

# OpenScape Business V2



## How to Configure SIP Trunk for ITSP Foliateam

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## Table of History

Date	Version	Changes
18.10.2019	1.0	First version LM/DB
29.10.2019	1.1	Validated version

## Information

ISTP profile FOLIATEAM is natively integrated in the V2R7.1 version.

SIP infrastructures are provided according to the number of channels requested by the customer:

IPBX			Type of Trunk SIP		
BUILDERS	MODELES	VER.	PREMIUM 1-30 CHANNELS	PLATINIUM +30 CHANNELS	> 100 CHANNELS
<b>UNIFY</b>	OpenScape Business	V2	Proxy	vSBC	Tailor-made offer  Dedicated vSBC

The minimal Osbiz software version supported is osbiz\_v2R7.1.

Certification valid for all OpenScape Business systems X3/X5/X8/S.

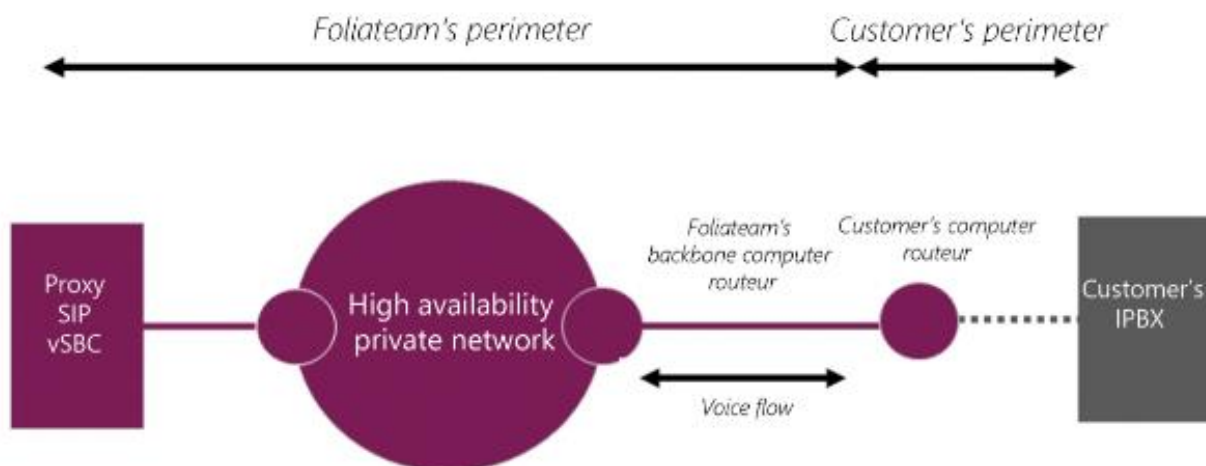
This document describes the configuration of the Openscape Business for the French market on our SIP proxy infrastructure

## Trunk Configuration Data provided by Foliateam

The configuration data required to configure the SIP trunk will be provided by the Foliateam services. .

The values for registration are provided by Foliateam.

Our services production are described in the diagram below, the access link (SDSL or FTTO) is MPLS VPN type:

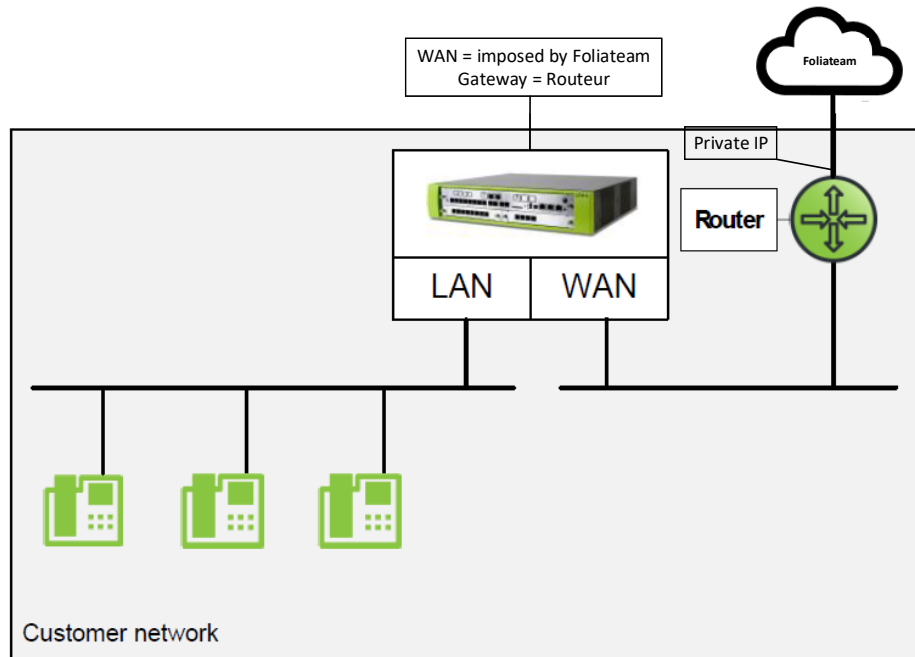


## Use LAN or WAN interface?

The VOIP network is imposed by the proxy provider, the Osbiz allows 2 configurations (LAN or WAN interface):

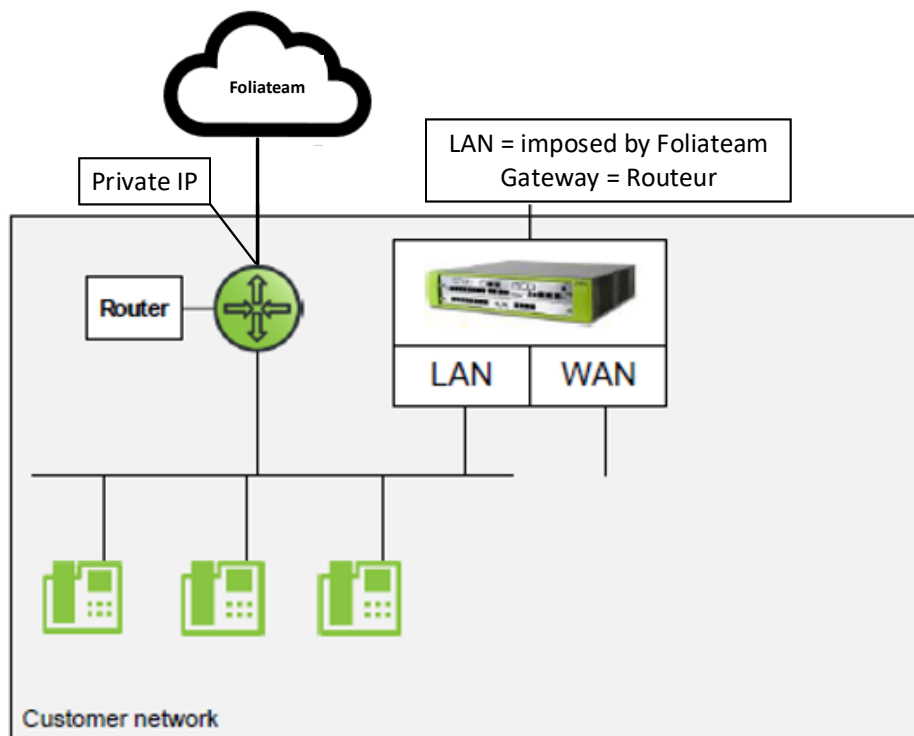
### No possibility to change Network IP address:

- Use the WAN interface for the SIP TRUNK, the LAN interface for VOIP (HFA extension, VOIP applications).



### Possibility to change Network IP address:

- Use the LAN interface for the SIP TRUNK and VOIP (HFA extension, VOIP applications).



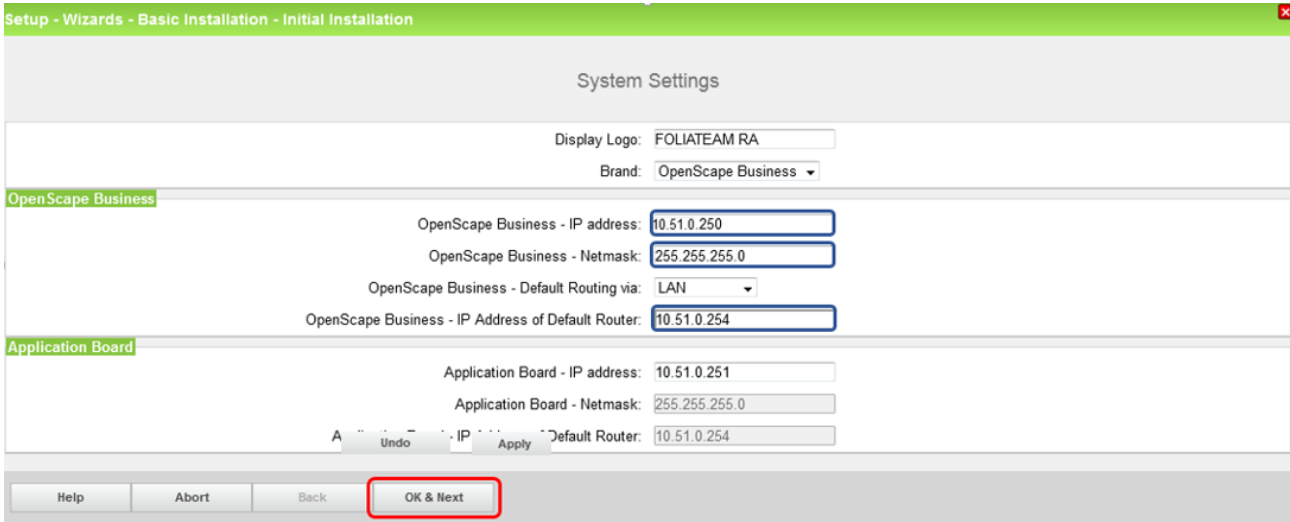
## Network configuration

### LAN Network interface configuration

Network setting:

#### *Setup/Basic\_Installation/Initial\_Installation*

Modify the IP setting of the IPBX according to the network addressing imposed by the Proxy configuration (IP address / GW address), example:



The screenshot shows the 'Setup - Wizards - Basic Installation - Initial Installation' window. The 'System Settings' section includes 'Display Logo: FOLIATEAM RA' and 'Brand: OpenScape Business'. The 'OpenScape Business' section has the following settings: 'OpenScape Business - IP address: 10.51.0.250', 'OpenScape Business - Netmask: 255.255.255.0', 'OpenScape Business - Default Routing via: LAN', and 'OpenScape Business - IP Address of Default Router: 10.51.0.254'. The 'Application Board' section has: 'Application Board - IP address: 10.51.0.251', 'Application Board - Netmask: 255.255.255.0', and 'Application Board - Default Router: 10.51.0.254'. At the bottom, the 'OK & Next' button is highlighted with a red rectangle.

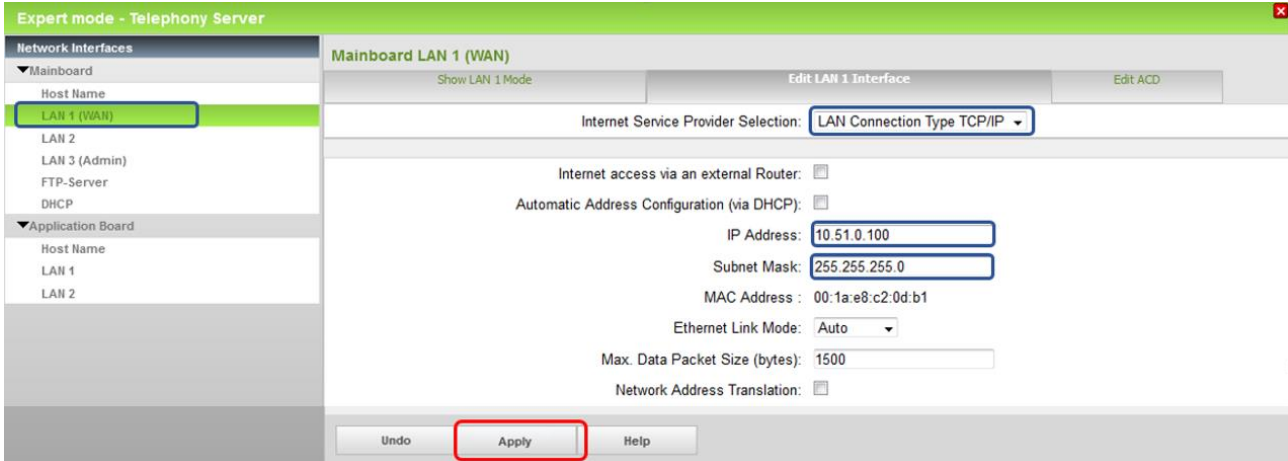
Click [OK & Next]. Until the end of the wizard, **system reboot**

## WAN Network interface configuration

LAN network configuration can't be changed.

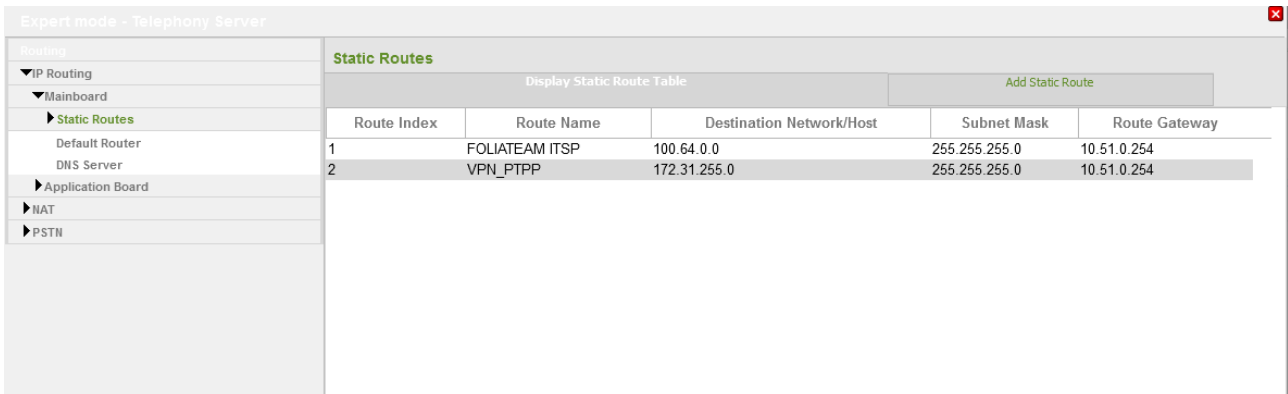
You must activate the WAN interface for the SIP trunk (LAN connection type TCP / IP) and assign the IP address imposed by the Proxy (IP Address/Mask):

### *Expert\_mode/Telephony\_Server/Network\_Interfaces*



PABX default gateway is LAN interface (ex 192.168.1.254), so it is necessary to add 2 static route table to join the proxy + the PPTP connection (remote VPN for IPBX administration):

### *Expert\_mode /Telephony\_Server/Routing*

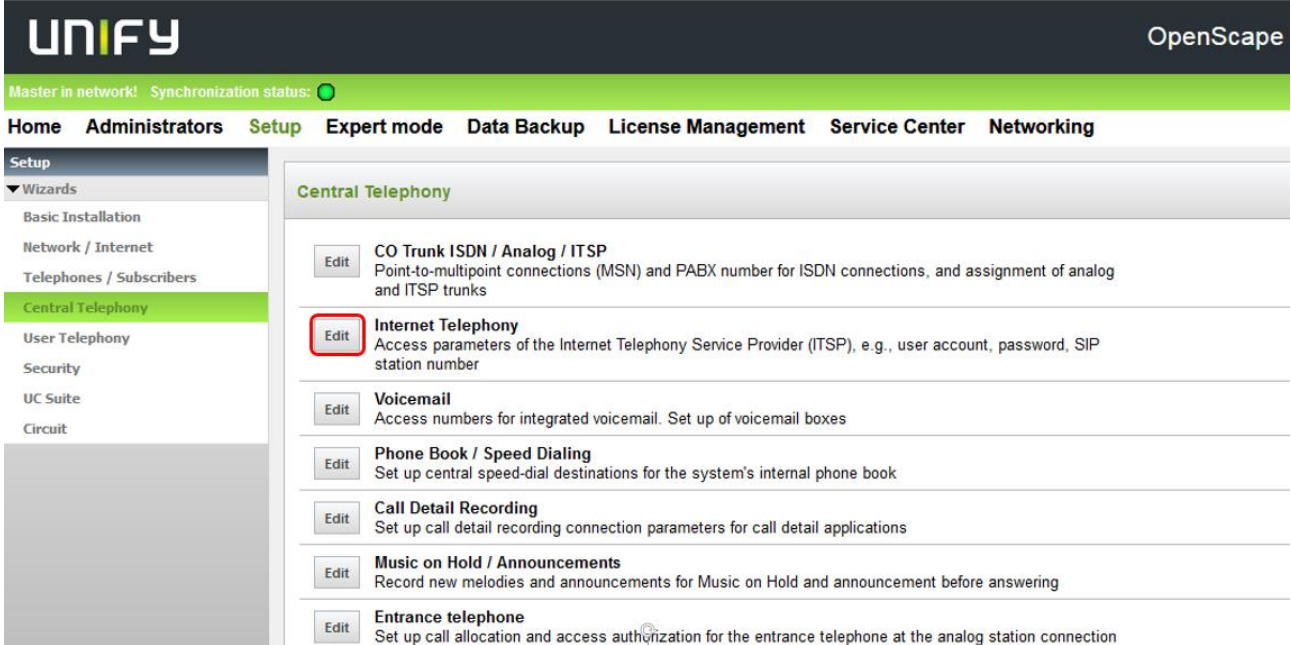


Route Index	Route Name	Destination Network/Host	Subnet Mask	Route Gateway
1	FOLIATEAM ITSP	100.64.0.0	255.255.255.0	10.51.0.254
2	VPN_PTPP	172.31.255.0	255.255.255.0	10.51.0.254

## ITSP account configuration

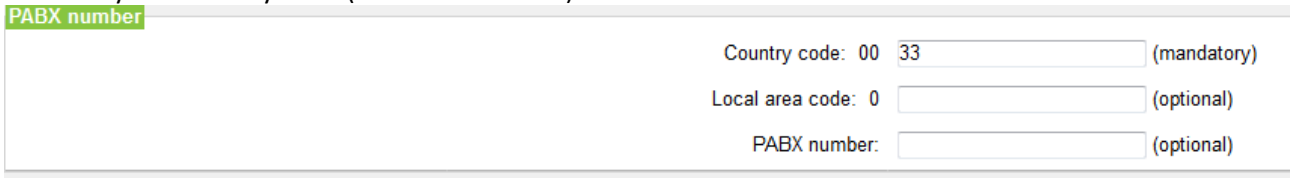
### Configuration/Telephony\_central/Telephony\_internet

To configure the SIP account you must used « internet Telephony » (screenshot below).



The screenshot shows the UNIFY OpenScape web interface. The left sidebar lists navigation options: Home, Administrators, Setup, Expert mode, Data Backup, License Management, Service Center, and Networking. Under 'Setup', the 'Central Telephony' option is selected. The main content area displays the 'Central Telephony' configuration page with several options, each with an 'Edit' button. The 'Internet Telephony' option is highlighted with a red box. Below it, the 'Voicemail', 'Phone Book / Speed Dialing', 'Call Detail Recording', 'Music on Hold / Announcements', and 'Entrance telephone' options are listed.

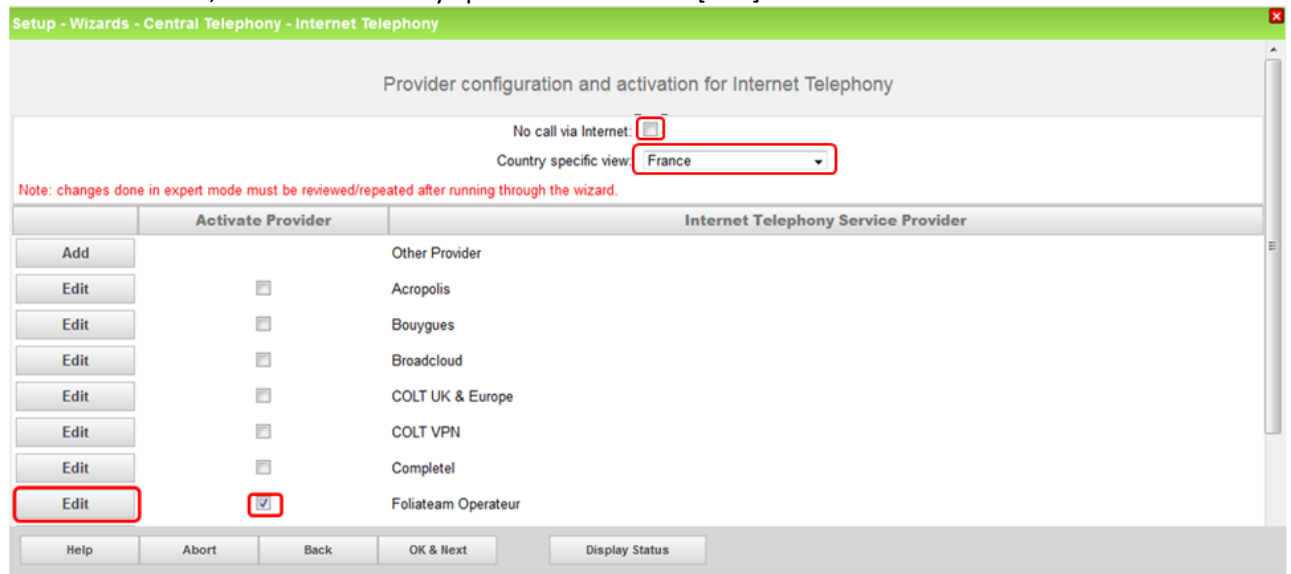
Enter only the Country code (screenshot below).



The screenshot shows the 'PABX number' configuration form. It includes fields for 'Country code', 'Local area code', and 'PABX number'. The 'Country code' field is highlighted with a red box and contains the value '00 33'. The 'Local area code' field is empty and marked as optional. The 'PABX number' field is empty and marked as optional.

Click [OK & Next].

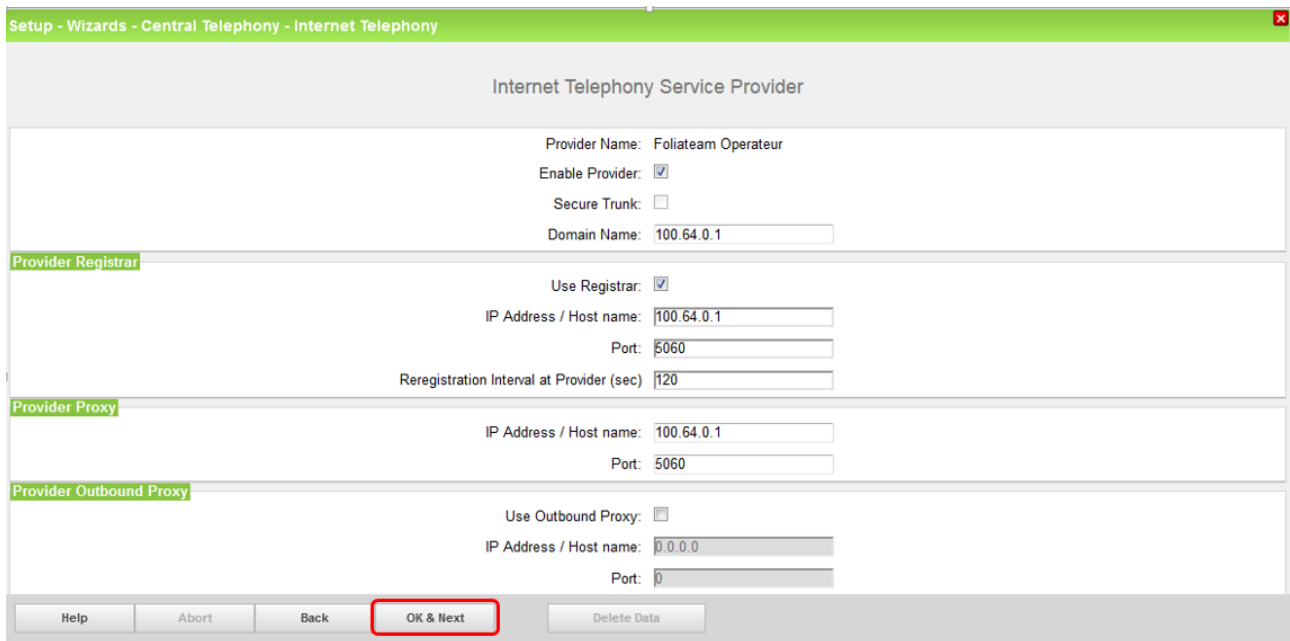
Activate Provider, Use France County specific and click on [Edit]:



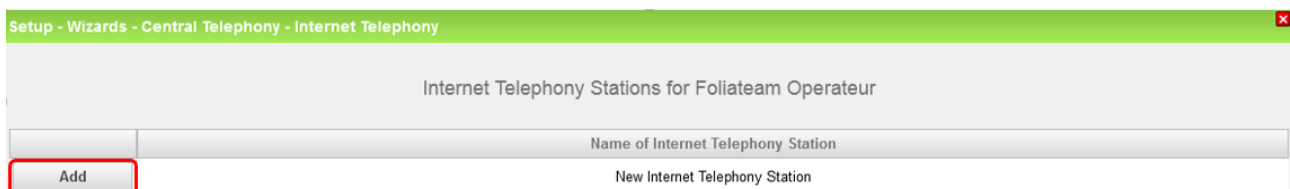
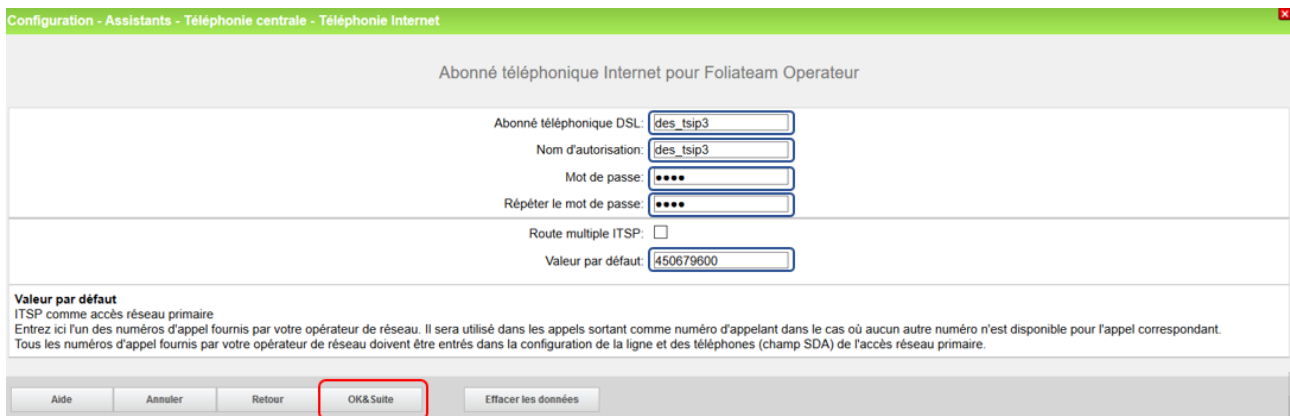
The screenshot shows the 'Setup - Wizards - Central Telephony - Internet Telephony' window. The title bar indicates the current step. The main content area is titled 'Provider configuration and activation for Internet Telephony'. It includes a 'No call via Internet' checkbox (checked) and a 'Country specific view' dropdown menu set to 'France'. A note states: 'Note: changes done in expert mode must be reviewed/repeated after running through the wizard.' Below this is a table with two columns: 'Activate Provider' and 'Internet Telephony Service Provider'. The table lists several providers, with 'Foliateam Operateur' selected in the 'Activate Provider' column. The 'Edit' button for 'Foliateam Operateur' is highlighted with a red box. At the bottom, there are buttons for 'Help', 'Abort', 'Back', 'OK & Next', and 'Display Status'.



On the next page you have to check the following information:



Click on [Add].

**Internet telephony station:** Username is inserted here (e.g: des\_tsip3)

**Authorization name:** Username is inserted here (the values username/password for registration are provided by Foliateam)

**Password:** Password provided by Foliateam

**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: 450679600). Usually the **Lead Number** is entered here.

Click [OK & Next]



Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Stations for Foliateam Operateur

Name of Internet Telephony Station
ITSP_FOLIATEAM

Buttons: Help, Abort, Back, **OK & Next**

Click [OK & Next]

Setup - Wizards - Central Telephony - Internet Telephony

Call Number Assignment for Foliateam Operateur

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)

Buttons: Help, Abort, Back, **OK & Next**

Click [OK & Next]

Setup - Wizards - Central Telephony - Internet Telephony

Provider configuration and activation for Internet Telephony

No call via Internet: ☐

Country specific view: France

Note: changes done in expert mode must be reviewed/repeated after running through the wizard.

	Activate Provider	Internet Telephony Service Provider
Add		Other Provider
Edit	<input type="checkbox"/>	Acropolis
Edit	<input type="checkbox"/>	Bouygues
Edit	<input type="checkbox"/>	Broadcloud
Edit	<input type="checkbox"/>	COLT UK & Europe
Edit	<input type="checkbox"/>	COLT VPN
Edit	<input type="checkbox"/>	Comptel
Edit	<input checked="" type="checkbox"/>	Foliateam Operateur

Buttons: Help, Abort, Back, **OK & Next**, Display Status

Click [OK & Next].

## Define bandwidth (# Trunks)

Enter the bandwidth and the number of channels planned, then "distribute lines":

(PS: it takes about 128 kbit/s per line)

Setup - Wizards - Central Telephony - Internet Telephony

Settings for Internet Telephony

**Simultaneous Internet Calls**

Available Lines for ITSP: 170

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) = 1024**

In the 'Change Feature -> Internet Telephony' Assistant. This upstream allows you to conduct up to 8 Internet phone calls simultaneously. If the call quality deteriorates due to the network load, need to reduce this number of simultaneous calls.

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

Upstream up to (Kbps): 1024

Number of Simultaneous Internet Calls: 5 Distribute Lines

**Line assignment**

Internet Telephony Service Provider	Configured Lines	Assigned Lines
Foliateam Operateur	5	5 <span style="border: 1px solid black; padding: 2px;"></span>

Help Abort Back OK & Next

Click [OK & Next]

Setup - Wizards - Central Telephony - Internet Telephony

Special phone numbers

Note:  
Emergency calls should always be built up with ISDN or Analog Trunk for safety reasons.  
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	0C15	Foliateam Operateur ▼
2	0C17	Foliateam Operateur ▼
3	0C18	Foliateam Operateur ▼
4	0C112	Foliateam Operateur ▼
5	0C115	Foliateam Operateur ▼
6	0C119	Foliateam Operateur ▼
7		Foliateam Operateur ▼
8		Foliateam Operateur ▼

Help Abort Back OK & Next

Check ITSP status

Setup - Wizards - Central Telephony - Internet Telephony

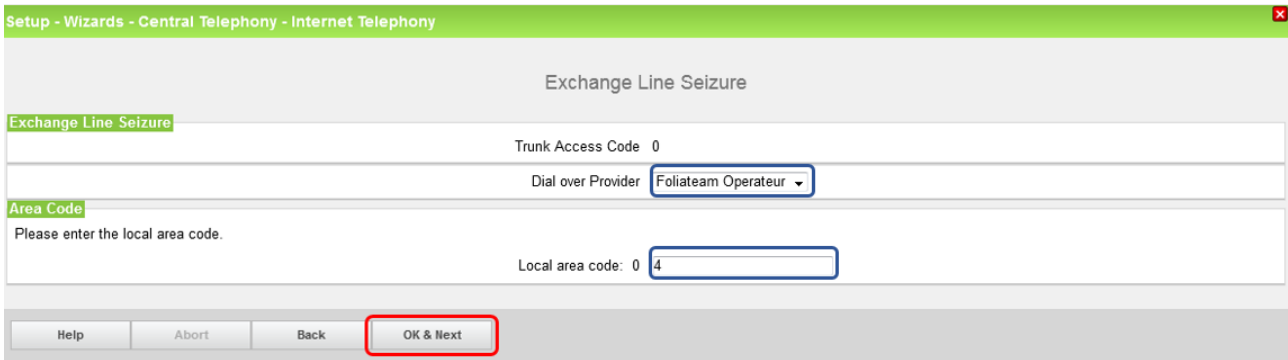
Status for the Internet Telephony Service Provider (ITSP)

	Provider		User	
<span style="border: 1px solid green; padding: 2px;"></span> Restart	Foliateam Operateur	Enabled	ITSP_FOLIATEAM	registered <span style="border: 1px solid gray; padding: 2px;">Diagnose</span>

Help Abort Back OK & Next

Click [OK & Next]

Select Foliateam Operator Provider, Enter local code (ex: Southeast "4"),



Setup - Wizards - Central Telephony - Internet Telephony

Exchange Line Seizure

Exchange Line Seizure

Trunk Access Code 0

Dial over Provider Foliateam Operateur

Area Code

Please enter the local area code.

Local area code: 0 4

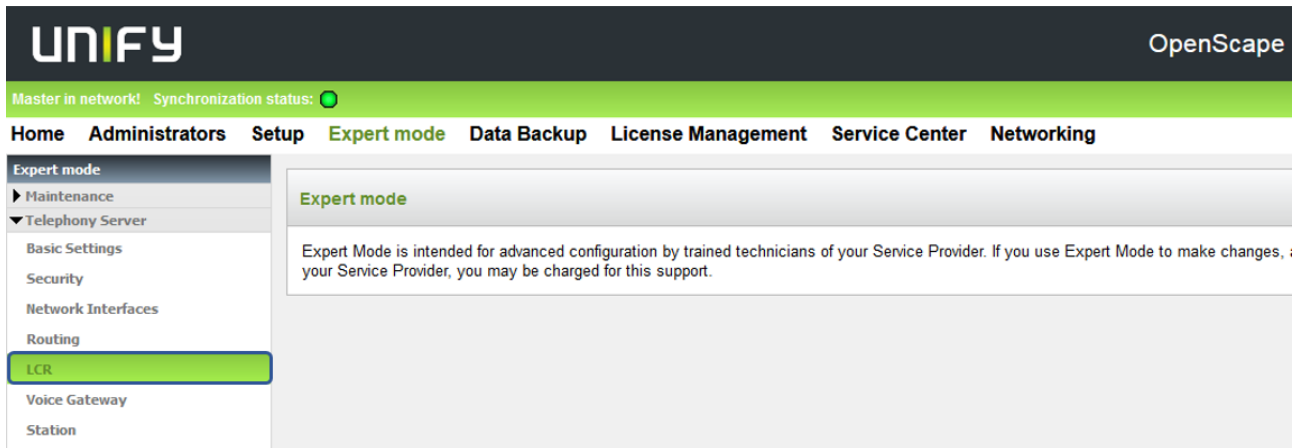
Help Abort Back OK & Next

Click [OK & Next].

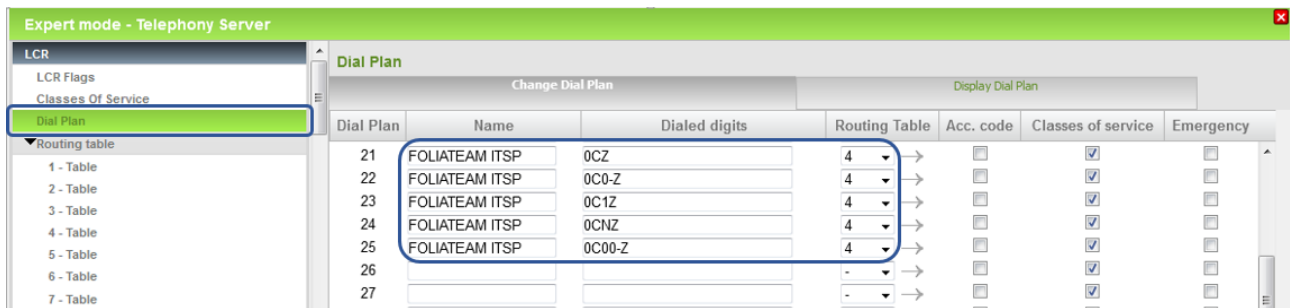
## LCR

Once the operation is complete, the wizard has configured the LCR table, so you may check the following information:

### Expert\_mode/Telephony\_Server/LCR

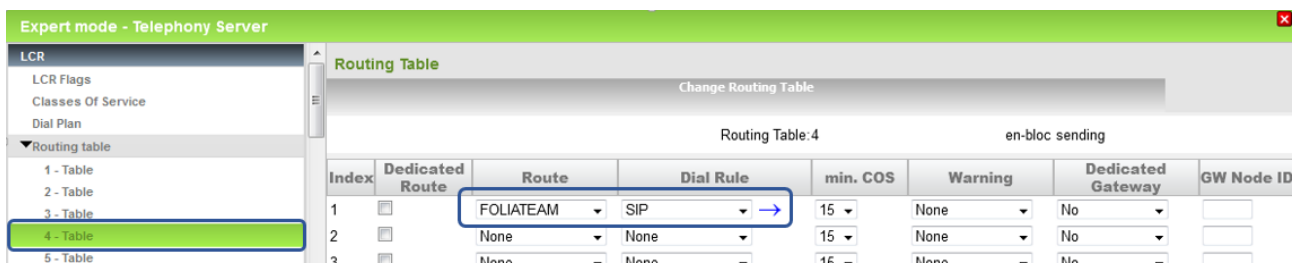


Dial plan:



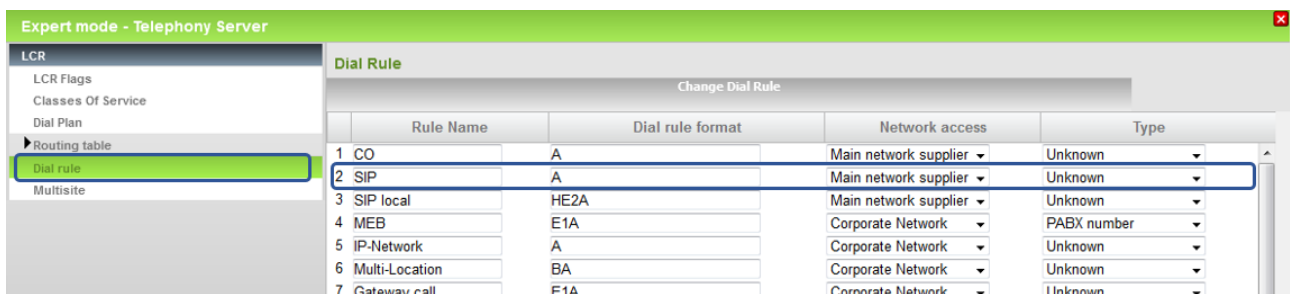
Dial Plan	Name	Dialed digits	Routing Table	Acc. code	Classes of service	Emergency
21	FOLIATEAM ITSP	0CZ	4		<input checked="" type="checkbox"/>	<input type="checkbox"/>
22	FOLIATEAM ITSP	0C0-Z	4		<input checked="" type="checkbox"/>	<input type="checkbox"/>
23	FOLIATEAM ITSP	0C1Z	4		<input checked="" type="checkbox"/>	<input type="checkbox"/>
24	FOLIATEAM ITSP	0CNZ	4		<input checked="" type="checkbox"/>	<input type="checkbox"/>
25	FOLIATEAM ITSP	0C00-Z	4		<input checked="" type="checkbox"/>	<input type="checkbox"/>
26			-		<input checked="" type="checkbox"/>	<input type="checkbox"/>
27			-		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Routing Table :



Index	Dedicated Route	Route	Dial Rule	min. COS	Warning	Dedicated Gateway	GW Node ID
1	<input type="checkbox"/>	FOLIATEAM	SIP	15	None	No	
2	<input type="checkbox"/>	None	None	15	None	No	
3	<input type="checkbox"/>	None	None	15	None	No	

Dial rule:



Rule Name	Dial rule format	Network access	Type
1 CO	A	Main network supplier	Unknown
2 SIP	A	Main network supplier	Unknown
3 SIP local	HE2A	Main network supplier	Unknown
4 MEB	E1A	Corporate Network	PABX number
5 IP-Network	A	Corporate Network	Unknown
6 Multi-Location	BA	Corporate Network	Unknown
7 Gateway call	E1A	Corporate Network	Unknown

## DID configuration

In the DID Section, the full DID will need to be entered without the country code (fr = 9 digits).

Expert mode - Telephony Server

Station  
 ▼ Station  
   ▶ UP0 Stations  
   ▼ IP Clients  
     ▶ System Clients  
     ▶ SIP Clients  
     ▶ RAS User  
     ▶ Deskshare User

**IP Clients**  
 Edit Subscriber    Device Info    Secondary Gateway    Fallback Hosting  

CallNo	DID	First Name	Last Name	Display	Type
Search:					
130					
130	→ 450679601	Reunion	-	Reunion	System Client

## License

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

Home Administrators Setup Expert mode Data Backup License Management Service Center

**License Management**

License information

▼ Additional Products

OpenScape Personal Edition

▼ Local User licenses

Overview

IP User

TDM User

Mobility User

Deskshare User

**CO Trunks**

**CO Trunks**

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

**PRI (S2M/T1)**

Type	Slot	Port	Feature	Demands
------	------	------	---------	---------

## Codec Parameters

Go to Expert Mode → Telephony Server → Voice Gateway → Codec Parameters

To comply with the requirements of the ITSP the following codec parameters **MUST** be changed:

- Only G.711 is supported by FOLIATEAM ITSP.

T38 fax protocol is not supported, Fax is supported via G.711 only but not recommended (Foliateam recommends the use of its fax-to-mail / mail-to-fax services).

For this reason, you **MUST** disable T38 protocol.

Expert mode - Telephony Server

**Voice Gateway**

SIP Parameters

▶ ITSP Loc-ID Settings

**Codec Parameters**

▶ Destination Codec Parameters

▶ Internet Telephony Service Provider

▶ Networking

▶ SIPQ-Interconnection

▶ Native SIP Server Trunk

**Codec Parameters**

Edit Codec Parameters

Codec	Priority	Voice Activity Detection	Frame Size
G.711 A-law	Priority 1	VAD: <input type="checkbox"/>	20 msec
G.711 μ-law	Priority 2	VAD: <input type="checkbox"/>	20 msec
G.729A	Priority 4	VAD: <input type="checkbox"/>	20 msec
G.729AB	Priority 3	VAD: <input checked="" type="checkbox"/>	20 msec

**Enhanced DSP Channels**

Use G.711 only ☐

**T.38 Fax**

T.38 Fax: ☐

Use FillBitRemoval: ☒

Max. UDP Datagram Size for T.38 Fax (bytes): 1472

Error Correction Used for T.38 Fax (UDP): t38UDPRedundancy

## Check ITSP status

### *Service\_Center/Diagnostics/Status*

Show status allows you to check if the account is connected,

Service Center - Diagnostics - Status					
Station Status	Dialup Network Status	ITSP Status	VPN Status	Overview of IP Addresses	BLF Status
Status for the Internet Telephony Service Provider (ITSP)					
		Fournisseur	Abonnés		
 Nouveau démarrage		FOLIATEAM_V2	Activé	des_tsp3	Enregistré