

# Riverbed Unified Agent

A single platform for managing Riverbed and select third-party agent-based modules



# AI is the next big inflection point

Data is the currency of today's businesses. In the world of AI and machine learning (ML), data accuracy is of paramount importance. The more accurate the data the more accurate your AI and machine learning. Riverbed collects and aggregates the most accurate data in the marketplace. Accurate data is THE critical foundation for successful AI and ML implementations.

When it comes to delivering on the promise of superior observability and optimization to enterprises, instrumentation is required across all points of the enterprise computing model: data centers, cloud, and edge devices. All this must be achieved despite the migration of applications to the cloud and the implementation of zero trust networks, both of which create blind spots due to the traditional approach to network traffic analysis. IT organizations need full-fidelity telemetry data to understand, predict, prevent, and resolve issues. Sampled and synthetic data are not optimal for use in building AI capabilities.

Riverbed's unique ability to capture and analyze data and our strategy of providing a fully integrated suite of products that is smart, simple, and open is what sets us apart. The ability to capture and bring together the full spectrum of data and apply AI-driven correlation and automation capabilities makes us the leader in AI-driven automation for enterprise IT observability and optimization.

The most effective way of working autonomously and continuously is using software agents to manage or provide visibility into the enterprise IT environment. The problem comes as complexity grows and IT departments feel the impact of too many agents.

## Challenges with managing an agent fleet

ITOps teams need to gather data from all sources for complete observability across an enterprise or government organization. One of the most efficient ways to capture this data is by using agents. Agents can be typically deployed on any endpoint – on end user devices, on application servers, and in cloud containers.

Managing an agent fleet is largely manual today, which means it's time-consuming, inefficient, and costly. Riverbed research shows users have an average of 31 agents on their device. As a result, some devices take up to 3 minutes to boot and they suffer an average of one agent crash per month per device.

There are two key challenges to managing a fleet of software agents across endpoints:

1. Agent fatigue or the effort to continually qualify, install, manage, and update the agent fleet is a top concern of service desk teams. IT must qualify each agent before

installing to determine if there are security risks, agent compatibility, or integration issues by the new agent.

Installing the latest agent patches and updates is also manual. IT must manually touch hundreds of different components to update each agent. This process is laborious and mind-numbing.

2. Agent proliferation can hinder user experience.

The use of too many agents can impact system performance, leading to increased device boot or shutdown times. Additionally, agent collisions can disable core functionality.

Here are some of the stories we heard from our customers that illustrate these points:

- F500 retailer says their laptops “are paper weights” based on how long they take to boot, because of too many security agents.
- A Government agency says employees start preparing to leave the office 30 minutes before the end of day to allow for the 30-minute shut-down sequence to run.

- F500 Insurance company had over 2,000 devices experiencing multiple “blue screen of death” each day. Analysis determined a security agent conflicted with other agents on the PC.

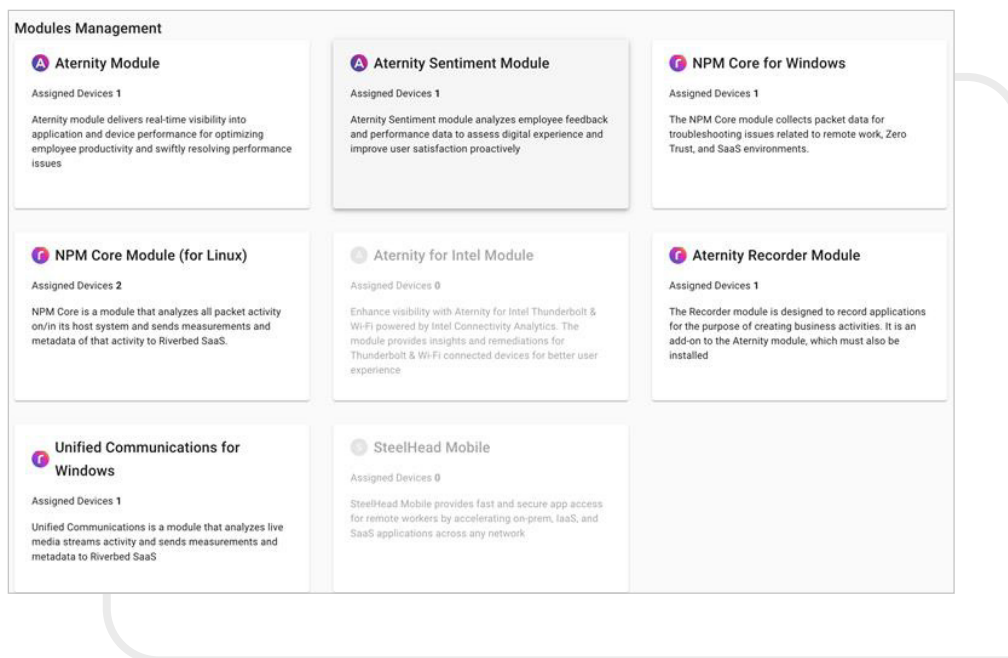
I’m sure you can easily think of your own horror stories.

# Riverbed Unified Agent simplifies agent management

The Riverbed Unified Agent is an essential element of Riverbed’s fully integrated AIOps Platform. Riverbed Unified Agent has been architected from day one to be the single agent platform for deploying and managing all Riverbed and select third-party agent-based offerings, providing massive scalability and efficiencies.

The Riverbed Unified Agent Manager is a single agent management tool that allows IT to easily deploy, update, and manage modules from Riverbed and third-party certified modules. The Unified Agent Manager provides tangible benefits to IT administrators, including:

- Single installation process.
- Single point of management for enabling modules features.
- Single security validation.
- Ability to easily to add or disable agent modules.
- Built-in governance to protect customer assets.
- Automatic updates of modules
- Support for third-party modules, certified by Riverbed.



**Figure 1:** Riverbed Unified Agent is a combination of selectable modules packaged into a single agent and managed by the powerful and intuitive Unified Agent Manager tool.



## Riverbed Unified Agent overcomes agent fatigue

The Riverbed Unified Agent is distinctive in the industry because it is:

- **SMART:** Riverbed Unified Agent provides one solution to deploy, manage and update all Riverbed agents and modules.
- **SIMPLE:** Unified Agent Modules can be easily updated with a click of a button.
- **OPEN:** We certify select third-party software modules so you can have confidence that they work seamlessly as part of the Riverbed Unified Agent and the Riverbed Platform.
- **FULL-FIDELITY:** Due to our extensive instrumentation and data capture techniques, our data is true full-fidelity data, not merely sampled or synthetic data, and it captures user sentiment data, which means your AI outcomes are more accurate. You will achieve better outcomes.
- **EFFICIENT:** Riverbed Unified Agent has a lower footprint, consolidating legacy agents up to 3:1 for even greater impact across your IT landscape.

## Future proof your agent strategy

Riverbed offers immediate access to a library of selectable modules to future-proof agent strategy. Modules include: end-user experience monitoring, network visibility, VoIP and video performance analysis, Intel Thunderbolt and Wi-Fi diagnostics, and SteelHead Mobile support. A Packet Capture Module will be available shortly.

Modules are supported on Windows and Mac desktops, Windows and Linux servers and soon, Kubernetes.

## Granular control over deployment

The Riverbed Unified Agent Manager provides granular control over deployment options, putting you in charge of where, when and which module each device receives. It enables faster access to enhancements and new features by allowing modules to be released individually without waiting for other updates. Together with the introduction of new certified modules delivered by partners like Intel. As a result, IT spends less time and cost rolling out updates.

- Auto-configure and deploy modules with fine-grained control
- Clear deployment license status: Total licenses, Active Services, In Progress, Stopped and Errors
- At-a-glance view of the number and types of deployed and undeployed modules
- Automatic module updates

## Reduce management overhead

Easily control who gets which modules and when. Management features include:

- **Flexible control modules:** Start, stop, update, restart, custom install, reinstall, and uninstall modules.
- **Fine-grained endpoint management:** Easy creation of custom groups by O/S, device type, country, or host names for managing deployment and updates.
- **Achieve clear identification of module version and status:** stable, beta, alpha, excluded devices.
- **Gain at-a-glance module status indicators:** Failed, updating, restarted, cannot start, pending, reinstalling.

The Riverbed Unified Agent also reduces the risk of conflict. We certify our modules' compatibility and provide a fast path on-ramp for you to certify within their environment. Because modules share common elements, the Riverbed Unified Agent requires less overhead and is more efficient.

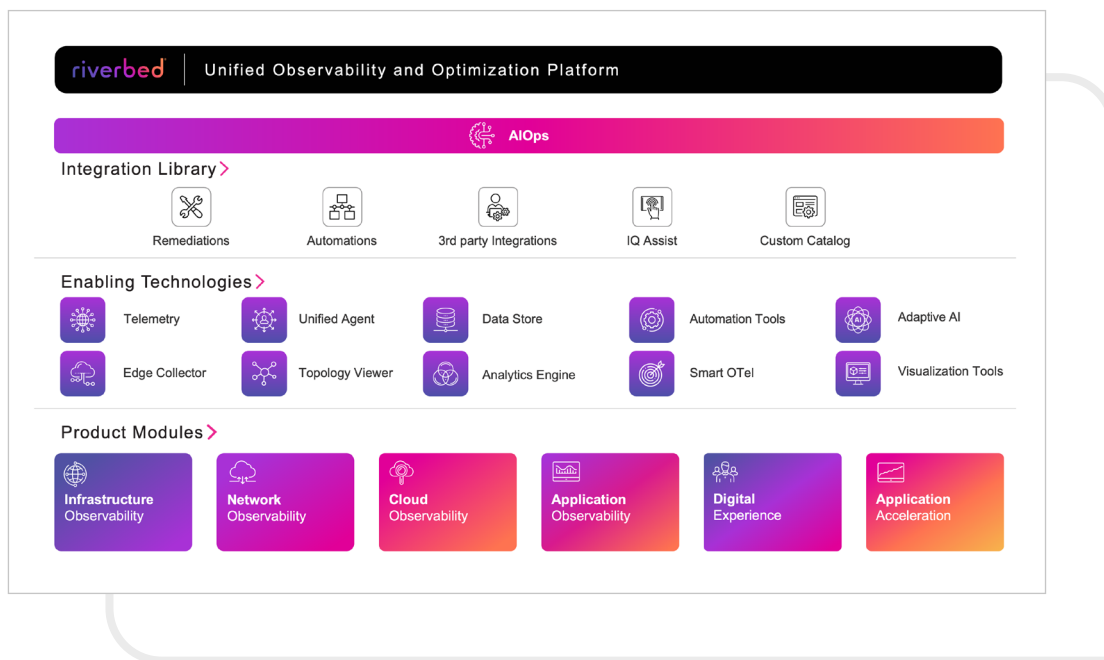
Lastly, the Unified Agent Manager delivers a better user experience by governing performance and system resources with insights from the full fidelity data collection so IT can deliver better user experiences.

# How Riverbed Unified Agent fit into the Riverbed Platform

Not only does Riverbed solve the challenges associated with how to reduce the effort required to continually qualify, install, and manage our agents. We also solve “the what can be done” problem with the data captured across the spectrum of both agent-based and agentless collection techniques to benefit the organization.

The Riverbed Unified Agent modules collects full-fidelity data and directs key metric to the Riverbed Data Store where it can be leveraged by Riverbed IQ Ops for advanced analysis and correlation, automated remediation, and visualization through customizable dashboards as part of Riverbed Platform.

Riverbed’s true power comes not just from the Riverbed Unified Agent capabilities, but rather in its combination with Riverbed Edge, which processes our on-premises network data. Together, Riverbed’s comprehensive collection of full-fidelity network pack, flow, and infrastructure data from on-premises and agents on endpoint devices and cloud-delivered services is unmatched.



**Figure 2:** The Riverbed Platform supports the full stack of observability and user experience data gathered across hybrid, multi-cloud environments. Unified Agent plays an integral role in the collection of data.



The Riverbed Platform is a set of fully integrated products that are all designed to work together seamlessly and with popular third-party products. In addition to superior observability and optimization, it allows IT leaders to break down the silos of the IT organization for major gains in efficiency and to shift investments from maintaining what they must to investing for innovation. How do we do it?

## We instrument everything

With Riverbed's data collection approach – nothing is invisible. We capture full-fidelity data from client devices, networks, servers, applications, cloud-native environments, and users themselves. Unlike other products that sample data to deal with the scale of today's distributed environments, our platform sees every transaction, packet, and flow. It also analyzes actual user experience – quantitative and qualitative – for every type of application, not just web and mobile. As a result Riverbed provides real data, not only synthetic or sampled data, to the AI learning engine which makes our AI-driven analysis and remediation highly accurate.

## We make it smart

By applying a variety of proprietary data science techniques across disparate data streams. Riverbed detects and correlates anomalies to surface the most business-impacting events faster and with precision. Unlike other products that correlate events primarily on time, our platform automates the process of gathering and correlating every relevant metric across time, device, location, users, and applications.

## We make it automated

Riverbed delivers context-rich, filtered, and fix-first insights, ready for IT action. These insights enable effective cross-domain collaboration and decision-making to accelerate mean time to resolution (MTTR). Providing a single source of truth for IT reduces time wasted in war rooms, finger-pointing, and excessive escalations. Through open APIs, these actionable insights also add value to a broader ecosystem of tools, – such as ServiceNow, Splunk and Datadog – to improve digital experience and IT quality.

## We make it agile

Riverbed uses AI and machine learning, correlation, and automation runbooks to streamline repeatable processes with minimal human intervention, lowering costs and improving user satisfaction. It uniquely offers broad automation use cases that extract insights across the Riverbed Platform telemetry and third-party tools to simplify and automate resolution.

## We play well with others

The Riverbed Platform easily integrates with industry-leading third-party solutions that are being used across your IT structure. This means you don't have to change the way you work or walk away from your current investments. It is also a pathway to consolidating management tools and reducing licensing costs and complexity.

In short, Riverbed gives IT leaders a pragmatic strategy to optimize today's investments and plan for the future.





# Summary

Riverbed Unified Agent aims to address the challenges associated with agent management, providing a SMART, SIMPLE, and OPEN solution. The emphasis is on enhancing IT efficiency, reducing costs, and improving user experience.

Riverbed Unified Agent in combination with the Riverbed Platform enables customers to confidently engage with Riverbed for powerful and compelling answers to your AIOps and observability needs.



## 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](https://riverbed.com).