OpenScape Business

How to Configure SIP Trunk for Telia Denmark

OpenScape Business - 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 supported 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 88XXXXX – 88XXXXX, 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 \rightarrow Telephony Server \rightarrow Voice Gateway \rightarrow Codec Parameters RFC2833 \rightarrow Payload Type for RFC2833: **MUST** be set to 101.

RFC2833	
Transmission of Fax/Modem Tones according to RFC2833:	
Transmission of DTMF Tones according to RFC2833:	
Payload Type for RFC2833:	101
Redundant Transmission of RFC2833 Tones according to RFC2198:	

ITSP settings

Go to Expert Mode \rightarrow Telephony Server \rightarrow Voice Gateway \rightarrow 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*}

Expert mode - Telephony Server			6
Voice Gateway	Internet Telephony Service Provider		
SIP Parameters	Edit Internet Telenhony Service Provider	Delate Internet Telephony Convice Previder	Add Internet Tolenhony Station
Codec Parameters		beec mener reprinty better transe	And internet respiritly statistic
Destination Codec Parameters	Prov	ider Name: Telia Denmark	
▼Internet Telephony Service Provider	Enabl	la Bravidar:	
181	Ellab	e Fronder.	
1_ipnordic A/S	Provider Identifier	in System: Trunk Group 13 V	
▼Telia Denmark	Dom	nain Name: 194.255.250.108	
88804090	T	at any tank in the second seco	
Acropolis	Transpo	n protocoi: uap V	
Amis	Transpo	rt security: traditional (udp or tcp) ∨	
AT&T	Medi	ia security: RTP only ~	
BabyTEL	Dravidar Daaietrar		
BCOM		Desister	
Belgacom IMS	USE	Registrar.	
Belgacom	IP Address / H	lost name: 194.255.250.108	
BLU		Port: 5060	
Bouygues			
BT IPVS	Reregistration Interval at Pro	vider (sec) 600	
Cablecom	Provider Proxy		
Cbeyond	IP Address / H	lost name: 194.255.250.108	
CenturyLink 1		Dat: 6060	
CenturyLink 2		Puit. pudu	
COLT UK & Europe	Provider Outbound Proxy	_	
COLT VPN	Use Outbo	und Proxy:	
Commander Primus	IP Address / H	lost name: 0.0.0.0	
Completel		Dett. 0	
CIBC		Port: p	
Deanconnect B.V.	Provider Inbound Proxy		
Destiny	Use Inbo	und Proxy:	
	IP Address / H	lost name: 0.0.0.0	
e-toll AG			
ecotel sip Trunk Connect 1.0		Port: U	
Elies	Provider STUN		
Fridin	l l	Jse STUN:	
Frank AG	IP Address / H	Host name:	
equada		D	
FL1 Telecom Liechtenstein		Port: 3478	
Gamma StaticIP			
Gamma with Register	Lextender Nite trouder Data		
	✓ Apply Undo Restart ITSP Help		
< >>			

Configuration Wizard

Internet Telephony

Go to Setup - Central Telephony - Internet Telephony – Click Edit

		administrator@system Logon
Home Administrators	Setup Expert mode Data Backup License Management Service Center	
Setup		
▼ Wizards	Central Telephony	(2)
Basic Installation		9
Network / Internet	Edit CO Trunk ISDN / Analog / ITSP Print Analog / ITSP Print Annual ISDN connections and assignment of analog and ITSP trunks	
Telephones / Subscribers	For the manupoint connections (mort) and their names to reset connections, and assignment of analog and their admits	
Central Telephony	Edit Internet Telephony Access parameters of the Internet Telephony Service Provider (ITSP), e.g., user account, password, SIP station number	
User Telephony	Voicemail	
Security	Edit 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	
	Music on Hold / Announcements	
	Ldit Record new melodies and announcements for Music on Hold and announcement before answering	
	Edit Edit Entrance telephone Set up call allocation and access authorization for the entrance telephone at the analog station connection	

Enter Country code

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'. PADX number:			
Country code:	45 (mandatory)		
Local area code:	(optional)		
PABX number: (optional)			

Click OK og Next

Uncheck No call via Internet

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

Provider configuration and activation for Internet Telephony				
No call via Internet:				
	Country specific view: Denmark ~			
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		1_ipnordic A/S		
Edit		Telia Denmark		
Edit		COLT UK & Europe		
Edit		COLT VPN		
Edit		Global Connect		
Edit		Skype Connect		
Edit		Uni-tel A/S		
Edit		Verizon		
Edit		Vodafone Anlagenanschluss R3		

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

Setup - Wizards - Central Telephony - Internet Telephony	
Internet Telephony	y Service Provider
Provider Name:	Telia Denmark
Enable Provider:	V
Secure Trunk:	

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

Setup - Wizards - Central Telephony - Internet Telephony	
Internet Telepho	ny Station for Telia Denmark
Internet telephony	tation: 88804080
Authorization	name:
Pas	sword:
Confirm Pas	sword:
Call number assignment	
Use public numbe	(DID)
Use internal number (Callno) / Single e	ntries 💿
Use internal number (Callno) / Range	entry 🔘
If using 'configurable clip' you have to cha Changing trunk parameters in	nge the configuration to "Use public number (DID)" here! ase of internal subscriber no. is not allowed!
Default N	umber: +4588804090
MEXIN	umber:
Default Number ITSP as primary CO access Enter one of the call numbers supplied by your network provider here. This will be used in outg All call numbers supplied by your network provider are to be entered within the trunk and telep MEX Number To use the feature Mobile Extension (MEX) you have to enter a MEX number here. An entered For use of MEX it is also necessary to configure a DISA number.	oing calls as the calling party number in case no other number is available for the respective call. oones configuration (DID field) primary CO access. MEX number will only be stored if the ITSP is marked as 'active'.
Help Abort Back OK & Next De	ete Data

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.

etup - Wizards - Central Telephony - Internet Telephony				
Settings for Internet Telenhony				
Simultaneous Internet Calls				
Available Lines for ITSP: 195				
Please enter in field 'Upstream up to (Kbit/sec)' the Upstream of your Internet connection o Upstream up to (Kbps) = 1024	communicated by your Provider. You have typed in			
In the 'Change Feature> Internet Telephony' Assistant. This upstream allows you to cond	duct up to 8 Internet phone calls simultaneously. If the call quality deteriorates due to the ne	twork 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				
ielia Danmark 4				

Click OK & Next

Special phone numbers

Enter special phone numbers here if necessary.

Setup - wrzarbs - Gentral 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	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									
	Skype Connect	Disabled								
	TDC DK	Disabled								
Restart	Telia Denmark	Enabled	88804090	registered						
	Verizon									
	Vodafone Anlagenanschluss R3	Disabled								
	Circuit UTC (Cloud)	Disabled								

Click Next

Exchange Line Seizure

Check if it's correct

etup - Wizards - Central Telephony - Internet Telephony										
	Exchange Line Seizure									
Exchange Line Seizure	Exchange Line Seizure Trunk Access Code 0									
	Dial over Provider Tella Denma									
Click OK & Next										
Setup - Wizards - Central Telephony - Internet Telephony		2								
	Seizure Code for the 'Outside line Seizure	9								
	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	

Click Finish

DID configuration

IMPORTANT: DID needs to be 8 digits.

etup - Wizards - Telephones / Subscribers - IP Telephones										
Select a station -LAN Phones/WLAN Phones										
Take DID from changed call number										
Box Slot Callno	First Name	Last Name	Display	DID	Туре	Fax Callno	Fax DID	Class of service	Call pickup	
۹ 🗌 🔤					~ ~			~ ·		~
/ 1 0 198				88804091	System Client v	298	88804098	International ~	Call pickup group 1	~
/ 1 0 199				88804092	System Client ~	-	-	International ~	Call pickup group 1	~
/ 1 0 200				88804093	SIP Client v	-	-	International ~	Call pickup group 1	\sim

Additional manual Configuration

LCR

LCR	^	Routing	Table							
LCR Flags		_	Channe Routinn Table							
Classes Of Service										
Dial Plan		Daution Table ? an blog conding								
▼Routing table					Routing Table	1.2	en-bloc se	nung		
1 - Table		Index	Dedicated Route	Route	Dial Rule	min. COS	Warning	Dedicated Gateway	GW Node ID	
2 - Table		1		1 Telia DK 🗸	Add cc to Cano ∨ →	15 ~	Display ~	No v		
3 - Table		2		Nene	Nene	45	Nene	Na		
4 - Table		2		None	None	15 🗸	None V	140 0		
5 - Table		3		None ~	None ~	15 ~	None ~	No v		

LCR	^	Routing	Routing Table							
LCR Flags			Change Routing Table							
Classes Of Service										
Dial Plan					Routing Table	3	en-bloc ser	ading		
Routing table					routing table.			lang		
1 - Table		Index	Dedicated Route	Route	Dial Rule	min. COS	Warning	Dedicated Gateway	GW Node ID	
2 - Table		1		1_Telia DK v	Internatto_Can ~ ->	15 ~	Display ~	No v		
3 - Table		2		None ~	None	15 ~	None ~	No		
4 - Table		3		None	None	15 ~	None	No		
5 - Table		4		None	None	15	None	No		
- Table			_			13 0	Indite v			

16	Services	OCZ	$2 \checkmark \rightarrow$	\checkmark	
17	National	0C0-Z	$2 \checkmark \rightarrow$	\checkmark	
18	Local	0C1Z	$2 \checkmark \rightarrow$	\checkmark	
19	Local	0CNZ	$2 \lor \rightarrow$	\checkmark	
20	International	0C00-Z	$3 \checkmark \rightarrow$	\checkmark	

Dial	Jial Rule									
	Change Dial Rule									
	Rule Name	Dial rule format	Network access		Туре					
1	CO	A	Main network supplie V	Unknown	~					
2	SIP	A	Main network supplie 🗸	Country code	\sim					
3	SIP local	HE2A	Main network supplie V	Unknown	\sim					
4	MEB	E1A	Corporate Network V	PABX number	\sim					
5	IP-Network	A	Corporate Network V	Unknown	\sim					
6	Multi-Location	BA	Corporate Network V	Unknown	\sim					
7	Gateway call	E1A	Corporate Network V	Unknown	\sim					
8	COInternat	E4A	Main network supplie 🗸	Unknown	~					
9	Add_cc_to_Canoni	D45E2A	Main network supplie V	Country code	\sim					
10	National_to_Cano	D45E3A	Main network supplie V	Country code	\sim					
11	Internatto_Can	E3A	Main network supplie 🗸	Country code	~					
12	SIP local_Canoni	HE2A	Main network supplie 🗸	Country code	\sim					
13			Unknown 🗸	Unknown	\sim					