Gigaset pro

Third Party Interoperability Testing

InterOperation & Configuration Notes For Gigaset pro IP DECT Systems Interworking With The Samsung OfficeServ 7200 PBX

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Contents

Change History

Document revision	Date	Authored by	Sections affected	Reason for change
Rev 001	19 April 2013	JL	All	Initial release

1. Overview

1.1. Introduction

This document provides a summary of how the Samsung OfficeServ 7200 PBX can interoperate with Gigaset pro IP DECT Cordless systems and phones. This is a Gigaset pro "self-certification" document based on own testing with the Samsung PBX.

1.2. Session Initiation Protocol

Session Initiation Protocol (SIP) is a simple protocol that facilitates peer-to-peer communication sessions. Users (or, in general, any addressable entities) in a SIP framework are identified by Universal Resource Identifiers (URI). Each such Internet-style address (for example, sip: johndoe@proximitycomms.com) maps into one or more Contacts, each of which typically represents a device or service at which the corresponding user may be reached. The SIP framework is responsible for routing a request for a peer-to-peer session addressed to a given URL to one or more appropriate contacts for that URL. The framework may utilise information about the preferences, presence and location of the user identified by the URL, to determine the most appropriate contacts. The protocol also provides mechanisms to specify the type of session that is requested as well as means to change session parameters.

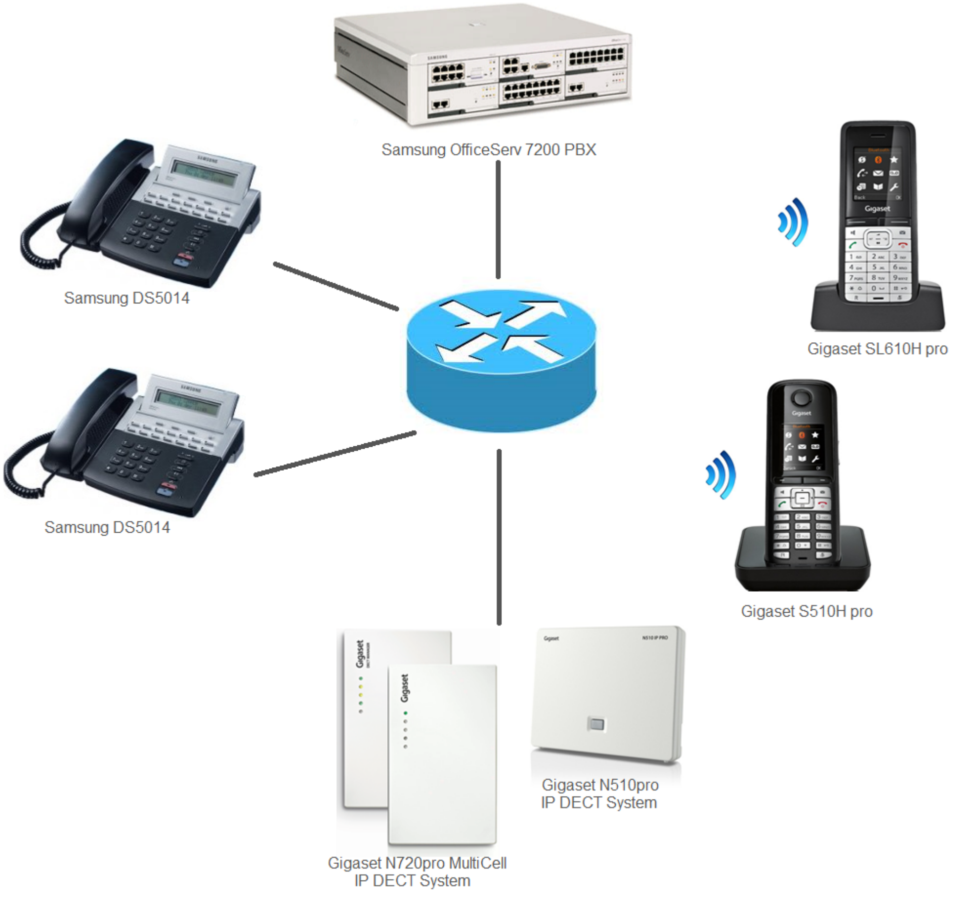
It is important to understand that SIP is not a standardised protocol but in fact is an IETF RFC (**R**equest **F**or **C**omment). An RFC is a document that describes the specifications for a recommended technology. If the specification is ratified it becomes a standards document. At the time of producing this document SIP still remains a RFC. Not all RFCs become standards; some are designated indefinitely with Informational or Experimental status. Therefore interoperability of two SIP devices is not guaranteed; this is why Gigaset pro has produced this document to explain the configuration and features available when using available when using its products with third-party providers' services.

Full details of the SIP IETF RFC can be found here: http://www.ietf.org/rfc/rfc3261.txt

2. Testing Configuration

2.1. Architecture Overview

The following is a diagram of the solution architecture showing the components used during the test.



2.2. Software versions

The following software versions were used during the testing by Gigaset pro

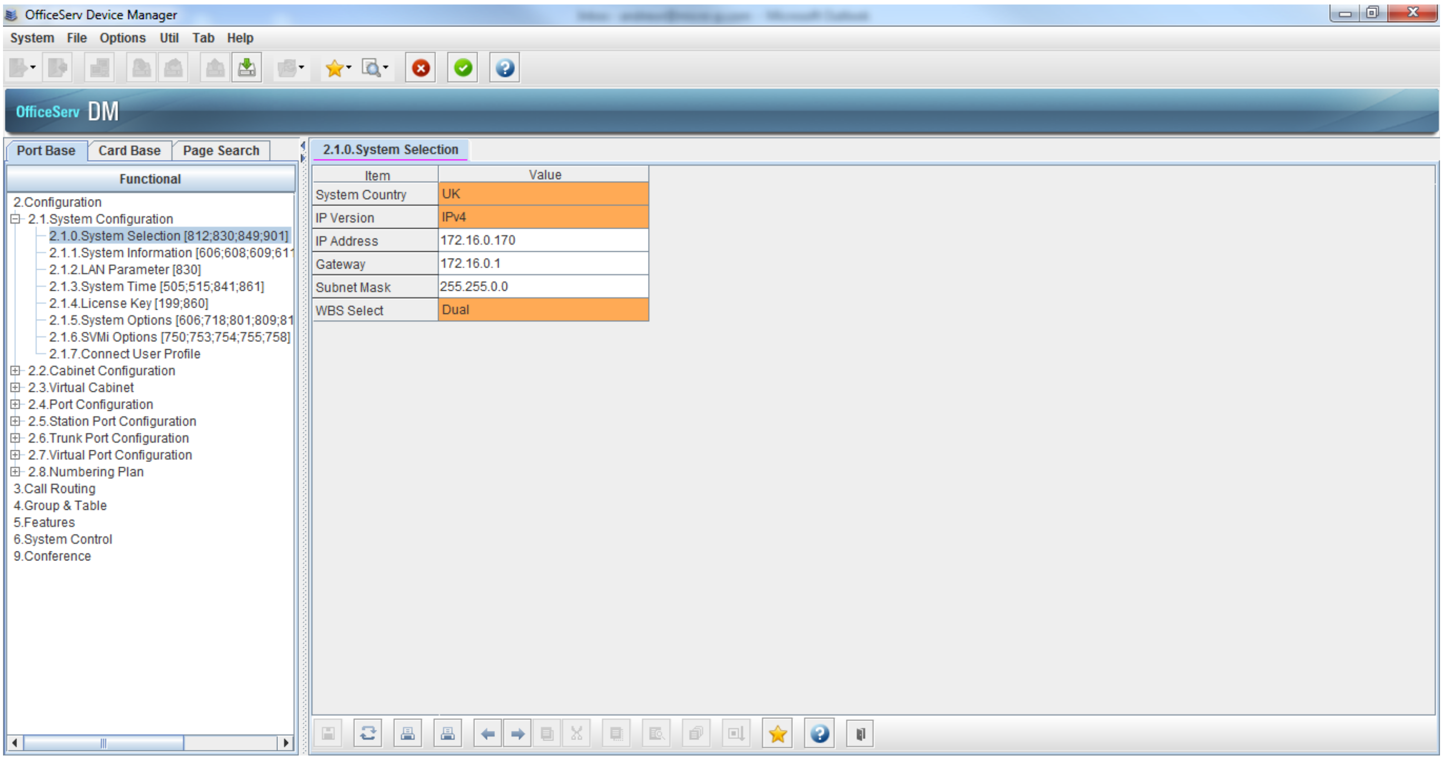
Device	Software version
Samsung OfficeServ 7200 Version	4.65
Gigaset N300IP & N510 pro	42.075
Gigaset N720DM pro	70.068

3. Configuration

3.1. Samsung

Configure Global SIP Settings
The Samsung PBX used for the testing was an OfficeServ 7200 with MP20 processor along with an OAS card for the RTP gateway.

Ensure that the system is connected to the same network as the phones and contains a static IP address. The IP address can be sent in menu 2.1.0 or MMC830. This IP address is used for the signalling.



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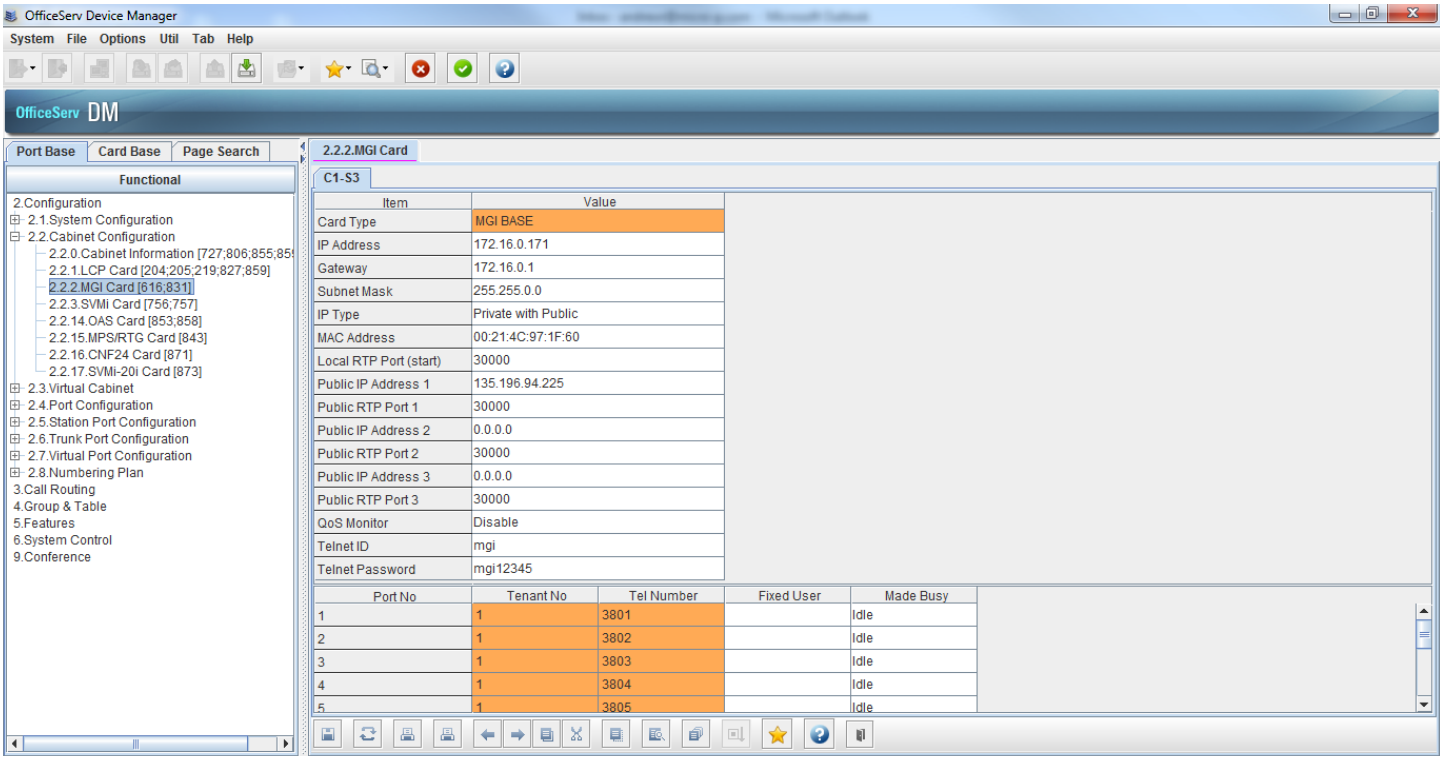
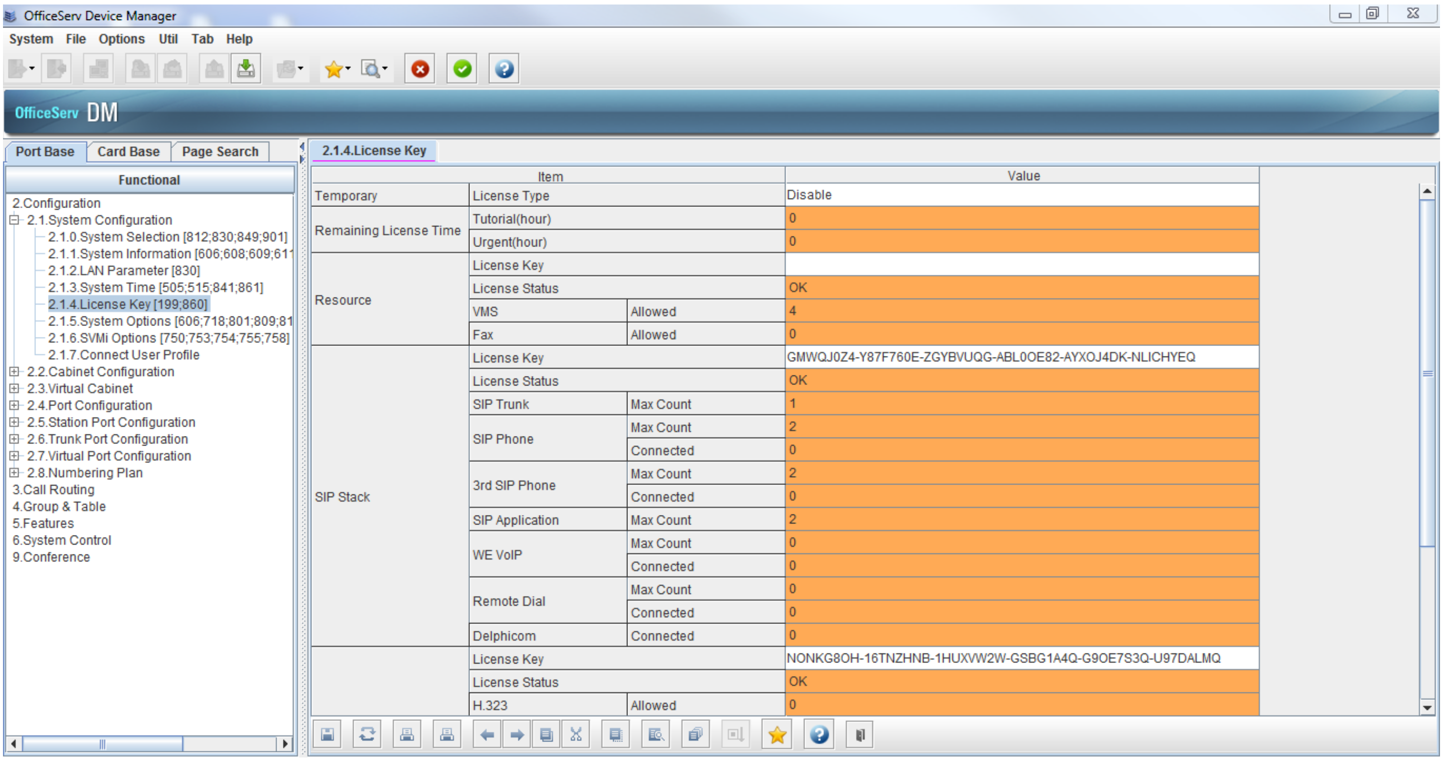
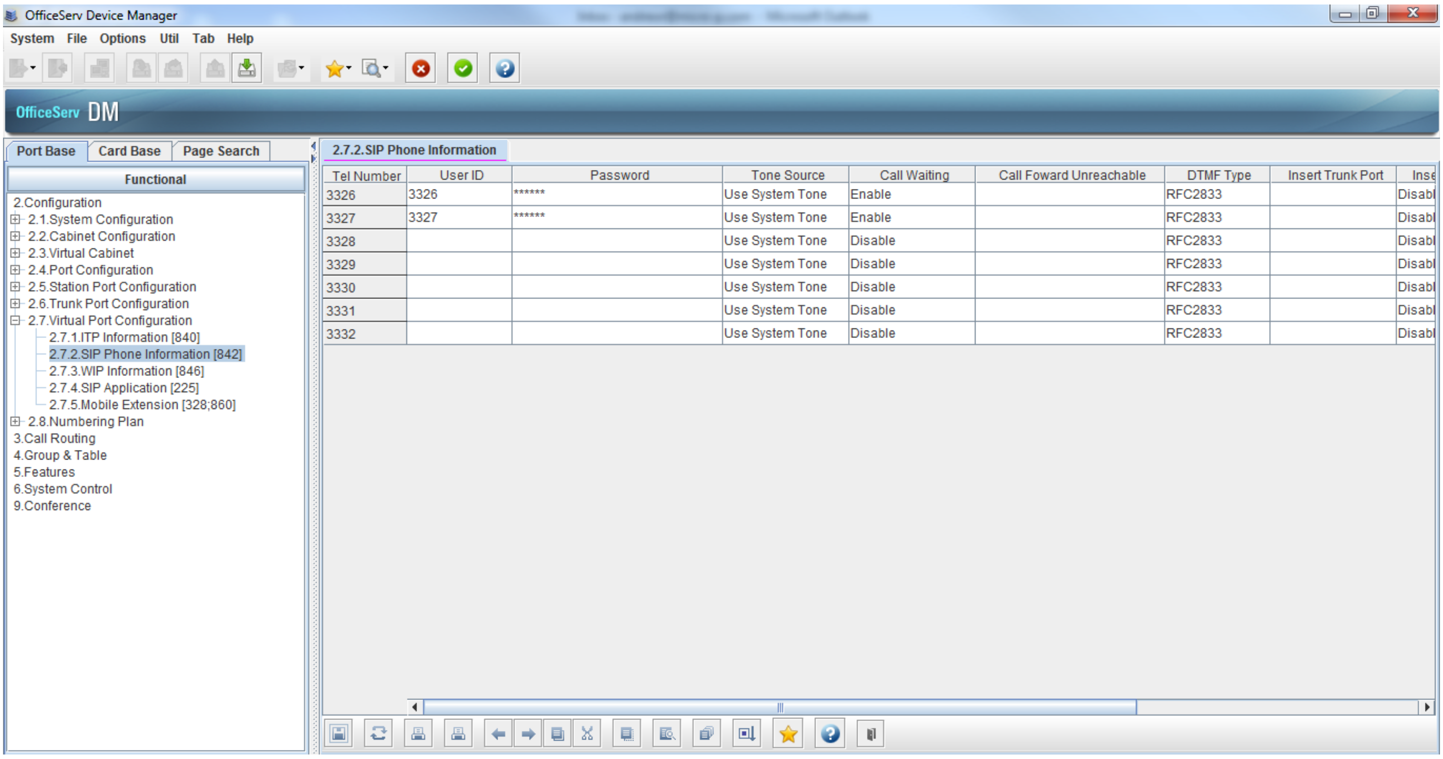
Assign an IP address to the OAS card (OfficeServ Applications Server). This is the card where the RTP traffic is dealt. Menu 2.2.2 or MMC831.



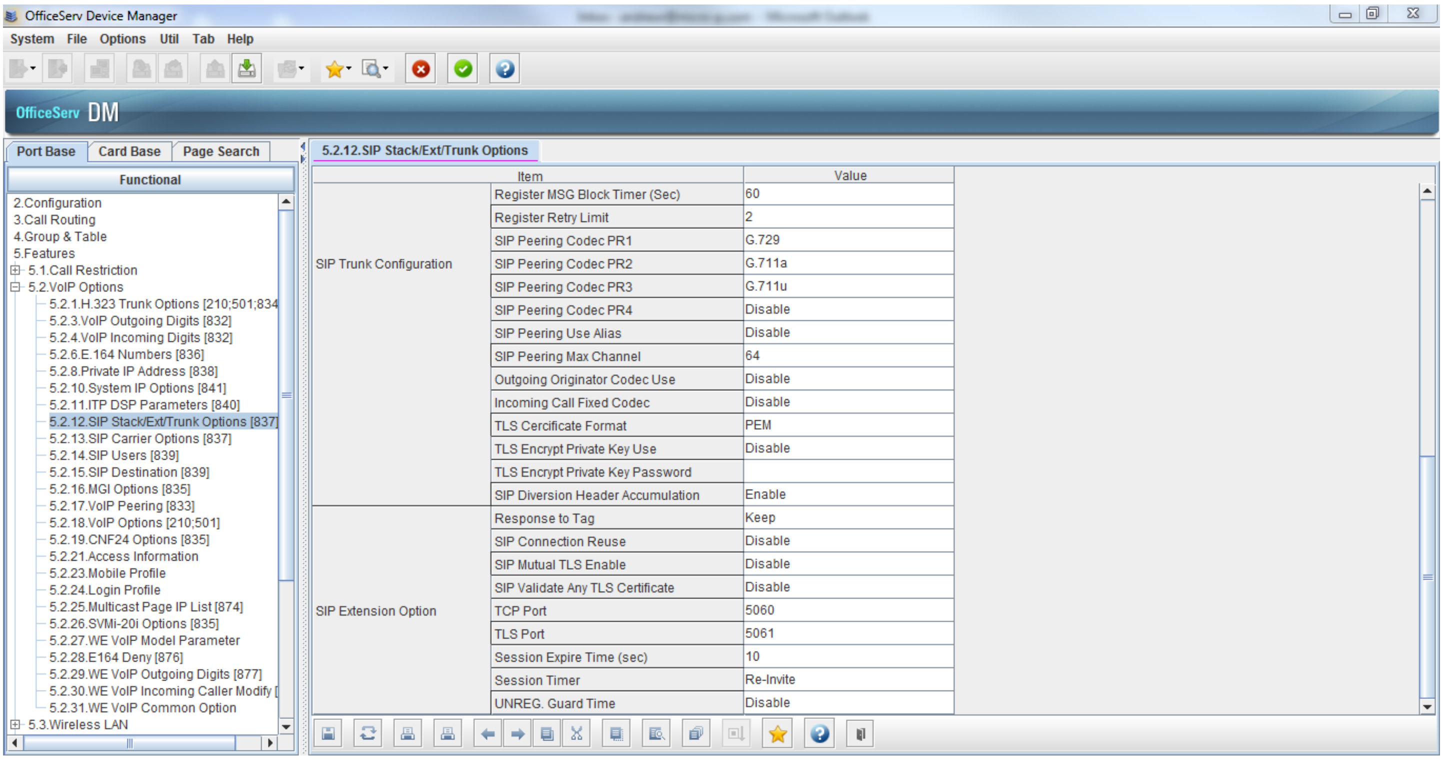
A 3rd Party CTI license will need to be installed in Menu 2.1.4 or MMC860:



SIP username and passwords will be set as well as enabling call waiting. This is in menu 2.7.2 or MMC842:



Enable the support for Re-Invite. 5.2.12 or MMC837. It's the second option from the bottom, the one above is the timer for when for re-invite is sent:



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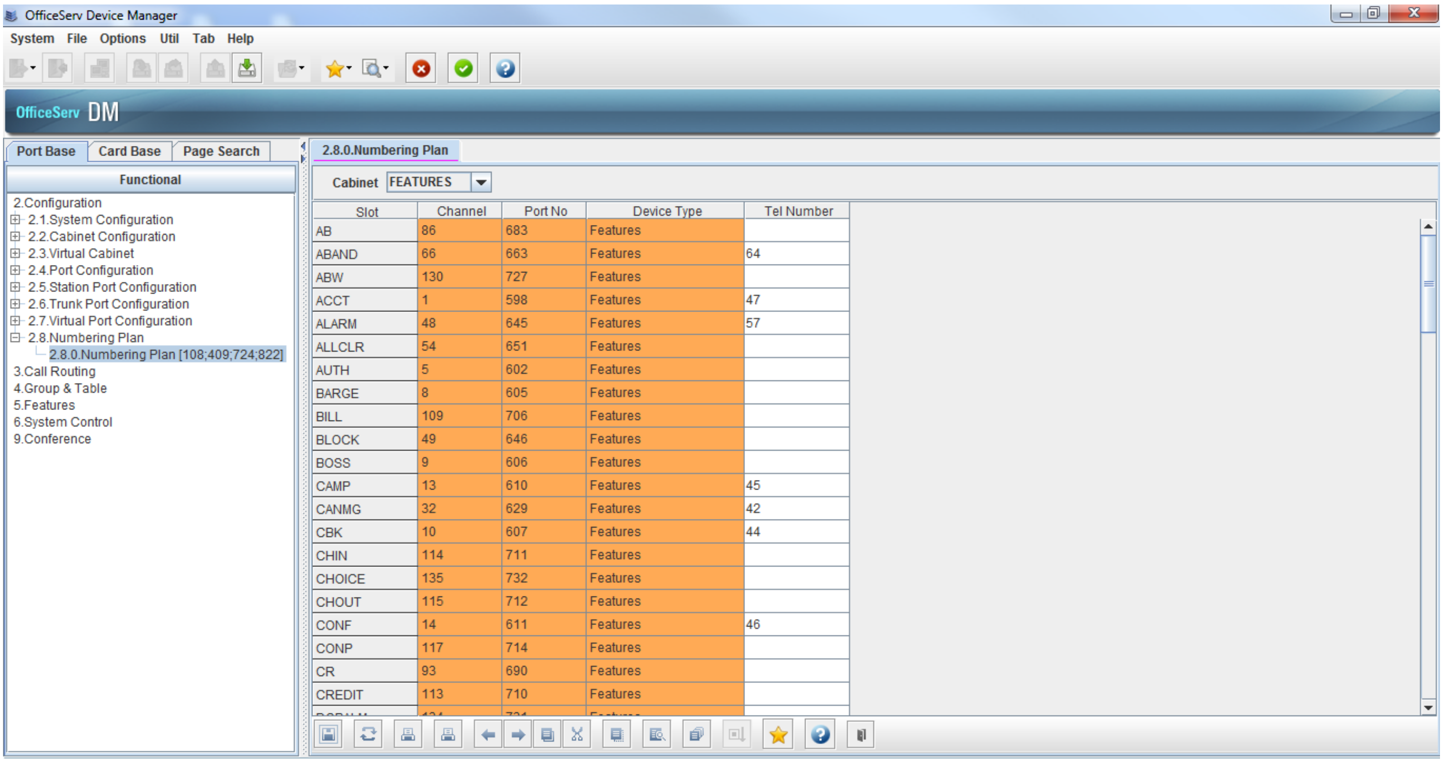
Feature codes can be set in menu 2.8.0 or MMC724:



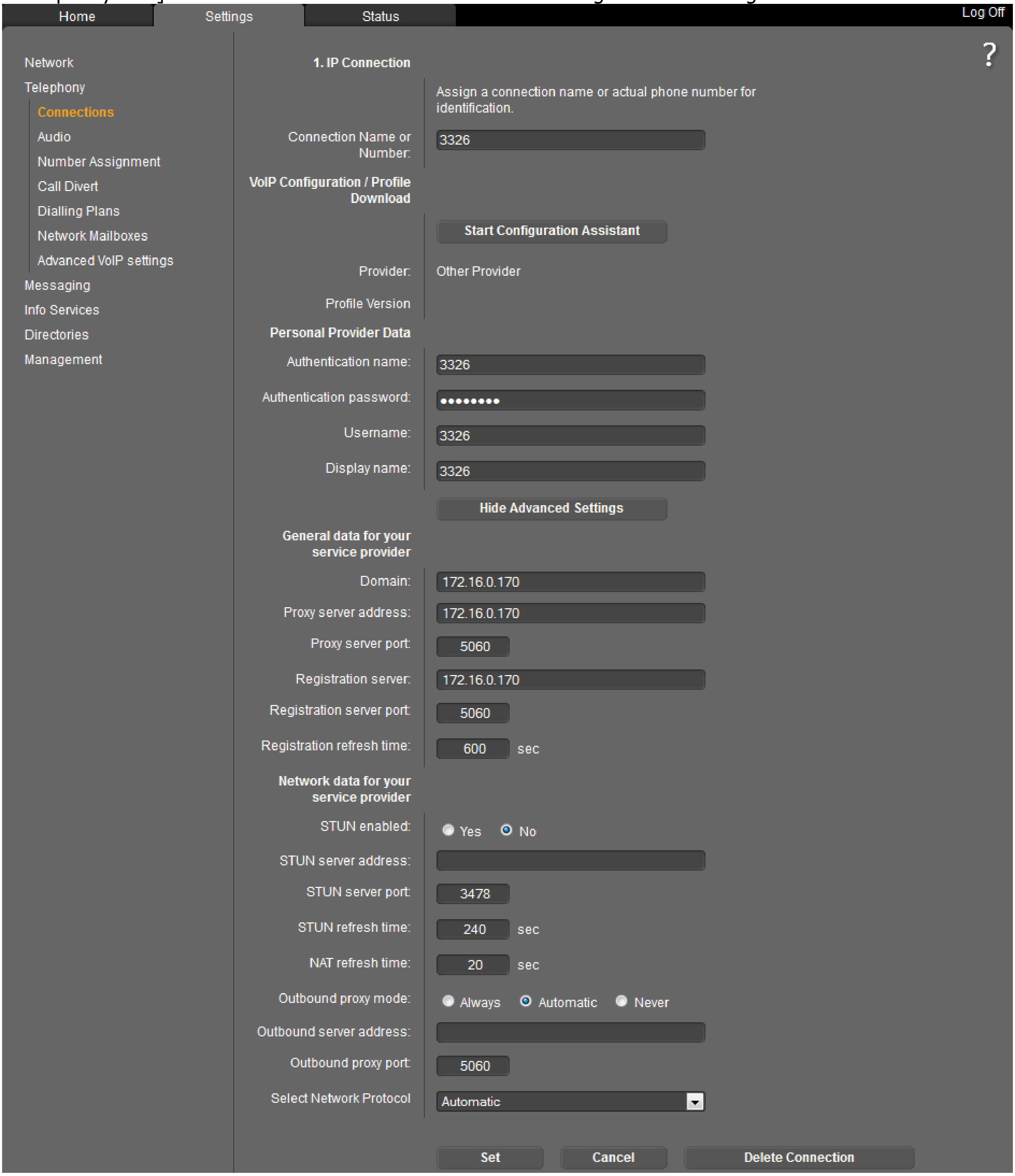
Default feature codes.

- Call Forward No Answer - 603
- Call Forward Busy - 602
- Call Forward Busy no Answer - 604
- Call Forward Immediate – 601
- Call Pickup - 66 followed by the pickup group. (Everyone is in pickup group 1 by default).
- Call Pickup direct extension – 65 followed by the extension number.
- DND - 605

3.2. Gigaset

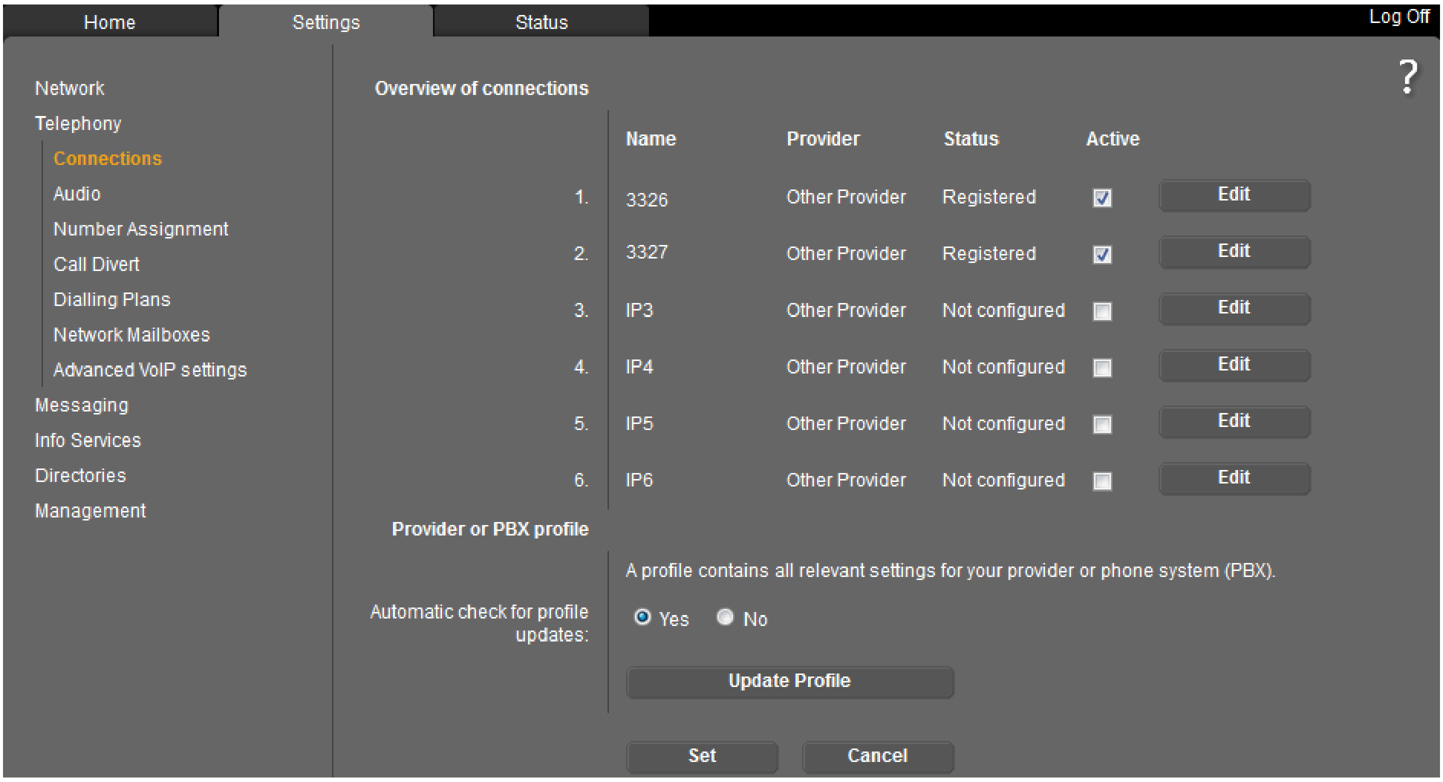
The screenshots are those of an N510pro however similar configuration parameters are shared across the Gigaset IP product portfolio.

Under the menu heading **Connections** edit the first VoIP account IP1 [note: up to six VoIP accounts/DECT Users/Samsung extensions can be configured on the N300IP and N510pro, whilst up to 100 Users on the N720 pro system]. Enter the VoIP account User credentials and global PBX settings:

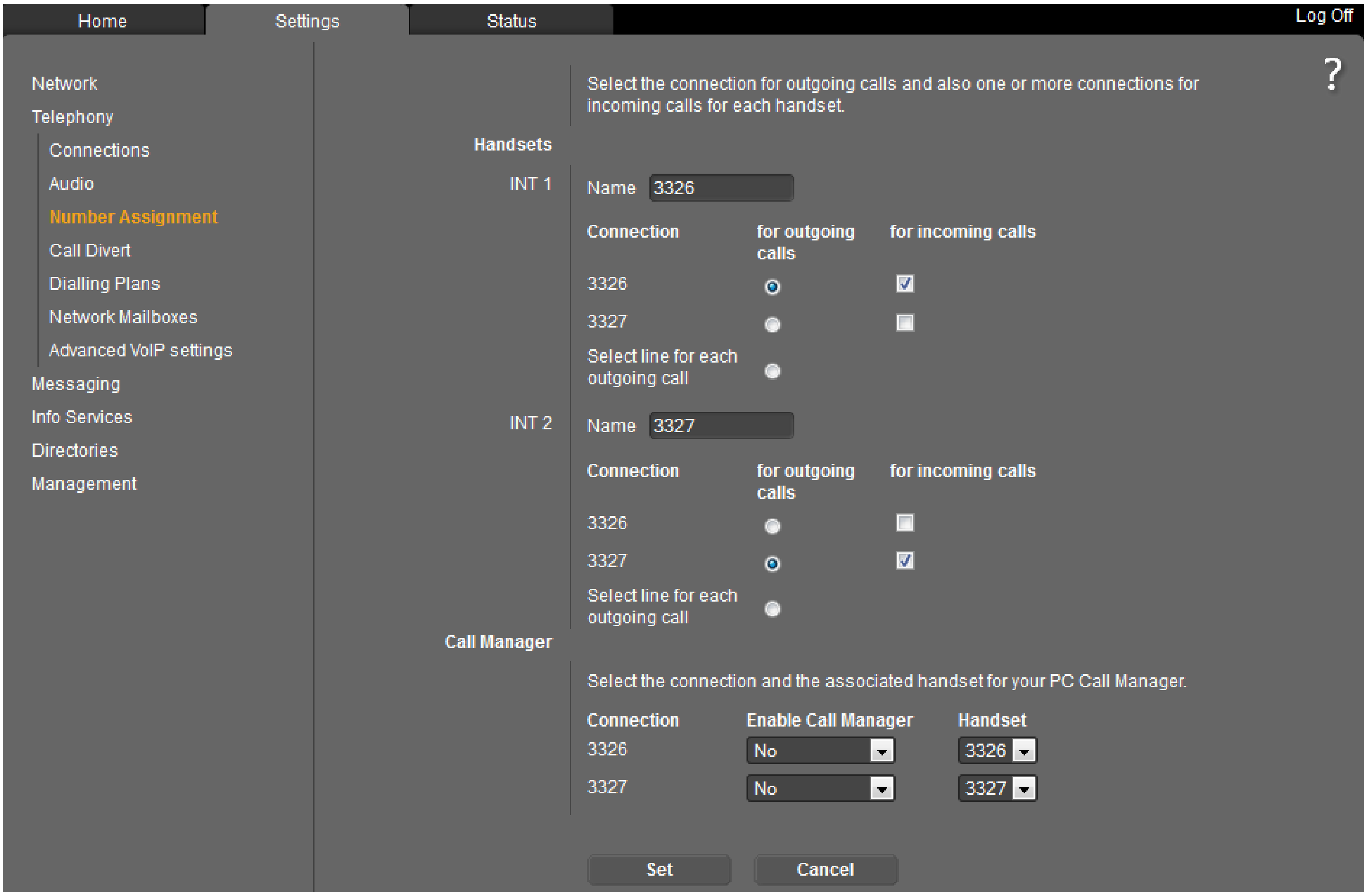


Connection Name = Name to be associated with this connection – default is IP1
Authentication Name = Extension number defined on Samsung under individual users
Authentication Password = Password as defined under 'SIP Password' under individual users
User Name = Extension number defined on Samsung under individual users
Display Name = Name that will be displayed as the CPND when calls are made from the DECT handset
Domain = SIP Domain / Realm that is configured on the Samsung Environment
Proxy Server Address = IP of Samsung switch providing SIP Proxy
Proxy Server Port = Default 5060
Registration Server Address = IP of Samsung switch providing SIP Proxy
Registration Server Port = Default 5060
Registration Refresh Timer = Must match the timer that has been configured in Samsung eg 600
STUN = Disabled
Outbound Proxy = Not required

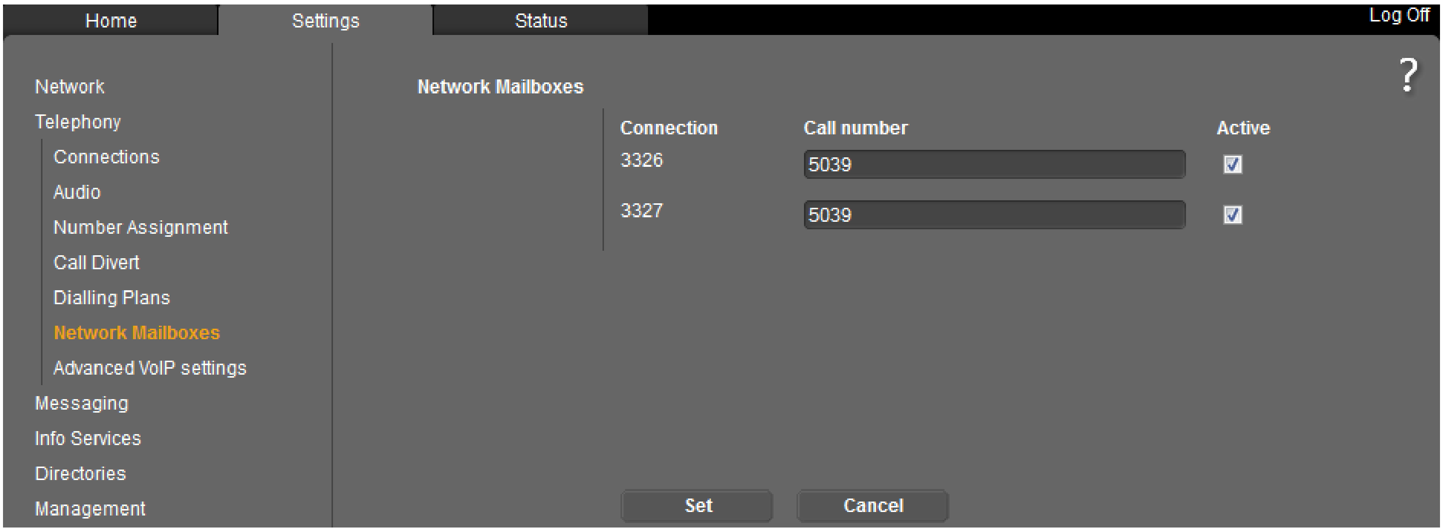
Click **Set** and note the Status changes to **Registered**:



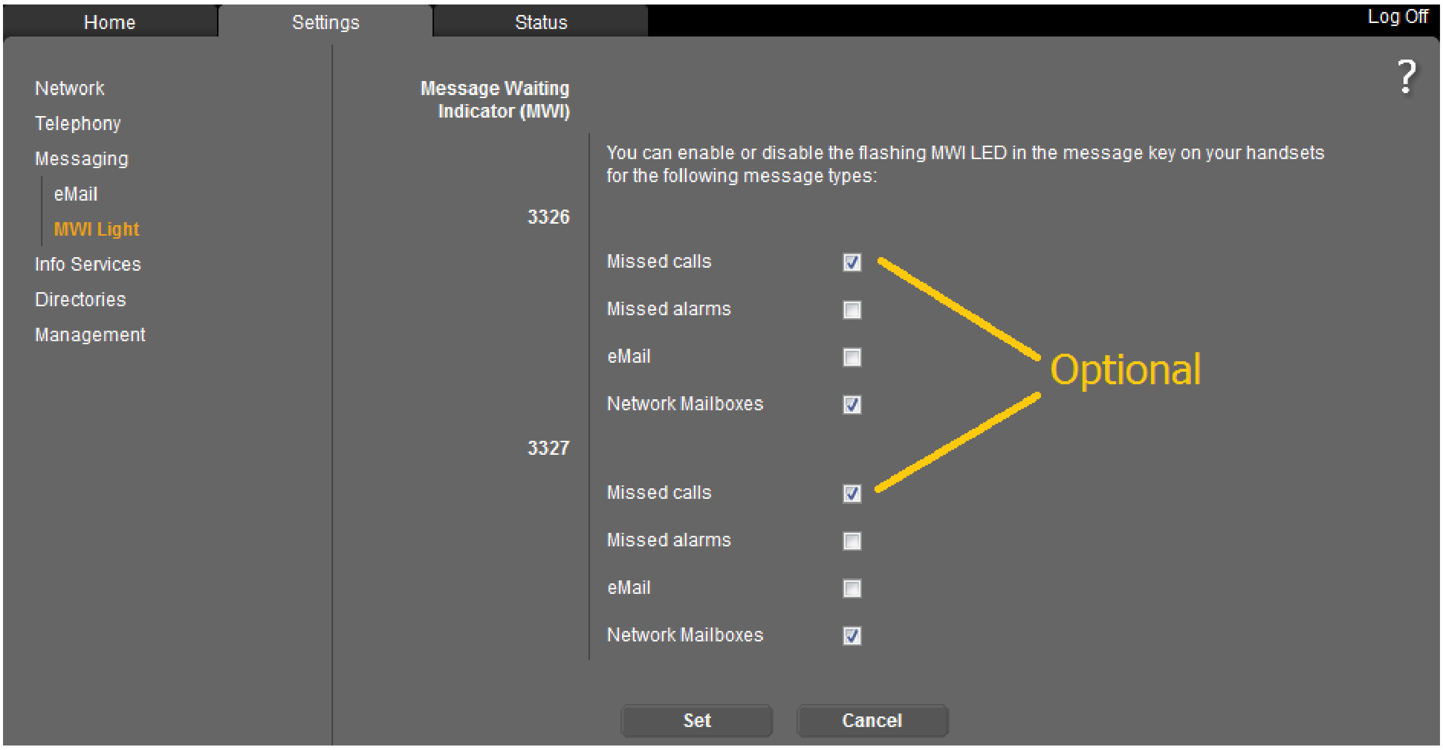
Select the **Number Assignment** menu option:
Ensure that the "Samsung" connection is used for both outgoing and incoming calls.



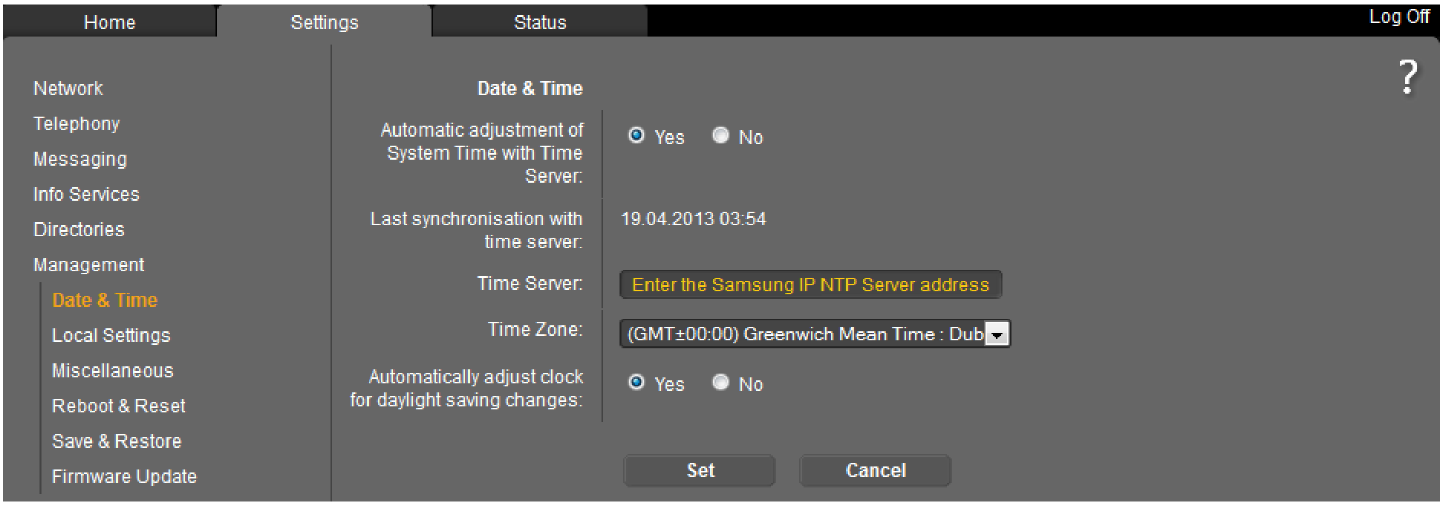
Select the **Network Mailboxes** menu option:
Enter the Samsung network voicemail access number.



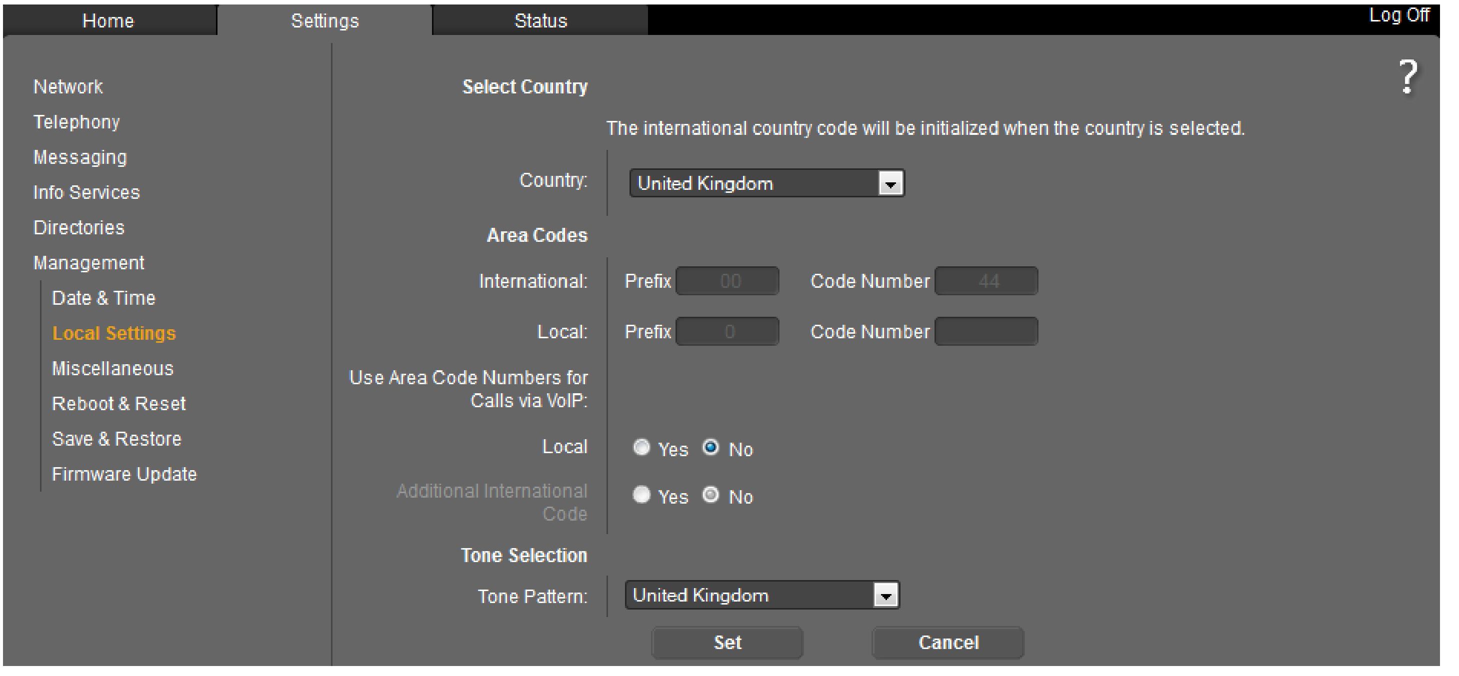
Select the **Messaging > MWI Light** menu option:
Ensure the Network Mailboxes is checked. Missed call notification is optional.



Select the **Date & Time** menu option:
Ensure that the Samsung IP address is used for as the NTP server.



Select the **Local Settings** menu option:
Ensure that the UK Tone scheme is selected.



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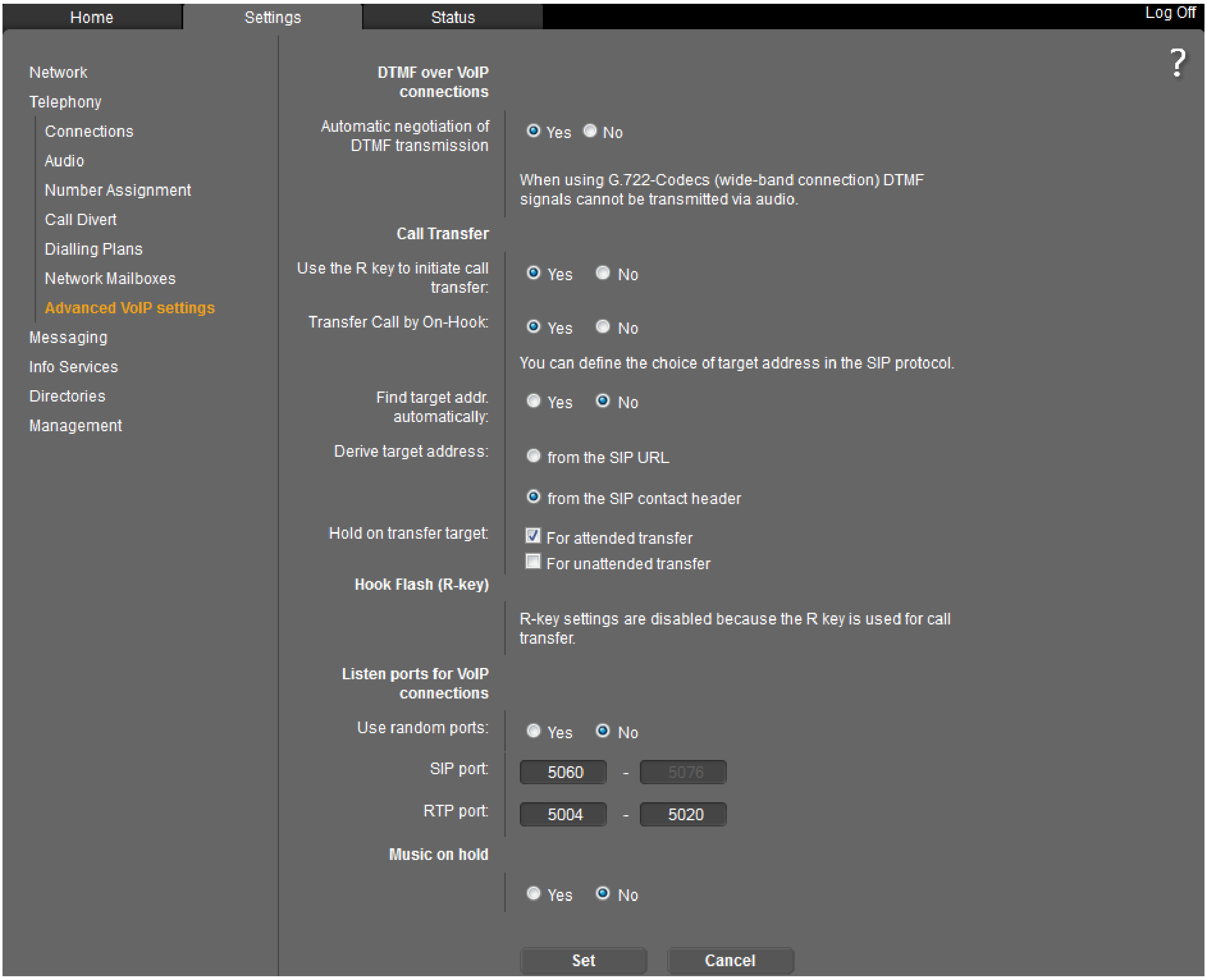
Select the **Advanced VoIP Settings** menu option:
Ensure that **Transfer Call By On-Hook** is selected



INFO NOTE: All of the above settings can be Auto Provisioned into the Gigaset Device using plain XML via appropriate Redirection methods, thereby achieving a Zero-Touch experience with a new device for the End User.

3.3. Correct procedure for initiating Call Transfers from a Gigaset DECT handset:

During an established call, proceed as follows:

1. Press either the **R** key (Recall/Hookflash-telecoms terminology!) or the soft key **Ext.Call** (as indicated in the display during the call) to place the call on hold. Either will have the effect of signalling to the PBX to place the call on hold.

2. Enter the telephone number of the User you wish to call and wait for ringing.

3. At this stage you can either:
   - Blind Transfer - hang up to transfer the call unannounced
   - Consultative Transfer - wait for the other party to answer, then consult/announce the call and hang up. Or it could be that the other party doesn't wish to speak with the Caller in which case select the displayed option to **END ACTIVE CALL** and you will be connected to the Caller once again.

Call Transfer Method:
For transferring calls when connected to an advanced PBX trunk (SIP REFER signalling protocol).

Uses:
- On-site IP-PBX
- Hosted IP-PBX
- IP Centrex

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4. Test Results

Issues deemed to require a resolution are displayed in BLUE

Feature	Success	Comments
Call – initiate	✓	
Call – accept	✓	
On hook dialling & handsfree speaker	✓	
Hold/unhold	✓	
Park/unpark	-	Untested
Transfer – consultative	✓	
Transfer – unattended	✓	
Call Forward	✓	
Do Not Disturb	✓	
Redial	✓	
Caller ID – outgoing	✓	
Caller ID – incoming	✓	
Redirect to VoiceMail	✓	
Voice mailbox access	✓	
VoiceMail new message indicator & counter	partial	N720 OK. N510 bug with Gigaset R&D
Call Waiting	✓	
3-Party Conference (as attendee)	✓	
3-Party Conference (initiate)	×	Further testing required
Call Pick up (group)	✓	
Call Pick up (directed)	✓	
Broadcast – initiate	-	Untested
Broadcast – audible	-	Untested
DTMF signalling	✓	

[Highlights only – full test plan results available upon request]

Further configuration details can be found in the product specific Admin Guides which are available for download in the Support area of the Gigaset pro website.

Comments or questions in relation to this document should be addressed to the originator:

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