

OpenScape Business V2



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
License.....	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:

The screenshot shows the 'Trunk Group Modify' configuration page in the IPfone portal. The breadcrumb trail is 'System > PROFESSIONAL_SERVICES_ENT > professional_services > Trunk Group > ProfessionalServicesTrunk'. The page title is 'Trunk Group Modify' with the subtitle 'Modify the selected trunk group.' There are buttons for 'OK', 'Apply', 'Delete', and 'Cancel'. The configuration fields include:

- * Name: ProfessionalServicesTrunk
- Department: None
- * Maximum Active Calls Allowed: 3 (highlighted with a red box)
- Maximum Active Incoming Calls Allowed: [empty]
- Maximum Active Outgoing Calls Allowed: [empty]
- Enable Authentication: [checked]
- Authentication User Name: 2156633615 (highlighted with a red box)
- Type new authentication password: [masked with dots]
- Re-type new authentication password: [masked with dots]
- Trunk Group Identity: [empty] @ professionalservices.com
- OTG/DTG Identity: [empty]
- Enable Trunk Group Prefix: [unchecked]
- Allow calls directly to trunk group with Trunk Identity: [unchecked]

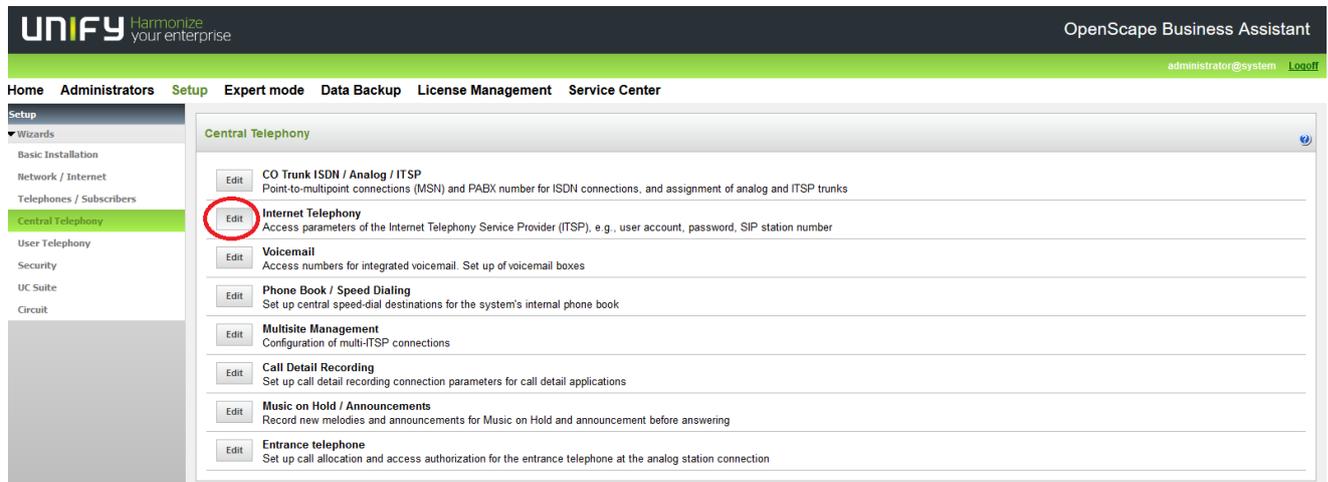
The following information was provided by the ITSP and was used as part of the test configuration. The information you receive may be slightly different

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

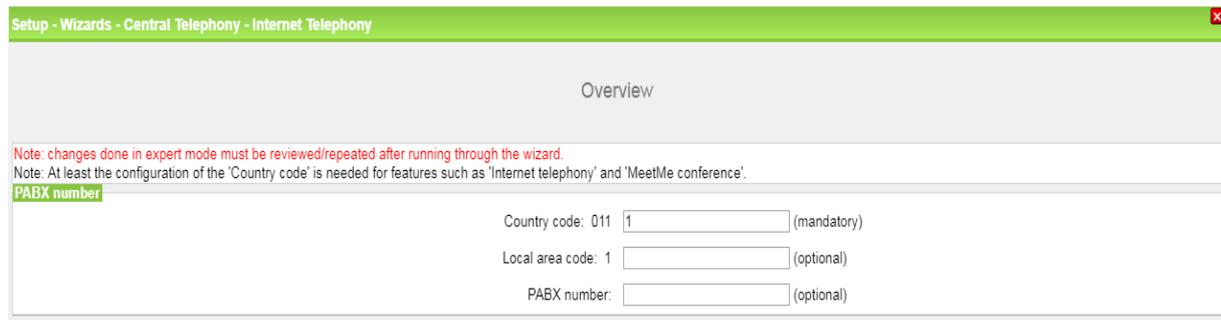
Configuration Wizard

Internet Telephony

Go to Central Telephony – “Internet Telephony”



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



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 in expert mode must be reviewed/repeated after running through the wizard.

	Activate Provider	Internet Telephony Service Provider
Edit	<input type="checkbox"/>	Fusion 360
Edit	<input type="checkbox"/>	gnTel
Edit	<input type="checkbox"/>	Intermedia.net Inc
Edit	<input checked="" type="checkbox"/>	IPfone
Edit	<input type="checkbox"/>	Skype Connect
Edit	<input type="checkbox"/>	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 Telephony 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

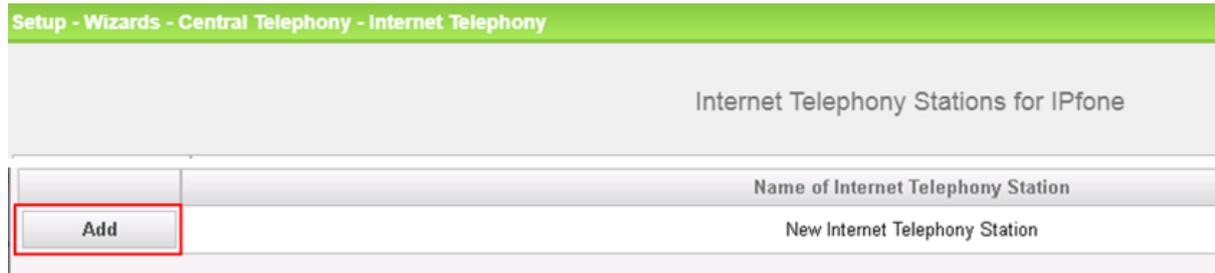
Provider Outbound Proxy

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.



Click on [Add].

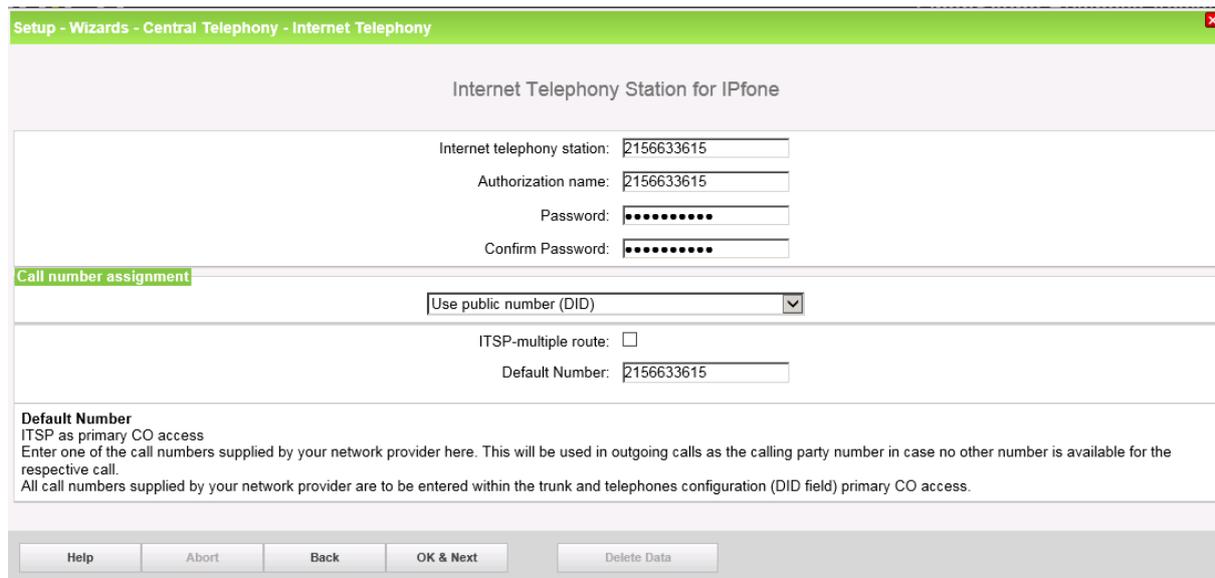
Data provided on the **ipfone** Portal must be entered as follows:

Internet telephony station: **Authentication User Name** is inserted here (e.g: 2156633615)

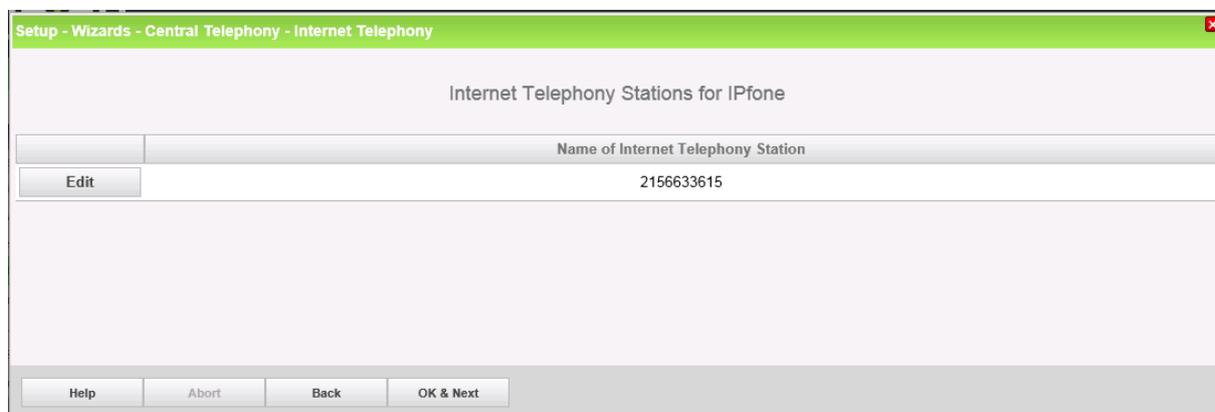
Authorization name: **Authentication User Name** is inserted here (e.g: 2156633615)

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 **Lead Number** is entered here.



Enter the relevant data and click [OK & Next]



Click [OK & Next]

Setup - Wizards - Central Telephony - Internet Telephony

Call Number Assignment for IPfone

Name of Internet Telephony Station	Internet Telephony Phone Number	Direct inward dialing	Use as PABX number for outgoing calls
In order to complete the configuration please verify that the relevant user DIDs are set in stations.(Telephones / Subscribers configuration)			

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 - 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 in expert mode must be reviewed/repeated after running through the wizard.

	Activate Provider	Internet Telephony Service Provider
<input type="button" value="Edit"/>	<input type="checkbox"/>	Fusion 360
<input type="button" value="Edit"/>	<input type="checkbox"/>	gnTel
<input type="button" value="Edit"/>	<input type="checkbox"/>	Intermedia.net Inc
<input type="button" value="Edit"/>	<input checked="" type="checkbox"/>	IPfone
<input type="button" value="Edit"/>	<input type="checkbox"/>	Skype Connect
<input type="button" value="Edit"/>	<input type="checkbox"/>	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

Settings for Internet Telephony

Simultaneous Internet Calls

Available Lines for ITSP: 200

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 allows you to conduct up to 4 Internet phone calls simultaneously. If the call quality deteriorates due to the network load, you will need to reduce this number of simultaneous calls.

The number of simultaneous Internet Calls also depends on the licensing.

Upstream up to (Kbps):

Number of Simultaneous Internet Calls:

Line assignment

Internet Telephony Service Provider	Configured Lines	Assigned Lines
IPfone	3	3 <input style="width: 50px;" type="text"/>

Click [OK & Next]

Special phone numbers

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

Setup - Wizards - Central Telephony - Internet 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.

Setup - Wizards - Central Telephony - Internet Telephony

Status for the Internet Telephony Service Provider (ITSP)

	Provider	Enabled	User	
<input type="checkbox"/>	IPfone	Enabled	registered	<input type="button" value="Diagnose"/>

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

Exchange Line Seizure

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 Telephony

Seizure Code for the 'Outside line Seizure'

	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.



Additional Configuration

License

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

Home Administrators Setup Expert mode Data Backup License Management Service Center

The screenshot shows the 'License Management' section of the OpenScape Business V2 interface. The left sidebar lists 'License Management' as the active section, with sub-items for 'License information', 'Additional Products', and 'Local User licenses'. The main content area is titled 'CO Trunks' and contains the following information:

- The access to central office via PRI(S2m/T1) trunks or via Internet telephony is licensed by CO trunk licenses. Available licenses for SIP and PRI(S2m/T1) trunks: 32
- SIP trunks**: The configured number of simultaneous Internet calls for each Internet Telephony Service Provider is: 10. License number of simultaneous Internet calls in this node: 10. License demand for number of simultaneous Internet calls in this node: 10 (highlighted with a red box).
- PRI (S2M/T1)**: A table with columns for Type Slot, Port, Feature, and Demands.

Mandatory configuration in Expert Mode

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

The screenshot shows the 'Expert mode - Telephony Server' configuration page. The left sidebar lists various configuration sections, with 'Codecs Parameters' selected. The main content area is titled 'Codecs Parameters' and contains the following configuration options:

- Codecs Parameters**: A table with columns for Codec, Priority, Voice Activity Detection, and Frame Size. The table lists G.711 A-law, G.711 µ-law, G.729A, and G.729AB with their respective priorities and VAD settings.
- Enhanced DSP Channels**: Use G.711 only
- T.38 Fax**: T.38 Fax: (highlighted with a red box). Use FillBitRemoval: . Max. UDP Datagram Size for T.38 Fax (bytes): 1472. Error Correction Used for T.38 Fax (UDP): 138UDPRedundancy.
- T.30 Fax**: Enable ECM:
- Misc.**: ClearChannel: . Frame Size: 20 msec.
- RFC2833**: Transmission of Fax/Modem Tones according to RFC2833: . Transmission of DTMF Tones according to RFC2833: . Payload Type for RFC2833: 98. Redundant Transmission of RFC2833 Tones according to RFC2198:

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

- “Supress Station number” flag is disabled
- “Digit transmission” is set to en-bloc sending.

Expert mode - Telephony Server

Trunks/Routing

Trunks

Route

ISDN

Trk Grp. 2

Trk Grp. 3

Trk Grp. 4

Trk Grp. 5

Trk Grp. 6

Trk Grp. 7

UC Suite

Trk Grp. 9

Trk Grp. 10

Trk Grp. 11

IPhone

Trk Grp. 13

Trk Grp. 14

Trk Grp. 15

Networking

QSIG-Feature

MSN assign

ISDN Parameters

Route

Change Route

Change Routing Parameters

Special Parameter change

PABX number-incoming

Country code: 1

Local area code:

PABX number:

Location number:

PABX number-outgoing

Country code: 1

Local area code:

PABX number:

Suppress station number:

Overflow route

Overflow route: None

Digit transmission

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.

Expert mode - Telephony Server

Trunks/Routing

Trunks

Route

ISDN

Trk Grp. 2

Trk Grp. 3

Trk Grp. 4

Trk Grp. 5

Trk Grp. 6

Trk Grp. 7

UC Suite

Trk Grp. 9

Trk Grp. 10

Trk Grp. 11

IPhone

Trk Grp. 13

Trk Grp. 14

Trk Grp. 15

Networking

QSIG-Feature

MSN assign

ISDN Parameters

Route

Change Route

Change Routing Parameters

Special Parameter change

Routing flags

Digit repetition on:

Analysis of second dial tone / Trunk monitoring:

Intercept per direction:

Over. service 3.1 kHz audio:

Add direction prefix incoming:

Add direction prefix outgoing:

Call No. with international / national prefix:

Ringback tone to CO:

Name in CO:

LIN activated:

Segmentation: yes

deactivate UUS per route:

Always use DSP:

Analog trunk seizure: no pause

Trunk call pause: Pause 2 s

Type of seizure: linear

Route type: CO

No. and type, outgoing: Local area code

Call number type: Direct inward dialing

Press the “Apply” Button to confirm the information.