Symantec™ ApplicationHA 6.1 Release Notes - Linux on VMware

Symantec™ ApplicationHA 6.1 Release Notes

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Symantec ApplicationHA Release Notes

This document includes the following topics:

- Introduction
- What is Symantec ApplicationHA
- What's new
- System requirements
- Software limitations
- Known issues
- Software fixes and enhancements in 6.1
- No longer supported
- Documentation

Introduction

This document provides important information about Symantec ApplicationHA 6.1. Review this entire document before you install or upgrade ApplicationHA.

This is Document Version: 6.1 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 capabillities for applications running inside virtual machines managed by Veritas Operations Manager (VOM) Management Server 6.0.

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), Intelligent Monitoring Framework (IMF), 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 the 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.

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.

- 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.

- 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 for managing 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

What's new

The enhancements in this release of Symantec ApplicationHA are as follows:

Change of packaging in the ApplicationHA 6.1 installation media

With this release, Symantec ApplicationHA is packaged along with the Storage Foundation and High Availability (SFHA) 6.1 installation media. This change

eliminates the need to download and manage separate installation media for
ApplicationHA.

Keyless licensing

Keyless licensing is a user-friendly licensing option for deploying and managing
Storage Foundation and High Availability (SFHA) product installations.

Keyless licensing uses a management server model (via Veritas Operations
Manager) to ensure fair and authorized installation and upgrades of all SFHA
component products, including Symantec ApplicationHA. This method eliminates
the need to maintain a large inventory of license keys for various instances and
releases of SFHA stack products installed in your data center.

Support for centralized installations using the Deployment Server

The Deployment Server lets you store multiple release images in one central location
and deploy them to systems of any supported platform.

You can load and store product binaries for Symantec products dating back to
version 5.1 in a central repository. You can use the Deployment Server for
performing the following tasks:

■ Version checking

■ Release image management

■ Install or upgrade systems

■ Update metadata and preferences

Added support for VMware versions

Symantec ApplicationHA provides an added support for the following VMware
versions:

■ vSphere Client 5.0 Update 1 a/b, 5.1, 5.5

■ vCenter Server 5.0 Update 1 a/b, 5.1, and 5.5

■ VMware ESXi Server 5.0 Patch 4, 5.1, and 5.5

Changes related to product name branding

Beginning with the 6.1 release, Storage Foundation and High Availability Solutions
product names are rebranded.

Table 1-1 lists the rebranded Storage Foundation and High Availability Solutions
products.

Table 1-1   Rebranded Storage Foundation and High Availability Solutions
products

Old product name	New product names with Symantec branding
Veritas Storage Foundation	Symantec Storage Foundation (SF)
Veritas Dynamic Multi-Pathing	Symantec Dynamic Multi-Pathing (DMP)
Veritas Replicator Option	Symantec Replicator Option
Veritas File Replicator Option	Symantec File Replicator Option (VFR)
Veritas Volume Replicator	Symantec Volume Replicator (VVR)
Veritas Storage Foundation Cluster File System HA	Symantec Storage Foundation Cluster File System HA (SFCFSHA)
Veritas Storage Foundation for Oracle RAC	Symantec Storage Foundation for Oracle RAC (SFRAC)
Veritas Storage Foundation for Sybase ASE CE	Symantec Storage Foundation for Sybase ASE CE
Veritas Storage Foundation HA	Symantec Storage Foundation HA (SFHA)
Veritas Cluster Server	Symantec Cluster Server (VCS)
Veritas Disaster Recovery Advisor	Symantec Disaster Recovery Advisor (DRA)
Veritas Storage Foundation and High Availability Solutions	Symantec Storage Foundation and High Availability Solutions (SFHAS)
Veritas High Availability Agent Pack	Symantec High Availability Agent Pack
Veritas File System Software Development Kit	Symantec File System Software Development Kit

Symantec rebranding does not apply to the following:

- Product acronyms
- Command names
- Error messages
- Alert messages
- Modules and components
- Feature names

- License key description
- Veritas Operations Manager product branding

System requirements

- For information about the supported operating systems, hardware and software requirements, supported applications and other general requirements, see the *Symantec™ ApplicationHA Installation and Upgrade Guide*.

- 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
  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.

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 hot fix 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 sfmh RPM contains the 'Veritas Storage Foundation Messaging Service' (xprtld) 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 5	rhel5_x86_64
Oracle Linux 6	rhel6_x86_64
Red Hat Enterprise Linux 5	rhel5_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 5 operating system,

```
# cd cdrom_root/applicationha/rhel5_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/VRTSvcs/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.

Application restart attempt may enter infinite loop

This behavior occurs only if you upgrade from Symantec ApplicationHA 5.1 to Symantec ApplicationHA 6.0 or 6.1.

Symantec ApplicationHA makes a configurable number of attempts to restart a failed application. If the application restarts successfully before the last possible restart attempt, then ApplicationHA waits for a certain period of time before resetting the count of attempted restarts to zero. The OnlineRetryInterval attribute defines this time period. If the application faults again within this time period, ApplicationHA does not attempt to restart it. Instead, ApplicationHA declares the application faulted, and takes further fault-management action as configured. For example, a graceful internal reboot of the virtual machine.

In ApplicationHA 5.1, the default value of OnlineRetryInterval is 0. Therefore, if an application repeatedly fails after restarting, ApplicationHA continues to restart it each time, instead of attempting the next configured fault-management action (such as a graceful internal reboot).

This was a known issue in release 5.1, and was fixed in the subsequent agent pack release. However, when you directly upgrade from ApplicationHA 5.1 to 6.0 or 6.1, the issue persists. (2611051)

Workaround

Modify the OnlineRetryInterval attribute by using the following commands:

1. ` # haconf -makerw`

2. # **hagrp -modify** *applicationname* **OnlineRetryInterval 120**

   Where *applicationame* is the name of the application that you have configured for monitoring.

3. # **haconf -dump -makero**

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.

Oracle agent configuration may affect upgrade to ApplicationHA 6.1

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. This limitation is caused due to an agent attribute that is specific to the ApplicationHA agent for Oracle. (3331997)

Workaround

Perform the following steps:

1. Unconfigure detail monitoring.

2. Upgrade to ApplicationHA 6.1.

3. Reconfigure detail monitoring of Oracle database instances, if required, by using the LevelTwoMonitorFreq attribute.

   For more information, see the *Symantec ApplicationHA Agent for Oracle Configuration Guide*.

Install program does not provide keyless licensing option during upgrade

If you try to upgrade to ApplicationHA 6.1 but do not have a valid license key already installed, the install program prompts you to specify a valid license key. In this step, the install program presently does not provide you with the option to specify keyless licensing. (3335745, 3336308)

Workaround

Perform the following steps

1. When the installer prompts you to specify a license key, if you want to specify keyless licensing, enter 'q' to quit the install program.

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

    `# /opt/VRTS/install/installapplicationha61 -license `*`sys1`*

    Where sys 1 is the name of the system where you want to enable keyless licensing.

ApplicationHA installer displays incorrect EULA path for non-English locales

During ApplicationHA 6.1 installation on guests running Linux, AIX, or Solaris SPARC operating systems, the installer prompts the user to accept the End User's License Agreement (EULA) at following locations for Japanese and Chinese locales, respectively:

`applicationha/EULA/ja/`

`applicationha/EULA/zh/`

No EULA exists at the said locations. (3344863)

Workaround

ApplicationHA 6.1 users must read and accept the following EULA:

applicationha/EULA/en/EULA_ApplicationHA_Ux_6.1.pdf

Software fixes and enhancements in 6.1

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

Incident number	Description
2141382	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.
2385156	Single sign-on (SSO) configuration between the virtual machine and the Console host involves specifying the virtual machine administrator account to set up single sign-on for the virtual machine. This configuration fails if the administrator account credential includes the following special characters: ■ & (ampersand) ■ * (asterisk) ■ % (percent) ■ + (plus) A syntax error dialog is displayed when you try to log on to the virtual machine from the Symantec High Availability tab in the vSphere client.
2376384	You may be unable to install VOM Management Server on a virtual machine where ApplicationHA guest components are installed and a single sign-on is configured with Symantec High Availability Console.
3049819	If you try to install ApplicationHA using the vSphere Client GUI, on some Linux distributions, the pre-install check fails.
3119778	If you configure 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 other applications may go offline.
3128114	If you try to install ApplicationHA guest components using the vSphere Client GUI, and if some of the installer files do not conform to the UNIX format, the installation fails.
3164479	If your Linux guests are running certain versions of VMware tools, you may not be able to install ApplicationHA 6.1 on Linux guests by using the vSphere Client.

No longer supported

Support for the following features, terms, components, or operating sytems is discontinued in release 6.1:

■ Veritas Operations Manager 5.0 or earlier

■ Veritas Operations Manager Add-on for ApplicationHA management

- VMware Site Recovery Manager (SRM) 4.1

- Symantec ApplicationHA components for VMware SRM Server

- Symantec ApplicationHA Console is replaced by the Symantec High Availability Console

- Symantec ApplicationHA tab is replaced by the Symantec High Availability tab. Symantec ApplicationHA Dasboard is replaced by Symantec High Availability Dashboard

- SuSE Linux (SLES) 10

- Embedded evaluation license keys

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
Symantec High Availability Console Release Notes	sha_console_notes_61.pdf	Provides release information such as system requirements, changes, fixed incidents, known issues, and limitations of the Symantec High Availability Console. The component is essential to deploy Symantec Cluster Sever (VCS) or Symantec ApplicationHA in a VMware virtual environment by using the VMware vSphere Client GUI.
Symantec High Availability Console Installation and Upgrade Guide	sha_console_install_61.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
Symantec ApplicationHA Release Notes	applicationha_notes_61_ 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.
Symantec ApplicationHA Installation and Upgrade Guide	applicationha_install_61_ 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.

Table 1-3 Symantec ApplicationHA documentation *(continued)*

Document title	File name	Description
Symantec ApplicationHA User's Guide	applicationha_users_61_ 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.
Symantec ApplicationHA Agent for Oracle Configuration Guide	applicationha_oracle_agent_61_ vmware_lin.pdf	Describes how to configure application monitoring for Oracle.
Symantec ApplicationHA Agent for SAP NetWeaver Configuration Guide	applicationha_sap_agent_61_ vmware_lin.pdf	Describes how to configure application monitoring for SAP NetWeaver.
Symantec ApplicationHA Agent for WebLogic Server Configuration Guide	applicationha_weblogicserver_agent_61_ vmware_lin.pdf	Describes how to configure application monitoring for WebLogic Server.
Symantec ApplicationHA Generic Agent Configuration Guide	applicationha_gen_agent_61_vmware_ lin.pdf	Describes how to configure application monitoring for a generic application.
Symantec ApplicationHA Agent for WebSphere MQ Configuration Guide	applicationha_webspheremq_agent_61_ vmware_lin.pdf	Describes how to configure application monitoring for WebSphere MQ.
Symantec ApplicationHA Agent for WebSphere Application Server Configuration Guide	applicationha_websphereas_agent_61_ vmware_lin.pdf	Describes how to configure application monitoring for WebSphere Application Server.
Symantec ApplicationHA Agent for DB2 Configuration Guide	applicationha_db2_agent_61_ vmware_lin.pdf	Describes how to configure application monitoring for DB2.
Symantec ApplicationHA Agent for Apache HTTP Server Configuration Guide	applicationha_apache_agent_61_ vmware_lin.pdf	Describes how to configure application monitoring for Apache HTTP Server.
Symantec™ ApplicationHA Agent for JBoss Application Server Configuration Guide	applicationha_jboss_agent_61_ vmware_lin.pdf	Describes how to configure application monitoring for JBoss Application Server.
Symantec™ ApplicationHA Agent for MySQL Configuration Guide	applicationha_mysql_agent_61_ vmware_lin.pdf	Describes how to configure application monitoring for MySQL.

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