
DEC Distributed Queuing Service for OpenVMS
Systems Release Notes

March 1994

These release notes describe technical changes, restrictions, and corrections not covered elsewhere in the DEC Distributed Queuing Service for OpenVMS Systems, Version 1.3, documentation.

Revision/Update Information: This is a new manual.

Operating System and Version: OpenVMS AXP Version
6.1 or higher
OpenVMS VAX, Version
5.5-2 or higher

Software Version: DEC Distributed
Queuing Service for
OpenVMS VAX, Version
1.3

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These release notes describe product restrictions, undocumented features, and other essential information about the DEC Distributed Queuing Service (DQS) for OpenVMS Systems, Version 1.3, software. These release notes supersede all other documents.

The DQS Version 1.3 software product is based on and works with the DEC Distributed Queuing Service for OpenVMS AXP, Version 1.2, software and the VAX Distributed Queuing Service (VAX DQS), Version 1.2, software products. Any differences between DQS V1.3 and the previous versions are documented in these release notes.

Intended Audience

All users of this product should read these release notes:

- o DECnet network or system managers who install and configure the DQS software in their network
- o Users who want to print files on devices attached to remote DECnet systems in their network

Structure of the Release Notes

The release notes contain the following chapters:

- o Chapter 1 provides general information about the DQS Version 1.3 product.
- o Chapter 2 describes new features and functionality for the DQS, Version 1.3, product.
- o Chapter 3 describes restrictions while using the product and workarounds to these restrictions, if they exist.

- o Chapter 4 describes known problems with the software.
- o Chapter 5 explains features that are no longer supported.

Associated Documents

The DQS Version 1.3 information set consists of:

- o DEC Distributed Queuing Service for OpenVMS Systems Documentation Set
- o DQS, PRINT, QDELETE, QSET, and QSHOW entries in the OpenVMS HELP facility
- o DEC Distributed Queuing Service for OpenVMS Systems Cover Letter
- o DEC Distributed Queuing Service for OpenVMS Systems Software Product Description (SPD)

Resources listed in Table 1 may also be useful.

Table 1 Additional Information	
For information on	See the following
The OpenVMS Digital Command Language (DCL) commands	OpenVMS DCL Dictionary
Extensions to the DCL language for PostScript printers	DECprint Supervisor for OpenVMS User's Guide
Understanding OpenVMS system error messages	OpenVMS System Messages and Recovery Procedures Reference Manual or the online HELP /MESSAGE facility
OpenVMS system management, in general	OpenVMS System Manager's Manual and OpenVMS System Manager's Utilities Reference Manual
The POLYCENTER Software Installation utility	Software Integrator User's Guide
How to license a product	OpenVMS License Management Utility Manual

Conventions

The following conventions are used throughout this manual:

Conventions	Meaning
UPPERCASE NOTATION	In command lines, indicates keywords that you must enter. Also used for directory names.
lowercase italics	Indicates variables in command syntax or examples for which the user supplies a value.
Ctrl/x	Indicates a control key sequence. Press the key labeled Ctrl while you simultaneously press another key; for example, Ctrl/Z.
Return	Indicates the Return key.
.	Indicates that code not directly related to the example has been omitted.
.	
.	
. . .	In command formats, indicates that you can repeat the item one or more times.
[]	In command formats, encloses optional values. (Do not type the brackets.)

About the Product

DEC Distributed Queuing Service for OpenVMS Systems Version 1.3 software is an extension of the OpenVMS print queue system to a DECnet network-based distributed system environment. The DQS software allows users of one system to request and query output services on another system.

The DQS Version 1.3 software product is based on and works with the VAX and AXP DQS, Version 1.2, software products. The functionality is essentially the same for all DQS products. Minor differences between the products are described in these release notes.

1.1 Hardware and Software Requirements

The DQS Version 1.3, software product has the following hardware and software requirements:

- o Any VAX or AXP processor
- o OpenVMS VAX Version 5.5-2 or higher operating system or OpenVMS AXP Version 6.1 or higher operating system
- o DECnet for OpenVMS VAX or DECnet/OSI for OpenVMS VAX networking software

For a complete list of hardware and software requirements, see the product's Software Product Description (SPD).

1.2 Software License Terms

A Product Authorization Key (PAK) is necessary to use DQS Version 1.3 . See the Software Product Description (SPD) for detailed license terms.

1.3 Product Documentation

The DQS documentation set includes one manual DEC Distributed Queuing Service for OpenVMS Systems Documentation Set, which consists of the following four parts:

- o Part I User's Guide
- o Part II System Manager's Guide
- o Part III Installation Guide
- o Part IV Appendixes

This document replaces the following Version 1.1 and 1.2 documents:

- o VAX Distributed Queuing Service User's Guide
- o VAX Distributed Queuing Service Management Guide
- o VAX Distributed Queuing Service Installation Guide
- o DEC Distributed Queuing Service for OpenVMS AXP Installation Guide

New Features and Functionality

This section describes differences between the DQS Version 1.3 product and the DQS Version 1.2 products:

- o The DQS product has a new name: DEC Distributed Queuing Service Version 1.3 for OpenVMS Systems.

This product replaces the following DQS Version 1.2 products:

- VAX Distributed Queuing Service Version 1.2
- DEC Distributed Queuing Service Version 1.2 for OpenVMS AXP
- o The OpenVMS VAX and OpenVMS AXP software are functionally equivalent.
- o DECnet Phase V full name support is added (in addition to DECnet Phase IV support).
- o The DQS documentation set has been upgraded. A new installation guide is provided. (The VAX DQS documentation set was last updated for VAX DQS V1.1 in 1988.)
- o DQS server queues no longer require the /RETAIN qualifier.

A command procedure DQS\$SERVER_UPDATE_QUEUE_DEFNS.COM is provided which removes the /RETAIN qualifier from all the DQS V1.n server queues.

See the postinstallation instructions in the Installation Guide for more information.

- o The installation procedure has changed.
 - The installation procedure has been simplified. The user is no longer prompted to define client and

server queues during installation.

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- The DQS software is no longer started at the conclusion of the installation.
- The DQS installation procedure no longer asks the installer to name the device on which the DQS\$SERVER should place its temporary spooled files. Instead, Digital provides a command procedure to do this:

SYS\$MANAGER:DQS\$SERVER_CHANGE_DEFAULT_DEVICE.COM

See the section titled Move the Server Account Directory to Another Device in the System Manager's Guide.

- o The Installation Verification Procedure (IVP) has changed.

When the IVP is executed during installation, it no longer runs the product. The procedure checks to make sure that all files are where they are supposed to be.

The system manager can use the DQS\$IVP.COM in SYS\$TEST to run the product and test the environment. Invoke DQS\$IVP.COM after completing your site-specific customizations and starting the DQS software.

- o The location of DQS\$STARTUP changed.

The DQS startup file DQS\$STARTUP.COM is now placed in SYS\$STARTUP. This was changed from SYS\$MANAGER to be consistent with other layered product conventions.

- o For DEC DQS for OpenVMS AXP V1.2:

The DQS startup file DQS\$STARTUP.COM resides in SYS\$STARTUP.

- o For VAX DQS V1.2:

The DQS startup file DQS\$STARTUP.COM resides in SYS\$MANAGER.

- o DQS\$SYSTARTUP.COM file is added.

With DQS V1.3 you no longer edit the startup file. You add all site-specific customizations (logical definitions and client queue definitions) in a new command procedure called DQS\$SYSTARTUP.COM. This command procedure is invoked automatically by

DQS\$STARTUP.COM.

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The DQS V1.3 installation provides the file `DQS$$SYSTARTUP.TEMPLATE` in the `SYSS$STARTUP` directory. You can use this template file to create your own `DQS$$SYSTARTUP.COM`.

- o On Upgrade, the DQS Installation renames `DQS$STARTUP.COM`.

On Upgrade, the DQS installation procedure renames your current version of the `DQS$STARTUP.COM` file to `DQS$STARTUP.COM_OLD`. The `DQS$STARTUP.COM_OLD` procedure is saved so that any DQS V1.2 site-specific customizations will not be deleted when upgrading. After installation of DQS V1.3, you should place all your site-specific customizations in the new site-specific `DQS$SYSTARTUP.COM` file.

The system manager may want to copy the `DQS$STARTUP.COM` procedure to `DQS$STARTUP.COM_SAV` before installing DQS V1.3.

- o Procedures for defining server queues and authorizing access to servers have changed.

With this new version, you define server queues with the `QUEUE` keyword in the file `DQS$SERVER_CONFIG.TXT`. That means that defining the logical `DQS$QUEUE_` queue name is no longer necessary.

Additionally, you authorize access to servers with the `ALLOW_NODE` and `DENY_NODE` keywords in the `DQS$SERVER_CONFIG.TXT` file. This means that defining the logicals `DQS$DENY_ACCESS` and `DQS$CONTROLLED_ACCESS` is no longer necessary.

You use the command procedure `DQS$SERVER_UPDATE_CONFIG.COM` to enable the server queue definitions and server access. See Chapter 8 of the System Manager's Guide for more information.

See the section on managing the server in Part II, the System Manager's Guide.

- o Parameter 8 format has changed.

The DQS software uses parameter 8 of the `/PARAMETERS` qualifier to the `PRINT` command to pass information to print symbionts to display on the print jobs banner page.

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The format of this string has changed. This should only affect people who have written their own print symbiont and who have depended on the information in P8. Digital has tried to retain backward compatiblilty.

Software Restrictions

This section discusses software restrictions and workarounds, if available.

- o DQS QSHOW command

The DQS QSHOW command does not display the queue description field as defined by the /DESCRIPTION qualifier (which can be used with the INIT/QUEUE, START /QUEUE, or the SET QUEUE commands).

No workaround exists.

Use the SHOW QUEUE/FULL command to view the description field of queues on the DQS client node.

- o QSET and QDELETE do not work on print jobs with job numbers greater than 65,535.

No workaround exists.

- o DQS\$SERVER Account

When installing DQS V1.3 for the first time. The DQS installation creates the account DQS\$SERVER on the node that DQS is installed on. The UIC of this account is [300,311].

When upgrading to DQS V1.3, the installation procedure modifies the DQS\$SERVER account to have the UIC [300,311].

Digital recommends that the UIC for the DQS\$SERVER account be unique. If the UIC [300,311] is already in use, please modify the account that is using this UIC to use a different UIC.

The following example shows that the UIC [300,311] is not in use:

```
$ Set Default SYS$SYSTEM
$ RUN AUTHORIZE
UAF> SHOW [300,311]
No user matches specification
UAF> EXIT
```

The next example shows that the UIC [300,311] has been assigned to the DQS\$SERVER account:

```
$ Set Default SYS$SYSTEM
$ RUN AUTHORIZE
UAF> Show [300,311]
Username: DQS$SERVER           Owner:  DQS$SERVER DEFAULT
Account:  DECNET               UIC:   [300,311] ([DQS$SERVER])
...
UAF> EXIT
```

If the UIC [300,311] has been assigned to any other account, you should

1. Pick an unused UIC
 2. Modify the account to use the new UIC
 3. Modify all the files that belong to that account to have the new UIC
- o DQS and DECnet Phase IV and DECnet Phase V interoperability

Digital recommends that DECnet synonyms be defined on all DQS DECnet Phase V nodes which interoperate with DQS DECnet Phase IV nodes.

Synonyms are not required by DQS in a network that only contains DECnet Phase V nodes.

Known Problems

This section describes known problems with the DQS Verison 1.3 software.

- o DQS Version 1.3 print jobs print with incorrect information on their burst, flag, and trailer pages with Versions 1.0, 1.0B, and 1.0C of the DECprint Supervisor software. The job name, which is printed in large type near the top of the page, incorrectly includes the job submission date and time. The submitted date and time, which is printed in small type, is incorrect.
- o There is a problem when using QDELETE and daisy chained queues.

Given the following configuration:

```
NODE A::          NODE B::          NODE C::  
  
QUEUE_A  -->  QUEUE_B  -->  QUEUE_C  -->  printer
```

If you print a job, and then QDELETE the entry, the queue entry is deleted from QUEUE_B on node B but the queue entry does not get deleted from QUEUE_C on node C.

Workaround: A second QDELETE will delete the job from QUEUE_C on node C. If you have four queues, you will need to execute three QDELETES to delete all the jobs.

Obsolete Functionality

The following items are no longer supported by DQS:

- o The NADRIVER.EXE device driver is no longer provided as part of DQS. The functionality that the NADRIVER.EXE provided for DQS customers is now being provided by the LAT Software. Please refer to Chapter 9, Spooling to a Client Queue for information on how to use the LAT Software.
- o DQS\$HIGH_AVAILABILITY and DQS\$CLUSTER_MEMBERS are no longer supported. These logicals increased the probability that a user could print if the node where the printer's execution queue resided on became unavailable.

Recent versions of OpenVMS have provided the /AUTOSTART_ON qualifier to the \$ INIT/QUEUE command. This OpenVMS functionality allows the queue to fail over to another node if the node on which the queue is running leaves the cluster. The availability of this functionality in OpenVMS has made the corresponding DQS functionality obsolete.

The functionality provided by the use of these two logicals has not been removed from the DQS product, but will be in a future release. You can use similar functionality by specifying /AUTOSTART_ON=(node-1,node-2,...,node-n) as part of the fifth parameter (local_ qualifiers) to DQS\$DEFINE.COM in DQS\$SYSTARTUP.COM.

```
$!  
$! @sys$manager:dqs$define -  
$!     local_queue_name -      ! Queue being defined  
$!     server_node_name -     ! Node where implemented  
$!     remote_queue_name -    ! Queue on that node  
$!     0 -                    ! Unit number of pseudo-device  
$!     local_qualifiers      ! Optional qualifiers on local  
$!                           ! queue  
$!
```