

# Unified Communications Analysis

# For Riverbed AppResponse

# Real-time and historical analysis of voice and video performance calls.

Collaboration apps like Zoom and Microsoft Teams grew exponentially during the pandemic, while VoIP solutions showed strong growth. With a full 83% of decision-makers believing 25%+ of their workforce will be hybrid post-pandemic<sup>1</sup>, the need for collaboration apps is clearly here to stay.

Both voice-over-IP (VoIP) and video can help organizations reduce telecommunications operating costs while delivering the high call quality that users expect. How¬ever, ensuring a quality user experience requires effective management, including a monitoring solution that will proactively identify call quality issues and enable rapid troubleshooting.

The Riverbed® AppResponse™ Unified Communications Analysis (UCA) module provides real-time and historical insights into voice and video call quality. An optional module for AppResponse, UCA is based on real voice and voice calls with the ability to drill-down to the underlying problem source to understand the interaction of voice, video and data traffic

## Riverbed Benefits

- Deliver consistent and reliable voice, and video performance for today's hybrid workforce
- Proactively monitor voice and video call quality and resolve issues before they affect end users
- Minimize the impact of performance degradations or unplanned outages on VoIP and video services
- Easily troubleshoot the source of poor call quality with real-time, web-based dashboards for quick resolution
- Reduce complexity and improve collaboration between IT professionals with a single solution for voice, video and data services

# Key Features

The key capabilities of the UCA module include:

- Vendor agnostic solution
- · Passive analysis of voice and video
- P.564 class 1 compliant MOS analysis
- Rich set of RTP metrics on a per-call, per-channel basis
- Automatic detection of active calls and incremental quality statistics
- Tracks QoS priority settings on the network
- Holistic solution for voice, video and data applications
- Business-level views of overall network health and VoIP performance

<sup>&</sup>lt;sup>1</sup>Riverbed | Aternity Hybrid Work Global Survey, 2021

# Insights

• Individual: UC Host Group

• Summary: All UC Traffic

• Summary: VoIP/Video Calls

# Navigator Views

- All UC Traffic
- Call User Groups
- Media Types
- Individual Calls
- Individual Channels

## **VoIP Metrics**

## Call Quality Metrics

- · Listening, conversational and transmission quality
- MOS ratings with ACR (MOS-CQ, MOS-V)
- TU and TTC scaling MOS-LQ

### Jitter Buffer Metrics

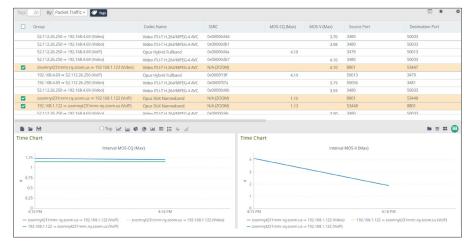
Out-of-sequence packets, lost packets, discarded packets and corrected packets

## IP/RTP Metrics

 Burst length/density, gap length/ density, and Type of Service (TOS)

### Degradation Factors

 Percentage contribution of loss, jitter, and codec to call degradation



#### Figure 1

The AppResponse UCA module provides visibility into MOS-CQ and MOS-V metrics for channels and individual calls. The highlighted channels are Zoom traffic. Note there's been some degradation in video quality over time.

#### **About Riverbed**

Riverbed enables organizations to maximize visibility and performance across networks, applications and end-user devices, so they can fully capitalize on their IT, hybrid workplace and digital investments. Riverbed solutions enable organizations to visualize, optimize, remediate and accelerate the performance of any network for any application, while supporting business objectives to mitigate cybersecurity risk and enhance the digital experience for all end users. Riverbed offers two best-in-class product lines: end-to-end visibility solutions – including Network Performance Management and Digital Experience Management (APM and EUEM) – that delivers actionable insights; and network and acceleration solutions, including application acceleration (SaaS, client and cloud acceleration), WAN optimization, and enterprise-grade SD-WAN. Riverbed's 30,000+ customers include 95% of the Fortune 100. Learn more at riverbed.com.

