

# Riverbed NPM+

Holistic network observability for Cloud, Zero Trust, and Remote work environments

## The Challenge: Network Landscape is Changing and Evolving

In today’s digital landscape, effective network performance monitoring and observability have become crucial for organizations aiming to ensure seamless digital experiences and robust security. With the proliferation of remote work, cloud services, and complex network architectures, traditional monitoring tools often fall short in providing comprehensive visibility and actionable insights.

### User Location

Hybrid work and work from anywhere models have become popular since the pandemic. Employee locations are increasingly shifting from brick-and-mortar offices to home offices, hotels, or even coffee shops. Network operations teams are struggling to gain full visibility into the network traffic and performance issues experienced by remote workers, making it hard to diagnose and resolve issues promptly.

### Network Access

Organizations are accelerating the migration to SaaS-based applications. More organizations are shifting to public clouds accessed with zero-trust technology. Monitoring dynamic resource usage and tracking various network paths in hybrid environments is increasingly difficult.

### Server Location

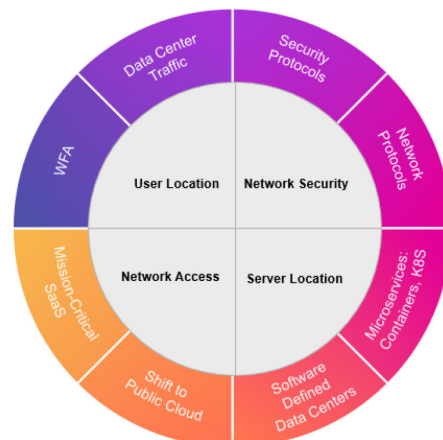
The emergence of modern server technologies, including microservices, containers, Kubernetes, and software-defined data centers is enabling flexibility

and adaptability of contemporary network architectures. With the decentralized nature of microservices and the abstract layers introduced by containers and Kubernetes, gaining end-to-end visibility across all components can be challenging. Also pinpointing the source of a performance bottleneck in such layered and distributed systems is often more complex than in traditional setups.

## Network Security

The proliferation of new network protocols and security measures, such as SASE and SSE, further worsens the issue of network visibility. Also, the widespread use of encryption or tunneling means IT teams are increasingly unable to inspect the contents of encrypted data.

With the evolution of the network landscape, achieving comprehensive network visibility has become a daunting challenge for enterprises. These blind spots limit Network Operations teams’ ability to monitor and manage the entire IT network.



## A New Approach for Network Observability is Needed

Adoption of hybrid data center architectures, cloud-based services and applications, dynamic deployment, and SaaS adoption is creating new blind spots. It has made the Network Operations team's jobs more difficult to get the visibility and perspective required.

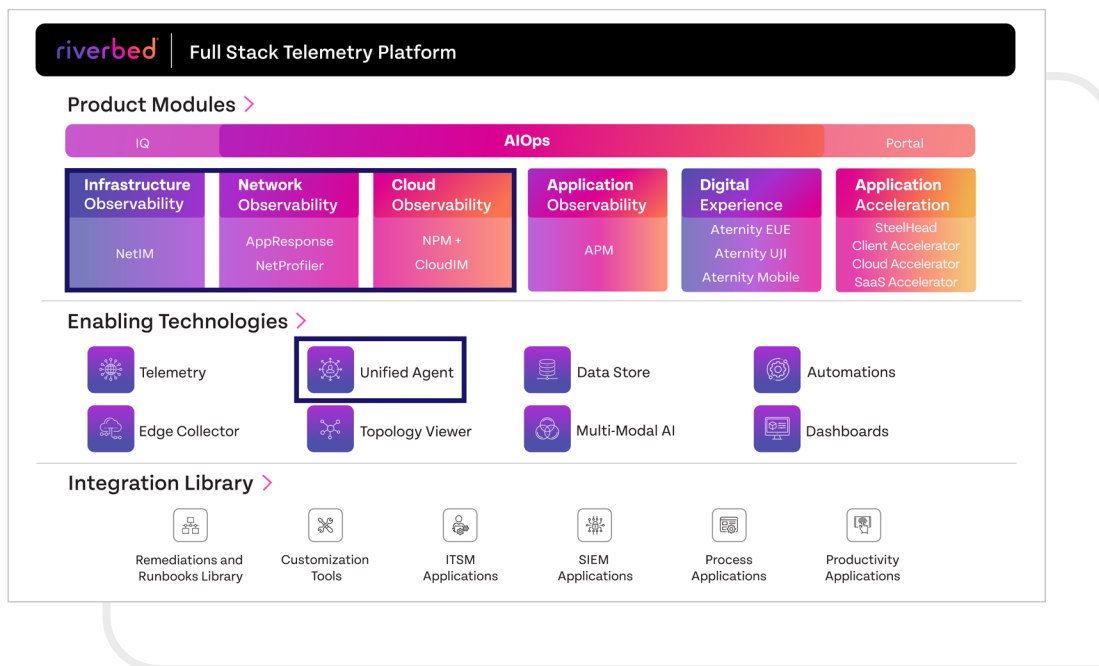
Packets are still the optimal source for "what-did-the-network-do" analysis. How and where you collect packets has shifted though. Encryption and tunneling lowers the forensic value of captured packets using on-premises appliances, so organizations need an approach that sees the data packets before they are encrypted or tunneled.

A better and newer approach is needed for visibility into blind spots. Net Ops teams:

- Cannot solely depend on appliance-centric approaches and can't presume centralized (data center-based) packet analysis only will see everything IT requires.
- Need an approach that analyzes packets where the data is readily available and provides the value expected – the endpoints.
- Require simplicity and AI-driven automation.

## Riverbed's New Approach to Network Observability with NPM+

### Network Analysis for Edge, Data Center and Cloud Environments



Riverbed NPM+ ensures holistic network observability by extending visibility to previously unmonitored network locations. NPM+ collects decrypted data at user and server endpoints, filling visibility gaps caused by encrypted tunnels in Zero Trust environments. Additionally, it extends similar performance analysis benefits of Riverbed AppResponse for public cloud and remote work services.

Riverbed NPM+ is a SaaS-delivered service that uses the Riverbed Unified Agent to capture and analyze packet-based performance metrics from every user and server endpoint. It fills visibility gaps caused by encrypted tunnels in Zero Trust, remote work, and cloud-native environments. Taking an agent-based deployment approach ensures flexibility, simplicity, and scalability.

## NPM+ Transforms Packet Analysis

NPM+ delivers simplified, easy-to-understand insights for monitoring TCP/IP connection behavior, significantly reducing the dependence on manual analysis. Its smart, interactive workflows streamline network performance, root cause analysis, triage, diagnostics, and mean-time-to-resolution across network teams. It also provides real-time visibility into network performance metrics and facilitates collaborative analysis across network operations, network engineering, system administrators, platform engineering teams, security operations and other IT stakeholders.

**SaaS offering:** We are offering a 100% software only SaaS offering. Riverbed NPM+ is a SaaS-based network observability service supported on the Riverbed Aternity SaaS platform.

**Compliments AppResponse:** AppResponse delivers continuous packet capture with real-time and historical application monitoring – letting you observe all network and application interactions as they cross the wire. The key aspect of NPM+ is providing access to packets that AppResponse can't see. NPM+ provides visibility into areas where work-from-home or remote work situations; and situations where zero trust tools are literally making traditional packet analysis impossible.

## What Makes NPM+ Unique



Unified Visibility



New Deployment Paradigm



Intelligent Workflow Insights

### Unified Visibility

- Integrates data from a wide range of sources including packets, flows, devices, and logs.
- This broad data collection capability allows it to monitor everything from traditional data centers to modern cloud environments and even remote work setups.
- Unified management dashboard that consolidates views from across the network, regardless of where elements are hosted (on-premises, in the cloud, or in hybrid environments).
- Crucial for environments that use a mix of legacy and modern technologies, such as microservices and containers.

### New Deployment Paradigm

- Supported on Windows and Linux clients and servers
- Does not rely on expensive hardware/virtual “boxes” that are becoming increasingly harder to deploy and can't be used to cover SaaS, public cloud, private cloud, user WFH scenarios
- Allows customers to deploy a single visibility agent on any user or server endpoint and select the desired EUEM and/or network module
- Less costly than traditional appliance approaches
- Flexible, easy, and scalable approach to instrumentation

## Intelligent Workflow Insights

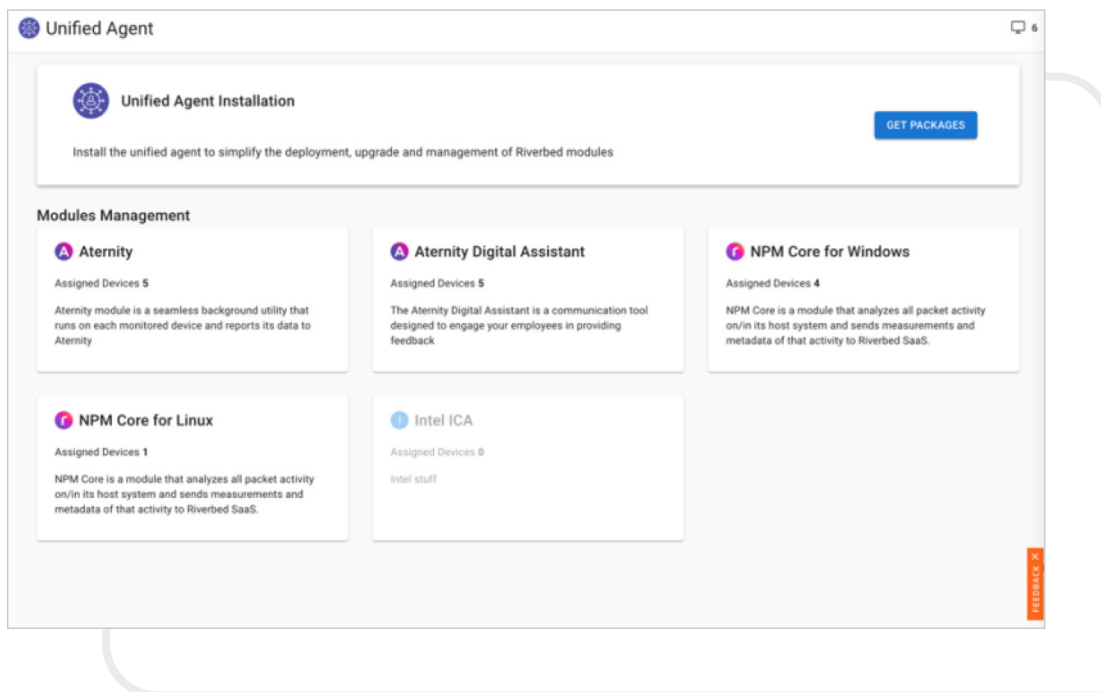
- Intelligent insights to understand TCP/IP behavior
- Measure app performance for all users of your critical apps
- Monitor network performance for all users all the time
- Extends visibility into network environments that are otherwise unattainable – public cloud, private cloud, SaaS, WFH/WFA and encrypted environments
- Break down application response time into contributing sources and launch troubleshooting of root causes
- Measure traffic by application, user, business division, and location
- Analyze historical information for trending and capacity planning
- View device metrics, such as usernames, processes, applications, system names to streamline troubleshooting

## Related Products

### Riverbed Unified Agent

The [Riverbed Unified Agent](#) is a single agent technology that streamlines deployment, management, and updates of Riverbed’s agent-based offerings. Using selectable modules, it helps IT reduce agent fatigue and agent conflict, while collecting a broad range of telemetry. As an essential element of our Riverbed AIOps platform, the optional modules are specialized for

collecting observability data for Aternity EUE, NPM+ and select third-party modules from devices across edge, datacenter and cloud environments. Riverbed Unified Agent streamlines the deployment of agent modules, delivering a single installation and management process. As a result, the Riverbed Unified Agent underpins the ability to deliver enhanced digital experiences while mitigating the impact on system resources.



## Riverbed AppResponse

Riverbed AppResponse, appliance-based packet capture and analysis, provides robust network and application analytics, streamlining issue diagnosis and resolution of complex network issues. Complementary to Riverbed NPM+, it comes ready with predefined network insights and a rich variety of application metrics for monitoring on-premises network environments. AppResponse integrates network forensics, application analytics, and end-user experience monitoring in one solution.

## Learn More

For more information on Riverbed NPM+, please go to [riverbed.com/npm-plus](https://riverbed.com/npm-plus).

## Riverbed Aternity EUEM

Riverbed Aternity End User Experience Monitoring provides visibility into the employee experience on every cloud, SaaS, thick client, or enterprise app in your portfolio. NPM+ has been built as an easy and natural complement to Aternity. The UI looks and acts the same. They both leverage the Unified Agent. NPM+ gives Aternity users easy access to network performance data.



### Riverbed – Empower the Experience

Riverbed, the leader in AI observability, helps organizations optimize their users' 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 improve 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](https://riverbed.com).