



BroadSoft Partner Configuration Guide

Gigaset Maxwell 3 Basic

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BroadWorks® Guide

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Version	Reason for Change
1.1	Introduced document for Gigaset Maxwell 3 and Basic version 2.11.8 validation with BroadWorks Release 22.0.
1.2	Edited and published document.



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1 Overview

This guide describes the configuration procedures required for the Gigaset Maxwell for interoperability with BroadWorks. This models includes:

- Maxwell 3
- Maxwell Basic

The Maxwell Devices are a Desktop phone that uses 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 Maxwell. For those details, see the *Gigaset Communications GmbH Maxwell 3 Guide* [1] supplied by Gigaset.



2 Interoperability Status

This section provides the known interoperability status of the Gigaset Maxwell 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.

2.1 Verified Versions

The following table identifies the verified Gigaset Maxwell 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 Maxwell phone 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.

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	Maxwell-3-Basic Verified Version	Maxwell-3-Basic Compatible Versions
04/2017	Release 22.0	Maxwell 3 and Maxwell Basic: 2.11.8	Any maintenance version of the verified version.

2.2 Interface Capabilities Supported

This section identifies interface capabilities that have been verified through testing as supported by Gigaset Maxwell.

The *Supported* column in the tables in this section identifies the Gigaset Maxwell's 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 Maxwell 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 Maxwell 3 and Gigaset Maxwell Basic.

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	Yes	Only for Outgoing calls.	
	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	Third-Party Call Control – Basic	Yes		
Services	Third-Party Call Control – Advanced	No		
	Voice Message Deposit/Retrieval	Yes		
	Message Waiting Indicator – Unsolicited	Yes		
	Message Waiting Indicator – Solicited	Yes		
	Message Waiting Indicator – Detail	Yes	Except saved and urgent information.	
	Voice Portal Outcall	Yes		
	Advanced Alerting – Ringing	Yes		
	Advanced Alerting – Call Waiting	No		



est Plan Package	Test Plan Package Items	Supported	Comments
	Advanced Alerting – Ring Splash	Yes	
	Advanced Alerting – Silent Alerting	No	
	Calling Line ID	Yes	
	Calling Line ID with Unicode Characters	Yes	
	Connected Line ID	Yes	
	Connected Line ID with Unicode Characters	Yes	
	Connected Line ID on UPDATE	No	
	Connected Line ID on Re-INVITE	Yes	
	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	
	Meet-Me Conferencing – Opus	No	
	Collaborate – Audio	Yes	
	Collaborate – Audio – G722	Yes	
	Collaborate – Audio – Opus	No	
	Call Decline Policy	Yes	
IT Services – II Control Services	Call Waiting	Yes	
ii control services	Call Hold	Yes	
	Call Transfer	Yes	Except Blind Transfer.
	Three-Way Calling	Yes	Except before answer.
	Network-Based Conference	No	
JT Services – egistration and	Register Authentication	Yes	
thentication	Maximum Registration	Yes	
	Minimum Registration	Yes	
	Invite Authentication	Yes	
	Re-Invite/Update Authentication	Yes	
	Refer Authentication	Yes	
	Device Authenticating BroadWorks	No	
JT Services -	Emergency Call	No	
nergency Call	Emergency Call with Ringback	No	
	REGISTER with P-Access-Network- Info Header	No	



Test Plan Package	Test Plan Package Items	Supported	Comments
OUT Services – P- Access-Network-Info Header	INVITE with P-Access-Network-Info Header	No	
DUT Services -	Do Not Disturb	Yes	
Miscellaneous	Call Forwarding Always	No	
	Call Forwarding Always Diversion Inhibitor	No	
	Anonymous Call	No	
	Anonymous Call Block	Yes	
	Remote Restart Via Notify	No	
Advanced Phone Services – Busy Lamp Field	Busy Lamp Field	Yes	Only user busy and user idle display. See section 2.3 Known Issues.
	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	
Services – Feature 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	
	Security Classification	No	
Advanced Phone Services – Missed Calls Display Synchronization	Missed Calls Display Sync	No	
Advanced Phone	Line-Seize	No	
Services - Shared	Call-Info/Lamp Management	No	



Test Plan Package	Test Plan Package Items	Supported	Comments
Call Appearance using Call Info	Public Hold	No	
using can into	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 Services – Call	Pause/Resume	No	
Recording Controls	Start/Stop	No	
	Record Local Conference	No	
	Record Network Conference	No	
Advanced Phone Services – Call	Basic Call	No	
Recording Video	Record Local Conference	No	
	Record Network Conference	No	
Advanced Phone Services – Security Classification	Security Classification	No	
Advanced Phone Services –	Network-Based Conference Creator	No	
Conference Event	Network-Based Conference Participant	No	
	Meet-Me Conference Participant	No	
Redundancy	DNS SRV Lookup	Yes	
	Register Failover/Failback	No	Except Failover which takes 3 seconds. See the 2.3 Known Issues.
	Invite Failover/Failback	No	
	Bye Failover	No	
	Register	Yes	



Test Plan Package	Test Plan Package Items	Supported	Comments
SBC/ALG - Basic	Outgoing Invite	Yes	
	Incoming Invite	Yes	
SBC/ALG – Failover/Failback	Register Failover/Failback	No	Except Failover which takes 3 seconds. See the 2.3 Known Issues.
	Invite Failover/Failback	No	
Video – Basic Video Calls	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 Video Conference	Network-based Conference	No	
video Conierence	Network-based Conference – HD	No	
	Collaborate – Video	No	
	Collaborate – Video – HD	No	
Video – BroadWorks WebRTC Client	Call from WebRTC Client	No	
Webkic Client	Call to WebRTC Client	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	
	Redundancy	No	
	SBC	No	



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

2.2.2 Other Interface Capabilities

The Gigaset Maxwell may have implemented support for the following:

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

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

BroadWorks Xtended Services Interface (Xsi) and BroadCloud IM&P Support Table				
Interface	Feature	Supported	Comments	
Xsi Features – Authentication	Authenticate with SIP Credentials	No		
Authentication	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		
Directories	Enterprise Common Phone List	No		
	Group Directory	No		
	Group Common Phone List	No		
	Personal Phone List	No		
	Search All Directories	No		
Xsi Features –	Placed Calls	No		
Call Logs	Received Calls	No		
	Missed Calls	No		
	All Calls	No		
	Sort by Name	No		



terface	Feature	Supported	Comments
si Features –	View Messages	No	
sual Voice Mail	Listen to Audio Message	No	
	Watch Video Message	No	
	Mark Message Read/Unread	No	
	Delete Message	No	
	Mark All Messages Read/Unread	No	
MPP Features –	Contacts	No	
Contact/Buddy List	Favorites	No	
	Groups	No	
	Non-XMPP Contacts	No	
	Conferences	No	
MPP Features –	Login Invisible	No	
resence	Presence State	No	
	Presence Status	No	

2.3 Known Issues

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

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

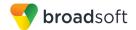
The *Issue Number* is a tracking number for the issue. If it is a Gigaset issue, the issue number is from Gigaset's tracking system. If it is a BroadWorks issue, the issue number is from BroadSoft's tracking system.

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

Issue Number	Issue Description	Part	ner Vei	rsion	
		2.11.8			
	Failover /Failback not supported. DUT makes 10 attempts (to first server) if it does not receive answer from the server, then it switches to secondary server. It takes about 32 seconds for failover. Workaround: None.	X			



Issue Number	Issue Description	Parti	ner Vei	rsion	
		2.11.8			
	SBC Failover /Failback not supported. DUT makes 10 attempts (to first server) if it does not receive answer from the server, then it switches to secondary server. It takes about 32 seconds for failover. Workaround: None.	X			
	BLF Modify Monitored User List not supported. BLF key will not be removed automatically from DUT, but it will not be monitored. BLF key assignment will be still visible after list update. Support for automatic creation of BLF keys feature is planned for next release. Workaround: Remove BLF key manually.	X			



3 BroadWorks Configuration

This section identifies the required BroadWorks device profile type for the Gigaset Maxwell as well as any other unique BroadWorks configuration required for interoperability with the Maxwell phones.

3.1 BroadWorks Device Profile Type Configuration

This section identifies the device profile type settings to use when deploying the Gigaset Maxwell with BroadWorks.

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

The device profile type shown provides the *Number of Ports* (number of SIP lines) setting for Gigaset Maxwell devices.

Model	Number of Lines
Maxwell 3	4
Maxwell Basic	4



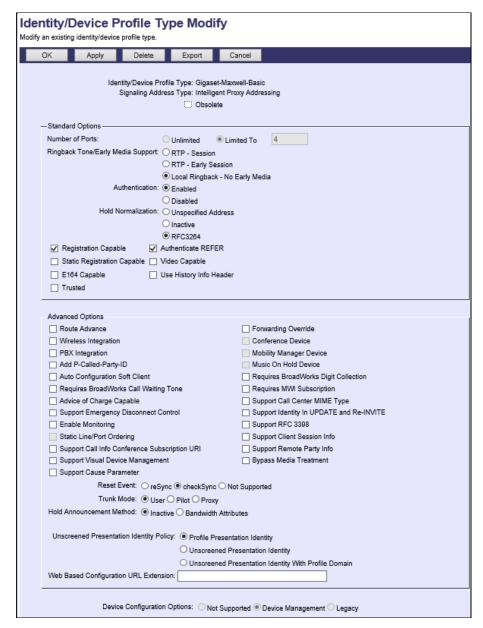


Figure 1 Device Identity/Profile Type

3.2 BroadWorks Configuration Steps

There are no additional BroadWorks configuration steps required.



4 Maxwell Configuration

This section describes the configuration settings required for the Gigaset Maxwell integration with BroadWorks, primarily focusing on the SIP interface configuration. The Maxwell 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 Maxwell 3 Guide* [1] for Gigaset Maxwell devices.

4.1 Configuration Method

The capabilities of the Maxwell 3/Maxwell Basic 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 http://www.gigaset.com/hq en/.

Configuration Files

Maxwell 3/Basic Configuration Files	Level	Description
GC_MAX_"Softwareversion"-release.bin	System	Contains the device firmware load.
MAC.xml Example: 0004f2000fbb.xml	Subscriber	Contains configurable parameters that apply to an individual device in a deployment.

4.2 System Level Configuration

This section describes system-wide configuration items that are generally required for each Gigaset Maxwell 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. <pre><pre><pre><pre><pre><pre>NET.LAN.IP.DHCP.Enabled"</pre> value="1"/></pre></pre></pre></pre></pre>	Enable or disable to retrieve the address from a DHCP server. DHCP enabled (Default) = 1 Static IP = 0
Step 2	Set the IP address. <param name=" NET.IP.IPv4.Address" value="192.168.2.2"/>	This is the IPv4 address in decimal format. Example: 192.168.2.2
Step 3	Set the subnet mask. <param name="NET.IP.IPv4.SubnetMask" value="255.255.255.0"/>	This is the IPv4 address in decimal format. Example: 255.255.255.0
Step 4	Set the standard gateway. <param name=" NET.IP.IPv4.StandardGateway" value="192.168.2.1"/>	This is the IPv4 address in decimal format. Example: 192.168.2.1
Step 5	Set the preferred DNS server. <pre><param name=" NET.IP.IPv4.PreferredDNSServer " value="192.168.2.253"/></pre>	This is the IPv4 address in decimal format. Example: 192.168.2.253



Step	Command	Description
Step 6	Set the alternate DNS server. <pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre>	This is the IPv4 address in decimal format. Example: 192.168.2.1
Step 7	Allow access from other networks. <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	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 = 0 No access (Default) = 1
Step 8	Set the device name in the network. <pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre>	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.
Step 9	<pre>Set the HTTP proxy. <param name="NET.HTTP.ProxyServer.Act ive" value="0"/></pre>	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) = 0 HTTP proxy enabled = 1
Step 10	Set the proxy server address. <pre> <pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>	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. <param name="NET.HTTP.ProxyServer.Por t" value="0"/>	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	<pre>Set VLAN tagging. <pre><pre><pre></pre></pre></pre></pre>	Enable or disable VLAN tagging. VLAN disabled (Default) = 0 VLAN enabled for LAN = 1 VLAN enabled for LAN and PC = 2
Step 13	Set the VLAN ID. <param name="NET.VLAN.LAN.Identifier" value="0"/>	Enter the VLAN identifier. The numbers range from 0 through 4094 (12-bit values).
Step 14	Set the VLAN priority. <param name="NET.VLAN.LAN.Priority" value="0"/>	Enter the VLAN priority. The numbers range from 0 through 7 (3-bit values).
Step 15	Set the VLAN ID. <param name="NET.VLAN.PC.Identifier" value="0"/>	Enter the VLAN identifier. The numbers range from 0 through 4094 (12-bit values).
Step 16	Set the VLAN priority. <pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre>	Enter the VLAN priority. The numbers range from 0 through 7 (3-bit values).



Browse to Settings \rightarrow Network \rightarrow IP.

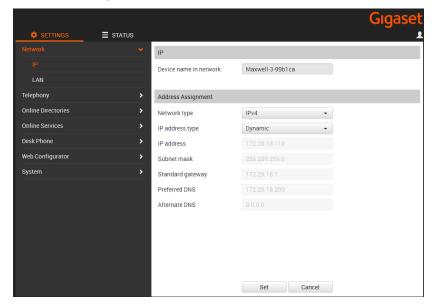


Figure 2 Gigaset Maxwell 3 – IP Configuration

4.2.2 Configure SIP Interface Settings

Step	Command	Description
Step 1	Set connection name or number. <param name="SIP.Account.N.AccountNam e (N=0-3)" value="Account1"/>	Enter a name for the IP account.
Step 2	Set the authentication name. <param name="SIP.Account.N.AuthName (N=0-3)" value="Authentication name"/>	Specify the authentication name agreed with your VoIP provider. The authentication name acts as an access ID when registering with the SIP proxy/registrar server.
Step 3	Set the authentication password. <param class="symb_item" name="SIP.Account.N.AuthPassword (N=0-3)" value="Password"/>	Enter the password that you have agreed with your VoIP provider. The phone requires the password when registering with the SIP proxy/registrar server.
Step 4	Set the user name. <pre><pre><pre><pre><pre><pre>SIP.Account.N.Username (N=0-</pre> 3)" value="Username"/></pre></pre></pre></pre></pre>	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 5	Set the display name. <param name="SIP.Account.N.DisplayNam e (N=0-3)" value="Display Name"/>	Enter the name that is shown on the other caller's display. All characters in the UTF8 character set (Unicode) are permitted.
Step 6	Set the domain. <param name="SIP.Account.N.Domain (N=0-3)" value="provider.com"/>	Specify the last part of the SIP address (URI), for example, for the SIP address "987654321@provider.com", enter "provider.com" under <i>Domain</i> .



Step	Command	Description
Step 7	Set the proxy server address <param name=" SIP.Account.N.ProxyServer.Addr ess (N=0-3)" value="myprovider.com"/>	The SIP proxy is your VoIP provider's gateway server. Enter the IP address or the DNS name (fully qualified domain name) of your SIP proxy server. Example: myprovider.com.
Step 8	Set the proxy server port. <param name="SIP.Account.N.ProxyServer.Port (N=0-3)" value="5060"/>	Enter the number of the communication port that the SIP proxy uses to send and receive signaling data (SIP port). Port 5060 is used by most VoIP providers.
Step 9	Set the registration server. <pre><param name=" SIP.Account.N.RegistrationServ er.Address (N=0-3)" value="reg.myprovider.com"/></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. <param name="SIP.Account.N.RegistrationServer.Port (N=0-3)" value="5060"/>	Enter the communication port used on the registrar. Port 5060 is used in most cases.
Step 11	Set the registration refresh time. <param name="SIP.Account.N.RegistrationServer.RefreshTimer (N=0-3)" value="180"/>	Enter the time interval (in seconds) whereby the phone repeats the registration with the VoIP server (SIP proxy). A request is sent to establish a session. The registration is repeated so that the phone's entry in the SIP proxy tables is retained and the phone can be reached. The registration is repeated for all enabled VoIP connections. The default is 180 seconds. If you enter 0 seconds, then the registration is not periodically repeated.
Step 12	Set STUN. <pre><pre><pre><pre>Sip.Account.N.STUN.Enabled (N=0-3)" value="0"/></pre></pre></pre></pre>	Enable or disable to STUN. STUN disabled (default) = 0 STUN enabled = 1
Step 13	Set the STUN server address. <param name="SIP.Account.N.STUN.Address(N=0-3)" value=""/>	Enter the DNS name (fully qualified domain name) or the IP address of the STUN server on the Internet (maximum 74 characters, 0-9, a-z, A-Z, -, _). The phone can determine its public address via the STUN. The phone requires this address to receive caller voice data.
Step 14	Set the STUN server port. <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Enter the number of the communication port on the STUN server. The default port is 3478.



Step	Command	Description
Step 15	Set the STUN refresh time. <param name="SIP.Account.N.STUN.RefreshTime r (N=0-3)" value="240"/>	Enter the time intervals at which the phone should repeat the registration with the STUN server. The registration must be repeated so that the entry of the phone in the STUN server tables is retained. The registration is repeated for all enabled VoIP connections. The default is 240 seconds. If you enter 0 seconds, the registration is not repeated periodically.
Step 16	<pre>Set NAT refresh time <param name=" SIP.Account.N.STUN.NATRefreshT imer (N=0-3)" value="20"/></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	Set the outbound proxy mode. <param name="SIP.Account.N.OutboundProxy.Mode (N=0-3)" value="2"/>	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. <param name="SIP.Account.N.OutboundProxy.Address (N=0-3)" value=""/>	Enter the DNS name (fully qualified domain name) or the IP address of your provider's outbound proxy.
Step 19	Set the outbound proxy port. <param class="symb_item" name="SIP.Account.N.OutboundProxy.Port (N=0-3)" value="5060"/>	Enter the number of the communication port used by the outbound proxy. The default port is "5060".
Step 20	<pre>Set the network protocol. <param name=" SIP.TransportProtocol" value="1"/></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). UDP – Communication occurs exclusively via UDP. TCP – Communication occurs exclusively via TCP. Integer: UDP = 1 TCP = 2
Step 21	<pre>Enable the SIP account. <pre><pre><pre><pre></pre></pre></pre></pre></pre>	Not Active (default) = 0 Active = 1



Step	Command	Description
Step 22	Set the DTMF. <param name="SIP.Account.N.AutoNegOfD TMFTransmission (N=0-3)" value="1"/>	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. Yes = 0 No (default) = 1
Step 23	Set the DTMF type. <param name="SIP.Account.0.DTMFTransm ission" value="1"/>	Enable Audio or RFC 4733 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: 0 = Audio 1 = RFC 4733 2 = Audio + RFC 4733 3 = SIP info 4 = RFC 4733 + SIP info 5 = Audio + RFC 4733 + SIP info
Step 24	Set the DTMF type. <pre><param name=" Telephony.PhoneSystem.Type" value="5"/></pre>	Set the phone system to BroadSoft. BroadSoft = 5

Browse to Settings \rightarrow Telephony \rightarrow Connections.



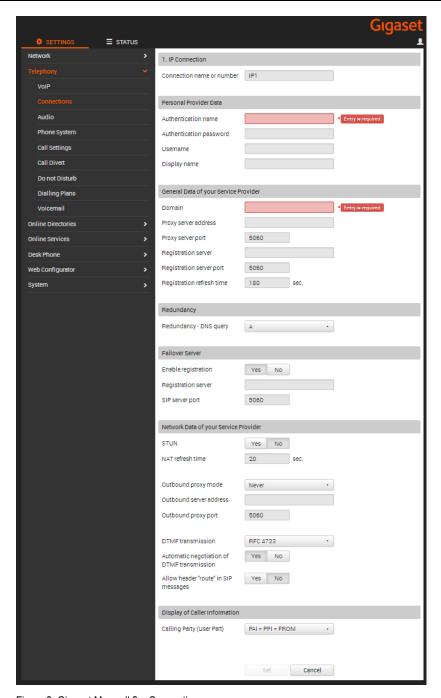


Figure 3 Gigaset Maxwell 3 - Connections

4.2.3 Configure Service Settings

4.2.3.1 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. <param name="SIP.Account.N.VoiceMail.Mail box (N=0-3)" value=""/>	For the VoIP connections, the maximum is 32 characters and/or digits (0-9, A-Z, a-z, *, #, R, P, -). Enter the BroadWorks voice mail number and name. The device subscribes to the Message service.
Step 2	Activate voice mail and MWI. <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	You can enable or disable individual network mailboxes. Enable = 1 Disable = 0

Browse to Settings \rightarrow Telephony \rightarrow Voicemail.

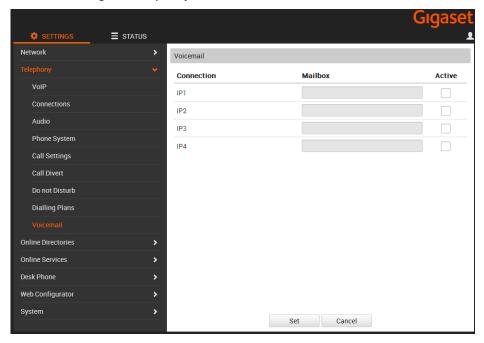


Figure 4 Gigaset Maxwell 3 - Voicemail

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

Step	Command	Description
Step 1	Set the MWI for network mailboxes. <param name=" Telephony.VoiceMail.VoicemailMessages.Active" value="1"/>	You can set for which type of new messages the LED should flash.
Step 2	Set the MWI for missed calls. <param name="Calls.Missed.Notificatio n.Active" value="1"/>	You can set for which type of new messages the LED should flash.

Browse to Settings → Desk Phone → Message Notification.



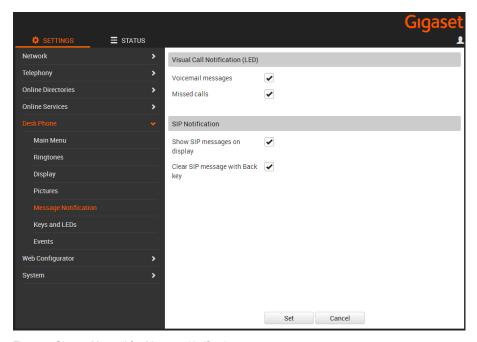
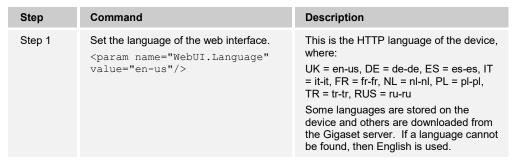


Figure 5 Gigaset Maxwell 3 – Message Notification

4.2.3.2 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.



Browse to the web interface Welcome page.



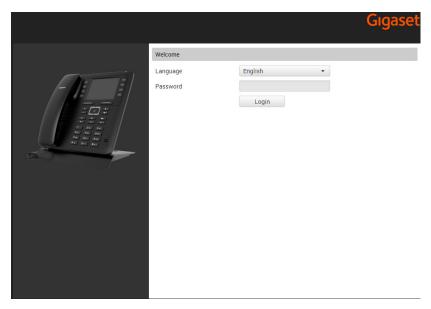


Figure 6 Gigaset Maxwell 3 – Welcome Page

2) Set the local settings.

Step	Command	Description
Step 1	<pre>Select the country. <param name="Telephony.AreaCodes.Coun try" value="Other"/></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 top of the list. NL = NLD, UK = GBR, DE = DEU, FR = FRA
Step 2	Set the tone selection. <param name="Telephony.ToneScheme" value="INT"/>	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 = INT, NL = NLD, UK = GBR, DE = DEU, FR = FRA

Browse to Settings \rightarrow Telephony \rightarrow Call Settings.



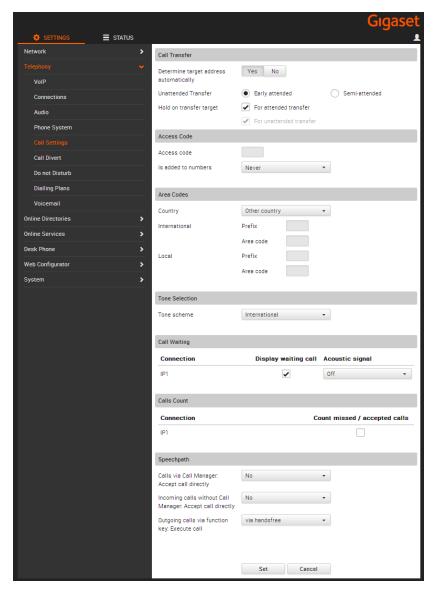


Figure 7 Gigaset Maxwell 3 - Call Settings

3) Set the date and time.

Step	Command	Description
Step 1	<pre>Set the time server. <param name="System.DateAndTime.TimeS erver" value=" pool.ntp.org"/></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 "pool.ntp.org" is set by default. However, you can overwrite this setting.



Step	Command	Description
Step 2	Set the time zone. <param name="System.DateAndTime.TimeZ one" value="GMT+1.Europe/Amsterdam"/>	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 = GMT+1.Europe/Amsterdam, UK = GMT.Europe/London
Step 3	Set clock to adjust automatically. <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	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. Yes = AutomatedDaylightSavingEnabled No = AutomatedDaylightSavingDisabled

Browse to Settings \rightarrow System \rightarrow Date and Time.

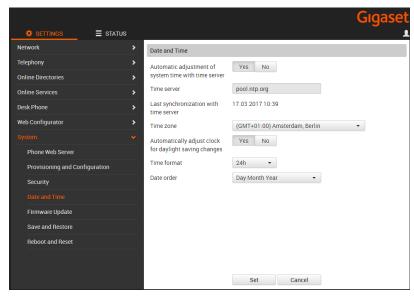


Figure 8 Gigaset Maxwell 3 - Date and Time

4.3 Redundancy Support

This section identifies the device-specific redundancy related parameters. The Gigaset Maxwell 3 and Maxwell Basic Phones use the DNS SRV according to *RFC 3263* to locate SIP servers in case of redundancy.

Step	Command	Description
Step 1	Set the DNS query type. <param name="SIP.Account.N.DNSQuery (N=0-3)" value="1"/>	Set the DNS query type. A (default) = 0 SRV + A = 1

Browse to Settings → Telephony → Connections



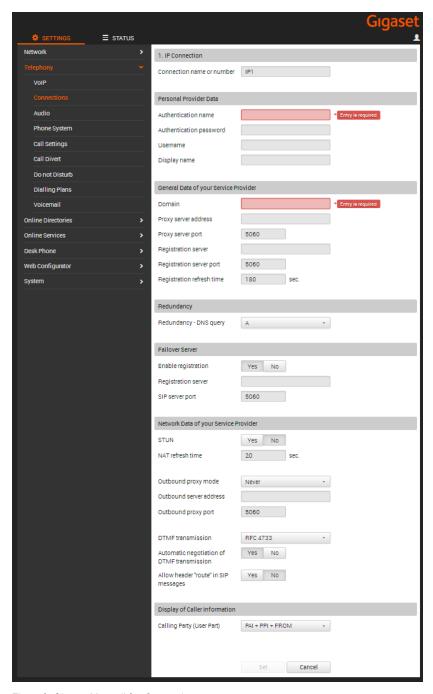


Figure 9 Gigaset Maxwell 3 - Connections

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

Currently this feature is not supported by Gigaset Maxwell.



4.4.2 Busy Lamp Field Configuration

The Busy Lamp Field implementation provides an attendant console function. Configuration of the phone to enable Busy Lamp Field is described as follows.

Step	Command	Description
Step 1	Set the Function Key type. <pre><param name="PhoneUI.Keys.FunctionKey s.N.Type (N=0-7)" value="4"/></pre>	Set the function key type to BLF.
Step 2	Set the display name for Function Key. <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Enter the display name of function key (maximum 10 characters will be visible on the display, 0-9, a-z, A-Z, -, .).
Step 3	Set which connection should be used. <param name="PhoneUI.Keys.FunctionKeys.N.Connection (N=0-7)" value="0"/>	Set which connection should be used with this BLF key. SIP Account 1 = 0 SIP Account 2 = 1 SIP Account 3 = 2 SIP Account 4 = 3
Step 4	Set Target number to be monitored. <param name="PhoneUI.Keys.FunctionKeys.N.PhoneNumber (N=0-7)" value=""/>	Set Target number which should be monitored by this BLF key.
Step 5	<pre>Set BLF URL <param name=" Telephony.PhoneSystem.BLFURL" value=""/></pre>	Enter BLF URL to enable SUBSCRIBE for BLF list.

Browse to Settings → Desk Phone → Keys and LEDs

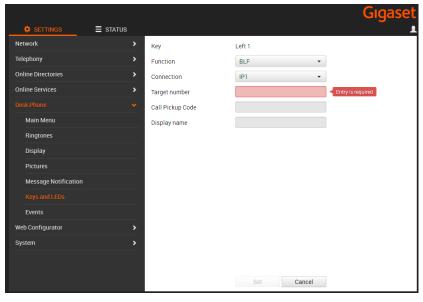


Figure 10 Gigaset Maxwell 3 – Keys and LEDs



4.4.3 Feature Key Synchronization Configuration

Currently this feature is not supported by Gigaset Maxwell.

4.4.4 Call Center Feature Configuration

Currently this feature is not supported by Gigaset Maxwell.

4.4.5 Call Recording Feature Configuration

Currently this feature is not supported by Gigaset Maxwell.

4.4.6 Security Classification Feature Configuration

Currently this feature is not supported by Gigaset Maxwell.

4.4.7 Emergency Call Configuration

Currently this feature is not supported by Gigaset Maxwell.

4.4.8 Advice of Charge Configuration

Currently this feature is not supported by Gigaset Maxwell.

4.4.9 Conference Event Configuration

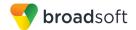
Currently this feature is not supported by Gigaset Maxwell.

4.5 Xtended Services Interface (Xsi) Feature Configuration

Currently this feature is not supported by Gigaset Maxwell.

4.6 Instant Message and Presence Configuration

Currently this feature is not supported by Gigaset Maxwell.



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 Maxwell 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 Maxwell 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 Maxwell '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

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 Maxwell 3 and Gigaset Maxwell Basic.

BroadWorks Device Management Interoperability Test Plan Support Table			
Test Plan Package	Test Plan Package Items	Supported	Comments
HTTP File	HTTP Download Using XSP IP Address	Yes	
Download	HTTP Download Using XSP FQDN	Yes	
	HTTP Download Using XSP Cluster FQDN	Yes	
	HTTP Download With Double Slash	Yes	
HTTPS File Download	HTTPS Download Using XSP IP Address	Yes	
	HTTPS Download Using XSP FQDN	Yes	
	HTTPS Download Using XSP Cluster FQDN	Yes	
HTTPS File Download with	HTTPS Download with Client Authentication Using XSP FQDN	No	



BroadWorks Device Management Interoperability Test Plan Support Table			
Test Plan Package	Test Plan Package Items	Supported	Comments
Client Authentication	HTTPS Download with Client Authentication Using XSP Cluster FQDN	No	
Time Zone Mapping	No associated test cases	Yes	
Language Mapping	No associated test cases	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	Yes	
HTTP File Upload	HTTP Upload Using XSP IP Address	No	
	HTTP Upload Using XSP FQDN	No	
	HTTP Upload Using XSP Cluster FQDN	No	
Call Processing	Register with Authentication	Yes	
Sanity Tests	Call Origination	Yes	
	Call Termination	Yes	
	Remote Restart	No	
	Shared Line Origination	No	
	Shared Line Termination	No	
	Shared Line Status	No	
	Busy Lamp Field	Yes	Only user busy and user idle display. See the 2.3 Known Issues.
	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	No	



5.2 Device Management Configuration

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

5.2.1 Configure BroadWorks Tags

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

The Gigaset Maxwell makes use of custom tags which can 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. The Gigaset Maxwell configuration templates make use of the tags in the following table. Add the tags if they do not already exist.

Tag Name	Valid Settings	Description
%SBC_ADDRESS%	IP address/FQDN	SBC SIP address.
%SBC_PORT%	Port	SBC SIP port. The port should be set if the defined session border controller (SBC) address is an IP address. If the SBC address is an FQDN, then the SBC port should not be set.



Example System Default Tag Settings

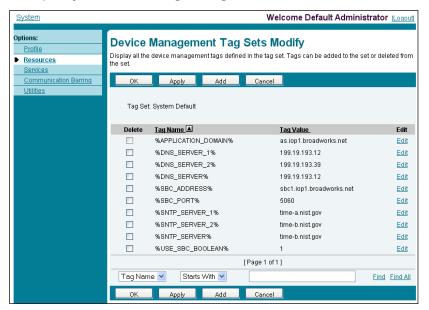
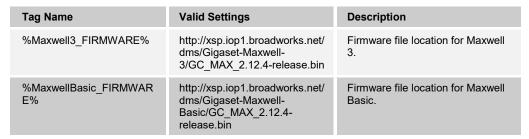


Figure 11 System Default Tag Settings

5.2.1.2 Create Device Type-specific Tags

Browse to *System* \rightarrow *Resources* \rightarrow *Device Management Tag Sets* and then click **Add** to add a new tag set. Configure the tag set name using the device name appended by *Tags*: Gigaset-Maxwell-3-Basic-*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 following tags are defined.



Example Device Type-specific Tag Settings

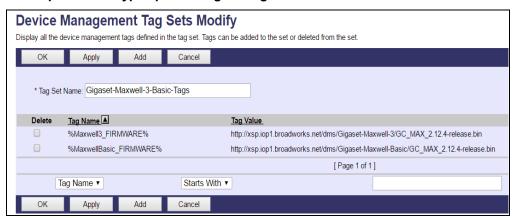


Figure 12 Device Type-specific Tag Settings



5.2.2 Configure BroadWorks Device Profile Type

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

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

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

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

Otherwise, use the manual method.

For more detailed instructions, refer to 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 Maxwell as a Device Management-enabled device type. Also, see the *BroadWorks CPE Kit Usage Guide* [8].

Download the Gigaset Maxwell-3 or Gigaset Maxwell-Basic CPE kit from BroadSoft Xchange at xchange.broadsoft.com. Extract the DTAF file(s) from the CPE kit. These are the import files. Repeat the following steps for each model you wish to import.

- Log in to BroadWorks as an administrator.
- Browse to System → Resources → Identity/Device Profile Types and then click Import.
- 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:

- Browse to System → Resources → Identity/Device Profile Types.
- 4) Perform a search to find the imported Gigaset device profile type, Gigaset-Maxwell-3.
- 5) Browse to the *Profile* page and change the Device Management Device Access FQDN to your Xtended Services Platform (XSP) or XSP cluster address.



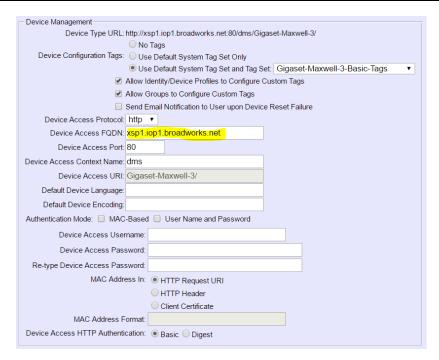


Figure 13 Device Access FQDN

6) Click the Files and Authentication link and then select the option to rebuild all the system files.

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

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

7) After importing the DTAFs, restart the Application Server to load the *TimeZoneAlias* files.

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 Maxwell 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 instruction on manual configuration, refer to 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 Maxwell.

Browse to $System \rightarrow Resources \rightarrow Identity/Device Profile Types$ and perform a search to find the Gigaset Maxwell 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 Maxwell downloads.

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

The following table identifies the Gigaset Maxwell configuration files distributed with the 2.11.8 CPE kit.

File Name	CPE Kit Template File Name	File Type	Description		
Examples					
BWMACADDRESS .xml	%BWMACADDRESS%.xml. template	Device-specific	This file contains all the configuration and firmware files that the device needs to load.		
TimeZoneAliasLab els_Gigaset- Maxwell- <model>.properties</model>	TimeZoneAliasLabels_ Gigaset-Maxwell- <model>.properties Model: 3 or Basic</model>	Time Zone Alias	The time zone alias file is a BroadWorks Device Management file used to map time zone identifiers between BroadWorks and <i>Gigaset-Maxwell</i> devices. A time zone alias file is required for each model.		

The following table identifies other files that the Gigaset Maxwell 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
GC_MAX_2.12.4-release.bin	Static	The firmware file used by Maxwell devices.

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

5.2.2.2.1 BWMACADDRESS.xml

Add the *BWMACADDRESS.xml* file to the device profile type with the settings shown in *Figure 14*.



After creating the device profile type file, upload *BWMACADDRESS.xml*, which is extracted from the CPE kit obtained from Gigaset. Use the **Browse** button on the file definition screen. Be sure to click **Apply** after uploading the file.

Identity/Device Profile Type File Modify

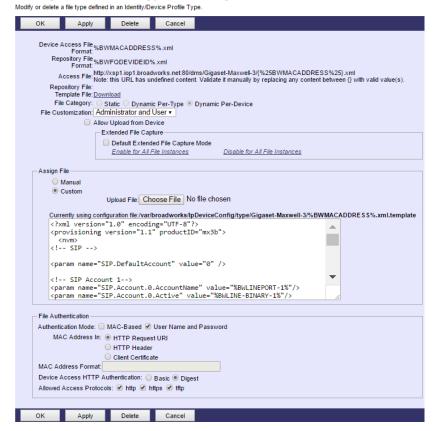


Figure 14 BWMACADDRESS.xml File Settings

5.2.2.2.2 Firmware File (static)

Add the firmware file to the device profile type with the settings shown in Figure 15.

After creating the device profile type file, upload *firmware*, which is obtained from Gigaset. Use the **Browse** button on the file definition screen. Be sure to click **Apply** after uploading the file.

To enable firmware download remember to change the *file version* to firmware version obtained from Gigaset in section *firmware* (that is, firmware file is *GC_MAX_2.12.4-release.bin* and file version is *<file version="2.12.4" url="...>*).



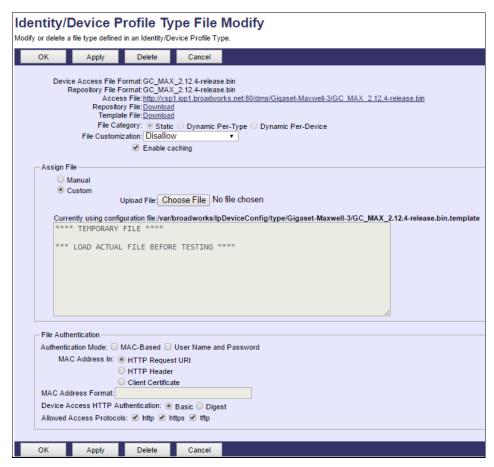


Figure 15 firmware File Settings

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 <code>Maxwell 3</code>, the time zone mapping file name must be <code>TimeZoneAliasLabels_Gigaset-Maxwell-3.properties</code>. (A space in the device name must be converted to a "+" in the file name.) A separate <code>TimeZoneAlias</code> file must be provided for each device profile type, corresponding to each <code>Maxwell</code> model.

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 for languages other than English, the languages defined on the BroadWorks Application Server must be mapped to the Gigaset Maxwell definitions.



To perform the mapping, select the device profile type and from there select the *Languages* link. The defined BroadWorks languages will be listed in a table. If languages other than English do not appear, they have not yet been defined on the BroadWorks Application Server.

The supported languages and required mapping are:

BroadWorks Language Identifier	Maxwell-3-Basic Language Mapping
English (US)	en-us
English (BR)	
French	fr-fr
German	de-de
Hungarian	hu-hu
Japanese	
Russian	ru-ru
Spanish (CALA)	
Spanish (Spain)	es-es
Swedish	sv-se

The language applied to an individual phone is determined by the language defined for the user on the *BroadWorks User's Profile* page (see *Figure 16*).

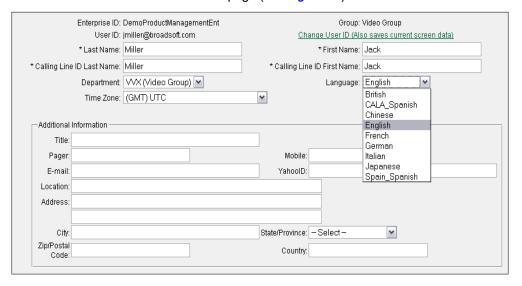


Figure 16 BroadWorks User Language Definition

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 Maxwell device.

Browse to the BroadWorks <*group* $> \rightarrow$ *Resources* \rightarrow *Identity/Device Profiles* page and then select **Add** to add a new Gigaset Maxwell device profile. Configure the device profile as shown in the *Figure 17* example.



Identity/Device Profile Modify

Modify or delete an existing group identity/device profile.



Figure 17 Device Profile Instance

5.2.4 Configure BroadWorks User

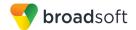
Configure the user with the desired BroadWorks configuration and services. Any services that require a specific configuration on the device are managed via Device Management and are defined in the device configuration files, if the template files are created with the correct Device Management tags.

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

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

5.2.5 Customize Tags

This section identifies custom tags used by the Gigaset Maxwell 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.



5.2.5.1 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.

- At the Group → Utilities → Configure Device page, select the Gigaset Maxwell device profile (for example, <partner-model>).
- 2) Click on the Custom Tags tab.
- 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 Gigaset Maxwell model provisioned in the group.

5.2.6 Configure Gigaset Maxwell

This section describes the steps necessary to configure the Gigaset Maxwell 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:

- 1) 5.2.6.1 Manual Provisioning
- 2) 5.2.6.2 No Touch Provisioning via BroadWorks Device Management
- 3) 5.2.6.3 No Touch Provisioning via Gigaset Device Management Redirect

5.2.6.1 Manual Provisioning

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

- 1) Log in to the Web User Interface (UI) for the phone (see *Figure 18*).
- Click Login.



Welcome Language Password Login

Example Login Screen (Default password is "admin")

Figure 18 Login Window

- Browse to the Settings → System → Provisioning and Configuration page (see Figure 19).
- 4) Under Provisioning Server, fill in the Provisioning server URL (same as the Device Management server address URL with device MACADDRESS.xml, that is, http(s)://xsp.iop1.broadworks.net/dms/Ggiaset-Maxwell-3/MACADDRESS.xml).
- 5) Click **Set** at the bottom of the *Provisioning and Configuration* page.



Example Upgrade Screen

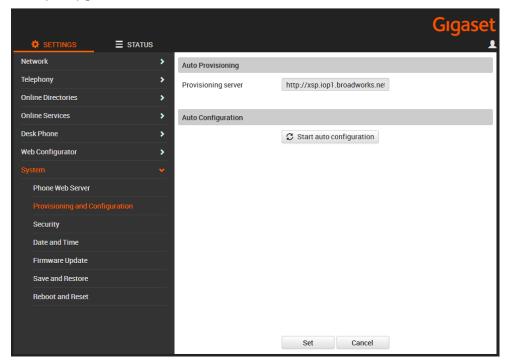


Figure 19 Provisioning and Configuration Settings Page

- 6) Browse to the Settings → System → Security page. (see Figure 20)
- 7) Under HTTP authentication, fill in the HTTP digest username and password (the default name and password are blank). The HTTPdigest username and password are the same as the provisioning server authentication name and password.
- 8) Click **Set** at the bottom of the *Provisioning and Configuration Settings* page.Click *Start auto configuration* button to download the Device Management configuration files and firmware.



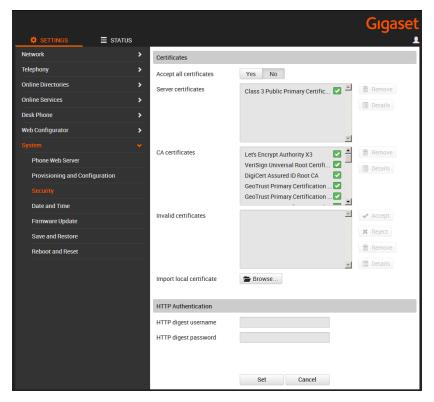


Figure 20 Security Settings Page

- 5.2.6.2 No Touch Provisioning via BroadWorks Device Management Currently this feature is not supported by Gigaset Maxwell.
- 5.2.6.3 No Touch Provisioning via Gigaset Device Management Redirect Currently this feature is not supported by Gigaset Maxwell.

5.3 Upgrade from Previous CPE Kits

The previous configuration sections are primarily structured around importing or manually configuring the Gigaset Maxwell 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 Maxwell Configuration Files

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

Device-specific File: MACADDRESS.xml

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

```
<?xml version="1.0" encoding="UTF-8"?>
cprovisioning version="1.1" productID="mx3b">
< nvm >
<!-- SIP -->
<param name="SIP.DefaultAccount" value="0"/>
<!-- SIP Account 1-->
<param name="SIP.Account.0.AccountName" value="%BWLINEPORT-1%"/>
<param name="SIP.Account.0.Active" value="%BWLINE-BINARY-1%"/>
<param name="SIP.Account.0.AuthName" value="%BWAUTHUSER-1%"/>
<param name="SIP.Account.0.AuthPassword" value="%BWAUTHPASSWORD-1%"/>
<param name="SIP.Account.0.Username" value="%BWLINEPORT-1%"/>
<param name="SIP.Account.O.DisplayName" value="%BWFIRSTNAME-1%"</pre>
%BWLASTNAME-1%"/>
<param name="SIP.Account.0.Domain" value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.O.ProxyServer.Address"</pre>
value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.O.ProxyServer.Port" value="5060"/>
<param name="SIP.Account.0.RegistrationServer.Address"</pre>
value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.0.RegistrationServer.Port" value="5060"/>
<param name="SIP.Account.0.RegistrationServer.RefreshTimer" value="3600"/>
<param name="SIP.Account.0.DNSQuery" value="1"/>
<param name="SIP.Account.0.FailoverServer.Enabled" value="0"/>
<param name="SIP.Account.0.STUN.Enabled" value="0"/>
<param name="SIP.Account.0.STUN.Address" value=""/>
<param name="SIP.Account.0.STUN.Port" value="3478"/>
<param name="SIP.Account.0.OutboundProxy.Mode" value="0"/>
<param name="SIP.Account.0.OutboundProxy.Address" value="%SBC ADDRESS%"/>
<param name="SIP.Account.0.OutboundProxy.Port" value="%SBC PORT%"/>
<param name="SIP.Account.0.CLIPSource" value="2"/>
<param name="SIP.Account.0.CallWaiting" value="1"/>
<!-- SIP Account 2-->
<param name="SIP.Account.1.AccountName" value="%BWLINEPORT-2%"/>
<param name="SIP.Account.1.Active" value="%BWLINE-BINARY-2%"/>
<param name="SIP.Account.1.AuthName" value="%BWAUTHUSER-2%"/>
<param name="SIP.Account.1.AuthPassword" value="%BWAUTHPASSWORD-2%"/>
<param name="SIP.Account.1.Username" value="%BWLINEPORT-2%"/>
<param name="SIP.Account.1.DisplayName" value="%BWFIRSTNAME-2%</pre>
%BWLASTNAME-2%"/>
<param name="SIP.Account.1.Domain" value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.1.ProxyServer.Address"</pre>
value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.1.ProxyServer.Port" value="5060"/>
<param name="SIP.Account.1.RegistrationServer.Address"</pre>
value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.1.RegistrationServer.Port" value="5060"/>
<param name="SIP.Account.1.RegistrationServer.RefreshTimer" value="3600"/>
<param name="SIP.Account.1.DNSQuery" value="1"/>
```



```
<param name="SIP.Account.1.FailoverServer.Enabled" value="0"/>
<param name="SIP.Account.1.STUN.Enabled" value="0"/>
<param name="SIP.Account.1.STUN.Address" value=""/>
<param name="SIP.Account.1.STUN.Port" value="3478"/>
<param name="SIP.Account.1.OutboundProxy.Mode" value="0"/>
<param name="SIP.Account.1.OutboundProxy.Address" value="%SBC ADDRESS%"/>
<param name="SIP.Account.1.OutboundProxy.Port" value="%SBC PORT%"/>
<param name="SIP.Account.1.CLIPSource" value="2"/>
<param name="SIP.Account.1.CallWaiting" value="1"/>
<!-- SIP Account 3-->
<param name="SIP.Account.2.AccountName" value="%BWLINEPORT-3%"/>
<param name="SIP.Account.2.Active" value="%BWLINE-BINARY-3%"/>
<param name="SIP.Account.2.AuthName" value="%BWAUTHUSER-3%"/>
<param name="SIP.Account.2.AuthPassword" value="%BWAUTHPASSWORD-3%"/>
<param name="SIP.Account.2.Username" value="%BWLINEPORT-3%"/>
<param name="SIP.Account.2.DisplayName" value="%BWFIRSTNAME-3%</pre>
%BWLASTNAME-3%"/>
<param name="SIP.Account.2.Domain" value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.2.ProxyServer.Address"</pre>
value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.2.ProxyServer.Port" value="5060"/>
<param name="SIP.Account.2.RegistrationServer.Address"</pre>
value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.2.RegistrationServer.Port" value="5060"/>
<param name="SIP.Account.2.RegistrationServer.RefreshTimer" value="3600"/>
<param name="SIP.Account.2.DNSQuery" value="1"/>
<param name="SIP.Account.2.FailoverServer.Enabled" value="0"/>
<param name="SIP.Account.2.STUN.Enabled" value="0"/>
<param name="SIP.Account.2.STUN.Address" value=""/>
<param name="SIP.Account.2.STUN.Port" value="3478"/>
<param name="SIP.Account.2.OutboundProxy.Mode" value="0"/>
<param name="SIP.Account.2.OutboundProxy.Address" value="%SBC ADDRESS%"/>
<param name="SIP.Account.2.OutboundProxy.Port" value="%SBC_PORT%"/>
<param name="SIP.Account.2.CLIPSource" value="2"/>
<param name="SIP.Account.2.CallWaiting" value="1"/>
<!-- SIP Account 4-->
<param name="SIP.Account.3.AccountName" value="%BWLINEPORT-4%"/>
<param name="SIP.Account.3.Active" value="%BWLINE-BINARY-4%"/>
<param name="SIP.Account.3.AuthName" value="%BWAUTHUSER-4%"/>
<param name="SIP.Account.3.AuthPassword" value="%BWAUTHPASSWORD-4%"/>
<param name="SIP.Account.3.Username" value="%BWLINEPORT-4%"/>
<param name="SIP.Account.3.DisplayName" value="%BWFIRSTNAME-4%</pre>
%BWLASTNAME-4%"/>
<param name="SIP.Account.3.Domain" value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.3.ProxyServer.Address"</pre>
value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.3.ProxyServer.Port" value="5060"/>
<param name="SIP.Account.3.RegistrationServer.Address"</pre>
value="%BWSERVERADDRESS%"/>
<param name="SIP.Account.3.RegistrationServer.Port" value="5060"/>
<param name="SIP.Account.3.RegistrationServer.RefreshTimer" value="3600"/>
<param name="SIP.Account.3.DNSQuery" value="1"/>
<param name="SIP.Account.3.FailoverServer.Enabled" value="0"/>
<param name="SIP.Account.3.STUN.Enabled" value="0"/>
<param name="SIP.Account.3.STUN.Address" value=""/>
<param name="SIP.Account.3.STUN.Port" value="3478"/>
<param name="SIP.Account.3.OutboundProxy.Mode" value="0"/>
<param name="SIP.Account.3.OutboundProxy.Address" value="%SBC ADDRESS%"/>
<param name="SIP.Account.3.OutboundProxy.Port" value="%SBC PORT%"/>
<param name="SIP.Account.3.CLIPSource" value="2"/>
<param name="SIP.Account.3.CallWaiting" value="1"/>
```



```
<!-- Select the PBX type -->
<param name="Telephony.PhoneSystem.Type" value="5"/>

<!-- Date and Time settings see wiki:
https://teamwork.gigaset.com/gigawiki/display/GPPPO/Maxwell+3+and+Basic+Pr
ovisioning+parameters for GMT settings-->
<param name="System.DateAndTime.TimeZone" value="%BWTIMEZONE-1%"/>

<!-- WebUI language settings-->
<param name="WebUI.Language" value="%BWLANGUAGE-1%"/>

<!-- Phone language settings-->
<param name="PhoneUI.Settings.Language" value="%BWLANGUAGE-1%"/>

</nvm>

</firmware>
<firmware>
<fire version="2.12.4" url="%Maxwell3_FIRMWARE%" />
</firmware>
</provisioning>
```



References

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- [5] BroadSoft, Inc. 2017. *BroadWorks SIP Phone Interoperability Test Plan, Release* 22.0. Available from BroadSoft at xchange.broadsoft.com.
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