



SIP Trunk Configuration Guide

using



www.ip1network.com

1-866-504-4674

The information contained in this document is specific to setting up SIP connections between SBX IP 320 and IP1 Network. If you require assistance with this application, please contact Vertical Customer Support.

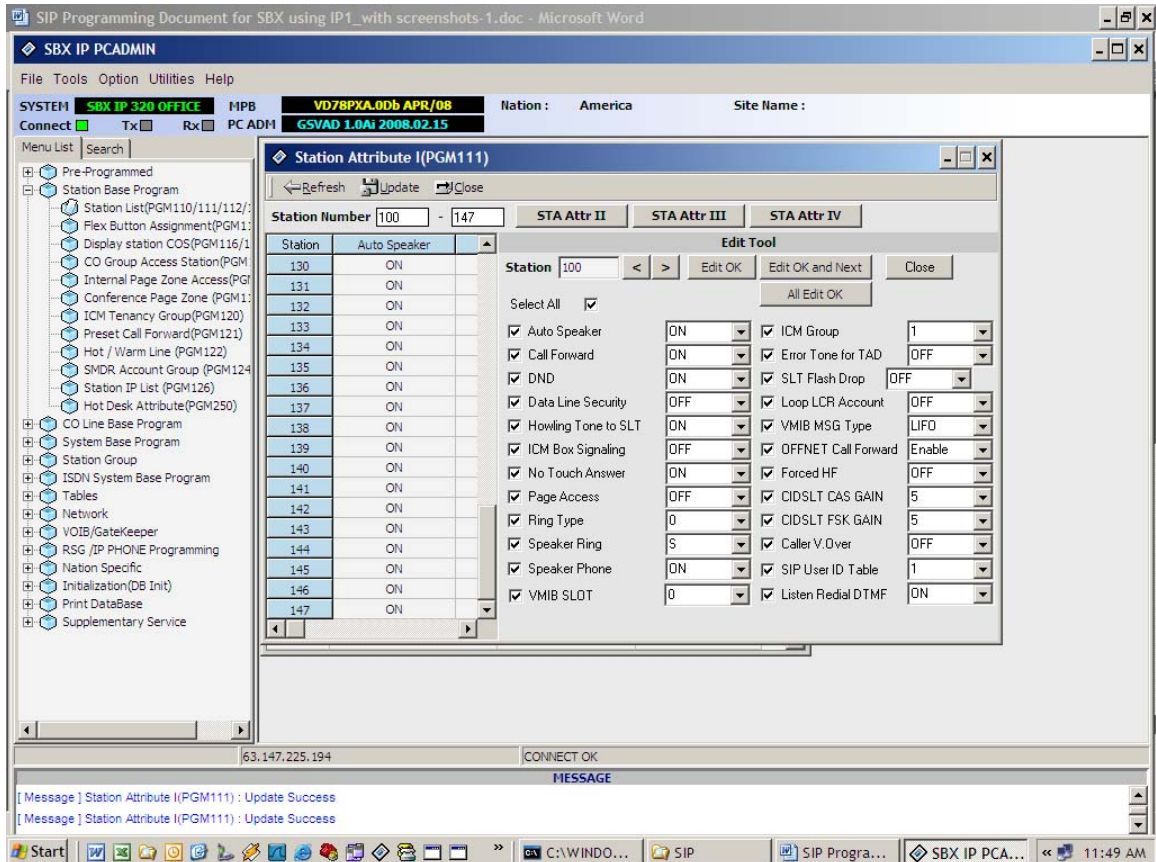
IP1 Network SIP Trunk Configuration

SIP Trunk Setup

> The PC Admin application is required to integrate SIP trunking with the SBX system.

After starting the PC Admin program, select the program settings from the Menu List tab as indicated in Steps 1-9 for the SBX system to work with the *IP1 Network* SIP trunks.

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*).



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- 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.

The screenshot shows the SBX IP PCADMIN software interface. The main window is titled "CO Line List(PGM140/141/142/143)". The interface includes a menu bar, a system information bar, and a left-hand navigation tree. The main area displays a table of CO Line List entries. The table has columns for CO Num, Type, Day, Msg, Night, Weekend, In Demanc, and Msg. The entries are as follows:

CO Num	Type	Day	Msg	Night	Weekend	In Demanc	Msg
7	ISDN DID						
8	ISDN DID						
9	ISDN DID						
10	ISDN DID						
11	ISDN DID						
12	ISDN DID						
13	ISDN DID						
14	ISDN DID						

Below the table is an "Update Tool" section with input fields for "CO Num" (7-14) and "Type" (ISDN DID), and buttons for "Update" and "Close".

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- 3.) **CO Line ISDN Attributes (PGM 143)** – Set the COLP and CLIP Table Idx fields to 0,
- Set the Call Type to Subscriber.
 - Set 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.

The screenshot displays the SBX IP PCADMIN interface for configuring CO Line ISDN Attributes (PGM 143). The main window shows a table of attributes for CO Lines 7 through 14. Below the table is an 'Update Tool' section with various configuration options.

CO Num	COLP Table Idx	CLIP Table Idx	Call Type	DID Conv type	DID Remove Num	SDN ENBLK Send	CLI Transit	in for
7	0	0	Subscriber	2	7	ON	CFW	KNOV
8	0	0	Subscriber	2	7	ON	CFW	KNOV
9	0	0	Subscriber	2	7	ON	CFW	KNOV
10	0	0	Subscriber	2	7	ON	CFW	KNOV
11	0	0	Subscriber	2	7	ON	CFW	KNOV
12	0	0	Subscriber	2	7	ON	CFW	KNOV
13	0	0	Subscriber	2	7	ON	CFW	KNOV
14	0	0	Subscriber	2	7	ON	CFW	KNOV

Update Tool

CO Num: 7 - 14

COLP Table Idx: 0
 CLIP Table Idx: 0
 Call Type: Subscriber
 DID Conv type: 2
 DID Remove Num: 7
 ISDN ENBLK Send: ON
 CLI Transit: CFW

Num Plan for Calling: UNKNOWN
 Num Plan for Called: UNKNOWN
 ISDN SS CD: NO Service
 ISDN 1 Digit Remove: OFF
 ISDN CP Inband: OFF
 CLI Type(0~2): NORMAL
 Screening Indicator: 0

Buttons: Update, Close

Message Log:

```
[Message] CO Line ISDN Attributes(PGM143) : Update Success
[Message] CO Line ISDN Attributes(PGM143) : Update Success
```

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- 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.

The screenshot displays the SBX IP PCADMIN software interface. The main window is titled "SBX IP PCADMIN" and shows a menu list on the left and a main configuration area on the right. The "COLP Table (PGM201)" window is open, showing a table with the following data:

Index	COLP Digits
0	1234567890
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

Below the table is an "Update Tool" section with a checkbox labeled "Update/Delete and next". Below this checkbox is a small table with the following data:

Index	COLP Digits
0	7862610303

The "Update" button is highlighted. The status bar at the bottom of the window shows "63.147.225.194" and "CONNECT OK". The taskbar at the bottom of the screen shows the Start button and several open applications, including "SBX IP PCADMIN", "ipecs...", "SIP", and "SIP P...". The system clock shows "1:54 PM".

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- 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.

SIP Programming Document for SBX using IP1_with screenshots-1.doc - Microsoft Word

SBX IP PCADMIN

File Tools Option Utilities Help

SYSTEM: SBX IP 320 OFFICE MPB VD78PXA.0DB APR/08 Nation: America Site Name:

Connect: TX RxC PC ADM GSVAD 1.0A: 2008.02.15

Menu List Search

Flexible DID Table(PGM231)

← Refresh Close

Enter Table Range: 303 303 Refresh All Range Refresh

Index	Name	Day Type	Day Dest.	Night Type	Night Dest.	Weekend Type	Weekend Dest.	Reroute Type	Reroute Dest.
303	Station	Station	100	Station	100	Not Assigned		Not Assigned	

Update Tool

Index: 303 Name: Update Delete All Initial All Delete Close

Edit with Range

Day Type: Station Night Type: Station Weekend Type: Not Assigned Reroute Type: Not Assigned

Day Dest.: 100 Night Dest.: 100 Weekend Dest.: Reroute Dest.:

63.147.225.194 CONNECT OK

MESSAGE

[Message] Flexible DID Table(PGM231) : Update Success

[Message] Flexible DID Table(PGM231) : Update Success

Start | C:\WINDO... | SIP | SIP Progra... | SBX IP PCA... | 11:54 AM

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6.) **Networking CO Line Attribute (PGM 322)** – Enter the VoIB trunks used for the SIP integration.

- Set the Networking CO Group to 0.
- Set the Networking CO Line Type to PSTN.
- Set Gatekeeper Usage to Off.
- Set VoIP mode to SIP.
- Program DTMF Mode to Inband DTMF, unless the carrier requires 2833.

The screenshot shows the SBX IP PCADMIN software interface. The main window is titled "Networking CO Line Attribute(PGM322)". It features a table with the following data:

CO Num	Networking CO Group	Networking CO Line Type	Gatekeeper Usage	VOIP Mode	DTMF Mode
7	0	PSTN	OFF	SIP	Inband DTMF
8	0	PSTN	OFF	SIP	Inband DTMF
9	0	PSTN	OFF	SIP	Inband DTMF
10	0	PSTN	OFF	SIP	Inband DTMF
11	0	PSTN	OFF	SIP	Inband DTMF
12	0	PSTN	OFF	SIP	Inband DTMF
13	0	PSTN	OFF	SIP	Inband DTMF
14	0	PSTN	OFF	SIP	Inband DTMF

Below the table is an "Update Tool" section with the following settings:

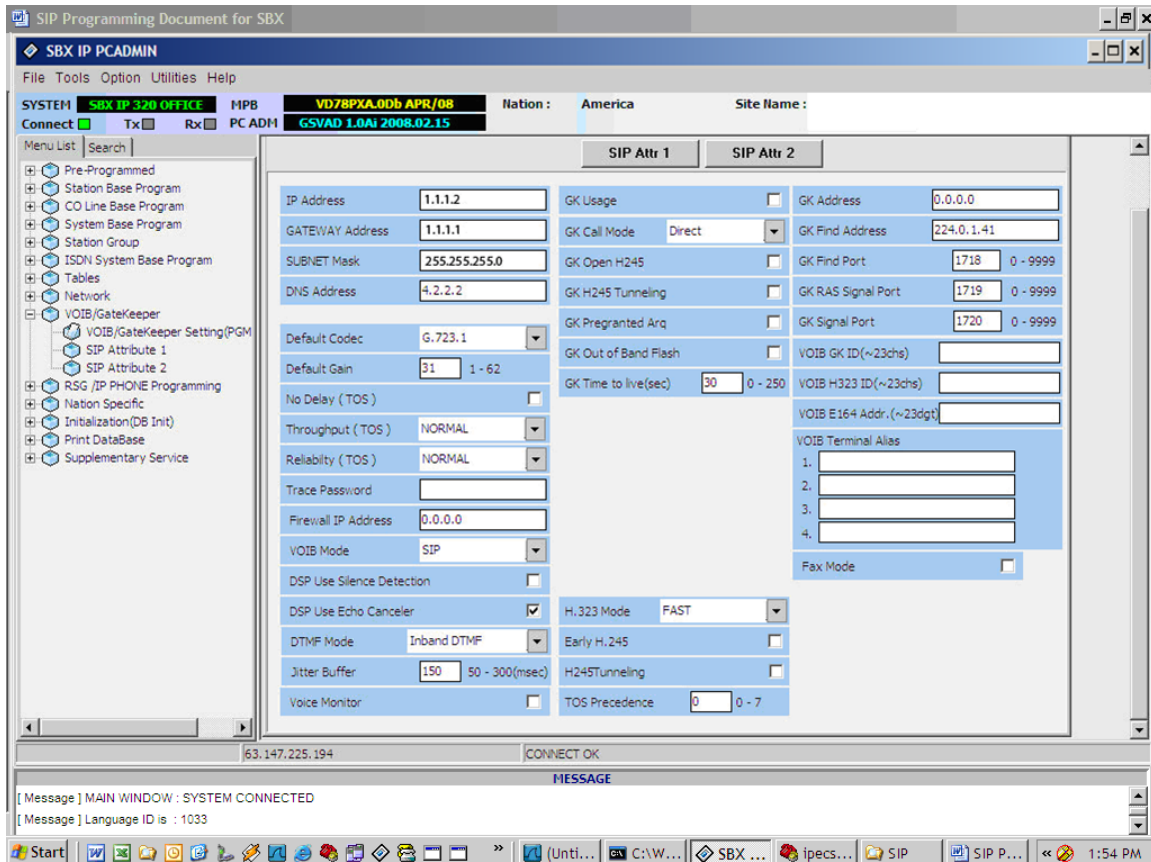
- CO Num: 7 - 14
- Select All:
- Networking CO Group: 0
- Networking CO Line Type: PSTN
- Gatekeeper Usage: OFF
- VOIP Mode: SIP
- DTMF Mode: Inband DTMF

The interface also shows a menu list on the left, a status bar at the bottom with "CONNECT OK", and a message window displaying two "Update Success" messages.

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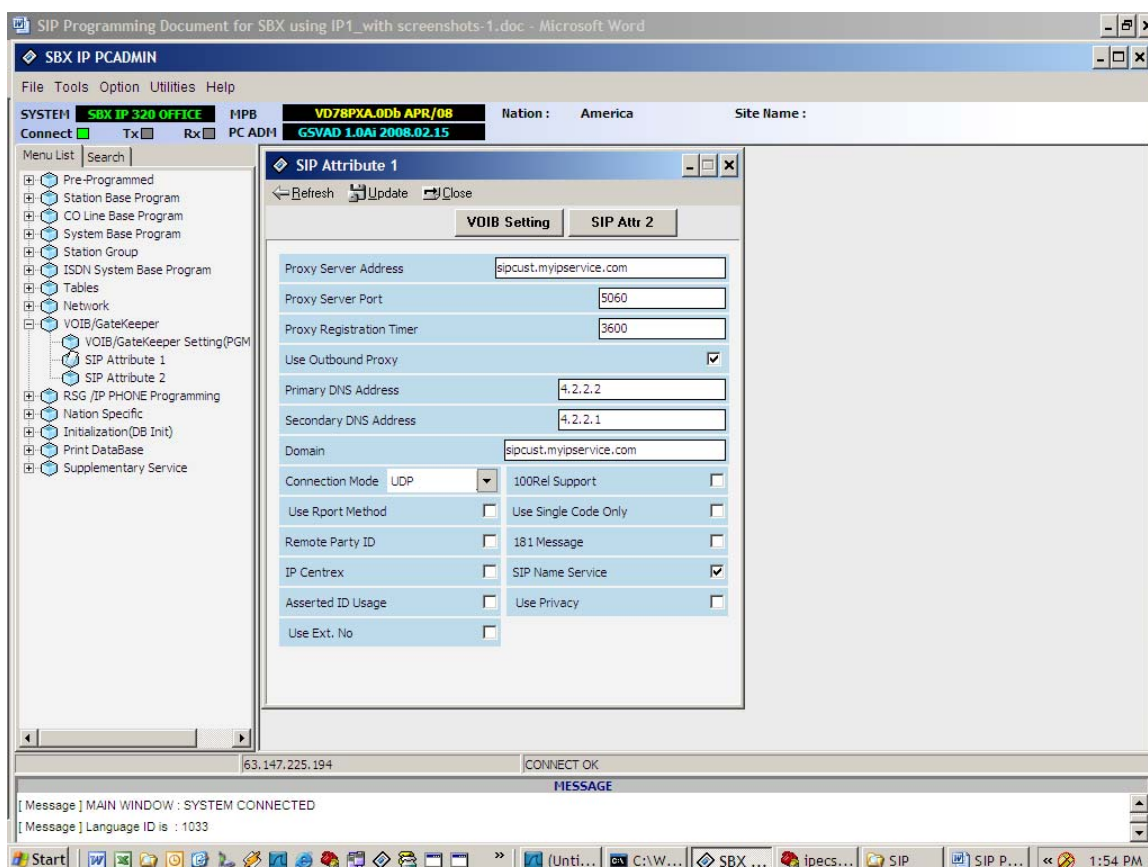
7.) VoIB/Gatekeeper Setting (PGM 340) – Program the IP Address, Gateway Address, Subnet Mask for the VoIB card.

- Set the VoIB 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.



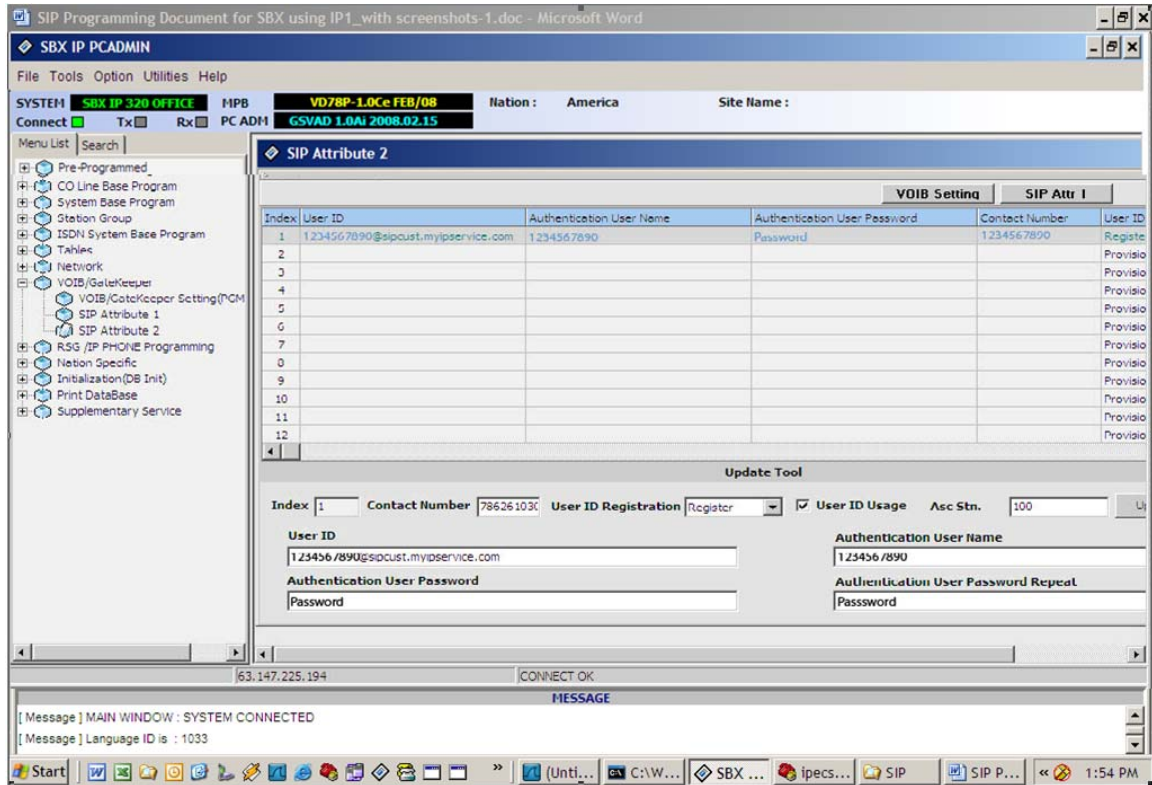
IP1 Network SIP Trunk Configuration

- 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.



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- 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.
- 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.



This completes the SIP Trunk configuration process. If you have any other questions, please contact Vertical Customer Support for assistance.