

OpenScape Business

How to Configure SIP Trunk for KCOM

UK

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Table of History

Date	issue	Changes
31.03.2016	1	First version
17.09.2024	2	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 KCOM ITSP in the UK.

2 Configuration

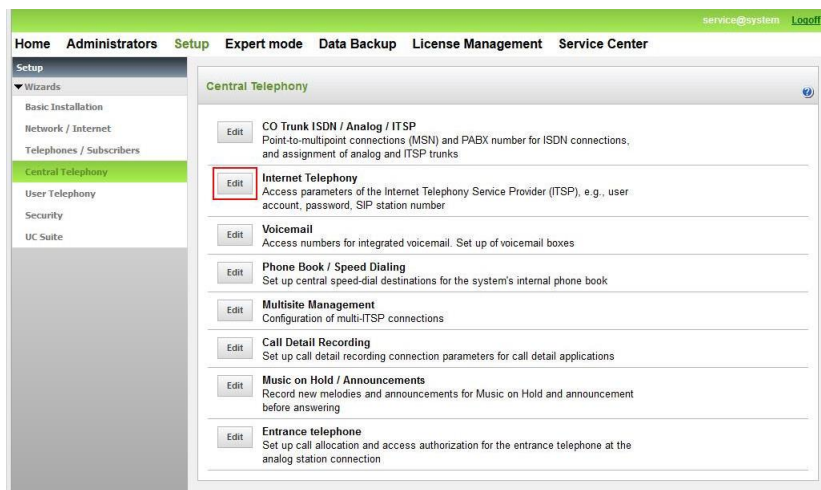
Most of the configuration should be carried-out using the built-in configuration wizards within OpenScape Business Assistant. Launch OpenScape Business Assistant and log-in.

2.1 Internet Telephony Configuration Wizard

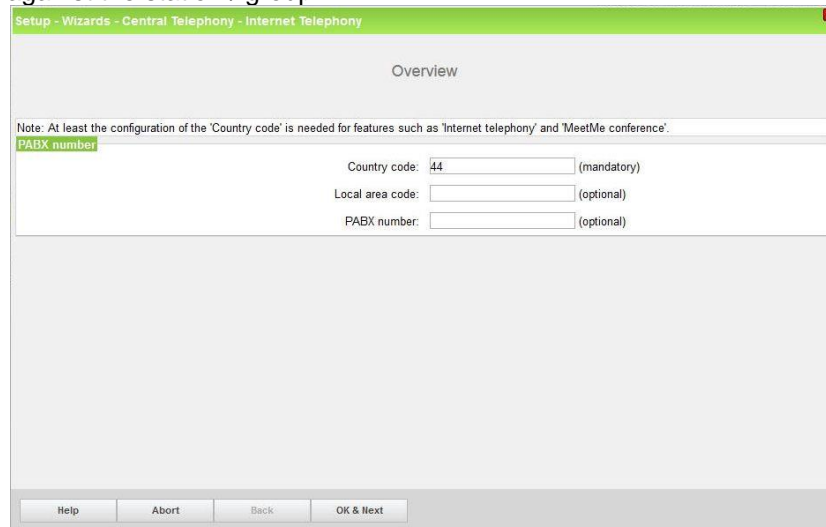
Launch the **Internet Telephony** wizard, navigate to:

Setup > Wizards > Central Telephony > Internet Telephony

1. Click on the **Edit** button.

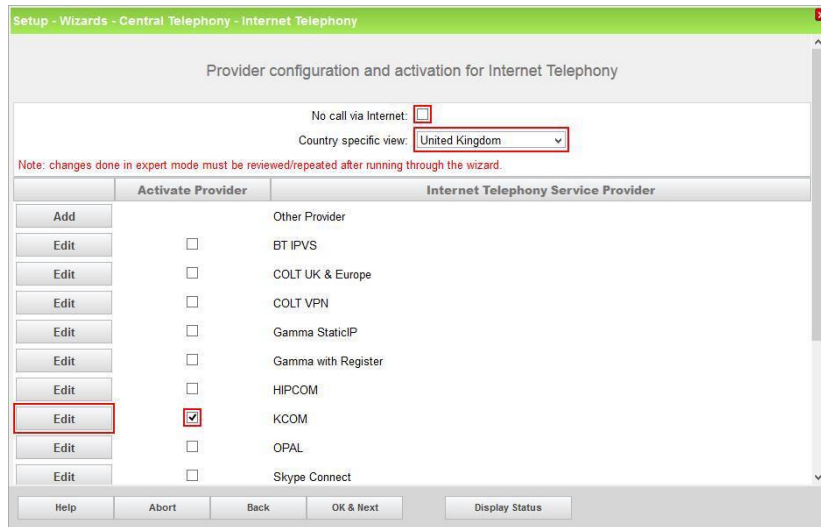


2. The **Overview** page appears for entering location data. The most flexible configuration method is to enter only the **Country code** on this page (e.g. 44 for the UK) and then enter the remaining digits as the **DID** number (minus the leading 0) against the station / group.

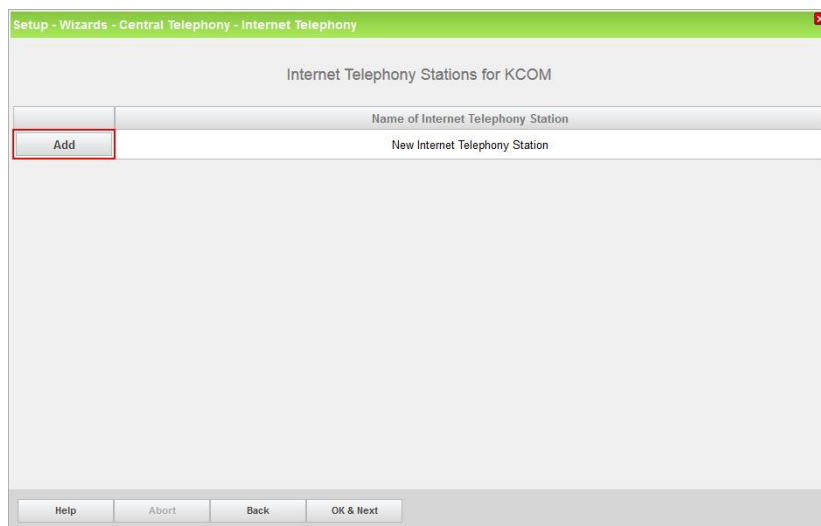


- Click on the **OK & Next** button.

- 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 'KCOM' enable the **Activate Provider** flag and then click on the **Edit** button.



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



- Enter the lowest DDI number in the range provided by KCOM into the **Internet telephony station** box. The **Authorization name**, **Password** and **Confirm Password** boxes should remain empty as KCOM do 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 KCOM as shown in the screenshot.

Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Station for KCOM

Internet telephony station: 01133999255

Authorization name:

Password:

Confirm Password:

Call number assignment

Use public number (DID)

Use internal number (Callno) / Single entries

Use internal number (Callno) / Range entry

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

Default Number: +441133999255

MEX 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.

MEX Number
To use the feature Mobile Extension (MEX) you have to enter a MEX number here. An entered MEX number will only be stored if the ITSP is marked as 'active'.
For use of MEX it is also necessary to configure a DISA number.

Help Abort Back **OK & Next** Delete Data

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

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

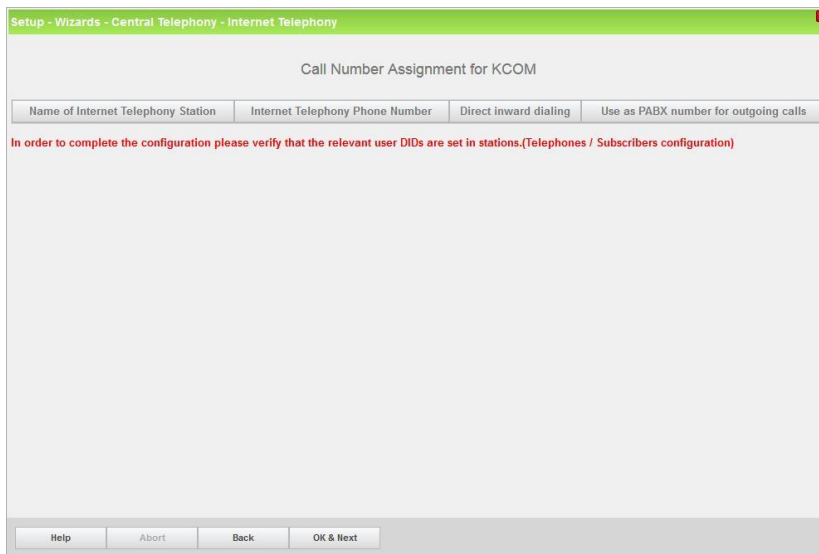
Setup - Wizards - Central Telephony - Internet Telephony

Internet Telephony Stations for KCOM

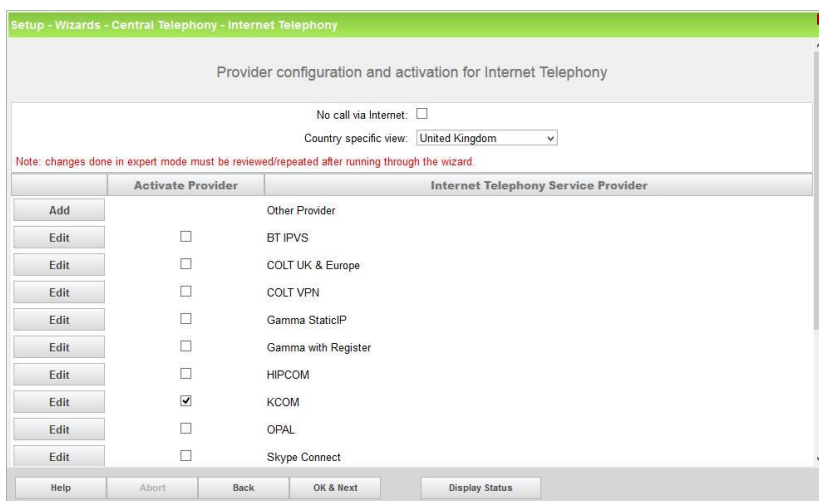
Name of Internet Telephony Station	
Edit	01133999255

Help Abort Back **OK & Next**

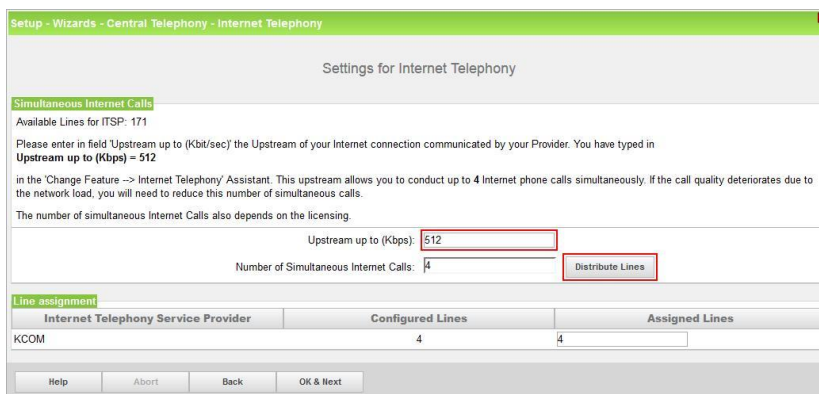
- At the next page click on the **OK & Next** button as we are routing via the **DID** assigned directly to the station / group.



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



- 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.

- 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 'KCOM' using the drop-down list for these numbers.

Special phone numbers

Note:
Emergency calls should always be built up with ISDN or Analog Trunk for safety reasons.
Please make sure that all special call numbers are supported by the selected provider without fail.

Special phone number	Dialed digits	Dial over Provider
1	9C112	ISDN
2	9C999	ISDN
3		ISDN
4		ISDN
5		ISDN
6		ISDN
7		ISDN
8		ISDN
9		ISDN
10		ISDN
11		ISDN
12		ISDN
13		ISDN
14		ISDN
15		ISDN

Buttons: Help, Abort, Back, OK & Next

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

- At the next screen KCOM should be shown with a green indicator.

Status for the Internet Telephony Service Provider (ITSP)

	Provider	Disabled	User
	BT IPVS	Disabled	
	COLT UK & Europe	Disabled	
	COLT VPN	Disabled	
	Gamma StaticIP	Disabled	
	Gamma with Register	Disabled	
	HIPCOM	Disabled	
Restart	KCOM	Enabled	01133999255 registered
	OPAL	Disabled	

Buttons: Help, Abort, Back, Next

Click on the **Next** button.

- At the next screen the **Trunk Access Code** for the 'KCOM' route is displayed.

Exchange Line Seizure

Exchange Line Seizure

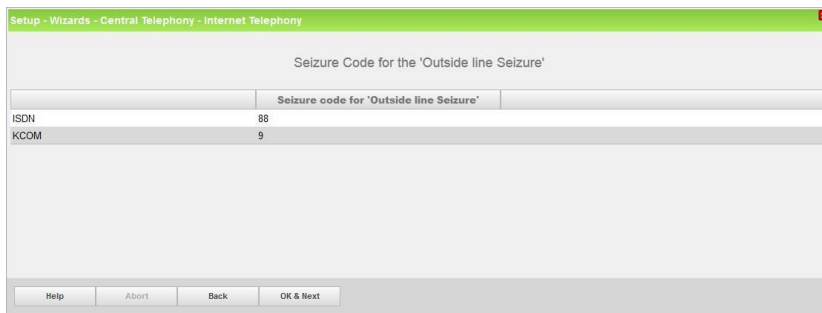
Trunk Access Code 88

Dial over Provider KCOM

Buttons: Help, Abort, Back, OK & Next

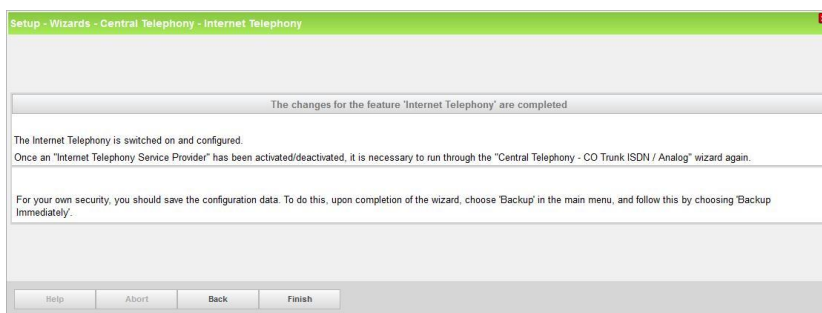
Click on the **OK & Next** button.

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



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

14. Configuration is complete.



Click on the **Finish** button.

2.2 Route Configuration

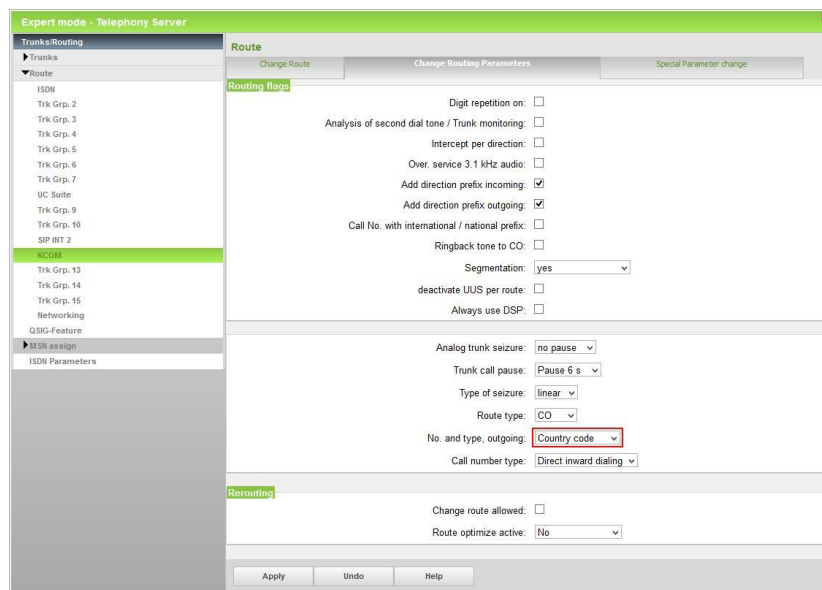
The KCOM SIP trunk route configuration will be automatically configured by the KCOM profile. However, it is worth checking that the **No. and type, outgoing** parameter is set correctly for the 'KCOM' trunk route. This parameter can be checked in **Expert mode**.

Navigate to:

Expert mode > Telephony Server > Trunks/Routing > Route

Select the 'KCOM' route in the left-hand pane and select the **Change Routing Parameters** tab in the right-hand pane.

For KCOM 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.

2.3 Station / Group DDI Assignment

2.3.1 Station DDI Assignment

The DDI numbers provided by KCOM 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 KCOM are entered directly at the station in the **DID** column (minus the leading 0), e.g. 01133999255 would be entered as 1133999255.

Box	Slot	UP0-Port	CallNo	Name	DID	Fax CallNo	Fax DID	Class of service
1	1	1 M	100	-	1133999255	-	-	International
1	1	2 M	101	-	1191234567	-	-	International
1	1	3 M	102	-	-	-	-	International
1	1	4 M	103	-	-	-	-	International
1	1	5 M	104	-	-	-	-	International
1	1	6 M	105	-	-	-	-	International
1	1	7 M	106	-	-	-	-	International
1	1	8 M	107	-	-	-	-	International

Click on the **Save Data** button after assigning all the required KCOM 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.

2.3.2 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.

2.4 Multi-Site Configuration

If ITSPs are configured with different area codes (e.g. area code 0113 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:

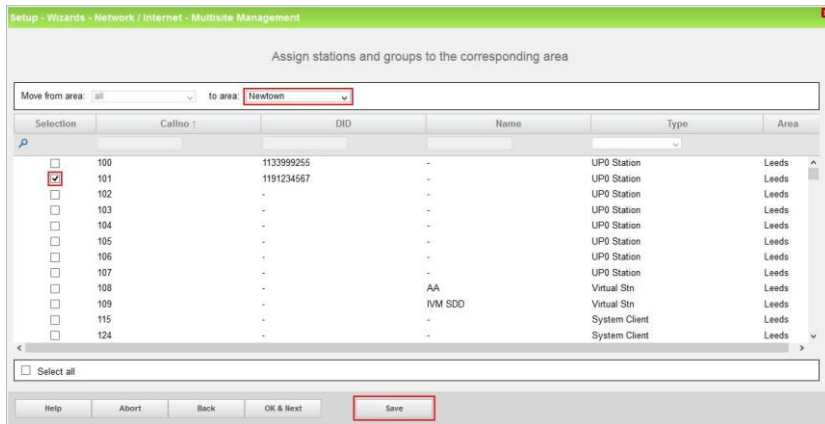
Setup > Wizards > Central Telephony > Multisite Management

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. 0113). Enter additional area codes below the default entry (e.g. 0119). For each area code enter the location in the **Area** field (e.g. Leeds, Newtown). Also define the **Dedicated Route** to be used for each area code (e.g. 'KCOM').

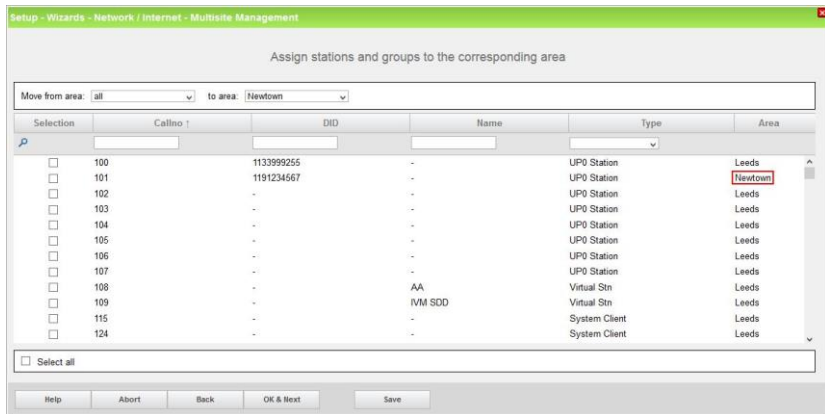
Delete	Area Code	Area	Dedicated Route
	0113	Leeds	KCOM
<input type="checkbox"/>	0119	Newtown	-
<input type="checkbox"/>			-
<input type="checkbox"/>			-
<input type="checkbox"/>			-
<input type="checkbox"/>			-
<input type="checkbox"/>			-
<input type="checkbox"/>			-

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

- On the next screen all stations will be set to the default **Area** (e.g. Leeds). 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.

- Configuration is complete, click on the **Finish** button.

