Symantec™ ApplicationHA Getting Started Guide

Windows on VMware

6.1

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Legal Notice

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

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

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

Symantec ApplicationHA Getting Started Guide

This document includes the following topics:

- What is Symantec ApplicationHA

- How Symantec ApplicationHA works with VMware vCenter Server

- Symantec ApplicationHA agents

- About ApplicationHA licensing

- Getting started with ApplicationHA

- Documentation

What is Symantec ApplicationHA

ApplicationHA is one of the application availability management solutions from Symantec. It provides monitoring capabilities for applications running inside virtual machines managed by a VMware vCenter Server. Symantec ApplicationHA adds a layer of application awareness to the core HA functionality offered by VMware virtualization technology.

Symantec ApplicationHA is based on ™ Cluster Server (VCS) and uses similar concepts such as agents, resources, and service groups. However, it does not include the high availability cluster components such as the Group Membership and Atomic Broadcast (GAB) and Low Latency Transport (LLT). Symantec ApplicationHA has a lightweight server footprint that allows faster installation and configuration.

Key benefits include the following:

- Out of the box integration with VMware vCenter Server.

- Full visibility and control over applications with the ability to start, stop, and monitor applications running inside virtual machines.

- Standardized way to manage applications using a single interface that is integrated with either VMware vSphere Client or the VOM Management Server console.

- Specialized Application Maintenance mode, in which ApplicationHA allows you to intentionally take an application out of its purview for maintenance or troubleshooting.

- Integration with VMware SRM Server that provides the capability to resume application monitoring after the virtual machines are started on the recovery site.

How Symantec ApplicationHA works with VMware vCenter Server

Symantec ApplicationHA communicates directly with VMware HA. ApplicationHA conveys the application health status in the form of an application heartbeat. This allows VMware HA to automatically reset or restart a virtual machine if the application heartbeat is not received within a specified interval.

In a VMware SRM environment, ApplicationHA provides application monitoring continuity after the virtual machines failover to the recovery site.

The following figure displays the sample deployment of Symantec ApplicationHA.
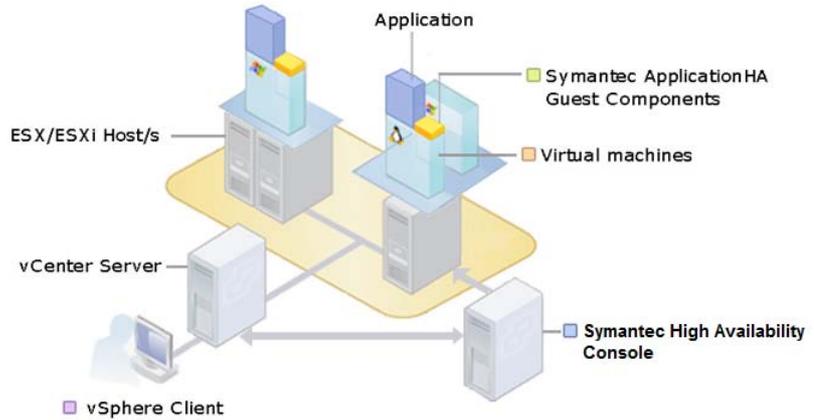
Symantec ApplicationHA Guest Components
- Include Heartbeat components integrated with VMware HA
- Include other components for monitoring application status

Virtual machines
- Running Windows OS or Linux OS

Symantec High Availability Console
- Integrates with vSphere Client
- Has vCentre privileges to provide discretionary access control (DAC)
- Offers single sign-on to virtual machines under ApplicationHA control
- Can be installed on a virtual machine or a physical machine

vSphere Client
- Integrates with Symantec High Availability View

The following figure displays the sample deployment of Symantec ApplicationHA in a VMware SRM environment.
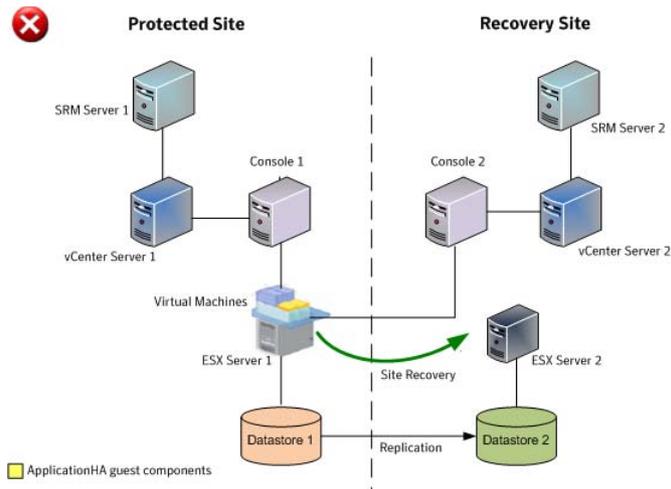
Symantec ApplicationHA agents

Agents are application-specific modules that plug into the ApplicationHA framework that manages applications and resources of predefined resource types configured for applications and components on a system. The agents are installed when you install Symantec ApplicationHA guest components. These agents start, stop, and monitor the resources configured for the applications and report state changes. If an application or its components fail, these agents also restart the applications and its resources on the virtual machine.

Symantec ApplicationHA agents are classified as follows:

- Infrastructure agents
  Infrastructure agents are packaged (bundled) with the base software and include agents for mount points, generic services, and processes. These agents are immediately available for use after you install Symantec ApplicationHA. Refer to the *Symantec™ ApplicationHA Generic Agents Guide* for more details about the infrastructure agents.

- Application agents
  Application agents are used to monitor third party applications such as Microsoft SQL Server, Oracle, and Microsoft Exchange. These agents are packaged separately and are available in the form of an agent pack that gets installed when you install Symantec ApplicationHA guest components.
  The ApplicationHA agent pack is released on a quarterly basis. The agent pack includes support for new applications as well as fixes and enhancements to

existing agents. You can install the agent pack on an existing ApplicationHA guest components installation.

Refer to the Symantec Operations Readiness Tools (SORT) Web site for information on the latest agent pack availability.

https://sort.symantec.com

Refer to the agent-specific configuration guide for more details about the application agents.

About ApplicationHA licensing

Symantec ApplicationHA is a licensed product. Licensing for Symantec ApplicationHA is based on the server operating systems in use.

A keyless license is embedded is the product. You can use the keyless license for 60 days.

If you install the product using the keyless option, a message is logged everyday in the Event Viewer indicating that you must perform any one of the following tasks, within 60 days of product installation. Failing this, a non-compliance error is logged every four hours.

■ Add the system as a managed host to a Veritas Operations Manager (VOM) Management Server.

■ Add an appropriate and valid license key on this system using the Symantec product installer.

Alternatively, you can procure an appropriate permanent license key from the Symantec license certificate and portal.

Refer to *Symantec™ ApplicationHA Installation and Upgrade Guide* for more information about product licensing.

Getting started with ApplicationHA

The following figure represents the workflow for getting started with ApplicationHA and the corresponding document you must refer for details:

Install Symantec High Availability Console

Refer
Symantec High Availability Console Installation and Upgrade Guide

Install Symantec ApplicationHA

Refer
Symantec ApplicationHA Installation and Upgrade Guide

Configure Single Sign-on

Refer
Symantec ApplicationHA User's Guide

For Site Recovery ······►

Configure Single Sign-on Between Sites

Refer
Symantec ApplicationHA User's Guide

Modify SRM Recovery Plan

Configure VMware HA Settings

Refer
Symantec ApplicationHA User's Guide

Configure ApplicationHA Access Control
(only if application monitoring is controlled
using vSphere Client)

Configure Application Monitoring

Refer
Respective Application Configuration Guide

Monitor Application

Refer
Symantec ApplicationHA User's Guide

Using vSphere Client

- Symantec High Availability Tab (VM level)
- Symantec High Availability Dashboard (VMware Cluster/Datacenter level)

Using a browser (VM level)
(https://<*VMNameorIP*>:5634/vcs/admin/application_health.html?priv=ADMIN)

Using Veritas Operations Manager (VOM)

Refer
VOM documentation

> **Note:** The Symantec High Availability Console enables ApplicationHA integration with VMware vSphere Client to perform the following ApplicationHA tasks:
>
> - Install ApplicationHA
>
> - Configure cross site single sign-on for site recovery configuration
>
> - Register virtual machine for auto recovery, if virtual machine auto recovery is configured
>
> - Administer application monitoring
>
> If you do not want to configure site recovery, register the virtual machine for auto recovery, or use the VMware vSphere Client to install ApplicationHA and administer application monitoring, then you need not install Symantec High Availability Console.

Documentation

The following sections contain important information about ApplicationHA product documentation.

Your feedback on product documentation is important to us. Send suggestions for improvements and reports on errors or omissions to the following email address:

sfha_docs@symantec.com

Finding product documentation

Product documents are in Adobe Portable Document Format (PDF). The documentation is available at the following locations:

- On the software disc in the `Docs` subdirectory under the platform-specific directory on the ApplicationHA software disc.

- All Symantec ApplicationHA product documentation is included in this location except the *Symantec ApplicationHA Getting Started Guide* and the *Symantec ApplicationHA Release Notes*. These guides are available at the top level of each ApplicationHA software disc.

> **Note:** Product documentation is not installed with the product. Symantec recommends that you copy the documentation to your local disc for future reference.

- On the Symantec Operations Readiness Tools (SORT) Web site at:

https://sort.symantec.com