

## AlliedView™ NMS Release 15.0

### NETWORK MANAGEMENT SOFTWARE, NSP EDITION

AlliedView NMS is a comprehensive network management platform, designed to offer network providers powerful tools for the management of 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, AlliedView NMS maximizes operational efficiency by providing proactive diagnostics, minimizing service deployment times and reducing operational expense, shortening the path to profitable revenue.

#### Flexible Management Tools

With extensive management capabilities, AlliedView NMS allows administration of thousands of Allied Telesis network elements from a remote operations center, reducing the need for support to perform diagnostics or make provisioning changes. Via a user-friendly Graphical User Interface (GUI), AlliedView NMS substantially decreases 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 core components of AlliedView NMS architecture are an integrated server and the distributed user clients.

- 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 support of the northbound interface. All updates to the relations database take place through the server.



#### 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 Protection Switching Rings (EPSRing)
- » 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
- » Resource management and status monitoring

- The server software also supports 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 client requests.
  - » Generates 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.
- Distributed clients act as the user interface between the end-users or administrators and AlliedView NMS server. There are two types of client interface—Java and HTML.

#### Network Inventory

AlliedView NMS provides automatic topology and device discovery of networks, regardless of size. It also allows for multiple network and device views where the user can observe the entire network or focus on an individual network device. In addition, AlliedView NMS contains an inventory of different device types and enables views of VLANs, Ethernet Protection Switched Ring (EPSRing™) domains, nodes, cards, network interfaces, ports, intelligent Multiservice Gateways (iMGs), and physical links.

## Zero Touch Service Provisioning

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 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

AlliedView NMS can perform scheduled or unscheduled network-wide firmware and software upgrades to many Allied Telesis device types. 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 Operational Support Systems/ Billing Support Systems to implement a subscriber Web portal for self-service provisioning. Subscriber self-service provisioning enhances the service offerings to the subscribers, dramatically reducing the operational expenditure of the service provider.

## Southbound Interface

Through the southbound interface, AlliedView NMS communicates with devices via multiple protocols including Simple Network Management Protocol (SNMP) TR069, the device Command Line Interface (CLI) and Trivial File Transfer Protocol (TFTP).

## Scripting

Provisioning network devices requires that many CLI text strings 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 further increase the flexibility of the AlliedView NMS, extensive text scripting capability has been added. The CLI scripts can now be dynamically generated and variables substituted using information stored in the database or acquired by AlliedView NMS from the network.

Faults (wsdl)	Inventory (wsdl)
getTrapParsers	getNodeNames
getTotalEventsCount	getNetworks
getEvents	getNodes
getEventFilters	getCards
getEventParsers	getPorts
setEventTarget	getIpInterfaces
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	

## Specifications

### Recommended Server and Platform Requirements

Client: Java 1.16.0\_16 enabled browser: Windows, Linux  
Database: PostgreSQL

### NMS Server

Windows Server 2003 or 2008, Windows 2012\*  
Processor: Intel Xeon dual core 2GHz or equivalent, Intel Xeon quad core 2.4GHz or equivalent  
RAM: 4GB  
Disk: 20GB  
Monitor: 1280 x 1024 resolution

\* Windows Compatibility Mode required

### Client to Communicate with AlliedView NMS 12.2 Client

Windows client  
OS: Windows 2000, 2003, XP, Windows 7, Windows 8  
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)

Supported Allied Telesis Devices

iMAPS	iMGs	ALLIEDWARE LAYER 3 SWITCHES	ALLIEDWARE PLUS LAYER 3 SWITCHES	LAYER 2 SWITCHES	ALLIEDWARE ROUTERS
iMAP Express 7101	AT-AR250E	AT-8624T/2M	AT-x510L-28GT	AT-x200-GE-28T	AT-AR130
iMAP Express 7105	AT-RG213	AT-8624POE	AT-x510L-28GP	AT-x200-GE-52T	AT-AR160
iMAP Express 7112	AT-IMG606	AT-8624T	AT-x510L-52GT	AT-x210-16GT	AT-AR250E
MicroMAP 9001	AT-IMG624A	AT-8624/SP	AT-x600-24Ts	AT-x210-24GT	AT-AR260S
MiniMAP 9101	AT-IMG624B	Rapier 24i	AT-x600-24Ts/XP	AT-8000S/16	AT-AR300
MiniMAP 9102	AT-IMG634A	Rapier 24iDCNEBS	AT-x600-24Ts-POE	AT-8000S/24	AT-AR300L
MiniMAP 9103	AT-IMG634B	Rapier 48i	AT-x600-48Ts	AT-8000S/24POE	AT-AR410
iMAP 9400 Series	AT-IMG634W	AT-8824	AT-x600-48Ts/XP	AT-8000S/48	AT-AR415S
iMAP 9700 Series	AT-IMG624-R2	AT-8824DC	AT-x610-24Ts	AT-8000S/48POE	AT-AR440S
iMAP 9810	AT-IMG634-R2	AT-8848	AT-x610-24Ts-POE+	AT-8000GS/24	AT-AR442S
AT-SBx3112	AT-IMG634W-R2	AT-8848DC	AT-x610-24Ts/X	AT-8000GS/24POE	AT-AR450S
	AT-IMG646BD	AT-9812T	AT-x610-24Ts/X-POE+	AT-8000GS/48	AT-AR550S
	AT-IMG646-PX-ON	AT-9812TDC	AT-x610-48Ts	AT-8012M	AT-AR560S
	AT-IMG626MOD	AT-9812TF	AT-x610-48Ts	AT-8012MQS	AT-AR570S
	AT-IMG646MOD	AT-9816GB	AT-x610-48Ts-POE+	AT-8016F MT	AT-AR720
	AT-IMG726MOD	AT-SB4104AC	AT-x610-48Ts/X	AT-8016FSC	AT-AR740
	AT-IMG746MOD	AT-SB4108AC	AT-x610-48Ts/X-POE+	AT-8016FST	AT-AR750S
	AT-iBG915FX	AT-SB4108DC	AT-x610-48Ts/X-POE+	AT-8016XL	AT-AR725
	AT-IMG1405	AT-9724TS	AT-x610-24SPs/X	AT-8024	AT-AR745
	AT-IMG1425	AT-9924SP	AT-x900-12XT	AT-8024M	AT-AR750
	AT-IMG1425RF	AT-9924T	AT-x900-24XT/S	AT-8024GB	AT-AR770S
	AT-IMG1505	AT-9924T/4SP	AT-x900-24XS	AT-8026FC	
	AT-IMG1525	AT-x900-24XT	AT-x900-24XT	AT-8026T	<b>Others</b>
	AT-IMG1525RF	AT-x900-24XS	AT-x900-24XT-N	AT-8088MT	CentreCOM 8000 Series
	AT-IMG2426	AT-x900-48FE	AT-x930-28GPX	AT-8088SC	CentreCOM 9400 Series
	AT-IMG2426F	AT-x900-48FS	AT-x930-28GSTX	AT-8100S/24C	CentreCOM FS Series
	AT-IMG2504		AT-x930-28GTX	AT-8100S/48	CentreCOM GS Series
	AT-IMG2522		AT-x930-52GPX	AT-8100S/48POE	CentreCOM 9048XL
	AT-IMG2524		AT-SBx908	AT-8216XL	
	AT-IMG2524F		AT-8000GS/24	AT-8216FXL/SC	
	AT-IMG2524H		AT-8000GS/24POE	AT-8216FXL/SMSC	
			AT-8000GS/48	AT-8224XL	
			AT-SBx8112	AT-8224SL	
				AT-8300 Series	
				AT-8400 Series	
				AT-8500 Series	
				AT-8600 Series	
				AT-8700 Series	
				AT-8800 Series	
				AT-8948	
				AT-9400 Series	
				AT-FS970M/24C	
				AT-FS970M/24PS	

Ordering Information

AlliedView NMS

Release 15.0, AlliedView NMS server requires license key

AT-TN-NMS-R15-S

NMS service provider server software download. Requires license key at end of “free” evaluation period.

AT-TN-NMS-5KS-SK

License key, NMS support for 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.

Support for Non-Allied Telesis Devices

GenBand-G6



the solution : the network

Americas Headquarters | 19800 North Creek Parkway | Suite 100 | Bothell | WA 98011 | USA | T: +1 800 424 4284 | F: +1 425 481 3895

Asia-Pacific Headquarters | 11 Tai Seng Link | Singapore | 534182 | T: +65 6383 3832 | F: +65 6383 3830

EMEA & CSA Operations | Incheonweg 7 | I437 EK Rozenburg | The Netherlands | T: +31 20 7950020 | F: +31 20 7950021

alliedtelesis.com