

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 tIPicall OnePBX Hosted PBX Service

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Change History

Document revision	Date	Author ed by	Sections affected	Reason for change
Rev 001	30 May 2014	JL	All	Initial release

1. Overview

1.1. Introduction

This document provides a summary of how the tIPicall 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 tIPicall .

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
BT	Version 2.2.2.7
Gigaset N300IP & N510 pro	42.194
Gigaset N720DM pro	70.084
Gigaset DE310 & DE410	02.00.08
Gigaset DE700 & DE900	02.00.10

3. Configuration

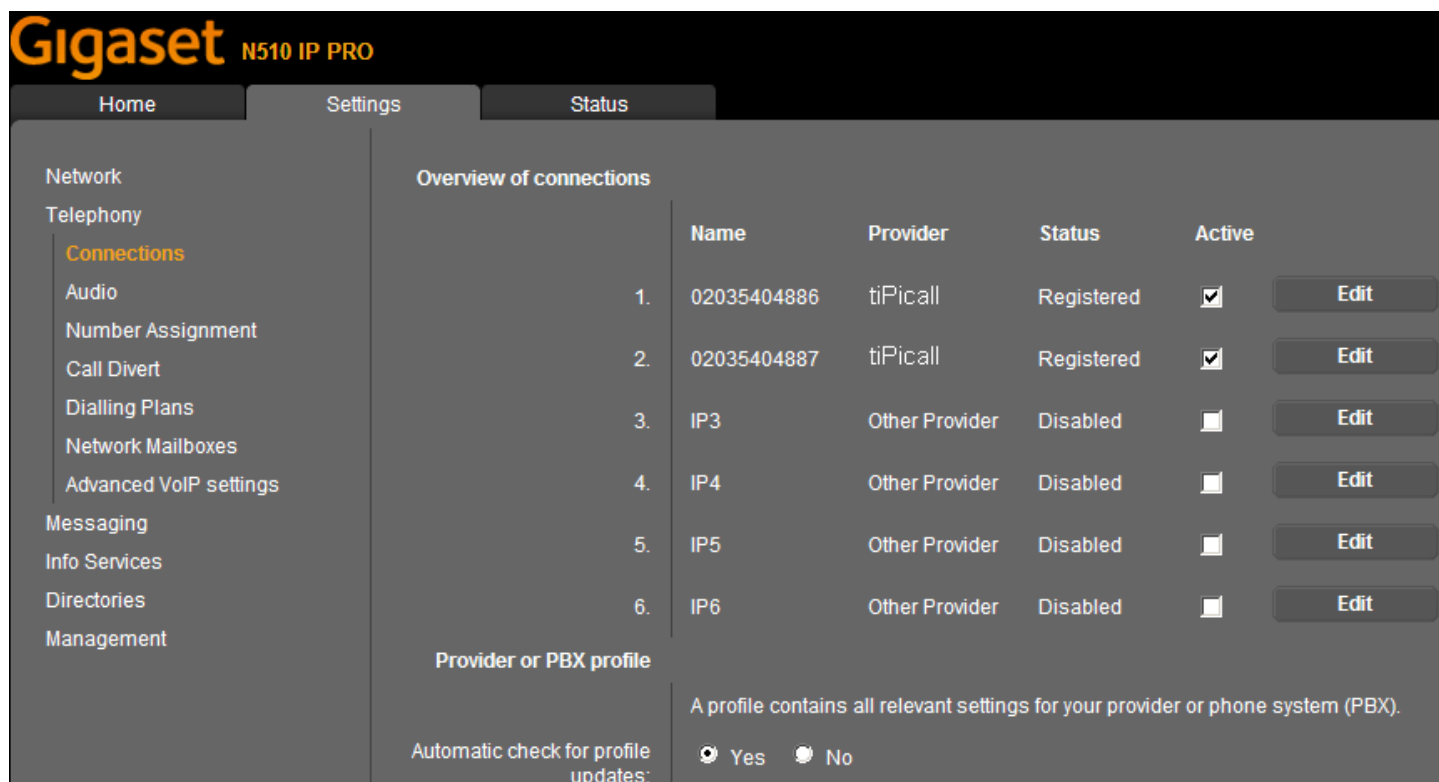
3.1. Gigaset

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 on a Gigaset N510 IP PRO system. The interface is divided into a left-hand navigation menu and a main configuration area. The navigation menu includes sections for Network, Telephony, Connections (highlighted), Audio, Number Assignment, Call Divert, Dialling Plans, Network Mailboxes, Advanced VoIP settings, Messaging, Info Services, Directories, and Management. The main configuration area is titled '1. IP Connection' and contains several sections: '1. IP Connection' with a text input for 'Connection Name or Number' (02035404886) and a 'Start Configuration Assistant' button; 'VoIP Configuration / Profile Download' with a 'Provider' dropdown (tiPicall) and 'Profile Version' field; 'Personal Provider Data' with fields for 'Authentication name' (user1000), 'Authentication password' (masked), 'Username' (1000), and 'Display name' (1000), along with a 'Hide Advanced Settings' button; 'General data for your service provider' with fields for 'Domain' (gigaset.onepbx.tatahipcc.local), 'Proxy server address' (proxy.instaccglobal.com), 'Proxy server port' (5060), 'Registration server' (gigaset.onepbx.tatahipcc.local), 'Registration server port' (5060), and 'Registration refresh time' (180 sec); 'Network data for your service provider' with a 'STUN enabled' radio button (set to No), 'STUN server address' (empty), 'STUN server port' (3478), 'STUN refresh time' (240 sec), and 'NAT refresh time' (20 sec); and 'Outbound proxy mode' (radio buttons for Always, Automatic, Never), 'Outbound server address' (proxy.instaccglobal.com), and 'Outbound proxy port' (5060). At the bottom, there is a 'Select Network Protocol' dropdown menu set to 'Automatic'.

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



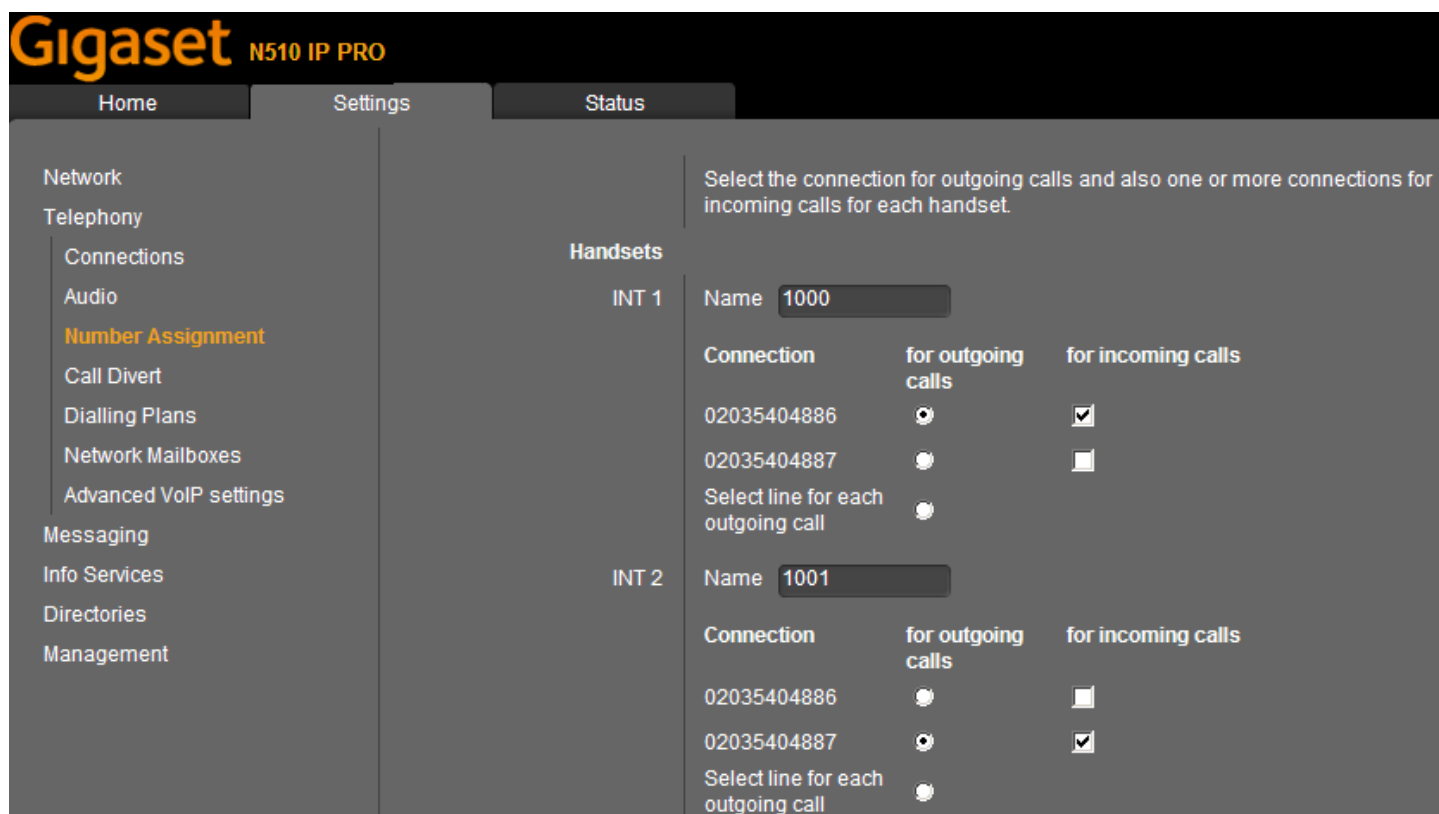
The screenshot shows the 'Overview of connections' screen in the Gigaset N510 IP PRO settings. A table lists six connections with their respective providers and statuses. The first two connections are 'Registered', while the others are 'Disabled'. Each row has an 'Edit' button.

Name	Provider	Status	Active
1. 02035404886	tiPicall	Registered	<input checked="" type="checkbox"/>
2. 02035404887	tiPicall	Registered	<input checked="" type="checkbox"/>
3. IP3	Other Provider	Disabled	<input type="checkbox"/>
4. IP4	Other Provider	Disabled	<input type="checkbox"/>
5. IP5	Other Provider	Disabled	<input type="checkbox"/>
6. IP6	Other Provider	Disabled	<input type="checkbox"/>

Below the table, there is a section for 'Provider or PBX profile' with a description: 'A profile contains all relevant settings for your provider or phone system (PBX)'. It includes a radio button for 'Automatic check for profile updates:' with 'Yes' selected and 'No' unselected.

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' screen in the Gigaset N510 IP PRO settings. It displays two handset profiles, 'INT 1' and 'INT 2', each with a name field and a table for assigning connections to outgoing and incoming calls.

Handset INT 1 (Name: 1000)

Connection	for outgoing calls	for incoming calls
02035404886	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
02035404887	<input type="radio"/>	<input type="checkbox"/>
Select line for each outgoing call	<input type="radio"/>	

Handset INT 2 (Name: 1001)

Connection	for outgoing calls	for incoming calls
02035404886	<input type="radio"/>	<input type="checkbox"/>
02035404887	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>
Select line for each outgoing call	<input type="radio"/>	

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

The screenshot shows the Gigaset N510 IP PRO settings interface. The 'Settings' tab is active, and the 'Network Mailboxes' menu option is highlighted in orange in the left sidebar. The main content area displays a table for configuring network mailboxes.

Connection	Call number	Active
02035404886	123	<input checked="" type="checkbox"/>
02035404887	123	<input checked="" type="checkbox"/>
IP3		<input type="checkbox"/>
IP4		<input type="checkbox"/>
IP5		<input type="checkbox"/>
IP6		<input type="checkbox"/>

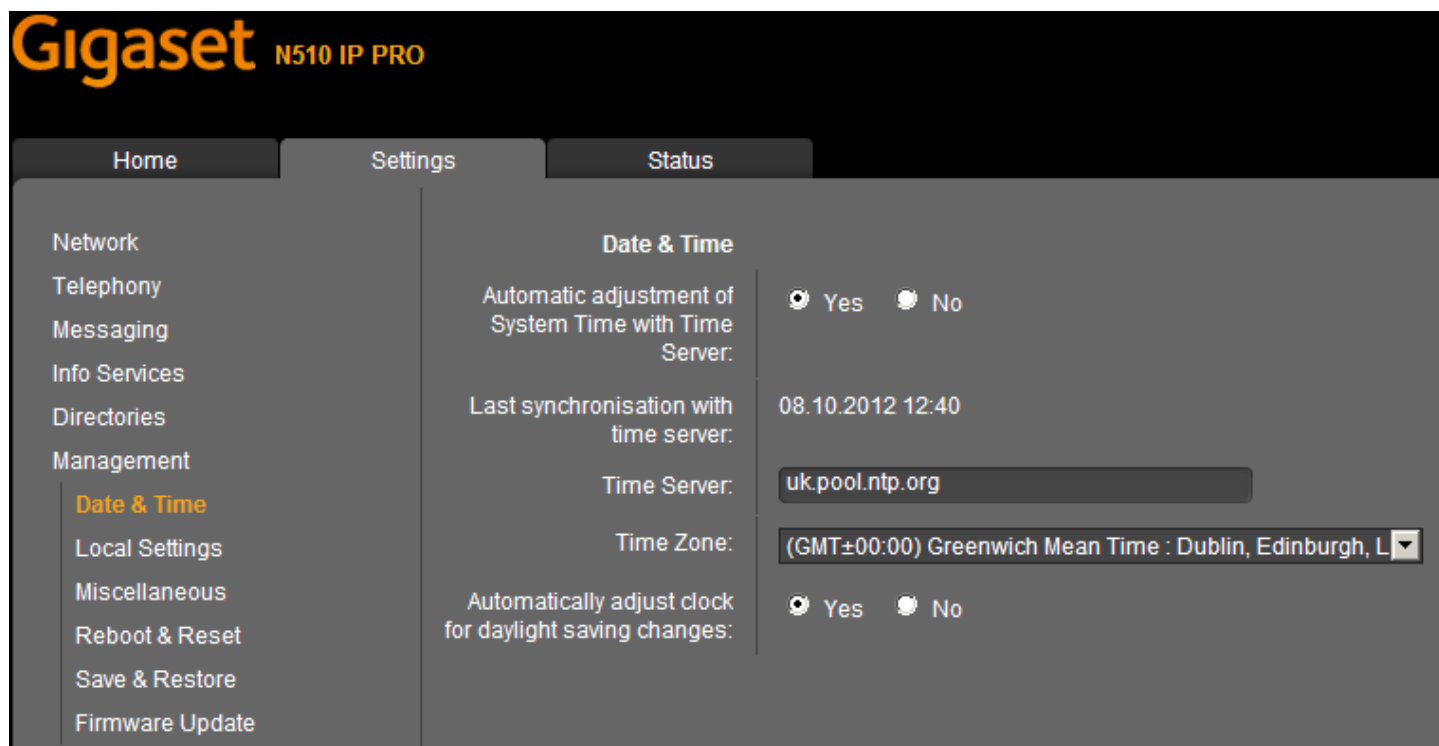
Select the **Messaging > MWI Light** menu option:
Ensure the Network Mailboxes is checked. Missed call notification is optional.

The screenshot shows the Gigaset N510 IP PRO settings interface. The 'Settings' tab is active, and the 'Messaging > MWI Light' menu option is highlighted in orange in the left sidebar. The main content area displays the 'Message Waiting Indicator (MWI)' configuration page.

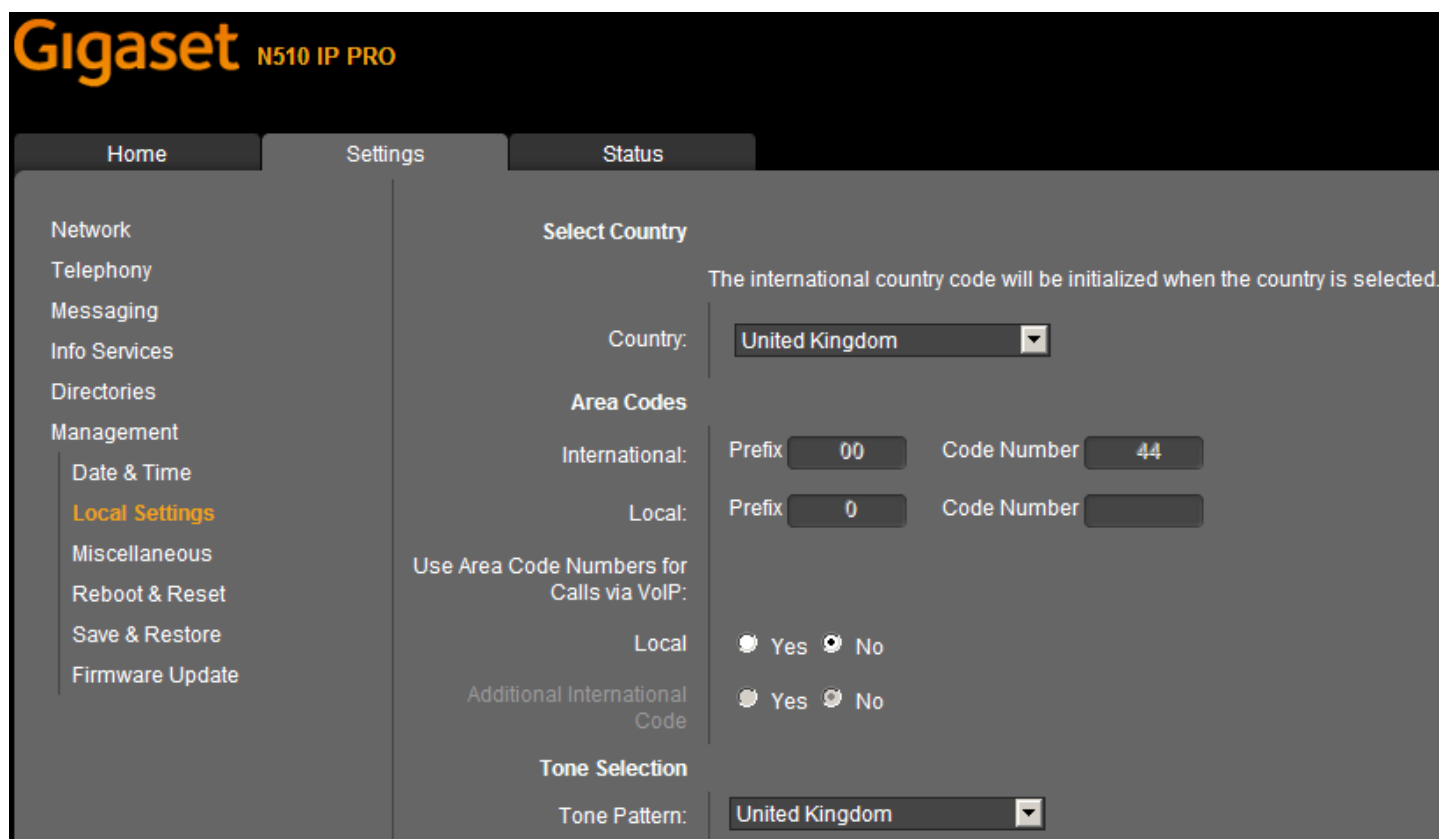
You can enable or disable the flashing MWI LED in the message key on your handsets for the following message types:

MWID	Message Type	Active
1000	Missed calls	<input type="checkbox"/>
	Missed alarms	<input type="checkbox"/>
	eMail	<input type="checkbox"/>
	Network Mailboxes	<input checked="" type="checkbox"/>
1001	Missed calls	<input type="checkbox"/>
	Missed alarms	<input type="checkbox"/>
	eMail	<input type="checkbox"/>
	Network Mailboxes	<input checked="" type="checkbox"/>

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 and un-check both **Hold on Transfer Target** boxes

The screenshot displays the 'Settings' menu of a Gigaset device, specifically the 'Advanced VoIP settings' section. The interface is dark-themed with a sidebar on the left containing navigation options like 'Network', 'Telephony', 'Connections', 'Audio', 'Number Assignment', 'Call Divert', 'Dialling Plans', 'Network Mailboxes', 'Advanced VoIP settings', 'Messaging', 'Info Services', 'Directories', and 'Management'. The main content area is titled 'DTMF over VoIP connections' and includes several settings:

- Automatic negotiation of DTMF transmission:** Radio buttons for 'Yes' (selected) and 'No'.
- Call Transfer:** Radio buttons for 'Yes' (selected) and 'No'.
- Transfer Call by On-Hook:** Radio buttons for 'Yes' (selected) and 'No'. This option is highlighted with a red box.
- Find target addr. automatically:** Radio buttons for 'Yes' and 'No' (selected).
- Derive target address:** Radio buttons for 'from the SIP URL' and 'from the SIP contact header' (selected).
- Hold on transfer target:** Two checkboxes: 'For attended transfer' (unchecked) and 'For unattended transfer' (unchecked). This section is highlighted with a red box.
- Hook Flash (R-key):** A note stating 'R-key settings are disabled because the R key is used for call transfer.'
- Listen ports for VoIP connections:** Radio buttons for 'Yes' and 'No' (selected).
- Use random ports:** Radio buttons for 'Yes' and 'No' (selected).
- SIP port:** Input fields showing '5060' and '5076'.
- RTP port:** Input fields showing '5004' and '5020'.
- Music on hold:** Radio buttons for 'Yes' (selected) and 'No'.

At the bottom of the settings area are 'Set' and 'Cancel' buttons.

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 for tIPicall:

CONNECT WITH THE WORLD

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:
 - Un-supervised Transfer – press **RED** End key to transfer the call unannounced
 - Supervised Transfer - wait for the other party to answer, then consult/announce the call and press **RED** end key. 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

4. Test Results

See published results [here](#)

Further configuration details can be found in the product specific Admin Guides which are available for download in the Gigaset pro [Wiki](#).

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