

OpenScape Business

How to Configure SIP Trunk for COSMOTE

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Table of History

Date	Version	Changes
26-09-2016	1.0	First version
02-10-2016	1.1	Final version
05-09-2024	1.2	editorial changes

Note: The basis for this document is the current OpenScope Business at the time of certification. Since OpenScope Business is constantly developed, input masks and interfaces as well as requirements may change in the future. The settings and entries described here then apply accordingly.

Configuration Data

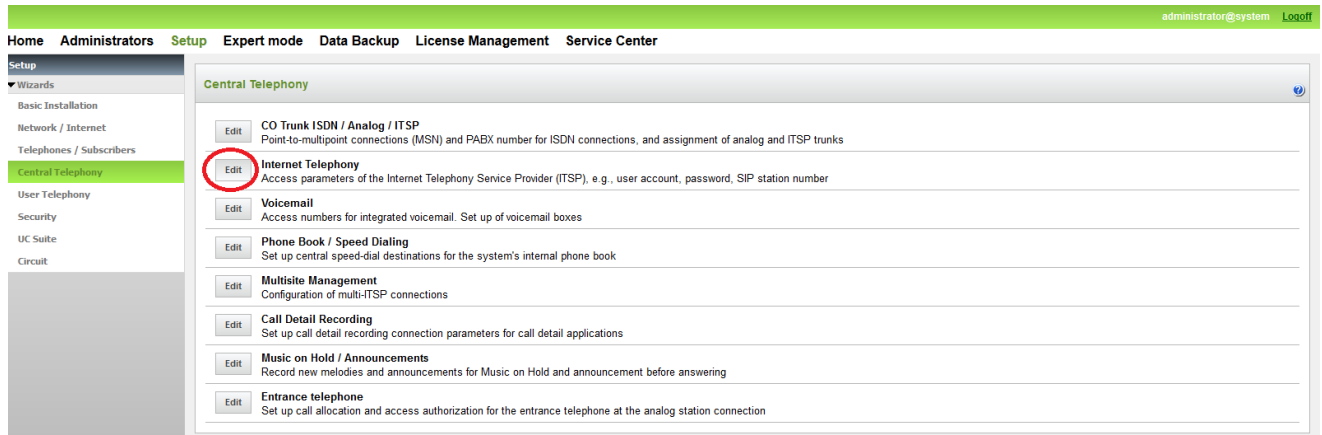
Information from ITSP COMOTE GR provided:

Name	Example
Call Number:	2142163500 - 09
Number of DID digits:	3
SIP Domain:	ims.otenet.gr
SBC_IP:	n/a
digest Auth.:	Yes
SIP Username:	+302142163500@ims.otenet.gr
SIP Password:	*****
Clip no Screening:	yes
Number of voice-channels:	4

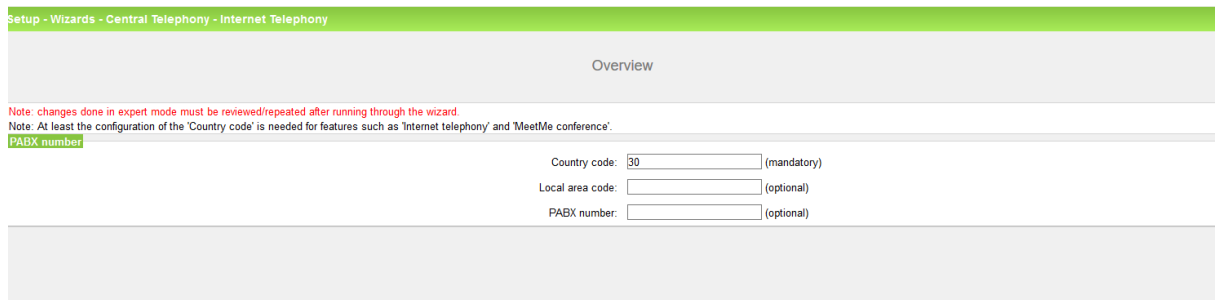
Configuration Wizard

Internet Telephony

Go to „Central Telephony – Internet Telephony“

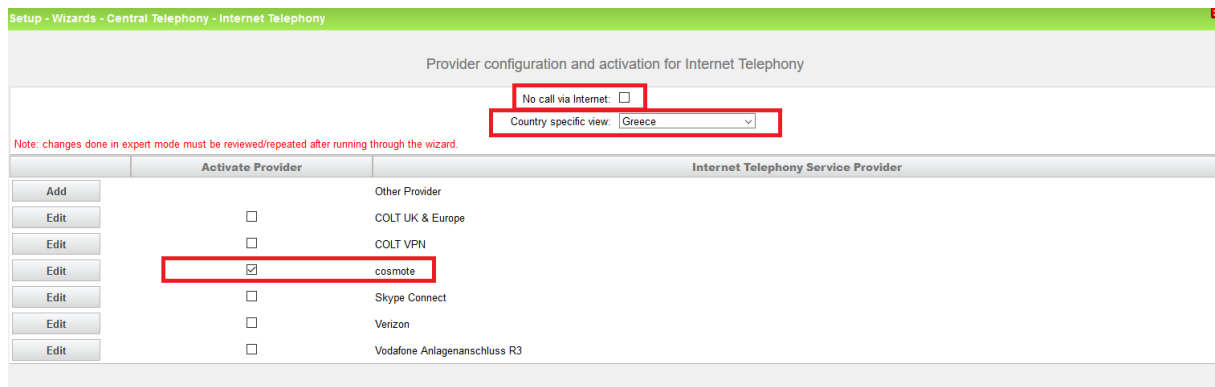


The overview page appears for entering the location data. The most flexible type of configuration is to enter the Country code only.



Click [OK & Next].

Provider configuration and activation for Internet Telephony -> No call via Internet -> uncheck Use County specific view: Greece and select COSMOTE.



Activate Provider and click on [Edit].

On the next page the predefined servers for COSMOTE are displayed, no changes are needed here.

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Service Provider

Provider Name:

Enable Provider:

Domain Name:

Transport protocol:

Transport security:

Provider Registrar

Use Registrar:

IP Address / Host name:

Port:

Reregistration Interval at Provider (sec)

Provider Proxy

IP Address / Host name:

Port:

Provider Outbound Proxy

Use Outbound Proxy:

IP Address / Host name:

Port:

Provider Inbound Proxy

Use Inbound Proxy:

IP Address / Host name:

Click [OK & Next].

In this dialog the specific customer SIP Userdata will be configured.

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Stations for COSMOTE

	Name of Internet Telephony Station
<input type="button" value="Add"/>	New Internet Telephony Station

Click on [Add].

Data provided by ITSP COSMOTE is inserted here.

Internet telephony station: SIP Username without domain name is inserted here (e.g: +302142163500)

Authorization name: SIP Username is inserted here (e.g: +302142163500@ims.otenet.gr)

Password: Password provided by COSMOTE

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: +302142163500)

Setup - Wizards - Basic Installation - Basic Installation

Internet Telephony Station for COSMOTE

Internet telephony station: +302144163500

Authorization name: +302144163500@ims.otene

Password: ****

Confirm Password: ****

Default Number: +302144163500

MEX Number:

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.

MEX Number
To use the feature Mobile Extension (MEX) you have to enter a MEX number here. An entered MEX number will only be stored if the ITSP is marked as 'active'. For use of MEX it is also necessary to configure a DISA number.

Enter the relevant data and click [OK & Next].

Setup - Wizards - Basic Installation - Basic Installation

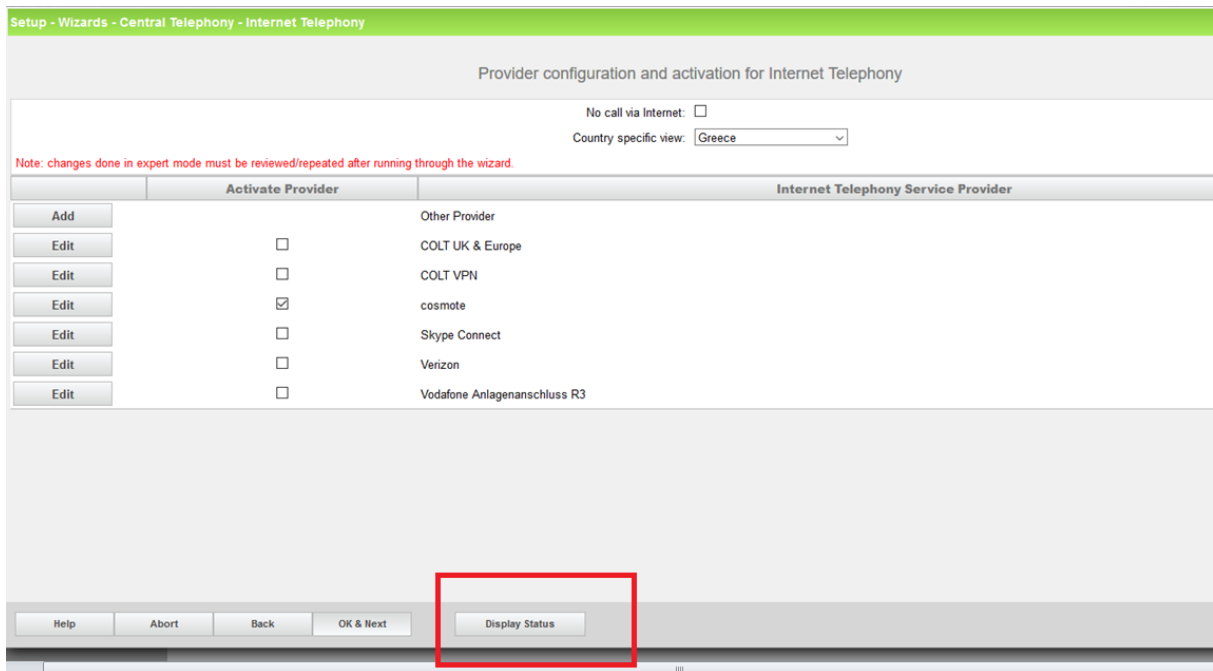
Call Number Assignment for COSMOTE

Name of Internet Telephony Station	Internet Telephony Phone Number	Direct inward dialing	Use as PABX number for outgoing calls
------------------------------------	---------------------------------	-----------------------	---------------------------------------

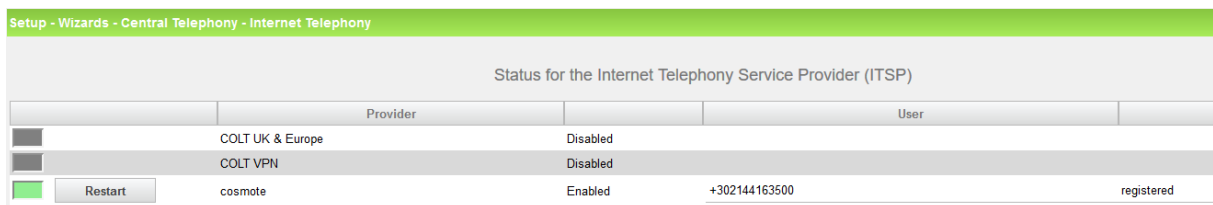
In order to complete the configuration please verify that the relevant user DIDs are set in stations.(Telephones / Subscribers configuration)

Help Abort Back **OK & Next**

Click [OK & Next] (no input needed)



On the next page you can check the status of the ITSP. Click [Display status]

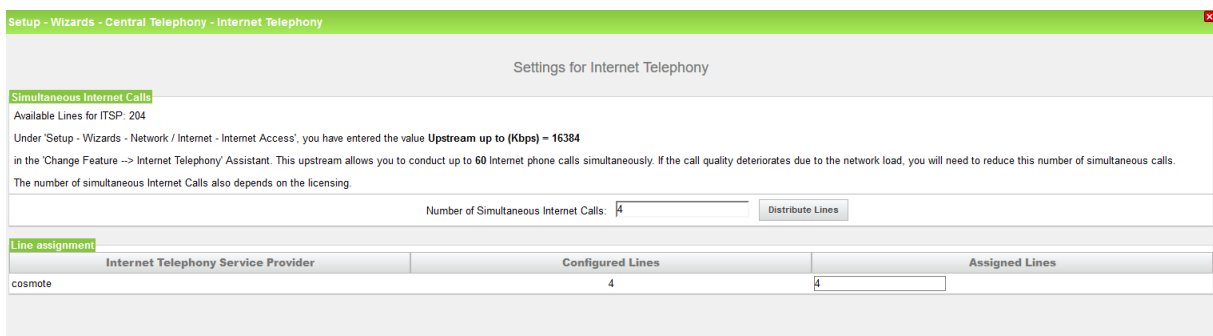


Click [Next] (no input needed)

You return to the previous screen. Click [OK & Next] (no input needed)

Define bandwidth (# Trunks)

In the next part the number of simultaneous calls via the SIP trunk will be defined. The calculation of the number of trunks is done by the wizard automatically depending on the bandwidth. For each 128K, one trunk is created.



Click [OK & Next]

Special phone numbers

In this dialog it is possible to route special phone numbers. When special phone numbers are not supported over the ITSP route it is possible to change this here.

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	0C112	cosmote
2	0C100	cosmote
3	0C166	cosmote
4	0C199	cosmote
5		cosmote
6		cosmote
7		cosmote

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	Status	User
<input type="checkbox"/>	COLT UK & Europe	Disabled	
<input type="checkbox"/>	COLT VPN	Disabled	
<input checked="" type="checkbox"/>	cosmote	Enabled	+302144163500 registered
<input type="checkbox"/>	Skype Connect	Disabled	
<input type="checkbox"/>	Verizon	Disabled	
<input type="checkbox"/>	Vodafone Anlagenanschluss R3	Disabled	
<input type="checkbox"/>	Circuit UTC (Cloud)	Disabled	

Restart

Help Abort Back Next

After this status page two more dialogs with „Exchange Line Seizure“ and an overview with all configured „Outside line Seizure“ are displayed.

Setup - Wizards - Central Telephony - Internet Telephony

Exchange Line Seizure

Exchange Line Seizure

Trunk Access Code 0

Dial over Provider

Help Abort Back OK & Next

Setup - Wizards - Central Telephony - Internet Telephony

Seizure Code for the 'Outside line Seizure'

Seizure code for 'Outside line Seizure'	
cosmote	855

Help Abort Back OK & Next

DID configuration

In general the DID has to be configured in long format

The country code 30 has to be configured as described before. The DID must always be the number without the country code (e.g: 210xxxxxxx).

Attention:

You MUST NOT use other number configurations in the DID because that will cause problems in different call scenarios and UC functionality. (e.g: for the DID-number 2142163501 do NOT configure 2142163 as Local Area Code and PABX number and then 3 digits 501 as DID)

Take DID from changed call number

Box	Slot	Callno	First Name	Last Name	Name	DID	Type	Fax Callno	Fax DID	Class of service	Call pickup
		100				2144163500	System Client			International	
		101				2144163501	System Client			International	
		102					No Port			International	
		103					No Port			International	
		104					No Port			International	
		105					No Port			International	
		106					No Port			International	
		107					No Port			International	
		108					No Port			International	
		109					No Port			International	

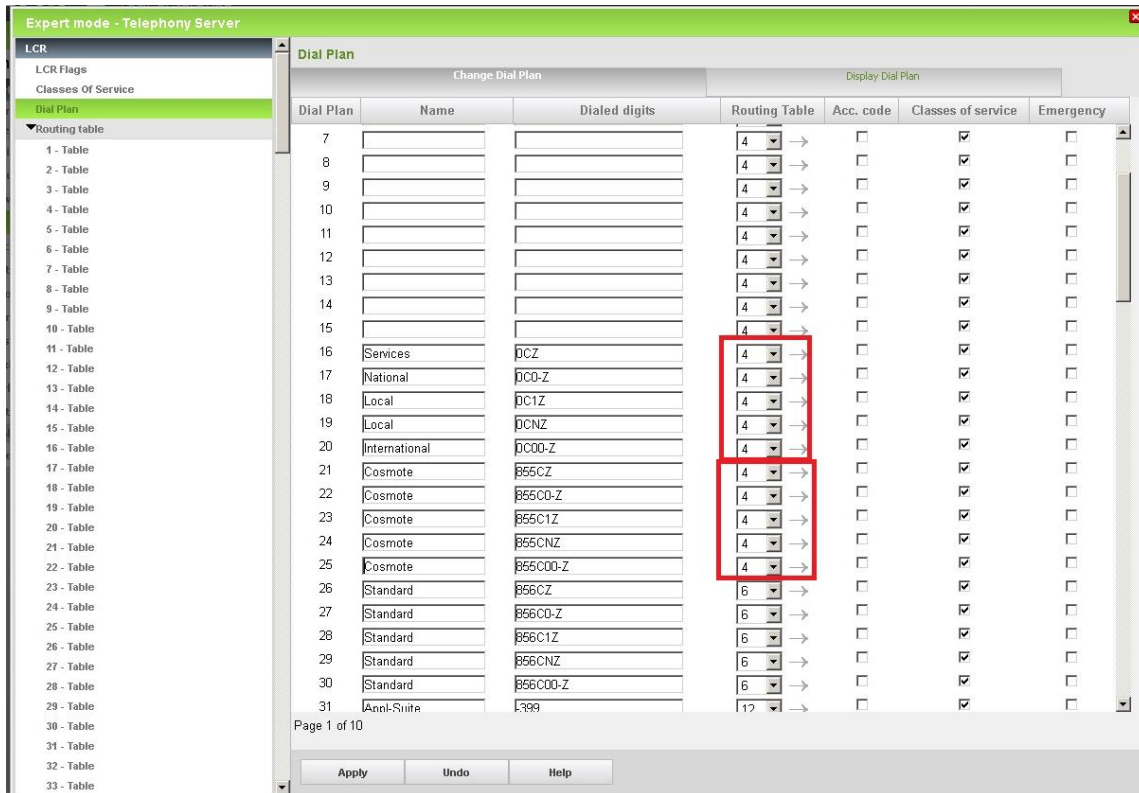
Additional manual Configuration

LCR changes (mandatory)

In expert mode , Telephony Server, LCR , - change the “Routing Table” in the way that **all Dial plans related to SIP (COSMOTE) route should follow the Routing Table 4.**

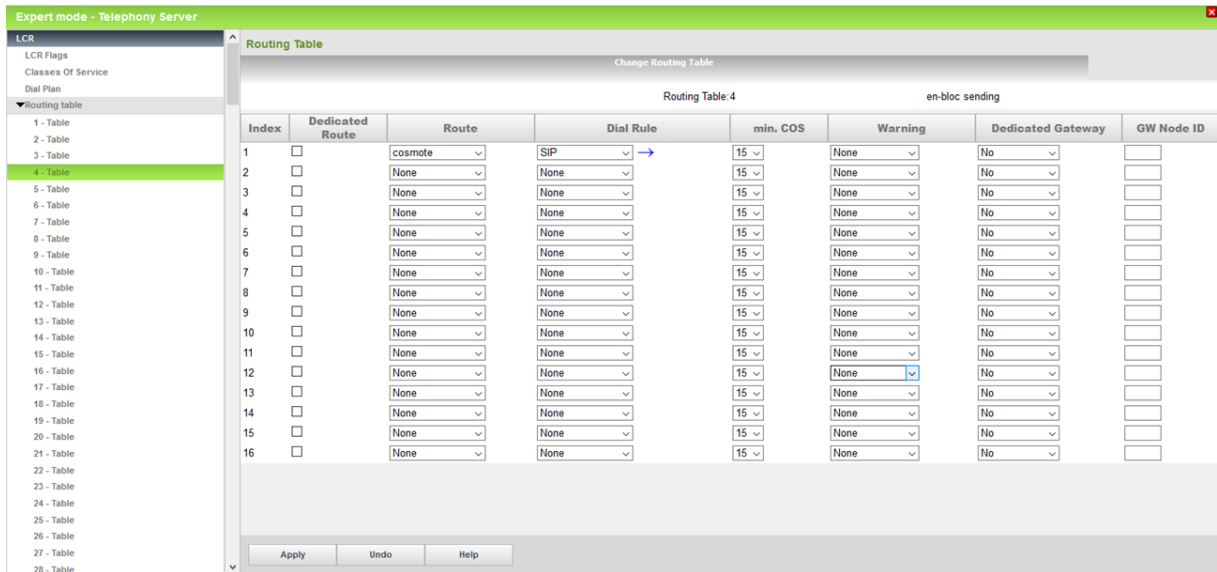
If not changed manually, the Routing table 4 uses the Dial Rule ‘SIP’ which by default has the Dial Rule format= ‘A’, Network Access=‘Main Network Supplier’ and Type=‘Unknown’ .

In case of a system with sw >=V2R2 the LCR should look like



In case of sw <V2R2 the LCR should look like

16	Standard	DCZ	4
17	Standard	DC1Z	4
18	Standard	DCNZ	4
19	Cosmote	B55CZ	4
20	Cosmote	B55C1Z	4
21	Cosmote	B55CNZ	4
22	Standard	B56CZ	6



Route configuration

You only need to setup the country code (30) for the route occupied for COSMOTE, if not exists already.

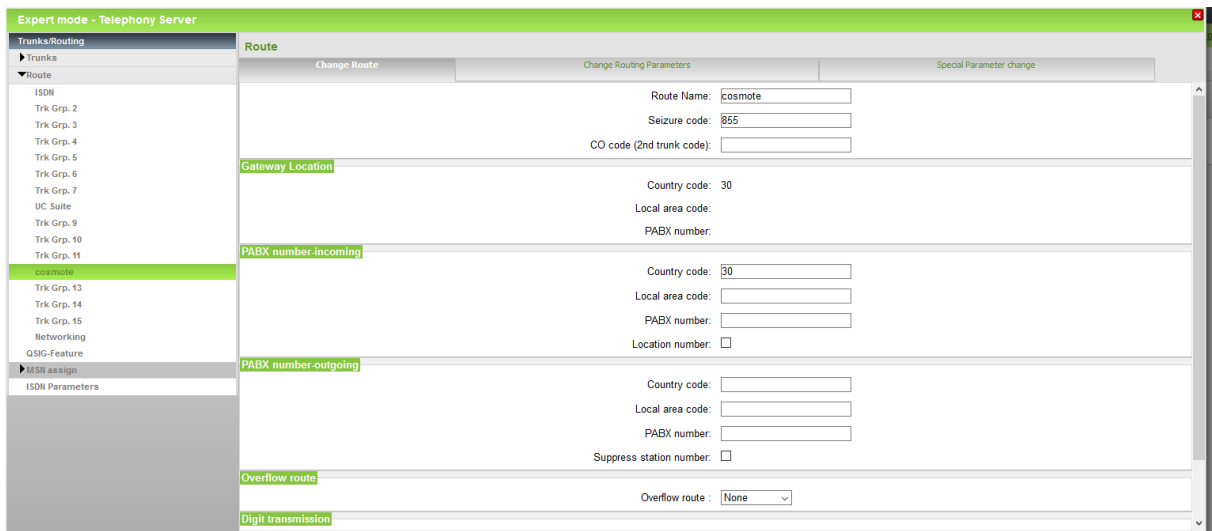
As recommended above, Local area code and PABX number must be empty.

The route parameters:

- Call No. With International/national prefix : unchecked
- No and type outgoing: Country code
- Call number type: DID

are automatically configured when the profile of COSMOTE is enabled by relevant wizard.

Consequently, you don't need to change/edit anything else here.

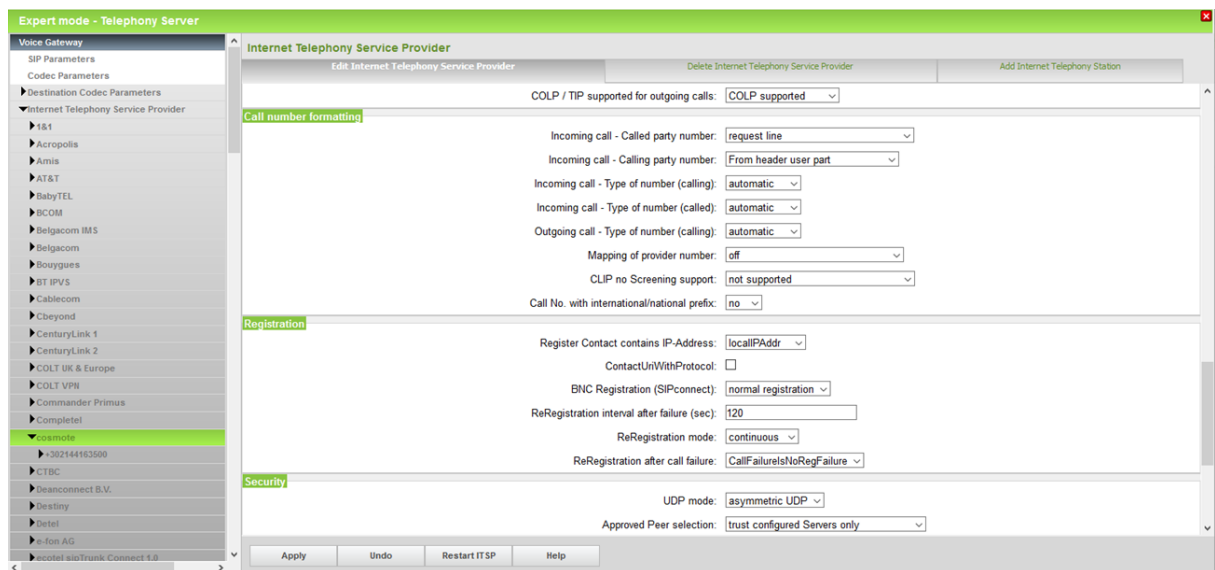
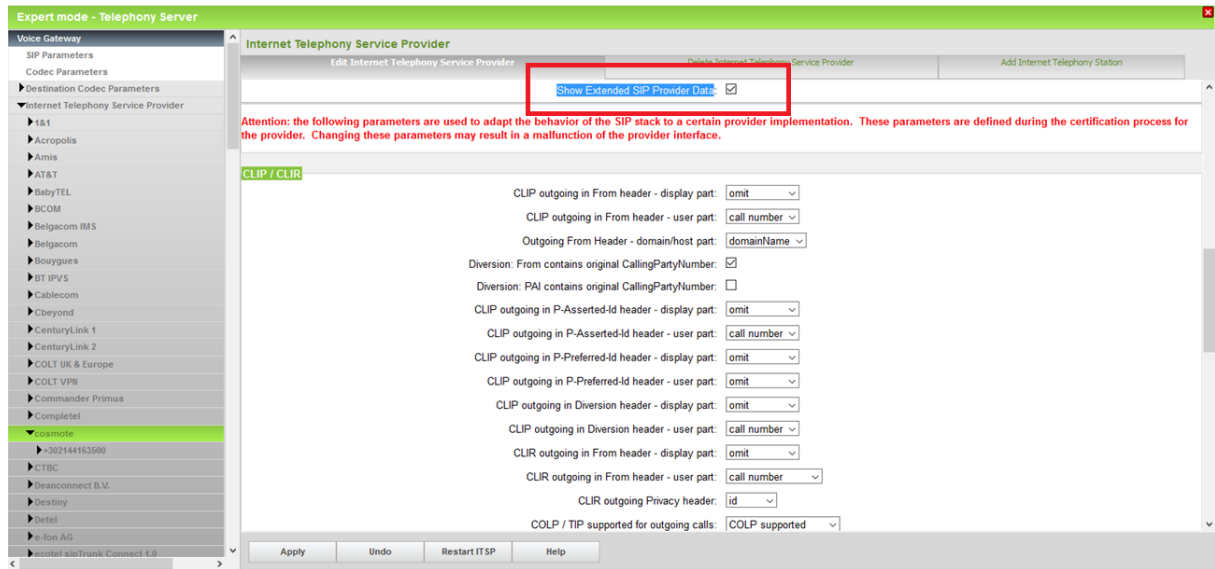


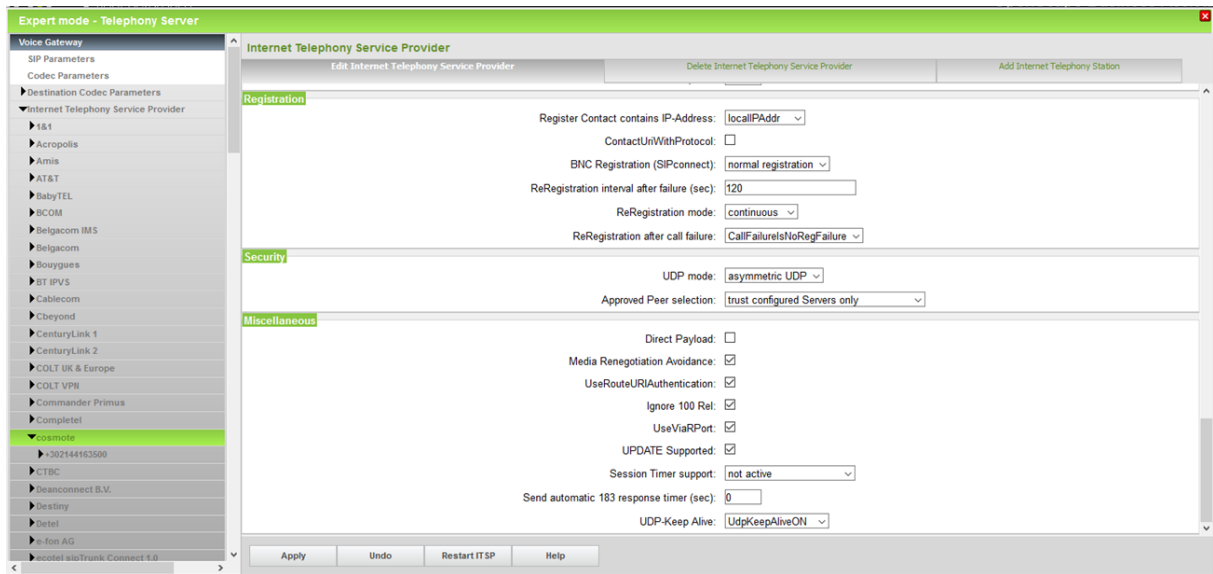
Cosmote Profile Settings used at certification process

Expert Mode-Telephony Server-Internet Telephony Server Provider

You don't need to change/edit anything in the profile of COSMOTE since the settings are already preconfigured.

However, the following pictures depict the official pre-defined profile as it is certified.

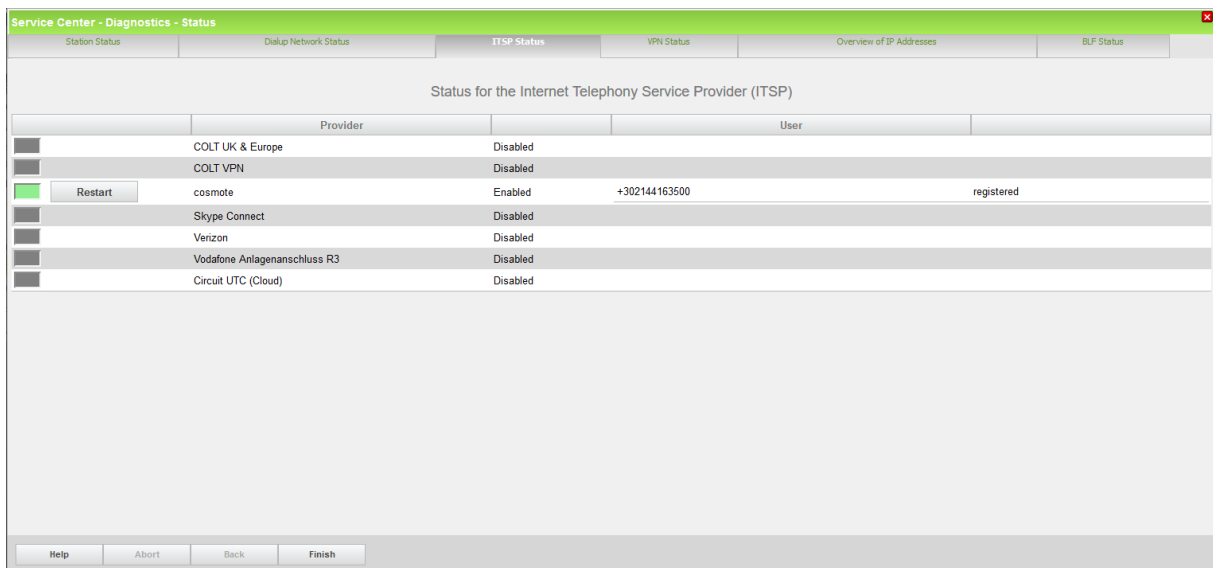
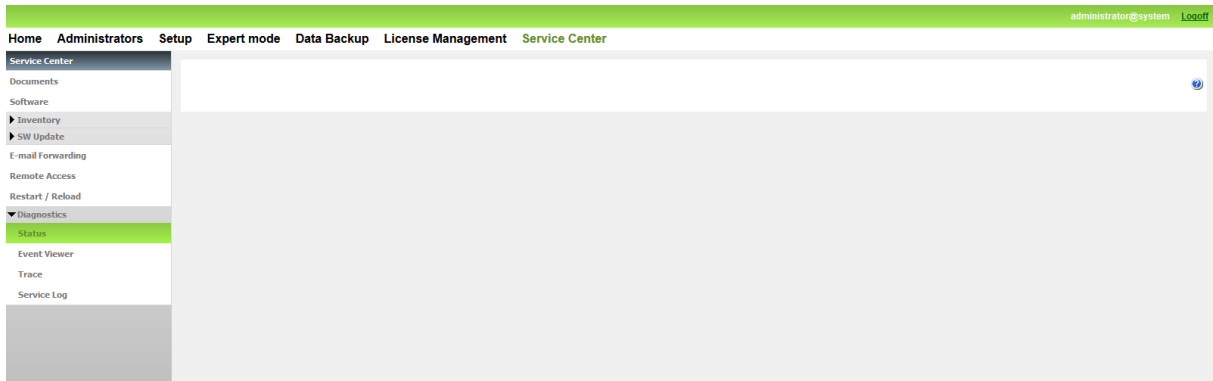




How to check the status of SIP connection with COSMOTE

Status OpenScope Business

“Status” provides information about the registration status of the ITSP. The ITSP registration can also be restarted here.



How to get Traces in case of problem

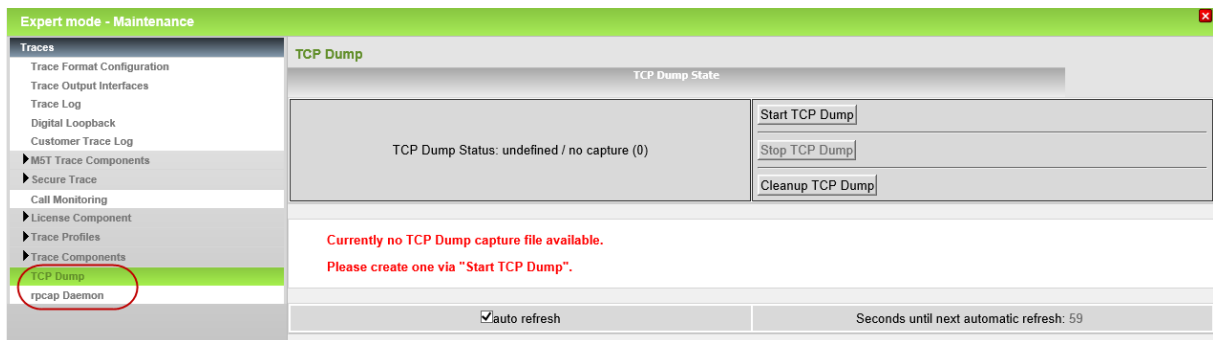
Wireshark traces

A Wireshark trace helps you to analyse SIP issues very easily. It is possible to start traces on the system which can be analyzed via Wireshark.

Expert mode / maintenance / traces

TCP Dump: Create max. 5 files with PCAP which can be downloaded afterwards and opened in Wireshark.

Rpcap Daemon: Will start the rpcap daemon and open a server port which allows direct remote access from protocol analyzers like Wireshark.



Internal traces

For a better analyses of problems internal system traces will be needed. Trace profiles are already pre-configured to make it easier to capture internal traces.

When issues with ITSP's occurs, the following trace profiles should be activated:

- Basic
- Voice_Fax_Connection
- SIP_Interconnection_Subscriber_ITSP

In case there are issues with the registration of an ITSP the following trace profile should also be activated.

- SIP_Registration

The relevant traces can be downloaded via Service Center –Diagnostics-Trace menu.

Start/Stop	Trace Profile	Description	Status
Start	CS/A_application	connections to external applications or wrong functionality. Application traces have to be collected additionally.	Red
Start	Display_problems	The displayed texts are incorrect, missing or appear after a delay. This applies to all device types with a display.	Red
Start	Feature_Service_activation	Issues with feature/service (de-)activation via service code or menu option.	Red
Start	Gateway_Stream_detailed	Detailed analysis of issues with missing payload in calls between IP and TDM, e.g. SIP trunk to UPOE phone or TDM trunk to IP phone. High influence on the system performance.	Red
Start	Gateway_Stream_overview	Issues with missing payload in calls between IP and TDM, e.g. SIP trunk to UPOE phone or TDM trunk to IP phone. Overview only, but low influence on the system performance.	Red
Start	IP_Interfaces	Issues with system IP interfaces; i.e. WAN, LAN or Admin.	Red
Start	License_problem	Issues with licensing, e.g. with license configuration or evaluation.	Red
Start	Network_Call_Routing_LCR	Issues with alive monitoring in between nodes, LCR dialrules or unreachable destinations.	Red
Start	Peripheral_cards	Issues with the initialization or startup of peripheral cards.	Red
Start	RAS_or_Internal_access	Shall be combined with the IP_Interfaces profile for detailed analysis of issues with remote administration (RAS) or internet access.	Red
Start	Ressources_MOH_Conferencing	Issues with music on hold or conferencing.	Red
Stop	SIP_Interconnection_Subscriber_ITSP	Shall be combined with the voice_fax_connection profile for detailed analysis of issues with SIP phones, access points, ITSP interfaces or SIP interconnections, e.g. calls to or from ITSP/SIP are not signaled at phones, DTMF or fax cannot be sent or received via ITSP/SIP interconnections.	Green
Start	SIP_Registration	ITSP / SIP-nodes / SIP-phones / SIP-access points cannot register or lose registration.	Red
Start	Smart_VM	Shall be combined with the voice_fax_connection profile for detailed analysis of issues with Smart Voicemail.	Red
Start	UC_Smart	Shall be combined with the voice_fax_connection profile for detailed analysis of issues with UC Smart.	Red
Stop	Voice_Fax_connection	Issues with voice or fax connections, e.g. missing or distorted connections, wrong LED signals, interrupted calls or faxes, user cannot take or answer call, call not ringing at phone, no ringback tone. This trace profile is enabled by default (factory settings). It may be combined with interface specific profiles depending on the involved device types.	Green
Start	VPN	Issues with VPN connections, e.g. connection disrupted, unable to import or generate SSL certificate (.crt), certificate revocation list (.crl), peer certificate (.pkcs12) for VPN, unable to import or generate SPE certificate.	Red

Buttons: Help, Abort, Back, Next, Delete Trace, Diagnosis Logs