OpenScape Business

How to Configure SIP Trunk for Telia Denmark

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Table of History

Date	Version	Changes
20-11-2016	1.0	Version 1
01-12-2016	1.1	Created document
01-12-2016	1.2	Pictures
12-12-2016	1.3	Document update
13-12-2016	1.4	Document update
18-01-2017	1.5	DTMF payload added. Telia document removed
09-02-2017	1.6	Information on COLP and 112
14-03-2017	1.7	Information on CLIP no screening
04-04-2017	1.8	Mail from ITSP
25-04-2017	1.9	Screenshot corrections
25-04-2017	2.0	Final layout for release
10-09-2024	2.1	editorial changes

Note: The basis for this document is the current OpenScape Business at the time of certification. Since OpenScape 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 Telia Denmark provided:

Name of Customer Related Data	Example	Used in Field of OSBiz-WBM	Needs to be configured
Call Number:	88804090-99		
Number of DIDs	10		
SIP Domain	VPN IP provided by ITSP	SIP Domain Name:	x
Registrar	VPN IP provided by ITSP	SIP Provider Registrar	
		SIP Provider Proxy	x
Account:	88804090	Internet Telephony Station	x
SIP Username:	88804090	Authorization Name:	
SIP Password:		Password & (Confirm Password)	
Number of voice-channels:	8	Assigned Lines	x

Important information:

COLP is NOT supportet by ITSP (This can be changed by the ITSP in the future)

ITSP need to have +45 I front of 112 and other service numbers (This can be changed by the ITSP in the future)

CLIP no screening is deactivated by default, so Telia may invoices on DID numbers level, this has the consequence that a-number does not appear when making an external enquiry or transfer of calls, and you cannot show number unknown to the ITSP.

If CLIP no screening is needed, you need to disable Diversion: PAI contains original Calling Party Number and activate CLIP no screening, billing of calls will then be at the ITSP account number.

Mail you will receive from ITSP

Hi,

Your SIP Trunk is now ready for test:

IP address to be used for SIP signalling and RTP: …
(Please note that this IP address will not answer ping and that it is only to be used for SIP phone traffic with Telia)

IP address to be used for ping test: …
(Please note that this IP address is only used for ping test)

We kindly ask you to ping test the SIP Trunk and to let us know whether the test was successful.

After that, you may test outgoing and incoming calls with your test number range 88XXXXXX – 88XXXXXX, which we have reserved for this SIP Trunk.

Attached you find a document containing the technical specifications for Telias SIP Trunk. The last page of that document is a form to be used for testing the various call scenarios which we recommend to test.

Please let us know in advance when you are going to do your test calls, so our technical department can be ready to make traces of your calls.

After that, we will let you know whether your calls are setup in accordance with the specifications of the SIP Trunk, and whether it can be taken into use with your "real" number ranges.

Billing for this SIP Trunk will start 5 days from now.

Mandatory Expert mode Configuration

DTMF Payload type

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

RFC2833 → Payload Type for RFC2833: **MUST** be set to 101.

ITSP settings

Go to Expert Mode → Telephony Server →Voice Gateway →Internet Telephony Server Provider

And select the provider Telia Denmark

Then fill in Domain Name and Provider proxy, this is provided by ITSP in a mail.

{IP address to be used for SIP signalling and RTP}

Configuration Wizard

Internet Telephony

Go to Setup - Central Telephony - Internet Telephony – Click Edit
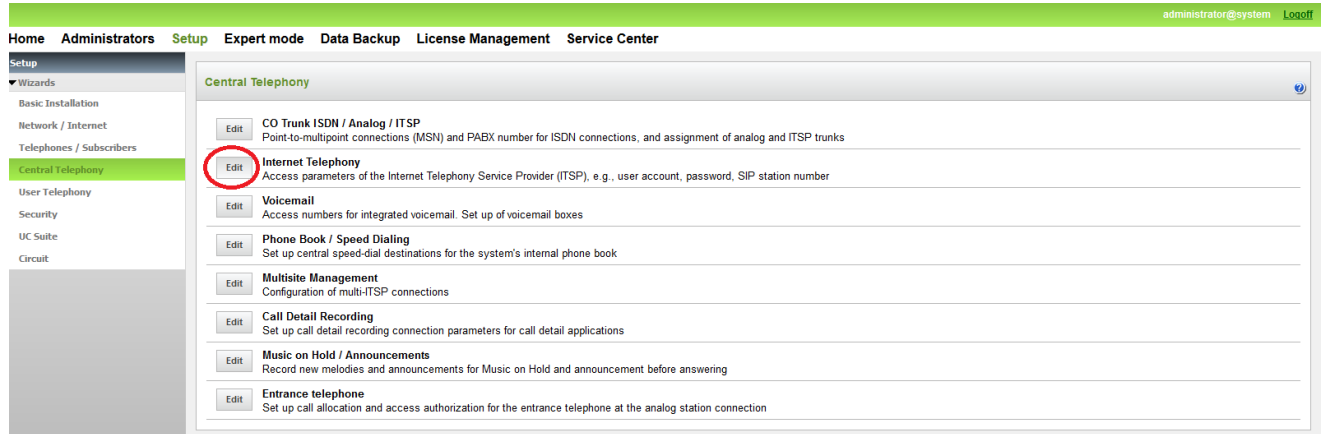
Enter **Country code**

Click **OK og Next**

Uncheck **No call via Internet**

Use **County specific view**, choose **Denmark** and **Activate Provider** - **Telia Denmark**.

Press the **Edit** button to configure your account.

Press **OK & Next**

Enter the data provided by Telia Denmark.

For Internet Telephony Station use the first number from the range of pool Telia Denmark has provided you. Default Number must me set in E.164 format only (e.g+4588804090)

Authorization name, Password and Confirm Password are left empty

Click **OK & Next** four times

Simultaneous internet calls and upstream.

Enter the Upstream up to (Kbps) and Number of Simultaneous Calls, remember to assign lines.

Setup - Wizards - Central Telephony - Internet Telephony	☒

Settings for Internet Telephony

Simultaneous Internet Calls

Available Lines for ITSP: 195

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, 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): 1024

Number of Simultaneous Internet Calls: 4   [Distribute Lines]

Line assignment

Internet Telephony Service Provider	Configured Lines	Assigned Lines
Telia Danmark	4	4

Click **OK & Next**

Special phone numbers

Enter special phone numbers here if necessary.

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	Uni-tel A/S ⌄
2		Uni-tel A/S ⌄
3		Uni-tel A/S ⌄

Click **OK & Next**

Status for the Internet Telephony Service provider (ITSP)

Check the status of the provider

Setup - Wizards - Central Telephony - Internet Telephony	☒

Status for the Internet Telephony Service Provider (ITSP)

		Provider		User	
		COLT UK & Europe	Disabled		
		COLT VPN	Disabled		
		Global Connect	Disabled		
		Skype Connect	Disabled		
		TDC DK	Disabled		
	Restart	Telia Denmark	Enabled	88804090	registered
		Verizon	Disabled		
		Vodafone Anlagenanschluss R3	Disabled		
		Circuit UTC (Cloud)	Disabled		

Click **Next**

Exchange Line Seizure

Check if it's correct

Setup - Wizards - Central Telephony - Internet Telephony	

Exchange Line Seizure

Exchange Line Seizure

Trunk Access Code   0

Dial over Provider   Telia Denma

Click **OK & Next**

Setup - Wizards - Central Telephony - Internet Telephony

Seizure Code for the 'Outside line Seizure'

	Seizure code for 'Outside line Seizure'	
Telia Denmark	0	

Click **OK & Next**

Setup - Wizards - Central Telephony - Internet Telephony

The changes for the feature 'Internet Telephony' are completed

The Internet Telephony is switched on and configured.

For your own security, you should save the configuration data. To do this, upon completion of the wizard, choose 'Backup' in the main menu, and follow this by choosing 'Backup Immediately'.

Click **Finish**

DID configuration

IMPORTANT: DID needs to be 8 digits.

	Box	Slot	Callno	First Name	Last Name	Display	DID	Type	Fax Callno	Fax DID	Class of service	Call pickup
🔍								⌄			⌄	⌄
✎	1	0	198				88804091	System Client ⌄	298	88804098	International ⌄	Call pickup group 1 ⌄
✎	1	0	199				88804092	System Client ⌄	-	-	International ⌄	Call pickup group 1 ⌄
✎	1	0	200				88804093	SIP Client ⌄	-	-	International ⌄	Call pickup group 1 ⌄

Additional manual Configuration

LCR

16	Services	0CZ	2 →	☐	☑	☐
17	National	0C0-Z	2 →	☐	☑	☐
18	Local	0C1Z	2 →	☐	☑	☐
19	Local	0CNZ	2 →	☐	☑	☐
20	International	0C00-Z	3 →	☐	☑	☐

Dial Rule

Change Dial Rule

	Rule Name	Dial rule format	Network access	Type
1	CO	A	Main network supplie	Unknown
2	SIP	A	Main network supplie	Country code
3	SIP local	HE2A	Main network supplie	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
8	COInternat	E4A	Main network supplie	Unknown
9	Add_cc_to_Canoni	D45E2A	Main network supplie	Country code
10	National_to_Cano	D45E3A	Main network supplie	Country code
11	Internat._to_Can	E3A	Main network supplie	Country code
12	SIP local_Canoni	HE2A	Main network supplie	Country code
13			Unknown	Unknown