

broadsoft broadworks

BroadSoft Partner Configuration Guide

Gigaset Single Cell IP DECT Phones

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BroadWorks[®] Guide

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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 mediumsized 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 Waiting	Yes	
Call Control Services	Call Hold	Yes	
	Call Transfer	Yes	Except Blind Transfer.
	Three-Way Calling	Yes	Except Before Answer.
	Network-Based Conference	No	
	Register Authentication	Yes	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	Test Plan Package Items	Supported	Comments
DUT Services –	Maximum Registration	Yes	
Authentication	Minimum Registration	Yes	
	Invite Authentication	Yes	
	Re-Invite/Update Authentication	Yes	
	Refer Authentication	Yes	
	Device Authenticating BroadWorks	No	
DUT Services –	Emergency Call	No	
Emergency Call	Emergency Call with Ringback	No	
DUT Services –	Do Not Disturb	No	
Miscellaneous	Call Forwarding Always	Yes	
	Call Forwarding Always Diversion Inhibitor	No	
	Anonymous Call	No	
	Anonymous Call Block	No	
	Remote Restart Via Notify	No	
Advanced Phone	Busy Lamp Field	No	
Field	Call Park Notification	No	
Advanced Phone	Do Not Disturb	No	
Services – Feature Key Synchronization,	Do Not Disturb Ring Splash	No	
Private Line	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	Do Not Disturb	No	
Key Synchronization,	Do Not Disturb Ring Splash	No	
Shared Line	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	Line-Seize	No	
Appearance using Call	Call-Info/Lamp Management	No	
Info	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	Hold Reminder	No	
Services – Call Center	Call Information	No	
	Hoteling Event	No	
	Status Event	No	
	Disposition Code	No	
	Emergency Escalation	No	
	Customer Originated Trace	No	
Advanced Phone	Pause/Resume	No	
Services – Call Recording Controls	Start/Stop	No	
	Record Local Conference	No	
	Record Network Conference	No	
Advanced Phone	Basic Call	No	
Services – Call Recording Video	Record Local Conference	No	
	Record Network Conference	No	
Advanced Phone Services – Security Classification	Security Classification	No	
Advanced Phone	Network-Based Conference Creator	No	
Services – Conference Event	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 –	Register Failover/Failback	Yes	
Failover/Failback	Invite Failover/Failback	No	Takes 32 seconds.
Video – Basic Video	Call Origination	No	
Calls	Call Termination	No	
	Call Hold	No	
	Call Waiting	No	
	Call Transfer	No	
Video – BroadWorks	Auto Attendant	No	
Video Services	Auto Attendant – HD	No	
	Voice Messaging	No	
	Voice Messaging – HD	No	
	Custom Ringback	No	
Video – BroadWorks	Network-based Conference	No	
Video Conference	Network-based Conference – HD	No	
	Collaborate – Video	No	
	Collaborate – Video – HD	No	
ТСР	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.

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	Remote Office	No		
Configuration	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	

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

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



ж	Apply	Delete	Export	Cancel
	ldent S	ity/Device Profil ionaling Addres	e Type: Gigaset- s Type: Intelliger	DECT at Provy Addressing
	-	-g	Obsolete	2
-Stand	lard Options ——			
Numb	er of Ports:	(Unlimited	Limited To
Ringo	ack Tone/Early M	edia Support: (RTP - Session	
			ORIP - Early Se	255ion
	۵	uthentication: (i	Cocal Ringbac	k - No Early Media
		(Disabled	
			Enabled With V	Nah Portal Cradentials
	Hold N	vormalization: (Unspecified Ar	Idress
		Č	Inactive	
		(RFC3264	
V F	Registration Capal	ble 🔽 A	uthenticate REFI	ER
	Static Registration	Capable 🗌 V	ideo Capable	
	E164 Capable	· _ u	lse History Info H	leader
	rusted			
-Advar	nced Options			
R	oute Advance			Forwarding Override
v	/ireless Integration	1		Conference Device
D P	BX Integration			Mobility Manager Device
🗌 A	dd P-Called-Party	-ID		Music On Hold Device
A	uto Configuration	Soft Client		Requires BroadWorks Digit Collection
🗌 R	equires BroadWo	rks Call Waiting	Tone	Requires MWI Subscription
🗆 A	dvice of Charge C	apable		Support Call Center MIME Type
🗌 S	upport Emergency	y Disconnect Co	ontrol	Support Identity In UPDATE and Re-INV
🗌 E	nable Monitoring			Support RFC 3398
S	tatic Line/Port Ord	dering		Support Client Session Info
	upport Call Info C	onference Subs	cription URI	Support Remote Party Info
U S	upport Visual Dev	ice Managemer	nt	Bypass Media Treatment
L s	upport Cause Par	ameter		
	Reset	Event: 🔘 reSy	nc 🖲 checkSync	Not Supported
	Trunk	Mode: 🖲 User	Pilot O Prox	У
Hold	Announcement M	ethod: 🖲 Inact	ive 🔿 Bandwidth	n Attributes
Une	creened Presenta	tion Identity Pol	icv: () Profile D	recentation Months
2				ned Presentation Identity
				ned Presentation Identity With Drofile Damain
			- Onscree	neo rresentation identity with Profile Domain

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 <i>siu_444.bin</i> 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<br="">ID="BS_IP_Data1.ucB_USE_DHCP" class="symb_item" value="0x1"/></symb>	Enable or disable to retrieve the address from a DHCP server. DHCP enabled (Default) = 0x1 Static IP = 0x0
Step 2	<pre>Set the IP address. <symb_item class="symb_item" id="BS_IP_Data1.ull_IP" value="0xc0a80202"></symb_item></pre>	This is the IPv4 address in hexadecimal format. Example: $192.168.2.2 \rightarrow 0xC0A80202$ 192(C0)168(A8)2(02)2(02)
Step 3	Set the subnet mask. <symb_item ID="BS_IP_Data1.ull_SUBNET_MAS K" class="symb item" value="0xffffff00"/></symb_item 	This is the IPv4 address in hexadecimal format. Example: 255.255.255.0 → 0xFFFFF00 255(FF)255(FF)255(FF)0(00)
Step 4	Set the standard gateway. <symb item<br="">ID="BS_IP_Data1.ull_DEFAULT_RO UTER" class="symb_item" value="0xC0A80201"/></symb>	This is the IPv4 address in hexadecimal format. Example: $192.168.2.1 \rightarrow 0xC0A80201$ $192(C0)168(A8)2(02)1(01)$
Step 5	Set the preferred DNS server. <symb_item ID="BS_IP_Data1.ull_DNS_SERVER _1" class="symb_item" value="0xC0A802FD"/></symb_item 	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.ull DNS SERVER _2" class="symb_item" value="0xC0A802FE"/></symb_item 	This is the IPv4 address in hexadecimal format. Example: $192.168.2.1 \rightarrow 0xC0A802FE$ 192(C0)168(A8)2(02)254(FE)
Step 7	Allow access from other networks. <symb_item ID="BS_IP_Data1.ucB_ACCEPT_FOR EIGN_SUBNET" class="symb_item" value="0x0"/></symb_item 	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. <syme_item ID="BS IP Data3.aucS NETWORK D EVICENAME[0]" class="symb_item" value='"N510 IP PRO"'/></syme_item 	This is the <i>Device Name</i> in the <i>Network</i> field, maximum 20 characters (0-9, a-z, A-Z). The phone can be addressed with this name in the local network.



Sten	Command	Description
Step 9	Set the HTTP proxy. <symb_item ID="BS IP Data3.ucB HTTP PROXY _ENABLED" class="symb_item" value="0x0"/></symb_item 	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"'/></symb_item 	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"/></symb_item 	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"/></symb_item 	Enable or disable VLAN tagging. VLAN disabled (Default) = 0x0 VLAN enabled = 0x1
Step 13	Set the VLAN ID. <symb item<br="">ID="BS_IP_Data1.uiI_VLAN_ID" class="symb item" value="0x0"/></symb>	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"/></symb_item 	Enter the VLAN priority. The numbers range from 0 through 7 (3-bit values).



Browse to Settings \rightarrow Network \rightarrow IP Configuration.

Gigaset	N510 IP PRO		
Home	Settings	Status	Log off
Network		Address Assignment	?
		IP address type:	Obtained automatically
Security			192 168 178 029
Telephony			255 255 255 000
Messaging			
Directories			192 . 168 . 178 . 001
Management			192 . 168 . 178 . 001
			Hide advanced settings
		D	
	,	networks:	● Yes O No
			Activating this parameter increases the risk of unauthorized access to your device settings.
	D	evice name in network:	N510-7C2F8030D21E
		HTTP Proxy	·
		Enable proxy:	• Yes O No
		Proxy server address:	
		Proxy server port:	
		VLAN Tagging	
			You should receive the tagging values of the virtual LAN (VLAN) from your provider. Wrong settings will require hardware reset.
		Use VLAN tagging:	• Yes • No
		VLAN identifier:	
		VLAN priority:	
			Set Cancel

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_ACCOU NT NAME N (N=1-6)" class="symb item" value='"Account1"'/></symb_item 	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"'/></symb_item 	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 <br="" class="symb_item" id="
BS_IP_Datal.aucS_SIP_PASSWORD_
N (N=2-6)">value='"Password"'/></symb_item>	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 <br="" class="symb item" id="
BS_IP_Datal.aucS_SIP_USER_ID_N
(N=2-6)">value='"Username"'/></symb_item>	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 DISPL AYNAME_N (N=2-6)" class="symb item" value='"Display Name"'/></symb_item 	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 DOMAI N_N (N=2-6)" class="symb_item" value='"provider.com"/></symb_item 	Specify the last part of the SIP address (URI), for example, for the SIP address "987654321@provider.com", enter "provider.com" under <i>Domain</i> .
Step 7	Set the proxy server address <symb item<br="">ID="BS_IP_Data1.aucS_SIP_SERVE R_N (N=2-6)" class="symb_item" value='"myprovider.com"'7></symb>	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	<pre>Set the proxy server port. <symb class="symb_item" id="BS_IP_Data1.uiI_SIP_SERVER PORT N (N=2-6)" item="" value='"5060"'></symb></pre>	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	<pre>Set the registration server. <symb class="symb_item" id="BS_IP_Data1.aucS_SIP_REGIS TRAR_N (N=2-6)" item="" value='"reg.myprovider.com"'></symb></pre>	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 <br="" id="
BS_IP_Data1.uiI_SIP_REGISTRAR_
PORT_N (N=2-6)" item="">class="symb_item" value='"5060"'/></symb>	Enter the communication port used on the registrar. Port 5060 is used in most cases.
Step 11	<pre>Set the registration refresh time. <symb_item class="symb_item" id="BS_IP_Data1.uiI_RE_REGISTR ATION_TIMER_N (N=2-6)" value='"180"'></symb_item></pre>	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	<pre>Set STUN. <symb_item class="symb item" id="BS IP Data1.ucB SIP USE ST UN_N (N=2-6)" value="0x0"></symb_item></pre>	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	<pre>Set the STUN server address. <symb class="symb_item" id="BS_IP_Datal.aucS_STUN_SERV ER N (N=2-6)" item="" value='""'></symb></pre>	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	<pre>Set the STUN server port. <symb class="symb_item" id="BS_IP_Data1.uiI_STUN_SERVE R PORT N (N=2-6)" item="" value='"3478"'></symb></pre>	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_TI MER_N (N=2-6)" class="symb_item" value='"240"'/></symb_item 	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	<pre>Set NAT refresh time <symb_item class="symb item" id="BS IP Data1.uiI NAT REFRES H_TIME_N (N=2-6)" value="0x14"></symb_item></pre>	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	<pre>Set the outbound proxy mode. <symb_item class="symb_item" id="BS IP Data1.ucI OUTBOUND P ROXY_MODE_N (N=2-6)" value="0x1"></symb_item></pre>	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='""'/></symb_item 	Enter the DNS name (fully qualified domain name) or the IP address of your provider's outbound proxy.
Step 19	<pre>Set the outbound proxy port. <symb class="symb_item" id="BS_IP_Data1.uil_OUTBOUND_P ROXY_PORT_N (N=2-6)" item="" value='"5060"'></symb></pre>	Enter the number of the communication port used by the outbound proxy. The default port is "5060".



Step	Command	Description
Step 20	<pre>Set the network protocol. <symb_item class="symb item" id="BS IP Datal.ucI SIP PREFER RED_TRANSPORT_LAYER_N (N=2-6)" value="0x0"></symb_item></pre>	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	<pre>Enable the SIP account. <symb class="symb_item" id="BS_IP_Datal.ucB_SIP_ACCOUN T_IS_ACTIVE_N (N=1-6)" item="" value="0x1"></symb></pre>	



		-
Gigaset N510 IP	PRO	
Home	Settings Status	Log off
Network	1. IP Connection	?
Telephony Connections		Assign a connection name or actual phone number for identification.
Audio Number Assignment	Connection name or number:	IP1
Call Divert	VolP Configuration / Profile Download	
Network mailboxes		Start Configuration Assistant
Advanced VoIP Settings	Provider:	Other provider
Messaging	Profile version	
Info Services	Personal Provider Data	
Management	Authentication name:	
	Authentication password:	
	Username:	
	Display name:	
		Hide advanced settings
	General Data of your Service Provider	
	Domain:	
	Proxy server address:	
	Proxy server port:	5000
	Registration server:	
	Registration server port:	5080
	Registration refresh time:	180 sec
	Network Data of your Service Provider	
	STUN enabled:	• Yes O No
	STUN server address:	
	STUN server port:	3478
	STUN refresh time:	240 sec
	NAT refresh time:	20 sec
	Outbound proxy mode:	Always O Automatic Never
	Outbound server address:	
	Outbound proxy port:	5080
	Select Network Protocol	Automatic •
		Set Cancel Delete connection

Browse to Settings \rightarrow Telephony \rightarrow 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 MO DE_AUTO" class="symb_item" value="0x1"/></symb_item 	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	<pre>Set the DTMF type. <symb class="symb item" id="BS_IP_Datal.ucI_DTMF_TX_MO DE BITS" item="" value="0x1"></symb></pre>	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	<pre>Set transfer call by on-hook. <symb_item class="symb_item" id="BS CUSTOM ORG.bit.bEct" value="0x1"></symb_item></pre>	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 \rightarrow Telephony \rightarrow Advanced VoIP Settings.

Gigaset _"	1510 IP PRO			
Home	Settings	Status		Log of
Network Telephony Connections Audio	Auto	DTMF over VolP Connections malic negoliation of DTMF transmission	O Yes ● No	?
Number Assignmen Call Divert Dialling Plans Network mailboxes Advanced VolP Set Messaging	Use the ings Trans	Call Transfer R key to initiate call transfer. fer call by on-hook:	wmen uang u / 22 Odecs (wideband connection), U Mer signals cannot be transmitted over audio. ○ Yes ● No ○ Yes ● No	

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='""'/></symb_item 	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<br="">ID="BS_IP_Data1.ucB_VOIP_NET_A M ENABLED 1" class="symb item" value="0x0"/></symb>	You can enable or disable individual network mailboxes. Enable MWI = 0x1 Disable = 0x0

Browse to Settings \rightarrow Telephony \rightarrow Network mailboxes.

Gigaset	N510 IP PRO					
Home	Settings	Status				Log off
Network	,	letwork mailboxes				?
Telephony			Connection	Call number	Active	
Connections			IP1		•	
Audio						
Number Assignmen						
Call Divert						
Dialling Plans						
Network mailboxes	5					

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	<pre>Set the MWI network mailboxes. <symb class="symb_item" id=" BS AE Subscriber.stMWI[N].bSho wMissedNetAM (N=0-5)" item="" value="0x1"></symb></pre>	For each handset, you can individually set for which type of new messages the LED should flash.

Gigaset _"	1510 IP PRO					
Home	Settings	Status				Log off
Network Telephony Messaging Email Message NotMicnik Info Services Directories Management	You car Me In	i customize the m ssage Waiting dication (MWI) INT 1	essage no You can the follov Missed c Missed a Email	tification on your h enable or disable t wing message type calls alarms	andsets. he flashing MWI LED in the message key on your handsets for S D D D D D	?
		INT 2	Network Missed o Missed a Email Network	mailboxes calls alarms mailboxes	2 2 2	
	Misso	ed Calls Count IP1	O Yes	• No Set	Cancel	

Browse to Settings \rightarrow Messaging \rightarrow Message Notification.

Figure 6 Gigaset IP DECT – Message Notification

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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	<pre>Set the language of the web interface. <symb_item class="symb item" id="BS_IP_Datal.uci_HTTPLANGUA GE" value="0x1"></symb_item></pre>	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.

Gigaset N510 IP PRO		
, n	Welcome	
	You can use this interface to administer your device. For your security, the configuration program is protected with the system PIN.	
	Please choose your language for menus and dialogs. English •	
ſ	Please enter your system PIN:	

Figure 7 Gigaset IP DECT - Welcome Page

1) Set the local settings.

Step	Command	Description
Step 1	<pre>Select the country. <symb class="symb_item" id="BS_IP_Data1.ucI_DIALING_PL AN COUNTRY ID" item="" value="0x19"></symb></pre>	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	<pre>Set the tone selection. <symb_item class="symb_item" id="BS_AE_SwConfig.ucCountryCo deTone" value="12"></symb_item></pre>	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 <i>Tone Selection</i> is automatically assigned according to the country selected in the previous step. However, you can change this setting. From the <i>Tone Selection</i> list, select the country or region to be used for your phone. International = 0, NL = 9, UK = 8, DE = 12, FR = 7



Home Settin	ngs Status	
work phony	Select Country	The international country code will be initialized when the country is selected
saging Services	Country:	Germany
ctories	Area Codes	
nagement ate and Time	International:	Prefix 00 Area code 49
	Local:	Prefix 0 Area code
iscellaneous eboot & Reset	Use Area Code Numbers for Calls via VolP:	
ave and Restore	Local	• Yes • No
rmware Update		🛡 Yes 🔍 No
	Tone Selection	
	Tone scheme:	International v

Browse to Settings \rightarrow Management \rightarrow Local Settings.

Figure 8 Gigaset IP DECT - Local Settings

1) Set the date and time.

Step	Command	Description
Step 1	<pre>Set the time server. <symb class="symb_item" id="BS_IP_Data1.aucS_TIME_NTP_ SERVER[0]" item="" value='"europe.pool.ntp.org"'></symb></pre>	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 TIMEZ ONE" class="symb_item" value="0x1b"/></symb_item 	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_A UTOMATIC_DST" class="symb_item" value="0x1"/></symb_item 	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 \rightarrow Management \rightarrow Date and Time.



Gıgaset	N510 IP PRO			
Home	Settings	Status		Log off
Network Telephony Messaging Info Services Directories Management Date and Time Local Settings Miscellaneous Reboot & Reset Save and Restore Firmware Update	Autor system tin Last sy Autors for daylig	Date and Time natic adjustment of with the server. Inchronization with time server. Time server. Time server. Iteratily adjust clock It saving changes:	O Yes ● No 09 09 2016 08 35 europe pool ntp org (GMT+01.00) Amsterdam, Berlin, Bern, Ror ♥ O Yes ● No	?

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='""'/></symb_item 	Remove the proxy server port settings by configuring an empty field.
Step 2	Set the registration server port. <symb_item <br="" id="
BS IP Data1.uiI SIP REGISTRAR
PORT N (N=2-6)">class="symb_item" value='""'/></symb_item>	Remove the registration server port settings by configuring an empty field.
Step 3	Set the outbound proxy port. <symb item<br="">ID="BS_IP_Data1.uiI_OUTBOUND_P ROXY_PORT_N (N=2-6)" class="symb_item" value='""'/></symb>	Remove the outbound proxy port settings by configuring an empty field.

Browse to Settings \rightarrow Management – Date and Time.



Gigaset ∗	510 IP PRO			
Home	Sett	ings Status		Log off
Network Telephony		2. IP Connection	Assign a connection name or actual phone number identification.	lor
Audio		Connection name or number	IP2	
Number Assignment Call Divert Dialling Plans Network mailboxes		VoIP Configuration Profile Download	Start Configuration Assistant	
Advanced VoIP Setting	gs	Provider	Other provider	
Messaging		Profile version		
Info Services		Personal Provider Data		
Management		Authentication name		
		Authentication password		
		Username		
		Display name		
			Hide advanced settings	
		General Data of you		
		Service Provide		To make use of SIP server
		Domain		redundancy there should
		Proxy server address		be no port numbers
		Proxy server port		configured. Fields must
		Registration server.		be empty.
		Registration server port		
		Registration refresh time	180 sec	
		Network Data of your Service Provider		
		STUN enabled	• Yes O No	
		STUN server address		
		STUN server port	3478	
		STUN refresh time	240 sec	
		NAT refresh time.	20 sec	
		Outbound proxy mode	● Always ○ Ar _ dc ● Never	
		Outbound server address		
		Outbound proxy port		

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.

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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	Dovico Managomont	Intereperability	/ Toot Dian	Support Table
DIGauvoiks	Device management	interoperability	יופסנ רומוו	Support rable



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	Register with Authentication	Yes	
Sanity rests	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	Provision via DHCP Options Field	No	
Provisioning	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 Giaaset
			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].

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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 \rightarrow Resources \rightarrow 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

Device Management Tag Sets Modify					
OK	OK Apply Add Cancel				
Tag Se	Tag Set: System Default				
Delete	Tag Name	Tag Value	Edit		
	%APPLICATION_DOMAIN%	as.iop1.broadworks.net	<u>Edit</u>		
	%DNS_SERVER_1%	199.19.193.13	<u>Edit</u>		
	%DNS_SERVER_2%	199.19.193.29	<u>Edit</u>		
	%DNS_SERVER%	199.19.193.12	<u>Edit</u>		
	%KWS300_XSP_PATH%	http://xsp.broadsoft.com/dms/kws300	Edit		
	%OUTBOUNDPROXYADDRESS%	199.19.193.9	Edit		
	%OUTBOUNDPROXYPORT%	5060	Edit		
	%OUTBOUNDPROXYTRANSPORT%	UDP	Edit		
	%SBC_ADDRESS%	sbc1.iop2.broadworks.net	<u>Edit</u>		
	%SBC_PORT%	5060	Edit		
	%SIP_TRANSPORT%	0	Edit		
	%SNTP_SERVER_1%	time-a.nist.gov	Edit		
	%SNTP_SERVER_2%	time-b.nist.gov	Edit		
	%SNTP_SERVER%	time-b.nist.gov	Edit		
	%SNTP_SERVERIP%	192.5.41.41	Edit		
	%USE_SBC_BOOLEAN%	1	Edit		
	%XSP_ADDRESS_XSI_ACTIONS%	xsp1.iop1.broadworks.net	Edit		
	%XSP_ADDRESS%	xsp1.iop1.broadworks.net	Edit		
	[Pag	e 1 of 1]			

Figure 11 System Default Tag Settings

5.2.1.2 Create Device Type-Specific Tags

Browse to System \rightarrow Resources \rightarrow 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

Device Management Tag Sets Modify Display all the device management tags defined in the tag set. Tags can be added to the set or deleted from the set.			
ОК	Apply	Add Cancel	
* Tag Se	et Name: Gigaset-E	ECT-Tags	
Delete	Tag Name 🔺	Tag Value	
	%FirmwareUrl%	http://xsp1.iop2.broadworks.net/dms/Gigaset-DECT/merkur239_42.bin	
		[Page 1 of 1]	
Tag I	Name 🗸	Starts With 🗸	
ОК	Apply	Add Cancel	

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 <u>xchange.broadsoft.com</u>. 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 \rightarrow Resources \rightarrow 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.

Device Configuration Options: O Not Supported O Device Management O Legacy			
Device Management			
Device Type URL: htt	tp://xsp1.iop1.broadworks.net:80/dms/Gigaset-DECT/		
	No Tags		
Device Configuration Tags:	Use Default System Tag Set Only		
	Use Default System Tag Set and Tag Set: Gigaset Tags		
✓ Al	low Identity/Device Profiles to Configure Custom Tags		
✓ All	low Groups to Configure Custom Tags		
Se	end Email Notification to User upon Device Reset Failure		
Device Access Protocol: h	ittp 🔻		
Device Access FQDN: xs	sp1.iop1.broadworks.net		
Device Access Port: 80	0		
Device Access Context Name: dr	ms		
Device Access URI: G	igaset-DECT/		
Default Device Language:			
Default Device Encoding:			
Authentication Mode: 📃 MAC-B	lased 🧧 User Name and Password		
Device Access Userna	ame:		
Device Access Passw	vord:		
Re-type Device Access Passw	vord:		
MAC Address	s In: HTTP Request URI		
	O HTTP Header		
	Olient Certificate		
MAC Address For	mat:		
Device Access HTTP Authentica	ition:		

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 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 \rightarrow Resources \rightarrow 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 <u>xchange.broadsoft.com</u>. 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 \rightarrow Resources \rightarrow Identity/Device Profile Types \rightarrow 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.

Device Access File %8 WMACADDRESS%.xml Repository File Kith //xsp1.lop1 throadworks.net.80/dms/Gigaset-DECT/%25BWMACADDRESS%25).xml Access File /htp://xsp1.lop1 throadworks.net.80/dms/Gigaset-DECT/%25BWMACADDRESS%25).xml Access File /htp://xsp1.lop1 throadworks.net.80/dms/Gigaset-DECT/%25BWMACADDRESS%25).xml Access File /beite / file Combad File Category:	ОК А	pply Delete	Cancel
Device Access File Provider Provi			
Repository File Format: http://xsp1iop1 broadworks net 80/dms/Gigaset-DECT/(%258/WMACADDRESS%25).xml Access File Note: this URL has undefined content. Validate it manually by replacing any content between () with valid value(s). Repository File: Template File: Download File Customization: (Administrator and User • A Access File Allow Upload from Device Extended File Capture Default Extended File Capture Default Extended File Capture Default Extended File Capture Manual Custom Upload File: Choose File No file chosen Currently using configuration file:/var/broadworks/lpDeviceConfig/type/Gigaset-DECT/%BWMACADDRES \$%.xml.template {?providerFrame: Xml: This // Xml: Xml: Simplate File (ProviderFrame: Xml: This // Xml: Xml: Simplate Xml: Simplate File (ProviderFrame: Xml: This // Xml: Xml: Simplate X	Device Access For	File %BWMACADDRES	SS%.xml
Access File Mar. The Second Se	Repository	File %BWFQDEVICEID	D%.xml
Repository File: Template File: Download File Category: Static Dynamic Per-Type © Dynamic Per-Device File Category: Static Dynamic Per-Type © Dynamic Per-Device File Category: Allow Upload from Device Extended File Capture Default Extended File Capture Mode Enable for All File Instances Disable for All File Instances Assign File Manual © Custom Upload File: Chrone File No file chosen Currently using configuration file:/var/broadworks/lpDeviceConfig/type/Gigaset-DECT/%BWMACADDRESS%.xml.template (?>ml version="1.0" encoding="150-8859-1"> (ProviderFrame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi::nollamespaceSchemaLocation="W510.xsd"> (ProviderPame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" (ProviderPame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" (ProviderPame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" (ProviderPame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" (ProviderPame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" (ProviderPame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" (Store Access Internet to the class="symb_item" (Internet to the classe streaccore internet to the classe streacces matche	Access	File. http://xsp1.iop1.broa	padworks.net:80/dms/Gigaset-DECT/{%25BWMACADDRESS%25}.xml
Templatë File Download File Calegory: Static Download Ter-Type © Dynamic Per-Device File Customic Administrator and User • Allow Upload from Device Extended File Capture Default Extended File Capture Mode Enable for All File Instances Assign File Manual Custom Upload File: Choose File No file chosen Currently using configuration file:/var/broadworks/lpDeviceConfig/type/Gigaset-DECT/%BWMACADDRESS%.xml.template {?xml version="1.0" encoding="150-8859-1""> (?ml version="1.0" encoding="150-8859-1""> (?ml version="1.0" encoding="150-8859-1""> (?moviderFrame xnlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="W510.xsd"> (MAC_ADDRESS value="%8WMACADDRESS%"/> (ProviderFrame xnlns:si="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="W510.xsd"> (MAC_ADDRESS value="%8WMACADDRESS%"/> (ProviderFrame xnlns:pip_Data1.aucS_SIP_DISPLAYNAME" class="symb_item" /> File Authentication Authentication Mace: MAC-Based @ User Name and Password MAC Address Format: Device Access FITTP Authentication: Basic @ Digest Allowed Access Protocols: @ http @ https @ tttp	Repository	File:	undefined content. Validate it manually by replacing any content between {} with valid value
File Category: Static Dynamic Per-Type © Dynamic Per-Device File Customization: Administrator and User ▼ Administrator and User ▼ Category: Static Default Extended File Capture Default Extended File Capture Default Extended File Capture Mode Enable for All File Instances Disable for All File Instances Assign File Manual © Custom Upload File: Choose File No file chosen Currently using configuration file:/var/broadworks/lpDeviceConfig/type/Gigaset-DECT/%BWMACADDRE S \$%.xml.template (?xml version="1.0" encoding="ISO-8859-1"?> (ProviderFrame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="NSI0.xsd"> (NAC_ADDRESS value="%BlwMACADDRESS%"/> (ProviderFrame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="NSI0.xsd"> (NAC_ADDRESS value="%BlwMACADDRESS%"/> (PROFILE_INAME class="string" value="GigasetN300N510"/> VoIP account 1 (SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_DISPLAYNAME" class="symb_item" File Authentication Authentication Mode: MAC-Based @ User Name and Password MAC Address Format Device Access HTTP Authentication: Basic @ Digest Allowed Access Protocols: M http @ https @ ttp Device Access Protocols: M http @ https @ ttp	Template	File: Download	
File Customization Additionation and Osive Extended File Capture Default Extended File Capture Mode Enable for All File Instances Disable for All File Instances Disable for All File Instances Disable for All File Instances Assign File Manual © Custom Upload File: Choose File No file chosen Currently using configuration file:/var/broadworks/lpDeviceConfig/type/Gigaset-DECT/%BWMACADDRESS%.xml.template (?xml version="1.0" encoding="ISO-8859-1"?> (ProviderFrame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="N5I0.xsd"> (ProviderFrame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" (Provider) (Hac_ADDRESS value="%BWMACADDRESS%"/> (PROFILE_NAME class="string" value="GigasetN300N510"/> (1 VoIP account 1> (SYMB_ITEM ID="85_IP_Data1.auc5_SIP_DISPLAYNAME" class="symb_item" File Authentication Authentication Mode: MAC-Address Format: Device Access HTTP Authentication: Basic @ Digest Alowed Access Protocols: @ http @ https @ ttp OK Apple	File Categ	ory: Static Dynan	amic Per-Type Dynamic Per-Device
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		- Extended File Ca	Capture
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Assign File Manual Currently using configuration file:/var/broadworks/lpDeviceConfig/type/Gigaset-DECT/%BWMACADDRESS%.xml.template (?xml version="1.0" encoding="ISO-8859-1"?> (ProviderFrame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNlamespaceSchemaLocation="NSI0.xsd"> (ProviderFrame xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNlamespaceSchemaLocation="NSI0.xsd"> (MaC_ADDRESS value="%BWMACADDRESS%"/> (Provider> (MaC_ADDRESS value="%BWMACADDRESS%"/> (Provider> (I VoIP account 1> (SYMB_ITEM ID="BS_IP_Datal.aucS_SIP_DISPLAYNAME" class="symb_item") File Authentication Authentication Authentication Mode: MAC_Address In: HTTP Request URI (HTTP Header Clent Certificate MAC Address Format Device Access Protocols: Mation Mation Mation Allowed Access Protocols: Mation Mation Authentication: Device Access Protocols: Mation Mation Authentication: Device Access Protocols: Mation		Enable for All	II File Instances Disable for All File Instances
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<pre></pre>	<provid< td=""><td>ier></td><td></td></provid<>	ier>	
<pre></pre>			
<pre><!-- VoIP account 1--></pre>		<profile_n <="" td=""><td>VAILE= %DWHACADDRESS% // VAME class="string" value="GigasetN300N510"/></td></profile_n>	VAILE= %DWHACADDRESS% // VAME class="string" value="GigasetN300N510"/>
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File Authentication Authentication Mode: MAC-Based V User Name and Password MAC Address In: HTTP Request URI HTTP Header Client Certificate MAC Address Format Device Access HTTP Authentication: Basic Digest Allowed Access Protocols: Http Https V ttp	VOI</td <td>SYMB_ITEM_ID="BS_I</td> <td>IP Data1.aucS SIP DISPLAYNAME" class="symb_item"</td>	SYMB_ITEM_ID="BS_I	IP Data1.aucS SIP DISPLAYNAME" class="symb_item"
File Authentication Authentication MAC-Based ♥ User Name and Password MAC Address In: ● HTTP Request URI ● HTTP Header ○ Client Certificate MAC Address Format Device Access HTTP Authentication: ● Basic ● Digest Allowed Access Protocols: ♥ http ♥ https ♥ ttp			
Authentication Mode: MAC-Based V User Name and Password MAC Address In: HTTP Request URI Client Certificate MAC Address Format Device Access HTTP Authentication: Basic Digest Allowed Access Protocols: Http Https Ittp	File Authenticat	on	
MAC Address In: HTTP Request URI HTTP Header Client Certificate MAC Address Format Device Access HTTP Authentication: Basic Digest Allowed Access Protocols: Http: Cancel C	Authentication N	lode: 🗌 MAC-Based 🗷	User Name and Password
Client Certificate MAC Address Format Device Access HTTP Authentication: ○ Basic ● Digest Allowed Access Protocols: ♥ http ♥ https ♥ tftp		ess In: HTTP Reque	Jest URI
MAC Address Format	MAC Add		
Device Access HTTP Authentication: ○ Basic ● Digest Allowed Access Protocols: ♥ http ♥ https ♥ ttp	MAC Add	O HTTP Heade	der inste
Allowed Access Protocols: http://www.comparison.com/access	MAC Addr MAC Address F	O HTTP Heade	der ficate
OK Annha Delate Cancel	MAC Addr MAC Address F Device Access	O HTTP Heade O Client Certific format:	icate
OK Apply Delete Cancel	MAC Addr MAC Address F Device Access Allowed Access	O HTTP Heade O Client Certific Format: HTTP Authentication: Protocols: @ http @	der ficate ● Basic ● Digest https ✔ fftp
	MAC Addr MAC Address F Device Access Allowed Access	Client Certific ormat: HTTP Authentication:	der ficate ◎ Basic ◎ Digest https ✔ tftp

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

BROADSOFT PARTNER CONFIGURATION GUIDE – GIGASET SINGLE CELL IP DECT [©]2017 BROADSOFT INC.



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.

ок	Apply	Delete	Cancel	
De	evice Access File F Repository File F Acces Reposito Templa File Ca File Custom	Format: merkur2: Format: merkur2: ss File: <u>http://xsp</u> ry File: <u>Downloa</u> tegory: © Stati ization: Admini C Enable c	39_42.bin 39_42.bin 11.iop1.broadwo d c Dynamic F strator aching	vrks.net:80/dms/Gigaset-DECT/merkur239_42.bin Per-Type ◯ Dynamic Per-Device ▼
-Assign O) File) Manual) Custom L	Jpload File: Chr	oose File No	file chosen
"ʦ+ ÷> üH Ss: £* ¥•	<pre>i*Merkur] øXú» i*Merkur] øXú» #ñ¦òÇi'âG<wäp× ""f-[ötê8û9cgk="" ";="" 'y,p»áùđjš²'kf="" ibe+kŷû_uc(µĭ;="" jfxšxei̇is*ć="" pre="" rc²öiµtèàsëøÿ¦="" tkhýy§v65h'?&b="" xe%uðñg,å="" ý±'d<=""></wäp×></pre>	t-øk.U"œ %#XbKú,ÃP0·¦ ³loR 1Æ~{IUÉ ïÄäFP‹1Ó÷Ò=Y Vg:D[Ïà. Á.X ¡l"A+öEÍŽ/ø\ :+äÿ>ô3>ÓT&. : à»3ÅÔnŽ6™Åu	t-i€áPŸ [°] WºÑ ñEzé¹zÒ6ó²% ¥äÙ²€äç{:jw W^ØZĭfŻ<1[ª "Ù<4£á "Lô# ï/=´û&°‰O"~ @>ª];]"Ún¥´	3""¥@}nð¿KÉ&´ë",}Í}²ñ^Wú§ÝpÜ`5» ¦ÂXÍ<#XÊYJ@^ÓÚc.¢£uÚc=⊄X(Á+XV- Iø&ŠØÊu-ÍNÔÂĂxÓE7Cf`ùa7ä PÖ@Q,Tc^‰ aC)ÕĨÒ-i: 5fŒ*ûWŽ]jõæå A.VŸ2è?pê'-É(:/•¥zE″qÓ-MðŠW≧"≅ðXໆÝ è,,',\$n7'̶4ÈDh,,%P^Úwn″,õôj•,Ÿ?
– File Au Authen M	thentication tication Mode: IN IAC Address In: I	MAC-Based 📄 HTTP Reques HTTP Header	User Name an t URI	d Password
MAC A Device	ddress Format:	Client Certifica	te Basic ◯ Diges	st

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		

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

Example language mapping:

Identity/	dentity/Device Profile Type Languages ap BroadWorks languages to languages used by the Identity/Device Profile Type.				
ОК	Apply	Cancel			
BroadWorl	ks Language	Device Language			
	Chinese:				
	English:	0x1			
	French:	0x9			
	German:	0x2			
	Hungarain:				
	Italian:	0x7			
	Japanese:				
	Russian:	0x17			
	Spanish:	0x4			
	Swedish:				
ОК	Apply	Cancel			

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.



F	to make a 10-		0	Video Annua
En	iterprise ID:	DemoProductManagementEnt	Group:	Video Group
	User ID:	jmiller@broadsoft.com	Change User ID (Al:	so saves current screen data)
* L	Last Name:	Miller	* First Name:	Jack
* Calling Line ID L	Last Name:	Miller	* Calling Line ID First Name:	Jack
D)epartment:	VVX (Video Group) 💌	Language:	English
	Time Zone:	(GMT) UTC	¥	British
				CALA_Spanish
- Additional Infor	motion			Chinese
Additional Info	mation			French
Title:				German
Pager:			Mobile:	Italian
E-mail:			YahoolD:	Japanese Spain Spanish
Location:				- Spain_Spainsn
Address:				
City:			State/Province: - Select -	V
Zip/Postal Code:			Country:	

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 $\langle group \rangle \rightarrow Resources \rightarrow Identity/Device Profiles page and then select Add to add a new Gigaset DECT device profile. Configure the device profile as shown in the$ *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.



ОК	Apply	Delete	Cancel		
file		Use	rs	Files	Custom
Ide	entity/Device Prot	file Name: N510	Test		
lo	dentity/Device Pro	ofile Type: Gigas	et-DECT		
	Device I	ype URL: http:///	xsp1.lop1.broadworks.	net:80/dms/Gigaset-DECT/	
		Protocol: SIP	2.0 🔻		
	Host Name/IP	Address:		Port:	
		Transport: Unsp	pecified •		
	MAC	Address:			
	Seria	l Number:			
	De	escription:			
	Outbound Prox	ky Server:			
	STU	N Server:			
	Physical	Location:			
	Lir	nes/Ports: 6			
	Assigned Lir	nes/Ports: 2			
	onassigned Ei	Version: C530	IP/42.238.00.000.000		
Auther	ntication				
Us	e Identity/Device	Profile Type Cre	edentials		
• Us	e Custom Creder	ntials	acot		
	* Dovice Access	S Decement	γασει		
	" Device Acces	ss Password.			

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 $\langle user \rangle \rightarrow Addresses$. 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")

Please enter your	system PIN:
••••	ок

Figure 19 Login Screen

Go to the Settings \rightarrow Network \rightarrow 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 \rightarrow Management \rightarrow 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

Gigaset Not	IO IP PRO	
Home	Settings Status	Log off
Network Telephony Messaging Info Services Directories Management Date and Time Local Settings Miscellaneous Reboot & Reset Save and Restore Firmware Update	Firmware Update - Handse Automalic check fo software update Firmware Update - Base Data servet User defined firmware file Configuration file (URL) Automatic check fo software updates	Pres ● No r profile.gigaset.net/device r profile.gigaset.net/device r http://xxx bop1.broadworks.net/dfms/Gigaset r ● Yes ● No On starting the firmware update the device checks if the requirements of a successful firmware download are utilitied. The firmware is then download are utilitied. The firmware is then download are utilitied. The successful update results in the handset / base connection is ligits A successful update results in the handset / e-establishing the base connection. Update firmware Update firmware
	Firmware Downgrade Basi	You can downgrade the firmware to the previous version. Former Version You can downgrade the firmware to the delivery version. All your personal settings will be deleted. Delivery Version Set Cancel

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"</pre>
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"</pre>
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"</pre>
value='""'/>
    <SYMB ITEM ID="BS IP Data1.uiI SIP SERVER PORT" class="symb item"</pre>
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.ucl 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.uil RE REGISTRATION TIMER"
class="symb item" value="0xb4"/>
    <SYMB ITEM ID="BS IP Data1.uil RE STUN TIMER" class="symb item"</pre>
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"</pre>
value='"%BWAUTHUSER-2%"'/>
    <SYMB ITEM ID="BS IP Data1.aucS SIP PASSWORD 2" class="symb item"</pre>
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"</pre>
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"</pre>
value="0x13c4"/>
    <SYMB_ITEM ID="BS_IP_Data1.ui1_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.ucl_OUTBOUND_PROXY_MODE_2"
class="symb item" value="0x0"/>
    <SYMB ITEM ID="BS IP Data1.aucS OUTBOUND PROXY 2" class="symb item"</pre>
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.uil RE REGISTRATION TIMER 2"
class="symb item" value="0xb4"/>
    <SYMB_ITEM ID="BS_IP_Data1.uil_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"</pre>
value='"%BWAUTHUSER-3%"'/>
    <SYMB ITEM ID="BS IP Data1.aucS SIP PASSWORD 3" class="symb item"</pre>
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"</pre>
value='"%BWSERVERADDRESS%"'/>
    <SYMB ITEM ID="BS IP Data1.aucS SIP SERVER 3" class="symb item"</pre>
value='"%BWSERVERADDRESS%"'/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_SIP_REGISTRAR_3" class="symb_item"</pre>
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"</pre>
value="0xd96"/>
    <SYMB_ITEM ID="BS_IP_Data1.ucl_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.uil RE REGISTRATION TIMER 3"
class="symb item" value="0xb4"/>
    <SYMB ITEM ID="BS IP Data1.uil 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"</pre>
value='"%BWAUTHUSER-4%"'/>
    <SYMB ITEM ID="BS IP Data1.aucS SIP PASSWORD 4" class="symb item"</pre>
value='"%BWAUTHPASSWORD-4%"'/>
    <SYMB ITEM ID="BS IP Data1.aucS SIP USER ID 4" class="symb item"</pre>
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"</pre>
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"</pre>
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.ucl 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.uil RE REGISTRATION TIMER 4"
class="symb item" value="0xb4"/>
    <SYMB ITEM ID="BS_IP_Data1.uil_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"</pre>
value="0xd96"/>
    <SYMB ITEM ID="BS IP Data1.ucl OUTBOUND PROXY MODE 5"
class="symb item" value="0x0"/>
    <SYMB_ITEM ID="BS_IP_Data1.aucS_OUTBOUND_PROXY_5" class="symb_item"</pre>
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.uil RE REGISTRATION TIMER 5"
class="symb item" value="0xb4"/>
    <SYMB ITEM ID="BS IP Data1.uil RE STUN TIMER 5" class="symb item"</pre>
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"</pre>
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"</pre>
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.uil SIP SERVER PORT 6" class="symb item"</pre>
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.uil_OUTBOUND_PROXY_PORT_6"
class="symb item" value="0x13c4"/>
    <SYMB ITEM ID="BS IP Data1.uil RE REGISTRATION TIMER 6"
class="symb item" value="0xb4"/>
    <SYMB ITEM ID="BS IP Data1.uil 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"</pre>
class="symb item" value="0x0"/>
    <SYMB ITEM ID="BS Accounts.astAccounts[3].ucState" class="symb item"</pre>
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"</pre>
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"</pre>
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.ucl ONESHOT PROVISIONING MODE 1"
class="symb item" value="0x1"/>
    <SYMB ITEM ID="BS IP Data3.ucl ONESHOT PROVISIONING MODE 2"
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    <SYMB ITEM ID="BS IP Data3.ucl ONESHOT PROVISIONING MODE 3"
class="symb item" value="0x0"/>
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    <SYMB ITEM ID="BS IP Data3.ucl 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"</pre>
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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