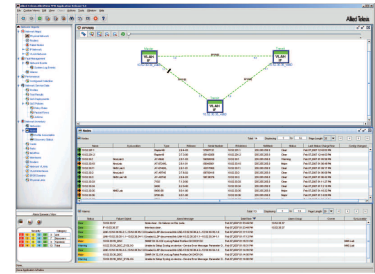


AlliedView™ NMS Release 12.1

Network Management Software NSP Edition



AT-TN-NMS-R12.1-S

Software, NMS release 12.1,
AlliedView NMS server requires license key

AlliedView NMS Overview

The AlliedView NMS is a comprehensive network management platform, designed to offer network providers powerful tools for the management of your Allied Telesis products and provisioning of multiple services in the IP and Ethernet-based access network. With a full suite of provisioning and monitoring tools, the AlliedView NMS maximizes the operational efficiency by providing proactive diagnostics, minimizing service deployment times, reducing operational expense and hence shortening the path to profitable revenue.

Flexible Management Tools

With extensive management capabilities, the AlliedView NMS allows the user to manage thousands of Allied Telesis network elements from a remote operations center - thus reducing the need for support to perform diagnostics or making provisioning changes. Via a user-friendly graphical user interface, AlliedView NMS will substantially decrease the time required for deploying and provisioning large networks. Among the key strengths of AlliedView NMS is network monitoring and network wide service provisioning.

Architecture Overview

The essential constituents of AlliedView NMS architecture is an integrated server and the distributed user clients.

- The integrated server software performs the core server-side network facing tasks, such as the discovery of managed objects, receiving and processing event and alarm notifications, data collection, report generation, status polling and northbound interface. All updates to the relations database takes place through the server.
- The server software also supports the distributed user clients and provides scalability in terms of the number of clients that can be supported. The server performs the following client support:
 - » Interfaces with and channels all the clients' requests.
 - » Generates the user client views through database read operations.
 - » Generates alarm and autonomous messaging from the server's database to clients.
- The integrated server code executes in a single physical AlliedView NMS server.
- The distributed clients acts as the user interfaces between the end-users or administrators and AlliedView NMS server.
 - » There are two types of client interfaces – Java client, and HTML client.

Network Inventory

The AlliedView NMS provides automatic topology and device discovery of networks, regardless of size. The AlliedView NMS allows for multiple network and device views where the user can observe the entire network or focus in on an individual network device. In addition, the AlliedView NMS contains inventory of different device types and enables views of VLANs, EPSR domains, nodes, cards network interfaces, ports, iMGs, and physical links.

Key Features

- Automatic topology discovery and creation of network maps:
 - » Layer 3 network
 - » Layer 2 network
 - » VLANs
 - » EPSR Rings
- Network inventory
 - » IP networks nodes, cards, ports, physical links
 - » VLANs, VLAN interfaces, EPSR domains
 - » iMG/RG, routers/switches
- Fault management
 - » Event and alarm notification
 - » System logs and audit trails
- Performance management
- Security management
- Zero touch service provisioning using profiles
 - » Profile creation and management
 - » TR-101 VLAN provisioning models
- Subscriber provisioning of multiple services
 - » Internet access, IPTV video, VoIP telephony
- Management and configuration of Ethernet Protected Switched Rings (EPSR)
- Creation and management of QoS policies
- Scripting – enabling flexible updates to CLI text strings
- Device configuration back-up and restore
- Firmware and software revision and upgrade management
- Detection of configuration changes
- AlliedView NMS resource management and status monitoring
- Northbound XML Web services based interface to Operational Support Systems (OSS)

Zero Touch Service Provisioning

The AlliedView NMS uses the DSLForum TR-101 recommended provisioning models for the rapid deployment of multiple services (e.g. Internet access, IPTV video and VoIP telephony) via VLANs and QoS policies across multiple devices using a Graphical User Interface (GUI). Provisioning and rollout of new services and devices are significantly accelerated via the use of profiles for the most common types of services in the network.

By defining a common set of profiles AlliedView NMS enables multiple services to a subscriber to be provisioned via a single screen. Service providers have the option of selecting the DSLForum - N:1 VLAN per service provisioning model.

Network Upgrades

The AlliedView NMS can perform scheduled or unscheduled network wide firmware and software upgrades to many of the Allied Telesis device types. The AlliedView NMS maintains control of software releases to ensure all nodes in the network always maintain consistent software loads.

Subscriber Self Service Provisioning via Operational Support System (OSS)

The AlliedView NMS northbound interface has been designed to enable the OSS/BSS system to implement a subscriber Web portal such that subscriber self service provisioning can be achieved. Subscriber self service provisioning will dramatically reduce the operational expenditure of the service provider.

Southbound Interface

On the southbound, AlliedView NMS communicates with devices via multiple protocols including Simple Network Management Protocol (SNMP), the device Command Line Interface (CLI) and Trivial File Transfer Protocol (TFTP).

Scripting

Provisioning network devices requires that many CLI text string have to be issued to network devices. The AlliedView NMS administrator does not have to learn or understand what operations are encapsulated by these text strings because the GUI will automatically generate the necessary CLI text for these operations. To increase the flexibility of the AlliedView NMS further, extensive text scripting capability has been added. The CLI scripts can now be dynamically generated and variables can be substituted using information stored in the database or acquired by the AlliedView NMS from the network.

Northbound Interface

AlliedView NMS can interoperate with existing Operation Support Systems (OSS) and Business Support Systems (BSS) through northbound protocols, such as SNMP and XML/SOAP. The northbound interface will support the following read/write Apache/AXIS XML based APIs:

Faults (wsdl)	Inventory (wsdl)
getTrapParsers	getNodeNames
getTotalEventsCount	getNetworks
getEvents	getNodes
getEventFilters	getCards
getEventParsers	getPorts
setEventTarget	getPlInterfaces
removeEventTarget	getVlanInterfaces
getEventTargets	getVlans
getTotalAlertsCount	getPhysicalLinks
getAlertsCount	getEpsrDomains
getAlerts	getProfiles
getAlertFilters	getTasks
getAlertAnnotation	getInventoryObjects
getAlertHistory	getDiscoveryProperties
AdminService (wsdl)	Mdti (wsdl)
AdminService	getDeviceInfo
Version (wsdl)	
getVersion	
Provisioning module (Administrator)	Subscriber module
getDeviceInterfaces	getServices
getDeviceVlans	updateService
getRGDeviceDetails	
provisionPort	
deprovisionPort	
modifyPort	
modifyRG	
provisionPorts	
deprovisionPorts	
modifyPorts	
modifyRGs	

Technical Specifications

AlliedView NMS (recommended) Server, Platform Requirements

Client:

Java 1.16.0_16 enabled browser: Windows, Solaris

Data base:

MySQL

Requirement: NMS Server

Windows Server 2003 or 2008 Processor:

Intel Xeon dual core 2GHz or equivalent,

(Intel Xeon quad core 2.4GHz or equivalent)

RAM: 4 GB (4GB)

Disk: 20GB (20GB)

Monitor: 1280 x 1024 resolution

Solaris 10 Processor:

UltraSPARC T1 1.0 GHz (UltraSPARC T2 1.2 GHz)

RAM: 4 GB (8GB)

Disk: 20GB (20GB)

Monitor: 1280 x 1024 resolution

Requirement: Client to communicate with AlliedView NMS 12.1 Client

Windows Client

OS: Windows 2000, 2003, XP

Processor: 1GHz minimum

RAM: 1GB

Monitor: 1280 x 1024 resolution

Java JRE: 1.5.0_11

Browser: Explorer 6.0 and above
Mozilla 1.7 and above
(platform independent)

Solaris Server

OS: Solaris 10

Processor: 1GHz

RAM: 1GB

Monitor: 1280 x 1024 resolution

Java JRE: 1.5.0_11

Browser: Mozilla 1.7 and above
(platform independent)

Allied Telesis Devices Supported

iMAP	iMG	AW Layer 3 Switch	AW+ Layer 3 Switch	Layer 2 Switch	AW Router
iMAP Express 7101	AT-AR250E	AT-8000S/16	AT-8000GS/24	AT-8012M	AT-AR410
iMAP Express 7105		AT-8000S/24	AT-8000GS/24POE	AT-8016FMT	AT-AR415S
iMAP Express 7112	AT-RG213	AT-8000S/24POE	AT-8000GS/48	AT-8016FSC	AT-AR440S
		AT-8000S/48		AT-8016FST	
MiniMAP 9101	AT-IMG606	AT-8000S/48POE	AT-SBx908		AT-AR720
MiniMAP 9102				AT-8012MQS	AT-AR740
MiniMAP 9103	AT-IMG613-BD	AT-8624T/2M	AT-x600-24Ts		AT-AR750S
	AT-IMG613-LH	AT-8624POE	AT-x600-24Ts/XP	AT-8024	AT-AR725
iMAP 9400 series	AT-IMG613-SH	AT-8624T	AT-x600-24Ts-POE	AT-8024M	AT-AR745
	AT-IMG613-TX	AT-8624/2SP	AT-x600-48Ts	AT-8024GB	AT-AR750
iMAP 9700 series	AT-IMG613-TXJ		AT-x600-48Ts/XP		
		Rapier 24i		AT-8026FC	
iMAP 9810	AT-IMG623-BD	Rapier 24iDCNEBS	AT-x900-24XT	AT-8026T	
	AT-IMG623-LH	Rapier 48i	AT-x900-24XS		
	AT-IMG623-SH		AT-x900-24XT-N	AT-8088MT	
		AT-8824	AT-x900-12XT	AT-8088SC	
	AT-IMG624-A	AT-8824DC			
	AT-IMG624-B	AT-8848		AT-8324	
	AT-IMG634-A	AT-8848DC		8500 series	
	AT-IMG634-B				
	AT-IMG634-W	AT-9812T		AT-8724XL	
		AT-9812TDC		AT-8724XLDC	
	AT-IMG624-R2	AT-9812TF		AT-8724XLDNEBS	
	AT-IMG634-R2	AT-9816GB		AT-8748XL	
	AT-IMG634-W-R2	AT-9816GBDC		AT-8748XLDC	
		AT-9816GF			
	AT-IMG646-BD			AT-SBx3112	
	AT-IMG646-PX-ON	AT-SB4104AC			
		AT-SB4104DC			
	AT-IMG626MOD	AT-SB4108AC			
	AT-IMG646MOD	AT-SB4108DC			
	AT-IMG726MOD				
	AT-IMG746MOD	AT-9724TS			
		AT-9728TSP			
		AT-9924SP			
		AT-9924T			
		AT-9924T/4SP			
		AT-x900-24XT			
		AT-x900-24XS			
		AT-x900-48FE			
		AT-x900-48FS			

Support for Non-Allied Telesis Devices

GenBand-G6

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Ordering Information

AT-TN-NMS-R12-S

NMS service provider server software download.
Requires license key at end of 'free' evaluation period.
Supports 100 managed subscribers (or nodes) and five NMS clients.
Requires license key AT-TN-NMS-100S, 1000S-SK to support 100, or 1,000 managed subscriber CPEs or nodes and five NMS clients.

AT-TN-NMS-100S-SK

License key for NMS service provider 100 starter.
Supports 100 managed subscriber CPEs (or nodes) and five NMS clients.
Requires purchase of upgrade license key.
AT-TN-NMS-900S-UK to support additional 900 managed subscriber CPEs (or nodes) up to a maximum of 1,000.

AT-TN-NMS-900S-UK

License key, NMS upgrade to AT-TN-NMS-100S-SK to add support for an additional managed subscriber CPEs (or nodes) in increments of 900 up to a maximum of 1K.

AT-TN-NMS-5KS-UK

License key, NMS upgrade to AT-TN-NMS-1KS-SK to add support for an additional 5K managed subscriber CPEs (or nodes).

AT-TN-NMS-10CS-UK

License key, NMS client upgrade to AT-TN-NMS-SK to add support for an additional 10 NMS clients per single server.

AT-TN-NMS-5K-UK

License key, NMS client upgrade to AT-TN-NMS-1KS-SK to add support for an additional 10 NMS clients per server.

AT-TN-NMS-1KS-SK

License key for NMS service provider 1000 server.
Supports 1K managed subscribers or nodes and five NMS clients.
Requires license key AT-TN-NMS-5KS-UK to support additional 5K managed subscriber CPEs (or nodes).
Requires license key AT-TN-NMS-10CS-UK to support additional 10 NMS clients.

AT-TN-NMS-NK

License key, Northbound Web Services Interface.
XML/SOAP Web Services interface to heterogeneous computer systems.

Requires 'professional services' quote.