Allied Telesis™

Release Note for Vista Manager EX v2.5

AlliedWare Plus
OPERATING SYSTEM

Acknowledgments

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Content

What's New in Vista Manager EX v2.5.0

Introduction

This release note describes the new features in Vista Manager EX™ v2.5.0. It covers Vista Manager EX plus the optional Autonomous Wave Controller (AWC) and SNMP plug-ins.

You can obtain the software files from the Software Download area of the Allied Telesis website. Log in using your assigned email address and password.

Contact your authorized Allied Telesis support center to obtain a license.

Caution: Information in this release note is subject to change without notice and does not represent a commitment on the part of Allied Telesis, Inc.

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New Features and Enhancements

This section summarizes the new features added to Vista Manager EX v2.5.0.

Tracepath

Applicable to all Vista Manager installations.

From Vista Manager EX version 2.5.0, you will be able to use tracepath to determine where traffic is flowing. You can click on two nodes in the Vista Manager area map, the source and destination. Vista Manager will display the path between them and show RTT (round trip time) information.

In Vista Manager 2.5.0, the tracepath feature shows Layer 3 traffic.

To use tracepath, open the Area Map in Vista Manager. From the Area Map dropdown, select Tracepath.

You can manually enter the source and destination from the list on the left, or click on the nodes on the map to select them.
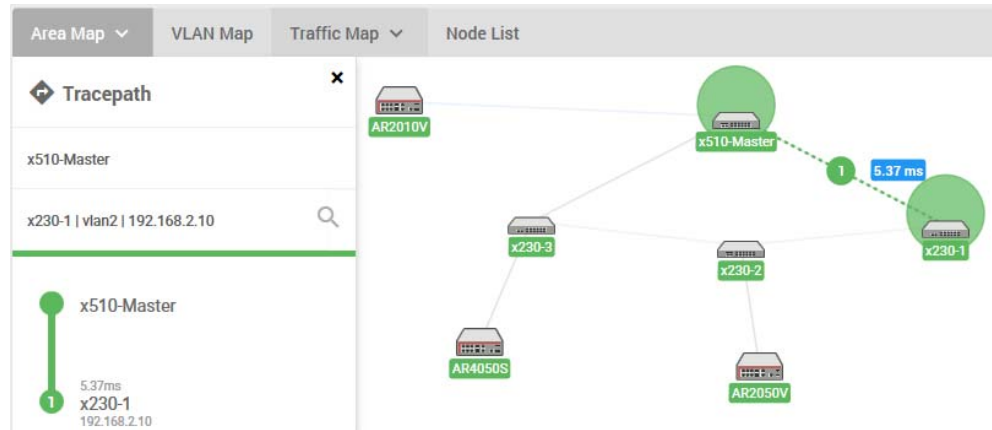
Export network map PDF

Applicable to all Vista Manager installations.

From Vista Manager EX version 2.5.0, you can export a network map in PDF format.

To export a PDF of your network map, open the Area Map in Vista Manager. In the bottom left corner, click on the Export PDF button.

Enhanced background image import
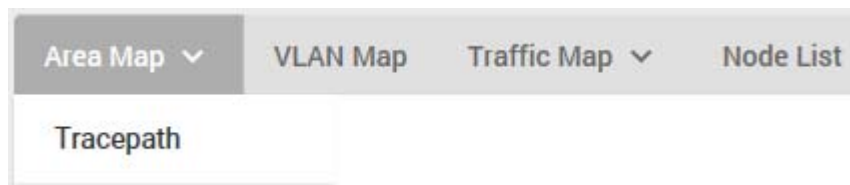
Applicable to all Vista Manager installations.

From Vista Manager EX version 2.5.0, you will to be able to use larger high resolution background images on the Vista Manager network/integrated map. You will also be to adjust the opacity of an image to clearly see nodes dependent on the background image.

To upload an image, open the Area Map in Vista Manager. In the bottom left corner, click on the Upload Image button.

To change the opacity of an image, adjust the slider below the image.
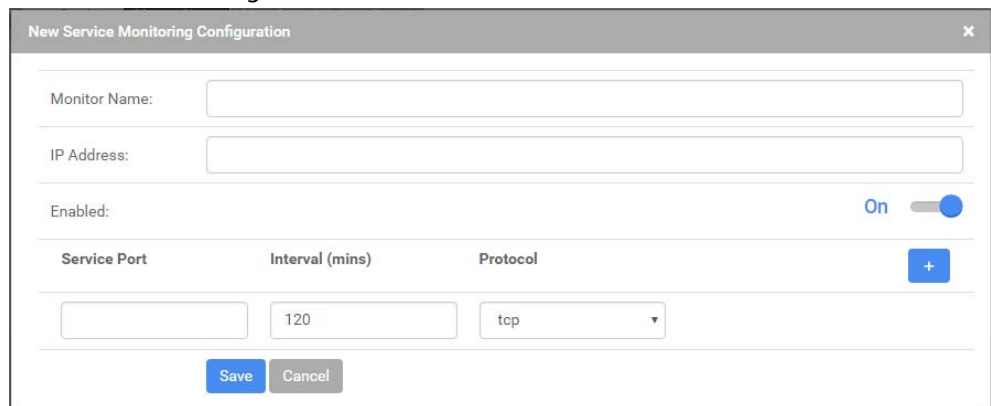
Service monitoring

Applicable to all Vista Manager installations.

From Vista Manager EX version 2.5.0, service monitoring allows a network administrator to learn the status of services running on devices within Vista. You can configure a monitoring task to run periodically, or to monitor services on demand.

Service Monitoring will display the status of the services. It helps you track the status of services of critical importance, and be updated as soon as they go down. Knowing the status of services may also help when performing diagnostic tasks.

To configure service monitoring:

- Open Service Monitoring in Vista Manager.

- Click on Create Monitor.

- Enter the following details:

  - 《 Monitor Name - a name to identify the monitor

  - 《 IP Address - the IP address of the device you want to monitor

  - 《 Service Port - the port that the service is running on

  - 《 Interval - how often to monitor the service

  - 《 Protocol - the protocol of the service, either TCP or UDP

- Click Save.

- The monitor has now been created. Click on Monitor Now to begin monitoring the service.
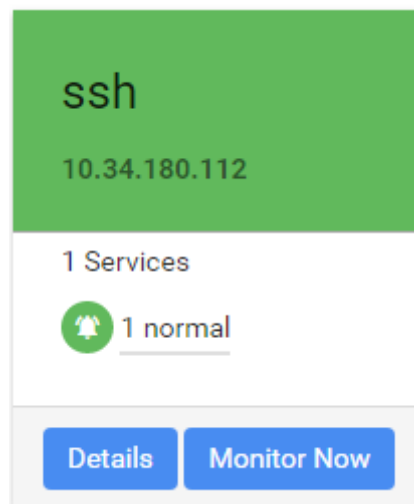
The service statuses may be one of the following:

- Pending: The service has not been monitored yet.

- Running: The service has responded to the latest monitoring probe.

- Filtered: Unable to determine the status of the service, because it is blocked by a network obstacle such as a firewall.

- Indeterminate: Unable to determine the status of the service. It may be blocked by a network obstacle, up, or down.

- Closed: No application is listening on the specified port.

- Unresponsive: A service exists on the port, but is not responding to probes.

- Unreachable: Unable to monitor the service, because the target IP address is unreachable.

- Error: Unable to monitor this service, because an error occurred while attempting to do so.
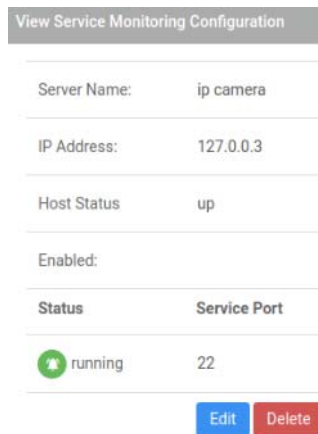
The status categories and the statuses that fall into each category are as follows:

- Category Pending - Pending status

- Category Normal - Running status

- Category Unknown - Filtered and Indeterminate statuses

- Category Critical - Closed, Unresponsive, Unreachable, and Error statuses
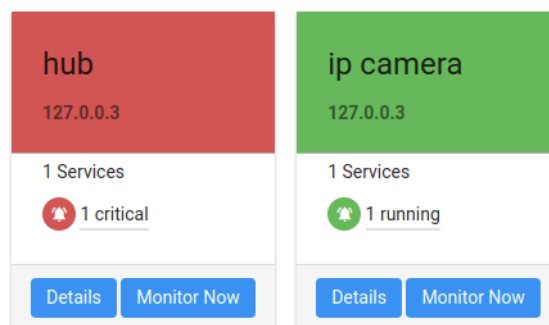
Single sign-on

Applicable to all Vista Manager installations and the SNMP and AWC plug-ins.

From Vista Manager EX version 2.5.0, users no longer use separate browser tabs to access the AWC or SNMP plug-ins. Instead, when plug-in is registered, side menu items appear for its secondary menus.

The left side menu now has three levels and scrolls vertically. The plug-in menus are now located directly beneath the Events menu item. The AWC and SNMP plug-ins register their three levels of menus in Vista on registration.
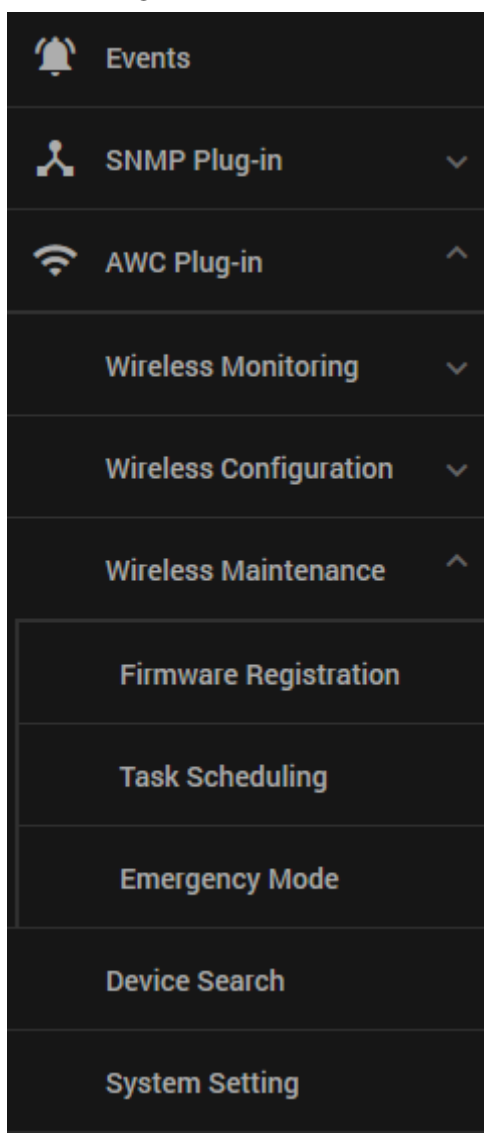
Individual plug-ins no longer have a user database. Instead, Vista is the only user database. Existing plug-in users will be moved into the Vista Manager database when you upgrade.

If you are using the AWC plug-in, the User Management page now has more settings, since settings from AWC have been moved into Vista. These are:

- Management groups
- Refresh Rates
- Country Codes

A user can edit their settings from the My Account page.

AMF Area permissions is no longer a checkbox, but is now a drop-down with the following options:

- No Permission
- Read-only
- Read/Write.

In 2.4.1, area write permissions were determined by the Permissions field. This meant users could have Read/Write for all selected areas or Read-only permission for all selected areas. Now in 2.5.0, users can have Read/Write on some areas, and Read-only on others. Features that require write access include:

- Vlan add/edit
- Device reboot/shell/backup
- Event archive
- Device notes

Note: When users are migrated from the plug-ins to Vista Manager, the labels for some fields in the database have changed. Refer to the tables for more information.

Table 1: AWC Plug-in User Values Before and After Migration

AWC 2.4.1 Information	Vista Manager 2.5.0 Information	Notes
User ID	Username	
Username	Full Name	
<no value>	Email	This is set to a default, and should be updated with a correct value.
Password	Password	This is set to "friend", and should be updated with a correct value.
<no value>	Account Type	Set to "User".
<no value>	Permissions	Set to "Read Only".
Management Group	Management Group	TEXT
<no value>	Management Group Permissions	Set to "Read Only".
Country Code	Country Code	
Language	Language	
Session Timeout	Timeout	Set to "5".

Table 2: SNMP Plug-in User Values Before and After Migration

SNMP 2.4.1 Information	Vista Manager 2.5.0 Information	Notes
User ID	Username	
Username	Full Name	
Email Address	Email	This is set to a default, and should be updated with a correct value.
Role	Account Type	
Language	Language	
<no value>	Timeout	Set to "5".

HTTPS access to Vista Manager

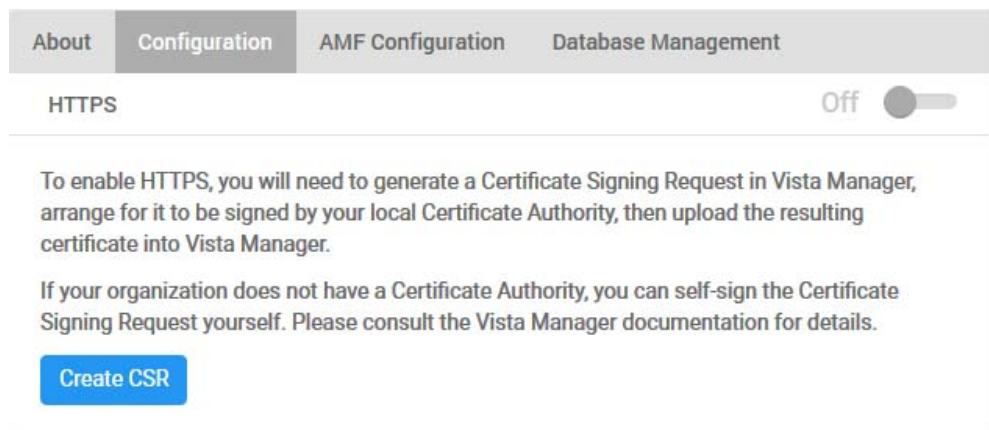*Applicable to all Vista Manager installations.*

From Vista Manager EX version 2.5.0, all traffic between Vista Manager and users is able to be secured with HTTPS. This option can be turned on in your Vista Manager configuration settings. Enabling HTTPS requires a signed certificate.

Vista Manager can generate a Certificate Signing Request (CSR) which you can then submit to a Certificate Authority (CA). The CA will then give you a signed certificate which you can import back into Vista Manager. Note that both the application's and CA's private key are never transmitted; this is essential to maintaining proper security.

Alternatively, you can use OpenSSL to self-sign the CSR. For more information, visit https://www.openssl.org/.
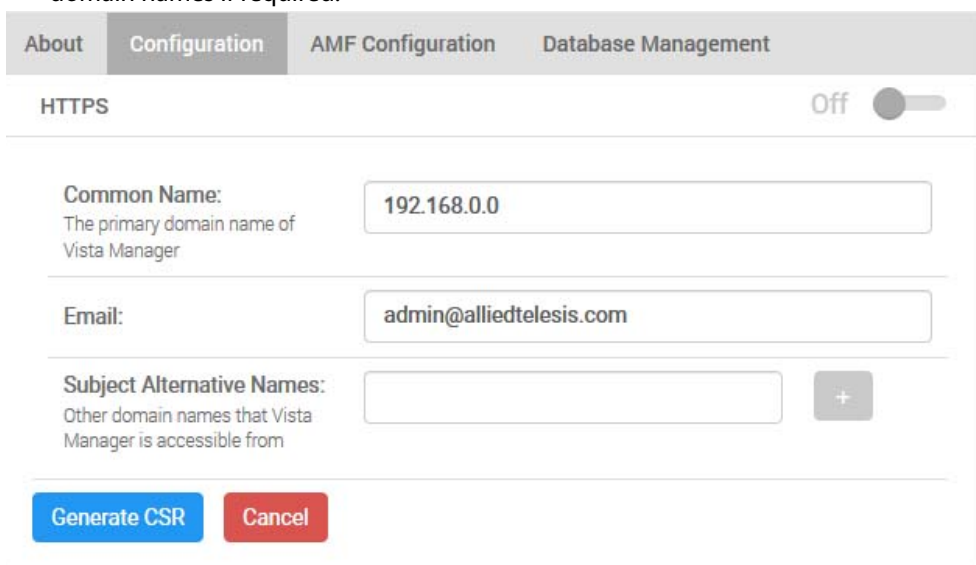
To enable HTTPS:

■   In Vista Manager, open the System Management menu item and click on the Configuration tab.
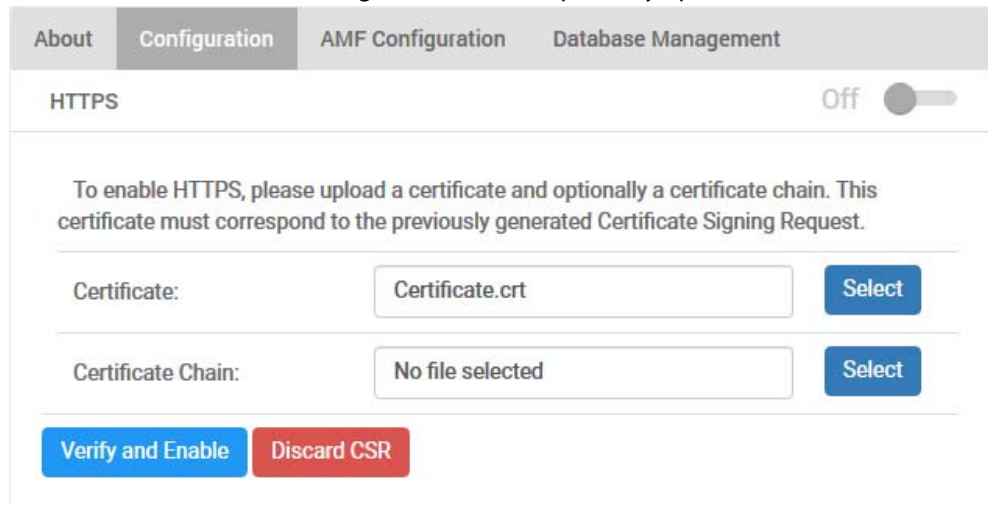
■   Click on Create CSR.

■   Make sure the primary domain name and email are correct. You can also add other domain names if required.

- Once the CSR has been generated, save it somewhere safe. Send this CSR to your CA to be signed.

- Once the CA has returned to you with a certificate, click the Next button. Then upload the certificate to Vista Manager. You can also optionally upload a certificate chain.

- Click on Verify and Enable. Once your certificate has been verified, HTTPS will be enabled.

Vista - plug-in secure communications

Applicable to all Vista Manager installations and the SNMP and AWC plug-ins.

From Vista Manager EX version 2.5.0, all communication between Vista Manager, plug-ins, and plug-in devices is encrypted. This ensures that a server responds only to authorized clients, and that data cannot be intercepted or modified en-route to an authorized client. To provide this security, Vista Manager uses TLS certificates as an identity mechanism.

To configure the plug-ins:

- In Vista Manager, under System Management, click on Manage Plug-ins.

- Click on Add Plug-in.

- Enter the plug-in's HTTPS address, and click Verify Connection.

Note: This is different from v2.4.x. In previous versions it was HTTP.

- Make sure you verify the certificate fingerprints are correct by checking the fingerprint of the plug-in.

- Click Save.

Note: In Vista Manager 2.5.0, all plug-ins will need to be removed and re-registered.

To check the plug-in fingerprint for the AWC plug-in:

- Locate the directory that Vista Manager was installed to.

- Open the following sub-directory:
\Plugins\AT-AWC\apache\key

- Open the file fingerprint.txt.

To check the plug-in fingerprint for the SNMP plug-in:

- Right-click the Windows start menu, and select Computer Management.

- Select Services and Applications > Internet Information Service (IIS) Manager.

- Select Server Certificates.

- Select netman, then click on the View action.

- Click the Details tab.

- The value will be displayed in the Thumbprint field.

Support limit for AMF controller increased

Applicable to all Vista Manager installations.

From Vista Manager EX version 2.5.0, an AMF controller can now support up to 300 AMF masters. This requires AlliedWare Plus 5.4.8-2 or later.

AWC plug-in logging

Applicable to Windows-based Vista Manager installations with the AWC plug-in.

The AWC plug-in now offers additional logging options. It creates a log of all error messages. This log automatically stores all error messages.

It also allows you to enable the logging of debug messages. Debug logging can be enabled by editing the core.conf. For example, the following settings will enable debug file output for all modules and levels:

```
#
# Debug Output Settings
#
#   DebugOutput - values:
#      all,
#      stdout, mongo, file
#   DebugModule - values:
#      all,
#      apmgr, apci, apca, confmgr, atvista, rti,
#      mongo, mao, support, sysctl, watchdog, rogue, async
#   DebugLevel - values:
#      all,
#      error, notice, info, dump, trace
#
DebugOutput file
DebugModule all
DebugLevel all
```

New platform support

Support has been added for the following devices:

- x950-28XSQ
- x530-28GPXm
- x530-28GTXm
- x530L-52GPX
- x220-52GT/52GP
- GS980M/52
- GS980M/52PS
- GS980MX/28
- TQm5403

Important Considerations Before Upgrading

This section describes changes since Vista Manager EX v2.5.0 that may affect your network behavior if you upgrade. Please read it carefully before upgrading.

AMF software version compatibility

- All AMF nodes must run version 5.4.7-0.1 or later.

- If any of your Controller or Area Master nodes are running 5.4.7-2.x, then they all must run 5.4.7-1.1 or later.

- If your AMF Master node is running 5.4.7-0.x, then all other nodes must also run 5.4.7-0.x (not 5.4.7-1.x or 5.4.7-2.x).

- If your AMF Master node is running 5.4.7-2.x, then member nodes can run 5.4.7-0.x or 5.4.7-1.x.

Wireless AP software version compatibility

- TQ5403 APs with firmware version 5.0.x

- TQ4x00/3x00/2450 APs with firmware version 4.2.x

- MWS series AP with firmware version 2.2.5

Virtualization Support

The Vista Manager virtual appliance is not supported on VMware vSphere Hypervisor (ESXi) 5.5. Please upgrade to VMware vSphere Hypervisor (ESXi) 6.0/6.5/6.7 if you wish to use this version of Vista Manager EX.

Vista Manager plug-ins

Vista Manager plug-ins are only available on Windows-based Vista Manager installations. Plug-ins are not available on Vista Manager virtual appliances.

Vista Manager backup compatibility

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 2.5.0 into a Vista Manager 2.4.1 installation.

Vista Manager and RMON

When Vista Manager connects to an AlliedWare Plus network, it automatically enables the RMON (Remote Network Monitoring) commands on each ATMF interface port that it finds. This is done for the purpose of collecting traffic statistics.

It does this by modifying the running config on all switchports that interconnect AMF devices (including LAGs). No notification is shown that these changes are being made.

Caution If the **copy run start** or **wr** commands are run on one of these devices, these config changes will be made permanent.

Information After Upgrading

This section lists the steps to take after upgrading Vista Manager EX. It also includes troubleshooting tips should you experience any problems with the upgrade process.

Clear browser cache

Applicable to all Vista Manager installations.

Clear your browser's cache after upgrading your Vista Manager EX installation. Incomplete dialog boxes, incorrectly populated drop-down lists, and truncated forms are all symptoms of a caching problem.

Remove and reinstall Vista Manager

Applicable to Windows-based Vista Manager installations with or without the SNMP and AWC plug-ins.

If you see an error message during the upgrade process, or experience database errors after installation, try a fresh install of Vista Manager EX.

- First, ensure your Vista Manager EX and plug-in's backups are in a secure location.
- Remove Vista Manager EX, and any installed plug-ins, using the Windows "Programs and Features" utility.
- Re-install Vista Manager EX.
- Restore your backups.

See upgrading "Vista Manager as a Windows-based installation" on page 19 for information on making backups, installing, and restoring Vista Manager EX.

De-register the AWC plug-in on large wireless networks

Applicable to Windows-based Vista Manager installations with the AWC plug-in.

Individual APs may disappear from the AWC plug-in if the plug-in is managing a large wireless network (approximately 600 APs or more). If this occurs, de-register the AWC plug-in from the Vista Manager's **System Management -> Plug-in Management** page. Features such as licensing, auto-recovery, and importing an AP from a guest node will still work, even if the plug-in is not registered.

Secure client access and disabling HTTPS

Applicable to all Vista Manager installations.

When HTTPS is enabled in Vista, the user's browser receives a Strict-Transport-Security header as is recommended for a secure client to server environment. If the user elects to disable HTTPS in Vista, their browser is likely to continue to use HTTPS to access that site, despite the user specifying an HTTP URL in the address bar.

This setting is local to the browser, and users are advised to consult their browser documentation on how to reset the HSTS security settings for a target site. Other quick workarounds are to use an incognito or private browser tab, or to use a different browser.

Polling errors

Applicable to Vista Manager 2.5.0 installations with nodes running 5.4.7-2.x.

After upgrading from 2.4.x to 2.5.0 with nodes that are running 5.4.7-2.x, the following error may appear in logs:

```
Error during polling-StatusCodeError:
500-"{\"code\":\"ANT_CODE_INTERNAL\"}"
```

If upgrading from 2.4.x, and you have nodes running 5.4.7-2.x, please enable "service atmf-application-proxy" on these nodes.

Microsoft Edge support

Applicable to all Vista Manager installations.

Security in Microsoft Edge may prevent you from navigating to Vista Manager using an IP address. We recommend that rather than using the IP address, you use DNS and a FQDN for Vista Manager.

If this is not possible, you can configure Microsoft Edge to allow communication with Vista Manager by doing the following:

1. In the Control Panel, open Internet Options. Click on the Security tab. Select Local Intranet, then click on Sites.

2. Set the following checkboxes:
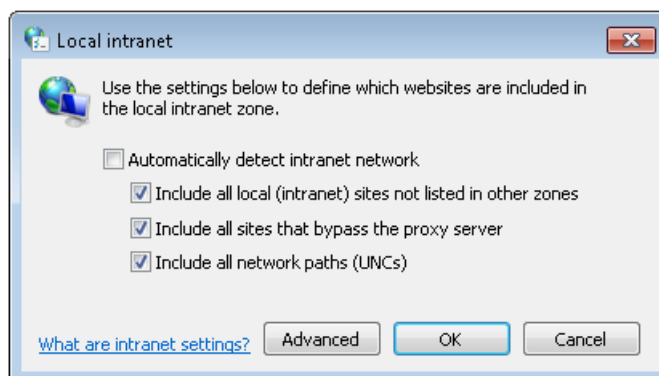
3. Click on Advanced. In the Add this website to the zone text field, enter the IP address of Vista Manager, then click on Add. Once it has been added, click on Close.
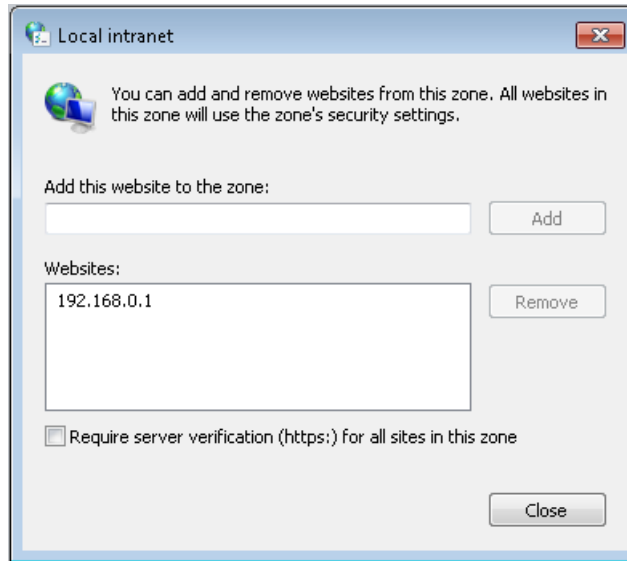
Note: Adding sites to your local intranet settings is a potential security risk. Before making these changes, ensure that the site is secure, and that you are aware of the security issues. If these risks are unacceptable, we recommend using a different browser.

Obtaining User Documentation

Vista Manager documentation An Installation and User Guide for Vista Manager EX is available from the Allied Telesis website, Vista Manager EX Installation and User Guide.

AMF documentation For full AlliedWare Plus documentation, see our online documentation library. For Vista Manager, the library includes the following documents:

■ the AMF Feature Overview and Configuration Guide.

■ the AMF Datasheet.
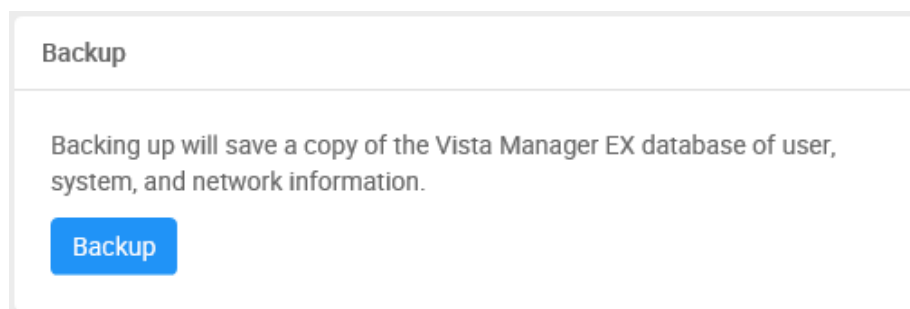
■ the VAA Installation Guide.

Upgrading to Vista Manager EX v2.5.0

This section describes the process involved to upgrade your existing Vista Manager instance to Vista Manager EX v2.5.0.

Vista Manager as a virtual appliance

To upgrade Vista Manager as a virtual appliance, use the following steps:

1. Log on to your current Vista Manager. From the System Management page, backup the database to a safe location.

    Backup

    Backing up will save a copy of the Vista Manager EX database of user, system, and network information.

    Backup

2. Download the software files for Vista Manager EX v2.5.0 from the Software Download area of the Allied Telesis website.

3. Import and start the new version of Vista Manager on your virtual machine host, following the instructions from the Vista Manager EX Installation and User Guide on the Allied Telesis website.

4. In the new Vista Manager, log in using the default credentials.

5. A dialog displays once you have logged in. On the displayed dialog, click the "Upload existing profile backup" link.

    upload existing profile backup

6. Browse to and upload the backup you created in Step 1.

    Upload existing backup file

    Browse...

7. In the new Vista Manager, log in again using the credentials from your current Vista Manager. Check that everything is functioning correctly, and that your settings have been correctly imported.

8. If you use a TLS proxy to provide HTTPS access to Vista Manager, then when you are satisfied that the new Vista Manager is working correctly, reconfigure your TLS terminating proxy to point to the new Vista Manager and stop the current one.

Vista Manager as a Windows-based installation

Windows-based Vista Manager has two optional plug-ins. These can be upgraded at the same time as Vista Manager EX.

1. Download Vista Manager EX from the Allied Telesis download center. If you are going to install the AWC and/or SNMP plug-ins then download these files from the same location.

    ■ The Vista Manager EX installation executable is named 'atvmex*XXX*b*XX*w.exe', with the *Xs* denoting the version and build numbers.

    ■ The AWC plug-in is called 'atawc*XXX*b*XX*w.exe'.

    ■ The SNMP plug-in is called 'atsnmp*XXX*b*XX*w.exe'.

    Do not rename these files. The installation requires them to be in this format.

2. Put the executables for Vista Manager and any plug-ins you wish to install in a single folder. This folder must be accessible from the machine you wish to install Vista Manager on.

Backup Vista Manager EX

3. Log on to your Vista Manager EX and select the System Management page.

4. Click on the Backup button in the Backup Pane.

5. Click Backup again to confirm you wish to make a backup.

Backup Vista Manager EX	✕
Are you sure you want to backup Vista Manager EX?	
	Cancel Backup
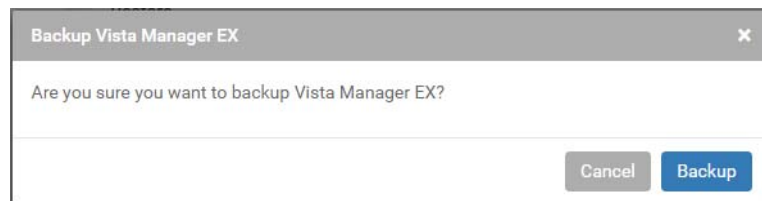
This automatically downloads a **tar** file backup to your default download location.

Backup the SNMP plug-in

6. If you have the SNMP plug-in installed then log on locally to the Vista Manager EX server.

7. Stop the SNMP server services using the shortcut or by running the following command line.

    "<Vista Install Path>\Plugins\AT-SNMP\NetManager\bin\svrcmd.bat" svrstop

8. Run the backup utility by using the shortcut or by running the following command line.

    "<Vista Install Path>\Plugins\AT-SNMP\NetManager\bin\SMBackup.exe"
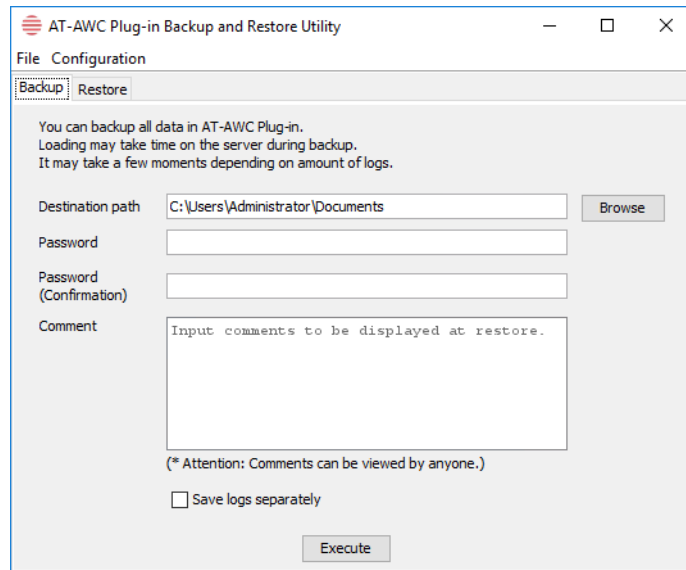
    Follow the instructions on the screen.

Backup the AWC plug-in

9. If you have the AWC plug-in installed then log on locally to the Vista Manager EX server.

10. Stop the AWC server services using the shortcut or by running the following command line.

    "<Vista Install Path>\Plugins\AT-AWC\root\stopserver.bat"

11. Run the backup/restore utility by using the shortcut or running the following command line.

    "<Vista Install Path>\Plugins\AT-AWC\tools\maintenance\maintenance.bat"

12. Select the backup tab and follow the instructions on the screen.

    Note: The default location of *<Vista Install Path>* is **C:\Program Files (x86)\Allied Telesis\AT-Vista Manager EX**
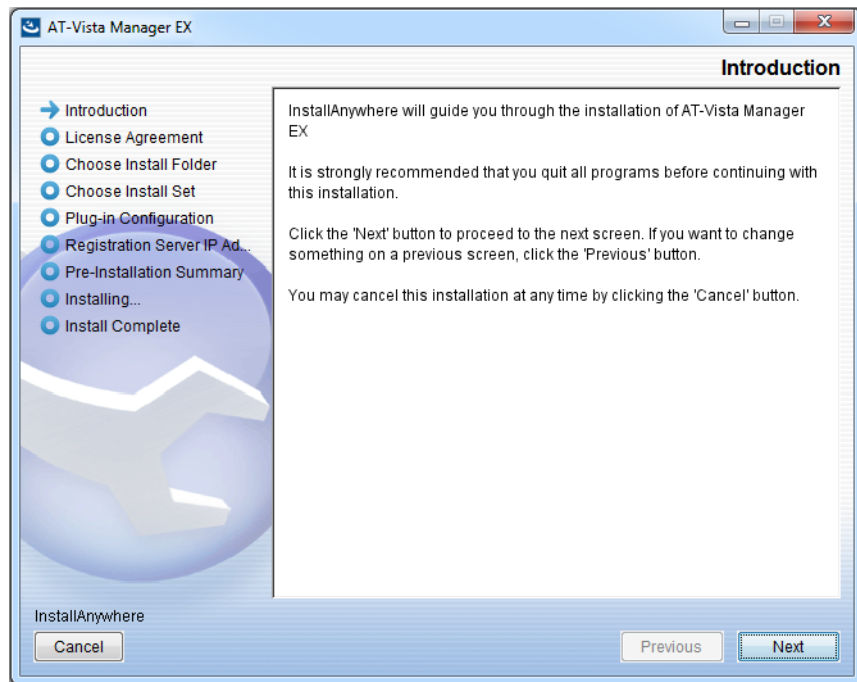
13. Execute the Vista Manager EX installation program 'atvmex*XXX*b*XX*w.exe'. This opens the following **AT-Vista Manager EX** dialog:

■Select the language from the drop down list

■Click **OK**

    Note: You must have administrator privileges to run the installer.

14. The **Introduction** dialog displays:

This wizard will guide you through the installation of the latest version of Vista Manager EX. Click **Next**.
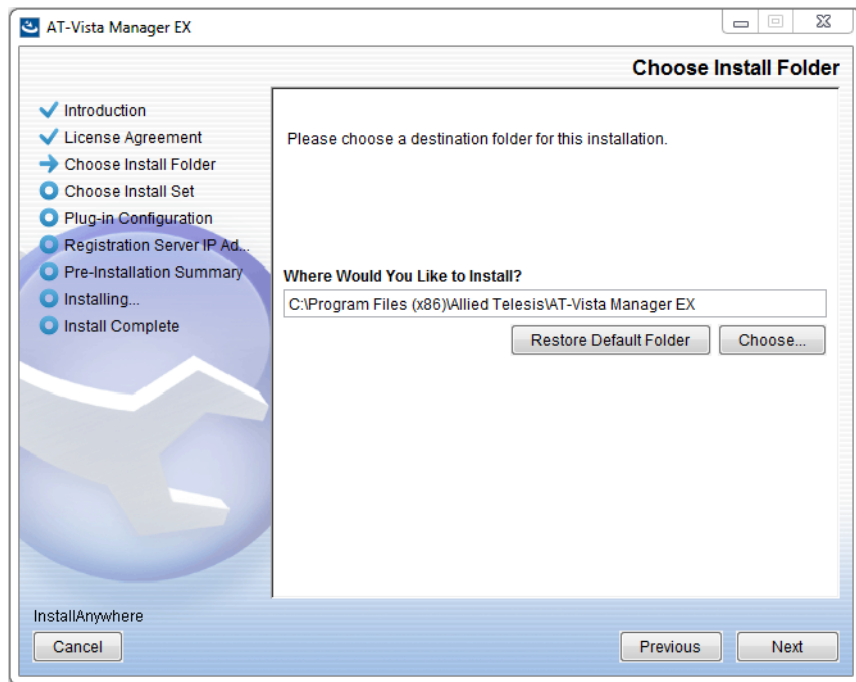
15. The **License Agreement** dialog displays:

Read the software license agreement terms and conditions. If you agree to accept the terms of the license agreement:
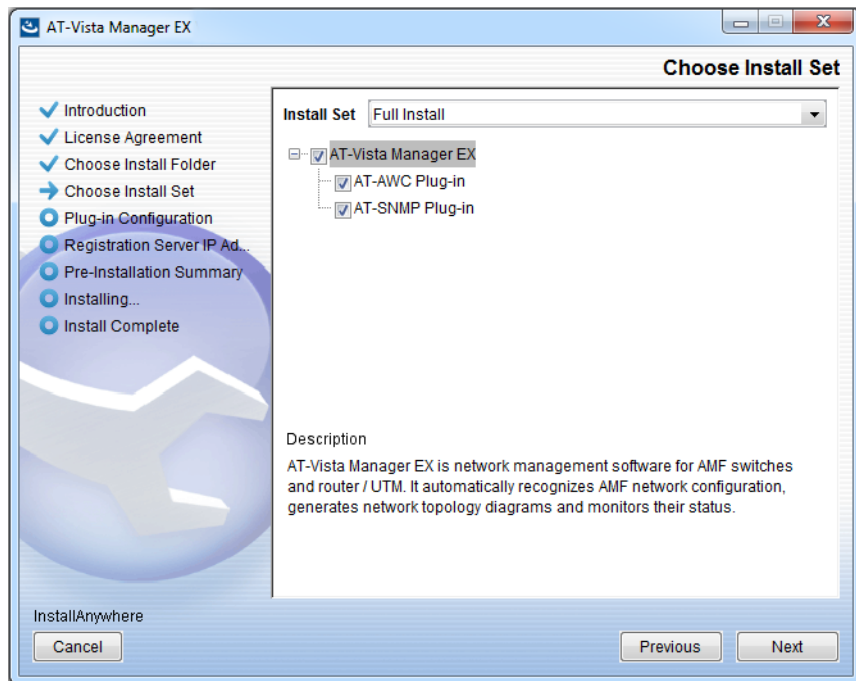
■ Click **I accept the terms of the License Agreement**

■ Click **Next**

16. The **Choose Install Folder** dialog displays:

Select a destination location and click **Next**.

17. The **Choose Install Set** dialog displays:

Select **Full Install** from the drop down list. By default all plug-ins will be selected. Clear the check box for any plug-ins you do not wish to install. Click **Next**.

18. The **Plug-In Configuration** dialog displays:

Select **Do not create a public key** unless you are intending to use the plug-ins in standalone mode. For more information on standalone mode, refer to the Installation Guide. Click **Next**.

19. The **Registration Server IP Address** dialog displays:
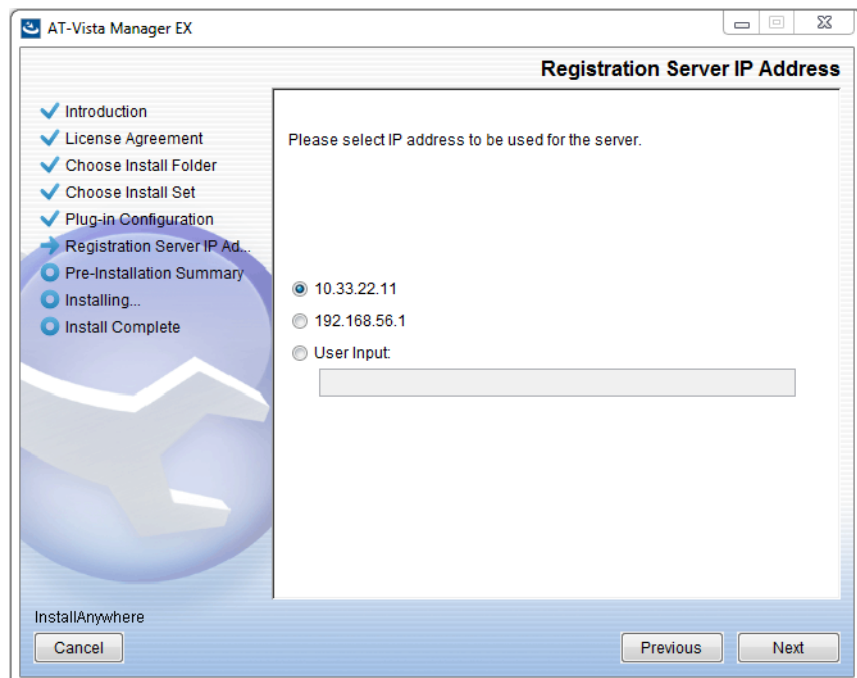
Either select from the list of IP addresses already configured on the Windows machine, or input a valid IP address. Make a note of this address; you use it to access Vista Manager via a local or remote web browser. Click **Next**.

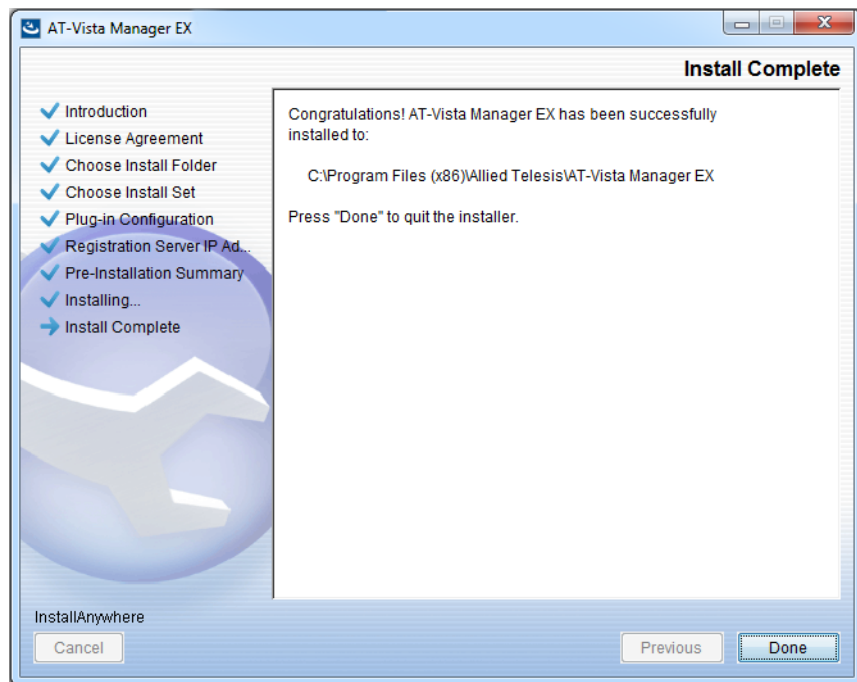20. The **Pre-Installation Summary** dialog displays:
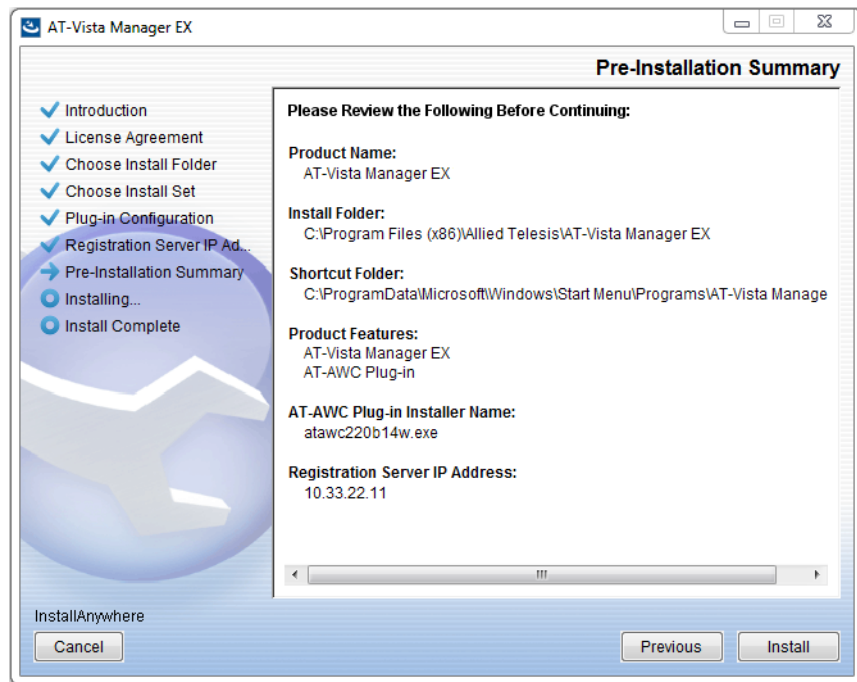
Check that your Product Name, Install Folder, Shortcut Folder, Product Features, Plugin Installer Name and Registration IP Address are correct, and then click **Install**.

21. The **Installing...** dialog displays:
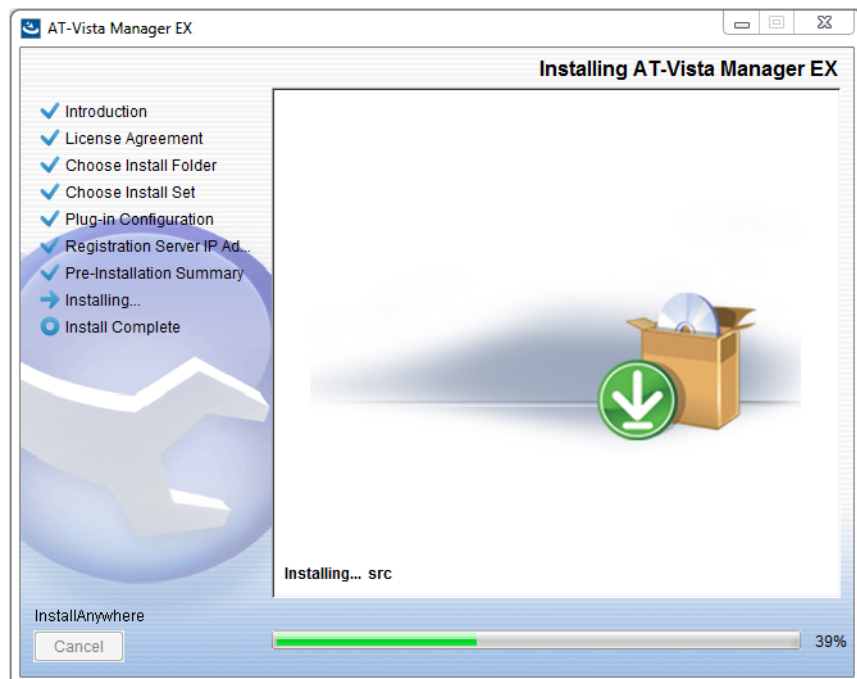
22. Once the installation is complete you will see the **Install Complete** dialog:

Check that the installation has completed successfully and click **Done**.

Register the plug-ins

After the upgrade is complete, if you are using the AWC or SNMP plug-ins, you need to register them with Vista Manager. To do this, use the following procedure.

23. Log on to Vista Manager. From the menu, select System Management, then click on the Manage Plug-ins button.

24. Under the list of plug-ins on the left, select the plug-in. Click on the Edit button.

25. In the Server URL field, enter the URL. For the AWC plug-in, use the following URL:

    https://localhost:5443/wireless_plugin

    For SNMP plug-in, use the following URL:

    https://localhost:6443/netmanager

26. Click on the Verify Connection button. Once you have verified that the certificate fingerprint is correct, click on the Save button.

27. If you have both plug-ins installed, repeat this process for the other plug-in.

Restoring Vista Manager EX

If you need to restore Vista Manager EX or any of plug-ins' data, use the appropriate procedure.

Restore Vista Manager EX

1. Log on to you Vista Manager EX and select the System Management page.

2. Click on the Restore button in the Restore Pane.

3. Select the appropriate tar file and restore.

Restore the SNMP plug-in

4. If you have the SNMP plug-in installed then log on locally to the Vista Manager EX server.

5. Stop the SNMP server services using the shortcut or by running the following command line.

   "<Vista Install Path>\Plugins\AT-SNMP\NetManager\bin\svrcmd.bat" svrstop

6. Run the restore utility by using the shortcut or by running the following command line.

   "<Vista Install Path>\Plugins\AT-SNMP\NetManager\bin\SMRestore.exe"

   Follow the instructions on the screen.

Restore the AWC plug-in

7. If you have the AWC plug-in installed then log on locally to the Vista Manager EX server.

8. Stop the AWC server services using the shortcut or by running the following command line.

   "<Vista Install Path>\Plugins\AT-AWC\root\stopserver.bat"

9. Run the backup/restore utility by using the shortcut or running the following command line.

   "<Vista Install Path>\Plugins\AT-AWC\tools\maintenance\maintenance.bat"

10. Select the restore tab on the dialog and follow the instructions on the screen.

Note: The default location of *<Vista Install Path>* is **C:\Program Files (x86)\Allied Telesis\AT-Vista Manager EX**