OpenScape Business V3

SIP Trunk for Chunghwa Telecom IP Centrex - Taiwan

OpenScape Business V3 Mainboard Family
OpenScape Business S

About this document

This configuration guide describes an example of how to set up the SIP trunk *Chunghwa Telecom IP Centrex* as an ITSP connection to the OpenScape Business.

Note: The basis for this document is the current OpenScape Business *V3R4.3*. 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.

System	OpenScape Business
Released with Version	*V3R4.3*
Chunghwa Telecom IP Centrex	**Features & Capabilities**
Account (DID/Client)	*DID*
Multisite	*no*
CLIP / CLIR	*no*
CLIP no Screening	*no*
COLP	*no*
Call Forwarding (302)	*no*
DTMF (RFC2833/4733)	*yes*
Codecs G.722/G.711/G.729	*no / yes / yes*
G.711 Fax /T.38 Fax	*no / no*
Secure trunk	*no*

Remarks:

The SIP trunk *Chunghwa Telecom IP Centrex* is not released for
- G.711 Fax / T.38 Fax
- UC Suite

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Table of History

Date	Version	Changes
18.02.2026	1.0	release with OpenScape Business V3R4.3

Information

The ***Chunghwa Telecom IP Centrex*** SIP-Trunk will be released for the first time with OpenScape Business V3R4.3 variants

- OpenScape Business V3 Mainboard Family
- OpenScape Business S

## Trunk Configuration Data provided by Chunghwa

Applying for ***Chunghwa Telecom IP Centrex*** requires providing the OpenScape Business IP information (configured as WAN IP), Domain Name for SIP Trunk, SIP Proxy Domain, and Outbound Proxy IP Address. This information can also be provided by the ***Chunghwa Telecom*** installer who provides the ITSP.

Configuration Wizard

Internet Configuration (WAN Interface dedicated to ITSP)

*Chunghwa Telecom* supplies the SIP trunk connection in conjunction with the appropriate access device.

The IP address for the OpenScape Business is listed in the customer data and must be configured on the WAN interface, e.g.:
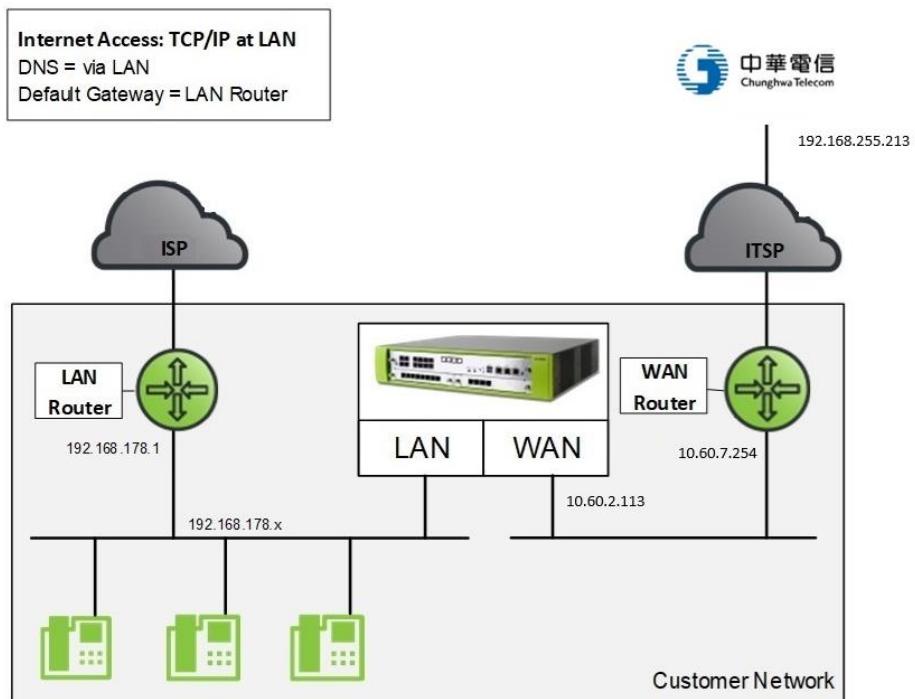

ℹ	No static route is required for the default configuration.

Configure WAN Interface

For the configuration of the WAN Interfaces go to wizard for Network / Internet – "Internet Configuration" or Basic Installation,

activate the option „*TCP/IP via external routers: LAN port (default), WAN port (ITSP only)*" and assign upstream for LAN and WAN interface.
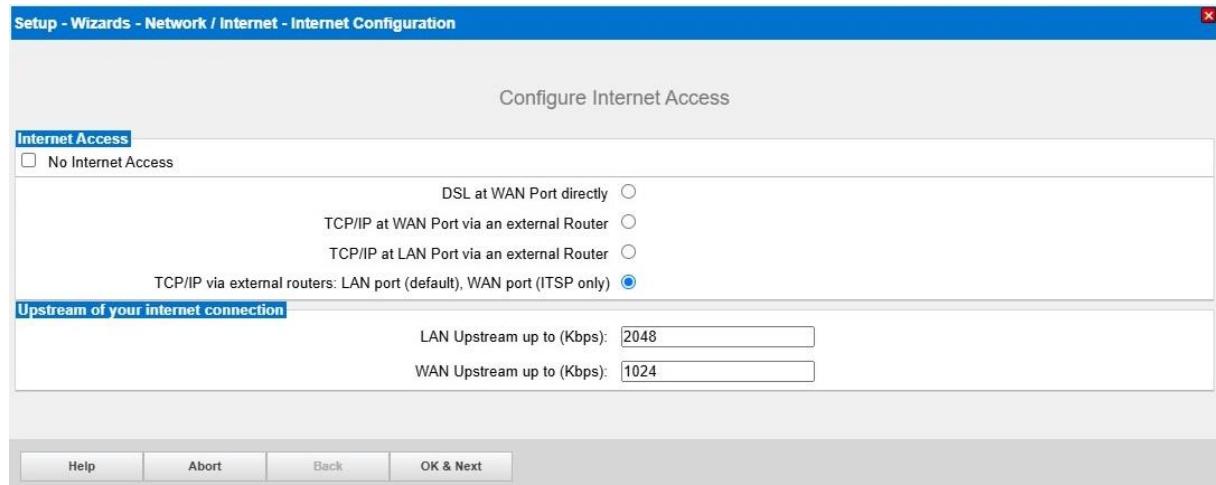
Click [OK & Next].

On the next page please add OpenScape Business WAN IP address, Subnet Mask and IP address of Default Router for WAN interface:

Setup - Wizards - Network / Internet - Internet Configuration ✖

Internet Access

IP Address:	10.60.2.113
Subnet Mask:	255.255.248.0
MAC Address :	00:1a:e8:▓▓:▓▓:▓
Ethernet Link Mode:	Auto ⌄
Max. Data Packet Size (bytes):	1500
Bandwidth Control for Voice Connections:	Keine ⌄
Bandwidth for Downloads:	10000
Bandwidth for Uploads:	10000
Bandwidth Used for Voice/Fax (%):	80
IEEE802.1p/q Tagging:	☐
IEEE802.1p/q VLAN ID:	0
IP Address of Default Router for WAN:	10.60.7.254

Help	Abort	Back	OK & Next

Click [OK & Next].

On next page please add the primary DNS Server and default router of the LAN interface:

Setup - Wizards - Network / Internet - Internet Configuration ✖

Routing Configuration

DNS Server

IP Address of primary DNS Server: 192.168.178.1

Default Router

IP Address of Default Router: 192.168.178.1

Help	Abort	Back	OK & Next

Click [OK & Next].

With the next step finish the wizard:

Setup - Wizards - Network / Internet - Internet Configuration

The 'Internet Access' feature has been changed successfully.

You have configured your Internet Access via LAN successfully.

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'.

| Help | Abort | Back | Finish |

Click [Finish].

> After activating the „*TCP/IP via external routers: LAN port (default), WAN port (ITSP only)*" settings the OpenScape Business must be restarted.

Internet Telephony

Go to Central Telephony – "Internet Telephony"

The overview page appears for entering the location data – e.g.:

Click [OK & Next].

Provider configuration and activation for Internet Telephony

- No call via Internet -> uncheck
- Use County specific view: **Taiwan** and select **Chunghwa Telecom IP Centrex**

<optional>

<table>
<tr><td>ℹ</td><td>As long as the profile **Chunghwa Telecom IP Centrex** is not available, please create a private profile **Chunghwa _2** (see appendix).</td></tr>
</table>
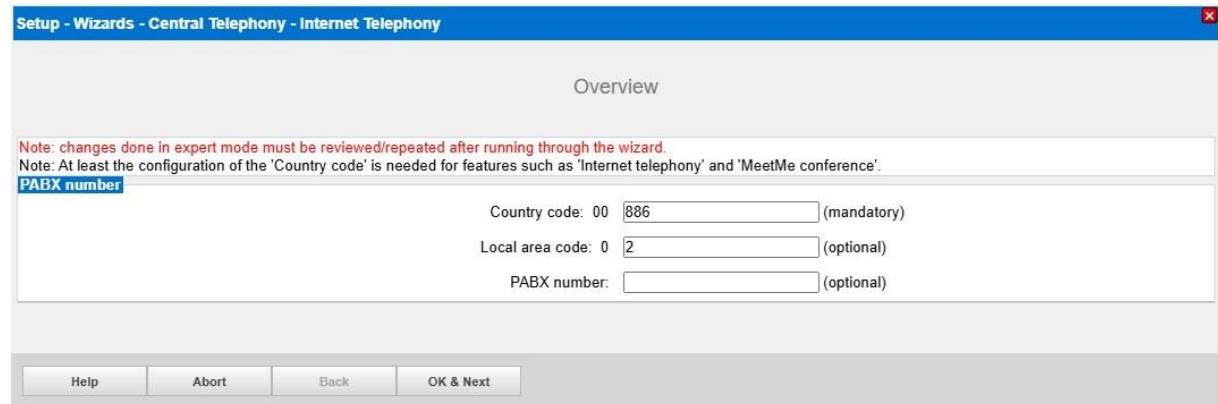
Setup - Wizards - Central Telephony - Internet Telephony

Provider configuration and activation for Internet Telephony

No call via Internet: ☐
Country specific view: Taiwan

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	☐	
Edit	☐	
Edit	☑	Chunghwa Telecom IP Centrex
Edit	☐	
Edit	☐	

| Help | Abort | Back | OK & Next | Display Status |

Figure 3

Activate Provider and click on [Edit].

On the next page please enter **Domain Name**, **Provider Proxy** and **Provider Outbound Proxy** provided by *Chunghwa Telecom*. The required **Ports** are pre-configured and need not to be changed.

In this example:.

- **Domain Name**: im2.cht.com.tw
- **Provider Proxy**: im2.cht.com.tw
- **Provider Outbound Proxy**: 192.168.255.213
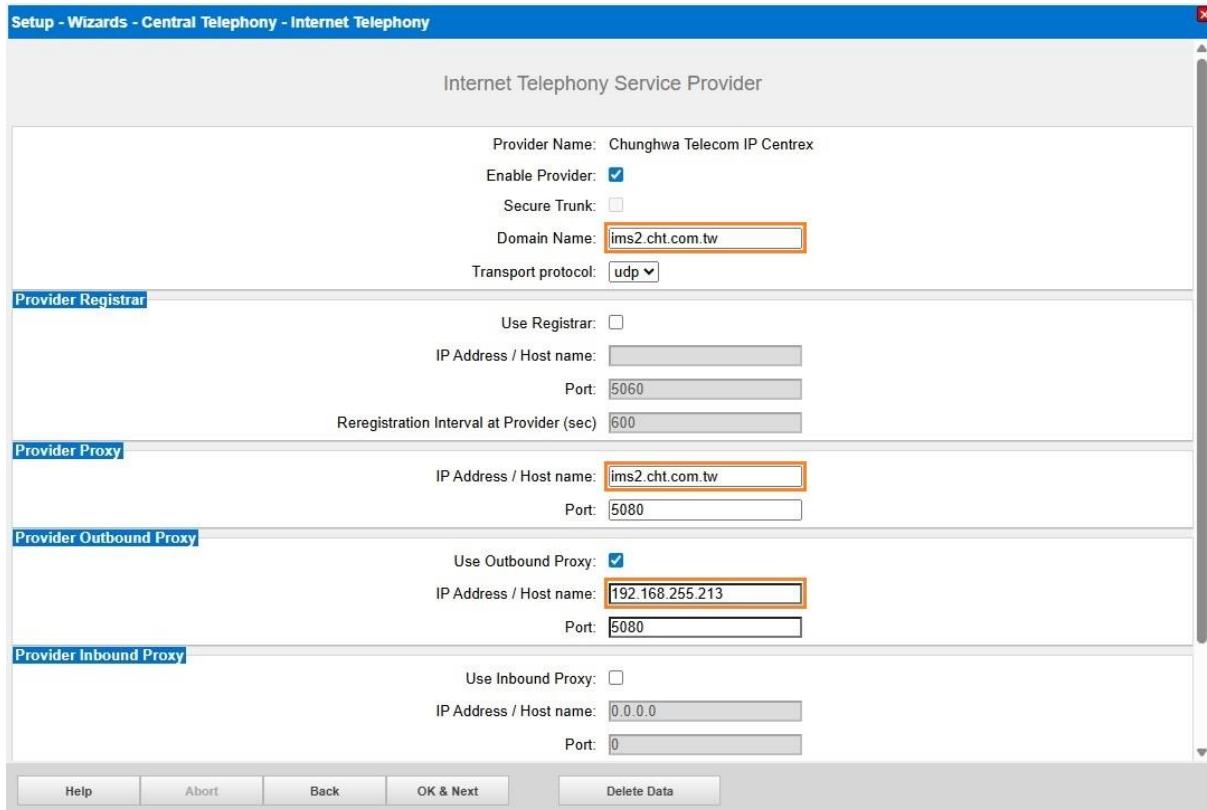
Figure 4

Click [OK & Next].

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

Figure 5

Click on [Add].

Data provided by the *Chunghwa Telecom*.

Internet telephony station: PSTN Number

Authorization name: n/a

Password: n/a

Default number: 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. Usually, the Lead Number is entered here.
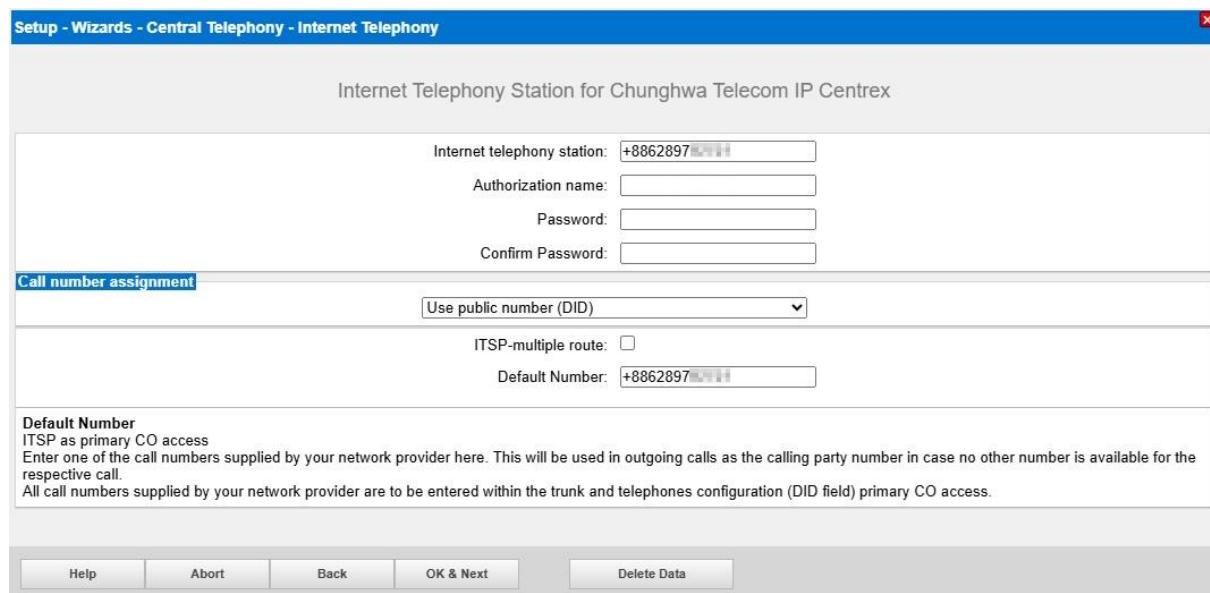
Figure 6

Enter the relevant data and click [OK & Next].
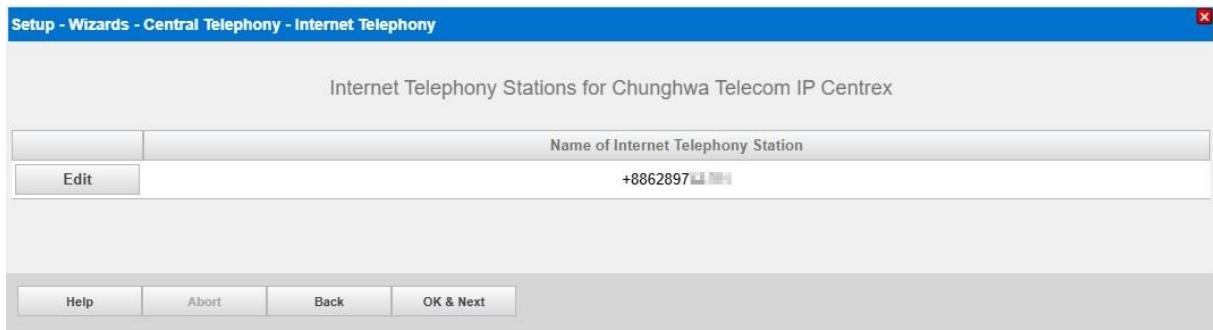
Figure 7

Click [OK & Next]

Figure 8

Click [OK & Next] (no input needed)
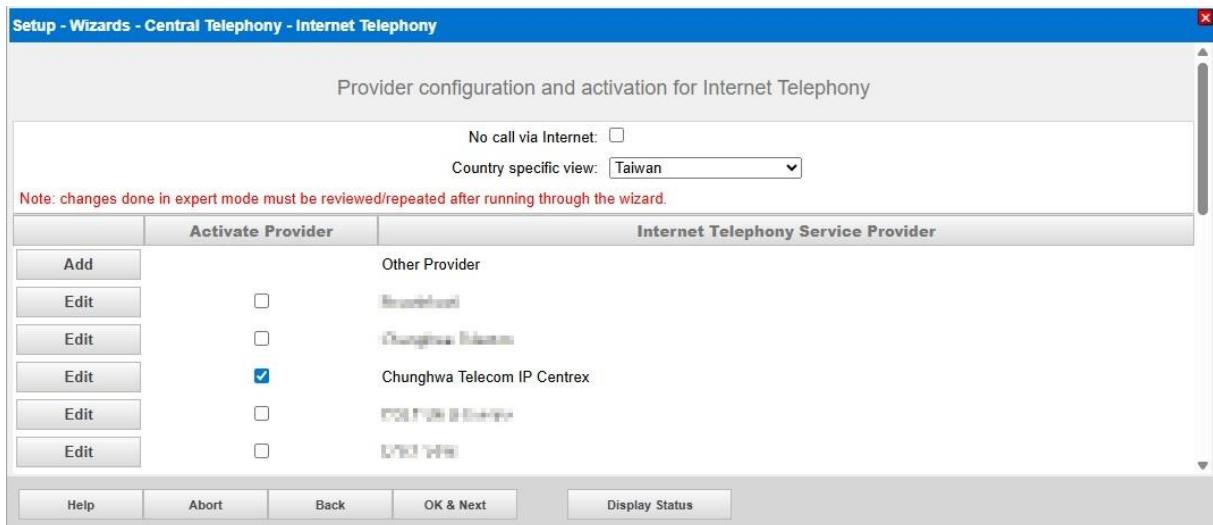
Figure 9

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 by *Chunghwa Telecom*.

Simultaneous Internet Calls

Available Lines for ITSP: 174

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) = 2048

In the 'Change Feature –> Internet Telephony' Assistant. This upstream allows you to conduct up to **16** 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): 2048

Number of Simultaneous Internet Calls: 4   Distribute Lines

Line assignment

Internet Telephony Service Provider	Configured Lines	Assigned Lines
Chunghwa Telecom IP Centrex	0	4

Help   Abort   Back   OK & Next

Click [OK & Next]

Now the corresponding configuration data will be created and entered into the system, please wait until the progress bar reaches 100%.

Special phone numbers

In this dialog it is possible to adjust the routing of special phone numbers. The following example is for the TAIPEI area. For other areas, please adjust the settings according to customer's needs.
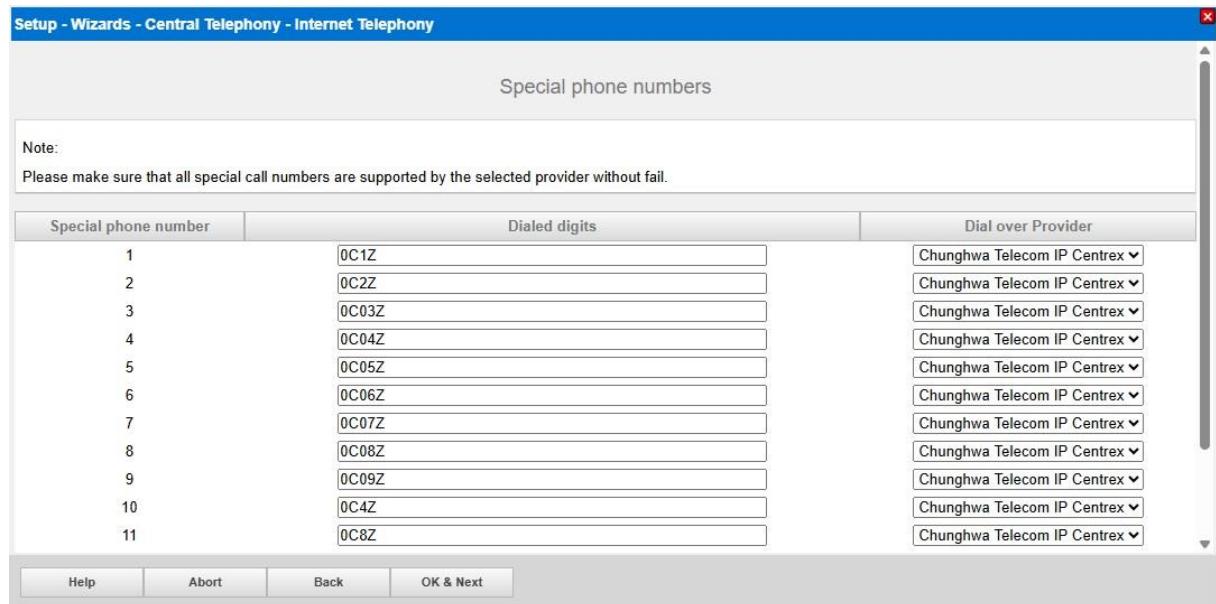
Figure 11

Click [OK & Next]

On next page status of ITSP is displayed.
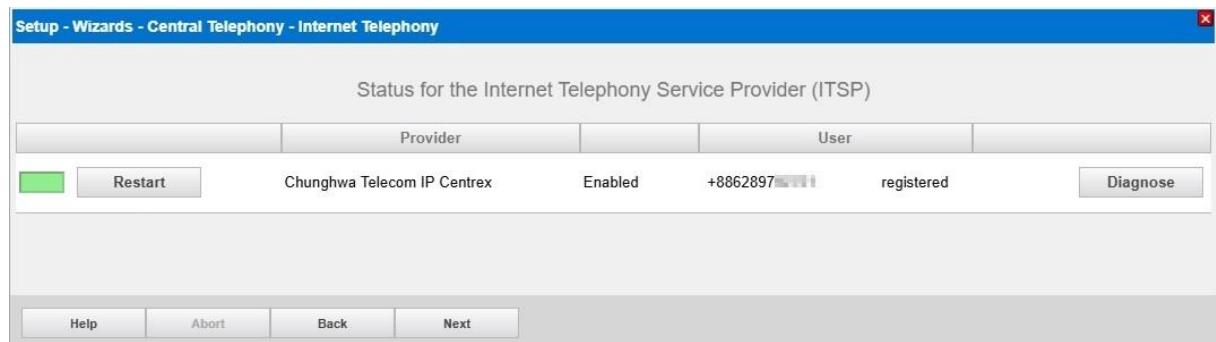
Figure 12

- If the SIP trunk has been successfully registered, the light will be green, and you can proceed to the next step. The "Diagnose" button opens a new window with a list of configured data.

- If the light is orange, clicking the "Diagnose" button will open a new window. This window provides information about potential problems and a list of configured data for review.

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).
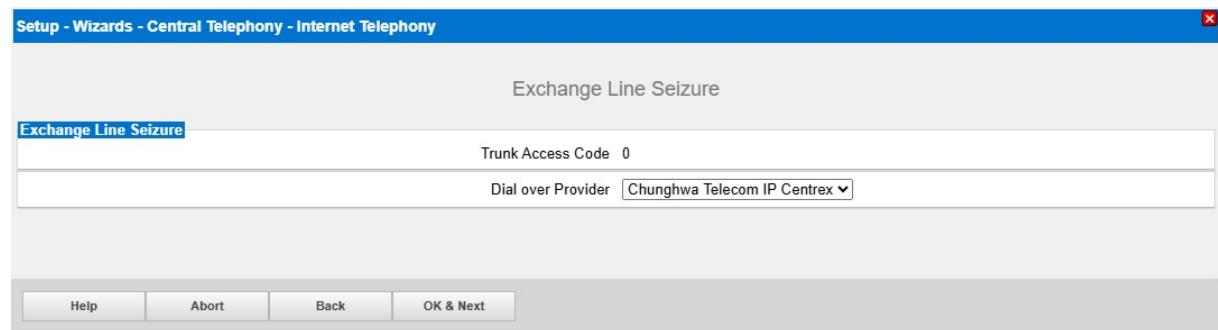
Figure 13

Click [OK & Next]

Overview with all configured „Outside line Seizure" are displayed.
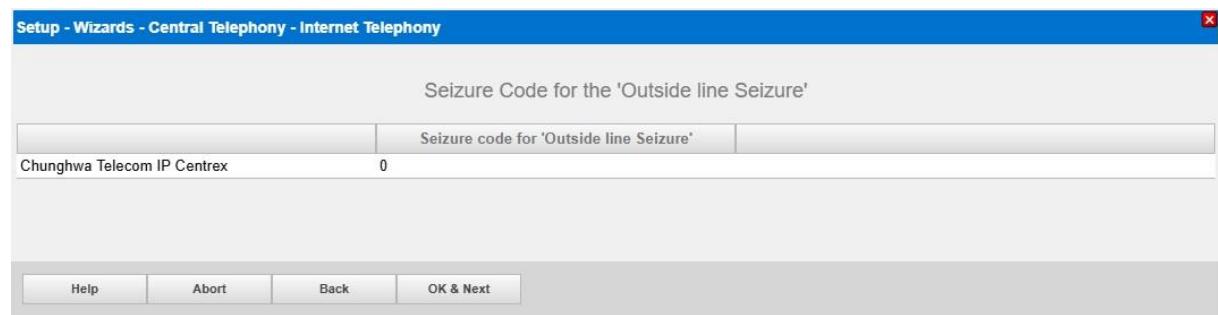
Figure 14

Click [OK & Next] and
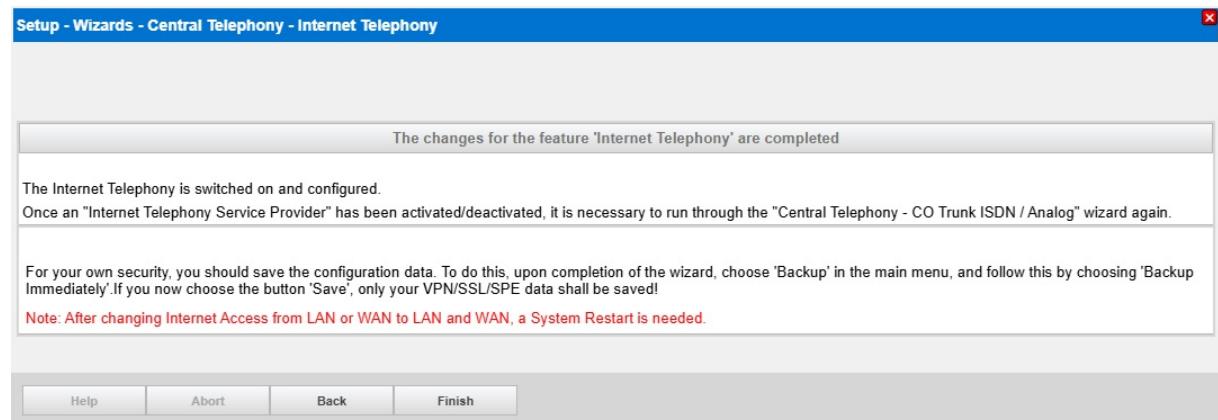
Figure 15

on the next page [Finish].

DID configuration

In the DID Section, the DID will need to be entered (remaning part without country code, and if configured without local area code, PABX number). Mostly the DID is same with Extension Number (Callno).

Figure 16

In the trunk route outgoing, always use the same outbound number to dial (activate "Supress station number).

Figure 17

For inbound calls the PABX number outgoing of **Figure 17** is configured as AutoAttendant group.
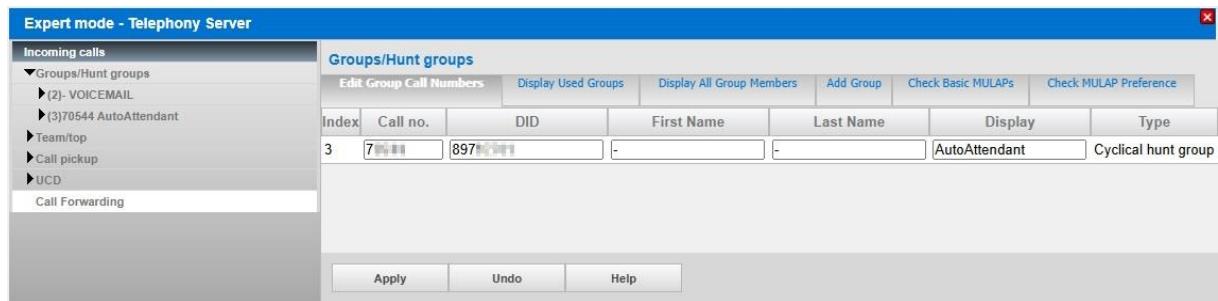
Figure 18

Additional Configuration

License

Add the "S2M/SIP Trunk" license to the SIP-Trunk
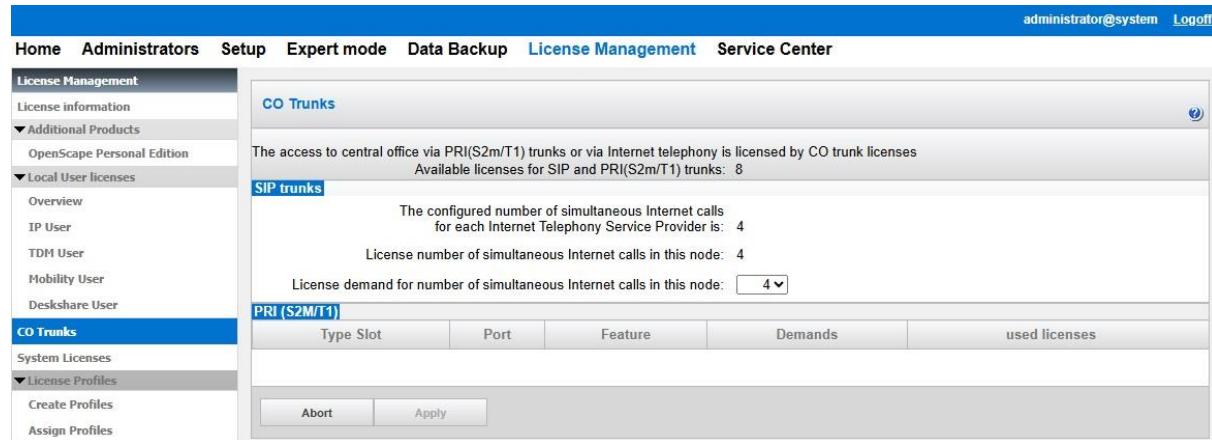
Known limitations and restrictions

The SIP trunk **Chunghwa Telecom IP Centrex** is not released for

- G.711 Fax / T.38 Fax
- UC Suite

Hold call or Tranfer Call from far end was not tested.

Mandatory configuration in Expert Mode

Port management

Go to Expert Mode → Telephony Server → Basic Settings → Port Management

To comply with the requirements of the *Chunghwa Telecom IP Centrex* the SIP_EXT port **MUST** be configured with 5060 (default is 5070).

It's recommended that SIP devices can be identified as internally or externally connected.

After the ports are changed, OpenScape Business **MUST** be restarted.

Codec Parameters

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

To comply with the requirements of the *Chunghwa Telecom IP Centrex* the following codec parameters **MUST** be changed:

1. The usage of the T.38-Fax protocol is not released for *Chunghwa Telecom IP Centrex*. For this reason, disable T.38-Fax protocol.

2. RFC 2833 payload type must be set to customer's requirements and is provided by *Chunghwa Telecom*, for example 100.

After the T.38-Fax settings are changed OpenScape Business **MUST** be restarted.

Appendix

Create profile

As long as the *Chunghwa Telecom IP Centrex* profile is not yet available, please first create a private profile with the name *Chunghwa _2* as follows.

Please open the wizard for "Central Telephony – Internet Telephony" as described in **Figure 1** and **Figure 2** and go to:

Provider Configuration and -activation for Internet-Telephony:

- "No call via Internet" -> uncheck
- "County specific view": *Taiwan* and select *Other Provider*
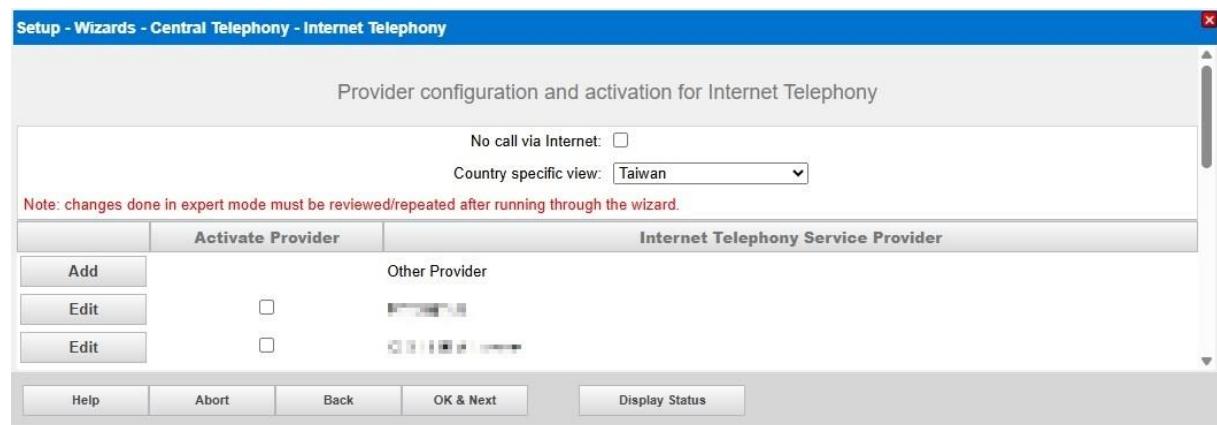
Click on [Add].

Use the *default* template with name *Chunghwa _2*, enable the provider and configure the server data provided by *Chunghwa Telecom*.

In this example:

- **Domain Name**:   im2.cht.com.tw
- **Provider Proxy**:   im2.cht.com.tw   **Port**:   5080
- **Provider Outbound Proxy**:   192.168.255.213   **Port**:   5080

as follows (see **Figure 4**):
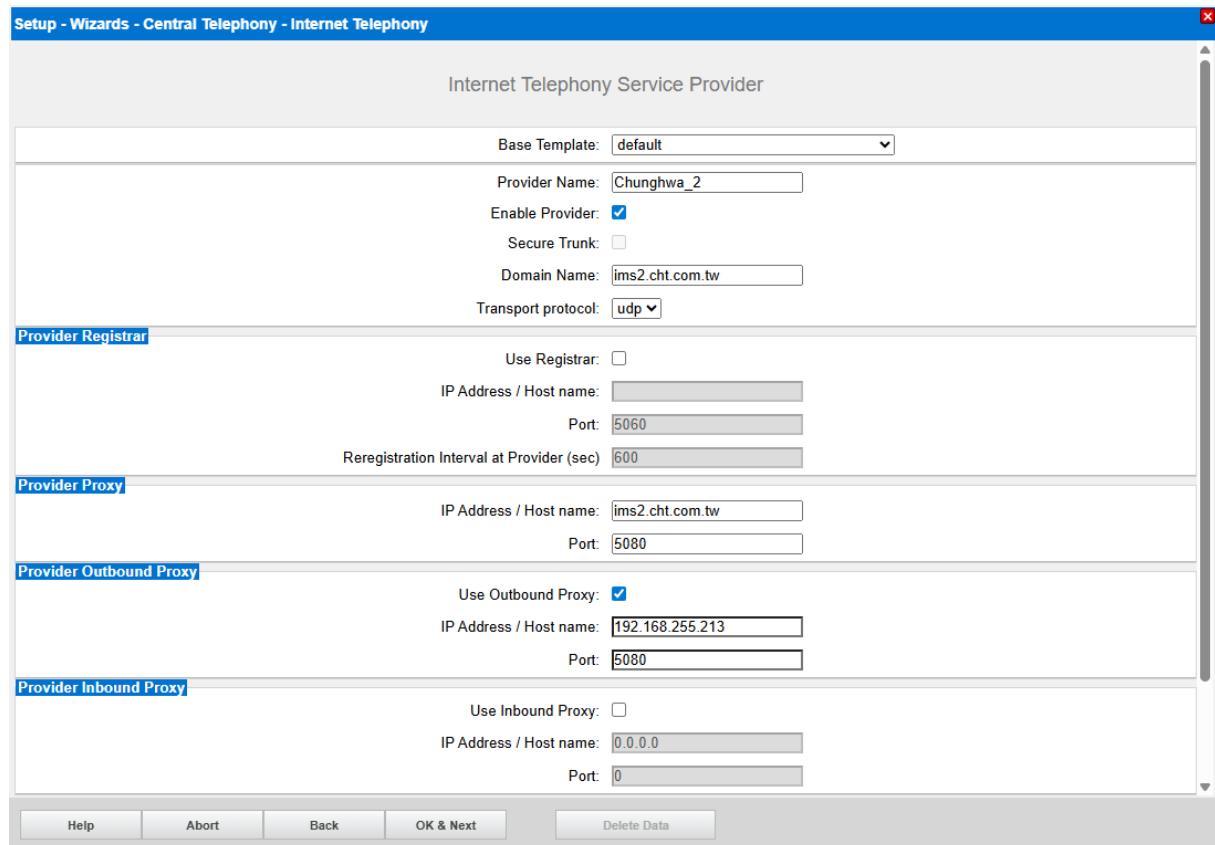
Click [OK & Next]

In the following dialog, the access data is entered, as described in the instructions from **Figure 5** onwards.
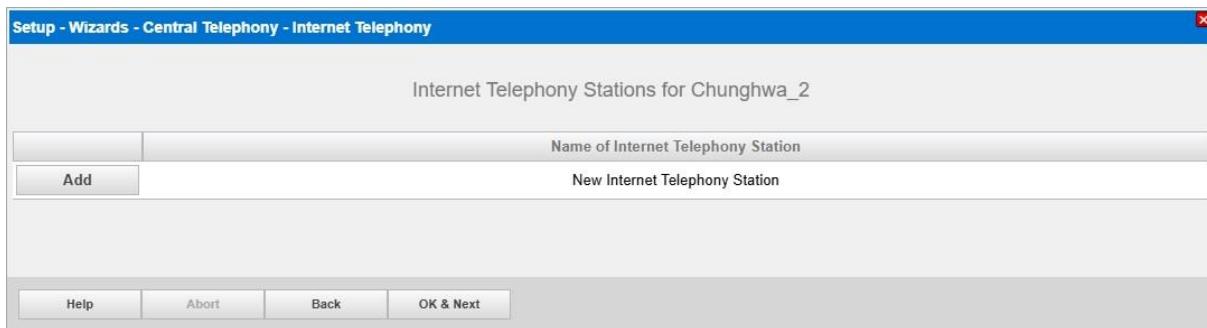
Extended SIP Provider Data

To ensure compatibility with the *Chunghwa Telecom IP Centrex*, the following settings must be made in Expert Mode → Voice Gateway → Internet Telephony Service Provider → *Chunghwa_2* for the extended SIP provider data:

Call number formatting

Incoming call - Called party number:	To header user part
Incoming call - Calling party number:	From header user part
Incoming call - Type of number (calling):	automatic
Incoming call - Type of number (called):	automatic
Outgoing call - Type of number (calling):	automatic
Outgoing call - Type of number (called):	automatic
Mapping of provider number:	off
CLIP no Screening support:	not supported
Call No. with international/national prefix:	no
Called number in E164 format:	yes
Route optimization:	not allowed
MEX supported:	no
Contact URI contains:	call number
TCP port used in Contact URI:	ephem. src-port

Registration

Register Contact contains IP-Address:	localIPAddr
ContactUriWithProtocol:	☐
BNC Registration (SIPconnect):	normal registration
ReRegistration interval after failure (sec):	120
ReRegistration mode:	continuous
ReRegistration after call failure:	CallFailureIsNoRegFailure

Click on [Apply] and restart the ITSP [Restart ITSP].

Please close the window and run through the ITSP Wizard for *Chunghwa_2* again (**Figure 3**).