



# How to Configure SIP Trunk for IPfone United States

# **Table of Contents**

Trunk Configuration Data provided by IPfone	3
Configuration Wizard	4
Internet Telephony	4
Define bandwidth (# Trunks)	7
Special phone numbers	8
DID configuration	9
Additional Configuration	10
License1	10
Mandatory configuration in Expert Mode	10
Check ITSP Route Parameter Settings	11

# Table of History

Date	Version	Changes
10/31/2019	1.0	First version

# **Trunk Configuration Data provided by IPfone**

The configuration data needed to setup the SIP trunk can be found on the **ipfone** Portal:

#### ipfone System >PROFESSIONAL\_SERVICES\_ENT >professional.services >Trunk Group >ProfessionalServicesTrunk Options: **Trunk Group Modify** Profile Modify the selected trunk group Utilities OK Apply Delete Cancel \* Name: ProfessionalServicesTrunk Department: None 🔻 \* Maximum Active Calls Allowed: 3 Maximum Active Incoming Calls Allowed: Maximum Active Outgoing Calls Allowed: Enable Authentica Authentication User Name: 2156633615 Type new authentication password: •••••• type new authentication password: Trunk Group Identity @ professionalservices.com • OTG/DTG Identity: Enable Trunk Group Prefix Allow calls directly to trunk group with Trunk Identity

The following information was provided by the ITSP and was used as part of the test configuration. The information you receive may be slightly different

Information from IPfone	Example Used in Field of OSBiz-WBM		
Call Number	2156633615/2156633699		
Authentication User Name	2156633615	Internet Telephony Station & Authorization Name	
Display Name	2156633615	Default Number	
Password	****	Password & (Confirm Password)	
Maximum active calls allowed	3	Assigned Lines	

# **Configuration Wizard**

## **Internet Telephony**

## Go to Central Telephony – "Internet Telephony"

UNIFY Harmor	ize terprise	OpenScape Business Assistant
		administrator@system Logoff
Home Administrators Se	etup Expert mode Data Backup License Management Service Center	
Setup		
✓ Wizards	Central Telephony	0
Basic Installation		
Network / Internet	Edit CO Trunk ISDN / Analog / ITSP Point-to-multinoint connections (MSN) and PABX number for ISDN connections, and assignment of analog and ITSP trunks	
Telephones / Subscribers		
Central Telephony	Leant Access parameters of the Internet Telephony Service Provider (ITSP), e.g., user account, password, SIP station number	
User Telephony	voicemail	
Security	Lout Access numbers for integrated voicemail. Set up of voicemail boxes	
UC Suite	Edit Phone Book / Speed Dialing	
Circuit	Set up central speed-dial destinations for the system's internal phone book	
	Edit Multisite Management Configuration of multi-ITSP connections	
	Edit Call Detail Recording   Set up call detail recording connection parameters for call detail applications	
	Edit Music on Hold / Announcements Record new melodies and announcements for Music on Hold and announcement before answering	
	Edit Entrance telephone Set up call allocation and access authorization for the entrance telephone at the analog station connection	

The overview page appears for entering the location data. The most flexible type of configuration is to enter the Country code only.

Setup - Wizards - Central Telephony - Internet Telephony	×			
Overview				
Note: changes done in expert mode must be reviewed/repeated after running through the wizard. Note: At least the configuration of the 'Country code' is needed for features such as 'Internet telephony' and 'MeetMe conference'.				
PABX number Country code: 011 1 (mandatory)				
Local area code: 1 (optional)				
PABX number: (optional)				

Click [OK & Next].

Provider configuration and activation for Internet Telephony -> No call via Internet -> uncheck Use County specific view: United States of America and select "IPfone".

Setup - Wizards - Central Telephony - Internet Telephony							
	Provider configuration and activation for Internet Telephony						
	No call via Internet:						
		Country specific view: United States of America					
Note: changes done	e in expert mode must be reviewed/repeat	ed after running through the wizard.					
	Activate Provider	Internet Telephony Service Provider					
Edit		Fusion 360					
Edit		gnTel					
Edit		Intermedia.net Inc					
Edit	8	IPfone					
Edit		Skype Connect					
Edit		Skype for Business					

Activate Provider and click on [Edit].

On the next page the server settings are listed. They are predefined and must not be changed.

Setup - Wizards - Central Telephony - Internet Telephony	
Internet Telephor	ny Service Provider
Provider Name	IPfone
Enable Provider	
Secure Trunk	
Domain Name	siptrunks.isncom.net
Provider Registrar	
Use Registrar	
IP Address / Host name	siptrunks.isncom.net
Port	5060
Reregistration Interval at Provider (sec	60
Provider Proxy	
IP Address / Host name	siptrunks.isncom.net
Port	5060
Provider Outbound Proxy	
Use Outbound Proxy	:
IP Address / Host name	0.0.0.0
Port	0

#### In the next dialog the specific customer SIP User data will be configured.

	Setup - Wizards - Central Telephony - Internet Telephony					
		Internet Telephony Stations for IPfone				
		Name of Internet Telephony Station				
	Add	New Internet Telephony Station				
ľ						

Click on [Add].

Data provided on the **ipfone** Portal must be entered as follows:

Internet telephony station:	Authentication User Name is inserted here (e.g: 2156633615)
Authorization name:	Authentication User Name is inserted here (e.g: 2156633615)
Password:	Password provided by IPfone
Default number:	Main number of connection. The default number is used as outgoing number when no DDI number is assigned to a station. (e.g: 2156633615). Usually the <b>Lead Number</b> is entered here.

Setup - Wizards - Central Telephony - Internet Telephony					
Internet Telephony	Station for IPfone				
Internet telephony station:	2156633615				
Authorization name:	2156633615				
Password:	•••••				
Confirm Password:	•••••				
Call number assignment					
Use public number (DID)	V				
ITSP-multiple route:					
Default Number:	2156633615				
Default Number ITSP as primary CO access Enter one of the call numbers supplied by your network provider here. This will be used in outgoing calls as the calling party number in case no other number is available for the respective call. All call numbers supplied by your network provider are to be entered within the trunk and telephones configuration (DID field) primary CO access.					
Help Abort Back OK & Next De	elete Data				

Enter the relevant data and click [OK & Next]

Setup - Wizards -	Central Telephony - Internet Telephony	×
	Internet Telephony Stations for IPfone	
	Name of Internet Telephony Station	
Edit	2156633615	
Help	Abort Back OK & Next	

Click [OK & Next]

Setup - Wizards - Central Telephony - Internet Telephony									
	Call Number Assignment for IPfone								
Name of	Name of Internet Telephony Station Internet Telephony Phone Number Direct inward dialing Use as PABX number for outgoing call								
In order to comple	te the configurati	on please verify t	hat the relevant us	er DIDs are set in stations.(Te	lephones / Subscribers con	figuration)			
Help	Abort	Back	OK & Next						

*Hint: As DID mode is selected, the configuration of DIDs is done directly at the Stations configuration.* Click [OK & Next] (no input needed)

Setup - Wizards - Ce	ntral Telephony - Internet Telep	phony
		Provider configuration and activation for Internet Telephony
		No call via Internet:
		Country specific view: United States of America •
Note: changes done i	n expert mode must be reviewed/re	epeated after running through the wizard.
	Activate Provider	Internet Telephony Service Provider
Edit	0	Fusion 360
Edit		gnTel
Edit		Intermedia.net Inc
Edit	2	IPfone
Edit		Skype Connect
Edit	0	Skype for Business

Click [OK & Next]

# Define bandwidth (# Trunks)

The amount of simultaneous Internet (Assigned Lines) calls must be aligned with the Maximum Active Calls assigned to the Trunk Group on the ipfone Portal.

Setup - Wizards - Central Telephony - Internet Telephony	Setup - Wizards - Central Telephony - Internet Telephony						
	Settings for Internet Telephony						
Available Lines for ITSP: 200							
Please enter in field 'Upstream up to (Kbit/sec)' the Upstream of your Int Upstream up to (Kbps) = 512	Please enter in field 'Upstream up to (Kbit/sec)' the Upstream of your Internet connection communicated by your Provider. You have typed in Upstream up to (Kbps) = 512						
In the 'Change Feature> Internet Telephony' Assistant. This upstream reduce this number of simultaneous calls.	allows you to conduct up to ${\bf 4}$ Internet phone calls simultaneously. If the	call quality deteriorates due to the network load, you will need to					
The number of simultaneous Internet Calls also depends on the licensin	g.						
	Upstream up to (Kbps): 512						
Number of Simultaneous Internet Calls: 4 Distribute Lines							
Line assignment							
Internet Telephony Service Provider	Configured Lines	Assigned Lines					
IPfone	3	3					

Click [OK & Next]

# **Special phone numbers**

In this dialog it is possible to route special phone numbers.

Setup - Wizards - Central Telephony - Inf	ternet Telephony	
	Special phone numbers	
Note: Please make sure that all special call numbers	are supported by the selected provider without fail.	
Special phone number	Dialed digits	Dial over Provider
1	9C911	IPfone 💌
2		IPfone 👻
3		IPfone 👻
4		IPfone 👻
5		IPfone 👻
6		IPfone 👻
7		IPfone 👻
8		IPfone 👻
9		IPfone 👻
10		IPfone 👻
11		IPfone 👻
12		IPfone 👻

#### Click [OK & Next]

On next page status of ITSP is displayed.

Restart	IPfone	Enabled	registered	Diagnose			
	Provider		User				
Status for the Internet Telephony Service Provider (ITSP)							
Setup - Wizards - Central Te	elephony - Internet Telephony						

Click [Next]

"Exchange Line Seizure":

Select which trunks will access code 9. Enter the local area code without prefix digits (needed only when local area code was not entered in first step PBX number)

Setup - Wizards - Central Telephony - Internet Telephony		
Evolution Line Solitura	Exchange Line Seizure	
	Trunk Access Code 9	
	Dial over Provider IPfone 🗸	

Click [OK & Next]

#### Overview with all configured "Outside line Seizure "are displayed.

Setup - Wizards - Central Telephony - Internet Telepho	ny	
	Seizure Code for the 'Outside line Se	izure'
	Seizure code for 'Outside line Seizure'	
IPfone	9	

Click [OK & Next] and on the next page [Finish]

# **DID configuration**

In the DID Section, the full DID will need to be entered without the country code.

Expert mode - Telephony Server											
Station	System Clients	System Clients									
▼Station		Edit station narameters									
UP0 Stations											
▼IP Clients	Callno	DID	First Name	Last Name	Display	Туре	Clip/Lin	Active	Fax Callno	Fax DID	ITSP Loc-II
System Clients	Search:										
14 114 -											
15 115 -	114 ->	22116534615				System Client	-	×	7799	22116534624	1.
SIP Clients	115 ->					System Client		· ·			
RAS User											
Deskshare User											

# **Additional Configuration**

#### License

Add the "S2M/SIP Trunk" license to the SIP-Trunk

Home Administrators	Setup Expert mod	e Data Backup	License Mar	agement Service Cer	nter
License Management					
License information	CO Trunks				
▼Additional Products					
OpenScape Personal Edition	The access to centra	I office via PRI(S2m/T1)	trunks or via Inter	net telephony is licensed by CO	D trunk licenses
▼Local User licenses		Availat	ble licenses for SI	P and PRI(S2m/T1) trunks: 32	
Overview	SIP trunks				
IP User		The conf for	igured number of s each Internet Tele	imultaneous Internet calls phony Service Provider is: 10	
TDM User		License numbe	er of simultaneous	Internet calls in this node: 10	
Mobility User	Lie	ance demand for numbe	r of cimultonoous	Internet calls in this node:	10 -
Deskshare User					10 •
CO Trunks	PRF(S2M/11)	pe Slot	Port	Feature	Demands
en 1 1 1		•			

## Mandatory configuration in Expert Mode

The T38 fax protocol is not supported by **ipfone**. Fax is supported via G.711 only. For this reason you MUST disable T38 Fax protocol.

Expert mode - Telephony Server						
Voice Gateway	Codec Parameters					
SIP Parameters		Edit Codec Parame	ers			
▶ITSP Loc-ID Settings						
Codec Parameters	Codec	Priority	Voie	ce Activity Detection	Frame Size	
Destination Codec Parameters	G.711 A-law	Priority 2	•	VAD:		20 🖕 mse
Networking	G.711 µ-law	Priority 1	-	VAD:		20 🚽 mse
SIPQ-Interconnection	G.729A	Priority 4	-	VAD:		20 🖕 mse
Native SIP Server Trunk	G.729AB	Priority 3	-	VAD: 🗸		20 🚽 mse
	Enhanced DSP Channels					
		Use G.711 c	nly 📃			
	T.38 Fax					
		T.38 Fa	x: 📃			
		Use FillBitRemov	al: 🗸	-		
		Max_UDP Datagram Size for T 38 Fax (byte)	1472			
		Error Correction Used for T.38 Fax (UD	P) [t38UDPRed	undancy 👻		
	T.30 Fax		-			
		Enable E	CM: 🗹			
	Misc.					
		ClearChan	iel: 🔽		Frame Size: 20 🚽 msec	
	RFC2833					
		Transmission of Fax/Modem Tones according to RFC28	33: 🔲			
		Transmission of DTMF Tones according to RFC28	33: 🔽			
		Payload Type for RFC28	33: 98			
	Redu	undant Transmission of RFC2833 Tones according to RFC21	98:			

## **Check ITSP Route Parameter Settings**

After the ITSP is registered with the system the next (optional) step will be to revise the route group settings for the associated trunk group. The settings have been written by the wizard and should be like shown below.

*Path: Expert > Trunks/Routing > Route > Select* IPfone Route group.

On the Change Route tab insure the

- "Suppress Station number" flag is disabled
- "Digit transmission" is set to en-bloc sending.

Expert mode - Telephony Server				
Trunks/Routing	Route			
Trunks	Change Route	Change Route Change Routing Parameters		
▼Route				
ISDN		TABA NUMBER.		
Trk Grp. 2	PABX number-incoming			
Trk Grp. 3		Country code:	1	
Trk Grp. 4		Local area code:		
Trk Grp. 5				
Trk Grp. 6		PABX number:		
Trk Grp. 7		Location number:		
UC Suite	DARY number outgoing			
Trk Grp. 9	PABA number-outgoing			
Trk Grp. 10		Country code:	1	
Trk Grp. 11		Local area code:		
IPfone				
Trk Grp. 13		PABX number:		
Trk Grp. 14		Suppress station number:		
Trk Grp. 15	Overflow route			
Networking			N	
QSIG-Feature		Overnow route :	None 👻	
MSN assign	Digit transmission			
ISDN Parameters		Digit transmission:	en-bloc sending 👻	
	Mobile Extension Number (MEX)			
		MEX Number		

On the Change Routing Parameters tab insure that the

- *"Add direction prefix for incoming call flag"* is enabled
- "No and type outgoing" entry is set to Local Area Code
- "Call number type" is set for Direct inward dialing.

Trunks/Routing	Route				
Trunks	Change Poulte	ch	anne Poutinn Parameters		Special Parameter change
Route					operation i de anne de l'anne ge
ISDN	Routing flags				
Trk Grp. 2			Digit repetition on:	1	
Trk Grp. 3		Analysis of second dia	l tone / Trunk monitoring: 🔳	1	
Trk Grp. 4			Intercent per direction:	1	
Trk Grp. 5			intercept per direction.		
Trk Grp. 6		Ov	er. service 3.1 kHz audio: 🗵		
Trk Grp. 7		Add	direction prefix incoming: 👿	1	
UC Suite		٨dd	direction profix outgoing:	1	
Trk Grp. 9		Auu	unection prenx outgoing.	-	
Trk Grp. 10		Call No. with inte	rnational / national prefix: 📃		
Irk Grp. 11			Ringback tone to CO:	1	
Trik Cro. 12			Name in CO:	1	
Trk Grp. 13			Libit Contradio 🕅	-	
Trk Grp. 15			LIN activated: M	1	
Networking			Segmentation: y	res	<b>~</b>
QSIG-Feature		(	leactivate UUS per route:	1	
MSN assign					
100H D			Always use DSP:		
	Ar	nalog trunk seizure:	no pause 👻		
		Trunk call pause:	Pause 2 s 👻		
		Type of seizure:	linear 👻		
		Route type:	C0 -		
	No.	and type, outgoing:	Local area code 👻		
		Call number type:	Direct inward dialing	_	

Press the "Apply" Button to confirm the information.