

TECH TIP

DATE: April 30, 2008

Product Line: SBX IP 320 (all versions) Application: SIP Trunking

Bulletin Number: SBX-TT-043008a

TOPIC: **System Requirements for SIP Trunking**



NOTE

The SBX IP 320 does not support E.164. For this reason, you must request that the ITSP provision the lines as standard trunks with no ENUM.

SYSTEM REQUIREMENTS

- 1) SBX IP 320 system with a VOIB card installed
- 2) There is no licensing requirement for SIP trunks with SBX IP 320

SOFTWARE REQUIREMENTS

KSU minimum: 1.0Cf
VOIB minimum: B.1Ea

You must use the SBX PCAdmin tool (online version) to configure SIP trunks on SBX. This tool can be found on Vertical's CCC Support site.

Rely on the configuration guide published by Vertical for the specific carrier providing the SIP lines.

This is an outline of the required settings; there may be more settings detailed in the configuration guide.

- 1) **Station Attribute 1 (PGM 111)** – Program the SIP User ID Table that will correspond with the SIP account (programmed later in SIP Attributes 2).
- 2) **CO Line List (PGM 140)** – If the SIP carrier will be providing DID (direct inward dialing) trunks, program the VoIB trunks used for SIP integration as ISDN DID.
- 3) **CO Line ISDN Attributes (PGM 143)** – Set the COLP and CLIP Table Idx fields to 0, set the Call Type to Subscriber, the DID Conv Type to 2 (for integration with Flexible DID Table, PGM 231), set the DID Remove Num to 7 (or other entry if the carrier is sending more than 10 digits), and turn ISDN ENBLK Send to On.
- 4) **COLP Table (PGM 201)** – Enter the COLP digits in Index 0 (this will correspond with PGM 143 buttons 1 and 2). The COLP digits will most likely be the same as the Authorization User Name in SIP Attributes 2.
- 5) **Flexible DID Table (PGM 231)** – Program the ring assignments for the DID routes in this area. Use the last 3 digits of the inbound numbers that the SIP carrier provides as the table numbers.

- 6) **Networking CO Line Attribute (PGM 322)** – Enter the VoIP trunks used for the SIP integration. Set the Networking CO Group to 0, the Networking CO Line Type to PSTN, Gatekeeper Usage to Off, VoIP mode to SIP, and program DTMF Mode to Inband DTMF, unless the carrier requires 2833.
- 7) **VoIP/Gatekeeper Setting (PGM 340)** – Program the IP Address, Gateway Address, and Subnet Mask for the VoIP card. Set the VoIP mode to SIP unless the system is networked with another system, if so, use the DUAL option. Program the DTMF Mode so it matches the same field in PGM 322.
- 8) **SIP Attribute 1** – Program the Proxy Server Address, Proxy Registration Timer, Use Outbound Proxy check box, Primary and Secondary DNS Addresses, and Domain provided by the SIP carrier. Enable the remaining checkboxes (Remote Party ID, Asserted ID Usage, 100Rel Support, etc.) if the SIP carrier requires them.
- 9) **SIP Attributes 2** – Enter the User ID, Authentication User Name, Authentication User Password, and repeat the Authentication User Password. The contact number might have to be added depending on what the carrier expects. For Bandtel, it is 100.

For Cbeyond and Commpartners, it is the same as the Authentication User Name. For Bandwidth.com, it is blank. Set User ID Registration to Register if the SIP carrier expects a registration packet from the SBX system. Check the User ID Usage box. If the carrier does not want a registration packet from the SBX, set this field to Provision.

ADDITIONAL SUPPORT

If you require additional assistance or have questions regarding this topic, please contact Technical Support at 1-888-422-2305, Option 4.