Vista Manager EX

Network Monitoring and Management

Vista Manager EX delivers state-of-the-art monitoring and management for Allied Telesis Autonomous Management Framework™ Plus (AMF Plus) wired, Autonomous Wave Control (AT-AWC™) wireless, and third party endpoint devices. The Software Defined WAN (SD WAN) orchestrator provides centralized optimization of WAN traffic, while the AMF Plus orchestrator enables business intent to be easily translated into dynamic network change for performance-driven management.

Single-pane-of-glass

Vista Manager EX provides a single-pane-of-glass interface to the entire network including third-party and endpoint devices. The dashboard includes network details and status, event information, and a topology map. Critical issues, such as internal security threats, link tampering, network loops, environmental alarms, and failed nodes, are highlighted on the network map and in the event log - and an integrated Syslog server adds further capabilities for easy resolution. Asset management enables firmware and configuration backup and upgrade of one, many, or all devices. Vista Manager EX brilliantly combines a complete network overview with intuitive access to detailed information.

Secure SD-WAN

The SD-WAN orchestrator centralizes management of branch office connections for reliable and secure application delivery. Automatically optimize the performance of real-time applications for business productivity. Set up acceptable performance metrics for any application, and use the map, dashboard, and health pages to monitor SD-WAN operation.

AMF Plus orchestrator*

The AMF Plus orchestrator makes network management easy. Health monitoring provides at-a-glance visual network status, while simple graphical input enables LAN traffic management using QoS and ACLs. Easily create new inter-branch VPN connections, prioritize and shape application traffic over the WAN, manage security, and more.

Real-time maps

Integrated topology map

The topology map shows all wired and wireless network devices, with easy access to the GUI of any node for specific control. Group devices to show branch and building layout. Use Tracepath for a real-time connectivity check, while service monitoring allows visibility of services running on a chosen device, with actionable reporting of events and alarms.

Device discovery*

AMF Plus device discovery works seamlessly with optional Vista Manager plugins Nozomi guardian and Forescout continuum, and any combination of the three discovery tools can be used together. Discovered IT and OT endpoints like printers, servers, sensors, and more, are shown on the map and as part of asset management.

Traffic monitoring view

The color-coded traffic map provides visual bandwidth utilization across all links, while the advanced view uses sFlow to show protocol use. Live and historical views enable analyzing traffic and protocol use to improve performance.

VLAN view

Simplify network management by creating and editing VLANs across multiple switches at once with a few mouse clicks. The color-coded VLAN map highlights network connectivity, showing data paths for your important business applications.

SD-WAN map

The WAN map shows VPN connections between branch offices used by SD-WAN. Color-coding displays current status and the performance of inter-branch links for visual monitoring and proactive management.

Multi-network support

Support multiple tenants, as each network is kept separate for secure deployment and management. Allow full administration or read-only access to any part of the network. Multi-tenant supports large distributed companies, or service providers offering management services to individual companies.

Network automation

Powerful features like automatic backup, upgrade and configuration simplify management. Automated device recovery enables zero-touch replacement. AMF Plus and Vista Manager EX combine to reduce network administration.

Flexible deployment

Vista Manager has deployment options to suit your server room. Windows server installation, or VirtualBox on Linux installation with Vista virtual (VST-VRT), support your technology environment.

Plug-ins for additional functionality

Add capability with subscription based plug-ins.

AWC plug-in

Manage and monitor APs, with floor maps, wireless coverage heat maps, and client counts. AWC automatically optimizes AP output and channel for a superior user experience. Innovative Channel Blanket hybrid wireless provides a network with both high throughput and seamless roaming, while AWC Smart Connect enables simplified deployment, and a resilient solution using wireless uplink connectivity.

SNMP plug-in

Discover and manage devices with the Simple Network Management Protocol (SNMP) plug-in. Use the view you prefer, while notifications and alerts support proactive management.

* Device discovery and other AMF Plus intent-based features are not supported on multi-tenant networks

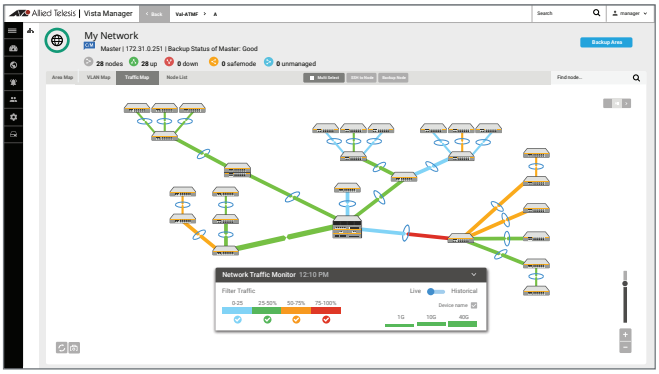
Key Features

- Intuitive single-pane-of-glass interface
- Centralized network and device management, with firmware and config backup, recovery, and upgrade
- Manage Allied Telesis switches, firewalls, and wireless APs[1]
- Automatically-created integrated topology map
- Group map icons into branches or buildings for intuitive visual management
- The AMF Plus orchestrator easily translates business intent into dynamic network change[2]
- Health monitoring enables proactive management with at-a-glance status, and automated event actions
- Protect the network from storms and outages with easy visual configuration of Loop Guard
- High-priority network issues and critical events are highlighted on the map, and in the event log
- SD-WAN inter-branch network optimization
- Automatic wireless output and channel control[1]
- Configure wireless access and security features such as Captive Portal and Passpoint2[1]
- AWC Channel Blanket hybrid wireless[3]
- AWC Smart Connect wireless uplinks[3]
- AWC Sky Defender for wireless client filtering[1]
- AWC Remote Monitor displays status of all wireless controllers[2]
- Use AMF Plus device discovery, and optional plugins Nozomi guardian and Forescout continuum, to discover and manage IT and OT endpoint devices
- Real-time traffic, protocol, and service monitoring
- Simplified VLAN creation and management
- Intelligent edge security lets you view endpoints attempting connection in asset management, and decide whether to allow or deny access
- Support multiple networks with flexible management access
- Add and manage Feature licenses on any AMF Plus node
- Deploy in Windows or virtualized environments

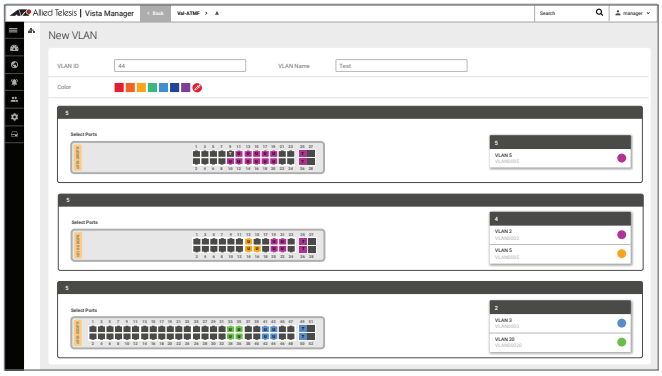
[1] AP management requires AWC plug-in license
[2] Using the AMF Plus orchestrator requires an AMF Plus Controller or AMF Plus Master AW+ license to be installed on the managed network. (Note that if an AMF Plus, and an old AMF license are both installed, the AMF Plus orchestrator Vista Manager menu will not be available).
[3] Requires AWC CB-2022 and AWC plug-in license

Network map views enable proactive visual management.

The color-coded traffic view provides real-time visual status of network utilization and bandwidth across all links. sFlow shows protocol use through the network:



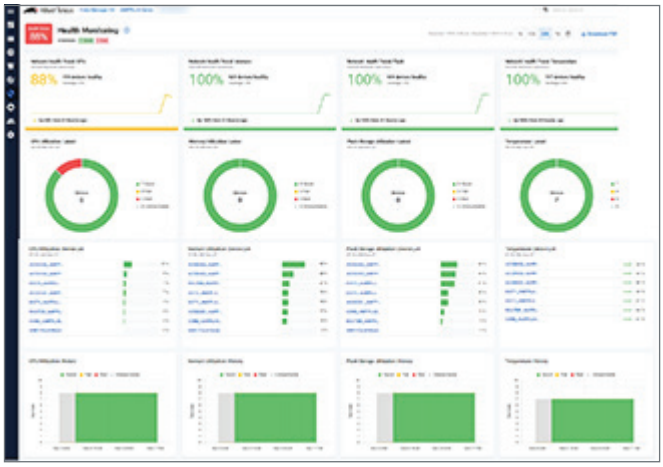
In the VLAN view, simplify network management by creating VLANs across multiple switches with a few mouse clicks:



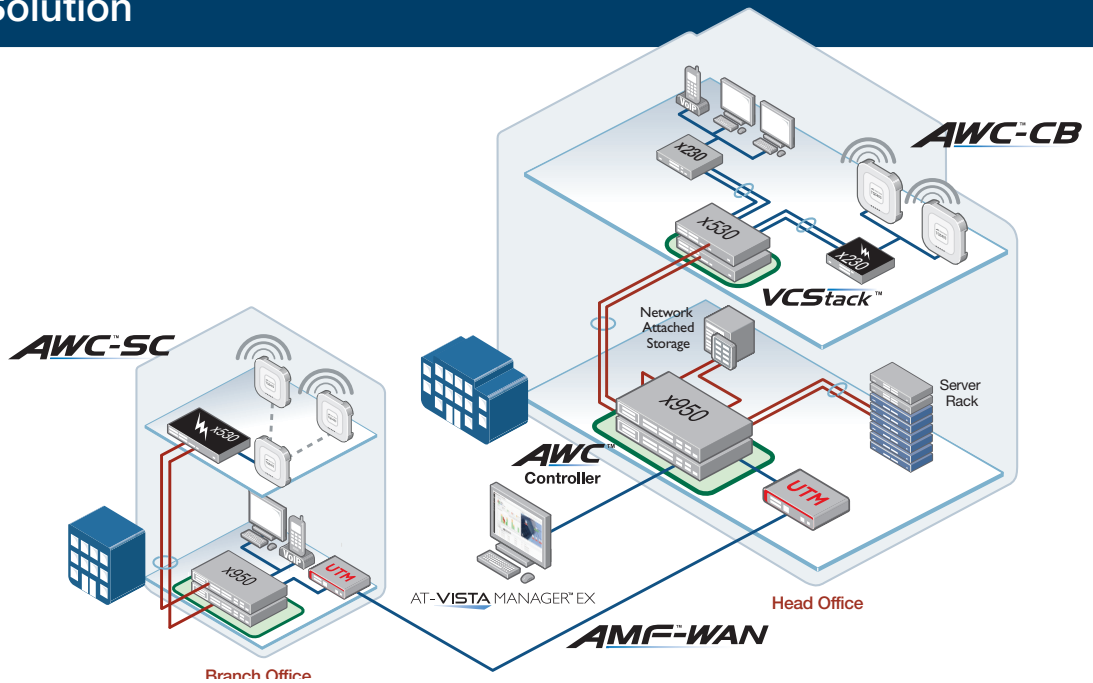
Deal proactively with issues through the Health Monitoring dashboard, and use automated event actions to alert administrators of any issues via the network map or an email.

The Device Health tab shows at-a-glance status and trends for CPU, memory, storage, and temperature of Allied Telesis and third-party devices.

The Network Health tab shows device error counters and link health across the network



Key Solution

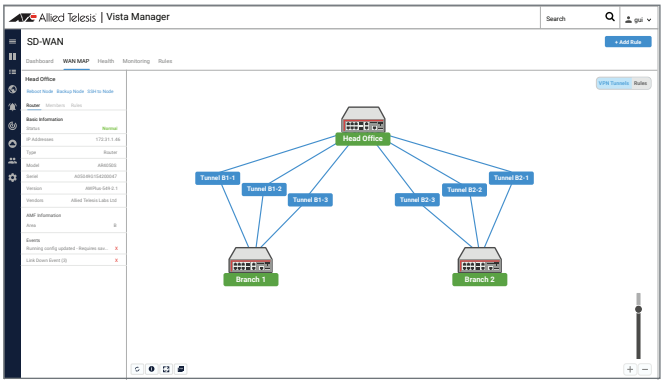


AMF-WAN

AMF-WAN (Allied Telesis SD-WAN) provides businesses with improved inter-branch network performance and reduced cost, by automatically optimizing application traffic over multiple WAN links between offices. SD-WAN uses our UTM firewalls and VPN routers for branch connectivity, to ensure secure transport of critical and sensitive data.

The SD-WAN orchestrator integrated into Vista Manager EX provides the ability to set acceptable performance metrics for any application, and load-balance traffic to meet requirements. By monitoring VPN link quality, time-sensitive or critical traffic is automatically switched over to the optimal link as required.

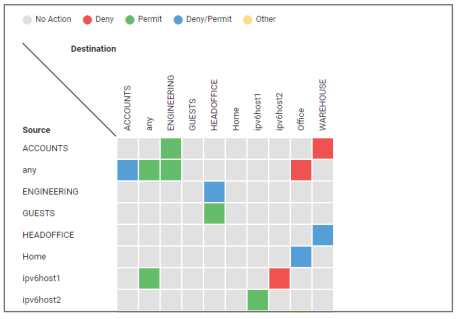
Visual monitoring enables easy management of the WAN, with the ability to drill down to specific links or applications to assess live and historical operation.



Intent-based AMF Plus orchestrator

The AMF Plus orchestrator enables effortless translation of business intent into dynamic network change to make network management easy. The AMF Plus orchestrator graphical interface supports:

- Dynamic creation of VPNs between locations with graphical drag-and-drop simplicity
- Prioritizing business-critical applications between office locations
- Shaping inter-branch traffic for maximum performance
- Breaking out cloud-based applications directly from the branch. Application databases can be shared from the head-office enabling breakout from a wider range of Allied Telesis branch-office end-points
- Simple setting of security levels for multiple locations
- Monitoring of CPU, memory, storage, and temperature of Allied Telesis and third-party devices. See network health status and trends at a glance, and simplify fault resolution
- Monitoring link health across the network, including latency, jitter, packet loss, and interface status
- Managing traffic, and automated control of the priority and performance of key applications right through the network, using centralized visual Quality of Service (QoS) administration
- Easily visualizing Access Control Lists (ACLs) in a matrix format to quickly and simply check for coverage inconsistencies, and ensure user data and different traffic types are managed in line with business policies



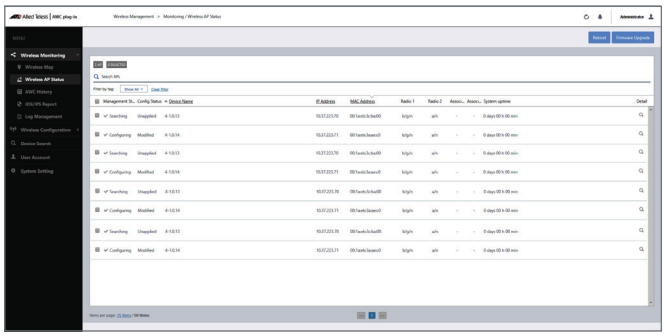
Easy visual ACL management with the AMF Plus orchestrator

AWC plug-in

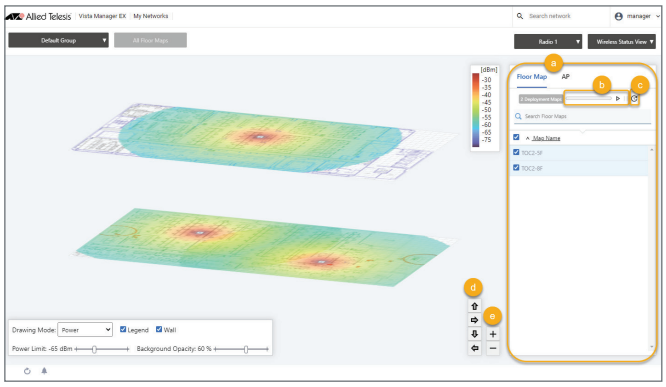
Allied Telesis innovative Autonomous Wave Control (AT-AWC™) regularly analyzes wireless networks, and dynamically updates Access Points (APs) to deliver significant improvements in connectivity and performance, by automatically minimizing coverage gaps and reducing AP interference.

Wireless network operation in multi-channel, single-channel (Channel Blanket), and hybrid (multi-channel and Channel Blanket) modes, supports maximum data throughput and seamless roaming for the most flexible wireless solution available.[4]

AWC-Smart Connect (AWC-SC)[5] provides plug-and-play wireless network growth, as new APs only need a power connection, and will then automatically create resilient wireless uplink connections to other APs.



The wireless concierge enables easy visualization with floor and heat maps, including client counts, with the 3D layered view allowing multi-dimensional signal management. AWC-Smart Activation (AWC-SAC) intelligently monitors and manages signal transmission, and autonomously controls AP activation to provide the best possible wireless coverage and performance.



Multi-level wireless management

AWC Remote Monitor in Vista Manager EX centrally manages wireless networks that are controlled by Vista Manager mini deployments – including integrating floor and heat maps, and centrally storing all wireless logs for easy review.

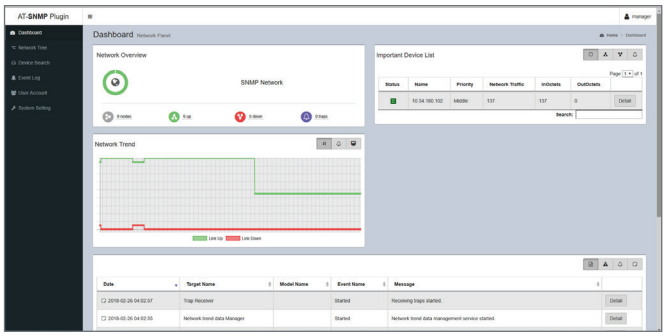
AWC Sky Defender in Vista Manager EX detects the MAC addresses of BYOD devices connected to Vista Manager mini wireless deployments, which enables control of which user devices are able to access the network, as well as monitoring their connection status.

AWC Vista Appliance Storage (VAS) allows the history of wireless data, connection status, floor maps and more to be stored on a remote Vista Manager Network Appliance for a selectable time-frame that supports auditing and review as required.

The flexibility of AWC ensures wireless networks of all sizes can be easily managed with powerful automation tools.

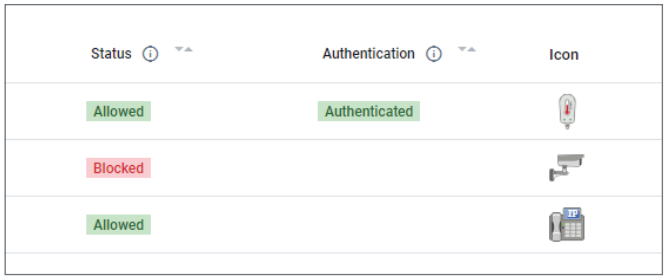
SNMP plug-in

The Simple Network Management Protocol (SNMP) plug-in can acquire detailed information and statistics from a broad range of networking devices. Different views enable users to manage devices the way they prefer. It supports management of up to 2000 devices, and in large networks it automatically searches for SNMP agents and displays each device found in tree form, for an easy view of the overall network topology. The SNMP plug-in is a powerful addition to Vista Manager EX, adding management flexibility by supporting non AMF Plus devices.



Intelligent edge security

View endpoints that do not have full authentication capability, but attempt network access, on Vista Manager's asset management page. Endpoints can then be allowed or denied access.



[4] Channel Blanket and Hybrid modes available on TQ6702 GEN2, TQ6602 GEN2, TQ6600, TQ5403 and TQ5403e APs

[5] AWC-SC available on TQ5403 and TQ5403e APs

Supported Allied Telesis Network Devices for Vista Manager version 3.12 / VST-VRT version 3.10.1

SWITCHES		FIREWALLS / ROUTERS	WIRELESS ACCESS POINTS	
SwitchBlade x8100 Series	IE510 Industrial Series	Virtual 10G UTM firewall	TQ6702 GEN2-R wireless router	TQm1402
SwitchBlade x908 GEN2	IE340 Industrial Series	AR4050S-5G UTM firewall	TQ6702e GEN2	
x950 Series	IE300 Industrial Series	AR4050S UTM firewall	TQ6702 GEN2	
x930 Series	IE220 Industrial Series	AR3050S UTM firewall	TQm6702 GEN2	
x550 Series	IE210L Industrial Series	AR2050V VPN router	TQ6602 GEN2	
x530 Series	IE200 Industrial Series	AR2010V Compact VPN router	TQm6602 GEN2	
x530L Series	CentreCOM XS900MX Series	AR1050V VPN router	TQ6602	
x510 Series	CentreCOM GS900MX Series		TQ5403	
IX5-28GPX	CentreCOM GS980MX Series		TQ5403e	
x330 Series	CentreCOM GS980EM Series		TQm5403	
x320 Series	CentreCOM GS980M Series		TQ4600	
x310 Series	CentreCOM GS970EMX Series		TQ4600-OF13 (OpenFlow)	
x240 Series	CentreCOM GS970M Series		TQ4400e	
x230 Series	CentreCOM FS980M Series		TQ1402	
x220 Series	CentreCOM SE240 Series			

Requirements for Vista Manager EX version 3.12 (WIndows server version)

SYSTEM REQUIREMENTS		
MINIMUM SPECIFICATION (SUPPORTS 600 ACCESS POINTS)		
CPU	Intel Core i5, 4 core processor, 2.5GHz or higher	
Memory (RAM)	8GB (without SNMP plugin)	16GB (with SNMP plugin)
Storage Capacity	240GB (without SNMP plugin)	340GB (with SNMP plugin)
AMF Plus nodes	3000	1500
AWC wireless APs	600	600
SNMP nodes	0	500
IOPS (Input/Output Per Second)[6, 7]	210	210
SPECIFICATION TO SUPPORT UP TO 3000 ACCESS POINTS		
CPU	Intel Xeon Gold, 12 core processor, 2.6GHz or higher	
Memory (RAM)	16GB (without SNMP plugin)	32GB (with SNMP plugin)
Storage Capacity	600GB (without SNMP plugin)	1.5TB (with SNMP plugin)
AMF plus nodes	3000	3000
AWC wireless APs	3000	3000
SNMP nodes	0	2000
IOPS (Input/Output Per Second)[6, 7]	2000	2000

[6] When using the Logging or Client Location Estimation features, it is necessary to use storage with IOPS of at least 20,000 (e.g. SSD storage rather than HDD storage) regardless of the number of devices

[7] When using the Advanced Traffic Monitoring feature, it is necessary to use SSD storage (rather than HDD storage) regardless of the number of devices

Requirements for Vista Manager EX version 3.12 (WIndows server version)

SYSTEM REQUIREMENTS WHEN LOGGING AWC WIRELESS OPERATION						
LOGGING REQUIREMENT					REQUIRED SYSTEM SPECIFICATIONS	
Access Points	Plugins being used		AWC logging duration		RAM	SSD capacity[8]
	AWC	SNMP	Intrusion detection	Associated Clients		
up to 100	■	-	1 Day	1 Day	18GB	240GB
	■	■	1 Day	1 Day	26GB	340GB
101 to 3,000	■	-	-	14 Days	54GB	1TB
	■	-	14 Days	-	186GB	1.5TB
	■	-	1 Day	1 Day	28GB	1TB
	■	-	14 Days	14 Days	205GB	1.5TB

SYSTEM REQUIREMENTS WHEN USING ADVANCED TRAFFIC MONITORING (SFLOW DATA COLLECTION)			
NUMBER OF SWITCH PORTS MONITORED WITH SFLOW	CPU	RAM	SSD CAPACITY[9]
1 Port	Intel Core i5, 4 core processor, 2.5GHz or higher	16GB	10GB
2 ports	Intel Core i5, 4 core processor, 2.5GHz or higher	16GB	20GB
10 ports	Intel Core i7, 8 Core processor, 2.5Ghz or higher	16GB	100GB
30 ports	Intel Core i7, 8 Core processor, 2.5Ghz or higher	32GB	500GB
40 ports	Intel Core i7, 8 Core processor, 2.5Ghz or higher	32GB	700GB

OPERATING REQUIREMENTS	UP TO 600 ACCESS POINTS	UP TO 3000 ACCESS POINTS
WINDOWS OS VERSIONS		
Windows Server 2022 (essential, standard, or datacenter editions)	■	■
Windows Server 2019 (essential, standard, or datacenter editions)	■	■
Windows Server 2016 (standard, or datacenter editions)	■	
Windows 10 Pro (64 bit)	■	
Windows 10 Pro Education (64 bit)	■	
Windows 8.1 Pro (64 bit)	■	
VIRTUALIZATION PLATFORM FOR WINDOWS SERVER		
VMWare vSphere Hypervisor (ESXi) 6.0/6.5/6.7/7.0/8.0	■	■
Hyper-V on Windows Server version 2012 R2 onwards	■	■
Nutanix AHV version AOS5.20.1.1 (LTS) (with Windows Server 2019)	■	■

Requirements for VST-VRT version 3.10.1

SUPPORT LIMITS	WITHOUT SNMP PLUGIN	WITH SNMP PLUGIN
AMF Plus nodes	3000	1500
AWC wireless APs	600	600
SNMP nodes	-	1000
SYSTEM REQUIREMENTS		
Host OS	The following Linux operating systems are supported as the host for VirtualBox Version 5.2 and Version 6.1.	
	Ubuntu	
	Debian	
	CentOS	
CPU	Intel Core i5, 4 core processor, 2.5GHz or higher	
Memory (RAM)	32GB	
Storage Capacity	630GB	
IOPS (Input/Output Per Second)[6,7]	350,000(Equivalent to SSD(Solid State Drive)	
Network Interface	GbE x 1 (or 2 GbE NICs when using Ethernet bonding)	

[6] When using the Logging or Client Location Estimation features, it is necessary to use storage with IOPS of at least 20,000 (e.g. SSD storage rather than HDD storage) regardless of the number of devices
[7] When using the Advanced Traffic Monitoring feature, it is necessary to use SSD storage (rather than HDD storage) regardless of the number of devices

Browser Support

WEB BROWSERS	MINIMUM RESOLUTION
Google Chrome Mozilla Firefox Microsoft Edge Safari for iPad	1280 x 768 pixels

Vista Manager EX version 3.12 / VST-VRT version 3.10.01 Licenses

Note: You can try Vista Manager EX for free by activating the 90 Day trial license after installation. The Trial license includes support for the AWC and SNMP plug-ins.

LICENSE NAME	SUBSCRIPTION
AT-FL-VISTA-BASE-1YR	1 year Vista Manager EX license
AT-FL-VISTA-BASE-5YR	5 year Vista Manager EX license
AT-FL-VISTA-AWC10-1YR[8]	1 year Vista Manager AWC plug-in license for managing up to 10 access points
AT-FL-VISTA-AWC10-5YR[8]	5 year Vista Manager AWC plug-in license for managing up to 10 access points
AT-FL-VISTA-CB10-1YR-2022[8, 9]	1 year Vista Manager AWC-Channel Blanket and AWC-Smart Connect license for managing up to 10 access points
AT-FL-VISTA-CB10-5YR-2022[8, 9]	5 year Vista Manager AWC-Channel Blanket and AWC-Smart Connect license for managing up to 10 access points
AT-FL-VISTA-SNMP-1YR[10]	1 year Vista Manager SNMP plug-in license
AT-FL-VISTA-SNMP-5YR[10]	5 year Vista Manager SNMP plug-in license

[8] Purchase one license per 10 access points
[9] Channel Blanket and Smart Connect require an AWC-CB license, an AWC license, and a Vista Manager EX base licenses to operate. Channel Blanket is supported on TQ6702 GEN2, TQ6602 GEN2, TQ6602, TQ5403 and TQ5403e access points. Smart Connect is supported on TQ5403 and TQ5403e access points
[10] If your AlliedWare Plus network is running AMF Plus automation and management, then the SNMP plugin is automatically enabled in Vista Manager with no license required. If the network is running the older AMF automation and management, then the Vista Manager SNMP license is required

VST-VRT version 3.10.1 only Licenses

LICENSE NAME	SUBSCRIPTION
AT-AMFCLOUD-PLUS-CTRL-1YR	1 year AMF Plus Controller 10 areas base/add-on license (maximum 300 areas)
AT-AMFCLOUD-PLUS-CTRL-5YR	5 year AMF Plus Controller 10 areas base/add-on license (maximum 300 areas)
AT-AMFCLOUD-PLUS-BASE-1YR	1 year AMF Plus Master license for up to 10 nodes
AT-AMFCLOUD-PLUS-BASE-5YR	5 year AMF Plus Master license for up to 10 nodes
AT-AMFCLOUD-PLUS-EX1-1YR	1 year AMF Plus Master 1 node add-on license (maximum 300 nodes)
AT-AMFCLOUD-PLUS-EX1-5YR	5 year AMF Plus Master 1 node add-on license (maximum 300 nodes)
AT-AMFCLOUD-PLUS-EX10-1YR	1 year AMF Plus Master 10 node add-on license (maximum 300 nodes)
AT-AMFCLOUD-PLUS-EX10-5YR	5 year AMF Plus Master 10 node add-on license (maximum 300 nodes)
AT-FL-AMFSec-BASE10-1YR[11, 12]	1 year Base software including 10 node license
AT-FL-AMFSec-BASE10-5YR[11, 12]	5 year Base software including 10 node license
AT-FL-AMFSec-ADD10-1YR[11, 12]	1 year license for an additional 10 nodes
AT-FL-AMFSec-ADD10-5YR[11, 12]	5 year license for an additional 10 nodes

[11] AMF-Sec version 2.3.x runs on the hardware-based Vista Manager Network Appliance (VST-APL), or the software-based Vista Manager virtual deployment option (VST-VRT)
[12] This license is available with AMF-Sec version 2.3.x or later

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