Symantec™ ApplicationHA Agent Pack Installation Guide

Linux, Solaris, and AIX

2Q2014

June 2014

Symantec

Symantec™ ApplicationHA Agent Pack Installation Guide

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: 2Q2014

Document version: 2Q2014 Rev 0

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_apac@symantec.com
Europe, Middle-East, and Africa	semea@symantec.com
North America and Latin America	supportsolutions@symantec.com

About Symantec Connect

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

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

Documentation

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

doc_feedback@symantec.com

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

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

Contents

Technical Support 4

Chapter 1 Introducing Symantec ApplicationHA Agent Pack 8

About the Symantec ApplicationHA agents 8
Symantec ApplicationHA Agent Pack 8

Chapter 2 Planning to install Symantec ApplicationHA Agent Pack 10

Before installing ApplicationHA Agent Pack 10
Supported applications 10
ApplicationHA Agent Pack installation methods 12
About the ApplicationHA Agent Pack install program 12
About Manual installation 13

Chapter 3 Installing the Symantec ApplicationHA Agent Pack using the install program 15

Installing the Symantec ApplicationHA Agent Pack using the install program 15

Chapter 4 Uninstalling the Symantec ApplicationHA Agent Pack using the install program 18

Preparing to uninstall Symantec ApplicationHA Agent Pack 18
Uninstalling Symantec ApplicationHA Agent Pack using the uninstall program 19
Running uninstallagpack from the Symantec ApplicationHA Agent Pack media 20

Appendix A Symantec ApplicationHA installation packages 21

Symantec ApplicationHA installation packages 21

Chapter 1

Introducing Symantec ApplicationHA Agent Pack

This chapter includes the following topics:

- About the Symantec ApplicationHA agents
- Symantec ApplicationHA Agent Pack

About the Symantec ApplicationHA agents

Agents are processes that manage application instances on a system. The agents are installed when you install Symantec ApplicationHA. A system has one agent per application. The agent monitors all configured instances of the application. For example, an Oracle agent manages all Oracle application instances that are configured. The agents then periodically send the application status to Symantec ApplicationHA.

Agents perform the following operations:

- Start application instances
- Stop application instances
- Monitor instances and report state changes

For more details about an application agent, refer to the application-specific configuration guide. See "Supported applications" on page 10.

Symantec ApplicationHA Agent Pack

In addition to the agents provided with Symantec ApplicationHA base package, Symantec ApplicationHA provides agents for monitoring key enterprise applications.

These agents are available in the form of an Agent Pack that contains newly added agents to support the corresponding applications.

Chapter 2

Planning to install Symantec ApplicationHA Agent Pack

This chapter includes the following topics:

- Before installing ApplicationHA Agent Pack
- ApplicationHA Agent Pack installation methods

Before installing ApplicationHA Agent Pack

This is Document version: 2Q2014 Rev 0. Before you continue, make sure that you are using the current version of this guide. You can find it online at:

https://sort.symantec.com/agents

Supported applications

Supported applications lists the applications that ApplicationHA Agent Pack currently supports on virtual machines.

Table 2-1 ApplicationHA Agent Pack supported applications

Application	Version	Document	Supported platforms
SAP NetWeaver	NW04, NW04s, ERP/ECC 5.0/6.0, SCM/APO 4.1/5.0/5.1/7.0, SRM 4.0/5.0/7.0, CRM 4.0/5.0/7.0	Symantec ApplicationHA Agent for SAP NetWeaver Configuration Guide	Linux on VMware

Table 2-1 ApplicationHA Agent Pack supported applications *(continued)*

Application	Version	Document	Supported platforms
SAP NetWeaver	7.1, 7.3, and 7.4	Symantec ApplicationHA Agent for SAP Web Application Server Configuration Guide	Linux on VMware
SAP NetWeaver with HA-API support	SAP NetWeaver 7.x with SAP Kernel 7.20 DCK	Symantec ApplicationHA Agent for SAP NetWeaver Configuration Guide	Linux on VMware
Oracle Database	10gR2, 11gR1, and 11gR2	Symantec ApplicationHA Agent for Oracle Configuration Guide	Linux on VMware, Linux on KVM, Solaris on Oracle VM Server for SPARC, AIX on IBM PowerVM
WebLogic Server	9.x, 10.x, and 12c	Symantec ApplicationHA Agent for WebLogic Server Configuration Guide	Linux on VMware
WebSphere MQ	7.0, 7.1, and 7.5	Symantec ApplicationHA Agent for WebSphere MQ Configuration Guide	Linux on VMware, Linux on KVM
WebSphere Application Server	7.x	Symantec ApplicationHA Agent for WebSphere Application Server Configuration Guide	Linux on VMware, Linux on KVM
Apache HTTP server	1.3, 2.0, and 2.2. Also supports IBM HTTP Server 7.x.	Symantec ApplicationHA Agent for Apache HTTP server Configuration Guide	Linux on VMware, Linux on KVM, Solaris on Oracle VM Server for SPARC, AIX on IBM PowerVM
DB2	9.5, 9.7, 10.1, and 10.5	Symantec ApplicationHA Agent for DB2 Configuration Guide	Linux on VMware, Linux on KVM, AIX on IBM PowerVM
JBoss Application Server	5.x and 6.x	Symantec ApplicationHA Agent for JBoss Application Server Configuration Guide	Linux on VMware, Linux on KVM
MySQL	5.x	Symantec ApplicationHA Agent for MySQL Configuration Guide	Linux on VMware, Linux on KVM

Note: Alternatively, you can use the Custom Application wizard to configure and monitor applications that are not listed in the above support matrix. For more information on configuring the custom application, refer to the *Symantec ApplicationHA Generic Agent Configuration Guide*.

ApplicationHA Agent Pack installation methods

Table 2-2 lists the different methods that you can use to install ApplicationHA Agent Pack on virtual machines.

Table 2-2 ApplicationHA Agent Pack installation methods

Method	Description
Interactive installation using the `installagpack` program.	The install program installs new agents and, if required, updates existing agents. The install program also updates the application configuration wizards.
Manual installation using the native comands and utilities.	You can install the ApplicationHA Agent Pack using the package installation commands of native operating system. **Note:** Re-configure the monitored applications if you choose this method of installation.

About the ApplicationHA Agent Pack install program

You can access the `installagpack` program from the command line.

The ApplicationHA Agent Pack installation program is interactive and manages the following tasks:

- Installing ApplicationHA Agent Pack packages on one or more systems
- Updating ApplicationHA Agent Pack packages on one or more systems

The `uninstallagpack` program, a companion to the `installagpack` program, uninstalls ApplicationHA Agent Pack packages and some Symantec ApplicationHA packages.

Caution: After you run the `uninstallagpack` program, you must reinstall Symantec ApplicationHA.

About Manual installation

By performing the following procedures you can install the ApplicationHA agent pack packages manually.

Before uninstallation

1 Create a backup of the following files to restore after installation:

`/opt/VRTSvcs/portal/admin/.xprtlaccess` (Applicable only for VMware environment)

`/opt/VRTSvcs/portal/admin/plugins/unix/conf/app.conf`

`/opt/VRTSvcs/portal/world/appcontrol_config_status.xml`

`/opt/VRTSvcs/portal/world/GuestConfig.xml`

2 Create a backup of the following file which is required in post-installation steps:

`/opt/VRTSvcs/portal/admin/plugins/unix/conf/settings.conf`

3 Stop VCS by using the following command:

```
# /opt/VRTS/bin/hastop -all
```

4
- On Solaris, remove the preremove and postremove scripts before uninstallation of any package. For example, before uninstalling VRTSvcsvmw package, remove the following files:

  `/var/sadm/pkg/VRTSvcsvmw/install/preremove`

  `/var/sadm/pkg/VRTSvcsvmw/install/postremove`
- On AIX, remove the unpre_i script before uninstallation of any package. For example, before uninstalling VRTSvcsvmw package, remove the following file:

  `/lpp/VRTSvcsvmw/deinstl/VRTSvcsvmw.unpre_i`
- On Linux, you must uninstall the packages by specifying `--noscripts` and `--nodeps` options with `rpm` command.

Install the required packages manually.

After installation

1 Restore the backup copies of the files created in step 1 of the Before uninstallation procedure

2 Run the following script if `wls_update.pl` file is present:

```
# /opt/VRTSperl/bin/perl
/opt/VRTSagents/ha/bin/WebLogic/wls_update.pl
```

3 Run the following command to restore the previous settings from the `settings.conf` file which was backed up in step 2 of the Before uninstallation procedure.

```
# /opt/VRTSvcs/portal/admin/settings_upgrade.pl <backup location of file settings.conf>
```

4 Start VCS by using the following command:

```
# /opt/VRTS/bin/hastart -onenode
```

5 Wait for the service groups to come online. Check the state of the service groups using the following command:

```
# /opt/VRTS/bin/hagrp -state
```

6 Run the following command to eliminate any discrepancies between the old and new configurations:

```
# /opt/VRTSvcs/portal/admin/synchronize_guest_config.pl
```

Chapter 3

Installing the Symantec ApplicationHA Agent Pack using the install program

This chapter includes the following topics:

- Installing the Symantec ApplicationHA Agent Pack using the install program

Installing the Symantec ApplicationHA Agent Pack using the install program

Note: The system from where you install ApplicationHA Agent Pack must run the same operating system distribution as the target virtual machines. Make sure that password-less `rsh` or `ssh` communication exists between the systems. By default, the install program uses `ssh`.

To install the ApplicationHA Agent Pack

1. Confirm that you are logged in as the super user.
2. Extract the agent pack media.

3 Navigate to the folder that contains the `installagpack` install program for the required operating system:

Operating system	Directory path
Oracle Enterprise Linux	linux/rhel5_x86_64/
Red Hat Enterprise Linux 5	linux/rhel5_x86_64/
Red Hat Enterprise Linux 6	linux/rhel6_x86_64/
SUSE Linux Enterprise Server 11	linux/sles11_x86_64/
Solaris SPARC	solaris/sol_sparc/
AIX	aix/

For example, to install ApplicationHA Agent Pack on a machine running the RHEL 5 operating system,

```
# cd agentpack_media/linux/rhel5_x86_64/application_ha/6.1
```

Where *agentpack_media* is the directory where you extracted the agent pack media.

4 Start the `installagpack` install program by running the following command. You can optionally specify the system names as command line arguments as shown below:

```
# ./installagpack -upgrade sys1 sys2
```

The install program starts with a copyright message, specifies the directory where the logs are created and performs the following tasks:

- Ensures that the systems have the required operating system patches. If the install program reports that any of the patches are not available, you must install the patches on the system before proceeding with the ApplicationHA Agent Pack installation.
- Checks that the local system that runs the install program can communicate with the remote systems that you specified. For example: sys1 and sys2.
- Checks whether any of the packages already exists on a system. If the current version of any of the packages exists, the install program removes the packages from the installation list for the system.
- Displays the list of packages that the install program will install on each virtual machine.
- Checks whether the required space is available on the virtual machines where you want to install the ApplicationHA Agent Pack packages.

- Ensures that any ApplicationHA processes that are running do not conflict with the installation. The install program stops the conflicting ApplicationHA processes, if any, and proceeds to install ApplicationHA Agent Pack.

  Note: Once the Agent Pack installation is complete on a virtual machine, the conflicting processes that ApplicationHA stopped on the virtual machine during the installation, are restarted.

5 After the installation, note the location of the installation log files and the summary files for future reference.

  The files provide useful information that can assist you with future installations.

summary file	Lists the packages that are installed on each system.
log file	Details the entire installation.

Chapter 4

Uninstalling the Symantec ApplicationHA Agent Pack using the install program

This chapter includes the following topics:

- Preparing to uninstall Symantec ApplicationHA Agent Pack
- Uninstalling Symantec ApplicationHA Agent Pack using the uninstall program
- Running uninstallagpack from the Symantec ApplicationHA Agent Pack media

Preparing to uninstall Symantec ApplicationHA Agent Pack

Before you uninstall ApplicationHA Agent Pack from any virtual machine:

- Stop ApplicationHA guest components using the following command.

```
# /opt/VRTS/bin/hastop -local -force
```

You must fulfill the following conditions before you use the `uninstallagpack` to uninstall ApplicationHA Agent Pack from a virtual machine:

- Make sure that password-less `rsh` or `ssh` communication exists between systems. By default, the uninstall program uses `ssh`.
- Make sure that you can execute `ssh` or `rsh` commands as super user on systems from which you want to uninstall ApplicationHA Agent Pack.

If you cannot fulfill the above conditions, then you must run the `uninstallagpack` on each system.

The `uninstallagpack` removes all ApplicationHA Agent Pack packages and some Symantec ApplicationHA packages.

Caution: After you run the `uninstallagpack` program, you must reinstall Symantec ApplicationHA.

Uninstalling Symantec ApplicationHA Agent Pack using the uninstall program

This section demonstrates how to uninstall ApplicationHA Agent Pack using the `uninstallagpack` program. The `uninstallagpack` program uninstalls ApplicationHA Agent Pack from the two virtual machines: sys1 and sys2.

The program stops the ApplicationHA processes that are currently running during the uninstallation process

To uninstall ApplicationHA Agent Pack

1. Confirm that you are logged in as the super user.
2. Start `uninstallagpack`.

   ```
   # cd /opt/VRTS/install

   # ./uninstallagpack sys1 sys2
   ```

   The program displays a copyright notice and the directory where the logs are created.
3. Enter the names of the systems from which you want to uninstall ApplicationHA Agent Pack.

   The program performs the following system verification checks.

   - Verifies the communication between systems
   - Checks the installations on each system to determine the packages to be uninstalled.
4. Press Enter to continue with the uninstallation.
5. Enter y to confirm the uninstallation of ApplicationHA Agent Pack packages from the virtual machines that you specified in step 2. For example, sys1 and sys2.
6. After the uninstallation, note the location of summary and log files that the uninstall program create.

Running uninstallagpack from the Symantec ApplicationHA Agent Pack media

You can use the `uninstallagpack` on the ApplicationHA Agent Pack media in one of the following cases:

- If you need to uninstall ApplicationHA Agent Pack after an incomplete installation.
- If the `uninstallagpack` is not available in `/opt/VRTS/install`.

You can find the `uninstallagpack` program in the following location:

`/`*`agentpack_media`*`/linux/`*`operating_system`*`/application_ha/6.1`

Where *agentpack_media* is the directory where you extracted the agent pack media and *operating_system* is the directory that contains the `uninstallagpack` program for the required operating system:

Operating system	directory path
Oracle Enterprise Linux	linux/rhel5_x86_64/
Red Hat Enterprise Linux 5	linux/rhel5_x86_64/
Red Hat Enterprise Linux 6	linux/rhel6_x86_64/
SUSE Linux Enterprise Server 11	linux/sles11_x86_64/
Solaris SPARC	solaris/sol_sparc/
AIX	aix/

For example, to uninstall ApplicationHA from a machine running the RHEL operating system, you can find the `uninstallagpack` program in the following location:

```
# cd agentpack_media/linux/rhel5_x86_64/application_ha/6.1
```

Appendix A

Symantec ApplicationHA installation packages

This appendix includes the following topics:

- Symantec ApplicationHA installation packages

Symantec ApplicationHA installation packages

Symantec ApplicationHA installation packages lists the package name and contents for each package installed as part of Symantec ApplicationHA Agent Pack.

Table A-1 Symantec ApplicationHA packages

Package	Contents	Applicable platforms
VRTSvcsea	Contains the binaries for Symantec High Availability Agents for Oracle, Sybase and DB2	Linux on VMware, Linux on KVM, Solaris on SPARC, AIX
VRTSvcsvmv	Contains the binaries for Symantec ApplicationHA Application Discovery Framework and wizards	Linux on VMware, Linux on KVM, Solaris on SPARC, AIX
VRTSwls	Contains the binaries for Symantec High Availability Agent for WebLogic Server	Linux on VMware
VRTSmq6	Contains the binaries for Symantec High Availability Agents for WebSphere MQ and WebSphere MQ FTE	Linux on VMware, Linux on KVM

Table A-1 Symantec ApplicationHA packages *(continued)*

Package	Contents	Applicable platforms
VRTSvcswas	Contains the binaries for Symantec High Availability Agent for WebSphere Application Server	Linux on VMware, Linux on KVM
VRTSsapnw04	Contains the binaries for Symantec High Availability Agent for SAP NetWeaver	Linux on VMware
VRTSsapwebas71	Contains the binaries for Symantec High Availability Agent for SAP Web Application Server	Linux on VMware
VRTSjboss	Contains the binaries for Symantec High Availability Agent for JBoss Application Server	Linux on VMware, Linux on KVM
VRTSmysql	Contains the binaries for Symantec High Availability Agent for MySQL	Linux on VMware, Linux on KVM
VRTSsapnw	Contains the binaries for Symantec High Availability Agent for SAP NetWeaver with HA-API	Linux on VMware

Note: The Symantec ApplicationHA agent for Apache HTTP server is installed only via the ApplicationHA product installation and is not available as an upgrade in Agent Pack for ApplicationHA.