

Vista Manager EX

Network Monitoring and Management

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



AT-VISTA MANAGER™ EX

Single-pane-of-glass

Vista Manager EX provides a single-pane-of-glass interface to the entire network. 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 more reliable and secure application delivery. Automatically optimize the performance of real-time applications to ensure business productivity. Set up acceptable performance metrics for any application, and use the map, dashboard, and health pages to monitor SD-WAN operation.

Allied Telesis Intent-based Orchestrator

The AIO makes network management easy. Simple graphical input enables creation of new inter-branch VPN connections, prioritizing and shaping application traffic over the WAN, steering application traffic to the cloud, and managing security at multiple locations. Effortlessly enable the network to support your business intent.

Real-time maps

Integrated topology map

The topology map shows all wired and wireless devices connected across the LAN and WAN, with easy access to the GUI of any node for specific control. Group network devices to show branch and building layout, and pre-provision new devices ready for plug-and-play upgrade. Use Tracepath for a real-time connectivity check between any two nodes, while service monitoring allows visibility of services running on a chosen device, with actionable reporting of events and alarms.

Traffic monitoring view

The color-coded traffic map provides visual network utilization and bandwidth across all links, while the advanced view uses sFlow to show protocol use through the network, and from specific devices. Proactive network management uses live and historical views to analyze traffic patterns and protocol use, and 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 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 models AP location and signal strength, and automatically optimizes output and channel selection 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

Auto-discover and manage a wide range of devices with the Simple Network Management Protocol (SNMP) plug-in. Different network device views enable visibility the way you prefer. Extend network monitoring and enable pro-active management with automated notifications and alerts.

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 APs¹
- ▶ Automatically-created integrated topology map
- ▶ Group map icons into branches or buildings for intuitive visual management
- ▶ 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
- ▶ The AIO easily translates business intent into dynamic network change²
- ▶ Automatic wireless output and channel control¹
- ▶ Configure wireless access and security features such as Captive Portal and Passpoint¹
- ▶ AWC Channel Blanket hybrid wireless³
- ▶ AWC Smart Connect wireless uplinks⁴
- ▶ AWC Sky Defender for wireless client filtering¹
- ▶ AWC Remote Monitor displays status of all wireless controllers¹
- ▶ SNMP plug-in for broad device support⁵
- ▶ Real-time traffic, protocol, and service monitoring
- ▶ Simplified VLAN creation and management
- ▶ Support multiple networks with flexible management access
- ▶ Add and manage Feature licenses on any AMF node
- ▶ Deploy in Windows or Linux server environments

¹ AP management requires AWC plug-in license

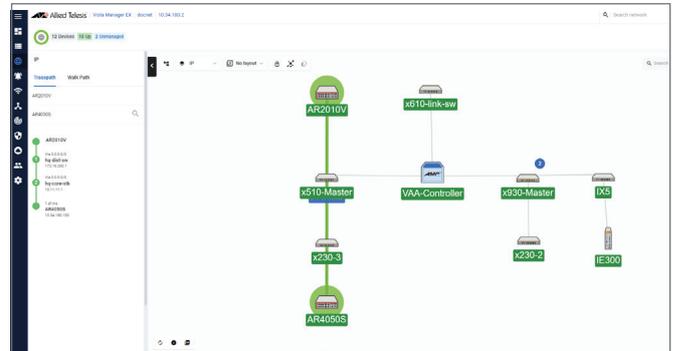
² Requires AIO license

³ Requires AWC Channel Blanket and AWC plug-in license

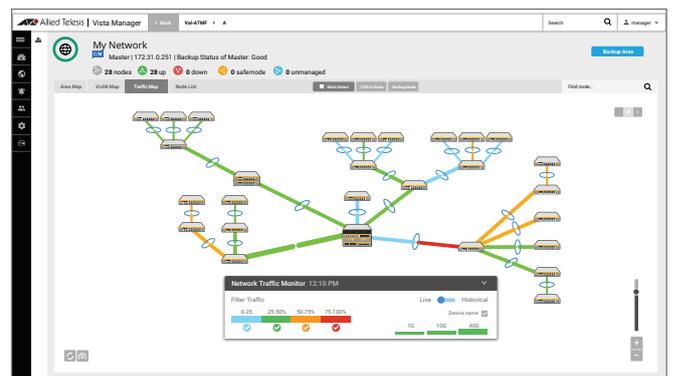
⁴ Requires AWC Smart Connect and AWC plug-in license

⁵ SNMP management requires SNMP plug-in license

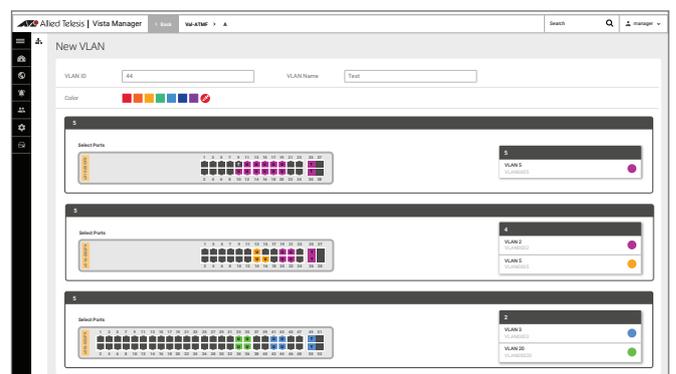
The integrated topology map shows all AMF wired, AWC wireless, and third party devices connected across the LAN and WAN, with many visual management features. IP Tracepath shown below displays the routes between any chosen nodes for easy connectivity testing and troubleshooting.



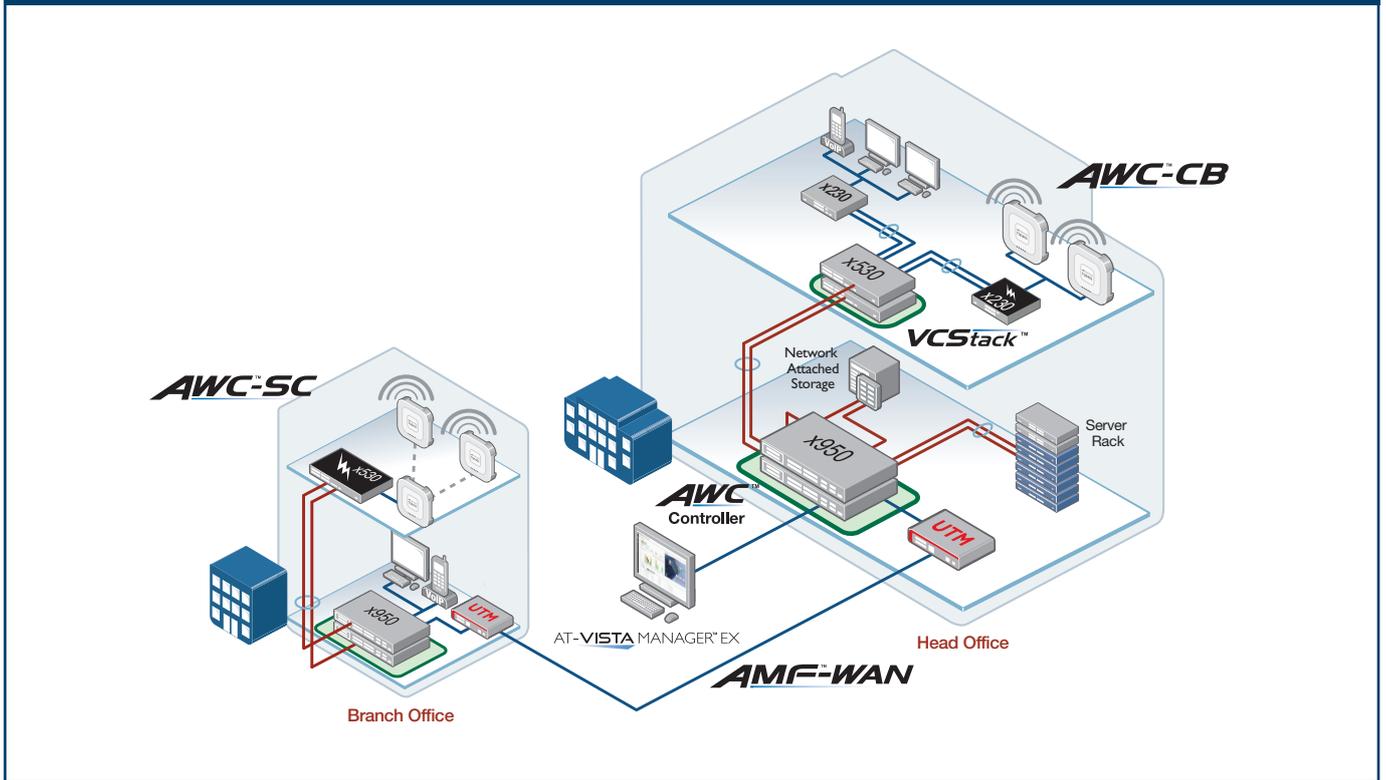
The color-coded traffic view shown below provides real-time visual status of network utilization and bandwidth across all links. The advanced view uses sFlow to show protocol use through the network.



The VLAN view shown below enables simplified network management by creating VLANs across multiple switches with just a few mouse clicks.



Key Solution

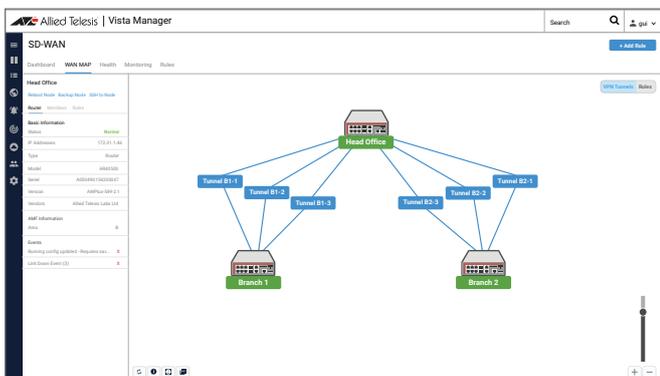


AMF-WAN

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.

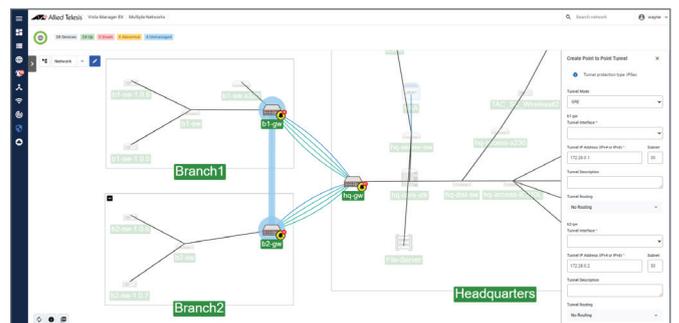


Allied Telesis Intent-based Orchestrator

The AIO enables effortless translation of business intent into dynamic network change to make network management easy. The AIO 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

Enjoy streamlined administration of WAN traffic between distributed office locations, with simple requirements input – and let AIO intelligence manage your network.



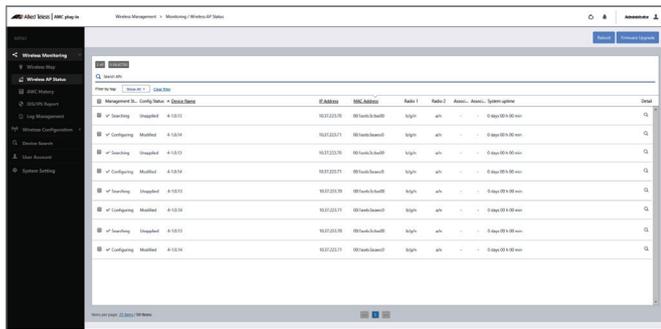
Drag-and-drop VPN creation with the AIO

AWC plug-in

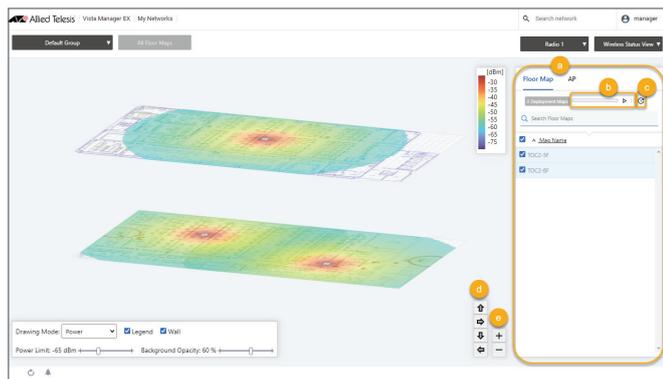
Allied Telesis innovative Autonomous Wave Control (AWC) regularly analyzes wireless networks, and dynamically updates Access Points (APs) to deliver significant improvements in connectivity and performance, by automatically minimizing coverage gaps and reducing AP interference.

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.⁶

AWC-Smart Connect (AWC-SC)⁷ 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.

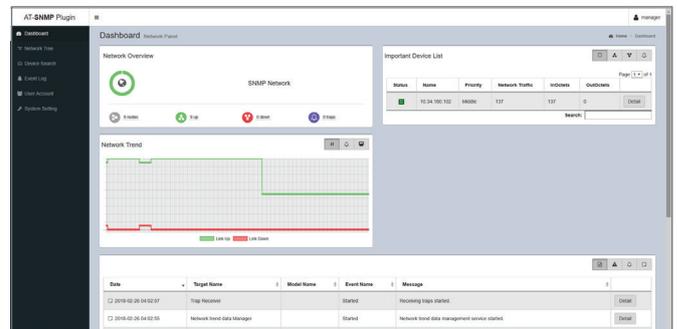
AWC Sky Defender in Vista Manager EX detects the MAC addresses of BYOD devices connected to Vista Manager mini wireless deployments, which enables control of which user devices are able to access the network, as well as monitoring their connection status.

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.

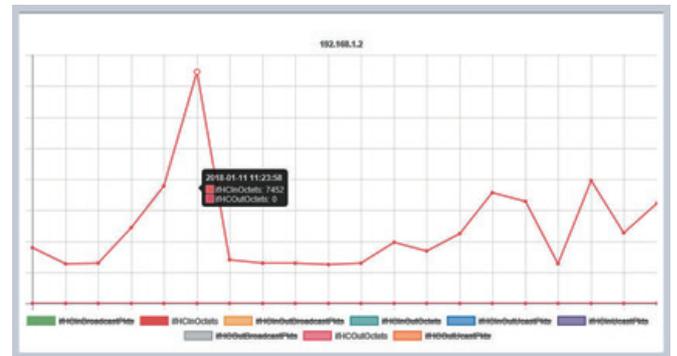
The flexibility of AWC ensures wireless networks of all sizes can be easily managed with powerful automation tools.

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 devices.



Graph statistical information obtained using SNMP such as interface traffic.



⁶ Channel Blanket and Hybrid modes available on TQ6602, TQ5403 and TQ5403e APs
⁷ AWC-SC available on TQ5403, TQ5403e, and TQm5403 APs

Supported Allied Telesis Network Devices for Vista Manager version 3.8.0 / VST-VRT version 3.4.1

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

Requirements for Vista Manager EX version 3.8.0

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 nodes	3000	1500
AWC wireless APs	600	600
SNMP nodes	0	500
IOPS (Input/Output Per Second) ^{8,9}	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 nodes	3000	3000
AWC wireless APs	3000	3000
SNMP nodes	0	2000
IOPS (Input/Output Per Second) ^{8,9}	2000	2000

⁸ 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

⁹When using the Advanced Traffic Monitoring feature, it is necessary to use SSD storage (rather than HDD storage) regardless of the number of devices

SYSTEM REQUIREMENTS WHEN LOGGING AWC WIRELESS OPERATION						
Access Points	LOGGING REQUIREMENT				REQUIRED SYSTEM SPECIFICATIONS	
	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 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		
VMWare vSphere Hypervisor (ESXi) 6.5, 6.7, or 7.0	■	■
Windows Hyper-V Server 2012 R2, 2019 (note: nested virtualization not supported)	■	■

Requirements for VST-VRT version 3.4.1

SUPPORT LIMITS	WITHOUT SNMP PLUGIN	WITH SNMP PLUGIN
AMF 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) ^{8, 9}	350,000(Equivalent to SSD(Solid State Drive))	
Network Interface	GbE x 1 (or 2 GbE NICs when using Ethernet bonding)	

⁸ 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
⁹ 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 3.8.0 / VST-VRT version 3.4.1 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 ¹⁰	1 year Vista Manager AWC plug-in license for managing up to 10 access points
AT-FL-VISTA-AWC10-5YR ¹⁰	5 year Vista Manager AWC plug-in license for managing up to 10 access points
AT-FL-VISTA-CB10-1YR ^{10, 11}	1 year Vista Manager AWC-Channel Blanket license for managing up to 10 access points
AT-FL-VISTA-CB10-5YR ^{10, 11}	5 year Vista Manager AWC-Channel Blanket license for managing up to 10 access points
AT-FL-VISTA-SC10-1YR ^{10, 12}	1 year Vista Manager AWC-Smart Connect license for managing up to 10 access points
AT-FL-VISTA-SC10-5YR ^{10, 12}	5 year Vista Manager AWC-Smart Connect license for managing up to 10 access points
AT-FL-VISTA-SNMP-1YR	1 year Vista Manager SNMP plug-in license
AT-FL-VISTA-SNMP-5YR	5 year Vista Manager SNMP plug-in license
AT-FL-VISTA-AIO-1YR	1 year Vista Manager AIO (Allied Telesis Intent-Based Orchestrator) license
AT-FL-VISTA-AIO-5YR	5 year Vista Manager AIO (Allied Telesis Intent-Based Orchestrator) license

¹⁰ Purchase one license per 10 access points

¹¹ Channel Blanket requires an AWC-CB license, an AWC license, and a Vista Manager EX base licenses to operate. Channel Blanket supported on TQ6602, TQ5403 and TQ5403e access points

¹² Smart Connect requires an AWC-SC license, an AWC license, and a Vista Manager EX base licenses to operate. Smart Connect supported on TQ5403, TQ5403e, and TQm5403 access points