

Symantec™ ApplicationHA 6.2 Release Notes - Linux on VMware

Symantec™ ApplicationHA Release Notes

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: 6.2

Document Version: 6.2 Rev 1

Legal Notice

Copyright © 2014 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, whether delivered by Symantec as on premises or hosted services. 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_apj@symantec.com

Europe, Middle-East, and Africa semea@symantec.com

North America and Latin America [supportolutions@symantec.com](mailto:supportsolutions@symantec.com)

Documentation

Product guides are available on the media in PDF format. Make sure that you are using the current version of the documentation. The document version appears on page 2 of each guide. The latest product documentation is available on the Symantec website.

<https://sort.symantec.com/documents>

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 Release Notes

This document includes the following topics:

- [Introduction](#)
- [What is Symantec ApplicationHA](#)
- [Changes in this release](#)
- [System requirements](#)
- [Software limitations](#)
- [Known issues](#)
- [Software fixes and enhancements in this release](#)
- [Documentation](#)

Introduction

This document provides important information about Symantec ApplicationHA 6.2. Review this entire document before you install or upgrade ApplicationHA.

This is Document Version: 6.2 Rev 1.

Before you start, make sure that you refer to the latest version of this document. You can find the latest version here:

<https://sort.symantec.com>

The information in the Release Notes supersedes the information provided in the product documents for ApplicationHA.

For the latest patches available for this release, go to:

<https://sort.symantec.com/patch/matrix>.

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.

Alternately, Symantec ApplicationHA provides monitoring capabilities for applications running inside virtual machines managed by Veritas Operations Manager (VOM) Management Server 6.0 or later.

Symantec ApplicationHA is based on Symantec™ 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), Low Latency Transport (LLT), and Veritas Fencing (VxFEN). 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 vSphere Web 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.

Salient features

Following are the salient features of ApplicationHA:

- Support for enterprise applications such as SAP NetWeaver, SAP Web Application Server, Oracle Database, Apache HTTP Server, DB2, MySQL,

JBoss Application Server, WebLogic Server, WebSphere Application Server, and WebSphere MQ.

- Speedy fault management of select applications by using the Intelligent Monitoring Framework (IMF).
- Simple workflow for installation and configuration
- Single sign-on across virtual machines in a vCenter
- Discretionary access control based on user privileges
- Access control based on organization, user group, or other organizational entities such as clusters, using Veritas Operations Manager (VOM) 6.0 or later.
- Option to install ApplicationHA with a keyless license. Veritas Operations Manager (VOM)-integrated option to view and manage licenses (evaluation and permanent license keys).
- vSphere Client integrated option to install ApplicationHA guest components, manage licenses, and configure single sign-on for site recovery.
- Ability to centrally manage installations of Symantec storage and high availability management products across a data center, using a deployment server.
- Single GUI (Symantec High Availability view or tab) to manage applications running on Windows, Linux, AIX, and Solaris SPARC platforms.
- Ability to view component dependency of configured applications over the GUI
- A single dashboard interface that provides a consolidated view of the configured applications and makes it easy for administrators to monitor the applications in the VMware virtual environment.
- Ability to configure graceful reboot of virtual machines in case of an application failure
- Ability to maintain application monitoring continuity in a VMware SRM controlled disaster recovery environment
- Continued updates and additional application support distributed via Symantec Agent Pack releases

Changes in this release

This section lists the new features as well as changes in attributes, platform support, and RPMs.

Change in packaging of certain ApplicationHA agents and VRTSacclib

Starting with this release 6.2, certain Symantec ApplicationHA agent RPMs and VRTSacclib will not be packaged as part of ApplicationHA installation media. You must download the required application agents from the latest Agent Pack release on [SORT](#).

However, there is no change in the packaging of the agents for the following applications; they continue to be packaged as part of the ApplicationHA installation media:

- Oracle Database
- Apache HTTP Server
- DB2
- Generic (custom) applications

The following table lists each application and its related ApplicationHA agent RPM that you must download from [SORT](#):

Table 1-1

Application	ApplicationHA agent RPM
JBoss Application Server	VRTSjboss
MySQL Server	VRTSmysql
SAP Web Application Server	VRTSsapcms
SAP NetWeaver	VRTSsaplc VRTSsapnw04 VRTSsapwebas71
WebSphere Application Server	VRTSvcswas
WebSphere MQ	VRTSmq6
WebLogic Server	VRTSwls
Required for all the above applications	VRTSacclib

Intelligent Monitoring Framework

VRTSamf is a new RPM introduced in this release. The package enables Symantec ApplicationHA agents to leverage the Intelligent Monitoring Framework (IMF) module.

IMF offers a way for ApplicationHA agents to avoid polling for state changes among the monitored application components. IMF allows the agents to register which components to monitor. When the state of an application component changes, IMF immediately notifies the agent. Corrective action can therefore be immediately taken once an event occurs. IMF enables the ApplicationHA agents to monitor a large number of components with a minimal effect on performance.

IMF support for the following ApplicationHA agents is introduced in this release:

- Apache HTTP Server
- DB2 Database
- Oracle Database
- Generic (custom) applications

Note: The Symantec High Availability Configuration wizard by default enables IMF support. To disable IMF support, you must use Symantec Cluster Server (VCS) commands.

Online upgrade for ApplicationHA

You can perform an online upgrade to ApplicationHA 6.2 by using the installer, while keeping your applications online. Ensure that you use one of the supported upgrade paths listed in the *Symantec ApplicationHA Installation Guide*.

During this upgrade process, ApplicationHA does not monitor the configured applications for high availability.

vSphere Web Client integration

Symantec has introduced the Symantec HA Plug-in for vSphere Web Client as part of Veritas Operations Manager 6.1 release. Installing and configuring VOM Management Server 6.1 in your virtualization environment, along with the plug-in, helps you perform ApplicationHA operations directly from the vSphere Web Client menu. This is in addition to the existing integration with the vSphere Client menu (desktop) via the Symantec High Availability Console. For detailed information on the vSphere Web Client integration see VOM 6.1 documentation.

For the latest information on ApplicationHA installation, configuration, and administration support via vSphere Web Client, see the following technical note:

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

Added support for VMware versions

The following VMware versions are now supported:

- vSphere Client 5.5 Update 1
- vCenter Server 5.5 Update 1
- VMware ESX Server and ESXi Server 5.5 Update 1
- VMware SRM Server 5.5 Update 1 (to be confirmed)

Added operating system support

Support for the following Operating System distributions is introduced in this release:

- Red Hat Enterprise Linux 7

Discontinued in this release

Support for the following features, terms, components, or operating systems is discontinued in release 6.2:

- Red Hat Enterprise Linux 5

System requirements

Before installing or upgrading Storage Foundation and High Availability Solutions products, review the current compatibility list to confirm the compatibility of your hardware and software.

- The software compatibility list (SCL) contains information about supported software and it is updated regularly. For the latest information on supported software, visit the following URL
<http://www.symantec.com/docs/TECH225258>
- For the latest information on application versions supported by Symantec high availability agents, see:
<https://sort.symantec.com/agents>
- For important updates regarding this release, review the Late-Breaking News TechNote on the Symantec Technical Support website:
<http://www.symantec.com/docs/TECH211540>
- For the latest patches available for this release, go to:
<https://sort.symantec.com/>

- The hardware compatibility list contains information about supported hardware and is updated regularly. For the latest information on supported hardware visit the following URL:
<http://www.symantec.com/docs/TECH211575>
- For information about the supported operating systems, hardware and software requirements, supported applications and other general requirements, also see the *Symantec™ ApplicationHA Installation and Upgrade Guide*.

Software limitations

The following limitations apply to this release of the product.

Dashboard does not detect virtual machines running ApplicationHA guest components of version 5.1 or 5.1 SP1

You cannot use the ApplicationHA dashboard to administer application monitoring on virtual machines that run either ApplicationHA 5.1 on Linux or ApplicationHA 5.1 SP1 on Windows. This is because the dashboard feature was introduced in ApplicationHA 5.1 SP2 and ApplicationHA guest components from the older release do not support the dashboard feature. You can, however, continue to administer application monitoring on such virtual machines through the Symantec High Availability tab.

Workaround:

Upgrade the ApplicationHA guest components from 5.1 or 5.1 SP1 to ApplicationHA 5.1 SP2 or later.

Configuration wizard does not support hardware monitoring

You cannot configure hardware components such as storage and network, using the ApplicationHA wizard.

Workaround

- Alternately, you can configure hardware components by using the Command Line Interface of Symantec Cluster Server (VCS) or Veritas Operations Manager (VOM).

ApplicationHA configuration wizard supports only one application per virtual machine

You can use the Symantec ApplicationHA Configuration wizard to monitor only one application per virtual machine.

Workaround

If you are familiar with underlying VCS and VOM concepts, you can add more applications or application components for monitoring.

For more information on how to use VCS commands or VOM to configure additional applications, see the following technical note:

<http://www.symantec.com/docs/TECH159846>

You cannot edit an application monitoring configuration

Once you configure an application, ApplicationHA does not support edits or additions to the configuration.

Workaround

Remove existing configuration and then re-configure

Simultaneous multiple installations may be slow

If you try to install ApplicationHA guest components on a large number of systems, the process may take a long time.

Workaround

Specify smaller batches of systems while using the ApplicationHA install program or response file for multi-system installations.

ApplicationHA Dashboard supports up to 30 (application) component groups per virtual machine

Symantec ApplicationHA introduces a dashboard interface that enables you to monitor the configured applications. In this release, the dashboard supports only 30 (application) component groups per virtual machine.

Symantec ApplicationHA does not support Symantec Backup Exec on Linux guests

Symantec Backup Exec lets you configure "Virtual Machine Auto Recovery" settings for the virtual machines under ApplicationHA control. From release 6.0, ApplicationHA supports Symantec Backup Exec on virtual machines running Windows. However, Symantec ApplicationHA does not support Symantec Backup Exec on virtual machines running Linux.

Known issues

The following known issues exist in this release of the product.

App.RestartAttempts setting does not take effect if value is set to 2 or more

App.RestartAttempts configuration option defines the number of times Symantec ApplicationHA tries to restart a failed application or its component. Its value can range from 1 to 6.

For certain application configurations, this setting fails to take effect if its value is set to 2 or more. After successfully configuring an application, if there is a fault in the application or its dependent component, ApplicationHA attempts to restart it once. If the application fails to start, ApplicationHA reports the application state as faulted. (2508392)

This issue is applicable only for the following applications/components:

On Windows

- Custom Application (includes services, processes, and storage mounts)

On Linux

- Custom Application
- SAP Netweaver
- SAP Web Application Server
- WebLogic Server
- JBoss Application Server
- WebSphere Application Server
- WebSphere MQ
- Apache HTTP Server
- DB2

Workaround

Currently there is no workaround to resolve this issue.

Symantec recommends that for applications mentioned earlier, you set the App.RestartAttempts value to 1.

This ensures that ApplicationHA makes at least one attempt to restart the failed component. If the component still fails to start, ApplicationHA then declares it as

faulted and takes further action as per the configuration settings (for example, a graceful reboot of the virtual machine).

Compatibility with other clustering products

Symantec ApplicationHA runs on Symantec Cluster Server (VCS). The version of VCS used by ApplicationHA is a customized version of VCS. Many components have been removed in order to provide a lighter footprint inside the virtual machine. You cannot run both ApplicationHA and VCS together inside the same virtual machine. There is no method to upgrade from ApplicationHA to VCS.

Additionally ApplicationHA does not co-exist with other clustering solutions offered by Symantec. These include, Symantec Storage Foundation High Availability, Clustered File System, Clustered File System High Availability and Clustered Volume Manager.

Symantec High Availability tab issue

If you install both Symantec Storage Foundation (SF) and ApplicationHA on the same virtual machine, and then remove SF, the Symantec High Availability tab on the vSphere client stops working. (2136077)

Workaround

When you install ApplicationHA on a virtual machine, and then try to install Symantec Storage Foundation (SF), you may notice errors in the SF installation.

When you remove SF, you automatically remove the VRTSsfmh rpm from the system. The vSphere client needs the VRTSsfmh rpm to communicate with the virtual machine.

To reinstate VRTSsfmh, perform the following steps:

- 1 Install VRTSspt and VRTSsfmh rpms from the ApplicationHA install media.
- 2 Stop the xprtld service:

```
# /etc/init.d/xprtld stop
```
- 3 Add following line to the `/etc/opt/VRTSsfmh/xprtld.conf` file, if not present:

```
namespaces vcs=/opt/VRTSvcs/portal
```
- 4 Start the xprtld service:

```
# /etc/init.d/xprtld start
```

Application monitoring configuration freezes

This issue occurs if you configure application monitoring on systems where host names start with a hyphen. (2038685)

The application monitoring configuration may freeze and the ApplicationHA view in the vSphere Client may not display the status of the application. If the configured application fails, ApplicationHA takes no action.

Symantec recommends that you rename systems whose host names start with a hyphen before installing ApplicationHA and configuring application monitoring on those systems.

Issues while working with VMware snapshots and migrating virtual machines

The following issues may occur while you are performing virtual machine administration on systems where Symantec ApplicationHA is actively monitoring applications:

- While working with virtual machine snapshots

This issue occurs if you have installed vCenter Server version 4.0, 4.1, and 4.1 Update 1 only. This issue does not occur if you have installed vCenter Server version 5.0.

While taking a virtual machine snapshot, the ApplicationHA view may freeze momentarily and may not display the current state of the applications being monitored. Also, after you revert a snapshot, the virtual machine may reboot after the operation completes.

The Events view on the Tasks & Events tab in the vSphere Client displays the following warning messages:

Application heartbeat **failed** for <virtualmachinedisplayname> on <ESX host> in cluster <clustername> in <datacentername>

Application heartbeat status changed to **appStatusRed** for <virtualmachinedisplayname> on <ESX host> in cluster <clustername> in <datacentername>

Application heartbeat status changed to **appStatusGreen** for <virtualmachinedisplayname> on <ESX host> in cluster <clustername> in <datacentername>

- While migrating virtual machines to an alternate ESX host

When you initiate a virtual machine migration, the ApplicationHA view may freeze momentarily and may not display the current state of the applications that is being monitored.

The Events view on the Tasks & Events tab in the vSphere Client displays multiple instances of the following warning messages:

Application heartbeat status changed to **appStatusGray** for <virtualmachinedisplayname> on <ESX host> in cluster <clustername> in <datacentername>

Application heartbeat status changed to **appStatusGreen** for <virtualmachinedisplayname> on <ESX host> in cluster <clustername> in <datacentername>

Workaround

This is a known issue with VMware HA. Check the following VMware knowledge base article for more information about the patch for this issue:

<http://kb.vmware.com/kb/1027413>

Symantec recommends that you disable the application heartbeat (Disable Application Heartbeat button in the ApplicationHA view) on the virtual machine before working with snapshots or migrating the virtual machine. After the virtual machine administration activity is complete, enable the application heartbeat (Enable Application Heartbeat button in the ApplicationHA view) again.

Symantec ApplicationHA commands do not display the time as per the locale settings

This issue occurs with all the ApplicationHA commands that display the date and time stamp in the output. The date and time stamp do not display as per the locale settings on the system. They are displayed only in English. (2142740)

Symantec High Availability tab may freeze

The Symantec High Availability tab in the vSphere Client may freeze if ApplicationHA is unable to establish a connection with the virtual machine. The application status in the Symantec High Availability view appears to be in a hung state and does not refresh. (2125902)

Workaround

This may occur if the virtual machine fails to respond to ApplicationHA http requests. Either the virtual machine has moved to a suspended state or is in the process of migrating to an alternate ESX host.

Perform the following actions:

- Verify that the virtual machine is powered on and accessible over the network.
- 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.

Symantec High Availability Console installation gives an error and the plugin registration fails if the installation directory contains multiple "%" characters

This issue occurs while installing Symantec High Availability Console using the Symantec High Availability Console Installer. On the System Validation panel, if you customize the installation directory to a path that contains consecutive multiple "%" characters, the wizard successfully completes the verification checks and allows you to proceed further. However, when you click **Next** on the Post-install Summary panel the wizard displays a "Failed to create private domain. The system cannot find the path specified" error. You can click **Ok** on the error message and proceed with the installation. However, after the installation workflow is complete the wizard fails to register the ApplicationHA plugin on the vCenter Server.

If you verify the plugin registration using the PluginMgmt.bat utility available on the Console server, the plugin status reflects that the plugin is already registered. However, if you verify the plugin status on the Plug-in Manager available on the vCenter Server, the plugin status reflects "Download & Install".

Workaround

Launch the Symantec High Availability Console installation wizard again and provide a valid path that does not contain multiple "%" characters.

ApplicationHA fails to work if Veritas Operations Manager is uninstalled

The Managed Host components of Veritas Operations Manager (VOM) are installed on the Console Server and the guest virtual machines, during the ApplicationHA installation. (2361128, 2323516)

Uninstallation of VOM removes the VRTSsfmh RPM which breaks the ApplicationHA functionality. The VRTSsfmh RPM contains the 'Veritas Storage Foundation Messaging Service' (xpftld) that is used by both, ApplicationHA and VOM.

Note: This issue also occurs when you uninstall the Veritas Operations Manager Central Server.

Workaround

Perform the following steps

- 1 Insert the ApplicationHA software disc into your system drive and navigate to the directory that contains the RPM for the required operating system:

Operating system	Directory
Oracle Linux 6	rhel6_x86_64
Red Hat Enterprise Linux 6	rhel6_x86_64
SUSE Linux Enterprise Server 11	sles11_x86_64

For example, to install ApplicationHA on a machine running the RHEL 6 operating system,

```
# cd cdrom_root/applicationha/rhel6_x86_64/rpms
```

- 2 Run the following command:

```
# rpm -ivh VRTSsfmh-*.rpm
```

Where * is the version of the Linux rpm. For example, version 4.1.119.0 for ApplicationHA 6.0 and 6.0.0.0 for ApplicationHA 6.1.

- 3 Stop the `xprtld` service.

```
# /etc/init.d/xprtld stop
```

- 4 Ensure that the file `/etc/opt/VRTSsfmh/xprtld.conf` contains the following text:

```
namespaces vcs=/opt/VRTSvcsvcs/portal
```

- 5 Start the `xprtld` service.

```
# /etc/init.d/xprtld start
```

- 6 From the Symantec High Availability tab on the vSphere client, configure single sign-on (SSO).

For more information on configuring SSO, refer to the *Symantec ApplicationHA User's Guide*

ApplicationHA guest components installation using the vSphere Client integrated menu may fail with "Failed to log-on..." error

While installing the ApplicationHA guest components using the vCenter integrated menu, the installation workflow completes successfully. However, the installation

may fail with the "Failed to log-on" error on some virtual machines after the tasks are queued for installation. (2361891)

Also, a "MKS error..." may appear if you try to connect to these virtual machines using the vSphere client.

Workaround

- Refer to the VMware KB at the following location:

```
http://kb.vmware.com/selfservice/microsites/search.do?
language=en_US&cmd=displayKC&externalId=749640
```

- Restart the virtual machines on which the installation has failed.
- If the problem continues, contact your network administrator.

vMotion causes delay in health view and dashboard refresh

If you have configured application monitoring on a virtual machine with VMware vMotion enabled, the vMotion process gets triggered if the application faults and the virtual machine reboots. (2363462)

Due to vMotion, after a reboot the virtual machine starts and the application comes online on a failover virtual machine on a new ESX host. Even if the application is online, the ApplicationHA health view and the dashboard reflects the application status after a slight delay.

After a vMotion application heartbeat status shows "appStatusGreen" even if the application is faulted

After the application faults if you trigger VMware vMotion instead of VM reboot, the Tasks and Events of a virtual machine reflects the application status as "appStatusGreen", even if the application is faulted. (2363487)

This issue is observed if you are using the VMware vSphere 4.0 and 4.1.

During a test recovery ApplicationHA dashboard at both the sites show the updates

If your VMware cluster network settings for test recovery are such that the failed over virtual machines are able to communicate with the protected site Symantec High Availability Console (due to the MAC address being the same as that of the protected site), then the updates due to the administrative tasks performed for application monitoring are reflected on the ApplicationHA dashboard at both the sites. (2363496)

Guest installation fails with an error "Failed to launch the guest installer process"

This issue is observed while installing the ApplicationHA guest components using the vSphere Client menu.

After the installation workflow is complete the virtual machine is queued for installation. However, the installation process may fail to start with a "Failed to launch the guest installer process" error in the vSphere Client tasks.

Workaround

On the virtual machine where the installation has failed run the installation wizard again.

Refreshing the Symantec High Availability tab multiple times displays a network connectivity error

This issue is typically observed in case of IE7 browser.

Symantec High Availability tab refreshes the application status every 60 seconds. However, in case of network failure if you manually refresh the ApplicationHA view multiple times, IE displays a network connectivity error. (2379946, 2379707)

If you click **Ok** on the error message and then click another virtual machine in the vSphere Client, then the Symantec High Availability tab displays the application status of an unknown application.

This issue also occurs if you refresh the Symantec High Availability tab and simultaneously reset the virtual machine.

Workaround

For details, refer to the following knowledge base article from Microsoft.

http://support.microsoft.com/kb/927917#more_information

Field selection using the Tab key may not work on the vCenter Server User Details panel

This issue occurs on the vCenter Server User Details panel during the ApplicationHA guest components installation, using the vSphere Client menu. The issue is typically observed if you have Adobe FlashPlayer version 10.1 installed on your system. (2362878)

Workaround

You have to click each field to specify the inputs.

Configuration option of ApplicationHA installer malfunctions

When you run the Symantec ApplicationHA installer, it displays the following option to configure ApplicationHA: **Configure an Installed Product**.

If you specify this option, the installer fails to configure ApplicationHA. Instead, the installer starts stopping certain ApplicationHA processes. (2621468)

Workaround

Do not use the installer option to configure an application. Instead, to configure Symantec ApplicationHA for monitoring an application, use one of the following methods:

- If you have already installed ApplicationHA, navigate to the following URL, and use the **Configure Application Monitoring** link to launch the Symantec ApplicationHA Application Monitoring Configuration Wizard:

```
https://<virtualmachineNameorIPAddress>:5634/vcs/admin/  
application_health.html?priv=ADMIN
```

- You can launch the Symantec ApplicationHA Configuration Wizard from the Symantec High Availability tab of the VMware vSphere client GUI.
For more information, see the *Symantec ApplicationHA User's Guide*

Single sign-on with Symantec High Availability console on recovery site fails

An ApplicationHA configuration in an SRM environment involves a single sign-on (SSO) configuration between the virtual machines at the protected site and the Symantec High Availability Console at the recovery site.

If the Symantec High Availability Console server is installed on a virtual machine or a physical system that runs a Japanese locale operating system, the single sign-on configuration between the sites fails.

For a workaround, contact Symantec support.

Dashboard does not work

If you upgrade a virtual machine from Symantec ApplicationHA 5.1, then after the upgrade, the ApplicationHA dashboard may not display the virtual machine, if the following condition occurs:

- At the time of the upgrade, ApplicationHA guest components are not running (2581676)

Workaround

Perform the following steps:

1. `# /etc/init.d/vcs start`
2. Wait for VCS to start (approximately two minutes)
3. `#!/opt/VRTSvcs/portal/admin/synchronize_guest_config.pl`

Storage Foundation uninstallation leads to warning

If you uninstall Storage Foundation 6.0 from a virtual machine where you have unconfigured and uninstalled ApplicationHA, the following CPI warning appears:

```
CPI WARNING V-9-40-3866 The VRTSsfmh rpm on <system_name> will be
uninstalled. Note that the system <system_name >is reporting to
the following management servers: appha://192.168.10.140
```

You can safely ignore this warning.

Users cannot modify the default log path for Symantec High Availability Wizard

The Symantec High Availability Wizard by default writes its backend logs to the following directory:

```
/var/VRTSvcs/log.
```

ApplicationHA users cannot modify this default path. No workaround exists for this issue. (3609791)

Application monitoring may not resume on exiting maintenance mode

If you suspend application monitoring from the Symantec High Availability view, and later resume it by clicking **Exit Maintenance Mode**, application monitoring may not resume as expected.

If you then refresh the tab/view, the Configure Application Monitoring link may appear. This issue may occasionally occur in any setup because of variations in the time taken by internal commands to complete, after you click **Exit Maintenance Mode**. In some cases, before the internal commands are complete, the High Availability Daemon (HAD) module may shut down and stop application monitoring. (3640282)

Workaround

Perform the followin steps:

1. From the command line, execute the following command:

```
# /opt/VRTSvcs/bin/hastart -onenode
```
2. From the Symantec High Availability view, try to resume application monitoring by clicking **Exit Maintenance Mode**.

Users unable to copy-paste Symantec High Availability logs

If you click the View Logs link in the Symantec High Availability tab from the vSphere Client, you may be unable to copy-paste the log content. This issue occurs if you access the Symantec High Availability tab from the vSphere 5.5 Web Client.

This issue does not occur with vSphere 5.1 Web Client. (3504113)

Data abruptly disappears from Status and System columns of dashboard

When you access the Symantec High Availability Dashboard from the vSphere Web Client, data from the Status and System columns may abruptly disappear. This issue occurs only with VMware vSphere 5.1. (3509084)

Workaround

- Clear the web browser cache and then restart VMware vSphere Web Client.
- Click a tab other than Symantec High Availability tab in the VMware vSphere Web Client (for example, Storage, Reports), refresh the web browser, and then go to the Symantec High Availability tab.

Symantec High Availability tab persists even after unregistering Symantec HA plug-in from vCenter

When you add a vCenter Server to Veritas Operations Manager, the Symantec HA plug-in is registered with the vCenter Server. For virtual machines associated with that vCenter, the Symantec High Availability tab appears in the vSphere Web Client. If you unregister the plug-in, the tab should also disappear. Presently the Symantec High Availability tab erroneously persists in the vSphere Web Client. (3498886)

Workaround

Based on your configuration, perform the steps listed below.

If multiple vCenter servers are configured to support the Symantec HA Plug-in, and if you want to unregister the plug-in from all the vCenter servers, perform both the steps.

If multiple vCenter servers are configured, and if you do not need to unregister the plug-in from all the vCenter servers, then you must only restart the vSphere Web Client service.

Note: To remove the Symantec HA Plug-in add-on from the VOM Management Server, you must unregister the plug-in from all the vCenter servers, and then perform both the steps:

1. Delete the cached plug-in data from the following location on the VMware vSphere Web Client host:

```
C:\ProgramData\VMware\vSphere Web  
Client\vc-packages\vsphere-client-serenity\com.symantec.applicationhawe-6.1
```

2. Restart the VMware vSphere Web Client service.

Software fixes and enhancements in this release

This section provides information about the Symantec ApplicationHA incidents that have been fixed in this release.

Incident number Description

3335745	While upgrading ApplicationHA, the install program does not provide users with the option to specify keyless licensing.
3491170	ApplicationHA installer displays incorrect EULA path for non-English locales
3491158	If you have configured Oracle database instances for detail monitoring with ApplicationHA 6.0 or earlier, you cannot perform a live upgrade to ApplicationHA 6.1.
3292905 and 3402560	If you use ApplicationHA to monitor multiple applications (component groups) on a virtual machine, and one application develops a fault, ApplicationHA restarts the faulted application. However, meanwhile, the VMWAppMonHB agent may start taking other healthy applications offline.
3536489	If you install ApplicationHA guests components from the VMware vSphere Client menu, the installer may not perform a pre-install check for ksh RPMs.

Documentation

Symantec Storage Foundation and High Availability Solutions product documentation is available in the Adobe Portable Document Format (PDF) on the product discs or with the downloaded software. See the release notes for information on documentation changes in this release.

Make sure that you are using the current version of documentation. The document version appears on page 2 of each guide. The publication date appears on the title page of each document. The latest product documentation is available on the Symantec website.

Symantec ApplicationHA guides are also available in the PDF format on the software media in the `/docs/applicationha` directory. Additional documentation is available online.

<http://sort.symantec.com/documents>

Documentation set

This topic describes the Symantec ApplicationHA documentation set that includes release notes, an installation guide, a user's guide, and agent guides.

The Symantec High Availability Console integrates ApplicationHA functionalities with the VMware vSphere Client menu. This topic also lists the Symantec High Availability Console documentation.

Symantec High Availability Console documentation

[Table 1-2](#) lists the documentation for the Symantec High Availability Console component.

Table 1-2 Symantec High Availability Console documentation

Document title	File name	Description
<i>Symantec High Availability Console Release Notes</i>	sha_console_notes_62.pdf	<p>Provides release information such as system requirements, changes, fixed incidents, known issues, and limitations of the Symantec High Availability Console.</p> <p>The component is essential to deploy Symantec Cluster Server (VCS) or Symantec ApplicationHA in a VMware virtual environment by using the VMware vSphere Client GUI.</p>

Table 1-2 Symantec High Availability Console documentation (*continued*)

Document title	File name	Description
<i>Symantec High Availability Console Installation and Upgrade Guide</i>	sha_console_install_62.pdf	Provides information required to install or upgrade the Symantec High Availability Console.

Symantec ApplicationHA documentation

[Table 1-3](#) lists the documentation for Symantec ApplicationHA.

Table 1-3 Symantec ApplicationHA documentation

Document title	File name	Description
<i>Symantec ApplicationHA Release Notes</i>	applicationha_notes_62_vmware_lin.pdf	Describes the new features and software and system requirements. This document also contains a list of limitations and issues known at the time of the release.
<i>Symantec ApplicationHA Installation and Upgrade Guide</i>	applicationha_install_62_vmware_lin.pdf	Describes the steps for installing and configuring and managing Symantec ApplicationHA. Some of the most common troubleshooting steps are also documented in this guide.
<i>Symantec ApplicationHA User's Guide</i>	applicationha_users_62_vmware_lin.pdf	Provides information about configuring ApplicationHA in a local VMware cluster environment and the VMware site recovery environment. Some of the most common troubleshooting steps are also documented in the guide.
<i>Symantec ApplicationHA Agent for Oracle Configuration Guide</i>	applicationha_oracle_agent_62_vmware_lin.pdf	Describes how to configure application monitoring for Oracle.
<i>Symantec ApplicationHA Generic Agent Configuration Guide</i>	applicationha_gen_agent_62_vmware_lin.pdf	Describes how to configure application monitoring for a generic application.
<i>Symantec ApplicationHA Agent for DB2 Configuration Guide</i>	applicationha_db2_agent_62_vmware_lin.pdf	Describes how to configure application monitoring for DB2.
<i>Symantec ApplicationHA Agent for Apache HTTP Server Configuration Guide</i>	applicationha_apache_agent_62_vmware_lin.pdf	Describes how to configure application monitoring for Apache HTTP Server.

Veritas Operations Manager (VOM) is a management tool that you can use to manage Symantec Storage Foundation and High Availability Solutions products. If you use VOM, refer to the VOM product documentation at:

<http://sort.symantec.com/documents>