Configuring Skype for Business using Grandstream CPE Devices

Thank you for your interest in configuring Grandstream's SIP devices for Skype's SIP Trunking Service. This document describes the basic configuration needed to begin using Skype for SIP Service with Grandstream's GXW400x Analog Gateway Series and GXE502x Series IP PBX.



Skype for SIP with the GXW400x



Configuring Skype for SIP Trunk

- 1. Click on ProfileX in the configuration page (Figure 6-1).
- 2. Fill in the Primary Sip Server with the credentials provided by Skype as shown below.
- 3. Fill in the Sip User ID, Authenticate ID, Password and Name in the FXS Ports page (Figure 6-2)

(Fandstrea	am Device (Configuratio	on	
STATUS BASIC SETTING	<u>ADVAI</u>	NCED SETTINGS	6 PROFILE 1	PROFILE 2	FXS PORTS
Profile Active:	ON∘ (🖲 Yes			
Primary SIP Server:	sip.skype.co	om	(e.g.,	sip.mycompany	y.com, or IP address)
Failover SIP Server:			(Optic	nal, used when	primary server no response)
Outbound Proxy:			(e.g.,	proxy.myprovi	der.com, or IP address, if any)
SIP transport:	🖲 UDP	🔘 TCP	O TLS (defa	ault is UDP)	
NAT Traversal (STUN):	O No (🔘 No, but sen	d keep-alive	🖲 Yes	
DNS Mode: User ID is phone number:	 A Recor No 	°d ○SRV ○Yes	🔘 NAPTI	RVSRV	
SIP Registration:	O No (◉ Yes			
Unregister On Reboot:	⊙ No (🔘 Yes			
Outgoing Call without Registration:	○ No (◉ Yes			
	60	- fire-			
-		Figure 6-	1		

Note: Below we provide a match of what it is obtained from Skype's BCP and the ProfileX and FXS Port pages in the GXW40xx.

Here are the SIP protile	e details: 😡
Profile name	Reservations.StarSpoter
SIP User:	99051000000477
Password:	iq54fqpXVKEf9f
Skype for SIP address:	sip.skype.com
UDP Port:	5060
STUN address:	stun skype.com

- SIP User \rightarrow Sip User ID and Authenticate ID
- Password \rightarrow Password
- Skype for SIP Address \rightarrow Primary Sip Server
- UDP Port → The GXW assumes port 5060 as the default value. If other port number is given, append it to the Primary Sip Server URL using a colon and the port number (e.g. Port 6060 sip.skype.com:6060).
- STUN address → Set Nat Traversal (STUN) to YES and enter the address in Advance Settings page > Stun Server

		Gran	ndstream Device Co	nfiguration		
	STATUS	BASIC SETTINGS	ADVANCED SETTINGS	PROFILE 1 PROFILE 2	FXS PORTS	
User :	Settings					
Port	SIP User ID	Authenticate ${\rm I\!D}$	Password	Name	Profile ID	Hunting Group
1	9905xxxxxxxx	9905xxxxxxxxx		John Doe	Profile 1 💌	None 💌
2					Profile 1 💌	None 💌
3					Profile 1 💌	None 💌
4						



The Profile ID number needs to correspond with the Profile number where you entered the Skype Sip server.

Skype for SIP with the GXE502X



Configuring Skype for SIP Trunk

1. Click on Trunk/Phone Lines on the left menu bar and then click on "SIP Trunk" to load the SIP Trunk configuration page (Figure 7-1).

2. Fill in the SIP Trunk with the credentials provided by Skype as shown below. For the fields "Trunk Name" and "Account Name" you can use an arbitrary name. Below we provide a match of what it is obtained from Skype's BCP and the SIP Trunk Configuration fields in the GXE502X.

- SIP User \rightarrow Account ID and Authenticate ID
- Password \rightarrow Password
- Skype for SIP Address \rightarrow SIP Server URL
- UDP Port → The GXE assumes port 5060 as the default value. If other port number is given append it to the SIP Server URL using a colon and the port number (e.g. Port 6060 sip.skype.com:6060).
- STUN address \rightarrow * (System Configuration > System Settings (Advanced) > STUN Server).

* Outside the SIP Trunk Configuration page.

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ere are the SIP protile	e details: 🕡	→ Add SIP Trunk	
Profile name	Reservations.StarSpoter	Trunk Name	
SIP LISAR'	9905100000477	Trunk Active	Enable Disable
		SIP Server URL	
Password:	IQ54°Q5XVVKE191	Outbound Proxy URL	
Skype for SIP address:	sip.skype.com	Account Name	
UDP Port:	5060	Account ID	
		Authenticate ID	
i UN address:	stun skype.com	Password	
		Max Concurrent Calls Allowed	8
ne une can:		Dial Profix	

Skype BCP and GXE5024 Web Interfaces (Figure 7-1)

3. To set a limit on the number of calls allowed through this trunk, please set the "Max Concurrent Calls Allowed" field to the limit allowed by Skype provider, or a lower number if you wish.

4. If desired set the "Dial Prefix" to a number users will use to make outbound calls with this trunk. This rule will be added automatically to the "General Outbound" Call Routing Profile and can be modified later.

5. "General Inbound" is chosen as the default Call Routing Profile and we recommend you to keep it that way unless you are sure about applying these modifications. The Call Routing Profile assigned to a trunk will determine what will happen when a call comes into the trunk. The Selected List should only include one profile.

Call Routing in GXE502X

Inbound Calls. GXE Call Routing capabilities allow the administrator to decide where the call will be routed and/or any additional conditions that may impact the routing of the call. For example the organization may want all of the calls to be answered by an Auto-Attendant or a Ring a Group. At the same time specific conditions can be added depending on the Caller Party CLI Number (Caller Line Identification), DID and any specific date, weekday or time of the day.



Outbound Calls. GXE Call Routing capabilities allows the administrator to create dial plan and digit manipulation rules to delimit the phone numbers users will be able to dial and how users will be dialing out. This may include using a prefix to access the SIP for Skype Trunk, Digit Manipulation for Local Digit Dialing, Permissions and so forth.



For more information please refer to the GXE User Manual:<u>http://www.grandstream.com/support/gxe_series/gxe502x/documents/gxe502x_user manual_english.pdf</u>



A Skype Account

Note

Skype for SIP Quick Start Guide

This quick start guide outlines the main steps to set up the open beta version of Skype for SIP. Skype for SIP Beta is set up via Skype's Business Control Panel (BCP). For detailed information on how to use Skype's BCP, please refer to the Skype for SIP Business Control Panel User Guide and Skype for SIP IT Guide about implementing and using Skype for SIP.

Further support resources can be found at skype.com/business/support

..... Before you get started you will need



An internet connection with a public IP address

An online Skype for SIP certified PBX

The ability to configure your SIP-enabled PBX
An accepted payment method
Icon Key:

Icon Key:

Sign into or register for the Business Control Panel

5

- The Business Control Panel (BCP) lets you manage your company's Skype products and Skype Credit online
 - When registering for a BCP, please bear in mind this BCP account will be used to administer Skype products and Skype Credit throughout your business. We therefore recommend you create a new Skype account using your company name to register for a BCP. If you do not have Skype, please download the latest version at skype.com/download and create a new Skype account.

Activate Skype for SIP and create a SIP Profile

You need to be signed into the BCP in order to access the Skype for SIP Beta settings. 2.1 On the Company tab, click the Skype for SIP Beta link.



2.2 Create a new SIP Profile and give it a friendly name so it's easier to remember.



- 2.3 Enter the number of channels you require and complete the purchase instructions on screen (this is the amount of concurrent calls you would like to use with your Skype for SIP Beta product and that these channels are charged on a monthly basis).
- 2.4 After completing the channel purchase your SIP Profile will be created with your login credentials displayed on screen.

Star Spotte	1 HOLEIS	Business Control Panel Help Sign
People Company		(S) \$20.20 <u>Add</u> 🐰 6 people <u>A</u>
Account details	Skype for SIP E	leta
Purchase Skype credit		
Add members	Set up completed	successfully!
Redeem vencher	Your profile will b	e activated in a few minutes.
Manage online numbers	Payment for your subs	cription was successfully made. 😡
Group people	\$63.00 was deducted for	m the Control Panel balance.
Order list	The next syment will be	taken on November 30, 2009.
Allocation report		
Payment preferences	Here are the SIP profil	e details: 🕑
Skype for SIP Beta	Profile name	Reservations.StarSpotter
	SIP User:	9905100000477
Review detailed	Passwordt	iq\$4/qsXWKEPPr
can reporta	Skype for SIP address:	sip.skge.com
International Price	UDP Port:	5060
14/10/201-2000 E.0.00 (+1)/0000220	STUN address:	stun skype.com
(+42) 684 7 100 (+42) 688 (+42) 688	Now you can:	
	Allocate Skype	this calls.

2.5 Allocate the amount of Skype Credit you need to your SIP Profile by clicking on the Allocate Skype Credit section.



Please refer to the SIP Profile managing credit section in the Skype for SIP Business Control Panel User Guide for more details on how to set up auto-recharging. This will generate a set of SIP Profile credentials (username, password etc) for you to configure your Skype for SIP certified PBX. We recommend you write them down or print them as you'll need them later.

If you do not want to make outbound calls with Skype for SIP Beta please proceed to step 5.



3 Configure your Skype for SIP certified PBX for Outbound Calls

Enter your SIP Profile credentials created in the previous step and configure your Skype for SIP certified PBX as per your manufacturer's instructions.



Make a test Outbound Call

- Call +1760-660-4690 to test audio quality and connectivity. It's Skype's echo test online number.
- If you want to receive inbound calls with Skype for SIP Beta proceed to step 6, if not, you have now successfully set up your Skype for SIP profile to make outbound calls.

5 Configure your Skype for SIP certified PBX for Inbound Calling





6 Set up a Skype Business Account to test Inbound Calls from people with Skype

 6.1 Create a Business Account in the Business Control Panel by selecting Add members in the Company options. Refer to the Business Control Panel User Guide if you require help.

Star Spotter	Hotels	Business Control Panel Help Sign or
People Company		🚫 \$60.00 <u>Add</u> 🛃 1 person <u>Add</u>
Account details	Create a business	account
Purchase Skype credit	Business accounts are created	, controlled and owned by your company. Allocate
Add members	accounts to employees of to m	epresent a deparonent.
Redeem woucher	Email address	george varsura@starsocite/hote/s.com
Manage online numbers		
Group people	Cruite skype Name	sterspotter.georgeyery Retireen 6 and 22 characters
Order list		
Allocation report	Setting a password is optiona If left blank, the email recipion	l. t will be invited to create their own password.
Payment preferences	Password	
Online numbers		Nust contain between 6 to 20 characters including at least one number.
	Repeat password	

 6.2 Assign the newly created Business Account in the Calling section to the SIP Profile you created during step 2.

People Company	(S) \$70.20 Add S epeople Add
Account details	Skype for SIP Beta Profile
Purchase Skype credit	Profile overview Calling Online numbers Caller ID
Redeem voucher Manage online numbers Greup people Order list	Reservations.StarSpotter - Incoming calls business accounts are required for incoming cals. Create more business accounts. Business Accounts in group and business accounts of the profile.
Allocation report	storspotter.reservationsdept v Save Cancel
Payment preferences	

7 Make a test Inbound Call from Skype

Call the Business Account's Skype Name you created in step 6 from Skype.

Assign an Online Number to receive calls from landlines and mobile phones

8.1 Buy an Online Number in the BCP.

People Company		(S) \$60.00 Ad	6 people Add			
Account details	Purchase online	numbers				
Purchase Skype credit						
Add members	L.Colliny Albaha	3. Number's				
Redeem voucher	Amount of numbers	1 4				
Manage online numbers	State	Ilinois 💌				
Group people	Area code	(773) Chicago Monroe	*			
Order list	Subscription period	3 months 0 12 months				
Allocation report	Continue					
Payment preferences						



 8.2 Associate that Online Number to the SIP Profile you have created.

People Company			5 \$70	0.20 <u>Add</u>	e people <u>Add</u>	
Account details	Skype for SI	P Beta	Profile			
Purchase Skype credit	Profile overview	Calling	Online numbers	Caller ID	« Back to profile lis	
Add members						
Redeem voucher	Reservations.StarSpotter - Online numbers					
Manage enline numbers	Assign online numbers to this profile. Calls to these assigned online numbers will be forwarded to this SIP profile.					
Group people	Buy more online nur	nbers				
Order list	-					
Allocation report	+1 773 572 9060	×)		Assign	
Payment preferences						

9 Make a test Inbound Call from a landline or mobile phone

Call the Online Number from a landline or mobile phone.



You have now successful set up Skype for SIP Beta for use with your Skype for SIP certified PBX.

> For more assistance with setting up and using Skype for SIP Beta please see the resources available at;

skype.com/business/support.

Access to a broadband Internet connection is required. Skype is not a replacement for traditional telephone service and cannot be used for emergency calling. Skype for SIP is meant to complement existing traditional telephone services used with a corporate PBX, not as a standalone solution. Skype for SIP users need to ensure all calls to emergency services are terminated through traditional telephone services. Important Information about your SIP enabled PBX configuration Skype for SIP open beta needs to authenticate your requests against the generated SIP User name and password that was created when you set up your SIP profile in the BCP. In your SIP enabled PBX's configuration ensure you have the following:

- SIP registrations and authentication using your SIP user name and password provided when you set up your SIP profile
- ✓ If you are making outgoing calls please ensure your SIP user name is in the From field in the SIP message (ie: 990500000231@sip.skype.com) otherwise Skype will reject your call
- Also ensure you have turned on INVITE authentication if it is a feature as Skype will request authentication even for a SIP INVITE
- If you are making outgoing calls to landline and mobile numbers make sure they are sent to Skype as full international format only (eg country code and landline/mobile numbers even if you are making a local call)
- If you are using Skype for SIP to receive calls, we will send the SIP user name in the Request URI (R-URI), but will not request authentication as you are a trusted user.

Warning It is very common that a SIP enabled PBX with an incorrect configuration may operate successfully within the business's telephone system, yet will suffer problematic start up and usage if the credentials are not correct and the SIP user name is not the From header for outgoing calls.



