

Riverbed IQ Ops

Solve problems faster by empowering IT with AIOps-driven automation.

Employees rely on seamless technology to stay productive and engaged. But when systems lag or workflows break down, frustration rises, and efficiency suffers. Every digital hiccup is a barrier to success, putting pressure on IT leaders to ensure a smooth experience. This is where Artificial Intelligence for IT Operations (AIOps) comes in—using AI-driven insights to predict, prevent, and resolve issues before they impact employees and processes, keeping the digital workplace running at its best.

Common IT Challenges Drive Need for AIOps

The complexity, volume and velocity of monitoring telemetry has increased so much that it is no longer feasible for IT to manually analyze and correlate the data and still meet operational expectations. Add to this an ongoing shortage of skilled IT experts and together they are driving the need to improve business insights with AIOps and automation.

According to Gartner, the following critical characteristics are essential to deliver value for AIOps implementations:

- Leverage AI/ML – specifically causal, predictive, and generative AI technologies – to eliminate manual processes, data silos, and poor user experience.
- Ensure AIOps actions and outcomes are explainable, simple to understand, and easy to include in ITSM/ITOM systems for future reference.
- Ingest and analyze data from a broad variety of observability and monitoring sources.
- Automatically detect incidents in real-time and surface their probable root cause.
- Correlate metrics and incidents to reduce alert noise and alert fatigue.
- Incorporate real-time, dynamic topology mapping to improve incident correlation to IT infrastructure.
- Enable automated troubleshooting and remediation to reduce mean time to resolution (MTTR).

Riverbed IQ Ops

Riverbed IQ Ops is Riverbed's SaaS solution for AIOps. It uses artificial intelligence (AI), machine learning (ML), and big data analytics to determine anomaly baselines, detect anomalous behavior, and automate IT operations to help organizations predict, detect, and resolve IT issues more efficiently.

It codifies expert knowledge so that automation can be used to investigate incidents, recommend remediations, and even autonomously remediate issues to continuously improve digital experience for customers and employees.

Riverbed IQ Ops uses full-fidelity network, application, and endpoint observability data from across the IT landscape and applies AI/ML to contextually analyze and correlate metrics and events to prioritize incidents by business impact or customer-specified factors such as location, application, etc. This analysis and correlation also triggers investigative automations that replicate the troubleshooting workflows of IT experts to gather additional supporting diagnostics, filter out noise, and set priorities—reducing the volume of alerts by many orders of magnitude to the most business impacting, and empowering staff at all skill levels to identify and solve problems fast.

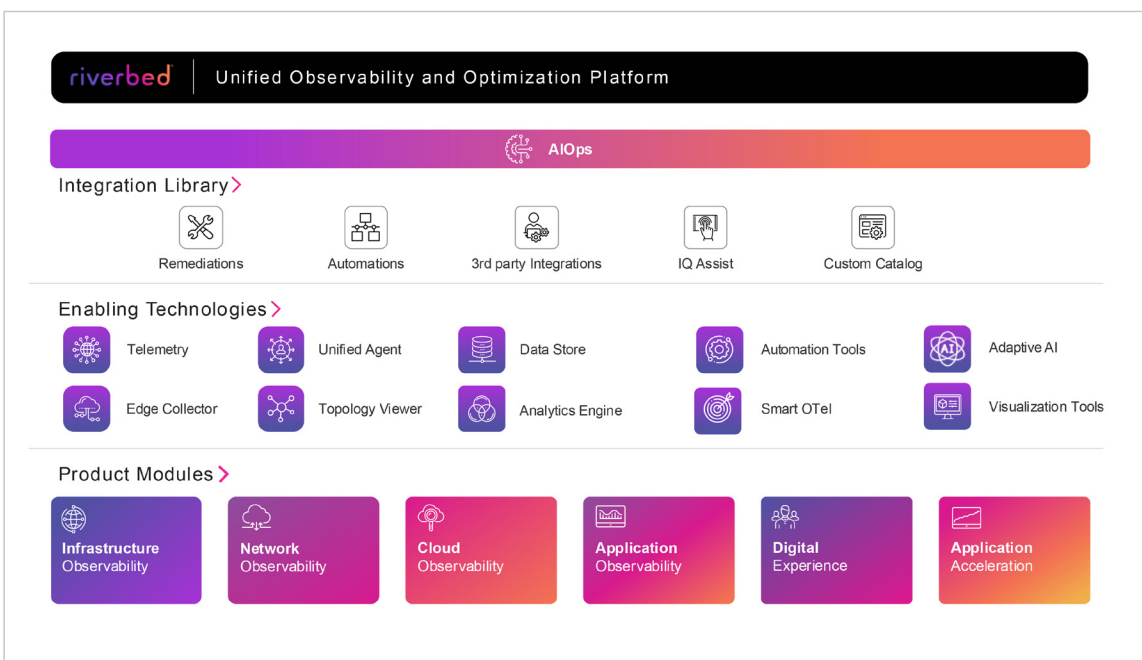


Figure 1: Riverbed IQ Ops reduces the high volume of alerts by correlating multiple high-fidelity trouble-indicators into a single high-confidence incident, automatically runs customizable scripted investigations to gather additional context, programmatically set the priority, and surface this information so IT staff can quickly resolve the issues that are critical to the enterprise.

Riverbed IQ Ops Benefits

Riverbed IQ Ops eliminates data silos, provides contextual insights, and enables automated actions, empowering organizations to move from simply monitoring and gaining visibility to reaping the benefits of full-fidelity AIOps. By building on key enabling technologies such as the Data Store, Analysis & Correlation, IQ Assist, Unified Agent, Automations, and Topology Map, Riverbed IQ Ops ensures customers can:

1. **Reduce MTTR** with actionable insights and intelligent automation that improve digital service quality and productivity for customers and employees.
2. **Improve first-level resolution rates** by enabling L1-L2 teams to troubleshoot more incidents without needing escalations and war-rooms involving multiple teams and subject matter experts.
3. **Reduce alert fatigue** by eliminating high-volume low-impact alerts, so IT staff can focus on fewer, more critical events.
4. **Share insights with an OTel collector** using Riverbed's Smart OTel feature, which turns telemetry data into actionable insights. By refining data before distribution, it cuts through the noise, enabling IT teams to focus on what matters—boosting efficiency and accuracy.
5. **Enhance IT productivity and collaboration** by resolving the challenge of distributed, inconsistent data and data silos across domain-specific IT teams that cause repeated trouble-ticket reassignments and extend time to resolution.
6. **Accelerate digital innovation** by reducing time spent on troubleshooting, leaving more time for revenue-generating projects.
7. **Capture environment-specific knowledge held by expert IT professionals** in flexible automated triage and investigation workflows, usable by all levels in the organization, instead of being buried under volumes of outdated documentation.



Key Features

Full-fidelity Telemetry

Broad-based telemetry brings together a unified view of performance and insights, which is the foundation of an AIOps service upon which all other capabilities are delivered. Unlike other products that limit or sample data to deal with the scale of today’s distributed environments, Riverbed IQ Ops leverages

full-fidelity packet, flow, network device/interface, and end user experience metrics. We do not sample. This richness of data gives IT a complete picture of what is happening, without missing key events.

Analysis & Correlation

Riverbed IQ seamlessly connects all deployed observability tools, whether Riverbed’s or from other vendors, and then applies AI/ML for causal

AI to identify root cause of issues, predictive AI to forecast future problems, generative AI to make smart recommendations, and explainable AI to give customers confidence in their decision making as they resolve incidents.

Unlike other products that correlate events primarily based on time, IQ automates the process of gathering and correlating data across time, device, location, users, and applications. It uses AI/ML to establish anomaly baselines and detect anomalies, consolidate related alerts and reduce the number of alerts IT must process. Applying advanced analytics to the set of observability data enriched by the Data Store, provides IT with more accurate insights into the scope and severity of issues and the root cause of poor performance.

Impact Dashboard

Customers use the Impact Dashboard to view prioritized incidents based on the number of impacted users, most-impacted locations, and most-impacted applications to help understand the effect on their business. Customers can filter by priority, time, or status, as well as view active event distribution by event priority and how incident priority changes over time.

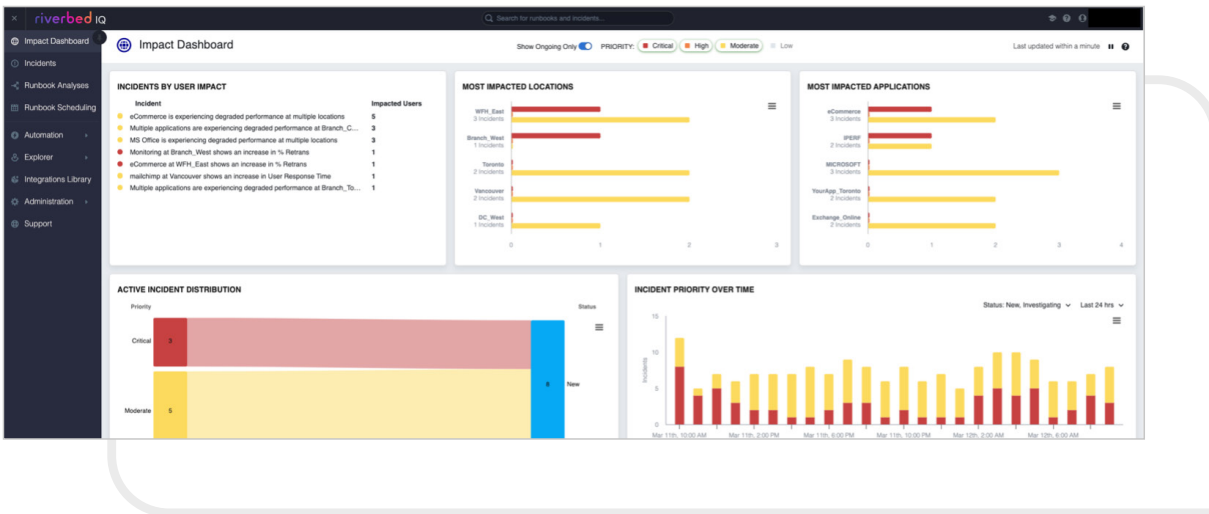


Figure 2: The Impact Dashboard leverages AI and ML-based correlations to identify and highlight the events that most impact your business.

Impact Summary

With the combination of full-fidelity telemetry, intelligent correlation, and workflow automation, Riverbed IQ Ops delivers context-rich, filtered, fix-first insights, ready for IT action. These insights enable effective cross-domain collaboration and decision-making to accelerate mean time to know/resolution.

Custom tags give the customer a feedback loop mechanism to enrich the properties of monitored entities for better prioritization of automations and to drive better decisions.

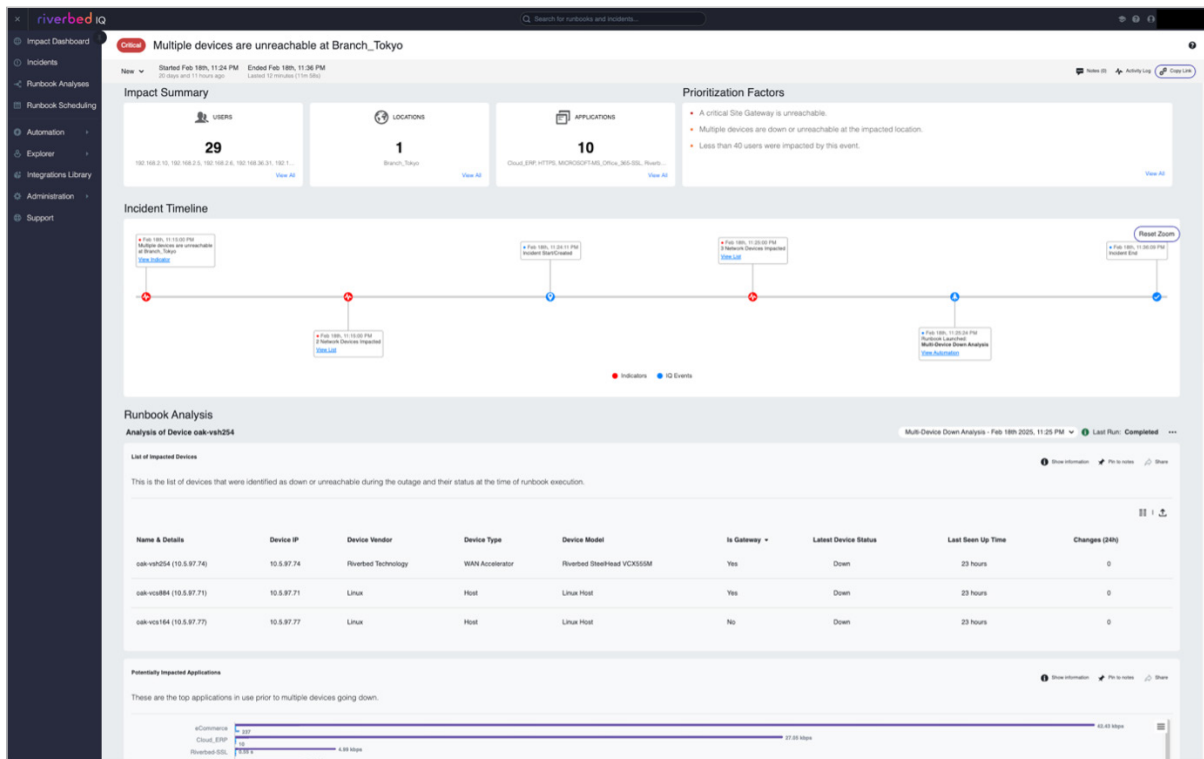


Figure 3: The Impact Summary spells out the timeline and root cause of a problem in plain language, and even lets you know what's not part of the issue.

Generative AI (Riverbed IQ Assist)

Riverbed IQ Ops includes Riverbed IQ Assist for Generative AI functionality, based on a secure, private, observability domain-specific large language model (LLM). Riverbed IQ Assist delivers natural language summaries of observability data and incident analysis from across the landscape of deployed observability tools, making it easy to identify and understand anomalies and root causes. Unlike competitors' GenAI products that require lengthy chatbot interactions, Riverbed IQ Assist provides automated, contextual diagnostic insights upfront. In addition, IT staff can describe issues in natural language to receive prioritized, actionable

remediation steps powered by AI. These capabilities simplify diagnostics, empower less experienced staff, and significantly reduce Mean Time to Repair (MTTR) and First Call Resolution (FCR).

IQ Assist boosts productivity by analyzing alerts, correlating them with remediation actions, and recommending the most effective solutions. Operators can trigger remediations manually or automate them for faster resolutions. This approach reduces manual effort, minimizes escalations, and optimizes workflows, allowing L1 teams to resolve issues with precision. Senior staff can focus on strategic projects that align with business goals, enhancing the organization's overall performance.

4.2/10 DEVICE SCORE

Patsy Pfaff
Title: Sales Engineer
Department: Sales
Location: Miami Office
Contact details: Patsy_Pfaff@company.com

HEALTH BOOT PERFORMANCE

CPU Model: Intel(R) Core(TM) i5-4670 CPU @ 3.40GHz
Device Serial Number: MXLE361130
Hostname: Patsy_Pfaff_WKS
IP Address: 10.100.75.3
Manufacturer: Dell Inc.
Memory: 2GB
Model: XPS 8900

Network in Use: LAN
OS Architecture: 32-bit
OS Free Disk Space: Up to 0.5 GB
OS Version: Microsoft Windows 10 Enterprise 1709
Stability Index: 9.8
Subnet: 172.4.0.0/16
User Name: patsy_pfaff

Recent Events

Event	Details	Recorded At
HD Failure	D: Drive (Drive)	Jan 16, 9:37 PM
Application Crash (After Hang)	outlook.exe 16.0.4615.1000 (Process)	Jan 16, 6:43 PM
Low Disk Space	C: (Drive)	Jan 16, 5:12 PM
Overheat Related Shutdown	N/A	Jan 16, 4:22 PM

SOFTWARE CHANGES

No software changes found in the selected time frame.

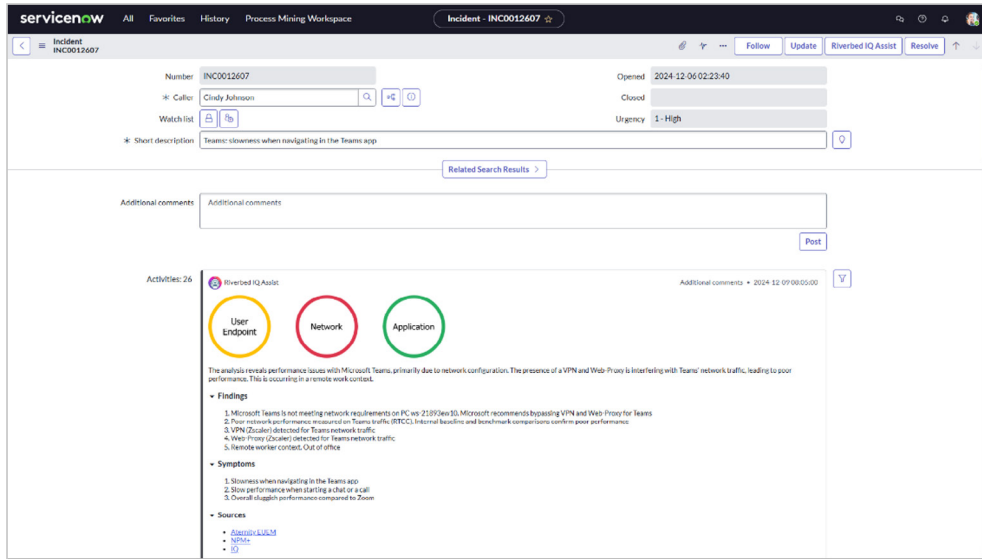
Orders portal not responding

I've analyzed the reported issue with the Orders portal not responding. This could be caused by various factors including network connectivity problems, browser cache issues, or DNS resolution problems. Let's explore some potential solutions to address these possibilities.

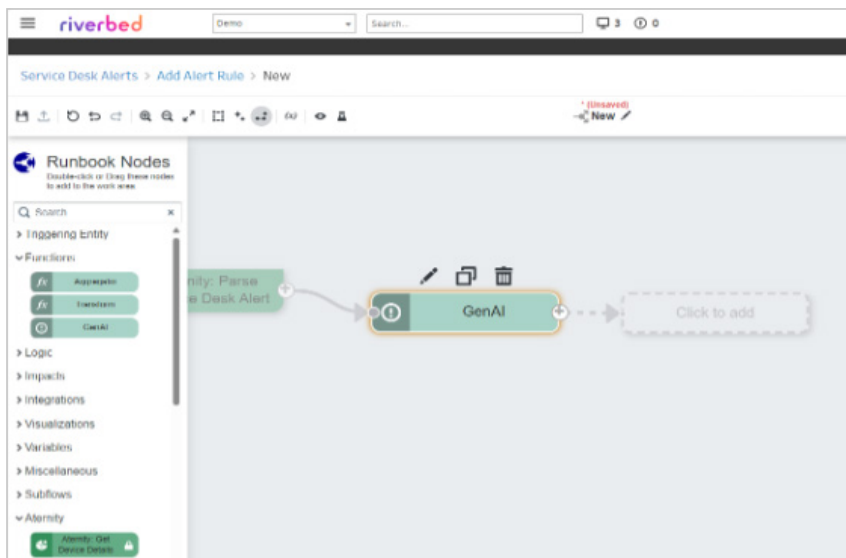
- > **Clear Browsers Cache**
Clearing the browser cache can resolve issues with web applications like the Orders portal. This action stops the browser(s) and clears their cache, which might help if the problem is related to outdated or corrupted cached data.
- > **Clear DNS Cache**
If the Orders portal is not responding due to DNS resolution issues, clearing the DNS cache can help. This action fixes 'DNS Server is not responding' application issues by refreshing the local DNS cache.
 - > Perform a DNS name server lookup for target address.This action can help identify if there are any DNS resolution problems specific to the Orders portal domain. It uses the nslookup command to check if the domain is resolving correctly.
 - > Ping a target address to check availability and collect round trip time
 - This can help determine if the Orders portal server is reachable and responsive. It will collect network round trip time against the target address using the ping command.
 - > Perform a tracert to against target address to understand network path and delay
 - If network connectivity is the issue, this action will help identify where in the network path the problem

Message Riverbed IQAssist

Building on the Causal and Predictive AI capabilities of Riverbed IQ Ops, IQ Assist offers natural language summaries of analytics from the customer's observability data. A graphical indicator highlights the root cause (e.g., network, endpoint, or application), ensuring tickets are routed correctly on the first attempt. Automated remediation resolves most issues without human intervention, speeding up MTTR and optimizing IT operations. This enhances collaboration and keeps your team agile and efficient in addressing complex challenges.



With IT talent in short supply, Riverbed helps maximize productivity by automating expert and tribal knowledge through low-code/no-code workflows. In 2024, Riverbed achieved significant customer success with the Intelligent Service Desk feature, which automates remediations effectively. IQ Assist advances this functionality by adding a GenAI LLM node, enabling tailored interactions without the inefficiencies of typical chatbot conversations. This node facilitates automated investigation and remediation aligned with your environment, ensuring accurate and proactive issue resolution.



Intelligent Automation

Rather than immediately sending an alert to users, Riverbed IQ Ops replicates the investigative workflows of IT experts to automate the process of gathering evidence, building context, and setting priorities. These investigations save time, reduce escalations to Level 3/4 experts, and turn the knowledge

that resides in the minds of a few specialists into knowledge that is usable by all IT. These no-code/low-code automations are easily customizable so additional workflows can be created using the highly graphical, easy-to-use interface.

Automation workflows can be triggered by detected anomalies or external events/alerts, can be scheduled to run at the customer's preferred time, or executed on-demand.

Riverbed IQ Ops automation enables multiple use cases - there is almost no restriction to what is possible.

Some commonly deployed examples are for:

- Incident response workflows to automate the troubleshooting processes of IT experts.
- Automated remediations as a part of the Aternity Intelligent Service Desk feature to address common issues like software asset management, disk/cache issues, device refresh, technology upgrades, UC performance, and more.
- Integrations with 3rd party observability products (e.g., APM, ITSM, ITOM, SIEM/SOAR, Event aggregators, etc.) to streamline troubleshooting and eliminate data silos.
- Smart OTEL to simplify and intelligently share observability data with an OTEL collector, while also serving as an OTEL broker for non-OTEL compliant products.
- Generative AI for incident summarization, recommended remediations, dynamic ticket management, and report generation.

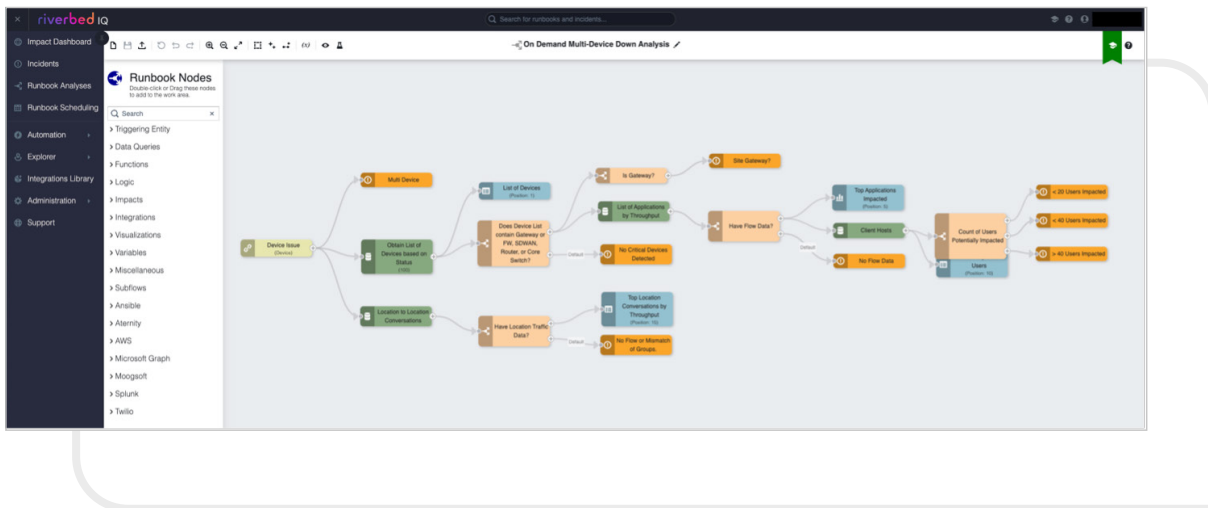


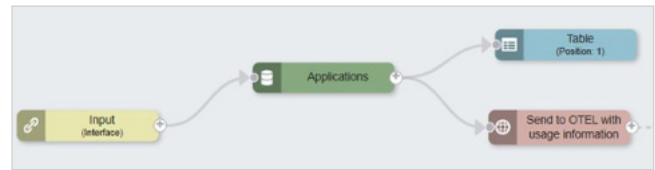
Figure 4: No-code/low-code workflows replicate the investigative processes of IT experts to automate the process of gathering evidence, building context, and setting priorities.

Smart OTEL (OpenTelemetry)

To overcome the fragmented nature of observability insights, many enterprises are turning to OpenTelemetry to collect data from all the data sources in their network and then apply analytics to that data. Unfortunately, this puts the onus on IT to store, process and build or optimize tools to analyze this massive volume of raw data. This further exacerbates the problem resulting in delayed analysis, slower resolution times, and escalating operational cost.

Riverbed Smart OTEL transforms OpenTelemetry implementation by integrating AI, automation, and precision filtering to deliver actionable insights at the right moment. Customers now have immediate access

to OTEL-compliant export of any data from any Riverbed product to any export of any data from any Riverbed product to any OTEL collector for further processing and/or visualization in tools such as Grafana. And, because this is all achieved through automation workflows, it can be combined with other IQ Ops functionality such as IQ Assist or integrations with 3rd party data sources to augment the OTEL data with even more value.



Third-Party Integrations

Riverbed firmly recognizes that an open ecosystem of tools that can integrate and interwork easily with each other, is essential to the success of IT Ops. Towards that end, Riverbed IQ Ops enables customers to securely integrate with any third-party solution which has an accessible REST API, or leverage a pre-built integration from the Integration Library.

These integrations support importing data into automation workflows to provide a more complete understanding of performance issues, as well as exporting actionable insights to non-Riverbed products such as ITSM, ITOM, or other tools used by IT in their current operations. Integrations are built as containerized, reusable nodes, called subflows, that can plug into any automation workflow.

For a list of pre-built integrations, please visit the Riverbed Integrations Library: riverbed.com/integrations-library/

Identity, Access & Security

- Riverbed IQ Ops supports SAML 2.0-based authentication so organizations can use their trusted identify provider and not need to manage passwords in another tool.
- Role-Based Access Controls (RBAC) let administrators control who has access to which data.
- Riverbed IQ Ops also achieved SOC 2 Type II and ISO 27001 certifications. For more details, visit our Trust Center: riverbed.com/trust-center/
- Riverbed IQ Ops is GDPR compliant.

Product Compatibility

As with any AI solution, the quality of the data directly impacts the outcome, and Riverbed IQ Ops provides richer insights when using multiple, diverse data sources.

- Riverbed® NetProfiler™ 10.24.2 or higher
- Riverbed® NetIM™ 2.6.1 or higher
- Riverbed® AppResponse™ 11.12 or higher
- Riverbed® Aternity™ SaaS

Learn More

Riverbed IQ Ops applies artificial intelligence to correlate data across domains and automates the investigation process to dynamically surface impactful issues with context, so IT can understand and resolve issues faster. It eliminates data silos and alert fatigue, improving decision-making to continuously improve business continuity.

To learn more about Riverbed, please visit riverbed.com/products/riverbed-iq/



About Riverbed

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