OpenScape Business V2



How to Configure SIP Trunk for IP Directions France

Open Scape Business V2 – How To: Configure SIP Trunk for IP Directions - France

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Table of History

Date	Version	Changes
09.07.2019	1.0	First version for V2R7

Trunk Configuration Data provided by IP Directions

You receive two e-mails with relevant information to confiugre the SIP trunk.

The first mail providing information about

- your public IP
- the amount of simultanous calls
- main callnumbers
- server IP

Madame, Monsieur,
Vous trouverez ci-après les paramètres de l'interconnexion SIP que vous avez commandée :
NOM: UNIFY_3
Interfaces:
IP : 85.119.57.79:5060 (UDP), PRIORITE 100 : Nombre maximum de communications simultanées : 4 : <u>Codecs</u> : G729a, PCMA (G711a), PCMU (G711u), G723 : Fax : T38, Fallback PCMA (G711a) : Voice Activity Detection automatic. : Temps d'étalonnage (<u>Ptime</u>) : 20ms : Numérotation : + et Indicatif Pays (CC) et Numéro National (NSN : sans le 0 initial)
Numéro de Désignation de l'Installation : 09702681
Serveur:
IP:128.140.150.200 (Public)
Documentation: https://extranet.ipdirections.net/online/Documentation/Aide/Specifications%20dinteroperabil ite%20passerelles%20SIP.pdf
Cordialement,
Service Production production@ipdirections.net
IP Directions 0811097402 Service 0.15 (/ appel • prix appel

The second mail providing information about all callnumbers assigned to your trunk:

Madame, Monsieur,	
Vous trouverez ci-apr	ès les ressources de numérotation avez commandées pour votre client UNIFY :
Commande: 35879 , Ti	cket: 44735
Ressource de numéro	tation pour le client final: ' UNIFY ' à BEZONS (95870)
Prévue: 15/01/2019 00	:00:00
1 tranches, 3 SDA	
NDI: 0970268120 (1 tro	nches / 3 SDA): residentiel
09702681. 09702681.	(3)
Commentaire:	
Ces ressources seront	activées dans les 24 heures.
Cordialement,	
	Service Production
(\cdot)	production@ipdirections.net
IP Directions	0811097402 Service 0,15 (/ appel + prix appel

Network configuration

IP Directions allows SIP traffic from the public IP of your network only. Appropriate configuration of the router is necessary.

The following (simplified) network topology is used for the configuration in this document.



Configuration Wizard

Internet Telephony

Go to Central Telephony – "Internet Telephony"

	nize terprise	OpenScape Business Assistant
		administrator@system Logoft
Home Administrators S	etup Expert mode Data Backup License Management Service Center	
Setup		
✓ Wizards	Central Telephony	۷
Basic Installation Network / Internet Talanhonas / Subscribers	Edit CO Trunk ISDN / Analog / ITSP Point-to-multipoint connections (MSN) and PABX number for ISDN connections, and assignment of analog and ITSP trunks	
Central Telephony	Edit Internet Telephony Access parameters of the Internet Telephony Service Provider (ITSP), e.g., user account, password, SIP station number	
User Telephony Security	Edit Voicemail Access numbers for integrated voicemail. Set up of voicemail boxes	
UC Suite Circuit	Edit Phone Book / Speed Dialing 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	
	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	

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

Setup - Wizards - Central Telephony - Internet Telephony					
Overview					
Note: changes done Note: At least the co	e in expert mode m onfiguration of the	ust be reviewed/re	peated after running throug eeded for features such as '	<mark>n the wizard</mark> . nternet telephony' and 'Me	etMe conference'.
PABX number					
			Country code: 00	33	(mandatory)
			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 "IP Directions".

Setup - Wizards -	Central Telephony - Internet Tele	phony D
	_	
	F	rovider configuration and activation for Internet Telephony
		No call via Internet:
		Country specific view: France
Note: changes dor	ne in expert mode must be reviewed/r	epeated after running through the wizard.
	Activate Provider	Internet Telephony Service Provider
Add		Other Provider
Edit		Acropolis
Edit		Bouygues
Edit		Broadcloud
Edit		BT Wholesale SIP Trunking (WSIPT)
Edit		COLT UK & Europe
Edit		COLT VPN
Edit		Completel
Edit		gnTel
Edit		Hexatel
Edit		IP Directions
Edit		MyStream
Edit		mytel
Edit		Nexphone AG -
Help	Abort Back	OK & Next Display Status

Activate	Provider	and	click on	[Edit]
----------	----------	-----	----------	--------

On the next page the server addresses are shown. All values are preconfigured, nothing has to be entered on this page:

Setup - Wizards - Central Telephony - Internet Telephony	×
Internet Telephon	y Service Provider
Provider Name:	IP Directions
Enable Provider:	$\mathbf{\nabla}$
Secure Trunk:	
Domain Name:	sip3.IPDirections.Net
Provider Registrar	
Use Registrar:	
IP Address / Host name:	
Port:	5060
Reregistration Interval at Provider (sec)	600
Provider Proxy	
IP Address / Host name:	sip3.IPDirections.Net
Port:	5060
Provider Outbound Proxy	
IP Address / Host name:	
In Audress / Host Hallie.	0
Port	h
Help Abort Back OK & Next	Delete Data

If no DNS server is accessible replace **sip3.ipdirections.net** by **128.140.150.200** Click [OK & Next]. In the next dialog the SIP User will be created:

Setup - Wizards ·	Central Telephony - Internet Telephony
	Internet Telephony Stations for IP Directions
	Name of Internet Telephony Station
Add	New Internet Telephony Station

Click on [Add].

Please enter the following data:

Internet telephony station:	a unique string representing the user (e.g. the NDI Number)
Default number:	Main number of connection must be entered here in international
	E.164 format (+33). Usually the NDI is entered here.

etup - Wizards - Central Telephony - Internet Telephony
Internet Telephony Station for IP Directions
Internet telephony station: 0970268120
Authorization name:
Password:
Confirm Password:
Call number assignment
Use public number (DID)
ITSP-multiple route:
Default Number: +33970268120
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.
Help Abort Back OK & Next Delete Data

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

Setup - Wizards -	Central Telephony - Internet Telephony
	Internet Telephony Stations for IP Directions
	Name of Internet Telephony Station
Edit	0970268120
Help	Abort Back OK & Next



Setup - Wizards - Central Telephony - Internet Telephony							
Call Number Assignment for IP Directions							
Name of Internet Telephony Station Internet Telephony Phone Number Direct in	nward dialing Use as PABX number for outgoing calls						
n order to complete the configuration please verify that the relevant user DIDs are set in stations.(Telephones / Subscribers configuration)							
Help Abort Back OK & Next							



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You will return to the overview page

Setup - Wizards -	etup - Wizards - Central Telephony - Internet Telephony								
	Provider configuration and activation for Internet Telephony								
	No call via Internet: 📃								
Country specific view: France									
Note: changes dor	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		Acropolis							
Edit		Bouygues							
Edit		Broadcloud							
Edit		BT Wholesale SIP Trunking (WSIPT)							
Edit		COLT UK & Europe							
Edit		COLT VPN							
Edit		Completel							
Edit		gnTel							
Edit		Hexatel							
Edit		IP Directions							
Edit		MyStream ·							
Help	Abort Back	OK & Next Display Status							

Click [OK & Next]

Define bandwidth (# Trunks)

The amount of simultaneous Internet calls (Assigned Lines) must be aligned with the Number of Channels assigned by IP Directions.

Setup - Wizards -	Central Telepho	ny - Internet Telej	phony			×		
	Settings for Internet Telephony							
Simultaneous Inte Available Lines fo	Simultaneous Internet Calls Available Lines for ITSP: 242							
Please enter in fie Upstream up to (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) = 25000							
In the 'Change Fe due to the network	In the 'Change Feature> Internet Telephony' Assistant. This upstream allows you to conduct up to 60 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 sin	nultaneous Internet	Calls also depends	s on the licensing.					
			Upstream up to (Kbps): 25000				
		Number of S	Simultaneous Internet Call	s: <mark>4</mark>	Distribute Lines			
Line assignment								
Internet T	elephony Servic	e Provider	Config	ured Lines	Ass	igned Lines		
IP Directions				0	4			
li - la		Deat						
Help	Abort	Back	OK & Next					

Click [OK & Next]

Special phone numbers

In this dialog it is possible to route special phone numbers (add 114, 191, 196, 197, 116000, 116117 and 116111 if needed).

	Special phone numbers	
e make sure that all special call numbers a	are supported by the selected provider without fail	
Special phone number	Dialed digits	Dial over Provider
1	0C15	IP Directions V
2	0C17	IP Directions ▼
3	0C18	IP Directions ▼
4	0C112	IP Directions ▼
5	00115	IP Directions ▼
5 7	ucita	IP Directions V
8		IP Directions V
9		IP Directions V
10		ID Directions =
- Wizards - Central Telephony - Intern	et Telephony Special phone numbers	
- Wizards - Central Telephony - Intern e make sure that all special call numbers a	et Telephony Special phone numbers are supported by the selected provider without fail.	
• Wizards - Central Telephony - Intern e make sure that all special call numbers a Special phone number	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits	Dial over Provider
• Wizards - Central Telephony - Intern e make sure that all special call numbers a Special phone number 1	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits OC15	Dial over Provider IP Directions •
Wizards - Central Telephony - Intern e make sure that all special call numbers a Special phone number 1 2	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C17	Dial over Provider IP Directions ▼ IP Directions ▼
Wizards - Central Telephony - Intern e make sure that all special call numbers a Special phone number 1 2 3	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C17 0C18	Dial over Provider P Directions V P Directions V P Directions V
• Wizards - Central Telephony - Intern e make sure that all special call numbers a Special phone number 1 2 3 4	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits OC15 OC17 OC18 OC112 OC112 OC15 OC15 OC15 OC15 OC15 OC15 OC15 OC15	Dial over Provider IP Directions V IP Directions V IP Directions V IP Directions V IP Directions V
Wizards - Central Telephony - Intern e make sure that all special call numbers a Special phone number 1 2 3 4 5	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C17 0C18 0C112 0C115 0C115 0C115 0C115 0C110 0C115 0C110 0C1	Dial over Provider IP Directions ▼ IP Directions ▼ IP Directions ▼ IP Directions ▼ IP Directions ▼ IP Directions ▼
e make sure that all special call numbers a Special phone number 1 2 3 4 5 6 7	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C17 0C18 0C112 0C115 0C115 0C119 0C114	Dial over Provider IP Directions ▼ IP Directions ▼ IP Directions ▼ IP Directions ▼ IP Directions ▼ IP Directions ▼ IP Directions ▼
e make sure that all special call numbers a Special phone number 1 2 3 4 5 6 7 8	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C17 0C18 0C112 0C115 0C115 0C114 0 0C114 0 0C114 0 0 0 0 0 0 0 0 0	Dial over Provider IP Directions • IP Directions •
e make sure that all special call numbers a Special phone number 1 2 3 4 5 6 7 8 9	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C15 0C17 0C18 0C112 0C115 0C116 0C114 0C19 0C114 0C196 0C19 0C196 0C19 0C19 0C19 0C19 0C19 0C19 0C19 0C19	Dial over Provider IP Directions • IP Directions •
e make sure that all special call numbers a special phone number 1 2 3 4 5 6 7 8 9 10	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C15 0C17 0C18 0C112 0C115 0C119 0C114 0C19 0C114 0C191 0C196 0C197 0C197	Dial over Provider IP Directions • IP Directions •
e make sure that all special call numbers a special phone number 1 2 3 4 5 6 7 8 9 10 11	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C17 0C18 0C112 0C115 0C115 0C119 0C114 0C190 0C114 0C190	Dial over Provider IP Directions • IP Directions •
e wizards - Central Telephony - Internet e make sure that all special call numbers a Special phone number 1 2 3 4 5 6 7 8 9 10 11 12	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C17 0C18 0C112 0C112 0C115 0C119 0C114 0C191 0C114 0C19 0C19 0C114 0C19 0C19 0C19 0C19 0C19 0C19 0C19 0C19	Dial over Provider IP Directions ▼ IP Directions ▼
e Wizards - Central Telephony - Intern e make sure that all special call numbers a Special phone number 1 2 3 4 5 6 7 8 9 10 11 12 13	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits 0C15 0C17 0C18 0C112 0C112 0C115 0C119 0C114 0C191 0C114 0C191 0C114 0C191 0C114 0C191 0C116 0C19 0C11 0C19 0C11 0C19 0C11 0C1 0C19 0C1 0C1 0C19 0C1	Dial over Provider IP Directions • IP Directions •
e Wizards - Central Telephony - Intern e make sure that all special call numbers a Special phone number 1 2 3 4 5 6 7 8 9 10 11 12 13 14	et Telephony Special phone numbers are supported by the selected provider without fail. Dialed digits OC15 OC17 OC18 OC112 OC116 OC115 OC119 OC114 OC191 OC114 OC191 OC114 OC191 OC114 OC191 OC116 OC191 OC116 OC190 OC190 OC116 OC190 OC116 OC190	Dial over Provider IP Directions • IP Directions •

Click [OK & Next]

On next page status of ITSP is displayed.

Setup - Wizards - Central Telephony - Internet	etup - Wizards - Central Telephony - Internet Telephony								
Status for the Internet Telephony Service Provider (ITSP)									
Pro	vider		User						
Restart IP Directions	Enabled	0970268120	registered	Diagnose					
Help Abort Back	Next								

Click [Next]

"Exchange Line Seizure":

Select which trunk will access code 0 and enter your area code

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Setup - Wizards - Central Telephony - Internet Telephony	×
Exchange Line Seizure	
Exchange Line Seizure Trunk Access Code 0	
Dial over Provider IP Directions	
Area Code Please enter the local area code.	
Local area code: 0 <mark>9</mark>	
Help Abort Back OK & Next	

Click [OK & Next]

Overview with all configured "Outside fille Seizure" are displayed.	Overview with	all	configured	"Outside	line	Seizure"	are display	ed.
---	---------------	-----	------------	----------	------	----------	-------------	-----

etup - Wizards - Central Telephony - Internet Telephony						
	Seizure Code for the 'Outside line Seizure'					
	Seizure code for 'Outside line Seizure'					
IP Directions	855					
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.

Set	up - Wizards - Tele	ephones / Subscribe	rs - IP Telephones						×
			Se	elect a station -L	AN Phones/WLA	N Phones			
	Take DID from cha	nged call number							
	Callno	First Name	Last Name	Display	DID	Туре	Fax Callno	Fax DID	
۹									
1	100	-	-	-	-	No Port 🔻	-	-	
	101	Alice	-	Alice	970268121	System Client •	-	-	
	102	Bob	-	Bob	970268122	System Client •	-	-	
	103	-	-	-	-	No Port 🔹	-	-	
	104	-	-	-	-	No Port 🔹	-	-	
	105	-	-	-	-	No Port 🔹	-	-	-
									۱.
Pag	ge 1 of 81								

Mandatory configuration in Expert Mode

The following setting must be checked and changed

- SIP port configuration
- T.38 must be disabled in system

Port management

IP Directions allows traffic from the public port 5060 only. As OpenScape Business has port 5070 as default for internet connections you must either

- Configure appropriate port forwarding in your router (internal 5070 to external 5060)
- Change the default port in OpenScape Business
 Go to Expert Mode → Telephony Server → Port Management
 Change EXT_SIP port to 5060 (default is 5070).

Basic Settings	Port Management		
System	-	Edit Global Port Management Settings	
System Flags			
Time Parameters	Protocol Name	Port Number	Port Type
Display	CSP	8800	single
Intercent/Attendant/Hotline	HFA	4060	single
IDAP	HEA EXT	4062	single
Texts	HEA TIS	4061	single
Flexible menu		4001	single
Speed Dials	HFA_ILS_EXI	4065	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	SIP TLS SUB	5062	single
Port Management	SIP TI S SUB EXT	5071	single
Call Charges	SIDE	5061	single
Voicemail / Announcement Player		9770	single
Phone Parameter Deployment	VSL_MOLTISITE	8//8	single
Power Management	_		
	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 ports are changed OSBiz **MUST** be restarted.

Codec Parameters

Go to Expert Mode \rightarrow Telephony Server \rightarrow Voice Gateway \rightarrow Codec Parameters

Due to T.38 interoperability issues Fax is supported via G.711 only. For this reason you MUST disable T38 protocol.

Expert mode - Telephony Server							
Voice Gateway	Codec Parameters						
SIP Parameters	Edit Coder Parameters						
ITSP Loc-ID Settings		Luit Couct Parameters					
Codec Parameters	Codec	Priority	Voice Activity Detection	Frame Size			
Destination Codec Parameters	C 711 A Jaw	Priority 1 V			20 10 maga		
Internet Telephony Service Provider	G./TITA-law		VAD.		ZU V Insec		
Networking	G.711 µ-law	Priority 2 🗸	VAD:		20 🗸 msec		
SIPQ-Interconnection	G.729A	Priority 4 🗸	VAD:		20 🗸 msec		
Native SIP Server Trunk	G 7294B	Priority 3 V					
	Enhanced DSB Channels	Thomas 3	VAD. E		ZU Insec		
	Emanced DSF Chamlers	Use G.711 only					
	T.38 Fax						
		T.38 Fax:					
		Use FillBitRemoval:	¥				
	May LIDP Dat	agram Size for T 29 Eav (butes):	4.472				
	Max. ODF Dat	agrani Size for 1.50 r ax (bytes).	1472				
	Error Cor	rection Used for T.38 Fax (UDP)	t38UDPRedundancy 🔽				
	T.30 Fax						
		Enable ECM:	\checkmark				
	Misc.						
		ClearChannel:	\checkmark	Frame Size: 20 🗸 msec			
	RFC2833						
	Transmission of Fax/Mode	em Tones according to RFC2833:					
	Transmission of DTM	/IF Tones according to RFC2833:					
		Payload Type for RFC2833:	98				
	Redundant Transmission of RFC28	33 Tones according to RFC2198:					
	Apply Undo Help						

Known limitations and restrictions

T.38 MUST be deactivated in the OpenScape Business system Due to interoperability issues UC-Fax is not released with IP-Directions

Additional Configuration

License

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

Home Administrators	Setup Expert mod	e Data Backup	License Managem	ent Service Cen	ter
License Management					
License information	CO Trunks				
Additional Products					
OpenScape Personal Edition	The access to centra	l office via PRI(S2m/T1)) trunks or via Internet telep	hony is licensed by CC) trunk licenses
▼Local User licenses		Availa	ble licenses for SIP and Pl	RI(S2m/T1) trunks: 32	
Overview	SIP trunks				
IP User		The con fo	figured number of simultan r each Internet Telephony S	eous Internet calls Service Provider is: 10	
TDM User		License numb	er of simultaneous Internet	calls in this node: 10	
Mobility User	Lie			celle in this works.	10
Deskshare User		ense demand for numb	er of simultaneous internet	calls in this node:	
CO Trunks	PRI (S2M/T1) Ty	pe Slot	Port	Feature	Demands
		-			