

OpenScape Business V2

How to Configure SIP Trunk for Voiceworks MEX

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Table of History

Date	Version	Changes
11.04.2017	0.1	First version
26.06.2017	0.2	Delete the expert mode paragraph

Information

Trunk Configuration Data provided by Voiceworks MEX

The configuration data needed to setup the SIP trunk can be found on the Voiceworks Operator Web Portal under Voiceconnect:

ALGEMEEN

KANAALNAAM	27875vc01
WACHTWOORD	*****
AFZENDERNUMMER	0267600097
NETNUMMER	026
CALL-LIMIT	2
LAND	The Netherlands

STATUS

USERAGENT	OpenScape Business M5T SIP Stack/4.2.12.14
HOST	89.184.187.124:5080
PEER	89.184.168.162:37956
CONTACTPERSOON	192.168.66.2

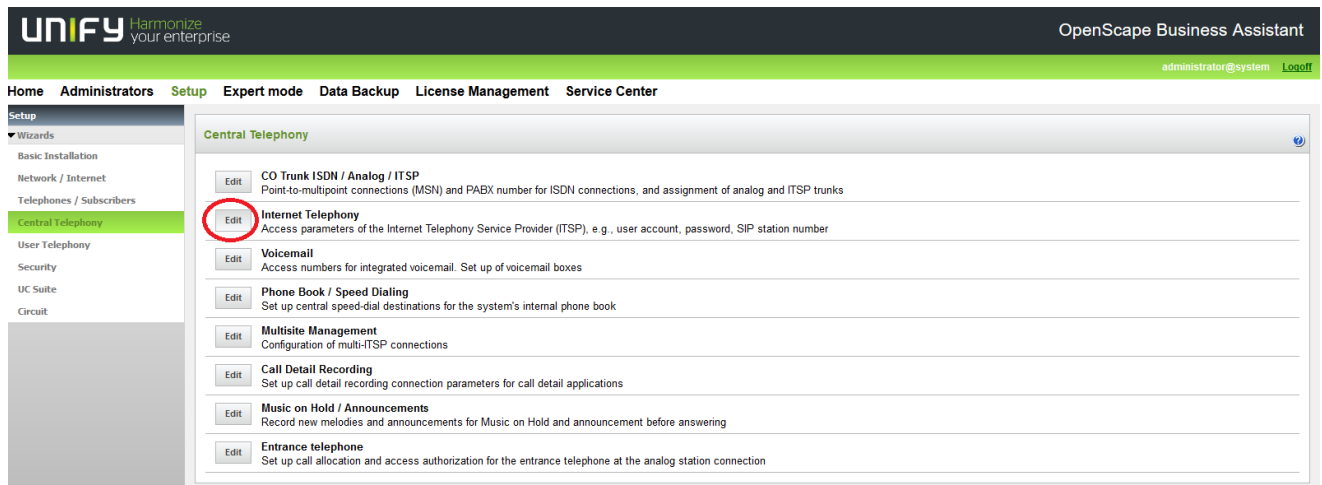
VOICE CONNECT

DTMF	rfc2833
G729 CODEC	Nee
T38 CODEC	Nee
DOORSCHAKELFACILITEITEN	Nee
REMOTE-PARTY-ID	Nee
PROGRESS INBAND	Nee
CALLERID IN DISPLAYNAME HEADER	Ja
CLIP METHODE	Dynamisch in From header
CLIP LENGTE	10-cijferig
CLIP DENY	Nee
DID LENGTE	9-cijferig
DID IN TO HEADER	Ja
DID IN URI HEADER	Nee
PING	SIP options ping

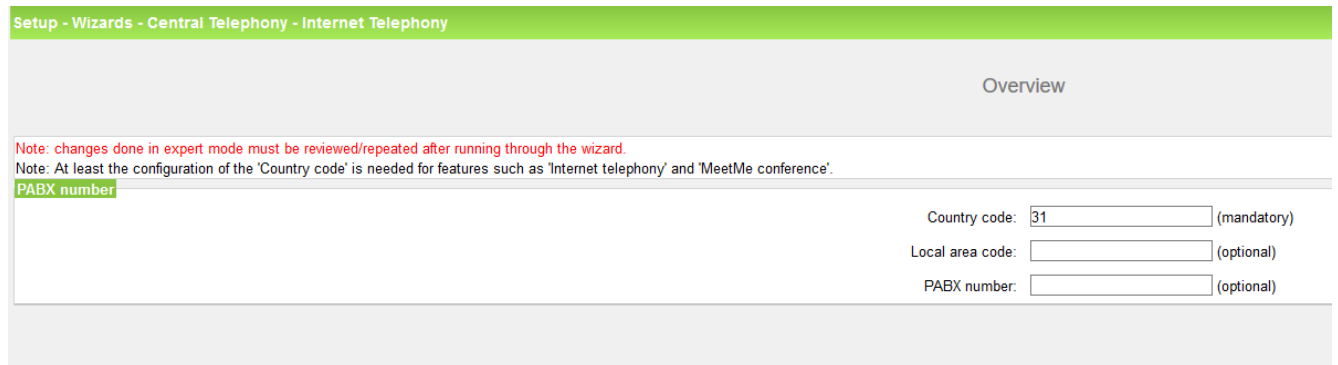
Configuration Wizard

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: Netherlands and select "VoiceworksMEX".

Setup - Wizards - Central Telephony - Internet Telephony

Provider configuration and activation for Internet Teleph

No call via Internet:

Country specific view:

Note: changes done in expert mode must be reviewed/repeated after running through the wizard.

Activate Provider		
Add		Other Provider
Edit	<input type="checkbox"/>	BCOM
Edit	<input type="checkbox"/>	BLU
Edit	<input type="checkbox"/>	COLT UK & Europe
Edit	<input type="checkbox"/>	COLT VPN
Edit	<input type="checkbox"/>	Deanconnect B.V.
Edit	<input type="checkbox"/>	Infopact
Edit	<input type="checkbox"/>	KPN
Edit	<input type="checkbox"/>	Motto Communications
Edit	<input type="checkbox"/>	oneCentral
Edit	<input type="checkbox"/>	OneXS
Edit	<input type="checkbox"/>	Priority Telecom
Edit	<input type="checkbox"/>	RoutIT
Edit	<input type="checkbox"/>	Signet B.V.
Edit	<input type="checkbox"/>	Skype Connect
Edit	<input type="checkbox"/>	SpeakUp
Edit	<input type="checkbox"/>	Tele2 NL-ASD
Edit	<input type="checkbox"/>	Tele2 NL-RT
Edit	<input type="checkbox"/>	T-Mobile (NL)
Edit	<input type="checkbox"/>	Verizon
Edit	<input type="checkbox"/>	Vodafone Anlagenanschluss R3
Edit	<input type="checkbox"/>	Vodafone NL
Edit	<input type="checkbox"/>	Voiceworks
Edit	<input checked="" type="checkbox"/>	VoiceworksMEX
Edit	<input type="checkbox"/>	X2COM
Edit	<input type="checkbox"/>	Ziggo

Activate Provider and click on [Edit].

On the next page you can activate the ITSP.

Click [OK & Next].

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

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Stations for VoiceworksMEX

	Name of Internet Telephony Station
Add	New Internet Telephony Station

Click on [Add].

Data provided on the Voiceworks Operator Web Portal:

ALGEMEEN

KANAALNAAM

WACHTWOORD

AFZENDERNUMMER

NUMERAFSCHERMING UIT AAN

NETNUMMER

VOICE CONNECT

TEMPLATE

T38 CODEC AAN UIT

DOORSCHAKELFACILITEITEN AAN UIT

DESTINATION FILTER

IP WHITELIST

REFERENTIE

PING

AUDIO STREAM

DTMF

EXTERNE RTP TOESTAAN AAN UIT

RTP TIMEOUT n.v.t.

RTP HOLD TIMEOUT n.v.t.

REMOTE-PARTY-ID AAN UIT

PROGRESS INBAND AAN UIT

CLIP

LENGTE 10-CIJFERIG 9-CIJFERIG

METHODE STATISCH (ZOALS INGESTELD BIJ 'AFZENDERNUMMER')
 DYNAMISCH IN FROM HEADER
 DYNAMISCH IN REMOTE-PARTY-ID HEADER
 DYNAMISCH IN P-ASSERTED OF P-PREFERRED-IDENTITY HEADER

WEIGEREN AAN UIT

RESTRICT VALUE

DID

LENGTE 10-CIJFERIG 9-CIJFERIG

CALLERID IN DISPLAYNAME HEADER AAN UIT

TO HEADER AAN UIT

URI HEADER AAN UIT

FILTEREN

The data provided on this page are used to fill the following fields:

Internet telephony station: **Kanaalnaam** is inserted here (e.g: 27875vc01)

Authorization name: **Kanaalnaam** is inserted here (e.g: 27875vc01)

Password: **Wachtwoord** provided by Voiceworks Operator

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: 0140199100). The MEX Number is as configured in VoiceworksOperator.

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Station for VoiceworksMEX

Internet telephony station:

Authorization name:

Password:

Confirm Password:

Call number assignment

Use public number (DID)

Use internal number (Callno) / Single entries

Use internal number (Callno) / Range entry

If using 'configurable clip' you have to change the configuration to 'Use public number (DID)' here!
Changing trunk parameters in case of internal subscriber no. is not allowed!

Default Number:

MEX Number:

Default Number

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

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Stations for VoiceworksMEX

	Name of Internet Telephony Station
<input type="button" value="Edit"/>	27875vc01

Click [OK & Next]

Setup - Wizards - Central Telephony - Internet Telephony

Call Number Assignment for VoiceworksMEX

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)

Setup - Wizards - Central Telephony - Internet Telephony

Provider configuration and activation for Internet Telephony

No call via Internet:

Country specific view:

Note: changes done in expert mode must be reviewed/repeated after running through the wizard.

Activate Provider		
Add		Other Provider
Edit	<input type="checkbox"/>	BCOM
Edit	<input type="checkbox"/>	BLU
Edit	<input type="checkbox"/>	COLT UK & Europe
Edit	<input type="checkbox"/>	COLT VPN
Edit	<input type="checkbox"/>	Deanconnect B.V.
Edit	<input type="checkbox"/>	Infopact
Edit	<input type="checkbox"/>	KPN
Edit	<input type="checkbox"/>	Motto Communications
Edit	<input type="checkbox"/>	oneCentral
Edit	<input type="checkbox"/>	OneXS
Edit	<input type="checkbox"/>	Priority Telecom
Edit	<input type="checkbox"/>	RoutIT
Edit	<input type="checkbox"/>	Signet B.V.
Edit	<input type="checkbox"/>	Skype Connect
Edit	<input type="checkbox"/>	SpeakUp
Edit	<input type="checkbox"/>	Tele2 NL-ASD
Edit	<input type="checkbox"/>	Tele2 NL-RT
Edit	<input type="checkbox"/>	T-Mobile (NL)
Edit	<input type="checkbox"/>	Verizon
Edit	<input type="checkbox"/>	Vodafone Anlagenanschluss R3
Edit	<input type="checkbox"/>	Vodafone NL
Edit	<input type="checkbox"/>	Voiceworks
Edit	<input checked="" type="checkbox"/>	VoiceworksMEX
Edit	<input type="checkbox"/>	X2COM
Edit	<input type="checkbox"/>	Ziggo

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 Voiceworks Operator Web Portal.

Inventarisatie Add-ons

KANAAL

CALL-LIMIT

CALL-LIMIT 10

VOLGENDE STAP

Setup - Wizards - Central Telephony - Internet Telephony

Settings for Internet Telephony

Simultaneous Internet Calls

Available Lines for ITSP: 170

Under 'Setup - Wizards - Network / Internet - Internet Access', you have entered the value **Upstream up to (Kbps) = 10000**

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 simultaneous Internet Calls also depends on the licensing.

Number of Simultaneous Internet Calls: 10 **Distribute Lines**

Line assignment

Internet Telephony Service Provider	Configured Lines	Assigned Lines
BroadCloud	0	10

Click [OK & Next]

Special phone numbers

Click [OK & Next]

On next page status of ITSP is displayed.

<input checked="" type="checkbox"/>	<input type="button" value="Restart"/>	VoiceworksMEX	Enabled	27875vc01
<input type="checkbox"/>		X2COM	Disabled	
<input type="checkbox"/>		Ziggo	Disabled	
<input type="checkbox"/>		Circuit UTC (Cloud)	Disabled	

Click [Next]

„Exchange Line Seizure“:

Select which trunk will access code 0. Enter the local area code without prefix digits (needed only when local area code was not entered in first step PBX number)

Setup - Wizards - Central Telephony - Internet Telephony

Exchange Line Seizure

Exchange Line Seizure

Trunk Access Code: 0

Dial over Provider:

Area Code

Please enter the local area code.

Local area code:

Click [OK & Next]

Overview with all configured „Outside line Seizure“ are displayed.

Setup - Wizards - Central Telephony - Internet Telephony

Seizure Code for the 'Outside line Seizure'

	Seizure code for 'Outside line Seizure'
VoiceworksMEX	0

Click [OK & Next] and on the next page [Finish]

DID configuration

No special DID is needed.

Additional Configuration

License

Add the “S2M/SIP Trunk” license to the SIP-Trunk

Home Administrators Setup Expert mode Data Backup License Management Service Center

The screenshot shows the 'License Management' section of the Voiceworks Operator interface. On the left, a navigation menu includes 'License Management', 'License information', 'Additional Products', 'OpenScape Personal Edition', 'Local User licenses', and 'CO Trunks'. The main content area is titled 'CO Trunks' and contains the following information:

- CO Trunks:** The access to central office via PRI(S2m/T1) trunks or via Internet telephony is licensed by CO trunk licenses. Available licenses for SIP and PRI(S2m/T1) trunks: 32
- SIP trunks:** The configured number of simultaneous Internet calls for each Internet Telephony Service Provider is: 10. License number of simultaneous Internet calls in this node: 10. License demand for number of simultaneous Internet calls in this node: 10 (highlighted with a red box).
- PRI (S2M/T1):** A table with columns: Type Slot, Port, Feature, Demands.

Route configuration

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

Best praxis 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.

The screenshot shows the 'Route' configuration page in the 'Expert mode - Telephony Server' interface. The left sidebar shows a tree view with 'Trunks/Routing' expanded, and 'VoiceMEX' selected. The main configuration area includes the following fields:

- Route Name:** VoiceMEX
- Seizure code:** 0
- CO code (2nd trunk code):** (empty)
- Gateway Location:** Country code: 31, Local area code: (empty), PABX number: (empty)
- PABX number-incoming:** Country code: 31, Local area code: (empty), PABX number: (empty), Location number:
- PABX number-outgoing:** Country code: 31, Local area code: 1401, PABX number: 99, Suppress station number:
- Overflow route:** Overflow route: None
- Digit transmission:** Digit transmission: en-bloc sending
- Mobile Extension Number (MEX):** MEX Number: 35800

Buttons for 'Apply', 'Undo', and 'Help' are located at the bottom of the configuration area.

The MEX number is configured the same as in Voiceworks Operator.

The PABX number outgoing is configured in international format and the same as set in the MEXaccount in Voiceworks Operator.

The route parameters:

Route

Change Route | Change Routing Parameters

Routing flags

- Digit repetition on:
- Analysis of second dial tone / Trunk monitoring:
- Intercept per direction:
- Over. service 3.1 kHz audio:
- Add direction prefix incoming:
- Add direction prefix outgoing:
- Call No. with international / national prefix:
- Ringback tone to CO:
- Name in CO:
- Segmentation:
- deactivate UUS per route:
- Always use DSP:

Rerouting

- Analog trunk seizure:
- Trunk call pause:
- Type of seizure:
- Route type:
- No. and type, outgoing:
- Call number type:

Change route allowed:

Route optimize active:

Apply | Undo | Help

LCR changes (mandatory)

On the LCR page in expert mode it is mandatory to route the Mobility users to the MEX provider as shown below.

Dial Plan

Change Dial Plan

Dial Plan	Name	Dialed digits	Routing Table
73	Standard	84C1Z	26 →
74	Standard	84CNZ	26 →
75	Standard	84C00-Z	26 →
76			- →
77	Mobility	0C-0686822085	50 →
78	Mobility	0C-0686819949	50 →
79			- →
--			- →

Routing Table

Change Routing Table

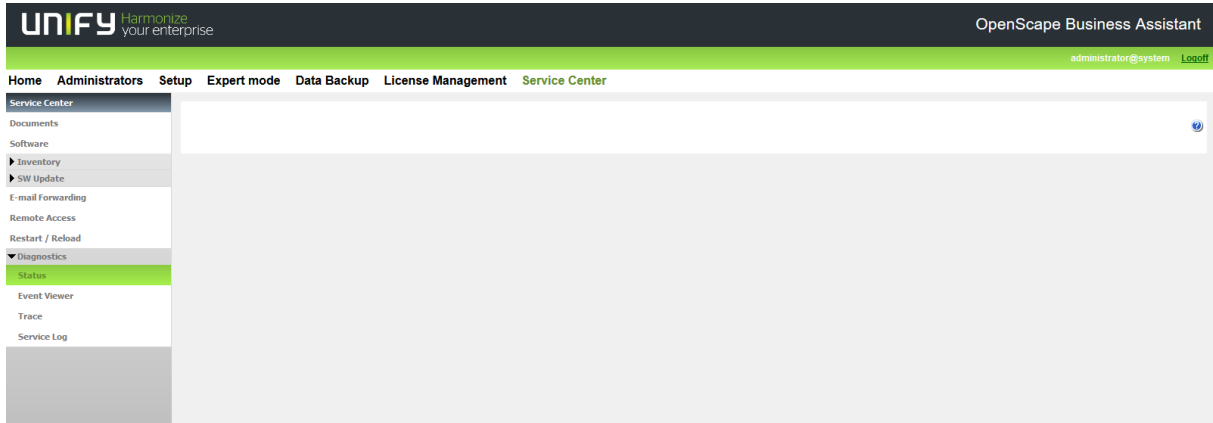
Routing Table: 50 en-bloc sending

Index	Dedicated Route	Route	Dial Rule	min. COS	Warning	en-bloc sending
1	<input type="checkbox"/>	VoiceMEX	MEXMobility →	15	None	No
2	<input type="checkbox"/>	None	None	15	None	No

Expert mode - Telephony Server				
Dial Rule				
Change Dial Rule				
	Rule Name	Dial rule format	Network access	Typ
1	CO	A	Main network supplier	Unknown
2	SIP	A	Main network supplier	Unknown
3	SIP local	HE2A	Main network supplier	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	DOE4A	Main network supplier	Unknown
9	Add_cc_to_Canoni	D31E2A	Main network supplier	Country code
10	National_to_Cano	D31E3A	Main network supplier	Country code
11	Internat_to_Can	E3A	Main network supplier	Country code
12	SIP local_Canoni	HE2A	Main network supplier	Country code
13			Unknown	Unknown
14			Unknown	Unknown
15	MEXMobility	E2A	Main network supplier	Unknown
16		

How to check the status of SIP connection with VoiceworksMEX

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



Service Center - Diagnostics - Status

Station Status		ITSP Status	
Status for the Internet Telephony Service Provider (ITSP)			
	Provider		
<input type="checkbox"/>	BCOM	Disabled	
<input type="checkbox"/>	BLU	Disabled	
<input type="checkbox"/>	COLT UK & Europe	Disabled	
<input type="checkbox"/>	COLT VPN	Disabled	
<input type="checkbox"/>	Deanconnect B.V.	Disabled	
<input type="checkbox"/>	Infopact	Disabled	
<input type="checkbox"/>	KPN	Disabled	
<input type="checkbox"/>	Motto Communications	Disabled	
<input type="checkbox"/>	oneCentral	Disabled	
<input type="checkbox"/>	OneXS	Disabled	
<input type="checkbox"/>	Priority Telecom	Disabled	
<input type="checkbox"/>	RoutIT	Disabled	
<input type="checkbox"/>	Signet B.V.	Disabled	
<input type="checkbox"/>	Skype Connect	Disabled	
<input type="checkbox"/>	SpeakUp	Disabled	
<input type="checkbox"/>	Tele2 NL-ASD	Disabled	
<input type="checkbox"/>	Tele2 NL-RT	Disabled	
<input type="checkbox"/>	T-Mobile (NL)	Disabled	
<input type="checkbox"/>	Verizon	Disabled	
<input type="checkbox"/>	Vodafone Anlagenanschluss R3	Disabled	
<input type="checkbox"/>	Vodafone NL	Disabled	
<input type="checkbox"/>	Voiceworks	Disabled	
<input type="button" value="Restart"/>	VoiceworksMEX	Enabled	27875vc01
<input type="checkbox"/>	X2COM	Disabled	
<input type="checkbox"/>	Ziggo	Disabled	
<input type="checkbox"/>	Circuit UTC (Cloud)	Disabled	

Buttons: Help, Abort, Back, Finish

Known restrictions:

The MEX-trunk may be used for mobility clients only!

The MEX-trunk may never be used as backup or failover for the default trunk or ISDN.

No default voice traffic may be offered through this trunk.

- 1) LCR-rules as shown above are mandatory.
- 2) The Cellphone SIM-cards of all the mobility clients must be registered under the same Voiceworks account as the MEX-trunk, this is mandatory by Voiceworks.
- 3) As the MEX-protocol views the incoming calls as internal calls it should be taken into account that if a user's CLIP is different from his internal number this will cause the user to be unreachable for the Mobility-user.

For Example, the user as shown below is preferable since his CLIP and internal number are the same.

Type: System Client

Call number: ×

First Name: ×

Last Name: ×

Display: ×

Direct inward dialing: ×

Device Type: OpenStage 40

Clip/Lin: ×

Access: LAN 0-SYS-1

The user below her will be unreachable if the mobility client dails from his 'missed calls'.

Type: System Client

Call number: ×

First Name: ×

Last Name: ×

Display: ×

Direct inward dialing: ×

Device Type: OpenStage 40

Clip/Lin: ×

Access: LAN 0-SYS-1

- 4) By a normal SIP trunk the CLIP is shown to the other party, and the DDI is used for incoming traffic.
- 5) By this MEX trunk the CLIP is shown to the other party (Mobility user) but the internal number is used for incoming calls from the Mobility user.
- 6) Mobility users are configured as described in the document [Administration_V2_R2.1.0_269.pdf](#), chapter 18.2.2 and can use the normal Mobility Entry features (DISA) or the MyPortal app. By a OpenScape Business X is a maximum of 16 simultaneously who can reserve a DTMF code receiver. By a OpenScape S is the maximum 180 receivers.

Appendix

CLIP / CLIR	CLIP outgoing in From header - display part: <input type="text" value="call number"/>
	CLIP outgoing in From header - user part: <input type="text" value="call number"/>
	Outgoing From Header - domain/host part: <input type="text" value="domainName"/>
	Diversion: From contains original CallingPartyNumber: <input checked="" type="checkbox"/>
	Diversion: PAI contains original CallingPartyNumber: <input type="checkbox"/>
	CLIP outgoing in P-Asserted-Id header - display part: <input type="text" value="omit"/>
	CLIP outgoing in P-Asserted-Id header - user part: <input type="text" value="omit"/>
	CLIP outgoing in P-Preferred-Id header - display part: <input type="text" value="omit"/>
	CLIP outgoing in P-Preferred-Id header - user part: <input type="text" value="omit"/>
	CLIP outgoing in Diversion header - display part: <input type="text" value="omit"/>
	CLIP outgoing in Diversion header - user part: <input type="text" value="call number"/>
	CLIR outgoing in From header - display part: <input type="text" value="anonymous"/>
	CLIR outgoing in From header - user part: <input type="text" value="fully anonymous"/>
	CLIR outgoing Privacy header: <input type="text" value="omit"/>
	COLP / TIP supported for outgoing calls: <input type="text" value="COLP supported"/>
Call number formatting	Incoming call - Called party number: <input type="text" value="To header user part"/>
	Incoming call - Calling party number: <input type="text" value="automatic"/>
	Incoming call - Type of number (calling): <input type="text" value="automatic"/>
	Incoming call - Type of number (called): <input type="text" value="automatic"/>
	Outgoing call - Type of number (calling): <input type="text" value="automatic"/>
	Mapping of provider number: <input type="text" value="off"/>
	CLIP no Screening support: <input type="text" value="not supported"/>
	Call No. with international/national prefix: <input type="text" value="yes"/>
	Called number in E164 format: <input type="text" value="no"/>
Registration	Register Contact contains IP-Address: <input type="text" value="localIPAddr"/>
	ContactUriWithProtocol: <input type="checkbox"/>
	BNC Registration (SIPconnect): <input type="text" value="normal registration"/>
	ReRegistration interval after failure (sec): <input type="text" value="120"/>
	ReRegistration mode: <input type="text" value="continuous"/>
	ReRegistration after call failure: <input type="text" value="CallFailureIsNoRegFailure"/>
Security	UDP mode: <input type="text" value="symmetric UDP"/>
	Approved Peer selection: <input type="text" value="trust configured Servers only"/>
Miscellaneous	Direct Payload: <input type="checkbox"/>
	Media Renegotiation Avoidance: <input checked="" type="checkbox"/>
	UseRouteURIAuthentication: <input checked="" type="checkbox"/>
	Ignore 100 Rel: <input checked="" type="checkbox"/>
	UseViaRPort: <input checked="" type="checkbox"/>
	UPDATE Supported: <input checked="" type="checkbox"/>
	P-Early-Media header support: <input type="text" value="not supported"/>
	Session Timer support: <input type="text" value="not active"/>
	Send automatic 183 response timer (sec): <input type="text" value="0"/>
	UDP-Keep Alive: <input type="text" value="UdpKeepAliveON"/>