SQmediator[®]

Active/Passive Performance Management System for IP Voice and Video

SQmediator^{*} is an advanced performance management system for IP networks that monitors, tests and troubleshoots the performance of a variety of services, including Voice over IP, Videoconferencing, Web, email, DNS, DHCP and IP transport.

Monitor Voice/Video Quality in Real Time —

elchemy

monitor up to millions of simultaneous voice and video sessions and get precise user quality of experience (MOS) scores and comprehensive performance analytics for every session.

Proactively Identify Problems — receive immediate alerts for quality impairments with Web UI dashboard notifications, email alerts, and SNMP traps when service performance thresholds are exceeded.

Quick Access to Data — view detailed call diagnostics or a custom dashboard for a customer or location with a single click. SQmediator's interactive charts enable users to quickly access critical data without navigating complex menus.

Manage Thousands of Customers and Sites -

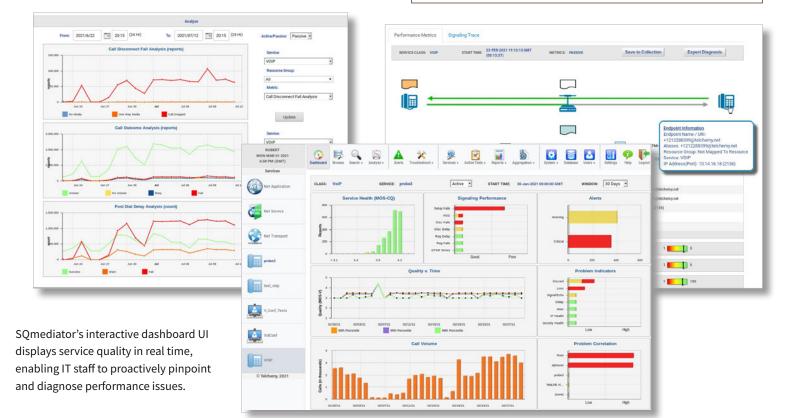
organize and filter data for as many as 15,000 entities in a hierarchy up to 10 levels deep. Keep private data secure by restricting user access to specific resource groups.

EY FEATURES

- Supports both passive monitoring and active testing
- Carrier grade performance manage up to millions of end users
- Multitenant architecture manage thousands of customers/sites using a single system and database
- Intuitive web browser based UI with interactive charts
- Custom dashboards for any customer, location, etc.
- Configurable internal/external service metric thresholds
- Real-time trouble notification via email alerts and SNMP traps
- SOAP/XML web services API for third-party system integration

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- Tracks user/subscriber QoE for every voice call/video session
- · Proactively identifies and diagnoses problems
- Fast response time immediately reports service impairments on the dashboard and via alerts
- User-friendly interface, easy to navigate no steep learning curve
- Correlates incoming performance data in real time no long processing delay
- Tailored product editions for Small/Medium Business, Enterprise, Small /Large Service Provider applications



SERVICE CLASS: VOIP STAF	8T TIME, 31-OCT-2023 04:26:35 EDT (00:00:07)	METRICS: ACTIVE	Save to Collection	Expert Diagnosis
Constant of Use of Constant	0.10, temyuaon0@10.8.0.10:5060 ent Group 1 d IP schve 5 (30000) 10.8.0.1 90.4.8.4 10.9.4.9.1 90.4.8.4 14.9.4.9.4 14.9.4.9.4	to exceeds to exc	and termination was normal ality heard by user termywal bitem induded: ality heard by user Bfdc244 ality heard by user Bfdc244 ality heard by user Bfdc244 ality heard by ality ality ality aligned by a second by a second ality al	be0@10.8.0.10 was fair. Call 41748c393@10.1.234.227:5060 cmail jitter buffer. 10 was 84 which indicates 910.1.234.227:5060 was 76 which if the test due to call quality problems or it. of the test ng due to call quality problems or
LISTENING QUALITY MOS	1.61	1		
Packet Loss Rate (%)	٥	o 🚺 8		0
Effective Packet Loss Rate (%)	NR	0 	NR	0 4

SQmediator simplifies the process of identifying and solving performance issues for both beginners and experts. Every call record provides a comprehensive set of metrics, some of which include:

- Mean Opinion Scores (MOS) QoE scores that rate user-perceived voice, video, audio and audiovisual quality on a straightforward 1-5 scale
- Detailed IP health metrics packet loss/discard, jitter, delay, bandwidth, signal/noise
- Signaling flow tracks step-by-step how the call was established, maintained and ended

Every quality record includes an "Expert Diagnosis" button that generates a clear and concise explanation of what happened and why. It highlights key factors that impacted the performance of the call or test, to aid with identifying targets for improvement and optimization.

		All Sip Flows: tcmyua0n0@10.8.0.10:50	LISTENING QUALITY MOS	4.16	1	5
10.0	8.0.14	SIP INVITE	Packet Loss Rate (%)	0	۰ [8
		100 - TRYING	Effective Packet Loss Rate (%)	NR	0	4
ms		180 - RINGING				
ms		200 - OK	Discard Rate (%)	0.8	o 🚺	8
ms ms	1	G711U-PLC - Audio Start				
ms		SIP ACK	Signal Level (dBm0)	-23	< -32	> -12
2ms		G711U-PLC - Audio Start	Noise Level (dBm0)	-61	< -65	> -40
			Signal-to-Noise Ratio (dBm0)	38	< 20	> 40

To help users quickly identify and address problem areas, performance metrics are displayed with color-coded indicators that show whether the value is acceptable.

To learn more about SQmediator, please visit www.telchemy.com/sqmediator or contact Telchemy.

TECHNICAL SPECIFICATIONS

Hardware

- Dual-core CPU or equivalent (quad-core recommended)
- Minimum 4 GB RAM (8-12 GB recommended)
- 250 GB available disk storage (1 TB recommended)
- Minimum of one (1) 10/100/1000 Ethernet interface

Operating System

- Red Hat Enterprise Linux / Rocky Linux / Oracle Linux version 8 or 9
- Oracle Java SE 8 / OpenJDK 8 JRE (installed on Reporter server)

Supported Databases

- Oracle 19c
- PostgreSQL 13 or 14

User Interface

- Graphical HTML5 UI supports most current/standard web browsers
- Supports multiple concurrent users
- · Strong role-based security model, hardened against common attacks and exploits
- · Optional SOAP XML web services interface



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