Alcatel-Lucent VitalQIP Services Manager Software

IP MANAGEMENT SOFTWARE

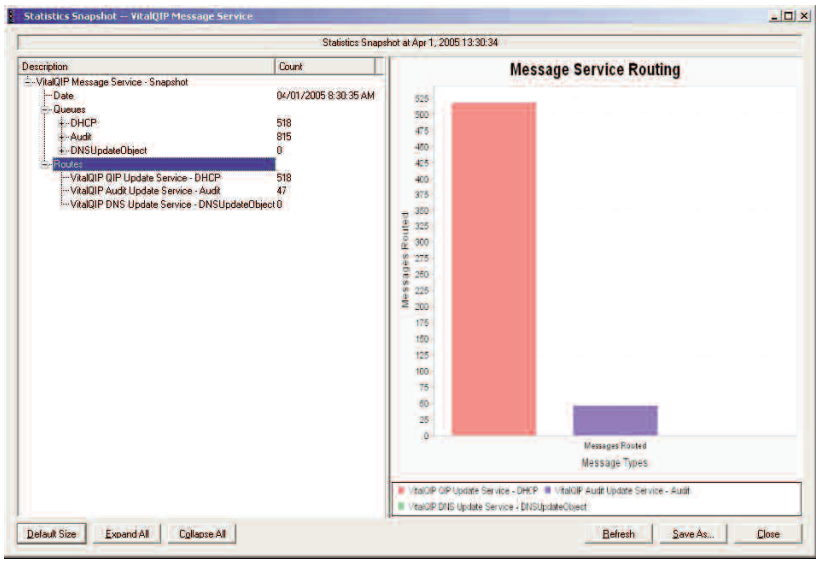
Alcatel-Lucent® VitalQIP™ DNS/DHCP and IP Management software efficiently configures, automates, integrates and administers IP services across an entire network — locally or globally. This powerful management software centralizes IP services planning and administration, enabling rapid provisioning of address space and reliable delivery of critical IP name and services. VitalQIP software provides the foundation on which to extend the system's capabilities and increase the return on network investment. Modules, such as VitalQIP Services Manager, augment the value and versatility of a VitalQIP software solution.

Key features

- DNS and DHCP Agents and Probes
- History logging

Key benefits

- Ensures service delivery by verifying the operation of DNS and DHCP servers network-wide
- Addresses potential issues by immediately identifying servers or processes that are not performing properly
- Gains essential management information by initiating probes for DNS resolutions and DHCP lease grants
- Simplifies capacity planning with automatically compiled server activity histories



Potential problems addressed before outages disrupt core business processes

Even a minor disruption of Domain Name System (DNS) and Dynamic Host Configuration Protocol (DHCP) services can compromise the ability to communicate, access and work with business-critical data. Most network management tools can verify that these services are up and running. However, the real test is whether a tool can tell if a DHCP or DNS server is operating as it should. For example, if DNS is resolving names correctly or DHCP is supplying addresses efficiently.

VitalQIP Services Manager software helps maintain tight control over these essential IP network services. The award-winning Alcatel-Lucent VitalQIP management system monitors probes and reports on all DNS and DHCP activity across the network. VitalQIP Services Manager software provides instant alerts of any change in server status and automatically maintains a history log of DNS and DHCP activity. It is easy to use and configure, and is readily customizable to monitor services not related to the VitalQIP system. In addition, users can preset service monitoring intervals for Agents, as well as the threshold for unavailable services, to trigger auto-restart on all services/daemons controlled by the VitalQIP Services Manager.

DNS status monitoring and analysis

VitalQIP Services Manager software provides network management information available from DNS servers on status, statistics and history.

- Status: DNS server status monitoring takes place at two levels:
  - ¬ DNS Agent: A Java™ application residing on the DNS server constantly monitors and reports all DNS-related activity.
  - ¬ Probes: The DNS Probes (located at multiple network points) test the various DNS servers by requesting known resolutions, ensuring they are responding correctly. Probes can be configured to query for any resource record type, and a probe agent can query as many DNS servers as necessary. Polling intervals or on-demand specialty tests are readily configurable.
- Statistics: Requests made of DNS servers are automatically recorded and can be viewed at any time. Information is presented both at summary and detailed levels, with graphical views for quick visualization. Statistics include the number of requests made of the server by resource record type.
- History: Information collected via polling of the DNS servers is captured for quick reference. This helps administrators know the DNS load at any given time and plan DNS server placement.

DHCP status monitoring and analysis

VitalQIP Services Manager software also provides network management information available from DHCP servers on status, statistics and history.

- Status: DHCP server status monitoring takes place at two levels:
  - ¬ DHCP Agent: A Java application residing on the DHCP server constantly monitors and reports all DHCP-related activity.
  - ¬ Probes: The VitalQIP Services Manager monitors the status of a DHCP server to verify all software components are running and determines whether the server is actually issuing leases. Probe agents perform DHCP broadcasts from various points on the network and receive addresses from the DHCP servers (and subsequent renews if required). Together the Services Manager and Probes monitor and report on the following:
    - ¬ Addresses are being issued
    - ¬ Renews are being performed
    - ¬ Correct servers are responding
    - ¬ Rogue servers are responding
- Statistics: Administrators can evaluate DHCP statistics from a summary level per server down to a particular subnet. Reported items include the number of DHCP and Bootstrap Protocol (BOOTP) addresses configured, used and unused.
- History: DHCP information is captured and stored for easy reference.

Message Service status monitoring and analysis

VitalQIP Services Manager software monitors the status of VitalQIP message routes and queues:

- Statistics: Administrators can evaluate Message Service statistics from a summary level per server down to a particular message route or queue. Reported items include the total number of messages received, messages routed per message type, messages received and queued (on disk and in memory) per message type.
- History: Message Server information is captured and stored for easy reference.

Flexible customization and interface options

VitalQIP Services Manager software defines, monitors, and remotely starts and stops diverse services based on UNIX® or Microsoft® Windows NT® running outside of the VitalQIP software environment. It is possible to define custom probes to test any environment; alerts are posted when responses are either not received or not as expected.

The Services Manager GUI can be replaced the with a network management system (e.g., Hewlett-Packard® OpenView™) interface currently in use.

Features

- Tools and interfaces
  - ¬ Server/status monitoring: polls remote agents for active status of server and services
  - ¬ Configuration: configures all services to be managed, plus polling times
  - ¬ Administration: templates enable creation of user views for multiple distributed administrators
  - ¬ GUI: based on Microsoft Windows® for ease of operation
  - ¬ Command line interface (CLI): for integration with other network management systems (e.g., HP OpenView)
  - ¬ Remote environment access: for reviewing the remote environment, logs and policy files from the GUI
  - ¬ Secure communication: optionally configure SSL connections for communication with the remote agents
  - ¬ RDBMS: uses a Sybase® database as a repository for all statistical data for faster and more efficient reporting
  - ¬ Statistical information: can be exported via the GUI for use with third-party graphing software for easy charting
  - ¬ Administrator permissions: fine grain control over Services Manager admin permissions; for example, restrict the ability of junior admins to only allow them to start services, or only view application logs
  - ¬ Customizable views: views are an arbitrary user-defined collection of servers and/or services. Some users manage things geographically, some manage by business unit, some by service type. Views allow the user to restrict access to specific servers or services for individual administrators.
- Platform support
  - ¬ Microsoft Windows Server® 2003 Enterprise and Standard editions (32 bit only)
  - ¬ Solaris™ 9 and 10 operating system on UltraSPARC® microprocessors
  - ¬ Red Hat® Enterprise Linux® 4 (x86 only)
  - ¬ Sybase 15.0.1

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