

# **Skype for Business SIP trunk Configuration for**

**DIDforSale and Cebod Telecom** 

# Skype for Business





## Skype for Business Server – SIP trunk configuration **Business SIP Trunking**

## Contents

Skype for Business Server – SIP trunk configuration Business SIP Trunking
SIP trunk Configuration details
Outbound call from SfB3
Inbound call to SfB
Default Port3
Sample DID used for verification3
Topology Diagram
Active Directory DNS Configuration
Skype for Business Topology Builder4
Adding PSTN gateway for Inbound Calls5
Adding PSTN Gateway for Outbound Calls7
Voice Routing Configuration11
Dial Plan11
VOICE POLICY
ROUTE
PSTN USAGE16
TRUNK CONFIGURATION17
Configure DID for the User
Assign Line URI: and Telephony type18

## SIP trunk Configuration details.

## Outbound call from SfB

- IP 1 : 209.216.2.212
- IP 2 : 209.216.15.71

## Inbound call to SfB

- IP 1 : 209.216.2.211
- IP 2 : 209.216.15.70.

Default Port to send Signals from SfB to SIP trunk : 5060

#### Sample DID used for verification

- > 19494568695
- > 18479041040
- > 18186653300



## Active Directory DNS Configuration

#### DNS Configuration for Inbound and Outbound Call

Ш	😑,	· · · · · · · · · · · · · · · · · · ·		
	(same as parent folder)	Host (A)	192.168.1.120	5/7/2018 8:00:00 AM
	DIDforsale	Host (A)	209.216.15.73	static
	didforsaleoutbound	Host (A)	209.216.2.212	static
	🗐 icrael	Hort (A)	50 57 / 5 171	static

## Skype for Business Topology Builder

Skype for Business Server  $\rightarrow$  <<Site name>>  $\rightarrow$  Skype for Business Server 2015  $\rightarrow$  Shared Components  $\rightarrow$  PSTN gateways  $\rightarrow$  New IP/PSTN Gateway...

Skype for	r Business Server 2015, Topology Builder 📃 🗖 🗙
File Action Help	
▲ B Skype for Business Server	The properties for this item are not available for editing.
⊿ 💷 Bellevue Wipro	
Lync Server 2010	
Lync Server 2013	
Skype for Business Server 2015	
Standard Edition Front End Servers	
Enterprise Edition Front End pools	
Director pools	
Mediation pools	
ी् onlinefe.skypecert.com	
Persistent Chat pools	
Edge pools	
Trusted application servers	
🚞 Video Interop Server pools	
A Description of the second	
SQL Server stores	
File stores	
PSTN gateways	
Trunks     New IP/PSTN Ga	iteway
Diffice Web A Topology	•
Video gatewa Help	
SIP Video trumos	
Branch sites	

## Adding PSTN gateway for Inbound Calls

15	Define New IP/PSTN Gateway	x
5	Define the PSTN Gateway FQDN	
Define th FQDN: *	ne fully qualified domain name (FQDN) for the PSTN gateway.	
didforsa	ale.setup17.loc	
Help	Back Next Cancel	

Define New IP/PST	rN Gateway	x
Define the IP address		
<ul> <li>Enable IPv4</li> <li>Use all configured IP addresses.</li> <li>Limit service usage to selected IP addresses.</li> <li>PSTN IP address:</li> </ul>		
<ul> <li>Enable IPv6</li> <li>Use all configured IP addresses.</li> <li>Limit service usage to selected IP addresses.</li> <li>PSTN IP address:</li> </ul>		
Help	Back Next Cance	:1

Define New IP/PSTN Gateway	x
Solution Define the root trunk	
Trunk name: *	
didforsale.setup17.loc	
Listening port for IP/PSTN gateway: *	
5060	
SIP Transport Protocol:	
TCP	•
Associated Mediation Server:	
onlinefe.skypecert.com Bellevue Wipro	•
Associated Mediation Server port: *	
5060	
Help Back Finish Cano	:el

Adding PSTN Gateway for Outbound Calls

Define New IP/PST	rN Gateway	x
Define the IP address		
<ul> <li>Enable IPv4</li> <li>Use all configured IP addresses.</li> <li>Limit service usage to selected IP addresses.</li> <li>PSTN IP address:</li> </ul>		
<ul> <li>Enable IPv6</li> <li>Use all configured IP addresses.</li> <li>Limit service usage to selected IP addresses.</li> <li>PSTN IP address:</li> </ul>		
Help	Back Next Cance	:1

19	Define New IP/PSTN Gateway	x
5	Define the PSTN Gateway FQDN	
Define th	ne fully qualified domain name (FQDN) for the PSTN gateway.	
FQDN: *		_
didforsa	aleoutbound.setup17.loc	8
Help	Back Next Cancel	

Define New IP/PSTN Gateway	x
Define the root trunk	
Trunk name: *	
didforsaleoutbound.setup17.loc	8
Listening port for IP/PSTN gateway: *	
506d	
SIP Transport Protocol:	
TCP	•
Associated Mediation Server:	
s17fe.setup17.loc Bellevue Public	•
Associated Mediation Server port: *	
5060	
Help Back Finish Can	cel

Make sure both PSTN for Inbound and Outbound gateways are available

- ▲ L Skype for Business Server
  - 🔺 🔢 Bellevue Public
    - Lync Server 2010
    - Lync Server 2013
    - Skype for Business Server 2015
      - Standard Edition Front End Servers
        - Enterprise Edition Front End pools
        - Director pools
      - Mediation pools
        - Persistent Chat pools
        - 🚞 Edge pools
        - Trusted application servers
        - Video Interop Server pools
    - A Description Shared Components
      - SQL Server stores
      - File stores
      - PSTN gateways
        - 🖏 didforsale.setup 17.loc
        - Note: The second second
      - 👂 🚞 Trunks
        - Office Web Apps Servers
        - 🚞 Video gateways
        - 🚞 SIP Video trunks
      - 🚞 Branch sites

## Voice Routing Configuration

#### Dial Plan

DIAL PLAN	I VOI	CE POLICY	ROUTE	PSTN USAGE	TRUNK CONFIGURATION	N TEST VOICE ROUTING
Create	voice ro	outing test	case inform	nation		
					٩	
💠 New	• 🦯	Edit 🔻 💋	Action 🔻	Commit 🔻		
Na	ne 🔺	Scope	State	Normalizatio	n rules Description	
e	Global	Global	Committed	4		

Edit Dial Plan - Global

JOK X Cancel				
Scope: Global				
Name: *				
Global				
Simple name: *				
DefaultProfile				
Description:				
Dial-in conferencing region:				
india		( <b>?</b> )		
External access prefix:				
		?		
Associated Normalization Rules				
🕂 New 🖹 Copy 📋 Paste	🛏 Select 🧪	Show details Remove 👚	4	
Normalization rule	State	Pattern to match	Translation pattern	
international	Committed	^(\d{10}\d+)\$	\$1	
internal	Committed	^(\d{4})\$	+1425577\$1	
local	Committed	^(\d{7})\$	+1425\$1	
national	Committed	^(\d{10})\$	+1\$1	
Dialed number to test:				
		Go 🥐		
ICE POLICY				
NAL PLAN VOICE POLICY ROUTE	PSTN USAGE	TRUNK CONFIGURATION TEST	VOICE ROUTING	
Create voice routing test case infor	mation			
[				
		0		

+	New 🔻 🧪 Edit 🔻	Action	<ul> <li>Commit '</li> </ul>	*	
	Name 🔺	Scope	State	PSTN usage	Description
	💮 Global	Global	Committed	global	
	Bellevue Public	Site	Committed	DIDforSAle	

dit Voice Policy - Global				
√ OK 🛛 🗙 Cancel				
Scope: Global				
Name: *				
Global				
Description:				
^ Calling Features				
🗹 Enable call forwarding			🗹 Enable team call	
🖌 Enable delegation			✓ Enable PSTN reroute	
🖌 Enable call transfer			Enable bandwidth policy override	
Enable call park			Enable malicious call tracing	
🗹 Enable simultaneous rin	iging of phones		Enable busy options	
Associated PSTN Usages				
🕂 New 🛛 🛀 Select 🧪	Show details Remove  👚	4		
PSTN usage record	Associated routes			
global	global, inbound call route			
Call forwarding and simultaneo	us ringing PSTN usages:			
Route using the call PSTN usage	s	?		
Translated number to test:				
		Go		

Edit Voice Policy - Bellevue Public

J OK 🗙 Cancel	
Scope: Site Name: * Pollogue Dublic	
Bellevue Public	
Description:	
^ Calling Features	
Enable call forwarding	✓ Enable team call
Enable delegation	✓ Enable PSTN reroute
✓ Enable call transfer	Enable bandwidth policy override
Enable call park	Enable malicious call tracing
Enable simultaneous ringing of phones	Enable busy options
Associated PSTN Usages	
🖶 New 🛀 Select 🧪 Show details Remove 🔶	1
PSTN usage record Associated routes	
DIDforSAle DIDforSALE	
Call forwarding and simultaneous ringing PSIN usages:	
Route using the call PSTN usages	
Translated number to test:	

#### ROUTE

DIAL PLAN VOICE POLICY ROI	JTE PSTN USAGE	TRUNK CONFIGURATION	TEST VOICE ROUTING			
Create voice routing test case information						
٩						
🕂 New 🧪 Edit 🔻 🕆 Move u	p 👆 Move down	Action <b>v</b> Commit <b>v</b>				
Name	State P	PSTN usage	Pattern to match			
global	Committed g	lopal	*			
DIDforSALE	Committed [	DIDforSAle	*			

#### Edit Voice Route - DIDforSALE

	Add
	Exceptions
	Remove
ch this pattern: *	
Edit Reset ?	
ppress caller ID	
ppress caller ID ernate caller ID:	
ppress caller ID ernate caller ID: ated trunks:	
ernate caller ID: ated trunks: PstnGateway:didforsaleoutbou	Add
rress caller ID mate caller ID:	

### PSTN USAGE

eate voice routing test ca	se information			
cate voice routing test of	se mornation			
		Q		
🕈 Edit 🔻 Action 🔻 Co	mmit 🔻			
Name	State	Routes	Policies	
DIDforSAle	Committed	DIDforSALE	Bellevue Public	
global	Committed	global, inbound call route	Global	
		TRUNK CONFIGURATION	TECT VOICE BOUTING	
L PLAN VOICE POLICY R	OUTE PSTN USAGE	TRUNK CONFIGURATION	TEST VOICE ROUTING	
Create voice routing test case w PSTN Usage Record - DID	e information forSAle			
Create voice routing test case w PSTN Usage Record - DID Close	e information forSAle			
Create voice routing test case w PSTN Usage Record - DID Close	e information forSAle			
Create voice routing test case w PSTN Usage Record - DID Close lame: DIDforSAle	e information forSAle			
Create voice routing test case w PSTN Usage Record - DID Close lame: DIDforSAle ssociated Routes	e information forSAle			
Create voice routing test case w PSTN Usage Record - DID Close lame: DIDforSAle ssociated Routes Route	e information forSAle			
Create voice routing test case w PSTN Usage Record - DID Close lame: DIDforSAle ssociated Routes Route DIDforSALE	e information forSAle Pattern to match			
Create voice routing test case w PSTN Usage Record - DID Close lame: DIDforSAle ssociated Routes Route DIDforSALE	e information forSAle Pattern to match			
Create voice routing test case w PSTN Usage Record - DID Close lame: DIDforSAle ssociated Routes Route DIDforSALE	e information forSAle Pattern to match .*			
Create voice routing test case w PSTN Usage Record - DID Close lame: DIDforSAle ssociated Routes Route DIDforSALE	e information forSAle Pattern to match			
Create voice routing test case w PSTN Usage Record - DID Close lame: DIDforSAle ssociated Routes Route DIDforSALE	e information forSAle Pattern to match .*			
Create voice routing test case w PSTN Usage Record - DID Close ame: DIDforSAle ssociated Routes Route DIDforSALE	e information forSAle Pattern to match .*			
Create voice routing test case w PSTN Usage Record - DID Close lame: DIDforSAle ssociated Routes Route DIDforSALE ssociated Voice Policies Voice policy	e information forSAle Pattern to match .*			

#### TRUNK CONFIGURATION

IAL PLAN	VOICE POLICY	ROUTE	PSTN USAGE	TRUNK CONFIGURATION	TEST VOICE ROUTING
Create vo	pice routing test	case infor	mation		
dit Trunk (	Configuration - G	ilobal			
🖌 ок	🗙 Cancel				
Scope: Glo	obal				
Global					
Description	n:				
Maximum	early dialogs supp	orted:			
Encryption	support level:				
Not suppo	orted			Ŧ	
Refer supp	ort:				
None				•	
	Enable media	bypass			
	Centralized m	nedia pro	ocessing		
	Enable RTP la	tching			
$\checkmark$	Enable forwa	rd call hi	story		
$\checkmark$	Enable forwa	rd P-Ass	erted-Identit	y data	
$\checkmark$	Enable outbo	und rou	ting failover t	timer	
^	Associated P	STN Us	ades		
				-	
	Select	Rem	ove 👚	+	
	PSTN usage	record		Associated routes	
	global			global, inbound call	route

# Configure DID for the User

USER SEARCH

	Search O LDAP search										
Sea	ch for users by typing a user	's name (	or clicking Ad	dd filter	Find	📄 😽 🔚 + Add filter					*
								Search r	esults: 8	Maximum users to di	isplay: 200 🌪
8	🕰 Enable users 🔻 🧪 Edit 💌 Action 💌										0
	Display name		Enabled	SIP address		Registrar pool		Telephony			
	DID 2. FOR SALE		$\checkmark$	sip:did2@setup17.loc		s17fe.setup17.loc		Enterprise Voice			
	DID FORSALE		$\checkmark$	sip:did@setup17.loc		s17fe.setup17.loc		Enterprise Voice			

Assign Line URI : and Telephony type

Edit Skype for Business Server User - DID FORSALE

🔚 Commit 🛛 🗙 Cancel				
Display name:				
DID FORSALE				
Enabled for Skype for Busines	s Server			
SIP address: *				
sip:did	@ setup17.loc	•		
Registrar pool:				
s17fe.setup17.loc		?		
Telephony:				
Enterprise Voice		•		
Line URI:	Line URI:			
tel:19494568695		?		
Dial plan policy:				
<automatic></automatic>		▼ View		
Voice policy:				
<automatic></automatic>		▼ View		
Conferencing policy:				
<automatic></automatic>		▼ View		
Client version policy:				
<automatic></automatic>		▼ View		
PIN policy:				
<automatic></automatic>		▼ View		