%%%%%  OPCOM  26-SEP-2002 09:33:42.58  %%%%%%%%%%
Message from user SYSTEM on LATEST
%QMAN-I-QUENOTSTART, queue TEST4 could not be started on node LATEST

%%%%%%%%%%  OPCOM  26-SEP-2002 09:33:42.58  %%%%%%%%%%
Message from user SYSTEM on LATEST
-QMAN-I-QUEAUTOOFF, queue TEST4 is now autostart inactive
```

```
%%%%%%%%%% OPCOM  26-SEP-2002 09:33:42.58  %%%%%%%%%%
Message from user SYSTEM on LATEST
-SYSTEM-F-IVDEVNAM, invalid device name
```

The following patch kit fixes this problem:

- VMS731_QMAN-V0100, for OpenVMS Alpha V7.3-1 systems

4.3 Problems Starting Queues with Multistreamed Symbionts

All sites running DCPS as a multistreamed process on OpenVMS V7.1 and earlier should install the Queue Manager Remedial Update.

The Queue Manager remedial update kits are:

- ALPQMAN03_062, for OpenVMS Alpha V6.2 systems
- VAXQMAN05_062, for OpenVMS VAX V6.2 systems
- VAXQMAN03_070, for OpenVMS VAX V5.5-2 systems

This update corrects problems that cause the START /QUEUE command to hang under certain circumstances when operating with a multistreamed symbiont. The release notes provided with the kit describe all the problems fixed by this update. After installing this update, you need to reboot your system to enable these changes.

If this update is not installed, a queue running in a multistreamed process that is stopped with STOP /QUEUE /RESET and quickly started with START /QUEUE will hang. Also, the following message will sometimes be written to OPCOM:

```
%DCPS-F-STREAMUSE, Request 4 for Stream Id n ignored.
Not consistent with symbiont state
```

To recover, issue a Ctrl/Y to return to the DCL prompt, then issue a STOP /QUEUE /RESET again, wait a few seconds, and try to start the queue again. To avoid this problem, install the queue manager update.

4.4 I/O Errors for Serially-Connected Printers

There is an OpenVMS terminal driver problem that may result in your printer reporting I/O problems when connected to a serial port of your OpenVMS system. You may see the problem with OpenVMS Alpha V6.2 through V7.0, and with OpenVMS VAX V5.5 through V7.0, depending in part on what kind of serial port you are using.

The problem is that the terminal driver sometimes does not respond quickly enough to an XOFF request from the printer to prevent the printer from losing data. This problem is fixed in OpenVMS Alpha V7.1.

The following patch kit fixes this problem:

- ALPOPDR04_062, for OpenVMS Alpha V6.2 systems

4.5 Symbiont Aborts with Access Violation or Bad Parameter Error

The DCPS symbiont can abort with an ACCVIO or BADPARAM error, possibly also indicating the CMA (DECthreads) facility. Other software on your system, including HP TCP/IP Services for OpenVMS and anything layered upon DECthreads, may also fail.

The problem is related to a long-standing OpenVMS restriction of fewer than 10,000 days in a delta-time value. POSIX-related software in particular, using the UNIX® reference date of 1 January 1970, can encounter this limit.

The following patch kits fix this problem:

- ALPLIBR07_070, for OpenVMS Alpha V6.2 systems
- VAXLIBR06_070, for OpenVMS VAX V5.5-2 and V6.2 systems

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Raw TCP/IP Port Numbers

When setting up a DCPS queue using a Raw TCP/IP connection, check the documentation for your network interface card (NIC), print server or terminal server to determine the number of its Raw TCP/IP port (if it has one). The Raw TCP/IP port must support bidirectional communication between the printer and your OpenVMS system.

Table A–1 shows the port numbers for some commonly-used devices.

Table A–1 Raw TCP/IP Port Numbers

20nn	DECserver terminal servers, where "nn" is the physical port number
2501	DIGITAL LN17ps and DIGITAL Laser Printer LN17+ps
	Emulex NICs
3001	DIGITAL Laser Printer LN15 and LN15+
	DIGITAL RapidPrint 500 print server
6869	Compaq Laser Printer LNC02
	DIGITAL Laser Printer LN20, LN40 and LNC02
9100	Compaq Laser Printer LN16, LN32 and LNM40
	GENICOM Intelliprint mL, LN and microLaser printers
	GENICOM RapidPrint MPS100 print server
	HP Color LaserJet printers
	HP LaserJet printers
	IBM InfoPrint printers
	Lexmark C, Optra, S, Optra T, T and W series printers
	Tektronix Phaser printers
	Xerox DocuPrint N printers
	HP JetDirect, Lexmark and XCD print servers
9101	HP 9085 MFP