

VQmon 5.5: Next-Generation Videoconferencing Quality Analysis

Modern videoconferencing services have evolved rapidly, adopting new error correction methods, more resilient group of pictures (GOP) structures, and smarter adaptive bitrate techniques. To keep pace with these advancements, VQmon 5.5 introduces optimized quality of experience (QoE) algorithms that more accurately model the real-world behavior of Teams, Zoom, Meet, WebEx and WebRTC-based solutions.

This release also incorporates both individual media stream analysis and session-level metrics that capture the full context of multiparty calls—including participant dynamics, screen sharing, and group-wide performance trends.

By combining enhanced stream-level analytics with session-wide visibility, VQmon 5.5 delivers a more precise and comprehensive view of user experience across today's widely used videoconferencing platforms.



What's New in Version 5.5:

Improved QoE Modeling

VQmon's QoE calculation engine has been upgraded to better reflect the delivery methods and perceptual quality of modern videoconferencing services.*

Enhancements include:

- Support for advanced error correction and redundancy (e.g., modern FEC methods)
- Recognition of improved GOP structures that limit error propagation
- Awareness of adaptive bitrate behaviors driven by network variability and service constraints such as bandwidth tiering

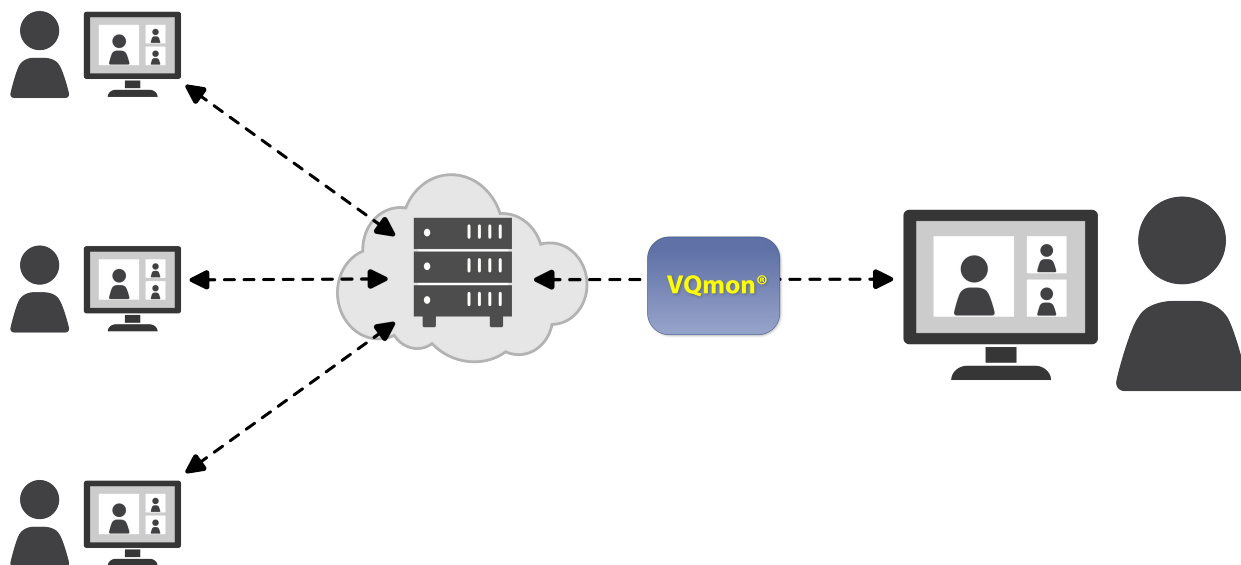
Multiparty Session Analytics

New multiparty analytics provide context beyond individual streams by capturing trends across the full session. These include:

- **Call Quality** - minimum, average, and peak MOS across participants
- **Participant Activity** - join/leave behavior, audio/video usage, and screen sharing sessions
- **Media Metrics** - aggregate bitrates, video frame rates and resolutions
- **Video Issues** - freeze and pause events; video frames dropped by client/server

** VQmon 5.5 may report higher MOS values than earlier versions for calls with comparable quality. This is an intentional outcome of updates made to the QoE algorithms to improve accuracy.*

Telchemy has performed extensive subjective and objective testing to ensure that VQmon-computed QoE scores accurately represent users' perception of call quality.



Key Benefits

- Improved QoE algorithms that more accurately reflect user-perceived video quality on modern platforms like Zoom, Teams, and Meet
- Session-level visibility across multiparty calls, enabling broader insight into collective user experience—not just individual streams
- Faster issue detection and troubleshooting through high-level performance summaries and group-wide metrics
- Deeper understanding of user behavior, including participation trends, media usage, screen sharing and call flow dynamics

Compatibility and Integration

Enhancements to VQmon's perceptual quality algorithm are fully backward-compatible and automatically reflected in QoE scores—no changes to workflows or API calls are required.

The new multiparty session metrics are available through existing VQmon APIs.

Next Steps

For current Telchemy customers, updated VQmon code and API documentation are available now.

To learn more about VQmon, please contact us using the details below.



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