
PSP Codec Selection for the Call

Packet Service Profiles (PSP) specify audio encoding methods and associated media attributes that the SBC uses when negotiating the media capabilities for calls during initial call setup.

During call setup several PSP are merged to determine the encoding for the call. For a detailed description of the PSP merge process, see [SBC Core Features Guide](#) as well as "PSX Product Description" and "PSX Provisioning Guide" documents.

Four different groups of available codec and other media preferences (packet size, DTMF transport method, etc.) are available on each call:

1. Offered by the originator (in the SIP INVITE)
2. Configured on the SBC trunk group of the originator (in the PSP)
3. Configured on the SBC trunk group for the terminator (in the PSP)
4. Allowed by the terminator (in the 200 OK)

Numerous outcomes are possible regarding which codec(s) is/are used for the call, depending on how the PSP are configured. You could, for example:

- Use the originator's first choice codec and force transcoding.
- Use the originating trunk group first choice codec and force transcoding.
- Pass the call through without any transcoding.
- Negotiate the codec's and only transcode if no common codec is found.