



A MITEL
PRODUCT
GUIDE

OpenScape Business V3

SIP Trunk configuration

Multi-Registration and Multi-Site

Release Number 09/2024

Contents

1 Introduction	4
2 Configuration	5
2.1 Create a basic multiple route	5
2.2 Add an additional ITSP route	7
3 Examples.....	8
3.1.1 DID account with separate registration per DID number range.....	8
3.1.2 Multisite with different area codes via one provider	10
3.1.3 Different Routes for ITSP accounts of one Provider.....	14

History of Changes

Date	Issue	Summary
24.11.2017	1.0	initial version
21.03.2018	1.1	numbering schema update
28.03.2018	1.2	update on screenshot
27.09.2024	1.1	english version with editorial changes

Note: The basis for this document is the current OpenScape Business at the time of certification. Since OpenScape Business is constantly developed, input masks and interfaces as well as requirements may change in the future. The settings and entries described here then apply accordingly.

Comments and corrections are welcome, please contact: osbiz-certification@mitel.com

1 Introduction

The Multisite feature is used for different call scenarios. It allows Providers the handling of numbers from different locations/areas via a single trunk (single registration) or dedicated trunks for each location/area (multiple registrations). This covers the support of migration scenarios from ISDN to IP-based connections.



The Multisite feature is available for **DID based ITSP trunks only** and is required whenever multiple routes are defined for the same ITSP.

With some ITSPs it might be necessary to register each assigned number block individually. In such a case the customer receives a separate access code for each number block. This requires only one route, but the extended option is also required to differentiate between the individual access identifiers (= Internet telephony subscribers).

Additional info is available in the ITSP descriptions and the list of certified ITSPs stored in the Wiki. This data is continually updated.

Possible use cases

1. The customer receives different DID number blocks from his provider with a separate registration per DID number range.
2. The customer has an OpenScape Business with several locations in different local areas (multisite) and receives a local telephone number from the associated local network (max. eight) for each location (site). All connections are provided via the same provider and have their own registration.
3. The customer has several ITSP DID connections on his OpenScape Business (max. eight) and would like to use the same extension numbers for all connections and use the directional area code to decide which phone number is sent to the central office.

When is multiple registration required?

- In DID mode, the SIP stack requires a criterion as to which phone numbers are assigned to a registration. This results in the need to assign unique telephone numbers to a registration.
- If the phone numbers of a connection have to be distributed in different directions, SIP Stack requires a criterion as to which phone numbers belong to one direction.

When is multiple registration not necessary?

- No registration is used (static mode) and all phone numbers are forwarded in the same direction.
- Only one registration is required for all phone numbers.

2 Configuration

2.1 Create a basic multiple route

The registration details are entered in the **Internet Telephony** wizard on the following page:

Internet Telephony Station for myITSP

Internet telephony station: +496987409301

Authorization name: +496987409301@my-provid

Password:

Confirm Password:

Call number assignment

Use public number (DID)

ITSP-multiple route:

Default Number: +4969874093010

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.

ITSP route prefixes	
Add	+496987409301

Enter all prefixes assigned to this ITSP route.

Help Abort Back OK & Next Delete Data

If an ITSP requires multiple directions and/or registrations, **ITSP-multiple route** must be enabled. This enables the **ITSP route prefixes** configuration.

The following rules apply to the prefix:

- Phone number format:

The prefix **MUST** be configured in the same format as the phone number in the request URI of an upcoming INVITE message:

Example: INVITE sip:+49698740930100@87.173.126.61:62274;transport=tcp SIP/2.0

The prefix **MUST** contain the significant part of the phone number in the same format, i.e. +4969xxxx

- Normally the **Default Number** and prefix are in the same format

Examples (in E.164 format):

- Number range: +496987409301 00-99
- **Default Number**: +4969874093010
- Prefix: +496987409301

If other formats are used (e.g. 004969... or 069...) the above rule applies accordingly.

- The prefix contains the significant part of the number range (always left-aligned).

- Prefix == **Default Number**:

If only one Internet telephony subscriber is configured on the ITSP and the prefix is identical to the **Default Number**, the prefix does not need to be added.

On following page of the wizard, the **Default Number** and prefixes are displayed for review:

Setup - Wizards - Central Telephony - Internet Telephony

Call Number Assignment for myITSP

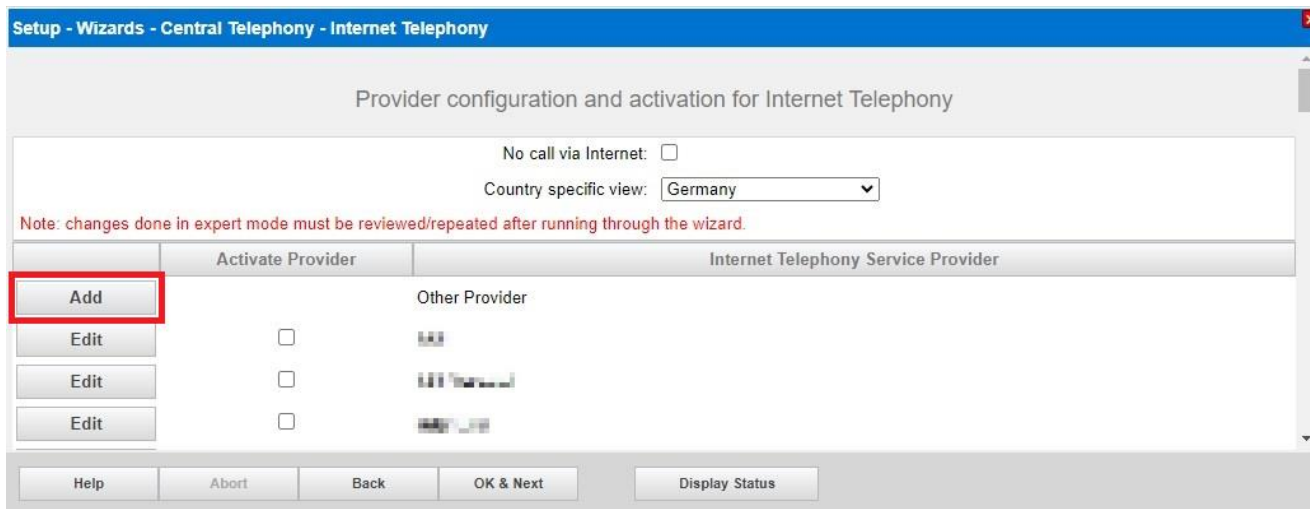
In order to complete the configuration please verify that the relevant user DIDs are set in stations. (Telephones / Subscribers configuration)

Name of Internet Telephony Station	Internet Telephony Phone Number	Internal Call Number	Use as PABX number for outgoing calls
+496987409301	+496987409301	-	<input type="radio"/>
+496987409301	+4969874093010	-	<input checked="" type="radio"/>

Help Abort Back OK & Next

2.2 Add an additional ITSP route

For scenarios where multiple ITSP routes are required the **Add "Other Provider"** functionality is required:



Setup - Wizards - Central Telephony - Internet Telephony

Provider configuration and activation for Internet Telephony

No call via Internet:

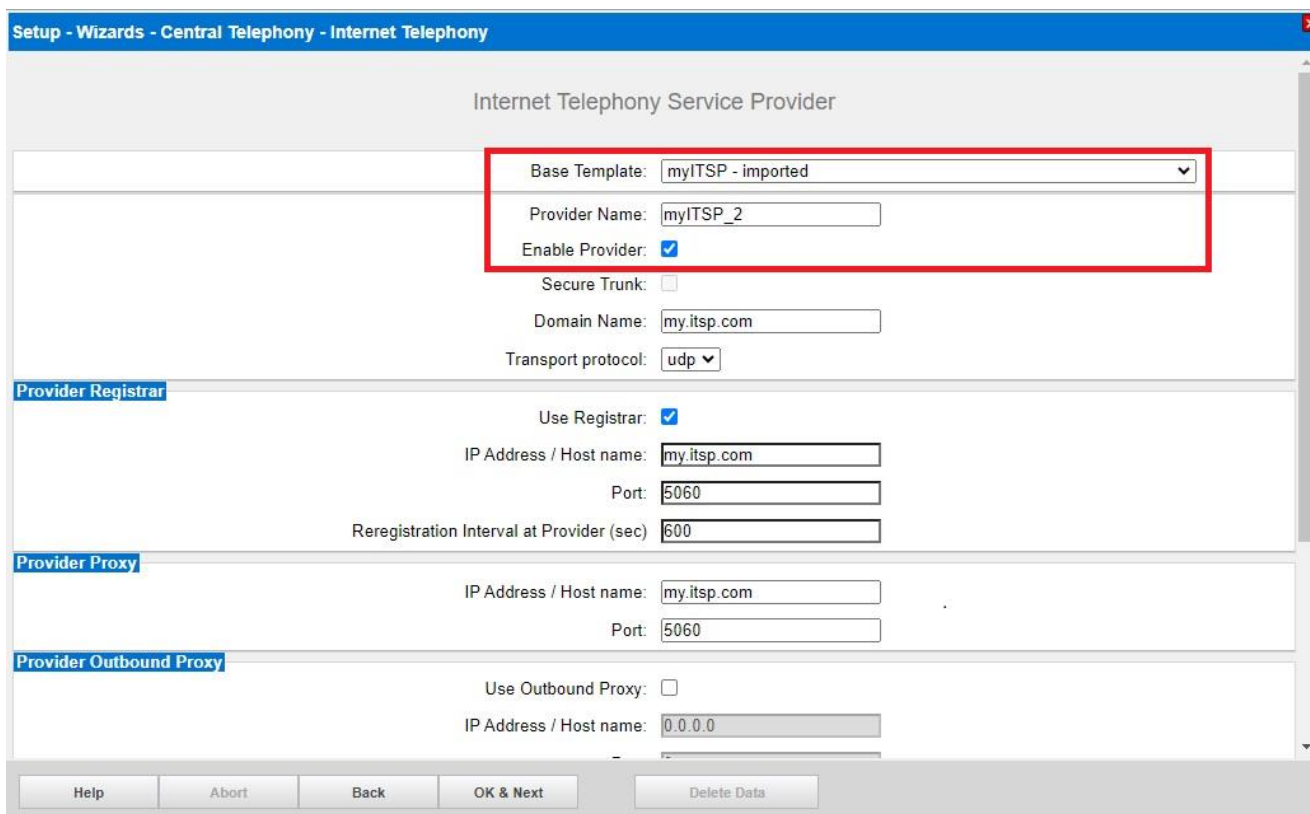
Country specific view:

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

	Activate Provider	Internet Telephony Service Provider
Add		Other Provider
Edit	<input type="checkbox"/>	...
Edit	<input type="checkbox"/>	...
Edit	<input type="checkbox"/>	...

Buttons: Help, Abort, Back, OK & Next, Display Status

On the following page you can select the appropriate ITSP under **Base Template**. All data defined in the profile is adopted.



Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Service Provider

Base Template:

Provider Name:

Enable Provider:

Secure Trunk:

Domain Name:

Transport protocol:

Provider Registrar

Use Registrar:

IP Address / Host name:

Port:

Reregistration Interval at Provider (sec):

Provider Proxy

IP Address / Host name:

Port:

Provider Outbound Proxy

Use Outbound Proxy:

IP Address / Host name:

Buttons: Help, Abort, Back, OK & Next, Delete Data

A unique provider name (here: **myITSP_2**) must be assigned. The name length is limited to 10 characters. This name is also used to identify the route used to reach the ITSP.

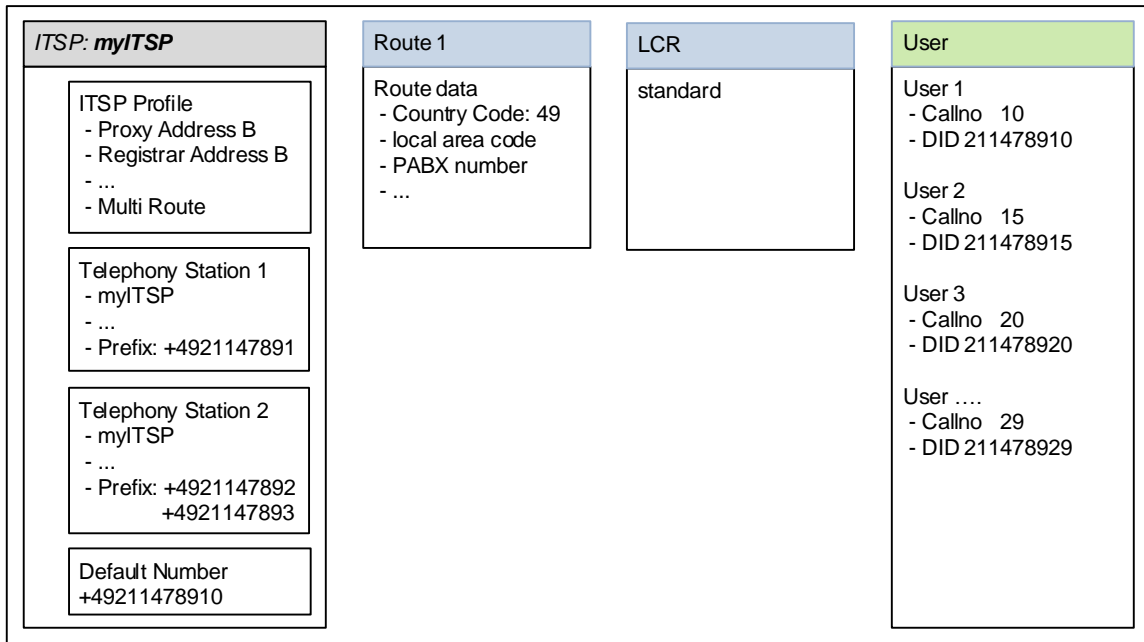
The **Internet telephony station** is then configured. The same instructions apply here as when setting up the 1st ITSP (see: **myITSP**).

3 Examples

3.1.1 DID account with separate registration per DID number range

The customer receives different DID number ranges (blocks) from his provider with a separate registration.

- DID range 1: +49-211-4789 10 - 19
- DID range 2: +49-211-4789 20 - 39



In this example, two registrations are necessary to cover the DID ranges.

Configuration steps

Select ITSP: **myITSP**

- configure first Internet Telephony Station for myITSP (see 2.1)
 - add **New Internet Telephony Station**
 - enter account data
 - assign **Default Number** (e.g. +49211478910)
 - enable **ITSP-multiple route**
 - add prefix +4921147891
- configure second Internet Telephony Station for **myITSP**
 - add **New Internet Telephony Station**
 - enter account data
 - **Default Number** is preassigned (e.g. +49211478910)

Since there is no unique prefix for "**DID range 2**", two prefixes must be configured

- add prefix +4921147892
- add prefix +4921147893

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Stations for myITSP

	Name of Internet Telephony Station
Add	New Internet Telephony Station
Edit	+4921147891

Buttons: Help, Abort, Back, OK & Next

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Station for myITSP

Internet telephony station:

Authorization name:

Password:

Confirm Password:

ITSP-multiple route:

Default Number:

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.

ITSP route prefixes	
Add	<input type="text"/>
Delete	+4921147892
Delete	+4921147893

Enter all prefixes assigned to this ITSP route.

Buttons: Help, Abort, Back, OK & Next, Delete Data

Setup - Wizards - Central Telephony - Internet Telephony

Call Number Assignment for myITSP

In order to complete the configuration please verify that the relevant user DIDs are set in stations.(Telephones / Subscribers configuration)

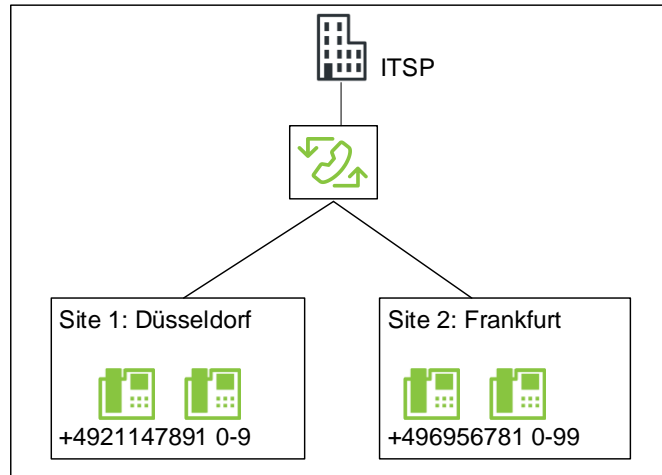
Name of Internet Telephony Station	Internet Telephony Phone Number	Internal Call Number	Use as PABX number for outgoing calls
+4921147891	+4921147891	-	<input type="radio"/>
+4921147891	+49211478910	-	<input checked="" type="radio"/>
+4921147892	+4921147892	-	<input type="radio"/>
+4921147892	+4921147893	-	<input type="radio"/>

Buttons: Help, Abort, Back, OK & Next

3.1.2 Multisite with different area codes via one provider

The customer has an OpenScope business with several locations in different local areas (multisite) and receives a local telephone number from the associated local area (max. 8) for each location. All connections are provided via the same provider and have their own registration

- DID range local area 1: +49-211-47891 0 - 9
- DID range local area 2: +49-69-56781 0 - 99



<p>ITSP1: myITSP</p> <p>ITSP Profile</p> <ul style="list-style-type: none"> - Proxy Address B - Registrar Address B - ... - Multi Route <p>Telephony Station 1</p> <ul style="list-style-type: none"> - myITSP - ... - Prefix: +4921147891 <p>Default Number</p> <p>+49211478910</p>	<p>Route 1</p> <p>Route data</p> <ul style="list-style-type: none"> - Country Code:49 - Area code: 211 - PBX Number: - ... 	<p>LCR</p> <p>Multisite:</p> <p>User 1</p> <ul style="list-style-type: none"> Site Dlf Route myITSP <p>User 2</p> <ul style="list-style-type: none"> Site Dlf Route myITSP <p>User 3</p> <ul style="list-style-type: none"> Site Ffm Route myITSP_2 <p>User ...</p> <ul style="list-style-type: none"> Site Ffm Route myITSP_2 	<p>User</p> <p>User 1</p> <ul style="list-style-type: none"> - Callno 10 - DID 478910 <p>User 2</p> <ul style="list-style-type: none"> - Callno 15 - DID 478915 <p>User 3</p> <ul style="list-style-type: none"> - Callno 20 - DID 5678100 <p>TIn</p> <ul style="list-style-type: none"> - Callno 29 - DID 5678129
<p>ITSP2: myITSP_2</p> <p>ITSP Profile</p> <ul style="list-style-type: none"> - Proxy Address B - Registrar Address B - ... - Multi Route <p>Telephony Station 2</p> <ul style="list-style-type: none"> - myITSP_2 - ... - Prefix: +496956781 <p>Default number</p> <p>+49695678100</p>	<p>Route 2</p> <p>Route data</p> <ul style="list-style-type: none"> - Country Code:49 - Area code: 69 - PBX Number: - ... 		

In this example, two registrations are necessary to cover the local areas and the number range.

Configuration steps

Select ITSP: **myITSP**

- configure first Internet Telephony Station for **myITSP** (see: 2.1 Create a basic multiple route)
 - add **New Internet Telephony Station**
 - enter account data
 - assign **Default Number** (e.g. +49211478910)
 - enable **ITSP-multiple route**
 - add prefix +4921147891

Via the Internet Telephony wizard add **Other Provider myITSP_2** using the **myITSP** template (see: 2.2 Add an additional ITSP route)

- configure second Internet Telephony Station for **myITSP_2** (see: 2.1 Create a basic multiple route)
 - add **New Internet Telephony Station**
 - enter account data
 - assign **Default Number** (e.g. +4969567810)
 - enable **ITSP-multiple route**
 - add prefix +496956781

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Station for myITSP

Internet telephony station: +4921147891

Authorization name: +4921147891@my-provider.

Password: ****

Confirm Password: ****

ITSP-multiple route:

Default Number: +49211478910

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.

ITSP route prefixes	
Add	<input type="text"/>
Delete	+4921147891

Enter all prefixes assigned to this ITSP route.

Help Abort Back OK & Next Delete Data

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Station for myITSP_2

Internet telephony station:

Authorization name:

Password:

Confirm Password:

ITSP-multiple route:

Default Number:

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.

ITSP route prefixes	
Add	<input type="text"/>
Delete	+496956781

Enter all prefixes assigned to this ITSP route.

Help Abort Back OK & Next Delete Data

Perform route configuration and **Multisite Management** wizard

Setup - Wizards - Network / Internet - Multisite Management

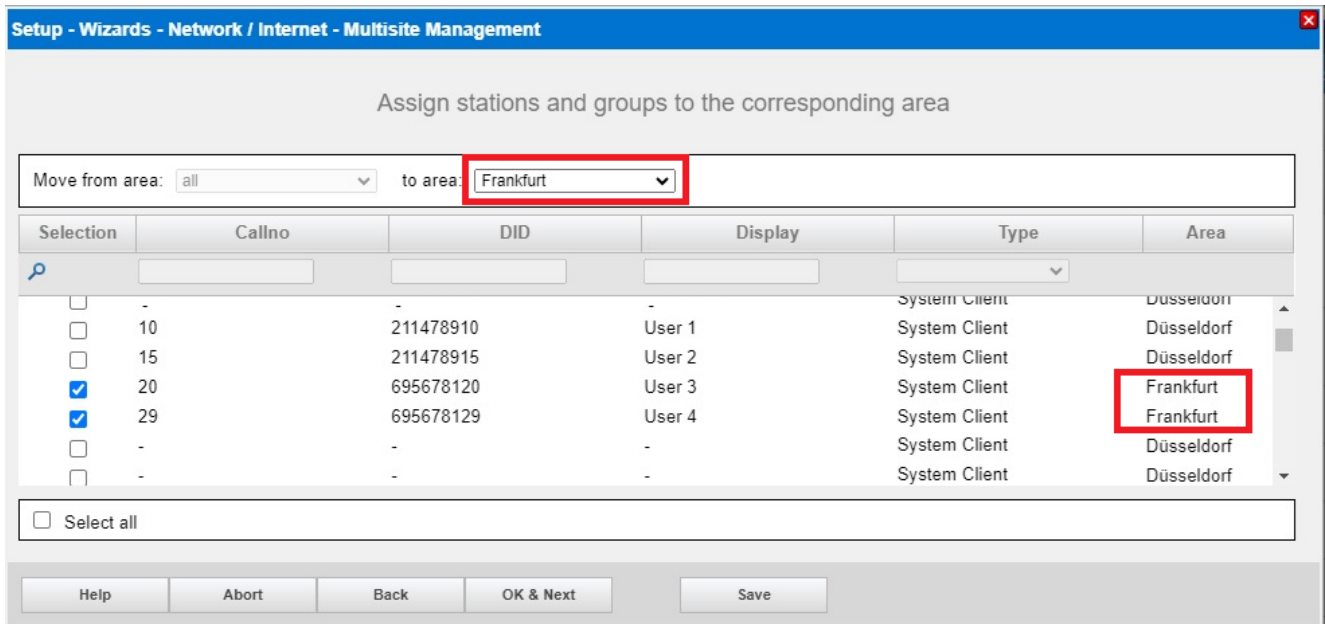
Define multi-site areas based on an area dialing code and assign the corresponding ITSP/trunk group

Up to 8 areas with freely editable names and an optional max 15 digit area dialing code with leading national prefix (0)

Configuration of areas allows users to dial a local destination w/o area dialing string

	Delete	Area Code	Area	Dedicated Route
1		<input type="text" value="211"/>	<input type="text" value="Düsseldorf"/>	<input type="text" value="myITSP"/>
2	<input type="checkbox"/>	<input type="text" value="69"/>	<input type="text" value="Frankfurt"/>	<input type="text" value="myITSP_2"/>
3	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="-"/>
4	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="-"/>
5	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="-"/>
6	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="-"/>
7	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="-"/>
8	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="-"/>

Help Abort Back OK & Next Save



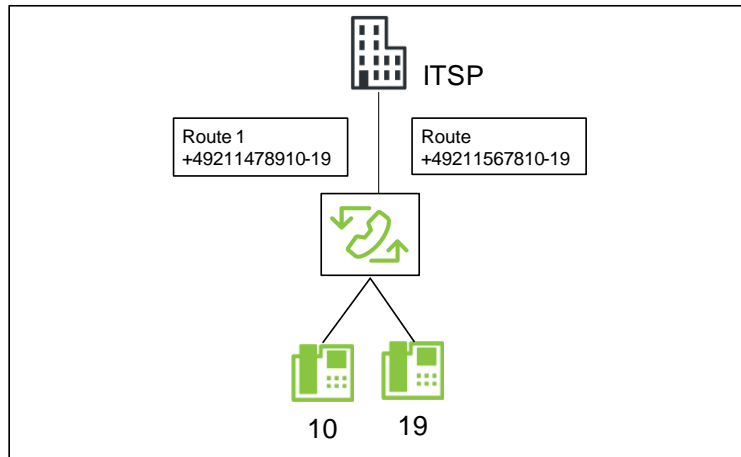
to assign the User to the different sites.

3.1.3 Different Routes for ITSP accounts of one Provider.

The customer has several ITSP DID connections on his OpenScope Business (max. 8) and would like to use the same extension numbers for all connections and use the line/direction code to decide which phone number is sent to the outside world.

In this example, two phone number ranges with identical extension ranges are used. The participants can therefore be reached via two different telephone numbers. Both number bands require their own direction and own registrations to cover the number range.

- DID range 1: +49-211-4789 10 - 19
- DID range 2: +49-211-5678 10 - 19



<p>myITSP</p> <p>ITSP Profile</p> <ul style="list-style-type: none"> - Proxy Address B - Registrar Address B - ... - Multi Route <p>Telephony Station 1</p> <ul style="list-style-type: none"> - Station 1 - ... - Prefix: +492114789 <p>Default number</p> <p>+49211478910</p>	<p>Route 1</p> <p>Route data</p> <ul style="list-style-type: none"> - Country Code:49 - Area code: 211 - PBX Number: 4789 - ... 	<p>LCR</p> <p>Standard</p>	<p>User</p> <p>User 1</p> <ul style="list-style-type: none"> - Callno 10 - DID 10 <p>User 2</p> <ul style="list-style-type: none"> - Callno 15 - DID 15 <p>User</p> <ul style="list-style-type: none"> - Callno 19 - DID 19
<p>myITSP_2</p> <p>ITSP Profile</p> <ul style="list-style-type: none"> - Proxy Address B - Registrar Address B - ... - Multi Route <p>Telephony Station 2</p> <ul style="list-style-type: none"> - Station 2 - ... - Prefix: +49695678 <p>Default number</p> <p>+4969567810</p>	<p>Route 2</p> <p>Route data</p> <ul style="list-style-type: none"> - Country Code:49 - Area code: 211 - PBX Number: 5678 - ... 		

In this example, two registrations are necessary to cover the local areas and the number range.

Configuration steps

Select ITSP: **myITSP**

- configure first Internet Telephony Station for **myITSP**
(see: 2.1 Create a basic multiple route)
 - add **New Internet Telephony Station**
 - enter account data
 - assign **Default Number** (e.g. +49211478910)
 - enable **ITSP-multiple route**
 - add prefix +492114789

Via the Internet Telephony wizard add **Other Provider myITSP_2** using the **myITSP** template
(see: 2.2 Add an additional ITSP route)

- configure second Internet Telephony Station for **myITSP_2**
(see: 2.1 Create a basic multiple route)
 - add **New Internet Telephony Station**
 - enter account data
 - assign **Default Number** (e.g. +49211567810)
 - enable **ITSP-multiple route**
 - add prefix +492115678



Attention: please be aware with this configuration that the **UC functionality** is ONLY possible via the default location (usually seizure code "0").

