Veritas Access Enterprise Vault Solutions Guide

Linux

7.4.1



Veritas Access Enterprise Vault Solutions Guide

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https://sort.veritas.com/data/support/SORT Data Sheet.pdf

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Chapter

Introduction

This chapter includes the following topics:

- About Veritas Access
- About this document
- About Veritas Access as archival storage for Enterprise Vault
- Veritas Access versions certified by Enterprise Vault

About Veritas Access

Veritas Access is a software-defined, scale-out network-attached storage (NAS) solution for unstructured data that works on commodity hardware. Veritas Access provides resiliency, multi-protocol access, and data movement to and from the public and private cloud based on policies. You can reduce your storage costs by using low-cost disks and by storing infrequently accessed data in the cloud.

About this document

This document describes how Veritas Access 7.4.1 can be configured as archival storage with Enterprise Vault. Veritas Enterprise Vault helps automate retention management, classification and supervision, while simplifying search and eDiscovery of unstructured data.

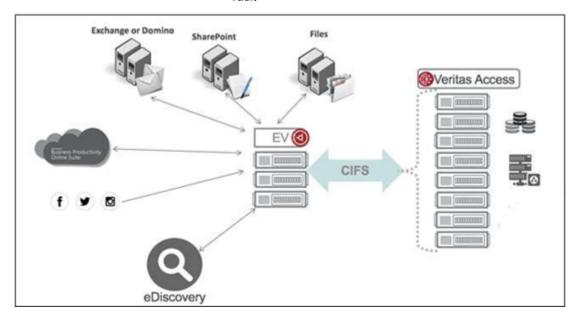
About Veritas Access as archival storage for Enterprise Vault

Veritas Access can be used as both primary storage and secondary storage for Enterprise Vault.

- Primary storage: Enterprise Vault can archive data directly to the storage system vault store partition.
- Secondary storage: Enterprise Vault can migrate collections of files from an NTFS or network share vault store partition to a secondary storage location.

Figure 1-1 shows how Veritas Access works as a primary archive datastore for Enterprise Vault.

Veritas Access as a primary archive datastore for Enterprise Figure 1-1 Vault



Veritas Access versions certified by Enterprise **Vault**

Veritas Access is certified for archival storage by Enterprise Vault.

See "Software requirements" on page 10. for details on Enterprise Vault Certification.

Chapter 2

System Requirements

This chapter includes the following topics:

- Server roles
- Hardware requirements
- Software requirements

Server roles

Figure 2-1 shows the roles of different servers in an Enterprise Vault configuration.

Figure 2-1

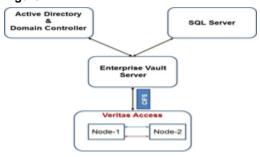


Table 2-1 gives the list of required servers and their use.

Table 2-1

Server	Use	
Active Directory and Domain Controller	Required for user authentication for Enterprise Vault.	

Server	Use
Enterprise Vault server	Required to configure Enterprise Vault services.
SQL server	Required by Enterprise Vault server to host its back-end database.
Veritas Access	Required as a storage system for archival by

Enterprise Vault.

Table 2-1 (continued)

Hardware requirements

Four physical or virtual servers are required to host the following:

1. Active Directory and Domain Controller server

2. SQL server

The SQL servers should have the following minimum specifications:

Number of CPUs: 8 (recommended)

Power of CPUs: 2.8 GHz or more

Memory: 16 GB (recommended)

The SQL server requires three fast local partitions (composed of one or more disks) to hold the following:

- SQL Server installation (OS Drive)
- SQL Server Data
- SQL Server Logs

3. Enterprise Vault server

The Enterprise Vault servers should have the following minimum specifications:

Number of CPUs: 8 (recommended)

Power of CPUs: 2.8 GHz or more

Memory: 16 GB (recommended)

Each Enterprise Vault server requires three fast local partitions (composed of one or more disks) to hold the following:

Table 2-2

Disk use	Disk size (minimum)
OS Drive:	100 GB
Enterprise Vault installation	
Enterprise Vault Cache	
Enterprise Vault Storage Queue	
Enterprise Vault Indexes	75 GB
Target data for archiving	75 GB
This disk is only required for EVSCEV01	

4. Veritas Access cluster

See the Veritas Access Installation Guide for the system requirements.

Software requirements

Table 2-3 shows the software requirements for the involved software components are as follows:

Table 2-3 Software requirements

Component	Requirements
Enterprise Vault	See the software requirements to configure the Enterprise Vault server at Veritas Enterprise Vault 12.0 – Installing & Configuring Guide.
Veritas Access	See the software requirements to configure the Enterprise Vault server at Veritas Access Installation Guide.

Table 2-4 shows the Enterprise Vault certification details for Veritas Access as a primary archival storage.

Table 2-4 Certification details

	Enterprise Vault 11	Enterprise Vault 12
Veritas Access 7.2.1 and later versions	Non-WORM	Non-WORM
Veritas Access 7.3 and later versions	N/A	WORM

See the Veritas Access Release Notes for operating system compatibility list.

Chapter 3

Installing and configuring Enterprise Vault with Veritas Access

This chapter includes the following topics:

- Enterprise Vault deployment
- Veritas Access deployment

Enterprise Vault deployment

Before you install Enterprise Vault, the Enterprise Vault Deployment scanner should be run on each of the intended Enterprise Vault servers.

If you want to configure partitions in both IPv6 and IPv4 modes, the following network settings are required on Enterprise Vault and the Active Directory (AD) server.

Network settings> NIC Properties> Enable IPv6 and Enable IPv4.

For more information, see Enterprise Vault installation and configuration.

Veritas Access deployment

For deploying Veritas Access, see the Veritas Access Installation Guide.

Chapter

Veritas Access features for Enterprise Vault archival storage

This chapter includes the following topics:

- Write-Once-Read-Many support
- Partition Secure Notification

Write-Once-Read-Many support

When a file is committed as Write-Once-Read-Many (WORM), the data in the file can be read but cannot be altered. The retention time for a WORM file specifies the time period for which the file must be retained after it is committed to WORM storage. The file cannot be deleted till the retention period expires. Once the retention time period has expired, the storage system allows the deletion of the file.

In the Veritas Access 7.4.1 release, the maximum value for the retention time period is 19 January 2038, 03:14:07 UTC. The WORM property is set at the file level. The file can be committed or enabled as WORM on a file system created with 'WORM' support. A new option has been added in the Storage> fs create command to enable WORM support.

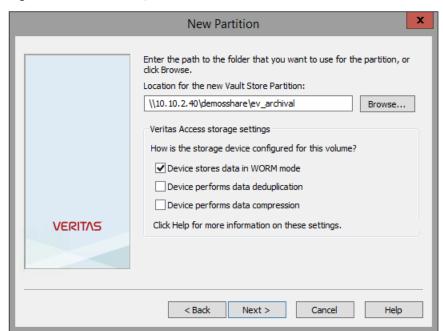
You can find out whether a given file system is WORM-enabled or not using the Storage> fs list command.

See the Storage> fs list man page for more details.

A new option has been added in the Veritas Access GUI as a policy to enable WORM support. You can find out whether a specific file system is WORM-enabled or not using the **File Systems** tab in the Veritas Access GUI.

While creating a partition in the Enterprise Vault Administration Console, select Device stores data in WORM mode.





Enterprise Vault archiving processes check the target servers for items to archive at scheduled times. When an item is archived, it is automatically assigned a retention category, which defines how long it must be kept in the archives (retention time). The administrator can define different retention categories for different types of data. Enterprise Vault monitors the archives and deletes items when the retention period expires.

Enterprise Vault sets a retention time on individual files. It sets the retention time by setting the access time of the file to a date in the future. For WORM-committed files, the access time of the file indicates the retention time.

Enterprise Vault uses a CIFS share, which exports the WORM-supported file system to archive data in WORM mode. Create the CIFS share with the full acl option.

Any file system and CIFS share created in this way can be used as WORM storage for Enterprise Vault's archival on WORM-enabled storage.

Note: When using Veritas Access file systems as WORM-enabled storage for Enterprise Vault, once WORM retention period is set on archived items from Enterprise Vault, it can be extended for the associated files on the Veritas Access file systems only through CLISH.

Partition Secure Notification

You can configure Enterprise Vault to retain original items until the vault store partition in which they are archived has been backed up. During the time between archival and removal, the original items are treated as safety copies by Enterprise Vault. A Partition Secure Notification (PSN) file is created at a source partition after the successful backup of the partition at the remote site. When the vault store partition has been backed up. Enterprise Vault removes the safety copies and creates placeholders.

The Veritas file-level replication is used to take a backup of a single partition. The Partition Secure Notification feature is enabled in the Veritas Access replication job create interface when an optional argument called evpsn is enabled.

Figure 4-2 shows the Enterprise Vault store settings when safety copies are removed after the partition has been backed up.

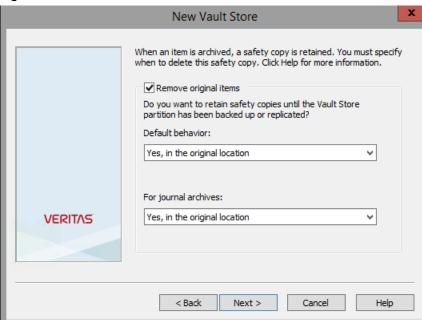
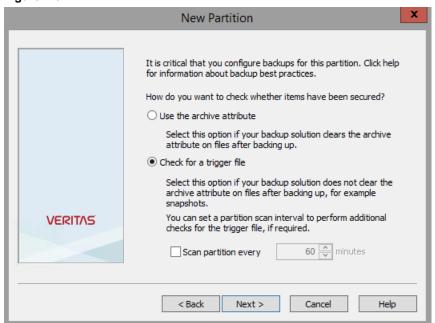


Figure 4-2

Enterprise Vault keeps the original items until the partition that contains the archived items has been backed up if Yes, in the original location option has been selected.

Figure 4-3 shows the Enterprise Vault store setting when a partition is created.

Figure 4-3



If the Check for a trigger file option is selected, Enterprise Vault refers to the PSN file to confirm that the archived data is secure. Accordingly, Enterprise Vault deletes safety copies and creates placeholders.

When the Enterprise Vault store is configured to delete the safety copies, it is important to configure how Enterprise Vault checks to ensure that the partition has been secured. Enterprise Vault checks for a trigger file when its storage service starts and the back mode is cleared

See the replication job create man page for more details.

See the Configuring replication chapter in the Veritas Access Administration Guide for more details on replication.

Chapter 5

Veritas Access archival policy configuration for Enterprise Vault

This chapter includes the following topics:

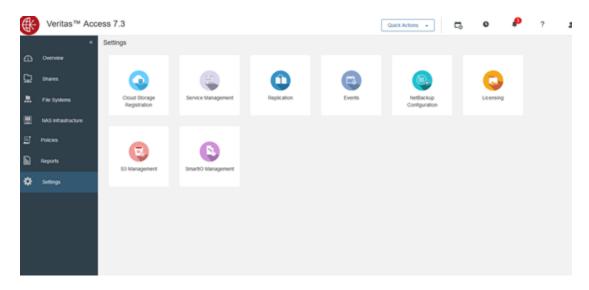
- Configuring CIFS for the Active Directory domain mode
- Veritas Access GUI policies for archival storage
- Configuring the storage pool
- Configuring the replication job
- Configuring the archival policy
- Storage provisioning using policies
- Configuring Veritas Access storage with Enterprise Vault store partition

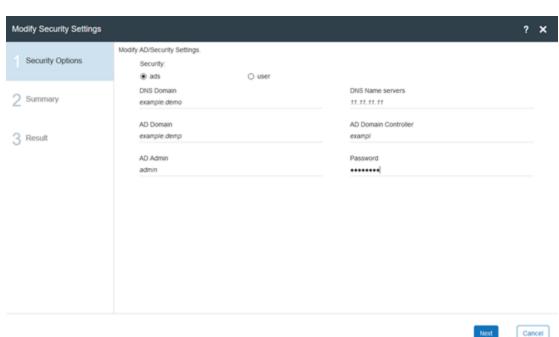
Configuring CIFS for the Active Directory domain mode

You have to configure Active Directory (AD) using the Veritas Access GUI.

To configure Active Directory

Click **Settings** > **Service Management** to configure AD.





Click **Settings** and modify the AD security settings.

Veritas Access GUI policies for archival storage

The Veritas Access GUI policies provide quick and easy configuration of archival storage for Enterprise Vault. The following policies are supported:

WORM

This policy gives Write Once Read Many storage and mirrors data across two devices, thus protecting against devices failures.

The key features of this archival policy are:

- Fault tolerance
- WORM

Prerequisites for this archival policy:

Storage pool should be configured.

Non-WORM

This policy protects data against device failures by creating mirrored data across two devices.

The key features of this archival policy are:

Fault tolerance

Prerequisites for this archival policy:

Storage pool should be configured.

Non-WORM with replication

This policy protects the data against device, node, and site failures. It replicates data across two clusters. Veritas recommends that these clusters should be in different data centers. This policy mirrors data across two devices and protects against device failures.

The key features of this archival policy are:

- Fault tolerance
- Replication

Prerequisites for this archival policy:

- Storage pool should be configured.
- Replication link should be set up.

WORM with replication

This policy provides Write Once Read Many (WORM) storage and protects data against device, node, and site failures. It replicates data across two clusters. Veritas recommends that these clusters should be in different data centers. This policy mirrors data across two devices and protects against device failure.

The key features of this archival policy are:

- Fault tolerance
- WORM
- Replication

Prerequisites for this archival policy:

Storage pool should be configured.

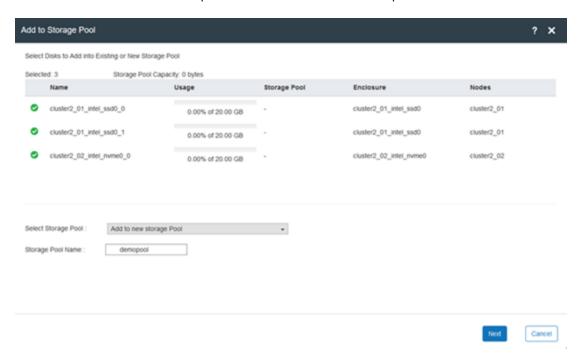
See "Configuring the storage pool" on page 21.

Configuring the storage pool

You have to configure the storage pool for archival storage.

To configure the storage pool

- 1 Log on to the Veritas Access GUI.
- 2 Click **NAS Infrastructure**. Select the disks to create the pool.
- 3 Enter a pool name. Click **Next** to create the pool.



Configuring the replication job

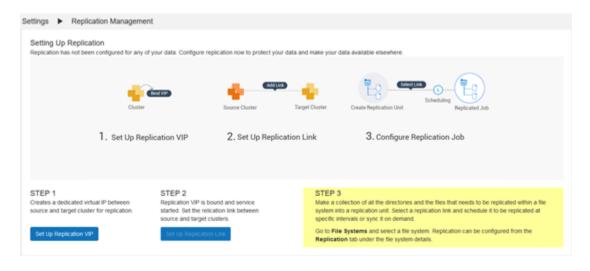
You have to configure replication for activating replication-related policies. As part of this configuration, you have to set up the replication VIP and replication link.

Archival policies use Veritas file-level replication.

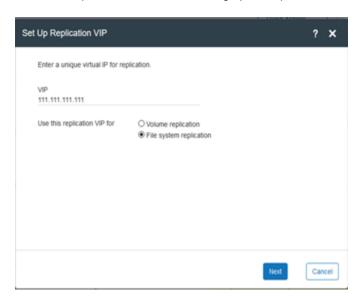
See the Veritas Access Administration Guide for more information on configuring replication.

To configure replication

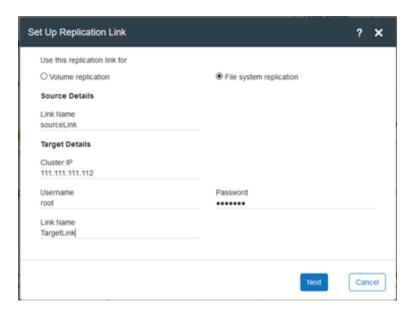
- Log on to the Veritas Access GUI.
- 2 Click Settings -> Replication Management



3 Enter the required information for setting up the replication VIP.



Enter the required information to set up the replication link.



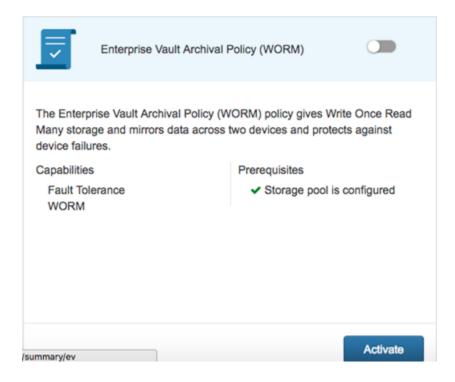
Configuring the archival policy

Once policy prerequisites are completed (like configuring storage pool and replication set up), you have to activate the archival policy.

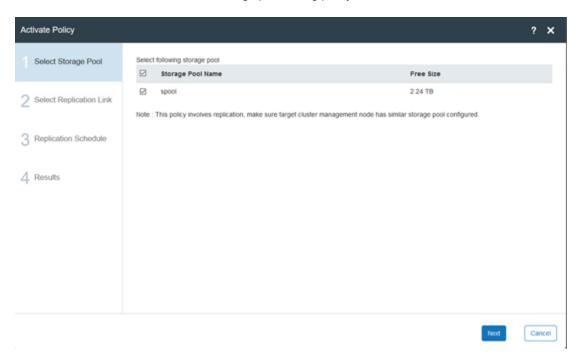
To configure the archival policy

- Log on to the Veritas Access GUI.
- 2 Click on Policies & Select Archival Policy. Activate the required policy by clicking Activate on the policy.

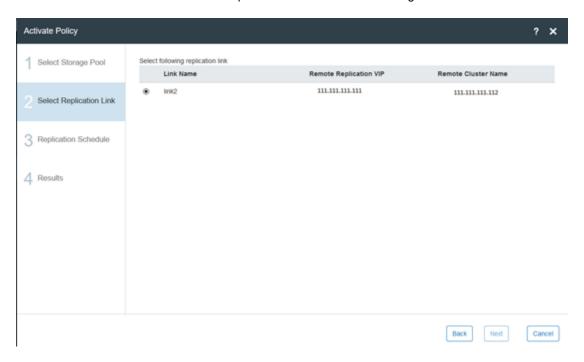
The figure below shows activation of Enterprise Vault WORM policy.



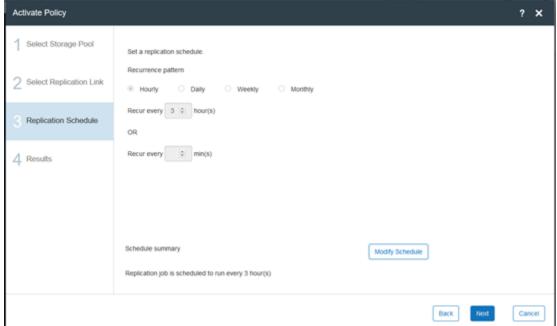
3 Select the storage pool during policy activation.



4 Select the replication link if the replication-related policy is activated. Select the file-level replication link that has been configured.



Provide replication job schedule information.



Once you activate the archival policy, storage for archival can be provisioned using the activated policy.

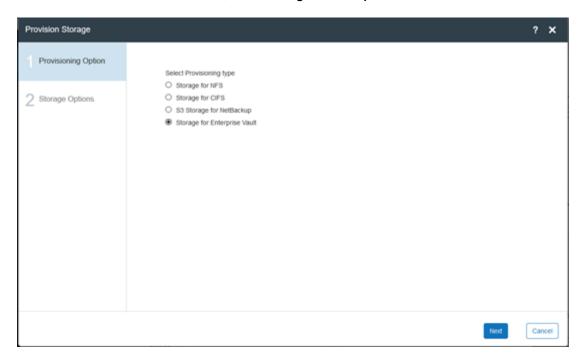
See "Storage provisioning using policies" on page 27.

Storage provisioning using policies

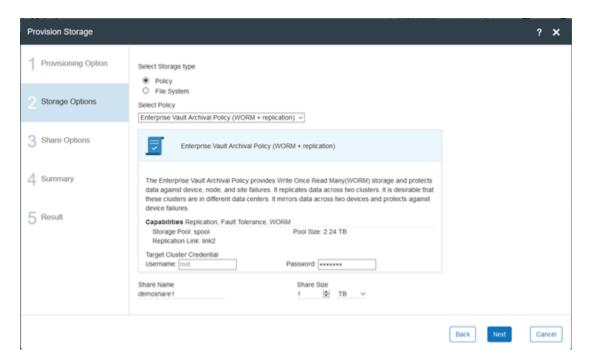
You have to configure replication and set up the replication VIP and replication link.

To configure replication

- On the Quick actions tab on top right corner of the Veritas Access GUIDashboard, select Provision Storage.
- 2 In the menu, select Storage for Enterprise Vault.

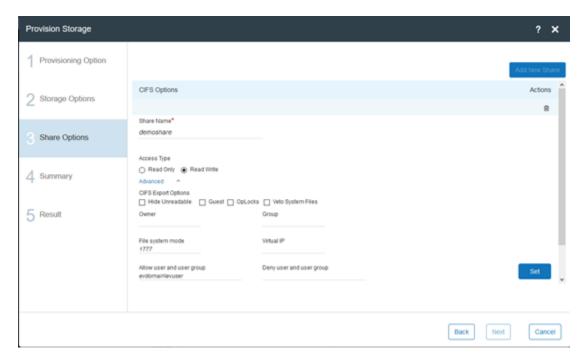


Provide the CIFS share name and other details.



The share configuration creates an empty directory called ev_archival inside the share, which is used for archival data by Enterprise Vault.

In the example above, CIFS network share path used for Enterprise Vault is demoshare1\ev archival



Specify the Enterprise Vault user permissions while creating the share.

Create the share with 'full acl' mode and allow read-write access for the Enterprise Vault user.

Note: After the share is created, full permissions should be given to the EV user for the ev archival directory in a CIFS share from the Windows client (Enterprise Vault server).

To give ownership of ev archival directory to evuser in EVSC domain using the chown command:

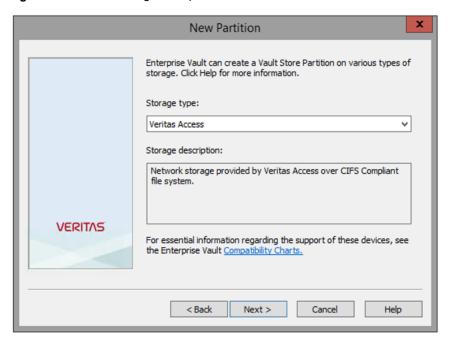
chown "EVSC\evuser" ev archival

Configuring Veritas Access storage with Enterprise Vault store partition

Once a CIFS share is created for archival storage provisioning, you can configure the Enterprise Vault store partition. Veritas Access is now listed as a storage type

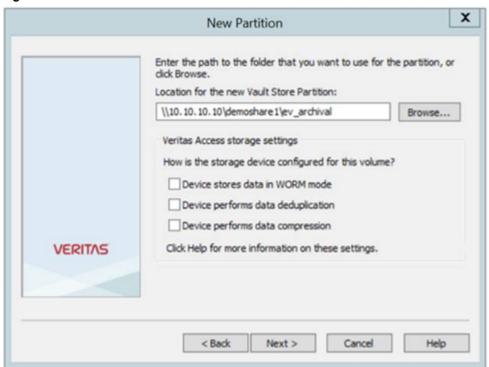
in the **New Partition** dialog of Enterprise Vault. You can create a new partition under the vault store as shown in Figure 5-1.

Creating a new partition Figure 5-1



Select Veritas Access as the Storage Type.

Figure 5-2



When you configure the Enterprise Vault store partition, specify the full path of the directory created in the CIFS share configuration step as a vault store partition location as shown in Figure 5-2.

demoshare1 is the Veritas Access CIFS share and ev_archival is the empty directory in this share that is created through the GUI archival policy.

Chapter 6

Troubleshooting

This chapter includes the following topics:

- Log locations for troubleshooting
- Additional resources

Log locations for troubleshooting

- See Veritas Access CIFS-related logs at /opt/VRTSnas/log/cifs.log for issues related to accessing CIFS shares.
- See Windows Event Log for errors related to the Enterprise Vault server.
 - Go to Run. Type eventvwr.
 - The Windows Event Viewer opens up.
 Select Applications and Services logs-> Microsoft -> Veritas Enterprise Vault.
- See Recent Activity at the top right corner of Veritas Access GUI for GUI-related status information

Additional resources

See the following documentation for more information on Veritas Access and Enterprise Vault.

- Veritas Access Installation Guide
- Veritas Access Administration Guide
- Veritas Access Online Help
- Enterprise Vault product documentation on the Enterprise Vault website.

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