# Symantec High Availability Console Installation and Upgrade Guide

Windows Server 2012 (x64)

6.0.2



# Symantec<sup>™</sup> High Availability Solution Installation and Configuration Guide for VMware

The software described in this book is furnished under a license agreement and may be used only in accordance with the terms of the agreement.

Product version: 6.0.2

Document version: 6.0.2 Rev 0

### Legal Notice

Copyright © 2013 Symantec Corporation. All rights reserved.

Symantec, the Symantec Logo, the Checkmark Logo, Veritas, Veritas Storage Foundation, CommandCentral, NetBackup, Enterprise Vault, and LiveUpdate are trademarks or registered trademarks of Symantec Corporation or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.

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

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

The Licensed Software and Documentation are deemed to be commercial computer software as defined in FAR 12.212 and subject to restricted rights as defined in FAR Section 52.227-19 "Commercial Computer Software - Restricted Rights" and DFARS 227.7202, "Rights in Commercial Computer Software or Commercial Computer Software Documentation", as applicable, and any successor regulations. Any use, modification, reproduction release, performance, display or disclosure of the Licensed Software and Documentation by the U.S. Government shall be solely in accordance with the terms of this Agreement. Symantec Corporation 350 Ellis Street Mountain View, CA 94043

http://www.symantec.com

### **Technical Support**

Symantec Technical Support maintains support centers globally. Technical Support's primary role is to respond to specific queries about product features and functionality. The Technical Support group also creates content for our online Knowledge Base. The Technical Support group works collaboratively with the other functional areas within Symantec to answer your questions in a timely fashion. For example, the Technical Support group works with Product Engineering and Symantec Security Response to provide alerting services and virus definition updates.

Symantec's support offerings include the following:

- A range of support options that give you the flexibility to select the right amount of service for any size organization
- Telephone and/or Web-based support that provides rapid response and up-to-the-minute information
- Upgrade assurance that delivers software upgrades
- Global support purchased on a regional business hours or 24 hours a day, 7 days a week basis
- Premium service offerings that include Account Management Services

For information about Symantec's support offerings, you can visit our website at the following URL:

#### www.symantec.com/business/support/index.jsp

All support services will be delivered in accordance with your support agreement and the then-current enterprise technical support policy.

### **Contacting Technical Support**

Customers with a current support agreement may access Technical Support information at the following URL:

#### www.symantec.com/business/support/contact\_techsupp\_static.jsp

Before contacting Technical Support, make sure you have satisfied the system requirements that are listed in your product documentation. Also, you should be at the computer on which the problem occurred, in case it is necessary to replicate the problem.

When you contact Technical Support, please have the following information available:

Product release level

- Hardware information
- Available memory, disk space, and NIC information
- Operating system
- Version and patch level
- Network topology
- Router, gateway, and IP address information
- Problem description:
  - Error messages and log files
  - Troubleshooting that was performed before contacting Symantec
  - Recent software configuration changes and network changes

#### Licensing and registration

If your Symantec product requires registration or a license key, access our technical support Web page at the following URL:

www.symantec.com/business/support/

### **Customer service**

Customer service information is available at the following URL:

www.symantec.com/business/support/

Customer Service is available to assist with non-technical questions, such as the following types of issues:

- Questions regarding product licensing or serialization
- Product registration updates, such as address or name changes
- General product information (features, language availability, local dealers)
- Latest information about product updates and upgrades
- Information about upgrade assurance and support contracts
- Information about the Symantec Buying Programs
- Advice about Symantec's technical support options
- Nontechnical presales questions
- Issues that are related to CD-ROMs or manuals

### Support agreement resources

If you want to contact Symantec regarding an existing support agreement, please contact the support agreement administration team for your region as follows:

Asia-Pacific and Japan	customercare_apac@symantec.com
Europe, Middle-East, and Africa	semea@symantec.com
North America and Latin America	supportsolutions@symantec.com

### About Symantec Connect

Symantec Connect is the peer-to-peer technical community site for Symantec's enterprise customers. Participants can connect and share information with other product users, including creating forum posts, articles, videos, downloads, blogs and suggesting ideas, as well as interact with Symantec product teams and Technical Support. Content is rated by the community, and members receive reward points for their contributions.

http://www.symantec.com/connect/storage-management

### Documentation

Your feedback on product documentation is important to us. Send suggestions for improvements and reports on errors or omissions. Include the title and document version (located on the second page), and chapter and section titles of the text on which you are reporting. Send feedback to:

#### doc\_feedback@symantec.com

For information regarding the latest HOWTO articles, documentation updates, or to ask a question regarding product documentation, visit the Storage and Clustering Documentation forum on Symantec Connect.

https://www-secure.symantec.com/connect/storage-management/ forums/storage-and-clustering-documentation

## Contents

Technical Sup	port	4
Chapter 1	Introducing the Symantec High Availability Console	9
	About the Symantec High Availability Console Supported VMware versions Supported operating systems Getting started with Symantec High Availability solution	10 10
Chapter 2	Installing the Symantec High Availability Console	13
	Before installing the Symantec High Availability Console Additional requirements Ports and firewall settings Installing Symantec High Availability Console Executing the ApplyPatch.bat file	14 15 16
Chapter 3	Administering the Symantec High Availability Console installation	21
	Upgrading the Console Server Repairing the Symantec High Availability Console installation Uninstalling Symantec High Availability Console	. 25
Appendix A	Roles and privileges	. 31
	About the roles and privileges assigned Configuring Symantec High Availability access control	
Appendix B	Troubleshooting	33
	About the installer and Console logging Troubleshooting Console issues Symantec High Availability Console files become corrupt Symantec High Availability Console host becomes permanently unavailable	34 34

Troubleshooting the Symantec High Availability plugin issues	36
About the Symantec High Availability plugin registration or	
unregistration issues	37
The Symantec High Availability plugin available in the vCenter	
Server Plug-in Manager is "Disabled"	39

# Chapter

# Introducing the Symantec High Availability Console

This chapter includes the following topics:

- About the Symantec High Availability Console
- Supported VMware versions
- Supported operating systems
- Getting started with Symantec High Availability solution

## 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.

You can install the Console server on a system thats 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 guest components
- Manage the Symantec High Availability guest components licenses
- Configure application monitoring

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 the Symantec High Availability home page, in 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 the Symantec High Availability guest components and to manage the licenses.

### Supported VMware versions

The Symantec High Availability solution currently supports the following VMware servers and management clients:

VMware ESX Server	4.1, 4.1 Update 1, 4.1 Update 2
VMware ESXi Server	4.1, 5.0, 5.0 Update 1 and 5.1
VMware vCenter Server	4.1, 4.1 Update 1, 5.0 <b>Note:</b> VMware Fault Tolerance is not supported.
VMware vSphere Client	4.1, 5.0, 5.0 Update 1 and 5.1

## Supported operating systems

 Table 1-1 lists the operating systems on which you can install the Symantec High

 Availability Console.

Server	Architecture	Edition	Service Pack
Windows Server 2008	x64	Standard Edition Enterprise Edition Datacenter Edition Web Edition Small Business Server	SP1 required, SP2 supported

Tabla 1 1	Supported operating systems for Sympotes High Availability Consolo
Table 1-1	Supported operating systems for Symantec High Availability Console

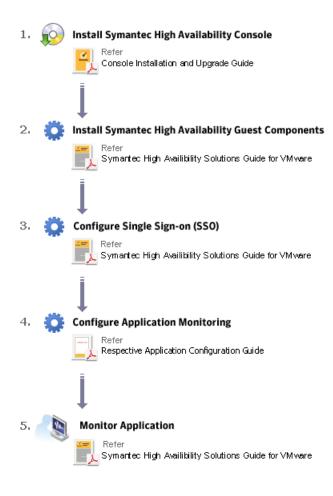
Table 1-1	Supported operating systems for Symantec High Availability Console	
	(continued)	

Server	Architecture	Edition	Service Pack
Windows Server	x64	Standard Edition	SP1
2008 R2		Enterprise Edition	
		Datacenter Edition	
		Web Edition	

# Getting started with Symantec High Availability solution

The Symantec High Availability solution can be deployed by following five simple steps.

The following figure represents the workflow for getting started with the Symantec High Availability solution and the corresponding document you must refer for details.



## Chapter

# 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
- Executing the ApplyPatch.bat file

## Before installing the Symantec High Availability Console

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

- The installation must be run locally. Remote install is not supported.
- You can install the Symantec High Availability Console on Windows Server 2008 or Windows Server 2008 R2 servers only.
- You can install the Symantec High Availability Console on a dedicated physical host or a virtual machine or on the vCenter Server itself. If you wish to configure availability for the Console Server itself, you must install the Console on a virtual machine.
- 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	
Tools > Internet Options, Security tab	<ul> <li>Active scripting</li> <li>Run ActiveX controls and plug-ins</li> <li>Script ActiveX controls marked safe for scripting</li> </ul>
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

Certain ports and services are used during installation and configuration of the Symantec High Availability Console. If you have configured a firewall, ensure that the firewall settings allow access to these ports and services.

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

of the Symantec High Availability Console

**Note:** Ensure that you enable the ports and services for both, inbound and outbound communication.

Services and ports used during the installation and configuration

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 High Availability 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.

Component Name/Process	Port/Protocol	Description
Symantec High Availability 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 (xprtld)	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.

## Table 2-1Services and ports used during the installation and configuration<br/>of the Symantec High Availability Console (continued)

### 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		Select the IP address of the local system from the drop-down list.
	Availability Console IP	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.
	-	Specify the https port used by the VMware Web Service.
	Port	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 <code>%Program Files%\Veritas</code> 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\<date\_timestamp>.

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.

 $install directory \verb|ApplicationHA\bin$ 

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 37.

**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 alongwith the Console Server components.

**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.

## Executing the ApplyPatch.bat file

Execute the ApplyPatch.bat file on the Console Server to perform the following:

- Install the Symantec High Availability guest components on a system running Windows Server 2012 operating system.
- Issue the 2048 bits authentication certificate for secured and encrypted communication between the client and server.

Over a https network pre-installed authentication certificates are issued to ensure secured and encrypted communication between the client and the Server. Older browsers required a 512 bits certificate. However, the newer browsers now require a certificate of minimum 1024 bits.

#### To execute the ApplyPatch.bat file

**1** On the product software disc, navigate to the following path:

apphaconsole-win\patch

- 2 Copy the contents to a temporary location.
- 3 From the command prompt run the "ApplyPatch.bat" file

# Chapter

# 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.

When upgrading the Console Server, ensure that the Symantec ApplictionHA Console Server version 5.1 SP2 or 6.0 is installed. 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:** In case the Console upgrade process fails, you must uninstall the Console and then reinstall it.

See "Uninstalling Symantec High Availability Console" on page 27.

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

**5** 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 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 was used during the previous installation. This IP address must be 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 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.
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 updated Symantec High Availability plugin on the vCenter Server.
Password	Specify the password for the user account specified in the User Name field.

**6** 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.

7 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.

8 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 High Availability service	net stop "ApplicationHA Server Server"
Symantec High Availability Authentication Service	net stop "AppHASecD"
Symantec High Availability Database Service	net stop "SQLANYe_ApplicationHAdb"

**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 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.

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

This completes the Console Server upgrade.

# 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, then 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 37.

#### To repair the Symantec High Availability Console installation

**1** On the Symantec High Availability Console system open Windows Programs and Features.

Click **Start > Settings > Control Panel** and then double-click **Programs and Features**.

- 2 Select **Symantec High Availability 6.0.1 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\<date\_timestamp>.

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** If you have configured application monitoring for the Console itself, then start the Veritas High Availability Engine service on the Symantec High Availability Console host.

To start the Veritas High Availability Engine service type the following command on the command prompt:

hastart

**11** 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.

Click **Start > Settings > Control Panel** and then double-click **Programs and Features**.

2 In the Add or Remove Programs window, select **Symantec High Availability 6.0.1 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\<date\_timestamp>.

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.

## Appendix

# 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.

## Appendix

# 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:

%AllUsersProfile%/Veritas/VPI/log/<date timestamp>/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:

%ALLUSERPROFILE%\Symantec\ApplicationHA\Logs

#### 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:

%AllUSERPROFILE%\Symantec\ApplicationHA\Logs

**2** Run the hagetcf utility from the directory.

Type the following command:

hagetcf

The hagetcf utility writes the output to %systemdrive%\hagetcf\mmdd uniquenumberdirectory.

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.

### 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\

 $\label{eq:allusersProfile} \end{tabular} Symantec \end{tabular} Application \end{tabular} HA \end{tabular}$ 

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.

# 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 <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.

40 | Troubleshooting Troubleshooting the Symantec High Availability plugin issues