



Managing service quality for VoIP over SD-WAN

5 ways to deliver the experience users expect

If you're considering VoIP over SD-WAN, then you've likely wondered more than a few times about how to handle call quality.

Because nothing spoils the savings and management benefits of SD-WAN faster than users complaining about their call experience. **Here's what you do:** Deliver and maintain the quality experience users expect with Cisco and LiveAction.

We bring together the unified communications, SD-WAN, and visual analytics solutions you need to ensure clear communications and the easy management of them.

The three components for a successful VoIP over SD-WAN strategy

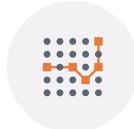




Cisco Unified Communications solutions

Broadest offering of solutions, from pocket to boardroom

Highest score in 2018 Gartner Critical Capabilities for Unified Communications





Cisco SD-WAN solutions

CRN 2018 Product of the Year Software-Defined Networking





LiveAction Visual Analytics

#1 network performance and visualization solution

Cisco DNA partner for Visual Analytics

Proven in 1000+ global enterprises

Deep Cisco SD-WAN integration with Day 0, 1, 2 workflows

5 ways to ensure optimal call quality using VoIP over SD-WAN



Enable collaboration experiences users will love across platforms and locations

User satisfaction starts with the solutions they're given. That's where Cisco Unified Communications solutions stand out: high user favorability ratings for ease of use and overall experience. Recognized leadership in innovation, performance, and work enablement. And the deepest offering to address the widest range of business needs.



Deliver voice services on a platform known for network performance

Cisco has many years of experience defining and implementing QoS for voice and real-time traffic. We understand the delay-sensitivity of voice data and the effects of packet loss, latency, and jitter on call performance. Echoes, interruptions, and strange sounds aren't what users want. They want reliability, while you want simplification and cost reduction. Cisco SD-WAN delivers. The combination of our intelligent automation software and best-in-breed networking hardware is why CRN awarded us the top spot in its Software-Defined Networking Product of the Year in 2018.



Extend the power of your existing Cisco infrastructure

Until recently, businesses needed to upgrade their hardware to take advantage of SD-WAN. Now application-aware routing is available with a Cisco IOS XE software update for Cisco ISR/ASR routers. The update enables higher bandwidth at lower cost, better reliability, and improved QoS for voice application experiences. It also means you can more easily connect your distributed offices, people, devices, and applications.







5 ways to ensure optimal call quality using VoIP over SD-WAN



Use visual analytics to simplify QoS management

People absorb information through images much faster than words and numbers. That's the advantage of LiveAction, the leading network performance and visualization platform. It provides full visualization of SD-WAN and QoS, regardless of network device.

It aggregates various telemetry data via traditional means, such as SNMP and IPFIX, along with API integration to Cisco vManage, to deliver continual performance visibility across applications, tunnel overlays, devices, and service provider transports.

NetOps can see, analyze, and control the SD-WAN environment end to end using intuitive visualization dashboards such as geography-based network topology maps, policy views, and flow paths. And because LiveAction is a trusted Cisco partner, it even offers deep insights across Cisco solutions to simplify overall network management.



Troubleshoot faster with pinpoint accuracy over traditional CLI commands

VoIP over SD-WAN has unique quality parameters and ranges needed for clear communications. LiveAction visual analytics helps ensure quality user experiences by monitoring performance and accelerating incident resolution. NetOps can use a single screen to view proactive alerts when network conditions change and see the exact interaction and parameters so they can isolate and resolve performance problems.

Here are ways LiveAction speeds incident resolution:

- Deep packet inspection (DPI) for rapid root cause.
 Voice troubleshooting requires SIP control plane and
 voice call visibility for problem isolation. LiveAction brings everything together to enable rapid isolation, root cause analysis, and a quicker mean time to repair (MTTR).
- Policy verification and visibility end to end.
 LiveAction looks at each device, interface, and traffic stream to ensure they're delivering the necessary resources to meet the defined key performance indicators. When key performance thresholds are crossed, LiveNX provides operational alerts to quickly identify issues.

Together, Cisco and LiveAction help you deliver the voice experience users expect, while enabling you to realize the cost savings, performance, and simplification benefits of implementing SD-WAN for voice applications.

Talk to us today to learn more.

LiveAction: sales@liveaction.com | Cisco: 1-800-553-6387