

VSI OpenVMS

**VSI Enterprise Directory
Installation Guide**

VSI Enterprise Directory Installation Guide



VMS Software

Copyright © 2024 VMS Software, Inc. (VSI), Boston, Massachusetts, USA

Legal Notice

Confidential computer software. Valid license from VSI 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.

The information contained herein is subject to change without notice. The only warranties for VSI products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. VSI shall not be liable for technical or editorial errors or omissions contained herein.

HPE, HPE Integrity, HPE Alpha, and HPE Proliant are trademarks or registered trademarks of Hewlett Packard Enterprise.

Preface	v
1. About VSI	v
2. Intended Audience	v
3. VSI Encourages Your Comments	v
4. OpenVMS Documentation	v
Chapter 1. Revision/Update Information	1
1.1. Prerequisite Software	1
1.2. Information Required	1
1.3. Disk Space, Resource, and Time Requirements	2
1.4. Release Notes and Read Before Installing Document	3
1.5. Installing the VSI OpenVMS Enterprise Directory	3
1.6. VSI Administrator for Enterprise Directory	3
1.7. Handling Errors	3
1.8. Verifying the Installation	3
1.9. Tasks After Installation	3
1.10. Saving Files on Reinstallation	4
1.11. Installing on Clusters	4
1.12. No AutoAnswer Support in Installation	4
1.13. Further Information	4

Preface

1. About VSI

VMS Software, Inc. (VSI) is an independent software company licensed by Hewlett Packard Enterprise to develop and support the OpenVMS operating system.

2. Intended Audience

This manual is intended for anyone how needs to install the VSI Enterprise Directory software.

3. VSI Encourages Your Comments

You may send comments or suggestions regarding this manual or any VSI document by sending electronic mail to the following Internet address: <docinfo@vmssoftware.com>. Users who have VSI OpenVMS support contracts through VSI can contact <support@vmssoftware.com> for help with this product.

4. OpenVMS Documentation

The full VSI OpenVMS documentation set can be found on the VMS Software Documentation webpage at <https://docs.vmssoftware.com>.

Chapter 1. Revision/Update Information

1.1. Prerequisite Software

Before you install the VSI OpenVMS Enterprise Directory V5.4 make sure you have the following installed and working on your system:

- OpenVMS for Alpha V7.3-2 or later
- OpenVMS for Integrity Servers (IA64) V8.2 or later

For the VSI OpenVMS Enterprise Directory Version 5.4 on OpenVMS for Alpha V7.3-2 or later (excluding Topaz Alpha) the following optional software products can be installed on your system:

- For LDAP or X.500 protocols that use RFC1006 connections, VSI TCP/IP Services for OpenVMS Alpha V5.4
- For LDAPv3 over SSL, VSI SSL for OpenVMS Alpha V1.1 or later
- For X.500 protocols over an OSI network, DECnet-Plus for OpenVMS Alpha V7.3-2 or later, including the application option (OSAK)

For the VSI OpenVMS Enterprise Directory Version 5.4 on OpenVMS for Alpha V8.2 (Topaz Alpha) or later, the following optional softwares can be installed on your system:

- For LDAP or X.500 protocols that use RFC1006 connections, VSI TCP/IP Services for OpenVMS V5.5 or later
- For LDAPv3 over SSL, VSI SSL V1.1 for OpenVMS or later
- For X.500 protocols over an OSI network, DECnet-Plus for OpenVMS Alpha V8.2 or later, including the application option (OSAK)

For the VSI OpenVMS Enterprise Directory Version 5.4 on OpenVMS Industry Standard 64 V8.2 for Integrity Servers (I64) systems, the following additional softwares need be installed on your system:

- Java 1.4.2-1 for OpenVMS Industry Standard 64 for Integrity Servers (I64) systems, or later
- Optionally:
 - For LDAPv3 over SSL, VSI SSL V1.1, for OpenVMS Industry Standard 64 for Integrity Servers (I64) systems, or later
 - VSI TCP/IP Services V5.5, for OpenVMS Industry Standard 64 for Integrity Servers (I64) systems, or later
 - For X.500 protocols over an OSI network, DECnet-Plus V8.2 for OpenVMS Industry Standard 64 for Integrity Servers (I64) systems or later, including the application option (OSAK)

1.2. Information Required

Before installing, make sure you have the following information:

- The name of the device where the installation media will be loaded.
- The UIC to be assigned to the DXD\$SERVER account.
- The name of the disk where the DXD\$SERVER directory is to be created.
- For clusters, the server node name. See Section 1.11.

If this is an upgrade installation, the installation procedure will find the information from the current system.

1.3. Disk Space, Resource, and Time Requirements

You need 40000 free blocks on the system device or Alternate Working Device that you use for the installation. If you are installing either the VSI AED Windows kit or the VSI AED Utility, you need an additional 130000 free blocks on this disk. After installation, the components require disk space permanently on both the system disk and the disk where the DXD\$SERVER directory is to be created. Some components need global pages and sections. These requirements are cumulative.

Component	System Disk space	DXD\$SERVER Disk space	Global Pages	Global Sections
Base (mandatory component)	8000	1000	3200	8
Server	18000	-	-	-
Admin ¹	7000	-	3200	4
API	1000	-	-	-
LUC	5000	-	-	-
VSI AED ^b Windows kit	-	70000	-	-
VSI AED Utility	-	60000	-	-

¹This is not the VSI Administrator for Enterprise Directory; it is the Admin component.

^bThis is the VSI Administrator for Enterprise Directory; it is the Windows GUI for managing the Directory.

The IA64 system requires following set of resources to run the DIRECTORY server image.

Component	System Disk space	DXD\$SERVER Disk space	Global Pages	Global Sections
Base (mandatory component)	17500	1000	3200	8
Server	25600	-	-	-
Admin ¹	7000	-	3200	4
API	1000	-	-	-
LUC	5000	-	-	-
VSI AED ^b Windows kit	-	70000	-	-
VSI AED Utility	-	60000	-	-

Before installing, ensure that the system resources allow for all of the components you install, remembering that the Base component is mandatory.

You are recommended to back up your system disk before you begin the installation. Installation of all components takes approximately 15 minutes.

1.4. Release Notes and Read Before Installing Document

Read the release notes before installing the software. Use `VMSINSTAL OPTIONS N` to print the release notes.

The product documentation includes a *Read Before Installing* document, which you must also read.

1.5. Installing the VSI OpenVMS Enterprise Directory

Log in to an account with SETPRV and type:

```
$ @SYS$UPDATE:VMSINSTAL DXDA054 device OPTIONS N
```

The installation procedure displays a menu. Select the components that you want to install, and follow the instructions.

The Base component is mandatory on all systems on which you want to run directory applications. It is installed automatically when you select any other component.

Note that components you do not specify are deinstalled if present. You must specify all components that you want on the system, including any that are already present.

1.6. VSI Administrator for Enterprise Directory

If you want to use VSI Administrator for Enterprise Directory for management of your directory, you should first install the components "VSI Administrator for Enterprise Directory—Windows" and "VSI Administrator for Enterprise Directory—Utility". When the installation is complete, set `DXD$DIRECTORY` to be your default directory, and copy the file `[.CAED_WIN32]DIRECTORYADMINISTRATOR.EXE` to your PC. This file is an executable program that when run on a PC will install VSI Administrator for Enterprise Directory.

1.7. Handling Errors

If an error occurs during installation, check the prerequisites, and refer to *VSI Enterprise Directory — Problem Solving* for details of installation problems.

1.8. Verifying the Installation

To verify the installation, run `SYS$TEST:DXD$IVP.COM`.

1.9. Tasks After Installation

Edit `SYS$STARTUP:SYSTARTUP_VMS.COM` to include the following command line:

```
$ SUBMIT SYS$STARTUP:DXD$COMMON_STARTUP.COM
```

You also need to run that Directory Service startup file before configuring the product as described in *VSI Enterprise Directory — Management*.

If you are reinstalling or upgrading, then you might have old copies of customized schema files. You need to incorporate your customizations into the newly installed schema files, and recompile the schema before starting the DSA. The *Read Before Installing* document provides further information about upgrading.

See the file `ReadMe.txt` in the *VSI Administrator for Enterprise Directory* kit for details.

1.10. Saving Files on Reinstallation

The installation procedure saves copies of the following files if you reinstall the Directory.

```
SYS$COMMON:[SYS$STARTUP]DXD$DSA_STARTUP.NCL
SYS$COMMON:[SYS$STARTUP]DXD$DSA_STARTUP.COM
SYS$COMMON:[SYS$STARTUP]DXD$DSA_SHUTDOWN.NCL
SYS$COMMON:[SYS$STARTUP]DXD$TEMPLATE_STARTUP.NCL
DXD$DIRECTORY:DXD$ACI_TEMPLATE.DXIM
```

Each file is renamed by inserting `_SAV n` into the file name, where n is a number.

If the installation procedure finds schema files, these are moved to a subdirectory called `SAV n` , for example, `DXD$DIRECTORY:[DXD$SERVER.SAV1]`. The procedure only moves schema files that were installed by the Directory product. Any schema files created by the customer are unaffected.

1.11. Installing on Clusters

Only one node in a cluster can run the server. The installation prompts you for the server node name, and edits `DXD$LOGICALS_STARTUP.COM` to define a logical based on your answer.

On a cluster that has multiple system disks (including mixed architecture clusters), you must repeat the installation for each system disk. All system disks must run V5.6 of the Directory Service. You must install the same components and specify the same server node during each installation.

The installation registers the `DXIM` command. To make the command available to all cluster nodes, use the following command on each node:

```
$ INSTALL SYS$SHARE:DCLTABLES /REPLACE
```

If you prefer, you can use the `SYSMAN` utility for this task.

1.12. No AutoAnswer Support in Installation

AutoAnswer files can only be used on installations that follow the pattern of previous installations. AutoAnswer files created during a first-time installation (that is, installation on a system that had no Directory previously), are not available during an upgrade. AutoAnswer files created during an upgrade will be available at the time of the next upgrade and any subsequent upgrade.

1.13. Further Information

VSI Enterprise Directory — Problem Solving contains a list of the files installed on your system, their locations and approximate sizes. The guide also lists errors that you might see during installation and verification and explains what to do if they occur.