Riverbed OPNET Sentinel®
Network Audit, Security, and Policy Compliance

OPNET Sentinel is a software appliance for ensuring network integrity, security, and policy compliance. It performs automated network-wide configuration audits, analyzing an up-to-date model of your network to diagnose device mis-configurations, policy violations, configuration inefficiencies, and security violations. OPNET Sentinel's intelligent analysis and reporting engine:

- Employs a unique model-driven auditing approach and rules-based analysis engine to pinpoint configuration mistakes and differences not detectable through traditional stringmatching techniques.
- Offers over 1,000 out-of-the-box rules based on industry best-practices (e.g., Cisco SAFE, CIS Benchmarks), security standards (e.g., PCI, DISA STIG), and field expertise.
- Provides simple, powerful, and flexible template-based checking of any command line output collected from devices.
- Allows rapid customization of rules and templates to ensure conformance to organizational standards and requirements.

Benefits

- Avoid network outages and minimize downtime by rapidly detecting network mis-configurations.
- Ensure compliance with regulatory, organizational, and security policies.
- Reduce operational costs with automated auditing and reporting.
- Plan for timely handling of hardware and software end-of-life announcements.
- Enhance staff productivity.

Testimonials

"Based on the customized audit reports in OPNET Sentinel, we were able to enforce a global standard across the entire organization. The entire process is now automated, not only leading to significant cost savings, but also detecting policy violations much faster, before they affect service availability. As a result, we have been able to reduce network outages by as much as 30%.”

Network Architect
Global News Organization
### Key Features

- Performs scheduled audits of network devices (e.g., routers, switches, firewalls, and load balancers) to pinpoint configuration errors.
- Analyzes a semantic model of the network to identify network configuration issues and differences not detectable through regular expression-based analysis (the approach used by most other auditing tools). Checks topology, routing information, individual device consistency, and logical relationships between devices to accurately pinpoint network configuration inconsistencies and differences.
- Provides popular out-of-the-box templates for regulatory and industry standards, e.g., PCI-DSS, FISMA, HIPAA, CIS, SOX, DISA STIGs, NIST, NSA, and Cisco SAFE.
- Verifies that network security policies have been implemented effectively by identifying breaches in defenses such as open ports and misconfigured Access Control Lists (ACLs).
- Identifies device configuration, topology, performance, and routing changes in a comprehensive network differences report.
- Validates device configurations against a “golden” configuration. Enables proactive problem prevention with automatic download of new security advisories and OS end-of-life announcements.
- Provides a fully customizable rule suite, and an open authoring environment to enable rapid customization of audits based on organizational standards and requirements.
- Automatically alerts on critical issues via email, pager, SNMP trap, syslog, or trouble detection.

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**Testimonials**

“OPNET Sentinel takes the manual labor out of running a network audit. It automates the whole process of configuration collection, analysis, and reporting. The reports are created like clockwork every night and they identify a wide array of potential configuration issues that would be virtually impossible to identify manually.”

**Senior Network Analyst**
US Energy Utility

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**Diagram Example:**

- **HSGP: Insufficient Number of Routers**
  - This rule checks if every HSRP standby group in the network includes at least the specified minimum number of routers.
  - The rule score is 75.

- **Trend Audit Results and Compliance Over Time:**
  - Detect latent errors in redundancy configurations.
  - Trend audit results and compliance over time.
Audit devices against vendor-issued security advisories and end-of-life notices. Plan for timely handling of hardware and software EOE and EOL announcements.

Periodically audit against security standards like PCI-DSS Standard.

Testimonials

[Riverbed] was selected to add value by allowing us to optimize network performance, including right-sizing links, minimizing mistakes in router configurations and even pointing out inefficient configurations. We have already experienced the benefit of using [Riverbed] software through the reduced number of customer trouble tickets.

Senior Consultant
Global IT Services Management Organization
Compare OPNET Sentinel to Other Solutions

- Unlike most auditing tools that use traditional string matching techniques, OPNET Sentinel software uses an intelligent semantic analysis of the network to provide a more comprehensive detection of network problems.
- Provides a comprehensive network difference report comparing performance, routing and configuration changes to enable easy correlation of configuration changes to their impact.
- OPNET Sentinel software offers validation and auditing of proposed changes prior to deployment.

Testimonials

“Misconfigurations were reduced by more than 70% in just a few months through regular network configuration analysis. Our credit card services network is now operating with higher than ever infrastructure availability - over 99.5%. Routing, IP addressing, Hot Standby, ACLs - all of these are too important and too complex to be managed manually.”

VP, Infrastructure Performance Management
Major US Bank

For Service Providers

- Out-of-the-box auditing of BGP, IS-IS, OSPF, MPLS, and VPN configurations.
- Service summary reports describing configured L2/L3 VPNs and VPLS instances.
- IPv6 readiness assessments to evaluate a network’s ability to support required features prior to migration or deployment.
- Specialized rules to verify subscription/ oversubscription thresholds based on client interfaces and services.
About Riverbed

Riverbed delivers performance for the globally connected enterprise. With Riverbed, enterprises can successfully and intelligently implement strategic initiatives such as virtualization, consolidation, cloud computing, and disaster recovery without fear of compromising performance. By giving enterprises the platform they need to understand, optimize and consolidate their IT, Riverbed helps enterprises to build a fast, fluid and dynamic IT architecture that aligns with the business needs of the organization. Additional information about Riverbed (NASDAQ: RVBD) is available at www.riverbed.com.

DATA SHEET: OPNET Sentinel

RELATED SOLUTIONS

Riverbed OPNET NetMapper software
Automated Network Documentation

OPNET NetMapper software accelerates network diagramming, auditing, and troubleshooting by automatically generating up-to-date infrastructure diagrams. Diagrams include detailed logical and physical device configuration information and logical views of the network, including Layer 2/3, OSPF, EIGRP, HSRP/VRRP, BGP, VLANs, Spanning Tree, VPNs, and device virtualization.

Riverbed OPNET Network Planner Software
Network Planning and Engineering

OPNET Network Planner software automates analysis and planning of multi-technology, multi-vendor networks. It performs “what if” analyses to manage risk and cost associated with network growth and change – accelerating application deployments and migration to new technologies, such as VoIP, VPNs, IPv6, and more. OPNET Network Planner’s predictive design environment trends traffic growth for capacity planning, optimizes network designs to reduce the risk of downtime, and proposes QoS configurations to achieve desired network and application performance.

Riverbed OPNET nCompass software
Real-Time Network Visualization and Monitoring

OPNET nCompass software provides unified, real-time visualization and monitoring of large, heterogeneous networks, including devices, their interconnectivity, traffic, status and events. OPNET nCompass software unifies data from a wide range of network management tools, providing consolidated views for more intuitive and productive navigation and analysis. Third-party tools and scripts can be launched from the OPNET nCompass console for deeper drill-down and expedited troubleshooting.


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