

Veritas Storage Foundation[™] and High Availability Solutions Getting Started Guide

Windows 2000, Windows Server 2003

5.0

Veritas Storage Foundation and HA Solutions Getting Started Guide

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Storage Foundation 5.0 for Windows HA

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Licensing and registration

Storage Foundation for Windows and Storage Foundation HA for Windows are licensed products. See the *Storage Foundation and High Availability Solutions for Windows, Installation and Upgrade Guide* for license installation instructions.

Technical support

For technical assistance, visit <http://entsupport.symantec.com> and select phone or email support. Use the Knowledge Base search feature to access resources such as TechNotes, product alerts, software downloads, hardware compatibility lists, and our customer email notification service.

Getting Started with Storage Foundation and High Availability Solutions for Windows

[Getting Started](#)

[What's included](#)

[About Storage Foundation and High Availability Solutions](#)

[Symantec Licensing Portal](#)

[System requirements](#)

[Installation](#)

[What's new in this version](#)

[Getting help](#)

[Documentation](#)

[Late-breaking news](#)

Getting Started

The Veritas Storage Foundation and High Availability Solutions for Windows products are used for enterprise data management and protection, failover and high availability. This guide provides an overview of the products in this release and the contents of the product software discs. It also explains how to obtain a product license

The 5.0 release of Veritas Storage Foundation and High Availability Solutions for Windows includes the following products:

- Veritas Storage Foundation 5.0 for Windows (SFW)
Storage Foundation for Windows offers storage management functionality and support for high availability in a Microsoft Cluster Service (MSCS) environment.
- Veritas Storage Foundation HA 5.0 for Windows (SFW HA)
Storage Foundation HA for Windows combines the storage management capabilities of SFW with the high availability functionality of Veritas Cluster Server (VCS).

Both products can be used with the Veritas Volume Replicator option in a disaster recovery environment.

What's included

The Veritas Storage Foundation and High Availability Solutions media kit includes multiple software discs. The disc label describes the contents of each disc. Table [Table 1-1](#) describes the The following software discs are included:

Table 1-1 Media kit contents

Veritas disc	Contents
Veritas Storage Foundation and High Availability Solutions 5.0 for Windows	32-bit and 64-bit versions of SFW and SFW HA.
Veritas Cluster Management Console for Windows	32-bit and 64-bit versions of Cluster Management Console.

Table 1-1 Media kit contents

Veritas disc	Contents
Veritas Storage Foundation and High Availability Solutions 5.0 for Windows Language Pack	Veritas Storage Foundation and High Availability Solutions 5.0 for Windows is localized in Japanese. If you purchase a Veritas non-English language product, a language disc is included. The language disc contains localized packages that must be installed for Veritas products to operate in the supported locale as well as localized product documentation.

Note: If you wish to assess products and options for which you have not purchased a license, an evaluation license key is embedded in the product. To use this key click Next at the license key entry screen of the product installer. This license key is valid for a limited evaluation period only.

About Storage Foundation and High Availability Solutions

Veritas Storage Foundation and High Availability Solutions for Windows contain the following components:

Storage Foundation for Windows (SFW)

Veritas Storage Foundation for Windows brings advanced volume management technology, quick recovery and fault tolerant capabilities to Windows Server 2003 and Windows 2000 enterprise computing environments.

Veritas Cluster Server (VCS)

Veritas Cluster Server provides the high availability component of SFW HA. A cluster connects multiple independent systems to provide fault tolerance and failover capability thus reducing application downtime. VCS supports local, metropolitan (Campus Cluster), and global clusters.

Veritas Volume Replicator (VVR) option

Veritas Volume Replicator provides continuous data replication over IP networks, enabling rapid and reliable recovery of critical applications at remote recovery sites.

Graphical user interfaces

Veritas Storage Foundation and High Availability Solutions for Windows offers several GUIs:

Veritas Enterprise Administrator (VEA) console

The Veritas Enterprise Administrator console provides a graphical view of your storage. It allows you to monitor and manage storage objects including disk groups, disks, volumes, fibre channel and iSCSI storage arrays.

Cluster Management Console (CMC)

The Cluster Management Console allows you to monitor, manage, and report on multiple VCS clusters from a single Web-based console. CMC provides enhanced visualization of the managed clusters, centralized control for global applications, and complete reports of each application's availability status.

Cluster Manager (Java Console)

Cluster Manager (Java Console) offers complete administration capabilities for your cluster. You can use the different views in the Java Console to monitor clusters and VCS objects, including service groups, systems, resources, and resource types.

Solutions Configuration Center

The Storage Foundation and High Availability Solutions Configuration Center guides you through setting up your SFW HA environment. You can use the Configuration Center and its wizards to set up your environment for any combination of the following configurations:

- High availability at a single site for a new installation
- Wide area disaster recovery involving two or more sites
- Quick Recovery for on-host recovery from logical errors in application data
- Fire drill to test the fault readiness of your disaster recovery environment

Planning Tools

Cluster Simulator

Cluster Simulator allows cluster administrators to simulate and test application failover scenarios without affecting production environments.

Veritas Volume Replicator Advisor (VRAdvisor)

The Veritas Volume Replicator Advisor (VRAdvisor) tool allows you to collect and analyze data in order to optimize the replication settings for your environment.

Storage Foundation Basic

Storage Foundation Basic for Windows (SFW Basic) is a special offering specifically designed for edge-tier workloads. It is a zero cost SFW license and includes the Dynamic Multi-pathing option. An SFW Basic license is required for each physical server and certain limitations apply.

Symantec Licensing Portal

To register and receive a valid software license key, access the Symantec Licensing Portal at <https://licensing.symantec.com>. You will need the Enterprise License System (ELS) serial number and customer number on your license certificate.

The Symantec Licensing Portal provides access to the following tools for registering and managing license keys:

- **License Management:** Register and manage product and maintenance licenses.
- **Version Upgrades:** Register your upgrade notification and receive new version keys.
- **Voucher Center:** Redeem vouchers created by Symantec business partners. A voucher typically entitles a customer to a specific Symantec software product.
- **FileConnect:** Download enterprise products as soon as they are available and request physical media shipments for version upgrades.
- **Enterprise Flex:** Deploy licenses on demand across a variety of Symantec products.

- LKWeb (for use by Symantec business partners): Create and register licenses prior to resale of Symantec products.

For additional help with Symantec product licenses, email questions to license@symantec.com.

See the *Veritas Storage Foundation and High Availability Solutions Installation and Upgrade Guide* for more information about product licensing.

System requirements

SFW and SFW HA have client and server components that run on specific Windows operating systems.

SFW and SFW HA software for servers

Your server must run one of the following operating systems:

- Windows 2000 Server, Windows 2000 Advanced Server, or Windows 2000 Datacenter Server (all require Service Pack 4 with Update Rollup1).
- Windows Server 2003 (32-bit): Standard Edition, Enterprise Edition, or Datacenter Edition (SP 1 required for all editions)
- Windows Server 2003 R2 (32-bit): Standard Edition, Enterprise Edition, or Datacenter Edition
- Windows Server 2003 Web Edition: fully supports SFW and supports only file share for SFW HA (SP1 required)
- Windows Server 2003 for Itanium-based systems: Enterprise Edition or Datacenter Edition (SP 1 required for all editions)
- Windows Server 2003 x64 Editions (for AMD64 or Intel EM64T): Standard x64 Edition, Enterprise x64 Edition, or Datacenter x64 Edition
- Windows Server 2003 x64 Editions (for AMD64 or Intel EM64T): Standard x64 R2 Edition, Enterprise x64 R2 Edition, or Datacenter x64 R2 Edition

SFW and SFW HA software for clients

Your client must run one of the following operating systems:

- Windows 2000 Server, Windows 2000 Advanced Server, or Windows 2000 Datacenter Server (all require Service Pack 4 with Update Rollup1)
- Windows Server 2003 (32-bit): Standard Edition, Enterprise Edition, or Datacenter Edition (SP 1 required for all editions)

- Windows Server 2003 R2 (32-bit): Standard Edition, Enterprise Edition, or Datacenter Edition
- Windows Server 2003 for Itanium-based systems: Enterprise Edition or Datacenter Edition (SP 1 required for all editions)
- Windows Server 2003 x64 Editions (for AMD64 or Intel EM64T): Standard x64 Edition, Enterprise x64 Edition, or Datacenter x64 Edition
- Windows Server 2003 x64 Editions (for AMD64 or Intel EM64T): Standard x64 R2 Edition, Enterprise x64 R2 Edition, or Datacenter x64 R2 Edition
- Windows XP Professional (SP 2 required): supported only for SFW, not SFW HA
- Windows 2000 Professional (SP 4 required): supported only for SFW, not SFW HA

Display resolution

- Minimum required: 800 x 600 pixels
- Recommended: 1024 x 768 pixels or higher

Supported browsers

Veritas Cluster Management Console is supported on the following browsers:

- Microsoft Internet Explorer 6.0 with SP2 or newer
- Firefox 1.5 or newer
- Veritas Cluster Management requires the Macromedia Flash Plugin v8.0.

Installation

The product installer enables you to install the software for Veritas Storage Foundation for Windows or Veritas Storage Foundation HA for Windows. An SFW HA installation includes Veritas Storage Foundation for Windows and Veritas Cluster Server. You may select other applicable options during the installation.

If you wish to assess products and options for which you have not purchased a license, an evaluation license key is embedded in the product. To use this key click Next at the license key entry screen of the product installer. This license key is valid for a limited evaluation period only.

See the *Veritas Storage Foundation and High Availability Solutions Installation and Upgrade Guide*.

Installation options

During the product installation you choose an installation option, either Complete/Custom or Administrative Console.

- Complete/Custom installs the server components and allows you to customize the installation by choosing to install the client components, documentation, and other product options
- Administrative Console installs only the Veritas Enterprise Administrator console, Solutions Configuration Center, and for SFW HA, the VCS Cluster Manager (Java console).

Installation methods

You can choose either method to install the product using either the wizard-driven product installer or silently from the command line. The product installer allows you to install to multiple systems simultaneously. A command line installation is limited to one local or remote system at a time.

What's new in this version

Storage Foundation and High Availability Solutions 5.0 for Windows contains and builds upon version 4.3 functionality. A description of the new features in this version is available in the *Veritas Storage Foundation and High Availability Solutions Release Notes* which can be found on the product disc or online at <http://entsupport.symantec.com/docs/285845>

Getting help

If an issue arises while you are using SFW or SFW HA, use the following information to pinpoint the problem and, if necessary, report it to Symantec.

For technical assistance, visit <http://entsupport.symantec.com/> and select phone or email support. This site also provides access to resources such as TechNotes, product alerts, software downloads, hardware compatibility lists, and the Symantec customer email notification service. Use the Knowledge Base Search feature to access additional product information, including current and past releases of product documentation.

Documentation

All product documentation is available in Adobe Portable Document Format (PDF).

You can view and print the PDF documents with Adobe Acrobat Reader. For more information on the latest version of Acrobat Reader, or for help with the Acrobat Reader installation, visit the Adobe web site at <http://www.adobe.com>.

Note: The Release Notes file is located on the Veritas product disc. Symantec recommends that you copy the release notes from the disc to the directory %Program Files%\Veritas\Docs\ENU so they are available on your system for reference. Updated Release Notes can be found at <http://entsupport.symantec.com/docs/285845>

Where to find the documentation

Product documentation is available from the following locations:

- installed with the product and available from the Start menu.
- the Veritas software discs in the \Docs directory and, in some cases, at the root of the disc directory structure. To view a document, explore the software disc and double-click the file name
- the Symantec Support web site at <http://entsupport.symantec.com>.
- contact your salesperson to purchase hard copy software guides

Documentation set

[Table 1-2](#) lists the product documentation available with Veritas Storage Foundation and High Availability Solutions 5.0 for Windows

Table 1-2 Veritas Storage Foundation and High Availability Solutions for Windows Documentation Set

Title	File Name
Veritas Storage Foundation and High Availability Solutions	
<i>Veritas Storage Foundation and High Availability Solutions 5.0 Getting Started Guide</i>	SFW_GettingStarted.pdf
<i>Veritas Storage Foundation and High Availability Solutions 5.0 Installation and Upgrade Guide</i>	SFW_InstallUpgrade.pdf
<i>Veritas Storage Foundation and High Availability Solutions 5.0 Release Notes</i>	SFW_ReleaseNotes.pdf
<i>Veritas Storage Foundation and High Availability Solutions 5.0 Solutions Guide</i>	SFW_Solutions.pdf

Table 1-2 Veritas Storage Foundation and High Availability Solutions for Windows Documentation

Title	File Name
<i>Veritas Storage Foundation and High Availability Solutions 5.0 HA and Disaster Recovery Solutions Guide for Microsoft Exchange</i>	SFW_HA_DR_Exch_Solutions.pdf
<i>Veritas Storage Foundation and High Availability Solutions 5.0 Quick Recovery and MSCS Solutions Guide for Microsoft Exchange</i>	SFW_QR_MSCS_Exch_Solutions.pdf
<i>Veritas Storage Foundation and High Availability Solutions 5.0 HA and Disaster Recovery Solutions Guide for Microsoft SQL</i>	SFW_HA_DR_SQL_Solutions.pdf
<i>Veritas Storage Foundation and High Availability Solutions 5.0 Quick Recovery and MSCS Solutions Guide for Microsoft SQL</i>	SFW_QR_MSCS_SQL_Solutions.pdf
Veritas Storage Foundation	
<i>Veritas Storage Foundation 5.0 Administrator's Guide</i>	SFW_Admin.pdf
Veritas Cluster Server	
<i>Veritas Cluster Server 5.0 Administrator's Guide</i>	VCS_Admin.pdf
<i>Veritas Cluster Server 5.0 Agent Developer's Guide</i>	VCS_AgentDev.pdf
<i>Veritas Cluster Server 5.0 Bundled Agents Reference Guide</i>	VCS_BundledAgents.pdf
<i>Veritas Cluster Server 5.0 Application Note: Disaster Recovery for Microsoft SharePoint Portal Server 2003</i>	VCS_AppNote_Sharepoint.pdf
<i>Veritas Cluster Server 5.0 Application Agent for Microsoft Exchange, Configuration Guide</i>	VCS_Exch_Agent.pdf
<i>Veritas Cluster Server 5.0 Database Agent for Oracle, Configuration Guide</i>	VCS_Oracle_Agent.pdf
<i>Veritas Cluster Server 5.0 Database Agent for Microsoft SQL, Configuration Guide</i>	VCS_SQL_Agent.pdf
<i>Veritas Cluster Server 5.0 Hardware Replication Agent for EMC SRDF, Configuration Guide</i>	VCS_SRDF_Agent.pdf
<i>Veritas Cluster Server 5.0 Hardware Replication Agent for Hitachi MirrorView, Configuration Guide</i>	VCS_MirrorView_Agent.pdf
<i>Veritas Cluster Server 5.0 Hardware Replication Agent for Hitachi TrueCopy, Configuration Guide</i>	VCS_TrueCopy_Agent.pdf

Table 1-2 Veritas Storage Foundation and High Availability Solutions for Windows Documentation

Title	File Name
<i>Veritas Cluster Server 5.0 Hardware Replication Agent for IBM Metro Mirror, Configuration Guide</i>	VCS_MetroMirror_Agent.pdf
<i>Veritas Cluster Server 5.0 Hardware Replication Agent for IBM PPRC, Configuration Guide</i>	VCS_PPRC_Agent.pdf
Veritas Cluster Management Console	
<i>Veritas Cluster Management Console 5.0 Implementation Guide</i>	VCMC_Implementation.pdf
<i>Veritas Cluster Management Console 5.0 Release Notes</i>	VCMC_Notes.pdf
Veritas Volume Replicator	
<i>Veritas Storage Foundation 5.0 Volume Replicator, Administrator's Guide</i>	VVR_Admin.pdf
<i>Veritas Storage Foundation 5.0 Volume Replicator Advisor, User's Guide</i>	VVR_Advisor.pdf
Symantec Product Authentication Service	
<i>Veritas Storage Foundation and High Availability Solutions 5.0 Quick Start Guide for Symantec Product Authentication Service</i>	SPAS_QuickStart.pdf
<i>Symantec Product Authentication Service 4.3 Administrator's Guide</i>	SPAS_AT_Admin.pdf
<i>Symantec Product Authentication Service 4.3 Release Notes</i>	SPAS_AT_ReleaseNotes.pdf

Providing feedback about the documentation

Your feedback on product documentation is important to us. Send suggestions for improvements and reports on errors or omissions to sfwha_solns_docs@symantec.com. Include the title and part number of the document (located in the lower left corner of the title page), and chapter and section titles of the text on which you are reporting. Our goal is to ensure customer satisfaction by providing effective, quality documentation.

Late-breaking news

For the latest information on updates, patches, and software issues regarding this release, see the following Symantec Technical Support TechNote:

<http://entsupport.symantec.com/docs/285845>

Before installing or upgrading SFW or SFW HA, review the current compatibility lists to confirm the compatibility of your hardware and software.

<http://entsupport.symantec.com/>