AudioCodes Session Border Controller (SBC) Products

Mediant[™] 500L

Hybrid E-SBC and Media Gateway



Benefits

- Fully integrated device for secured SIP trunking and PSTN access
- Hybrid SBC and Media Gateway platform lowers
 CAPEX and reduces space and power footprints
- Extensive interoperability and partnerships that extend across multiple vendor devices and protocol implementations
- Offers comprehensive security, interoperability and reliability
- Delivers high service performance and voice quality
- Branch office survivability in the event of a WAN outage

Key Features

- Rich and powerful SIP normalization and routing mechanisms for seamless interoperability
- Hybrid SBC enables seamless migration and PSTN fallback
- Support for BRI interfaces
- Perimeter defense against denial of service, fraud and eavesdropping
- VoIP quality monitoring and enforcement

The AudioCodes **Mediant 500L Enterprise Session Border Controller (E-SBC)** and Media Gateway offers a complete connectivity solution for small-to-medium sized enterprises.

The Mediant 500L connects IP-PBXs to any SIP trunking service provider, scaling up to 60 concurrent SBC sessions. It offers superior performance in connecting any SIP to SIP environment, legacy TDM-based PBX systems to IP networks, and IP-PBXs to the PSTN, supporting up to 4 BRI interfaces.

Vast mediation capabilities and proven interoperability
The Mediant 500L supports a wide range of voice coders and
is capable of transcoding between narrowband and wideband
voice coders, providing SIP normalization, fax handling, gain
control and numerous additional media processing features.
It offers certified interoperability with leading unified
communications solutions and SIP trunking providers.

Security

The Mediant 500L provides robust protection for the IP communications infrastructure, preventing Denial of Service, fraud and service theft and guarding against cyber-attacks and other service-impacting events.

Reliability

The Mediant 500L offers and maintains high voice quality to deliver reliable enterprise VoIP communications. Advanced call routing mechanisms, network voice quality monitoring and branch survivability capabilities (including PSTN fallback with E911) result in minimum communications downtime.

Applications

- SIP trunking
- Hosted PBX & UC as a Service
- · IP contact centers
- · Remote and mobile worker support
- · SIP mediation between UC and IP-PBX systems



Mediant[™] 500L

SPECIFICATIONS

Capacities			
Max. Signaling/Media Sessions	60	Max. SRTP/RTP Sessions	45
Max. Registered Users	200		
Telephony Interfaces			
Digital	1-4 BRI ports, network 5	S/T interfaces, NT or TE termination	
Clock Source	5 ppm High Precision		
Network Interfaces			
Ethernet	4 FE interfaces configur	red in 1+1 redundancy or as individual po	orts
Security			
Access Control	DoS/DDoS line rate pro	tection, bandwidth throttling, dynamic bla	cklisting
VoIP Firewall	RTP pinhole management, rogue RTP detection and prevention, SIP message policy, advanced RTP latching		
Encryption/Authentication	TLS, SRTP, HTTPS, SSH, client/server SIP Digest authentication, RADIUS Digest		
Privacy	Topology hiding, user privacy		
Traffic Separation	VLAN/physical interface	e separation for multiple media, control ar	nd OAMP interfaces
Intrusion Detection System	Detection and prevention of VoIP attacks, theft of service and unauthorized access		
Interoperability			
SIP B2BUA	Full SIP transparency, m	nature and broadly deployed SIP stack, sta	ateful proxy mode
SIP interworking	3xx redirect, REFER, PRACK, session timer, early media, call hold, delayed offer		
Registration and Authentication	User registration restriction control, registration and authentication on behalf of users, SIP authentication server for SBC users		
Transport Mediation	SIP over UDP/TCP/TLS, IPv4 / IPv6, RTP / SRTP (SDES)		
Message Manipulation	Ability to add/modify/delete SIP headers and message body using advanced regular expressions (regex)		
URI and Number Manipulations	URI user and host name manipulations, ingress and egress digit manipulation		
Vocoders	Coder normalization including transcoding, coder enforcement and re-prioritization, extensive vocoder support: G.711, G.723.1, G.726, G.729, GSM-FR, AMR-NB/WB, SILK-NB/WB, Opus-NB/WB		
Signal Conversion	DTMF/RFC 2833/SIP, T.38 fax, packet-time conversion		
NAT	Local and far-end NAT traversal for support of remote workers		
Voice Quality and SLA			
Call Admission Control	Based on bandwidth, se	ession establishment rate, number of con	nections/registrations
Packet marking	802.1p/Q VLAN tagging, DiffServ, TOS		
Standalone Survivability	Maintains local calls in the event of WAN failure.		
Impairment Mitigation	Packet Loss Concealment, Dynamic Programmable Jitter Buffer, Silence Suppression/Comfort Noise Generation, RTP redundancy, broken connection detection		
Voice Enhancement	detection, Fixed & dyna	coustic echo cancellation, replacing voice mic voice gain control	profile due to impairment
Direct Media (No Media Anchoring)	Hair-pinning of local calls to avoid unnecessary media delays and bandwidth consumption		
Voice Quality Monitoring			I bandwidth consumption
	RTCP-XR, AudioCodes S	ession Experience Manager (SEM)	d bandwidth consumption
Quality of Experience			
	Access control and med	ession Experience Manager (SEM)	and bandwidth utilization
Quality of Experience	Access control and med Ability to remotely verify	ession Experience Manager (SEM) dia quality enhancements based on QoE a connectivity, voice quality and SIP messa	and bandwidth utilization age flow between SIP UAs
Quality of Experience Test agent	Access control and med Ability to remotely verify	ession Experience Manager (SEM) dia quality enhancements based on QoE a	and bandwidth utilization age flow between SIP UAs
Quality of Experience Test agent SIP Routing	Access control and med Ability to remotely verify Request URL, IP addres REST API QoE, bandwidth, SIP me	ession Experience Manager (SEM) dia quality enhancements based on QoE at a connectivity, voice quality and SIP messates, FQDN, ENUM, advanced LDAP, third-patessage (SIP request, coder type, etc.), Layer	ind bandwidth utilization nge flow between SIP UAs rty routing control through er-3 parameters
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Quality of Experience Test agent SIP Routing Routing Methods Advanced Routing Criteria Routing Features SIPRec Management OAM&P Physical / Environmental Dimensions Weight	Access control and med Ability to remotely verify Request URL, IP addres REST API QoE, bandwidth, SIP me Least-cost routing, call tand prioritization IETF standard SIP recor Browser-based GUI, CLI 51 x 296 x 160 mm (2 x 670g Desktop Single universal AC pow	ession Experience Manager (SEM) dia quality enhancements based on QoE at connectivity, voice quality and SIP messates, FQDN, ENUM, advanced LDAP, third-patessage (SIP request, coder type, etc.), Laysforking, load balancing, E911 gateway supding interface SNMP, INI Configuration file, REST API, Extra 11.65 x 6.3 in.) (HxWxD)	and bandwidth utilization age flow between SIP UAS rty routing control through er-3 parameters aport, emergency call detection MS
Quality of Experience Test agent SIP Routing Routing Methods Advanced Routing Criteria Routing Features SIPRec Management OAM&P Physical / Environmental Dimensions Weight Mounting	Access control and med Ability to remotely verify Request URL, IP addres REST API QoE, bandwidth, SIP me Least-cost routing, call tand prioritization IETF standard SIP recor Browser-based GUI, CLI 51 x 296 x 160 mm (2 x 670g Desktop Single universal AC pow	ession Experience Manager (SEM) dia quality enhancements based on QoE at a connectivity, voice quality and SIP messats, FQDN, ENUM, advanced LDAP, third-passage (SIP request, coder type, etc.), Layeforking, load balancing, E911 gateway sugding interface x 11.65 x 6.3 in.) (HxWxD) ver supply 100-240V, 50-60 Hz, 12V/3A of (44 to 104°F); Storage: -25 to 85°C (-13	and bandwidth utilization age flow between SIP UAS rty routing control through er-3 parameters aport, emergency call detection MS
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ABOUT AUDIOCODES

AudioCodes Ltd. (NasdagGS: 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, VolPerfect HDTM, 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.

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