Configuring Avaya BCM 6.0 for Spitfire SIP Trunks

This document is a guideline for configuring Spitfire SIP trunks onto Business Communication Manager release 6.0 and includes the settings required for Inbound DDI routing and Outbound CLI presentation. The settings contained within have been tested and are known to work at the time of testing.

SIP trunk details such as account number and password will be provided separately.

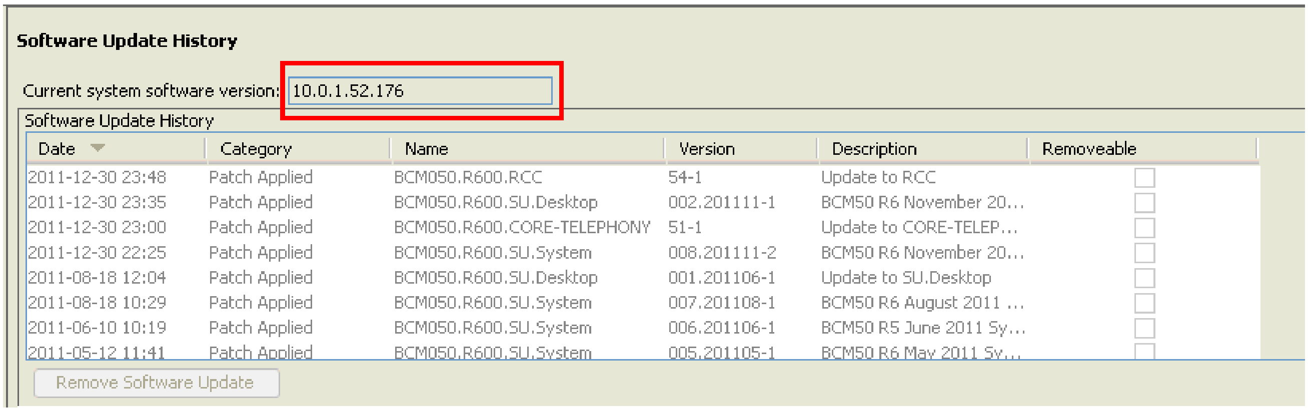
Software level

Release 6.0 continues the common software release for both BCM50 and BCM450. Therefore BCM will refer to BCM Release 6.0 and will not refer to any particular hardware platform.

The Avaya BCM must be running at least software version 10.0.1.52.xxx. You can check the version of BCM by viewing the following screen under **Administration è Software Management è Software Update History**.

It is highly recommended that the latest software updates are applied.

This software release 10.0.1.52.xxx refers to BCM Release 6.

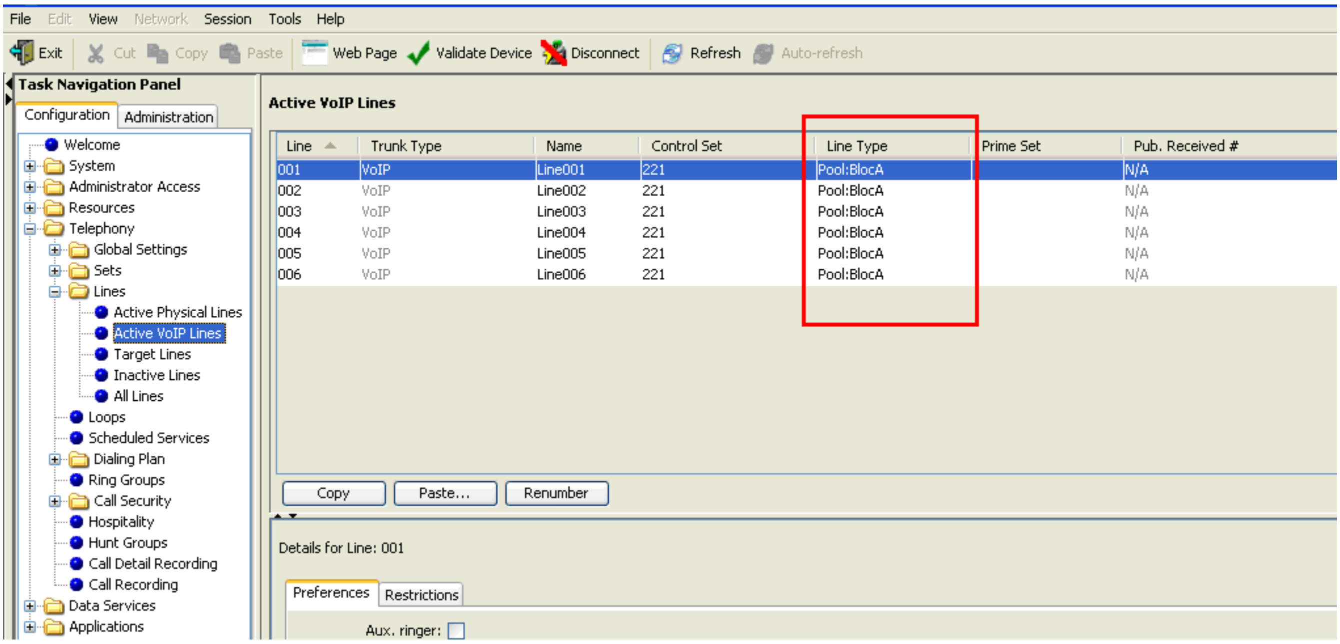


Licenses

There are two VoIP trunk license options: SIP Gateway Trunk License and VoIP Trunk Gateway License. The SIP Gateway Trunk License enables SIP-only trunks and the VoIP Trunk Gateway License enables SIP or H.323 trunks. Either type of trunk licenses can be used for SIP signaling.

Once the licenses have been added you can check under **Configuration è Telephony è Lines è Active VoIP Lines** to see if trunks have been allocated. The total number of lines shown corresponds to the number of IP trunks licenses added.

When the VoIP trunks are set up you can assign them to line pools and program their behavior in the same way you would PRI lines.



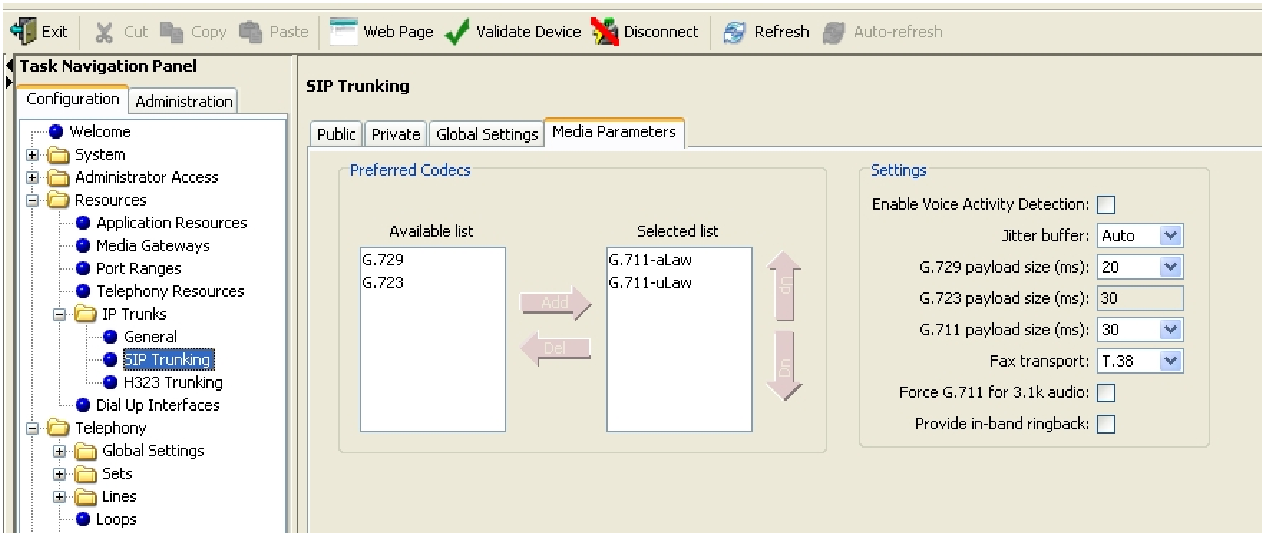
VoIP trunks should be configured to use a single line pool. Do not mix other trunk types on the same line pool (e.g. analog, PRI, etc).

Adding a SIP trunk

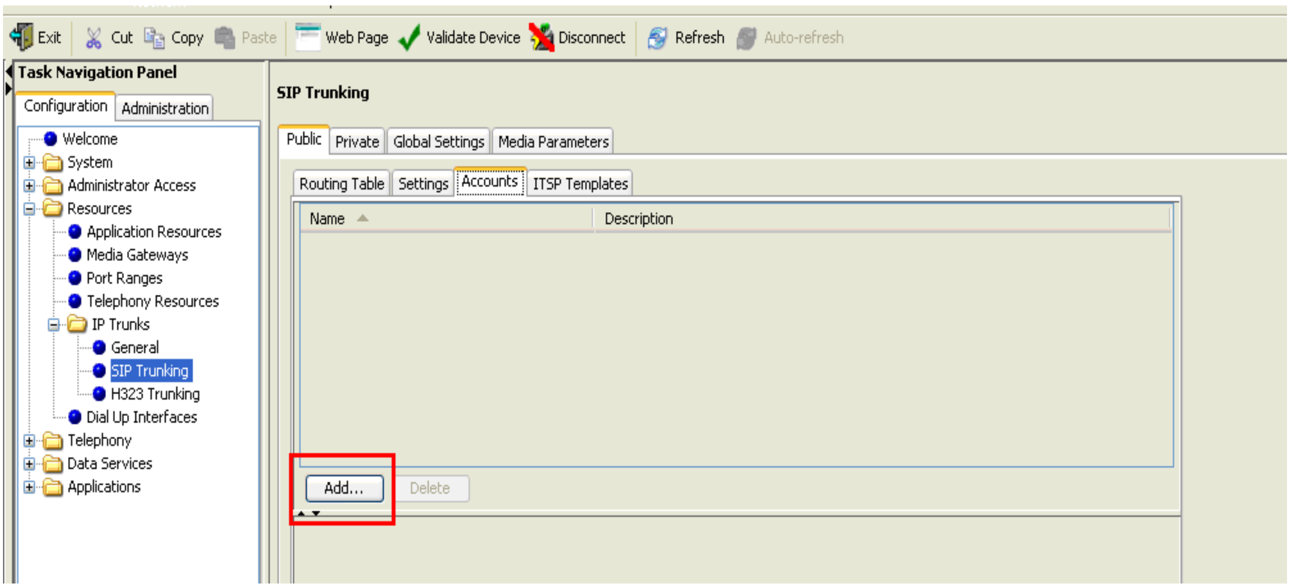
Go to **Resources è IP Trunks è SIP Trunking**

Select the **Media Parameters** tab and configure as below

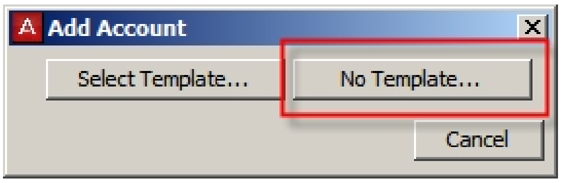
- 1st Preferred Codec: G.711-aLaw
- 2nd Preferred Codec: G.711-uLaw
- Voice Activity Detection: Disabled
- Jitter Buffer: Auto
- G.711 payload size: 30
- Fax transport: T.38



Select the **Public** tab, then the **Accounts** sub-tab and select **Add**

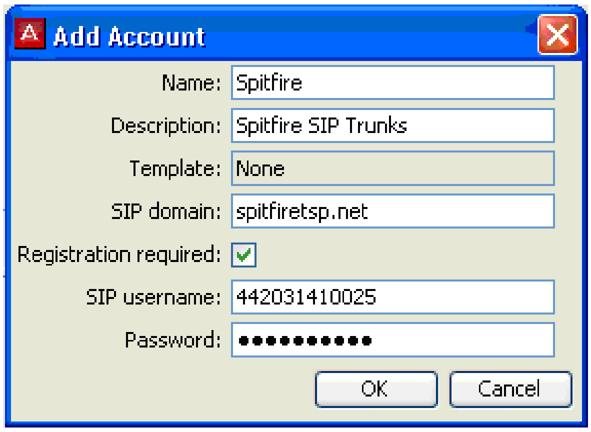


Select **No Template**

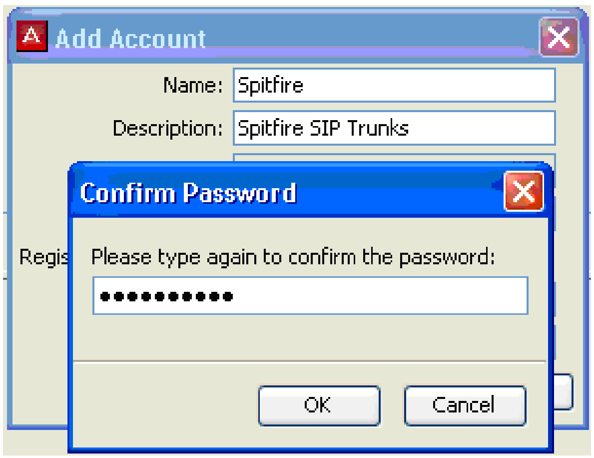


Enter the Spitfire SIP trunk account settings:

- Name: Enter a logical name for the Spitfire SIP trunk
- Description: Brief description of the account (optional)
- SIP domain: spitfiretsp.net
- Registration required: Checked
- SIP username: As supplied by Spitfire. **Note that it does not include the <u>@spitfiretsp.net</u>**
- SIP password: As supplied by Spitfire



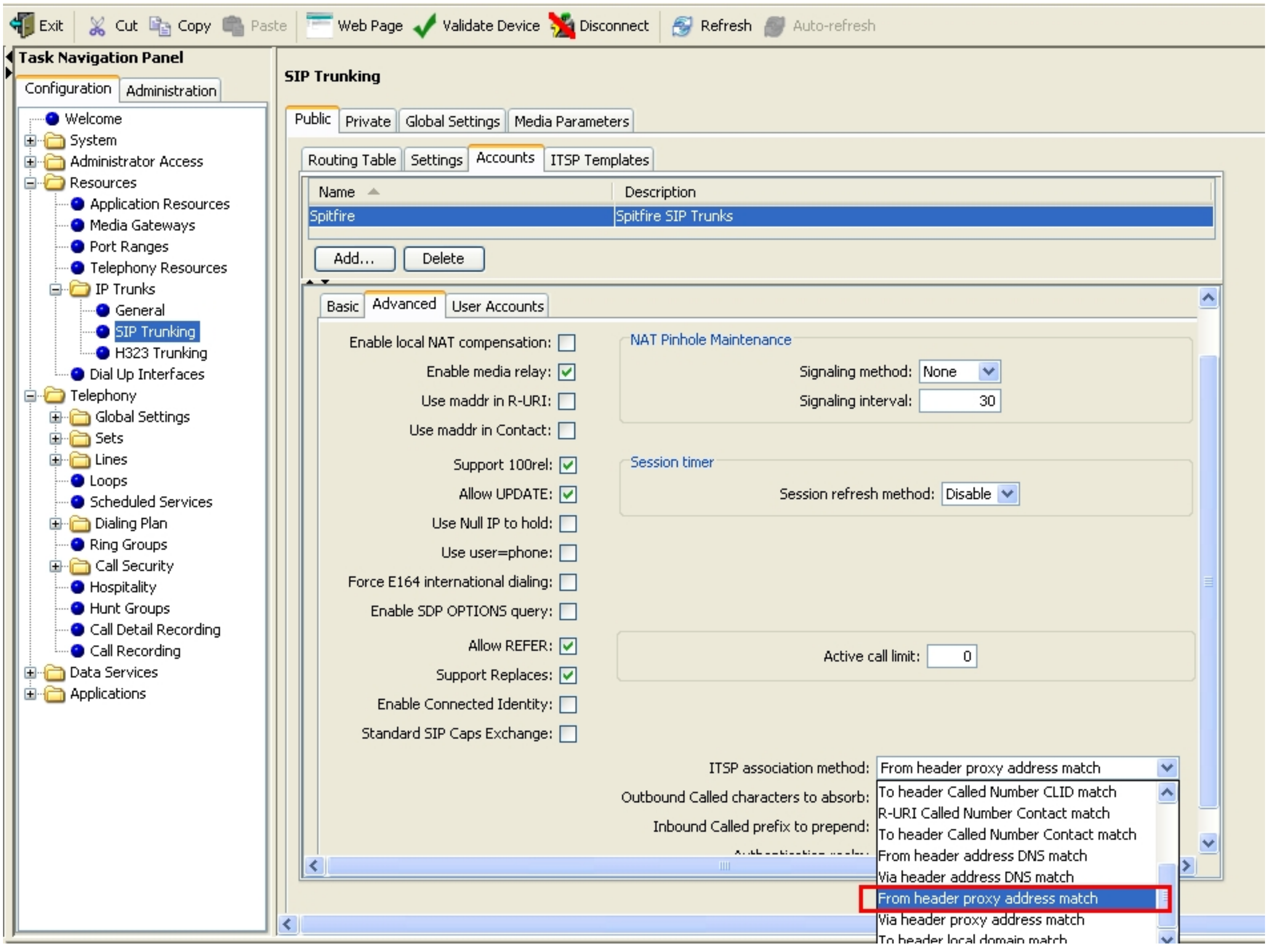
- Confirm Password: Enter the password again



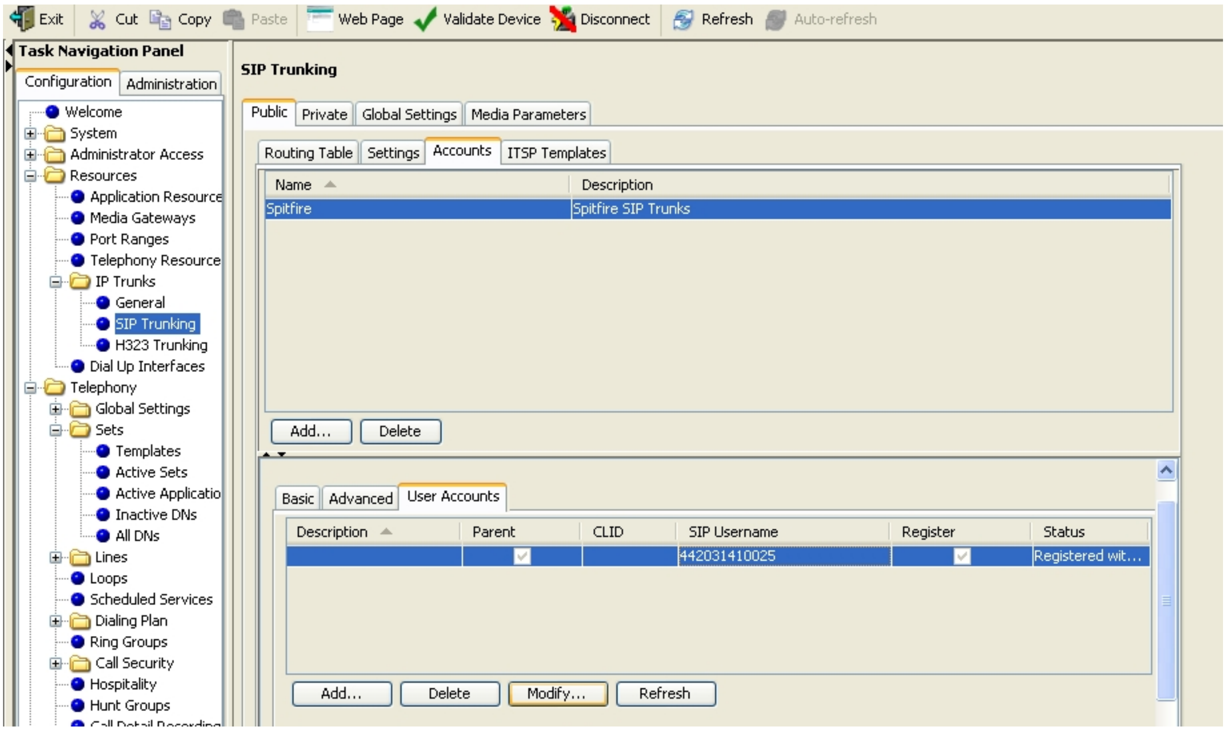
Select OK to Add the account

Once the account has been added highlight the account and select the **Advanced** sub-tab.

- Enabled media relay: If you have audio transmission problems when using IP sets switch on media relay
- ITSP association method: Ensure this is set to **"From header proxy address match"**

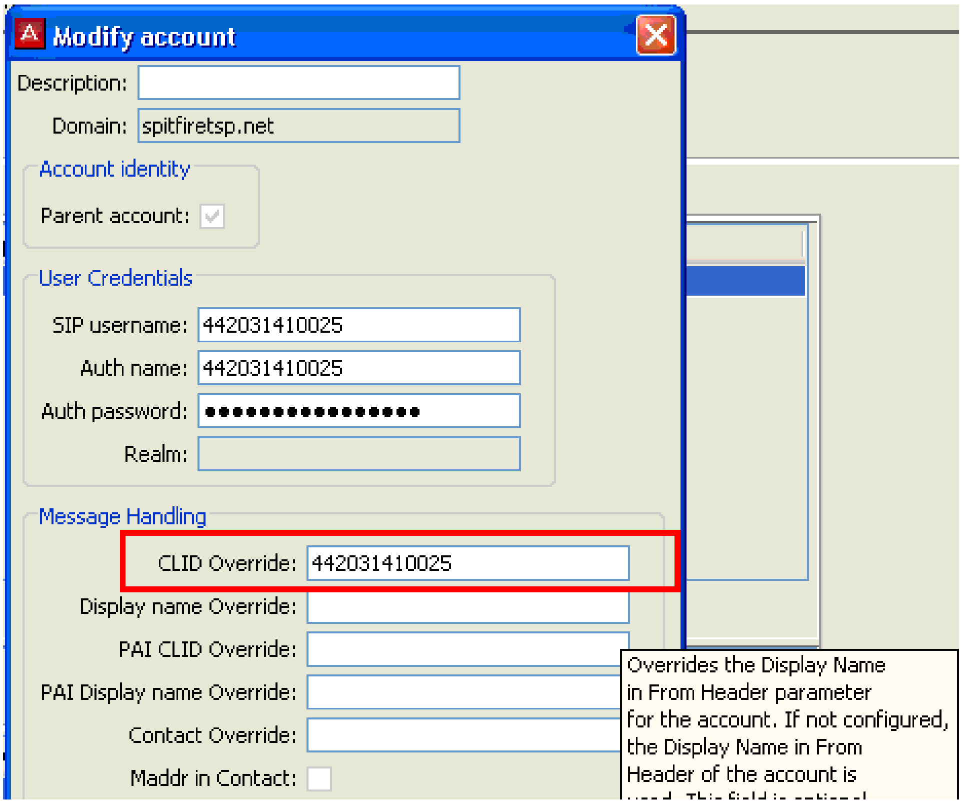


Select the **User Accounts** sub-tab.



Highlight the Spitfire account and select **Modify**

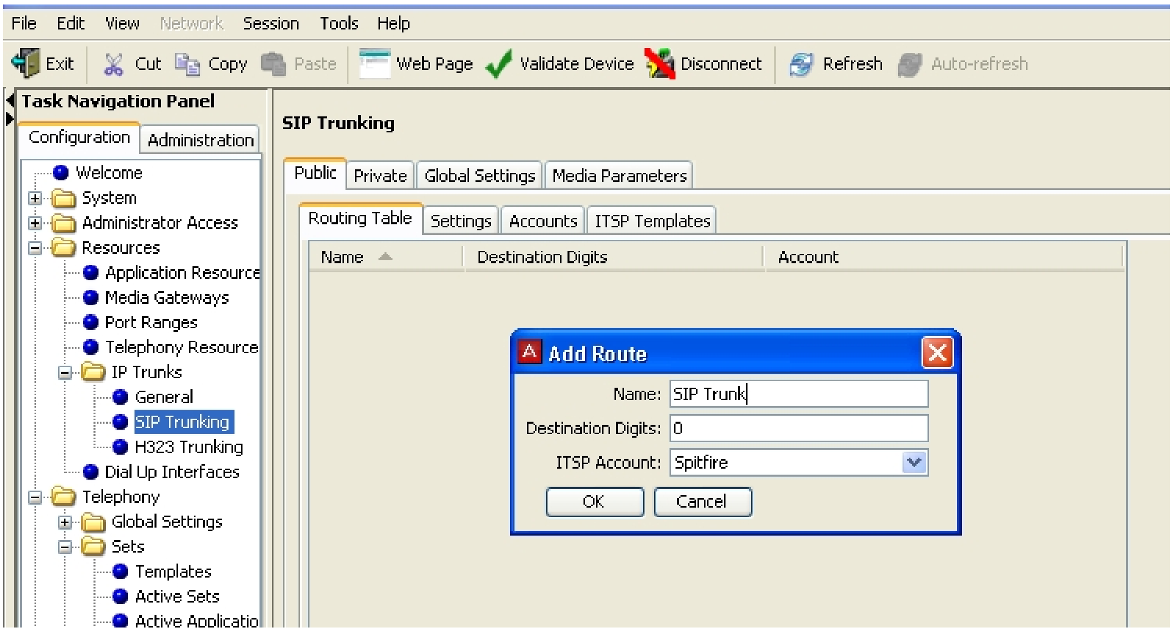
In the Message Handling field set "**CLID Override"** to your SIP trunk account number as supplied by Spitfire **without** the @spitfiretsp.net



Select the **Routing Table** sub-tab

Add a SIP trunk route by clicking on the "Add" button. A new window dialog appears. Enter the following:

- Name: Identifier for the route
- Destination Digits: Enter the leading destination digits i.e. 0 for 01, 02 etc. You may enter multiple leading digits separated by a space
- ITSP Account: Select the Spitfire ITSP account created previously



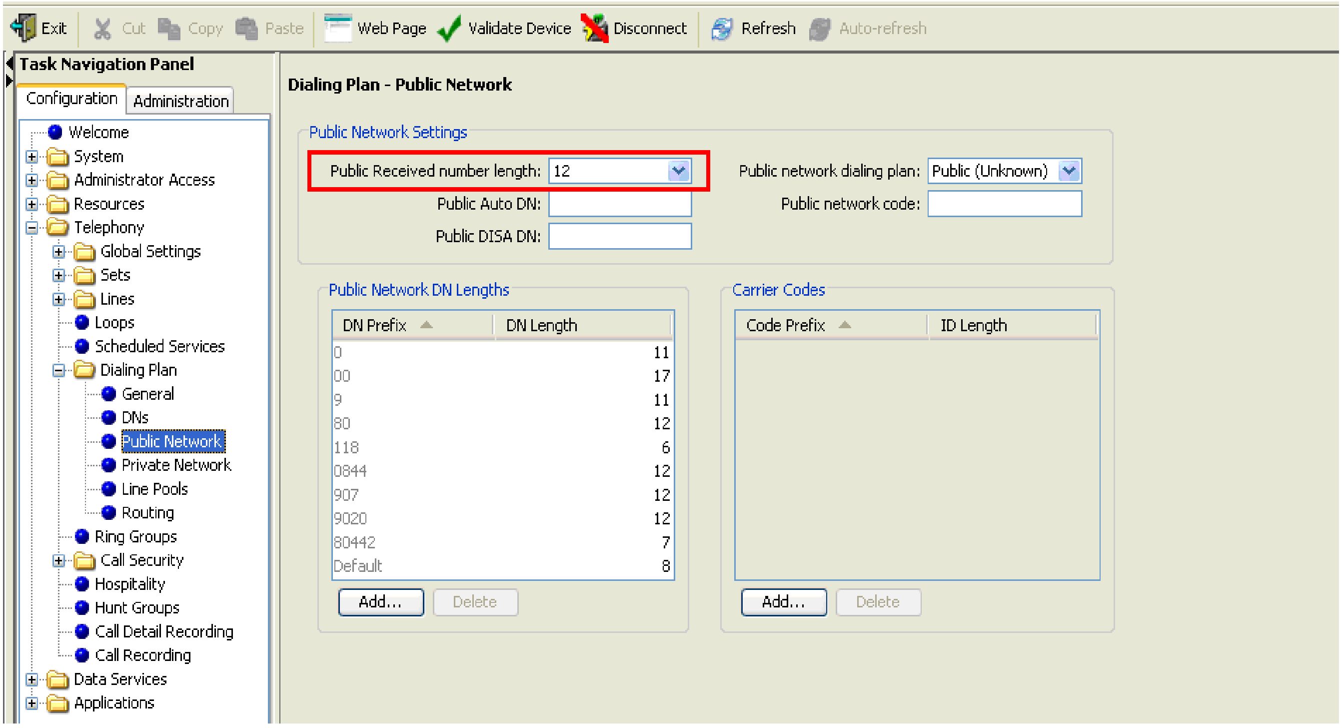
Inbound DDI Routing

There are obviously several ways to program inbound DDI's onto the BCM so this example is for reference only.

In this example I am programming the full received number (12 digits) for clarity in Element manager and for ease of programming the Outbound CLI. The received public number is programmed into a Target Line which is in turn assigned to active extension 302.

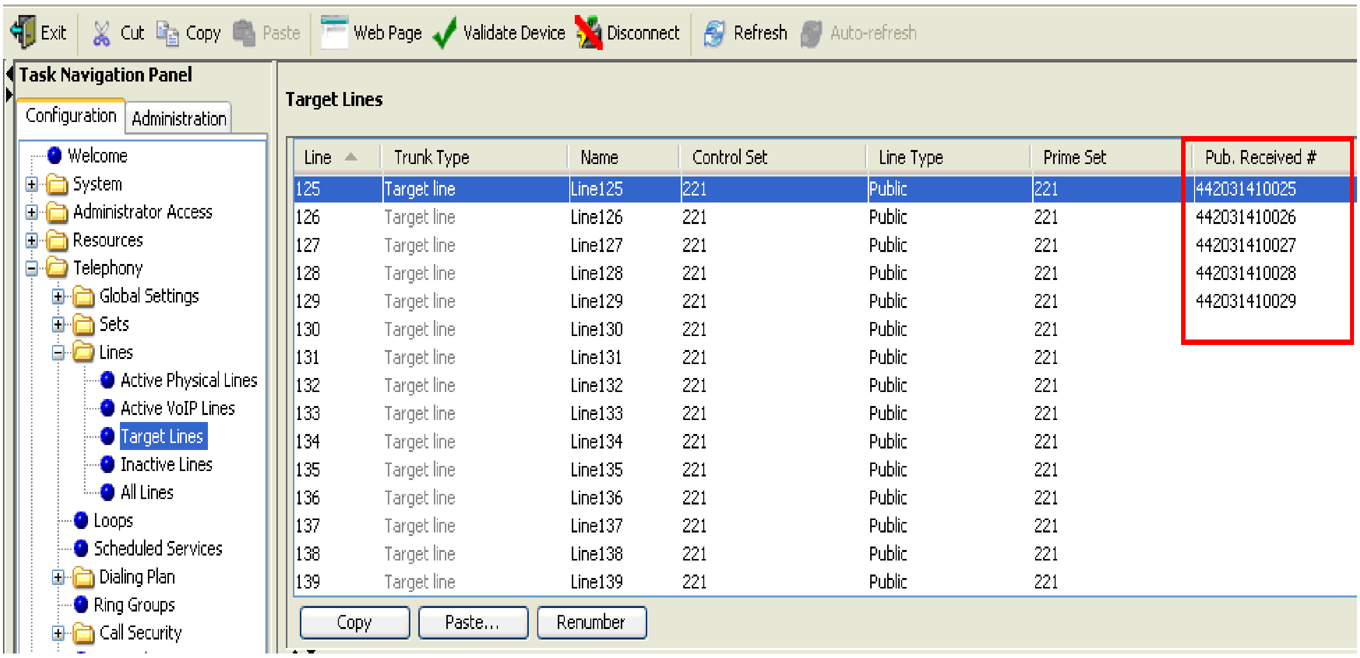
Go to **Telephony è Dialing Plan è Public Network**

Change **Public Received number length** to **"12"**



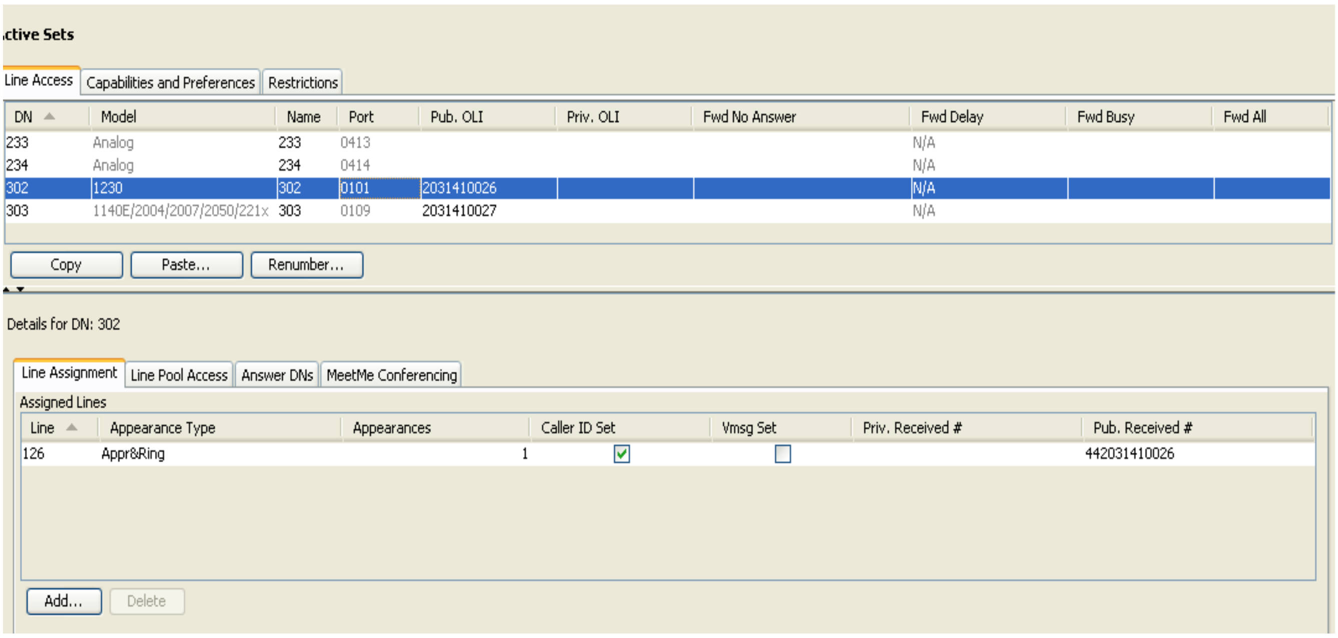
Go to **Telephony è Lines è Target Lines**

Enter the DDI's allocated by Spitfire in the **Pub.Received #** field, 1 per Target Line



Go to **Telephony è Sets è Active Sets**

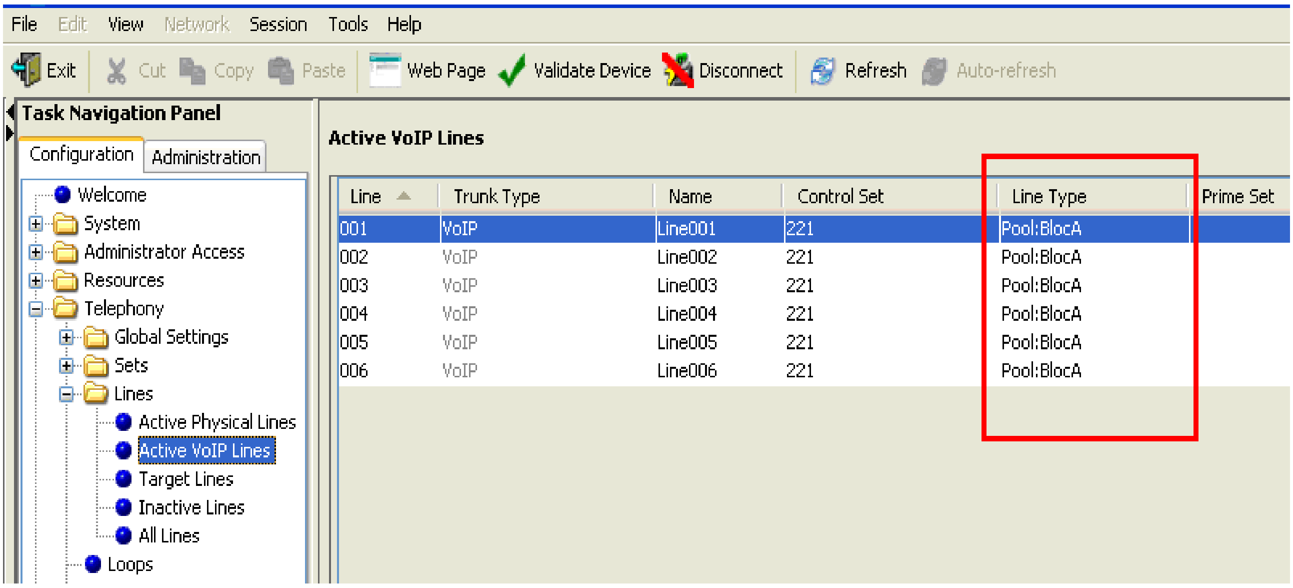
Assign the applicable Target line to the DN you wish the number to ring on.



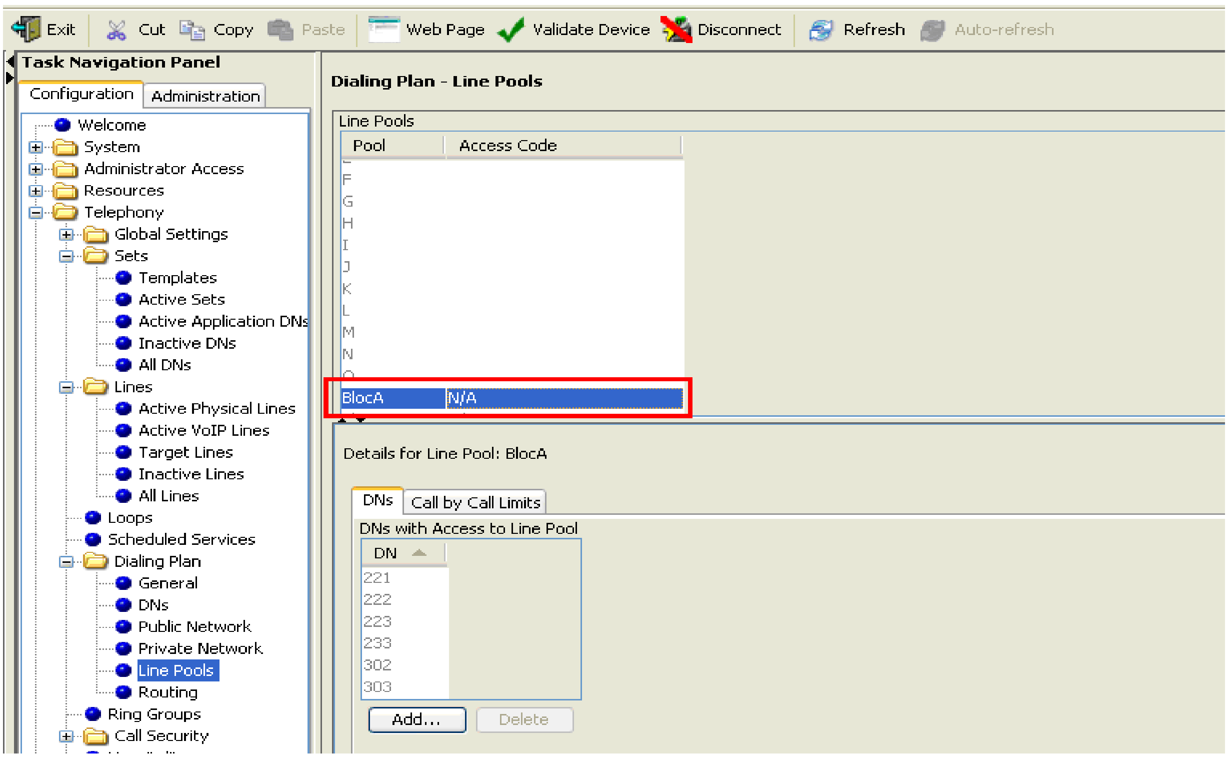
Outbound Routing

The BCM can be configured with a very complex routing table. This guide is not intended to cover all aspects of ARS/TRS on the BCM, it simply gives a very basic example on how to send outbound calls over the Spitfire SIP trunks.

Go to **Configuration è Telephony è Lines è Active VoIP Lines** and confirm which Bloc the VoIP lines are in

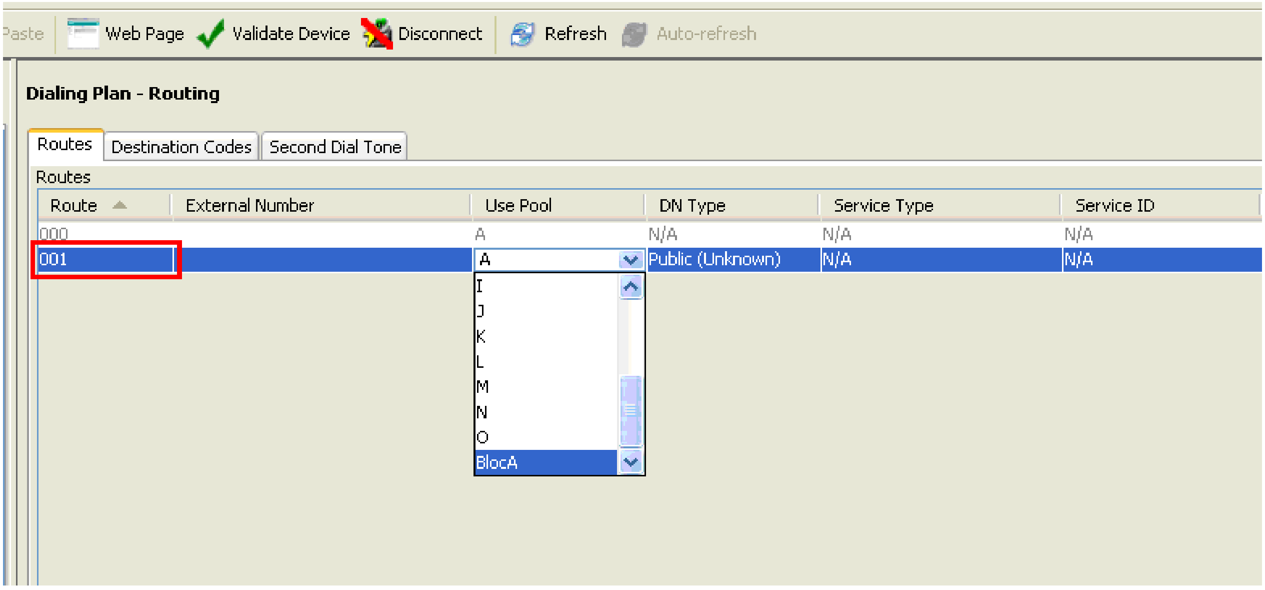


Got to **Configuration è Telephony è Dialing Plan è Line Pools** and ensure that the extensions have access to the pool that contains the VoIP lines



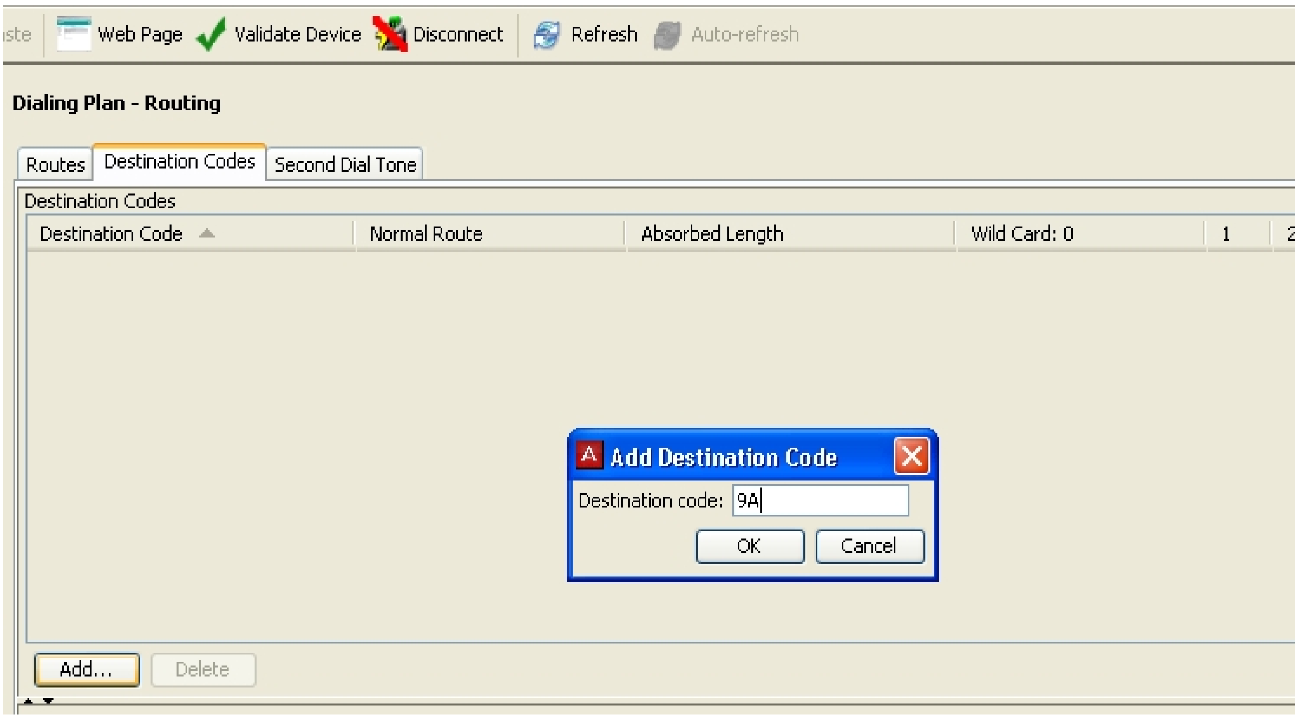
Select **Configuration è Telephony è Dialing Plan è Routing** and add a new route or amend an existing route on the **"Routes"** tab. In this example I am modifying **"Route 1"**

- Name: Select the Pool associated with the SIP trunk (BlocA in this case.
- DN Type: Public (Unknown)



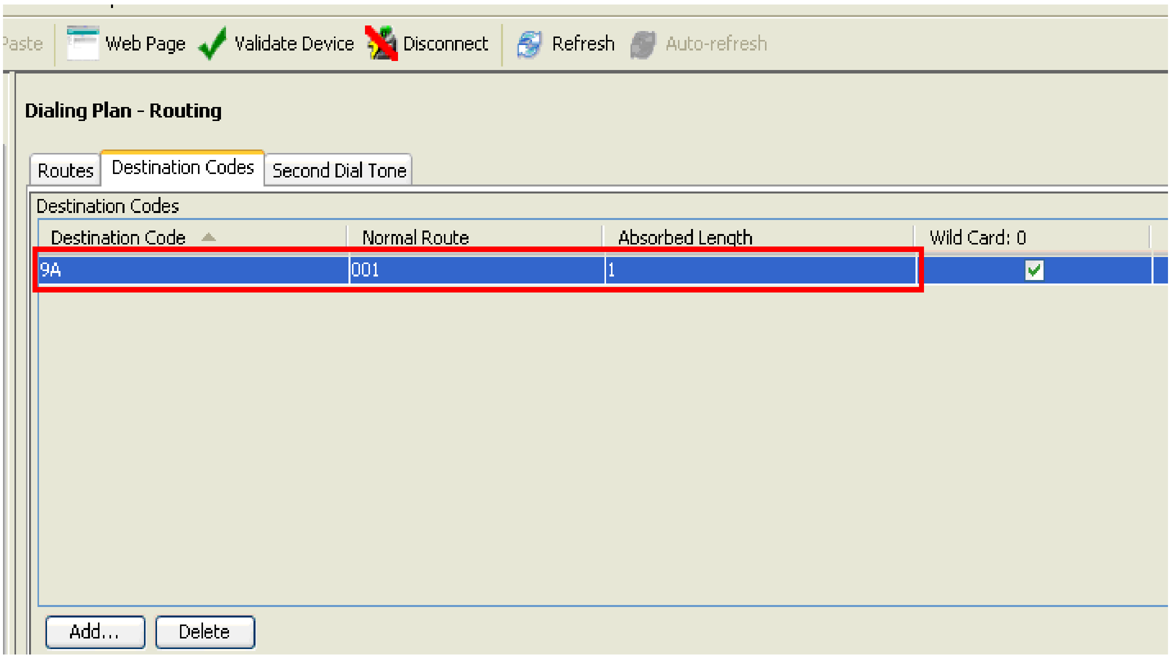
Now select the **"Destination Codes"** tab

Add the required destination code – here I am simply using 9 followed by the wildcard for anything



Change the Route (Normal, Night etc) to the Route created for your SIP trunks. In this case it is Route 1 as created on the previous page.

Absorb the applicable leading digits – i.e. 1 for the leading 9 as I do not want this sent to line.



Outbound CLI Presentation

Select **Configuration è Telephony è Sets è Active Sets** and select the extension you wish to modify. Enter the number you wish to present in the Pub. OLI field. This should be a DDI associated with the Spitfire SIP trunk **without** the leading 44, as below.