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DSNlink Version 2.2D for OpenVMS Installation Guide

September 15, 1999

This document describes the installation of DSNlink Version 2.2D, an engineering change order (ECO) kit. Installing the DSNlink Version 2.2 for OpenVMS software is a prerequisite.

Revision/Update Information:	This is a revised document.
Operating System and Version:	OpenVMS VAX Version 6.2, 7.1, or 7.2
Software Version:	DSNlink Version 2.2D for OpenVMS

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Preface

The Purpose of the Kit

DSNlink Version 2.2D contains bug fixes and some new features for DSNlink Version 2.2. For more information, see the *DSNlink Version 2.2D Release Notes*.

Audience

This guide is intended for the system manager who installs DSNlink software.

Where to Get DSNlink Kits

DSNlink Version 2.2 for OpenVMS is a prerequisite to DSNlink Version 2.2D. If you have not installed DSNlink Version 2.2, you can get it and DSNlink Version 2.2D from the following locations:

- The DSNlink Web site:

  http://www.service.digital.com/dsnlink/

  Click on Download Kits.

- This anonymous FTP directory:

  ftp.service.digital.com

  Set default to the directory that contains the kit you want to install. For example, these are the directories with DSNlink kits for the Alpha and VAX systems running OpenVMS:

  ```
  ftp> cd /public/DSNlink/ovms-alpha/
  ```

  Or:

  ```
  ftp> /public/DSNlink/ovms-vax/
  ```

  The directory and file names are case-sensitive. Be sure to type them as shown above.

The Readme files with each kit explain how to proceed.

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Preparing to Install DSNlink

This section describes the preinstallation requirements for DSNlink Version 2.2D.

1.1 Preinstallation Checklist

Use the following checklist ☐ √ to ensure that your system has the prerequisites for installing DSNlink Version 2.2D:

- ☐ Verify that you are installing DSNlink Version 2.2D on a system running OpenVMS Version 6.2, 7.1, or 7.2.
- ☐ The minimum DSNlink version that your system must have is DSNlink Version 2.2 for OpenVMS. DSNlink Version 2.2C is also acceptable. If you install DSNlink Version 2.2 for OpenVMS, perform the postinstallation tasks.

  For the location of the documentation and software, see the Preface.

  To see if DSNlink is installed, use this command:

  ```
  $ DSN SHOW VERSION
  ```

  DSNlink displays the DSNlink version. Note that DSNlink Version 1.2 for OpenVMS does not recognize the DSN SHOW VERSION command.
- ☐ Rename any modem scripts you want to continue using.

  The DSNlink Version 2.2D installation procedure overwrites your current modem scripts with new scripts if the script names are identical. If you use a modem and want to continue using its dialer script, rename the script to keep. For example:

  ```
  $ SET DEFAULT DSN$DATA
  $ RENAME CO2264.DDSF_SRC CO2264_KEEP.DDSF_SRC
  ```

  For more information about modem scripts, see the *DSNlink Version 2.2D for OpenVMS Release Notes*.
- ☐ Make sure you have enough disk space. The following is the amount of disk space used by the combined kit, which you download, and the Alpha and VAX kits after the installation:

Table 1–1 DSNlink Version 2.2D Kit Sizes

Platform	Size in Blocks
Alpha	11,500
VAX	11,700
Combined kit	20,500

From the combined kit, the installation procedure supplies only the files for your system. For example, if you install DSNlink on an Alpha system, DSNlink does not supply the files for VAX systems.

For more information about installing DSNlink Version 2.2D on a cluster, see Section 1.3.

- [ ] Verify that the account from which you will install DSNlink has SETPRV or at least the following privileges:

  CMKRNL
  DETACH
  NETMBX
  SYSPRV
  SYSNAM
  SYSLCK
  TMPMBX
  WORLD

- [ ] Make sure there are no running DSNlink Version 2.2 for OpenVMS modem daemons.

  The installation procedure checks for running modem daemons. If any are found, a prompt asks if you want to have the installation procedure stop them. Answering Y or Yes interrupts the processes and daemons, which could annoy users. Answering N or No causes the installation procedure to exit.

  Note that users can continue to use DSNlink on other non-modem transports, such as TCP/IP, during the installation.

- [ ] Make sure the Queue Manager is running.
- [ ] Verify that the queue SYS$BATCH exists.
- [ ] Back up your system disk.

1.2 A Correction to the DSNlink Version 2.2 Installation Guide

The *DSNlink Version 2.2 for OpenVMS Installation Guide* has incorrect minimum values for the MAXBUF parameter. The value was listed as 1200 for both Alpha and VAX. It should be 8192 for both systems.

Table 1–2 lists the minimum required SYSGEN values for installing and running DSNlink Versions 2.2 and 2.2D.

Table 1–2 Required System Parameters

SYSGEN Parameter	Minimum Value
SCSNODE	Must be defined
SCSSYSTEMID	Must be defined
MAXBUF	Alpha: 8192 VAX: 8192
TTY_ALTYPAHD[1]	Alpha: 2048 VAX: 2048

[1]TTY_ALTYPAHD is checked only if you choose the modem transport.

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Table 1–2 (Cont.) Required System Parameters

SYSGEN Parameter	Minimum Value
GBLPAGES	Alpha: 6623 VAX: 6754
GBLSECTIONS	Alpha: 21 VAX: 33

Also, the Installation Guide states that if you enter more than one access number when installing DSNlink Version 2.2, only the first access number is tested during the installation verification procedure (IVP). That is incorrect. DSNlink tests all access numbers you enter during the installation procedure. If any access number fails, the Network Exerciser messages notify you.

1.3 Installing DSNlink Version 2.2D on an OpenVMS Cluster

Where to Install DSNlink Version 2.2D in a Cluster

Use these guidelines for installing DSNlink Version 2.2D on clusters:

- If you have a cluster of both Alpha and VAX systems, you must install ECOs on one of the Alphas and one of the VAXes. Do not install DSNlink on a disk shared by Alpha and VAX systems.

  For example, in a mixed cluster of five nodes, A, B, C, D, and E, if nodes A, B, and C are VAXes that share a common disk, you must install DSNlink Version 2.2D on either node A, B, or C. If nodes D and E are Alpha systems that share a common disk, you must install DSNlink Version 2.2D on either node D or E.

- If you previously installed DSNlink Version 2.2C, install DSNlink Version 2.2D on the same systems.

- If your cluster has only VAX or Alpha systems, install DSNlink Version 2.2D on one node in each group that shares a common disk.

DSNlink Startup in Clusters

When each DSNlink node in a cluster runs the DSNlink startup procedure, DSN$STARTUP.COM, the produces the following error:

```
%JBC-E-STARTED, queue already started
```

The individual startup procedures attempt to start a queue that is already started. For information on how to modify the startup files to correct this error, see Section 2.3.1.

1.4 Kit Contents

The DSNlink Version 2.2D save set, DSNLINKD022.A, contains:

- Files for both Alpha and VAX systems
- The release notes:

  DSNLINK022D_RELEASE_NOTES.TXT - the text version
  DSNLINK022D_RELEASE_NOTES.PS - the PostScript version

- The installation guide (this document):

  DSNLINK022D_INSTALL_GUIDE.TXT - the text version
  DSNLINK022D_INSTALL_GUIDE.PS - the PostScript version

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A Sample DSNlink Version 2.2D Installation

Before you start a DSNlink Version 2.2D installation, verify that your system meets the prerequisites listed in Section 1.1.

2.1 Existing Files Changed by the Installation Procedure

The DSNlink Version 2.2D installation replaces modem scripts with new scripts if the file names are identical. The script files are in the directory defined by the logical name DSN$DATA and have the file extension .DDSF_SRC. For a list of the modem scripts, see the Files and Images section of the *DSNlink Version 2.2D for OpenVMS Release Notes*.

Because the installation replaces only DSNlink Version 2.2 for OpenVMS files that have the same name as files in DSNlink Version 2.2D, if you want to keep the files you have, rename or copy them to another directory before installing DSNlink Version 2.2D. For example, to prevent the Codex modem script from being replaced:

```
$ RENAME DSN$ROOT:[DAT]CODEX.DDSF_SRC -
-$ DSN$ROOT:[DAT]CODEX_KEEP.DDSF_SRC
```

After the DSNlink Version 2.2D installation, rename the file to CODEX.DAT.

The installation also provides a new route map template. The template has changes to the routing entries for Customer Support Centers around the world. The changes do not appear in your route map unless you rebuild it. You do not have to rebuild your route map if you can reach your Customer Support Center successfully now.

2.2 A Sample Installation

Example 2–1 shows a sample DSNlink Version 2.2D installation on an Alpha system. The DSNlink kit was previously copied to the SYS$UPDATE directory.

Example 2–1 Sample DSNlink Version 2.2D Installation

```
$ SET DEFAULT SYS$UPDATE
$ @VMSINSTAL DSNLINKD022 ddcu:[dir] ➊

        OpenVMS AXP Software Product Installation Procedure V7.1

It is 10-SEP-1999 at 10:09.
```

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Example 2–1 (Cont.) Sample DSNlink Version 2.2D Installation

```
Enter a question mark (?) at any time for help.
%VMSINSTAL-W-NOTSYSTEM, You are not logged in to the SYSTEM account.
%VMSINSTAL-W-ACTIVE, The following processes are still active:
       DECW$SERVER_0
       DECW$MWM
       DECW$Clock
       DECW$TE_005C
       DECW$TE_005F
       DECW$TE_0064
       DECW$TE_006D
       line-000

* Do you want to continue anyway [NO]? Y
* Are you satisfied with the backup of your system disk [YES]? Y

The following products will be processed:
  DSNLINKD V2.2
Beginning installation of DSNLINKD V2.2 at 10:09

%VMSINSTAL-I-RESTORE, Restoring product save set A ...
%VMSINSTAL-I-RELMOVED, Product's release notes have been moved to SYS$HELP.

********************************************************************************

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        Note: You can enter a question mark (?) when prompted for
              input and a detailed explanation will be displayed
              about what information is needed.

%DSNLINKD-I-PREINSTALL, Checking for required privileges

%DSNLINKD-I-PREINSTALL, Checking for minimum version of OpenVMS

%DSNLINKD-I-PREINSTALL, Checking for minimum version of DSNlink

%DSNLINKD-I-PREINSTALL, Checking for existing DSNlink directory tree

%DSNLINKD-I-PREINSTALL, Checking for sufficient free blocks on system disk
```

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Example 2–1 (Cont.) Sample DSNlink Version 2.2D Installation

```
%DSNLINKD-I-PREINSTALL, Checking for executing Queue Manager

%DSNLINKD-I-PREINSTALL, Checking for SYS$BATCH batch queue

%DSNLINKD-I-PREINSTALL, Checking for running DSNlink modem processes

        DSNlink modem processes are currently running on this system.
        In order to continue with this installation, they must be shut
        down, which will terminate all existing modem links. If you
        decide to proceed, this installation procedure will shut down
        the DSNlink modem processes.

* Do you want to continue with the installation of DSNlink? [NO]? Y ❷

%DSNLINKD-I-PREINSTALL, Starting shutdown of DSNlink...

Job DSN$SHUTDOWN (queue SYS$BATCH, entry 4) started on SYS$BATCH

%DSNLINKD-I-PREINSTALL, Shutdown of DSNlink completed

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

 All installation questions have been answered. The rest of the
 installation will proceed automatically and may take up to 10
        minutes, depending on your system type.

%DSNLINKD-I-PRODAT, Providing English Motif resource files...


%DSNLINKD-I-PRODAT, Providing files to DSN$HELP...

%DSNLINKD-I-UPDDCLHLP, Updating DCL Help

%DSNLINKD-I-PRODAT, Providing files to DSN$DATA...

%DSNLINKD-I-PROLIB, Providing images to DSN$LIBRARY...

%DSNLINKD-I-PROEXE, Providing images to DSN$SYSTEM...

%DSNLINKD-I-PROUTL, Providing image to DSN$UTILITIES...

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

DSN-I-SECURE, Setting the owner and protection on the DSNlink directories

DSN-I-SECURE, Setting the owner and protection on the DSNlink system files

DSN-I-SECURE, Setting the owner and protection on all DSNlink files

DSN-I-SECURE, Setting the owner and protection on specific DSNlink files

DSN-I-SECURE, Owner and protection successfully set on all DSNlink files

%DSNLINKD-I-POSTINSTALL, Applying corrections to DSN$STARTUP.COM...

%DSNLINKD-I-POSTINSTALL, Recreating the DSNlink Route Map...

%DSNLINKD-I-POSTINSTALL, Submitting DSN$STARTUP.COM to SYS$BATCH...

Job DSN$STARTUP (queue SYS$BATCH, entry 5) started on SYS$BATCH

 Installation of DSNLINKD V2.2 completed at 10:11

    Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY

    Creating installation data file: VMI$ROOT:[SYSUPD]DSNLINKD022.VMI_DATA

 VMSINSTAL procedure done at 10:12
$
```

The following refer to items in the previous sample installation:

❶ Replace *ddcu:[dir]* with the file specification of the kit on your system.

❷ This prompt appears only if there are running DSNlink modem process on your system. If you enter Yes or Y at the prompt to continue, the installation procedure stops the processes, which interrupts the DSNlink applications and may annoy the users. If you enter No or N, the installation stops.

❸ If you choose to purge the files replaced by the installation, DSNlink removes only the files for which there are new files in the kit. For a list, see the Files and Images section in the *DSNlink Version 2.2D for OpenVMS Release Notes*.

2.3 Postinstallation Tasks

The postinstallation tasks are as follows:

- Be sure you have performed all the postinstallation procedures for DSNlink Version 2.2 for OpenVMS.
- If you renamed a modem script to prevent it from being overwritten by the new modem script:
  1. Log in to the SYSTEM account.
  2. Determine if the modem line is in use with this command:

     ```
     $ DSN SHOW LINE
     ```

     If the value for the Current State field is ONLINE, the line is in use.
  3. Stop the modem line:

     ```
     $ DSN STOP LINE
     ```
  4. Rename the modem script to its original name. For example:

     ```
     $ SET DEFAULT DSN$DATA
     $ RENAME CO2264_KEEP.DDSF_SRC CO2264.DDSF_SRC
     ```
  5. Start the modem line:

     ```
     $ DSN START LINE
     ```

2.3.1 Modifying the DSNlink Startup to Start Queues Once

On OpenVMS clusters, the DSNlink startup file tries to start the queue DSN$BATCH_*nodename* twice, where *nodename* is the name of the node in the cluster. This is the error message:

```
%JBC-E-STARTED, queue already started
```

To have DSNlink start the queue once in a cluster, edit SYS$STARTUP:DSN$STARTUP.COM on each DSNlink node to remove the START/QUEUE command or the /START qualifier from the INITIALIZE/QUEUE command. This is the part of the file to change:

```
$! If we're on a VMScluster, then init a
$! generic DSN$BATCH batch queue with
$! DSN$BATCH_nodename execution queues
.
.
.
$create_execution_queues:
$   exec_queue_name = f$element(element_nbr,",",queue_name_list)
$   member_name = f$element(element_nbr,";",batchque_nodename)
$   if exec_queue_name .eqs. "," then goto create_generic_queue
$   on_qual = "/ON=''member_name'::"
$   set noon
$   initialize/queue/batch/start/job_limit=5'on_qual' 'exec_queue_name'
$   start/que'on_qual' 'exec_queue_name'
```

Remove either of the items in boldface text to have the queue started only once.

The DSNlink Version 2.2D installation is complete.

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