

## **SIP Trunk Configuration Guide**

## using

## COMM PARTNERS

www.commpartnersconnect.com 1-800-274-9390

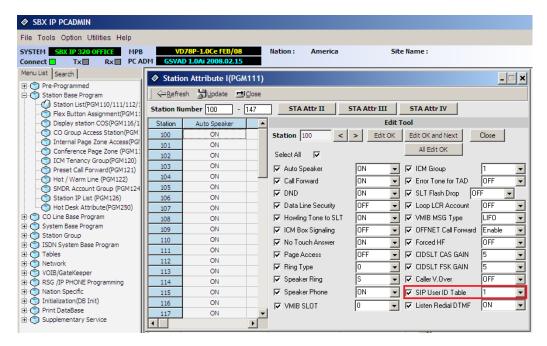
The information contained in this document is specific to setting up SIP connections between Vertical SBX IP and CommPartners. If you require assistance with this application, please contact Vertical Customer Support.

## SIP Trunk Setup

> PC Admin is needed to completely 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 *CommPartners* 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).



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.

SBX IP PCADMIN												
File Tools Option Utilities Help												
SYSTEM         SBX IP 320 OFFICE         MPB           Connect         Tx         Rx         PC AD		)78P-1.0Ce FE D 1.0Ai 2008.0		Nati	ion :	America		5	ite Name :			
Menu List Search CO Line List(PGM140/141/142/143)												
Pre-Programmed	V CULI	· · · ·	40/14	1/14Z/14	+3)							크스
🗄 🍈 Station Base Program		sh <u>H</u> Close										
CO Line Base Program	CO Num	7 - 14	СО	Ring Ass	ign C	0 Attr I	CO At	tr II	CO Attr II	и со	ISDN Attr	C
CO Ring Assignment(PGM144/:						Ne	ormal					
CO Line Attribute III(PGM146)		-	-									
CO CID Attribute(PGM147)	CO Num	Туре	Day	Msg	Night	Msg	Weekend	Msg	)n Demanc	Msg		
SMS Attribute(PGM292)	7	ISDN DID										
🗄 🅎 System Base Program	8	ISDN DID										
🗄 🅎 Station Group	9	ISDN DID										
ISDN System Base Program	10	ISDN DID										
1 Tables	11	ISDN DID										
Network	12	ISDN DID										
VOIB/GateKeeper     SG /IP PHONE Programming	13	ISDN DID										
RSG / P PHONE Programming	14	ISDN DID										
H- Print DataBase					1	Update T	ool					
⊕ Supplementary Service				_								
	CO Num		pe	_					Up	date		
	7 -	ISI	ON DID	<u> </u>								
									C	lose		

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.

SBX IP PCADMIN												
File Tools Option Utilities Help												
SYSTEM SBX IP 320 OFFICE MPB Connect Tx Rx PC A		78P-1.0Ce D 1.0Ai 200		Nation : An	ierica		Site	e Name :				
Menu List Search	🛷 CO Li	ne ISDN At	tributes(PG	M143)							- 🗆 🗙	
Pre-Programmed     Station Base Program	∫	Gefresh ⊒J⊆lose										
CO Line Base Program	CO Num	7 - 14		CO List		CO Attr I		CO Attr II	CO Attr III		CO CID	
CO Ring Assignment(PGM144/:	CO Num	OLP Table Io	LIP Table Id	Call Type	DID Con	nv type	Remove N	SDN ENBLK Send	CLI Transit	in for	Jum Plan for Calle	
CO Line Attribute III(PGM146)	7	0	0	Subscriber	2		7	ON	ORI	KNOV	UNKNOWN	
SMS Attribute(PGM292)	8	0	0	Subscriber	2	-	7	ON	ORI	KNOV	UNKNOWN	
🗈 🅎 System Base Program	9	0	0	Subscriber	2		7	ON	ORI	KNOV	UNKNOWN	
Tables				Update Tool								
🗄 🍈 Network	CONum	<u>Ľ</u>	COLP Table			Num F	Plan for Ca	-				
VOIB/GateKeeper	7		CLIP Table I	***			Plan for Ca	lled UNKNOWN			Update	
RSG /IP PHONE Programming     Nation Specific		<u> </u>	Call Type	Subscribe	r 🔻	ISDN SS CD			NO Service	•	Close	
	14	F	DID Conv ty	/pe 2	•	🔽 ISDN	🛛 ISDN 1 Digit Remove		OFF		Close	
🕀 🅎 Print DataBase	Sele	t All 🔽 🧗	DID Remove	e Num 7	-	ISDN ISDN	CP Inband		OFF	-		
⊡ ·		F	ISDN ENBLK	Send ON	-		ype(0~2)	NORMA	L	•		
		F	CLI Transit	ORI	•	Scree	ning Indica	ator	0	•		

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.

SBX IP PCADMIN				
File Tools Option Utilities Help				
SYSTEM         SBX IP 320 OFFICE         MPB           Connect         Tx         Rx         PC A		Nation :	America	Site Name :
Connect     Tx     Rx     PC A       Menu List     Search     Image: Search     Image: Search       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program     Image: System Base Program       Image: System Base Program     Image: System Base Program	GSVAD 1.0Ai 2008.02.15           COLP Table (PGM201)           Refresh         Icon           Index         COLP Digits           0         111111111           1         2           3         4           5         6           7         8           9         10           11         12           13         14           Update Tool         Update Tool           Index         COLP Digits           0         11111111			
	Update Delete Clos	se		

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.

SBX IP PCADMIN									- 8 ×
File Tools Option Utilities Help									
SYSTEM SBX IP 320 OFFICE MPB			ion : Ame	rica	Site Name				
Connect Tx Rx PC A	DM G5VAD 1.0Ai 2008.0	02.15							
Menu List Search	🛷 Flexible DID Table	e(PGM231)							
Pre-Programmed		. ,							
Station Base Program									
🗄 🌍 CO Line Base Program	Enter Table Range	100	100	Refresh A	Il Range	Refresh			
🗉 🅎 System Base Program								1	
⊡-	Index Name	Day Type	Day Dest.	Night Type	Night Dest.	Weekend Type		Reroute Type	Reroute Des
ISDN System Base Program	100	Station	100	Station	100	Station	100	Not Assigned	_
E-C Tables									
LCR Assignment (PGM220)									
LCR - LDT Table (PGM221)									
LCR - DMT Table (PGM222)									
LCR Table Initialization (PGM22									
$\rightarrow$ $\rightarrow$ $\rightarrow$ $\rightarrow$									
Canned Toll Table (PGM225)	•								•
Authorization Code Table (PGM22				sbaU	ate Tool				
Customer Call Routing(PGM228									
Executive/Secretary Table(PGN	Index 100	Name		Update	Delete	All Initial	All Delete	Close	1
Flexible DID Table(PGM231)		· ·			_				1
System Speed Zone(PGM232)	🔲 Edit with Range								
Weekly Time Table(PGM233)	Deve Trans	Make Trees		No also al Trans	0	when There a	-		
Voice-Mail Dialing Table(PGM235)	Day Type	Night Type		Weekend Type		oute Type	r		
Mobile Extension(PGM236)	Station 💌	Station	S	itation	<ul> <li>Not A</li> </ul>	kssigned 💌			
Local Code Table (PGM204)	Day Dest.	Night Dest.	1	Neekend Dest.	Rero	oute Dest.			
E-C Network	100	100		.00			1		
E- VOIB/GateKeeper	,								
E C RSG /IP PHONE Programming									
Nation Specific									
Initialization(DB Init)									
Print DataBase									
- Supplementary Service									
-									

6.) **Networking CO Line Attribute (PGM 322)** – Enter the VoIB 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.

SBX IP PCADMIN									
File Tools Option Utilities Help									
SYSTEM         SBX IP 320 OFFICE         MPB         VD78P-1.0Ce FEB/08         Nation :         America         Site Name :           Connect         Tx         Rx         PC ADM         G5VAD 1.0Ai 2008.02.15         FEB/08         FEB/08         FEB/08         FEB/08         FEB/08         FEE/08         FEE/08 <td< td=""></td<>									
Menu List Search	Netw	orking CO Line Att	ribute(PGM322)			_ 🗆 ×			
	← <u>R</u> efre								
CO Line Base Program     System Base Program	CO Num	7 - 14	CO ISDN	Attr					
🕀 🍈 Station Group	CO Num	Networking CO Group	Networking CO Line Type	Gatekeeper Usage	VOIP Mode	DTMF Mode			
ISDN System Base Program	7	0	PSTN	OFF	SIP	Inband DTMF			
⊡ Tables	8	0	PSTN	OFF	SIP	Inband DTMF			
Network     Networking Attributes(PGM320	9	0	PSTN	OFF	SIP	Inband DTMF			
Networking Attributes(PGM320     Networking CO Line Attribute(F	10	0	PSTN	OFF	SIP	Inband DTMF			
Network Numbering Plan Table	11	0	PSTN	OFF	SIP	Inband DTMF			
	12	0	PSTN	OFF	SIP	Inband DTMF			
RSG /IP PHONE Programming	13	0	PSTN	OFF	SIP	Inband DTMF			
🗄 🎲 Nation Specific	14	0	PSTN	OFF	SIP	Inband DTMF			
🕀 💬 Initialization(DB Init)									
Print DataBase			Update 1	Tool					
		Select /							
	CO Num			VOIP	Mode	SIP 🚽			
	7 -	14	working CO Group 0						
	,	/ Net	working CO Line Type PS	TN 🔽 🗹 DTMF	Mode	Inband DTMF 🗨			
		Gat	ekeeper Usage OF	F 🔽					
			odate Close						
			Close						

7.) **VoIB/Gatekeeper Setting (PGM 340)** – Program the IP Address, Gateway Address, Subnet Mask, DNS address and Firewall address if you are using a one to one NAT through firewall/router 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.

SBX IP PCADMIN						
File Tools Option Utilities Help						
SYSTEM         SBX IP 320 OFFICE         MPB           Connect         Tx         Rx         PC ADI	VD78P-1.0Ce FEB/ GSVAD 1.0Ai 2008.02		America	Site Nam	e:	
Menu List Search	VOIB/GateKeeper Set	etting(PGM340/34	1)			- 🗆 🗙
Pre-Programmed     Station Base Program	Refresh Hupdate	-UClose				
CO Line Base Program			SIP Attr 1	SIP Attr 2	2	
	IP Address 19	92.168.1.2	GK Usage		GK Address	0.0.0
🖭 🍈 Network	GATEWAY Address	92.168.1.1	GK Call Mode	Direct 💌	GK Find Address	224.0.1.41
VOIB/GateKeeper     VOIB/GateKeeper Setting(PGM	SUBNET Mask 2	55.255.255.0	GK Open H245		GK Find Port	1718 0 - 9999
SIP Attribute 1	DNS Address 20	05.171.3.65	GK H245 Tunneling		GK RAS Signal Port	1719 0 - 9999
E SG /IP PHONE Programming		.723.1	GK Pregranted Arq		GK Signal Port	1720 0 - 9999
Nation Specific     Initialization(DB Init)			GK Out of Band Flas	sh 🗖	VOIB GK ID(~23chs)	
Print DataBase     Supplementary Service	Default Gain 3		GK Time to live(sec)	) 30 0 - 250	VOIB H323 ID(~23chs)	
Entry Service	No Delay ( TOS )				VOIB E 164 Addr. (~23dg	at)
		ORMAL -			VOIB Terminal Alias	
	Reliabilty (TOS ) N	ORMAL 👻			1.	
	Trace Password				2.	
	Firewall IP Address	.0.0.0			4.	
	VOIB Mode Si	IP 💌			Eax Mode	
	DSP Use Silence Detection				- ax Hode	
	DSP Use Echo Canceler		H.323 Mode F	AST 💌		
	DTMF Mode Inba	and DTMF 📃 💌	Early H.245			I
	Jitter Buffer 1	50 50 - 300(msec)	H245Tunneling			
	Voice Monitor		TOS Precedence	0 - 7		

8.) SIP Attribute 1 – Program the Proxy Server Address (will be provided by carrier), 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, 181 message and SIP name service) if the SIP carrier requires them.

File Tools Option Utilities Help SYSTEM SBX 119820 OFFICE MP Connect Tx Rx PC		Nation : America	
Menu List Search   Pre-Programmed   Station Base Program  CO Line Base Program	SIP Attribute 1	e VOIB Setting   SIP Attr 2	<u></u> ,
	Proxy Server Address Proxy Server Port Proxy Registration Timer	as-obproxy.commpartners.us	
VOIB/GateKeeper Setting(PGM SIP Attribute 1 SIP Attribute 2 C SIP Attribute 2 C Nation Specific C Nation Specific C Initialization(DB Init)	Use Outbound Proxy Primary DNS Address Secondary DNS Address	205.171.3.65 205.171.2.65	<b>V</b>
Print DataBase     Supplementary Service	Domain Connection Mode UDP Use Rport Method	company.com           IORel Support           Use Single Code Only	
	Remote Party ID IP Centrex	ISE single Code only           IS1 Message           SIP Name Service	<u>।</u> र
	Asserted ID Usage Use Ext. No	Use Privacy	



9.) **SIP Attributes 2** – Select the index number you used in *Station Attributes 1 (PGM 111)* Enter the User ID (*phone number*@ *domainname.com*, Authentication User Name, Authentication User Password, and repeat the Authentication User Password which is provided by your Commpartners setup letter. The contact number might have to be added depending on what the carrier expects.

SBX IP PCADMIN							- 8 ×
File Tools Option Utilities Help							
SYSTEM         SBX 1P 320 OFFICE         MPB           Connect         Tx         Rx         PC A		VD78P-1.0Ce FEB/08 Nat 55VAD 1.0Ai 2008.02.15	ion : America Sil	te Name :			
Menu List Search	🔷 S	iIP Attribute 2					
Pre-Programmed     Station Base Program		<u>R</u> efresh <u>⊐JC</u> lose					
CO Line Base Program     System Base Program					VOIB Setting	SIP Attr 1	
E Station Group	Index	User ID	Authentication User Name	Authentication User Passw	ord C	Contact Number	User ID Re
🗄 - 🍈 ISDN System Base Program	1	11111111@company.com	111111111	111111111	1	1111111111	Register
Tables     Tetwork	2						Provision
	3						Provision
VOIB/GateKeeper Setting(PGM	4						Provision
- 🕎 SIP Attribute 1	5						Provision
SIP Attribute 2	6						Provision Provision
							Provision
	9						Provision
Print DataBase	10						Provision
🗄 🍈 Supplementary Service	11						Provision
	12						Provision
	1						
			Upo	date Tool			
	Inde	ex 1 Contact Number 111111	11 User ID Registration Register	🔻 🔽 User ID Usag	e Asc Stn.		Upda
	U U	ser ID		Authentic	ation User Nar	me	
	1	11111111@company.com		11111111	1		
	A	uthentication User Password		Authentic	ation User Pas	ssword Repeat	
	1	111111111		11111111			
		-	J	1			

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

NOTE -- in version 1.1 > only the logo and the Web Address were updated on the cover page.