

## Technical Specifications

| Voice Quality Measurement           |  |
|-------------------------------------|--|
| Call rating measured metrics        | - Mean Opinion Score (MOS) (as specified by ITU-T recommendation P.800)<br>- Jitter<br>- Packet Loss<br>- Delay (or Latency)<br>- Echo   |
| Call quality policy                 | - Three sensitivity zones (green, yellow, and red) configurable per media port group. Defaults available   |
| Monitoring end points               | - AudioCodes SBCs and Media Gateways probe the network. No need for external dedicated probes  |
| Main capabilities                   |  |
| Contextual reports                  | - Entire network<br>- Selected devices<br>- Selected links<br>- Per time selection   |
| Call trend statistics               | - Call performance:<br>• Failed calls vs. successful calls<br>• Average Call Duration (ACD)<br>• Failed calls percentage<br><br>- Call quality:<br>• MOS /Jitter/Packet loss/Delay graphs<br><br>- Utilization:<br>• Received and transmitted average traffic load (Kbps)<br><br>- Summary:<br>• Failed Calls – top reasons summary<br>• Calls quality and bad quality cause split summary (pie chart)<br>• Average utilization (Kbps) |
| Per call details                    | - Call lists (per device/link):<br>• Summary<br>• Media and control extensive information<br>• Search<br>• Various filters and sorting capabilities<br><br>- Extensive voice quality details:<br>• Per MOS/Packet Loss/Delay and Echo metric<br>• Trends over time during the call<br>• Poor Quality By MOS /Jitter /Delay /Packet Loss Rate<br>• Fax Quality  |
| Alarms                              | - Alarms from devices, activated upon user defined threshold<br>• Active alarms<br>• History alarms<br>• Alarm details in both active and historical views<br>• Search entire alarm table for any data string  |
| Reports                             | - Network and trend reports (per device/link):<br>• Summary<br>• Voice quality<br>• Network Utilization<br><br>- Top user reports:<br>• Call count<br>• Call duration<br>• Poor quality by MOS/jitter/delay/packet loss rate<br>• Fax quality  |
| Platforms                           |  |
| Supported AudioCodes products       | - Enterprise Session Border Controllers (E-SBCs) and Media Gateways :<br>• Mediant 800<br>• Mediant 1000B<br>• Mediant 2000<br>• Mediant 3000<br>• Mediant 4000<br>• MP1XX   |
| Supported databases                 | - Oracle   |
| Supported platforms                 | - CentOS, VMware   |
| Minimum/recommended server hardware | - CPU: Intel Xeon E5504 (4MB Cache, 2.00 GHz)<br>• RAM: minimum 2 GB RAM<br>• Storage : 160 GB<br>• DVD-ROM  |

### About AudioCodes

AudioCodes Ltd. (NasdaqGS: AUDC) designs, develops and sells advanced Voice over IP (VoIP) and converged VoIP and Data networking products and applications to Service Providers and Enterprises. AudioCodes is a VoIP technology market leader focused on converged VoIP & data communications and its products are deployed globally in Broadband, Mobile, Enterprise networks and Cable. The company provides a range of innovative, cost-effective products including Media Gateways, Multi-Service Business Routers, Session Border Controllers (SBC), Residential Gateways, IP Phones, Media Servers and Value Added Applications. AudioCodes' underlying technology, VoIPerfectHD™, relies on AudioCodes' leadership in DSP, voice coding and voice processing technologies. AudioCodes High Definition (HD) VoIP technologies and products provide enhanced intelligibility and a better end user communication experience in Voice communications.

**International Headquarters**  
1 Hayarden Street,  
Airport City  
Lod 70151, Israel  
Tel: +972-3-976-4000  
Fax: +972-3-976-4040

**AudioCodes Inc.**  
27 World's Fair Drive,  
Somerset, NJ 08873  
Tel: +1-732-469-0880  
Fax: +1-732-496-2298

**Contact us:** www.audiocodes.com/info  
**Website:** www.audiocodes.com

©2013 AudioCodes Ltd. All rights reserved. AudioCodes, AC, HD VoIP, HD VoIP Sounds Better, IPmedia, Mediant, MediaPack, OSN, SmartTAP, VMAS, VoIPerfect, VoIPerfectHD, Your Gateway To VoIP and 3GX are trademarks or registered trademarks of AudioCodes Limited. All other products or trademarks are property of their respective owners. Product specifications are subject to change without notice.

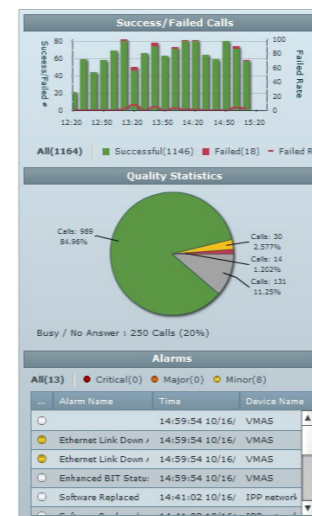
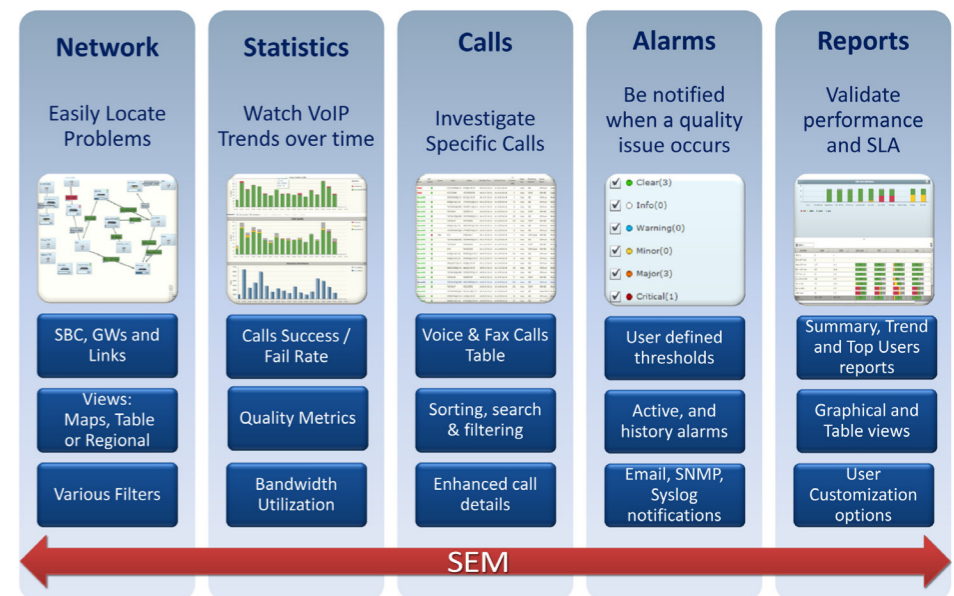


Ref # LTRM-20095 02/13 V.4



Guarantee effective utilization, smooth performance and delivery of expected QoS and SLAs of your VoIP network and services.

**AudioCodes Session Experience Manager (SEM)** is an intelligent analysis tool designed to monitor the quality of Voice over IP calls within the enterprise network and its connecting trunks to service providers. By leveraging SEM, IT managers and administrators of hosted and managed services get a detailed view of the quality of voice traffic, allowing them to quickly identify, fix and prevent issues that can affect the voice calling experience at the enterprise.



### Intelligent Analysis of Voice Experience

**SEM** collects real-time statistics for voice and fax call attempts and IP traffic from AudioCodes devices within the enterprise network locations.

**SEM** presents intuitive graphical dashboard screens of the network elements, links and their associated VoIP measurements, forming a complete picture of the organization's current and historical VoIP quality.

**SEM** provides an in-depth analysis with zoom-in reach on specific network elements and links such as SIP or TDM trunks.

**SEM** monitoring probes are provided on AudioCodes' devices such as Enterprise Session Border Controllers and Media Gateways.

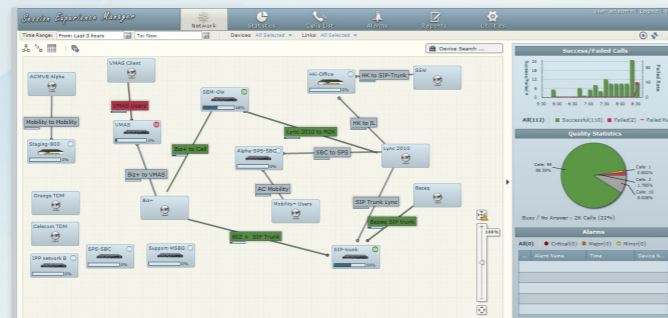
**SEM** does not require any network changes or additional network probes.

**SEM** integrates with AudioCodes Element Management System (EMS), enabling convenient device configuration updates as a quick remedy to identified performance issues.

## SEM MAIN APPLICATIONS

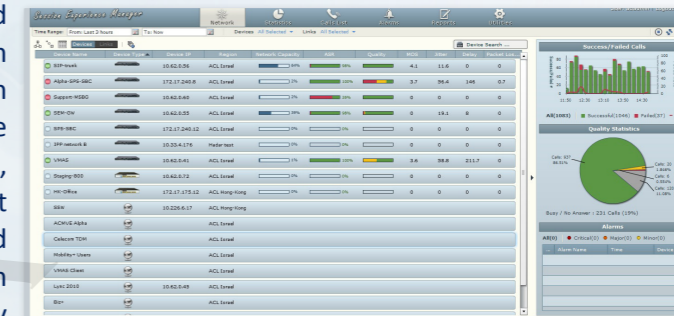
### NETWORK MAP:

View a graphical, real-time snapshot of your entire VoIP network's quality, enabling you to identify quality issues promptly and perform effective triage. The Network Map displays all monitored devices, the connections between them, and their current quality status.



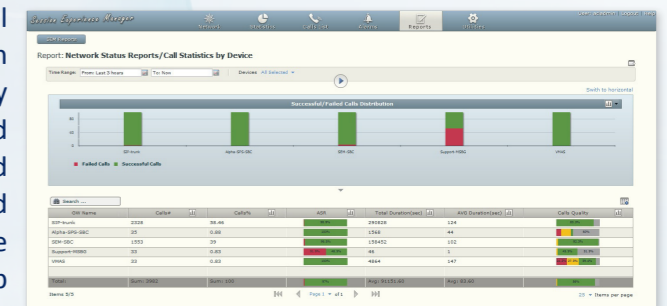
### NETWORK TABLE:

View all devices and links between them in sorted lists with associated voice quality metrics, enabling accurate root cause analysis and rapid identification of sources of quality degradation. Side-panel dashboard displays network status summary, graphic visualization of call success ratio, voice quality and alarms.



### ALARMS AND REPORTS:

Real-time and historical alarms triggered upon occurrence of VoIP quality issues with user defined thresholds, combined with search, sort and filter capabilities. Flexible summary, trend and top users reports per device or link, including user choice of tracked parameters and viewing options, and a unique fax transmission quality analysis.



### TIME BASED STATISTICS:

Use the time-based statistics graphs for average call success/fail rates, quality metrics, and VoIP network bandwidth utilization to rapidly identify and isolate momentary problems and perform smarter network capacity planning.



### CALL DRILL DOWN:

Filter and search call records simply and effectively. Calls can be filtered by called party, caller, time/date, fail or success status, call quality metrics, and call duration. Convenient drill down to the details of a given call, including quality rating, control and media information, trends and alarms. Call trends enable rapid analysis of the call performance over the entire call duration, including time-based views of MOS, jitter, packet loss, delay and echo.

