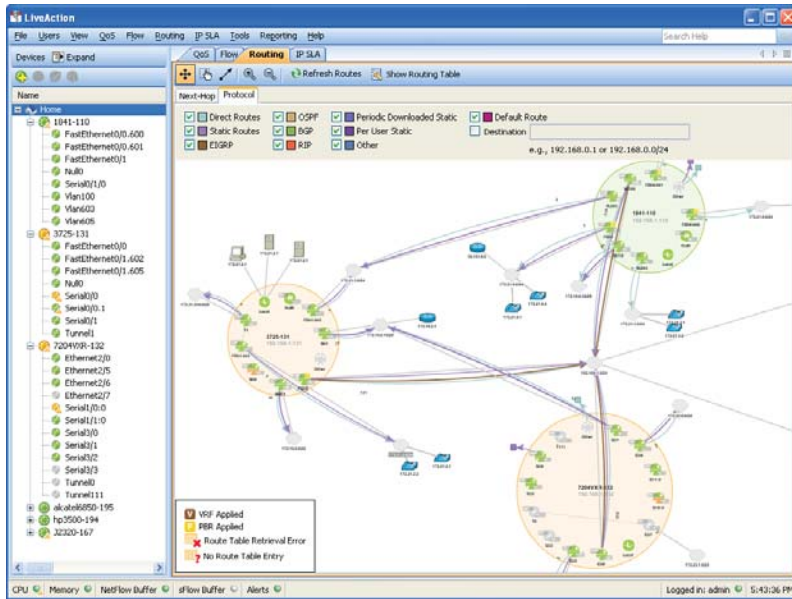


# LiveAction™ Routing

Richly detailed routing layer visualizations plus interactive PBR for Cisco networks



LiveAction Routing automatically generates a live topology view (shown) as well as detailed device level views. Real-time visualization shows routes among various devices and interfaces on the network for easy detection of routing loops, asymmetric routes, and other anomalies.

Routers are depicted as larger diameter circles and interfaces as smaller diameter circles. Green indicates normal activity or usage, gray indicates inactivity, and amber indicates congestion. Routes appear as curved lines that are color-coded by protocol.

LiveAction includes display filters for closer inspection of specific routes and protocols.

**L**iveAction Routing is a software module that provides real-time routing layer visualizations for Cisco networks. In addition, the module's policy-based routing feature provides a high degree of control allowing users to route traffic easily and predictably over user-specified paths.

## Why LiveAction Routing?

LiveAction Routing makes it easy to view and understand how traffic is routed through your network by providing highly intuitive visualizations at both the system topology and device level. The software shows how traffic is being forwarded, why some traffic is not getting through, identifies routing loops, asymmetric routes, and other anomalies. Convenient filtering controls makes it easy to focus on specific routes based on their protocols and destinations. At the device level, the software displays route table information both in tabular form and in a topology view.

## Policy-Based Routing

Cisco policy-based routing is a powerful feature that often goes unused due to the complexity of the command line interface and the extensive knowledge required to use it effectively. LiveAction makes policy-based routing nearly effortless by eliminating the need to learn and use command lines and by providing an expert, knowledge based interface for use by IT engineers of all experience levels.

The LiveAction Routing module allows users to set rules and instructions to reroute designated packets over very specific paths. There are many applications for policy-based routing such as enforcing security, enhancing QoS or load balancing, and ensuring that essential traffic gets through during emergency situations.

## Key Features and Benefits

- **Ease of use**—An intuitive graphical interface makes it easy to view and troubleshoot routes and to implement policy-based routing without the need to learn and use complicated command lines.
- **Improved efficiency and performance**—Reduces the time required to troubleshoot network problems and simplifies policy-based routing to improve network security, efficiency, and quality of service.
- **Built-In routing expertise**—LiveAction Routing is based on Cisco best practices and uses an extensive knowledge base of Cisco routing functions.
- **Rich visualizations**—LiveAction provides live topological views with numerous filtering options for highly focused visualizations of the routes on the network. Routing paths are easily correlated with traffic flows for quicker problem identification. At the device level, the software also displays a graphical view of the router's route table.
- **Interactive configuration**—The powerful policy-based routing feature allows IT engineers, regardless of their experience level, to create, edit, and execute detailed routing policies and Set statements to achieve very high levels of control with complete ease and confidence.
- **Virtual Routing and Forwarding (VRF)**—LiveAction VRF visualizations displays and exports virtual routing and forwarding table information.
- **Exceptional ROI**—By taking full advantage of existing features built into Cisco routers. LiveAction significantly reduces the need for additional equipment while maximizing the proficiency and speed of IT staff.

# Features and Specifications

## Features

- System level topology view of active routes
  - Displays by protocol, directionality, and destination
  - Mouseover displays individual route statistics
- Device route table views in graphical and tabular form
  - Shows destinations for interface
  - Displays all entries or filtered entries only
- Route display filtering by protocol
  - Filters by direct and static routes
  - Filters EIGRP, OSPF, BGP, RIP protocols
  - Filters per user and periodic downloaded static routes
  - Other filters: IS-IS, mobile, on demand, IGRP, EGP
- Next-hop route tracing with topology view
  - Trace path to destination address
  - Optionally show return route path
- Route display filtering by destination
  - Shows default route
  - Shows routes to destination IP address
  - Shows routes to destination network
- Export function
  - Exports route, route table info for further analysis
  - Exports forwarding tables to CSV file (by device)
- Refresh for real-time updates of routing layer
  - Refreshes all routes or specified routes only
- Troubleshooting capabilities
  - Displays routing loops and asymmetric routes
  - Alerts to routing instabilities
  - Detects black holes
  - Provides error summarization
- Policy-based routing (PBR)
  - Configuration and editing of PBR and Set statements
  - Editing of existing route map configurations
  - Validates user entries to ensure PBR compliance
  - Displays indicates where PBR is applied
  - Exports route map statistics
  - Displays static routes and PBR issues
- Virtual Routing and Forwarding (VRF) Visualization
  - Display virtual routing and forwarding tables
  - Export VRF tables to CSV file

## Devices Supported

- Cisco Series Routers\*—800, 1700, 1800, 2600, 2600XM, 2800, 3600, 3700, 3800, 7200, 7600
- Cisco Series Switches\*—Catalyst 6500, 4500, and 3000 series switches.

\*IOS 12.3, 12.4; IOS 12.2 for 7600 and Cat 6500 series

Policy-based routing provides an additional layer of control for enhancing security, blocking unauthorized traffic, improving QoS and network performance, and redirecting traffic in the event of route failures.

## LiveAction Technology Module Options with Routing

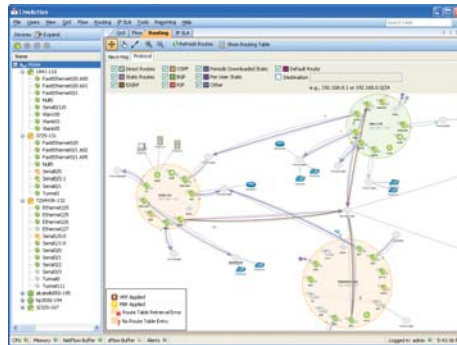
- Monitor Suite: QoS (monitor only), Flow, Routing
- Master Suite: QoS, Flow, Routing, IP SLA

## System Requirements

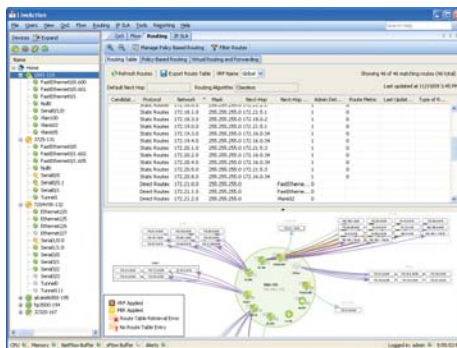
- Windows-based PC with network connection (visit our web site for current system requirements)

## Warranty and Support

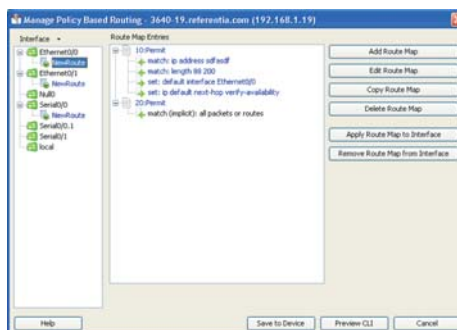
- 90 day warranty and support including free upgrades
- Online technical support
- Annual software maintenance plans available



LiveAction displays active routes in real time. Route filtering and color coding shows routes based on selected protocols and destinations. This simplifies troubleshooting and provides a more focused analysis of specific routes.



Device level view displays the entire route table in both tabular form (upper portion) and graphically (lower portion).



LiveAction makes it easy to implement policy-based routing to force packets to take specific routes based on user-specified rules.



LiveAction software is available from Referentia Systems, Inc.  
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