# Riverbed NetlM

# Infrastructure management, monitoring and troubleshooting

# The Business Challenge

As much as one-third of all enterprise network problem are configuration changes/errors while 31% of problems are device failures/bugs (Enterprise Management Associates, Network Management Megatrends 2018: Exploring NetSecOps Convergence, Network Automation, and Cloud Networking) however, most organizations "have four or more tools monitoring their IT infrastructure" (EMA, Network MegaTrends 2018). These multiple IT Infrastructure Monitoring (ITIM) tools create challenges in an increasingly dynamic infrastructure environment. Infrastructure teams have difficulty managing proactively while performance blind spots make troubleshooting problems difficult and time consuming.

Unfortunately, disruptive technology is only increasing this pressure. DevOps causes servers to quickly be added and retired, cloud adoption causes new network challenges, and IoT places increased burden on network bandwidth and performance. Without a new, holistic approach to ITIM, companies will fall behind, failing to deliver the initiatives and services that drive the business.

#### The Riverbed Solution

Riverbed® NetIM is a holistic solution for discovery, modeling, monitoring and troubleshooting your infrastructure. It enables companies to capture infrastructure topology, detect performance and

configuration issues, map application network paths, diagram your network, and troubleshoot infrastructure problems. As an integrated component of the Riverbed platform, customers are able to manage infrastructure issues in the context of overall, blended performance management.

- Unified Network Performance Management (NPM)
  Performance Management: As a part of the Riverbed
  NPM platform, NetIM adds critical infrastructure data
  and analysis. This complements other performance
  domains (application performance, network
  performance, UC, and end-user experience
  management), and provides context to infrastructure
  management. It enables companies to holistically
  manage performance and rapidly troubleshoot problems.
- Real-Time Monitoring: Riverbed NetIM leverages multiple approaches (e.g., synthetic testing, SNMP, CLI, WMI, Syslog, Traps) to continually discover and identify new and changed infrastructure components.
- Automated Analytics: Powerful analysis enables you to establish performance baselines, measure current performance, and identify anomalies and violations. Configuration information is also captured and similar analytics are applied to detect and identify configuration changes, which may impact the infrastructure.
- Rich Visualization: Riverbed NetIM provides a rich set of tailored information from real-time topology with information overlays and dashboards for level 1 operations, to advanced reporting for heads of IT operations.

• Troubleshoot Performance: Search-based workflows, event management, and on-demand network paths enable companies to quickly identify and troubleshoot infrastructure performance issues. In addition,

Portal-based blended views enable organizations to analyze infrastructure issues in the context of applications, network, and end-user performance.

### Key Benefits

Riverbed NetIM dramatically reduces the workload associated with managing and monitoring your infrastructure. It maximizes network availability by reducing performance blind spots, empowering proactive infrastructure management, and improving troubleshooting.

# Increasing IT infrastructure visibility and understanding

- Discover and map infrastructure devices
- Identify changed devices
- Leverage real time network topology views to monitor infrastructure performance

### Improve anomaly detection

- Automatically set performance baselines
- Identify performance deviations
- Streamline hand-off between infrastructure and network teams

# Troubleshoot infrastructure issues with actionable intelligence

- Drill-down from high-level blended performance views to application specific topology maps
- · Quickly identify infrastructure elements that are underperforming or misconfigured
- Understand application path as it travels throughout the network

# Get started rapidly and easily

- · Horizontal Scale: Highly distributed with horizontal scale architecture to meet enterprise needs for large and complex infrastructures
- Cloud Deployment: Available as virtual or cloud deployments
  - ESXi 6.5 and 6.7 OVA
  - AWS Commercial and Government Regions
  - Azure Commercial and Government Regions



Figure 1 Home page enables you to visualize infrastructure performance by side, device, and by type.

#### Key Features In Depth

# Real-time network topology

- Riverbed NetIM leverages multiple approaches (e.g., synthetic testing, SNMP, CLI, WMI) to identify new and changed components within the infrastructure topology
- · A new topology view is updated in real-time providing instant insight into the health and performance of the managed infrastructure

#### Reporting

- · Reports including Performance, Inventory, Availability, Configuration and more.
- Capacity Performance reports help customers identify short-term and long-term capacity needs on links and other objects across global infrastructure.

### Proactive performance management

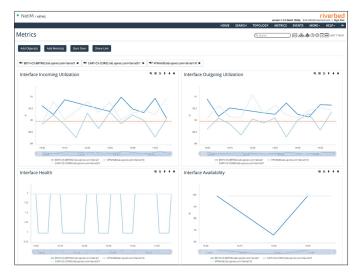
- Curated views provide drilldown details into site, group, device, and interface details
- · Out-of-the-box reports provide insight into your managed infrastructure and operational issues
- Automated health index scores help identify poor performers
- Synthetic testing allows you to proactively monitor application availability and performance remotely from various locations in your network

#### Efficient troubleshooting

- Troubleshooting Toolbox empowers IT operations managers with the ability to triage and troubleshoot issues that relate to network availability, performance and configuration information
- Metrics navigator provides in-depth visibility and troubleshooting into the performance issues by letting users mix and match multiple metrics from different devices in a single view and compare them
- AppNetwork path shows how application data transverses the network making performance troubleshooting easier
- One-click drill down between NetProfiler and NetIM combines network traffic information with infrastructure (availability, performance and configuration)

#### Integrations

· One-click drill down between NetProfiler and NetIM combines network traffic information (Flow visibility) with infrastructure health (SNMP) in a single pane of glass, to enable application-aware infrastructure visibility





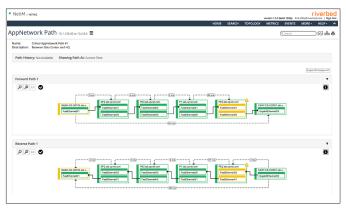


Figure 3 AppNetwork path lets you view application data as it transverses the network.

#### Related Products

#### Riverbed NetAuditor

Automates network mapping, documentation, auditing, security, and policy compliance. Riverbed® NetAuditor is a comprehensive solution that helps companies diagram, manage, and report enterprise configuration. The solution's context-specific network maps and diagrams enables users to troubleshoot network and configuration issues, automate audit reporting, and better execute network changes.

#### Riverbed NetPlanner

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. Riverbed® NetPlanner'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 NetProfiler

Provides troubleshooting and root cause of network and application issues with end-to-end network performance monitoring. The solution combines data from Riverbed® Flow Gateway, SteelHead, and AppResponse appliances, as well as virtual solutions into a single, integrated view.

#### Learn More

For IT, application performance is the most visible indicator of job performance, and that's why organizations around the world rely on Riverbed® NPM products for the insight they need to deliver a consistently top-notch user experience. With our performance management solutions, you can monitor every critical part of your network and application performance and troubleshoot any issues that arise—before they become problems. Whether you are rolling out new applications, consolidating or virtualizing data centers, migrating to the cloud, or simply in need of a troubleshooting and visibility solution, Riverbed NPM provides you with a holistic view of your environment.

To learn more about Riverbed NPM solutions please visit riverbed.com/NPM.

#### **About Riverbed**

Riverbed enables organizations to maximize performance and visibility for networks and applications, so they can overcome complexity and fully capitalize on their digital and cloud investments. The Riverbed Network and Application Performance Platform enables organizations to visualize, optimize, remediate and accelerate the performance of any network for any application. The platform addresses performance and visibility holistically with best-in-class WAN optimization, network performance management (NPM), application acceleration (including Office 365, SaaS, client and cloud acceleration), and enterprise-grade SD-WAN. Riverbed's 30,000+ customers include 99% of the *Fortune* 100. Learn more at riverbed.com.

