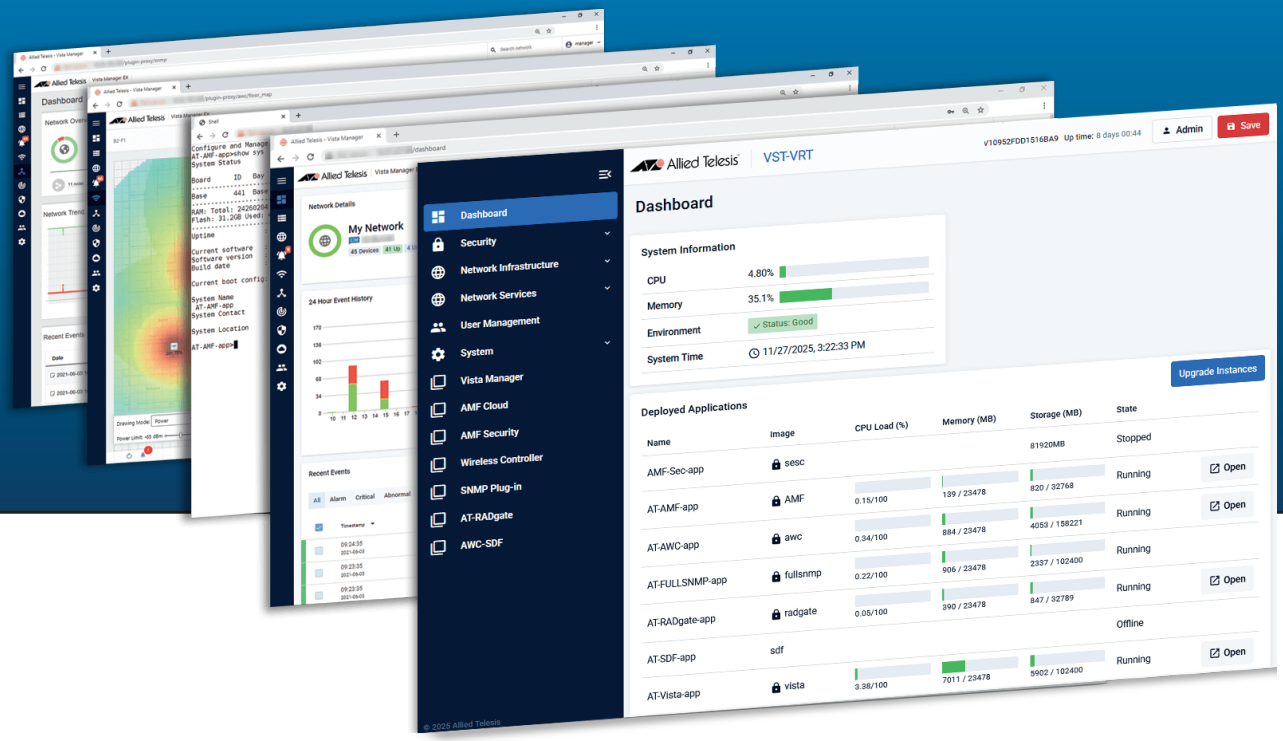
Release Notes



AT-VST-VRT Vista Manager Virtual 3.14.x

- VST-VRT 3.14.1

Revision B

Acknowledgments

Getting the most from this Release Note

To get the best from this release note, we recommend using Adobe Acrobat Reader version 8 or later. You can download Acrobat free from **www.adobe.com/**

Contents

Important Considerations Before Upgrading

This section describes changes that may affect VST-VRT if you upgrade. Please read it carefully before upgrading.

Oracle VM Virtual Box is not supported from VST-VRT 3.11.1

From VST-VRT 3.11.1, VST-VRT does not support the following as a virtual platform:

- Oracle VM VirtualBox version 6.1 and version 5.2

VST-VRT Software Version 3.14.1

Product family supported by this version:
AT-VST-VRT Vista Manager Virtual

Introduction

The virtual machine version of Vista Manager is called Vista Manager Virtual (VST-VRT). VST-VRT includes the tools to simplify and centralize management and security of your network. It provides an integrated graphical view for monitoring and management of wired, wireless and third-party devices. The VST-VRT Web GUI allows you to manage the virtual machine and to set up and access applications that run on it.

This release note describes Vista Manager Virtual running VST-VRT application software version 3.14.1 and the new features in this version.

This version of VST-VRT is supported on the following virtual platforms:

- Windows Server Hyper-V 2019, 2022, 2025
- Hyper-V Server 2019
- VMWare vSphere Hypervisor (ESXi) 7.0, 8.0

The VST-VRT upgrade is packaged as a file image in two file formats, ISO file (.iso) and VHD file (.vhd). When upgrading, use the installation method and file format that match your virtualization environment and method.

The upgrade files are available from Allied Telesis Support Portal. The files are named **VST_VRT-3.14.1.iso** and **VST_VRT-3.14.1.vhd**.

For full system requirements for VST-VRT see the Vista Manager EX datasheet.

Application support in VST-VRT 3.14.1

VST-VRT is a collection of an OS and a number of applications. This collection has its own version number, which is 3.14.1.

The following table lists the version numbers of each individual part of this VST-VRT version:

ITEM	VERSION
VST-VRT Operating System	1.13.1
VST-VRT Application	3.14.1
Vista Manager	3.16.0
Wireless Controller (AWC)	3.16.0
SNMP-Full	2.14.4
AMF Cloud	5.5.5-2.1
AMF Security	2.6.1
RADgate	1.2.0
AWC Sky Defender (AWC-SDF)	1.1.0

What's New in VST-VRT 3.14.1

This VST-VRT version includes the following support for new application versions, new features and enhancements.

For release notes for Vista Manager EX and its AWC and SNMP plugins, see the Vista Manager EX Release Notes page on our website.

For other technical documents for Vista Manager Virtual (VST-VRT) and its applications, see the Vista Manager Virtual Technical Document page on our website.

Upgraded application versions

This VST-VRT version includes the following support for new application versions.

Vista Manager

The Vista Manager application was upgraded to version 3.16.0. For release notes for Vista Manager EX and its AWC and SNMP plugins, see the Vista Manager EX Release Notes page on our website.

Wireless Controller (AWC)

The Wireless Controller (AWC) application was upgraded to version 3.16.0. For release notes for Vista Manager EX and its AWC and SNMP plugins, see the Vista Manager EX Release Notes page on our website.

SNMP

The SNMP (full SNMP) plugin application was upgraded to 2.14.4. For release notes for Vista Manager EX and its AWC and SNMP plugins, see the Vista Manager EX Release Notes page on our website.

AMF Cloud

The AMF Cloud application was upgraded to version 5.5.5-2.1. For release notes for AMF Cloud, see the Release Notes for AlliedWare Plus™ Version 5.5.5-x.x page on our website. For other technical documents for AMF Cloud, see the Vista Manager Virtual (VST-VRT) Technical Document page on our website.

RADgate

The RADgate plugin application was upgraded to 1.2.0. For release notes and other technical documents for RADgate, see the Vista Manager Virtual Technical Document page on our website.

Support for IPv6 management

This version of VST-VRT adds support for IPv6 address.

All configuration and fields in the VST-VRT GUI that previously supported IPv4 addresses now also support IPv6 addresses.

Note that if the VST-VRT is set to accept DHCP addressing (this is the default), DHCP will accept an IPv6 address if offered. You can then manage the device completely using IPv6 addressing.

If an IPv6 address is not offered via DHCP, you will initially need to access the device via IPv4. You can then configure IPv6 addresses as required and manage the device via IPv6 from then on.

Remote Logging

From VST-VRT version 3.13.3, you can configure VST-VRT to send log messages to:

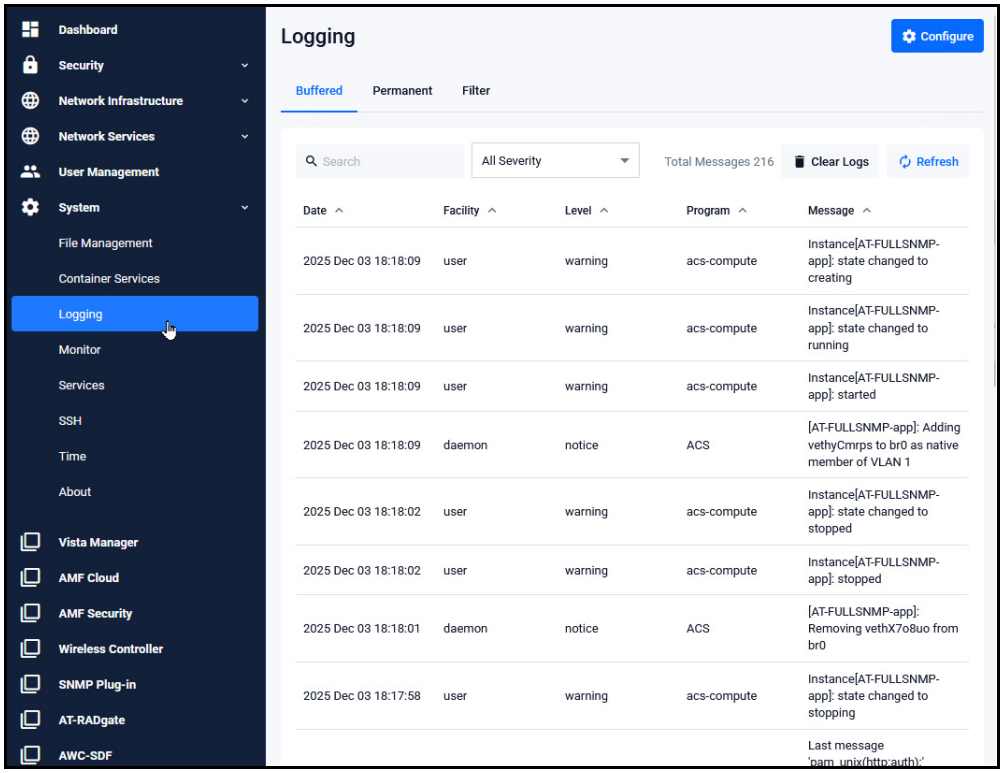
- a remote syslog server
- an email address.

You can use this to monitor the appliance and to alert a user to serious issues.

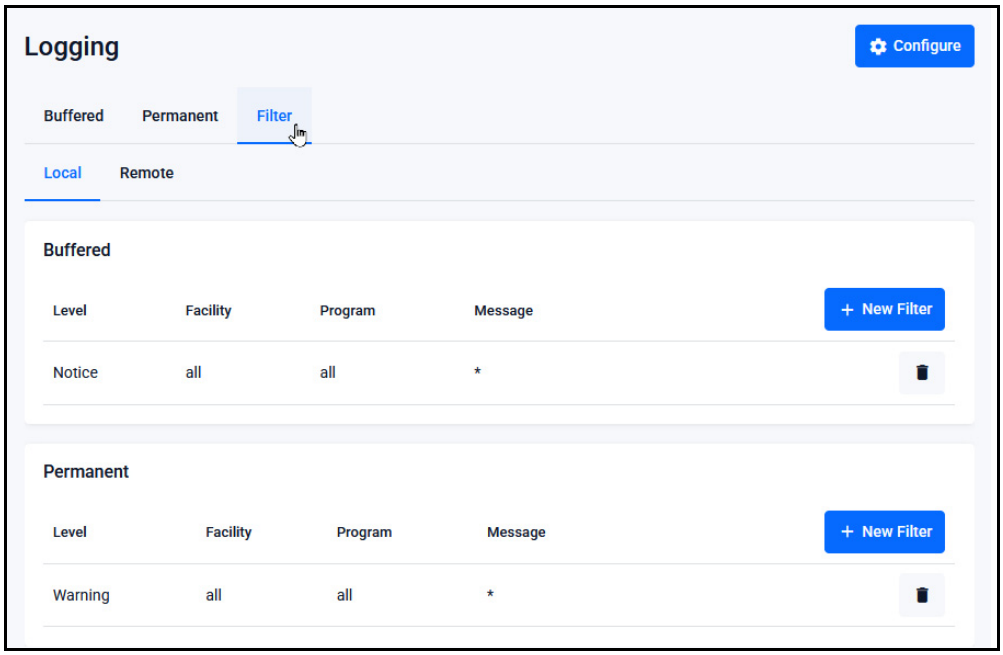
As in previous versions, VST-VRT also sends log messages to the permanent and buffered logs on the local device.

Send log messages to a remote syslog server

1. In the VST-VRT menu, click **System** > **Logging**.

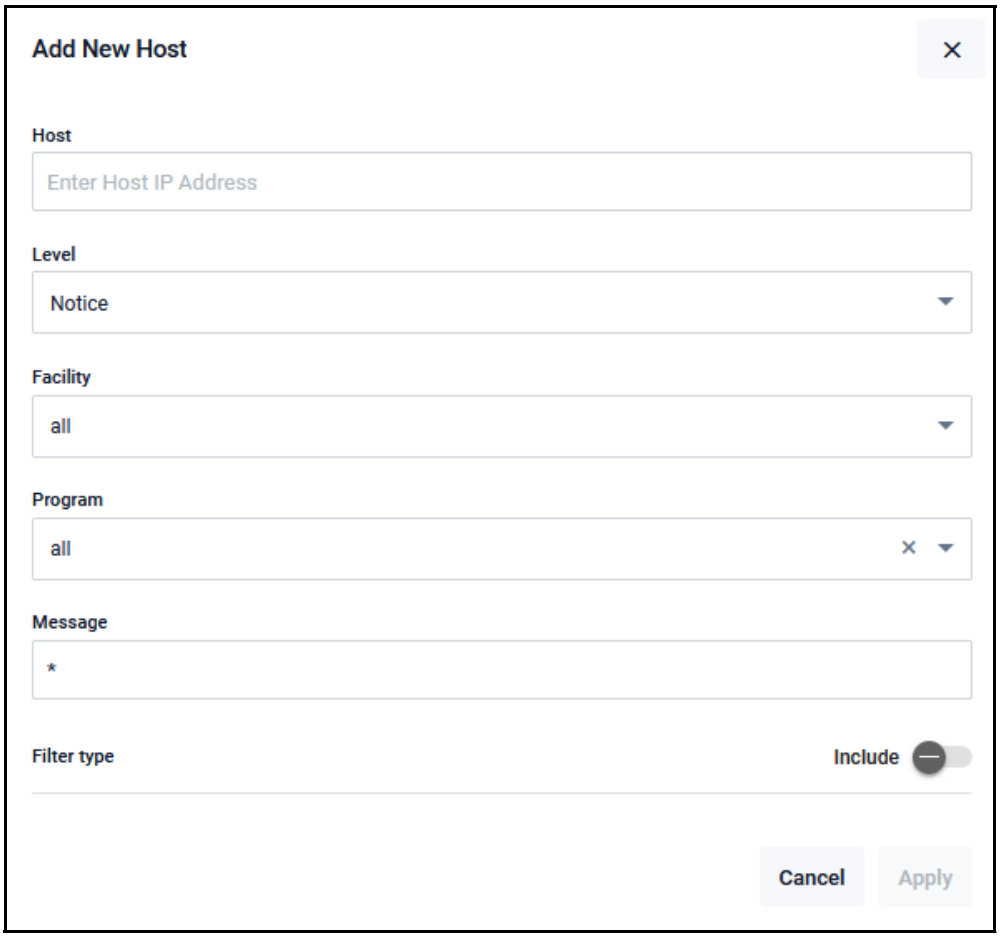


2. In the Logging page, click **Filter**.



3. Click **Remote**.

4. Click + **New Host**.



5. Enter the IP address of the syslog **Host** to send log messages to.

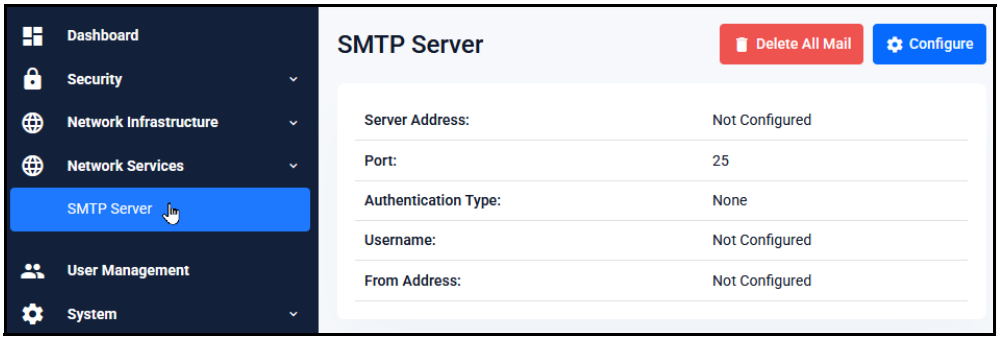
6. Set the filter parameters to select which messages to send ("Filter the messages to send" on page 12).

7. Click **Apply**.

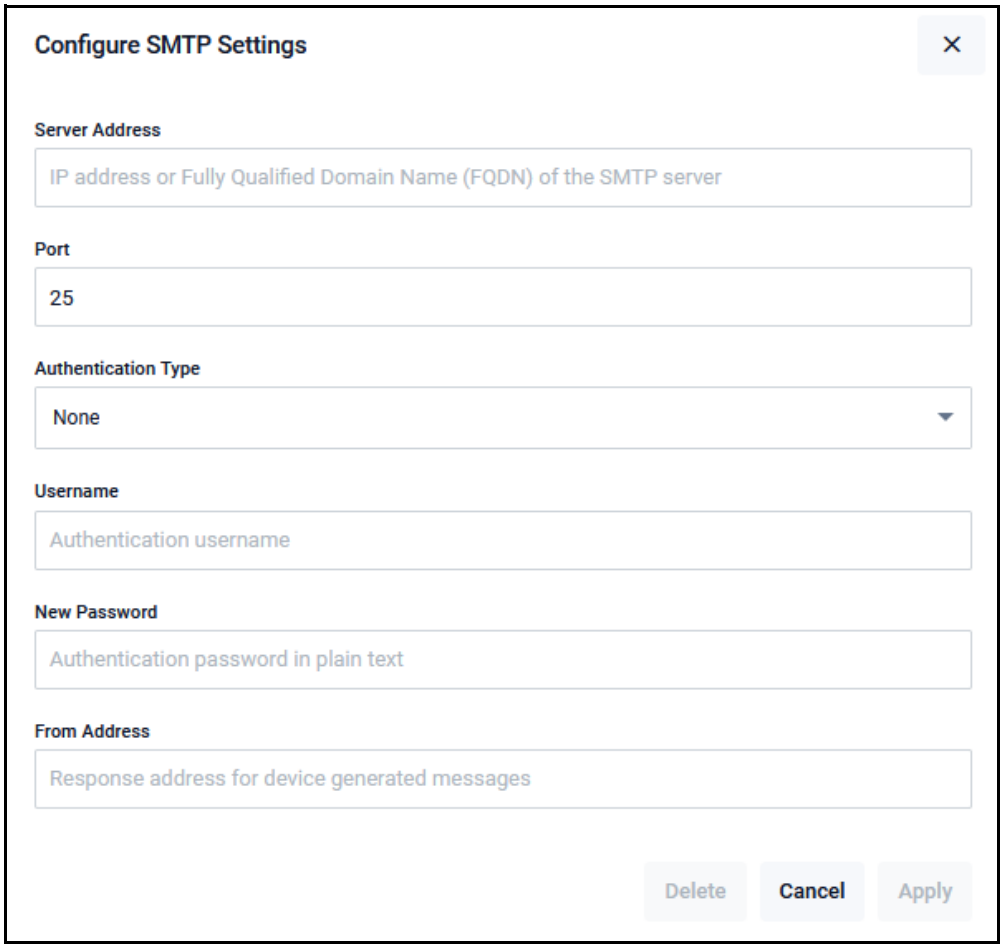
Configure an SMTP server.

To send messages by email, you must configure an SMTP server.

1. In the VST-VRT menu, click **Network Services** > **SMTP Server**.



2. Click the **Configure** button at the top of the SMTP Server page.

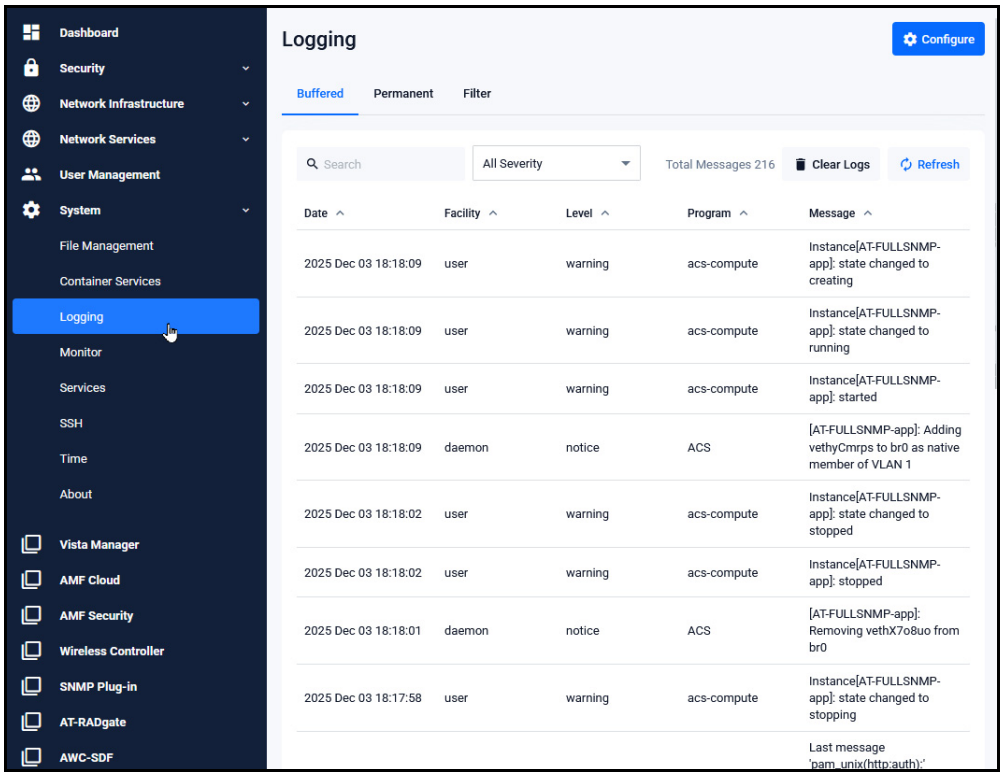


3. Configure SMTP settings based on your mail server configuration:
   - Enter the **Server Address**—the IP address or domain name of the SMTP server.
   - Enter the **Port** to use for the SMTP server (port 25 by default).
   - Select the **Authentication Type** to apply (None, Login, CRAM-MD5, or Plain).
   - Enter your user name and password for the SMTP server if required for authentication.
   - Enter the **From Address**. Log message emails will show that they were sent from this address.

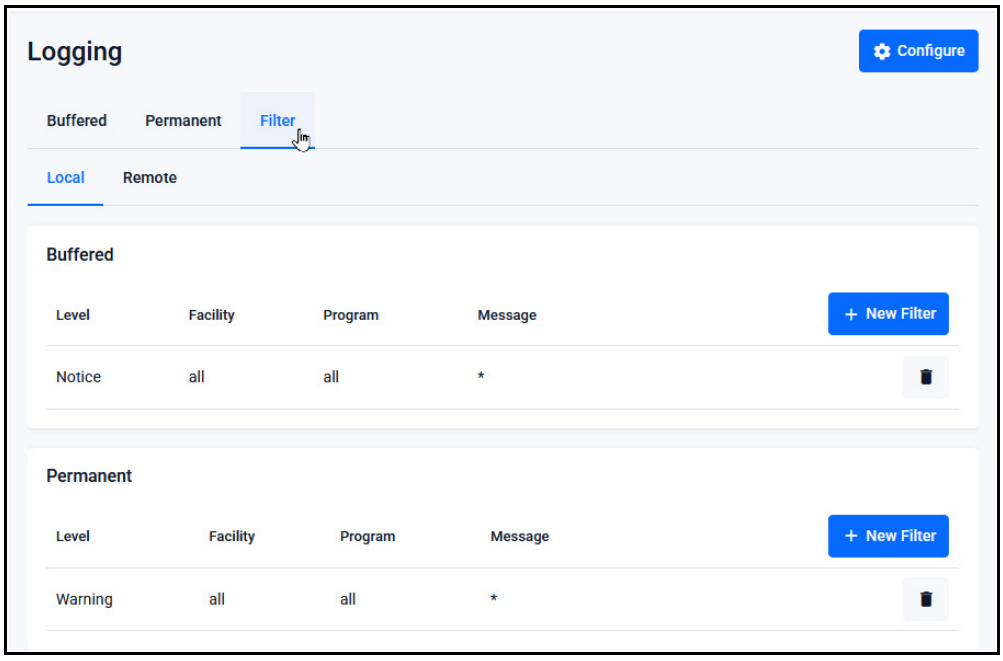
4. Click **Apply**.

Send log messages to an email address

1. In the VST-VRT menu, click **System** > **Logging**.

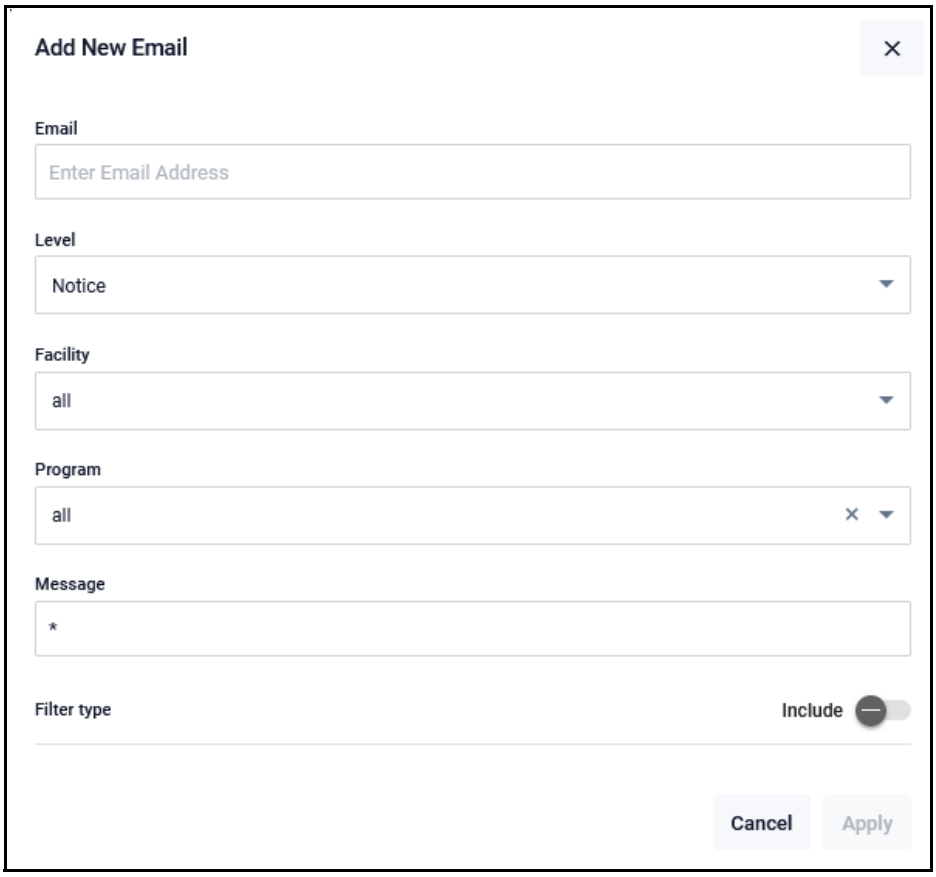


2. In the Logging page, click **Filter**.



3. Click **Remote**.

4. Click + **New Email**.



5. Enter the **Email** address to send log messages to.

6. Set the filter parameters to select which messages to send ("Filter the messages to send" below).

Filter the messages to send

By default, VST-VRT will send all messages with severity level Notice or higher. To change which messages it sends, specify filter parameters. You can add more filters after the syslog or email receiver has been set up. You can also create filters for the permanent and buffered logs on the device.

1. Select the **Level** (**Notice** by default). Messages at or above this severity level match the filter.

2. Select the **Facility** or match messages from all facilities.

3. Select the **Program** or match messages from all programs.

4. Enter a text string in the **Message** field to send only messages that include this string. Wild cards are implicit.
   By default, set with an asterisk "*", all message strings are included.

5. When you first set up remote logging, set the filter to **Include**. This sets it to send all the messages that match the filtering fields above.
   Once you have created this initial filter, you can refine the filtering by setting up additional filters to include or exclude particular messages.

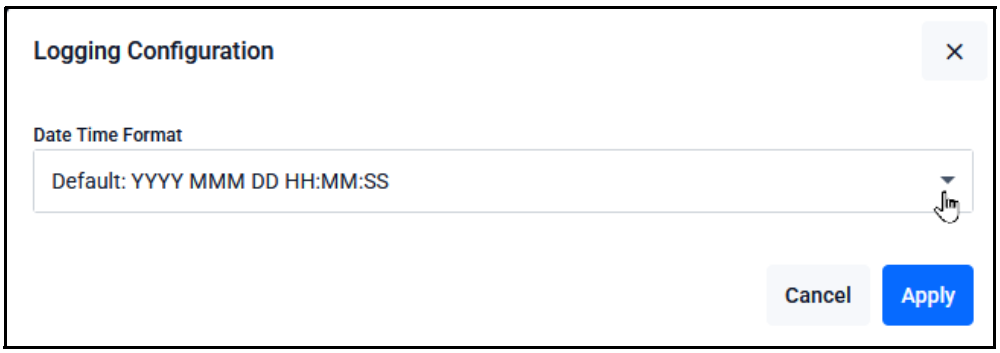
6. Click **Apply**.

Set the date-time format for log messages

The date and time when a log message is generated will be included in all log messages in one of these formats:

- YYYY MMM DD HH:MM:SS (default)
- YYYY-MM-DDThh:mm:ssTZD (ISO standard)

To set this, click **Configure** at the top right of the Logging page, and select the format required.



AWC Sky Defender (AWC-SDF)

This version of VST-VRT adds support for the AWC Sky Defender (AWC-SDF) app.

AWC Sky Defender in Vista Manager EX detects the MAC addresses of BYOD devices connected to Embedded Wireless Controller deployments, which enables control of which user devices are able to access the network, as well as monitoring their connection status.

Set up AWC Sky Defender

See the User Guide: Vista Manager AWC Plug-in version 3.15.0 > Operation Reference > AWC-SDF (AWC Sky Defender) > Access Control using MAC Address Collecting Network.

You will need to:

1. Create an instance of the AWC-SDF app in VST-VRT.

   Set the storage to 8192 MB.

   For more information about how to configure apps, see the "Vista Manager Virtual (VST-VRT) User Guide" on the Vista Manager Virtual (VST-VRT) Technical Documents page on our website.

2. Configure the Embedded Wireless Controller on the remote wireless AP that you want AWC Sky Defender to work with.

   Note that you will need to register the Embedded Wireless Controller that is in the Allied Telesis Wireless Access Points with the Remote Controller in AWC. In later versions of the Device GUI on the wireless APs, the Embedded Wireless Controller is configured from the Wireless Controller menu item. In earlier versions of the Device GUI, this was called Vista Manager mini.

3. Configure the AWC plugin in Vista Manager EX.

4. Configure the AWC Sky Defender.

Host networking mode for application instances

This version of VST-VRT supports network mode **Host** in addition to the previous network mode **Private**.

In Private mode, you must configure the network, including routing to and from the application. The advantage is that multiple services, for instance web servers, can run via a single network port. This suits many networks.

In Host mode, you do not need to configure the private network and routing. However, multiple services cannot use the same network port, so you must configure each service to use a different port. For instance, you cannot have two web servers running on port 443, and must configure each web server to use a different port.

Configure network mode Host

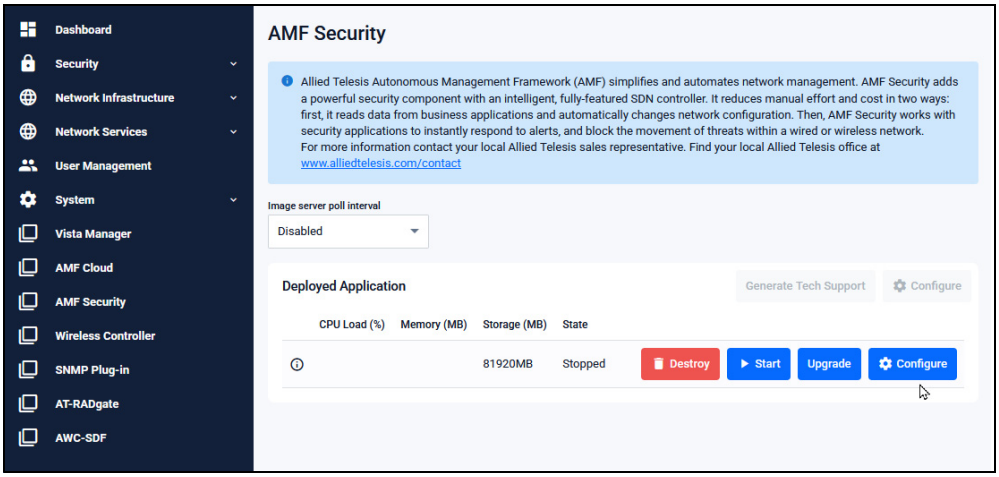
You can configure network mode Host:

- when you create the application instance, or
- by stopping the app instance, reconfiguring it, and starting it again.

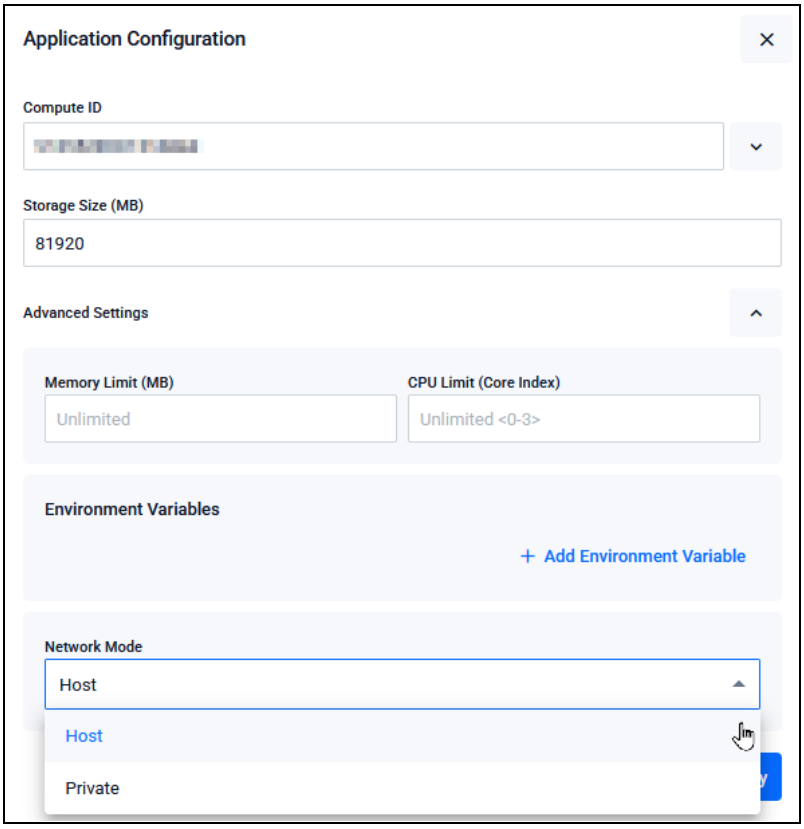
The default setting is Private.

1. From the VST-VRT menu, select the application.

2. In the application page, if the app instance is running, click **Stop** and wait for it to stop. Click **Configure**.



3. In the Application Configuration dialog box, expand Advanced Settings. In the **Network Mode** drop down list, select **Host**.



4. Click **Apply**.

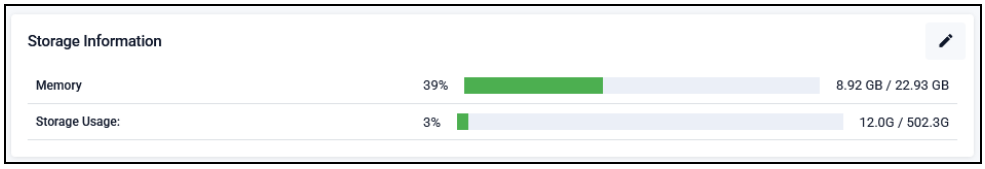
SWAP enabled by default on VST-VRT instances

Applies to VST-VRT and VST-APL devices running Device GUI version 2.22.0 or later

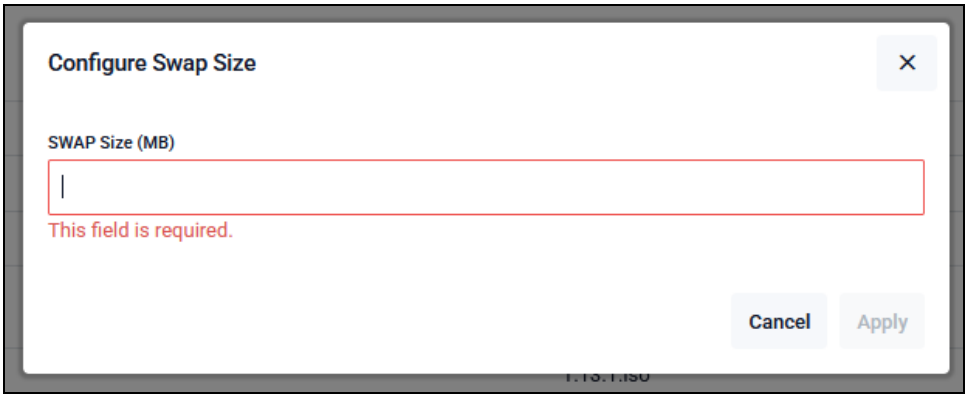
From VST-VRT OS version 1.13.1 onwards, SWAP is enabled by default on VST-VRT instances. Enabling SWAP improves system stability and reduces the chance of an error occurring.

Note that on VST-VRT instances, SWAP takes up 24GB of existing storage on the device that you host the VST-VRT instance on.

This change adds a new section of Storage Information to the **System** > **About** page, which includes a list of system resources such as memory, flash, SWAP. This is updated every 5 seconds.



If your device supports SWAP configuration, a pencil icon is displayed in the top right corner of the Storage Information section. When you click this icon, you can configure the SWAP size.



The size limit is from 256 MB, up to a maximum of either 32 GB, or 50% of the available flash storage—depending on which is smaller.

You can check how much storage is available from this page, and use the color to indicate the status:

- Green - usage is below 90%
- Red - usage is at or above 90%

Upgrading VST-VRT

This section describes how to upgrade the VST-VRT software and applications. It describes how to:

Back up application data

We recommend backing up application data for all applications regularly. You should also backup all the application data before following this upgrade procedure. See the relevant application's user manual for information on how to backup an application.

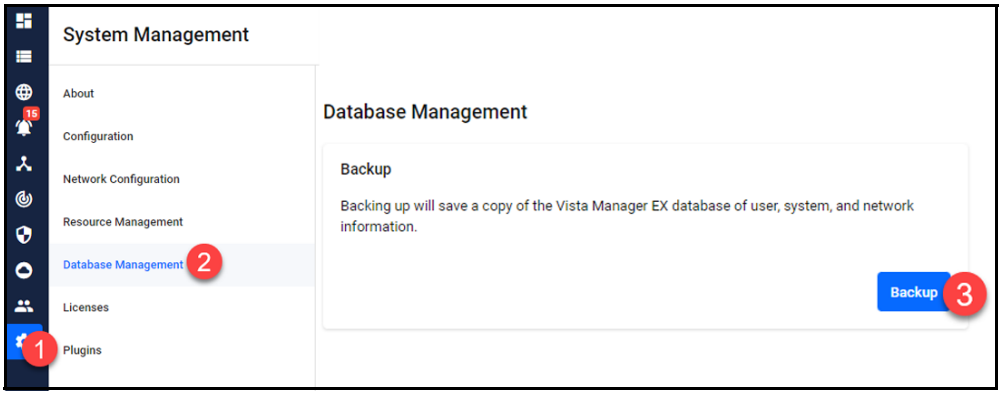
If you are using the **Wireless Controller (AWC)** or the **SNMP (full)** plugin applications, you must back up these applications before proceeding. This is because the process destroys and recreates the application instance. See "Upgrade Wireless Controller (AWC) and SNMP (Full) plugin applications" on page 27 for information on backing up these applications before you continue with following section.

Backup system data for Vista Manager EX

1. Log into the Vista Manager EX app using an Admin account. You can open it either by clicking **Open** next to it on the VST-VRT Dashboard or by pointing your browser to its IP address.

2. In the Vista Manager EX GUI, navigate to the **System Management** menu item and then to the **Database Management** tab.

3. Click on the **Backup** button in the **Backup** pane.



4. Click **Backup** again to confirm you wish to make a backup.
   This automatically downloads a **tar** file backup to your default download location. Keep this **tar** file in a safe location.

Note: Restoring Vista Manager backups from a newer version into an older version is not supported. It is not possible, for example, to restore a backup made in Vista Manager 3.14.0 into a Vista Manager 3.13.0 installation.

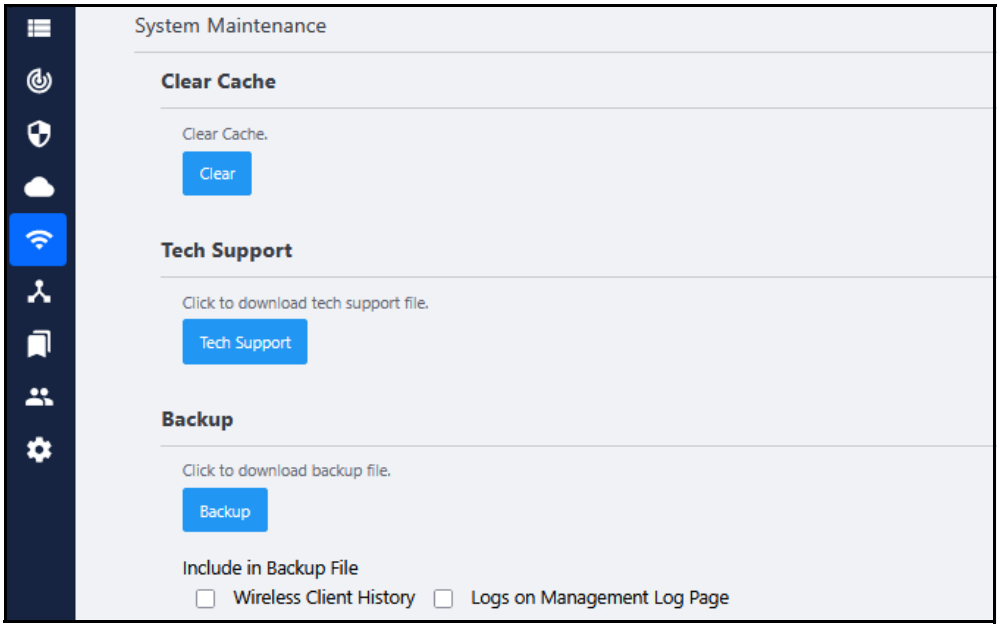
Back up system data for the Wireless Controller (AWC) plug-in application

Before upgrading the Wireless Controller application, you must back up its system data. This is because you have to destroy the application instance to upgrade it.

Note: Make sure that directories and filenames used for backup and restoration do not contain any multibyte characters.

1. Log into the Vista Manager EX app using an Admin account.

2. From the AWC plugin menu, select **System Setting**. In the **System Information** page, scroll down to the **System Maintenance** section, and in that to the **Backup** section.



3. Optionally, check the **Wireless Client History** and **Logs on Management Log Page** boxes to back up these in addition to other data backup.

4. To start the back-up downloading, click the **Backup** button.

5. From your web browser's dialog box, save the backup file to a safe location.

   The backup filename will be in the format: "config_atawc-X.X.X_-YYYYMMDDhhmmss.zip".

Back up system data for the SNMP plugin application

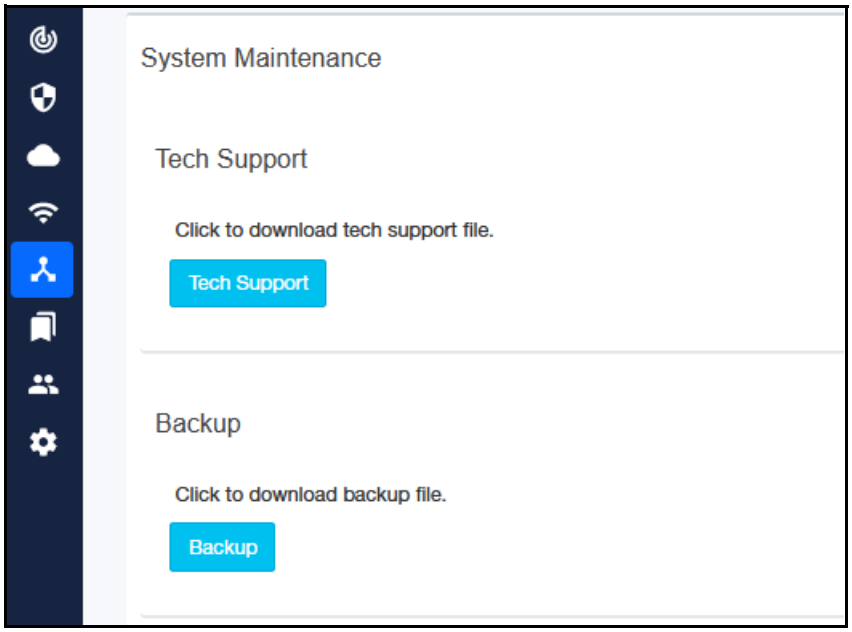
Before upgrading the SNMP Full applications, you must back up its system data. This is because you have to destroy the application instance to upgrade it.

Note: Make sure that directories and filenames used for backup and restoration do not contain any multibyte characters.

1. Log in to Vista Manager EX using an Admin account.

2. Click the **SNMP plugin** icon in the left menu of the Vista Manager application, then click the **Version Information** in the menu.

3. In the System Settings panel, scroll down to the **System Maintenance** panel, and in that to the **Backup** section. Click the **Backup** button. This creates a backup of application data.



4. Save the backup file to a safe location.

Upgrade the VST-VRT operating system and GUI on Hyper-V Server

There are two different upgrade methods, depending on how you installed VST-VRT. Follow the appropriate instructions below.

When installing using the .iso image method

If the product was installed using the .iso image method, the .iso image file is used when updating the firmware. To upgrade the VST-VRT operating system, follow these steps.

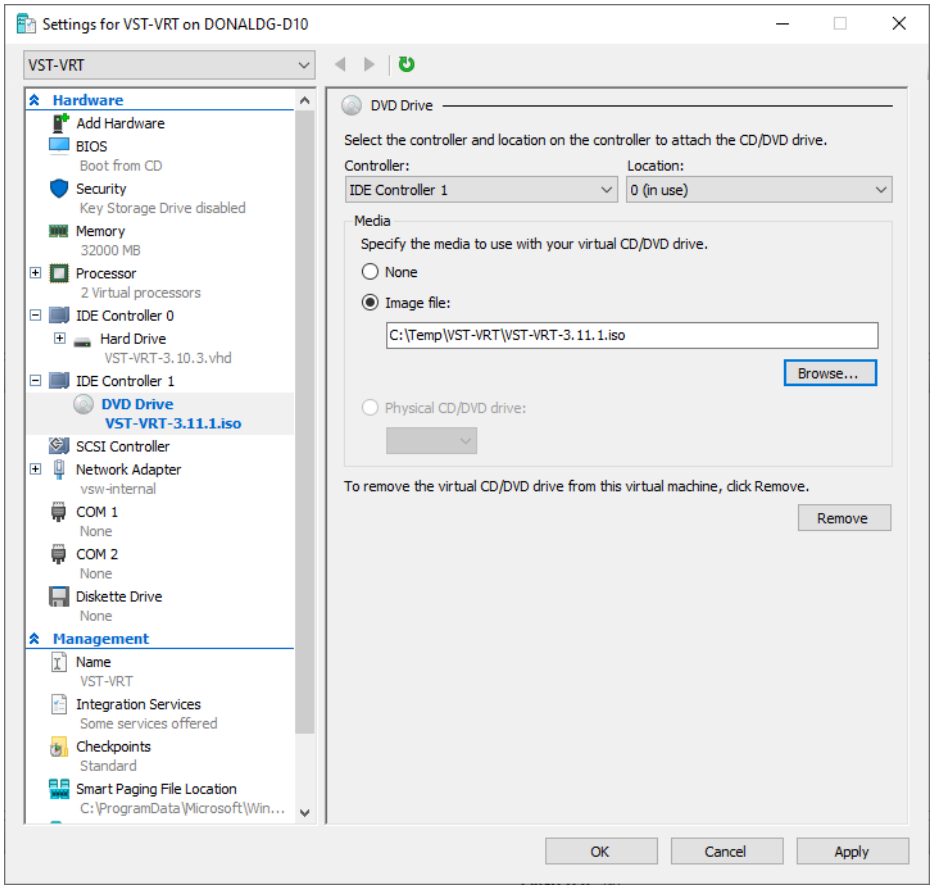
1. Get the latest version of the VST-VRT software from the Allied Telesis Support Portal. This will have a filename like VST_VRT-x.x.x.iso, where x.x.x is the version. Download it to a directory that is visible to your VST-VRT virtual machine.

2. If you want to retain the current unsaved configuration of VST-VRT, login to the VST-VRT GUI and click the **Save** button on the top right of the page. This stores the current state of the applications. The upgrade process will reboot the VST-VRT.

3. If the virtual machine is running, stop the machine. To stop the machine, right-click the virtual machine in the Virtual Machines pane of Hyper-V Manager, and select Shut Down from the context menu.

4. Right-click the virtual machine in the Virtual Machines pane of Hyper-V Manager, and select Settings from the context menu.

5. Select Hardware > IDE Controller 1 > DVD Drive on the left pane, then specify the new .iso image file in the Image file field. Click OK.



6. Right-click the virtual machine in the Virtual Machines pane of Hyper-V Manager, and select Start from the context menu.

7. The product will start with the new version. This completes updating the firmware of this product using the ISO image method.

When installing using the .vhd image method

If the product was installed using the .vhd image method, the .vhd image file is used when updating the firmware. To upgrade the VST-VRT operating system, follow these steps.

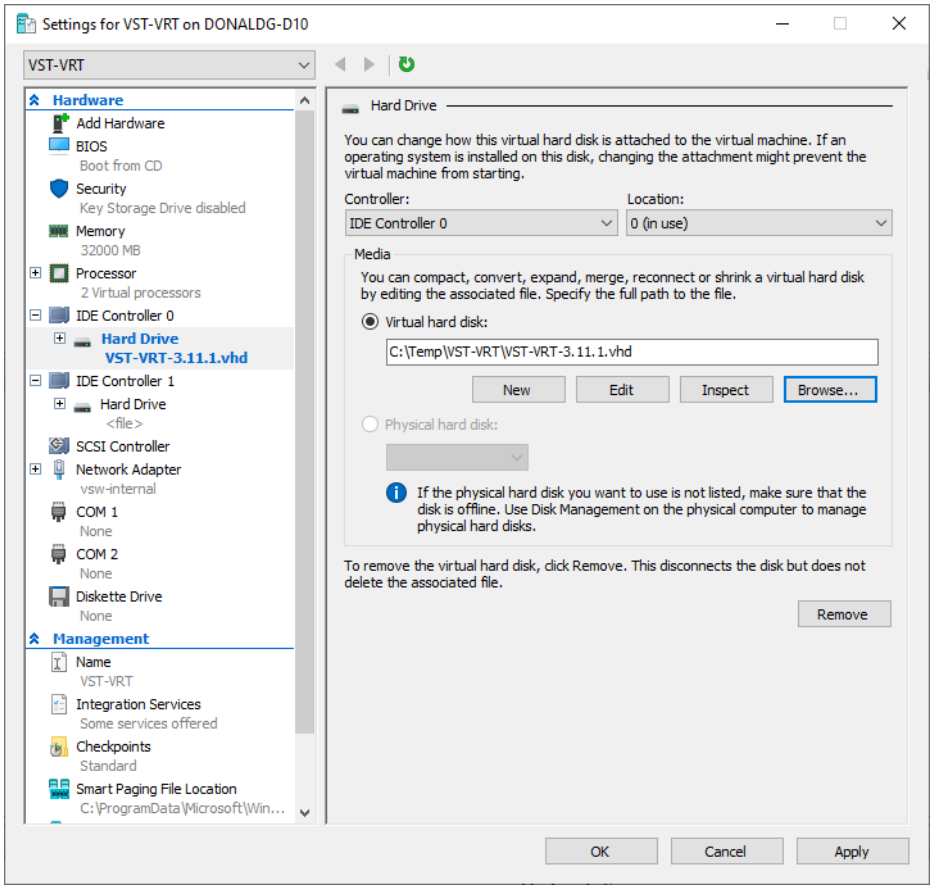
1. Get the latest version of the VST-VRT software from the Allied Telesis Support Portal. This will have a filename like VST_VRT-x.x.x.iso, where x.x.x is the version. Download it to a directory that is visible to your VST-VRT virtual machine.

2. If you want to retain the current unsaved configuration of VST-VRT, login to the VST-VRT GUI and click the **Save** button on the top right of the page. This stores the current state of the applications. The upgrade process will reboot the VST-VRT.

3. If the virtual machine is running, stop the machine. To stop the machine, right-click the virtual machine in the Virtual Machines pane of Hyper-V Manager, and select Shut Down from the context menu.

4. Right-click the virtual machine in the Virtual Machines pane of Hyper-V Manager, and select Settings from the context menu.

5. Select Hardware > IDE Controller 0 > Hard Drive on the left pane, then specify the new .vhd file in the Virtual hard disk field. Click OK.



6. Right-click the virtual machine in the Virtual Machines pane of Hyper-V Manager, and select Start from the context menu.

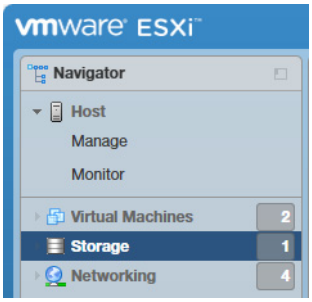
7. The product will start with the new version. This completes updating the firmware of this product using the .vhd image method.

Upgrade the VST-VRT operating system and GUI on VMware VSphere ESXi

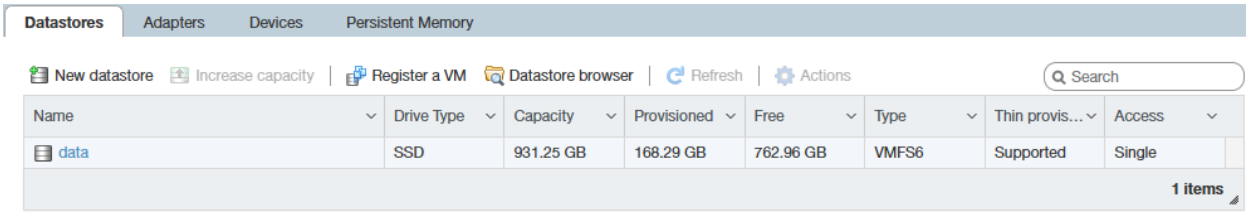
To upgrade or downgrade the firmware of the virtual machine, use the following steps:

1. Enter the IP address of the VMware ESXi server in the web browser, and enter the user name and password on the login screen to log in.

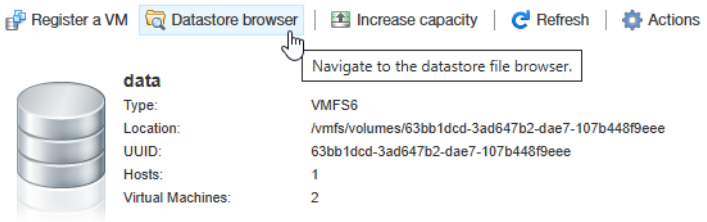
2. Select **Storage** from the menu on the left side of the management screen.



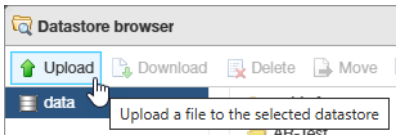
3. Select the datastore you want to upload the VST-VRT .iso image file to from the displayed datastores.



4. Select **Datastore Browser**.



5. Click the **Upload** button.



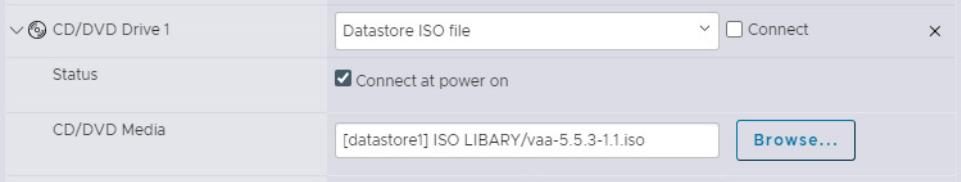
6. Select the .iso image file of VST-VRT to be uploaded on the local side, and save the .iso image in the data store.

7. If the virtual machine is running, stop the virtual machine.

8. From the VM menu, click on your virtual machine.

9. Click on Edit from the top menu.

10. Click the arrow to the left of CD/DVD Drive 1 to expand it. Click Browse to select the new .iso file, then click Select.



11. Click Save when you return to the settings screen.

12. Start the virtual machine.

13. The virtual machine will start from the updated .iso.

Upgrade Vista Manager, AMF Cloud, AMF Security, and RADgate applications

You can upgrade these applications as a bundle. This ensures they are compatible with each other and with the operating system version.

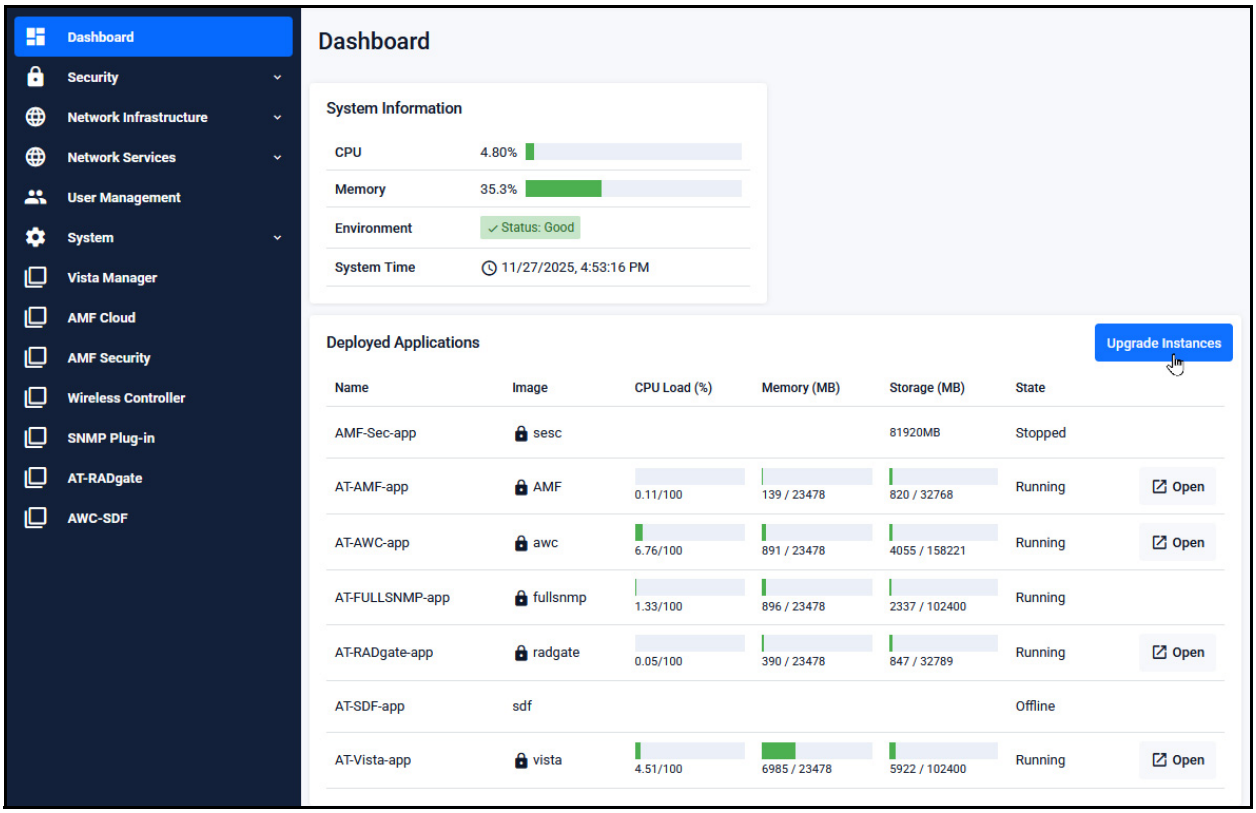
Before upgrading these applications:

- We recommend backing up application data for all applications regularly, and before upgrading the applications.
- "Upgrade the VST-VRT operating system and GUI on Hyper-V Server" on page 19

Use the procedure in this section to dynamically upgrade these applications:

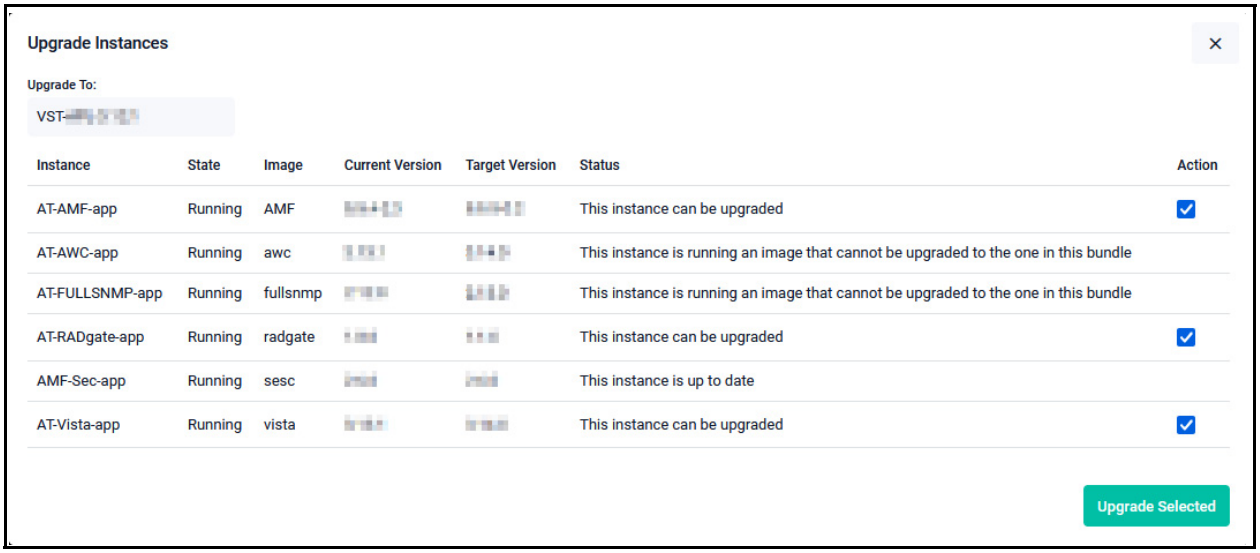
- Vista Manager
- AMF Cloud
- AMF Security
- AT-RADgate

1. In the VST-VRT **Dashboard** page, click the **Upgrade Instances** button.



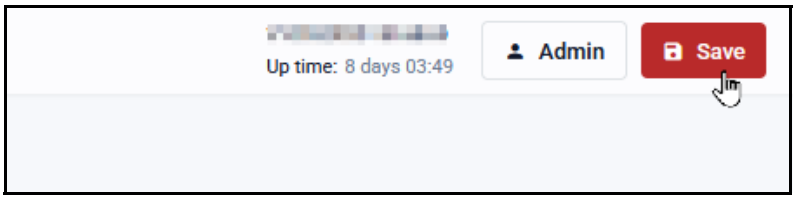
2. Make sure the correct version of the bundle file is displayed in the **Upgrade to** field at the top left of the upgrade instances panel. If not, use the drop down list to select the correct version.

   Applications that can be upgraded are shown as selected. We recommend upgrading them all.



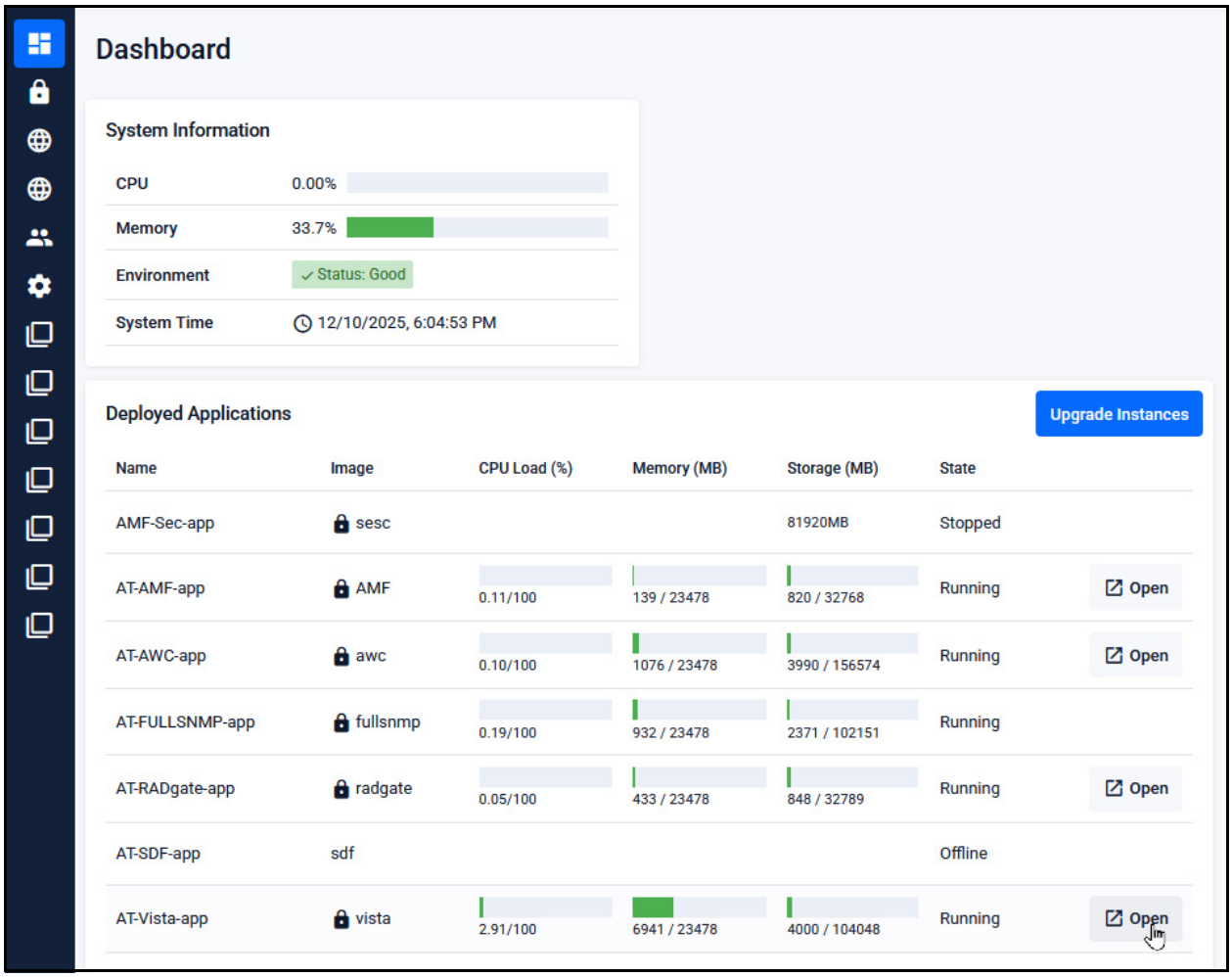
3. Click the **Upgrade Selected** button and wait till upgrade is complete. The **Status** column shows progress. They first stop, then change to the new version, then start.

4. It is important to save the state of the VST-VRT operating system after the upgrade. The **Save** button in the top right corner of the screen is orange when there are unsaved changes. Click on the button to save the changes.

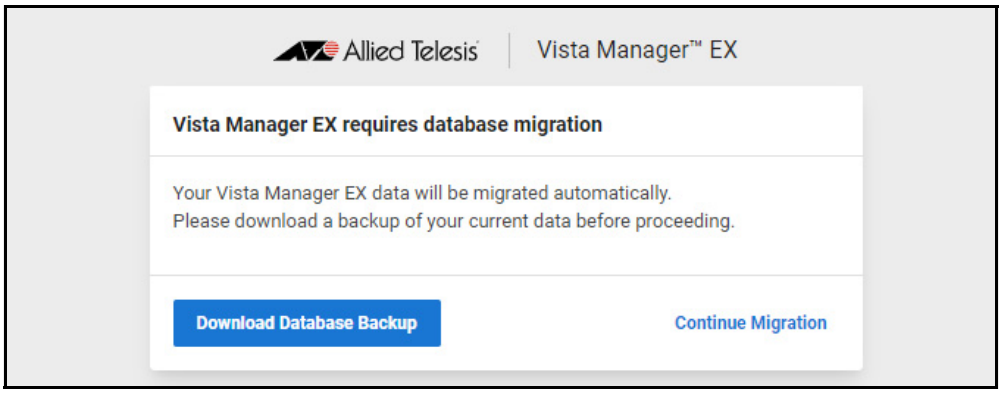


   If you do not save and VST-VRT is rebooted, the upgraded applications will revert to the old app images and fail to start. You will see 'configured image "<image-name>" doesn't exist' messages if this happens.

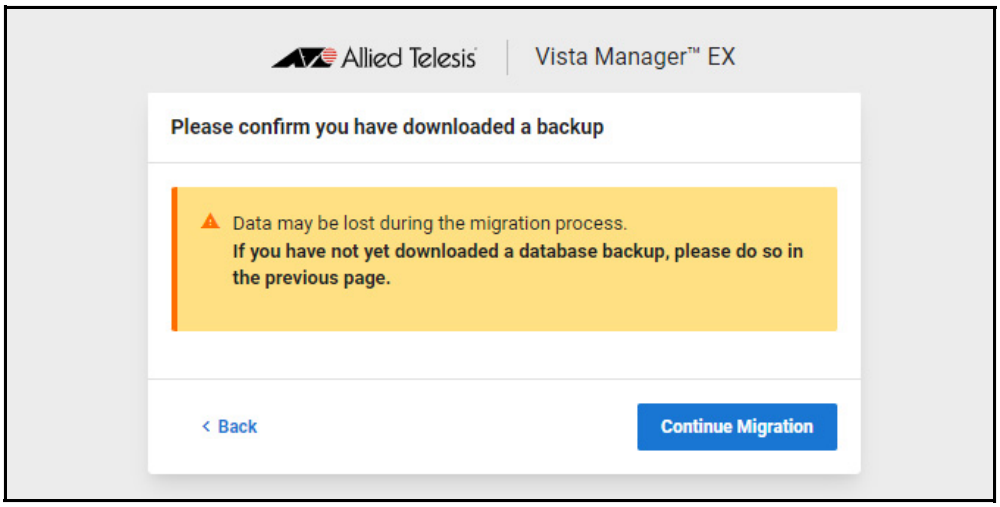
5. In the VST-VRT GUI **Dashboard** page, open Vista Manager by clicking the **Open** button next to AT-Vista-app.

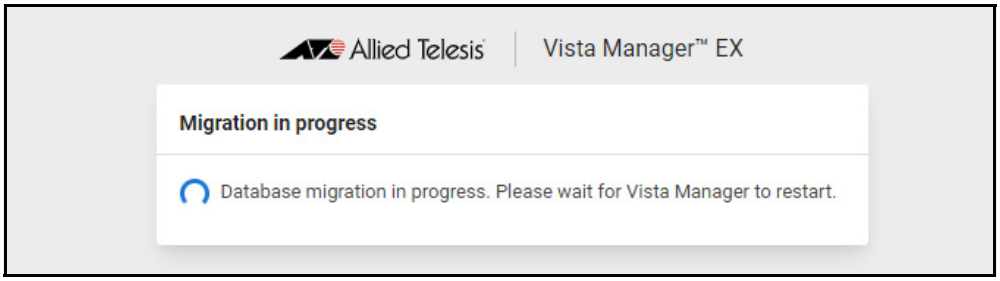


6. Vista Manager EX may prompt you to migrate the database. Select **Download Database Backup** to make a backup.



7. Confirm you have successfully downloaded a backup file, then select **Continue Migration**. If you get a browser error about the page becoming unreachable, then refresh your browser.





8. Once the migration has completed, your connection may be lost. If this happens, close your browser and reopen the application from the VST-VRT dashboard.

Upgrade Wireless Controller (AWC) and SNMP (Full) plugin applications

Use this manual procedure to upgrade the following applications by destroying the old and creating new instances.

- Wireless Controller (AWC)
- SNMP (Full)

Before upgrading these applications,

- "Back up application data" on page 17
- "Upgrade the VST-VRT operating system and GUI on Hyper-V Server" on page 19.

For AWC and SNMP (full) applications, you **cannot**:

- upgrade these as part of a set
- use the upgrade procedure from versions earlier than VST-VRT 3.4.1.
- use the Upgrade button in the VST-VRT GUI to upgrade.

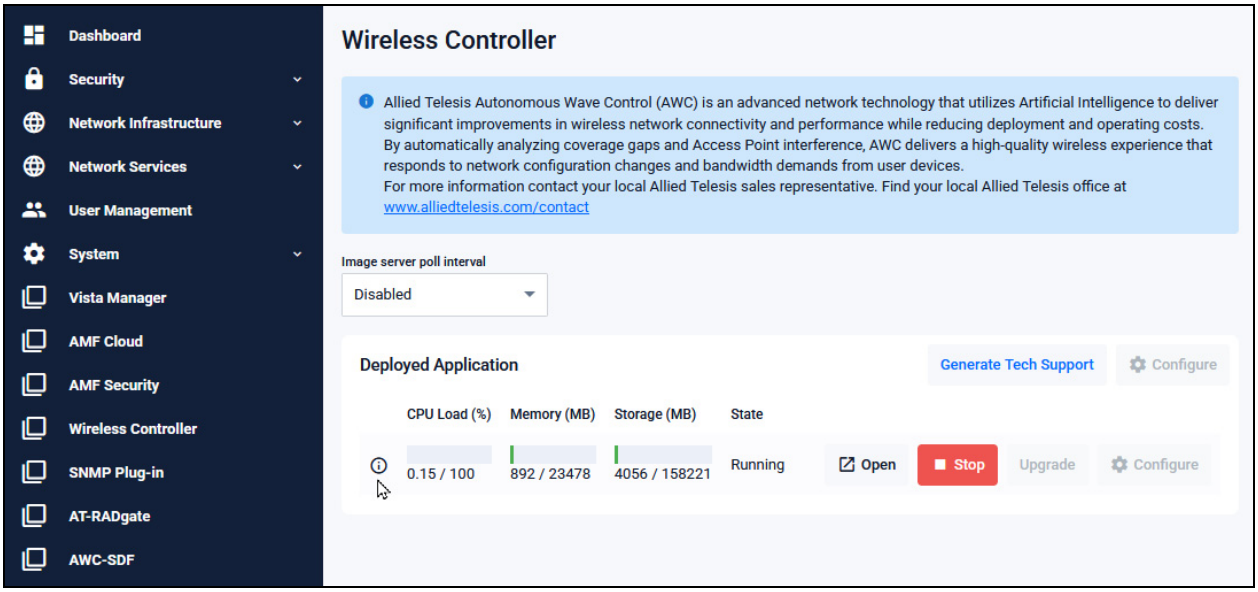
Instead, use these procedures:

- "Destroy and recreate the application instances" on page 28
- "Re-register plugins in Vista Manager" on page 31
- "Restore application data from back-up" on page 33.

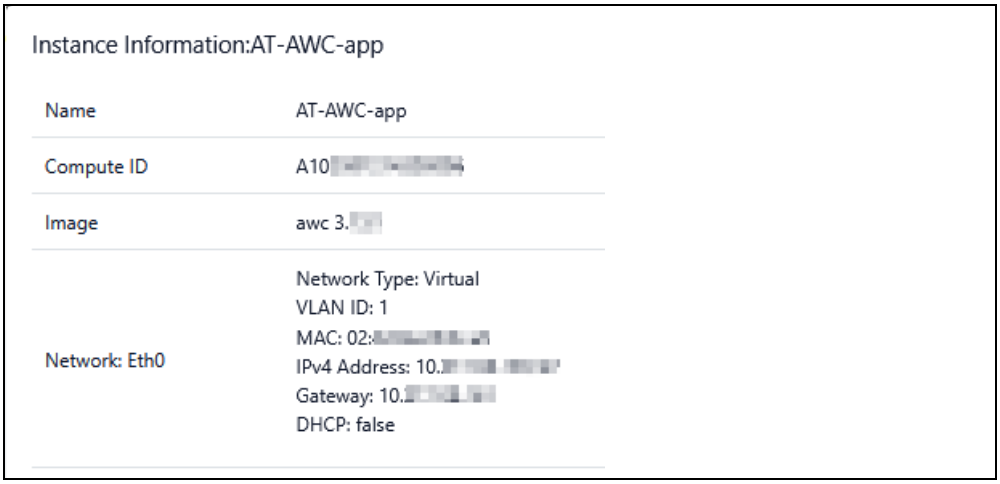
Destroy and recreate the application instances

In the VST-VRT GUI, follow these steps.

1. Navigate to the application page for the application.

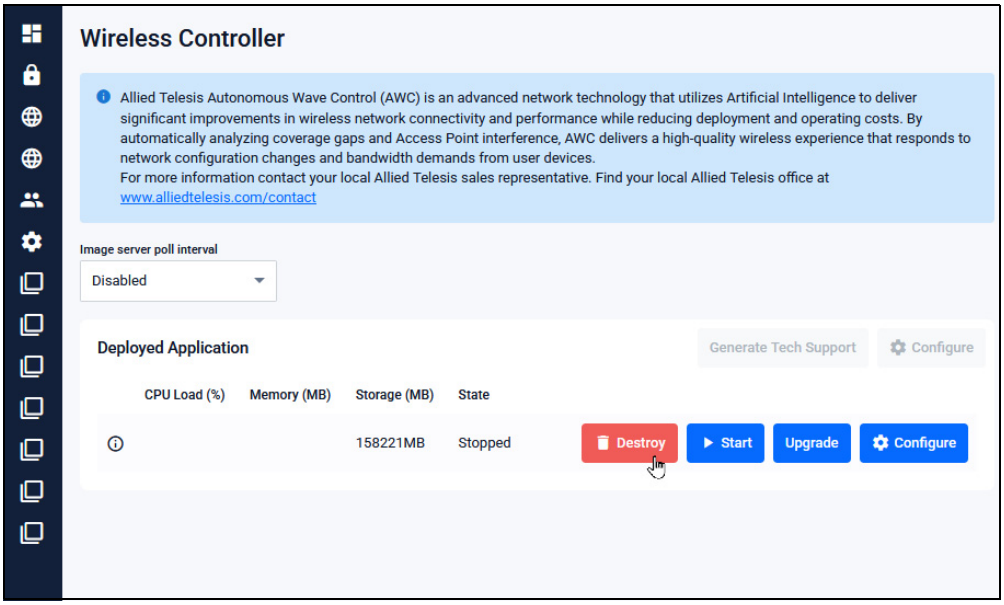


2. Hover over the Instance Information icon (i) and record information about the application from the **Instance Information** panel. Record all the Network settings (Network Type, etc). You will need this information in a later step.



3. In the application page, stop the application by clicking the **Stop** button.

4. Destroy the application by clicking the **Destroy** button.

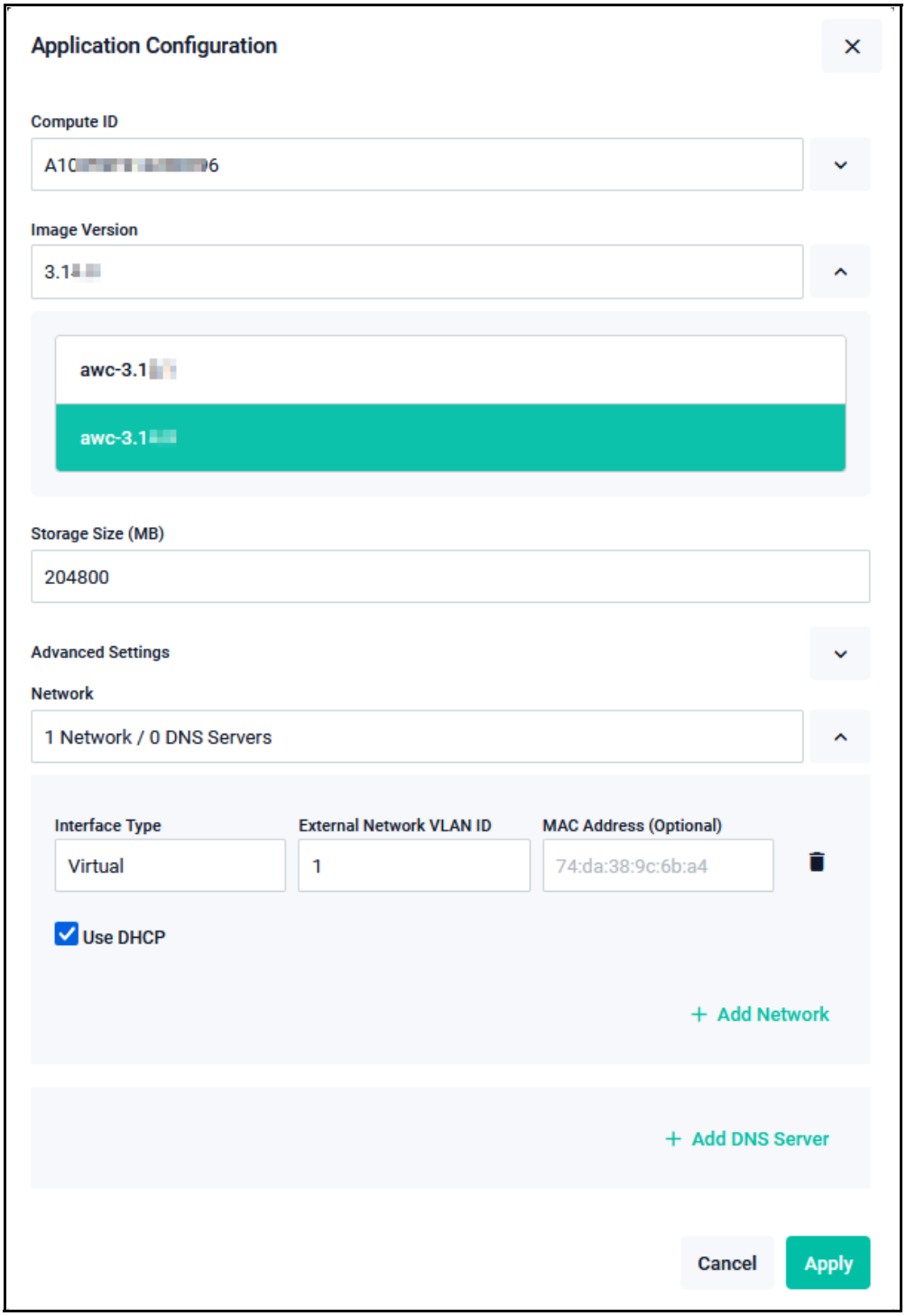


5. Create a new instance. First, in the application page, click the **Configure** button.

6. Add an interface to connect the application to your network. Expand the Network section. Either select DHCP or add a static IP address and gateway address, and add a DNS server if needed.

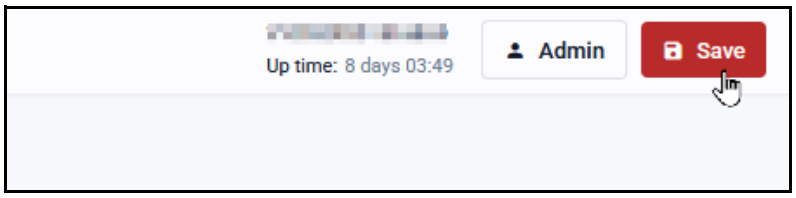
7. In the **Application Configuration** dialog box, fill in the storage and prerecorded network data. The recommended storage values are:

   AWC: 204 800 MB
   SNMP Full: 102 400 MB



8. Click the **Apply** button. This creates a new version of the application instance. Wait a few minutes for this to start and for the **Open** button to appear.

9. It is important to save the state of the VST-VRT operating system after the upgrade. The **Save** button in the top right corner of the screen is orange when there are unsaved changes. Click on the button to save the changes.



10. From the VST-VRT menu, navigate to the **Vista Manager** page and click the **Open** button. If necessary, wait for Vista Manager EX to perform its initial set up.

11. Log in to Vista Manager EX.

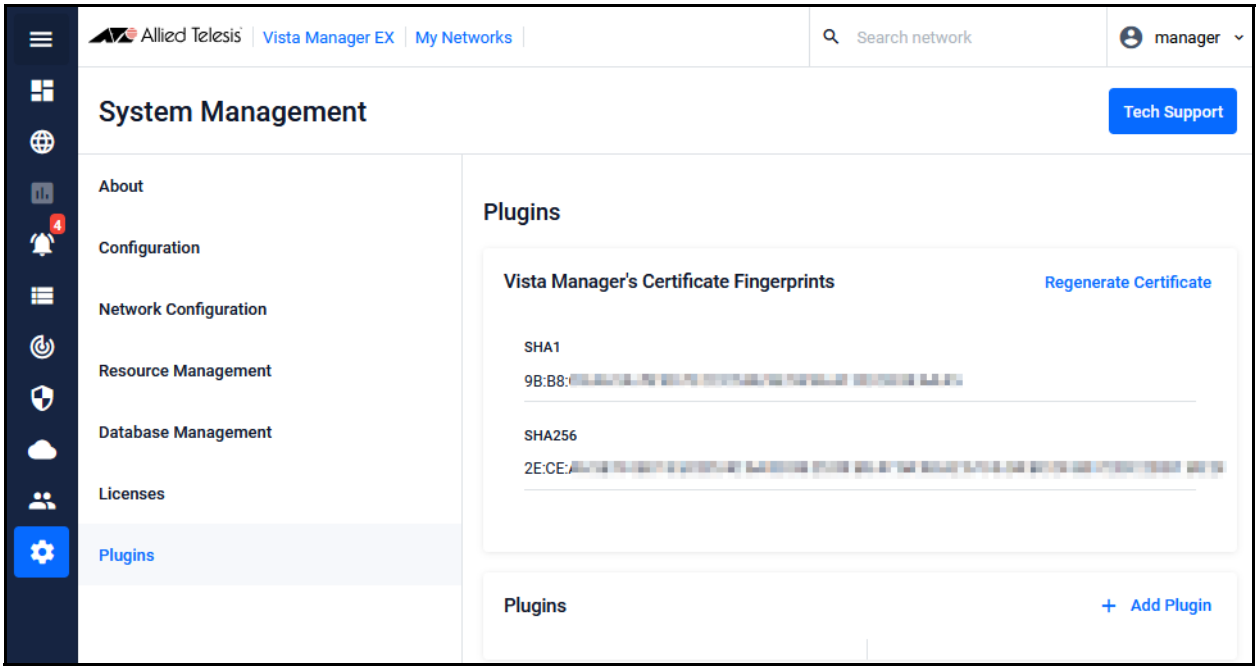
Re-register plugins in Vista Manager

If you are using these plugins in Vista Manager EX, you will need to reregister them:

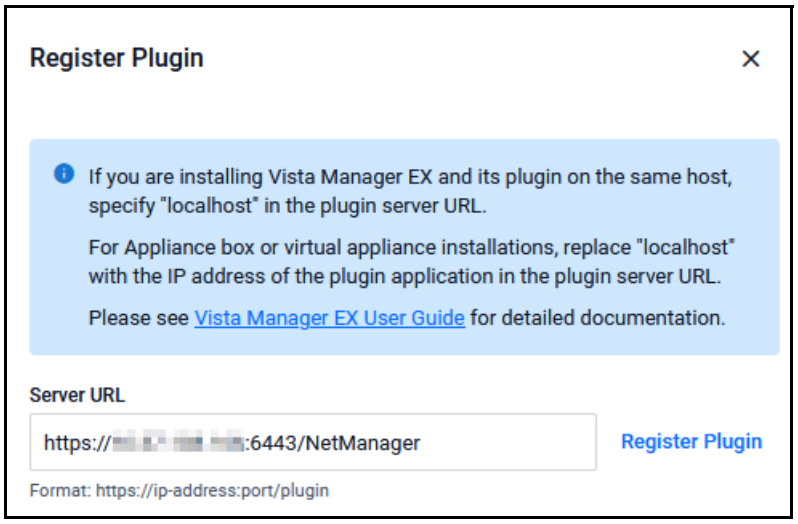
- Wireless Controller (AWC)
- SNMP (Full)

Follow these steps for each of the plugins.

1. On the Vista Manager EX page, navigate to **System Management** > **Plugins**.



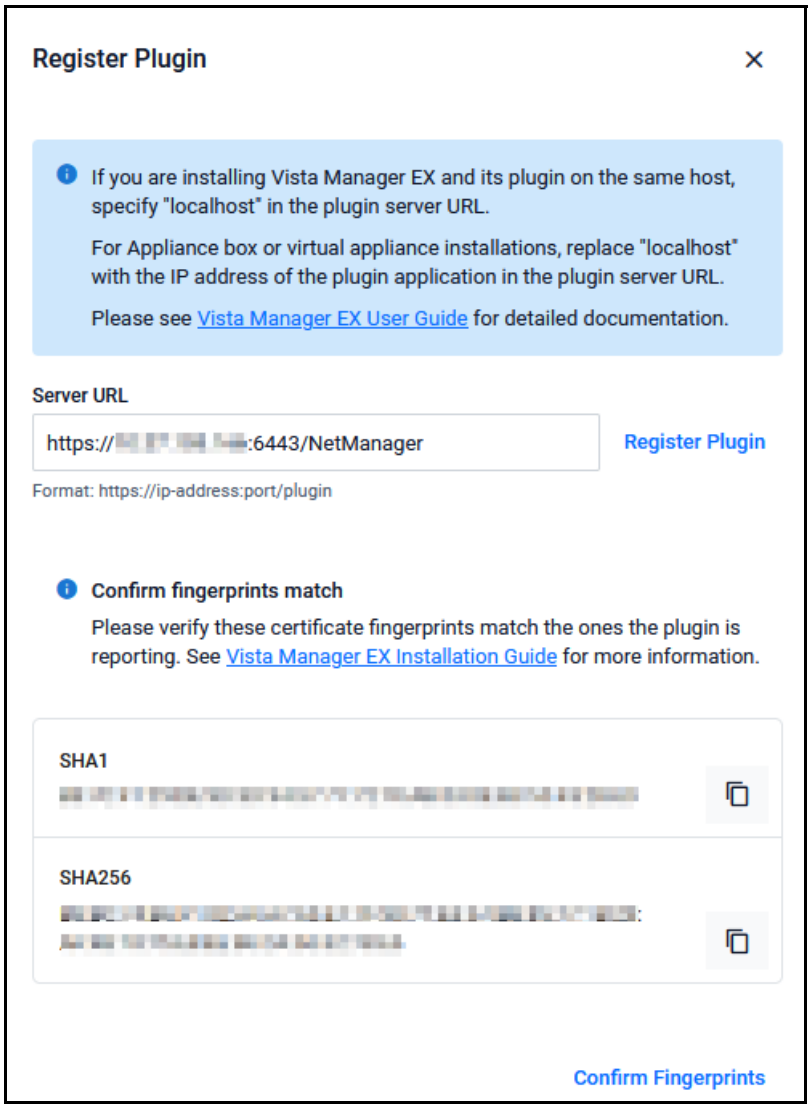
2. Clic k **+Add Plugin**.



3. Enter the server URL. This includes the IP address of the plugin application.

- For the SNMP (Full) plugin, this is `<ip-address>:6443/NetManager`
- For the Wireless Controller (AWC) plugin, this is `<ip-address>:5443/wireless_plugin`

Click **Register Plugin**.



4. Check that the certificate fingerprints match the ones reported in the plugin. Click **Confirm Fingerprints**. A 'plugin updated' pop-up message confirms that the plugin has been updated.

Next, restore system data for the plugin application from the back-up file.

Restore application data from back-up

For the Wireless Controller and SNMP (Full) applications, use the following procedures to restore the system data from backup files:

- "Restore system data for the Wireless Controller plugin" below
- "Restore system data for the SNMP plugin" on page 34

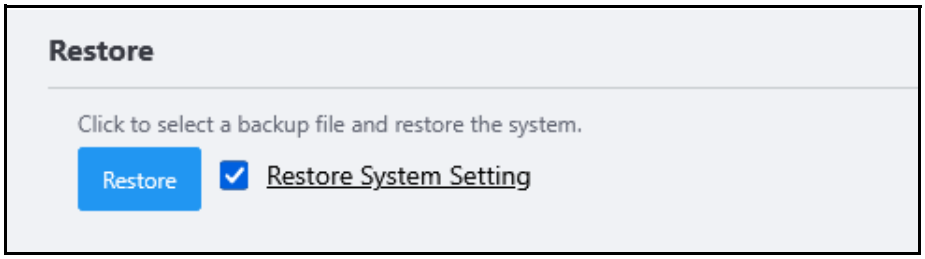
Note that:

- Restoring a backup file made on another platform is not supported.
- For the applications upgraded as a set in this procedure "Upgrade Vista Manager, AMF Cloud, AMF Security, and RADgate applications" on page 24, the data is restored automatically.

Restore system data for the Wireless Controller plugin

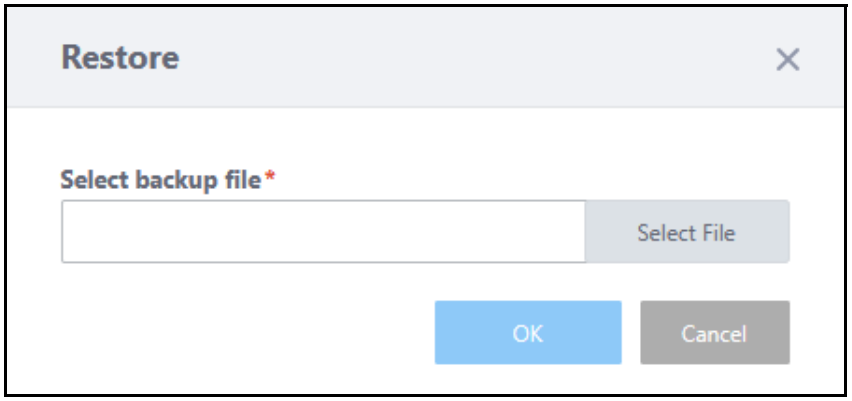
To restore data from the back-up file for the Wireless Controller (AWC) plugin application, follow these steps:

1. Log in to Vista Manager EX using an Admin account.
2. In the Vista Manager EX menu, navigate to **AWC plugin** > **System Setting**.
3. Scroll down to the **System Maintenance** section, and in that section, scroll down to the **Restore** section.



Hover over **Restore System Setting** to see the system settings that will be restored. Check the box and click the **Restore** button.

4. In the Restore dialog box, click **Select File** and select the backup file.



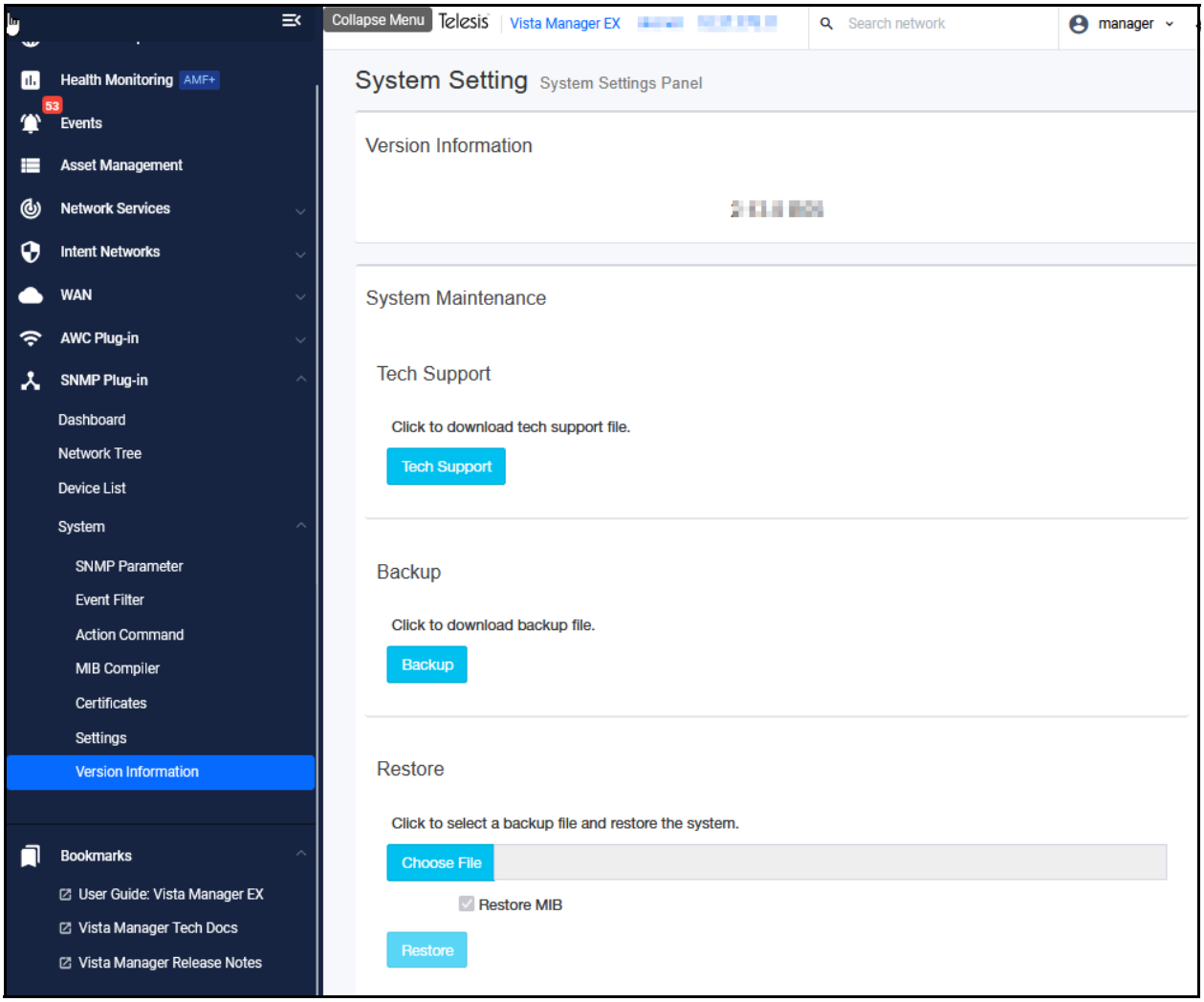
5. Click **OK**. Confirm.
6. After it has finished restoring, a dialog box shows that restoration is complete. Click **OK**.

Restore system data for the SNMP plugin

To restore data from the backup of application data for the SNMP plugin application, follow these steps.

1. Log in to Vista Manager EX using an Admin account.
2. In the left menu of Vista Manager EX, click the **SNMP plugin** icon, then click **Version Information**.

3. In the **System Setting** panel, scroll down to the **System Maintenance** panel and in that, to the **Restore** panel.



4. Select the file to restore from and click the **Restore** button. This restores the data from the back-up for the SNMP plugin application.

Remove obsolete files from memory

You can make more space available by removing obsolete files. Keep the current versions.

1. From the VST-VRT dashboard, navigate to the **System** > **File Management** page.

2. Click the **Delete** button to the right of the obsolete files you want to remove.

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