

# Vista Manager Network Appliance

# Network Automation, Monitoring and Management

The Vista Manager Network Appliance (VST-APL) delivers state-of-theart network automation, with integrated monitoring and management. Combining powerful applications for automating network management and security, and providing visibility with actionable reporting, reduces administration effort, complexity and cost.



VISTA MANAGER™ NETWORK APPLIANCE

# Seamless network management

The Vista Manager Network Appliance (VST-APL) seamlessly integrates the tools for effortless management. Autonomous Management Framework (AMF) and Autonomous Wave Control (AWC) centralize management and automatically optimize all wired and wireless network devices, while the SNMP plug-in supports third party devices. AMF Security (AMF-Sec) ensures a self-defending network. Vista Manager is a single-pane-of-glass interface to the entire AMF, AWC, SNMP, and AMF-Sec network. VST-APL brilliantly combines these tools in a powerful yet simple management solution.

### Flexible deployment

The VST-APL ships with Vista Manager enabled. Add capability and capacity with subscription-based licenses for AMF-Cloud, AWC plug-in, SNMP plug-in, and AMF-Security automation and management tools:

### Vista Manager

Vista Manager 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 so they can be easily dealt with. A syslog server shows informative messages from network nodes, while asset management enables firmware and configuration backup and upgrade of one, many, or all devices.

The integrated SD-WAN orchestrator automatically optimizes inter-branch connections for secure application delivery.

The Allied Telesis Intent-based Orchestrator (AIO) makes 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.

#### **AMF Cloud**

AMF Cloud centralizes management of switches, firewalls, and routers across the network – whether local or remote. In addition, powerful features like auto-backup, auto-recovery, auto-provisioning, and auto-upgrade provide zero-touch administration for truly plug-and-play networking. AMF reduces the time and skill required to maintain the network and ensures a stable environment by preventing human error.

#### AWC plug-in

AWC enables management and monitoring of Allied Telesis wireless APs, with floor maps, wireless coverage heat maps, and client counts. AWC models AP location and signal strength, and automatically optimizes wireless output and channel selection for a superior user experience. Use innovative Channel Blanket hybrid wireless for a no compromise network with high throughput and seamless roaming, while AWC Smart Connect provides simplified deployment, and a resilient Wi-Fi solution using wireless uplink connectivity.

The AWC plug-in can also be configured to display and integrate APs that are operated by AWC-Lite, with local management provided by Vista Manager mini on a switch/firewall Device GUI. Logs for these APs are collected and available in the AWC plugin. This wireless management hierarchy enables distributed or departmental administration where appropriate.

# SNMP plug-in

The Simple Network Management Protocol (SNMP) plug-in enables auto-discovery and management of a wide range of third party devices, which are displayed on the Vista Manager network map alongside AMF and AWC devices. Extend network monitoring and enable pro-active management with automated SNMP trap notifications and alerts.

# **AMF-Security**

The AMF-Sec controller partners with best-of-breed firewall and security appliances. When the security appliance detects an internal malware threat, the AMF-Sec controller responds immediately to isolate the affected part of the network and quarantine the suspect device. Remediation can be applied so the device can re-join the network with minimal disruption. Responses are configurable, and comprehensive logging forms a clear audit trail. AMF-Sec avoids lost time and unnecessary disruption by enabling a self-defending network.





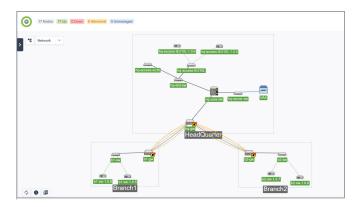




# Vista Manager visual management

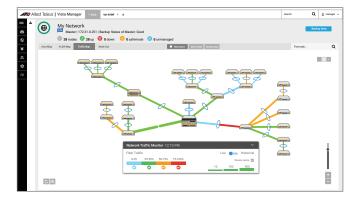
# Integrated topology map

The topology map shows all AMF wired and AWC 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 preprovision 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.



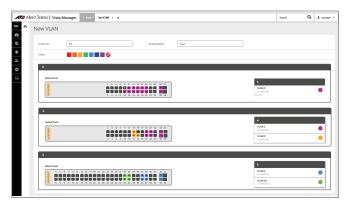
### Traffic monitoring view

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. Use live and historical views to analyze traffic patterns and protocols and improve performance.



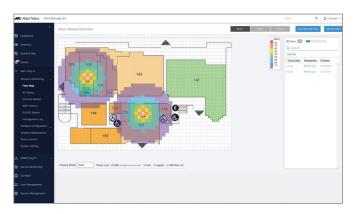
### **VLAN** view

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.



### Wireless heat map

When using the AWC plug-in, easily visualize AP deployment and operation with wireless floor and heat maps. Wi-Fi client location and counts are available to further support proactively managing the wireless environment.



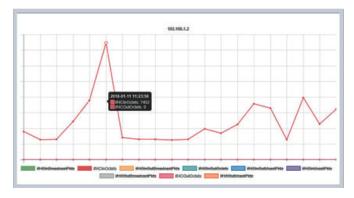
# SNMP graphs

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.

SNMP 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 way to add management flexibility by supporting non-AMF devices.



Graph statistical information obtained using SNMP such as interface traffic.



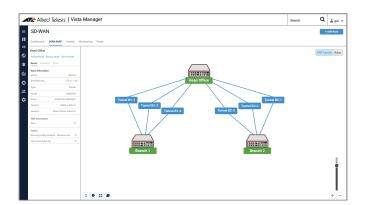
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### **Secure SD-WAN**

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 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.

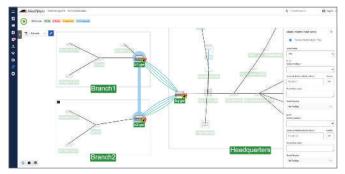


### **Allied Telesis Intent-based Orchestrator**

The AIO in Vista Manager enables effortless translation of business intent into dynamic network change to meet requirements, and 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
- ► Simple setting of security levels for multiple locations

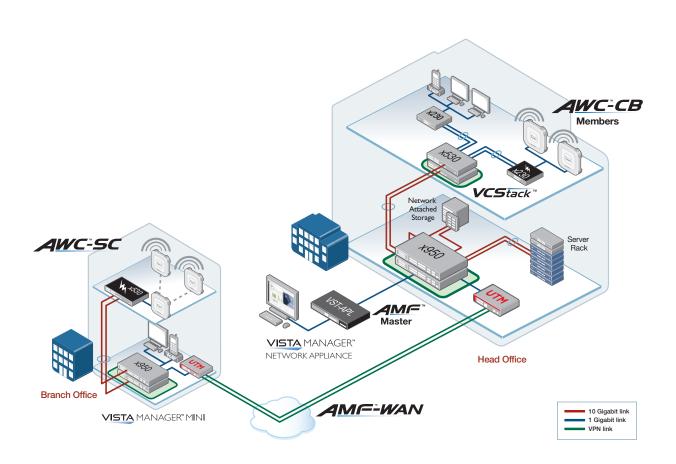
Enjoy streamlined administration of WAN traffic between distributed office locations, with simple requirements input – and let the intelligence of the AIO manage your business network.



Drag-and-drop VPN creation with the AIO



# Key Solution - Integrated wired and wireless network management



The Vista Manager Network Appliance (VST-APL) enables integrated management of the entire wired, wireless, and inter-branch infrastructure.

AMF automates day to day administration of all switches and firewalls, with centralized management of one, many, or all devices, and features like autobackup, auto-recovery, auto-provisioning, and autoupgrade enabling zero-touch administration for plugand-play networking. Complimenting AMF, the SNMP plug-in supports third party devices for complete network management and monitoring.

AWC regularly analyzes the wireless network, and dynamically updates APs to deliver significant improvements in connectivity and performance, by automatically minimizing coverage gaps and reducing AP interference. AWC Channel Blanket (AWC-CB) provides a single blanket of wireless coverage for seamless roaming and always-on connectivity, while AWC-Smart Connect (AWC-SC) enables 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.

AWC will also display and integrate APs that are operated by AWC-Lite, where local management is provided by Vista Manager mini on the branch office x950 switch. Logs for these remote APs are collected by AWC, to provide access to the operation and status of all APs across the entire network.

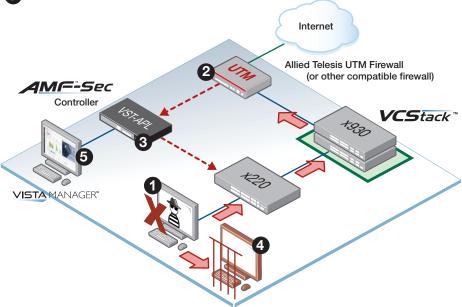
AMF-WAN (our SD-WAN solution) optimizes the performance of business-critical traffic for the best possible performance, and automatically uses the best path to maximize the operation of real-time applications – all with no administrator intervention.

With Vista Manager providing visual monitoring and management of the entire network, the VST-APL is a cohesive and powerful solution to support modern organizations, by meeting their business needs and intent with reduced complexity and cost.

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# Key Solution - Integrated security for a self-defending network

- 1 Targeted attack inside the network! Threat information is seen upline
- 2 Firewall sends threat notification
- 3 AMF-Sec instructs switch to shut down threat source
- 4 Infected device sent to quarantine
- 5 Security alerts shown on Vista Manager network map



## Block threats at the source

Most threat protection solutions are only capable of blocking suspicious external traffic coming through the firewall from the Internet—this is the traditional "secure border" model.

However, the AMF-Sec controller partners with bestof-breed firewall and security appliances. When the security appliance detects an internal malware threat, the AMF-Sec controller responds immediately to isolate the affected part of the network and quarantine the suspect device.

AMF-Sec provides visual alerts on the Vista Manager network map, to make finding the suspect device simple so remediation can be applied.

## A self-defending network

AMF-Sec does not require administrator action to protect the network, as the controller automatically responds to any threats, whether malicious behavior, or even malware threats introduced inadvertently by staff with USB sticks, BYOD and so on. AMF-Sec can also block unauthenticated users from accessing the network to reduce risks to digital information, online resources, and business-critical applications.

AMF-Sec is an innovative security solution that can monitor traffic entering and traversing the local network, without introducing latency or bottlenecks. AMF-Sec helps organizations avoid lost time and unnecessary disruption, with automated security that enables a self-defending network.

# **Specifications**

PRODUCT	10/100/1000T (RJ-45) COPPER PORTS <sup>1</sup>	100/1000/10GB (RJ-45) COPPER PORTS <sup>1</sup>	USB <sup>2</sup>
VST-APL-06	6	-	2
VST-APL-10	6	4	2

### **Physical Specifications**

PRODUCT	WIDTH X DEPTH X HEIGHT	WEIGHT	
		UNPACKAGED	PACKAGED
VST-APL-06	438 x 292 x 44 mm (17.24 x 11.49 x 1.73 in)	4.5 kg	7.5 kg
VST-APL-10	438 x 292 x 44 mm (17.24 x 11.49 x 1.73 in)	4.9 kg	7.9 kg

### Power, Heat and Noise

PRODUCT	MAX POWER CONSUMPTION	MAX POWER DISSIPATION	NOISE
VST-APL-06	120W	388.6 BTU/h	29 dBA
VST-APL-10	150W	502.3 BTU/h	29 dBA

#### **Operational Limits**

AMF CLOUD		
AMF Controllers supported	1	
AMF Masters per AMF Controller <sup>3</sup>	60	
AMF Members per AMF Master	300	
VISTA MANAGER		
AMF Areas <sup>4</sup>		1
AMF Devices		300
SNMP Devices		1000
AWC remote wireless AP management	Vista-mini instances able to be connected to the AWC plugin	60
APs	System	500
(whether directly managed or	TQ Series APs	500
managed through Vista-mini instances)	TQm Series APs	100
Wireless Clients		3000
	Total Blankets	20
Channel Blanket	Blankets per AP	6
(AWC-CB)	APs per Blanket	100
	Clients per Blanket	500
	Maximum APs	20
Smart Connect <sup>5</sup> (AWC-SC)	Maximum hops	2
	Maximum APs per hop	4
AMF-SEC		
Locations	300	
AMF network devices	300	
End user devices	5000	
User device MAC addresses	5000	
Policies associated with end user dev	5000	

# **Environmental Specifications**

- Operating temperature range: 0°C to 40°C (32°F to 122°F)
- ➤ Storage temperature range: -25°C to 70°C (-13°F to 158°F)
- ► Operating relative humidity range: 5% to 90% non-condensing
- ► Storage relative humidity range: 5% to 95% non-condensing
- Operating altitude: 2,000 meters maximum (6,561 ft)

### **Electrical Approvals and Compliances**

- ► EMC: CISPR 32 class A, EN55032 class A, FCC class A, VCCI class A
- ► Immunity: EN55035, EN55024

# Safety

- Standards: UL62368, IEC60950-1, IEC62368, EN62368
- ► Certification: UL, TUV

# Restrictions on Hazardous Substances (RoHS) Compliance

▶ EU RoHS compliant

AWC-SC supports a maximum of 4 Connector APs (at hop 1), and 16 Terminator APs (at hop 2).

<sup>&</sup>lt;sup>1</sup> The copper ports are used for management connectivity, and do not support network switching capability.

 $<sup>^{2}\,</sup>$  The USB interfaces will be supported in a future firmware release.

Multi-tenant mode is not supported.

<sup>&</sup>lt;sup>4</sup> While AMF Cloud supports an AMF controller and multiple AMF areas (with an AMF Master each), Vista Manager only provides visual management for a single area comprising 1 AMF Master and up to

<sup>&</sup>lt;sup>5</sup> There are 3 levels of APs in an AWC-SC network: APs directly connected to a switch or router are Root APs, while APs at the edge of the AWC-SC wireless network are Terminator APs. Connector APs are deployed between the Root and Terminator APs.

### **Feature Licenses**

LICENSE	DESCRIPTION
AT-FL-AMFCLOUD-CTRL-1YR	1 year AMF Controller 10 areas base/add-on license (maximum 300 areas)
AT-FL-AMFCLOUD-CTRL-5YR	5 year AMF Controller 10 areas base/add-on license (maximum 300 areas)
AT-FL-AMFCLOUD-BASE-1YR	1 year AMF Master license for up to 10 nodes
AT-FL-AMFCLOUD-BASE-5YR	5 year AMF Master license for up to 10 nodes
AT-FL-AMFCLOUD-EX1-1YR	1 year AMF Master 1 node add-on license (maximum 300 nodes)
AT-FL-AMFCLOUD-EX1-5YR	5 year AMF Master 1 node add-on license (maximum 300 nodes)
AT-FL-AMFCLOUD-EX10-1YR	1 year AMF Master 10 node add-on license (maximum 300 nodes)
AT-FL-AMFCLOUD-EX10-5YR	5 year AMF Master 10 node add-on license (maximum 300 nodes)
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
AT-FL-VISTA-SNMP-1YR	1 year license for SNMP plug-in
AT-FL-VISTA-SNMP-5YR	5 year license for SNMP plug-in
AT-FL-VISTA-AWC10-1YR	1 year wireless controller (AWC) plug-in license for 10 APs
AT-FL-VISTA-AWC10-5YR	5 year wireless controller (AWC) plug-in license for 10 APs
AT-FL-VISTA-CB10-1YR6	1 year license for AWC-Channel Blanket plug-in for 10 APs
AT-FL-VISTA-CB10-5YR6	5 year license for AWC-Channel Blanket plug-in for 10 APs
AT-FL-VISTA-SC10-1YR7	1 year license for AWC-Smart Connect plug-in for 10 APs
AT-FL-VISTA-SC10-5YR7	5 year license for AWC-Smart Connect plug-in for 10 APs
AT-FL-SESC-BASE-1YR	1 year AMF-Sec base license for 10 nodes
AT-FL-SESC-BASE-5YR	5 year AMF-Sec base license for 10 nodes
AT-FL-SESC-ADD10-1YR	1 year AMF-Sec 10 node add-on license
AT-FL-SESC-ADD10-5YR	5 year AMF-Sec 10 node add-on license
AT-FL-SESC-ADD50-1YR	1 year AMF-Sec 50 node add-on license
AT-FL-SESC-ADD50-5YR	5 year AMF-Sec 50 node add-on license
AT-FL-SESC-ADD100-1YR	1 year AMF-Sec 100 node add-on license
AT-FL-SESC-ADD100-5YR	5 year AMF-Sec 100 node add-on license
AT-FL-SESC-ADD200-1YR	1 year AMF-Sec 200 node add-on license
AT-FL-SESC-ADD200-5YR	5 year AMF-Sec 200 node add-on license

<sup>&</sup>lt;sup>6</sup> Channel Blanket requires an AWC-CB license, and an AWC license to operate. Channel Blanket is supported on TQ5403 and TQ5403e access points.

# **Ordering Information**

### AT-VST-APL-06

AT-Vista Manager Network Appliance with 6 x 10/100/1000T copper ports

# AT-VST-APL-10

AT-Vista Manager Network Appliance with 6 x 10/100/1000T, and 4 x 100/1000T/10G copper ports



points.

7 Smart Connect requires an AWC-SC license, and an AWC license to operate. Smart Connect is supported on T05403, T05403e, and T0m5403 access points.