

OpenScape Business V2

KCOM UK ITSP SIP Trunk Configuration

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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

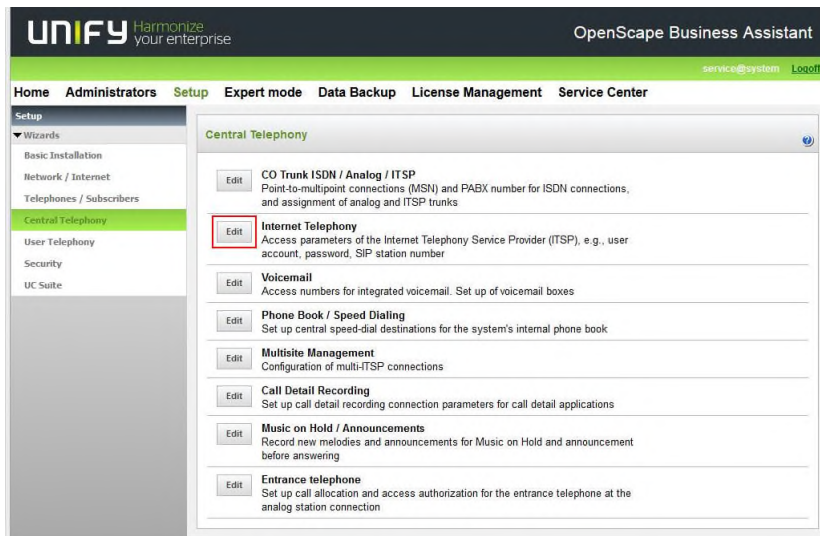
Most of the configuration should be carried-out using the built-in configuration wizards within OpenScape Business Assistant. Launch OpenScape Business Assistant and log-in.

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.

OpenScape Business V2

KCOM UK ITSP SIP Trunk Configuration

Setup - Wizards - Central Telephony - Internet Telephony

Overview

Note: At least the configuration of the 'Country code' is needed for features such as 'Internet telephony' and 'MeetMe conference'.

PABX number

Country code: 44 (mandatory)

Local area code: (optional)

PABX number: (optional)

Help Abort Back OK & Next

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.

Setup - Wizards - Central Telephony - Internet Telephony

Provider configuration and activation for Internet Telephony

No call via Internet:

Country specific view: United Kingdom

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"/>	BT IPVS
Edit	<input type="checkbox"/>	COLT UK & Europe
Edit	<input type="checkbox"/>	COLT VPN
Edit	<input type="checkbox"/>	Gamma StaticIP
Edit	<input type="checkbox"/>	Gamma with Register
Edit	<input type="checkbox"/>	HIPCOM
Edit	<input checked="" type="checkbox"/>	KCOM
Edit	<input type="checkbox"/>	OPAL
Edit	<input type="checkbox"/>	Skype Connect

Help Abort Back OK & Next Display Status

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

OpenScape Business V2

KCOM UK ITSP SIP Trunk Configuration

5. 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.

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

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

OpenScope Business V2

KCOM UK ITSP SIP Trunk Configuration

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.

Setup - Wizards - Central Telephony - Internet Telephony

Call Number Assignment for KCOM

Name of Internet Telephony Station	Internet Telephony Phone Number	Direct inward dialing	Use as PABX number for outgoing calls
------------------------------------	---------------------------------	-----------------------	---------------------------------------

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

Help Abort Back OK & Next

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

OpenScape Business V2

KCOM UK ITSP SIP Trunk Configuration

Setup - Wizards - Central Telephony - Internet Telephony

Provider configuration and activation for Internet Telephony

No call via Internet:

Country specific view: United Kingdom

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"/>	BT IPVS
Edit	<input type="checkbox"/>	COLT UK & Europe
Edit	<input type="checkbox"/>	COLT VPN
Edit	<input type="checkbox"/>	Gamma StaticIP
Edit	<input type="checkbox"/>	Gamma with Register
Edit	<input type="checkbox"/>	HIPCOM
Edit	<input checked="" type="checkbox"/>	KCOM
Edit	<input type="checkbox"/>	OPAL
Edit	<input type="checkbox"/>	Skype Connect

Help Abort Back OK & Next Display Status

9. 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.

Setup - Wizards - Central Telephony - Internet Telephony

Settings for Internet Telephony

Simultaneous Internet Calls

Available Lines for ITSP: 171

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) = 512**

in the 'Change Feature -> Internet Telephony' Assistant. This upstream allows you to conduct up to 4 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): 512

Number of Simultaneous Internet Calls: 4 **Distribute Lines**

Line assignment

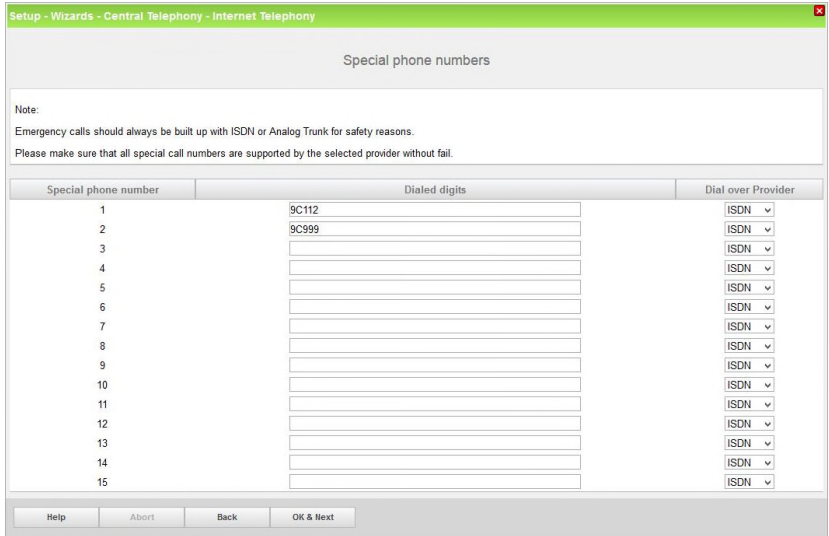
Internet Telephony Service Provider	Configured Lines	Assigned Lines
KCOM	4	4

Help Abort Back OK & Next

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

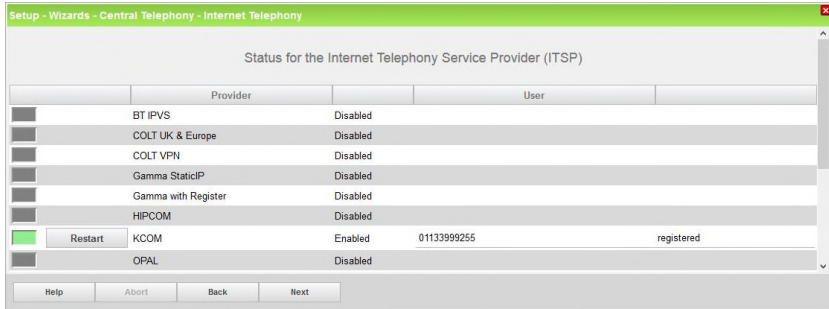
10. On the next page emergency and special numbers that cannot be routed via the ITSP must be configured. Usually emergency calls are routed via ISDN or analogue trunks if possible. However, if the customer does not have ISDN or analogue trunks then emergency calls can be routed over the ITSP trunks.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

OpenScope Business V2 KCOM UK ITSP SIP Trunk Configuration



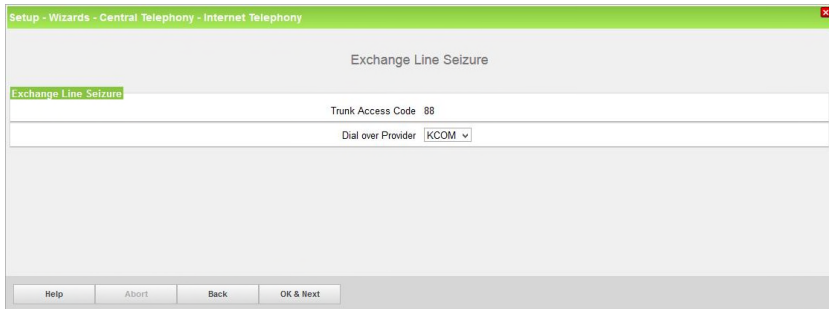
Make any required changes and then click on the **OK & Next** button.

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



Click on the **Next** button.

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



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

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

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KCOM UK ITSP SIP Trunk Configuration

Seizure code for 'Outside line Seizure'	
ISDN	88
KCOM	9

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

14. Configuration is complete.

The changes for the feature 'Internet Telephony' are completed

The Internet Telephony is switched on and configured.
Once an "Internet Telephony Service Provider" has been activated/deactivated, it is necessary to run through the "Central Telephony - CO Trunk ISDN / Analog" wizard again.

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'.

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.

OpenScape Business V2

KCOM UK ITSP SIP Trunk Configuration

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.

OpenScape Business V2

KCOM UK ITSP SIP Trunk Configuration

Box	Slot	UP0-Port	Callino	Name	DID	Fax Callino	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:

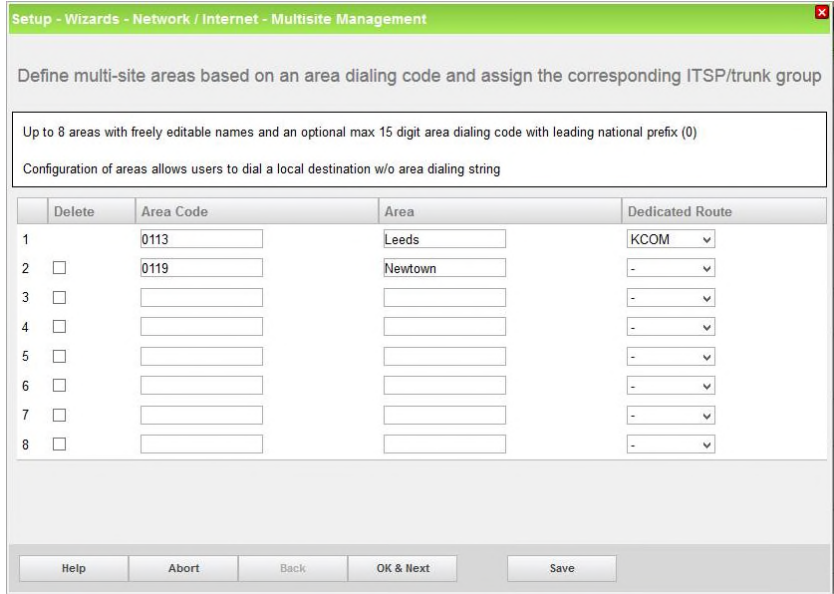
Setup > Wizards > Central Telephony > Multisite Management

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

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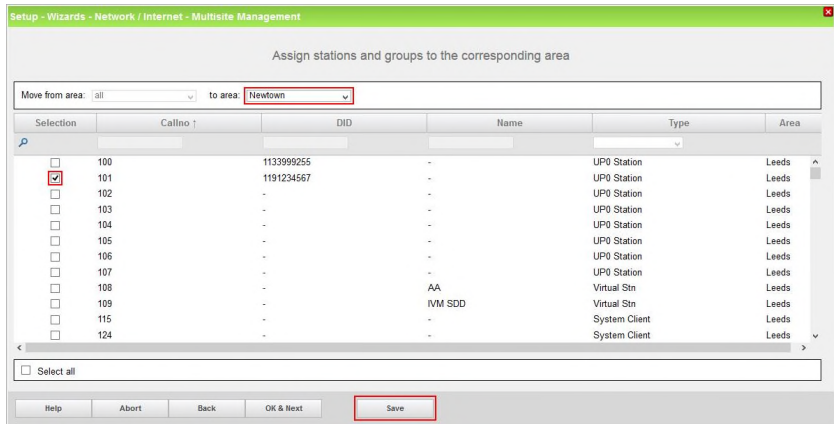
KCOM UK ITSP SIP Trunk Configuration

(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').



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

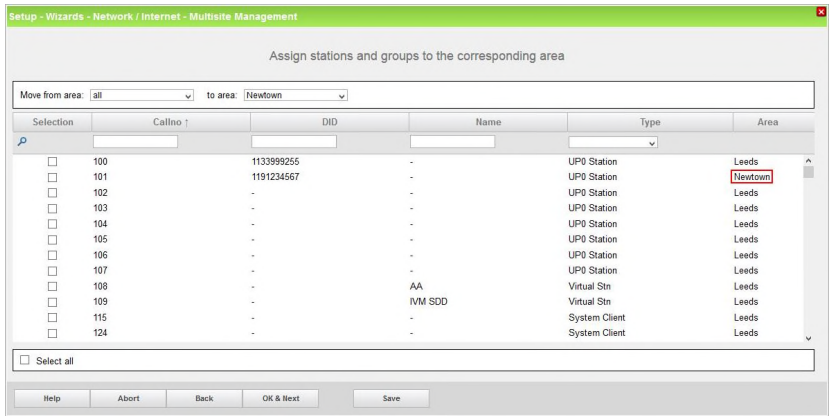
- On the next screen all stations will be set to the default **Area** (e.g. Leeds). Next, using the **Selection** flag select all stations that share one of the other area codes (e.g. Newtown). Select 'Newtown' from the **to area** drop-down list and click on the **Save** button.



The **Area** for the selected stations will now change to the selected location (e.g. Newtown).

OpenScope Business V2

KCOM UK ITSP SIP Trunk Configuration



Repeat the procedure for other stations and areas.

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

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

