

Symantec™ High Availability Console Installation and Upgrade Guide

Windows

6.1

Symantec™ High Availability Console Installation and Upgrade Guide

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Product version: 6.1

Document version: 6.1 Rev 1

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Symantec Corporation
350 Ellis Street
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<http://www.symantec.com>

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Contents

Technical Support	3	
Chapter 1	Introducing the Symantec High Availability Console	9
	About the Symantec High Availability Console	9
	Supported operating systems	10
Chapter 2	Installing the Symantec High Availability Console	11
	Before installing the Symantec High Availability Console	11
	Additional requirements	12
	Ports and firewall settings	13
	Installing Symantec High Availability Console	14
Chapter 3	Administering the Symantec High Availability Console installation	19
	Upgrading the Console Server	19
	Repairing the Symantec High Availability Console installation	24
	Uninstalling Symantec High Availability Console	26
Appendix A	Roles and privileges	29
	About the roles and privileges assigned	29
	Configuring Symantec High Availability access control	30
Appendix B	Troubleshooting	31
	About the installer and Console logging	31
	Troubleshooting Console issues	32
	Backing up Symantec High Availability Console files and registry	32
	Symantec High Availability Console files become corrupt	33
	Symantec High Availability Console host becomes permanently unavailable	35

	If the Console host abruptly restarts, the high availability tab may disappear	35
	Troubleshooting the Symantec High Availability plugin issues	36
	About the Symantec High Availability plugin registration or unregistration issues	36
	The Symantec High Availability plugin available in the vCenter Server Plug-in Manager is "Disabled"	39
Appendix C	Difference between ApplicationHA Console and Symantec High Availability Console	41
	ApplicationHA Console and Symantec High Availability Console—What's the difference?	41

Introducing the Symantec High Availability Console

This chapter includes the following topics:

- About the Symantec High Availability Console
- Supported operating systems

About the Symantec High Availability Console

You must install the Symantec High Availability Console, if you plan to configure application monitoring in a VMware virtual environment and are using the vSphere desktop client for performing the application monitoring operations.

For information about using the vSphere Web Client, see:

<http://www.symantec.com/docs/TECH222796>

Note: You can configure application monitoring on the Windows as well as Linux systems. However, you can install the Console on a system that runs Windows operating system only.

See “Supported operating systems” on page 10.

The Symantec High Availability Console enables integration with vSphere Client and configures access control for vCenter Server users to perform the following tasks:

- Install the Symantec High Availability and ApplicationHA guest components
- Manage the Symantec High Availability and ApplicationHA licenses
- Configure application monitoring

- In case of ApplicationHA, configure cross-site single sign-on for site recovery and register the virtual machines for auto recovery

As part of the Symantec High Availability Console installation, the installer registers the Symantec High Availability plugin for VMware vCenter Server. This plugin is required to view the Symantec High Availability tab, the Symantec High Availability dashboard and the Symantec High Availability home page, using the vSphere Client.

Use the Symantec High Availability tab to configure and control application monitoring on an individual virtual machine.

Use the Symantec High Availability Dashboard to administer application monitoring at a VMware datacenter/cluster level.

Use the Symantec High Availability home page to install guest components, manage licenses and to configure cross-site single sign-on for site recovery (only in case of ApplicationHA).

Supported operating systems

You can install the Symantec High Availability Console on the systems running any of the following operating systems:

- Windows Server 2008 R2 (SP1 included)
- Windows Server 2012 (SP1 included)
- Windows Server 2012 R2

For the latest information on supported software, see the Software Compatibility List (SCL) at:

<http://www.symantec.com/docs/TECH209010>

Installing the Symantec High Availability Console

This chapter includes the following topics:

- Before installing the Symantec High Availability Console
- Ports and firewall settings
- Installing Symantec High Availability Console

Before installing the Symantec High Availability Console

Consider the following before you proceed to install the Symantec High Availability Console:

- The installation must be performed locally. Remote install is not supported.
- .Net 4.5 framework is installed on the virtual machine.
- Ensure that the virtual machine meets the following system requirements:
 - CPU: Dual processor
 - Memory: 4 GB
 - Disk space: 15 GB
- You can install the Symantec High Availability Console on a dedicated physical host or a virtual machine.

Note: You must not install the Console on a machine where VMware vCenter Server is installed.

- If you wish to configure monitoring for the Console itself, you must install the Console on a virtual machine.

Note: You can configure monitoring for the Console only in a start-stop mode on a single virtual machine, using the Symantec ApplicationHA guest components. You cannot configure monitoring for the Console in a failover mode, using the Symantec High Availability guest components.

- The installer uses the logged-on user account context to perform the installation. Verify that the logged-on user has local administrator privileges on the machine where you want to install the server.
- As part of the Symantec High Availability Console installation, the installer registers the Symantec High Availability plugin for VMware vCenter Server.
- The Symantec High Availability solution supports one Console per vCenter Server.
To reconfigure the vCenter Server with another instance of Symantec High Availability Console, you must first uninstall the existing Console and verify that the plugin is unregistered from the vCenter Server.

Additional requirements

Note the following additional requirements before deploying the Symantec High Availability solution in your environment:

- Microsoft Internet Explorer version 6.0 or later
- Mozilla Firefox 3.x or later
- Pop-up blockers are not enabled on the machine
- To view the High Availability tab in the vSphere Client, verify that the following settings in your Internet Explorer (IE) browser are enabled:

Tools > Internet Options, Advanced tab

- Use SSL 2.0
- Use SSL 3.0
- Use TLS 1.0

Tools > Internet Options, Security tab

- Active scripting
- Run ActiveX controls and plug-ins
- Script ActiveX controls marked safe for scripting

Tools > Manage Add-ons

- Shockwave Flash Object

- To view the Symantec High Availability tab on Windows Server 2008 systems running Internet Explorer (IE) version 9, verify that IE Enhanced Security Setting is set to "Off" for the Administrator and the Users group.
- Installation media and licenses for all products and third-party applications.
- Adobe Flash Player
 Install Adobe Flash Player version 11.5 or later on the systems from where you run the VMware vSphere Client to manage the virtual machines.
- When installing Symantec High Availability Console, ensure that there are no parallel installations, live updates, or Microsoft Windows updates in progress.

Ports and firewall settings

Table 2-1 displays the services and ports used during the installation and configuration of the Symantec High Availability Console.

Table 2-1 Services and ports used during the installation and configuration of the Symantec High Availability Console

Component Name/Process	Port/Protocol	Description
File and Printer Sharing		Used by the installer during the Console server installation. The installer uses this to copy the installation files to the machine.
Windows Management Instrumentation (WMI) service		Used by the installer during the Console server installation, to discover the virtual machines.
VMware Web Service	443/ https (Default port)	Used by the installer during the Console server installation, to register High Availability plugin and add High Availability privileges to the vCenter Server.
Symantec ApplicationHA Service	14151, 14152/ TCP	Used by the High Availability Console host to run Java Servlets that fetch the application monitoring status from the virtual machines and display the information on the High Availability tab in the vSphere Client.

Table 2-1 Services and ports used during the installation and configuration of the Symantec High Availability Console (*continued*)

Component Name/Process	Port/Protocol	Description
Symantec ApplicationHA Authentication Service	14153/ TCP	Used by the High Availability Console to authenticate the single sign-on account configured for a virtual machine.
Symantec ApplicationHA Database Service	14154/ TCP	Used by the High Availability Console to read and update the Sybase database.
Veritas Storage Foundation Messaging Service (xpirtld)	5634 / TCP	Used for communications between the High Availability Console host machine and the virtual machines.
VMwareDisksAgent	443/https	Used for communication between virtual machines and the ESX hosts.

Installing Symantec High Availability Console

Use the product installer to install the Symantec High Availability Console in your VMware virtualization environment.

To install High Availability Console using the installation wizard

- 1 From the machine identified to serve as the Symantec High Availability Console, navigate to the software package directory and run **Setup.exe** to launch the installer or download the installation package from the following location:

<https://fileconnect.symantec.com>

- 2 On the product installer, click **Install/Upgrade Console Server Components** under Symantec High Availability Console to launch the installation wizard.
- 3 Review the prerequisites on the Welcome panel and then click **Next**.

Note that the **Check for product updates** check box is selected by default. The product installer searches for the available product updates on the SORT website. If you do not want to apply the available patches, clear the selection of **Check for product updates** check box.

You can download and apply the available updates.

- 4 On the License panel, read the Symantec Software License Agreement, select **I accept the terms of License Agreement**, and then click **Next**.

The **Participate in the Symantec Product Improvement Program by submitting system and usage information anonymously** check box is selected by default. The Product Improvement Program allows the product installer to collect installation, deployment, and usage data and submit it anonymously to Symantec. The collected information helps identify how customers deploy and use the product. If you do not want to participate in the product improvement program, clear the selection of the check box.

- 5 On the Product Updates panel, review the list of available product updates. This panel appears only if you have selected the **Check for product updates** check box on the Welcome panel.

The product updates comprise of the pre-installation patches, post-installation patches, High Availability Agents, and Array-Specific Modules. The panel lists the available pre-installation patches and the post-installation patches. Download and apply the pre-installation patches in the sequence shown in the table and the re-run the wizard. After the successful installation of the product, apply the post-installation patches. Also download and install the High Availability Agents and Array-Specific Modules from the SORT website.

6 On the vCenter Details panel, specify the vCenter Server details and then click **Next**.

Provide the following details:

Symantec High Availability Console IP	Select the IP address of the local system from the drop-down list. This is the IP of the machine where you will install the High Availability Console. The drop-down list may display several IPs if the system has multiple network adapters each with a unique IP address assigned. Select the host IP address that is accessible from the vCenter Server.
vCenter Server FQHN or IP	Specify the fully qualified host name or IP address of the VMware vCenter Server. Ensure that the specified vCenter Server host name or IP address is accessible from the machine where you are installing the Symantec High Availability Console.
Web Service Https Port	Specify the https port used by the VMware Web Service. The default port number is 443.
User Name	Specify the name of the user account that has the privileges to extend the vSphere Client. The installer uses this account to register the Symantec High Availability plugin on the vCenter Server.
Password	Specify the password for the user account specified in the User Name field.

7 On the System Validation panel, the installer automatically selects the local host for installation and begins verification.

After the status shows as *Ready for Install*, click **Next**.

The wizard uses `%Program Files%\Veritas` as the default installation directory. To change the directory, click the folder icon next to the system and then choose the installation directory.

The wizard performs validation checks on the machine. If the machine does not meet the required criteria, the status is reflected as *Verification failed*. To view the cause of a validation failure, click the Information icon. Rectify the issue and then click **Re-verify** to perform the validation checks again.

The wizard does not proceed unless the system passes the validation checks.

- 8 On the Pre-install Summary panel, review the pre-installation summary and then click **Next**.

Click **Save Report** if you wish to save the pre-installation summary report for reference.

- 9 The Installation panel displays the installation progress.

After the panel indicates that the installation is complete, click **Next**.

- 10 On the Post-install Summary panel, review the installation results and then click **Next**.

The wizard configures the required services and registers the Symantec High Availability plugin on the specified vCenter Server.

If the installation has failed on the system, review the post-install summary report and refer to the wizard log file for details.

The log file is located at

```
%AllUsersProfile%\Veritas\VPI\log\
```

You may have to repeat the installation if the wizard indicates that the install has failed.

If the logs indicate that the Symantec High Availability plugin registration has failed, you may have to manually register the plugin on the vCenter Server. Use the PluginMgmt.bat utility present at the following location to register the plugin.

```
installdirectory\ApplicationHA\bin
```

Here, *installdirectory* is the directory where you install the Console, typically, C:\Program Files\Veritas.

See “About the Symantec High Availability plugin registration or unregistration issues” on page 36.

- 11 On the Finish panel click **Finish**.

This completes the installation of Symantec High Availability Console.

Note: The Veritas Operations Manager- Managed Host (VOM MH) components are also installed along with the Console Server components.

To configure an application for high availability, you must now proceed to install the Symantec High Availability guest components on the systems where you want to configure the application.

You can install the guest components in any of the following ways:

- Using the product installer

For more details refer to the product installation and upgrade guide.

- Using the command line interface (CLI)

For more details refer to the product installation and upgrade guide.

- Using the VMware vSphere client integrated menu

For more details refer to the *Symantec High Availability Solutions Guide for VMware*.

- 12** This step is applicable only if you have re-installed Symantec High Availability Console in your monitoring environment.

After completing the installation, the Symantec High Availability tab may fail to retrieve the application status. In such a case, you may have to close the Symantec High Availability tab and open it again.

In the vSphere Client, click another virtual machine, then click the original virtual machine again and then select the Symantec High Availability tab, or exit the vSphere Client and launch it again.

The Symantec High Availability view then displays the status of the configured applications on the virtual machine.

The Symantec High Availability dashboard also displays the status of the configured applications on the virtual machine, and the other virtual machines under Symantec High Availability control in the same cluster or data center.

Administering the Symantec High Availability Console installation

This chapter includes the following topics:

- Upgrading the Console Server
- Repairing the Symantec High Availability Console installation
- Uninstalling Symantec High Availability Console

Upgrading the Console Server

Use the Symantec High Availability product installer to upgrade the Console. You can upgrade the Console on local machine only. After upgrade, the updated Symantec High Availability plugin is registered on the vCenter Server.

Note: If you upgrade the ApplicationHA Console to Symantec High Availability Console, then the application monitoring interfaces; the AppHA tab and the AppHA Dashboard (that are added to the vSphere Client) are upgraded to Symantec High Availability tab and Symantec High Availability dashboard.

Upgrade matrix

Table 3-1 lists the versions from which you can upgrade the Console to Symantec High Availability Console 6.1.

Table 3-1 Console upgrade matrix

Upgrade from	Upgrade to
ApplicationHA Console 6.0	Symantec High Availability Console 6.1
Symantec High Availability Console 6.0.1	
Symantec High Availability Console 6.1	

If your current installation does not meet the minimum level required by the installer, you must manually apply the appropriate upgrades to meet the minimum level required before proceeding with the installer. You can get the intermediate versions on the Symantec Support site.

Note: If you have configured monitoring for the ApplicationHA Console, then you must suspend the application monitoring before upgrading the Console. During the time the monitoring is suspended, Symantec ApplicationHA does not monitor the state of the Console. After the upgrade is complete, you can resume the application monitoring.

For more details on suspending and resuming the application monitoring, refer to *Symantec™ ApplicationHA User's Guide*.

To upgrade the Console Server

- 1** From the system where you want to upgrade the Console Server, navigate to the software package directory and run **Setup.exe** to launch the installer.
- 2** On the Symantec High Availability Installer, click **Install or upgrade Symantec High Availability Console Components** under Symantec High Availability Console tab to launch the installation wizard.
- 3** Review the prerequisites on the Welcome panel and then click **Next**.

Note that the **Check for product updates** check box is selected by default. The product installer searches for the available product updates on the SORT website. If you do not want to apply the available patches, clear the selection of **Check for product updates** check box.

- 4 On the License Agreement panel, read the Symantec Software License Agreement, select **I accept the terms of License Agreement**, and then click **Next**.

The **Participate in the Symantec Product Improvement Program by submitting system and usage information anonymously** check box is selected by default. The Product Improvement Program allows the product installer to collect installation, deployment, and usage data and submit it anonymously to Symantec. The collected information helps identify how customers deploy and use the product. If you do not want to participate in the product improvement program, clear the selection of the check box.

- 5 On the Product Updates panel, review the list of available product updates.

This panel appears only if you have selected the **Check for product updates** check box on the Welcome panel.

The product updates comprise of the pre-installation patches, post-installation patches, High Availability Agents, and Array-Specific Modules. The panel lists the available pre-installation patches and the post-installation patches. Download and apply the pre-installation patches in the sequence shown in the table and the re-run the wizard. After the successful installation of the product, apply the post-installation patches. Also download and install the High Availability Agents and Array-Specific Modules from the SORT website.

6 On the vCenter Details panel, specify the vCenter Server details and then click **Next**.

Provide the following details:

Symantec High Availability Console IP	<p>Select the IP address of the local system from the drop-down list.</p> <p>This is the IP of the machine where you will install the Console.</p> <p>The drop-down list may display several IPs if the system has multiple network adapters each with a unique IP address assigned.</p> <p>Select the host IP address that was used during the previous installation. This IP address must be accessible from the vCenter Server.</p>
vCenter Server FQHN or IP	<p>Specify the fully qualified host name or IP address of the VMware vCenter Server.</p> <p>Ensure that the specified vCenter Server FQHN or IP address is the same as that specified during the previous installation. This FQHN or IP address must be accessible from the machine where you are installing Symantec High Availability Console.</p>
Web Service Https Port	<p>Specify the https port used by the VMware Web Service.</p> <p>The default port number is 443.</p>
User Name	<p>Specify the name of the user account that has the privileges to extend the vSphere Client.</p> <p>The installer uses this account to register the updated Symantec High Availability plugin on the vCenter Server.</p>
Password	<p>Specify the password for the user account specified in the User Name field.</p>

- 7 On the System Validation panel, the installer automatically selects the local host for installation and begins the validation checks.

After the status shows as **Ready for Upgrade**, click **Next**.

The installation directory used during the previous installation is selected by default. You cannot customize the installation directory location.

If the system does not meet the required criteria, the status is reflected as "Verification failed". To view the cause of a validation failure, click the Information icon. Rectify the issue and then click **Re-verify** to perform the validation checks again. The wizard does not proceed unless the system has passed the validation checks.

- 8 On the Pre-install Summary panel, review the pre-installation summary and then click **Next**.

Click **Save Report** if you wish to save the pre-installation summary report for reference.

- 9 On the Stop Services panel, review the status of services getting stopped.

If a service fails to stop, click **Retry** to initiate the process again. If the service again fails to stop, run the following commands to manually stop the service:

Service	Command
Symantec ApplicationHA service	<code>net stop "ApplicationHA Server"</code>
Symantec ApplicationHA Authentication Service	<code>net stop "AppHASecD"</code>
Symantec ApplicationHA Database Service	<code>net stop "SQLANYe_ApplicationHADb"</code>

- 10 The Installation panel displays the installation progress. After the panel indicates that the installation is complete, click **Next**.

- 11 On the Post-install Summary panel, review the installation results and then click **Next**.

The wizard configures the required services and registers the updated Symantec High Availability plugin on the specified vCenter Server.

If the installation has failed, review the post-install summary report and refer to the wizard log file for details.

The log file is located at

```
%AllUsersProfile%\Veritas\VPI\log\<date_timestamp>.
```

If the logs indicate that the Symantec High Availability plugin registration has failed, you may have to manually register the plugin on the vCenter Server. Use the PluginMgmt.bat utility to register the plugin.

- 12 On the Finish panel click **Finish**.

This completes the Console Server upgrade.

Note: In case the Console upgrade process fails, you must uninstall the Console and then reinstall it.

See “Uninstalling Symantec High Availability Console” on page 26.

Repairing the Symantec High Availability Console installation

Use the Symantec High Availability installer to repair the Symantec High Availability Console installation in your VMware virtualization environment.

Repairing the installation restores the server installation to its original state. Repairing fixes missing or corrupt files, shortcuts, and registry entries on the local system.

Note: You can repair the Symantec High Availability Console installation on the local system only. Repairing an installation remotely is not supported.

Consider the following points before you proceed:

- If you have configured application monitoring for Symantec High Availability Console itself, then you must unconfigure the same before repairing the installation. After the installation repair is complete, you must reconfigure it again.

- While the installer is repairing the Console installation the Symantec High Availability view and the Symantec High Availability dashboard in the vSphere Client may not display the most current status of the applications configured on the virtual machines.
- The installer uses the logged-on user account context to perform the repair. Verify that the logged-on user has local administrator privileges on the system where you want to repair the installation.
- After the repair completes successfully, you may have to register the Symantec High Availability plugin on the VMware vCenter Server again.
For details refer to:
See “About the Symantec High Availability plugin registration or unregistration issues” on page 36.

To repair the Symantec High Availability Console installation

- 1 On the Symantec High Availability Console system open Windows Programs and Features.
- 2 Select **Symantec High Availability 6.1 Console** in the programs list and then click **Change** to launch the installer.
- 3 On the Mode Selection panel, click **Repair** and then click **Next**.
- 4 Click **OK** on the dialog box that prompts you to repair the Veritas Operations Manager (Host Component). This does not begin to repair the VOM installation.

Refer to VOM documentation for more information.

- 5 On the System Validation panel the installer automatically selects the local system for repair and begins the validation checks. After the status shows as *Ready for repair*, click **Next**.

You can repair the installation on the local system only.

If the system does not meet the required criteria, the status is reflected as "Verification failed". To view the cause of a validation failure, click the Information icon. Rectify the issue and then click **Re-verify** to perform the validation checks again.

The wizard does not proceed with the repair unless the system has passed the validation checks.

- 6 On the Pre-install Summary panel, review the pre-update summary and then click **Next**.

Click **Save Report** if you wish to save the summary report for reference.

- 7 The Installation panel displays the installation progress. After the panel indicates that the installation is complete, click **Next**.

- 8 On the Post-install Summary panel, review the installation results and then click **Next**.

If the installation has failed, review the post-install summary report and refer to the wizard log file for details.

The log file is located at

```
%AllUsersProfile%\Veritas\VPI\log\
```

You may have to repeat the installation repair in case the installation fails.

- 9 On the Finish panel click **Finish**.

This completes the Symantec High Availability Console installation repair.

- 10 After performing the repair, the Symantec High Availability tab may fail to retrieve the application status. In such a case, you may have to close the Symantec High Availability tab and open it again.

In the vSphere Client, click another virtual machine, then click the original virtual machine again and then select the Symantec High Availability tab, or exit the vSphere Client and launch it again. The Symantec High Availability view then displays the status of the configured applications on the virtual machine.

The Symantec High Availability dashboard also displays the status of the configured applications on the virtual machine, and the other virtual machines that are included in the same cluster or data center.

Uninstalling Symantec High Availability Console

Use the Console server installation wizard to uninstall the Symantec High Availability Console from your VMware virtualization environment.

Consider the following points before you proceed:

- As part of the Console uninstallation, the installer also unregisters the Symantec High Availability plugin for vCenter Server. As a result the Symantec High Availability tab and the Symantec High Availability dashboard will be removed from the vSphere Client.
- If the purpose of the uninstall is to replace the existing server with another Symantec High Availability Console, then the application status may not be visible in the vSphere Client until the new server is installed and configured.
- The uninstallation must run locally. Remote uninstall is not supported.
- The installer uses the logged-on user account context to perform the uninstallation. Verify that the logged-on user has local administrator privileges on the system where you want to uninstall.

- If you have configured monitoring for the Console Server itself, then you must unconfigure the same before uninstalling the Console.
- Veritas Operations Manager binaries are installed as part of the Console installation. Do not uninstall these binaries before uninstalling the Console components.

Perform the following steps to uninstall the Symantec High Availability Console.

To uninstall the Symantec High Availability Console

- 1 On the Symantec High Availability Console host open Windows Add or Remove Programs.
- 2 In the Add or Remove Programs window, select **Symantec High Availability 6.1 Console** and then click **Uninstall**.
 This launches the Symantec High Availability installer.
- 3 Review the prerequisites on the Welcome panel and then click **Next**.
- 4 On the VMware vCenter Server Details panel, specify the vCenter Server details and then click **Next**.

Provide the following details:

vCenter Server Name or IP	Specify the host name or IP address of the VMware vCenter Server. Ensure that the specified vCenter Server host name or IP address is accessible from the High Availability Console host.
Web Service Https Port	Specify the https port used by the VMware Web Service. The default port number is 443.
User Name	Specify the name of the user account that has the privileges to extend the vSphere Client. The installer uses this account to unregister the High Availability plugin on the vCenter Server.
Password	Specify the password for the user account specified in the User Name field.

- 5 On the System Validation panel, the installer automatically selects the local host for uninstallation and begins verification. After the status shows as **Ready for uninstall**, click **Next**.

If the system does not meet the required criteria, the status is reflected as **Verification failed**. To view the cause of a validation failure, click the Information icon. Rectify the issue and then click **Re-verify** to perform the validation checks again.

The wizard does not proceed unless the system passes the validation checks.

- 6 On the Pre-uninstall Summary panel, review the summary and then click **Next**.

Click **Save Report** if you wish to save the pre-uninstallation summary report for reference.

- 7 The Symantec High Availability Console Un-installation panel displays the progress of the uninstallation.

After the panel indicates that the uninstallation is complete, click **Next**.

The installer stops the required services and unregisters the Symantec High Availability plugin on the vCenter Server.

- 8 On the Post-uninstall Summary panel, review the results and then click **Next**.

If the uninstallation has failed, review the post-uninstall summary report and refer to the wizard log file for details.

The log file is located at

```
%AllUsersProfile%\Veritas\VPI\log\
```

You may have to repeat the uninstallation if the wizard indicates that the installation itself has failed.

If the logs indicate that the Symantec High Availability plugin uninstallation has failed, you must disable the plugin from the vSphere Client menu (**Plugins > Manage Plugins**)

- 9 On the Finish panel click **Finish**.

This completes the Symantec High Availability Console uninstallation.

Note: After the Console is uninstalled, you may notice that the "ApplicationHA" folder is retained at the following location:

C:\ProgramData\Symantec

If you plan to reinstall Console, you must stop the Veritas Messaging Service, delete the "ApplicationHA" folder and then run the installation wizard.

Roles and privileges

This appendix includes the following topics:

- About the roles and privileges assigned
- Configuring Symantec High Availability access control

About the roles and privileges assigned

The following set of privileges are available after you install the Symantec High Availability Console. These privileges define the operations that a user can perform on the system. You can create roles and then assign privileges to them or assign privileges to the existing roles that are available in the vSphere environment. Application monitoring operations are enabled or disabled depending on the privileges that are assigned to the vCenter user account. For example, the Admin privilege is required for configuring application monitoring on a system.

vCenter Server administrators can use these privileges to configure access control while monitoring an application.

- **View Application State (Guest)**
Can view the application status on the system. The Guest cannot perform any application monitoring operations.
- **Control Application Availability (Operator)**
Can perform all the operations that include start and stop configured applications, enable and disable application monitoring, specify the application monitoring configuration settings, enter and exit application maintenance mode, and view the application status.
The Operator cannot configure or unconfigure application monitoring on the system.
- **Configure Application Availability (Admin)**

Can perform all operations that include configure and unconfigure application monitoring, start and stop configured applications, enable and disable application monitoring, specify the application monitoring configuration settings, enter and exit application maintenance mode, and view application status.

Configuring Symantec High Availability access control

After installing the Symantec High Availability solution you may want to configure access control for virtual machine users in our environment.

Use the vSphere Client to configure access control and to assign the privileges. You can either create additional roles or assign these privileges to existing roles directly.

Refer to the VMware documentation for more details on roles, users, and groups.

To assign Symantec High Availability user privileges

- 1 From the vSphere Client Home page click **Roles**.
- 2 In the Roles list, right-click the role to edit and click **Edit Role**.
- 3 In the Edit Role dialog box, expand **All Privileges**.
You should see the Symantec High Availability privileges in the list.
- 4 Expand Symantec High Availability privileges and then select the check boxes of the privilege you want to enable for the role.
- 5 Click **OK**.

Troubleshooting

This appendix includes the following topics:

- About the installer and Console logging
- Troubleshooting Console issues
- Troubleshooting the Symantec High Availability plugin issues

About the installer and Console logging

Symantec High Availability Console installer logs contain details about the installation tasks and the overall progress status. These logs are useful for resolving common installation related issues.

The installer creates the log directory as soon as you launch the wizard.

The log file is located at the following location:

```
%AllUsersProfile%\Veritas\VPI\log\\HighAvailability_Console601_Installer_A.log
```

Here, %AllUsersProfile% is the Windows variable that typically expands to C:\ProgramData.

To collect the Symantec High Availability Console logs, use the `hagetcf` utility. This utility retrieves and writes detailed diagnostic information about the monitoring configuration. These details are useful for debugging configuration related issues.

After you install the Symantec High Availability Console the `hagetcf` utility is available in the following directory on the Console host:

```
%AllUsersProfile%\Symantec\ApplicationHA\Log
```

Perform the following steps to collect the Symantec High Availability Console logs

- 1 On the Symantec High Availability Console host, navigate to the following directory from the command prompt:

```
%AllUsersProfile%\Symantec\ApplicationHA\Log
```

- 2 Run the `hagetcf` utility from the directory.

Type the following command:

```
hagetcf
```

The `hagetcf` utility writes the output to

```
%systemdrive%\hagetcf\mdd_<unique number> directory.
```

For example, `C:\hagetcf\0819_2316`.

The directory contains several folders and log files representing various components.

Troubleshooting Console issues

This section lists common troubleshooting scenarios that you may encounter while or after installing the Symantec High Availability Console.

Backing up Symantec High Availability Console files and registry

After configuring application monitoring on the virtual machines, you can take a backup of Symantec High Availability Console files and registry keys. The backed up files can be used to restore the configuration data in cases where the Console files become corrupt.

You perform the following steps on the Symantec High Availability Console host.

To back up Symantec High Availability Console files and registry

- 1 Stop the following ApplicationHA services.
 - Symantec ApplicationHA Authentication Service
 - Symantec ApplicationHA Database Service
 - Symantec ApplicationHA Service
- 2 Back up the following directory from the Symantec High Availability Console host:

```
<installdirectory>\Veritas Shared
```

Here, *<installdirectory>* is the directory where you installed the Console, typically, `C:\Program Files\Veritas`.

- 3 Click **Start > Run**, type **regedit** and then click **OK** to open the Windows Registry Editor and then navigate to the following location:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Veritas\VPI
```

- 4 Take a back up of the VPI key.

Right-click **VPI**, then click **Export** and then specify the file name and a location for saving the VPI registry branch.

- 5 Back up the following directories on the Symantec High Availability Console host:

```
%AllUsersProfile%\Symantec\ApplicationHA\sec
%AllUsersProfile%\Symantec\ApplicationHA\conf
%AllUsersProfile%\Symantec\ApplicationHA\BESec\certstore
%AllUsersProfile%\Symantec\ApplicationHA\BESec\keystore
```

Here %AllUsersProfile% typically expands to C:\ProgramData.

Store the backup files at a location from where you can retrieve them, if required. See the troubleshooting section for information on how to restore these files in case of a file corruption on the Console host.

Symantec High Availability Console files become corrupt

If the Symantec High Availability Console files and registry becomes corrupt and the Console fails to respond, perform the following to restore and get the Symantec High Availability Console up and running.

These steps presume that you had backed up the following directories and registry from the Symantec High Availability Console host, after configuring application monitoring on the virtual machines:

- *<installdirectory>*\Veritas Shared
 Here, *<installdirectory>* is the directory where you installed the Console, typically, C:\Program Files\Veritas.
- %AllUsersProfile%\Symantec\ApplicationHA\sec
 %AllUsersProfile%\Symantec\ApplicationHA\conf
 Here %AllUsersProfile% typically expands to C:\ProgramData.
- HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Veritas\VPI

Perform the following steps on the Symantec High Availability Console host:

- 1 Restore the veritas shared directory that you backed up to the following location:

`<installdirectory>\`

Here, *<installdirectory>* is the directory where you installed the Console, typically, `C:\Program Files\Veritas`.

- 2 From the Windows registry editor, restore the following VPI registry key that you had backed up earlier:

Perform the following:

- Click **Start > Run**, type `regedit` and then click **OK** to open the Windows Registry Editor.

- Navigate to the following location:

`HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Veritas`

- Click **File > Import** and then specify the VPI registry key that you had backed up earlier and then click **Open**.

- After the import is successful, save and close the registry editor.

- 3 From the Windows Add or Remove Programs, repair Symantec High Availability Console.

- 4 After the Console repair completes, stop the following services:

- Symantec ApplicationHA Authentication Service
- Symantec ApplicationHA Service
- Veritas Storage Foundation Messaging Service

- 5 Restore the `sec` and `conf` directories that you backed up earlier at the following location:

`%AllUsersProfile%\Symantec\ApplicationHA\`

`%AllUsersProfile%\Symantec\ApplicationHA\`

Here `%AllUsersProfile%` typically expands to `C:\ProgramData`.

- 6 Start the services that you stopped in step 5 earlier

- 7 Exit the vSphere client, launch it again and then log on to the vCenter Server that manages the virtual machines where you have configured application monitoring.

- 8 In the vSphere client Inventory pane, click on a virtual machine where you have configured application monitoring, and then select the Symantec High Availability tab to view the status of the applications configured.

Symantec High Availability Console host becomes permanently unavailable

If the Symantec High Availability Console host becomes unavailable either due to a server crash or because you want to set up the Console on a new server altogether, there are series of steps that you must perform before you get the new Symantec High Availability Console host up and running.

Perform the following steps:

- 1 Unregister the Symantec High Availability plugin for the vCenter Server.
 - If your existing Symantec High Availability Console host is still available, use the pluginmgmt.bat utility for the operation.
 - If you have lost the existing Symantec High Availability Console host, unregister the plugin manually, using VMware MOB.
- 2 Install Symantec High Availability Console on a new system.
- 3 Exit the vSphere client, launch it again and then log on to the vCenter Server that manages the virtual machines where you have configured application monitoring.
- 4 From the vSphere client Inventory pane, click on a virtual machine where you have configured application monitoring, select the Symantec High Availability tab, and then configure the virtual machine administrator account on the new Console host.
- 5 Repeat step 4 for all the virtual machines where you have configured application monitoring.

The Symantec High Availability tab then displays the status of the configured applications on the virtual machines.
- 6 Configure Symantec High Availability user privileges for the vCenter Server users, if required.

If the Console host abruptly restarts, the high availability tab may disappear

If the system that hosts the Symantec High Availability Console abruptly restarts, then the registration of the Symantec High Availability plugin with the VMware vCenter Server does not persist.

As a result, the Symantec High Availability tab does not appear on the vSphere Client GUI. (2919549)

Workaround: Repair the Console installation.

Troubleshooting the Symantec High Availability plugin issues

This section lists common troubleshooting scenarios that you may encounter while or after registering the Symantec High Availability plugin.

About the Symantec High Availability plugin registration or unregistration issues

The Symantec High Availability Plugin for vCenter Server is registered when you install the Symantec High Availability Console.

You may need to manually unregister and register the plugin in cases where,

- the plugin registration or unregistration has failed during Symantec High Availability Console installation or uninstallation, respectively.
- you wish to change the existing Symantec High Availability Console host, or if there is a change in the vCenter Web Service port.

The PluginMgmt.bat utility helps you manage the Symantec High Availability plugin registration in your VMware environment. The utility provides options to register, unregister, and verify the registration of the plugin on the vCenter Server.

The PluginMgmt.bat utility is available in the following directory on the Console host:

```
<installdirectory>\ApplicationHA\bin
```

Here, <installdirectory> is the directory where you install the Console, typically, C:\Program Files\Veritas.

To administer the plugin registration using PluginMgmt.bat

- 1 From the Symantec High Availability Console host, launch the command prompt in the Run as Administrator mode and then navigate to the following directory in the command window:

<installdirectory>\ApplicationHA\bin

2 Type the following command to run the pluginmgmt.bat in desired mode:

```
PluginMgmt <register|unregister|verify>  
<Symantec High Availability Console_IP>  
<vCenterServer_IP> <vCenterServerSDK_Port>  
<vCenterServer_Username> <vCenterServer_Password>
```

The following inputs are required:

register unregister verify	Specify register to register the plugin. Specify unregister to unregister the plugin. Specify verify to validate the plugin registration. The PluginMgmt.bat utility performs these operations on the vCenter Server specified for vCenterServer_IP value.
Symantec High Availability Console_IP	If you wish to register the plugin, specify the IP address of the system where you installed the Symantec High Availability Console. If you wish to unregister or verify the plugin, specify the IP address of the system that is currently running the Symantec High Availability Console.
vCenterServer_IP	Specify the IP address of the vCenter Server used to manage the virtual machines.
vCenterServerSDK_Port	If you wish to register or verify the plugin, specify the port used by the VMware Web Service. If you wish to unregister the plugin, then specify the port that was used while registering the plugin. The default port is 443.
vCenterServer_Username	Specify a user account that has the vCenter Extension privileges on the vCenter Server specified for vCenterServer_IP value.
vCenterServer_Password	Specify the password of the user account specified for vCenterServer_Username value.

The output of the command confirms the status of the requested operation.

The Symantec High Availability plugin available in the vCenter Server Plug-in Manager is "Disabled"

This issue typically occurs if the vCenter Server fails to access the Symantec High Availability Console IP, that was used while configuring single sign-on between the Symantec High Availability Console and the vCenter Server. Since the plugin is disabled the Symantec High Availability tab and dashboard are not available.

Resolution:

Perform the following steps to resolve the issue

- 1 Using the PluginMgmt.bat utility unregister the plugin and then register it again.

While registering the plugin again, specify a Console server IP address that is accessible over the network from the vCenter Server.

- 2 On the Console Server, run the following command and then restart the Symantec High Availability Service.

```
"c:\Program Files\Veritas\VRTSsfmh\bin\perl.exe" "c:\Program
Files\Veritas\ApplicationHA\bin\create_cert.pl"
AppHAConsoleIP=ConsoleIP
```

The ConsoleIP is the IP address you specified while registering the plugin again.

Difference between ApplicationHA Console and Symantec High Availability Console

This appendix includes the following topics:

- ApplicationHA Console and Symantec High Availability Console—What's the difference?

ApplicationHA Console and Symantec High Availability Console—What's the difference?

The Symantec High Availability Console is a replacement for the ApplicationHA Console. ApplicationHA Console is a predecessor of the Symantec High Availability Console.

Table C-1 lists the differences between the ApplicationHA Console and Symantec High Availability Console

Table C-1 Differences between ApplicationHA Console and Symantec High Availability Console

Category	ApplicationHA Console	Symantec High Availability Console
About the Console	Manages installation of ApplicationHA guest components	Manages installation of the following: <ul style="list-style-type: none"> ■ ApplicationHA guest components ■ Symantec High Availability guest components (VCS)
Console versions	5.1 SP1, 5.1 SP2, and 6.0	6.0.1, 6.1, 6.2
Supported guest components	ApplicationHA guest components version- 5.1SP1, 5.1 SP2, and 6.0 Note: ApplicationHA Console does not support Symantec High Availability guest components.	<ul style="list-style-type: none"> ■ ApplicationHA guest components version- 5.1 SP2 and later ■ Symantec High Availability guest components (VCSW and SFW HA) version- 6.0.1 and later ■ Symantec High Availability guest components (VCS and SF HA) version- 6.0.2 and later

Table C-1 Differences between ApplicationHA Console and Symantec High Availability Console (continued)

Category	ApplicationHA Console	Symantec High Availability Console
Supported Console upgrades	<ul style="list-style-type: none"> ■ ApplicationHA Console 6.0 to the following: <ul style="list-style-type: none"> ■ Symantec High Availability Console 6.0.1 ■ Symantec High Availability Console 6.1 ■ Symantec High Availability Console 6.2 ■ ApplicationHA Console 5.1SP2 to the following: <ul style="list-style-type: none"> ■ ApplicationHA Console 6.0 ■ Symantec High Availability Console 6.0.1 ■ ApplicationHA Console 5.1SP1 to the following: <ul style="list-style-type: none"> ■ ApplicationHA Console 5.1 SP2 ■ ApplicationHA Console 6.0 	<p>Symantec High Availability Console 6.0.1 to 6.2</p> <p>Symantec High Availability Console 6.1 to 6.2</p> <p>Note: If you upgrade ApplicationHA Console to Symantec High Availability Console, then the application monitoring interfaces; the AppHA tab and the AppHA Dashboard (that are added to the vSphere Client) are upgraded to Symantec High Availability tab and Symantec High Availability dashboard.</p>
About Console coexistence	<ul style="list-style-type: none"> ■ Only one Console can be configured with a single VMware vCenter server. ■ To configure the Symantec High Availability Console with a VMware vCenter Server that is already configured with ApplicationHA Console, you must upgrade the ApplicationHA Console to Symantec High Availability Console. 	

44 | Difference between ApplicationHA Console and Symantec High Availability Console
ApplicationHA Console and Symantec High Availability Console—What's the difference?