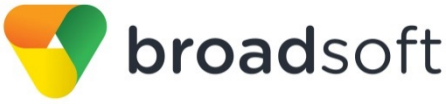

BroadSoft Partner Configuration Guide

Gigaset Single Cell IP DECT Phones

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BroadWorks® Guide

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Document Revision History

Version	Reason for Change
1.1	Introduced document for Gigaset Single Cell IP DECT Phones version 42.238 validation with BroadWorks Release 21.sp1.
1.2	Edited and published document.
1.3	Updated the document to include the Device Management as supported by Gigaset Single Cell IP DECT Phones version 42.238.
1.4	Edited changes and published document.

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1 Overview

This guide describes the configuration procedures required for the Gigaset Single Cell IP DECT Phones for interoperability with BroadWorks. These include:

- C590
- C595IP
- N300IP
- N300A IP
- C610IP
- C610A IP
- N510IP PRO
- A510 IP
- A510A IP
- C530IP
- C530A IP
- C430IP
- C430A IP
- SL400 GO
- SL400A GO
- C430A GO
- E630 A GO
- CL 750A GO
- S850 A GO
- SL 450A GO

The Gigaset Single Cell IP DECT Phones are DECT base stations for small- and medium-sized businesses supporting up to six DECT handsets and six SIP accounts that use the Session Initiation Protocol (SIP) to communicate with BroadWorks for call control.

This guide describes the specific configuration items that are important for use with BroadWorks. It does not describe the purpose and use of all configuration items on the Gigaset Single Cell IP DECT Phones. For those details, see the *Gigaset Communications GmbH N510 IP PRO Guide* [1] supplied by Gigaset Communications GmbH.

2 Interoperability Status

This section provides the known interoperability status of the Gigaset Single Cell IP DECT Phones with BroadWorks. This includes the version(s) tested, the capabilities supported, and known issues.

Interoperability testing validates that the device interfaces properly with BroadWorks via the SIP interface. Qualitative aspects of the device or device capabilities not affecting the SIP interface such as display features, performance, and audio qualities are not covered by interoperability testing. Requests for information and/or issues regarding these aspects should be directed to Gigaset Communications GmbH.

2.1 Verified Versions

The following table identifies the verified Gigaset Single Cell IP DECT Phones and BroadWorks versions and the month/year the testing occurred. If the device has undergone more than one test cycle, versions for each test cycle are listed, with the most recent listed first.

Compatible Versions in the following table identify specific Gigaset Single Cell IP DECT Phones versions that the partner has identified as compatible so should interface properly with BroadWorks. Generally, maintenance releases of the validated version are considered compatible and may not be specifically listed here. For any questions concerning maintenance and compatible releases, contact Gigaset Communications GmbH.

NOTE: Interoperability testing is usually performed with the latest generally available (GA) device firmware/software and the latest GA BroadWorks release and service pack at the time the testing occurs. If there is a need to use a non-verified mix of BroadWorks and device software versions, customers can mitigate their risk by self-testing the combination themselves using the *BroadWorks SIP Phone Interoperability Test Plan* [5].

Verified Versions

Date (mm/yyyy)	BroadWorks Release	Gigaset Single Cell IP DECT Phones Verified Version	Gigaset Single Cell IP DECT Phones Compatible Versions
09/2016	Release 21.sp1	42.238	Any maintenance revisions of the validated release.

2.2 Interface Capabilities Supported

This section identifies interface capabilities that have been verified through testing as supported by Gigaset Single Cell IP DECT Phones.

The *Supported* column in the tables in this section identifies the Gigaset Single Cell IP DECT Phones support for each of the items covered in the test plan, with the following designations:

- Yes Test item is supported
- No Test item is not supported
- NA Test item is not applicable to the device type
- NT Test item was not tested

Caveats and clarifications are identified in the *Comments* column.

2.2.1 SIP Interface Capabilities

The Gigaset Single Cell IP DECT Phones has completed interoperability testing with BroadWorks using the *BroadWorks SIP Phone Interoperability Test Plan* [5]. The results are summarized in the following table.

The BroadWorks test plan is composed of packages, each covering distinct interoperability areas, such as "Basic" call scenarios and "Redundancy" scenarios. Each package is composed of one or more test items, which in turn are composed of one or more test cases. The test plan exercises the SIP interface between the device and BroadWorks with the intent to ensure interoperability sufficient to support the BroadWorks feature set.

NOTE: *DUT* in the following table refers to the *Device Under Test,* which in this case is the Gigaset IP DECT Phones.

BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
Basic	Call Origination	Yes	
	Call Termination	Yes	
	Session Audit	Yes	
	Session Timer	No	
	Ringback	Yes	
	Forked Dialog	Yes	
	181 Call Being Forwarded	Yes	
	Dial Plan	Yes	
	DTMF – Inband	Yes	
	DTMF – RFC 2833	Yes	
	DTMF – DTMF Relay	Yes	
	Codec Negotiation	Yes	
	Codec Renegotiation	Yes	

BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
BroadWorks Services	Third-Party Call Control – Basic	Yes	
	Third-Party Call Control – Advanced	No	
	Voice Message Deposit/Retrieval	Yes	Only Solicited.
	Message Waiting Indicator – Unsolicited	No	
	Message Waiting Indicator – Solicited	Yes	
	Message Waiting Indicator – Detail	Yes	Except saved and urgent message information.
	Voice Portal Outcall	Yes	
	Advanced Alerting – Ringing	No	
	Advanced Alerting – Call Waiting	No	
	Advanced Alerting – Ring Splash	No	
	Advanced Alerting – Silent Alerting	No	
	Calling Line ID	Yes	
	Calling Line ID with Unicode Characters	Yes	
	Connected Line ID	No	
	Connected Line ID with Unicode Characters	No	
	Connected Line ID on UPDATE	No	
	Connected Line ID on Re-INVITE	No	
	Diversion Header	Yes	
	History-Info Header	Yes	
	Advice of Charge	No	
	Meet-Me Conferencing	Yes	
	Meet-Me Conferencing – G722	Yes	
	Meet-Me Conferencing – AMR-WB	No	
	Collaborate – Audio	Yes	
	Collaborate – Audio – G722	Yes	
	Call Decline Policy	Yes	
DUT Services – Call Control Services	Call Waiting	Yes	
	Call Hold	Yes	
	Call Transfer	Yes	Except Blind Transfer.
	Three-Way Calling	Yes	Except Before Answer.
	Network-Based Conference	No	
	Register Authentication	Yes	

BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
DUT Services – Registration and Authentication	Maximum Registration	Yes	
	Minimum Registration	Yes	
	Invite Authentication	Yes	
	Re-Invite/Update Authentication	Yes	
	Refer Authentication	Yes	
	Device Authenticating BroadWorks	No	
DUT Services – Emergency Call	Emergency Call	No	
	Emergency Call with Ringback	No	
DUT Services – Miscellaneous	Do Not Disturb	No	
	Call Forwarding Always	Yes	
	Call Forwarding Always Diversion Inhibitor	No	
	Anonymous Call	No	
	Anonymous Call Block	No	
	Remote Restart Via Notify	No	
Advanced Phone Services – Busy Lamp Field	Busy Lamp Field	No	
	Call Park Notification	No	
Advanced Phone Services – Feature Key Synchronization, Private Line	Do Not Disturb	No	
	Do Not Disturb Ring Splash	No	
	Call Forwarding	No	
	Call Forwarding Always Ring Splash	No	
	Call Forwarding Always Diversion Inhibitor	No	
	Call Center Agent Logon/Logoff	No	
	Call Center Agent Unavailable Code	No	
	Executive – Call Filtering	No	
	Executive-Assistant – Call Filtering	No	
	Executive-Assistant – Diversion	No	
	Call Recording	No	
	Security Classification	No	
Advanced Phone Services – Feature Key Synchronization, Shared Line	Do Not Disturb	No	
	Do Not Disturb Ring Splash	No	
	Call Forwarding	No	
	Call Forwarding Always Ring Splash	No	
	Call Forwarding Always Diversion Inhibitor	No	

BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Security Classification	No	
Advanced Phone Services – Missed Calls Display Synchronization	Missed Calls Display Sync	No	
Advanced Phone Services – Shared Call Appearance using Call Info	Line-Seize	No	
	Call-Info/Lamp Management	No	
	Public Hold	No	
	Private Hold	No	
	Hybrid Key System	No	
	Multiple Call Arrangement	No	
	Bridge Active Line	No	
	Bridge Active Line – Silent Monitor	No	
	Call Park Notification	No	
Advanced Phone Services – Call Park Notification	Call Park Notification	No	
Advanced Phone Services – Call Center	Hold Reminder	No	
	Call Information	No	
	Hoteling Event	No	
	Status Event	No	
	Disposition Code	No	
	Emergency Escalation	No	
	Customer Originated Trace	No	
Advanced Phone Services – Call Recording Controls	Pause/Resume	No	
	Start/Stop	No	
	Record Local Conference	No	
	Record Network Conference	No	
Advanced Phone Services – Call Recording Video	Basic Call	No	
	Record Local Conference	No	
	Record Network Conference	No	
Advanced Phone Services – Security Classification	Security Classification	No	
Advanced Phone Services – Conference Event	Network-Based Conference Creator	No	
	Network-Based Conference Participant	No	
	Meet-Me Conference Participant	No	

BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
Redundancy	DNS SRV Lookup	Yes	
	Register Failover/Failback	Yes	
	Invite Failover/Failback	No	Takes 32 seconds.
	Bye Failover	No	Takes 32 seconds.
SBC/ALG - Basic	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
SBC/ALG – Failover/Failback	Register Failover/Failback	Yes	
	Invite Failover/Failback	No	Takes 32 seconds.
Video – Basic Video Calls	Call Origination	No	
	Call Termination	No	
	Call Hold	No	
	Call Waiting	No	
	Call Transfer	No	
Video – BroadWorks Video Services	Auto Attendant	No	
	Auto Attendant – HD	No	
	Voice Messaging	No	
	Voice Messaging – HD	No	
	Custom Ringback	No	
Video – BroadWorks Video Conference	Network-based Conference	No	
	Network-based Conference – HD	No	
	Collaborate – Video	No	
	Collaborate – Video – HD	No	
TCP	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
IPV6	Call Origination	No	
	Call Termination	No	
	Session Audit	No	
	Ringback	No	
	Codec Negotiation/Renegotiation	No	
	Voice Message Deposit/Retrieval	No	
	Call Control	No	
	Registration with Authentication	No	
	Busy Lamp Field	No	

BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Redundancy	No	
	SBC	No	
	Video	No	
	Dual Stack with Alternate Connectivity	No	

2.2.1 Other Interface Capabilities

The Gigaset Single Cell IP DECT Phones may have implemented support for the following:

- BroadWorks Xtended Services Interface (Xsi)
- Extensible Messaging and Presence Protocol (XMPP) (BroadCloud/BroadWorks Collaborate Instant Messaging and Presence [IM&P])

Support for these interfaces is demonstrated by completing the *BroadWorks SIP Phone Functional Test Plan* [6]. Support for these interfaces is summarized in the following table.

BroadWorks Xtended Services Interface (Xsi) and BroadCloud IM&P Support Table

Interface	Feature	Supported	Comments
Xsi Features – Authentication	Authenticate with SIP Credentials	No	
	Authenticate with BroadWorks User Login Credentials	No	
	Authenticate with BroadWorks User Directory Number	No	
Xsi Features – User Service Configuration	Remote Office	No	
	BroadWorks Anywhere	No	
	Simultaneous Ringing	No	
	Caller ID Blocking	No	
	Call Forwarding Always	No	
	Call Forwarding Busy	No	
	Call Forwarding No Answer	No	
	Do Not Disturb	No	
Xsi Features – Directories	Enterprise Directory	No	
	Enterprise Common Phone List	No	
	Group Directory	No	
	Group Common Phone List	No	
	Personal Phone List	No	
	Search All Directories	No	
Xsi Features – Call Logs	Placed Calls	No	
	Received Calls	No	
	Missed Calls	No	
	All Calls	No	
	Sort by Name	No	
Xsi Features – Visual Voice Mail	View Messages	No	
	Listen to Audio Message	No	
	Watch Video Message	No	
	Mark Message Read/Unread	No	

BroadWorks Xtended Services Interface (Xsi) and BroadCloud IM&P Support Table			
Interface	**Feature**	**Supported**	**Comments**
	Delete Message	No	
	Mark All Messages Read/Unread	No	
XMPP Features – Contact/Buddy List	Contacts	No	
	Favorites	No	
	Groups	No	
	Non-XMPP Contacts	No	
	Conferences	No	
XMPP Features – Presence	Login Invisible	No	
	Presence State	No	
	Presence Status	No	
	Contact's Presence State	No	

2.3 Known Issues

This section lists the known interoperability issues between BroadWorks and specific partner release(s). Issues identified during interoperability testing and known issues identified in the field are listed.

The following table provides a description of each issue and, where possible, identifies a workaround. The verified partner device versions are listed with an "X" indicating that the issue occurs in the specific release. The issues identified are device deficiencies or bugs, and are typically not BroadWorks release dependent.

The *Issue Number* is a tracking number for the issue. If it is a Gigaset issue, the issue number is from the Gigaset tracking system. If it is a BroadWorks issue, the issue number is from the BroadSoft tracking system.

For more information on any issues related to the particular partner device release, see the partner release notes.

Issue Number	Issue Description	Partner Version			
		42.238			
	Invite Failover/Fallback Failover/Fallback takes 32 seconds to switch over or back to the working Application Server. Workaround: None.	x			

3 BroadWorks Configuration

This section identifies the required BroadWorks device profile type for the Gigaset Single Cell IP DECT Phones as well as any other unique BroadWorks configuration required for interoperability with the Gigaset Single Cell IP DECT Phones.

3.1 BroadWorks Device Profile Type Configuration

This section identifies the device profile type settings to use when deploying the Gigaset Single Cell IP DECT Phones with BroadWorks.

Create a device profile type for the Gigaset Single Cell IP DECT Phones with settings as shown in the following example. The settings shown are recommended for use when deploying the Gigaset Single Cell IP DECT Phones with BroadWorks. For an explanation of the profile parameters, see the *BroadWorks Device Management Configuration Guide* [2].

The following table shows the *Number of Ports* (number of SIP lines) setting for Gigaset Single Cell IP DECT Phones.

Model Name	Number of SIP Lines
C590	6
C595IP	6
N300IP	6
N300A IP	6
C610IP	6
C610A IP	6
N510IP PRO	6
A510 IP	6
A510A IP	6
C530IP	6
C530A IP	6
C430IP	6
C430A IP	6
SL400 GO	6
SL400A GO	6
C430A GO	6
E630 A GO	6
CL 750A GO	6
S850 A GO	6
SL 450A GO	6

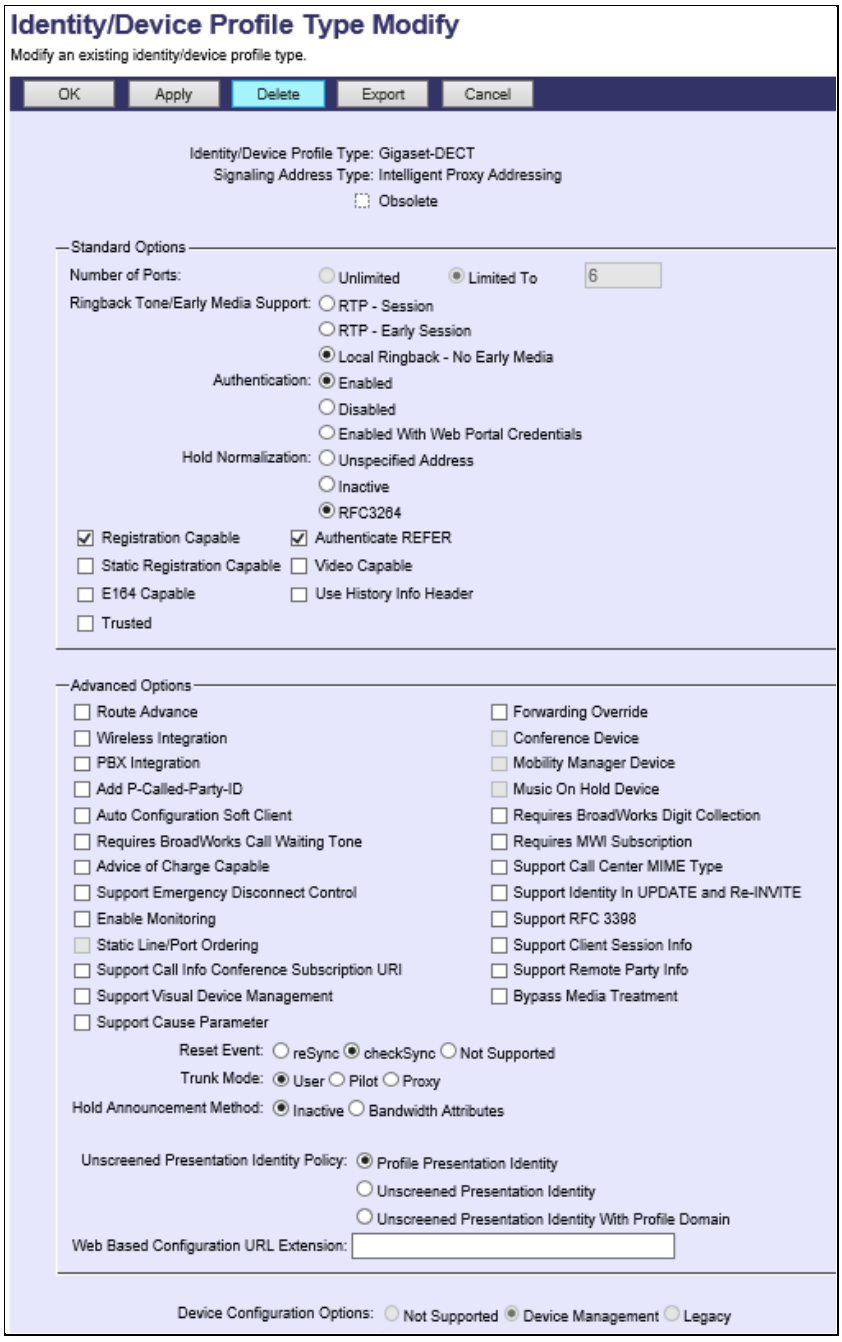

Figure 1 Device Identity/Profile Type

3.2 BroadWorks Configuration Steps

No special BroadWorks configuration is required.

4 Gigaset Single Cell IP DECT Phones Configuration

This section describes the configuration settings required for the Gigaset Single Cell IP DECT Phones integration with BroadWorks, primarily focusing on the SIP interface configuration. The Gigaset Single Cell IP DECT Phones configuration settings identified in this section have been derived and verified through interoperability testing with BroadWorks. For configuration details not covered in this section, see the *Gigaset Communications GmbH N510 IP PRO Guide* [1] for Gigaset Single Cell IP DECT Phones.

4.1 Configuration Method

The capabilities of the Gigaset Single Cell IP DECT Phones have been verified for use with BroadWorks using the default settings, where only the SIP information to register to BroadWorks is entered. The following tables provide more information about how to change the individual configuration items to adjust to specific customer requirements. For more information, see the Gigaset wiki site.

Configuration Files

Gigaset Single Cell IP DECT Phones Configuration Files	Level	Description
master.bin	System	Contains all the information about the firmware files, language files, and SIU files for this device.
baselines.bin	System	Contains all the information about the software version.
version.bin	System	Web interface coded date and time. This is an optional file that can be used to determine if it is necessary to replace a possibly outdated web interface language file on the device.
wl_xx.bin	System	Web interface language files: 02 = German, 09 = French, 10 = Netherlands, 07 = Italian, 04 = Spanish, 20 = Portuguese, 17 = Polish Note that "01" is optional, it can contain the English language, if required. However, this language is already implemented on the device and it is the only language that is fixed on the device.
siu_444.bin	System	Contains all the information about the location of the configuration files and the naming used.
merkur"Softwareversion"_42.bin	System	Device firmware file.
MAC.xml Example*: 0004f2000fbb.xml*	Subscriber	Contains configurable parameters that apply to an individual device in a deployment. The naming can be different and it depends on the *siu_444.bin* file settings.

4.2 System Level Configuration

This section describes system-wide configuration items that are generally required for each Gigaset Single Cell IP DECT Phones to work with BroadWorks. Subscriber-specific settings are described in the next section.

4.2.1 Configure Network Settings

Step	Command	Description
Step 1	Set the DHCP or static IP address. <SYMB_ITEM ID="BS_IP_Data1.ucB_USE_DHCP" class="symb_item" value="0x1"/>	Enable or disable to retrieve the address from a DHCP server. DHCP enabled (Default) = 0x1 Static IP = 0x0
Step 2	Set the IP address. <SYMB_ITEM ID="BS_IP_Data1.ulI_IP" class="symb_item" value="0xc0a80202"/>	This is the IPv4 address in hexadecimal format. Example: 192.168.2.2 → 0xC0A80202 192(C0)168(A8)2(02)2(02)
Step 3	Set the subnet mask. <SYMB_ITEM ID="BS_IP_Data1.ulI_SUBNET_MASK" class="symb item" value="0xffffff00"/>	This is the IPv4 address in hexadecimal format. Example: 255.255.255.0 → 0xFFFFFF00 255(FF)255(FF)255(FF)0(00)
Step 4	Set the standard gateway. <SYMB ITEM ID="BS_IP_Data1.ulI_DEFAULT_ROUTER" class="symb_item" value="0xC0A80201"/>	This is the IPv4 address in hexadecimal format. Example: 192.168.2.1 → 0xC0A80201 192(C0)168(A8)2(02)1(01)
Step 5	Set the preferred DNS server. <SYMB_ITEM ID="BS_IP_Data1.ulI_DNS_SERVER_1" class="symb_item" value="0xC0A802FD"/>	This is the IPv4 address in hexadecimal format. Example: 192.168.2.253 → 0xC0A802FD 192(C0)168(A8)2(02)253(FD)
Step 6	Set the alternate DNS server. <SYMB_ITEM ID="BS IP Data1.ulI DNS SERVER_2" class="symb_item" value="0xC0A802FE"/>	This is the IPv4 address in hexadecimal format. Example: 192.168.2.1 → 0xC0A802FE 192(C0)168(A8)2(02)254(FE)
Step 7	Allow access from other networks. <SYMB ITEM ID="BS_IP_Data1.ucB_ACCEPT_FOREIGN_SUBNET" class="symb_item" value="0x0"/>	To authorize access from other networks, select “Yes”. To disable remote access, select “No” (access is then limited to PCs in your local network). Allow access = 0x1 No access (Default) = 0x0
Step 8	Set the device name in the network. <SYMB_ITEM ID="BS IP Data3.aucS NETWORK DEVICENAME[0]" class="symb_item" value='"N510 IP PRO"'/>	This is the *Device Name* in the *Network* field, maximum 20 characters (0-9, a-z, A-Z). The phone can be addressed with this name in the local network.

Step	Command	Description
Step 9	Set the HTTP proxy. <SYMB_ITEM ID="BS IP Data3.ucB HTTP PROXY _ENABLED" class="symb_item" value="0x0"/>	If the phone handles HTTP calls via the network's HTTP proxy server, then select "Yes". If you select "No", then the phone attempts to directly access the Internet. HTTP proxy disabled (Default) = 0x0 HTTP proxy enabled = 0x1
Step 10	Set the proxy server address. <SYMB_ITEM ID="BS_IP_Data3.aucS_HTTP_PROX Y_URL" class="symb_item" value='"Proxy Server"'/>	Enter the URL of the proxy server to which your phone is to send HTTP calls. The proxy server then creates the connection to the Internet.
Step 11	Set the proxy server port. <SYMB_ITEM ID="BS_IP_Data3.uiI_HTTP_PROXY PORT" class="symb item" value="0x0"/>	Enter the communication port used on the HTTP proxy server, (which is a number between 1 and 55000). Usually port 80 is used.
Step 12	Set VLAN tagging. <SYMB_ITEM ID="BS IP Data1.ucB VLAN ENABL ED" class="symb item" value="0x0"/>	Enable or disable VLAN tagging. VLAN disabled (Default) = 0x0 VLAN enabled = 0x1
Step 13	Set the VLAN ID. <SYMB ITEM ID="BS_IP_Data1.uiI_VLAN_ID" class="symb item" value="0x0"/>	Enter the VLAN identifier. The numbers range from 0 through 4094 (12-bit values).
Step 14	Set the VLAN priority. <SYMB_ITEM ID="BS IP Data1.ucI VLAN PRIOR ITY" class="symb_item" value="0x0"/>	Enter the VLAN priority. The numbers range from 0 through 7 (3-bit values).

Browse to *Settings → Network → IP Configuration.*

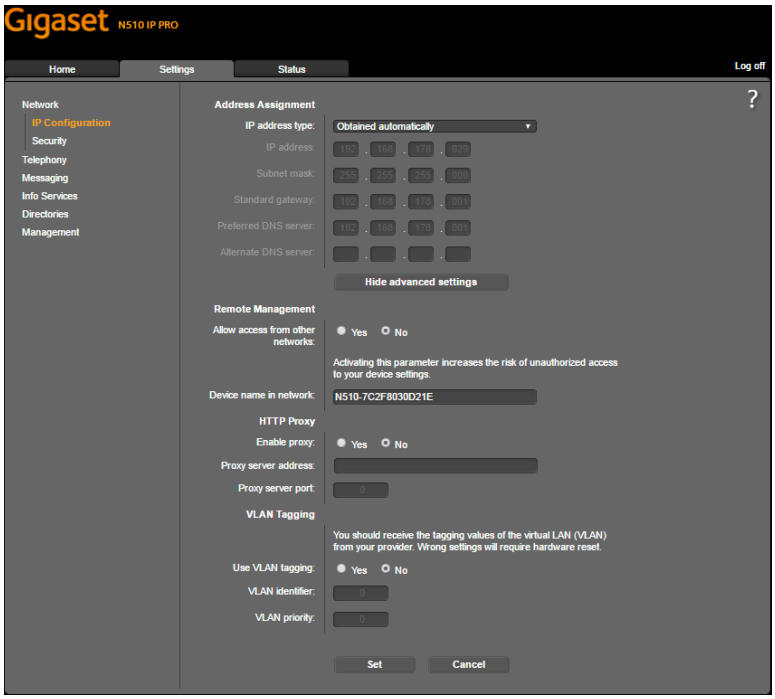

Figure 2 Gigaset IP DECT – IP Configuration

4.2.1.1 Configure IPV6 Settings

IPv6 is not supported by the Gigaset IP DECT Phones.

4.2.2 Configure SIP Interface Settings

Step	Command	Description
Step 1	Set connection name or number. `<SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_ACCOUNT NAME N (N=1-6)" class="symb item" value='"Account1"'/>`	Enter a name for the IP account.
Step 2	Set the authentication name. `<SYMB_ITEM ID="BS_IP_Data3.aucS_SIP_LOGIN ID N (N=2-6)" class="symb_item" value='"Authentication name"'/>`	Specify the authentication name agreed with your VoIP provider. The authentication name acts as an access ID when registering with the SIP proxy/registrar server.
Step 3	Set the authentication password. `<SYMB_ITEM ID=" BS_IP_Data1.aucS_SIP_PASSWORD_N (N=2-6)" class="symb_item" value='"Password"'/>`	Enter the password that you have agreed with your VoIP provider. The phone requires the password when registering with the SIP proxy/registrar server.
Step 4	Set the user name. `<SYMB_ITEM ID=" BS_IP_Data1.aucS_SIP_USER_ID_N (N=2-6)" class="symb item" value='"Username"'/>`	Enter the caller ID for your VoIP provider account (maximum 32 characters). The ID is usually the same as the phone number for this VoIP account.

Step	Command	Description
Step 5	Set the display name. <SYMB_ITEM ID="BS IP Data1.aucS SIP DISPLAYNAME_N (N=2-6)" class="symb item" value='"Display Name"'/>	Enter the name that is shown on the other caller's display. All characters in the UTF8 character set (Unicode) are permitted.
Step 6	Set the domain. <SYMB_ITEM ID="BS IP Data1.aucS SIP DOMAIN_N (N=2-6)" class="symb_item" value='"provider.com"'/>	Specify the last part of the SIP address (URI), for example, for the SIP address "987654321@provider.com", enter "provider.com" under *Domain*.
Step 7	Set the proxy server address <SYMB ITEM ID="BS_IP_Data1.aucS_SIP_SERVER_N (N=2-6)" class="symb_item" value='"myprovider.com"'/>	The SIP proxy is your VoIP provider's gateway server. Enter the IP address or the DNS name (fully qualified domain name) of your SIP proxy server. Example: myprovider.com.
Step 8	Set the proxy server port. <SYMB ITEM ID="BS_IP_Data1.uiI_SIP_SERVER PORT N (N=2-6)" class="symb_item" value='"5060"'/>	Enter the number of the communication port that the SIP proxy uses to send and receive signaling data (SIP port). Port 5060 is used by most VoIP providers.
Step 9	Set the registration server. <SYMB ITEM ID="BS_IP_Data1.aucS_SIP_REGISTRAR_N (N=2-6)" class="symb_item" value='"reg.myprovider.com"'/>	Enter the DNS name (fully qualified domain name) or the IP address of the registrar server. The registrar is required when the phone is registered. It assigns the public IP address/port number that was used by the phone on registration to your SIP address (Username@Domain). With most VoIP providers, the registrar server is the same as the SIP server. Example: reg.myprovider.com.
Step 10	Set the registration server port. <SYMB ITEM ID="BS_IP_Data1.uiI_SIP_REGISTRAR_PORT_N (N=2-6)" class="symb_item" value='"5060"'/>	Enter the communication port used on the registrar. Port 5060 is used in most cases.
Step 11	Set the registration refresh time. <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_REGISTRATION_TIMER_N (N=2-6)" class="symb_item" value='"180"'/>	Enter the time interval (in seconds) whereby the phone repeats the registration with the VoIP server (SIP proxy). A request is sent to establish a session. The registration is repeated so that the phone's entry in the SIP proxy tables is retained and the phone can be reached. The registration is repeated for all enabled VoIP connections. The default is 180 seconds. If you enter 0 seconds, then the registration is not periodically repeated.

Step	Command	Description
Step 12	Set STUN. <SYMB_ITEM ID="BS IP Data1.ucB SIP USE STUN_N (N=2-6)" class="symb item" value="0x0"/>	If the phone to use STUN, select “Yes”. Note that STUN can only be used if your router uses an asymmetric NAT and a non-blocking firewall. STUN disabled (default) = 0x0 STUN enabled = 0x1
Step 13	Set the STUN server address. <SYMB ITEM ID="BS_IP_Data1.aucS_STUN_SERVER N (N=2-6)" class="symb_item" value='""'/>	Enter the DNS name (fully qualified domain name) or the IP address of the STUN server on the Internet (maximum 74 characters, 0-9, a-z, A-Z, -, _). The phone can determine its public address via the STUN. The phone requires this address to receive caller voice data.
Step 14	Set the STUN server port. <SYMB ITEM ID="BS_IP_Data1.uiI_STUN_SERVER PORT N (N=2-6)" class="symb_item" value='"3478"'/>	Enter the number of the communication port on the STUN server. The default port is 3478.
Step 15	Set the STUN refresh time. <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_STUN_TIMER_N (N=2-6)" class="symb_item" value='"240"'/>	Enter the time intervals at which the phone should repeat the registration with the STUN server. The registration must be repeated so that the entry of the phone in the STUN server tables is retained. The registration is repeated for all enabled VoIP connections. The default is 240 seconds. If you enter 0 seconds, the registration is not repeated periodically.
Step 16	Set NAT refresh time <SYMB_ITEM ID="BS IP Data1.uiI NAT REFRESH_TIME_N (N=2-6)" class="symb item" value="0x14"/>	Specify the intervals at which you want the phone to update its entry in the NAT routing table. Specify an interval in seconds that is a little less than the NAT session timeout.
Step 17	Set the outbound proxy mode. <SYMB_ITEM ID="BS IP Data1.ucI OUTBOUND PROXY_MODE_N (N=2-6)" class="symb_item" value="0x1"/>	Specify when the outbound proxy should be used. All signaling and voice data is always sent by the phone to the outbound proxy. Automatic data sent by the phone is only sent to the outbound proxy when the phone is connected to a router with symmetric NAT or a blocking firewall. If the phone is behind an asymmetric NAT, then the STUN server is used. The outbound proxy is never used.
Step 18	Set the outbound server address. <SYMB_ITEM ID="BS IP Data1.aucS OUTBOUND PROXY_N (N=2-6)" class="symb_item" value='""'/>	Enter the DNS name (fully qualified domain name) or the IP address of your provider’s outbound proxy.
Step 19	Set the outbound proxy port. <SYMB ITEM ID="BS_IP_Data1.uiI_OUTBOUND_PROXY_PORT_N (N=2-6)" class="symb_item" value='"5060"'/>	Enter the number of the communication port used by the outbound proxy. The default port is “5060”.

Step	Command	Description
Step 20	Set the network protocol. <SYMB_ITEM ID="BS IP Data1.ucI SIP PREFERRED_TRANSPORT_LAYER_N (N=2-6)" class="symb item" value="0x0"/>	The SIP server usually communicates using the User Datagram Protocol (UDP). Note that UDP does not guarantee reliable transmission, that is, the SIP server does not check whether messages have been successfully transferred. If you need reliable transmission, you can use the Transmission Control Protocol (TCP). Automatic – The protocol is defined automatically. UDP only – Communication occurs exclusively via UDP. TCP only – Communication occurs exclusively via TCP. Integer: 0 = automatic 6 = TCP only 17 = UDP only
Step 21	Enable the SIP account. <SYMB ITEM ID="BS_IP_Data1.ucB_SIP_ACCOUNT_IS_ACTIVE_N (N=1-6)" class="symb_item" value="0x1"/>	

Browse to *Settings* → *Telephony* → *Connections.*

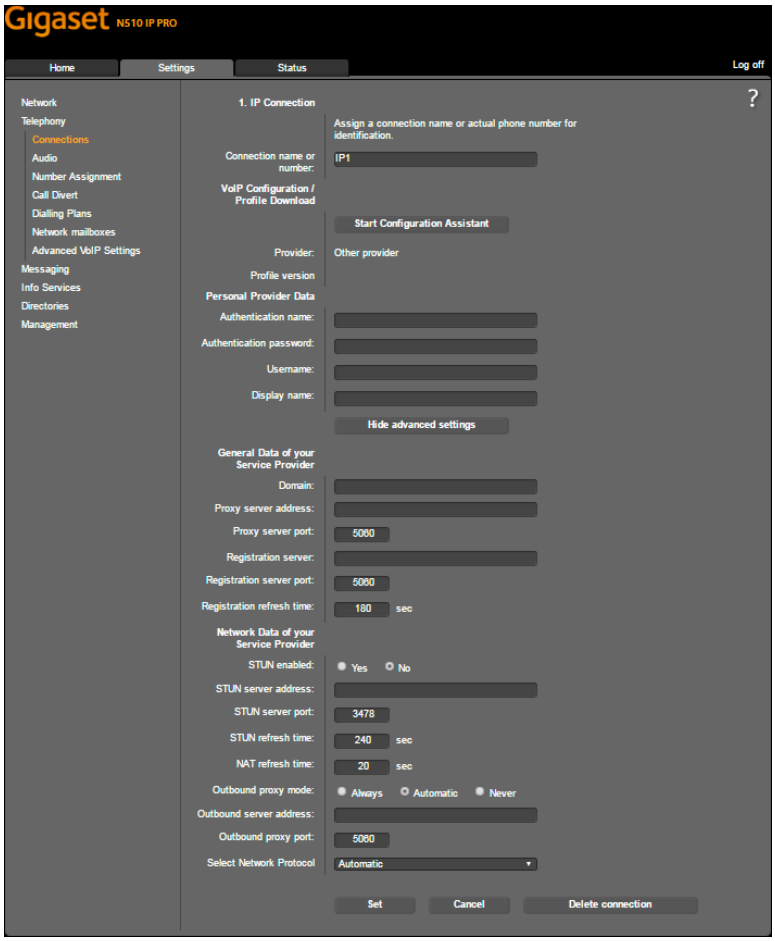

Figure 3 Gigaset IP DECT – Connections

4.2.1 Configure Service Settings

4.2.1.1 DTMF and Call Transfer Settings

Step	Command	Description
Step 1	Set the DTMF. <SYMB_ITEM ID="BS IP Data1.ucB DTMF TX MODE_AUTO" class="symb_item" value="0x1"/>	If you select "Yes", then for each call, the phone attempts to set the appropriate DTMF signaling type for the codec currently being negotiated. If you select "No", then you can specify the DTMF signaling type explicitly.
Step 2	Set the DTMF type. <SYMB ITEM ID="BS_IP_Data1.ucI_DTMF_TX_MODE BITS" class="symb item" value="0x1"/>	Enable *Audio* or *RFC 2833* if DTMF signals are to be transmitted acoustically (that is, in voice packets). Enable *SIP Info* if DTMF signals are to be transmitted as code. **NOTE**: Automatic negotiation for DTMF transmission must be set to "No". Integer: 1 = Audio 2 = RFC 2833 3 = Audio + RFC 2833 4 = SIP INFO 5 = Audio + SIP INFO 6 = RFC 2833 + SIP INFO 7 = Audio + RFC 2833 + SIP INFO
Step 3	Set transfer call by on-hook. <SYMB_ITEM ID="BS CUSTOM ORG.bit.bEct" class="symb_item" value="0x1"/>	If you select "Yes", then the external parties are connected when you replace the handset. Your connections with the parties are terminated. Yes (Default) = 0x1 No = 0x0

Browse to *Settings* → *Telephony* → *Advanced VoIP Settings.*

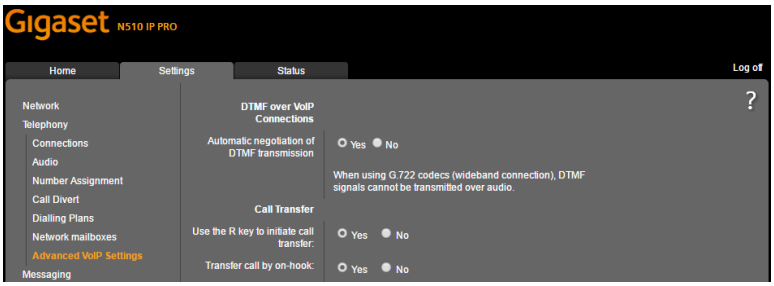

Figure 4 Gigaset IP DECT – Advanced VoIP Settings

4.2.1.2 MWI

This section provides configuration instructions to configure Voice Mail and Message Waiting Indicator (MWI) notification with BroadWorks.

1) Enter the BroadWorks voice mail number and name and then enable the service.

Step	Command	Description
Step 1	Set the voice mail box call number. `<SYMB_ITEM ID="BS IP Data1.aucS VOIP NET AM_NUMBER_N[0] (N=1-6)" class="symb_item" value='""'/>`	For the VoIP connections, the maximum is 32 characters and/or digits (0-9, A-Z, a-z, *, #, R, P, -). Enter the BroadWorks voice mail number and name. The device subscribes to the Message service.
Step 2	Activate voice mail and MWI. `<SYMB ITEM ID="BS_IP_Data1.ucB_VOIP_NET_AM ENABLED 1" class="symb item" value="0x0"/>`	You can enable or disable individual network mailboxes. Enable MWI = 0x1 Disable = 0x0

Browse to *Settings* → *Telephony* → *Network mailboxes*.

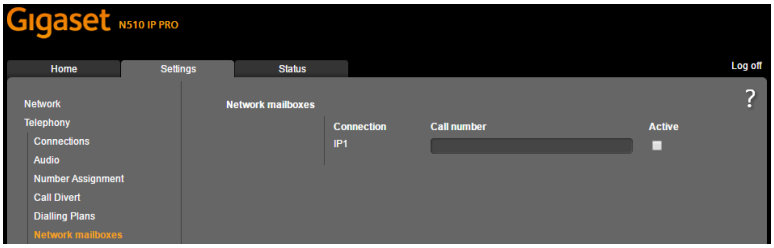

Figure 5 Gigaset IP DECT – Network Mailboxes

2) You can enable or disable the flashing MWI LED in the message key on your handsets.

Step	Command	Description
Step 1	Set the MWI network mailboxes. `<SYMB ITEM ID="BS AE Subscriber.stMWI[N].bShowMissedNetAM (N=0-5)" class="symb_item" value="0x1"/>`	For each handset, you can individually set for which type of new messages the LED should flash.

Browse to *Settings* → *Messaging* → *Message Notification*.

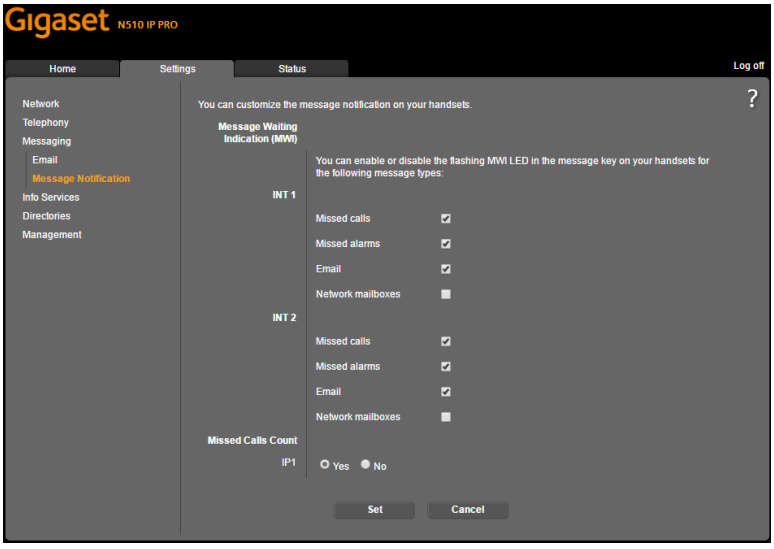

Figure 6 Gigaset IP DECT – Message Notification

4.2.1.3 Device Language, Country Settings, and Ringtones

This section provides configuration instructions to configure a device to be used in the different countries.

1) Set the web interface language setting.

Step	Command	Description
Step 1	Set the language of the web interface. <SYMB_ITEM ID="BS_IP_Data1.ucI_HTTPLANGUAGE" class="symb item" value="0x1"/>	This is the HTTP language of the device, where: UK = 0x1, DE = 0x2, ES = 0x4, IT = 0x7, FR = 0x9, NL = 0xa, PL = 0x11, TR = 0x10 Some languages are stored on the device and others are downloaded from the Gigaset server. If a language cannot be found, then English is used.

Browse to the web interface *Welcome* page.

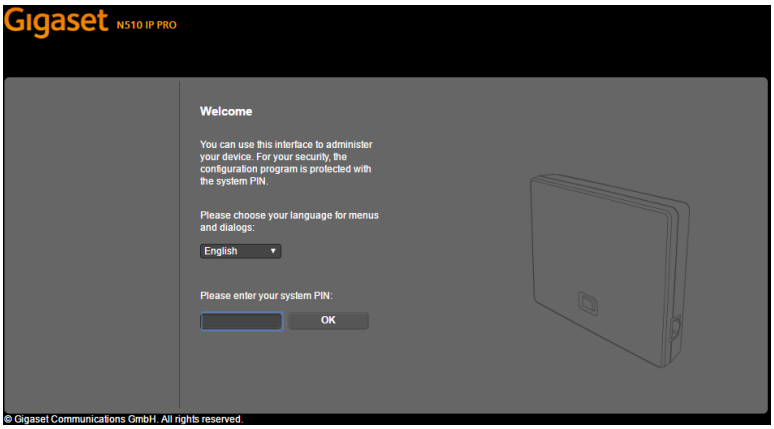

Figure 7 Gigaset IP DECT – Welcome Page

1) Set the local settings.

Step	Command	Description
Step 1	Select the country. <SYMB_ITEM ID="BS_IP_Data1.ucI_DIALING_PLAN COUNTRY ID" class="symb_item" value="0x19"/>	Select the country in which you are using your phone, for example, “Germany”. If your country is not included in the list, then select “Other Country” found at the end of the list. NL = 0x30, UK = 0x4A, DE = 0x19, FR = 0x18
Step 2	Set the tone selection. <SYMB_ITEM ID="BS_AE_SwConfig.ucCountryCodeTone" class="symb_item" value="12"/>	Tones such as dialing tones, call tones, busy tones, and call waiting tones are specific to a country or region. You can choose from various tone groups for your phone. The *Tone Selection* is automatically assigned according to the country selected in the previous step. However, you can change this setting. From the *Tone Selection* list, select the country or region to be used for your phone. International = 0, NL = 9, UK = 8, DE = 12, FR = 7

Browse to *Settings* → *Management* → *Local Settings*.

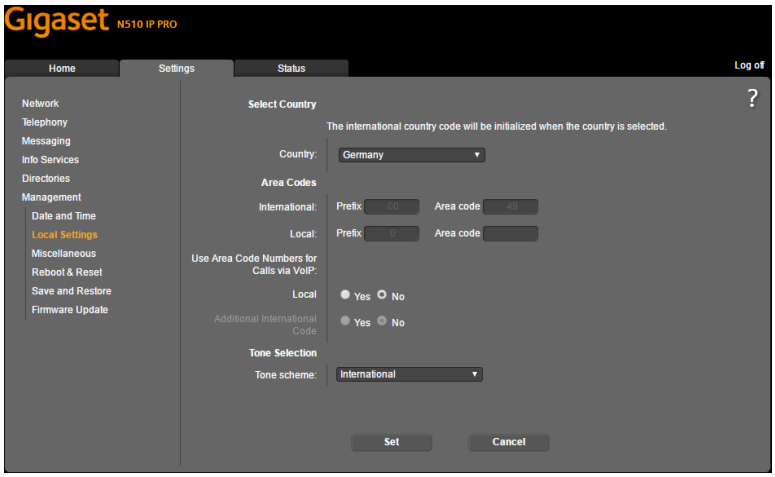

Figure 8 Gigaset IP DECT – Local Settings

1) Set the date and time.

Step	Command	Description
Step 1	Set the time server. `<SYMB_ITEM ID="BS_IP_Data1.aucS_TIME_NTP_SERVER[0]" class="symb_item" value='"europe.pool.ntp.org"'/>`	Enter the Internet address or DNS name of the time server from which the time and date settings should be copied (maximum 74 characters, 0-9, a-z, A-Z, -, .). The time server “europe.pool.ntp.org” is set by default. However, you can overwrite this setting.
Step 2	Set the time zone. `<SYMB_ITEM ID="BS_IP_Data1.uiI_TIME_TIMEZONE" class="symb_item" value="0x1b"/>`	A list of the valid time zones appears. Each time zone shows the deviation between local time (not summer time) and Greenwich Mean Time (GMT). Select the appropriate time zone for the location of the phone from the list. NL = 0x1b, UK = 0x1a, DE = 0x1b, FR = 0x1b
Step 3	Set clock to adjust automatically. `<SYMB_ITEM ID="BS_IP_Data1.ucB_TIME_USE_AUTOMATIC_DST" class="symb_item" value="0x1"/>`	Select “Yes” (default), if you want the time to change automatically to summer time or standard time when summer time begins and ends respectively. Select “No”, if you do not want to automatically change to summer time.

Browse to *Settings* → *Management* → *Date and Time.*

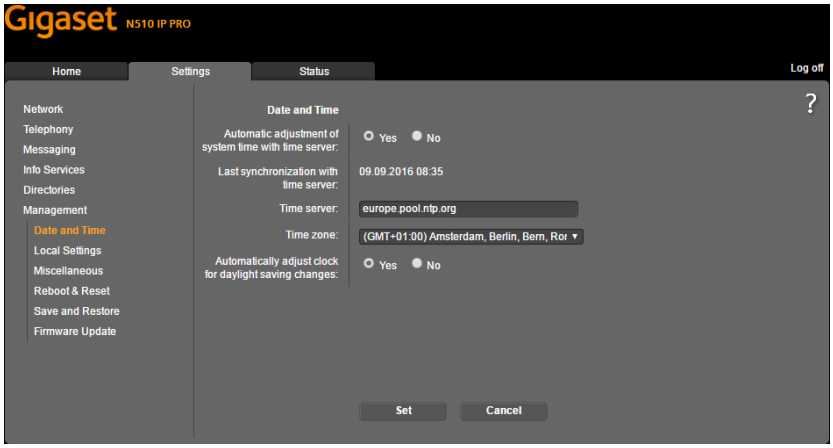

Figure 9 Gigaset IP DECT – Date and Time

4.3 Redundancy Support

This section identifies the device-specific redundancy related parameters. The Gigaset IP DECT Phones use the DNS SRV according to *RFC 3263* to locate SIP servers in case of redundancy.

Step	Command	Description
Step 1	Set the proxy server port. `<SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_SERVER PORT N (N=2-6)" class="symb_item" value='"'"'/>`	Remove the proxy server port settings by configuring an empty field.
Step 2	Set the registration server port. `<SYMB_ITEM ID=" BS IP Data1.uiI SIP REGISTRAR PORT N (N=2-6)" class="symb_item" value='"'"'/>`	Remove the registration server port settings by configuring an empty field.
Step 3	Set the outbound proxy port. `<SYMB ITEM ID="BS_IP_Data1.uiI_OUTBOUND_PROXY_PORT_N (N=2-6)" class="symb_item" value='"'"'/>`	Remove the outbound proxy port settings by configuring an empty field.

Browse to *Settings → Management – Date and Time*.

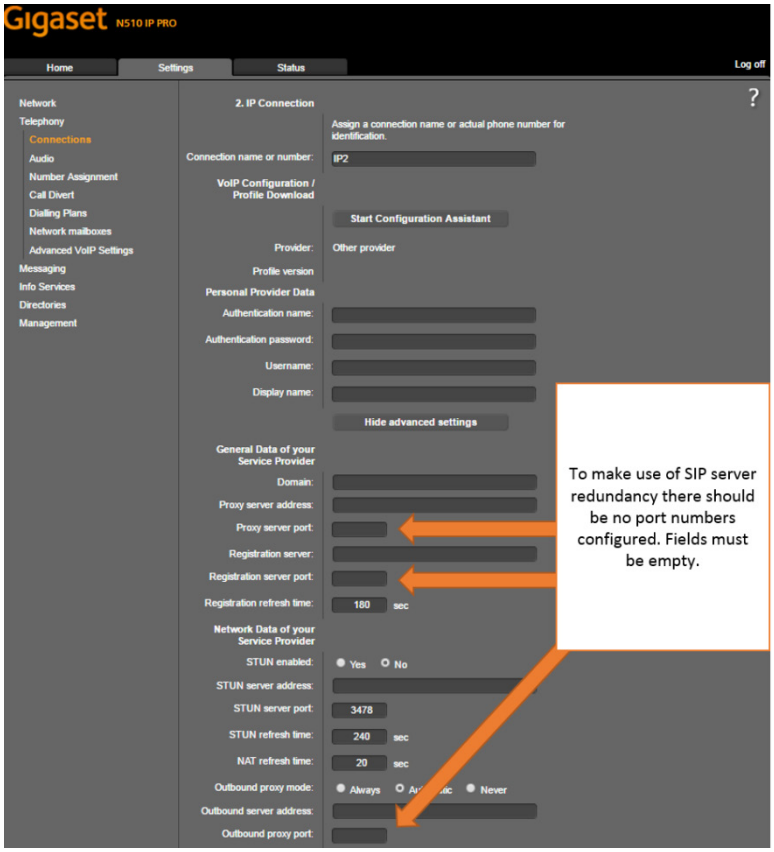

Figure 10 Gigaset IP DECT – DNS SRV

4.4 SIP Advanced Feature Configuration

This section provides configuration instructions for advanced SIP features supported by the phone including but not limited to Shared Call Appearance, Busy Lamp Field, Feature Key Synchronization, Call Center, Emergency Call, Advice of Charge, Call Recording, and Security Classification.

4.4.1 Shared Call Appearance Configuration

The Gigaset Single Cell IP DECT Phones do not support the Shared Call Appearance (SCA) feature.

4.4.1.1 Hybrid Key System Configuration

The Gigaset Single Cell IP DECT Phones do not support the Hybrid Key System feature.

4.4.2 Busy Lamp Field Configuration

The Gigaset Single Cell IP DECT Phones do not support the Busy Lamp Field feature.

4.4.3 Feature Key Synchronization Configuration

The Gigaset Single Cell IP DECT Phones do not support the Feature Key Synchronization feature.

4.4.4 Call Center Feature Configuration

The Gigaset Single Cell IP DECT Phones do not support the Call Center feature.

4.4.5 Call Recording Feature Configuration

The Gigaset Single Cell IP DECT Phones do not support the Call Recording feature.

4.4.6 Security Classification Feature Configuration

The Gigaset Single Cell IP DECT Phones do not support the Security Classification feature.

4.4.7 Emergency Call Configuration

The Gigaset Single Cell IP DECT Phones do not support the Emergency Call feature

4.4.8 Advice of Charge Configuration

The Gigaset Single Cell IP DECT Phones do not support the Advice of Charge feature.

4.4.9 Conference Event Configuration

The Gigaset Single Cell IP DECT Phones do not support the Conference Event feature.

4.5 Xtended Services Interface Feature Configuration

The Gigaset Single Cell IP DECT Phones do not support the Xtended Services Interface (Xsi) features.

4.6 Instant Message and Presence Configuration

The Gigaset Single Cell IP DECT Phones do not support the Instant Message and Presence features.

5 Device Management

The BroadWorks Device Management feature provides the capability to automate generation of device configuration files to support mass deployment of devices. This section identifies the device management capabilities supported by the Gigaset DECT Phone and the configuration steps required. For Device Management configuration details not covered here, see the *BroadWorks Device Management Configuration Guide* [2] and the *BroadWorks CPE Kit Usage Guide* [8].

5.1 Device Management Capabilities Supported

The Gigaset DECT Phone has completed Device Management interoperability testing with BroadWorks using the *BroadWorks Device Management Interoperability Test Plan* [7]. The results are summarized in the following table.

The BroadWorks test plan is composed of packages, each covering distinct interoperability areas. Each package is composed of one or more test items, which in turn, are composed of one or more test cases. The test plan exercises the Device Management interface between the device and BroadWorks with the intent to ensure interoperability.

The *Supported* column in the following table identifies the Gigaset DECT Phone's support for each of the items covered in the test plan packages, with the following designations:

- Yes Test item is supported
- No Test item is not supported
- NA Test item is not applicable
- NT Test item was not tested
- No* Test item is supported only in limited capacity and does not fully comply with BroadWorks requirements

Caveats and clarifications are identified in the *Comments* column.

NOTE: *DUT* in the following table refers to the *Device Under Test*, which in this case is the Gigaset DECT Phone.

BroadWorks Device Management Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
HTTP File Download	HTTP Download Using Xtended Services Platform (Xsp) IP Address	Yes	
	HTTP Download Using Xtended Services Platform FQDN	Yes	
	HTTP Download Using Xtended Services Platform Cluster FQDN	Yes	
	HTTP Download With Double Slash	Yes	
HTTPS File Download	HTTPS Download Using Xtended Services Platform IP Address	Yes	
	HTTPS Download Using Xtended Services Platform FQDN	Yes	

BroadWorks Device Management Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	HTTPS Download Using Xtended Services Platform Cluster FQDN	Yes	
File Inspection	Inspect System Config File	NA	
	Inspect Device-Specific Config File	Yes	
	Inspect Other Config Files	NA	
	Inspect Static Files	Yes	
Device Inspection	Inspect SIP Settings	Yes	
	Inspect Line Settings	Yes	
	Inspect Service Settings	No	
HTTP File Upload	HTTP Upload Using Xtended Services Platform IP Address	No	
	HTTP Upload Using Xtended Services Platform FQDN	No	
	HTTP Upload Using Xtended Services Platform Cluster FQDN	No	
Call Processing Sanity Tests	Register with Authentication	Yes	
	Call Origination	Yes	
	Call Termination	Yes	
	Remote Restart	No	
	Shared Line Origination	No	
	Shared Line Termination	No	
	Shared Line Status	No	
	Busy Lamp Field	No	
	Network-Based Conference	No	
Flexible Seating	Association via Voice Portal	No	
	Association via Phone	No	
No Touch Provisioning	Provision via DHCP Options Field	No	
	No Touch Provision via DM redirect	No	
	No Touch Provision via Vendor redirect	Yes	Except BroadWorks DM Redirect. See section *5.2.5.3 No Touch Provisioning via Gigaset Redirect Service.*

5.2 Device Management Configuration

This section identifies the steps required to enable the Gigaset DECT Phone for device management. For Device Management configuration details not covered here, see the *BroadWorks Device Management Configuration Guide* [2] and the *BroadWorks CPE Kit Usage Guide* [8].

5.2.1 Configure BroadWorks Tags

The template files in Device Management use tags to represent the data stored on BroadWorks. When a configuration changes for a user, Device Management parses the template files and replaces the Device Management tags with the associated data stored on BroadWorks. There are default tags defined in the Device Management software and there are custom tags that the service provider can create/define via the web portal for use by Device Management. There are two types of custom tags that can be defined: system-default tags are common to all phones on the system; device type-specific tags are common to Gigaset DECT phone models only.

The Gigaset DECT Phone makes use of dynamic tags, which may be configured by a BroadWorks administrator as either system default or device type-specific tags. This section identifies the required tags.

5.2.1.1 Create System Default Tags

Browse to *System* → *Resources* → *Device Management Tag Sets* and select the *System Default* tag set. Add the system default tags in the following table if they do not already exist.

Tag Name	Valid Settings	Description
%SBC_ADDRESS%	IP address/FQDN	SBC SIP address

Example System Default Tag Settings

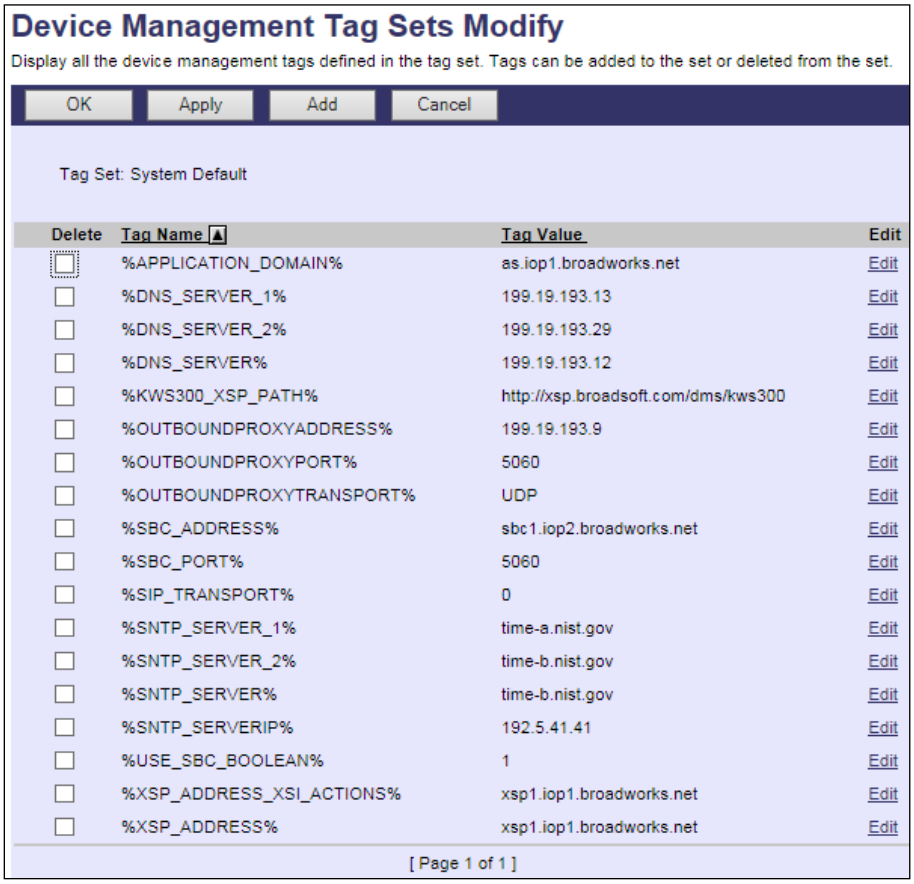

Figure 11 System Default Tag Settings

5.2.1.2 Create Device Type-Specific Tags

Browse to *System* → *Resources* → *Device Management Tag Sets* and select *Add* to add a new tag set. Configure the tag set name using the device name appended by Tags: *Gigaset-DECT-Tags*. Add the device type-specific tags in the following table to the device tag set. If the tag set already exists, make sure the tags are defined in the following table.

Tag Name	Valid Settings	Description
%FirmwareUrl%	Example: http://xsp1.iop1.broadworks.net /dms/Gigaset-DECT/merkur239_42.bin	Identifies the location to download the firmware.

Example Device Type-specific Tag Settings

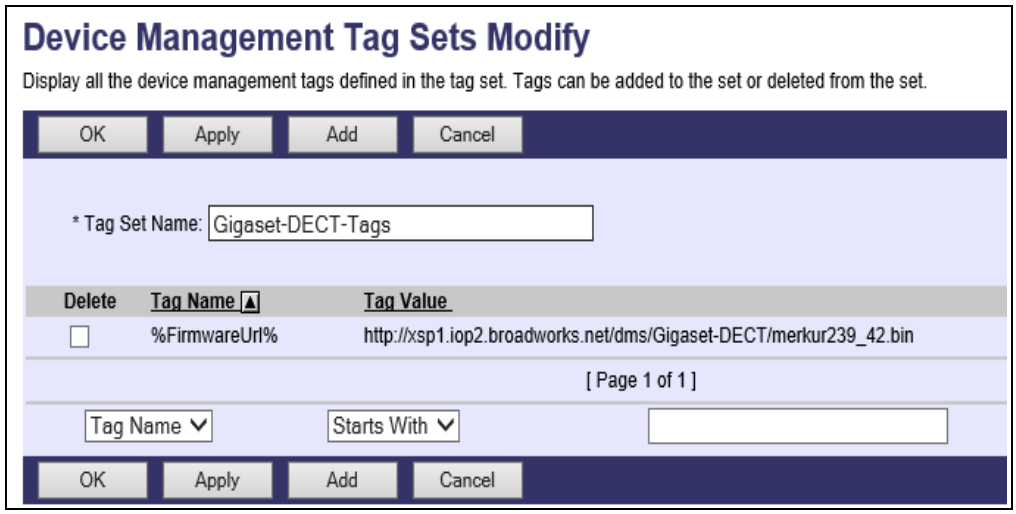

Figure 12 Device Type-specific Tag Settings

5.2.2 Configure BroadWorks Device Profile Type

The device profile type is a system-level structure that defines how the device interfaces with BroadWorks. It also identifies the default configuration files and other files, such as firmware, which are required for the device to operate correctly. The device profile type is created by the system administrator. Group administrators use the device profile type to create a device profile. The device profile is an instance of the device profile type that is associated with a physical device.

There are two BroadWorks device profile configuration methods described: import and manual. The import method takes a DTAF as input and builds the BroadWorks device profile type(s) automatically. The manual method takes the administrator through the steps to manually add and configure the device profile type(s).

The import method should be used if all of the following prerequisites are met:

- The BroadWorks Release is 17.0 or later.
- The device profile type(s) being imported do not already exist on the system. (If either a previous import or manual configuration was done, then the import fails.)
- There is a DTAF file available for import with a BroadWorks release level that is the same as or prior to the release to which it is being imported. If the DTAF file is at a release level later than the release being imported to, then the import can fail.

Otherwise, use the manual method.

For more detailed instructions, see the *BroadWorks CPE Kit Usage Guide* [8] and the *BroadWorks Device Management Configuration Guide* [2].

5.2.2.1 Configuration Method 1: Import

This section identifies the steps necessary to make use of the Device Management import feature to configure BroadWorks to add the Gigaset DECT Phone as a Device Management-enabled device type. Also, see the *BroadWorks CPE Kit Usage Guide* [8].

Download the Gigaset DECT Phone CPE kit from BroadSoft Xchange at xchange.broadsoft.com. Extract the DTAF file(s) from the CPE kit. These are the import files. Repeat the following steps for each model you wish to import.

1. Log in to BroadWorks as an administrator.
2. Browse to *System* → *Resources* → *Identity/Device Profile Types* and then click **Import**.
3. Select *Browse* to find the extracted DTAF file for the model and then click **OK** to start the import.

   After the import finishes, complete the following post-import configuration steps:
4. Browse to *System* → *Resources* → *Identity/Device Profile Types.*
5. Perform a search to find the imported Gigaset device profile type, Gigaset-DECT.
6. Browse to the *Profile* page and change the Device Management Device Access FQDN to your Xtended Services Platform (Xsp) or Xtended Services Platform cluster address.

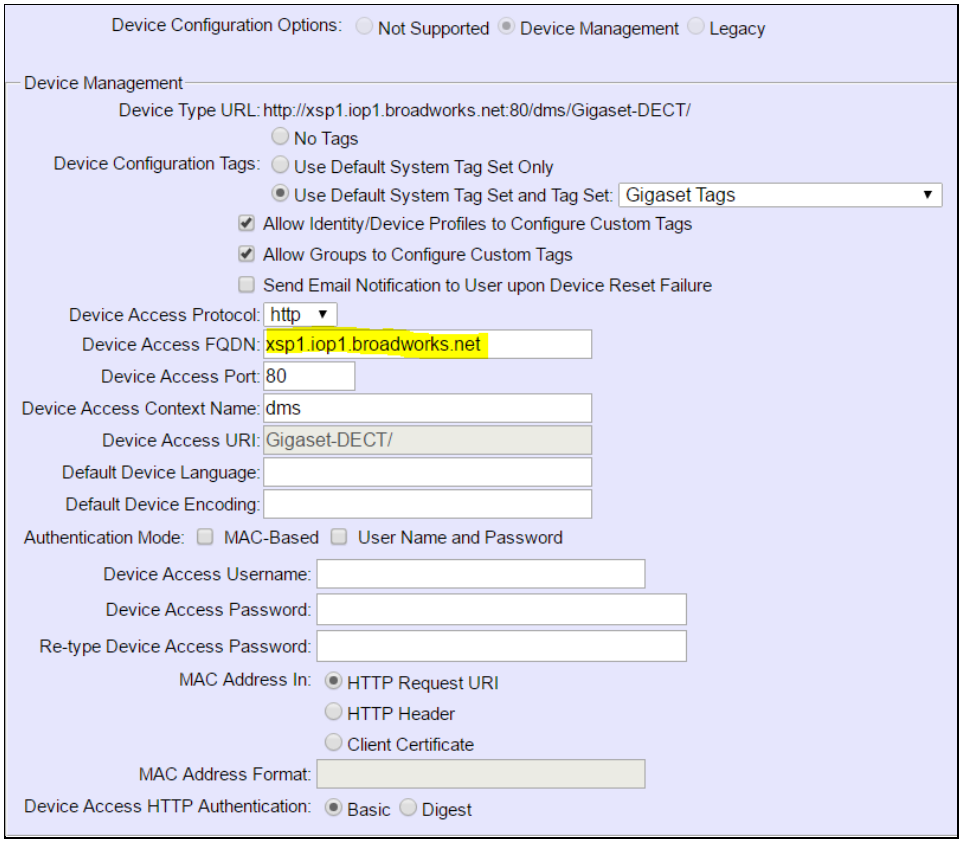

Figure 13 Device Access FQDN

7. Click the **Files and Authentication** link and then select the option to rebuild all the system files.

   Firmware files must be obtained from Gigaset. These files are not included in the import. Complete the steps in section *5.2.2.2.2 Define Device Profile Type Files* to define the static firmware files and to upload the firmware.

NOTE: The non-firmware static files in section *5.2.2.2.2 Define Device Profile Type Files* are normally included in the import.

8. After importing the DTAFs, restart the Application Server to load the *TimeZoneAlias* files.
9. Update the device profile type language setting according to instructions provided in section *5.2.2.2.4 Language Mapping*.

5.2.2.2 Configuration Method 2: Manual

This section identifies the basic steps necessary for an administrator to manually configure BroadWorks to add the Gigaset DECT Phone as a Device Management-enabled device type. This method should not be used except in special cases as described in the opening to section *5.2.2 Configure BroadWorks Device Profile Type*.

For more detailed instructions on the manual configuration, see the *BroadWorks CPE Kit Usage Guide* [8] and the *BroadWorks Device Management Configuration Guide* [2].

The steps in this section can also be followed to update previously imported or configured device profile type(s) with new configuration files and firmware.

If there are DTAFs for more than one device model, these steps must be completed for each model.

5.2.2.2.1 Create or Modify Device Profile Type

This section identifies the BroadWorks device profile type settings relevant to Device Management for the Gigaset DECT Phone.

Browse to *System* → *Resources* → *Identity/Device Profile Types* and perform a search to find the Gigaset DECT device profile type(s) created in section *3.1 BroadWorks Device Profile Type Configuration* or add the device profile type for each model using the settings from section *3.1 BroadWorks Device Profile Type Configuration* if they do not exist.

Configure the device profile type *Signaling Address Type*, *Standard* and *Advanced* options settings to match the settings in section *3.1 BroadWorks Device Profile Type Configuration*.

Configure the device profile type *Device Management* options as shown in section *5.2.2.1 Configuration Method 1: Import*.

The following subsections identify the required settings specific to Device Management.

5.2.2.2.2 Define Device Profile Type Files

This section describes the BroadWorks Device Management configuration necessary to identify the configuration files and other files that the Gigaset DECT Phone downloads.

Configuration templates, firmware, and other files the Gigaset DECT Phone uses must be uploaded to BroadWorks. Download the Gigaset DECT Phone CPE kit from BroadSoft Xchange at xchange.broadsoft.com. Extract the configuration files from the *Configuration Files* folder of CPE kit. Obtain the firmware files directly from Gigaset.

The following table identifies the Gigaset DECT Phone configuration files distributed with the CPE kit.

File Name	CPE Kit Template File Name	File Type	Description
		System-level, Device-specific, Static, Time Zone Alias	

File Name	CPE Kit Template File Name	File Type	Description
Examples			
BWMACADDRESS.xml	*%BWMACADDRESS%.xml*	Device-specific	This file contains device-specific parameters that the phone has to load.

The following table identifies other files that the Gigaset DECT Phone downloads from the server or uploads to the server. These files are not provided in the CPE kit and must be obtained from Gigaset.

File Name	File Type	Description
merkur239_42.bin	Static	Device firmware file.

Browse to *System* → *Resources* → *Identity/Device Profile Types* → *Files and Authentication* to add the files as described in the following subsections.

5.2.2.2.2.1 Device-Specific File

This section identifies the device-specific files used by Gigaset DECT and provides instructions for defining the files and uploading for Device Management.

Each Gigaset DECT phone downloads a phone-specific file based on the phone's MAC address using the following file name format:

- <mac-address>.xml

Add the <mac-address>.xml file to the device profile type with the settings shown in *Figure 14 <mac-address>.cfg Settings*.

After creating the device profile type file, upload <mac-address>.xml extracted from the CPE kit. Use the **Browse** button on the file definition screen. Be sure to click **Apply** after uploading the file.

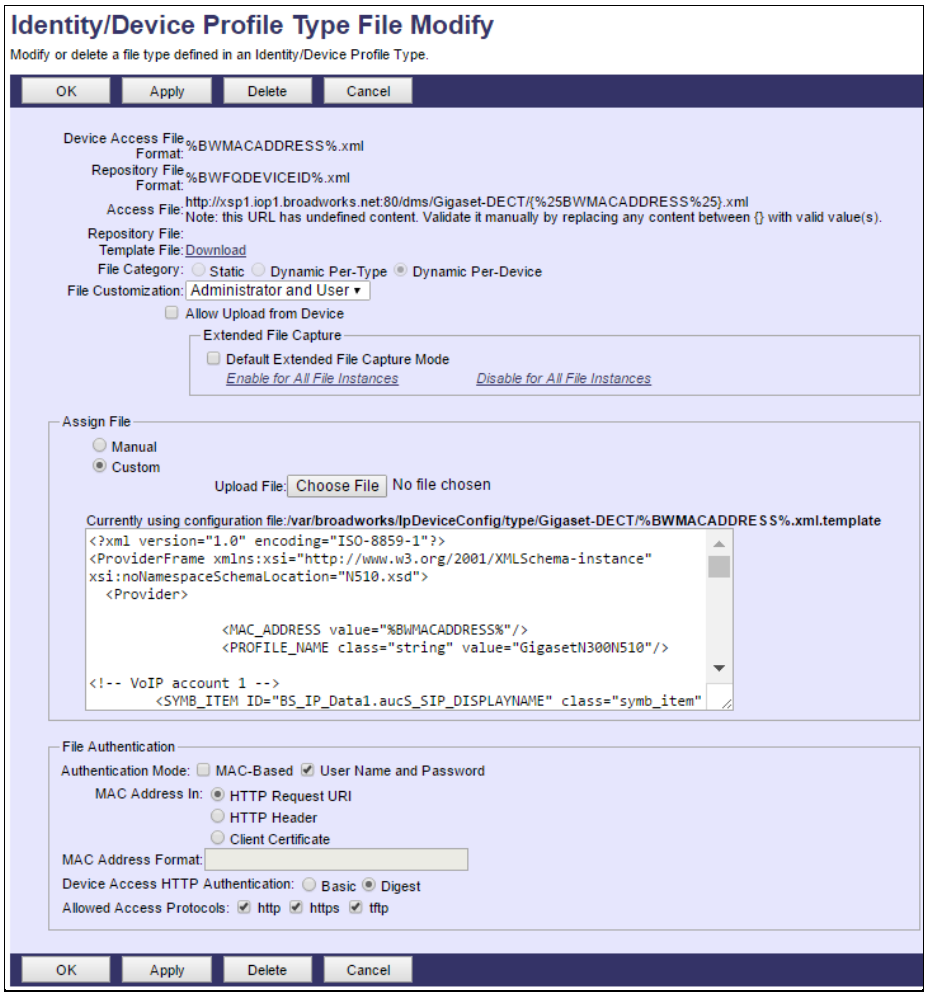

Figure 14 <mac-address>.cfg Settings

5.2.2.2.2.2 Static Files

Static files are files such as firmware and media files that are not configurable and/or do not make use of the dynamic BroadWorks Device Management tags. The Gigaset DECT phones requires the following static files:

- merkur239_42.bin

Add the static file to the device profile type with the settings shown in *Figure 15 Static File Settings*.

After creating the device profile type file, upload *static files (*extracted from the CPE kit and obtained from Gigaset). Use the **Browse** button on the file definition screen. Be sure to click **Apply** after uploading the file.

Figure 15 Static File Settings

5.2.2.2.3 *Time Zone Mapping*

The CPE kit contains a time zone properties file for each device model. This file maps the BroadWorks user's time zone settings to the device's time zone settings.

This time zone mapping file must be added to the */usr/local/broadworks/bw_base/conf/dms* directory on the Application Server using the following file name format: *TimeZoneAliasLabels_<Device_Type_Name>.properties*.

For example, if the device type name is *Gigaset-DECT,* the time zone mapping file name must be *TimeZoneAliasLabels_ Gigaset-DECT.properties*. A space in the device name must be converted to a "+" in the file name.

The following is an example of the file contents:

```
US_HAWAII=0x2
US_ALASKA=0x3
CANADA_PACIFIC_TIME=0x4
MEXICO_PACIFIC_TIME=0x4
US_PACIFIC_TIME=0x4
US_ARIZONA=0x5
CANADA_MOUNTAIN_TIME=0x7
MEXICO_MOUNTAIN_TIME=0x7
US_MOUNTAIN_TIME=0x7
CANADA_CENTRAL_TIME=0x9
US_CENTRAL_TIME=0x8
US_INDIANA=0xe
CANADA_EASTERN_TIME=0xd
US_EASTERN_TIME=0xf
CANADA_ALTANTIC_TIME=0xf
CANADA_NEWFOUNDLAND=0x12
VENEZUELA_TIME=0xf
CHILE_TIME=0xf
ARGENTINA_TIME=0x14
GREENWICH_MEAN_TIME=0x1a
CENTRAL_EUROPEAN_TIME=0x1d
EASTERN_EUROPEAN_TIME=0x24
EAST_AFRICAN_TIME=0x29
IRAN_TIME=0x2a
AZERBAIJAN_TIME=0x2c
AFGHANISTAN_TIME=0x2d
PAKISTAN_TIME=0x2f
INDIA_TIME=0x30
EASTERN_KAZAKHSTAN_TIME=0x32
MYANMAR_TIME=0x35
THAILAND_TIME=0x36
CHINA_TIME=0x38
JAPAN_TIME=0x3d
AUSTRALIAN_CENTRAL_STANDARD_TIME=0x40
AUSTRALIAN_EASTERN_STANDARD_TIME=0x43
NEWZEALAND_TIME=0x48
```

You must restart the Application Server for the *TimeZoneAlias* files to be picked up by the system.

5.2.2.2.4 Language Mapping

To enable Device Management control of the phone language, the languages defined on the BroadWorks Application Server must be mapped to the Gigaset DECT language files. To perform the mapping, select the Gigaset DECT device profile type and then select the *Languages* link. The defined BroadWorks languages are listed in a table. If languages other than English do not appear, they have not been defined. The supported languages and required mapping are as follows.

BroadWorks Language	Gigaset DECT Language Mapping
English	0x1
German	0x2

BroadWorks Language	Gigaset DECT Language Mapping
Spain_Spanish	0x4
Italian	0x7
French	0x9
Russian	0x17

Example language mapping:

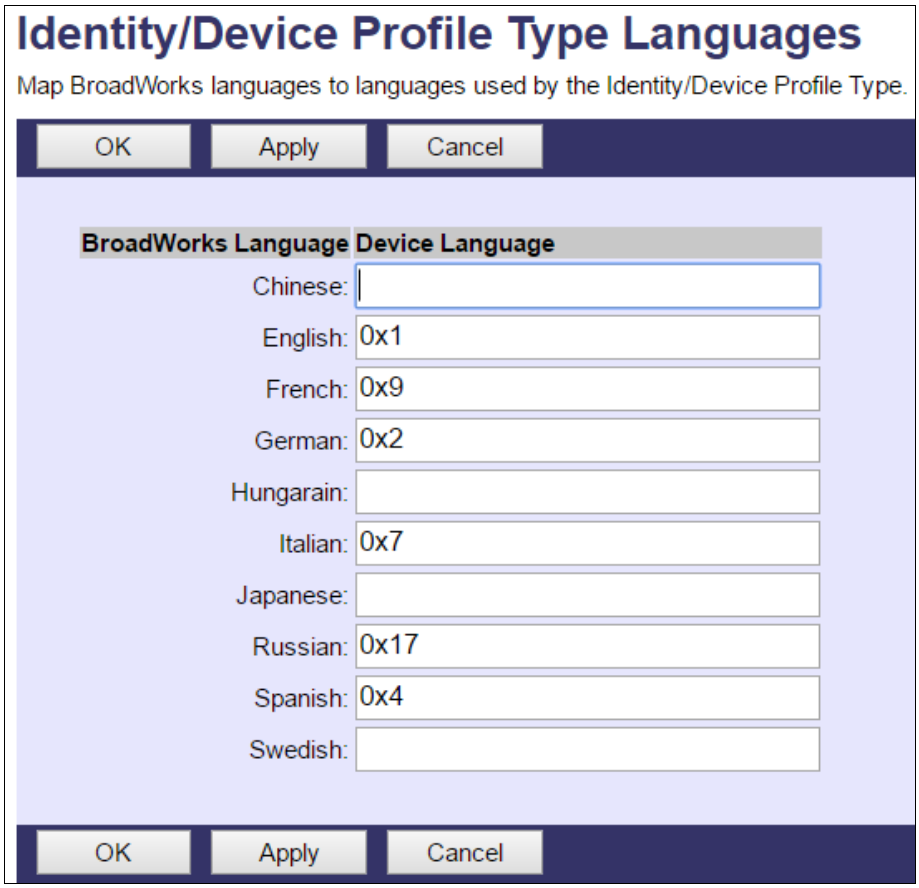

Figure 16 Language Mapping

The language applied to an individual phone is determined by the language defined for the first SIP user on the *BroadWorks User's Profile* page.

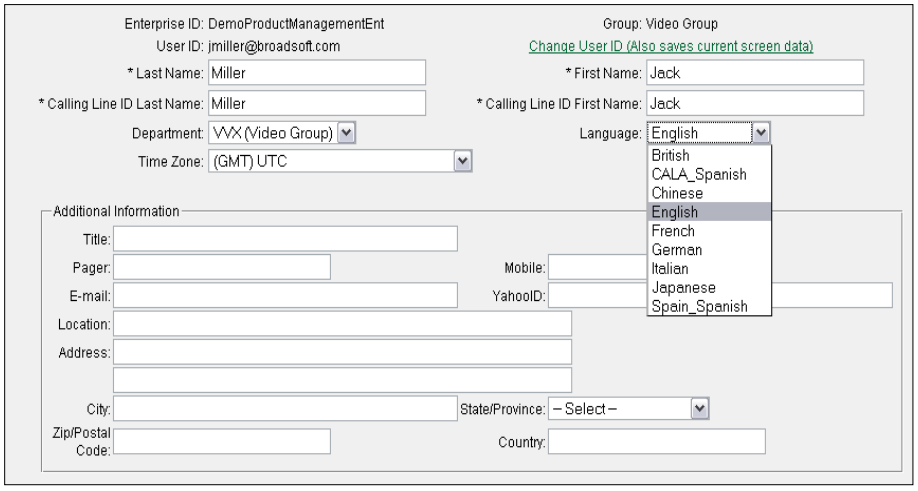

Figure 17 BroadWorks User Language Definition

5.2.3 Create Device Profile Instance

The previous sections defined the device profile type such that the system is ready to mass deploy device profiles. A device profile is an instance of the device profile type and defines the BroadWorks interface to an individual Gigaset DECT Phone device.

Browse to the BroadWorks *<group>* → *Resources* → *Identity/Device Profiles* page and then select **Add** to add a new Gigaset DECT device profile. Configure the device profile as shown in the *Figure 18 Device Profile Instance* example.

The *Use Custom Credentials* option must be selected. Set the Device Access User Name and Password to the username and password the device uses for file download.

Figure 18 Device Profile Instance

5.2.4 Configure BroadWorks User

Configure the user with the desired BroadWorks configuration and services. Any services that require a specific configuration on the device are managed via Device Management and are defined in the device configuration files, if the template files are created with the correct Device Management tags.

The device profile created in the previous section must be assigned to the BroadWorks user. Assigning the device profile to the user automatically causes the Device Management feature to generate the device configuration files for this user's device.

To assign the device profile to the user, browse to the BroadWorks *<user>* → *Addresses.*
Customize Tags

This section identifies custom tags used by the Gigaset DECT that may need to be customized at the group or device profile. Customizing a tag at the group level overrides the setting on the device profile type for the device profiles created within the group. Customizing a tag at the device profile level overrides the setting at the device profile type and/or group level for the individual device profile.

5.2.4.1 SBC Address Customization for Edge Device

In many deployments, an edge device, such as an enterprise SBC or application layer gateway, is deployed on the enterprise edge. The edge device's SIP server or outbound proxy setting is configured with the service provider's SBC IP address or FQDN. If there is no edge device, the following customization does not apply.

To integrate the edge device with Device Management, the SBC address tag (%SBC_ADDRESS%) defined in section *5.2.1.1 Create System Default Tags* must be overridden at the group level with the LAN address of the edge device. To do so, perform that following steps.

1. At the *Group* → *Utilities* → *Configure Device* page, select the Gigaset DECT device profile (for example, Gigaset-DECT).
2. Click on the *Custom Tags* tab.
3. Click **Add**.
4. For the tag, enter "SBC_ADDRESS".
5. For the value, enter the edge device LAN IP address.
6. To save the tag data, click **OK**.

Repeat these steps for each <partner name> model provisioned in the group.

5.2.5 Configure Gigaset DECT Phone

This section describes the steps necessary to configure the Gigaset DECT to integrate with BroadWorks Device Management.

The phone must be configured with the Device Management URL and authentication user name and password. This configuration can be done as described in the following sections:

- *5.2.5.1 Manual Provisioning*
- *5.2.5.2 No Touch Provisioning via BroadWorks Device Management*
- *5.2.5.3 No Touch Provisioning via Gigaset Redirect Service*

5.2.5.1 Manual Provisioning

Log in to the web user interface for the Gigaset DECT Phone (https://<phone-ip-address>).

Example Login (Default PIN is "0000")

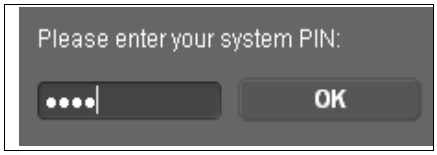

Figure 19 Login Screen

Go to the *Settings* → *Network* → *Security* web page and set the following:

- HTTP digest:

  username – BroadWorks Device Access User Name (Example: gigaset; username the same as in chapter 5.2.3)

  password – BroadWorks Device Access Password (Example: 123456; password the same as in chapter 5.2.3)

After all parameters are entered, click the **Set** button.

Example Security web page

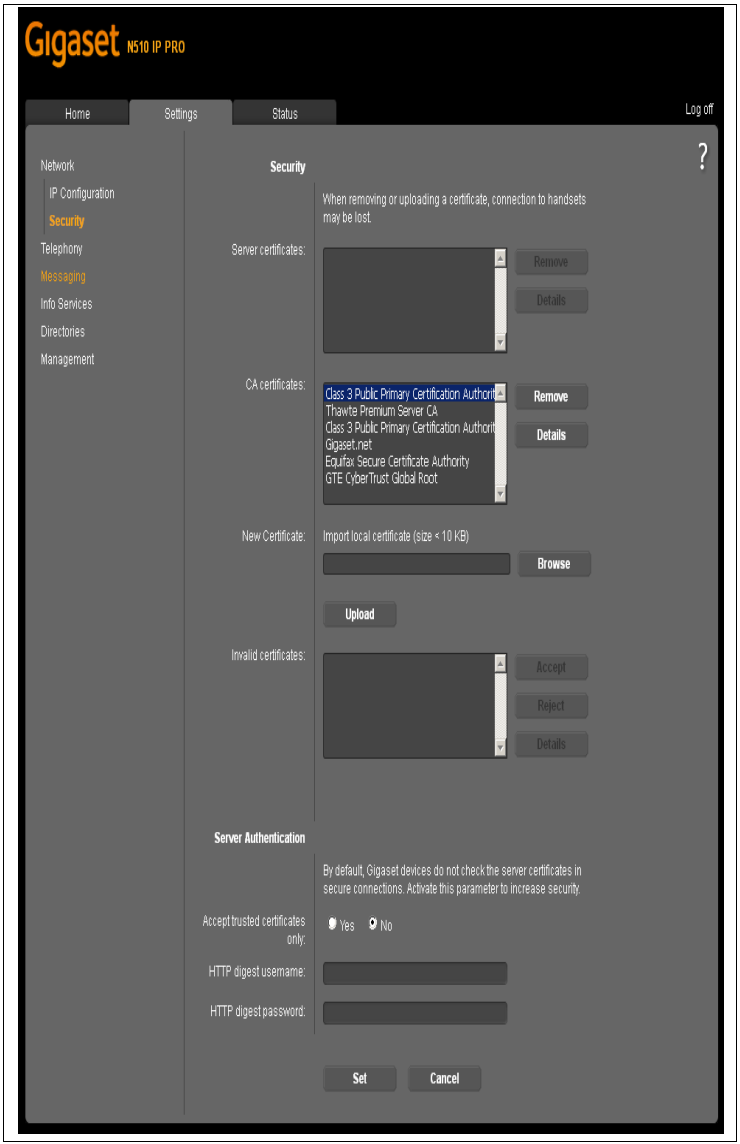

Figure 20 Security Screen

Go to the *Settings* → *Management* → *Firmware Update* web page and set the following:

- Configuration file (URL) – Device Management server (Xtended Services Platform) device address URL

  (Example: http(s)://xsp1.broadworks.net/dms/Gigaset-DECT/<MAC-address>.xml)

After all parameters are entered, click the **Set** button.

Example Firmware Update web page

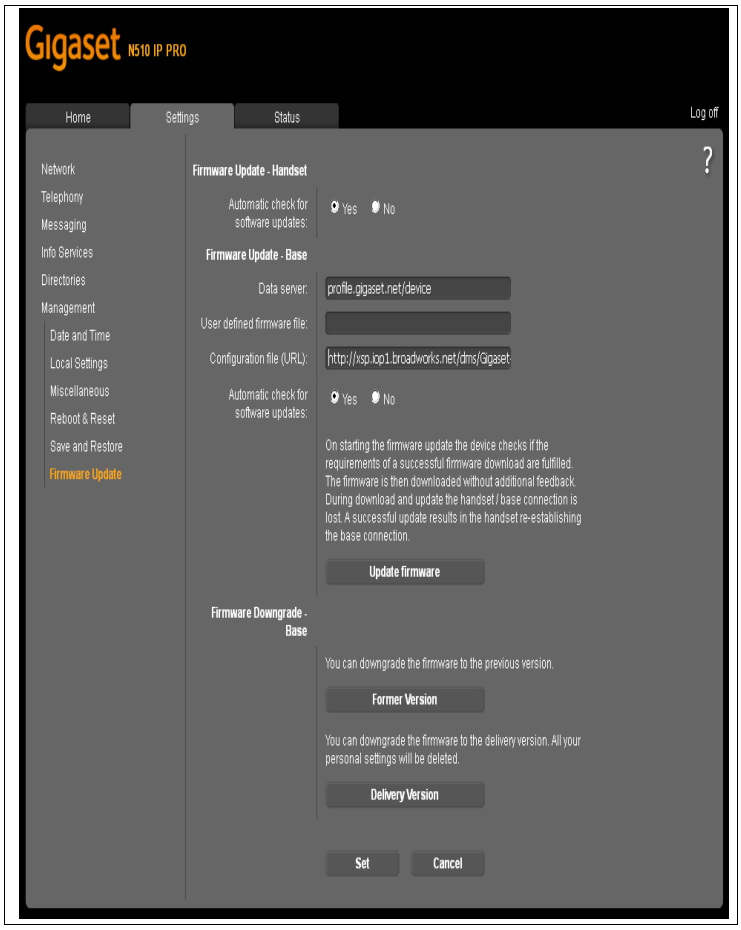

Figure 21 Firmware Update Screen

Restart the phone to force the phone to download the Device Management configuration files and firmware.

Allow the phone to reboot and retrieve the new configuration parameters from Device Management.

5.2.5.2 No Touch Provisioning via BroadWorks Device Management

The Gigaset Single Cell IP DECT Phones do not support the No Touch provisioning via BroadWorks DM redirect.

5.2.5.3 No Touch Provisioning via Gigaset Redirect Service

Gigaset Device Management Redirect is a web redirect service hosted by Gigaset. It works in conjunction with the BroadWorks Device Management Redirect. Hence, prior to device deployment, the administrator is required to log in to Gigaset's web portal to associate each device based on the MAC address to the default BroadWorks Device Management URL. At boot time, the Gigaset DECT phones automatically queries the Gigaset Device Management Redirect service for the associated BroadWorks URL. The Gigaset DECT phone finally completes the provisioning process as detailed in the previous section. For more information about the Gigaset Device Management Redirect service, go to http://wiki.gigasetpro.com

NOTE: If a secured (HTTPS) connection is required, then use https instead of http in URL. Certificates are downloaded and installed automatically.

5.3 Upgrade from Previous CPE Kits

The previous configuration sections are primarily structured around importing or manually configuring the Gigaset DECT device profile types for the first time. Many of the steps are unnecessary when upgrading to a new firmware release or CPE kit version.

For general instructions on upgrading, see the *BroadWorks CPE Kit Usage Guide* [8].

Appendix A: Reference Gigaset DECT Configuration Files

The following is a reference configuration for the Gigaset DECT configured for use with BroadWorks.

Device-specific File: <device-specific configuration file name>

NOTE: This is an example file and it should be used for reference only.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<ProviderFrame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="N510.xsd">
  <Provider>

            <MAC_ADDRESS value="%BWMACADDRESS%"/>
            <PROFILE_NAME class="string" value="GigasetN300N510"/>

<!-- VoIP account 1 -->
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DISPLAYNAME" class="symb_item"
value='"%BWFIRSTNAME-1% %BWLASTNAME-1%"'/>
    <SYMB_ITEM ID="BS_IP_Data3.aucS_SIP_LOGIN_ID" class="symb_item"
value='"%BWAUTHUSER-1%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PASSWORD" class="symb_item"
value='"%BWAUTHPASSWORD-1%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_USER_ID" class="symb_item"
value='"%BWLINEPORT-1%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DOMAIN" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_SERVER" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_REGISTRAR" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_STUN_SERVER" class="symb_item"
value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PROVIDER_NAME" class="symb_item"
value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_SERVER_PORT" class="symb_item"
value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_REGISTRAR_PORT" class="symb_item"
value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_USE_STUN" class="symb_item"
value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_STUN_SERVER_PORT" class="symb_item"
value="0xd96"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucI_OUTBOUND_PROXY_MODE"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_OUTBOUND_PROXY" class="symb_item"
value='"%SBC_ADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_OUTBOUND_PROXY_PORT"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_REGISTRATION_TIMER"
class="symb_item" value="0xb4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_STUN_TIMER" class="symb_item"
value="0xf0"/>

    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_ACCOUNT_IS_ACTIVE_1"
class="symb_item" value="0x%BWLINE-BINARY-1%"/>

<!-- VoIP account 2 -->
```

```
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DISPLAYNAME_2" class="symb_item"
value='"%BWFIRSTNAME-2% %BWLASTNAME-2%"'/>
    <SYMB_ITEM ID="BS_IP_Data3.aucS_SIP_LOGIN_ID_2" class="symb_item"
value='"%BWAUTHUSER-2%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PASSWORD_2" class="symb_item"
value='"%BWAUTHPASSWORD-2%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_USER_ID_2" class="symb_item"
value='"%BWLINEPORT-2%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DOMAIN_2" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_SERVER_2" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_REGISTRAR_2" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_STUN_SERVER_2" class="symb_item"
value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PROVIDER_NAME_2"
class="symb_item" value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_SERVER_PORT_2" class="symb_item"
value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_REGISTRAR_PORT_2"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_USE_STUN_2" class="symb_item"
value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_STUN_SERVER_PORT_2" class="symb_item"
value="0xd96"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucI_OUTBOUND_PROXY_MODE_2"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_OUTBOUND_PROXY_2" class="symb_item"
value='"%SBC_ADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_OUTBOUND_PROXY_PORT_2"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_REGISTRATION_TIMER_2"
class="symb_item" value="0xb4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_STUN_TIMER_2" class="symb_item"
value="0xf0"/>

    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_ACCOUNT_IS_ACTIVE_2"
class="symb_item" value="0x%BWLINE-BINARY-2%"/>

<!-- VoIP account 3 -->
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DISPLAYNAME_3" class="symb_item"
value='"%BWFIRSTNAME-3% %BWLASTNAME-3%"'/>
    <SYMB_ITEM ID="BS_IP_Data3.aucS_SIP_LOGIN_ID_3" class="symb_item"
value='"%BWAUTHUSER-3%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PASSWORD_3" class="symb_item"
value='"%BWAUTHPASSWORD-3%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_USER_ID_3" class="symb_item"
value='"%BWLINEPORT-3%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DOMAIN_3" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_SERVER_3" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_REGISTRAR_3" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_STUN_SERVER_3" class="symb_item"
value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PROVIDER_NAME_3"
class="symb_item" value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_SERVER_PORT_3" class="symb_item"
value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_REGISTRAR_PORT_3"
class="symb_item" value="0x13c4"/>
```

```
    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_USE_STUN_3" class="symb_item"
value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_STUN_SERVER_PORT_3" class="symb_item"
value="0xd96"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucI_OUTBOUND_PROXY_MODE_3"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_OUTBOUND_PROXY_3" class="symb_item"
value='"%SBC_ADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_OUTBOUND_PROXY_PORT_3"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_REGISTRATION_TIMER_3"
class="symb_item" value="0xb4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_STUN_TIMER_3" class="symb_item"
value="0xf0"/>

    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_ACCOUNT_IS_ACTIVE_3"
class="symb_item" value="0x%BWLINE-BINARY-3%"/>

<!-- VoIP account 4 -->
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DISPLAYNAME_4" class="symb_item"
value='"%BWFIRSTNAME-4% %BWLASTNAME-4%"'/>
    <SYMB_ITEM ID="BS_IP_Data3.aucS_SIP_LOGIN_ID_4" class="symb_item"
value='"%BWAUTHUSER-4%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PASSWORD_4" class="symb_item"
value='"%BWAUTHPASSWORD-4%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_USER_ID_4" class="symb_item"
value='"%BWLINEPORT-4%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DOMAIN_4" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_SERVER_4" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_REGISTRAR_4" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_STUN_SERVER_4" class="symb_item"
value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PROVIDER_NAME_4"
class="symb_item" value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_SERVER_PORT_4" class="symb_item"
value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_REGISTRAR_PORT_4"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_USE_STUN_4" class="symb_item"
value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_STUN_SERVER_PORT_4" class="symb_item"
value="0xd96"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucI_OUTBOUND_PROXY_MODE_4"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_OUTBOUND_PROXY_4" class="symb_item"
value='"%SBC_ADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_OUTBOUND_PROXY_PORT_4"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_REGISTRATION_TIMER_4"
class="symb_item" value="0xb4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_STUN_TIMER_4" class="symb_item"
value="0xf0"/>

    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_ACCOUNT_IS_ACTIVE_4"
class="symb_item" value="0x%BWLINE-BINARY-4%"/>

<!-- VoIP account 5 -->
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DISPLAYNAME_5" class="symb_item"
value='"%BWFIRSTNAME-5% %BWLASTNAME-5%"'/>
```

```
    <SYMB_ITEM ID="BS_IP_Data3.aucS_SIP_LOGIN_ID_5" class="symb_item"
value='"%BWAUTHUSER-5%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PASSWORD_5" class="symb_item"
value='"%BWAUTHPASSWORD-5%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_USER_ID_5" class="symb_item"
value='"%BWLINEPORT-5%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DOMAIN_5" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_SERVER_5" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_REGISTRAR_5" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_STUN_SERVER_5" class="symb_item"
value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PROVIDER_NAME_5"
class="symb_item" value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_SERVER_PORT_5" class="symb_item"
value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_REGISTRAR_PORT_5"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_USE_STUN_5" class="symb_item"
value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_STUN_SERVER_PORT_5" class="symb_item"
value="0xd96"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucI_OUTBOUND_PROXY_MODE_5"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_OUTBOUND_PROXY_5" class="symb_item"
value='"%SBC_ADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_OUTBOUND_PROXY_PORT_5"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_REGISTRATION_TIMER_5"
class="symb_item" value="0xb4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_STUN_TIMER_5" class="symb_item"
value="0xf0"/>

    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_ACCOUNT_IS_ACTIVE_5"
class="symb_item" value="0x%BWLINE-BINARY-5%"/>

<!-- VoIP account 6 -->
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DISPLAYNAME_6" class="symb_item"
value='"%BWFIRSTNAME-6% %BWLASTNAME-6%"'/>
    <SYMB_ITEM ID="BS_IP_Data3.aucS_SIP_LOGIN_ID_6" class="symb_item"
value='"%BWAUTHUSER-6%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PASSWORD_6" class="symb_item"
value='"%BWAUTHPASSWORD-6%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_USER_ID_6" class="symb_item"
value='"%BWLINEPORT-6%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DOMAIN_6" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_SERVER_6" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_REGISTRAR_6" class="symb_item"
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_STUN_SERVER_6" class="symb_item"
value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_PROVIDER_NAME_6"
class="symb_item" value='""'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_SERVER_PORT_6" class="symb_item"
value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_SIP_REGISTRAR_PORT_6"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_USE_STUN_6" class="symb_item"
value="0x0"/>
```

```
    <SYMB_ITEM ID="BS_IP_Data1.uiI_STUN_SERVER_PORT_6" class="symb_item"
value="0xd96"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucI_OUTBOUND_PROXY_MODE_6"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_OUTBOUND_PROXY_6" class="symb_item"
value='"%SBC_ADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_OUTBOUND_PROXY_PORT_6"
class="symb_item" value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_REGISTRATION_TIMER_6"
class="symb_item" value="0xb4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_RE_STUN_TIMER_6" class="symb_item"
value="0xf0"/>

    <SYMB_ITEM ID="BS_IP_Data1.ucB_SIP_ACCOUNT_IS_ACTIVE_6"
class="symb_item" value="0x%BWLINE-BINARY-6%"/>

    <SYMB_ITEM ID="BS_Accounts.astAccounts[0].uiSendMask"
class="symb_item" value="0x1"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[0].uiReceiveMask"
class="symb_item" value="0x1"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[0].ucState" class="symb_item"
value="0x1"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[1].uiSendMask"
class="symb_item" value="0x2"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[1].uiReceiveMask"
class="symb_item" value="0x2"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[1].ucState" class="symb_item"
value="0x1"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[2].uiSendMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[2].uiReceiveMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[2].ucState" class="symb_item"
value="0x1"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[3].uiSendMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[3].uiReceiveMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[3].ucState" class="symb_item"
value="0x1"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[4].uiSendMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[4].uiReceiveMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[4].ucState" class="symb_item"
value="0x1"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[5].uiSendMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[5].uiReceiveMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[5].ucState" class="symb_item"
value="0x1"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[6].uiSendMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[6].uiReceiveMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[6].ucState" class="symb_item"
value="0x1"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[7].uiSendMask"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_Accounts.astAccounts[7].uiReceiveMask"
class="symb_item" value="0x0"/>
```

```
    <SYMB_ITEM ID="BS_Accounts.astAccounts[7].ucState" class="symb_item"
value="0x1"/>

    <SYMB_ITEM ID="BS_IP_Data.ucB_AUTO_UPDATE_PROFILE" class="symb_item"
value="0x1"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucB_DO_CHECK_FOR_PROFILE_UPDATES"
class="symb_item" value="0x1"/>
    <SYMB_ITEM ID="BS_IP_Data3.ucI_ONESHOT_PROVISIONING_MODE_1"
class="symb_item" value="0x1"/>
    <SYMB_ITEM ID="BS_IP_Data3.ucI_ONESHOT_PROVISIONING_MODE_2"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data3.ucI_ONESHOT_PROVISIONING_MODE_3"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data3.ucI_ONESHOT_PROVISIONING_MODE_4"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data3.ucI_ONESHOT_PROVISIONING_MODE_5"
class="symb_item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data3.ucI_ONESHOT_PROVISIONING_MODE_6"
class="symb_item" value="0x0"/>

    <SYMB_ITEM ID="BS_IP_Data1.ucI_HTTPLANGUAGE" class="symb_item"
value="%BWLANGUAGE-1%"/>
    <SYMB_ITEM ID="BS_IP_Data1.uiI_TIME_TIMEZONE" class="symb_item"
value="%BWTIMEZONE-1%"/>

    <SYMB_ITEM ID="BS_IP_Data1.aucS_SPECIAL_DATA_SRV[0]"
class="symb_item" value='"%FirmwareUrl%"'/>

  </Provider>
</ProviderFrame>
```

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