

NetProfiler

Proactive, ubiquitous flow monitoring for hybrid and multi-cloud

Business Challenge

“The network is slow.” If you’re like most netops managers, you probably hear this complaint too often. To really understand what’s occurring on your network, you need an end-to-end view of the hybrid network into performance issues.

Riverbed® NetProfiler

Riverbed NetProfiler provides network flow analytics that you can use to quickly diagnose network issues and identify security threats before end users ever know there’s a problem. NetProfiler combines network flow data with packet-based flow metrics to provide proactive monitoring, analysis, and reporting. Use NetProfiler to answer questions such as how much traffic do I have, who is using it, where is it going, and how is it prioritized?

Behavioral Analytics

IT organizations need to understand how degraded performance affects network and application performance, and ultimately business performance. NetProfiler uses behavioral analytics for proactive monitoring. It baselines normal performance and alerts on changes as soon as they occur—typically before users are even aware that performance is degrading.

Dependency Mapping

NetProfiler automates the mapping of application transactions to their underlying infrastructure so that application definitions and interdependencies are accurate. This helps you create service maps that accelerate the identification of issues across complex application ecosystems, and plan for data center consolidation, cloud, disaster recovery, or virtualization initiatives.

Ubiquitous Visibility

Deploy anywhere and everywhere you need for on-premise, virtual, or cloud visibility. NetProfiler is designed to meet your hybrid and cloud needs, supporting Azure NSG Flow Logs, AWS VPC Flow Logs and Google Cloud VPC Flow Logs.

For more information on NetProfiler, please visit: riverbed.com/netprofiler.

Integrations

NetProfiler integrates with several other Riverbed NPM solutions to enrich your every day IT operations functions.

These one-click integrations include:

- **Riverbed® AppResponse and AppResponse Cloud:** network forensics and networked application analysis
- **Riverbed® NetIM:** infrastructure management with network path analysis
- **Riverbed® SteelHead™:** WAN optimization and functions as remote data source for NetProfiler
- **Riverbed® Portal:** single source of truth for network, application, infrastructure performance, and end-user experience monitoring
- **Riverbed® IQ:** Unified observability platform with AI driven metrics and event correlation

“Riverbed NPM has reduced the time it takes us to identify network slowdowns and application performance issues. It saves my network team a lot of time.”

Operations Manager,
Small Business Consume Products Company

“The reporting capabilities of Riverbed NetProfiler are awesome. It can generate any type of report I need!”

Network Administrator,
Large Enterprise Electronics Company

Key Benefits

Improve cloud and hybrid network visibility and performance

Speed problem identification and resolution

Mitigate cyber-security risks

NetProfiler Home Screen

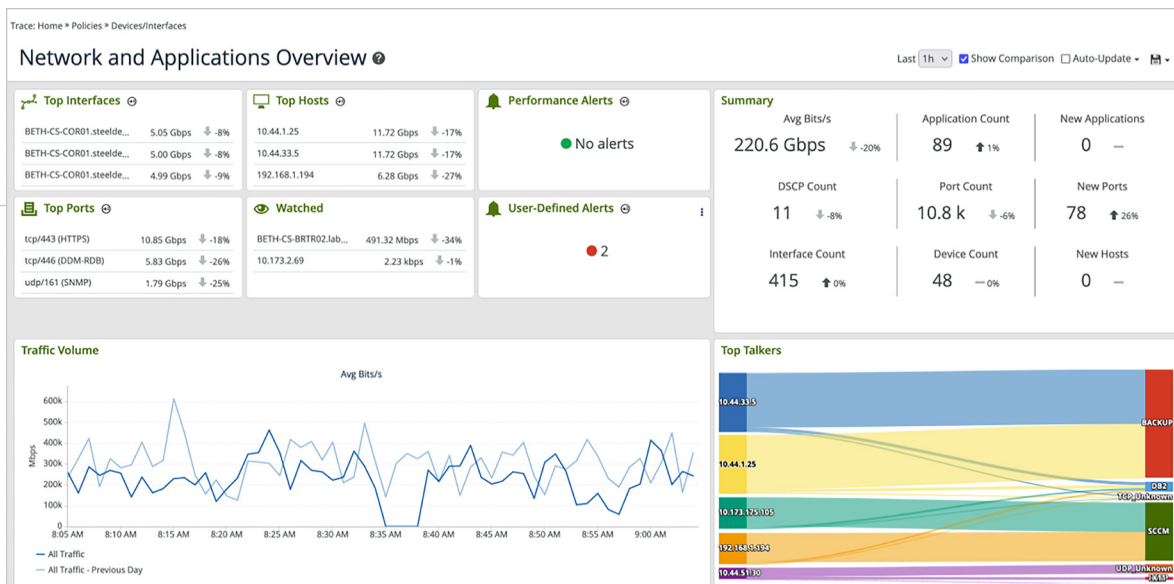


Figure 1: Personizable to each user, the NetProfiler Home Screen offers an at-a-glance summary of the network and how it's changed; recent alerts; To Talkers Sankey; overall traffic charts, and a watch list so you can see what's important to you.

Key Features

Application Recognition and Monitoring

NetProfiler offers three ways to create a custom application definition. You can map:

- Hosts, host groups, protocols, ports to an application name
- Auto-recognized applications to an application name
- URLs to an application name

Deep packet inspection of application traffic from Riverbed AppResponse, NetShark and SteelHead for easy viewing and analysis in the NetProfiler dashboard to help you quickly and accurately distinguish business-critical from recreational applications that are running across your network including the optimized WAN.

Anomaly Detection

Uses baseline statistics and proactive monitoring to trigger an alert once a deviation is detected, without prior knowledge of specific applications, path dependencies, and number of users.

SD-WAN Visibility

Ensure the success of your Cisco Viptela SD-WAN environment by understanding network and application performance of the traffic on both the SD-WAN overlay and the underlying physical network.

Discovery and Dependency Mapping

- Includes a discovery wizard that creates application dashboards to automate the process of mapping transactions to their underlying infrastructure so that application definitions and interdependencies are accurate— including discovering through F5, Riverbed® SteelApp™ Traffic Manager and other application delivery controllers (ADCs).
- Creates service maps for accelerating troubleshooting across complex application ecosystems, and planning for data center consolidation or cloud, disaster recovery, and virtualization initiatives.

WAN Optimization Analysis

- Robust analysis of optimized Riverbed SteelHead and Interceptor environments enable you to easily plan your optimization deployments, assess the impact, and quantify benefits.
- Cost-effective troubleshooting of branch issues using a single product for visibility, control and optimization.
- Centralized reporting and monitoring of inbound and outbound quality of service (QoS) site and classes.
- Rich application monitoring of 2000+ default applications and custom- defined apps.

Streamlined Workflows

One-click dashboard creation creates NetOps-centric, application-specific, SteelHead WAN optimization-specific, and VoIP-related dashboards that quickly surface relevant data and streamline troubleshooting workflows.

Home Screen

Offers at-a-glance summary of key network and application KPIs and how they've changed; recent performance and security alert lists; Top Talkers sankey diagram; overall traffic, cloud performance; and watch list so you can monitor what's important to you.

Service Monitoring

- Monitor all network and infrastructure components involved in delivering an application service such as users, Web servers, load balancers, application servers, authentication and DNS servers, databases, and the links between them.
- Advanced analytics changes in performance, providing proactive notification of brewing issues.
- Service dashboards provide a quick view into the end-to-end health of a business service that is visually shown by red-yellow-green health status indicators.
- Guided drill down reveals details of the most critical applications and essential data for fast troubleshooting.

Server Virtualization and VMware NSX SDN

NSX-aware IPFIX format enables Riverbed NPM products to provide detailed information about what NSX virtual overlay networks are running on the physical network, what applications are involved, and which hosts and virtual tunnel endpoints are generating the traffic.

Cloud Visibility

NetProfiler is deployable in:

- AWS
- AWS GovCloud West
- Azure
- Azure Government (non-DoD, no Iowa)

Cloud Flow Telemetry

The following flow telemetry can generate and send flow for the cloud to NetProfiler in the cloud or on-prem:

- AppResponse Cloud
- AWS VPC Flow Logs
- Azure NSG Flow Logs
- Azure Government (non-DoD, no Iowa)
- Google Cloud (GCP) VPC Flow Logs

Learn More

For more information about Riverbed NetProfiler specifications, please visit riverbed.com/NPM.



Riverbed – Empower the Experience

Riverbed is the only company with the collective richness of telemetry from network to app to end user that illuminates and then accelerates every interaction so that users get the flawless digital experience they expect across the entire digital ecosystem. Riverbed provides two industry-leading solutions: the Riverbed Unified Observability portfolio, which integrates data, insights, and actions across IT to enable customers to deliver seamless digital experiences; and Riverbed Acceleration, which offers fast, agile, and secure acceleration of any application over any network to users, whether they are mobile, remote, or on-premises. Together with our thousands of partners, and market-leading customers across the world, we empower every click, every digital experience. Learn more at riverbed.com.

Riverbed Flow Gateway

Collect, aggregate, and compress flow data from across the enterprise network.

Business Challenge

Accurate data collection is a must if you want to truly understand your network. Not just a sampled subset, but complete data about peak usage, packet loss, and quality of service (QoS) is the most powerful way to get real-time visibility and historical insight that can help you optimize delivery of your network services. Yet in today's complex network environment, it can be difficult to quickly collect data from different devices and quickly gain an end-to-end network view without having to install probes everywhere.

The Riverbed Solution

Riverbed® Flow Gateway collects and forwards flow data (NetFlow, sFlow, J-Flow, IPFIX and other popular flow statistics, Google VPC, AWS VPC, Azure NSG flow logs) from network devices and Alluvio NPM Flow from Alluvio AppResponse packet-capture appliances. It de-duplicates common information, and then forwards it to the Riverbed® NetProfiler console for network troubleshooting, just-in-time alerting, and reporting.

Flow Gateway is available as physical or virtual appliances compatible with VMWare, AWS, Azure and Google Cloud.

Key Benefits

Multi-Cloud friendly, highly scalable, easy-to-use flow collection for cost-effective, end-to-end insight into traffic and bandwidth usage.

Key Features

Track 100% of all flow traffic on the network

Collects popular metrics from Alluvio nomenclature and add cloud 'NetFlow (V1, V5, V7 and V9), IPFIX, Enhanced NetFlow, NBAR, sFlow V2 and V5, J-Flow, cFlow, Packeteer FDR, Citrix AppFlow, Palo Alto Networks, Cisco, NBAR2, Cisco MediaNet, Cisco, ASA NSEL, Alluvio NPM Flow, Azure NSG, AWS VPC and Google Cloud VPC flow logs.

Deduplication

Flow Gateway appliances remove flow data redundancy through deduplication and centralizing the storage of flow data. Flow Gateway de-duplicates flows for end-to-end flow visibility, better accuracy in reporting, and lower total cost of ownership.

Reliable compressed transmission

Flow data is critical when every transaction counts but it shouldn't clog the network in order for you to analyze it. Flow Gateway aggregates the data, de-duplicates it, compresses it by five to ten times, encrypts it, and then transmits it via TCP to NetProfiler for enhanced reliability to NetProfiler reliability and reduced impact on the network.

Data granularity

All organizations can benefit from continuous flow data analysis, especially those in financial services, trading, government, healthcare, and retail. Flow Gateway supports 8 million flows per minute (FPM) at up to one minute data granularity so nothing is missed.

You can have multiple loadbalanced Flow Gateways to increase flow uptake. You can also distribute Flow Gateways geographically to collect flows.

Resiliency

When connectivity is lost to the NetProfiler, Flow Gateway will temporarily store flows until connectivity is restored and flows can be delivered.

Learn More

For more information about Riverbed Flow Gateway specifications, please visit riverbed.com/products.



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