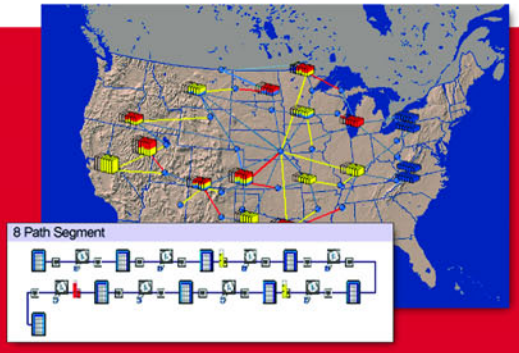
VitalEvent®
Real-Time Event Analysis Software



Lucent's exclusive topology and path map displays provide real-time visual status information on elements across your network.

Proactive Problem Identification via Real-time Surveillance

VitalEvent® software helps you optimize ATM, MPLS, VPN and IP services with powerful real-time capabilities and views of network connectivity that traditional management products cannot match. Using the data collection capabilities of Lucent's VitalNet™ Network Performance Management software, it lets you monitor key events as they unfold. Adaptive statistical thresholding and end-to-end path analysis enable you to proactively identify network resources that are not meeting specified service parameters, as well as congestion hot spots, so you can address emergent problems before they impact your customers.

Features

- **Real-time event analysis and notification capabilities**
  - Real-time surveillance — continuously monitors WAN, IP, Frame Relay and ATM traffic, elements and interfaces network-wide
  - Versatile thresholding — offers default, user-configurable and adaptive (learned from historical data) thresholds, device-specific or network-wide
  - Multi-hop path analysis — discovers and monitors selected point-to-point IP paths through the network, tracking events on individual devices and resources
  - Powerful event analysis — advanced tools filter, analyze and summarize raw performance data, present it instantly in comprehensible graphical displays
  - Instantaneous event notification — provides graphical screen displays, e-mail/pager and trap messages
- **Powerful visualization tools**
  - Real-time displays — provides choice of customizable geographic topology maps, connectivity views, path visual displays, graphs, tabular reports; all with immediate drill-down functions for details
  - Browser-based interface — enables easy, intuitive navigation and data manipulation
- **Industry-leading scalability** — accommodates today's largest networks; readily expandable to monitor new elements as they are introduced
- **Flexible multi-technology support** — monitors diverse resource types and more than 500 devices from more than 50 vendors

Benefits

- **Real-time abnormality detection and resolution** — detect performance changes as they happen, cut diagnosis and resolution times from hours to minutes, minimize trouble tickets
- **Prioritized problem-resolution efforts** — filters, analyzes and summarizes quality indicators, letting you focus your efforts based on severity and user classification
- **Intelligent capacity and congestion management** — end-to-end path analysis spotlights under- and over-utilization, enabling proactive congestion management
- **Improved service quality** — continuously identify and communicate network irregularities that threaten service quality
- **Enhanced end-user satisfaction** — uncover event patterns that cause chronic performance problems; pre-empt performance-threatening problems before they degrade service quality; verify third-party vendors' SLA compliance in real time

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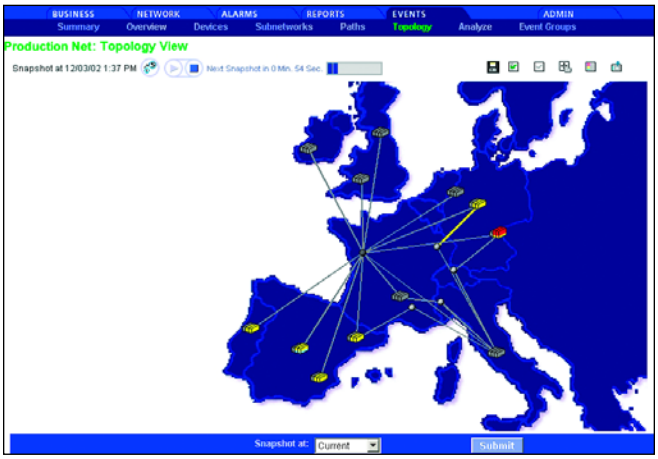
VitalEvent® Software Operations and Specifications

Data Collection

- Automatic discovery of network SNMP-enabled devices
- Leverages VitalNet™ data collection pollers to prevent network traffic spikes due to data collection
- Supports virtually any SNMP network element via standard SNMP objects, including Lucent, Cisco, Nortel and others
- ATM support for trunk links; ATM and FR support for PVC and SPVC measurements
- Collects key performance data including utilization, packet loss, Internet Control Message Protocol (ICMP) data, throughput and CPU utilization for network elements and interfaces
- Flexible architecture accommodates new network elements as network evolves
- Performance measurement query ability allows for viewing historical performance data
- Stores performance data in a commercial relational database management system allowing SQL access
- Capacity designed for at least 8 days of periodic data and 32 days of events

Visualization

- Geographic Topology views (below) of performance data show devices, interfaces and subnetworks with associated events; allow complex topologies to be viewed at a high level with drill-down to more detailed information; customizable topology allows nodes to be placed on a user-configurable map image



- Path analysis maps display selected IP route paths through the network
- Tabular text views of performance data, including a summary display with drill-down expansion; tables can be customized by specifying columns, column order and default sort order

Advanced Thresholds

- Flexible threshold capability (includes default, user-configurable and adaptive – based on historical data) generates events for network conditions according to user-established parameters
- Customizable "business-aware" threshold sets for various times of the day or week
- Rate-based thresholds enable alerts based on multiple occurrences of performance events over a specific time period
- Event conditions by thresholding interval – allows event conditions to be configured as active only during a certain time of day, for SLAs that apply during specific periods
- Aggregate "super events" can be generated from collections of correlated events

Event/Alarm Processing

- SNMP traps are processed against configurable thresholds; includes standard traps as well as configurable trap formats
- Users can be notified of events even when they are not viewing a VitalEvent® software screen; flexible configuration options allow specific messages (or messages about specific devices) to go to specific individuals
- SNMP traps can be generated (and forwarded) for a configurable set of performance events to systems such as HP OpenView, Micromuse NetCool, or Lucent *Navis*® Network Fault Manager (NFM)
- Integrated Fault Management allows performance and trap events to be viewed from the same GUI screen for faster problem diagnosis
- "Event Index" ranks the relative importance of multiple network events
- Event conditions can be applied to members of a specific event group

Scalability

- N-tier architecture for unsurpassed scalability
- Data collection interface with VitalNet™ supports up to 10M polled objects

Flexibility

- Provides open APIs
- Supports SNMP v1/v2
- Supports 100's of simultaneous users/active clients through Web-based interface

Administration

- Uses the same powerful web-based GUI as other VitalSuite® products for both administrative and real-time displays
- Robust default behavior and configurability provides out-of-the-box functionality
- Secure SSL (https) provides 128-bit encryption between client/master

Server Configurations

VitalEvent® – VitalNet™ WIN2000 Servers

Network Resources	Master Servers	Aggregation Servers	Poller Servers	Report Servers	VitalEvent® Servers
0–25,000	1	0	0	0	1
25,000–70,000	1	1	2	1	1
70,000–20,000,000	1	1 per 70,000	2 per 70,000	1 (optional)	1 per 70,000*

* Note: The number of VitalEvent® Servers required follows the number of VitalNet™ Aggregation Servers

VitalEvent® Software Operations and Specifications *(continued)*

Monitored Devices/Resource Types

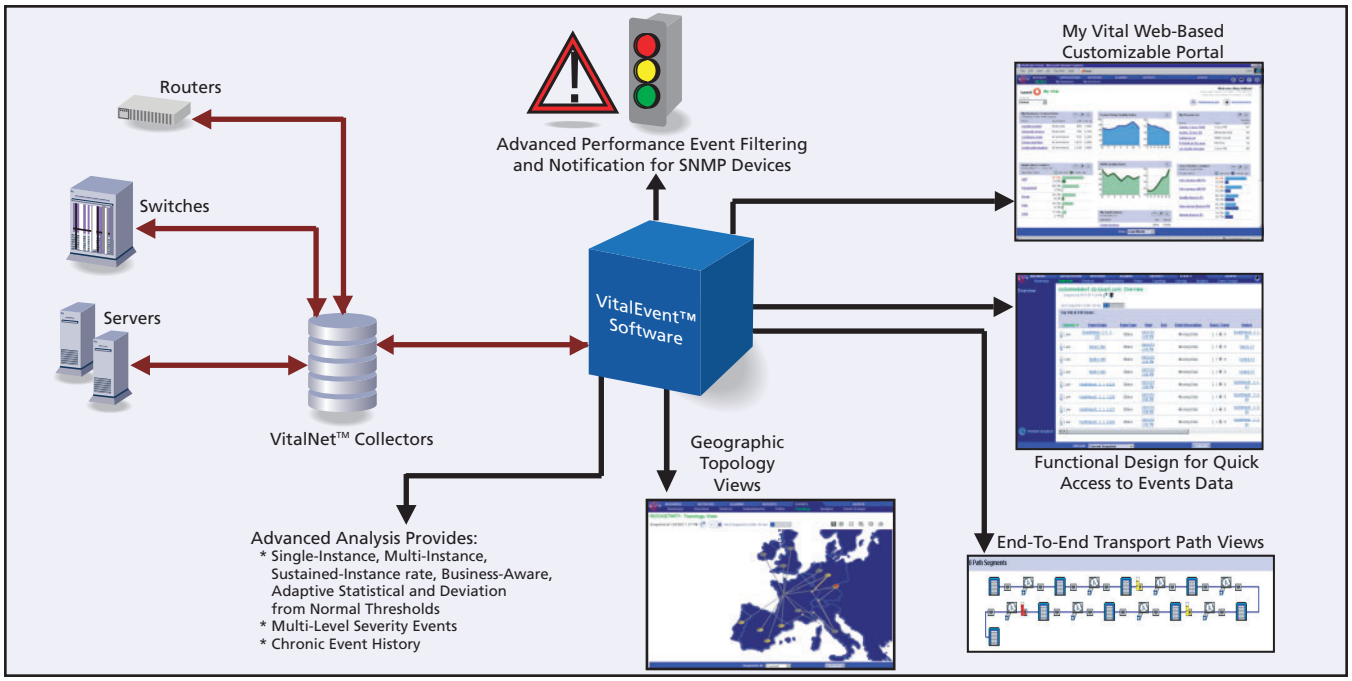
- Over 50 vendors supported via VitalNet™ software
- Over 500 devices certified
- Routers: Lucent, Cisco, Nortel, 3Com®, Juniper, Redback
- WANs: Circuits, Frame Relay PVCs, ATM PVCs, ATM trunks, logical ports on WAN switches, and routers
- LANs: Ethernet, Token Ring, switches, hubs, SMON VLAN
- Servers: Microsoft® NT/2000, UNIX, Novell®, Compaq®, SNMP Research, BMC

Client/Administrator Interface Requirements

- IE 5.5/6.0 or Netscape 6.2 (Solaris) and Netscape 7 (Windows®)
- Video resolution 1024 x 768
- Acrobat Reader 4.0/5.0 with browser plug-in

System Requirements

- **Windows® 2000**
  Dual Pentium® III Processor @ 700 MHz, or equivalent, 1.5 GB RAM, 72 GB free disk space, CD-ROM drive, Windows® 2000, SQL 2000 database



Collecting data from VitalNet™ Performance Management software, the VitalEvent® system meters, analyzes and reports packet network performance in real time.

VitalSuite® Network Performance Management Portfolio

Optimize network, service and application performance

Winner of many awards, including the Network World "World Class Award" for best performance management system, the Lucent VitalSuite® portfolio integrates multiple software modules to provide comprehensive, cost-effective service provider solutions. Giving you real-time views into everything from complex application transactions to mission-critical network resources, it lets you continuously monitor, measure and optimize performance at every level of your network.

VitalEvent® software helps you optimize multi-vendor packet data and voice networks with real-time capabilities and views of network connectivity that are unavailable from conventional performance management systems. It uses the VitalNet™ data collection capabilities to help you identify, analyze and visualize key events as they unfold.

VitalApps™ Application Performance Management software monitors your network-based applications, giving you a real-time view of each user transaction from the desktop, across the network or Internet, to the servers and back again. You get a complete picture of overall application performance network-wide. Potential trouble spots are clearly flagged on the system's graphical summary screens. And powerful fault management capabilities enable problems to be rapidly diagnosed and efficiently addressed.

VitalNet™ software seamlessly merges network performance data with real-time event and application data from the other VitalSuite® modules, VitalEvent® and VitalApps™, to help you instantly understand how diverse processes and multi-vendor devices are interacting to support your network operations.

Navis® iOperations Software Solutions

Navis® iOperations software is a comprehensive portfolio of multi-vendor, multi-technology Operations Support Systems for wireline, wireless, optical, circuit and data networks. *Navis*® iOperations systems are developed on extensible, programmable platforms, open APIs and advanced system architectures to provide carrier-class reliability and scalability, as well as rapid and affordable integration into your preferred operations infrastructure.

The award winning Lucent *Navis*® iOperations portfolio, including VitalSuite® and VitalQIP™ network management software, support the breadth of network management operations, including service provisioning, service assurance, and element management, mediation and modeling. *Navis*® iOperations solutions enable the delivery of advanced services across current and next-generation networks – while improving efficiencies, significantly reducing operating expenses and delivering the quality of service that customers demand.

Navis® iOperations software solutions are supported by Lucent Worldwide Services (LWS), systems integrators and service provider partners who provide a comprehensive suite of world-class planning, deployment, operations and maintenance services.

To learn more, contact your Lucent Technologies sales representative, authorized reseller or sales agent. You can also visit our web site at http://www.lucent.com/oss or call 1-888-426-2252

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