DECdfs for OpenVMS

Release Notes

January 2005

This document contains release notes for DECdfs for OpenVMS Version 2.4.

Software Version: DECdfs for OpenVMS Version 2.4

Operating System: OpenVMS Alpha Version 8.2
                               OpenVMS I64 Version 8.2

Hewlett-Packard Company
Palo Alto, California

Contents

Preface

These release notes describe new and changed features, problems corrected in this release, and current restrictions. The release notes also provide general information about DECdfs Version 2.4 that can help you install and use the product.

Intended Audience

This document is intended for all DECdfs users.

Associated Documents

The DECdfs documentation set consists of these release notes, the *DECdfs for OpenVMS Installation Guide*, and the *DECdfs for OpenVMS Management Guide*.

Reader's Comments

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

Internet	**openvmsdoc@hp.com**
Postal Mail	Hewlett-Packard Company OSSG Documentation Group, ZKO3-4/U08 110 Spit Brook Rd. 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
```

Conventions Used in This Document

The following graphic conventions are used in this document.

`Special type`	This special type in examples indicates system output or user input.
Bold type	Bold type in examples indicates user input.
[ ]	Brackets in command lines indicate that the enclosed values are optional. (Do not type the brackets.)
UPPERCASE	Uppercase letters in command lines indicate keywords that must be entered. You can enter them in either uppercase or lowercase. You can abbreviate command keywords to the minimum unique abbreviation.

lowercase letters	Lowercase letters (often hyphenated) in command syntax or examples indicate variables that you replace with appropriate values.

The Return key, which you must press in order to execute commands, is assumed in command examples.

All numbers are decimal unless otherwise noted.

In the DECdfs documentation, DECnet Phase IV is used to refer to DECnet for OpenVMS, and DECnet Phase V is used to refer to either or both DECnet/OSI and DECnet-Plus for OpenVMS.

1 Required Hardware and Software

DECdfs for OpenVMS Systems Version 2.4 requires the following products:

- Operating system versions:
  - OpenVMS Alpha Version 8.2 with DECnet Phase IV or DECnet Phase V
  - OpenVMS I64 Version 8.2 with DECnet Phase IV or DECnet Phase V
- DECnet for OpenVMS (Phase IV), DECnet/OSI for OpenVMS (Phase V), or DECnet-Plus for OpenVMS (Phase V)

2 Product Authorization Key

You need a license Product Authorization Key (PAK) to install and run DECdfs software. Use the License Management Utility (LMF) documentation to register and load a license PAK. You can install DECdfs software without a PAK but you cannot run the IVP or start DECdfs.

3 New Features

The following features are new in the DECdfs Version 2.4 release:

- Support for OpenVMS Alpha Version 8.2
- Support for OpenVMS I64 Version 8.2

4 Year 2000 Readiness

DECdfs has been investigated and is Year 2000 ready. However, you should be aware of a condition related to Year 2000 handling. DECdfs uses the file system $QIO interface, which supports several attributes for RSX-11 compatibility. Of these, ATR$C_EXPDAT and ATR$C_ASCDATES return the file creation date, revision date, and expiration date using 2-digit years.

These attributes are not normally used by native code and can be replaced with the following documented, compliant interfaces:

```
ATR$C_CREDATE
ATR$C_EXPDATE
ATR$C_REVDATE
```

5 Installation

The DECdfs Version 2.4 software kit is named HP-VMS-DECDFS024, and consists of multiple savesets. Saveset A is used by all installations. Each supported platform uses one and only one of the other savesets. The installation procedure will automatically select and install the proper saveset after determining the OpenVMS version, CPU architecture, and type of network software currently running.

You can install DECdfs software by using a VMSINSTAL command similar to the following:

```
$ @SYS$UPDATE:VMSINSTAL HP-VMS-DECDFS024 kit-location
```

The installation procedure determines the system configuration and asks for confirmation.

Refer to the *DECdfs for OpenVMS Installation Guide* for more information.

5.1 Running the Installation Verification Procedure (IVP)

The IVP may be run at the conclusion of the installation (provided old DFS drivers are not loaded), or it may be run at a later time. Write access to a DECdns namespace is no longer required. It is only necessary for the operator to provide the name of a temporary access point which is added and then deleted for the test.The IVP will also add and later remove a proxy for the operator, if necessary.

If the system is client-only, the operator needs to supply the name of an existing access point on a server system. The node name of the server is also requested if the system under test does not have DECdns software.

5.2 Post-Installation Steps

To start DECdfs software automatically on your system after completing the installation procedure, edit your system startup command file so that it invokes the DECdfs startup command procedure.

```
@SYS$STARTUP:DFS$STARTUP.COM
```

If you are running DECnet Phase IV, put this statement after the statement that invokes the DECnet startup command file (STARTNET.COM). The DECnet software must be started before the DECdfs software. If you are running DECnet Phase V, the DECdfs startup statement can be placed anywhere within your SYSTARTUP procedure.

If DECdns software is not available, the DECdfs startup procedure issues an advisory message to that effect and continues the startup.

5.3 Upgrading DECdfs Software

This kit upgrades any previous version of DECdfs software. If possible, reboot your system before starting the upgrade and disable the startup of DECdfs. Typically, this is accomplished by commenting out the call to DFS$STARTUP.COM in your SYSTARTUP procedure. Disabling an earlier version of DECdfs software ensures that incompatible DECdfs drivers and images are not loaded when Version 2.4 is installed. Because drivers cannot be unloaded or replaced, the presence of loaded drivers prevents the new DECdfs from being started and prevents the IVP from being run. If the system is rebooted before the installation, it does not need to be rebooted again after the installation is completed. Otherwise, a reboot is necessary to place the new version into use.

If necessary, you can continue running your present version of DECdfs software during the Version 2.4 installation. This might be necessary if the installation kit is located on a DECdfs-served disk. However, once the installation is completed, DFSCP commands do not work because of the incompatibility of new and old images. Therefore, the system should be rebooted as soon as possible.

If the installation procedure finds DECdfs drivers already loaded, it issues a warning, and allows the installer to abort or continue the installation.

6 Known Problems and Restrictions

This section includes information about the following topics:

- Backup Restrictions
- DECdfs Compatibility Issues
- No ACL Support

- No Shared Write Access

- DECnet Phase V Hidden Areas Not Supported

- Upgrading a DECdfs Node from DECnet Phase IV to DECnet Phase V

- Use of STOP COMMUNICATIONS Not Recommended

- DECdns and DECnet Phase V Search Path

- Support for Extended File Specifications

6.1 Backup Restrictions

DECdfs Version 2.4 software does not support the /FAST, /IMAGE, and /PHYSICAL qualifiers to the BACKUP command.

6.2 DECdfs Compatibility Issues

For each of the supported OpenVMS and DECnet versions, DECdfs Version 2.4 can work as a DECdfs client with any other as a server.

Any supported platform can also function as client or server with a platform running DECdfs Version 1.3, with the limitation that DECdfs Version 1.3 clients cannot mount disks served by OpenVMS Alpha DECnet servers. This is because the new MOUNT qualifier, /NODE, is not available on Version 1.3 clients.

Where a Version 2.4 client is used with a Version 2.1, or earlier server, directory creation is not supported.

6.3 No ACL Support

The use of ACLs is unsupported on DECdfs mounted disks.

6.4 No Shared Write Access

When a user has a file open for writing, no other DECdfs access is allowed. If a DECdfs user has the file open for writing, no other local or DECdfs access is allowed.

6.5 DECnet Phase V Hidden Areas Not Supported

DECdfs does not support client access from, or server access to, nodes in DECnet Phase V hidden areas. This situation arises only when a DECnet network with hidden areas has added some nodes running DECnet Phase V.

6.6 Upgrading a DECdfs Node from DECnet Phase IV to DECnet Phase V

If a DECdfs server node running DECnet Phase IV is upgraded to DECnet Phase V, it is important to remove all of the access points served by that system before shutting it down for the upgrade. If this is not done, the name server may refuse to register the access points under DECnet Phase V because the node name has a different syntax and format. Use the REMOVE ACCESS_POINT command, giving each access point name that is served by the node.

After the DECnet Phase V upgrade and reinstallation of DECdfs, the normal server startup procedure reregisters the access points with the name server.

In any other case where a server permanently ceases serving an access point, the REMOVE ACCESS_POINT command should be used before the server is shut down.

6.7 Use of STOP COMMUNICATIONS Not Recommended

Hewlett-Packard recommends using the SHUTDOWN COMMUNICATION command instead of STOP COMMUNICATION. The STOP COMMUNICATION command stops communication as soon as the command is entered and aborts all existing connections regardless of whether an operation is in progress. This may cause processes to hang or the system to crash. In contrast to STOP COMMUNICATION, SHUTDOWN COMMUNICATION initiates a controlled shutting down of services and does not abort user operations. It causes the Communication Entity to refuse new requests and then to stop communication when all open files are closed.

6.8 DECdns and DECnet Phase V Search Path

On a system running DECnet Phase V, if you wish to mount a DECdfs access point registered in a DECdns namespace, you must include DECdns in the session control naming search path. This can be done using NET$CONFIGURE to specify DECdns as one of the directory services. Otherwise, include the /NODE qualifier in your DFS MOUNT command to specify the node serving the access point. Failing to do either will result in a %DFS-E-CVT_TO_DNS_NAME error.

6.9 Support for Extended File Specifications

DECdfs for OpenVMS Version 2.4 provides support for Extended File Specifications and ODS-5 volumes, with certain restrictions. Only OpenVMS Alpha Version 7.2 (or later) systems running DECdfs Version 2.3 (or later) are capable of serving and mounting access points on ODS-5 volumes. If a pre-Version 7.2 client running DECdfs Version 2.3 (or later) attempts to mount a DECdfs access point on an ODS-5 volume, the operation fails with the following error:

```
%DFS-F-UNSUPPFS, Unsupported file system structure
```

A client system running an older version of DECdfs fails with a different error on an attempt to mount or access an ODS-5 access point, as follows:

```
%SYSTEM-E-UNSUPPORTED, unsupported operation or function
```

On OpenVMS VAX Version 7.2 and 7.3 systems, you can mount DECdfs access points on ODS-5 volumes, but you are limited to ODS-2-compliant file operations.

See the *DECdfs for OpenVMS Management Guide* for more information about restrictions on DECdfs support for Extended File Specifications. For more information on Extended File Specifications and ODS-5 volumes, to the OpenVMS documentation set.

6.10 Support for DECnet-over-TCP/IP connections

DECnet-Plus has the ability to make DECnet connections to another node over a TCP/IP network, if both systems involved are running DECnet-Plus along with a compatible TCP/IP product. In addition, the TCP/IP product must contain and be configured to load a PWIP driver.

Once DECnet-Plus and TCP/IP have been properly configured, DECdfs is able to utilize this capability. To force DECdfs to make a DECnet connection over TCP/IP ,use the /NODE qualifier on the DFS MOUNT command to specify the DECdfs server's domain name and address.

For example:

```
DFS>MOUNT DFSTEST:.HOST_TEST1 /NODE=HOST.EXAMPLE.COM
%MOUNT-I-MOUNTED, DFSTEST:.HOST_TEST1 mounted on _DFSSC1386:
```

```
DFS>MOUNT DFSTEST:.HOST_TEST2 /NODE=16.12.34.56
%MOUNT-I-MOUNTED, DFSTEST:.HOST_TEST2 mounted on DFSC1387:
```

Note that in order to use a domain name, the domain directory service must be included in the DECnet- Plus Session Control NAMING SEARCH PATH and BACKTRANSLATION SEARCH PATH characteristics.