

NetProfiler

Flow-Powered Intelligence for Complex Traffic Analysis

The Visibility Gap in Modern Networks

Network performance problems often surface as vague complaints like “the network is slow,” leaving IT teams to sort through a maze of systems and metrics to find the root cause. As environments expand across data centers, clouds, and remote offices, pinpointing performance and security issues becomes even more difficult. Teams need a comprehensive view of how traffic moves, where it’s impacted, and what drives the behavior.

Understanding the Need for Observability

Modern network operations depend on real-time, reliable insight into traffic and application behavior. Observability isn’t just about collecting data; it’s about correlating flows, understanding baselines, and recognizing when something isn’t right. When network, application, and security signals are unified, teams resolve issues faster and make better decisions.

How NetProfiler Delivers Insight and Control

Riverbed® NetProfiler turns flow telemetry into intelligence you can act on. By analyzing patterns, establishing performance baselines, and alerting on deviations, it helps identify problems before they affect users. NetProfiler integrates flow data from a broad range of vendor devices with insights from on-prem, cloud, and SD-WAN overlays to deliver comprehensive visibility across complex infrastructures.

With NetProfiler, you answer critical questions like: How much traffic is on the network? Who’s generating it? Where is it going? Is it business-critical or not? And is it performing as expected?

With proactive monitoring, intuitive reporting, and integration across Riverbed’s observability platform, NetProfiler supports smarter, faster network operations.

Behavioral Analytics

IT organizations need to understand how degraded performance affects network and application performance, and ultimately, business outcomes. NetProfiler uses behavioral analytics for proactive monitoring by establishing performance baselines and alerting on deviations as soon as they occur, often before users notice a problem. These same behavioral insights can also help detect unusual or unauthorized activity, strengthening security by flagging traffic patterns that may indicate policy violations or potential threats.

AI-Driven Insights with Riverbed IQ Ops

Riverbed IQ Ops brings the power of AI and automation to NetProfiler environments, helping IT teams detect and resolve issues faster and more accurately. By correlating telemetry from NetProfiler with application, endpoint, and infrastructure data, IQ Ops highlights anomalies in a clear business context, prioritizes incidents by impact, and reduces alert fatigue. Intelligent workflows automate investigations and recommend or execute remediations, turning complex diagnostics into efficient, repeatable actions.

With Riverbed IQ Ops, NetProfiler customers boost productivity, shorten resolution times, and empower every team member with expert-level insights.

Optimized for Scale, Resilience, and Speed

NetProfiler is built for fast, reliable performance in large, demanding environments. Its Flow Gateway architecture supports dynamic VIP load balancing to distribute telemetry across multiple collectors, as well as BGP Anycast for resilient routing to an available or preferred gateway. This gives organizations greater flexibility to scale flow ingestion, improve availability, and reduce manual reconfiguration. Paired with Riverbed xx90 hardware or virtual deployments, NetProfiler delivers high-speed analytics without sacrificing visibility.

Dependency Mapping

NetProfiler automatically maps how applications interact with the underlying network, helping teams visualize dependencies and maintain up-to-date service definitions. This clarity accelerates root cause analysis, reduces configuration errors, and supports strategic efforts like data center consolidation, disaster recovery, virtualization initiatives, or cloud migration. Instead of manually creating and updating diagrams or inventories, teams gain a dynamic view of their environment, reducing downtime and enabling better planning with confidence.

Flexible Deployment and End-to-End Visibility

Designed for versatility, NetProfiler supports deployment across hybrid, cloud, on-premises, virtual, and data center environments. Whether running on Riverbed's high capacity xx90 hardware, virtual infrastructure, or public cloud, NetProfiler provides consistent visibility into how traffic flows, how applications perform, and where issues may arise, no matter where infrastructure resides.

Integrated with the Riverbed Observability Ecosystem

NetProfiler works seamlessly with other Riverbed solutions to provide end-to-end visibility, faster troubleshooting, and smarter decision-making across your IT environment.

- **Riverbed AppResponse:** Enriches NetProfiler with packet-based application and error detail for deeper visibility into traffic behavior. One-click drill-down from NetProfiler to AppResponse enables faster, more precise root cause analysis.
- **Riverbed NetIM:** Adds infrastructure health and path analytics to NetProfiler's flow data, helping teams connect performance anomalies to topology changes. This accelerates troubleshooting and supports proactive infrastructure planning.
- **Riverbed SteelHead:** Functions as a remote telemetry source for NetProfiler and provides visibility into WAN optimization. Teams can assess the impact of optimization policies and resolve remote site issues more efficiently.
- **Riverbed Portal:** Provides a unified, customizable dashboard for viewing NetProfiler data alongside other network and application metrics. This gives stakeholders a shared source of truth across performance domains.
- **Riverbed IQ:** Uses AI to correlate NetProfiler flow insights with events across the stack, reducing alert noise and improving triage. This helps IT teams resolve incidents faster and more confidently.

Key Benefits

- **Gain end-to-end visibility across hybrid, cloud, and SD-WAN environments:** Understand how traffic flows across the entire infrastructure—on-prem, cloud, and virtual networks—with comprehensive flow-based observability.
- **Accelerate issue detection, diagnosis, and resolution:** Baseline performance, detect anomalies in real time, and drill into root causes faster with integrated telemetry and guided workflows.
- **Strengthen security posture through advanced traffic analysis:** Detect policy violations, blocked flows, and suspicious behavior with flow-level visibility across cloud and on-premise environments.
- **Scale analytics with confidence as infrastructure grows:** Handle increasing telemetry volumes with high-performance analytics and flexible Flow Gateway architectures. Use VIP load balancing or BGP Anycast to distribute flow ingestion, improve availability, and support large, geographically distributed environments.

- **Unify IT workflows with integrated observability:** Leverage one-click integrations with Riverbed AppResponse, NetIM, Portal, and IQ for a seamless, correlated view across network, infrastructure, and application performance.

“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,
Consumer Products Company

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

Network Administrator,
Electronics Company

NetProfiler Home Screen

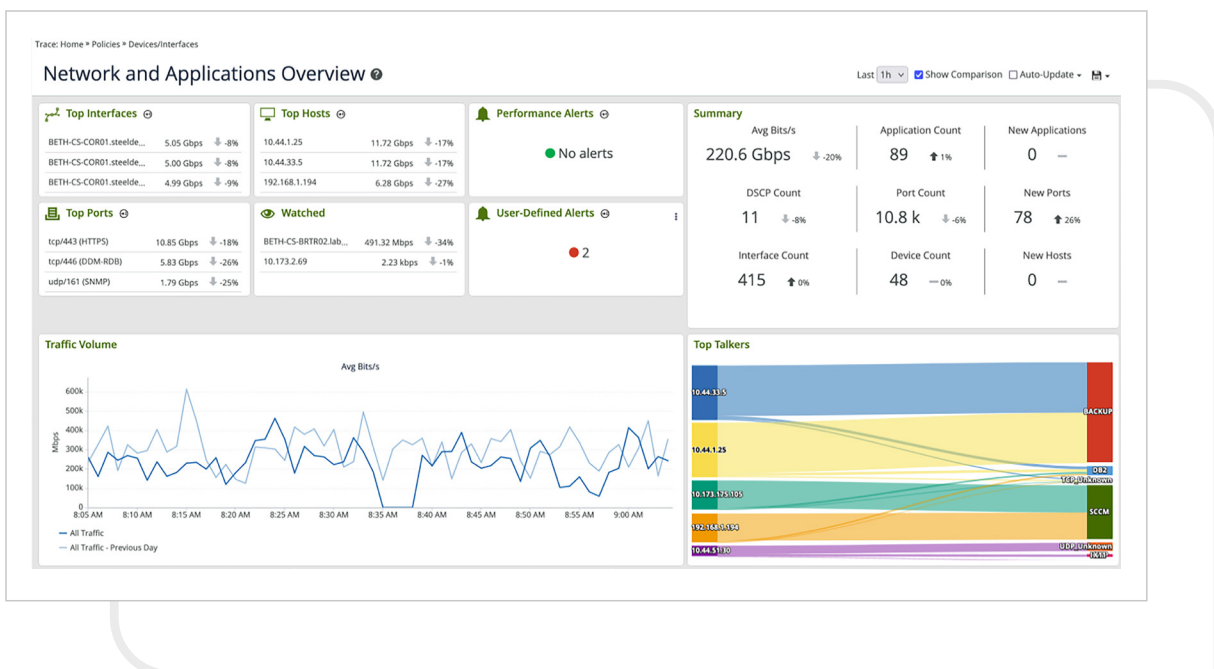


Figure 1: The NetProfiler Home Screen gives each user a personalized summary of network changes, recent alerts, traffic trends, Top Talkers Sankey, and prioritized watch list items.

Key Features

Application Recognition and Monitoring

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

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

Riverbed AppResponse enhances NetProfiler with enriched flow data derived from deep packet inspection, providing clearer insight into application behavior and helping distinguish business-critical traffic from recreational use.

Anomaly Detection

By analyzing performance baselines and monitoring for deviations, the system proactively alerts IT teams to unusual network activity. Integration with APIs, SD-WAN orchestrators, and cloud flow logs enhances this capability with enriched metadata. AI-driven insights provide real-time visibility into both ACCEPTED and DENIED flows from cloud providers, helping to uncover blocked traffic, diagnose policy misconfigurations, and support cloud security compliance.

Flexible and Resilient Flow Ingestion

NetProfiler supports two Flow Gateway deployment options for scalable flow collection. Dynamic VIP load balancing distributes incoming telemetry across multiple collectors, while BGP Anycast allows multiple gateways to advertise the same collection address so standard network routing can direct flows to an available or preferred gateway. These options help organizations improve availability, support distributed architectures, and scale ingestion as flow volumes grow.

SD-WAN Visibility

Gain deep insight into the performance of your Cisco Viptela, Arista VeloCloud, and Versa SD-WAN environments. NetProfiler correlates telemetry from both the SD-WAN overlay and the physical underlay to deliver a unified view of traffic behavior, application performance, and path-level issues. This helps IT teams quickly isolate bottlenecks, validate service delivery, and ensure a consistent user experience across distributed and hybrid WAN architectures.

Discovery and Dependency Mapping

- A built-in discovery wizard helps automatically map application traffic to the underlying infrastructure, creating accurate dashboards that reflect how services depend on systems like F5, Riverbed® SteelApp™ Traffic Manager, and other application delivery controllers.
- Generates clear service maps that simplify troubleshooting and support strategic initiatives such as cloud migration, disaster recovery planning, and data center consolidation.

WAN Optimization Analysis

- Robust analysis of optimized Riverbed SteelHead and Interceptor environments enables 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

With one click, NetProfiler creates targeted dashboards for NetOps, application performance, SteelHead WAN optimization, VoIP, and more. These focused views bring the right data to the forefront, helping teams streamline troubleshooting workflows and accelerate issue resolution.

Home Screen

The NetProfiler Home Screen offers a personalized view tailored to each user or team, delivering an at-a-glance summary of network and application health. Monitor changes in KPIs, review recent performance and security alerts, explore Top Talkers via a Sankey diagram, and track overall traffic and cloud trends. Custom watch lists help teams focus on what matters most to their role.

Service Monitoring

- Monitor all network and infrastructure components involved in delivering an application service, including users, Web servers, load balancers, application servers, authentication and DNS servers, databases, and the links between them.
- Receive proactive notifications for flow collection failures and policy runtime issues to ensure IT teams quickly identify and resolve anomalies before they impact operations.
- Display service dashboards for a quick view of the end-to-end health of a business service with red-yellow-green health status indicators.
- Employ guided drill-downs that detail the most critical applications and essential data for fast troubleshooting.
- Schedule precomputed data backups for faster disaster recovery and seamless migration between NetProfiler instances.

Virtual Network Visibility

Gain detailed visibility into your virtual infrastructure with support for NSX-aware IPFIX. Riverbed NPM solutions identify which NSX virtual networks are running on the physical infrastructure, the applications in use, and the hosts or virtual tunnel endpoints generating traffic. NetProfiler also collects and analyzes flow data from cloud-integrated platforms like Nutanix, Hyper-V, and Microsoft Azure Stack HCI, helping teams manage and troubleshoot across modern virtual environments.

Cloud Visibility

NetProfiler integrates seamlessly with AWS and Microsoft Azure cloud environments to provide deep visibility into cloud traffic patterns and application performance.

By ingesting cloud-native flow logs, it enables proactive monitoring, anomaly detection, and troubleshooting across distributed, cloud-hosted infrastructure. This cloud-native insight supports faster issue resolution and optimized service delivery across hybrid deployments.

Comprehensive Flow Telemetry Support

NetProfiler ingests and analyzes a wide range of flow data to deliver deep, actionable insights across your network. Supported flow types include:

- **Standard and Enhanced Flow Protocols:** NetFlow, IPFIX, sFlow, J-Flow, cFlow
- **Vendor-Specific Extensions:** Cisco NBAR, NBAR2, ASA NSEL, MediaNet; Citrix AppFlow; Palo Alto Networks
- **Riverbed Flows:** SteelFlow for integrated Riverbed visibility
- **Cloud Flows:** AppResponse Cloud, AWS VPC Flow Logs, Azure NSG Flow Logs, Azure Government (non-DoD, no Iowa)

This broad compatibility allows NetProfiler to unify visibility across hybrid, multi-cloud, and SD-WAN environments, enabling consistent performance monitoring and threat detection wherever your traffic flows. Flow Gateway deployments can use VIP-based load balancing or BGP Anycast to provide resilient, scalable ingestion of this telemetry across distributed environments.

Learn More

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

Confident Network Control

Riverbed NetProfiler gives IT teams the insight and agility to manage complex networks with confidence. By turning flow data into real-time intelligence, NetProfiler accelerates troubleshooting, strengthens security, and supports seamless performance across hybrid environments.



About Riverbed

Riverbed, the leader in AIOps for observability, helps organizations optimize their user's experiences by leveraging AI automation for the prevention, identification, and resolution of IT issues. With over 20 years of experience in data collection and AI and machine learning, Riverbed's open and AI-powered observability platform and solutions optimize digital experiences and greatly improves IT efficiency. Riverbed also offers industry-leading Acceleration solutions that provide fast, agile, secure acceleration of any app, over any network, to users anywhere. Together with our thousands of market-leading customers globally – including 95% of the FORTUNE 100 – we are empowering next-generation digital experiences.

Learn more at riverbed.com.