

# **OpenScape Business V3**

# How to Configure SIP Trunk for RoutIT TLS NL

## About this document

This configuration guide describes an example of how to set up the SIP trunk *RoutIT TLS NL* as an ITSP connection to the OpenScape Business.

**Note**: The basis for this document is the current OpenScape Business *V3R3*. 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 | V3R3                    |
| RoutIT TLS NL         | Features & Capabilities |
| Account (DID/Client)  | DID                     |
| Multisite             | yes - single trunk      |
| CLIP / CLIR           | yes                     |
| CLIP no Screening     | yes                     |
| COLP                  | no                      |
| Call Forwarding (302) | no                      |
| DTMF (RFC2833/4733)   | yes                     |
| Codecs G711/G729      | yes / no                |
| T.38 Fax              | yes                     |
| Secure trunk          | yes                     |

# **Table of Contents**

| Information                                 | 4  |
|---|----|
| Trunk Configuration Data provided by RoutIT | 4  |
| Call Processing Policies                    | 5  |
| Certificate import                          | 6  |
| Configuration Wizard                        | 8  |
| Internet Telephony                          | 8  |
| Define bandwidth (# Trunks)1                | L3 |
| Special phone numbers 1                     | ٤4 |
| DID configuration1                          | 16 |
| Additional Configuration                    | L7 |
| License 1                                   | L7 |
| Known limitations and restrictions: 1       | L7 |
| Mandatory configuration in Expert Mode1     | 18 |
| Codec Parameters 1                          | 18 |

# **Table of History**

| Date       | Version | Changes  |
|------------|---------|--|
| 2023-07-21 | 1.0     | Release RoutIT TLS NL with OpenScape Business V3R3 |
| 2024-09-10 | 1.1     | editorial changes                                  |
|            |         |  |

#### Information

The *RoutIT TLS NL* SIP-Trunk will be released for the first time with OpenScape Business V3R3.

#### **Trunk Configuration Data provided by RoutIT**

The configuration data needed to setup the SIP trunk can be found on the **RoutIT Broadsoft** Portal under SIP Trunking Page > Trunk Group > Edit under the selected Trunk Group:

|  | ·   |
|--|---|
| * Name:                                | 312^  |
| Department:                            | None ~  |
| * Maximum Active Calls Allowed:        | 8   |
| Maximum Active Incoming Calls Allowed: |   |
| Maximum Active Outgoing Calls Allowed: |   |
|  | Enable Authentication                                   |
| Authentication User Name:              | 312   |
| Type new authentication password:      |   |
| Re-type new authentication password:   |   |
| Trunk Group Identity:                  | @ .voipit.nl v  |
| OTG/DTG Identity:                      |   |
|  | Enable Trunk Group Prefix                               |
| 0                                      | Allow calls directly to trunk group with Trunk Identity |
|  | Allow calls directly to trunk group with DTG Identity   |
|  | Include Trunk Identity for Calls to Trunk Group         |
|  | Include DTG Identity for Calls to Trunk Group           |
|  | Include Trunk Identity for Calls from Trunk Group       |
|  | Include OTG Identity for Calls from Trunk Group         |
|  | Enable Network Address Identity                         |
| anonymous                              | Allow Unscreened Calls                                  |
|  | Allow Unscreened Emergency Calls                        |
|  | Route To Peering Domain                                 |

## **Call Processing Policies**

Following "Call Processing Policies" must be configured in RoutIT Broadsoft Portal

# **Call Processing Policies**

View or modify Call Processing Policies for the group.

| OK          | Apply                                    | Cancel          |   |  |  |  |
|-------------|--|-----------------|---|--|--|--|
|             |  |                 |   |  |  |  |
| Calling     | Calling Line ID                          |                 |   |  |  |  |
|             | Use group name for Calling Line Identity |                 |   |  |  |  |
|             | Allow Department Name Override           |                 |   |  |  |  |
|             | Ċ  |                 |   |  |  |  |
| <b>U</b> se | e Group Callin <mark>g</mark> L          | ine Id Policy   | Ouse Enterprise Calling Line Id Policy        |  |  |  |
| Exte        | ernal Calls: 🧕 U                         | se user phone   | number for Calling Line Identity              |  |  |  |
|             | Οu                                       | se configurabl  | e CLID for Calling Line Identity              |  |  |  |
|             | Οu                                       | se group/depa   | rtment phone number for Calling Line Identity |  |  |  |
| Enterr      | orise Calls: 🦲 🕕                         | se extension    |   |  |  |  |
|             | Ou                                       | se location co  | de plus extension                             |  |  |  |
|             | ΟU                                       | se External Ca  | alls Policy                                   |  |  |  |
|             |  |                 |   |  |  |  |
| Gi          | roup Calls: 🧧 U                          | se extension    |   |  |  |  |
|             | Οu                                       | se location co  | de plus extension                             |  |  |  |
|             | Οu                                       | se External Ca  | alls Policy                                   |  |  |  |
| Emerge      | ency Calls: 🤘 U                          | se user phone   | number for Calling Line Identity              |  |  |  |
|             | Ou                                       | se configurabl  | e CLID for Calling Line Identity              |  |  |  |
|             | ΟU                                       | se group/depa   | rtment phone number for Calling Line Identity |  |  |  |
| 🔽 Alle      | ow Alternate Nun                         | nbers for Redir | recting Identity                              |  |  |  |
| Z Alle      | ow Configurable                          | CLID for Redir  | ecting Identity                               |  |  |  |
|             | ow Mobile DN for                         | Redirecting lo  | dentity                                       |  |  |  |
| 🗹 Blo       | Block Calling Name for External Calls    |                 |   |  |  |  |

### **Certificate import**

Customer needs to order the certificates from **RoutIT**.

Before OpenScape Business can establish a TLS connection to the ITSP server, the certificates provided by the ITSP must be imported.

The certificate import is performed in the WBM page Expert mode -> Telephony Server -> Security -> Signaling and Payload Encryption (SPE) -> SPE CA Certificates:

Select the \*.pem file of your CA certificate and click [View Fingerprint of Certificate]. Close the window showing the fingerprint - click [OK].

Click [Import Certificate from File] and wait until the confirmation window appears.

| Expert mode - Telephony Server  |   |  |  |  |
|---|---|--|--|--|
| Security<br>Application Firewall<br>Deployment and Licensing Client (DLSC)          | SPE CA Certificate(s) Import trusted CA Certificate (XLS09 file) for SPE  |  |  |  |
| <ul> <li>Signaling and Payload Encryption (SPE)</li> <li>SPE Certificate</li> </ul> | File with certificate (PEM or binary): Choose File Chart en CA crt.pem  |  |  |  |
| SPE CA Certificate(s)   | CRL Distribution Point (CDP) Protocol: CHTP<br>CDP (without e.g. Idap://):  |  |  |  |
| 120<br>1221<br>1222<br>1223   |   |  |  |  |
| E⊇2<br>E⊇23<br>IN SSL<br>Web Security<br>Sql Security                               | Fingerprint:<br>A898 THE BOOK CONTROL CONTROL OF THE C |  |  |  |
|   | View Fingerprint of Certificate Import Certificate from File Help   |  |  |  |

Close with [OK].



Note: OpenScape Business cannot import files with a "certificate chain". Each file can contain only one certificate.

The imported certificate can now be displayed. Click on the "number", not on the symbol.

| Expert mode - Telephony Server                             |                            |                                      | 3  |
|--|----------------------------|--------------------------------------|--|
| Security   | SPE CA Certificate(s)      |                                      |  |
| Application Firewall                                       | Ven Cetificite             | Direlau (D)                          | Demons Catillants                          |
| Deployment and Licensing Client (DLSC)                     |                            | Usplay Cric                          | Kentive Celuitate                          |
| <ul> <li>Signaling and Payload Encryption (SPE)</li> </ul> |                            | Certificate Type:                    | Self-Signed CA Certificate                 |
| ▼SPE Certificate   |                            | Serial Number of Certificate:        | 的行为 医结核菌属 医无关系                             |
| ✓SPE CA Certificate(s)                                     |                            | Serial Number of Certificate (hex)   | The same strength and the state of a local |
|  |                            | Senar Rumber of Certificate (nex).   |  |
| 2017   |                            | Type of Signature Algorithm:         | sha256KSA                                  |
| 18   |                            | Start Time of Validity Period (GMT): | Thursday, 08/01/2013 12:00:00              |
| 2019   |                            | End Time of Validity Period (GMT):   | Friday, 01/15/2038 12:00:00                |
| 20   |                            | CRL Distribution Point:              |  |
| 1921<br>1921   | Issued by CA               |                                      |  |
| 5073   |                            | Country (C):                         | US   |
| ▼SSL   |                            | Organization (O):                    | DigiCert Inc                               |
| Certificate Generation                                     |                            | Organization Unit (OU):              | www.digicert.com                           |
| Certificate Management                                     |                            | Common Name (CN):                    | DigiCert Global Root G2                    |
| Web Security   | Subject Name               | contribut Harris (011)               | Signalit and a second                      |
| Sql Security   |                            | Country (C):                         | US   |
|  |                            | Organization (O):                    | DigiCert Inc                               |
|  |                            | Organization Unit (OU):              | www.digicert.com                           |
|  |                            | Common Name (CN):                    | DigiCert Global Root G2                    |
|  | Subject Alternative Name   |                                      |  |
|  |                            |                                      |  |
|  | Public Key Encryption Data |                                      |  |
|  |                            | Public Key Length:                   | 2048                                       |
|  |                            | Public Key:                          | BB37CD34DC7B6BC9B26890AD4                  |
|  |                            | Fingerprint:                         | DF3C                                       |
|  |                            |                                      |  |
|  | Help                       |                                      |  |

Then import the CA root certificate in the same way.

# **Configuration Wizard**

#### **Internet Telephony**

#### Go to Central Telephony – "Internet Telephony"

| Home Administrators Se   | etup Expert mode Data Backup License Management Service Center  |   |
|--------------------------|---|---|
| Setup                    |   |   |
| ▼ Wizards                | Central Telephony   |   |
| Basic Installation       |   | • |
| Network / Internet       | CO Trunk ISDN / Analog / ITSP   |   |
| Telephones / Subscribers | Edit Point-to-multipoint connections (MSN) and PABX number for ISDN connections, and assignment<br>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,   |   |
| Security                 | password, SIP station number  |   |
| UC Suite                 | Edit Voicemail<br>Access numbers for integrated voicemail. Set up of voicemail boxes  |   |
| Cloud Services           | Phone Book / Sneed Dialing  |   |
| Mass Data                | Edit 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<br>Set up call detail recording connection parameters for call detail applications                             |   |
|                          | Music on Hold / Announcements   |   |
|                          | Record new melodies and announcements for Music on Hold and announcement before<br>answering  |   |
|                          | Edit Entrance telephone<br>Set up call allocation and access authorization for the entrance telephone at the analog station<br>connection |   |
| Harris                   |   |   |

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

| setup - mearus -                          | Gendar Telepho                            | ny - internet telepi                          | Ove   | nyiew                                    |                      |  |
|---|---|---|---|--|----------------------|--|
|   |   |   | 0/6   | VIEW                                     |                      |  |
| Note: changes don<br>Note: At least the c | e in expert mode r<br>onfiguration of the | must be reviewed/rep<br>'Country code' is nee | eated after running through the w<br>eded for features such as 'Interne | <mark>izard</mark><br>t telephony' and ' | 'MeetMe conference'. |  |
| PABX number                               |   |   | Country code: 00  | 31                                       | (mandatory)          |  |
|   |   |   | Local area code: 0  |  | (optional)           |  |
|   |   |   | PABX number:  |  | (optional)           |  |
|   |   |   |   |  |                      |  |
|   | r   | -   |   |  |                      |  |

Click [OK & Next].

Provider configuration and activation for Internet Telephony -> No call via Internet -> uncheck Use County specific view: *Netherlands* and select *RoutIT TLS NL*.

| Setup - Wizards - | Central Telephony - Internet     | Telephony   | ×  |  |
|-------------------|----------------------------------|---|----|--|
|                   | _                                |   | Î  |  |
|                   | P                                | rovider configuration and activation for internet relephony |    |  |
|                   |                                  | No call via Internet:                                       |    |  |
|                   |                                  | Country specific view: Netherlands                          |    |  |
| Note: changes do  | ne in expert mode must be review | red/repeated after running through the wizard.              | -1 |  |
|                   | Activate Provider                | internet relephony Service Provider                         |    |  |
| Add               |                                  | Other Provider  |    |  |
| Edit              |                                  | 474X  |    |  |
| Edit              |                                  | 8.8   |    |  |
| Edit              |                                  | A San Alex  |    |  |
| Edit              |                                  | 00.7343.5ee   |    |  |
| Edit              |                                  | 2017/01   |    |  |
| Edit              |                                  | December 40 h   |    |  |
| Edit              |                                  | RoutIT  |    |  |
| Edit              |                                  | RoutIT TLS NL   |    |  |
| Edit              |                                  | Text (  |    |  |
| Edit              |                                  | - K   |    |  |
| Edit              |                                  | 598.128.W.  |    |  |
| Edit              |                                  | Mana Queen L, N., Jan.                                      | •  |  |
| Help              | Abort Back                       | OK & Next Display Status                                    |    |  |

Activate Provider and click on [Edit].

On the next page you have to enter the following information:

- Domain Name

The SIP Domain Name can be found on the **RoutIT Broadsoft** Portal, under SIP Trunking Page > Trunk Group > Edit under the selected Trunk Group. The part required is found on the section called Registered Domain.

\_\_\_.\_\_.voipit.nl

| * Line/Port: 312                 |                            | @ (         | s.voipit.nl 🗸 |
|----------------------------------|----------------------------|-------------|---------------|
| Provider Registrar, Provider Pro | oxy and the Provider Outbo | ound Proxy: |               |
| The <b>Provider Registrar</b>    | : sbc.sc.voipit.nl         |             |               |
| The <b>Provider Proxy</b>        | :voipit.nl                 |             |               |
|                                  |                            |             |               |

| Internet Telephony Service Provider       |                  |  |  |  |
|---|------------------|--|--|--|
| Provider Name:                            | RoutIT TLS NL    |  |  |  |
| Enable Provider:                          |                  |  |  |  |
| Secure Trunk:                             |                  |  |  |  |
| Domain Name:                              | voipit.nl        |  |  |  |
| Provider Registrar                        | 7                |  |  |  |
| Use Registrar:                            |                  |  |  |  |
| IP Address / Host name:                   | sbc.sc.voipit.nl |  |  |  |
| Port:                                     | 5081             |  |  |  |
| Reregistration Interval at Provider (sec) | 120              |  |  |  |
| Provider Proxy                            |                  |  |  |  |
| IP Address / Host name:                   | voipit.nl        |  |  |  |
| Port:                                     | 5081             |  |  |  |
| Provider Outbound Proxy                   | 12               |  |  |  |
| Use Outbound Proxy.                       |                  |  |  |  |
| IP Address / Host name:                   | 145.131.159.211  |  |  |  |
| Port: 5081                                |                  |  |  |  |
|   |                  |  |  |  |
|   |                  |  |  |  |
|   |                  |  |  |  |
|   |                  |  |  |  |
| Help Abort Back OK & Next D               | elete Data       |  |  |  |
|   |                  |  |  |  |

Click [OK & Next].

| In the next dia | log the specific | customer SIP | User data will | be configured. |
|-----------------|------------------|--------------|----------------|----------------|
|                 |                  |              |                |                |

| Setup - Wizards | Central Telephony                | - Internet Tele | phony          |                                    | × |
|-----------------|----------------------------------|-----------------|----------------|------------------------------------|---|
|                 |                                  |                 | Internet Telep | ephony Stations for RoutIT TLS NL  |   |
|                 |                                  |                 |                | Name of Internet Telephony Station |   |
| Add             | d New Internet Telephony Station |                 |                |                                    |   |
|                 |                                  |                 |                |                                    |   |
| Help            | Abort                            | Back            | OK & Next      |                                    |   |

Click on [Add].

Data provided on the RoutIT Broadsoft Portal, under SIP Trunking Page > Trunk Group > Edit under the selected Trunk Group:

| Internet telephony station: | Username is inserted here (e.g: 31297745780)  |
|-----------------------------|---|
| Authorization name:         | Username is inserted here (e.g: 31297745780)  |
| Password:                   | Password provided by RoutIT   |
| 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: 31297745780). Usually the <b>Lead Number</b> is entered here. |

| Setup - Wizards - Central Telephony - Internet Telephony   |                         |  |  |  |  |
|--|-------------------------|--|--|--|--|
| Internet Telephony Sta   | ation for RoutIT TLS NL |  |  |  |  |
| Internet telephony station:  | 31297745780             |  |  |  |  |
| Authorization name:  | 31297745780             |  |  |  |  |
| Password:  |                         |  |  |  |  |
| Confirm Password:  |                         |  |  |  |  |
| Call number assignment   |                         |  |  |  |  |
| Use public number (DID)  | ~                       |  |  |  |  |
| ITSP-multiple route:   |                         |  |  |  |  |
| Default Number:  | 31297745780             |  |  |  |  |
| Default Number<br>ITSP as primary CO access<br>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<br>respective call.<br>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 Dr   | elete Data              |  |  |  |  |

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

| Setup | - Wizards | - Central 1 | elephony - | Internet Telephony |   | × |
|-------|-----------|-------------|------------|--------------------|---|---|
|       |           |             |            | Inte               | rnet Telephony Stations for RoutIT TLS NL |   |
|       |           |             |            |                    | Name of Internet Telephony Station        |   |
|       | Edit      | 1           |            |                    | 31297745780                               |   |
|       |           |             |            |                    |   |   |
|       |           |             |            |                    |   |   |
|       | Help      | Abo         | ort        | Back OK 8          | i Next                                    |   |
|       |           |             |            |                    |   |   |

#### Click [OK & Next]

| e of Internet Telephony Station Internet Telephony Phone Number Direct inward dialing Use as PABX number for outgoin | ing calls |
|--|-----------|

#### Click [OK & Next] (no input needed)

| Setup - Wizards - | Central Telephony - Internet     | Telephony  | ×  |
|-------------------|----------------------------------|--|----|
|                   | F                                | Provider configuration and activation for Internet Telephony | Î  |
|                   |                                  | No call via Internet:  |    |
|                   |                                  | Country specific view: Netherlands                           |    |
| Note: changes do  | ne in expert mode must be review | wed/repeated after running through the wizard.               | -  |
| 644               | Activate Provider                | Internet Telephony Service Provider                          |    |
| Add               |                                  | Other Provider   |    |
| Edit              |                                  | 60as   |    |
| Edit              |                                  |  | 10 |
| Edit              |                                  | A tan dan  |    |
| Edit              |                                  | 00.7345.5ee.   |    |
| Edit              |                                  | 2010   |    |
| Edit              |                                  | Bernard h  |    |
| Edit              |                                  | RoutIT   |    |
| Edit              |                                  | RoutIT TLS NL  |    |
| Edit              |                                  | mer -  |    |
| Edit              |                                  | 18   |    |
| Edit              |                                  | 198.128 B.   |    |
| Edit              |                                  | Mare Owen Life Lifes   | •  |
| 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 RoutIT Broadsoft Portal.

|   | ***  |                                   |                      |  |
|---|--|-----------------------------------|----------------------|--|
|   | ^ Name: 31≠                                    | 1                                 |                      |  |
| * M   | aximum Active Calls Allowed: 8                 |                                   |                      |  |
| Maximum A   | ctive Incoming Calls Allowed:                  | -                                 |                      |  |
| Maximum A   | ctive Outgoing Calls Allowed:                  |                                   |                      |  |
|   | S S Enable Ar                                  | Ithentication                     |                      |  |
|   | Authentication User Name: 312                  |                                   |                      |  |
| Type r  | ew authentication password:                    |                                   |                      |  |
| Re-type r   | ew authentication password:                    |                                   |                      |  |
|   | Trunk Group Identity:                          | @                                 | .voipit.nl 🗸         |  |
|   | OTG/DTG Identity:                              |                                   |                      |  |
| Setup - Wizards - Central Telephony - Internet Telepho  | ny   |                                   |                      | ×  |
|   | Settings for Inf                               | ernet Telephony                   |                      |  |
| Simultaneous Internet Calls   |  |                                   |                      |  |
| Available Lines for ITSP: 170   |  |                                   |                      |  |
| Please enter in field 'Upstream up to (Kbit/sec)' the Upstrea<br>Upstream up to (Kbps) = 2048                             | m of your Internet connection                  | communicated by your Provider.    | You have typed in    |  |
| In the 'Change Feature> Internet Telephony' Assistant. Th<br>network load, you will need to reduce this number of simulta | is upstream allows you to con<br>aneous calls. | duct up to 16 Internet phone call | s simultaneously. If | the call quality deteriorates due to the |
| The number of simultaneous Internet Calls also depends or   | i the licensing.                               |                                   |                      |  |
|   | Upstream up to (Kbps)                          | 2048                              |                      |  |
|   | openedin op to (rope)                          | 2010                              |                      |  |
| Number  | of Simultaneous Internet Calls                 | 8                                 | Distribute Lines     |  |
|   |  |                                   |                      |  |
| Line assignment   | C F  |                                   |                      | A  |
| Internet Telephony Service Provider   | Configu  | ired Lines                        |                      | Assigned Lines                           |
| RoutIT TLS NL   |  | 0                                 | 8                    |  |
|   |  |                                   |                      |  |
|   |  |                                   |                      |  |
| Help Abort Back   | OK & Next                                      |                                   |                      |  |
|   |  |                                   |                      |  |
| Click [OK & Next]   |  |                                   |                      |  |

## Special phone numbers

| In this dialog it is possible to route special | phone numbers. |
|--|----------------|
|--|----------------|

| Setup - Wizards - Central Telephony -      | tup - Wizards - Central Telephony - Internet Telephony     |                    |  |  |  |  |
|--|--|--------------------|--|--|--|--|
|  | Special phone numbers                                      | Î                  |  |  |  |  |
| Note:                                      |  |                    |  |  |  |  |
| Please make sure that all special call nun | nbers are supported by the selected provider without fail. |                    |  |  |  |  |
| Special phone number                       | Dialed digits  | Dial over Provider |  |  |  |  |
| 1  | 0C112  | RoutIT TLS NL 🗸    |  |  |  |  |
| 2  | 0C14Z  | RoutIT TLS NL V    |  |  |  |  |
| 3  |  | RoutIT TLS NL V    |  |  |  |  |
| 4  |  | RoutIT TLS NL 🗸    |  |  |  |  |
| 5  |  | RoutIT TLS NL 🗸    |  |  |  |  |
| 6  |  | RoutIT TLS NL 🗸    |  |  |  |  |
| 7  |  | RoutIT TLS NL V    |  |  |  |  |
| 8  | [  | RoutIT TLS NL 🗸    |  |  |  |  |
| Help Abort                                 | Back OK & Next   |                    |  |  |  |  |

Click [OK & Next]

#### On next page status of ITSP is displayed.

| ny - Internet Telephony |   |  |   | ×  |
|-------------------------|---|--|---|--|
| Status for th           | ne Internet Tel                               | ephony Service Pro   | ovider (ITSP)   |  |
| Provider                |   |  | User  |  |
| RoutIT TLS NL           | Enabled                                       | 31297745780  | registered  | Diagnose   |
|                         |   |  |   |  |
|                         |   |  |   |  |
|                         |   |  |   |  |
| Back Nex                | t   |  |   |  |
|                         | Status for th Provider RoutIT TLS NL Back Nex | Status for the Internet Tel       Provider       RoutIT TLS NL     Enabled       Back     Next | Status for the Internet Telephony Service Provider       Provider       RoutIT TLS NL       Enabled       31297745780 | Status for the Internet Telephony Service Provider (ITSP)       Provider     User       RoutIT TLS NL     Enabled     31297745780     registered |

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 RoutIT TLS NL                         |   |
| Area Code<br>Please enter the local area code.           |   |
|  |   |
|  |   |
|  |   |
| Help Abort Back OK & Next                                |   |

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'     |  |  |  |  |  |  |
| RoutIT TLS NL  |       | (    |   |  |  |  |  |  |  |
|  |       |      |   |  |  |  |  |  |  |
| Help   | Abort | Back | OK & Next                                   |  |  |  |  |  |  |

#### Click [OK & Next] and

| Setup - Wizards -                         | Central Telepho                         | ny - Internet Telep                     | ohony                 | Ê   |
|---|---|---|-----------------------|---|
|   |   |   |                       |   |
|   |   |   | The changes for th    | e feature 'Internet Telephony' are completed  |
| The Internet Telepi<br>Once an "Internet" | nony is switched o<br>Felephony Service | n and configured.<br>Provider" has been | activated/deactivat   | ed, it is necessary to run through the "Central Telephony - CO Trunk ISDN / Analog" wizard again. |
| Immediately'.                             | niy, you should se                      | ive the comgutator                      | r data. To do tina, u | the completion of the wizard, choose Dackup in the main menu, and follow this by choosing Dackup  |
|   |   |   |                       |   |
|   |   |   |                       |   |
| Help                                      | Abort                                   | Back                                    | Finish                |   |

on the next page [Finish]

## **DID configuration**

In the DID Section, the full DID will need to be entered without the country code.

| Expert mode - Telephony Server |                 |           |            |             |                  |               |     |           |        |                  |         | ×           |
|--------------------------------|-----------------|-----------|------------|-------------|------------------|---------------|-----|-----------|--------|------------------|---------|-------------|
| Station                        | IP Clients      |           |            |             |                  |               |     |           |        |                  |         |             |
| ▼ Station                      | Edit Subscriber |           |            | Device Info |                  |               | way |           |        | Fallback Hosting |         |             |
| UP0 Stations                   |                 |           |            |             |                  |               |     |           |        |                  |         |             |
| ▼IP Clients                    | Callno          | DID       | First Name | Last Name   | Display          | Type          |     | Clip/Lin  | Active | Fax Callno       | Fax DID | ITSP Loc-ID |
| System Clients                 | Search          |           |            |             |                  |               |     |           |        |                  |         |             |
| SIP Clients                    |                 |           |            |             |                  |               | ~   |           |        |                  |         |             |
| RAS User                       |                 |           |            |             |                  |               |     | -         |        | _                |         |             |
| Deskshare User                 | 3200 →          | -         | Asterix    | de Gallier  | Asterix de Galli | System Client | ~   | ·         |        | -                | -       | -           |
| Analog Stations                | 3201 →          | -         | Obelix     | Menhir      | Obelix Menhir    | System Client | ~   | -         | -      | 3274             | -       | -           |
| ISDN Stations                  | 3202 →          | -         | Panoramix  | De Druide   | Panoramix De Dru | System Client | *   | -         | -      | 3272             | -       | -           |
| DECT Stations                  | 3203 →          | 297745782 | Dogmatix   | the dog     | Dogmatix the dog | System Client | ~   | 297745780 | -      | -                | -       | -           |

# **Additional Configuration**

#### License

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

|            |  |                          |                     |                                    |                                     | administrator@system | Logoff |
|------------|--|--------------------------|---------------------|------------------------------------|-------------------------------------|----------------------|--------|
| Home       | Administrators   | Setup Expert mode        | Data Backup         | License Management                 | Service Center                      |                      |        |
| License M  | lanagement   |                          |                     |                                    |                                     |                      |        |
| License in | nformation   | CO Trunks                |                     |                                    |                                     |                      | 0)     |
| ▼ Additio  | nal Products   |                          |                     |                                    |                                     |                      |        |
| Open50     | cape Personal Edition  | The access to central or | ffice via PRI(S2m/T | 1) trunks or via Internet telephor | ny is licensed by CO trunk licenses |                      |        |
| ▼Local U   | ser licenses   | SID trunke               | Available licens    | ses for SIP and PRI(S2m/T1) tru    | unks: 242                           |                      |        |
| Overvie    | ew   | SIF UUIIKS               | The configured n    | umber of simultaneous Internet     | calls                               |                      |        |
| IP User    |  |                          | for each Inte       | ernet Telephony Service Provid     | er is: 8                            |                      |        |
| TDM Us     | TDM User License number of simultaneous Internet calls in this node: 8   |                          |                     |                                    |                                     |                      |        |
| Mobilit    | Mobility User     License demand for number of simultaneous Internet calls in this node:     8 •       Deskshare User     DPRI (\$2MLT1) |                          |                     |                                    |                                     |                      |        |
| Desksh     |  |                          |                     |                                    |                                     |                      |        |
| CO Trunk   | s  | Type Slot                | Port                | Feature                            | Demands                             | used licenses        |        |
| System L   | icenses  |                          |                     |                                    |                                     |                      |        |
| ▼ License  | Profiles   |                          |                     |                                    |                                     |                      |        |
| Create     | Profiles   |                          |                     |                                    |                                     |                      |        |
| Assign     | Profiles   |                          |                     |                                    |                                     |                      |        |
| Registrat  | ion  |                          |                     |                                    |                                     |                      |        |
| Activate   | License Online   | Abort                    | Apply               |                                    |                                     |                      |        |

## Known limitations and restrictions:

- Codec G.729 is not support by *RoutIT TLS NL*
- Call Deflection (SIP 302 Response) can't be configured in combination with TLS configuration
- COLP is not support by *RoutIT TLS NL* and therefore not tested in certification

# Mandatory configuration in Expert Mode

#### **Codec Parameters**

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

To comply with the requirements of the *RoutIT* the following codec parameters **MUST** be changed:

- 1. G.729 is **NOT** supported by *RoutIT* and **SHOULD** be disabled.
- 2. RFC 2833 payload type **MUST** be 101.

| Expert mode - Telephony Server      |   |                            |                          |               |            |             |  |  |  |
|-------------------------------------|---|----------------------------|--------------------------|---------------|------------|-------------|--|--|--|
| Voice Gateway                       | Codec Parameters                                  |                            |                          |               |            |             |  |  |  |
| SIP Parameters                      | Edit Codec Parameters                             |                            |                          |               |            |             |  |  |  |
| ITSP Loc-ID Settings                |   |                            |                          |               |            |             |  |  |  |
| Codec Parameters                    | Codec   | Priority                   | Voice Activity Detection |               | Frame Size |             |  |  |  |
| Destination Codec Parameters        | G 711 A-law                                       | Priority 1 ¥               |                          |               |            | 20 🗙 msec   |  |  |  |
| Internet Telephony Service Provider | 0.711   |                            | VAD.                     |               |            | 20 - 111360 |  |  |  |
| Networking                          | G./11 µ-law                                       | Priority 2 🗸               | VAD:                     |               |            | 20 V msec   |  |  |  |
| SIPQ-Interconnection                | G.729A  | not used 🛩                 | VAD:                     |               |            | 20 v msec   |  |  |  |
| Native SIP Server Trunk             | G.729AB   | not used 🛩                 | VAD:                     |               |            | 20 v msec   |  |  |  |
|                                     | Enhanced DSP Channels                             |                            |                          |               |            |             |  |  |  |
|                                     |   | Use G.711 only             |                          |               |            |             |  |  |  |
|                                     | T.38 Fax  |                            |                          |               |            |             |  |  |  |
|                                     |   | T.38 Fax:                  |                          |               |            |             |  |  |  |
|                                     |   | Use FillBitRemoval:        |                          |               |            |             |  |  |  |
|                                     | Max LIDP Datagram Size for T 38 Fax (bytes): 1472 |                            |                          |               |            |             |  |  |  |
|                                     |   |                            |                          |               |            |             |  |  |  |
|                                     | Error Correcti                                    | on Used for 1.36 Fax (UDP) | t380DPRedundancy V       |               |            |             |  |  |  |
|                                     | 1.30 Fax  | Enable ECM:                |                          |               |            |             |  |  |  |
|                                     | Misc.   | ClearChannel               | <b>V</b>                 | Frame Size:   | 20 v msec  |             |  |  |  |
|                                     | DEC 2823  | oldar ollamitol.           |                          | r tunio oizo. | 20 1 11000 |             |  |  |  |
|                                     | Transmission of Fax/Modem T                       | ones according to RFC2833: |                          |               |            |             |  |  |  |
|                                     | Transmission of DTMF T                            | ones according to RFC2833: |                          |               |            |             |  |  |  |
|                                     |   | Payload Type for RFC2833:  | 101                      |               |            |             |  |  |  |
|                                     | Redundant Transmission of RFC2833 T               | ones according to RFC2198: |                          |               |            |             |  |  |  |
|                                     |   |                            |                          |               |            |             |  |  |  |
|                                     | Apply Undo  | Help                       |                          |               |            |             |  |  |  |