

Alluvio NPM Platform

Gain cross-domain visibility, network forensics, and business insights across hybrid IT environment

Remote Work, Hybrid IT Complexity Drives Visibility Needs

The surge in remote work and greater IT complexity from a mix of on-prem, cloud, and SaaS applications has shifted the focus of IT departments. Millions of employees had to shift their ways of working, creating unique and immediate technical concerns for IT.

Adding to that is the pressure to modernize the network to meet new demands for agility, speed and capacity while reducing costs. IT leaders are adopting hybrid and multi-cloud architectures that combine on-premises and off-premises infrastructure, connected by private and public transport types.

These networks must support highly distributed applications and user environments. As a result, operations teams require holistic visibility and intelligent security across the hybrid network and network devices to ensure optimal application performance and an enhanced user experience.

Alluvio NPM Platform

To solve the challenges of delivering great network and application visibility with robust incident detection and response over complex infrastructure, you need network visibility across on prem, cloud, and last-mile networks. There are several steps to achieve this:

Broad, deep and scalable data collection

To provide a complete picture of network and application performance health and security forensics, NPM solutions need to collect data from all domains, all the time. This integrated visibility is the only way to address all of the potential problem sources and ensure high-quality digital experiences.

Alluvio NPM platform is the only solution that provides this level of comprehensive coverage, combining and unifying performance monitoring across network flow, packet and infrastructure.

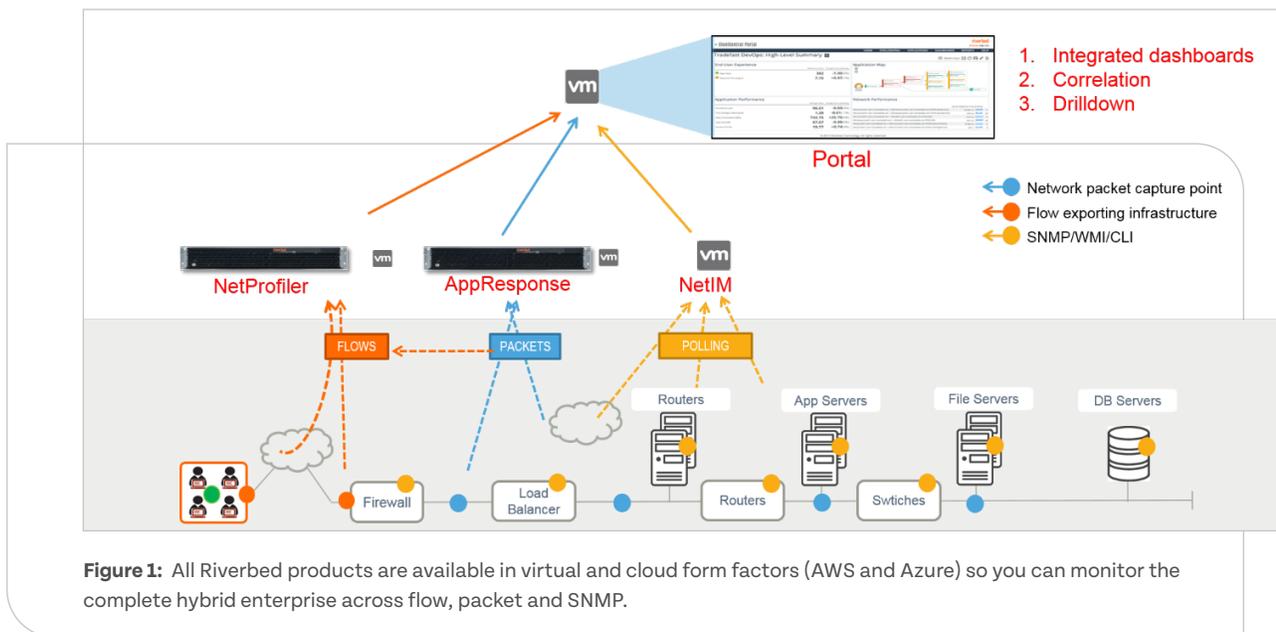
Support for all types of networks

More than ever before, successful digital business initiatives depend on network performance. Unified NPM solutions must provide visibility and diagnostics across all types of network environment—physical, virtual, hybrid and multi-cloud—to ensure enterprise support of mission-critical applications. Riverbed NPM solutions are available as physical, virtual, and cloud appliances for AWS and Azure.

Business-centric, cross-domain insights

Improve user experience by blending end-to-end performance monitoring of data and analytics from different domains in a common user interface to make it easy to share and tailor among various technical disciplines executive and business

stakeholders. Drill down into any performance issue both reactively and proactively. The Riverbed NPM platform combines breadth of monitoring and depth of analysis, presented in custom views according to role (figure 1).



Surfacing insights with AIOps

AIOps refers to the analytics for IT Operations. Today's IT Ops teams need all of the data they can get to simplify their job and keep users happy: infrastructure metrics, SNMP, CLI and API data, network flows, device health, user experience metrics, packets and transactional metadata, synthetic transactions, even application traces and logs.

Riverbed NPM not only uses machine learning and analytics in all its domain-level products, but also at the unified NPM level. It brings together the billions of transactions, metadata, and metrics that are generated each day across the product lines and applies artificial intelligence and machine learning

insights to identify the types of incidents that can only be identified when you bring this volume of disparate types of data together.

Enterprise Management Associates found that, “Integrated platforms are more effective at performance monitoring than standalone, best-of-breed tools” and “that tools that can correlate multiple classes of network data are more effective in all NPM use cases.”¹

¹ <https://www.riverbed.com/document/infographics/digital-transformation-is-the-top-driver-of-enterprise-network-strategies-infographic.pdf>

Alluvio Unified NPM Platform

Alluvio NPM is an integrated, but modular solution— it can be used to provide a holistic network and application visibility while any component (figure 2) can be used independently, to solve domain-specific

problems. This allows investment protection as solutions can be extended at any time to provide additional breadth, depth, or capacity.

Unified Network Performance Monitoring

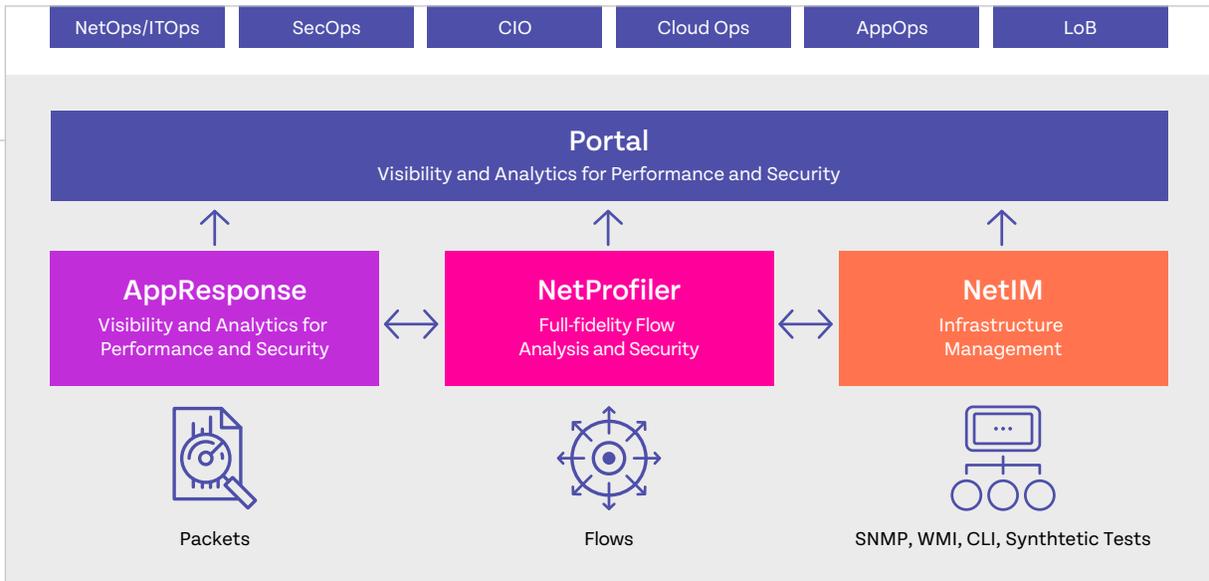


Figure 2: Alluvio NPM components, not only all send data up for an integrated view in Portal, but also integrate horizontally with domain-level solutions.

Alluvio Portal

Integrated, role-based dashboards

Alluvio Portal blends data from all of the Riverbed NPM components plus Alluvio Aternity™ EUEM and APM, and provides a centralized, dynamic view of your enterprise's digital environment. This holistic

view provide operational teams, executives, and line of business a single source of truth for network and application performance monitoring and accelerated troubleshooting.

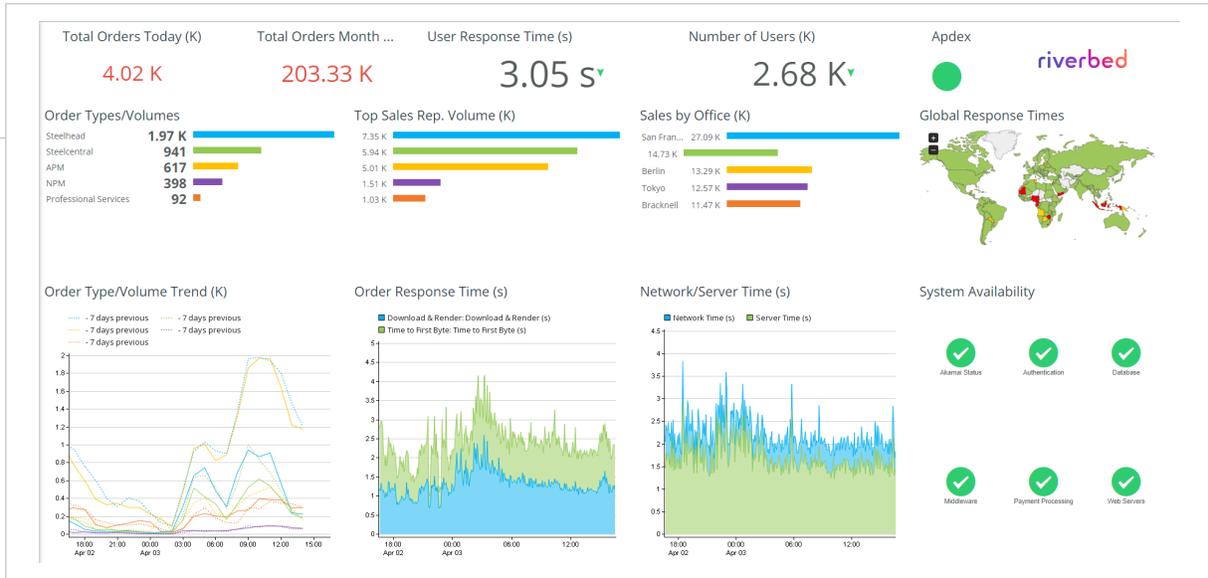


Figure 3: Portal blends flow, packet and device metrics in unified dashboards to create unique business views.

Alluvio AppResponse

Packet-based Application Performance Monitoring

Alluvio AppResponse provides powerful, flexible network and application analytics and workflows to speed problem diagnosis and resolution. Functional out of the box with pre-defined insights and a rich variety of performance metrics. AppResponse helps you get answers fast. It combines network forensics, application analytics and end-user experience monitoring in a single solution so you have everything you need at your fingertips to resolve network and application performance issues quickly.

AppResponse passively monitors the network and collects packet data for continuous, real-time and historical application monitoring. Continuous packet

capture means rich troubleshooting details are always available when you need them, saving time and money by minimizing the effect downtime has on business productivity and reducing or avoiding business-stopping slowdowns or outages.

AppResponse integrates with:

- Alluvio Packet Analyzer Plus speeds network pack analysis and reporting of large trace files using an intuitive graphical user interface and a broad selection of pre-defined analysis views
- Alluvio Transaction Analyzer provides detailed analysis of transactions using powerful visualization and advanced analytical techniques

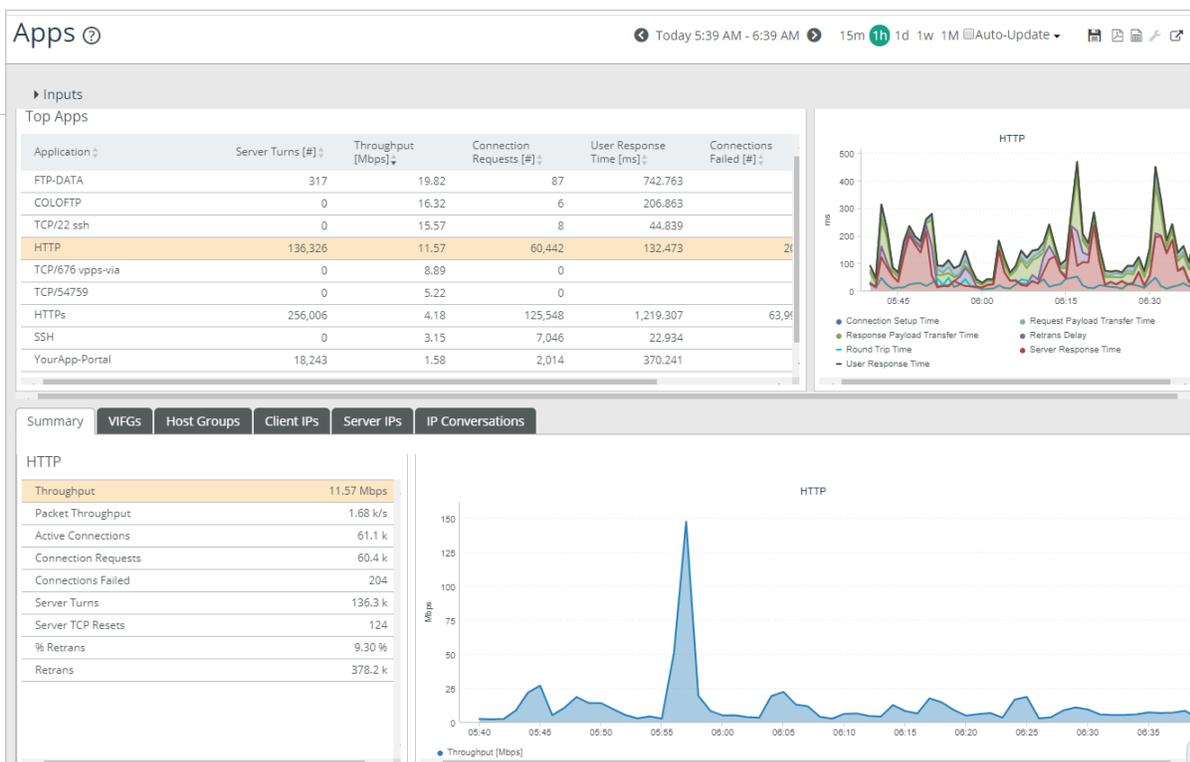


Figure 4: Alluvio AppResponse provides network forensics, application analytics and end-user experience monitoring to help you troubleshoot faster.

Alluvio NetProfiler

Enterprise Flow Monitoring

Alluvio NetProfiler is centralized network flow reporting and analysis that you can use to quickly view hybrid network performance and troubleshoot issues before your end users ever know there's a problem. It can combine network flow data with packet-based performance metrics to provide proactive monitoring, analysis, and reporting. NetProfiler uses automated discovery

and dependency mapping to help you understand the application services in your environment and automated behavior analytics to baseline normal performance and alert on abnormal changes as soon as they occur—typically before users are even aware that performance is degrading.

NetProfiler leverage Alluvio Flow Gateway for flow collection, aggregation and de-duplication.

NetProfiler Advanced Security Module

Incident detection and response

The NetProfiler Advanced Security Module transforms network flow into cybersecurity intelligence, providing essential visibility and forensics for broad threat detection, investigation, and mitigation. Using full-fidelity network flow, to

capture and store all the data you need for forensic analysis the Advanced Security Module delivers the crucial insights and empirical evidence to detect and investigate advanced persistent threats that bypass typical preventative measures as well as those that originate inside the network.

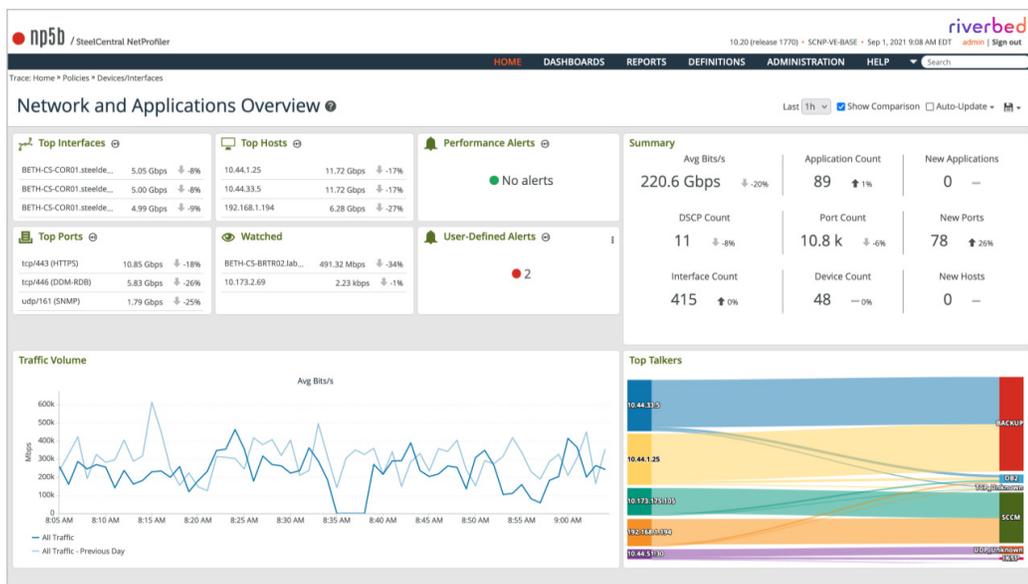


Figure 5: NetProfiler provides flow-based analysis for monitoring the global health of your hybrid network.

Alluvio NetIM

Infrastructure Management

Alluvio NetIM provides integrated mapping, monitoring, and troubleshooting for your IT infrastructure. With NetIM, you can capture infrastructure topology information, detect and troubleshoot performance issues, map application network paths, and diagram your network. Additionally, you can manage infrastructure issues within the context of application, network, and end-user experience for a blended view of overall performance.

NetIM provides agentless infrastructure component monitoring (SNMP, WMI, CLI, API, synthetic testing) to deliver a comprehensive picture of how your infrastructure is affecting network and application performance and how that affects user experience. NetIM infrastructure management complements Riverbed's network and application performance visibility.

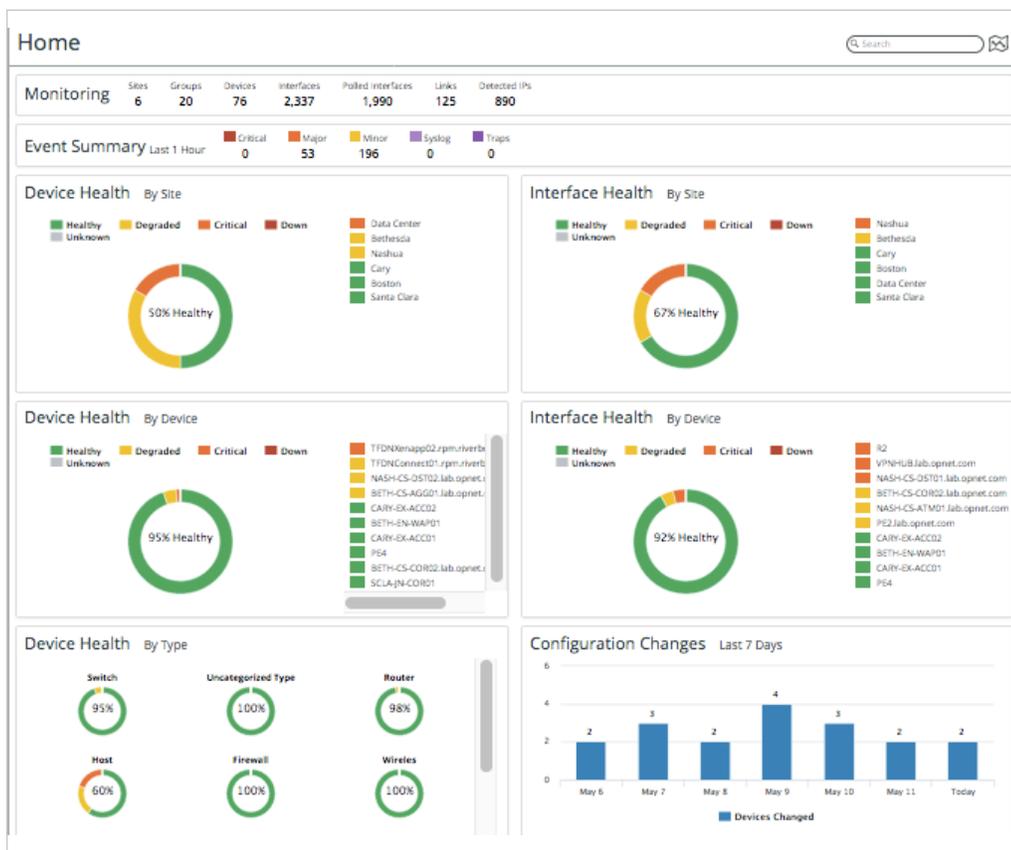


Figure 6: NetIM provides integrated mapping, monitoring, and troubleshooting for your IT infrastructure.



About Riverbed

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 organizations can deliver a seamless digital experience and drive enterprise performance. Riverbed offers two industry-leading portfolios: Alluvio by Riverbed, a differentiated Unified Observability portfolio that unifies data, insights, and actions across IT, so customers can deliver seamless, secure digital experiences; and Riverbed Acceleration, providing fast, agile, secure acceleration of any app, over any network, to users anywhere. Together with our thousands of partners, and market-leading customers globally – including 95% of the FORTUNE 100 –, we empower every click, every digital experience. Riverbed. Empower the Experience. Learn more at riverbed.com.