

QoS for Video Conferencing: Critical Considerations for Empowered Communications



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Enterprise video conferencing is gaining ground: PCWorld reports 40 percent of companies are now "very interested" or "somewhat interested" in video communication technology. While voice conferences offer some utility, meeting managers sometimes find it difficult to know who's talking and ensure everyone is paying attention. Visual solutions, meanwhile, promote ease of connection and corporate collaboration, but come with a caveat: ensuring quality of service (QoS) meets user expectations. Think of it as a QoS test.



As video becomes more important to enterprises, QoS for video conferencing is critical.

How can enterprises ensure their QoS for video conferencing addresses critical issues and helps deliver ideal performance?

Quality Considerations

According to Forbes, QoS is a top priority for both IT and non-IT executives, covering everything from visual fidelity to reliability. For example, the Forbes piece points out that lost time during video calls can quickly add up since every minute lost applies to all conference participants. Just five minutes lost on a 10-person call means 50 minutes of time wasted. Video conferencing also comes with

substantial bandwidth demands. Even with robust cloud resources, enterprises are often hard-pressed to ensure QoS policies can keep bandwidth available and adapt to changing circumstances.

QoS for Video Conferencing: Targeting Traffic

One of the biggest challenges for video conferencing QoS is bandwidth. Given the huge amount of traffic handled for day-to-day enterprise operations, it's critical that your organization specifically addresses traffic concerns and can effectively compensate for changing conditions. In practice, this requires a comprehensive understanding of traffic movement and types, which include:

- **What:** What type of traffic is coming across the network? QoS solutions must be able to determine if incoming traffic contains video data and adjust accordingly. For example, this may mean scaling back other traffic-heavy services during video calls to ensure high quality is maintained.
- **Where:** Where is traffic coming from? Where is it headed? By prioritizing specific senders and receivers, companies can reduce the chance of jitter or lag on conference calls. This also works in reverse: Businesses can limit inbound traffic from nonpriority sites and services while conference calls are active.
- **Why:** Are you expecting high traffic from a specific source? QoS protocols must be able to differentiate between incoming video call requests and illegitimate spam traffic from botnets, for example.
- **How Much:** Your network can only handle so much. Here, the right cloud provider can help relieve the pressure of high-bandwidth video calling, but QoS for video conferencing only works with the built-in ability to recognize upper limits and ensure multiple calls or conferences don't exceed capacity.

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Improving Conference Confidence

In addition to traffic-conscious QoS policies, it's also possible for enterprises to improve conference confidence with specific technology solutions, such as:

- **Multiprotocol Label Switching (MPLS):** MPLS networks are effectively secure links between corporate locations that bypass typical internet traffic and instead route packets directly. Benefits include high reliability and low packet loss, in turn reducing the chance of dropped calls or lag. It's also possible to assign specific traffic priorities over a robust MPLS.
- **Software-Defined Wide Area Network (SD-WAN):** Leveraging software-defined protocols, SD-WAN solutions effectively eliminate traditional technology boundaries by unifying network services. This allows enterprises to easily scale up bandwidth on demand and add new links without impacting network infrastructure. In addition, SD-WAN uses traditional internet connections, making it more cost-effective than many MPLS solutions.

- **Unified Communications-as-a-Service (UCaaS):** UCaaS solutions combine video conferencing, VoIP, and other multimedia communications under a single umbrella, giving companies greater control over collaboration and connectivity while embracing a cloud-first mandate. Improved UCaaS offerings now enable HD voice and video conferencing for hundreds of users simultaneously.

Making a Plan

The ultimate test of any QoS plan boils down to the user experience. Computerworld notes end users aren't able to articulate specific issues with video conferencing. Firewall issues or unexpected packet loss might be the cause, but from their perspective, the service simply doesn't work. Considering the novelty of these solutions, the reticence many users have when compelled to be on-camera, and the growing weight of mobile-first expectations, it's undeniably critical for enterprises to develop clear QoS plans before rolling out video services.

Start by identifying needs:

- How will your organization benefit from video solutions?
- How many users does the system need to accommodate?
- Define critical QoS policies, including traffic management, network monitoring, and responsive security.
- Decide which solution offers the best balance of bandwidth throughput, adaptability, and cost.

Video calling is now an integral part of the enterprise communication strategy. QoS for video conferencing is essential to deliver robust, reliable service across your organization.

Learn more about advanced video services and QoS tools by connecting with a Vonage Business expert.