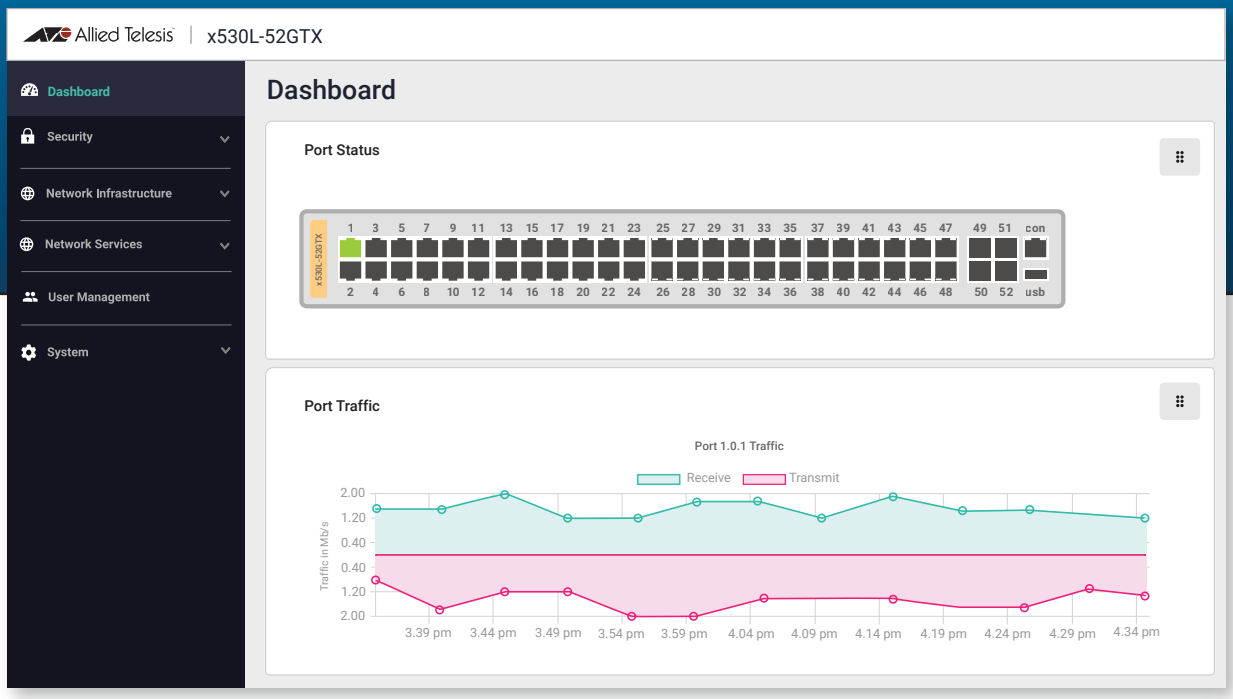
Release Notes



Device GUI Version 2.22.x

2.22.0, 2.22.1

Acknowledgments

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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/**

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SwitchBlade x908 Generation 3
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x930 Series
x550 Series
x540L Series
x530 Series
x530L Series
x330 Series
x320 Series
x250 Series
x240 Series
x230 and x230L Series
x220 Series
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AR4000S-Cloud
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AR3050S
AR2050V[2]
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AR1050V
TQR Series
TQ6702 GEN2-R

1. Not available in all regions
2. Does not support all of the latest features

Introduction

This release note describes the new features in the Allied Telesis Web-based Device GUI version 2.22.1. You can run 2.22.1 with AlliedWare Plus firmware versions 5.5.5-x.x, 5.5.4-x.x, or 5.5.3-x.x on your device, although the latest GUI features may only be supported with the latest firmware version.

For information on accessing and updating the Device GUI, see "Accessing and Updating the Web-based GUI" on page 23.

The following table lists model names that support this version:

Table 1: Models

Models	Family
AMF Plus Cloud	
SBx81CFC960	SBx8100
SBx908 GEN3	SBx908 GEN3
SBx908 GEN2	SBx908 GEN2
x950-28XSQ x950-28XTQm x950-52XSQ x950-52XTQm	x950

Table 1: Models(cont.)

Models	Family
x930-28GTX x930-28GPX x930-28GSTX x930-52GTX x930-52GPX	x930
x550-18SXQ x550-18XTQ x550-18XSPQm	x550
x540L-28XTm x540L-28XS	x540L
x530-10GHXm x530-18GHXm x530-28GTXm x530-28GPXm x530-52GTXm x530-52GPXm x530DP-28GHXm x530DP-52GHXm	x530
x530L-10GHXm x530L-18GHXm x530L-28GTX x530L-28GPX x530L-52GTX x530L-52GPX	x530L
x330-10GTX x330-20GTX x330-28GTX x330-52GTX	x330
x320-10GH x320-11GPT	x320
x250-18XS x250-18XTm x250-28XS x250-28XTm	x250
x240-10GTXm x240-10GHXm x240-26GHXm	x240
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
IE560-12GSX	IE560
IE360-12GTX IE360-12GHX	IE360

Table 1: Models(cont.)

Models	Family
IE340-12GT IE340-12GP IE340-20GP IE340L-18GP	IE340
IE220-6GHX IE220-10GHX	IE220
IE210L-10GP IE210L-18GP	IE210L
SE540L-28XTm SE540L-28XS	SE540L
SE250-18XS SE250-18XTm SE250-28XS SE250-28XTm	SE250
SE240-10GTXm SE240-10GHXm	SE240
XS916MXT XS916MXS	XS900MX
GS980MX/10HSm GS980MX/18HSm GS980MX/28 GS980MX/28PSm GS980MX/52 GS980MX/52PSm	GS980MX
GS980EM/10H GS980EM/11PT	GS980EM
GS980M/52 GS980M/52PS	GS980M
GS970EMX/10 GS970EMX/20 GS970EMX/28	GS970EMX
GS970M/10PS GS970M/10 GS970M/18PS GS970M/18 GS970M/28PS GS970M/28	GS970M
AR4000S-Cloud	
ARX200S-GT ARX200S-GTX	ARX200S
10GbE UTM Firewall	
AR4050S AR4050S-5G AR3050S	AR-Series UTM firewalls
AR1050V AR2050V AR2010V[1]	AR-Series VPN routers
TQ7613-R	TQR

Table 1: Models(cont.)

Models	Family
TQ7403-R	TQR
TQ6702 GEN2-R	TQR
TQ6702e GEN2-R	TQR
TQ3403-R	TQR

1. AR2010V and AR2050V do not support all of the latest features

New Features and Enhancements

This section summarizes the new features in the Device GUI software version 2.22.1.

Reduction in GUI file size

CR-88971

In version 2.22.1, the size of the GUI file has been significantly reduced, from 7.3M down to 5.1M. This makes more storage space available on your device.

Issues Resolved in Version 2.22.1

Support for x230, x230L and GS970M Series switches

CR-88971

Version 2.22.1 supports the x230, x230L and GS970M Series switches. In version 2.22.0, these switches were not supported.

What's New in Version 2.22.0

Product families supported by this version:

AMF Plus Cloud
SwitchBlade x8100: SBx81CFC960
SwitchBlade x908 Generation 3
SwitchBlade x908 Generation 2
x950 Series
x930 Series
x550 Series
x540L Series
x530 Series
x530L Series
x330 Series
x320 Series
x250 Series
x240 Series
x230 and x230L Series[1]
x220 Series
IE560-12GSX
IE360 Series
IE340 Series
IE220 Series
IE210L Series
SE540L Series[2]
SE250 Series[2]
SE240 Series[2]
XS900MX Series
GS980MX Series
GS980EM Series
GS980M Series
GS970EMX Series
GS970M Series[1]
10GbE UTM Firewall
ARX200S Series
AR4000S-Cloud
AR4050S
AR4050S-5G
AR3050S
AR2050V[3]
AR2010V[3]
AR1050V
TQR Series
TQ6702 GEN2-R

1. x230, x230L and GS970M Series are not supported in version 2.22.0. Use 2.22.1 or later instead.
2. Not available in all regions
3. Does not support all of the latest features

Introduction

This release note describes the new features in the Allied Telesis Web-based Device GUI version 2.22.0. You can run 2.22.0 with AlliedWare Plus firmware versions 5.5.5-x.x, 5.5.4-x.x, or 5.5.3-x.x on your device, although the latest GUI features may only be supported with the latest firmware version.

For information on accessing and updating the Device GUI, see "Accessing and Updating the Web-based GUI" on page 23.

The following table lists model names that support this version:

Table 1: Models and software file names

Models	Family
AMF Plus Cloud	
SBx81CFC960	SBx8100
SBx908 GEN3	SBx908 GEN3
SBx908 GEN2	SBx908 GEN2

Table 1: Models and software file names (cont.)

Models	Family
x950-28XSQ x950-28XTQm x950-52XSQ x950-52XTQm	x950
x930-28GTX x930-28GPX x930-28GSTX x930-52GTX x930-52GPX	x930
x550-18SXQ x550-18XTQ x550-18XSPQm	x550
x540L-28XTm x540L-28XS	x540L
x530-10GHXm x530-18GHXm x530-28GTXm x530-28GPXm x530-52GTXm x530-52GPXm x530DP-28GHXm x530DP-52GHXm	x530
x530L-10GHXm x530L-18GHXm x530L-28GTX x530L-28GPX x530L-52GTX x530L-52GPX	x530L
x330-10GTX x330-20GTX x330-28GTX x330-52GTX	x330
x320-10GH x320-11GPT	x320
x250-18XS x250-18XTm x250-28XS x250-28XTm	x250
x240-10GTXm x240-10GHXm x240-26GHXm	x240
x230-10GP x230-10GT x230-18GP x230-18GT x230-28GP x230-28GT x230L-17GT x230L-26GT	x230 and x230L[1]
x220-28GS x220-52GT x220-52GP	x220
IE560-12GSX	IE560

Table 1: Models and software file names (cont.)

Models	Family
IE360-12GTX IE360-12GHX	IE360
IE340-12GT IE340-12GP IE340-20GP IE340L-18GP	IE340
IE220-6GHX IE220-10GHX	IE220
IE210L-10GP IE210L-18GP	IE210L
SE540L-28XTm SE540L-28XS	SE540L
SE250-18XS SE250-18XTm SE250-28XS SE250-28XTm	SE250
SE240-10GTXm SE240-10GHXm	SE240
XS916MXT XS916MXS	XS900MX
GS980MX/10HSm GS980MX/18HSm GS980MX/28 GS980MX/28PSm GS980MX/52 GS980MX/52PSm	GS980MX
GS980EM/10H GS980EM/11PT	GS980EM
GS980M/52 GS980M/52PS	GS980M
GS970EMX/10 GS970EMX/20 GS970EMX/28	GS970EMX
GS970M/10PS GS970M/10 GS970M/18PS GS970M/18 GS970M/28PS GS970M/28	GS970M[1]
AR4000S-Cloud	
ARX200S-GT ARX200S-GTX	ARX200S
10GbE UTM Firewall	
AR4050S AR4050S-5G AR3050S	AR-Series UTM firewalls
AR1050V AR2050V AR2010V[2]	AR-Series VPN routers

Table 1: Models and software file names (cont.)

Models	Family
TQ7613-R	TQR
TQ7403-R	TQR
TQ6702 GEN2-R	TQR
TQ6702e GEN2-R	TQR
TQ3403-R	TQR

1. x230, x230L and GS970M Series are not supported in version 2.22.0. Use 2.22.1 or later instead.
2. AR2010V and AR2050V do not support all of the latest features

New Features and Enhancements

This section summarizes the new features in the Device GUI software version 2.22.0.

Packet Capture

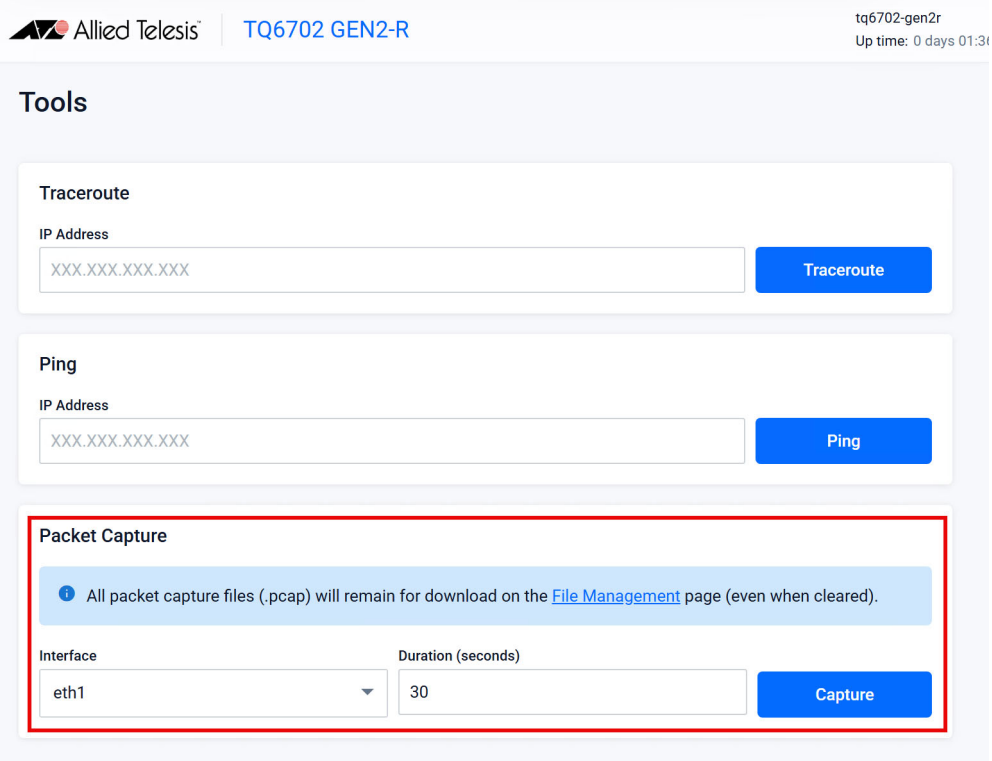
Available on all devices running AlliedWare Plus

From Device GUI version 2.22.0 using AlliedWare Plus software version 5.5.5-2.1 onwards, you can use the GUI to capture packets.

How to capture packets

To capture packets, do the following steps:

1. Select Network Services > Tools in the left-hand menu.
2. Select the desired interface and duration.
3. Click the Capture button.
4. To see the capture file, click on the File Management link or select System > File Management in the left-hand menu.

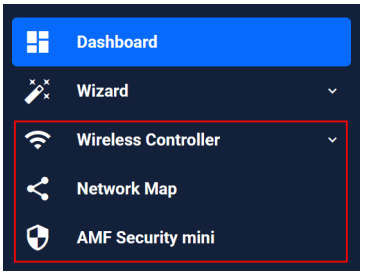


Menu Change to Replace Vista Manager mini

Available on SBx908 GEN3, SBx908 GEN2, x950, x930, x550, x540L, x530, ARX200S, AR4050S, AR3050S, TQ7613-R, TQ7403-R, TQ6702 GEN2-R, TQ6702e GEN2-R, and TQ3403-R

From Device GUI version 2.22.0 onwards, the Vista Manager mini menu has been replaced, to make it easier to see the features that were part of Vista Manager mini.

Previously, the Vista Manager mini menu contained 3 sub-menu items: Network MAP, Wireless and AMF Security mini. These have moved to the top level of the menu, as shown in the following screenshot:



This is only a menu change; the functionality has not changed.

Note that Wireless has been renamed Wireless Controller.

Other items in the menu vary depending on the product. The above screenshot is from a firewall.

Wireless Controller able to control TQR Series

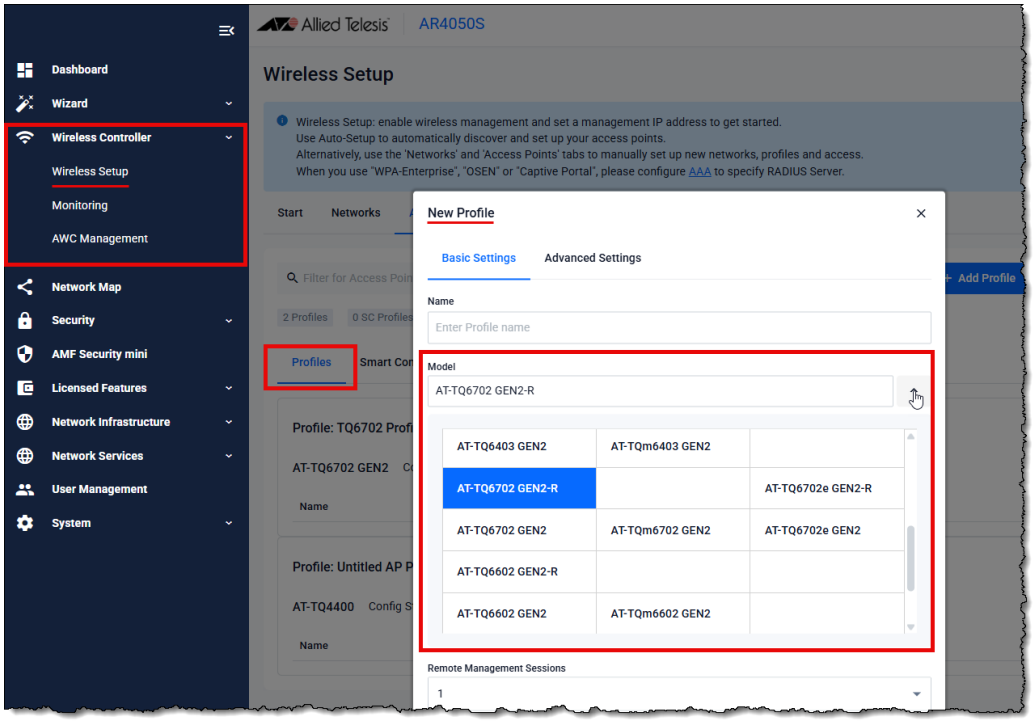
Available on all devices that support the Wireless Controller

From Device GUI version 2.22.0 using AlliedWare Plus software version 5.5.5-2.1 onwards, you can use the Wireless Controller to configure TQR Series access points, as well as TQ Series access points.

The Wireless Controller was previously part of Vista Manager mini. It allows you to use one of a range of AlliedWare Plus switches and routers to configure the access points in your network. You can use the Wireless Controller directly from the Wireless Controller menu in the Device GUI.

Configuring TQR Series

From the Wireless Controller menu you can use **Wireless Setup** to configure TQR Series devices:



For more information about the Embedded Wireless Controller, see the User Guide for Wireless management (AWC) with The Wireless Controller (TBC)

Wireless Controller on TQR series

Applies to TQR Series

From Device GUI version 2.22.0 using AlliedWare Plus software version 5.5.5-2.1 onwards, the Wireless Controller is available on TQR Series devices. This allows you to manage other TQ and TQR Series devices within your network directly from the Wireless Controller menu in the Device GUI.

The Wireless Controller provides centralized visibility and control of wireless devices. Key features include:

- *Wireless Setup*

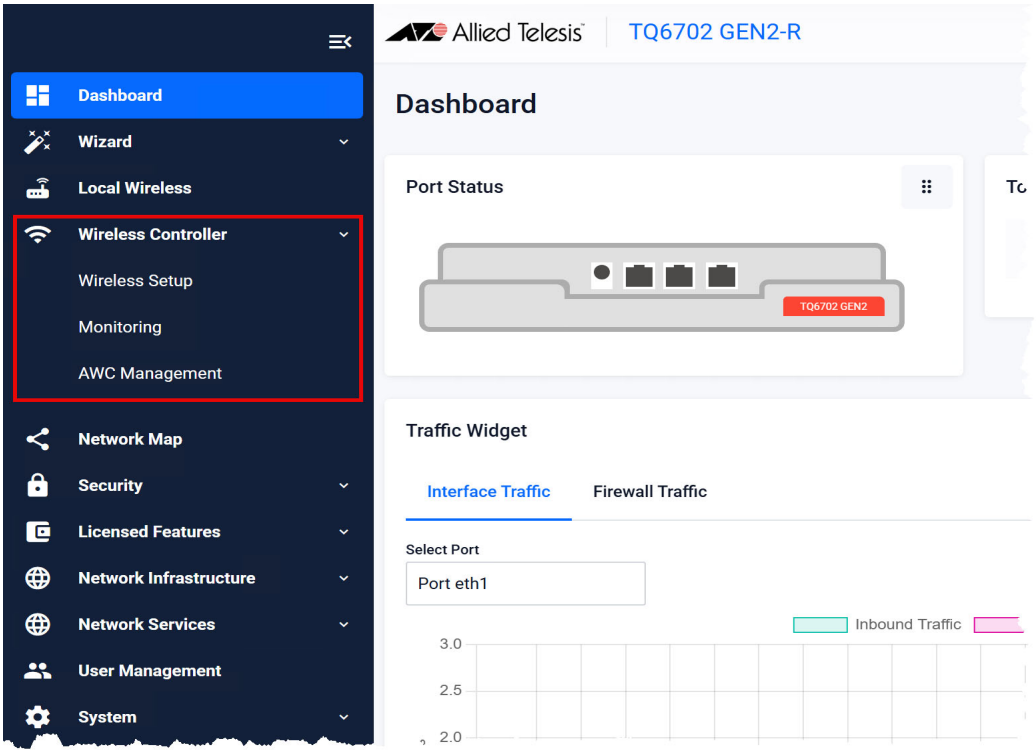
  Quickly enable wireless management by assigning a management IP address. Use Auto-Setup to automatically discover and configure access points, or manually create networks and profiles through the Networks and Access Points tabs.

- *Monitoring*

  View the real-time status of wireless access points and connected clients. Easily identify unauthorized or failed APs, schedule immediate or delayed configuration or firmware updates, and reboot devices as needed.

- *AWC Management*

  Continuously analyze access point locations and signal strength with Autonomous Wave Control (AWC). It uses intelligent algorithms to automatically adjust wireless output and channel selection to deliver optimal performance and a better user experience.



Note that TQR Series devices also include a **Local Wireless** menu item, which lets you configure that device's own wireless settings.

Enable pre-authentication features on multiple VAPs on TQR Series

From Device GUI version 2.22.0 using AlliedWare Plus software version 5.5.5-2.1 onwards, TQR Series devices support pre-authentication on all Virtual Access Points (VAPs).

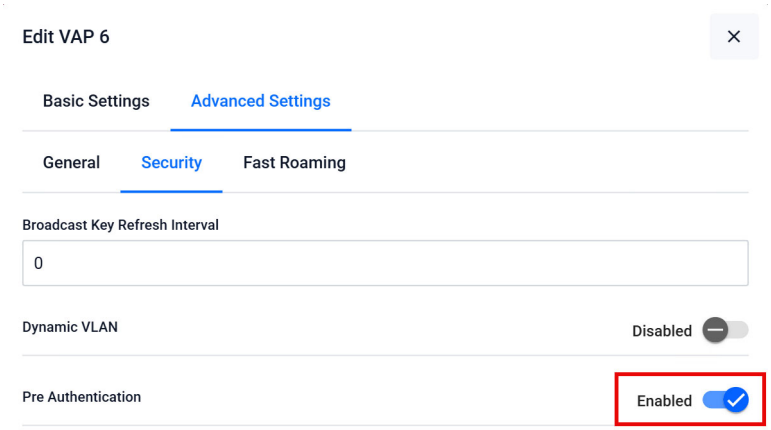
Pre-authentication shortens the authentication time during roaming by sharing authentication information between APs in advance.

Until now, this feature has only been supported on VAP0 for all radios. From 5.5.5-2.1 onwards, it is supported on all VAPs, for all radios.

How to enable or disable pre-authentication

Pre-authentication is enabled by default. To enable or disable it, do the following steps:

1. Select Local Wireless in the left-hand menu.
2. Select the radio you want to configure.
3. Scroll to the VAP you want to configure and then click the Edit button on the right-hand side of that VAP. The Edit VAP dialog opens.
4. On the Basic Settings tab, set the Security to WPA Enterprise.
5. Click on the Advanced Settings tab, then the Security tab.
6. Set Pre Authentication to Enabled or Disabled.
7. Click the Apply button to apply the settings.
8. Click the Save button to save the configuration.



For more information about wireless configuration of TQR Series APs, see Wireless Management for the TQR series using the Device GUI.

Set IEEE 802.11r key holder AP list on TQR Series

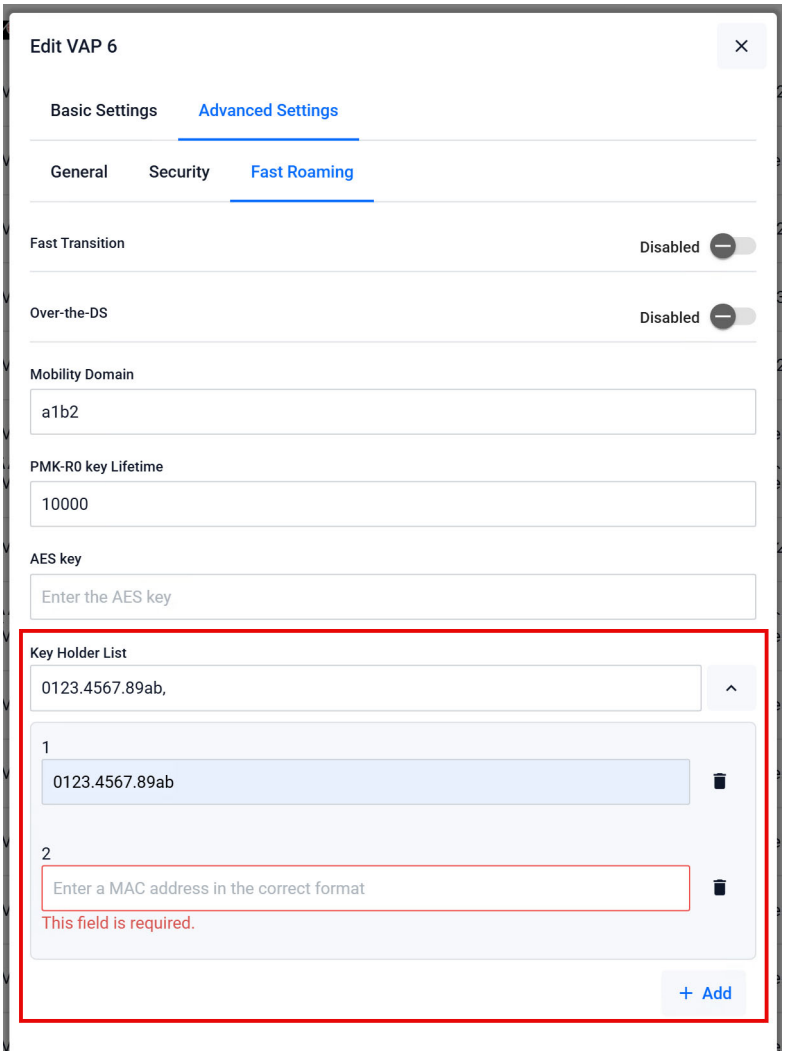
From Device GUI version 2.22.0 using AlliedWare Plus software version 5.5.5-2.1 onwards, TQR Series devices support the “Key Holder List” feature. This is a list of candidate access points for roaming - the potential next access points that a device can connect to when roaming. This list is required by IEEE 802.11r (Fast Roaming). This enhancement enables you to create this list on TQR Series devices.

This feature is supported for local wireless control on TQR series devices only. It is not supported when using the Wireless Controller to configure other APs.

How to create the Key Holder List and add entries to it

To create the list and add entries to it, do the following steps:

1. Select Local Wireless in the left-hand menu.
2. Select the radio you want to configure.
3. Scroll to the VAP you want to configure and then click the Edit button on the right-hand side of that VAP. The Edit VAP dialog opens.
4. On the Basic Settings tab, set the Security to WPA Enterprise.
5. Click on the Advanced Settings tab, then the Fast Roaming tab.
6. Click on the dropdown arrow next to Key Holder List. A field opens for you to enter the first MAC address in the Keyholder List.
7. Enter the MAC address in the format hhhh.hhhh.hhhh.
8. Click the + Add button to add that entry and open up a field to enter the next entry.
9. Repeat steps 7 and 8 until you have finished.
10. Click the Apply button to apply the settings.
11. Click the Save button to save the configuration.



For more information about wireless configuration of TQR series APs, see Wireless Management for the TQR series using the Device GUI.

Bridge VAPs and eth1 by default on TQR series

From Device GUI version 2.22.0 using AlliedWare Plus software version 5.5.5-2.1 onwards, new TQR Series devices have bridging configured by default. Now, all default VAPs and the eth1 interface are added to the bridge interface br0, so that all traffic is bridged between these interfaces.

This change gives the TQR Series access points the same initial bridging configuration as TQ Series access points.

Note that if a device has an eth2 interface, that is not added to the bridge automatically.

What are the changes?

The default configuration for TQR devices using AlliedWare Plus has the following changes:

- eth1 is placed in br0
- The device tries to use DHCP to obtain an IP address for br0
- If DHCP fails, the device uses the static IP address of 192.168.1.1/24 on br0
- All VAP interfaces are placed in br0.

For more information about bridging, see the Bridging Feature Overview and Configuration Guide.

For more information about basic configuration of TQR series APs, see Getting Started with the TQR Series Wireless Router.

Virtual IP Address for Captive Portal on TQR series

From Device GUI version 2.22.0 using AlliedWare Plus software version 5.5.5-2.1 onwards, TQR series products support a virtual IP address for Captive Portal.

Previously, the Captive Portal feature on the TQR products used the IP address of the VAP as the management IP address. This posed a security risk. This feature instead uses a virtual IP for Captive Portal authentication, thereby hiding the management IP address of the TQR Series device from clients.

You can use any IP address except for the following:

- 0.0.0.0 - 0.255.255.255
- 127.0.0.0 - 127.255.255.255
- 224.0.0.0 - 255.255.255.255
- a subnet used by one of the wireless clients
- the system's IP address.

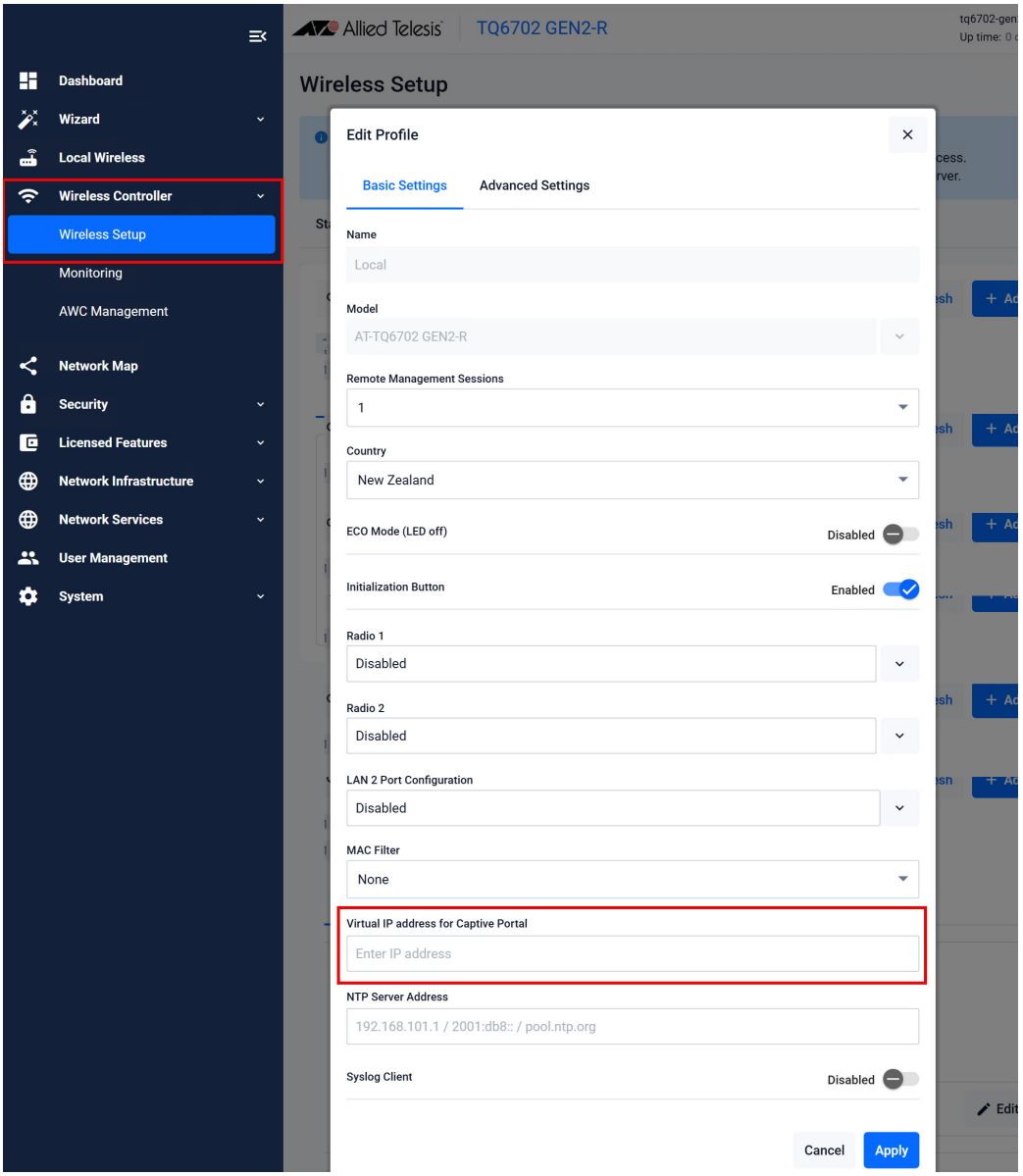
Note that you cannot enter a domain name, only an IP address.

How to add a virtual IP address for Captive Portal

The virtual IP address for Captive Portal is part of the AP profile. The AP profile for configuring a TQR Series device is named "local". Therefore, to add a virtual IP address, you have to configure the local profile.

To do this, do the following steps:

1. Select Wireless Controller > Wireless Setup in the left-hand menu (not Local Wireless).
2. Select the Access Points tab.
3. Click the Edit button on the right-hand side Profile: Local. The Edit Profile dialog opens.
4. On the Basic Settings tab, scroll down to Virtual IP address for Captive Portal.
5. Enter the IP address.
6. Click the Apply button to apply the settings.
7. Click the Save button to save the configuration.



For more information about wireless configuration of TQR Series APs, see Wireless Management for the TQR series using the Device GUI.

Accessing and Updating the Web-based GUI

This section describes how to access the GUI, check the version, and update it.

Important Note: Very old browsers may not be able to access the Device GUI. From AlliedWare Plus version 5.5.2-2.1 onwards, to improve the security of the communication for the Device GUI, ciphersuites which use RSA or CBC based algorithms have been disabled, as they are no longer considered secure. Note that the removal of ciphersuites using those algorithms may prevent some old versions of browsers from communicating with the device using HTTPS.

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

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

   - on switches: 169.254.42.42
   - on AR-Series, TQR Series, and ARX200S Series: 192.168.1.1

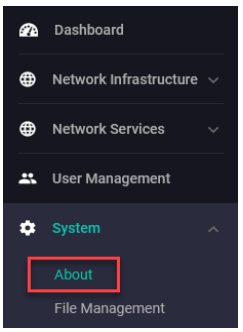
2. Open a web browser and browse to the IP address from step 1.

3. 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*.

Check the GUI version

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

If you have an earlier version than 2.22.1, update it as described in "Update the GUI on switches" on page 24 or "Update the GUI on ARX200S and AR-Series devices" on page 25.



Update the GUI on switches

Perform the following steps through the Device GUI and 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 the Allied Telesis Support Portal.

   The filename for v2.22.1 of the GUI is:

   - awplus-gui_555_41.gui,
   - awplus-gui_554_41.gui, or
   - awplus-gui_553_41.gui

   Make sure that the version string in the filename (e.g. 555) matches the version of AlliedWare Plus running on the switch (e.g. 5.5.5-x.x). The file is not device-specific; the same file works on all devices.

2. Log into the GUI:

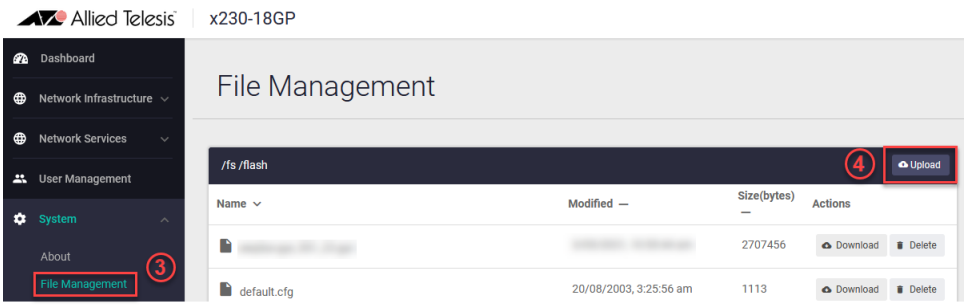
   Start a browser and browse to the device's IP address, using HTTPS. You can access the GUI via any reachable IP address on any interface.

   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*.

3. Go to **System** > **File Management**

4. Click **Upload**.



5. Locate and select the GUI file you downloaded from the Allied Telesis Support Portal. The new GUI file is added to the **File Management** window.

   You can delete older GUI files, but you do not have to.

6. Reboot the switch. Or alternatively, use a Serial console connection or SSH to access the CLI, then use the following commands to stop and restart the HTTP service:

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

   To confirm that the correct file is now in use, use the commands:

   ```
   awplus(config)# exit
   awplus# show http
   ```

Update the GUI on ARX200S and AR-Series devices

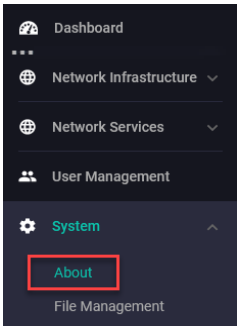
Prerequisite: If the firewall is enabled, you need to create a firewall rule to permit traffic generated by the device that is destined for external services. See the "Configuring a Firewall Rule for Required External Services" section in the Firewall and Network Address Translation (NAT) Feature Overview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

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

1. Use a Serial console connection or SSH to access the CLI, then use the following commands to download the new GUI:

```
awplus> enable
awplus# update webgui now
```

2. Browse to the GUI and check that you have the latest version now, on the **System** > **About** page. You should have v2.22.1 or later.



Verifying the GUI File

On devices that support crypto secure mode, to ensure that the GUI file has not been corrupted or interfered with during download, you can verify the GUI file. To do this, enter Global Configuration mode and use the command:

```
awplus(config)#crypto verify gui <hash-value>
```

Where <*hash-value*> is the known correct hash of the file.

This command compares the SHA256 hash of the release file with the correct hash for the file.

The correct hash is listed in the table of Hash values below.

Caution

If the verification fails, the following error message will be generated:
"% Verification Failed"
In the case of verification failure, please delete the release file and contact Allied Telesis support.

If you want the device to re-verify the file when it boots up, add the **crypto verify** command to the boot configuration file.

Table: Hash values

Firmware Version	GUI File	Hash
5.5.5-x.x	awplus-gui_555_41.gui	666448edacd4b3950ffcac0572bf613fb00d7f528950d3f2600a028e1d8692ea
5.5.4-x.x	awplus-gui_554_41.gui	666448edacd4b3950ffcac0572bf613fb00d7f528950d3f2600a028e1d8692ea
5.5.3-x.x	awplus-gui_553_41.gui	666448edacd4b3950ffcac0572bf613fb00d7f528950d3f2600a028e1d8692ea

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