

How to Design.... AudioCodes Solutions

This guide is designed to be used as a guideline to specifying AudioCodes Solutions. Always ensure that relevant customer data is collected before proceeding with a quote. Please contact your Pre-Sales support team if you have any questions.

(I) This section defines how to design a combination of both **analogue and digital solutions** using the Mediant 600 Media Gateway

(II) All connectivity from the AudioCodes Mediant 600 gateway is SIP as standard

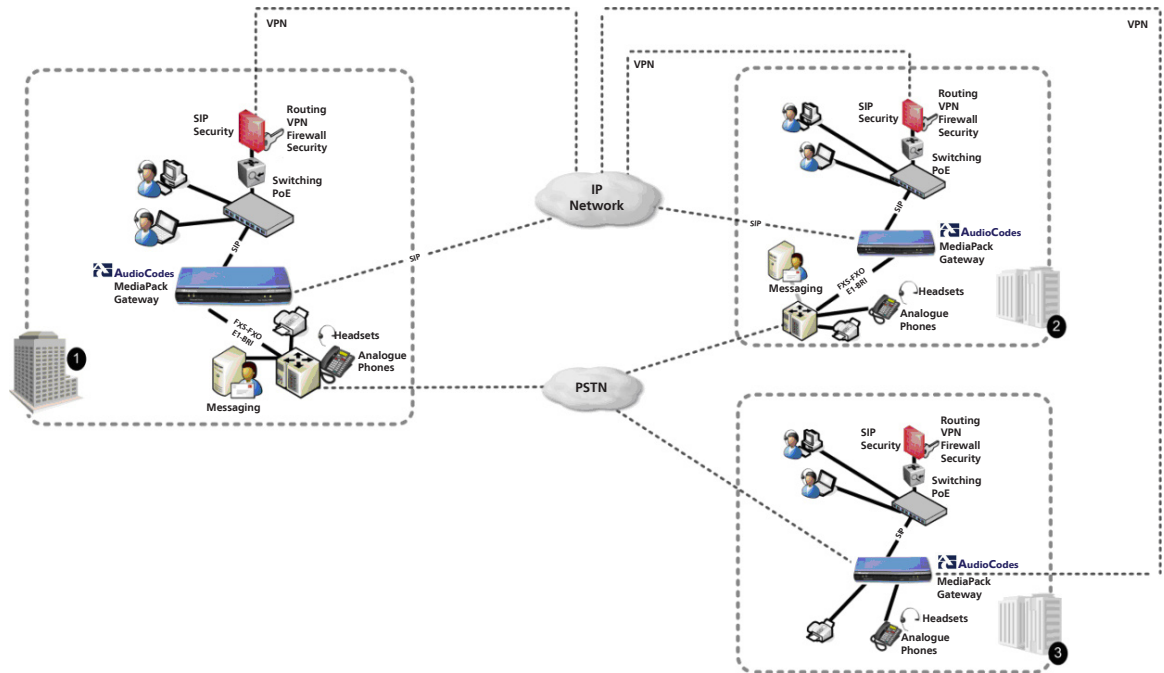
(III) SIP Trunking to a SIP carrier is supported

(IV) Stand Alone Survivability (SAS) is supported for up to 100 SIP User Agents (UA) through purchasing the SAS licence.

Customer Requirements	AudioCodes Part Code	Description	LAN	Codec Support	Media / Control
1 E1 Trunk Connection	AudioCodes Mediant 600 M600/1Span	Allows 1 E1 trunk connection to either a PBX or a carrier (BT)	10/100	G.711 G.723.1 G.726 G.729A	SRTP H.235 IPSEC TLS/SIPS
2 E1 Trunk Connections	AudioCodes Mediant 600 M600/2Span	Allows 2 E1 trunk connections to either a PBX or a carrier (BT)	10/100	G.711 G.723.1 G.726 G.729A	SRTP H.235 IPSEC TLS/SIPS
4 BRI Trunks	AudioCodes Mediant 600 M600/4B	Allows 4 BRI trunk connections to either a PBX or a carrier (BT)	10/100	G.711 G.723.1 G.726 G.729A	SRTP H.235 IPSEC TLS/SIPS
8 BRI Trunks	AudioCodes Mediant 600 M600/8BRI	Allows 8 BRI trunk connections to either a PBX or a carrier (BT)	10/100	G.711 G.723.1 G.726 G.729A	SRTP H.235 IPSEC TLS/SIPS
Mixture of BRI trunks and analogue extensions	AudioCodes Mediant 600 M600/4B/4S	Connects 4 BRI trunks to the carrier (BT) and allows connectivity to 4 analogue devices i.e. Telephone	10/100	G.711 G.723.1 G.726 G.729A	SRTP H.235 IPSEC TLS/SIPS
Mixture of BRI trunks and analogue trunks	AudioCodes Mediant 600 M600/4B/4O	Connects 4 BRI trunks and 4 analogue trunks to the carrier (BT)	10/100	G.711 G.723.1 G.726 G.729A	SRTP H.235 IPSEC TLS/SIPS
Mixture of E1 trunks and analogue extensions	AudioCodes Mediant 600 M600/1Span/4S	Connects 1 E1 trunk to the carrier (BT) and allows connectivity of 4 analogue devices i.e. Telephone	10/100	G.711 G.723.1 G.726 G.729A	SRTP H.235 IPSEC TLS/SIPS
Mixture of E1 trunks and analogue trunks	AudioCodes Mediant 600 M600/1Span/4O	Connects 1 E1 trunk and 4 analogue trunks to the carrier (BT)	10/100	G.711 G.723.1 G.726 G.729A	SRTP H.235 IPSEC TLS/SIPS
Mixture of E1 trunks and BRI trunks	AudioCodes Mediant 600 M600/1Span/4B	Connects 1 E1 trunk and 4 BRI trunks to the carrier (BT)	10/100	G.711 G.723.1 G.726 G.729A	SRTP H.235 IPSEC TLS/SIPS
Survivability	Standalone Survivability SW/M600/SAS	Enables local breakout to the PSTN if the WAN fails			

Customer Solution

The customer needs to connect their IP PBX at site **1** to the analogue PBX at site **2** and the remote location at site **3**. All sites are required to be survivable should the IP Network fail.



The products required to achieve this are as follow:

Site **1** : 8 BRI Digital Trunks supporting a maximum of 16 concurrent calls across the IP network or to the PSTN, including survivability

M600/8B	Mediant 600 VoIP Gateway, 8 BRI, SIP package including 8 BRI ports (16 calls). Dual 10/100BaseT Ethernet and single AC power supply. Control protocol: SIP, including G.711/723.1/726/727/729AB Vocoders
SW/M600/SAS	Stand-Alone Survivability (SAS) application for IP-Centrex, Remote Branch Office and Disaster Recovery for up to 100 IP users

Site **2** : 4 BRI Digital Trunks supporting a maximum of 8 concurrent calls across the IP network or to the PSTN, including survivability. In addition there are 4 analogue FXS ports available for additional analogue devices to be connected.

M600/4B/4S	Mediant 600 VoIP Gateway, 4 BRI, 4 FXS, SIP package including 4 BRI ports (8 calls) and 4 FXS ports. Dual 10/100BaseT Ethernet and single AC power supply. Control protocol: SIP, including G.711/723.1/726/727/729AB Vocoders
SW/M600/SAS	Stand-Alone Survivability (SAS) application for IP-Centrex, Remote Branch Office and Disaster Recovery for up to 100 IP users

Site **3** : A maximum of 4 analogue connections for devices such as telephone, FAX and modem as well as support for up to 4 calls to/from the PSTN should the IP Network fail.

MP118/4S/4O/SIP	MediaPack 118 Analog VoIP Gateway, 4 FXS, 4 FXO SIP Package including 4 FXO and 4 FXS analog lines, single 100/10 BaseT, AC power supply, including G.711/723.1/726/727/729AB Vocoders, SIP
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Examples of where this could be deployed:

- **General Office:** Geographically remote locations
- **Education:** University Campus
- **Healthcare:** Hospital building connectivity
- **Government:** Analogue break-out points within the network

Benefits of this design:

1) Investment Protection

- ✓ No investment required to be made in the existing PBXs at sites **1** and **2**

2) Secure Connectivity

- ✓ Toll Fraud prevention
- ✓ Call Privacy

3) Business Continuity

- ✓ All sites are fully survivable
- ✓ Support for local call break-out
- ✓ If the IP network fails, calls are re-routed to the PSTN

4) Flexible Connectivity

- ✓ Sites **1** and **2** have BRI connections
- ✓ Site **3** has analogue extensions

5) Reduced CapEx and OpEx

- ✓ The remote location is connected cost effectively without the requirement to install a PBX
- ✓ Reduced inter-site call costs

