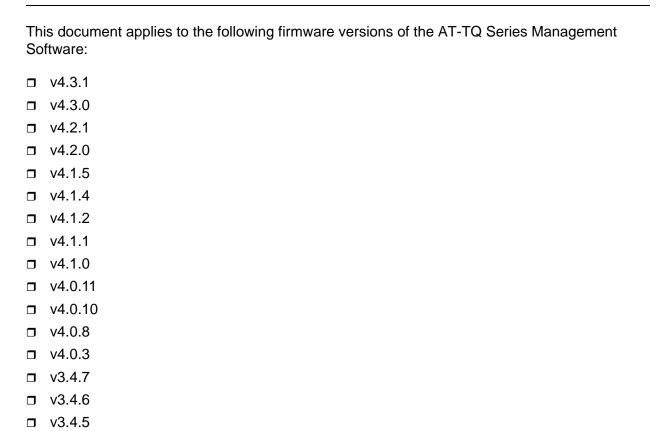# AT-TQ4400e and AT-TQ4600 Wireless Access Points
Versions 3.4.5 to 4.3.1 Software Release Notes

Please read the following document before managing AT-TQ access points. The document has the following sections:

Firmware Versions

This document applies to the following firmware versions of the AT-TQ Series Management Software:

❒ v4.3.1

❒ v4.3.0

❒ v4.2.1

❒ v4.2.0

❒ v4.1.5

❒ v4.1.4

❒ v4.1.2

❒ v4.1.1

❒ v4.1.0

❒ v4.0.11

❒ v4.0.10

❒ v4.0.8

❒ v4.0.3

❒ v3.4.7

❒ v3.4.6

❒ v3.4.5

To view the firmware version number on the access point from its web browser interface, select Basic Settings from the main menus to display the "Provide basic settings" window.

AT-TQ Series Access Points

The following access points support v3.4.5 to v4.3.1 of the AT-TQ Series Management Software:

❒ AT-TQ4400e

❒ AT-TQ4400e-01

❒ AT-TQ4600

❒ AT-TQ4600-01

For instructions on how to upgrade the management software on the access points, see the latest version of the AT-TQ Series Management Software User's Guide, available on the Allied Telesis Inc. web site at www.alliedtelesis.com.

> **Note**
> These release notes and firmware versions do not apply to the AT-TQ4600-OF13 access point, which supports the OpenFlow protocol and Secure Enterprise Software Defined Networking controller. For more information, refer to the Allied Telesis Inc. web site at www.alliedtelesis.com.

Acronyms

The document uses the following acronyms:

- ☐ AWC - Autonomous Wireless Controller
- ☐ DNS - Domain Name Server
- ☐ FQDN - Fully Qualified Domain Name
- ☐ NTP - Network Time Protocol
- ☐ SDN - Software Defined Networking
- ☐ WDS - Wireless Distribution System
- ☐ VAP - Virtual Access Point

Management Programs

Listed here are the access point management programs:

- ☐ On-board web browser interface
- ☐ AT-Vista Manager EX program and Autonomous Wireless Controller (AWC) plug-in
- ☐ AT-Vista Manager program
- ☐ AT-UWC and AT-UWC-60-APL programs

The on-board web interface comes standard with the access point. The other management programs are optional utilities from Allied Telesis.

The management programs are not supported on all firmware versions of the access points. Refer to Table 1. For example, to manage an access point with firmware v4.1.2, you can use either its on-board web browser interface or the AT-Vista Manager EX program and AWC plug-in. You cannot manage it with AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Table 1: Management Programs Support

AT-TQ Software Version	Web Browser Interface	AT-Vista Manager EX and AWC Plug-in	AT-Vista Manager[1]	AT-UWC and AT-UWC-60-APL Managers
4.3.1	Yes	Yes	No	No
4.3.0	Yes	Yes	No	No
4.2.1	Yes	Yes	No	No

Table 1: Management Programs Support (Continued)

AT-TQ Software Version	Web Browser Interface	AT-Vista Manager EX and AWC Plug-in	AT-Vista Manager[1]	AT-UWC and AT-UWC-60-APL Managers
4.2.0	Yes	Yes	No	No
4.1.5	Yes	Yes	No	No
4.1.4	Yes	Yes	No	No
4.1.2	Yes	Yes	No	No
4.1.1	Yes	Yes	No	No
4.1.0	Yes	Yes	No	No
4.0.11	Yes	Yes	No	No
4.0.10	Yes	Yes	Yes	No
4.0.8	Yes	Yes	Yes	No
4.0.3	Yes	Yes	Yes	No
3.4.7	Yes	No	No	Yes
3.4.6	Yes	No	No	Yes
3.4.5	Yes	No	No	Yes

1. Firmware version 1.2.2

There are different versions of the AT-Vista Manager EX program and AWC plug-in. It is important to use the correct version for the management software on the access point. Refer to Table 2 on page 4. For example, an access point with v4.1.1 management software can be managed with AT-Vista Manager EX v2.3.1 and AWC plug-in v1.3.0. Managing the access point with older or newer versions may cause unexpected results. In some cases it may be necessary to upgrade the access point's management software or the AT-Vista Manager EX program and AWC plug-in.

Table 2: AT-Vista Manager EX Program and AWC Plug-in Versions

AT-TQ Software Version	AT-Vista Manager EX Version	AWC Plug-in Version
4.3.1	v3.0.0	v3.0.0
4.3.0	v3.0.0	v3.0.0
4.2.1	v2.4.0, v2.4.1, or v2.5.0	v2.0.0 or v2.1.0
4.2.0	v2.4.0 or v2.4.1	v2.0.0 or v2.1.0
4.1.5	v2.3.0 or v2.3.1	v1.2.0 or v1.3.0
4.1.4	v2.3.0 or v2.3.1	v1.2.0 or v1.3.0
4.1.2	v2.3.0 or v2.3.1	v1.2.0 or v1.3.0
4.1.1	v2.3.1	v1.3.0

Table 2: AT-Vista Manager EX Program and AWC Plug-in Versions (Continued)

AT-TQ Software Version	AT-Vista Manager EX Version	AWC Plug-in Version
4.1.0	v2.3.0	v1.2.0
4.0.11	v2.2.0	v1.1.0
4.0.10	v2.2.0	v1.1.0
4.0.8	v2.2.0	v1.1.0
4.0.3	v2.1 or v2.2.0	v1.0.0 or v1.1.0

Management Software Filenames

Refer to the table for the filenames of the management software for your access points.

Table 3: Management Software Filenames

Software Version	Access Point	Software Filename
v4.3.1	AT-TQ4400e	AT-TQ4400e-4.3.1.b01.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.3.1.b01.img
	AT-TQ4600-01	
v4.3.0	AT-TQ4400e	AT-TQ4400e-4.3.0.b06.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.3.0.b06.img
	AT-TQ4600-01	
v4.2.1	AT-TQ4400e	AT-TQ4400e-4.2.1.b03.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.2.1.b03.img
	AT-TQ4600-01	
v4.2.0	AT-TQ4400e	AT-TQ4400e-4.2.0.b06.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.2.0.b06.img
	AT-TQ4600-01	
v4.1.5	AT-TQ4400e	AT-TQ4400e-4.1.5.b01.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.1.5.b01.img
	AT-TQ4600-01	

Table 3: Management Software Filenames (Continued)

Software Version	Access Point	Software Filename
v4.1.4	AT-TQ4400e	AT-TQ4400e-4.1.4.b02.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.1.4.b02.img
	AT-TQ4600-01	
v4.1.2	AT-TQ4400e	AT-TQ4400e-4.1.2.b03.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.1.2.b03.img
	AT-TQ4600-01	
v4.1.1	AT-TQ4400e	AT-TQ4400e-4.1.1.b05.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.1.1.b05.img
	AT-TQ4600-01	
v4.1.0	AT-TQ4400e	AT-TQ4400e-4.1.0.b05.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.1.0.b05.img
	AT-TQ4600-01	
v4.0.11	AT-TQ4400e	AT-TQ4400e-4.0.11.b01.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.0.11.b01.img
	AT-TQ4600-01	
v4.0.10	AT-TQ4400e	AT-TQ4400e-4.0.10.b03.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.0.10.b03.img
	AT-TQ4600-01	
v4.0.8	AT-TQ4400e	AT-TQ4400e-4.0.8.b03.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.0.8.b03.img
	AT-TQ4600-01	
v4.0.3	AT-TQ4400e	AT-TQ4400e-4.0.3.b02.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-4.0.3.b02.img
	AT-TQ4600-01	

Table 3: Management Software Filenames (Continued)

Software Version	Access Point	Software Filename
v3.4.7	AT-TQ4400e	AT-TQ4400e-3.4.7.b01.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-3.4.7.b01.img
	AT-TQ4600-01	
v3.4.6	AT-TQ4400e	AT-TQ4400e-3.4.6.b01.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-3.4.6.b01.img
	AT-TQ4600-01	
v3.4.5	AT-TQ4400e	AT-TQ4400e-3.4.5.b02.img
	AT-TQ4400e-01	
	AT-TQ4600	AT-TQ4600-3.4.5.b02.img
	AT-TQ4600-01	

Known Firmware Issues

The following issues apply to all firmware versions:

❐ The access point might stop forwarding traffic when performing SNMP walks during periods of heavy traffic.

❐ The access point assigns the same RADIUS accounting session ID numbers to clients who leave and reconnect within three seconds.

❐ The Neighbor Details window for cluster members in the access point's web management software does not display VAP1-15 SSID numbers. The SSID numbers are included in the Neighbor Details window for non-cluster members.

❐ Wireless clients who are assigned their VIDs from a RADIUS server and are authenticated with IEEE 802.1x might require two attempts to successfully connect to a network.

Firmware Limitations

The following limitations apply to all firmware versions:

❐ The access point forwards packets up to 1549 bytes and discards packets equal to or larger than 1550 bytes.

❐ The access point might drop packets on the radios when its LAN port is operating at 100% capacity.

❐ When the NTP client is enabled, the access point synchronizes its time with the server whenever its IP address lease on a DHCP server expires, even when assigned the same IP address.

❐ The error packet counter does not work correctly.

❏ The MAC address filter does not work correctly on access points that are part of Wireless Distribution System (WDS) bridges.

❏ The access point might not respond to pings if it has four enabled Legacy Rate Sets. This issue does not occur when the access point has greater or less than four enabled Legacy Rate Sets.

❏ Access points might transmit unnecessary packets when they are part of a WDS bridge and have different encryption settings on their VAP0 VLANs.

❏ All access points in a cluster should be the same model and have the same version of operating system. Otherwise, the cluster might not operate correctly.

❏ You must reset the access point after changing the 5GHz radio from IEEE 802.11a to IEEE 802.11a/n/ac.

❏ You must reset the access point after changing the country setting. A new country setting does not take affect until the unit is reset.

❏ Clusters should not have more than sixteen access points. Clusters with more than sixteen units may experience problems.

❏ Authentications of wireless clients who roam across different VLANs might fail if the VLAN security is WPA or WPA2 Enterprise and the RADIUS server is using the Network Access Protection facility.

❏ The access point might accept corrupt or incomplete channel lists from the AT-UWC. (Applies only to v3.4.5 and v3.4.6. Later versions cannot be managed with AT-UWC.)

Version 4.3.1

Version 4.3.1 has the following additional information.

New Features

❏ No new features.

Enhancement

❏ No new enhancements.

Management

❏ This version supports the access point's web browser interface.

❏ This version supports AT-Vista Manager EX v3.0.0 or later and AWC v3.0.0 or later. Refer to Table 2 on page 4.

> **Note**
> This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.3.0

Version 4.3.0 has the following additional information.

New Features

❒ Support association advertisements feature.

Enhancement

❒ Starting with AT-Vista Manager EX v3.0.0 and AWC plug-in v3.0.0, client locations are now displayed in floor maps.

❒ Added captive portals with click-through authentication. Must be managed with AT-Vista Manager EX v3.0.0 and AWC plug-in v3.0.0. You cannot use the access point's web browser interface to manage captive portals.

❒ The accuracy of radar detection is improved.

Management

❒ This version supports the access point's web browser interface.

❒ This version supports AT-Vista Manager EX v3.0.0 or later and AWC v3.0.0 or later. Refer to Table 2 on page 4.

Note
This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.2.1

Version 4.2.1 has the following additional information.

New Features

❒ No new features.

Enhancement

❒ Added more information to the technical support file.

Management

❒ This version supports the access point's web browser interface.

❒ This version supports AT-Vista Manager EX v2.4.0 or later and AWC v2.0.0 or later. Refer to Table 2 on page 4.

Note
This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.2.0

Version 4.2.0 has this additional information.

New Features

❒ No new features.

Enhancements

❒ Access points provide more information to the AT-Vista Manager EX program and AWC plug-in, such as NetBIOS names and client statistics.

❒ You can enable or disable dynamic VLANs on individual VAPs.

❒ The configuration timeout of the AWC plug-in has been changed to 900 seconds.

❒ The technical support file, which is available from either the on-board web management interface or AWC plug-in, is now available only in GZIP.

Management

❒ This version supports the access point's web browser interface.

❒ This version supports AT-Vista Manager EX v2.4.0 and AWC v2.0.0 or later. Refer to Table 2 on page 4.

> **Note**
> This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.1.5

Version 4.1.5 has this additional information.

New Features

❒ No new features.

Enhancements

❒ No new enhancements.

Management

❒ This version supports the access point's web browser interface.

❒ This version supports AT-Vista Manager EX v2.3.0 or 2.3.1, and AWC v1.2.0 or 1.3.0. Refer to Table 2 on page 4.

> **Note**
> This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.1.4

Version 4.1.4 has this additional information.

New Features

❒ Support association advertisements feature. This feature allows access points to exchange notifications over the wired network when roaming clients change their associations. The notifications inform access points to delete session information of clients that are no longer associated with them. This feature is configurable with the web browser interface on a per VAP basis. It must be enabled on wireless access points that send and receive the messages.

Enhancements

❒ The accuracy of radar detection is improved.

Management

❒ This version supports the access point's web browser interface.

❒ This version supports AT-Vista Manager EX v2.3.0 or 2.3.1, and AWC v1.2.0 or 1.3.0. Refer to Table 2 on page 4.

> **Note**
> This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.1.2

Version 4.1.2 has this additional information.

New Features

❒ No new features.

Enhancement

❒ The technical support file includes new information.

Management

❒ This version supports the access point's web browser interface.

❒ This version supports AT-Vista Manager EX v2.3.0 or 2.3.1, and AWC v1.2.0 or 1.3.0. Refer to Table 2 on page 4.

> **Note**
> This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.1.1

This version has the following additional information.

New Features

❒ Wireless access points continue to accept normal profiles but now reject profiles from SDN controllers.

Enhancements

❒ Added wireless client IP addresses to Status/Client pages.

❒ Added two new CPU status check commands, TOP and MPSTAT, to the technical support file.

❒ Added improvements to dynamic VLANs with MAC authentication.

❒ Improved flash memory.

❒ The waiting period after a failed MAC address authentication is changed from 1 hour to 60 seconds.

Management

❒ This version supports the access point's web browser interface.

❒ This version supports AT-Vista Manager EX v2.3.1 and AWC v1.3.0 only. Refer to Table 2 on page 4.

> **Note**
> This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.1.0

This section lists information about software version 4.1.0.

New Features

❒ AT-Vista Manager EX and AWC are enhanced for the access points.

❒ This version adds support for Intrusion Detection System / Intrusion Prevention System, through the AWC plug-in.

❒ This version adds the new log Detection IP Address/NETBIOS name for associated clients.

Enhancements

❒ Updated OpenSSL to v1.0.2I from v0.9.8.zg.

❒ Added SSID/RSSI information into some client connection logs.

❒ Updated the pop-up message for outdoor use of the access point.

❒ Updated the factory default values for some parameters.

❒ Improved communications for negotiating power requirements between PoE access points and PoE power sources.

Management

❐ This version supports the access point's web browser interface.

❐ This version supports AT-Vista Manager EX v2.3.0 and AWC v1.2.0 only. Refer to Table 2 on page 4.

> **Note**
> This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.0.11

This section lists information about software version 4.0.11.

New Features

❐ No new features.

Enhancements

❐ No new enhancements.

Management

❐ This version supports the access point's web browser interface.

❐ This version supports AT-Vista Manager EX v2.3.0 and AWC v1.2.0 only. Refer to Table 2 on page 4.

> **Note**
> This version does not support AT-Vista Manager, AT-UWC, or AT-UWC-60-APL.

Version 4.0.10

This section lists information about software version 4.0.10.

New Features

❐ Support association advertisements feature.

Enhancements

❐ The accuracy of radar detection is improved.

Management

❐ This version supports the access point's web browser interface.

❐ This version supports AT-Vista Manager EX v2.2.0 and AWC v1.1.0.

❐ This version supports AT-Vista Manager v1.2.2.

> **Note**
> This version does not support AT-UWC or AT-UWC-60-APL.

Version 4.0.8

This section lists information about software version 4.0.8.

New Features

❏ No new features.

Enhancements

❏ The packet buffer handling is improved when the packet buffer is in shortage.

❏ Information is added to the tech-support file.

❏ The length of FWDN input range is changed from 255 to 253 characters.

Management

❏ This version supports the access point's web browser interface.

❏ This version supports AT-Vista Manager EX v2.2.0 and AWC v1.1.0. Refer to Table 2 on page 4.

❏ This version supports AT-Vista Manager v1.2.2.

> **Note**
> This version does not support AT-UWC or AT-UWC-60-APL.

Version 4.0.3

This section lists information about software version 4.0.3.

New Feature

❏ Added support for AT-Vista Manager EX and AWC.

Enhancement

❏ The NTP synchronization value is changed from seconds to microseconds.

Management

❏ This version supports the access point's web browser interface.

❏ This version supports AT-Vista Manager v1.2.2.

❏ This version supports AT-Vista Manager EX v2.1.0 or v2.2.0, and AWC v1.0.0 or v1.1.0. Refer to Table 2 on page 4.

> **Note**
> Starting with this version, AT-UWC and AT-UWC-60-APL are no longer supported. The following menu selections in the on-board web interface are no longer supported:
> Manage -> Managed Access Point Settings
> Status -> Managed AP DHCP

Version 3.4.7

Version 3.4.7 has this additional information.

New Features

❒ No new features.

Enhancements

❒ No new enhancements.

Specification changes

❒ No specification changes.

Management

❒ This version supports management using the access point's web interface.

❒ This version supports management with AT-UWC or AT-UWC-60-APL.

❒ This version does not support AT-Vista Manager EX and the AWC plug-in.

Version 3.4.6

Version 3.4.6 has this additional information.

New Features

❒ No new features.

Enhancements

❒ Improved the detection of radar signals.

❒ Added authentication frame processor counter to the technical support file.

Specification changes

❒ Improved wireless communications performance.

Management

❒ This version supports management using the access point's web interface.

❒ This version supports management with AT-UWC or AT-UWC-60-APL.

❒ This version does not support AT-Vista Manager EX and the AWC plug-in.

Version 3.4.5

Version 3.4.5 has this additional information.

New Features

❒ No new features.

Enhancements

❒ The packet buffer handling is improved when the packet buffer is in shortage.

❒ Added new information to the technical support file.

❒ The maximum length of the FQDN value is changed from 255 to 253 characters.

Management

❒ This version supports management using the access point's web interface.

❒ This version supports management with AT-UWC or AT-UWC-60-APL.

❒ This version does not support AT-Vista Manager EX and the AWC plug-in.

❒ Access points disable the following items when their management software is upgraded from v 1.2.0 or earlier to v 2.0.1 or later, with the Switch button on Maintenance > Upgrade page:

  • Manage > Radio > MCS settings
  • Manage > Managed Access Point > WDS Managed Mode settings
  • Manage > Managed Access Point > WDS Managed Ethernet Port settings

Resolved Issues

Listed here are resolved issues from v3.4.5 to 4.3.1:

❒ The access point stopped transmitting traffic to wireless clients if Airtime Fairness was enabled.

❒ A kernel bug caused the access point to reboot. In rare instances, the device would stop responding to the web browser interface and network Pings.

❒ The wireless LAN driver could cause the access point to stop forwarding traffic.

❒ The access point could experience a reduction in performance when managed with AT-Vista Manager EX v2.4.0 or later because of high CPU usage.

❒ The access point experienced a memory leak problem when managed with AT-Vista Manager EX v2.4.0 or later.

❒ RADIUS re-authentication looped when wireless stations reconnected.

❒ The device failed to send Probe Response frames in response to Probe Request frames.

❒ The Appweb vulnerability where authentication was bypassed with a valid username and null password is resolved.

❒ The access point could be managed when DHCP release time was set to 30 seconds or less.

❒ NTP time synchronization failed when a user set FQDN with 176 characters or longer to the NTP server.

❒ Log relay failed when a user set FQDN with 176 characters or longer to the relay host.

❒ The access point did not forward traffic to wireless clients in power saving mode.

❒ The access point did not forward traffic from wireless clients with two MAC addresses in a teaming configuration.

❒ The access point transmitted SNMP linkup/down traps with the incorrect wlan0/wlan1 ifindex.

❒ The access point had several problems with the AWC.

❒ The access point stopped forwarding traffic after sending AMPDU frames to disassociated clients.

❒ When multiple clients are connected to the access point, its Web Authentication is not completed after session timer expires.

- ❒ The DFS radar detection feature had problems with the optional antennas on the AT-TQ4400e access point.
- ❒ SNMP walks timed out if the access point has 16 VAPs on both radios.
- ❒ The access point added "example.com" into DNS queries when connecting to a NTP server.
- ❒ The access point stopped forwarding traffic when band-steering was enabled.
- ❒ The access point stopped forwarding traffic when handling AMSDU packets.
- ❒ The state machine looped during PHY calibration.
- ❒ Some unsupported OIDs were removed from the BRIDGE-MIB.
- ❒ The access point forwarded unnecessary frames on the LAN port.
- ❒ SNMP traps were transmitted with incorrect port numbers when the trap community name had a space character.
- ❒ The access point did not correctly apply band-steering settings from AT-Vista Manager EX.
- ❒ Band-steering did not work correctly on VAPs 2 and higher.
- ❒ Access points ignored some authentication frames with Shared Key algorithms.
- ❒ Access points periodically stopped forwarding wireless packets.
- ❒ Access points stopped forwarding traffic during broadcast storms.
- ❒ Access points managed with AT-Vista Manager EX periodically ignored authentication frames.
- ❒ Access points erroneously detected DFS radar during periods of heavy wireless traffic.
- ❒ Access points periodically stopped forwarding traffic when handling APSD.
- ❒ Access points periodically stopped forwarding wireless packets and broadcasting beacons.
- ❒ Access points managed with AT-Vista Manager EX unauthenticated wireless clients who used dynamic VLANs.

Contacting Allied Telesis

If you need 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 Return Merchandise Authorizations (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 RMA request via our interactive support center.

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