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 leader focused on VoIP communications, applications and networking elements, and its products are deployed globally in Broadband, Mobile, Cable, and Enterprise networks. The company provides a range of innovative, cost-effective products including Media Gateways, Multi-Service Business Gateways, Residential Gateways, IP Phones, Media Servers, Session Border Controllers (SBC), Security Gateways and Value Added Applications. AudioCodes underlying technology, VoIPerfectHD™, relies primarily 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 emerging Voice networks.

AudioCodes Enterprise Session Border Controller (E-SBC) Products

Mediant™ 1000 Enterprise Session Border Controller (E-SBC)

• A highly integrated device for VoIP, Data, Security & Access, forming a single managed point of demarcation
• Based on three core foundations: Perimeter Defense, Mediation and Service Assurance
• Standards-based solution with proven interoperability
• Software license scalability up to 150 secured SBC VoIP sessions.
• Encryption for communication privacy and prevention of eavesdropping
• Transparent communication for mobile users
• Survivability with PSTN Failover
• IP-to-IP protocol normalization and media transcoding
• Proven Voice Quality superiority
• Media Processing for Transcoding, Gain Control, DTMF/FAX, etc.
• Extensive filtering and admittance policies
• Embedded BroadSoft PacketSmart agent for QoE lifecycle management

AudioCodes’ Mediant 1000™ Enterprise Session Border Controller (E-SBC) is a member of AudioCodes family of Enterprise Session Border Controllers, enabling connectivity and security between enterprises and Service Providers' VoIP networks.

The Mediant 1000 E-SBC provides Perimeter Defense as a way of protecting companies from malicious VoIP attacks; mediation for allowing the connection of any PBX and/or IP-PBX to any Service Provider; and Service Assurance for service quality, and manageability. Designed as a cost effective appliance, the Mediant 1000 E-SBC is based on AudioCodes’ Mediant 1000 Multi-Service Business Gateway (MSBG), which combines AudioCodes’ field-proven VoIP and network services with a native host processor, allowing the creation of purpose-built, multi-service appliances with integrated quality of service, SLA monitoring, security and manageability. The native implementation of SBC functions on the Mediant 1000 Multi-Service Business Gateway provides a host of additional capabilities that are not possible with standalone SBC appliances, such as VoIP mediation, PSTN Access, data routing, WAN access, data security, survivability, and third party value-added services applications. This enables enterprises to utilize the advantages of converged networks and eliminate the need for standalone appliances.

Why Enterprise Session Border Controllers? Session Border Controllers were traditionally deployed at the border of service provider core networks. Both Enterprises and Service Providers have now realized the essential need of enterprise-based session border controllers, located at the customer premises for addressing the security, mediation and SLA requirements of the Enterprise. The Mediant 3000 E-SBC provides an open and flexible architecture for all Enterprise deployments, acting as the demarcation point between an Enterprise and a SBC Trunking provider, an enterprise and a hosted Unified Communication service provider or an enterprise and other organizations for direct VoIP calling.

Enterprise Session Border Controller and Security Services
AudioCodes’ Mediant 1000 E-SBC is designed as a secured VoIP and data platform. Enhanced Media Gateway security features include encryption schemes, such as SRTP for media, TLS for SIP control, and IPSec for management. A fully featured Enterprise-class Session Border Controller provides a secured voice network deployment, based on the embedded Back-to-Back User Agent (B2BUA). Data Security functions include an integrated Stateful Firewall, IDS/IPS, and SSL for remote user access and site to site VPN.

Integrated PSTN Connectivity
The Mediant 1000 E-SBC is based on a highly interoparable Media Gateway, which supports a mix of 1-4 E1/T1/J1 Spans, 4-20 BRI lines and 4-24 Analog FXS/FXO interfaces in an integrated Stateful Firewall, IDS/IPS, and SSL for remote user access and site to site VPN.

LAN, Data Routing and WAN Access
The Mediant 1000 E-SBC offers data routing capabilities by providing static routing and dynamic routing protocols such as RIP/OSPF and BGP. In addition, the Mediant 1000 E-SBC supports a selection of WAN interfaces such as 10/100/1000Base-T, 1000Base-SX/LX, T1 DSU/CSU, SHDSL, ADSL2+ and E1 DSU/CSU, providing extensive flexibility in connecting to Service Providers networks.

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Mediant™ 1000 Enterprise Session Border Controller (E-SBC)

**Roadmap**

Mediant resources. User Agents deployed remotely across the WAN. The Mediant 1000 manageability and service level assurance services, connecting the enterprise to migrate from legacy PSTN connectivity to cost-effective SIP Trunking. Using the Mediant 1000 E-SBC, enterprise customers can seamlessly predictably voice performance, as compared to typical software transcoding, all controlled by standard protocols (e.g., SIP and MSCML).

**Quality of Service (QoS) and Quality of Experience (QoE)**

AudioCodes Mediant 1000 E-SBC supports enhanced IP Quality of Service (QoS) enforcement and Quality of Experience (QoE) Monitoring. Leveraging a BroadSoft PacketSmart enabled agent, a SaaS-based lifecycle management solution, the Mediant 1000 E-SBC enables service providers and multi-site enterprises toachsen networks, certify VoIP deployments, and measure, monitor, track, and help optimize the QoE of their VoIP services. The PacketSmart solution is either offered as a public cloud service or within the customer’s data center in a private cloud deployment. AudioCodes Mediant 1000 E-SBC also supports enhanced IP Quality of Service (QoS), including Ethereen frame tagging (802.1p), IP packet marking (DiffServ), and traffic shaping.

**Survivability Services**

Customers seeking a centralized, SIP-based IP Centrex server or branch offices of distributed enterprises may face service discontinuities in case of WAN failure. The integrated SAG (Stand Alone Survivability) feature of the Mediant 1000 E-SBC enables internal office communication between SIP clients (e.g., IP Phones), along with PSTN fallback, in case of disconnection from the centralized IP Centrex server or IP-PBX.

**Value-Added Services by an Open Platform for 3rd-Party Applications**

AudioCodes Mediant 1000 E-SBC extends the flexibility of a standalone SBC with the built-in Open Solution Network (SoN) server (based on an Intel processor). Independent Software Vendors and OEM customers can utilize this integrated, general-purpose server to host their own applications (e.g., IPBX, IVR, Call Center, Conferencing, and more). In addition, an advanced, on-board DSP Resource Farm enables the implementation of narrowband as compared to typical software transcoding, all controlled by standard protocols (e.g., SIP and MSCML). Utilizing AudioCodes dedicated DSP resources enables robust and predictable voice performance, as compared to typical software implementations, based on general purpose CPUs.

**Applications**

**SIP Trunking Solution**

Using the Mediant 1000 E-SBC, enterprise customers can seamlessly migrate from legacy PSTN connectivity to cost-effective SIP Trunking Services. The Mediant 1000 E-SBC provides security, session mediation and service level assurance services, connecting the enterprise to multiple SIP Trunking providers, while maintaining interoperability and manageability.

**Contact Center Solution**

Contact Centers place SIP Application Server in the LAN, with SIP User Agents deployed remotely across the WAN. The Mediant 1000 E-SBC monitors these User Agents, and resolves any NAT traversal issues they might face. In addition, with its vast media processing features such as Video Activity Detection, Answering Machine, Call Progress Tones and DTMF detectors, the Mediant 1000 E-SBC provides support for outbound calling campaigns, utilizing the same hardware resources.

**Hosted Centrex Solution**

IP Centrex solutions rely on VoIP technology, whose implementation may present significant challenges, especially to businesses without prior VoIP experience. One of the challenges is service continuity during WAN outages. The Mediant 1000 E-SBC, with its Stand Alone Survivability feature, allows to monitor registrations to the SIP Proxy, so that if connectivity is lost the Mediant 1000 E-SBC can continue to serve in both internal and external calling capacities.

**Mediant 1000 E-SBC as a demarcation point for Service Providers**

As medium Enterprises strive to control their communication operating and equipment costs, outsourcing Voice and Data Infrastructure to a Service Provider becomes more attractive. The Mediant 1000 E-SBC offers Service Providers, who are delivering hosted and managed communication services, a clear and easy-to-manage demarcation point combining Secure VoIP, Data Routing and Data Security, WAN Access, Mediation Services, and Service Level Assurance.

**Mediant 1000 E-SBC in Enterprise Networks**

Medium Enterprises are motivated to become more productive, efficient, and responsive to their internal users. The convergence of secured voice services, Stand Alone Survivability, Data Routing and Security, WAN Access, have the potential to offer a level of investment protection, cost-optimization and support for the growing communication needs of the Enterprise.

**Benefits for Service Providers**

- A high integrated device for VoIP Data, Security & Access, forming a single managed point of mediation.
- Utilizing AudioCodes dedicated DSP resources enables robust and predictable voice performance, as compared to typical software implementations, based on general purpose CPUs.

**Applications**

- SIP Trunking Solution
- Contact Center Solution
- Hosted Centrex Solution
- Mediant 1000 E-SBC in Enterprise Networks
- Benefits for Business Customers
- SIP Trunking Solution
- Contact Center Solution
- Hosted Centrex Solution
- Mediant 1000 E-SBC in Enterprise Networks
- Benefits for Business Customers