

# Veritas Storage Foundation™ and High Availability Solutions Release Notes

Windows Server 2008

5.1 Service Pack 1 Application Pack 1



# Veritas Storage Foundation and High Availability Solutions Release Notes for SP1 AP1

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- Available memory, disk space, and NIC information
- Operating system
- Version and patch level
- Network topology
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North America and Latin America [supportsolutions@symantec.com](mailto:supportsolutions@symantec.com)



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# Veritas Storage Foundation and High Availability Solutions 5.1 SP1 AP1 Release Notes

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# Introduction

This document provides important information about Application Pack 1 for

- Veritas Storage Foundation™ 5.1 SP1 for Windows (SFW)
- Veritas Storage Foundation™ HA 5.1 SP1 for Windows (SFW HA)

Please review this entire document before using Application Pack 1.

General information regarding Veritas Storage Foundation and High Availability Solutions for Windows is available on the Symantec website:

<http://www.symantec.com>

For the latest version of this document, see the *Veritas Storage Foundation and High Availability Solutions 5.1 SP1 Application Pack 1 Release Notes* at:

<http://entsupport.symantec.com/docs/303042>

For the latest information on supported software, see the Software Compatibility list at:

<http://entsupport.symantec.com/docs/337682>

For the latest updates to array support and for supported hardware configurations, see the Hardware Compatibility list at:

<http://entsupport.symantec.com/docs/337683>

## New features and changes in this release

This section describes the changes introduced in Veritas Storage Foundation for Windows (SFW) and Veritas Storage Foundation HA for Windows (SFW HA) version 5.1 SP1 Application Pack 1.

New features available in Veritas Storage Foundation for Windows and Storage Foundation HA for Windows version 5.1 SP1 are described in the *Veritas Storage Foundation and High Availability Solutions 5.1 SP1 Release Notes*.

### New application version support

This release provides support for the following new application versions:

- Microsoft Exchange Server 2010
  - SFW supports VSS-based backup and restore operations with Exchange Server 2010.  
Refer to the *Veritas Storage Foundation and High Availability Solutions Quick Recovery Solutions Guide for Microsoft Exchange 2010*.
  - SFW HA supports HA and DR configurations for Exchange Server 2010. Refer to the *Veritas Storage Foundation and High Availability Solutions HA and Disaster Recovery Solutions Guide for Microsoft Exchange 2010* to configure a new HA and DR environment for Exchange 2010.
  - The Microsoft Exchange Server tab of the Symantec Solutions Configuration Center supports Exchange Server 2010 solutions. The Exchange Server 2010 Configuration Wizard can be launched from the Solutions Configuration Center to configure Exchange Server 2010 service groups. The online help and PDF files in the Solutions Configuration Center include documentation for Exchange Server 2010 solutions.

For additional detailed application version support information, see “[Supported software](#)” on page 14.

## Veritas Cluster Server

### Microsoft Exchange Server 2010 support

This release provides High Availability (HA) and Disaster Recovery (DR) support for Exchange 2010. High availability support for Exchange 2010 is available for Exchange 2010 mailbox databases. VCS provides a new database agent for Exchange 2010 that monitors the mailbox databases configured on shared storage. VCS also provides a new configuration wizard for configuring the Exchange 2010 database service group.

Refer to the *Veritas Storage Foundation and High Availability Solutions HA and Disaster Recovery Solutions Guide for Microsoft Exchange 2010* for more details.

### hagetcf utility support for Exchange 2010

The VCS `hagetcf` utility can be used to retrieve and write detailed diagnostic information about the Exchange 2010 configuration in VCS. The `-exch` command line option can be used to get detailed information about Exchange 2010 in the VCS cluster configuration.

See the *Veritas Cluster Server Administrator's Guide* for more details about `hagetcf`.

### VCS Exchange 2010 management pack for SCOM 2007

VCS provides a management pack for Exchange 2010. You can use this management pack to monitor Exchange 2010 instances configured under VCS in a Systems Center Operations Manager (SCOM) 2007 monitoring environment. This management pack is supported on SCOM 2007 SP1 and R2 versions.

### MountV agent changes

The VCS MountV agent supports folder mounts on local system disks. You can mount shared disks on local system drives using folder mounts. The VCS MountV agent is modified such that during failover, the agent creates the folder mount directories, if they do not exist on the target node.

For example, a shared disk is mounted as `Mydata` on a system drive (`C:\`). The path of the mount is now `C:\Mydata`. When the MountV agent is failed over to another node, it creates the folder `Mydata`, if it does not exist on that node, and then mounts it on `C:\` on that node.

## Exchange 2010 service group configuration wizard enhancement

VCS provides a new configuration wizard, the Exchange 2010 Configuration Wizard, for configuring Exchange 2010 database service groups.

This wizard detects shared disks that are mounted as folder mounts on the local system drives. You can mount shared drives as folder mounts on local system drives and then configure the folder mounts in the Exchange database service group.

## Co-existence with Symantec Mail Security for Microsoft Exchange

You can install Symantec Mail Security for Microsoft Exchange (SMSMSE) version 6.5.0.67 in an environment where Microsoft Exchange 2010 is configured with VCS. VCS does not affect the SMSMSE functionality.

However, VCS does not provide HA support for SMSMSE itself.

Note the following:

- If you are installing SMSMSE on systems where VCS is already installed, then the SMSMSE installer prompts whether you wish to register the cluster resource components. Do not register the cluster components. Select No when prompted for the registration.
- If you have already installed SMSMSE and registered the cluster resource components in a VCS environment, then ensure that you do not configure the SMSMSE cluster resource in an environment where Exchange 2010 is configured with VCS. Such a configuration is not supported.

## Requirements

Review these product installation requirements before installing Application Pack 1.

For the latest information on supported software, see the Software Compatibility list at:

<http://entsupport.symantec.com/docs/337682>

Application Pack 1 can be applied only to an existing installation of the following SFW or SFW HA versions:

- SFW 5.1 SP1
- SFW HA 5.1 SP1

Application Pack 1 installation requires approximately 350 MB of disk space.

For SFW 5.1 SP1 and SFW 5.1 HA SP1 installation requirements, see the *Veritas Storage Foundation and High Availability Solutions 5.1 SP1 Installation and Upgrade Guide*.

## Supported software

In addition to applications supported by SFW 5.1 SP1 and SFW HA 5.1 SP1, this Application Pack 1 release includes new support for the following application:

- Microsoft Exchange Server 2010

### Microsoft Exchange Server

[Table 1-1](#) lists the new supported Microsoft Exchange Server editions and operating systems for this Application Pack 1 release. Note that all systems must be running the same operating system.

**Table 1-1** Microsoft Exchange Server 2010 and Windows Server support

Application	Windows Server
Microsoft Exchange Server 2010 (Standard or Enterprise Edition)	<ul style="list-style-type: none"> <li>■ Microsoft Windows 2008 x64, Service Pack 2 (Standard or Enterprise Edition)</li> <li>■ Microsoft Windows 2008 x64 R2 (Standard or Enterprise Edition)</li> </ul>

# Installing Application Pack 1

This section provides information related to installing the application pack. Application Pack 1 can only be applied to an existing installation of SFW 5.1 SP1 or SFW HA 5.1 SP1. The SFW HA-specific tasks described in this application pack release notes presume that you have already created application service groups in the SFW HA environment.

---

**Note:** You are not required to install Microsoft Exchange Server 2010 on your system before installing SFW HA 5.1 SP1 AP1. You can install SFW HA 5.1 SP1 AP1 before or after you install Microsoft Exchange Server 2010 on your system. Refer to your Microsoft Exchange Server documentation or the Microsoft support website for information about the process for migrating from Microsoft Exchange Server 2007 to Microsoft Exchange Server 2010.

---

Read the following topics:

- See [“Download location”](#) on page 15.
- See [“Preparing to install the application pack”](#) on page 16.
- See [“Installing Application Pack 1 using the installer”](#) on page 18.
- See [“Installing Application Pack 1 using the command line”](#) on page 20.
- See [“Tasks after installing Application Pack 1”](#) on page 21.

## Download location

The download package includes both 32-bit and 64-bit versions. Download the package for this release from the following location:

**Table 1-2** Application Pack 1 download path

To install	Download packages from
SFW HA 5.1 SP1 Application Pack 1	<a href="http://entsupport.symantec.com/docs/350624">http://entsupport.symantec.com/docs/350624</a>

## Preparing to install the application pack

Ensure the following before installing the application pack:

- Make sure that you back up all your data.
- Make sure that you back up the system state.
- Ensure that you have network access to each remote computer.
- Test the system after each upgrade, especially after applying other product upgrades. An incremental upgrade eases the troubleshooting process.

### Preparing a DMP environment

For a DMP environment, you must either disconnect the DMP paths or bring the disk group offline, before you begin with the upgrade.

For Basic disks not under DMP cluster resource, you must disconnect the DMP paths. For the disks under the cluster resource, you must bring the cluster resources offline.

Similarly, for dynamic disks that are not under DMP cluster resource, you must deport or bring the resource offline. For disks under cluster resource, you must move or deport the disk group to another node before you begin to upgrade the node in context.

---

**Note:** Always back up your data before upgrading.

---

For instructions about disconnecting DMP paths, refer to the *Veritas Storage Solutions 5.1 SP1 for Windows Installation and Upgrade Guide*.

### Preparing an SFW HA environment

The preparation tasks described here presume that you have already configured a VCS cluster and have created service groups in the SFW HA environment.

Complete the following procedures:

- [“Removing VCS Management Console”](#) on page 16
- [“Saving and closing the cluster configuration”](#) on page 17

### Removing VCS Management Console

If one or more nodes in the cluster have Veritas Cluster Server Management Console installed, you must remove the management console before installing the application pack.



### To remove VCS Management Console

- 1 Stop the VCS Management Console. If the management console is clustered, take the CMC\_MS service group offline.
- 2 Back up the console's data directory and datadir.conf files. Typically, the files are located at the following paths:
  - C:\Program Files\Symantec\VRTScmcm
  - or
  - C:\Program Files(x86)\Symantec\VRTScmcm
- 3 Remove VCS Management Console from all nodes in the cluster using Windows Add/Remove Programs.  
You can reinstall the management console later, after the upgrade.

### Saving and closing the cluster configuration

Use the VCS Cluster Manager (Java Console) to save and close the configuration. This operation involves saving the latest configuration to disk and changing the configuration state to read-only mode. You must also bring the service groups offline and stop VCS before installing the application pack.

#### To save and close the configuration

- ◆ From the VCS Cluster Manager (Java Console), click **File > Save** and **File > Close Configuration** on the Cluster Explorer toolbar.

#### To bring the service groups offline

- ◆ From the VCS Cluster Manager (Java Console), right-click the service group and then click **Offline**.  
or  
From the command prompt, type:  

```
hagrp -offline group_name -sys system_name
```

where *group\_name* is the name of the service group and *system\_name* is the node on which the group is online.  
Repeat this for all service groups that are online.

#### To stop the VCS High Availability Engine (HAD)

- ◆ Stop HAD on all the cluster nodes that you wish to upgrade.  
Type the following at command prompt:  

```
hastop -all -force
```

## Installing Application Pack 1 using the installer

The following steps describe the procedure for installing the application pack using the GUI.

### To install Application Pack 1 using the installer

- 1 Insert the DVD containing the installation software into your system's disc drive or download the installation software from the Symantec support page on the Symantec Web site.  
See "[Download location](#)" on page 15.
- 2 Allow the autorun feature to start the installation or double-click **Setup.exe**.
- 3 On the 5.1 SP1 AP1 Installer screen, under Product Installation select **5.1 SP1 AP1 Installer**.
- 4 On the 5.1 SP1 Application Pack 1 Installer Welcome screen, review the set of prerequisites and click **Next**.
- 5 On the License Agreement panel review the terms of the license agreement and select "I accept the terms of License Agreement". Click **Next**.
- 6 On the System Selection panel, add the systems on which you want to install 5.1 SP1 AP1. You can perform this in one of the following ways:
  - In the System Name text box, manually type the system name and click **Add**.
  - Alternatively, browse to select the systems.  
On the Select Systems panel, the systems that belong to the domain in which you have logged in are listed in the Available Systems list. Select one or more systems and click the right arrow to move them to the Selected Systems list. Click **OK**.  
Once you add or select a system, the wizard performs the verification checks and notes the verification details. To review the details, click the corresponding information icon.

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**Note:** The files are installed at the location where 5.1 SP1 is installed.

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- 7 On the System Selection panel, click **Next**.  
Note that the installer fails to proceed with the installation, unless all the selected systems have passed the verification checks and are ready for installation. In case the verification checks have failed on any of the system, review the details and rectify the issue. Before you choose to proceed with the installation click **Re-verify** to re-initiate the verification checks for this system.

- 8 On the Pre-install Summary panel, review the summary and click **Next**.  
Click the **Save Report** button to access a Save Webpage screen. You can then save an .htm, html file format report of this information.  
Click **Next** to proceed with the installation.
- 9 On the 5.1 SP1 Application Pack 1 Installation panel view the installation progress and click **Next** when the installation is complete.
- 10 On the Post-install Summary panel, review the summary.  
Click the **Save Report** button to access a Save Webpage screen. You can then save an .htm, html file format report of this information.  
Click **Next** to proceed.
- 11 On the Finish panel click **Finish**.

## Installing Application Pack 1 using the command line

Download the Application Pack 1 installation files from the Symantec support page on the Symantec Web site.

See [“Download location”](#) on page 15.

You can perform a silent installation of Application Pack 1 using the Setup.exe command from command line. With a silent installation, you can only install on one computer at a time.

### To install Application Pack 1 using the command line

- 1 Click **Start > Run**, type **cmd** and then click **OK** to open the command prompt.

---

**Note:** For Windows Server 2008, all CLI commands must run in the command window in the “run as administrator” mode.

---

- 2 From the command prompt, navigate to the location where you have copied the application pack installation files.
- 3 To install Application Pack 1, type the following command at the command prompt:

```
Setup.exe /s INSTALL_MODE=<InstallMode>  
SOLUTIONS=<SolutionID> NODE=<nodename>
```

[Table 1-3](#) describes the values that the parameters can take.

**Table 1-3** Setup.exe: Silent install parameters

Parameter	Usage
/s	Set for silent mode. If not entered, the product installer GUI starts.
Install_Mode	Set to indicate an installation or uninstallation. <b>1</b> = To install or upgrade the product <b>5</b> = To uninstall the product Example: INSTALL_MODE=1
Solutions	Set this value to 1 for Application Pack 1
Node	Set the node name. Specify only one node at a time. The default setting is the local node. Example: Node=SysA

## Silent installation example: Local Server

This command installs the application pack on the local node. The application pack is installed to the same directory as the 5.1 SP1 base installation.

```
Setup.exe /s INSTALL_MODE=1 SOLUTIONS=1
```

## Silent installation example: Remote Server

This command installs the application pack on a remote node. It states that the node it is installing is SysA. The application pack is installed to the same directory as the 5.1 SP1 base installation.

```
Setup.exe /s INSTALL_MODE=1 SOLUTIONS=1 NODE=SysA
```

## Tasks after installing Application Pack 1

Depending on your site environment, perform the following tasks:

- See [“Re-installing VCS Management Console”](#) on page 21.
- See [“Re-enabling VCS resources after the update”](#) on page 21.
- See [“Re-enabling DMP after the update”](#) on page 22.

## Re-installing VCS Management Console

To re-install VCS Management Console

- 1 Install VCS Management Console.  
Refer to the *Veritas Cluster Server Management Console Implementation Guide*.
- 2 Restore the backed-up VCS Management Console data files. These are the files that you had backed-up before installing the application pack.  
See [“Removing VCS Management Console”](#) on page 16.
- 3 Start the VCS Management Console. If the management console is clustered, bring the CMC\_MS service group online.

## Re-enabling VCS resources after the update

Ensure that all service groups that were taken offline prior to the update are brought online again, in the appropriate order based on resource dependencies.

To bring a service group online

- 1 Check the resource dependencies and bring the service group online in the appropriate order.

- From the VCS Cluster Manager (Java Console), right-click the service group and click **Online**.
- or
- From the command prompt, type:  
`hagrp -online group_name -sys system_name`  
where *group\_name* is the name of the service group and *system\_name* is the node on which the group is online.

2 Repeat for additional service groups.

### Re-enabling DMP after the update

If you have disconnected DMP paths, you can reconnect them. For instructions about reconnecting DMP paths, refer to the *Veritas Storage Solutions 5.1 SP1 for Windows Installation and Upgrade Guide*.

# Removing Application Pack 1

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**Warning:** Application Pack 1 contains support for several features including Microsoft Exchange Server 2010. If you have configured these applications, then after removing Application Pack 1 you will not be able to use the supported features and applications in a SFW HA 5.1 SP1 for Windows clustered environment.

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**Note:** If you are planning to remove the entire SFW HA stack from your systems, you must first remove SP1AP1 completely, and then proceed to uninstalling the base version.

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Read the following topics:

- See [“Preparing the SFW HA 5.1 SP1 cluster”](#) on page 23.
- See [“Removing Application Pack 1 using the installer”](#) on page 24.
- See [“Removing Application Pack 1 from the command line”](#) on page 26.

## Preparing the SFW HA 5.1 SP1 cluster

Before removing the application pack, delete the Exchange Server 2010 service group if it is configured in the cluster. Then use the VCS Cluster Manager (Java Console) to save and close the configuration. This operation involves saving the latest configuration to disk and changing the configuration state to read-only mode. You must also bring the service groups offline and stop VCS before removing the application pack.

---

**Warning:** Some configurations may require other steps. Before removing the application pack or performing the following steps, check the Support website at the following URL for updates or additions to the procedure:  
<http://entsupport.symantec.com/docs/316327>

---

Perform the following steps.

### To save and close the configuration

- ◆ From the VCS Cluster Manager (Java Console), click **Save and Close Configuration** on the Cluster Explorer toolbar.

**To bring the service groups offline**

- ◆ From the VCS Cluster Manager (Java Console), right-click the service group and select the **Offline** menu option.

or

From the command prompt, type:

```
hagrp -offline group_name -sys system_name
```

where *group\_name* is the name of the service group and *system\_name* is the node on which the group is online.

Repeat this command for all service groups that are online.

**To stop VCS High Availability Engine (HAD)**

- ◆ Stop the Veritas High Availability Engine (HAD) on all the cluster nodes that you wish to remove the application pack from.

Type the following at the command prompt:

```
hastop -all -force
```

## Removing Application Pack 1 using the installer

The following procedure describes how to remove SFW HA 5.1 SP1 Application Pack 1 for Windows from the cluster. After removing the application pack, the systems are restored to the SFW HA 5.1 SP1 version level.

**To remove the application pack using the installer**

- 1 Go to **Start > Settings > Control Panel > Add or Remove Programs**.  
In case you are working on Windows Server 2008, from the Windows Control Panel, go to Programs and Features.
- 2 Select **Application Pack 1 for SFW and SFW HA 5.1 SP1** and click **Remove**.  
In case of Windows Server 2008, click **Uninstall**.
- 3 The 5.1 SP1 Application Pack 1 Installer Welcome screen appears.  
Review the prerequisites for the uninstallation and click **Next**.
- 4 On the System Selection panel, add the systems from which you want to uninstall the application pack. You can perform this in one of the following ways:
  - In the System Name text box, manually type the system name and click **Add**.
  - Alternatively, browse to select the systems.  
The systems that belong to the domain in which you have logged in are listed in the Available Systems list. Select one or more systems and click the right arrow to move them to the Selected Systems list. Click **OK** Once you add or select a system, the wizard performs the



verification checks and notes the verification details. To review the details, click the corresponding information icon.

---

**Note:** By default the local system is selected for un-installation. In case you are performing a remote un-installation and do not want to uninstall the application pack from the local system, click the corresponding “x” icon to remove the system from the list.

---

- 5 Click **Next**.  
Note that the wizard fails to proceed with the un-installation, unless all the selected systems have passed the validation checks and are ready for un-installation.  
In case the validation checks have failed on any of the system, review the details and rectify the issue. Before you choose to proceed with the un-installation click **Re-verify** to re-initiate the verification checks for this system.
- 6 On the Pre-uninstall Summary panel, review the summary.  
Click the **Save Report** button to access a Save Webpage screen. You can then save an .htm, html file format report of this information.  
Click **Next**.
- 7 On the **5.1 SP1 Application Pack 1 un-installation** panel, review the un-installation progress and click **Next** when the un-installation is complete
- 8 On the Post-uninstall Summary panel review the un-installation results and click **Next**.  
If the un-installation has failed on any of the system, review its summary report and check the log file for details.  
Click the **Save Report** button to access a Save Webpage screen. You can then save an .htm, html file format report of this information.  
Click **Next**.
- 9 On the Finish panel, click **Finish**.

## Removing Application Pack 1 from the command line

The following procedure describes how to remove SFW HA 5.1 SP1 Application Pack 1 for Windows using the Setup.exe command to perform a silent removal from the command line. With a silent removal, you can remove the application pack on only one computer at a time. After removing the application pack, the system is restored to the SFW HA 5.1 SP1 for Windows version level.

Examples showing the removal of the application pack are included at the end of this section.

### To remove Application Pack 1 using the command line

- 1 Click **Start > Run**, type **cmd** and then click **OK** to open the command prompt.

---

**Note:** For Windows Server 2008, all CLI commands must run in the command window in the “run as administrator” mode.

---

- 2 From the command prompt, navigate to the location where you have copied the application pack installation files.
- 3 To remove Application Pack 1, type the following command at the command prompt:

```
Setup.exe /s INSTALL_MODE=<InstallMode>
SOLUTIONS=<SolutionID> NODE=<nodename>
```

[Table 1-4](#) describes the values that the parameters can take.

**Table 1-4** Setup.exe: Silent install parameters

Parameter	Usage
/s	Set for silent mode. If not entered, the product installer GUI starts.
Install_Mode	Set to indicate an installation or uninstallation. <b>1</b> = To install or upgrade the product <b>5</b> = To uninstall the product Example: INSTALL_MODE=1
Solutions	Set this value to 1 for Application Pack 1
Node	Set the node name. Specify only one node at a time. The default setting is the local node. Example: Node=SysA

### Silent removal example: Local Server

This command removes the application pack from the local node.

```
Setup.exe /s INSTALL_MODE=5 SOLUTIONS=1
```

## Silent removal example: Remote Server

This command removes the application pack from a remote node. It states that the node it is removing it from is SysA.

```
Setup.exe /s INSTALL_MODE=5 SOLUTIONS=1 NODE=SysA
```

## Repairing the installation

The product installer provides a Repair option to repair the existing installation. This installer can only repair the local system.

---

**Note:** In the Repair Option, only the missing files are added. Other changes like changes in the types.cf must be made manually.

---

### To repair the installation

- 1 Go to **Start > Settings > Control Panel > Add or Remove Programs**.  
In case you are working on Windows Server 2008, from the Windows Control Panel go to Programs and Features.
- 2 Select **Application Pack 1 for SFW and SFW HA 5.1 SP1** and click **Change**.
- 3 On the System Selection panel, add the systems on which you want to install 5.1 SP1 AP1. You can perform this in one of the following ways:
  - In the System Name text box, manually type the system name and click **Add**.
  - Alternatively, browse to select the systems.  
On the Select Systems panel, the systems that belong to the domain in which you have logged in are listed in the Available Systems list. Select one or more systems and click the right arrow to move them to the Selected Systems list. Click **OK**.  
Once you add or select a system, the wizard performs the verification checks and notes the verification details. To review the details, click the corresponding information icon.

---

**Note:** The files are installed at the location where 5.1 SP1 is installed.

---

- 4 On the System Selection panel, click **Next**.  
Note that the installer fails to proceed with the installation, unless all the selected systems have passed the verification checks and are ready for installation. In case the verification checks have failed on any of the system, review the details and rectify the issue. Before you choose to proceed with the installation click **Re-verify** to re-initiate the verification checks for this system.

**Removing Application Pack 1**

- 5 On the Pre-install Summary panel, review the summary and click **Next**.  
Click the **Save Report** button to access a Save Webpage screen. You can then save an .htm, html file format report of this information.  
Click **Next** to proceed with the installation.
- 6 On the 5.1 SP1 Application Pack Installation panel view the installation progress and click **Next** when the installation is complete.
- 7 On the Post-install Summary panel, review the summary.  
Click the **Save Report** button to access a Save Webpage screen. You can then save an .htm, html file format report of this information.  
Click **Next** to proceed.
- 8 On the Finish panel click **Finish**.

## Known issues

The following known issues exist in the Application Pack 1 for Veritas Storage Foundation 5.1 SP1 for Windows and Veritas Storage Foundation HA 5.1 SP1 for Windows.

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

<http://entsupport.symantec.com/docs/303042>

## Installation, upgrades, and licensing

This section provides information on known installation, upgrade, and licensing issues.

### **SFW HA installer may fail if you try to remove the base product (2031945)**

The product installer may fail if you try to remove the base SFW HA product on the systems where you have installed SP1AP1.

This issue occurs if you have installed SP1AP1 on systems where the product installation order was any of the following:

SFW HA 5.1 > SFW HA 5.1 AP1 > SFW HA 5.1 SP1

or

SFW HA 5.1 > SFW HA 5.1 SP1

Workaround: If you wish to remove the base product in such a configuration, you must first remove SP1AP1 completely and then proceed to uninstalling the base product.

### **Solutions Configuration Center not refreshed by installation or uninstallation (2025404)**

If you leave the Solutions Configuration Center (SCC) window open during Application Pack 1 installation, the SCC window does not refresh to show the new content when installation is complete. The same applies if you uninstall Application Pack 1.

Workaround: To refresh the window, close the SCC window and then re-launch the SCC. You can launch the SCC from **Start > All Programs > Symantec > Veritas Storage Foundation > Solutions Configuration Center** or from **Start > All Programs > Symantec > Veritas Cluster Server > Solutions Configuration Center**.

## Veritas Storage Foundation

This section provides information on known Storage Foundation issues.

### **Allow restore using the vxsnap restore command if mailbox is removed or missing (2013769)**

If a mailbox database component is missing or deleted from an Exchange 2010 configuration, then use the `vxsnap restore` command to recover the missing or deleted database component.

To restore a missing database, perform the following steps:

- 1 Create mailbox with same name as that of the missing mailbox database and mention the same database file and log path.  
Make sure to uncheck the **Mount this database** checkbox.
- 2 Set the database properties by right-clicking the database and enabling the checkbox **"This database can be overwritten by a restore"** option in the Exchange Management Console.
- 3 Now try to restore the missing database using the `vxsnap restore` command.

```
vxsnap -x <filename> [-f] [-b] [-r] [-a] restore  
restoreType=<PIT|POF> writer=<writername>  
[subComponent=<subComponentName>] [RSG=<Yes|No>]
```

Note that the `subComponent` and `RSG=Yes|No` is not valid for Exchange 2010.

### **Scheduled VSS snapshots of an Exchange mailbox database configured under a VCS cluster setup starts with some delay of around 2 to 3 minutes (2021279)**

Prepare and Create VSS snapshot operations starts with some delay and takes sometime to get launched, mostly 2 to 3 minutes.

### **If a VCS resource database is configured for an Exchange 2010 mailbox database, the same database node appears in the VEA console tree-view more than once (2028846)**

Workaround: Perform manual `vxsnap refresh` operation to refresh the VEA console.

## Event viewer shows error message "Could not impersonate Veritas Scheduler Service login user ....." when VSS restore and snapback operations are performed (2028835)

In case of an Exchange 2010 VCS cluster setup, if the Scheduler Service is stopped then the user may get the following error message "**Could not impersonate Veritas Scheduler Service login user. Make sure this service is started and configured with a domain user account**" in the VEA console and Application event log.

Workaround: If a Fileshare resource is configured for a VCS cluster setup, ensure that the Veritas Scheduler Service is running and configured with an appropriate user account. If snapshot metadata files are stored on a local volume, then this error can be ignored.

## For a cluster setup, configure the Veritas Scheduler Services with a domain user account

In case of a clustered (VCS or DAG/MSCS) setup with more than one node, on each node of the cluster you must configure the Veritas Scheduler Services with a domain user account that has administrative privileges.

## Sometimes VSS snapshot schedules are not visible under the Exchange node in the VEA console tree-view but are visible on the right pane of the console (2028805)

Create VSS Snapshot Schedules for an Exchange 2010 mailbox database. Expand the **Scheduled Tasks > Exchange Node** on the left pane of the VEA tree-view. It is noticed that the schedules are not visible under the Exchange node on the left pane but on the right pane of the VEA GUI.

Workaround: Perform a VSS refresh. The snapshot schedules get displayed under the Exchange node in the tree-view on the left pane.

## Snapshot metadata files are not deleted after VSS Snapback and PIT Restore operation (2030283)

For an Exchange 2010 VCS cluster setup that has a fileshare resource configured to store snapshot metadata files, it is noticed that after performing a VSS Point in Time (PIT) restore or snapback operation the snapshot metadata files are not deleted even though the restore or snapback operation completes successfully. These snapshot files are displayed in the VSS restore and snapback wizards.

Workaround: Manually delete the older snapshot metadata files or if there is requirement to use the same file name, then use the `-o` option with the `vxsnap` utility command.

For example if `\\FSAP1\share\mb1.xml` is the snapshot set file name specified during Create snapshot operation, then files with the names `mb1.xml$`, `mb1.xmlwmd`, and `mb1.xml` should be deleted. They are present at the location `\\FSAP1\share`.

### **If an inaccessible path is mentioned in the vxsnap create CLI, the snapshot gets created and the CLI fails (2030292)**

If a wrong path or path which is not accessible is specified during the VSS create snapshot operation, then the operation fails after actual snapshot of the volumes and while generating a snapshot metadata file.

Workaround: Perform manual snapback of the volumes which are part of a component and take a VSS snapshot again by specifying a valid and accessible path.

### **If snapshot set files are stored on a Fileshare path, then they are visible and accessible by all nodes in the VCS cluster**

If snapshot metadata files are stored on a fileshare path, they are visible and accessible by all nodes in a VCS cluster. Hence, VSS restore and reattach operations should be performed only on a node where the Exchange mailbox is online.

## Veritas Cluster Server

This section provides information on known Veritas Cluster Server issues.

### **DR wizard cannot create an RVG that contains more than 32 volumes (2010918)**

For VVR replication, the DR wizard cannot create a Replicated Volume Group (RVG) that contains more than 32 volumes. If you select more than 32 volumes while running the DR wizard, the create RVG task fails when you reach the Implementation panel.

Workaround: To configure DR when any RVG contains more than 32 volumes, use the following steps:

- 1 Run the DR wizard until the Application Installation panel is displayed and then exit the wizard.
- 2 Complete the application installation on the secondary nodes.
- 3 Using the Veritas Enterprise Administrator (VEA) console, create a replicated data set (RDS) with a Primary and Secondary RVG with only 32 volumes. Do not select more than 32 volumes in the create RVG operation.



For more information on creating an RDS, see the *Veritas Volume Replicator Administrator's Guide*.

- 4 Once the RVG is created, right click on the RDS name and select **Add Volume**. Using the Add Volume wizard, add the remaining volumes that are part of the RVG.
- 5 Finish running the DR wizard to complete the service group cloning, replication configuration, and global cluster option (GCO) configuration.
- 6 In the VEA, change the IP address in the replication settings to match what you entered for the replication IP in the DR wizard, as follows:
  - Open the VEA and connect it to a system on the primary site where the primary RVG is configured. From the same VEA GUI, connect to a system on the secondary site where the secondary RVG is configured.
  - Go to Replication Network View.
  - Right click on the secondary RVG and select **Change Replication Settings**.
  - Change the primary side IP address and secondary side IP address to the same values which you provided in the DR wizard on the Replication Attribute Settings panel.

## Veritas Volume Replicator

This section provides information on known Veritas Volume Replicator issues.

### Secondary host is getting removed and added when scheduled sync snapshots are taken (2010491)

Schedule a synchronized snapshot on the secondary host. It is noticed that sometimes when a synchronized snapshot happens on the secondary, the secondary gets removed and added. This is because the snapshot operation is taking too long to complete. To avoid this, increase the `AE_TIMEOUT` value in the registry to one minute. Its default value is set to 30 secs.

## Software fixes and enhancements

Fixed issues and software enhancements are referenced by Symantec incident number and described briefly below.

### Veritas Storage Foundation

The following issues were fixed in this Application Pack 1 release:

**Table 1-5** Fixed issues for Storage Foundation for Windows

Incident Number	Description
1919142, 1925491	Unable to import the latest SCOM 2007 Management Pack due to Strong Name verification.
1959339	During first cluster service startup after a reboot, Quorum resource comes online after a long time.

### Veritas Cluster Server

The following issues were fixed in this Application Pack 1 release:

**Table 1-6** Fixed issues for Veritas Cluster Server

Incident Number	Description
2012768	After bringing the file share service group online, the file share resource faults and fails over to the next available system in service group's system list. After coming online on the next system, the resource again faults on that system and fails back to the original system or to an alternate system. This fault and failover activity repeats itself in a cyclic manner.  This issue typically occurs on multi-node (two or more nodes) file share service groups configured on Windows Server 2008 (SP2 and R2) systems.

## Documentation changes

The information in this section either supersedes or is in addition to the information included in the product documentation for Veritas Storage Foundation HA 5.1 SP1 AP1.

### Veritas Storage Foundation and High Availability Solutions HA and Disaster Recovery Guide for Microsoft Exchange 2010

In the chapter on configuring the Exchange 2010 service group, it is documented that a mailbox database and its transactions log must reside on the same cluster disk group, and must be mounted on the system where you run the wizard.

The Exchange 2010 Configuration Wizard creates an Exchange service group per cluster disk group. If you select multiple mailbox databases that reside on different cluster disk groups, the wizard configures those databases in separate service groups.

In addition, the following condition also applies:

Before running the wizard, you must ensure that the cluster disk groups and volumes where the databases reside are accessible from all the systems that will be part of the Exchange 2010 service groups that the wizard creates.

## Documentation

Storage Foundation for Windows documentation is included on the product software discs for Veritas Storage Foundation and High Availability Solutions 5.1 SP1 AP1 for Windows in Adobe Portable Document Format (PDF). Explore the `\Docs` directory of the software disc and double-click the file name to view a document.

The Application Pack 1 release includes the following new and updated documents.

**Table 1-7** New and updated documents for SFW HA 5.1 SP1 Application Pack 1

Title	File Name
<i>Veritas Storage Foundation and High Availability Solutions HA and Disaster Recovery Solutions Guide for Microsoft Exchange 2010</i>	SFW_HA_DR_Exch2010_Solutions.pdf
<i>Veritas Storage Foundation and High Availability Solutions Quick Recovery Solutions Guide for Microsoft Exchange 2010</i>	SFW_QR_Exch2010_Solutions.pdf

**Table 1-7** New and updated documents for SFW HA 5.1 SP1 Application Pack 1

Title	File Name
<i>Veritas Storage Foundation Administrator's Guide</i>	SFW_Admin.pdf
<i>Veritas Storage Foundation and High Availability Solutions 5.1 SP1 Application Pack 1 Release Notes</i>	SFWHA_ReleaseNotes.pdf

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**Note:** Updates to release notes can be found at:  
<http://entsupport.symantec.com/docs/303042>

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PDF copies of the product guides are also available on the Symantec Support website at:  
<http://www.symantec.com/business/support/index.jsp>

## Documentation feedback

Your feedback on product documentation is important to us. Send suggestions for improvements and reports on errors or omissions to [sfwha\\_docs@symantec.com](mailto:sfwha_docs@symantec.com). Include the document's title, its document version (located on the top of page two), the chapter title, and the section title of the text.