

Flow Gateway

Collect, aggregate, and optimize flow telemetry to power network observability.

Business Challenge

To manage and optimize modern networks, organizations need complete, high-fidelity telemetry – not just sample data. Visibility into peak usage, packet loss, and QoS is essential for both real-time insight and historical analysis, but with networks spanning on-premises, cloud, and remote environments, collecting data from diverse sources without deploying probes everywhere is a growing challenge. IT teams need a scalable, efficient way to capture flow data across the entire network without compromising simplicity or fidelity.

The Riverbed Solution

Riverbed® Flow Gateway is a high-performance, distributed flow collector that serves as the telemetry engine for Riverbed NetProfiler. It ingests flow records from routers, firewalls, cloud platforms, and SD-WAN environments then de-duplicates, compresses, and securely forwards them to NetProfiler for centralized analytics.

Flow Gateway supports a scalable, load-balanced architecture using a virtual IP (VIP) model to distribute traffic across multiple collectors, ensuring consistent performance and resilience in high-volume environments. With built-in support for SD-WAN platforms such as Cisco Viptela, VMware VeloCloud, and Versa Networks, as well as flow logs from AWS, Microsoft Azure, and Google Cloud, Flow Gateway enables rich, end-to-end visibility across hybrid networks.

Available on the high-performance xx90 hardware series, virtual, or cloud appliance, Flow Gateway supports flexible deployment across any infrastructure, providing a robust foundation for scalable, actionable network intelligence.

Key Benefits

High-Performance Analytics at Scale: Delivers optimized, de-duplicated telemetry to ensure accurate, real-time analytics across even the largest, most demanding network environments. Supports rapid troubleshooting, performance validation, and capacity planning without compromising speed or granularity.

Comprehensive Visibility Across Hybrid Networks:

Collects and consolidates flow data from physical infrastructure, virtual environments, SD-WAN, and multi-cloud platforms. Provides continuous, unified insight into application performance, user experience, and network behavior wherever workloads run.

Reliable and Resilient Data Delivery: Compresses, encrypts, and transmits telemetry via secure TCP connections, with built-in buffering to maintain flow continuity during connectivity disruptions or spikes in traffic.

Scalable, Distributed Deployment Model: Uses VIP-based load balancing to distribute telemetry across multiple collectors. Scales effortlessly to support growing data volumes and complex environments, without adding operational burden.

High-Fidelity Telemetry for Deeper Insights:

Transforms raw flow records into high-quality, enriched telemetry that feeds advanced analytics. Enables more precise alerting, anomaly detection, forensic investigations, and long-term trend analysis, empowering smarter, faster decisions across IT and security teams.

Key Features

Comprehensive Multi-Source Flow Collection: Flow Gateway collects and forwards flow telemetry from a wide range of sources, including NetFlow (v1, v5, v7, v9), IPFIX, Enhanced NetFlow, NBAR, sFlow (v2, v5), J-Flow, cFlow, Packeteer FDR, Citrix AppFlow, Palo Alto Networks, Cisco NBAR2, Cisco MediaNet, Cisco ASA NSEL, Riverbed NPM Flow, as well as cloud-native flow logs from Azure NSG, Azure VNET, AWS VPC, and Google Cloud VPC.

Intelligent Flow Deduplication: Redundant records are removed at the collector level before reaching NetProfiler, improving reporting accuracy, reducing resource consumption, and enabling cleaner analytics outcomes.

Elastic, Distributed Architecture with VIP Load Balancing: Multiple Flow Gateways can operate behind a virtual IP to dynamically balance flow traffic. This ensures consistent, high-volume ingestion and uninterrupted data delivery to NetProfiler across distributed enterprise networks.

High-Throughput, Granular Flow Processing: With support for up to 8 million de-duplicated flows per minute at one-minute granularity, Flow Gateway enables NetProfiler to perform fine-grained baselining, anomaly detection, and root cause analysis in near real-time.

Secure and Efficient Data Transmission: Telemetry is compressed and encrypted before being transmitted via TCP to NetProfiler. During outages, Flow Gateway buffers and forwards data once connectivity is restored, maintaining telemetry integrity for security and compliance needs.

Powering NetProfiler with High-Fidelity Telemetry: Riverbed Flow Gateway plays a critical role in end-to-end network observability as the high-performance telemetry engine for Riverbed NetProfiler. Its ability to collect, optimize, and securely transmit flow data from complex, hybrid environments gives IT and security teams the actionable insights they need into performance, usage, and risk.

Flow Gateway empowers organizations to confidently manage performance, detect anomalies, and improve operational efficiency no matter how distributed or dynamic the network.

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



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.