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# Media Services

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Additional sections:

***Alternate Media IP Addresses Support***

***Audio Support***

***Comfort Noise Support***

***Direct Media***

***DTMF and RTP Relay***

***Fax Over IP***

***Media Antitrombone***

***MSRP Support***

***SBC Universal XPAD***

***Supported Codecs and Transcoding***

***Tones and Announcements***

***Video Support***

When establishing a call, the SBC Core establishes a media session as part of the call. If the media session is a pass-through session, the SBC polices the media stream and adjusts the appropriate headers, but essentially passes the media stream through transparently.

Alternatively, the SBC transcodes the media stream by converting it from one codec to another or from one packet size to another. If the media stream includes DTMF, fax or modem tone content, various DTMF, fax, or modem tone detection and handling capabilities are applied.

The SBC Core supports up to six media streams per session. Additional streams received are rejected.

- One media stream is typically reserved for audio. The SBC can establish SIP calls without the Audio m line on the condition that any other supported streams such as video, application or msrp are present.
- The streams are shared between video, BFCP-UDP, BFCP-TCP (RFC 4583), and Far End Camera Control (RFC 4753).

The SBC supports the following media functionality:

- Establishing SIP calls when the incoming offer has two or more m lines (maximum of six) with an audio m line with RTP port 0.
- Establishing calls when the incoming Offer has single audio m line with port # of 0. The Offer sent by the SBC will have a single m line with a port number of "0".
- Accepting call modification requests with a single audio m line with port # of 0. The Modify Offer sent by the SBC includes a single m line with port number of "0".
- Audio-only calls when the peer answers by disabling the audio m line in the answer by setting the port to 0. The Answer sent by the SBC to the opposite peer in this case will have port # of 0.
- Removal of audio/image stream from a call that has already been set up with audio and at least one additional stream. The removal can be achieved by:
  - A Modify Offer with the port for the audio/image line set to "0".
  - A Modify Offer with the audio/image media line completely removed.
- Adding audio streams for calls setup without audio via modify offers.
- Setting ingress and egress bearer type in callMediaStatus to "multimedia" if the call contains multiple streams or no audio.
- SIP REFER and/or REPLACES for calls without Audio.
- Direct Media for calls without Audio.



