

Veritas Access Appliance Upgrade Guide

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Veritas Services and Operations Readiness Tools (SORT)

Veritas Services and Operations Readiness Tools (SORT) is a website that provides information and tools to automate and simplify certain time-consuming administrative tasks. Depending on the product, SORT helps you prepare for installations and upgrades, identify risks in your datacenters, and improve operational efficiency. To see what services and tools SORT provides for your product, see the data sheet:

https://sort.veritas.com/data/support/SORT_Data_Sheet.pdf

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Introduction

This chapter includes the following topics:

- [About the Veritas Access 3340 Appliance upgrade](#)
- [About the supported software versions](#)
- [Supported upgrade paths](#)

About the Veritas Access 3340 Appliance upgrade

Veritas Access 3340 Appliance supports the following upgrade methods:

- Rolling upgrade
Use this method if the Veritas Access 3340 Appliance is configured and the appliance nodes are part of the Access cluster.
- Node-by-node upgrade
Use this method if the appliance nodes are in factory state.

Note: The appliance nodes that are in **Not in Access cluster** state cannot be upgraded. You can reset a node to the default factory settings, and then upgrade the node.

Table 1-1 Upgrade methods

Upgrade method	Description
Rolling upgrade	<p>During a rolling upgrade, each node in the Access cluster is upgraded successively without stopping the Access cluster. Rolling upgrade minimizes the service downtime.</p> <p>Download the required upgrade package to one of the nodes in the cluster and upgrade the node where the upgrade package is downloaded. The upgrade process copies and installs the upgrade package to other nodes in the cluster. During the upgrade, services switch between the nodes to keep the Access Appliance online. The services are down only when the services switch between the nodes.</p> <p>If upgrade fails on one of the nodes, the update is automatically rolled back on all the nodes in the cluster and the nodes are restored to their earlier version.</p>
Node-by-node upgrade	<p>Warning: Ensure that all the nodes are in factory state before you use this upgrade method.</p> <p>Download the required upgrade package to each node, and then upgrade each node separately by installing the update on each of the nodes.</p> <p>If the upgrade fails, the update is rolled back and the node is restored to its earlier version.</p>

About the supported software versions

Veritas Access 3340 Appliance supports Access software release versions 7.3.2 and 7.4.2.

[Table 1-2](#) shows the Access software versions for the recent Access Appliance software releases.

Table 1-2 Access Appliance software releases and the corresponding Access software versions

Appliance software release	Access software release
7.3.2	7.3.2
7.4.2	7.4.2

Supported upgrade paths

The following upgrade paths are supported for Access 3340 appliance:

Upgrade from	Upgrade to	Estimated completion time
7.3.2	7.4.2	Approximately 2.5 hours

Performing pre-upgrade tasks

This chapter includes the following topics:

- [Running a software self-test](#)
- [Installing EEB to resolve the Spectre vulnerability \(CVE-2017-5715\)](#)

Running a software self-test

Run the software self-test on each of the appliance nodes to verify the status of the appliance software components. Ensure that you run a self-test on each of the appliance nodes that you want to upgrade. The self-test must complete with a **PASS** status.

To run the software self-test, complete the following steps:

- 1 Open an SSH session and log on to the appliance node as an administrator using the Access Appliance shell menu.

The `Main_Menu` view is displayed.

- 2 To run the self-test, enter the following command:

```
Main_Menu > Support > Test Software
```

The self-test validates the status of components such as the Access service, the S3 service, and the installed RPM packages. Ensure that the self-test completes with **PASS** status.

Installing EEB to resolve the Spectre vulnerability (CVE-2017-5715)

CVE-2017-5715 (Spectre variant 2) is an indirect branching poisoning attack that can lead to data leakage. This attack allows a virtual guest to read memory from the host system. If you have not already installed the patch to resolve this vulnerability, install this Emergency Engineering Binary (EEB) when you upgrade from Access 3340 Appliance version 7.3.2 to 7.4.2.

To install the EEB, refer to the following tech note:

[Veritas Access 3340 Appliance BIOS update for CVE-2017-5715 \(Spectre variant 2\)](#)

Upgrading the Access 3340 Appliance

This chapter includes the following topics:

- [Downloading the appliance software release updates](#)
- [Upgrading Access 3340 Appliance version 7.3.2 to 7.4.2](#)

Downloading the appliance software release updates

Appliance software updates can be downloaded by using the Access Appliance shell menu or manually through a share. Updates must be downloaded to the appliance before you start the upgrade.

Downloading software updates directly to an Access 3340 appliance node

Use this procedure to download a software release update to an appliance node.

For a rolling upgrade, download the package to one of the nodes in the cluster. For a node-by-node upgrade, you need to download the package to all the nodes.

For more details about the upgrade methods, See [“About the Veritas Access 3340 Appliance upgrade”](#) on page 5.

To download software release updates directly to an appliance node, complete the following steps:

- 1** Open an SSH session and log on to the appliance as an administrator using the Access Appliance shell menu.

The `Main_Menu` view is displayed.

- 2** To determine if a software update is available from the Veritas Support website, enter the following command:

```
Main_Menu > Manage > Software > List AvailablePatch
```

The software release update that is available for installation is displayed.

Note the name of the software release update package name. For example, `VRTSaccess-app-update-7.4.2-1.x86_64.rpm`

- 3** To download the available software update, enter the following command:

```
Main_Menu > Manage > Software > Download update_name
```

where *update_name* is the name of the software release update package.

For example:

```
Main_Menu > Manage > Software > Download  
VRTSaccess-app-update-7.4.2-1.x86_64.rpm
```

- 4** To verify that the software update has downloaded successfully, enter the following command:

```
Main_Menu > Manage > Software > List Downloaded
```

The downloaded software update is validated and details such as the patch name, size, and version are displayed.

Downloading software updates to an Access 3340 appliance node using a client share

Use this procedure to download the software release updates to an appliance node using a CIFS or an NFS client share.

To download software release update to an appliance node using a CIFS or an NFS client share, complete the following steps:

- 1** Open an SSH session and log on to the appliance as an administrator using the Access Appliance shell menu.

- 2** To open an NFS or a CIFS share, enter the following command:

```
Main_Menu > Manage > Software > Share Open
```

Note: If you experience a 'time-out' or 'denied' error when mounting the NFS share on your client computer, refer to the Access Release Notes 7.3.2 for details about how to bring the NFS server online.

- 3** Mount the appliance share directory as follows:

For NFS: `Node_management_IP:/inst/patch/incoming`

For CIFS: `\\Node_management_IP\incoming_patches`

where `Node_management_IP` is the IP address that is assigned to eth1 of each node.

- 4** Download the upgrade package files and the MD5 and SHA1 checksums.

- Release updates

Click each of the following links to download the split tar files from the Veritas SORT website:

[VRTSaccess-app-N-7.4.2-1.x86_64-tar-split.1of3](#)

[VRTSaccess-app-N-7.4.2-1.x86_64-tar-split.2of3](#)

[VRTSaccess-app-N-7.4.2-1.x86_64-tar-split.3of3](#)

- MD5 and SHA1 checksums

Click the following link to a text file on the Veritas SORT website that contains the MD5 and SHA1 checksums:

[Access_Appliance_Release_742_MD5_SHA1.txt](#)

Verify that the downloaded MD5 or SHA1 checksums match those in the file on the Veritas SORT website.

- 5** Use the following command to merge and extract the release update .rpm files:

```
cat VRTSaccess-app-N-7.4.2-1.x86_64-tar-split.1of3
VRTSaccess-app-N-7.4.2-1.x86_64-tar-split.2of3
VRTSaccess-app-N-7.4.2-1.x86_64-tar-split.3of3 | tar xvf -
```

The resulting files are:

```
VRTSaccess-app-update-7.4.2-1.x86_64.rpm
update.rpm.md5_checksum
update.rpm.shal_checksum
```

- 6** Run one of the following commands to compute the checksum of the rpm file:

```
md5sum VRTSaccess-app-update-7.4.2-1.x86_64.rpm
shalsum VRTSaccess-app-update-7.4.2-1.x86_64.rpm
```

- 7** Copy this release update to the mounted share.

Note: When copying the update, do not run any commands on the appliance. Doing so, can cause the copy operation to fail.

- 8** Unmount the shared directory after copying the update.

- 9** Close the NFS and the CIFS shares:

```
Main_Menu > Manage > Software > Share Close
```

- 10** List the downloaded files:

```
Main_Menu > Manage > Software > List Downloaded
```

The downloaded update is validated and details such as the patch name, size, and version are displayed.

Upgrading Access 3340 Appliance version 7.3.2 to 7.4.2

The following table summarizes the steps that you need to complete to upgrade the Access Appliance from version 7.3.2 to 7.4.2.

Table 3-1 Upgrade roadmap

Task	Description
Complete the pre-upgrade tasks.	<ul style="list-style-type: none"> ■ Install the EBB for BIOS update (Recommended). See “Installing EEB to resolve the Spectre vulnerability (CVE-2017-5715)” on page 9. ■ Run the software self-test on each appliance node. See “Running a software self-test” on page 8.
Download the software upgrade package.	<ul style="list-style-type: none"> ■ For a rolling upgrade, download the software upgrade package to one of the nodes in the cluster. ■ For a node-by-node upgrade, download the software upgrade package to each node that you want to upgrade. <p>See “Downloading software updates directly to an Access 3340 appliance node” on page 10.</p> <p>See “Downloading software updates to an Access 3340 appliance node using a client share” on page 11.</p>
Install the software update.	<ul style="list-style-type: none"> ■ For a rolling upgrade, install the software update on the node where you downloaded the upgrade package. ■ For a node-by-node upgrade, install the software update on each node that you want to upgrade. <p>See “Installing an appliance software update on the Access 3340 Appliance” on page 14.</p>
Review the licensing requirements.	<p>Ensure that you comply with the product licensing requirements after upgrading the appliance.</p> <p>See “Reviewing the license requirements” on page 16.</p>

Installing an appliance software update on the Access 3340 Appliance

Use the following procedure to upgrade the appliance.

To install the downloaded software release update, complete the following steps:

- 1** Connect to the Intelligent Platform Management Interface (IPMI) console of the node where you downloaded the software update package.

Note: Veritas recommends that you log in using the Access Appliance shell menu from the IPMI console instead of an SSH session. The IPMI console is also known as the Veritas Remote Management Console. For details about how to access and use the Veritas Remote Management Console, refer to the *Veritas Access Appliance Initial Configuration and Administration Guide*.

- 2** Log in to the Access Appliance shell menu.
- 3** To install the software release update, run the following command:

```
Main_Menu > Manage > Software > Install patch_name
```

where *patch_name* is the name of the software release update that you want to install.

A summary of the upgrade changes is displayed and you are prompted for confirmation. Review the details and type **yes** to continue.

- 4** Monitor the preflight check and check if any **Check failed** messages are displayed.

After the preflight check completes, you have the following options:

- If **Check failed** messages are not displayed and the preflight check completes successfully, the **Pre-flight check finished successfully** message is displayed and you are prompted to continue to the next step.
- If a **Check failed** message is displayed, the upgrade cannot continue. You must resolve the reported failures, and then install the update again (see step 3) so that the preflight check can verify that the failures have been resolved. For information about how to resolve the reported issues, refer to the technical articles corresponding to the displayed UMI codes (V-409-xxx-xxxx).

- 5** When the following message is displayed and you are promoted for confirmation, type **yes** to continue:

```
This software update requires a reboot of the appliance after the
installation process completes. Do you want to continue? (yes/no)
```

- 6 To check the upgrade status, run the following command:

```
Main_Menu > Manage > Software > UpgradeStatus
```

The details about the completed tasks and the completion status are displayed.

If the upgrade fails at any point in time, error messages and the details about possible solutions are displayed and a rollback operation is initiated automatically. After the rollback is completed successfully, the **Rollback is done** message is displayed.

If the software update is installed successfully, the following message is displayed:

This appliance node is not in upgrade state.

To ensure that the appliance was upgraded successfully, run the `Main_Menu > Appliance > Status` command and verify the Access version and the appliance version.

- 7 After upgrading the appliance, if the Access GUI becomes unresponsive complete the following steps:

- Determine the node that hosts the `ManagementConsole` service by using the following command:

```
Support > Services Show
```

The following example shows the sample output:

Service	node_01	node_02
-----	-----	-----
...		
ManagementConsole	OFFLINE	ONLINE
...		

- In an elevated maintenance prompt from the determined node, run the following command:

```
# /opt/VRTSnas/pysnas/bin/isaconfig
```

Reviewing the license requirements

Starting with Access Appliance version 7.4.2, the licensing model has changed. The Access Appliance supports the per-TB licensing model with a perpetual license.

If you have a valid per-core or a per-TB-core license from a prior release, you can continue to use the license after you upgrade the appliance. However, Veritas recommends that you switch to the per-TB licensing model after you upgrade to Access Appliance version 7.4.2.

For more information about the Access Appliance license, see the *Veritas Access Appliance Initial Configuration and Administration Guide*.