ALCATEL-LUCENT OMNIVISTA 2500 NETWORK MANAGEMENT SYSTEM

The Alcatel-Lucent OmniVista® 2500 Network Management System (NMS) provides cohesive management and network-wide visibility, increasing IT efficiency and business agility. It provides a full set of management tools for converged campus networks and data center switching. This single, cohesive platform provides security for the Alcatel-Lucent Unified Access solution, and data center virtualization management for large, diversified network infrastructures. It also provides advanced network analytics for a full visibility into users, devices and applications, as well as predictive analysis for forward planning.

Providing a network-wide management system for the Alcatel-Lucent Enterprise Network portfolio, the OmniVista 2500 NMS provides a comprehensive set of components and tools for infrastructure configuration, monitoring, security, device configuration, alert management, quarantine, troubleshooting, downtime resolution, and overall management.

The OmniVista 2500 NMS increases the efficiency of day-to-day IT operations, resulting in a better user quality experience. It provides CIOs with the necessary tools and reports to enable successful business outcome.

BENEFITS

- Provides a web-based user interface for comprehensive, network-wide management platform, increasing IT efficiency and business agility.
- Web interface provides a customizable dashboard that can be tailored to the network administrator's most-used or critical management functions.
- HTML5 topology with advanced multi-level discovery to create comprehensive network map
- Northbound interfaces based on RESTtful APIs easily integrate customized network management functions or third-party systems.
- The highly scalable system is available as a virtual appliance. It can be installed on major operating systems with virtualization support, or deployed as a virtual appliance with its own operating system on Tier-1 Enterprise hypervisors.
- Network analytics monitor the network bandwidth and key traffic patterns through advanced collection and reporting capabilities. This provides insights for the IT department and CIO on how network resources are consumed, making it possible to proactively optimize the quality of the end-user experience.
- Application Visibility, with application monitoring, helps IT organizations to get a better understanding of bandwidth consumption per application. It provides network-wide user-based policies for bandwidth prioritization and enforcement

actions. Application Visibility-optimized IT operations, allow better security compliance and network resource use.
- Unified management of the entire network, including both Alcatel-Lucent and third-party network equipment:
  - ¬ Integration with the ClearPass™ Policy Management System provides full bring-your-own-device (BYOD) services for ease and consistency of management.
  - ¬ Unified access provisioning provides a single set of policy enforcement instructions for both wired and wireless users
- Simplifies configuration change management through scheduling and backup operations.
- Reduces the cost and time required to deploy Quality of Service and access control lists across thousands of devices, delivering consistent policy behavior.
- Provides an open approach by integrating with third-party intrusion detection/protection solutions (IDS/IPS), or any other intrusion notifications, leveraging security and traffic monitoring built into Alcatel-Lucent OmniSwitch® and OmniAccess® wireless solutions.
- Supports virtual overlay technology (VXLAN) for the data center as well as gateway functionality.
- Creates seamless, fully integrated management for virtual machine (VM) movements and ensures that network policies move with the VM.

Alcatel·Lucent
Enterprise

FEATURES

Platform

- Enterprise class , web-based consolidated network management application for network provisioning, troubleshooting, performance analysis and configuration operations
- Unified workflow for network services, resources, and users for wired and wireless infrastructure
- Northbound interface RESTful APIs for application interoperability and eco-system support

Deployment

- as Available as a virtual software appliance for full turnkey operation, supporting leading Hypervisors and operating systems

User interface

- HTML5 web-based client, allowing access through any browser, including mobile browsers
- User interface follows Web 2.0 principles, responsive web design enabling easy navigation, consistent workflow and user experience

Topology

- Detailed discovery of Alcatel-Lucent Enterprise Portfolio and third-party devices
- HTML5 topology with overlay display for Wired/wireless devices and virtual chassis
- Easily Customizable map with cluster rendering for large infrastructure
- Network visualization for logical and physical infrastructure, with actual neighbor linkage info (IP subnet, Layer 2, LLDP adjacency protocols) and live device status
- Dynamic, customizable, logical map based on user-defined filters (IP subnet, location, model, user-provided descriptive info)

Dashboard

- Real-time monitoring and analysis of critical network performance indicators through visual widgets
- Full choice of displays, data and other important network and device information, with advanced reporting capabilities

Role-based administrative controls

- Provides network administrators with both the tools and the ability to grant access to only those features and resources operators need.

- Provides controls to support IT for best practices. Management rights and access to all devices managed by OmniVista 2500 are granted through operator groups, device groups, and custom views of the devices with fine granularity on the authorized feature set.

Notification manager

- Monitors and analyzes alerts, notifications and network performance from Alcatel-Lucent and third-party devices in real time
- Advanced alert capabilities through customizable filters and sorting capabilities
- Remediation and notification actions based on predefined conditions with a single click

Locator

- Rapid troubleshooting and isolation of network issues through one-click mitigation
- Allows administrators to quickly search and pinpoint device location and associated devices, based on multiple criteria and live or historical searches
- Discovers third-party devices and indicates the nearest device that runs the Alcatel-Lucent operating system and to which the third-party device can be switched, showing the link on a topology map
- Expedites troubleshooting and problem resolution with right-click contextual menu and direct interaction with other OmniVista 2500 NMS components

Resource manager

- Manages complete device configuration life cycle
- Enables error-free, infrastructure-wide complex configuration management changes
- Automation tools to create infrastructure-wide software image update for baseline version management

Network analytics

- Monitors network bandwidth and traffic patterns down to the device port level through sflow® sampling collection and reporting
- Provides valuable insights into the applications (Top N apps) that are consuming the most network bandwidth, monitors application traffic arriving from users (Top N talkers), and stores and displays flow data with up to one minute granularity
- Provides insight in the network health with advanced graphical analytics on most problematic switches based on device state (CPU, memory, temperature)

- Enables automatic generation of business-centric, CIO-oriented graphical analytics reports for network

Predictive analytics

- Improves network health by providing capacity trending analysis, application on-port utilization, and potential anomalies in the on-port utilization that could impact network health and operational performance, thus enabling an enhanced end-user experience
- Threshold alert on trend projections and network anomalies, accelerating issue resolution by quickly identifying root causes and early warning signs of situations that could lead to outages, thus reducing downtimes
- Identifies new network resource requirements or needs for network redesign at an early stage, before they become a problem, thus streamlining network deployment

Application Visibility

- Provides Application Visibility through extensive application monitoring, for network-wide application inventory and use, allowing a better understanding of bandwidth consumption
- Allows centralized policy enforcement and application usage policy for the discovered applications by applying QoS policy enforcement such as, rate limiting, blocking and application prioritization
- Maintains application signature library that is always up to date, with subscription services for efficient application monitoring deployment
- Improves user experience and business outcome with embedded analytics engine, showing in depth application usage reports and key measurement indicators

Policy view

- Configures and deploys policies network-wide for bandwidth management and network access credentials through a task-centric workflow

Unified Access configuration

- Unified user interface for wired and wireless role profiles for user-based access
- Cohesive authentication configuration and end-user profile definition for appropriate network access rights and dynamic business policies

Figure 1. HTLM5 Topology view - Advanced display capabilities

Figure 2. Dashboard - Key indicators for faults, availability and performances

Figure 3. Unified Network Access- single management solution

Unified network management
• Unified access control
• Unified policy profile

OmniVista 2500 NMS

OmniSwitch 6860

OmniAccess AP

Corporate user directory
• Application access
• Network access
• Network policy

Secured unified access
• Users and guests are challenged for network access with any device
• Network policies are enforced on a per-user basis
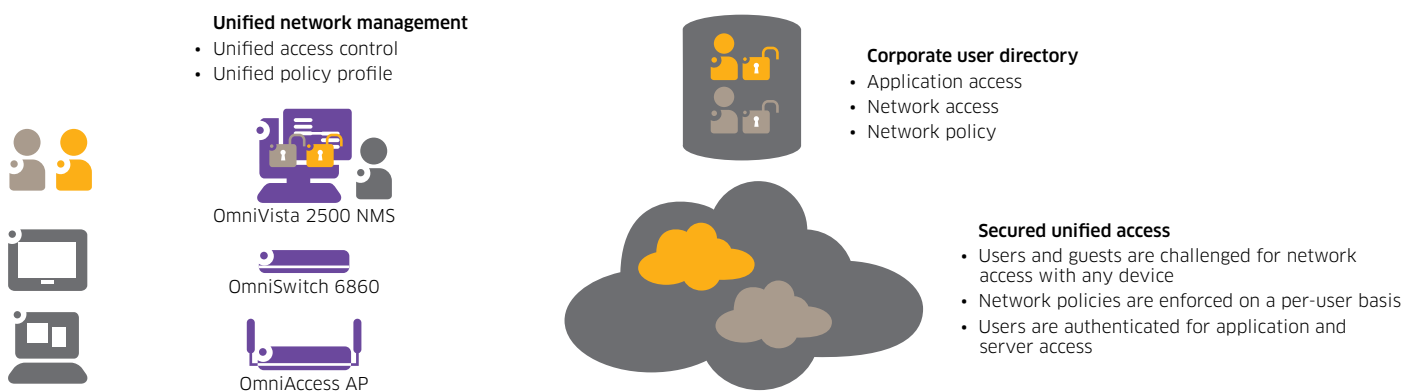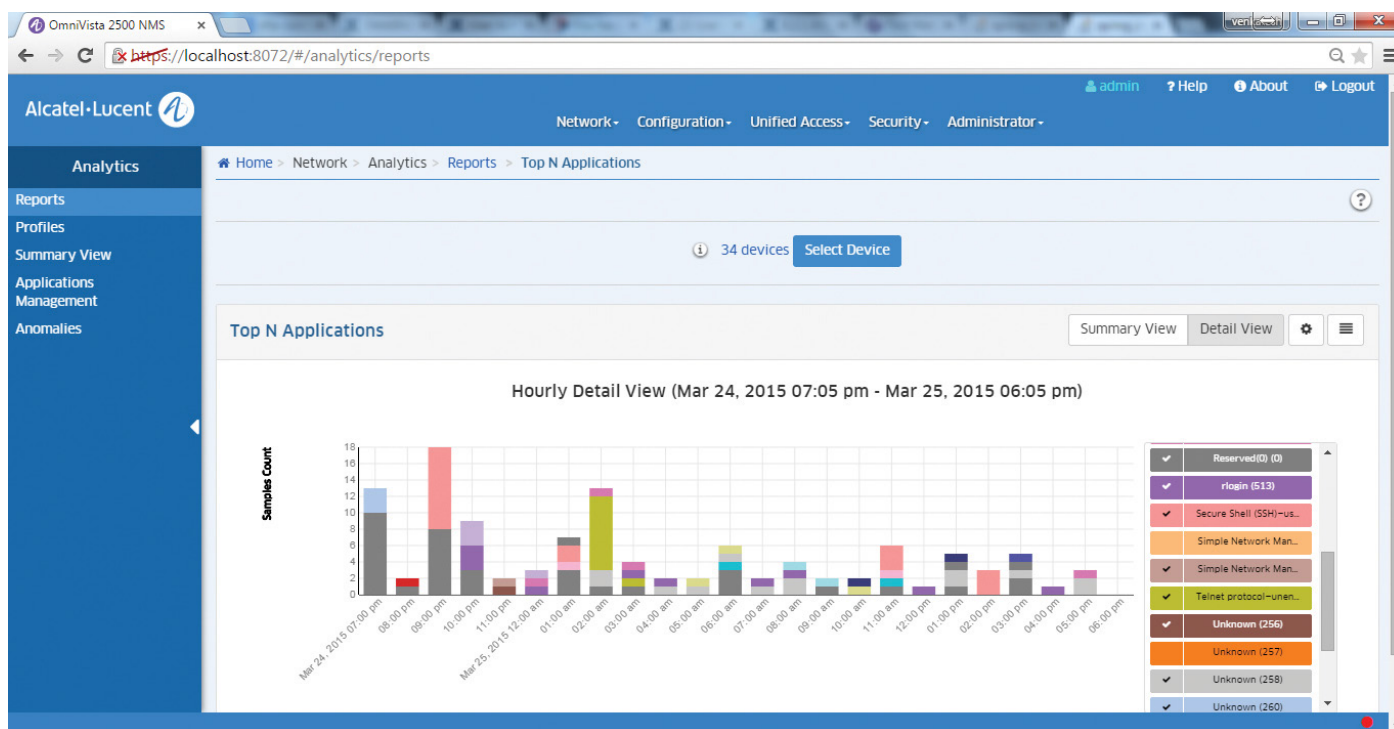• Users are authenticated for application and server access

Figure 4. Analytics – Top N apps - application usage indicators - detailed view

Premium (BYOD) services

• Integrates with ClearPass for unified authentication, with consistent checking for profile definition across all solution components
• Authentication configuration and end-user profile definition for appropriate network access rights and dynamic business policies

Quarantine Manager

• Provides threat mitigation through a secure perimeter against intrusion and malware attacks
• Provides mitigation and remediation through various actions (quarantine VLAN, port shutdown, blocking MAC addresses)

Virtual machine manager

• Single pane-of-glass for end-to- end physical and virtual networks infrastructure operations
• Agnostic support, Interfaces with VMware vCenter®, Microsoft Hyper-V® and Citrix™ XenServer® for discovery and inventory
• Real-time tracking between VM and its network location

ProActive Lifecycle Management

• Facilitates customer support and maintenance operations by delivering automated network insights and in-depth device inventory

• Captures hardware and software information at the device level based on warranty level, and lifecycle status based on hardware and software status through graphical reporting and instant dashboard reporting widgets
• Analyzes and correlates data against the Alcatel-Lucent Enterprise service and support maintenance best practices for faster support and easy remediation operations (requires an adequate support and service maintenance contract for feature access)

TECHNICAL SPECIFICATIONS

The OmniVista 2500 NMS solution is available as a Virtual appliance running on certified operating systems with hypervisors and Virtualization platforms
- The OmniVista 2500 NMS client is HTML5 web-based.

OmniVista 2500 NMS server
- Certified operating systems (64-bit version only) with hypervisor support
  - Microsoft® Windows™ Server 2012 R2 Hyper-V
  - Microsoft Windows 8.1 Pro & Enterprise Editions (with Hyper-V installed)
  - Red Hat® Enterprise Server 6.5 or higher with VirtualBox v5.0.12 or higher installed
  - SUSE® Linux Professional v12 with VirtualBox v5.0.12 or higher installed
- Certified hypervisors:
  - VMware ESXi™ 5.5 and 6.0
  - Microsoft Hyper-V 2012
  - VirtualBox v5.0.12 min.
- Minimum resource requirements
  - Intel® Pentium™ Quad Core 2.4 GHz
  - 16 GB RAM
  - 128 GB free disk space

OmniVista 2500 NMS appliance
- Certified web browsers:
  - Microsoft Internet Explorer™ 10+ for Windows PC client
  - Mozilla® FireFox™ 26+ for Windows PC and Linux clients
  - Google Chrome 26+ for Windows PC and Linux clients
- Minimum configuration
  - Microsoft Windows, Red Hat ES, SUSE LP (64-bit version only)
  - Intel Pentium Dual Core 2.4 GHz min.
  - 4 GB RAM

OmniVista 2500 NMS client
- Minimum configuration
  - Microsoft Windows, Red Hat ES, SUSE LP (32- and 64-bit versions)
  - Intel Pentium Dual Core 2.4 GHz minimum
  - 4 GB RAM
- Certified web browsers:
  - Microsoft Internet Explorer™ 10+ for Windows PC client
  - Mozilla® FireFox™ 26+ for Windows PC and Linux clients
  - Google Chrome 26+ for Windows PC and Linux clients

OmniVista 2500 NMS Unified Role based support
- OmniAccess WLAN controller release 6.3 or higher
- OmniAccess IAP (Instant Access Point) release 6.4 or higher
- OmniSwitch 6860/6860E with AOS release 8.1.1 or higher

OmniVista 2500 NMS Application Visibility
- OmniSwitch 6860 and 6860E with AOS release 8.2.1 or higher
- OmniSwitch 6900 and OmniSwitch 10K with AOS release 7.3.4R02 or higher

OmniVista 2500 NMS third-party systems interoperability
- Virtual Machine Manager hypervisor interoperability
  - VMware vCenter™ Standard Release 6.0 and higher
  - Microsoft Hyper-V 2012
  - Citrix XenServer™ Advanced and Enterprise Release 6.5 and higher
- Policy manager interoperability
  - Requirements for unified access: Aruba® ClearPass CPPM release 6.3 or higher

ORDERING INFORMATION

The OmniVista 2500 NMS license model is based on a license for core functionality for nodes and devices under supervision (NETWORK MANAGEMENT), with additional licenses required for additional functionalities, such as the Virtual Machine Manager (VMM).

Network management license

NETWORK MANAGEMENT licenses provide node and device management for the OmniVista 2500 NMS for advanced configuration and provisioning for Alcatel- Lucent Enterprise devices. NM License includes Application Visibility with application monitoring for the OS6860/6860E series, and application fingerprinting for the OS6900 /OS10k series . OmniVista 2500 NMS Application Visibility feature includes nodal provisioning for application monitoring, application enforcement and analytics reporting capabilities. Regular signature updates for OS6860E series are included as part of the Application Visibility feature.

NM license includes third party node management capabilities, such as discovery, topology and troubleshooting for Simple Network Management Protocol (SNMP) capable third-party devices. Network Management type licenses are available in various quantities and can be combined to match any specific configuration.

PART NUMBER	DESCRIPTION
OV4-START-NEW	OmniVista 2500 NMS - STARTER PACK- NEW Deployment - Virtual appliance for OmniVista 2500 NMS application. Configuration starter includes node management licenses (10 for Alcatel-Lucent Enterprise nodes, 10 for third-party devices) with supplemental licenses for VMM application (10 VMs). For Alcatel-Lucent Enterprise switching nodes, one license required for each physical unit in VC and stack configurations.
OV-NM-EX-10-N	OmniVista 2500 NMS - NODE MANAGEMENT EXTENSION 10 nodes - NEW Deployment. Additional node management license for 10 Alcatel-Lucent Enterprise nodes and 10 third-party devices. One license required per physical unit for VC and stack configurations for enterprise switching nodes. Application Visibility included as part of Node Management License. Can be added to other node management (NM) extensions –NEW to provide appropriate license configuration.
OV-NM-EX-20-N	OmniVista 2500 NMS - NODE MANAGEMENT EXTENSION 20 nodes - NEW Deployment. Additional node management license for 20 Alcatel-Lucent Enterprise nodes and 20 third-party devices. One license required per physical unit for VC and stack configurations for enterprise switching nodes. Application Visibility included as part of Node Management License. Can be added to other NM extensions - NEW to provide appropriate license configuration.

PART NUMBER	DESCRIPTION
OV-NM-EX-50-N	OmniVista 2500 NMS - NODE MANAGEMENT EXTENSION 50 nodes - NEW Deployment. Additional node management license for 50 Alcatel-Lucent Enterprise nodes and 50 third-party devices. One license required per physical unit for VC and stack configurations for enterprise switching nodes. Application Visibility included as part of Node Management License. Can be added to other NM extensions - NEW to provide appropriate license configuration.
OV-NM-EX-100-N	OmniVista 2500 NMS - NODE MANAGEMENT EXTENSION 100 nodes - NEW Deployment. Additional node management license for 100 Alcatel-Lucent Enterprise Nodes and 100 third-party devices. One license required per physical unit for VC and stack configurations for enterprise switching nodes. Application Visibility included as part of Node Management License. Can be added to other NM extensions - NEW to provide appropriate license configuration.
OV-NM-EX-500-N	OmniVista 2500 NMS - NODE MANAGEMENT EXTENSION 500 nodes - NEW Deployment. Additional node management license for 500 Alcatel-Lucent Enterprise nodes and for 500 third-party devices. One license required per physical unit for VC and stack configurations for enterprise switching nodes. Application Visibility included as part of Node Management License. Can be added to other NM extensions - NEW to provide appropriate license configuration.
OV-NM-EX-1K-N	OmniVista 2500 NMS - NODE MANAGEMENT EXTENSION 1000 nodes - NEW Deployment. Additional node management license for 1000 Alcatel-Lucent Enterprise nodes and for 1000 third-party devices. One license required per physical unit for VC and stack configurations for enterprise switching nodes. Application Visibility included as part of Node Management License. Can be combined with other NM extensions - NEW to provide appropriate license configuration.

VMM licenses

Virtual Machine Manager licenses are optional , providing supplemental capabilities for the OmniVista 2500 NMS. This license enables features set such as VM inventory, location, and state monitoring, with all the network infrastructure provisioning automation required to move VMs. VM Licenses are available in various quantities and can be combined to match any specific VM count.

PART NUMBER	DESCRIPTION
OV-VMM-200-N	OmniVista 2500 NMS - VMM - 200 VM - NEW Deployment. License for 200 VMs. Supplemental feature license for VMM applications for VM inventory, monitoring and UNP provisioning automation for VMware vCenter, Microsoft Hyper-V 2012 and Citrix XenServer platforms. Can be added to other NEW VMM extensions to provide adequate VMM
OV-VMM-500-N	OmniVista 2500 NMS - VMM - 500 VM - NEW Deployment. License for 500 VMs. Supplemental feature license for VMM applications for VM inventory, monitoring and UNP provisioning automation for VMware vCenter , Microsoft Hyper-V 2012 and Citrix XenServer platforms. Can be added to other NEW VMM extensions to provide adequate VMM
OV-VMM-1K-N	OmniVista 2500 NMS - VMM - 1000 VM- NEW Deployment. License for 1000 VMs. Supplemental feature license for VMM applications for VM inventory, monitoring and UNP provisioning automation for VMware vCenter, Microsoft Hyper-V 2012 and Citrix XenServer platforms. Can be added to other NEW VMM extensions to provide adequate

Alcatel-Lucent Enterprise provides access to services and continuous update maintenance support program for the OmniVista 2500 NMS. Evaluation licenses and parts upgrade numbers from previous deployments are available upon request.

Contact your Alcatel-Lucent Enterprise representative for further details.
http://enterprise.alcatel-lucent.com/?product=OmniVista2500NetworkManagementSystem&page=overview

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