



# ALCATEL-LUCENT VITALQIP® APPLIANCE MANAGER

End-to-end, feature-rich,  
appliance-based DNS/DHCP  
and IP address management

.....  
AT THE SPEED OF IDEAS™

Alcatel·Lucent  
Enterprise



# STREAMLINE MANAGEMENT AND CUT ADMINISTRATIVE COSTS WITH THE ALCATEL-LUCENT VITALQIP APPLIANCE MANAGER

Alcatel-Lucent is a proven global provider of market-leading IT management solutions. Our solutions can maximize profitability and productivity and help you leverage IT investment for a competitive advantage.

The Alcatel-Lucent award-winning VitalQIP software is used today by more than 850 customers worldwide, including over 50 percent of Fortune 100 companies.

# VitalQIP is a next-generation solution for automating address management services across IPv4 and IPv6 networks.

In today's complex networking world, it is critical to have reliable, secure, low-cost address allocation and management software that keeps your network running smoothly every day. The VitalQIP Appliance Manager portfolio provides a seamless, cost-effective way to deploy and maintain VitalQIP DNS/DHCP and IP Address Management software on an integrated appliance platform. The platform includes customized remotes and automated software patching, with monitoring on a certified hardware appliance or in a virtual environment.

## AUTOMATED DEPLOYMENT OF SERVICES

IP name and address services are essential to service availability and end-user performance capabilities. If end users are unable to obtain an IP address, they can't communicate or complete tasks essential to your business success. If application host names are not quickly resolved by programs in the end users' PCs, connecting to these applications and other services is difficult, if not impossible.

Consolidating all IP address information in a single location ensures that your geographically dispersed network administrators can access the same IP database. This eliminates duplication of administrative efforts and allows you to maintain a consistent IP inventory network-wide. Administrative efficiency is also increased by hosting IP address management services, such as DNS and DHCP, on specialized hardware appliance platforms – and security and uptime are improved, as well.

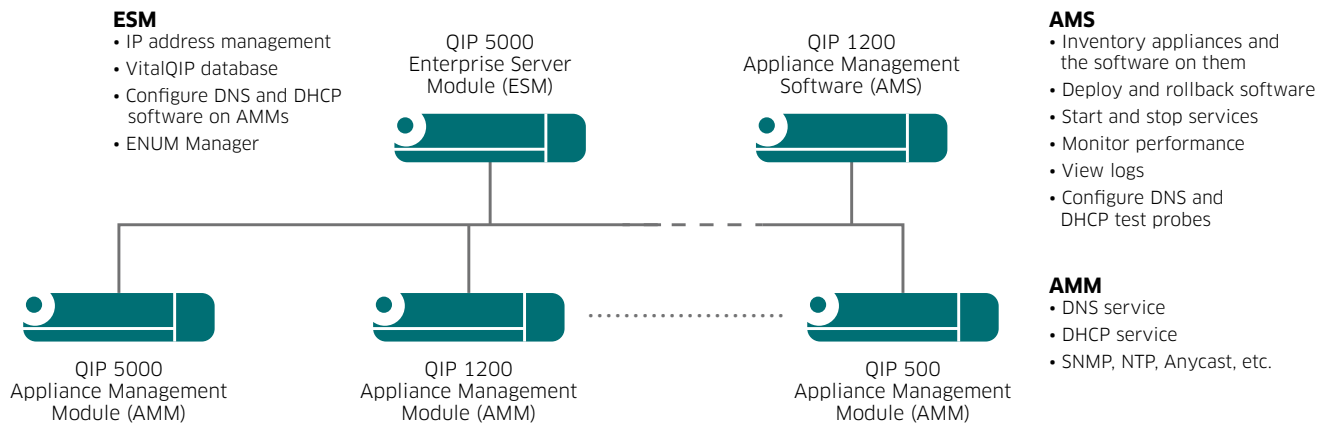
The VitalQIP Appliance Manager offers the latest multi-core Intel-based architecture, combined with the hardened Red Hat Linux operating system. In addition, a web-based graphical user interface (GUI) allows you to seamlessly manage deployment, apply patches and upgrades, and monitor IPAM, DNS, DHCP and other services.



## BENEFITS

This fully integrated, end-to-end appliance solution for market-leading VitalQIP software provides:

- + Automated deployment of critical IP name and address services
- + Simplified software upgrades and centralized deployment and monitoring of IPAM, DNS, DHCP, TFTP, NTP, SNMP and other services
- + Secure services with hardened OS (Red Hat Linux®) preloaded onto the appliance
- + Streamlined management that cuts administrative costs
- + Flexible deployment models and virtual options



Notes: 1) The ESM and AMS can reside on the same appliance, starting in AM 1.8 in April 2012.  
 2) Using a QIP 500 or QIP 700 Appliance as an ESM is not recommended.

Figure 1. Sample VitalQIP Appliance Manager configuration

## ENHANCED ADMINISTRATOR EFFECTIVENESS

The Alcatel-Lucent VitalQIP Appliance Manager:

- + Centralizes the definition of IP addresses and distributes network services, such as DNS and DHCP, using a single system. These capabilities are key to effective management of network-wide IP information.
- + Configures remote DNS and DHCP appliances using centralized data, which improves administrator productivity, while reducing errors.
- + Eliminates the need for administrators to individually access each and every remote machine.
- + Performs appliance management using the central console, which includes the Appliance Management Software.

## VITALQIP APPLIANCE MANAGEMENT SOFTWARE

The centralized VitalQIP Appliance Management Software (AMS) maintains an inventory of software packages and appliances and is easily launched from the VitalQIP web-based GUI. A token-based appliance authentication process is also included for security.

Deployment, upgrades and maintenance are simplified by configuring services on the AMS GUI before deployment and by logically grouping the appliances. With a few simple clicks, administrators can upgrade remote services, such as DNS and DHCP, to the latest software version, across many appliances. If any issues arise, you can roll back to a previous version of the service because upgrade records for each appliance are maintained in the AMS.

Using AMS monitoring capabilities, administrators have centralized access and a view of the entire appliance network. This centralized control provides quick and easy access to all log and configuration files, enables remote start and stop of services and allows any appliance to be taken offline rapidly for suspicious behavior. The appliances can also be rebooted from a central location, saving travel costs and time.

## HARDWARE AND SOFTWARE OPTIONS

The VitalQIP Appliance Manager is offered on redundant, high-performance, standard hardware and software configurations to meet the specific requirements of your network. The VitalQIP Appliance Manager QIP 5000 is designed for demanding environments and provides NEBS compliance. The VitalQIP Appliance Manager QIP 1200, QIP 1200-RAID and QIP 700 platforms are designed for typical enterprise applications. The VitalQIP Appliance Manager QIP 500 is ideally suited for retail and small office applications where cost, noise and size are important factors. Alcatel-Lucent also offers additional flexibility with software and virtual appliances, allowing you to install the same software that runs on VitalQIP hardware appliances on the hardware you choose.

# SUMMARY OF FEATURES

## PLATFORMS

- Integration with the market-leading VitalQIP software
- Centralized appliance management data store to oversee services and remote appliances
- Automated software upgrade capability with rollback options
- Highly secure communication between AMS and appliances, with unique appliance key generation
- Logical grouping of appliances to simplify upgrades
- Software version history maintained per appliance in AMS
- Remote start/stop/initialization of services
- High-availability DNS using heartbeat and virtual address mechanism
- Retrieval of log/config files
- Connect, configure and go model for appliance activation
- Syslog redirection that enables centralized monitoring of appliances and services
- Software appliance option that enables use of existing corporate standard hardware or virtualization, which provide the same benefits as the hardware appliance

## SERVICES

- VitalQIP Enterprise Services with Sybase database, which provides appliance-based IP address management
- Industry's highest performance DHCP server, enabling rapid IP address assignment for the delivery of robust IP services
- VitalQIP DNS server (BIND 9 based), which enables rapid address resolution
- DNS reliability enhanced with DNS high-availability and anycast features
- DNS/DHCP probes that enable testing and monitoring of DNS/DHCP services
- VitalQIP SNMP service for monitoring DNS/DHCP services and appliance hardware
- TFTP service for file transfer services
- NTP service for time synchronization among appliances and clients
- VitalQIP Auto Discovery, which discovers network devices quickly and efficiently

## SECURITY

- Security-hardened version of Red Hat Linux OS
- Limited port access, as well as lockdown of appliance console
- Unique secret key that is exchanged between centralized software and each appliance for authentication
- Authorized appliance access granted by a centralized AMS administrator



### VITALQIP 500

Powered by an Intel 64-bit Atom processor in a compact desktop chassis



### VITALQIP 700

Powered by a 64-bit Intel Pentium CPU in a 1U platform, which includes 4 GigE NICs, 4 GB of memory, a 500-GB disk and lights out management



### VITALQIP 1200

Powered by a high-performance 64-bit architecture, 1U form factor platform, with Intel Xeon X3430 Quad Core 2.4-GHz CPU, 4 GB of memory, 500-GB SATA HD, DVD drive, 4 GigE NIC cards, dual power supply and remote lights out card



### VITALQIP 1200-RAID

Powered by a high-performance 64-bit architecture, 1U form factor platform, with Intel Xeon X3430 Quad Core 2.4-GHz CPU, 8 GB of memory, (4) 500-GB RAID-10 Disks, a DVD drive, 4 GigE NIC cards, dual power supply and remote lights out card



### VITALQIP 5000

Powered by two 64-bit multi-core Intel Xeon processors in a NEBS-3 compliant 1U form factor platform that is NEBS compliant (AC or DC), with mirrored RAID 1, dual power supplies and remote lights out card



The VitalQIP Appliance Manager includes the Appliance Management Software (AMS), the Enterprise Server Module (ESM) and the Appliance Management Module (AMM). The AMS is used to manage appliances in the network. The ESM provides VitalQIP Enterprise Services, such as the IP Address Management functions, user interface and centralized database support. The AMM provides VitalQIP remote services, including DNS, DHCP, SNMP and other services. The AMM and AMS functions can run on any of the QIP appliances. The ESM function can run on QIP 1200, QIP 1200-RAID and QIP 5000 appliances. The hardware and software configuration options are summarized in Table 1.

**Table 1.** VitalQIP Appliance performance - a price-performance-leading solution

	<b>QIP 5000 NEBS COMPLIANT WITH RAID AND DUAL POWER SUPPLIES</b>	<b>QIP 1200 AND QIP 1200-RAID ENTERPRISE APPLIANCES</b>	<b>QIP 700 ENTERPRISE REMOTE APPLIANCE</b>	<b>QIP 500 RETAIL AND SMALL OFFICE APPLIANCE</b>
Leases per second	6,400+	12,000+	1,500+	1,000+
Queries per second	60,000+	100,000+	50,000+	10,000+

Alcatel-Lucent leverages innovations from Bell Labs and experience and expertise from the Global Customer Delivery team to provide high-performing and highly scalable solutions. The benefits include increased IT staff productivity resulting from user technology, and more reliable network and application performance for improved service availability.



**Table 2.** Hardware/software configuration options

PLATFORM	AMS MANAGEMENT STATION	AMM REMOTE DNS/DHCP SERVICES	ESM VITALQIP ENTERPRISE SOFTWARE	CAPACITY
QIP 500	√	√	N/A	Powered by an Intel 64-bit Intel® Atom™ processor in a compact desktop chassis
QIP 700	√	√	N/A	Powered by a 64-bit Intel Pentium® CPU in a 1U platform, includes 4 GigE NICs, 4 GB of memory, 500-GB disk and lights-out management
QIP 1200	√	√	√	Powered by a high-performance 64-bit architecture, 1U form factor platform, with Intel Xeon® X3430 Quad Core 2.4-GHz CPU, 4 GB of memory, 500-GB SATA HD, DVD drive, 4 GigE NIC cards, dual power supply and remote lights out card
QIP 1200-RAID	√	√	√	Powered by a high-performance 64-bit architecture, 1U form factor platform, with Intel Xeon X3430 Quad Core 2.4-GHz CPU, 8 GB of memory, (4) 500-GB RAID-10 disks, DVD drive, 4 GigE NIC cards, dual power supply and remote lights out card
QIP 5000	√	√	√	Powered by two 64-bit multi-core Intel Xeon processors in a NEBS-3 compliant 1U form factor platform with mirrored RAID 1, dual power supplies and remote lights out card, NEBS compliant (AC or DC)
Software appliance	S-AMS	S-AMM	S-ESM	64-bit Red Hat Linux-compatible hardware virtualization

# THE ALCATEL-LUCENT ADVANTAGE

To learn more about these and other management solutions, contact your Alcatel-Lucent sales representative, authorized reseller or sales agent. You can also visit our web site at:

**[www.alcatel-lucent.com/vitalqip](http://www.alcatel-lucent.com/vitalqip)**