

Gigaset pro

Third Party Interoperability Testing



Desktop Phones
DE310 DE410 DE700 DE900 DX800A



N510 pro
Business class IP DECT system



N720 pro
MultiCell IP DECT System



InterOperation & Configuration Notes For Gigaset pro IP Desktop Phones & IP DECT Systems Interworking With The Voipfone Hosted PBX Service

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Change History

Document revision	Date	Author ed by	Sections affected	Reason for change
Rev 001	30 September 2013	JL	All	Initial release
Rev 002	30 May 2014	JL	All	Hyperlink updates mainly

1. Overview

1.1. Introduction

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

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**equ**S**t **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 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. Software versions

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

Device	Software version
Voipfone	
Gigaset N300IP & N510 pro	42.075
Gigaset N720DM pro	70.073
Gigaset DE310 & DE410	02.00.05
Gigaset DE700 & DE900	02.00.08

3. Configuration

3.1. 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 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:

The screenshot displays the configuration page for a VoIP connection. The interface is divided into three main sections: Home, Settings, and Status. The 'Settings' section is active, showing a sidebar menu on the left with options like Network, Telephony, and Connections. The main content area is titled '1. IP Connection' and contains several sections of configuration fields:

- 1. IP Connection:** Includes a text input for 'Connection Name or Number' (set to 'VoIPfone') and a 'Start Configuration Assistant' button.
- VoIP Configuration / Profile Download:** Shows 'Provider: Voipfone' and 'Profile Version: d_voipfone_uk.bin 1307532360'.
- Personal Provider Data:** Includes fields for 'Authentication name: 30151262*201', 'Authentication password: [masked]', 'Username: 30151262*201', and 'Display name: 201'. A 'Hide Advanced Settings' button is also present.
- General data for your service provider:** Includes 'Domain: sip.voipfone.net', 'Proxy server address: sip.voipfone.net', 'Proxy server port: 5060', 'Registration server: sip.voipfone.net', 'Registration server port: 5060', and 'Registration refresh time: 60 sec'.
- Network data for your service provider:** Includes 'STUN enabled: No', 'STUN server address: [empty]', 'STUN server port: 3478', 'STUN refresh time: 240 sec', 'NAT refresh time: 20 sec', 'Outbound proxy mode: Never', 'Outbound server address: [empty]', and 'Outbound proxy port: 5060'.
- Select Network Protocol:** A dropdown menu set to 'Automatic'.

At the bottom of the form are three buttons: 'Set', 'Cancel', and 'Delete Connection'.

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

The screenshot shows the 'Status' page in the Gigaset interface. The left sidebar contains 'Network' and 'Telephony' sections. Under 'Telephony', 'Connections' is highlighted. The main area is titled 'Overview of connections' and contains a table with the following data:

	Name	Provider	Status	Active	
1.	VoIPfone	Voipfone	Registered	<input checked="" type="checkbox"/>	Edit
2.	IP2	Other Provider	Not configured	<input type="checkbox"/>	Edit
3.	IP3	Other Provider	Not configured	<input type="checkbox"/>	Edit
4.	IP4	Other Provider	Not configured	<input type="checkbox"/>	Edit
5.	IP5	Other Provider	Not configured	<input type="checkbox"/>	Edit
6.	IP6	Other Provider	Not configured	<input type="checkbox"/>	Edit

Below the table is the 'Provider or PBX profile' section, which includes a description: 'A profile contains all relevant settings for your provider or phone system (PBX)'. It has radio buttons for 'Automatic check for profile updates:' with 'Yes' selected and 'No' unselected. There is an 'Update Profile' button. At the bottom of the page are 'Set' and 'Cancel' buttons.

Select the **Number Assignment** menu option:

Ensure that the correct connection is used for both outgoing and incoming calls.

The screenshot shows the 'Number Assignment' page in the Gigaset interface. The left sidebar has 'Number Assignment' highlighted under the 'Telephony' section. The main area is titled 'Handsets' and contains the following information:

Select the connection for outgoing calls and also one or more connections for incoming calls for each handset.

Handsets

INT 1

Name: 201

Connection	for outgoing calls	for incoming calls
VoIPfone	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>

Select line for each outgoing call:

Call Manager

Select the connection and the associated handset for your PC Call Manager.

Connection	Enable Call Manager	Handset
VoIPfone	No	INT 1

At the bottom of the page are 'Set' and 'Cancel' buttons.

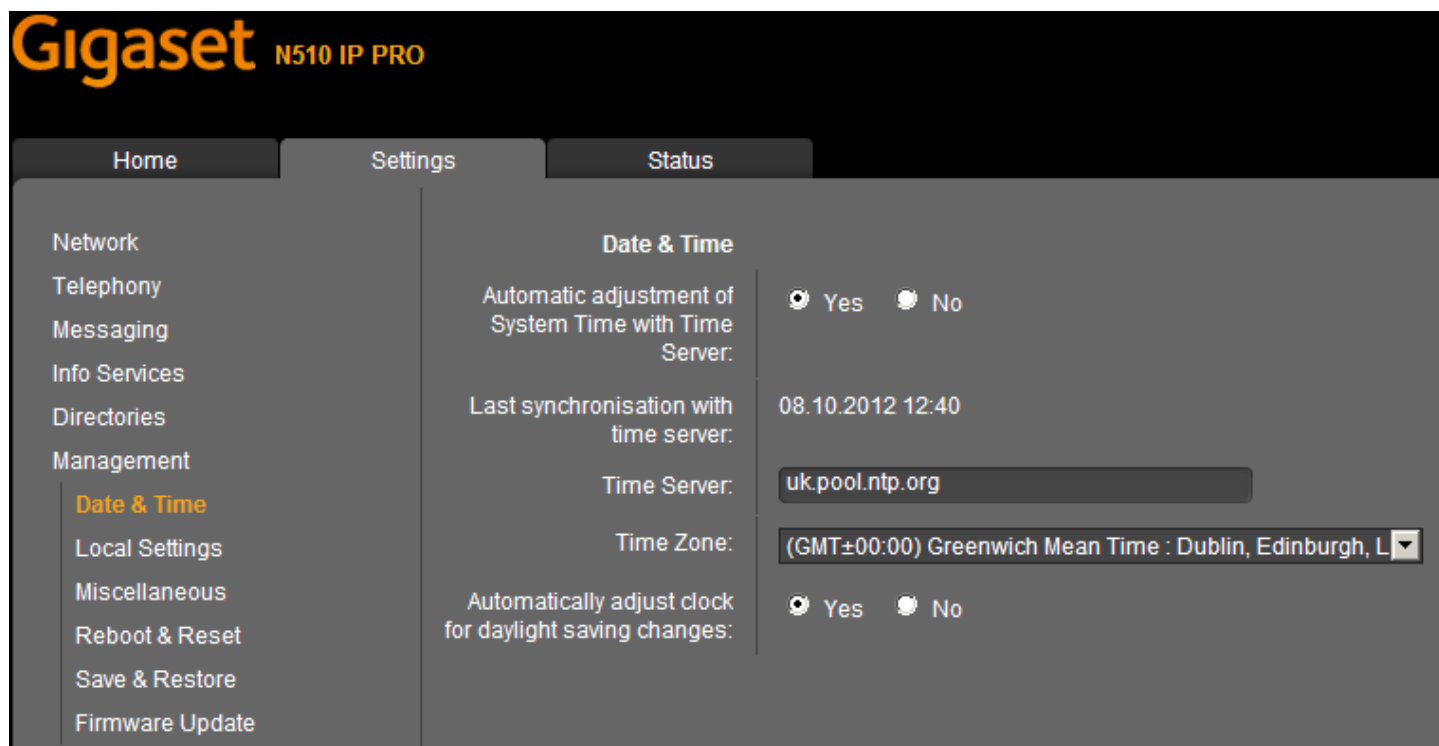
Select the **Network Mailboxes** menu option:
Enter the network voicemail access number.

The screenshot shows a web interface with a top navigation bar containing 'Home', 'Settings', and 'Status'. On the left, a sidebar menu lists various settings categories: Network, Telephony, Connections, Audio, Number Assignment, Call Divert, Dialling Plans, **Network Mailboxes** (highlighted in orange), Advanced VoIP settings, Messaging, Info Services, Directories, and Management. The main content area is titled 'Network Mailboxes' and contains a table with the following columns: 'Connection', 'Call number', and 'Active'. The 'Connection' is set to 'VoIPfone', the 'Call number' is '1571', and the 'Active' checkbox is checked. At the bottom of the main area are 'Set' and 'Cancel' buttons.

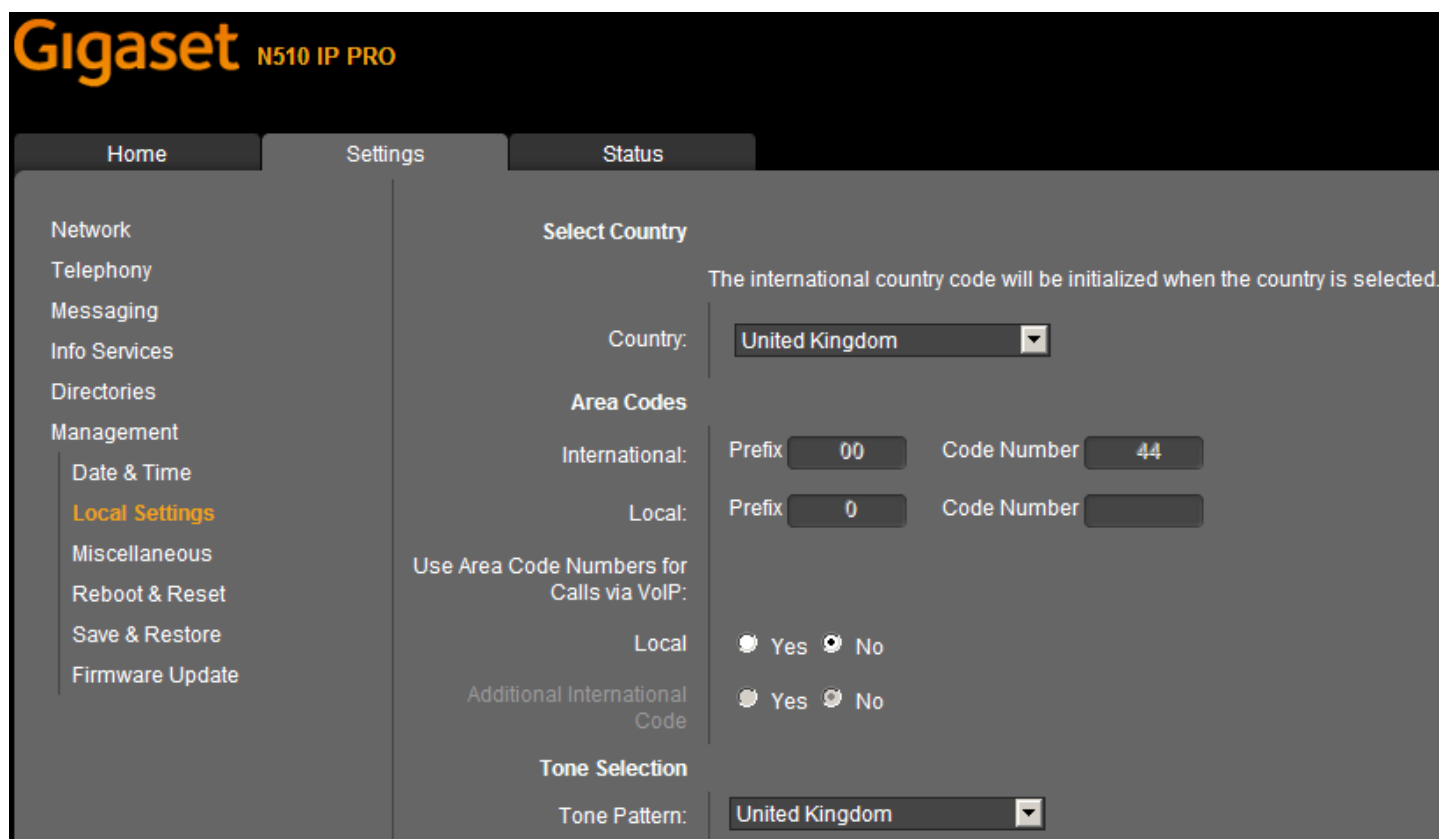
Select the **Messaging > MWI Light** menu option:
Ensure the Network Mailboxes is checked. Missed call notification is optional.

The screenshot shows a web interface with a top navigation bar containing 'Home', 'Settings', and 'Status'. On the left, a sidebar menu lists various settings categories: Network, Telephony, Messaging, eMail, **MWI Light** (highlighted in orange), Info Services, Directories, and Management. The main content area is titled 'Message Waiting Indicator (MWI)' and includes a sub-section 'INT 1'. Below this, there is explanatory text: 'You can enable or disable the flashing MWI LED in the message key on your handsets for the following message types:'. A list of message types follows, each with a checkbox: 'Missed calls' (unchecked), 'Missed alarms' (unchecked), 'eMail' (unchecked), and 'Network Mailboxes' (checked). At the bottom of the main area are 'Set' and 'Cancel' buttons.

Select the **Date & Time** menu option:
Enter your preferred NTP server.



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



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

Home Settings Status Log Off

Network
Telephony
Connections
Audio
Number Assignment
Call Divert
Dialling Plans
Network Mailboxes
Advanced VoIP settings
Messaging
Info Services
Directories
Management

DTMF over VoIP connections

Automatic negotiation of DTMF transmission Yes No

When using G.722-Codecs (wide-band connection) DTMF signals cannot be transmitted via audio.

Call Transfer

Use the R key to initiate call transfer: Yes No

Transfer Call by On-Hook: Yes No

You can define the choice of target address in the SIP protocol.

Find target addr. automatically: Yes No

Derive target address:

from the SIP URL

from the SIP contact header

Hold on transfer target:

For attended transfer

For unattended transfer

Hook Flash (R-key)

R-key settings are disabled because the R key is used for call transfer.

Listen ports for VoIP connections

Use random ports: Yes No

SIP port: 5060 - 5076

RTP port: 5004 - 5020

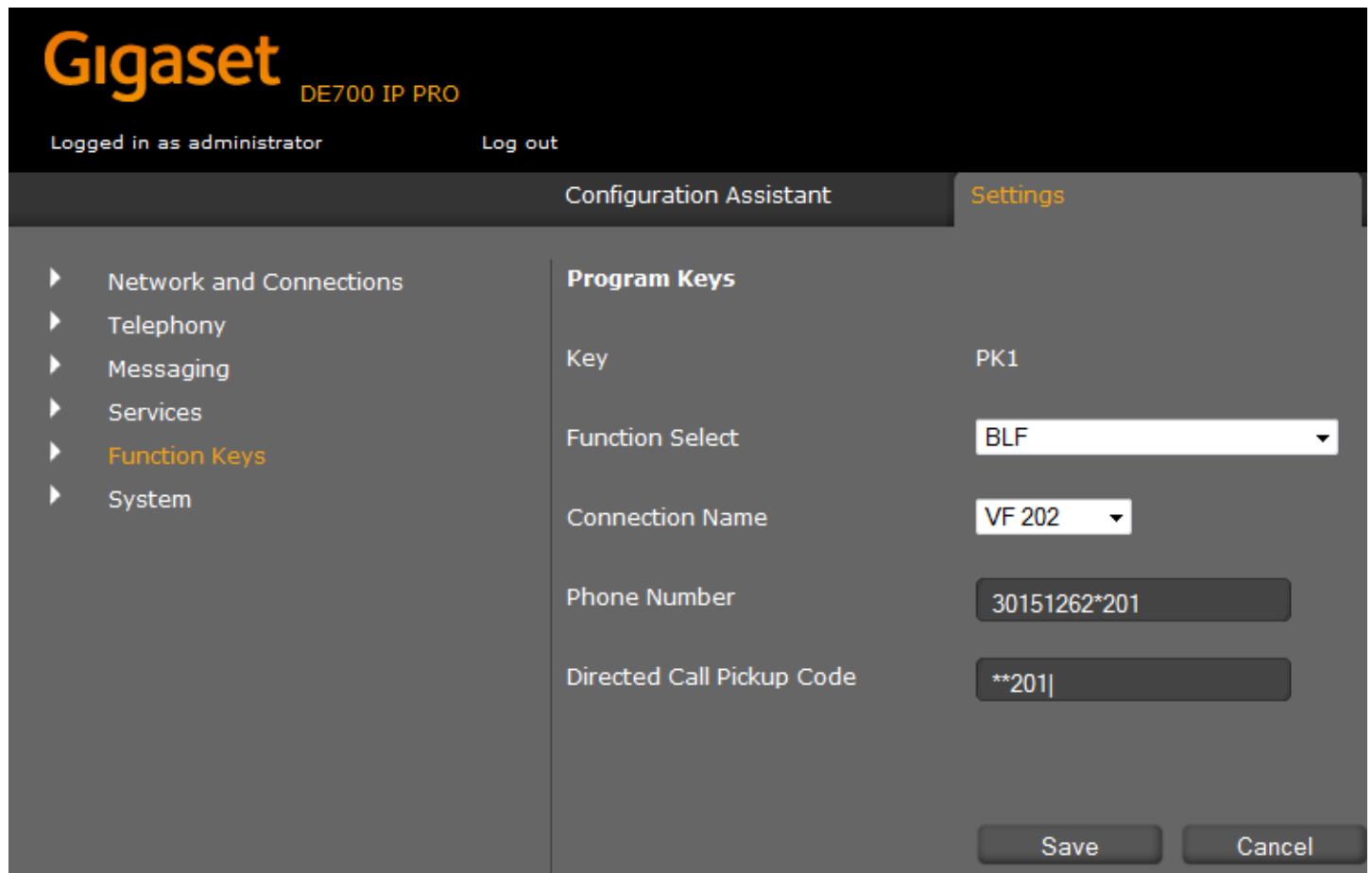
Music on hold Yes No

Set Cancel

Additional settings for DExxx Desktop Phones:

BLF & Call Pick-up

[Note with the Voipfone service after initiating a Call Pick-up the PBX will initiate a new call back to the User]



The screenshot shows the Gigaset DE700 IP PRO web interface. The user is logged in as an administrator. The 'Settings' tab is active, and the 'Program Keys' section is expanded. The settings for a key are as follows:

Field	Value
Key	PK1
Function Select	BLF
Connection Name	VF 202
Phone Number	30151262*201
Directed Call Pickup Code	**201

Buttons for 'Save' and 'Cancel' are visible at the bottom right of the settings panel.

Additional settings for DExxx Desktop Phones:

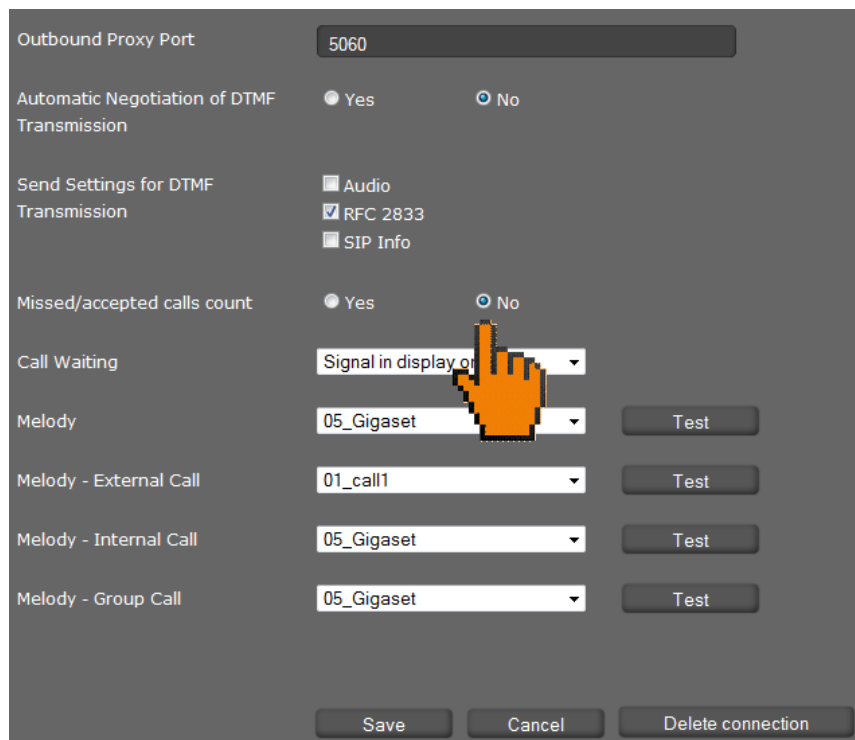
Optional – Preferred method for setting up VoiceMail

Introduction:

Personally I am not a great fan of MWI for missed calls. I believe the Message Envelope should only flash to alert you to new/unheard vMail, whereas in default it flashes for both missed calls & vMail – a “red herring”!

Also I think it looks very confusing on the display when there is a missed call counter together with a new vMail counter also! Particularly on DE310/DE410 with a limited black/white display. Therefore I have changed the default behaviour on my phone. In order for you to see what I mean & to test for yourself, please set your phone up as below in the order of the following steps:

1. On the phone itself, press the SoftKey **Calls**& scroll to **All Calls**. Scroll to **Delete List**& select to delete all. This will clear the Missed Call counter also (or if you prefer just select Missed Calls& Delete All).
2. Browse to the WEB UI. Go to **Telephony > Connections** & edit the Voipfone VoIP Connection. Show **Advanced Settings** & scroll down to the bottom. Check the radio button to disable **Missed Call Count** & Save:



Outbound Proxy Port: 5060

Automatic Negotiation of DTMF Transmission: Yes No

Send Settings for DTMF Transmission: Audio RFC 2833 SIP Info

Missed/accepted calls count: Yes No

Call Waiting: Signal in display of

Melody: 05_Gigaset [Test]

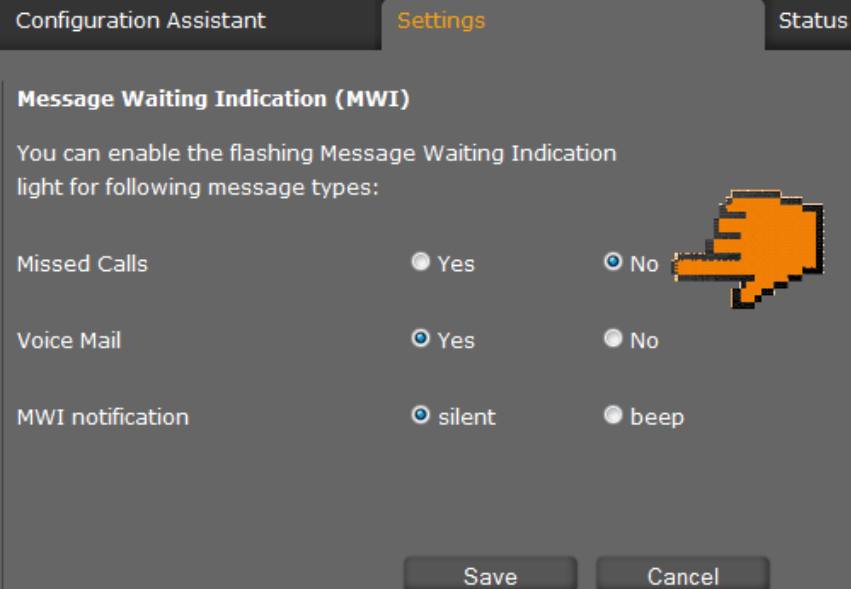
Melody - External Call: 01_call1 [Test]

Melody - Internal Call: 05_Gigaset [Test]

Melody - Group Call: 05_Gigaset [Test]

Save Cancel Delete connection

3. Go to **Messaging** > **MWI** & check the radio button **Missed Calls** to No & Save:



Configuration Assistant **Settings** Status

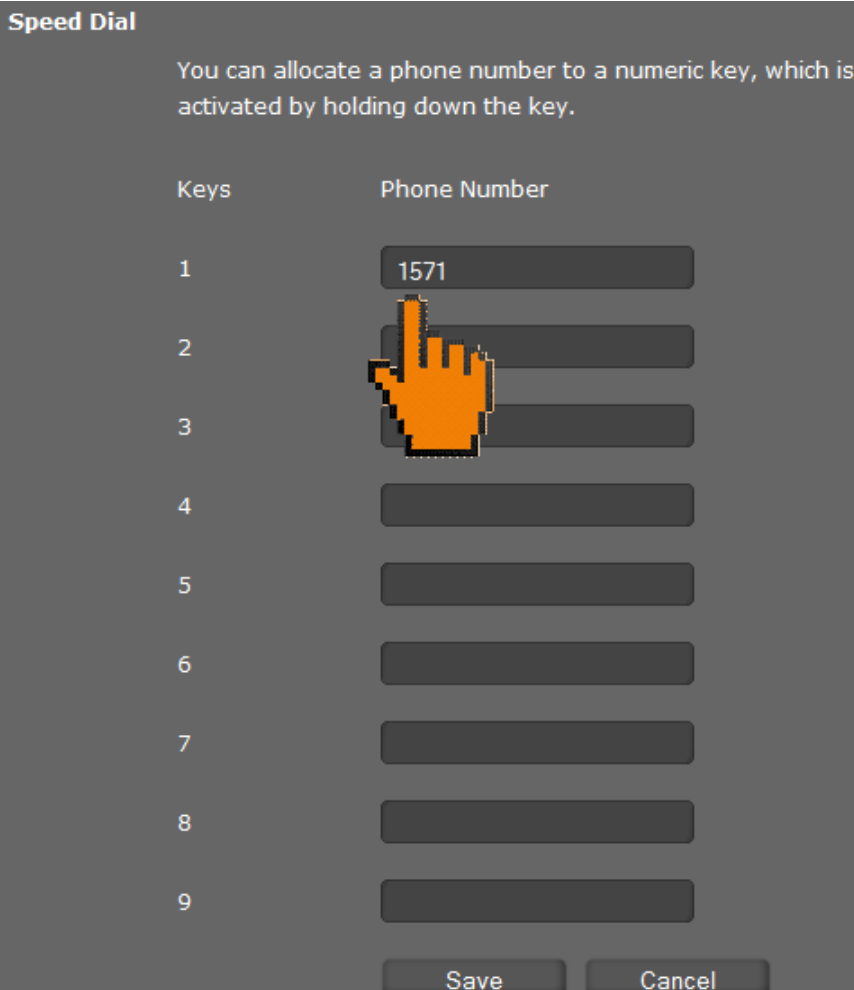
Message Waiting Indication (MWI)

You can enable the flashing Message Waiting Indication light for following message types:

Missed Calls	<input type="radio"/> Yes	<input checked="" type="radio"/> No
Voice Mail	<input checked="" type="radio"/> Yes	<input type="radio"/> No
MWI notification	<input checked="" type="radio"/> silent	<input type="radio"/> beep

Save Cancel

4. Go to Function Keys & scroll to Speed Dial. Enter the Voipfone vMail access code 1571 into the 1 Key & Save. This will provide the User with the same experience found on Gigaset DECT handsets whereby pressing & holding 1 drops you straight into your MailBox:



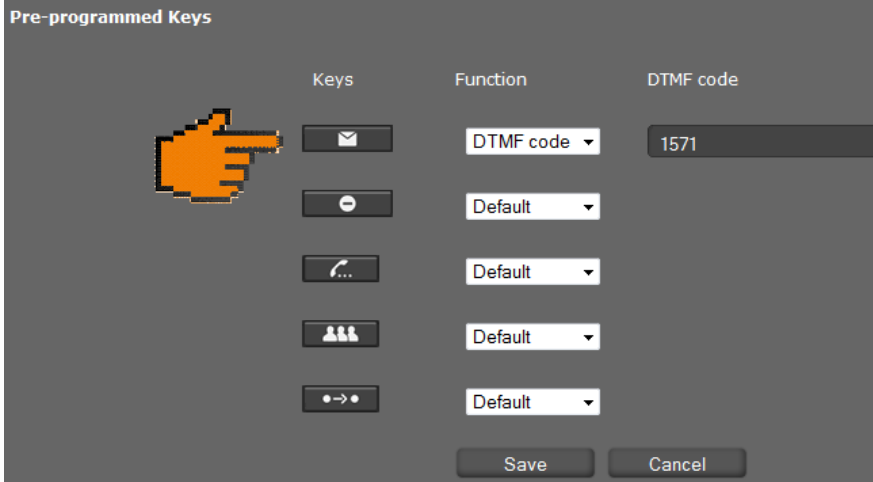
Speed Dial






You can allocate a phone number to a numeric key, which is activated by holding down the key.

Keys	Phone Number
1	1571
2	
3	
4	
5	
6	
7	
8	
9	

Save Cancel

5. Scroll down to Pre-programmed Keys. Change the function for the MWI key to **DTMF code** & enter 1571 & Save:



Keys	Function	DTMF code
	DTMF code	1571
	Default	
	Default	
	Default	
	Default	

6. Close WEB UI session

Test:

1. Leave yourself new vMail messages.
2. Note the Envelope flashing.
3. Note also the new message counter increments for each new message received.
4. There are two ways to easily access your mailbox:
 - a. either: Press & hold 1 (same function as for Gigaset DECT handsets – thereby same User experience).
 - b. or: Press the Envelope key.

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.

3.2. 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.



4. Test Results

See published results [here](#)

[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 Gigaset pro [Wiki](#).

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

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