Veritas Access Getting Started Guide

Linux 7.3.1



Veritas Access Getting Started Guide

Last updated: 2018-07-23

Document version: 7.3.1 Rev 0

Legal Notice

Copyright © 2018 Veritas Technologies LLC. All rights reserved.

Veritas, the Veritas Logo, Veritas InfoScale, and NetBackup are trademarks or registered trademarks of Veritas Technologies LLC or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.

This product may contain third-party software for which Veritas is required to provide attribution to the third party ("Third-Party Programs"). Some of the Third-Party Programs are available under open source or free software licenses. The License Agreement accompanying the Software does not alter any rights or obligations you may have under those open source or free software licenses. Refer to the third-party legal notices document accompanying this Veritas product or available at:

https://www.veritas.com/licensing/process

The product described in this document is distributed under licenses restricting its use, copying, distribution, and decompilation/reverse engineering. No part of this document may be reproduced in any form by any means without prior written authorization of Veritas Technologies LLC and its licensors, if any.

THE DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID. VERITAS TECHNOLOGIES LLC SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, PERFORMANCE, OR USE OF THIS DOCUMENTATION. THE INFORMATION CONTAINED IN THIS DOCUMENTATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

The Licensed Software and Documentation are deemed to be commercial computer software as defined in FAR 12.212 and subject to restricted rights as defined in FAR Section 52.227-19 "Commercial Computer Software - Restricted Rights" and DFARS 227.7202, et seq. "Commercial Computer Software and Commercial Computer Software Documentation," as applicable, and any successor regulations, whether delivered by Veritas as on premises or hosted services. Any use, modification, reproduction release, performance, display or disclosure of the Licensed Software and Documentation by the U.S. Government shall be solely in accordance with the terms of this Agreement.

Veritas Technologies LLC 500 E Middlefield Road Mountain View, CA 94043

http://www.veritas.com

Technical Support

Technical Support maintains support centers globally. All support services will be delivered in accordance with your support agreement and the then-current enterprise technical support policies. For information about our support offerings and how to contact Technical Support, visit our website:

https://www.veritas.com/support

You can manage your Veritas account information at the following URL:

https://my.veritas.com

If you have questions regarding an existing support agreement, please email the support agreement administration team for your region as follows:

Worldwide (except Japan)

CustomerCare@veritas.com

Japan

CustomerCare_Japan@veritas.com

Documentation

Make sure that you have the current version of the documentation. Each document displays the date of the last update on page 2. The document version appears on page 2 of each guide. The latest documentation is available on the Veritas website:

https://sort.veritas.com/documents

Documentation feedback

Your feedback is important to us. Suggest improvements or report errors or omissions to the documentation. Include the document title, document version, chapter title, and section title of the text on which you are reporting. Send feedback to:

doc.feedback@veritas.com

You can also see documentation information or ask a question on the Veritas community site:

http://www.veritas.com/community/

Veritas Services and Operations Readiness Tools (SORT)

Veritas Services and Operations Readiness Tools (SORT) is a website that provides information and tools to automate and simplify certain time-consuming administrative tasks. Depending on the product, SORT helps you prepare for installations and upgrades, identify risks in your datacenters, and improve operational efficiency. To see what services and tools SORT provides for your product, see the data sheet:

https://sort.veritas.com/data/support/SORT_Data_Sheet.pdf

Contents

Chapter 1	Introducing Veritas Access About Veritas Access	
Chapter 2	Getting started with the Veritas Access GUI	
Chapter 3	Getting started with the Veritas Access RESTful APIs Where to find more information on using the Veritas Access RESTful APIs	
Chapter 4	Getting started with the Veritas Access CLI Accessing the Veritas Access CLI Navigating the Veritas Access CLI Workflow for configuring and managing storage using the Veritas Access CLI	12 12
Chapter 5	Where to find the documentation Using the Veritas Access product documentation	

Introducing Veritas Access

This chapter includes the following topics:

About Veritas Access

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 or private cloud based on policies.

You can use Veritas Access in any of the following ways.

	0
Interface	Description
GUI	Centralized dashboard with operations for managing your storage. See the GUI and the Online Help for more information.
RESTful APIs	Enables automation using scripts, which run storage administration commands against the Veritas Access cluster. See the <i>Veritas Access RESTful API Guide</i> for more information.
Command-line interface (CLI or CLISH)	Single point of administration for the entire cluster. See the manual pages for more information.

 Table 1-1
 Interfaces for using Veritas Access

Table 1-2 describes the features of Veritas Access.

Feature	Description
Multi-protocol access	Veritas Access includes support for the following protocols:
	 Amazon S3
	■ FTP
	■ iSCSI target
	 NFS
	Oracle Direct NFS
	■ SMB 3
	 NFS with S3
WORM storage for Enterprise Vault Archiving	Veritas Access can be configured as WORM primary storage for archival by Enterprise Vault.
	Veritas Access is certified as a CIFS primary WORM storage for Enterprise Vault 12.1.
	For more information, see the Veritas Access Enterprise Vault Solutions Guide.
WORM support over NFS	Veritas Access supports WORM over NFS.
Creation of Partition Secure Notification (PSN) file for Enterprise Vault Archiving	A Partition Secure Notification (PSN) file is created at a source partition after the successful backup of the partition at the remote site.
	For more information, see the Veritas Access Enterprise Vault Solutions Guide.
Managing application I/O workloads using maximum IOPS settings	The MAXIOPS limit determines the maximum number of I/Os processed per second collectively by the storage underlying the file system.
Flexible Storage Sharing (FSS)	Enables cluster-wide network sharing of local storage.

 Table 1-2
 Veritas Access key features

Feature	Description
Scale-out file system	The following functionality is provided for a scale-out file system
	 File system that manages a single namespace spanning over both on-premises storage as well as cloud storage, which provides better fault tolerance for large data sets. Highly available NFS and S3 shares. You use scale-out file systems if you want to store a large capacity of data in a single namespace (3 PB is the maximum file system size). Creation of CIFS shares. File sharing for a scale-out file system using FTP.
Cloud as a tier for a scale-out file system	Veritas Access supports adding a cloud service as a storage tien for a scale-out file system. You can move data between the tiers based on file name patterns and when the files were last accessed or modified. Use scheduled policies to move data between the tiers on a regular basis.
	Veritas Access moves the data from the on-premises tier to Amazon S3, Amazon Glacier, Amazon Web Services (AWS), GovCloud (US), Azure, Google cloud, Alibaba, Veritas Access S3 IBM Cloud Object Storage, and any S3-compatible storage provide based on automated policies. You can also retrieve data archived in Amazon Glacier.
SmartIO	Veritas Access supports both read and writeback caching on solid state drives (SSDs) for applications running on Veritas Access file systems.
SmartTier	Veritas Access's built-in SmartTier feature can reduce the cost of storage by moving data to lower-cost storage. Veritas Access storage tiering also facilitates the moving of data between different drive architectures and on-premises.
Snapshot	Veritas Access supports snapshots for recovering from data corruption. If files, or an entire file system, are deleted or become corrupted, you can replace them from the latest uncorrupted snapshot.
Deduplication	You can run post-process periodic deduplication in a file system which eliminates duplicate data without any continuous cost.

 Table 1-2
 Veritas Access key features (continued)

Feature	Description
Compression	You can compress files to reduce the space used, while retaining the accessibility of the files and having the compression be transparent to applications. Compressed files look and behave almost exactly like uncompressed files: the compressed files have the same name, and can be read and written as with uncompressed files.
Erasure-coding	Erasure-coding is configured with the <i>EC log</i> option for NFS use case.
IP load balancing	With IP load balancing, a single virtual IP is used to act as a load balancer IP which distributes the incoming requests to the different nodes in the Veritas Access cluster for the services that are run on an active-active cluster.
iSCSI target	Veritas Access as an iSCSI target can be configured to serve block storage. iSCSI target as service is hosted in an active-active mode in the Veritas Access cluster.
NetBackup integration	Built-in NetBackup client for backing up your file systems to a NetBackup master or media server. Once data is backed up, a storage administrator can delete unwanted data from Veritas Access to free up expensive primary storage for more data.
OpenStack plug-in	Integration with OpenStack:
	 OpenStack Cinder integration that allows OpenStack instances to use the storage hosted by Veritas Access.
	 OpenStack Manila integration that lets you share Veritas Access file systems with virtual machines on OpenStack Manila.
Quotas	Support for setting file system quotas, user quotas, and hard quotas.
Replication	Periodic replication of data over IP networks.
	See the episodic (1) man page for more information.
	Synchronous replication of data over IP networks
	See the continuous (1) man page for more information.

 Table 1-2
 Veritas Access key features (continued)

Feature	Description
Support for LDAP, NIS, and AD	Veritas Access uses the Lightweight Directory Access Protocol (LDAP) for user authentication.
Partition Directory	With support for partitioned directories, directory entries are redistributed into various hash directories. These hash directories are not visible in the name-space view of the user or operating system. For every new create, delete, or lookup, this feature performs a lookup for the respective hashed directory and performs the operation in that directory. This leaves the parent directory inode and its other hash directories unobstructed for access, which vastly improves file system performance.
	By default this feature is not enabled. See the <pre>storage_fs(1)</pre> manual page to enable this feature.
Isolated storage pools	Enables you to create an isolated storage pool with a self-contained configuration. An isolated storage pool protects the pool from losing the associated metadata even if all the configuration disks in the main storage pool fail.
Performance and tuning	Workload-based tuning for the following workloads:
	 Media server - Streaming media represents a new wave of rick Internet content. Recent advancements in video creation, compression, caching, streaming, and other content delivery technology have brought audio and video together to the Internet as rich media. You can use Veritas Access to store your rich media, videos, movies, audio, music, and photos. Virtual machine support Other workloads

 Table 1-2
 Veritas Access key features (continued)

Getting started with the Veritas Access GUI

This chapter includes the following topics:

Where to find the Veritas Access GUI

Where to find the Veritas Access GUI

The Veritas Access GUI is automatically installed with the Veritas Access installer.

After the installation, the following URL is generated: http://consoleIP:14161/.

The URL for accessing the GUI is displayed after logging on to the Veritas Access CLI.

Open a browser window and copy in the generated URL to access the GUI. See the online Help for information on all the GUI operations. Click ? to access the online Help.

Getting started with the Veritas Access RESTful APIs

This chapter includes the following topics:

Where to find more information on using the Veritas Access RESTful APIs

Where to find more information on using the Veritas Access RESTful APIs

You can find more information on where to access and how to use the Veritas Access RESTful APIs in the *Veritas Access RESTful API Guide*.

Getting started with the Veritas Access CLI

This chapter includes the following topics:

- Accessing the Veritas Access CLI
- Navigating the Veritas Access CLI
- Workflow for configuring and managing storage using the Veritas Access CLI

Accessing the Veritas Access CLI

To access the Veritas Access CLI

- 1 After installation, connect to the management console using the console IP address you assigned during the installation.
- 2 You are prompted to change your password after the initial logon.

Navigating the Veritas Access CLI

All of the Veritas Access CLI commands are organized in different command modes depending on the operation you want to perform. You can get a list of the different command modes with descriptions of all the available modes by typing a question mark (?) at the CLI prompt.

To navigate the Veritas Access CLI

- 1 After logging on to the Veritas Access CLI, type a question mark (?) to see the available command modes.
- 2 Enter the Storage> mode by typing storage for example.

Workflow for configuring and managing storage using the Veritas Access CLI

See the Veritas Access manual pages for the detailed syntax for completing the operations.

Where to find the documentation

This chapter includes the following topics:

Using the Veritas Access product documentation

Using the Veritas Access product documentation

The latest version of the Veritas Access product documentation is available on the Veritas Services and Operations Readiness Tools (SORT) website.

https://sort.veritas.com/documents

You need to specify the product and the platform and apply other filters for finding the appropriate document.

Make sure that you are using the current version of documentation. The document version appears on page 2 of each guide. The publication date appears on the title page of each document. The documents are updated periodically for errors or corrections.

The following Veritas Access 7.3.1 documents are available on the SORT site:

- Veritas Access Administrator's Guide
- Veritas Access Command Reference Guide
- Veritas Access NetBackup Solutions Guide
- Veritas Access Release Notes
- Veritas Access RESTful API Guide
- Veritas Access Third-Party License Agreements
- Veritas Access Troubleshooting Guide

Veritas Access Enterprise Vault Solutions Guide