

Release Note for Web-based Device GUI Version 2.5.x



» 2.5.0 » 2.5.1 » 2.5.2

AlliedWare Plus
OPERATING SYSTEM

Acknowledgments

©2020 Allied Telesis Inc. All rights reserved. No part of this publication may be reproduced without prior written permission from Allied Telesis, Inc.

Allied Telesis, Inc. reserves the right to make changes in specifications and other information contained in this document without prior written notice. The information provided herein is subject to change without notice. In no event shall Allied Telesis, Inc. be liable for any incidental, special, indirect, or consequential damages whatsoever, including but not limited to lost profits, arising out of or related to this manual or the information contained herein, even if Allied Telesis, Inc. has been advised of, known, or should have known, the possibility of such damages.

Allied Telesis, AlliedWare Plus, Allied Telesis Management Framework, EPSRing, SwitchBlade, VCStack and VCStack Plus are trademarks or registered trademarks in the United States and elsewhere of Allied Telesis, Inc. Adobe, Acrobat, and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. Additional brands, names and products mentioned herein may be trademarks of their respective companies.

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

What's new in version 2.5.2	2
Introduction to version 2.5.2	2
New features and enhancements in version 2.5.2	5
AWC emergency mode - Vista Manager mini.....	5
Access to device GUI by clicking on device icon	5
Trap Receiver using SNMP for Vista Manager mini.....	6
Issues Resolved in Version 2.5.2.....	7
What's new in version 2.5.1	8
Introduction to version 2.5.1	8
New features and enhancements in version 2.5.1	11
Vista Manager mini wireless management on x550	11
AMF Security mini on AR4050S	11
New hardware support.....	12
What's new in version 2.5.0	13
Introduction to version 2.5.0	13
New features and enhancements in version 2.5.0	16
Additional GUI functionality	16
Security monitoring	16
Local RADIUS server enhancements.....	17
More visible access point status	17
User management.....	17
Installing and accessing the web-based GUI on switches	18
Installing and accessing the web-based GUI on AR-series devices	21

What's new in version 2.5.2

Product families supported by this version:

SwitchBlade x908 GEN2	IE510-28GSX-80
SwitchBlade x8100 Series	IE340 Series
x950 Series	IE300 Series
x930 Series	IE210L Series
x550 Series	IE200 Series
x530 Series	XS900MX Series
x530L Series	GS980M Series
x510 Series	GS980EM Series
x510L Series	GS970M Series
IX5-28GPX	GS900MX/MPX Series
x310 Series	FS980M Series
x320 Series	AR4050S
x230 Series	AR3050S
x230L Series	AR2050V
x220 Series	AR2010V
	AR1050V

Introduction to version 2.5.2

This section describes the new features in the Allied Telesis Web-based Device GUI software version 2.5.2. To use the new features in Device GUI version 2.5.2, you must be running AlliedWare Plus 5.5.0-0.1 or later firmware on your device. You can obtain the Device GUI software file and update it on:

- Switches from the [Software Download area of the Allied Telesis website](#). Log in using your assigned email address and password. See “[Installing and accessing the web-based GUI on switches](#)” on page 18.
- AR-Series devices from the Allied Telesis Update Service. See “[Installing and accessing the web-based GUI on AR-series devices](#)” on page 21.

The following table lists model names that support this version:

Table 1: Models

Models	Family
SBx908 GEN2	SBx908 GEN2
SBx81CFC960 v1 SBx81CFC960 v2	SBx8100
x950-28XSQ x950-28XTQm	x950
x930-28GTX x930-28GPX x930-52GTX x930-52GPX x930-28GSTX	x930

Table 1: Models (cont.)

Models	Family
x550-18SXQ x550-18XTQ x550-18XSPQm	x550
x530-28GTXm x530-28GPXm x530L-52GPX x530-52GTXm x530-52GPXm	x530 and x530L
x510-28GTX x510-52GTX x510-28GPX x510-52GPX x510-28GSX x510-28GSX-80 x510DP-28GTX x510DP-52GTX x510L-28GT x510L-28GP x510L-52GT x510L-52GP	x510 and x510L
IX5-28GPX	IX5
x310-26FT x310-50FT x310-26FP x310-50FP	x310
x320-10GH	x320
x230-10GP x230-10GT x230-18GP x230-18GT x230-28GP x230-28GT x230L-17GT x230L-26GT	x230 and x230L
x220-28GS x220-52GT x220-52GP	x220
IE510-28GSX	IE510-28GSX
IE340-20GP IE340L-18GP IE340-12GT IE340-12GP	IE340
IE300-12GT IE300-12GP	IE300
IE210L-10GP IE210L-18GP	IE210L
IE200-6FT IE200-6FP IE200-6GT IE200-6GP	IE200
XS916MXT XS916MXS	XS900MX
GS980M/52 GS980M/52PS	GS980M

Table 1: Models (cont.)

Models	Family
GS980EM/10H	GS980EM
GS970M/10PS GS970M/10 GS970M/18PS GS970M/18 GS970M/28PS GS970M/28	GS970M
GS924MX GS924MPX GS948MX GS948MPX	GS900MX/MPX
FS980M/9 FS980M/9PS FS980M/18 FS980M/18PS FS980M/28 FS980M/28PS FS980M/52 FS980M/52PS	FS980M
AR4050S AR3050S	AR-series UTM firewalls
AR2050V AR2010V AR1050V	AR-series VPN routers

New features and enhancements in version 2.5.2

This section summarizes the new features in the Device GUI software version 2.5.2, on AlliedWare Plus devices running firmware 5.5.0-0.1 or later.

There are also some minor improvements to the operation.

AWC emergency mode - Vista Manager mini

From version 2.5.2 onwards, you can configure emergency mode using Vista Manager mini.

You can use emergency mode to prevent people from being isolated from infrastructure in the event of a natural disaster such as an earthquake or typhoon.

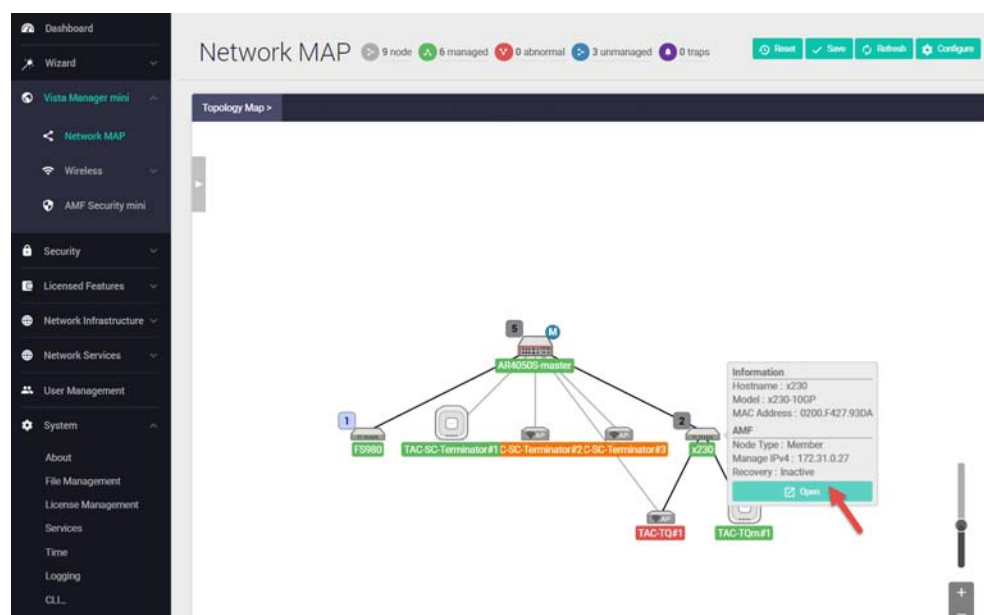
To configure emergency mode, go to the **Wireless Setup > Networks** menu, where you can mark a wireless network for emergency mode.

Wireless networks in emergency mode are only active when AWC is also in emergency mode. AlliedWare Plus retains the name of the user who enabled emergency mode and the time it was configured.

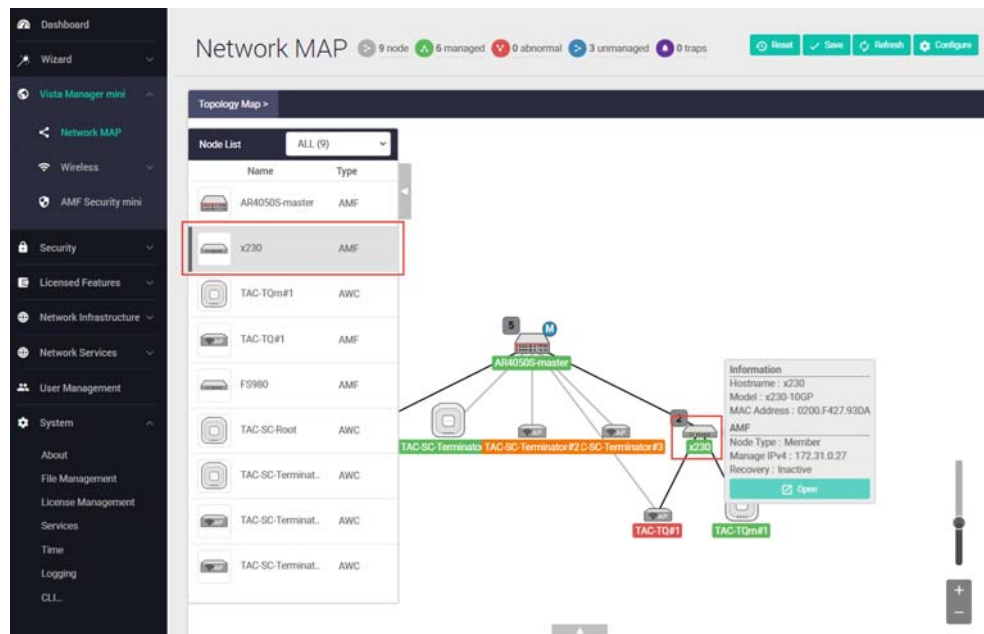
Access to device GUI by clicking on device icon

From version 2.5.2 onwards, you can open the GUI for a device in your network (e.g. an x230) from the network map in the GUI of another device in your network (e.g. an AR4050S).

When you click a node icon on the Network Map, the node information is displayed. In the node information window, click on the **Open** button to access the device's GUI.



You can use the **Node List** to help you locate a device in the network map. Simply click the device in the Node List to see its **Information** details displayed on the network map.



Trap Receiver using SNMP for Vista Manager mini

SNMP Device Discovery uses SNMP to discover devices which are then displayed on the network map in Vista Manager mini. SNMP traps can then be received for these SNMP discovered devices, and alerts for any problems or notable events with these devices are shown on the map. This enables real-time monitoring of third party devices.

After you configure Device Discovery, you can see SNMP discovery nodes from the Network MAP. All SNMP nodes are automatically displayed in positions where they are located on the topology map. If the discovery node is located under an AMF member, it automatically displays under that AMF member.

Use this feature to monitor SNMP trap events from the Network Map. From the 'Node List' you access SNMP devices, and the SNMP Recent Events List. The recent event list information displays: Date, Target Name, Model Name, Event Name, and Message.

This feature applies to all AlliedWare Plus™ products that are AMF master capable, running the Device GUI version **2.5.2** or later, and running AlliedWare Plus version **5.5.0-0.3** or later.

- For more information on Device Discovery, see the [Device Discovery using SNMP Feature Overview and Configuration Guide](#).

See the following documents for more detailed information about how to configure SNMP, SNMP MIBs, and AMF:

- For more information about SNMP, see the [SNMP Feature Overview and Configuration Guide](#).
- For more information about SNMP Management Information Base traps, see the [Support for Allied Telesis Enterprise MIBs in AlliedWare Plus Technical Guide](#).
- This feature makes use of an existing AMF network to supply this information to the device GUI. For more information about AMF, see the [AMF Feature Overview and Configuration Guide](#).

Issues Resolved in Version 2.5.2

This Device GUI version resolves the issues in the following table:

CR	Description
CR-68329	In the Fast Roaming tab of the New Network dialog box, if Mobility Domain, PMK-R0 key Lifetime, Reassociation Deadline and AES key were required and not entered, there was no error message to indicate that they needed to be entered. This issue has been resolved. A message now displays.
CR-68330	Previously, if you entered an SSID that was too long (more than 33 characters), there was no error message to indicate that the SSID was too long. This issue has been resolved. An error message now displays.
CR-68342	In the Security tab of the New Network dialog box, if Page Proxy URL and Redirect URL were required and not entered, there was no error message to indicate that they needed to be entered. This issue has been resolved. A message now displays.
CR-68453	Previously, if you uploaded a MAC address list as a CSV file via the MAC Filter tab of the wireless Setup page, then changed to another tab, and then returned to the MAC Filter tab, the CSV file no longer displayed. Similarly, if you selected a MAC Filter in the Edit Profile dialog box, then closed the dialog box, and then edited the profile again, the MAC Filter was no longer selected. These issues have been resolved.
CR-68559	Previously, the timestamp that shows when the wireless configuration was updated did not include the correct timezone. This issue has been resolved.

What's new in version 2.5.1

Product families supported by this version:

SwitchBlade x908 GEN2	IE510-28GSX-80
SwitchBlade x8100 Series	IE340 Series
x950 Series	IE300 Series
x930 Series	IE210L Series
x550 Series	IE200 Series
x530 Series	XS900MX Series
x530L Series	GS980M Series
x510 Series	GS980EM Series
x510L Series	GS970M Series
IX5-28GPX	GS900MX/MPX Series
x310 Series	FS980M Series
x320 Series	AR4050S
x230 Series	AR3050S
x230L Series	AR2050V
x220 Series	AR2010V
	AR1050V

Introduction to version 2.5.1

This section describes the new features in the Allied Telesis Web-based Device GUI software version 2.5.1. To use the new features in Device GUI version 2.5.1, you must be running AlliedWare Plus 5.5.0-0.1 or later firmware on your device. You can obtain the Device GUI software file and update it on:

- Switches from the [Software Download area of the Allied Telesis website](#). Log in using your assigned email address and password. See “[Installing and accessing the web-based GUI on switches](#)” on page 18.
- AR-Series devices from the Allied Telesis Update Service. See “[Installing and accessing the web-based GUI on AR-series devices](#)” on page 21.

The following table lists model names that support this version:

Table 1: Models

Models	Family
SBx908 GEN2	SBx908 GEN2
SBx81CFC960 v1 SBx81CFC960 v2	SBx8100
x950-28XSQ x950-28XTQm	x950
x930-28GTX x930-28GPX x930-52GTX x930-52GPX x930-28GSTX	x930

Table 1: Models (cont.)

Models	Family
x550-18SXQ x550-18XTQ x550-18XSPQm	x550
x530-28GTXm x530-28GPXm x530L-52GPX x530-52GTXm x530-52GPXm	x530 and x530L
x510-28GTX x510-52GTX x510-28GPX x510-52GPX x510-28GSX x510-28GSX-80 x510DP-28GTX x510DP-52GTX x510L-28GT x510L-28GP x510L-52GT x510L-52GP	x510 and x510L
IX5-28GPX	IX5
x310-26FT x310-50FT x310-26FP x310-50FP	x310
x320-10GH	x320
x230-10GP x230-10GT x230-18GP x230-18GT x230-28GP x230-28GT x230L-17GT x230L-26GT	x230 and x230L
x220-28GS x220-52GT x220-52GP	x220
IE510-28GSX	IE510-28GSX
IE340-20GP IE340L-18GP IE340-12GT IE340-12GP	IE340
IE300-12GT IE300-12GP	IE300
IE210L-10GP IE210L-18GP	IE210L
IE200-6FT IE200-6FP IE200-6GT IE200-6GP	IE200
XS916MXT XS916MXS	XS900MX
GS980M/52 GS980M/52PS	GS980M

Table 1: Models (cont.)

Models	Family
GS980EM/10H	GS980EM
GS970M/10PS GS970M/10 GS970M/18PS GS970M/18 GS970M/28PS GS970M/28	GS970M
GS924MX GS924MPX GS948MX GS948MPX	GS900MX/MPX
FS980M/9 FS980M/9PS FS980M/18 FS980M/18PS FS980M/28 FS980M/28PS FS980M/52 FS980M/52PS	FS980M
AR4050S AR3050S	AR-series UTM firewalls
AR2050V AR2010V AR1050V	AR-series VPN routers

New features and enhancements in version 2.5.1

This section summarizes the new features in the Device GUI software version 2.5.1, on AlliedWare Plus devices running firmware 5.5.0-0.1 or later.

There are also some minor improvements to the operation.

Vista Manager mini wireless management on x550

From version 2.5.1 onwards, the x550 GUI supports Vista Manager mini and AWC for Wireless Management on x550 switches. From the menu under Vista Manager mini, you can now find:

- Network MAP—an interactive map showing the device and any downstream devices connected to it.
- Wireless controller—allows you to set up and manage your wireless access points (APs) from the GUI. AWC uses wireless intelligence to model where your APs are located and what their signal strength is. Using this information, AWC automatically optimizes wireless output and channel selection. It minimizes coverage gaps and reduces AP interferences. This results in a high-quality wireless experience that responds to network configuration changes and bandwidth demands from user devices.

For more information about AWC, see [Vista Manager mini and AWC for Wireless Management on AlliedWare Plus Devices](#).

AMF Security mini on AR4050S

From version 2.5.1 onwards, the GUI supports AMF Security mini (AMF-Sec mini) on the AR4050S.

Allied Telesis Autonomous Management Framework (AMF) simplifies and automates network management. AMF Security mini adds a powerful security component with an intelligent SDN controller that works with firewalls and other security devices to instantly respond to alerts, and block the movement of malware threats within a wired or wireless network.

This requires:

- AR4050S running AlliedWare Plus 5.5.0-0.1 or later
- AMF-Sec mini image file (sesc_mips64_1.7.0.app) installed on the AR4050S

To install and access the AMF Security mini application on your device:

1. Download the image file (sesc_mips64_1.7.0.app) from the [Software Download area of the Allied Telesis website](#) and load it into the Flash memory on the AR4050S.
2. In the GUI's main menu, select **Vista Manager mini > AMF Security mini**.

From the AMF Security mini page, you can enable the AMF-Sec mini application and use the wizard to configure storage, memory and network interfaces.

New hardware support

From version 2.5.1, the Device GUI can now be used to manage the following models:

- SwitchBlade x8100 Series CFC960 v2
- IE340-12GT Industrial Ethernet Layer 3 Switch
- IE340-12GP Industrial Ethernet Layer 3 Switch.

What's new in version 2.5.0

Product families supported by this version:

SwitchBlade x908 GEN2	IE510-28GSX-80
SwitchBlade x8100 Series	IE340 Series
x950 Series	IE300 Series
x930 Series	IE210L Series
x550 Series	IE200 Series
x530 Series	XS900MX Series
x530L Series	GS980M Series
x510 Series	GS970M Series
x510L Series	GS900MX/MPX Series
IX5-28GPX	FS980M Series
x310 Series	AR4050S
x230 Series	AR3050S
x230L Series	AR2050V
x220 Series	AR2010V
	AR1050V

Introduction to version 2.5.0

This release note describes the new features in the Allied Telesis Web-based Device GUI software version 2.5.0. To use Device GUI version 2.5.0 you must be running AlliedWare Plus 5.4.9-0.1 or later firmware on your device. However some of the new features are only available with 5.4.9-1.x firmware.

You can obtain the Device GUI software file from the [Software Download area of the Allied Telesis website](#). Log in using your assigned email address and password.

For information on accessing and updating the Device GUI, see [“Installing and accessing the web-based GUI on switches” on page 18](#)

The following table lists model names that support this version:

Table 1: Models

Models	Family
SBx908 GEN2	SBx908 GEN2
SBx81CFC960v1	SBx8100
x950-28XSQ x950-28XTQm	x950
x930-28GTX x930-28GPX x930-52GTX x930-52GPX x930-28GSTX	x930
x550-18SXQ x550-18XTQ x550-18XSPQm	x550

Table 1: Models (cont.)

Models	Family
x530-28GTXm x530-28GPXm x530L-52GPX x530-52GTXm x530-52GPXm	x530 and x530L
x510-28GTX x510-52GTX x510-28GPX x510-52GPX x510-28GSX x510-28GSX-80 x510DP-28GTX x510DP-52GTX x510L-28GT x510L-28GP x510L-52GT x510L-52GP	x510 and x510L
IX5-28GPX	IX5
x310-26FT x310-50FT x310-26FP x310-50FP	x310
x230-10GP x230-10GT x230-18GP x230-18GT x230-28GP x230-28GT x230L-17GT x230L-26GT	x230 and x230L
x220-28GS x220-52GT x220-52GP	x220
IE510-28GSX	IE510-28GSX
IE340-20GP IE340L-18GP	IE340
IE300-12GT IE300-12GP	IE300
IE210L-10GP IE210L-18GP	IE210L
IE200-6FT IE200-6FP IE200-6GT IE200-6GP	IE200
XS916MXT XS916MXS	XS900MX
GS980M/52 GS980M/52PS	GS980M
GS970M/10PS GS970M/10 GS970M/18PS GS970M/18 GS970M/28PS GS970M/28	GS970M

Table 1: Models (cont.)

Models	Family
GS924MX GS924MPX GS948MX GS948MPX	GS900MX/MPX
FS980M/9 FS980M/9PS FS980M/18 FS980M/18PS FS980M/28 FS980M/28PS FS980M/52 FS980M/52PS	FS980M
AR4050S AR3050S	AR-series UTM firewalls
AR2050V AR2010V AR1050V	AR-series VPN routers

New features and enhancements in version 2.5.0

This section summarizes the new features in the Device GUI software version 2.5.0, on AlliedWare Plus devices running firmware 5.4.9-0.1 or later.

Additional GUI functionality

Configure, enable/disable, and view new features

From version 2.5.0 onwards, you can:

- enable/disable SSH
- enable/disable PoE per port
- configure secondary IP addresses on interfaces
- add/remove DNS servers
- enable/disable IGMP snooping on interfaces
- configure VCStack settings for stackable devices
- and view the:
 - ◀ FDB table
 - ◀ ARP table
 - ◀ STP settings
 - ◀ EPSR settings
 - ◀ Environment monitoring information

Security monitoring

Quickly see the security events a device has received over the last 48 hours. Available on firewalls/routers.

From version 2.5.0 onwards, you can use the Security Monitoring section of the GUI dashboard to view security events over the previous 48 hours. Events are polled every 30 seconds while the dashboard is open and displayed using charts for each event type. Event types include:

- Intrusion prevention
- URL filtering
- Web control
- IP reputation
- Malware protection
- Antivirus

Hover your mouse over a chart to see the event count for the previous 3, 6, 12, 24, or 48 hours.

Local RADIUS server enhancements

Configure more features on products that support the Local RADIUS Server

From version 2.5.0 onwards, you can use the GUI to:

- Download a Local CA
- Assign a VLAN ID to a group
- Download RADIUS user keys
- Import and export RADIUS users and groups via a CSV file
- Edit a RADIUS user's password and group

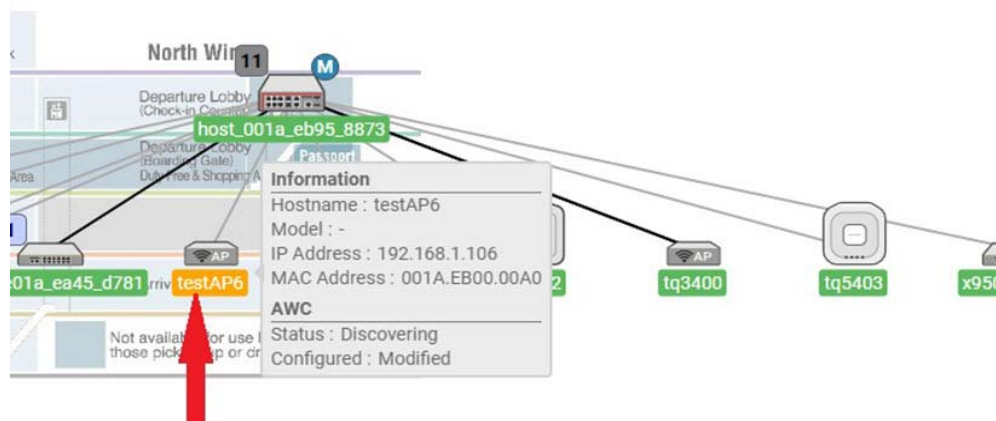
These features require a Local RADIUS running AlliedWare Plus version 5.4.9-2.1 or later.

More visible access point status

Identify Access Point (AP) status

From version 2.5.0 onwards, while Vista Manager mini is in the process of discovering an AP, the AP's icon color is bright orange (previously it was always green).

The orange discovery indicator is helpful because you cannot use an AP while it is in the discovery process. Once Vista Manager mini has completed the discovery process, the AP is available to use and its icon turns green.



User management

Create, edit, and delete GUI users

From version 2.5.0 onwards, you can use the User Management page to create, edit and delete Device GUI users.

This feature requires an administrator privilege level of 15.

Installing and accessing the web-based GUI on switches

This section describes how to access the GUI to manage and monitor your AlliedWare Plus switch.

The GUI is a convenient tool for monitoring your device's status and performing basic management tasks. Its dashboard provides at-a-glance monitoring of traffic and other key metrics.

On SBx908 GEN2 switches, x950 Series, x930 Series, and x530 Series, you can also optimize the performance of your Allied Telesis APs through the Autonomous Wave Control wireless manager.

The steps for installing and accessing the GUI depend on whether the latest GUI has been pre-installed on your device in the factory.

Check if the GUI is installed

To tell if the GUI is installed on your device, simply browse to it, as described below.

Browse to the GUI

Perform the following steps to browse to the GUI.

1. If you haven't already, add an IP address to an interface. For example:

```
awplus#configure terminal
awplus(config)#interface vlan1
awplus(config-if)#ip address 192.168.1.1/24
awplus(config-if)#exit
```

Alternatively, you can use the default address on unconfigured devices, which is 169.254.42.42.

2. Open a web browser and browse to the IP address from step 1.
3. If you do not see a login page, you need to install the GUI, as described in ["Install the GUI if it is not installed" on page 19](#). If you see a login page, log in. The default username is *manager* and the default password is *friend*.

Check the GUI version

To see which version you have, open the About page in the GUI and check the field called **GUI version**.

If you have an earlier version, update it as described in ["Update the GUI if it is not the latest version" on page 20](#)

Install the GUI if it is not installed

Perform the following steps through the command-line interface if your AlliedWare Plus switch does not currently have a GUI installed.

1. Obtain the GUI file from our Software Download center. The file to use is `awplus-gui_550_17.gui`.

The file is not device-specific; the same file works on all devices.

2. Copy the file into Flash memory on your switch. You can copy the file into Flash using any of the following methods:

- « TFTP server
- « USB Flash drive
- « SD card

For example, to copy the GUI file from your USB Flash drive, use the following commands:

```
awplus>enable
awplus#copy usb awplus-gui_550_17.gui flash
```

To view all files in Flash and check that the newly installed file is there, use the following command:

```
awplus#dir
```

3. Delete any previous Java switch GUI files.

If you have been using the previous Java switch GUI, we recommend you delete the old GUI file to avoid any conflict. To do this, delete any Java files (.jar) from the switches Flash memory. For example:

```
awplus#del x510-gui_547_02.jar
```

4. If you haven't already, add an IP address to a VLAN on the switch. For example:

```
awplus#configure terminal
awplus(config)#interface vlan1
awplus(config-if)#ip address 192.168.1.1/24
awplus(config-if)#exit
```

5. Make sure the HTTP service is running:

```
awplus# configure terminal
awplus(config)# service http
```

6. Log into the GUI:

Start a browser and browse to the device's IP address, using HTTPS. You can access the GUI via any reachable IP address on any interface.

The GUI starts up and displays a login screen. Log in with your username and password.

The default username is *manager* and the default password is *friend*.

Update the GUI if it is not the latest version

Perform the following steps through the command-line interface if you have been running an earlier version of the GUI and need to update it.

1. Obtain the GUI file from our Software Download center. The file to use is `awplus-gui_550_17.gui`.

The file is not device-specific; the same file works on all devices.

2. Copy the file into Flash memory on your switch. You can copy the file into Flash using any of the following methods:

- « TFTP server
- « USB Flash drive
- « SD card

For example, to copy the GUI file from your USB Flash drive, use the following commands:

```
awplus>enable
awplus#copy usb awplus-gui_550_17.gui flash
```

To view all files in Flash and check that the newly installed file is there, use the following command:

```
awplus#dir
```

3. Stop and restart the HTTP service:

```
awplus# configure terminal
awplus(config)# no service http
awplus(config)# service http
```

4. Log into the GUI:

Start a browser and browse to the device's IP address, using HTTPS. You can access the GUI via any reachable IP address on any interface.

The GUI starts up and displays a login screen. Log in with your username and password.

The default username is *manager* and the default password is *friend*.

Installing and accessing the web-based GUI on AR-series devices

This section describes how to access the GUI to manage and monitor your AlliedWare Plus device.

The GUI is a convenient tool for monitoring your device's status and performing basic management tasks. Its dashboard provides at-a-glance monitoring of traffic and other key metrics.

On AR4050S and AR3050S firewalls, you can use the GUI to create an advanced application-aware firewall with features such as Application control and Web control. Alternatively, you can configure real-time threat protection with URL filtering, Intrusion Prevention and Malware protection.

The steps for installing and accessing the GUI depend on whether the latest GUI has been pre-installed on your device in the factory.

Check if the GUI is installed

To tell if the GUI is installed on your device, simply browse to it, as described below.

Browse to the GUI

Perform the following steps to browse to the GUI.

Prerequisite: If the firewall is enabled, you need to create a firewall rule to permit traffic generated by the device that is destined for external services. See the "Configuring a Firewall Rule for Required External Services" section in the [Firewall and Network Address Translation \(NAT\) Feature Overview and Configuration Guide](#).

1. If you haven't already, add an IP address to an interface. For example:

```
awplus#configure terminal
awplus(config)#interface vlan1
awplus(config-if)#ip address 192.168.1.1/24
awplus(config-if)#exit
```

Alternatively, you can use the default address on unconfigured devices, which is 192.168.1.1.

2. Open a web browser and browse to the IP address from step 1.
3. If you do not see a login page, you need to install the GUI, as described in "[Install the GUI if it is not installed](#)" on page 22. If you see a login page, log in. The default username is *manager* and the default password is *friend*.

Check the GUI version

To see which version you have, open the About page in the GUI and check the field called **GUI version**. The version to use is 2.5.2. If you have an earlier version, update it as described in "[Install the GUI if it is not installed](#)" on page 22.

Install the GUI if it is not installed

Perform the following steps through the command-line interface if your AR-series device does not currently have a GUI installed.

1. If the device's firewall is enabled, create a firewall rule to permit traffic generated by the device that is destined for external services. See the "Configuring a Firewall Rule for Required External Services" section in the [Firewall and Network Address Translation \(NAT\) Feature Overview and Configuration Guide](#).
2. If you haven't already, create one or more IP interfaces and assign them IP addresses, including configuring WAN connectivity. For information about configuring PPP, see the [PPP Feature Overview and Configuration Guide](#). For information about configuring IP, see the [IP Feature Overview and Configuration Guide](#).

3. Use the following command to download and install the GUI:

```
awplus# update webgui now
```

4. Make sure the HTTP service is running:

```
awplus# configure terminal
awplus(config)# service http
```

5. Log into the GUI:

Start a browser and browse to the device's IP address, using HTTPS. You can access the GUI via any reachable IP address on any interface.

The GUI starts up and displays a login screen. Log in with your username and password.

Update the GUI if it is not the latest version

Perform the following steps through the command-line interface if you have been running an earlier version of the GUI and need to update it.

1. Use the following command to download and install the GUI:

```
awplus# update webgui now
```

2. Stop and restart the HTTP service:

```
awplus# configure terminal
awplus(config)# no service http
awplus(config)# service http
```

3. Log into the GUI:

Start a browser and browse to the device's IP address, using HTTPS. You can access the GUI via any reachable IP address on any interface.

The GUI starts up and displays a login screen. Log in with your username and password.