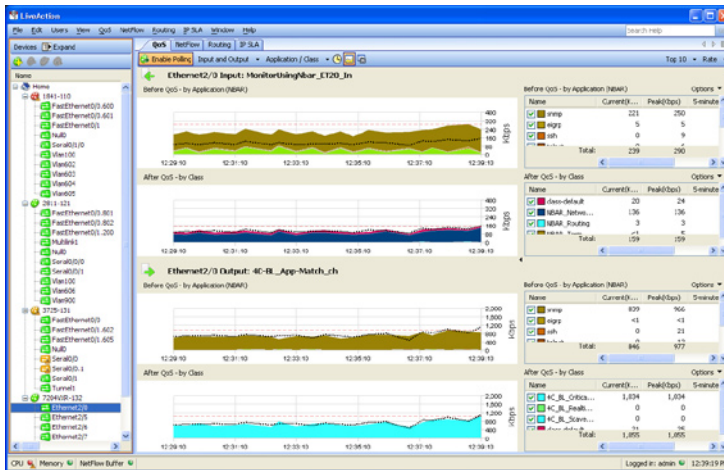


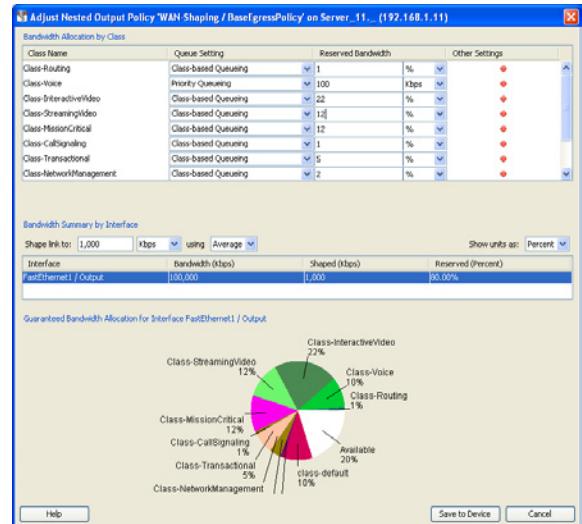
LiveAction™ QoS

Effortless quality of service monitoring and configuration for live networks



Pre- and Post-QoS Monitoring

The interface panel displays both the Input (ingress) and Output (egress) traffic for individual interfaces showing traffic before and after QoS is applied.



Easy QoS Management

See and adjust output policy and set guaranteed bandwidth allocations for specific classes on each interface.

LiveAction QoS is knowledge-based software for configuring, monitoring, and troubleshooting quality of service (QoS) for Cisco routers and switches. The software empowers IT engineers of all experience levels to create, edit, implement, and monitor highly effective QoS policies on live networks with complete ease and confidence. LiveAction QoS consists of two components.

- **QoS Monitoring**—LiveAction QoS monitoring provides rich QoS visualizations of the network topology plus live QoS data for individual interfaces and applications. In addition, LiveAction also includes extreme CBQoS monitoring plus historical views and reporting.
- **QoS Configuration**—LiveAction QoS configuration provides the ability to create, edit, and apply detailed QoS policies and configurations from scratch or using one of the many QoS templates provided.

Why LiveAction QoS?

Although QoS is built into Cisco routers and switches, many IT departments lack the resources or time to master this complex technology. LiveAction QoS simplifies router configuration and monitoring and makes it easy for IT engineers to fully implement Cisco QoS on their networks.

QoS helps ensure bandwidth is properly allocated and network applications are properly prioritized to meet the needs of the business and its users. In addition, LiveAction QoS can be used to detect, show, and effectively block unauthorized activity on the network.

Key Features and Benefits

- **Ease of use**—LiveAction's intuitive graphical interface replaces command lines to make on-the-fly configuration and monitoring fast and easy to understand.
- **Built-In QoS expertise**—Extensive expertise is built-into LiveAction based on our own knowledge of the features, functions, and even idiosyncrasies of Cisco devices.
- **QoS templates**—Policy and class templates allow rapid implementation of QoS settings based on Cisco best practices. Users can modify templates or create their own.
- **Policies**—Router configurations can be saved for future use, as backups, or for automatically scheduled configuration changes for individual or multiple devices.
- **Rich visualizations**—The software's graphical presentations provide a clear view of QoS details from system topology down to the individual interface and even the queue level.
- **Additional ROI**—LiveAction uses the QoS features built into Cisco devices, eliminating the need to invest in more hardware or specialized appliances.
- **Reduces Errors**—LiveAction reduces configuration errors with easy to apply, rules-based QoS policies and templates.
- **Enhances security**—Combine real-time QoS monitoring and configuration with NetFlow to identify and eliminate unauthorized traffic and denial of service (DoS) attacks. Prevents security leaks by easily stopping traffic from passing between networks.

Features and Specifications

QoS Monitoring

- Rate-based NBAR graphs
- Pre- and post-QoS graphs
- Peak and average rate statistics
- Class and interface drop graphs
- Congestion indicators
- Built in CBQoS MIB viewer
- Custom NBAR definitions
- Hierarchical policy graphs
- NBAR unknown port debugging
- GRE tunnel visualization
- Automatic QoS graph resync on policy changes

Troubleshooting

- Unknown port discovery
- View QoS graphs across routers
- Topology-based QoS state

Additional Reporting

- Historical views and reporting
- Extreme low level graphs of CBQoS statistics

QoS Configuration

- Full MQC QoS configuration support include WRED, CBQoS, Priority Queueing
- Ability to read existing QoS policies on the router
- Take snapshots of current configuration for future use
- Rollback to previous policies at anytime
- Apply or remove QoS configurations quickly and easily across multiple interfaces
- Ability to push policies to multiple devices
- Hierarchical policy creation for advanced configurations

- Custom NBAR based matches including HTTP URL, MIME, HOST and RTP protocols
- Build in ACL editor
- CLI command preview
- Built-in rules for QoS settings that also highlight attempted violations
- Graphical inbound and outbound QoS editors
- WAN shaping support

Devices Supported

- Cisco series routers—800, 1800, 2600, 2600XM, 2800, 3600, 3700, 3800, 7200, 7600 (IOS 12.3, 12.4)
- Cisco Catalyst switches—3900, 4500, 6500 series

LiveAction Technology Module Options with QoS

The following are available for 10, 25, 50, or 100 devices

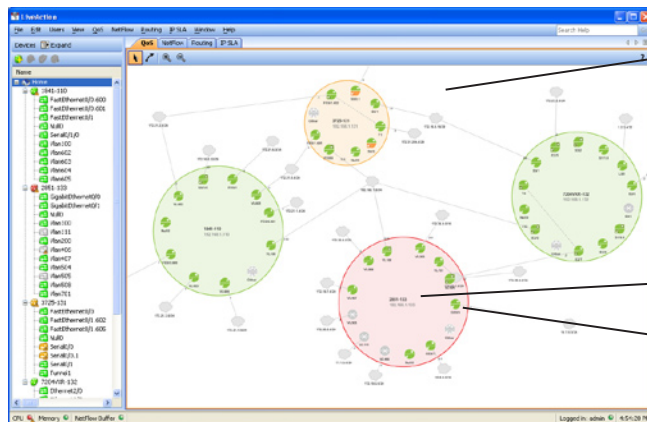
- QoS (monitor and configuration)
- Monitor suite: QoS (monitor only), NetFlow, Routing
- Master suite: QoS, NetFlow, Routing, IP SLA

System Requirements

- Network connection
- Operating system: Windows (Server 2003, XP, or Vista)
- CPU: Pentium 4 class, 1 GHz minimum, 2-3 GHz dual- or quad-core recommended
- System RAM 1 GB minimum—2-4 GB recommended
- Disk space: 100 MB to install—20 GB recommended

Warranty and Support

- 90 day warranty and support including free upgrades
- Online technical support
- Annual software maintenance plans available



QoS Topology View

LiveAction automatically generates a live topology view when you use the system to log onto network devices. It also identifies the interfaces in each of the devices and their network IP connections. Live Action QoS displays congestion and bandwidth usage from a live system level topology and allows users to drill down into individual devices and interfaces for greater detail.

Large circles indicate devices (routers, switches)

Smaller circles indicate individual interfaces

- Dark green color indicates QoS policy is applied to interface
- Amber color indicates congestion
- LiveAction displays input and output bandwidth for each interface.



LiveAction software is available from Referentia Systems, Inc.
550 Paiea Street, Suite 236, Honolulu , HI 96819

+1 808 423-1900

www.referentia.com liveaction@referentia.com

© 2009 Referentia Systems Incorporated. All rights reserved. Referentia and the Referentia logo are trademarks of Referentia Systems Incorporated. LiveAction is a trademark of ActionPacked! Networks. Cisco is a registered trademark of Cisco Systems, Inc. Information subject to change without notice. ActionPacked! Networks is a spin off of Referentia Systems, Inc.

D5001-001A-0509