



TQ1402 and TQm1402 Wireless Access Points Version 6.0.1-3.1 Software Release Notes

Please read this document before using the management software. Listed here are the document sections:

- “Version 6.0.1-3.1,” next
- “Easy Setup Window” on page 4
- “Cell Type and Single Channel Modes on the 5GHz Radio” on page 4
- “Undocumented Feature” on page 6
- “Contacting Allied Telesis” on page 8

Version 6.0.1-3.1

Supported Platforms

Version 6.0.1-3.1 is supported on the following wireless access points:

- TQ1402
- TQm1402

For instructions on how to upgrade the management software on wireless access points, refer to the *TQ1402 Series Wireless Access Points Management Software User’s Guide*, available from the Allied Telesis Inc. web site at www.alliedtelesis.com/support.

Firmware Filename

Listed here are the filename filenames:

- AT-TQ1402-6.0.1-3.1.img
- AT-TQm1402-6.0.1-3.1.img

New Features

- Easy Setup now supports Single Channel mode on VAP0 on Radio2. Refer to “Cell Type and Single Channel Modes on the 5GHz Radio” on page 4.

Note

Easy Setup is only available in the on-board web browser management interface. It is not available with AT-Vista Manager EX and the Autonomous Wave Controller (AWC) plug-in, or AWC Lite.

Supported Countries

Table 1 lists the countries where the TQ1402 and TQm1402 Wireless Access Points are supported. The table includes the firmware version numbers when the countries were added to the firmware.

Table 1: Supported Countries for the TQ1402 and TQm1402 Wireless Access Points

Country	TQ1402	TQm1402
Australia	v6.0.0-0.2	v6.0.0-0.2
European Union	v6.0.0-0.2	v6.0.0-0.2
Hong Kong	v6.0.0-0.3	v6.0.0-0.3
India	v6.0.0-0.3	v6.0.0-0.3
Japan	v6.0.0-0.2	v6.0.0-0.2
Korea	v6.0.0-0.3	v6.0.0-0.3
Malaysia	v6.0.0-0.3	v6.0.0-0.3
New Zealand	v6.0.0-0.2	v6.0.0-0.2
Singapore	v6.0.0-0.3	v6.0.0-0.3
Taiwan	v6.0.0-0.3	v6.0.0-0.3
Thailand	v6.0.0-0.3	v6.0.0-0.3
United States	v6.0.0-0.2	v6.0.0-0.2
Vietnam	v6.0.0-0.3	v6.0.0-0.3

Note

The wireless access points support Dynamic Frequency Selection (DFS) on 5GHz channels that countries or regions have designated as DFS channels.

Enhancements

None.

Specification Changes

None.

Resolved Issues

- ❑ The access point generated the log message “sh: cf: unknown operand” because of DHCP lease time.
- ❑ The access point did not always respond to web browser management after it was booted
- ❑ The time stamp in the technical support file was incorrect.
- ❑ The access point did not always initialize the Ethernet LAN port after it was booted if there was heavy traffic on the port.
- ❑ Changes made to SNMP settings with the on-board web browser interface were not reflected in Vista Manager EX (AWC Lite).
- ❑ The access point did not provide its firmware information to AMF masters, causing AMF masters to display the wrong firmware version number.
- ❑ NTP synchronization did not always work correctly after the access point was booted.

Known Issues

- ❑ Access points do not synchronize Hostname and SNMP System Name.
- ❑ Access points do not always save new values in the Secondary RADIUS Server Key value.
- ❑ Access points might disconnect inactive clients several seconds before the Inactivity Timer expires.
- ❑ Do not disconnect clients on WDS children using the Associated Client window in the web browser interface. The results may be unpredictable.
- ❑ In rare instances, the hardware and software tables may develop inconsistencies that can cause access points to reset. This is entered in the log as “kernel: Rebooting due to DMA error recovery.”
- ❑ Radio1 supports up to only 117 wireless clients when its seven VAPs are all set to WPA Personal.

Operational Notes

- ❑ The access point has only one Ethernet LAN port and so does not support LLDP.
- ❑ This version does not support the OpenFlow protocol. The OpenFlow tab in the web browser interface is disabled.
- ❑ Radio1 supports up to 120 clients and Radio2 up to 200 clients.
- ❑ Radio1 does not support WPA3 when set to WPA Enterprise.
- ❑ The “WPA2 and WPA3” setting is only available with WPA Personal.
- ❑ This version does not support Proxy ARP. The Proxy ARP settings in the Advanced Settings window in the web browser interface are disabled.
- ❑ The link on the Ethernet port may fluctuate up and down while the unit is initializing its management software after it is rebooted or powered on.

Easy Setup Window

Starting with version 6.0.1-2.1, the TQ1402 and TQm1402 wireless access points have an Easy Setup window that lets you configure many of the basic settings of the wireless access points from one window. Here are the actions available to you from the window:

- Enable the DHCP client on the wireless access point so that it obtains its IP address configuration from a DHCP server on your network.
- Assign it a static IP address, subnet mask, and default gateway for networks that do not have DHCP servers.
- Enable or disable 2.4GHz Radio1 or 5GHz Radio2.
- Set Radio2 to Cell Type or Single Channel mode.
- Select the radio channels.
- Enable or disable auto-channel selection.
- Set the WPA Personal key.
- Change the administrator name and password to the on-line web browser interface.

Note

The Easy Setup window requires that the bandwidths of the two radios be set to the default value 20MHz.

Note

The Easy Setup window is only available in the on-board web browser management interface. It is not available with AT-Vista Manager EX and the Autonomous Wave Controller (AWC) plug-in, or AWC Lite.

Cell Type and Single Channel Modes on the 5GHz Radio

The 5GHz radios (Radio2) in the TQ1402 and TQm1402 wireless access points have two operating modes:

- Cell Type mode: Neighboring wireless access points whose signals overlap on their 5GHz radios use different channels to avoid interference. This is the default mode.
- Single Channel mode: Up to five neighboring wireless access points can use the same channel on the 5GHz radios to form a single virtual access point.

The Cell Type mode is how conventional wireless networks commonly operate. Neighboring wireless access points whose transmissions overlap use different channels to avoid interference. Overlapping signals are often needed in network environments to ensure that wireless networks adequately cover all physical work areas. Conventional wireless networks of multiple channels work best for stationary clients who remain connected to the same wireless access points at all times.

Conventional wireless networks can, however, pose problems for roaming clients. Packets can be lost as clients change channels as they transition between access points. Also, roaming clients may experience slow traffic if, instead of transitioning, they remain connected to their original access points after moving a distance away.

The Single Channel mode on the 5GHz radio offers a different approach for wireless access points whose transmissions overlap. Rather than having to use multiple channels, they can all use the same channel to form a single virtual access point for the wireless clients. This avoids the need for roaming clients to change channels as they transition between access points, thereby reducing the chance of lost packets. Single mode operation can also reduce the need for complex channel planning.

The Single Channel mode has these guidelines:

- The mode is only supported on VAP0 in Radio2. It is not supported on Radio1.
- You select the operating mode of the 5GHz radio in the Easy Setup window.
- Single Channel mode groups can have up to five wireless access points.
- Groups are identified with the “Single Channel Group ID” parameter in the Easy Setup window. The range of the group ID number is 1 to 16.
- Different Single Channel mode groups in a network have to be assigned different group ID numbers. Otherwise the groups may not function reliably.
- Wireless access points can belong to only one group at a time.
- Radio2 and the VAP0 settings have to be at their default values.
- Do not change Radio2 or the VAP0 settings once Single Channel mode is activated.
- If you enable the Management VLAN Tag feature on the wireless access point, you have to set its VID to a value other than 1, the default value, so that packets from clients on VAPs with the VID1 are handled as untagged packets.

The 2.4GHz radio (Radio1) supports only the Cell Type mode.

Cell Type Mode and the Easy Setup Window

The following table lists the settings for Radio1 and Radio2 for the Cell Type mode when used together with the Easy Setup window. The table includes the menu paths to the settings in the on-board web browser management interface. Configure the parameters as shown in the table.

Radio	Setting and Menu
Radio1	Mode: IEEE 802.11 b/g/n Menu: Settings > Radio > Radio1 > Basic Settings tab
Radio2	Mode: IEEE 802.11 a/n/ac Menu: Settings > Radio > Radio2 > Basic Settings tab

Radio	Setting and Menu
Radio1 and Radio2 VAP0	Mode: WPA Personal WPA Version: WPA2 and WPA3 Cipher Suites: CCMP IEEE802.11w (MFP): Enabled Menu: Settings > VAP/Security > Radio1/2 > VAP0 > Security tab

Single Channel Mode and the Easy Setup Window

The following table lists the settings for Radio2 for the Single Channel mode when used together with the Easy Setup window. The table includes the menu paths to the settings in the on-board web browser management interface. Configure them as shown in the table.

Radio	Setting and Menu
Radio1	Radio1 does not support the Single Channel mode.
Radio2	Mode: IEEE 802.11 a/n/ac Menu: Settings > Radio > Radio2 > Basic Settings tab Maximum Clients: 500 Menu: Settings > Radio > Radio2 > Advanced Settings tab
Radio2 VAP0	Mode: WPA Personal WPA Version: WPA2 Cipher Suites: CCMP IEEE802.11w (MFP): Disabled Menu: Settings > VAP/Security > Radio2 > VAP0 > Security tab Association Advertisement: Enabled Menu: Settings > VAP/Security > Radio2 > VAP0 > Advanced Settings tab

Undocumented Feature

The following feature is not documented in the current TQ1402 Series User Guide:

- ❑ Quick Response (QR) codes for the VAPs - You can now generate QR codes for the individual VAPs on the wireless access points. Wireless clients can scan the codes to join VAPs on the wireless access points without having to manually enter the information.

You can generate QR codes for VAPs that have the following security settings:

- None
- Static WEP / Authentication: Open System / Key Type: HEX or ASCII
- Static WEP / Authentication: Shared Key / Key Type: HEX or ASCII
- WPA Personal / WPA Version: WPA and WPA2
- WPA Personal / WPA Version: WPA2

- WPA Personal / WPA Version: WPA2 and WPA3
- WPA Personal / WPA Version: WPA3

Here are the guidelines:

- The wireless access points come with default QR codes for VAP0 for Radio1 and Radio2. The QR codes are the same for both radios. Refer to Figure 1.
- New codes are generated by clicking the View QR Code button in the Virtual Access Point windows in the on-board web browser management interface of the wireless access point. Refer to Figure 2. The button is also available in the new Easy Setup window.
- Generating a QR code requires that the corresponding radio and VAP be enabled.
- QR codes are not supported on VAPs that use RADIUS servers or AWC to authenticate wireless clients.

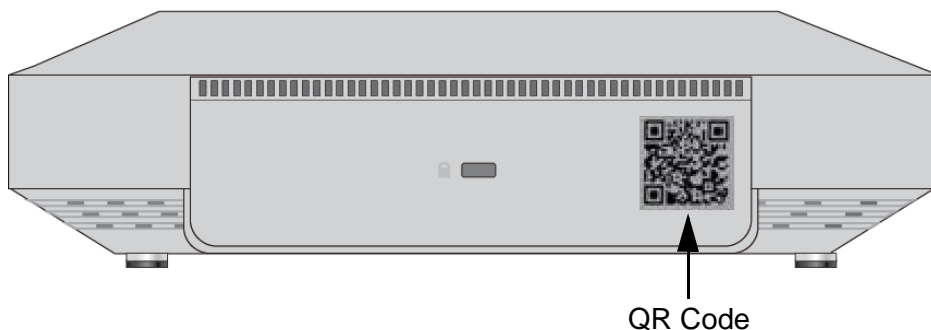


Figure 1. QR Code

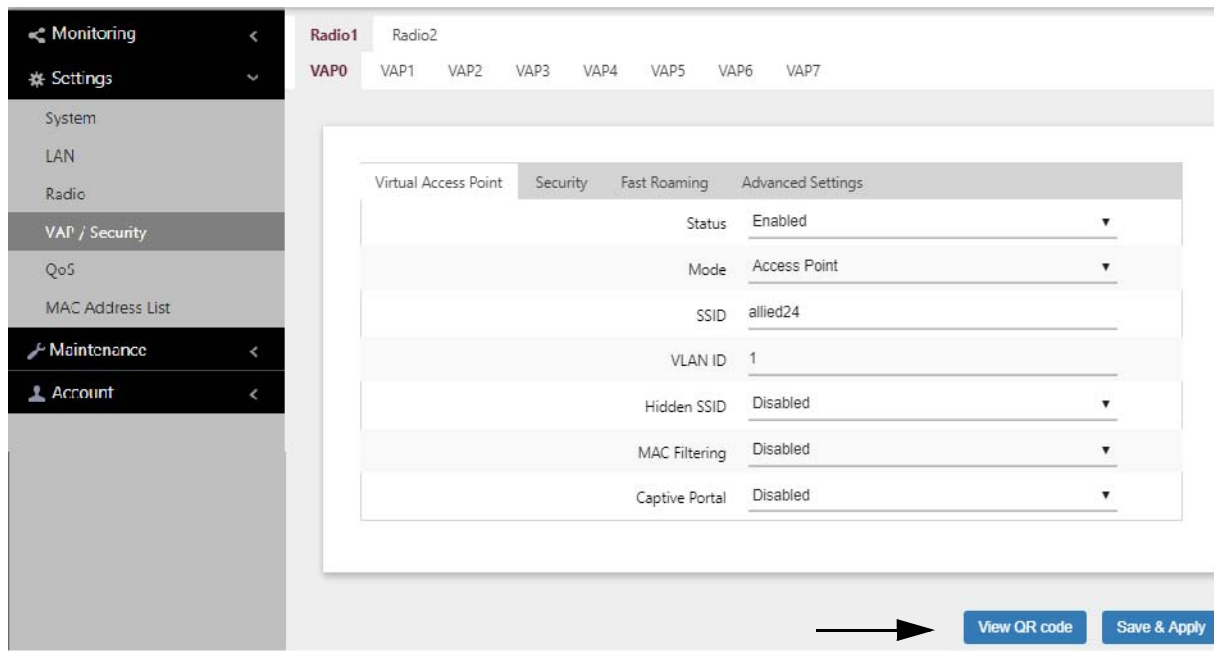


Figure 2. View QR Code Button

Contacting Allied Telesis

For assistance with this product, you can contact Allied Telesis Inc. technical support by going to the Support & Services section of the Allied Telesis Inc. web site at www.alliedtelesis.com/support. You can find links for the following services on this page:

- ❑ 24/7 Online Support — Enter our interactive support center to search for answers to your product questions in our knowledge database, to check support tickets, to learn about RMAs, and to contact Allied Telesis Inc. technical experts.
- ❑ USA and EMEA phone support — Select the phone number that best fits your location and customer type.
- ❑ Hardware warranty information — Learn about Allied Telesis Inc. warranties and register your product online.
- ❑ Replacement Services — Submit a Return Merchandise Authorization (RMA) request via our interactive support center.
- ❑ Documentation — View the most recent installation and user guides, software release notes, white papers, and data sheets for your products.
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