

OpenScape Business

How to Configure SIP Trunk for ITSP Orange Business Services

Table of Contents

Information	3
Trunk Configuration Data provided by Orange Business Services	3
Configuration Wizard	4
Internet Telephony	4
Define bandwidth (# Trunks)1	.0
DID configuration1	.2
Additional Configuration1	.3
Port management1	.3
Codec Parameters1	.4
SIP Parameters1	.4
License 1	.5
LCR changes1	.6
Route configuration (optional)1	.7
Usage of Orange Network Access device1	.9

Table of History

Date	Version	Changes
03.03.2018	1.0	released with final comments from ORANGE
10.09.2024	1.1	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.

Information

The "Orange Business Services SIP Trunking" profile delivered with the OpenScape Business system is used for 2 SIP trunking offers:

- Business Talk IP (BTIP), for French market
- Business Talk (BT) for international market

The present document describes the configuration of Business Talk IP (BTIP) with OpenScape Business for the French market. The configuration steps are similar if Business Talk (BT) for international market is used but the configuration for country specific settings may be different if Business Talk (BT) is used in other countries.

The minimal OpenScape Business software version is OpenScape Business_v2_R4.1.0 Certification valid for all OpenScape Business systems X3/X5/X8/S.

Trunk Configuration Data provided by Orange Business Services

The configuration data (IP addresses etc.) needed to setup the SIP trunk can be found on the Orange Business Services document you will receive by Orange.

As an example:

Items	Example
Orange Nominal SBC IP	10.25.200.73 UDP 5060
Orange Backup SBC IP	10.25.200.83 UDP 5060
Codecs	G711a, G711u, G729a, 20ms
Fax	Т.38
DTMF Transmission	RFC 2833
Recommended Number format	E.164 (ex: + 33 2 96 08 21 83)

Configuration Wizard

Internet Telephony

Go to Central Telephony – "Internet Telephony"

		inistration@system <u>Logon</u>
Home Administrators	Setup Expert mode Data Backup License Management Service Center	
Setup		
▼ Wizards	Central Telephony	
Basic Installation		9
Network / Internet	CO Trunk ISDN / Analog / ITSP	
Telephones / Subscribers	Point-to-multipoint connections (MSN) and PABX number for ISDN connections, and assignment of analog and ITSP trunks	
Central Telephony	Internet Telephony	
User Telephony	Edit Access parameters of the Internet Telephony Service Provider (ITSP), e.g., user account, password,	
Security	SIP station number	
UC Smart	Edit Phone Book / Speed Dialing Set up central speed-dial destinations for the system's internal phone book	
Circuit	Call Detail Recording	
Unified Directory	Edit Set up call detail recording connection parameters for call detail applications	
	Edit Music on Hold / Announcements Record new melodies and announcements for Music on Hold and announcement before answering	
	Edit Entrance telephone Set up call allocation and access authorization for the entrance telephone at the analog station connection	
	Editt SmartVM Set up SmartVM	

The overview page appears for entering the location data. The most flexible type of configuration is to enter the Country code only (suggestion for French market). If at a later stage extra DID numbers are added, which have a different local area, then the impact is minimal, since the local area code is part of the DID number of the user.

Setup - Wizards -	Central Telepho	ny - Internet Tele	phony				×
				Over	view		
Note: changes done Note: At least the c PABX number	e in expert mode n onfiguration of the	nust be reviewed/re 'Country code' is ne	peated after runni eeded for features	ng through the wizar such as 'Internet tel	r <mark>d.</mark> lephony' and 'MeetMe co	nference'.	
				Country code: 00	33	(mandatory)	
			I	Local area code: 0		(optional)	
				PABX number:		(optional)	
Help	Abort	Back	OK & Next				

Click [OK & Next].

Provider configuration and activation for Internet Telephony -> No call via Internet -> uncheck Use County specific view: France and select "Orange Business Services SIP trunking".

Setup - Wizards -	Central Telephony - Internet Te	lephony	×
	F	Provider configuration and activation for Internet Telephony	^
		No call via Internet:	
		Country specific view: France	
Note: changes dor	ne in expert mode must be reviewed	/repeated after running through the wizard.	
	Activate Provider	Internet Telephony Service Provider	
Add		Other Provider	
Edit		Acropolis	
Edit		Bouygues	
Edit		Broadcloud	
Edit		COLT UK & Europe	
Edit		COLT VPN	
Edit		Completel	
Edit		Hexatel	
Edit		MyStream	
Edit		OpenIP	
Edit		Orange Business Services SIP trunking	~
Help	Abort Back	OK & Next Display Status	

Activate Provider and click on [Edit].

On the next page, the IP address of the **Orange Nominal SBC** must be entered in the **Domain Name** field and in the **Provider Proxy** field (different for each customer and in our example, they would be 10.25.200.73 for both fields).

Setup - Wizards - Central Telephony - Internet Telephony	
Internet Telephon	y Service Provider
Provider Name:	Orange Business Services SIP trunking
Enable Provider:	
Secure Trunk:	
Domain Name:	please.enter.here
Provider Registrar	
Use Registrar:	
IP Address / Host name:	
Port:	5060
Reregistration Interval at Provider (sec)	600
Provider Proxy IP Address / Host name: Port:	please.enter.here
Provider Outbound Proxy Use Outbound Proxy:	
IP Address / Host name:	0.0.0.0
Port:	0
Help Abort Back OK & Next Delet	e Data

Click [OK & Next].

Setup - Wizards -	Central Telephony - Internet Telephony
	Internet Telephony Stations for Orange Business Services SIP trunking
	Name of Internet Telephony Station
Add	New Internet Telephony Station
Help	Abort Back OK & Next

In the next dialog the customer SIP user data will be configured.

Click on [Add].

The following fields need to be configured:

Internet telephony station: Default number: A **Unique name** is assigned here (e.g: a-SBC)

Main number of connection in international format. The default number is used as outgoing number when no DDI number is assigned to a station. (e.g: +33296082180). Usually the **Lead Number** is entered here.

Setup - Wizards - Central Telephony - Internet Telephony	
Internet Telephony Station for Ora	nge Business Services SIP trunking
Internet telephony station	a-SBC
Authorization name	
Password	
Confirm Password	
Call number assignment	
Use public number (DID)	~
ITSP-multiple route	:
Default Number	+33296082180
Default Number ITSP as primary CO access Enter one of the call numbers supplied by your network provider here. This will be used in or call. All call numbers supplied by your network provider are to be entered within the trunk and tel	tgoing calls as the calling party number in case no other number is available for the respective ephones configuration (DID field) primary CO access.
Help Abort Back OK & Next Det	ete Data

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

Setup - Wizards -	- Central Telephony - Internet Telephony
	Internet Telephony Stations for Orange Business Services SIP trunking
	Name of Internet Telephony Station
Edit	a-SBC
Help	Abort Back OK & Next

Click [OK & Next]

Setup - Wizards	Central Telepho	ony - Internet Tele	ephony			2
	Call Number Assignment for Orange Business Services SIP trunking					
Name of In	ternet Telephony	Station	Internet Telepho	ny Phone Number	Direct inward dialing	Use as PABX number for outgoing calls
In order to compl	ete the configurat	tion please verify	that the relevant us	ser DIDs are set in stati	ons.(Telephones / Subscriber	s configuration)
Help	Abort	Back	OK & Next			

Click [OK & Next] (no input needed)

Now you enter again the page "Provider configuration and activation for Internet Telephony"

If an **Orange Backup SBC IP** is available, a second trunk needs to be configured for supporting failover trunk functionality.

Setup - Wizards -	Central Telephony - Internet Tele		×
	Pr	rovider configuration and activation for Internet Telephony	^
		No call via Internet: 🛛	
		Country specific view: France	
Note: changes don	ie in expert mode must be reviewed/	repeated after running through the wizard.	
	Activate Provider	Internet Telephony Service Provider	
Add		Other Provider	
Edit		Acropolis	
Edit		Bouygues	
Edit		Broadcloud	
Edit		COLT UK & Europe	
Edit		COLT VPN	
Edit		Completel	
Edit		Hexatel	
Edit		MyStream	
Edit		OpenIP	
Edit	\checkmark	Orange Business Services SIP trunking	~
Help	Abort Back	OK & Next Display Status	

Click on [Add].

On the next page, select "Orange Business Services SIP trunking" as Base Template, provide a name (up to 10 characters) and enter the IP address of the **Orange Backup SBC** in the **Domain Name** field and in the **Provider Proxy** field (in our example 10.25.200.83).

Internet Telephor	ny Service Provider
Base Template	Orange Business Services SIP trunking - predefined 🗸
Provider Name	Orange-BAK
Enable Provider	
Secure Trunk	
Domain Name	please.enter.domain
Transport protocol	udp 🗸
Provider Registrar Use Registrar	
IP Address / Host name	
Port	5060
Reregistration Interval at Provider (sec	600
Provider Proxy IP Address / Host name	please.enter.here
Port	5060
Provider Outbound Proxy Use Outbound Proxy	
IP Address / Host name	0.0.0.0
Help Abort Back OK & Next De	lete Data

Click [OK & Next].

On the next page click on [Add] and enter the data for the Backup SBC SIP user.

The following fields needs to be configured:

Internet telephony station: Default number: A **Unique name** is assigned here (e.g: b-SBC) Please note that a number different form the one of the Nominal SBC User must be used (e.g: +33296082190).

Setup - Wizards - Central Telephony - Internet Telephony	
Internet Telephony Sta	tions for Orange-BAK
Internet telephony station:	b-SBC
Authorization name:	
Password:	
Confirm Password:	
Call number assignment	
Use public number (DID)	✓
ITSP-multiple route:	
Default Number:	+33296082190
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 call. All call numbers supplied by your network provider are to be entered within the trunk and telep	going calls as the calling party number in case no other number is available for the respective hones configuration (DID field) primary CO access.
Help Abort Back OK & Next Delet	e Data

Click [OK & Next] on this and the following pages and you will reach again the page "Provider configuration and activation for Internet Telephony":

Setup - Wizards -	tup - Wizards - Central Telephony - Internet Telephony				
	I	Provider configuration and activation for Internet Telephony			
		No call via Internet:			
		Country specific view: France			
Note: changes do	ne in expert mode must be reviewe	d/repeated after running through the wizard.	_		
	Activate Provider	Internet Telephony Service Provider			
Add		Other Provider			
Edit		Acropolis			
Edit		Bouygues			
Edit		Broadcloud			
Edit		COLT UK & Europe			
Edit		COLT VPN			
Edit		Completel			
Edit		Hexatel			
Edit		MyStream			
Edit		OpenIP			
Edit	\checkmark	Orange Business Services SIP trunking			
Edit	\checkmark	Orange-BAK	~		
Help	Abort Back	OK & Next Display Status			

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 Orange Business Services provider side.

Fill in the available bandwidth, and distribute the amount of SIP channels. The bandwidth does not need to be exact, it can also have a higher value.

Both Trunks "nominal" and "backup" must get the same amount of lines.

Setup - Wizards - Central Telephony - Internet Telephony			
Settings for Inte	rnet Telephony		
of your Internet connection comr	nunicated by your Provider.	You have typed in	
upstream allows you to conduct ous calls.	up to 60 Internet phone call	ls simultaneously. If t	he call quality deteriorates due to the
e licensing.			
Upstream up to (Kbps):	20000		
of Simultaneous Internet Calls:	16	Distribute Lines	
Configure	ed Lines		Assigned Lines
0		16	
0		16	
K & Next			
	Settings for Inte of your Internet connection comr upstream allows you to conduct ious calls. e licensing. Upstream up to (Kbps): of Simultaneous Internet Calls: Configure 0 0 0	Settings for Internet Telephony of your Internet connection communicated by your Provider. upstream allows you to conduct up to 60 Internet phone cal ous calls. e licensing. Upstream up to (Kbps): 20000 of Simultaneous Internet Calls: 16 Configured Lines 0 0 0 K & Next	Settings for Internet Telephony of your Internet connection communicated by your Provider. You have typed in upstream allows you to conduct up to 60 Internet phone calls simultaneously. If t ious calls. e licensing. Upstream up to (Kbps): 20000 of Simultaneous Internet Calls: 16 Distribute Lines Configured Lines 0 16 16 K & Next

Click [OK & Next]

Fill in the special numbers.

Setup - Wizards - Central Telephony - Internet Telephony				
	Special phone numbers	^		
Note:				
Emergency calls should always be built Please make sure that all special call n	t up with ISDN or Analog Trunk for safety reasons. umbers are supported by the selected provider without fail.			
Special phone number	Dialed digits	Dial over Provider		
1	0C15	Orange Business Services SIP trunking 🗸		
2	0C17	Orange Business Services SIP trunking V		
3	0C18	Orange Business Services SIP trunking V		
4	0C112	Orange Business Services SIP trunking 🗸		
5	0C115	Orange Business Services SIP trunking V		
6	0C119	Orange Business Services SIP trunking V		
7		Orange Business Services SIP trunking V		
8		Orange Business Services SIP trunking 🗸		
9		Orange Business Services SIP trunking V		
10		Orange Business Services SIP trunking V		
11		Orange Business Services SIP trunking 🗸		
12		Orange Business Services SIP trunking 🗸		
13		Orange Business Services SIP trunking 🗸		
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · ·		
Help Abort	Back OK & Next			

On next page status of ITSP is displayed.

Setup - Wizards - Central	Telephony - Internet Telephony				×
	Status for the	Internet Telepl	hony Service Provider	(ITSP)	
	Provider		U	lser	
Restart	Orange-BAK	Enabled	a-SBC	registered	Diagnose
Restart	Orange Business Services SIP trunking	Enabled	b-SBC	registered	Diagnose
Help Ab	ort Back Next				

Click [Next]

"Exchange Line Seizure":

Nominal SBC should be used with access code 0. If the local area code was not entered in first step PBX number (see "Internet Telephony" configuration), then there will be a field to enter the local area code (without prefix digits)

Setup - Wizards - Central Telephony - Internet Telephony
Exchange Line Seizure
Trunk Access Code 0
Dial over Provider Orange Business Services SIP trunking V
Area Code Please enter the local area code.
Local area code: 0 2
Help Abort Back OK & Next

Click [OK & Next]

Overview with all configured "Outside line Seizure" is displayed.

Setup - Wizards - Central Telephony - Internet Tel		
	Seizure Code for the 'Outside line	Seizure'
	Seizure code for 'Outside line Seizure'	
ISDN		You can optionally also assign a seizure code for an outline line seizure via ISDN. (Please refer to the configuration details in the online help.)
Orange Business Services SIP trunking	0	
Orange-BAK	856	
Help Abort Back	OK & Next	

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.

tation	IP Clients									
Station			Edit Subscriber				Device Info			
UP0 Stations										
▼IP Clients	Callno	DID	First Name	Last Name	Display	Туре	Clip/Lin	Active	Fax Callno	Fax DID
System Clients	Search:									
SIP Clients							-			
RASUser	2182	296082182]-	2182	SIP Client	▼.	· ·	-	
Deskshare User	2183	296082183].	2183	System Client	▼.	 ✓ 	2181	296082181
Analog Stations	•	-].].	No Port	 	-	-	-
ISDN Stations	-	-	-	-	-	No Port	* -	-	-	-
DECT Stations	-	-	-	-	-	No Port	.	-	-	-
IVM/EVM Ports	-			1.	1.	No Port	÷.	-		_
Virtual Stations	-	1.		1.	1.	No Port	• -	- ·		
UC Applications		1		1.	16	No Port	-			-i
Profiles/Templates						No Port		- 1		
DDI Extensions	-					No Polt	•••		-	
Mobility User						Νο Ροπ	• -			
Circuit User	·		-	-		No Port	•	_ •	-	
SfB User	-	-	-	-	-	No Port	• -		-	
Stations Overview	-	-	-	-	-	No Port	•		-	-
ey Programming	-	-	-	-	-	No Port	• -	-	-	-
	-		-]-].	No Port	▼.	-	-	-
		-].].	No Port	▼.	-	-	_ -
	-	-	-	-	-	No Port	* -	-	-	-
	-	-	-	1.	1-	No Port	•		-	
	-	1.			1.	No Port		— .		_
				1.		No Port		_		<u> </u>
	•				m	No r on				
	Page 1 of 20				A 1 1 1 1 1 1 1 1 1 1	6171819			lten	ns per page 10 25
	1 430 1 01 20									ie per page = =

Additional Configuration

Port management

To comply with the requirements of the Orange Business Services SIP trunk the EXT_SIP port **MUST** be configured with 5060 (default is 5070).

Expert mode - Telephony Server						
Basic Settings	Port Management					
▼System	1 ort management	Filt Clobal Det Management Settings				
System Flags						
Time Parameters	Protocol Name	Port Number	Port Type			
Display	CSP	8800	single			
DISA	HEA	4060	single			
Intercept/Attendant/Hotline		4000	single			
LDAP	HFA_EXT	4062	single			
lexts	HFA_TLS	4061	single			
Flexible menu	HFA_TLS_EXT	4063	single			
Service Codes	MEB_SIP	15060	single			
Gateway	RTP_MIN	29100	min. (ext. RTP-port range 30274-30529)			
DynDNS	SIP	5070	single			
Quality of Service	SIP EXT	5060	single			
Date and Time	SID TI S SUB	5062	single			
Port Management		5002	-tl-			
Call Charges	SIF_1E3_30B_EXT	5071	Single			
Voicemail / Announcement Player	SIPS	5061	single			
Phone Parameter Deployment	VSL_MULTISITE	8778	single			
Power Management						
	Apply Undo	Help				
	Apply Undo	Help				

The internal SIP port should be set to a different port (e.g. 5070). Having internal and external port with the same value is possible but may lead to significant security risks.

After the port(s) is changed OpenScape Business **MUST** be restarted.

Codec Parameters

To comply with the requirements of the Orange Business Services SIP trunk the following codec parameters **MUST** be changed:

- RFC 2833 payload type **MUST** be 101.
- RFC 2198 support **MUST** be disabled.
- G.729AB is **NOT** supported by ORANGE and **SHOULD** be disabled.

Expert mode - Telephony Server					×
Voice Gateway	Codec Parameters				
SIP Parameters	Edit Codes Desemblar				
ITSP Loc-ID Settings					
Codec Parameters	Codec	Priority	Voice Activity Detection	Frame Size	
Destination Codec Parameters	G 711 A-law	Priority 1 V			20 V msec
Internet Telephony Service Provider	0.744	P is 2 v			20 1 11300
Networking	G.711 µ-law	Priority 2 🗸	VAD: 🗆		20 V msec
SIPQ-Interconnection	G.729A	Priority 3 🗸	VAD:		20 🗸 msec
Native SIP Server Trunk	G.729AB	not used 🗸	VAD: 🗹		20 ∨ msec
	Enhanced DSP Channels		-		
		Use G.711 only			
	T.38 Fax				
		T.38 Fax:	\checkmark		
		Use FillBitRemoval:	\checkmark		
	Max. UDP Datagram Size for T.38 Fax (bytes): 1472				
	Error Correction	on Used for T.38 Fax (UDP)	t38UDPRedundancy V		
	Misc.				
		ClearChannel:		Frame Size: 20 🗸 msec	
	RFC2833				
	Transmission of Fax/wodem T	ones according to RFC2833:			
	Transmission of DTMF T	ones according to RFC2833:	\checkmark		
		Payload Type for RFC2833:	101		
	Redundant Transmission of RFC2833 T	ones according to RFC2198:			
	Apply Undo	Help			

SIP Parameters

To comply with the requirements of the Orange Business Services SIP trunk the following SIP parameter **SHOULD** be changed:

• Transaction Timeout **SHOULD** be modified from 32s (default value) to 5s.

Expert mode - Telephony Server	
Voice Gateway	SIP Parameters
SIP Parameters	Edit STP Parameters
ITSP Loc-ID Settings	
Codec Parameters	SIP Transport Protocol
Destination Codec Parameters	SIP via TCP: Yes
Internet Telephony Service Provider	SIP via UDP:
Networking	
SIPQ-Interconnection	SIP Via ILS. Tes
Native SIP Server Trunk	SIP Registrar
	Period of registration (sec): 120
	RFC 3261 Timer Values
	Transaction Timeout (msec): 5000
	SIP Session Timer
	RFC 4028 support: 🗹
	Session Expires (sec): 7101
	Minimal SE (sec): 90
	DNS Records
	Blocking time for unreachable destination(sec): 60
	Provider Calls
	Maximum possible Provider Calls: 16
	Apply Undo Help

License

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

U		nonize enterpri	ise				OpenScape Business Assis	tant
								Logoff
Home	Administrators	Setup	Expert mode	Data Backup	License Management	Service Center		
License M	lanagement							
License in	nformation	C	O Trunks					()
Addition	nal Products							
OpenSc	ape Personal Edition	The	access to central o	ffice via PRI(S2m/T	 trunks or via Internet teleph nees for SIP and PRI(S2m/T1 	ony is licensed by CO trunk license trunks: 48	es	
▼ Local U	ser licenses	SIP	trunks	Available licel		uunka. 40		
Overvie	2W			The configured r	number of simultaneous Interr	et calls		
IP User				ior each in	nemet relephony Service Pro	nderis. 16		
TDM Us	ier			cense number of sin	multaneous internet calls in th	shode. To		
Mobility	y User		License dema	nd for number of sin	multaneous Internet calls in thi	s node: 16 V		
Desksh	are User	PR	(S2M/11) Type Slot	Por	rt Eosturo	Domanda	used licenses	_
CO Trunk	S		Type Slot	FO	reature	Demanus	used incenses	
System Li	icenses							
▼License	Profiles							
Create	Profiles							
Assign	Profiles							
Registrat	ion							
Activate I	License Online							
Activate I	License File							
Settings								
			11					
			Abort	OK & Next				

LCR changes

For the SIP trunk failover functionality to work, additional configuration is required in LCR (LCR Overflow).

Expert mode - Telephony Server								×
LCR	Dial Plan							
LCR Flags	-	Change D	ial Plan	Display Dial Plan				
Classes Of Service								
Dial Plan	Dial Plan	Name	Dialed digits	Routing Table	Acc. code	Classes of service	Emergency	/
Routing table	16	Services	855CZ	$4 \lor \rightarrow$		✓		
Dial rule	17	National	855C0-Z	$28 \checkmark \rightarrow$		\checkmark		^
multisite	18	Local	855C1Z	$5 \lor \rightarrow$		\checkmark		
	19	Local	855CNZ	$5 \lor \rightarrow$		\checkmark		
	20	International	855C00-Z	$38 \lor \rightarrow$		\checkmark		
	21	Orange Business	0CZ	$4 \lor \rightarrow$		\checkmark		
	22	Orange Business	0C0-Z	$28 \lor \rightarrow$		\checkmark		
	23	Orange Business	0C1Z	$5 \lor \rightarrow$		\checkmark		
	24	Orange Business	OCNZ	$5 \lor \rightarrow$		\checkmark		
	25	Orange Business	0C00-Z	38 ∨ →		\checkmark		
	26	Orange-BAK	856CZ	$6 \lor \rightarrow$		\checkmark		
	27	Orange-BAK	856C0-Z	29 ∨ →		\checkmark		
	28	Orange-BAK	856C1Z	$7 \lor \rightarrow$		✓		
	29	Orange-BAK	856CNZ	$7 \lor \rightarrow$		\checkmark		
	30	Orange-BAK	856C00-Z	39 ∨ →		\checkmark		
	31	Appl-Suite	-296082186	$12 \checkmark \rightarrow$		\checkmark		
	32	Standard	88CZ	$1 \lor \rightarrow$		\checkmark		
	33	IP-Network	-Z	13 \checkmark \rightarrow				<u> </u>
	34	COInternat	0C00-33-7	$14 \lor \rightarrow$		\checkmark		
	Page 1 of 1	0	N 1 234	1516121819 🕨 🕅		Items per	page <u>10 25 50</u>	<u>100</u>
	Арр	ly Undo	Help					

Open each routing table (e.g. 4,5,28 and 38) of the primary SIP trunk (i.e. Orange Business Services SIP trunking) and configure the backup trunk as the second entry with the same dialing rules (i.e. Orange-BAK).

Expert mode - Telephony Server												×
LCR		Rout	ing Table									
LCR Flags					_	Change R	outing Ta	hle				
Classes Of Service							outing ru					
Dial Plan						Pout	na Tabla	• 4	on bl	ac conding		
						Rout	ing rable	.4	en-bi	oc seriality		\sim
1 - Table			Dedicated							Dedicated	GW Node	5
2 - Table		Inde	Route	Koute		Dial Kule		min. COS	Warning	Gateway	ID	
3 - Table	-1	1		Orange Bus	~	Add_cc_to_Can 🗸	\rightarrow	15 🗸	None 🗸	No 🗸		
4 - Table	-	2		Orange-BAK	~	Add cc to Can 🗸	i→	15 🗸	Display V	No 🗸		
5 - Table		3		None	V	None V	1	15 🗙	None	No		
7 - Table		ľ.		INDIRE	•	•	1	15 +		110 +		
8 - Table		4		None	~	None V		15 🗸	None V	No 🗸		
9 - Table		5		None	~	None 🗸]	15 🗸	None 🗸	No 🗸		
10 - Table		6		None	~	None 🗸]	15 🗸	None 🗸	No 🗸		
11 - Table		7		None	~	None 🗸	1	15 🗸	None 🗸	No 🗸		
12 - Table		8		None	~	None 🗸	i	15 🗸	None 🗸	No 🗸		
13 - Table		0	_	Nene		Nene	1	15 14	Nene	No. M		
14 - Table		9		None	~	None 🗸]	15 🗸	None 🗸	NO V		
15 - Table		10		None	~	None 🗸		15 🗸	None 🗸	No 🗸		
16 - Table		11		None	~	None 🗸]	15 🗸	None 🗸	No 🗸		
17 - Table		12		None	~	None 🗸	1	15 🗸	None 🗸	No 🗸		
19 - Table		13		None	~	None	ĺ	15 🗸	None 🗸	No 🗸		
20 - Table		14		Nono	~	Nono	1	15 ×	Nono	No		
21 - Table				INDIRE	•	None +	J	15 🗸	None +	110 +		
22 - Table		15		None	~	None V	1	15 🗸	None V	No V		~
23 - Table		16		None	~	None 🗸		15 🗸	None 🗸	No 🗸		
24 - Table			Annh	Unde	1	Hale						
25 - Table	\sim		Арріу	Undo		πειρ						

Repeat for all routing tables (e.g. 4,5,28 and 38). The "Display" value above is optional and serves to notify the user on the phone that the call goes through the backup interface.

Dial rules:

Expert mode - Telephony Server									
LCR	Dial Rule								
LCR Flags	Change Dial Rule								
Classes Of Service									
Dial Plan	Rule Name	Dial rule format	Network access	Туре					
Piol rule	1 CO	A	Main network supplie V	Unknown 🗸					
Multisite	2 SIP	A	Main network supplie V	Unknown 🗸					
	3 SIP local	HE2A	Main network supplie V	Unknown					
	4 MEB	E1A	Corporate Network V	PABX number V					
	5 IP-Network	A	Corporate Network V	Unknown 🗸					
	6 Multi-Location	BA	Corporate Network V	Unknown 🗸					
	7 Gateway call	E1A	Corporate Network V	Unknown 🗸					
	8 COInternat	D0E4A	Main network supplie V	Unknown 🗸					
	9 Add_cc_to_Canoni	D33E2A	Main network supplie V	Country code V					
	10 National_to_Cano	D33E3A	Main network supplie V	Country code V					
	11 Internatto_Can	E3A	Main network supplie V	Country code V					
	12 SIP local_Canoni	HE2A	Main network supplie V	Country code V					
	13 Emergency-Custom	A	Main network supplie V	Unknown					
	14		Unknown 🗸	Unknown 🗸					
	15		Unknown 🗸	Unknown 🗸					
	16		Unknown 🗸	Unknown 🗸					
	17		Unknown 🗸	Unknown 🗸					
	18		Unknown 🗸	Unknown 🗸					
	19		Unknown	Unknown					
	Page 1 of 11	A 1 2 3	3 4 5 6 7 8 9 🕨 🕅	Items per page <u>10 25 50 100</u>					
	Apply Undo	Help							

Route configuration (optional)

The route configuration will be created automatically. It should look like below.

Best practice is to enter the default Access Code in the field "Seizure code", enter the Country code for the PABX number-incoming and select Location number.

Expert mode - Telephony Server					×
Trunks/Routing	Route				
Trunks	Change Poute	Change Pouting Parameters		Special Parameter change	
▼Route	Change Route	Change Routing Parameters		Special Parameter change	
ISDN		Route Name:	Orange Bus	1	
Trk Grp. 2		Notice Name.	orange bus	-	
Trk Grp. 3		Seizure code:	0		
Trk Grp. 4		CO code (2nd trunk code):]	
Trk Grp. 5		,]	-
Trk Grp. 6	Gateway Location				
Trk Grp. 7		Country code:	33		
UC Suite		Local area code:			
Trk Grp. 9		PABX number			
Trk Grp. 10		TADA Indiliber.			-
Trk Grp. 11	PABX number-incoming				
Orange-BAK		Country code:	33		
Orange Bus		Local area code:]	
Trk Grp. 14					
Trk Grp. 15		PABX number:			
Networking		Location number:	\checkmark		
QSIG-Feature	DARX surplus sutasing		_		
MSN assign	PABA number-outgoing			1	
ISDN Parameters		Country code:			
		Local area code:]	
		PABX number:]	
		Suppress station number:			
	Overflow route				
		Overflow route :	None V		~
	Apply Und	lo Help			

Note: Trk Grp. is automatically chosen by the OpenScape Business ITSP wizard. Likewise, for the failover route.

Expert mode - Telephony Server					×
Trunks/Routing	Route				
Trunks	Change Route	Change Routing Parameters		Special Parameter change	
▼Route		change rooding raranteers		Special Fordifictor change	
ISDN		Route Name:	Orange-BAK		
Trk Grp. 2			orango brat		
Trk Grp. 3		Seizure code:	856		
Trk Grp. 4		CO code (2nd trunk code):			
Trk Grp. 5		,		1	- 11
Trk Grp. 6	Galeway Location				
Trk Grp. 7		Country code:	33		
UC Suite		Local area code:			
Trk Grp. 9		PABX number			
Trk Grp. 10		TABA Namber.			-11
Trk Grp. 11	PADA number-incoming			1	
Orange-BAK		Country code:	33		
Orange Bus		Local area code:			
Trk Grp. 14		DADY I			
Networking		PABX number:			
		Location number:			
Q SIG-I Eature	PABX number-outgoing				
ISDN Darametere		Country codo:		1	
13DN Parameters		Country code.			
		Local area code:			
		PABX number:			
		Commence station more harm			
		Suppress station number:			
	Overflow route				
		Overflow route :	None 🗸		~
	Apply Und	lo Help			

The route parameters:

Trunks/Routing	Route				
Trunks	Change Route	Change Routing Parameter	'5	Special Parameter change	
Route	Routing flags				
Trk Gro. 2	Routing nags	Digit repetition on:			
Trk Grp. 3		Digit repetition on.			
Trk Grp. 4	Anal	ysis of second dial tone / Trunk monitoring:	\checkmark		
Trk Grp. 5		Intercept per direction:			
Trk Grp. 6		Over enviro 2.4 kHz evulier			
Trk Grp. 7		Over. service 3.1 KHZ audio:	×		
UC Suite		Add direction prefix incoming:	\checkmark		
Trk Grp. 9		Add direction prefix outgoing			
Trk Grp. 10			_		
Trk Grp. 11		Call No. with international / national prefix:			
Orange-BAK		Ringback tone to CO:			
Orange Bus		Name in CO:			
Trk Grp. 14					
Trk Grp. 15		Segmentation:	yes 🗸		
Networking		deactivate UUS per route:			
QSIG-Feature			_		
MSN assign		Always use DSP:			
ISDN Parameters					
		Analog trunk seizure:	no pause 🗸		
		Trunk call pause:	Pause 6 s 🗸		
		- · ·			
		Type of seizure:	linear 🗸		
		Route type: CO V No. and type. outgoing: Country code V			

These settings are shown as reference. The OpenScape Business ITSP wizard will set all these parameters to the correct values, no manual intervention is needed here.

Usage of Orange Network Access device

Please note that the network topology provided in the current paragraph is a generic one for the most common Orange customer environments. There are more networking options available to fit the specific Orange customer needs. More information is provided at Orange FR website.



The OpenScape Business is connected via the LAN, to a Network Access device delivered to the customer as standard by Orange Business Services. This device will be added in the same subnet as the OpenScape Business subnet. The IP address of the device can be adapted by Orange, so that the Network Access device can be added in an existing voice VLAN of the OpenScape Business.

Inside this subnet, there is a default gateway. The SIP and RTP traffic to the Orange Business Services provider however needs to be routed via the Network Access device, all other traffic from OpenScape Business needs to be routed to the standard default gateway inside the subnet.

To be able to route the SIP/RTP traffic for Orange via the Network Access device, you do need to add a static route in the OpenScape Business. The static route is added for the Orange Business Services target IP address, with as gateway the IP address of the Network Access device.

To do so, go to the Expert Mode -> Routing

The default gateway needs to be configured with the address of the internet router.

Expert mode - Telephony Server	
Routing	Default Router
▼IP Routing	Edit Default Router
▼Mainboard	
Static Routes	Default Routing via: LAN
Default Router	
DNS Server	IP Address of Default Router: 10.8.150.1
Application Board	
NAT	
PSTN	
	Apply Undo Help

Traffic to the Orange SBCs e.g. 10.25.200.73 (nominal), 10.25.200.83 (backup) needs to be routed via the Network Access device.

To be on the safe side a route to a Class C subnet should be added -> 10.25.200.0 with mask 255.255.255.0.

Expert mode - Telephony Server		
Routing	Static Poutes	
▼IP Routing	Diseley Gabis Davis Table	add Clattic Davida
Mainboard	Display Static Route Table	Aud Static Route
Static Routes	Deute le deux	
Default Router	Route index.	I
DNS Server	Route Name:	ToOrange
▼Application Board		
▼Static Routes	Destination Network/Host:	10.25.200.0
Default Router	Subnet Mask:	255,255,255,0
NAT		
PSTN	Route Gateway:	<ip_gw_netaccess></ip_gw_netaccess>
	Apply Undo Help	

For an OpenScape Business S system the static routing configuration takes place in Linux O/S with using YAST or CLI.