AudioCodes Session Border Controller (SBC) Products

Mediant[™] 800

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 that connects to PSTN / PBX trunks for fallback and gradual enterprise migration to SIP
- Support for analog (FXO, FXS) and digital (PRI, BRI) interfaces
- Perimeter defense against denial of service, fraud and eavesdropping
- VoIP quality monitoring and enforcement
- High Availability using two box redundancy
- Media Processing for Transcoding, Gain Control, DTMF/Fax, etc.
- Optional Open Solution Network (OSN) Platform for hosting value-added applications



The Mediant 800 connects IP-PBXs to any SIP trunking service provider, scaling up to 250 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 60 voice channels in a 1U platform.

Vast mediation capabilities and proven interoperability
The Mediant 800 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 800 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 800 offers active/standby high availability 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



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SPECIFICATIONS

Capacities				
Max. Signaling/Media Sessions	250	Max. SRTP/RTP Sessions	180	
Max. Transcoding Sessions	57	Max. Registered Users	800	
Telephony Interfaces				
Analog	4/8/12 FXS ports; 4/8/12 FXO ports			
Digital	Up to two E1/T1 interfaces with an option for PSTN Fallback			
Clock Source	5 ppm High Precision			
Digital PSTN Protocols	Supporting various ISDN PRI protocols si 100 and others. It also supports different delay dial / start and others	uch as EuroISDN, North American nt variants of CAS protocols, includ	NI-2, Lucent™ 4/5ESS, Nortel™ DMS- ing MFC R2, E&M immediate start, E&M	
Network Interfaces				
Ethernet	4 GE or 4 GE + 8 FE interfaces configure	ed in 1+1 redundancy or as individ	ual ports	
Security				
Access Control	DoS/DDoS line rate protection, bandwidth throttling, dynamic blacklisting			
VoIP Firewall	RTP pinhole management, rogue RTP detection and prevention, SIP message policy, advanced RTP latching			
Encryption/Authentication	TLS, DTLS, SRTP, HTTPS, SSH, client/server SIP Digest authentication, RADIUS Digest			
Privacy	Topology hiding, user privacy			
Traffic Separation	VLAN/physical interface separation for multiple media, control and OAMP interfaces			
Intrusion Detection System	Detection and prevention of VoIP attacks, theft of service and unauthorized access			
	Detection and prevention of voir attacks	s, there of service and unauthorize	u access	
Interoperability	Full CID transcription and broad	Underland CID stack stateful and		
SIP B2BUA	Full SIP transparency, mature and broadly deployed SIP stack, stateful proxy mode 3vv redirect DEEED DRACK session timer early media, call hold, delayed offer			
SIP interworking	3xx redirect, REFER, PRACK, session timer, early media, call hold, delayed offer User registration restriction control, registration and authentication on behalf of users. SIP authentication server			
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/WebSocket, IPv4 / IPv6, RTP / SRTP (SDES/DTLS)			
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			
Transcoding and 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, T.38 V3, V.34, packet-time conversion, V.150.1 Interworking between WebRTC devices and SIP networks Supports WebSocket, Opus, VP8 video coder, lite ICE,			
WebRTC Controller	DTLS, RTP multiplexing, secure RTCP with feedback			
NAT	Local and far-end NAT traversal for supp	ort of remote workers		
Voice Quality and SLA				
Call Admission Control	Based on bandwidth, session establishn	nent rate, number of connections/	registrations	
Packet marking	802.1p/Q VLAN tagging, DiffServ, TOS			
Standalone Survivability	Maintains local calls in the event of WAN	I failure. Outbound calls can use P	STN fallback for external connectivity	
Incomplete the second s	(including E911) Packet Loss Concealment, Dynamic Prog	grammable Jitter Buffer, Silence Su	uppression/Comfort, Noise Generation.	
Impairment Mitigation	RTP redundancy, broken connection dete	ection		
Voice Enhancement	Transrating, RTCP-XR, Acoustic echo cancellation, replacing voice profile due to impairment detection, Fixed & dynamic voice gain control			
Direct Media	Hair-pinning of local calls to avoid unnecessary media delays and bandwidth consumption			
(No Media Anchoring) Voice Quality Monitoring	RTCP-XR, AudioCodes Session Experience Manager (SEM)			
High Availability (Redundancy)	SBC high availability with two-box redundancy, active calls preserved			
Quality of Experience	Access control and media quality enhancements based on QoE and bandwidth utilization			
	Ability to remotely verify connectivity, voice quality and SIP message flow between SIP UAs			
Test agent	Ability to remotely verify connectivity, vol	ce quality and SIP message now be	etween SIP DAS	
SIP Routing				
Routing Methods	Request URL, IP address, FQDN, ENUM, advanced LDAP, third-party routing control through REST API			
Advanced Routing Criteria	QoE, bandwidth, SIP message (SIP request, coder type, etc.), Layer-3 parameters			
Routing Features	Least-cost routing, call forking, load balancing, E911 gateway support, emergency call detection and prioritization			
SIPRec	IETF standard SIP recording interface			
Management				
OAM&P	Browser-based GUI, CLI, SNMP, INI Config	guration file, REST API, EMS		
OSN Server Platform (Optional)				
Single Chassis Integration	Embedded, open Network Solution Platfe	orm for third-party services		
Memory	Up to 16 GB RAM			
Storage	HDD or SSD			
Physical / Environmental				
Dimensions	1U x 320mm x 345mm (HxWxD)	Weight	Approx. 5.95lb (2.7kg) loaded with	
Mounting	Desktop or 19" rack mount	Power	OSN 100-240V 1.5A 50-60 Hz	
	5°-40° C	I OWEI	100-240 V 1.0A 00-00 HZ	
Operating Temperature	5 -40 0			
Regulatory Compliance	TIA/FIA IS OGS/FVO TAVIDADES TO	EQ202 021 (EVO interfere) TDD 4	(ICDN over E1 interfers), TDD42 (40 (E4	
	TIA/EIA-IS-968 (FXO, T1) interface, ETSI ES203 021 (FXO interface), TBR-4 (ISDN over E1 interface), TBR13/13 (E1 lines), TBR-3 (BRI interface)			
Telecommunications	lines), Ibn-3 (bhi interface)	IEC60950-1, UL60950-1, FCC Part 15 Class A, EN55022 Class A, EN55024, EN300 386		
Telecommunications Safety and EMC		class A, EN55022 Class A, EN5502	24, EN300 386	
		class A, EN55022 Class A, EN5502	24, EN300 386	
Safety and EMC	IEC60950-1, UL60950-1, FCC Part 15 C	ilass A, EN55022 Class A, EN5502	24, EN300 386	
Safety and EMC Environmental Storage	IEC60950-1, UL60950-1, FCC Part 15 C ETS300019-2-1 class T1.2	lass A, EN55022 Class A, EN5502	24, EN300 386	

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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