BT wholesale

OpenScape Business

How to Configure SIP Trunk for BT Wholesale SIP Trunking

UK

Table of Contents

Table of History

Date	issue	Changes
08.11.2017	2	First version
17.09.2024	3	editorial changes

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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.

1   Introduction

The purpose of this document is to provide an aide memoir for the configuration of SIP trunks for the BT Wholesale SIP Trunking (WSIPT) ITSP in the UK.
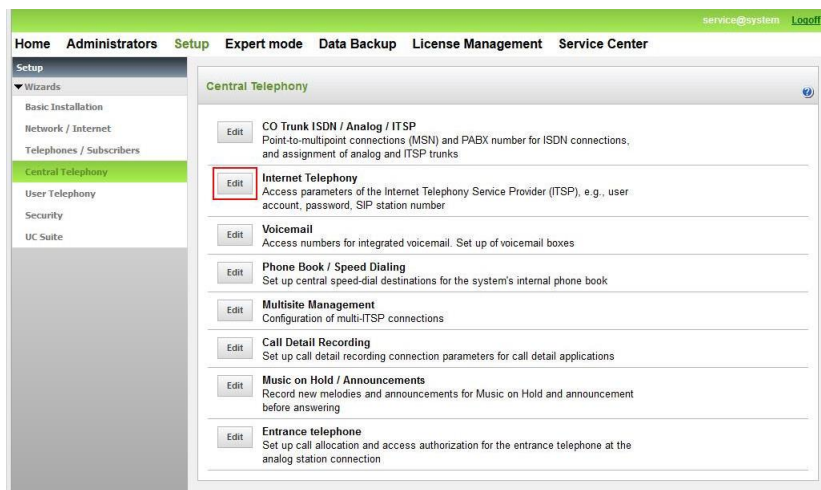
2   Configuration

Most of the configuration should be carried-out using the built-in configuration wizards within OpenScape Business Assistant. Launch OpenScape Business Assistant and log-in.

### 2.1   Internet Telephony Configuration Wizard

Launch the **Internet Telephony** wizard, navigate to:

Setup > **Wizards** > **Central Telephony** > **Internet Telephony**
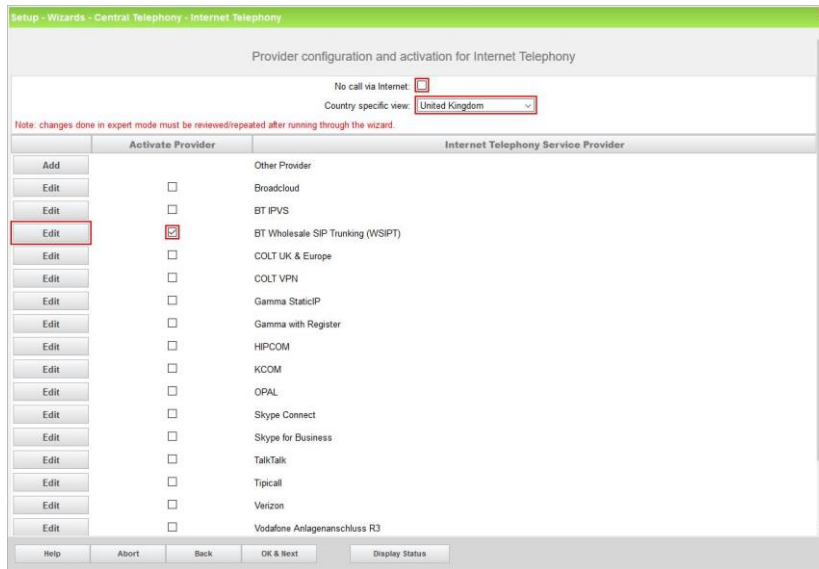
1.   Click on the **Edit** button.

2.   The **Overview** page appears for entering location data. The most flexible configuration method is to enter only the **Country code** on this page (e.g. 44 for the UK) and then enter the remaining digits as the **DID** number (minus the leading 0) against the station / group.
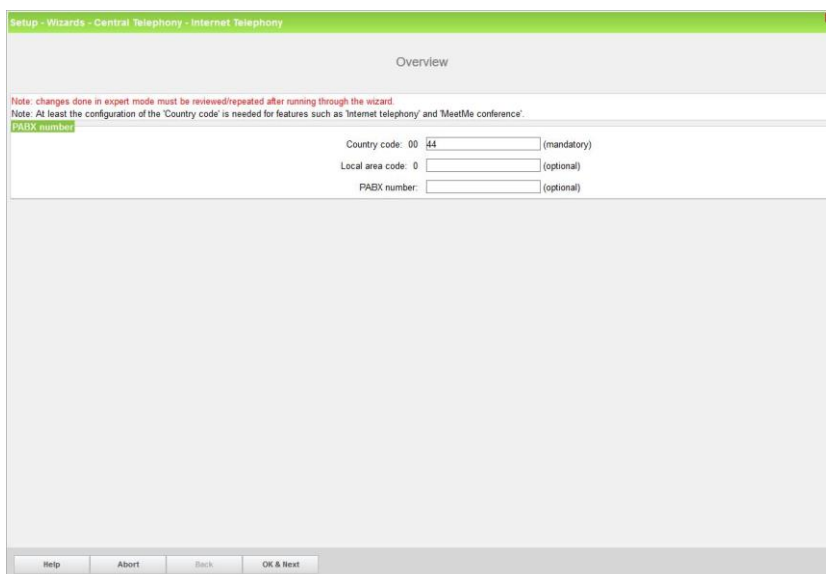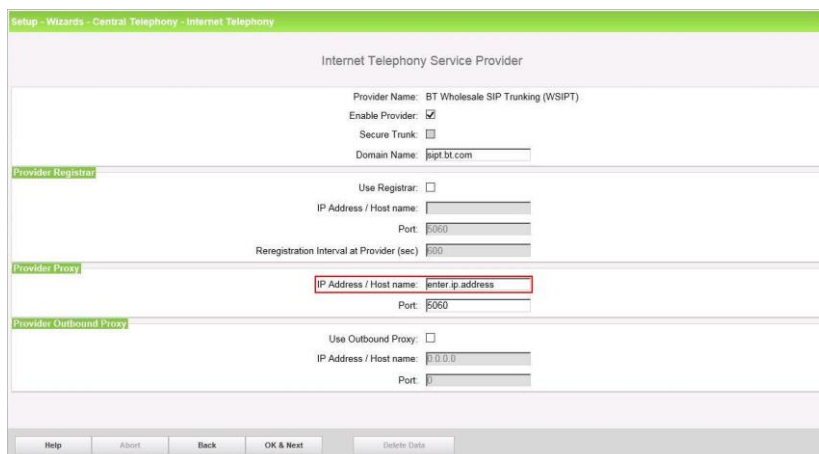

Click on the **OK & Next** button.

3. At the next page disable the **No call via Internet** flag and select 'United Kingdom' using the **Country specific view** drop-down list. Next to 'BT Wholesale SIP Trunking (WSIPT)' enable the **Activate Provider** flag and then click on the **Edit** button.

4. The **Provider Proxy IP Address / Host name** will contain a dummy value (e.g. enter.ip.address).

Please enter the IP address or host name provided by BT into this field (e.g. 62.239.32.253).

Click on the **OK & Next** button.

5. At the next page click on the **Add** button.

6. Enter the lowest DDI number in the range provided by BT into the **Internet telephony station** box. This number should be entered in canonical format for BT WSIPT as shown in the screenshot (e.g. +442380170422).

    The **Authorization name**, **Password** and **Confirm Password** boxes are greyed-out because BT WSIPT does not support registration, only static IP authentication is supported.

    Enter the main number in the DDI range as the **Default Number**; this number will be presented as the CLI on outgoing calls from stations with no DDI number assigned. This number should be entered in canonical format for BT WSIPT as shown in the screenshot (e.g. +442380170422).

Click on the **OK & Next** button.

7. At the next page click on the **OK & Next** button.

8. At the next page click on the **OK & Next** button as we are routing via the **DID** assigned directly to the station / group.
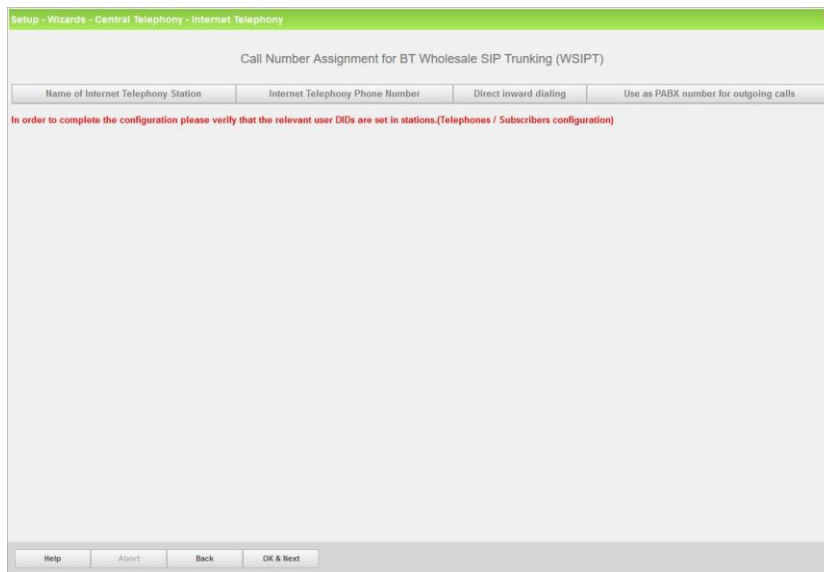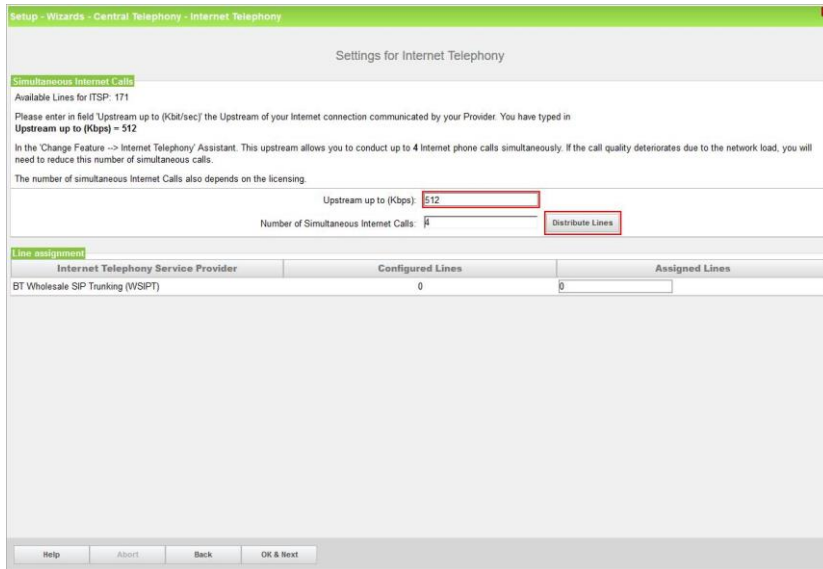

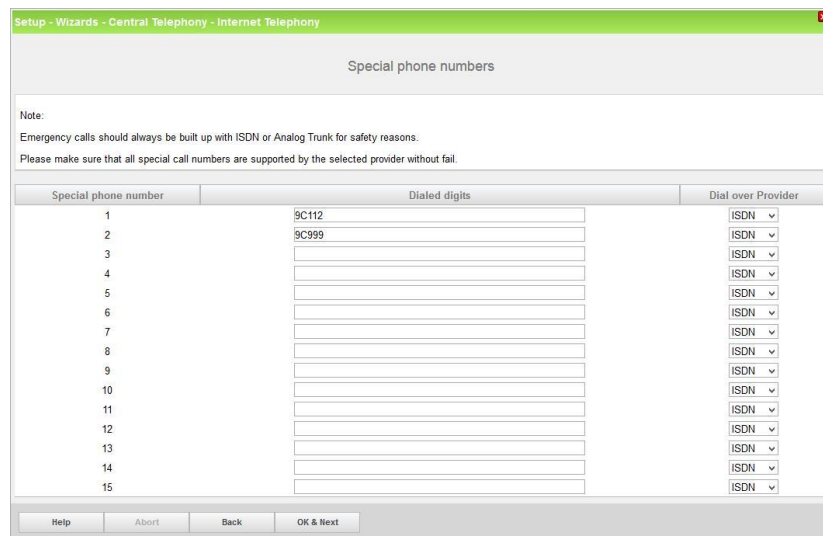9. At the next page click on the **OK & Next** button.
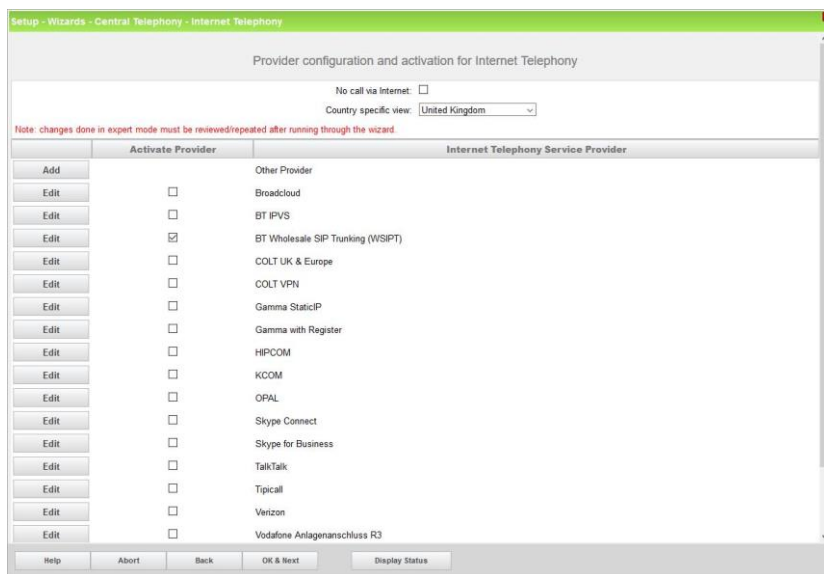
10. At the next page enter the upstream speed of your Internet connection in the **Upstream up to (Kbps)** box, the wizard will then automatically calculate the maximum **Number of simultaneous Internet Calls** possible. Click on the **Distribute Lines** button to automatically configure the correct number of SIP trunks.

Click on the **OK & Next** button.

11. On the next page emergency and special numbers that cannot be routed via the ITSP must be configured. Usually emergency calls are routed via ISDN or analogue trunks if possible. However, if the customer does not have ISDN or analogue trunks then emergency calls can be routed over the ITSP trunks. If this is the case change the **Dial over Provider** to 'BT Wholesale SIP Trunking (WSIPT)' using the drop-down list for these numbers.

Make any required changes and then click on the **OK & Next** button.

12. At the next screen 'BT Wholesale SIP Trunking (WSIPT)' should be shown with a green indicator, if this is not the case click on the **Diagnose** button for additional diagnostic information.
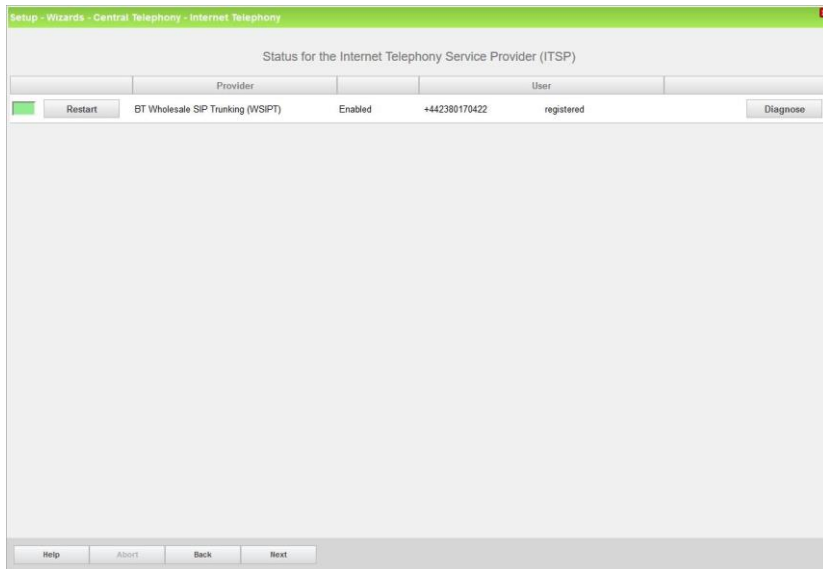
Click on the **Next** button.

13. At the next screen assign the **Trunk Access Code** to the 'BT Wholesale SIP Trunking (WSIPT)' route and enter the **Local area code** for this Internet telephony station minus the leading 0 (e.g. 23).
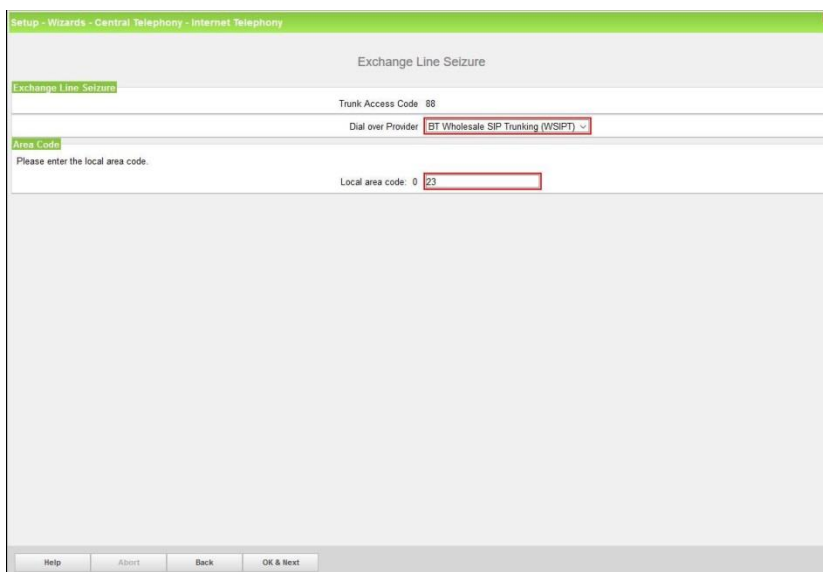
Click on the **OK & Next** button.

14. At the next screen the seizure codes for external calls are displayed.
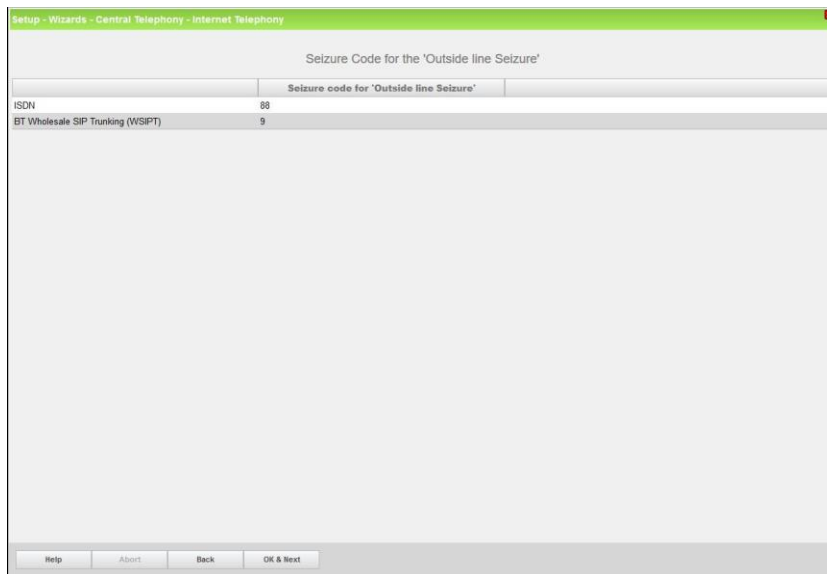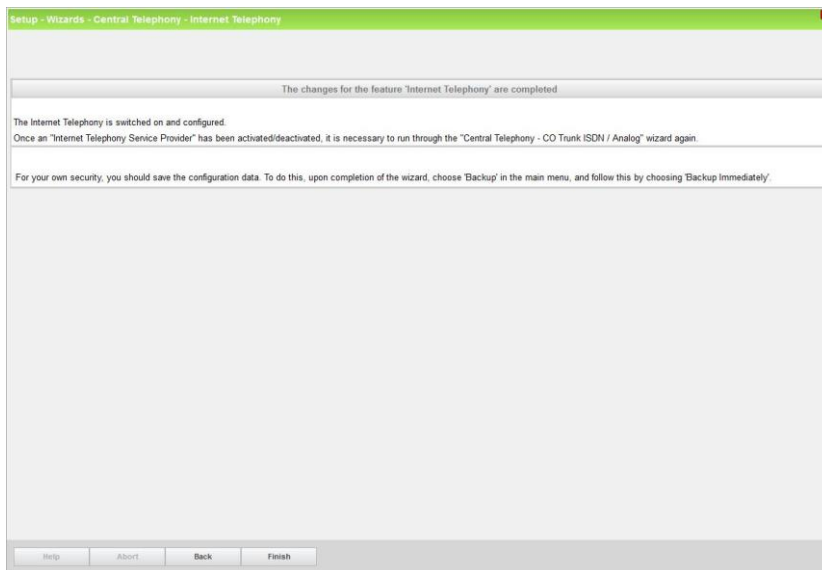

Click on the **OK & Next** button.

15. Configuration is complete.


Click on the **Finish** button.

2.2   STUN Configuration

BT WSIPT only support a static public IP address and do not provide a STUN server.

In the OpenScape Business STUN must be disabled and the static public IP address must be configured, navigate to:

Expert mode > **Telephony Server** > **Voice Gateway** > **Internet Telephony Service Provider** > **Edit STUN Configuration**

Change **STUN Mode** to 'Use static IP' using the drop-down list and enter the static **Public IP Address** in the field underneath.
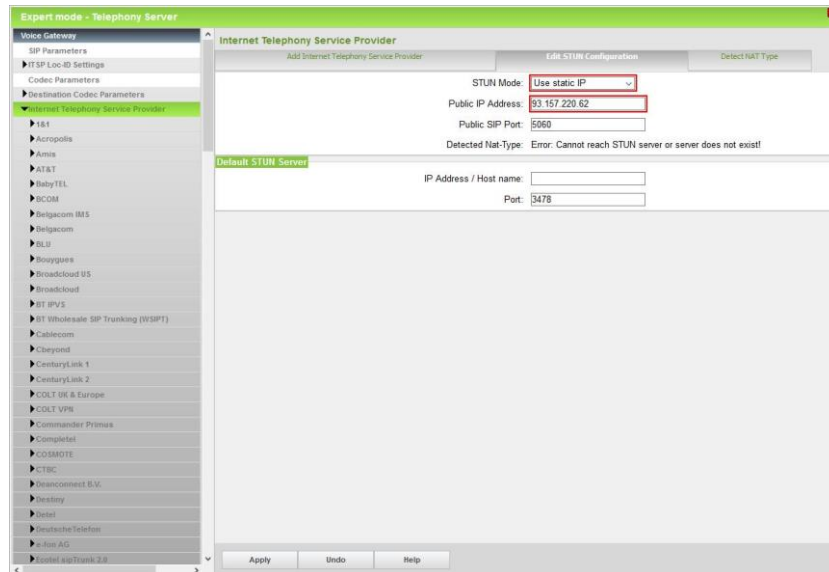
Click on the **Apply** button.

NOTE #1 *In order to disable STUN for a particular ITSP on OpenScape Business the ITSP profile has to be configured with the **Use STUN** flag enabled and a dummy STUN server has to be configured in the **IP address / Host name** field (e.g. use.static.ip) as this field cannot be empty. This is preconfigured for the BT Wholesale SIP Trunking (WSIPT) profile and can be seen in **Expert mode**.*

2.3 Route Configuration

The BT Wholesale SIP Trunking (WSIPT) SIP trunk route configuration will be automatically configured by the BT Wholesale SIP Trunking (WSIPT) profile. However, it is worth checking that the **No. and type, outgoing** parameter is set correctly for the 'BT Wholesale SIP Trunking (WSIPT)' trunk route. This parameter can be checked in **Expert mode**.

Navigate to:

Expert mode > **Telephony Server** > **Trunks/Routing** > **Route**

Select the 'BT Wholesale SIP Trunking (WSIPT)' route in the left-hand pane and select the **Change Routing Parameters** tab in the right-hand pane.

For BT WSIPT the **No. and type, outgoing** parameter should be set to 'Country code' using the drop-down list.
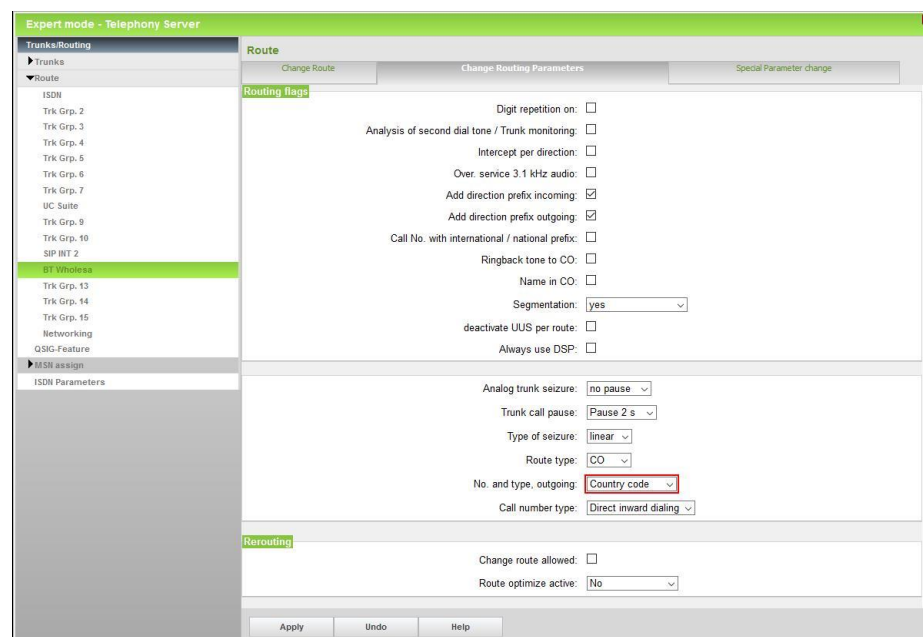
Click on the **Apply** button if any changes were made.

2.4 Station / Group DDI Assignment

2.4.1 Station DDI Assignment

The DDI numbers provided by BT should now be assigned to stations' using the appropriate wizard.

Navigate to:

Setup > **Wizards** > **Telephones / Subscribers**

Select the appropriate wizard (e.g. **UP0 Telephones**) depending on the installed telephone type.

If only the **Country code** was configured in section 2.1 step 2 (recommended) then the DDI numbers provided by BT are entered directly at the station in the **DID** column (minus the leading 0), e.g. 02380170422 would be entered as 2380170422.

Click on the **Save Data** button after assigning all the required BT DDI numbers. Either click on the **OK & Next** button to continue with the wizard or close the window.

Repeat the procedure with the other wizards in this area if the customer has other telephone types and DDI numbers need to be assigned.

2.4.2 Group Call / Hunt Group DDI Assignment

DDI numbers can be assigned to group call / hunt groups using the **Group Call / Hunt Group** wizard.

Navigate to:

Setup > **Wizards** > **User Telephony** > **Group Call / Hunt Group**

Enter any required DDI numbers into the **DID** column of the required group call / hunt group.

Click on the **OK & Next** button followed by the **Finish** button to complete the wizard.

2.5   Multi-Site Configuration

If ITSPs are configured with different area codes (e.g. area code 023 and 0119) either from the same ITSP or different ITSPs the system should be configured for multi-site. This allows each area code / location to be tied to a particular station and ITSP trunk route.

This has the advantage of allowing a station to dial a local number without the area code and the OpenScape Business system can then automatically insert the correct area code to enable the call to route successfully and also seize the correct ITSP trunk route.

Proceed as follows to configure multi-site working.

Navigate to:

Setup > **Wizards** > **Central Telephony** > **Multisite Management**

1. Define each **Area Code** provided by all configured ITSPs. The **Area Code** at the top of the table (default value 0) is the default area code that will be applied to all stations (e.g. 023). Enter additional area codes below the default entry (e.g. 0119). For each area code enter the location in the **Area** field (e.g. Southampton, Newtown). Also define the **Dedicated Route** to be used for each area code (e.g. 'BT Wholesale SIP Trunking (WSIPT)').
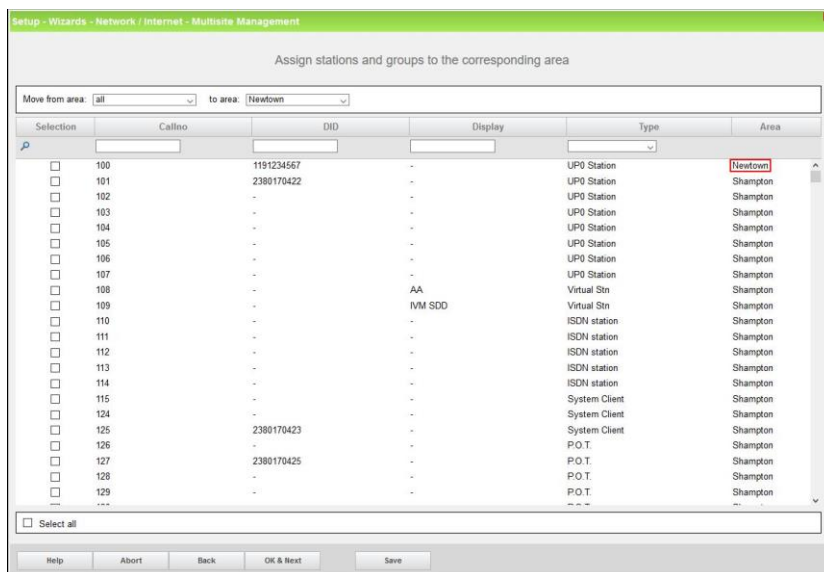

Click on the **OK & Next** button.

2. On the next screen all stations will be set to the default **Area** (e.g. Southampton). Next, using the **Selection** flag select all stations that share one of the other area codes (e.g. Newtown). Select 'Newtown' from the **to area** drop-down list and click on the **Save** button.
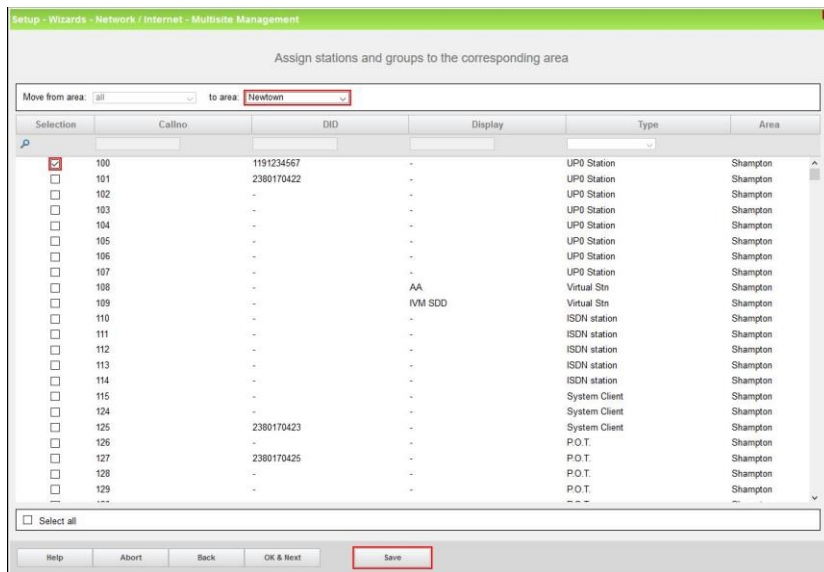
The **Area** for the selected stations will now change to the selected location (e.g. Newtown).
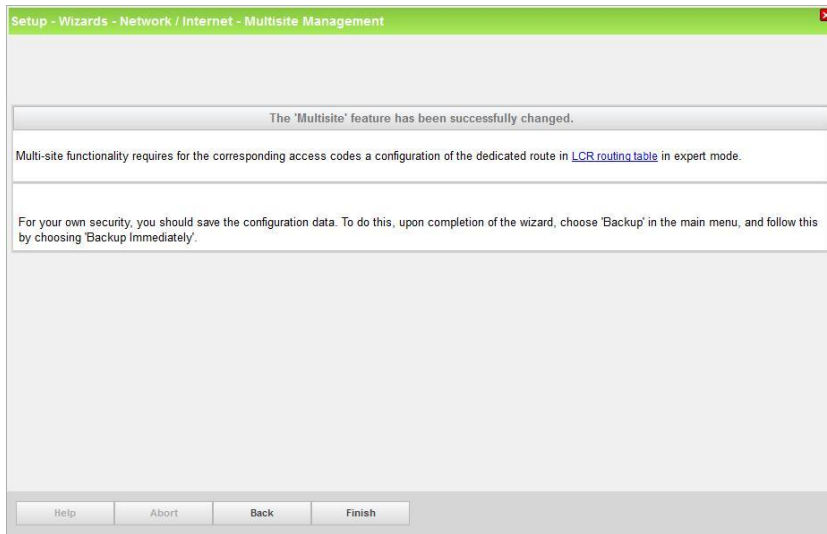

Repeat the procedure for other stations and areas.

Click on the **OK & Next** button.

3. Multi-site configuration is complete, click on the **Finish** button.

As stated on the final screen, LCR must be configured to route all configured area codes to their respective dedicated route.