

Keysight Technologies



Electronics manufacturing firm leverages Riverbed Observability solutions to gain network visibility and enable faster troubleshooting.

Overview

Keysight Technologies, an American-based manufacturer of software-centric electronic design, emulation, test, and measurement equipment, wanted to improve visibility into its network environment to proactively resolve any potential issues. Keysight sought assistance to improve efficiencies with Riverbed Observability solutions.

Challenge: Need for maximum visibility to understand dependencies

Keysight relies on a number of custom applications to manufacture its devices, and analyzing these applications' dependencies was critical for the company.

Keysight Technologies is an S&P 500 technology company that empowers engineers with software-centric design, emulation, and test solutions that serve across the design and development environment to enable innovation breakthroughs at speed and with reduced risk. Headquartered in California and with offices and manufacturing worldwide, Keysight customers span the communications, industrial automation, aerospace and defense, automotive, energy, semiconductor, and general electronics markets.

“A lot of our software development is tied to tool sets that are deeply integrated into public internet, which makes isolating performance issues extremely challenging,” says Ray Schumacher, Network Architect, at Keysight. “We needed visibility into the app environment to resolve any performance issues. We wanted to be notified early when apps did not work by setting alert thresholds.”

In Brief

Challenges

- Desired additional visibility into the network and application environment
- Wanted to better isolate network performance issues
- Interested in tracing dependencies
- Needed to optimize network capacity

Solution

- **Network Observability**
Riverbed® AppResponse
Riverbed® NetProfiler

Benefits

- Improved visibility and the ability to zoom into specific problematic sites
- Faster troubleshooting of server issues, streamlined general troubleshooting
- Early warning of increased consumption

Solution: Expanding the use of Riverbed solutions

Keysight has partnered with Riverbed for years, providing network packet brokers that can be used by Riverbed Network Observability solutions to simplify filtering, deduplication, and decryption of network traffic.

As a long-time Riverbed customer, Keysight wanted to maximize their visibility across networks and applications and dependencies.

Keysight started the implementation process with Riverbed NetProfiler and Riverbed NetFlow, and then added Wireshark to decode the packet capture.

This was followed by Riverbed AppResponse, which provided better visibility for real-time troubleshooting and historical packet data at any campus. Keysight then started expanding its footprint to all its infrastructure to increase visibility and gain the ability to zoom in on a particular site. While the cores and critical sites of Keysight are empowered with packet analysis through AppResponse, other sites across the globe employ NetProfiler which supports flow monitoring and on-demand packet analysis.

Benefits: Fast Diagnosis and Troubleshooting

Visibility and actionability are the biggest gains Keysight achieved with the Riverbed solution. Riverbed played a pivotal role in helping Keysight better orchestrate and architect some of the applications that were being used across different business towers. Additionally, having AppResponse on internet ports allows the company to capture changes in throughput and responsiveness when they face performance issues, a feature that's proven its worth in troubleshooting problems. "When things are suspicious and we see way too many re-transmissions or responses, Riverbed AppResponse helps us perform deep analysis," explains Schumacher. "We can dive into the visibility of AppResponse and NetProfiler to determine if there's something in common between the different thresholds. Looking into the network is instrumental to see what's really going on in the environment,

Moving to a Future of Zero Tickets

According to Schumacher, the number one benefit of Riverbed is "the ability to go back in time and see what was going on in the environment when there was an issue."

"Riverbed Network Observability solutions can digest data and provide visibility from all kinds of sources. I can go back in time and look at packets from eight hours ago from a Wireshark capture," Schumacher explains. "It is a really nice feature to see and use historical traffic data to continue developing and understanding how we utilize the network.

which provides us with insights that we can act on to improve productivity and performance."

"Today we've incorporated Riverbed AppResponse to support our system, data centers, and hub sites," Schumacher enthuses. "By having this rich visibility, it makes it easier to see where problems are and allows us to be proactive on identifying and diagnosing problems before our user communities raise tickets."

"Looking into the network is instrumental to see what's really going on in the environment, which provides us with insights that we can act on to improve productivity and performance."

Ray Schumacher,
Network Architect, Keysight Technologies

For forensic purposes, should we need to look at past raw data and interactions from some time ago, we can do so thanks to Riverbed's tools that we have put in here".

Today, Keysight has become more proactive with Riverbed, resulting in more uptime and ultimately a better digital experience for users. Instead of users opening a ticket for every reported instance, the Keysight team is using the platform to fix issues proactively and gain greater visibility. "We are aiming for near-zero tickets. Everything should be proactively resolved before a user raises a ticket. That is the goal in my mind," concludes Schumacher.

“Today we’ve incorporated Riverbed AppResponse throughout our system. It enables us to proactively identify and resolve potential issues before any tickets are raised, resulting in near-zero tickets.”

Ray Schumacher, Network Architect, Keysight Technologies



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.