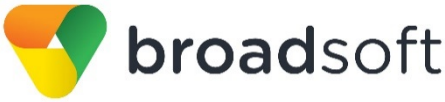

BroadSoft Partner Configuration Guide

Yealink SIP-T4x IP Phone

January 2017

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BroadWorks® Guide

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Version	Reason for Change
1.1	Introduced document for Yealink T46G IP Phone version 28.71.0.60 validation with BroadWorks Release 19.sp1.
1.2	Edited and published document.
1.3	Added T41P and T42G as supported models. Appendix updated to reflect the latest configuration template files.
1.4	Edited changes and published document.
1.5	Device configuration section is updated with Xtended Services Interface (Xsi) and Instant Messaging and Presence (IM&P) support.
1.6	Edited changes and published document.
1.7	Updated with Yealink T4x IP Phone version x.72.193.x validation with BroadWorks Release 20.sp1. Added T48G as supported model.
1.8	Edited changes and published document.
1.9	Updated with in-house Yealink T4x IP Phone version x.72.193.x validation with BroadWorks Release 20.sp1.
1.10	Updated copyright notice and trademarks. Made editorial changes.
1.11	Edited and published document.
1.12	Appendix A updated due to minor configuration template change.
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1.17	Updated the document to include the No-Touch Provisioning as supported by Yealink T4x phones.
1.18	Edited changes and published document.
1.19	Updated the DM Supported capability table.
1.20	Edited changes and published document.
1.21	Updated the DM Supported capability table to show status of No-Touch provisioning
1.22	Updated with Yealink T4x IP Phone version xx.81.193.15 validation with BroadWorks Release 21.sp1. Also, added newer models.
1.23	Edited changes and published document.

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1 Overview

This guide describes the configuration procedures required for the Yealink T4x Series for interoperability with BroadWorks. This includes the following models:

- T40P
- T41P
- T41S
- T42G
- T42S
- T46G
- T46S
- T48G
- T48S
- T49G

The T4x Series is an IP 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 T4x IP Phone. For those details, see the *Yealink T4x IP Phone User Guide* [1] supplied by Yealink.

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2 Interoperability Status

This section provides the known interoperability status of the Yealink T4x IP Phone with BroadWorks. This includes the version(s) tested, 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 Yealink.

2.1 Verified Versions

The following table identifies the verified Yealink T4x IP Phone 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 T4x IP Phone versions, which the partner has identified as compatible and they should interface properly with BroadWorks. Generally, maintenance releases of the validated version are considered compatible and are not specifically listed here. For any questions concerning maintenance and compatible releases, contact Yealink.

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	T4x IP Phone Verified Version	T4x IP Phone Compatible Versions
12/2016	Release 21.sp1	T40P: 54.81.193.15 T41P: 36.81.193.15 T41S: 66.81.193.15 T42G: 29.81.193.15 T42S: 66.81.193.15 T46G: 28.81.193.15 T46S: 66.81.193.15 T48G: 35.81.193.15 T48S: 66.81.193.15	Any maintenance revision of the validated releases. Note: T49G is currently not supported in v81
01/2016	Release 21.sp1	T40: 54.80.193.70 T40P: 54.80.193.70 T41P: 36.80.193.70 T42G: 29.80.193.70 T46G: 28.80.193.70 T48G: 35.80.193.70 T49G: 51.80.193.70	Any maintenance revision of the validated releases.

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Verified Versions			
Date (mm/yyyy)	**BroadWorks Release**	**T4x IP Phone Verified Version**	**T4x IP Phone Compatible Versions**
05/2015	Release 21.sp1	T48G: 35.73.193.50 T46G: 28.73.193.50 T42G: 29.73.193.50 T41P: 36.73.193.50	Any maintenance revision of the validated releases.
07/2014	Release 20.sp1	T48G: 35.72.193.10 T46G: 28.72.193.10 T42G: 29.72.193.10 T41P: 36.72.193.10	Any maintenance revision of the validated releases.

2.2 Interface Capabilities Supported

This section identifies interface capabilities that have been verified through testing as supported by Yealink T4x IP Phone.

The *Supported* column in the tables in this section identifies the Yealink T4x IP Phone'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 Yealink T4x IP Phone 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 Yealink T4x IP Phone.

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	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	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 Services	Third-Party Call Control – Basic	NA	
	Third-Party Call Control – Advanced	Yes	
	Voice Message Deposit/Retrieval	Yes	
	Message Waiting Indicator	Yes	Except for saved and urgent message information.
	Voice Portal Outcall	Yes	
	Advanced Alerting – Ringing	Yes	
	Advanced Alerting – Call Waiting	Yes	
	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	Yes	
	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	
	Collaborate – Audio	Yes	
	Collaborate – Audio – G722	Yes	
	Call Decline Policy	Yes	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
DUT Services – Call Control Services	Call Waiting	Yes	
	Call Hold	Yes	
	Call Transfer	Yes	
	Three-Way Calling	Yes	Before answer scenario is not supported.
	Network-Based Conference	Yes	
DUT Services – Registration and Authentication	Register Authentication	Yes	
	Maximum Registration	Yes	
	Minimum Registration	Yes	
	Invite Authentication	Yes	
	Re-Invite/Update Authentication	Yes	
	Refer Authentication	Yes	
	Device Authenticating BroadWorks	No	
DUT Services – Emergency Call	Emergency Call	NT	
	Emergency Call with Ringback	NT	
DUT Services – Miscellaneous	Do Not Disturb	Yes	
	Call Forwarding Always	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Anonymous Call	No	
	Anonymous Call Block	No	
	Remote Restart Via Notify	Yes	check-sync.
Advanced Phone Services – Busy Lamp Field	Busy Lamp Field	Yes	
	Call Park Notification	Yes	
Advanced Phone Services – Feature Key Synchronization, Private Line	Do Not Disturb	Yes	
	Do Not Disturb Ring Splash	Yes	
	Call Forwarding	Yes	
	Call Forwarding Always Ring Splash	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Call Center Agent Logon/Logoff	Yes	
	Call Center Agent Unavailable Code	Yes	
	Executive – Call Filtering	No	
	Executive-Assistant – Call Filtering	No	
	Executive-Assistant – Diversion	No	
	Call Recording	No	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Security Classification	Yes	
Advanced Phone Services – Feature Key Synchronization, Shared Line	Do Not Disturb	Yes	
	Do Not Disturb Ring Splash	Yes	
	Call Forwarding	Yes	
	Call Forwarding Always Ring Splash	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Security Classification	Yes	
Advanced Phone Services – Missed Calls Display Synchronization	Missed Calls Display Sync	Yes	
Advanced Phone Services – Shared Call Appearance using Call Info	Line-Seize	Yes	
	Call-Info/Lamp Management	Yes	
	Public Hold	Yes	
	Private Hold	Yes	
	Hybrid Key System	Yes	
	Multiple Call Arrangement	Yes	
	Bridge Active Line	Yes	
	Bridge Active Line – Silent Monitor	Yes	
	Call Park Notification	Yes	
Advanced Phone Services – Call Park Notification	Call Park Notification	Yes	
Advanced Phone Services – Call Center	Hold Reminder	Yes	
	Call Information	Yes	
	Hoteling Event	Yes	
	Status Event	Yes	
	Disposition Code	Yes	
	Emergency Escalation	Yes	
	Customer Originated Trace	Yes	
Advanced Phone Services – Call Recording Controls	Pause/Resume	No	
	Start/Stop	No	
	Record Local Conference	No	
	Record Network Conference	No	
	Basic Call	No	
	Record Local Conference	No	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
Advanced Phone Services – Call Recording Video	Record Network Conference	No	
Advanced Phone Services – Security Classification	Security Classification	Yes	
Advanced Phone Services – Conference Event	Network-Based Conference Creator	No	
	Network-Based Conference Participant	No	
	Meet-Me Conference Participant	No	
Redundancy	DNS SRV Lookup	Yes	
	Register Failover/Failback	Yes	
	Invite Failover/Failback	Yes	
	Bye Failover	Yes	
SBC/ALG - Basic	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
SBC/ALG – Failover/Failback	Register Failover/Failback	Yes	
	Invite Failover/Failback	Yes	
Video – Basic Video Calls	Call Origination	Yes	Only T49G model.
	Call Termination	Yes	Only T49G model.
	Call Hold	Yes	Only T49G model.
	Call Waiting	Yes	Only T49G model.
	Call Transfer	Yes	Only T49G model.
Video – BroadWorks Video Services	Auto Attendant	Yes	Only T49G model.
	Auto Attendant – HD	Yes	Only T49G model.
	Voice Messaging	Yes	Only T49G model and Message retrieval. For deposit, see known issues.
	Voice Messaging – HD	Yes	Only T49G model and Message retrieval. For deposit, see known issues.
	Custom Ringback	Yes	Only T49G model.
Video – BroadWorks Video Conference	Network-based Conference	Yes	Only T49G model.
	Network-based Conference – HD	Yes	Only T49G model.
	Collaborate – Video	Yes	Only T49G model, except upgrading to video.
	Collaborate – Video – HD	Yes	Only T49G model, except upgrading to video.
TCP	Register	Yes	

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BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
IPV6	Call Origination	Yes	
	Call Termination	Yes	
	Session Audit	Yes	
	Ringback	Yes	
	Codec Negotiation/Renegotiation	Yes	
	Voice Message Deposit/Retrieval	Yes	
	Call Control	Yes	
	Registration with Authentication	Yes	
	Busy Lamp Field	Yes	
	Redundancy	Yes	
	SBC	Yes	
	Video	NT	Only T49G model.
	Dual Stack with Alternate Connectivity	No	

2.2.1 Other Interface Capabilities

The Yealink T4x Series 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	Yes	
	Authenticate with BroadWorks User Login Credentials	Yes	Default.
	Authenticate with BroadWorks User Directory Number	No	
Xsi Features – User Service Configuration	Remote Office	Yes	
	BroadWorks Anywhere	Yes	Except modifying the number.
	Simultaneous Ringing	Yes	
	Caller ID Blocking	Yes	
	Call Forwarding Always	No	Supported via FKS feature.

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BroadWorks Xtended Services Interface (Xsi) and BroadCloud IM&P Support Table			
Interface	**Feature**	**Supported**	**Comments**
	Call Forwarding Busy	No	Supported via FKS feature.
	Call Forwarding No Answer	No	Supported via FKS feature.
	Do Not Disturb	No	Supported via FKS feature.
Xsi Features – Directories	Enterprise Directory	Yes	
	Enterprise Common Phone List	Yes	
	Group Directory	Yes	
	Group Common Phone List	Yes	
	Personal Phone List	Yes	
	Search All Directories	Yes	
Xsi Features – Call Logs	Placed Calls	Yes	
	Received Calls	Yes	
	Missed Calls	Yes	
	All Calls	Yes	
	Sort by Name	No	
Xsi Features – Visual Voice Mail	View Messages	Yes	
	Listen to Audio Message	Yes	
	Watch Video Message	No	
	Mark Message Read/Unread	Yes	
	Delete Message	Yes	
	Mark All Messages Read/Unread	Yes	
XMPP Features – Contact/Buddy List	Contacts	Yes	Only T46G, T46S, T48G, T48S and T49G models.
	Favorites	Yes	Only T46G, T46S, T48G, T48S and T49G models.
	Groups	Yes	Only T46G, T46S, T48G, T48S and T49G models.
	Non-XMPP Contacts	No	
	Conferences	No	
XMPP Features – Presence	Login Invisible	No	
	Presence State	Yes	Only T46G, T46S, T48G, T48S and T49G models.
	Presence Status	No	Only T46G, T46S, T48G, T48S and T49G models.
	Contact's Presence State	Yes	Only T46G, T46S, T48G, T48S and T49G models. Except in Call History.

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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 Yealink issue, the issue number is from Yealink'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	Partner Version			
		x.81.193.15	x.80.193.70	xx.73.193.50	
	Connected line Presentation on Re-Invite. When BroadWorks sends a re-Invite with P-Asserted-ID header, the Connected line number is not updated at the T4x end. Workaround: Needs a flag to be set which is available in the next release, that is, v80.			X	
66520	**Network 3-way; Public Hold, Add Party.** Network conference transforms to the local conference after retrieving the held call, so it fails to add another party to the network conference. Workaround: None.		X		
82624	**T49G cannot deposit Video VM.** T49G cannot support record video message in XX.193.0.70 because of the incompletion of video parameters in video INVITE message. Workaround: When we add profile-level-id=42801f; max-mbps=108000; max-fs=3600 in our video INVITE message we can record video message successfully. Supports record video message in next version 51.80.193.75.		X		

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3 BroadWorks Configuration

This section identifies the required BroadWorks device profile type for the Yealink T4x IP Phone as well as any other unique BroadWorks configuration required for interoperability with the T4x IP Phone.

3.1 BroadWorks Device Profile Type Configuration

This section identifies the device profile type to use when deploying the Yealink T4x IP Phone with BroadWorks.

Create a device profile type for the Yealink T48G IP Phone as shown in the following example. A separate device profile type should be created for each Yealink T4x IP Phone model. The settings shown are recommended for use when deploying the Yealink T4x IP Phone with BroadWorks. For an explanation of the profile parameters, see the *BroadWorks Device Management Configuration Guide* [2].

The following device profile type shown provides the *Number of Ports* (number of SIP lines) setting for Yealink T4x IP Phone. For other Yealink T4x IP Phone models, create a new device profile type and set the *Number of Ports* to match the available number of SIP lines per model according to the following table.

Model	Number of Lines
T40P	3 SIP accounts, 3 line keys
T41P	6 SIP accounts, 15 line keys
T41S	6 SIP accounts, 15 line keys
T42G	12 SIP accounts, 15 line keys
T42S	12 SIP accounts, 15 line keys
T46G	16 SIP accounts, 27 line keys
T46S	16 SIP accounts, 27 line keys
T48G	16 SIP accounts, 29 line keys
T48S	16 SIP accounts, 29 line keys
T49G	16 SIP accounts, 29 line keys

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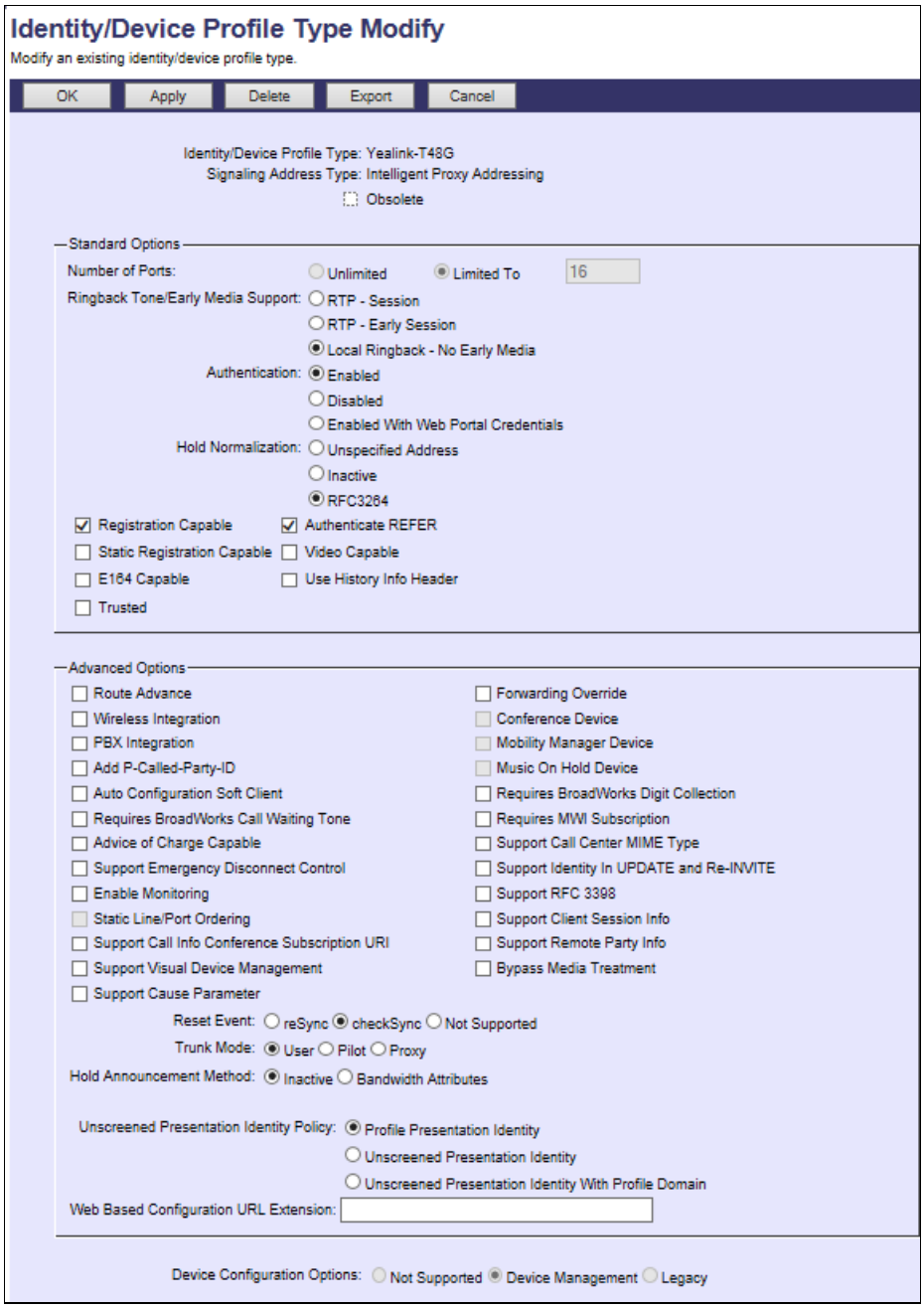

Figure 1 Device Identity/Profile Type

3.2 BroadWorks Configuration Steps

No additional BroadWorks configuration steps are required.

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4 T4x IP Phone Configuration

The T4x IP Phone can be configured with a configuration file using the Trivial File Transfer Protocol (TFTP) or through its embedded web server. The following examples describe how to set the parameters using a configuration file. This configuration description assumes the T4x IP Phone uses the Dynamic Host Configuration Protocol (DHCP) to get an IP address, TFTP server, and other network settings. The T4x IP Phone should be configured to load the configuration file each time it resets or re-synchronizes. For detailed information on automated provisioning, see the *Yealink T4x IP Phone User Guide* [1].

The capabilities of the T4xG IP Phone have been verified for use with BroadWorks based on the settings described in the following table. For more information on the meaning, purpose, and applicability of the individual configuration items see the *Yealink T4xG IP Phone User Guide* [1].

Configuration Files

Files Provided by Partner	Level	Description
y0000000000<xx>.cfg	system configuration file	"y0000000000xx.cfg", where "xx" is associated with the hardware version of Yealink device.
<MACADDRESS>.cfg	device-specific configuration file	

4.1 System Level Configuration

This section describes system-wide configuration items that are generally required for each T4x IP Phone to work with BroadWorks. Subscriber-specific settings are described in the next section.

Step	Command	Purpose
System Configuration Items y0000000000<xx>.cfg		

Step 1	Set SIP Proxy/Domain.
	`account.1.sip_server_host = as.broadworks.net`
	`account.1.SIPServerPort = 5060`
		Set the T4xG IP Phone SIP server to the Fully Qualified Domain Name (FQDN) for the BroadWorks Application Server cluster.
		The domain must match the domain configured for the BroadWorks subscriber's line/port domain.

Step 2	Set Outbound Proxy.
	`account.1.outbound proxy enable = 1`
	`account.1.outbound_host = sbc.broadworks.net`
	`account.1.outbound_port = 5060`
		Set the Outbound Proxy to the session border controller (SBC) if one is deployed between the T4xG IP Phone and BroadWorks.
		If there are redundant SBCs, set it to the FQDN for the SBC cluster.

Step 3	Set SIP Timers.
	`account.1.advanced.timer_t1 = 0.5`
	`account.1.advanced.timer_t2 = 4`
	`account.1.advanced.timer_t4 = 5`
		The SIP timers should be set to levels short enough to support a timely failover when there is no server response.

Step 4	Set Register Expire Timer. `account.1.expires = 3600`	Set the registration period.
Step 5	Enable reliable response. `account.1.100rel_enable = 1`	Reliable provisional response (PRACK) should be enabled.

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Step	Command	Purpose
System Configuration Items y0000000000<xx>.cfg		

Step 6	Enable Session Timer.
	`account.1.session_timer.enable = 1`
	`account.1.session timer.expires = 300`
	`account.1.session_timer.refresher = 1`
		Set the T4xG IP Phone to enable Session Timer.
		Session Refresher:
		0 = uac
		1 = uas

Step 7	Enable Call Waiting.
	`call_waiting.enable = 1`
	`call_waiting.tone = 1`
		Set the T4xG IP Phone series to enable Call Waiting and Call Waiting Tone.

Step 8	Enable MWI.
	`account.1.subscribe_mwi = 0`
	`account.1.subscribe_mwi_expires =3600`
		MWI: Solicited when setting SubscribeMWI = 1.
		MWI: Not solicited when setting SubscribeMWI = 0.

Step 9	Enable negotiated DTMF type. `account.1.dtmf.type = 1`	Set the T4xG IP Phone to enable inband or RFC 2833 negotiated DTMF.
Step 10	Select Transport Type. `account.1.sip server.1.transport type = 0`	Set the SIP transport: Transport = 0 (UDP) Transport = 1 (TCP) Transport = 2 (TLS) (except T18P) Transport = 3 (DNS-SRV) (except T80P)
Step 11	Enable Feature Key Sync. `bw.feature_key_sync = 1`	Enable Feature Key Sync (except T18): 1 = Enabled 0 = Disabled

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4.2 Subscriber Level Configuration Parameters

This section identifies the device-specific parameters, including registration and authentication. These settings must be unique across devices to be matched with the settings for a BroadWorks subscriber.

Provisioning a subscriber to register with BroadWorks allows calls to terminate to the subscriber's line. Registration requires that a unique address of record (AoR) is provisioned on BroadWorks and the phone; provisioning an AoR on BroadWorks consists of setting the line/port parameter to a unique value within the Application Server cluster.

Step	Command	Purpose
Subscriber parameters for the <MACADDRESS>.cfg		
Step 1	Enable line 1 to be used. Example: `account.1.enable = 1`	Enable a line of the T4xG IP Phone to be used.
Step 2	Configure display name for a line. Example: `account.1.display_name = Joe`	For the line, configure the name to be displayed on the device.
Step 3	Set Register User ID for a line. Example: `account.1.user_name = 2405551111`	The *register user ID* must correspond with the line/port setting on BroadWorks.

Step 4	Enable SIP Authentication for a line.
	Example:
	`account.1.auth_name = 2405551111`
	`account.1.password = 123456`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.

Step 5	Configure Network Phonebook.
	`account.1.xsi.host = xsp1.iop1.broad works.net`
	`account.1.xsi.user = 2413333601@as.iop1.broadworks.net`
	`account.1.xsi.password = yealink`
		This configures the phone to use the BroadWorks Xtended Services Interface (Xsi) to retrieve the group phone directory.
		Host: This is the identity of the BroadWorks Xtended Services Platform (Xsp) server/cluster address and relevant xsi-actions parameters.
		User: This is the BroadWorks user's login name.
		Password: This is the BroadWorks user's login password.

4.3 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.

4.3.1 Shared Call Appearance Configuration

The Shared Call Appearance (SCA) feature allows the administrator to add multiple locations to a given line. Any of the locations can be used to originate or receive calls.

When a call comes in to an idle line, all the provisioned locations for that line are alerted. The first location to answer the call is connected to the originator. If the line is already active in a call, only the active location is alerted.

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A subscriber can originate calls from any of the configured locations. All other locations are unable to originate calls until all calls are released.

It is recommended to use the phone number plus an index (<phoneNumber>_<index>) when provisioning the unique AoR for each shared line, for example: 2405551111_2. If a phone number does not exist, use the Media Access Control (MAC) address plus an index (<macAddress>_<index>).

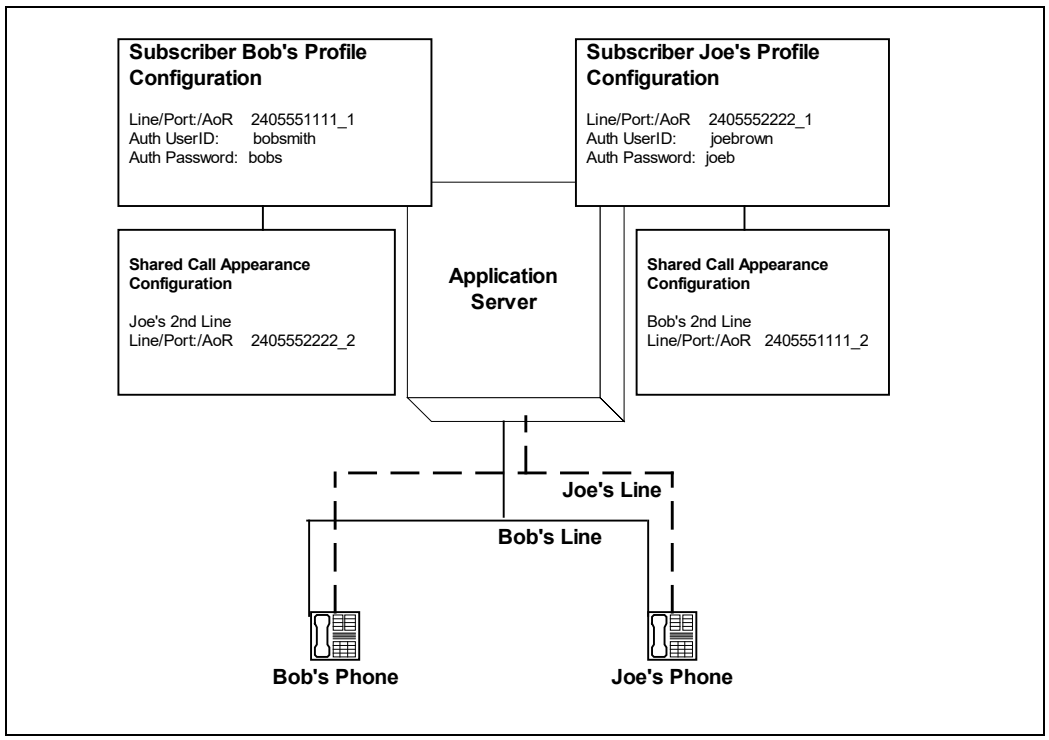

Figure 2 Shared Call Appearance Configuration

Figure 2 shows that Bob and Joe each have two lines and that Bob shares a line with Joe and Joe shares a line with Bob. The figure also shows the applicable Subscriber Profile and Shared Call Appearance configuration data for subscribers Bob and Joe.

When Bob (2405551111) is called, Bob's first line and Joe's second line ring. When Joe (2405552222) is called, Joe's first line and Bob's second line ring.

The following steps show how to configure both phones for this Shared Call Appearance configuration.

For configurations of SCA for the device, see the example in the following section.

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4.3.1.1 Bob's Phone Configuration – MAC.cfg

This is the SCA configurations as specified in *MAC.cfg*, that is, *0015651130dc.cfg* where "0015651130dc" is the MAC address of the SIP phone.

The following steps are used to configure line 1 for Bob's phone. This line rings when Bob is called, so it has Bob's authentication information.

Step	Command	Purpose
Step 1	Configure line as shared. `account.1.shared_line = 1;`	Configure the line as "shared" (as opposed to "private").
Step 2	Set Register User ID. Example: `account.1.user_name = 2405551111_1;`	The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	Enable SIP Authentication.
	Example:
	`account.1.auth_name = bobsmith;`
	`account.1.password = bobs;`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Bob is called, so it has Bob's authentication information.

Step 4	Configure display name. Example: `account.1.display_name = Bob Smith;`	Configure the name to be displayed on the device for this line.

The following steps are used to configure line 2 for Bob's phone. This line rings when Joe is called, so it has Joe's authentication information.

Step	Command	Purpose
Step 1	Configure line as shared. `account.2.shared_line = 1;`	Configure the line as "shared" (as opposed to "private").
Step 2	Set Register User ID. Example: `account.2.user_name = 2405551111_2;`	The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	Enable SIP Authentication.
	Example:
	`account.2.auth_name = joebrown;`
	`account.2.password = joeb;`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Joe is called, so it has Joe's authentication information.

Step 4	Configure display name. Example: `account.2.display_name = Joe Brown;`	Configure the name to be displayed on the device for this line.

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4.3.1.2 Joe's Phone Configuration – MAC.cfg

The following steps are used to configure line 1 for Joe's phone. This line rings when Joe is called, so it has Joe's authentication information.

Step	Command	Purpose
Step 1	Configure line as shared. `account.1.shared_line = 1;`	Configure the line as "shared" (as opposed to "private").
Step 2	Set Register User ID. Example: `account.1.user_name = 2405552222_1;`	The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	Enable SIP Authentication.
	Example:
	`account.1.Auth_Name = joebrown;`
	`account.1.password = joeb;`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Joe is called, so it has Joe's authentication information.

Step 4	Configure display name. Example: `account.1.Display_Name = Joe Brown;`	Configure the name to be displayed on the device for this line.

The following steps are used to configure line 2 for Joe's phone. This line rings when Bob is called, so it has Bob's authentication information.

Step	Command	Purpose
Step 1	Configure line as shared. `account.2.shared_line = 1;`	Configure the line as "shared" (as opposed to "private").
Step 2	Set Register User ID. Example: `account.2.user_name = 2405552222_2;`	The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	Enable SIP Authentication.
	Example:
	`account.2.Auth_Name = bobsmith;`
	`account.2.password password = bobs;`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Bob is called, so it has Bob's authentication information.

Step 4	Configure display name. Example: `account.2.Display_Name = Bob Smith;`	Configure the name to be displayed on the device for this line.

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4.3.1.3 Hybrid Key System Configuration

Hybrid Key System emulation requires the phone to support assignment of multiple line keys to a single registering line on the phone. It also requires the phone to limit each line key to a single call appearance or provide the configurability to roll a new call over to the next free line key. Any of the locations can be used to originate or receive calls.

First, from the Shared Call Appearance configuration web page, select **Add** to add a second appearance.

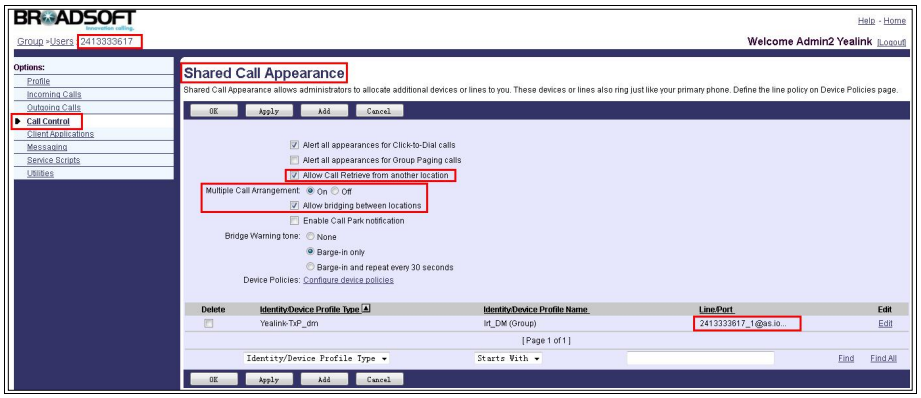

Figure 3 Shared Call Appearance Configuration Page

Second, on line registration web page, type in the host line and second appearance line as shown in the following figures.

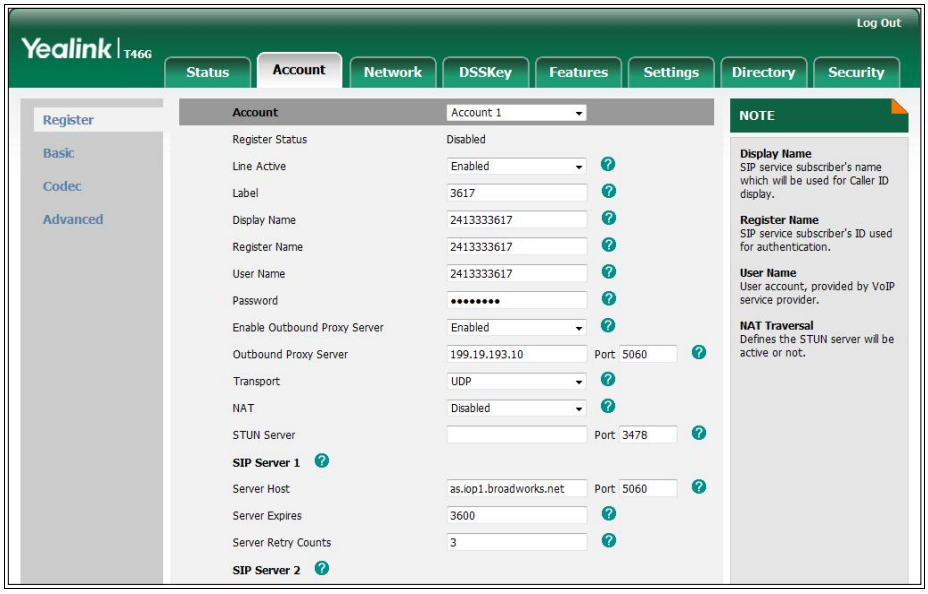

Figure 4 Account Register Page

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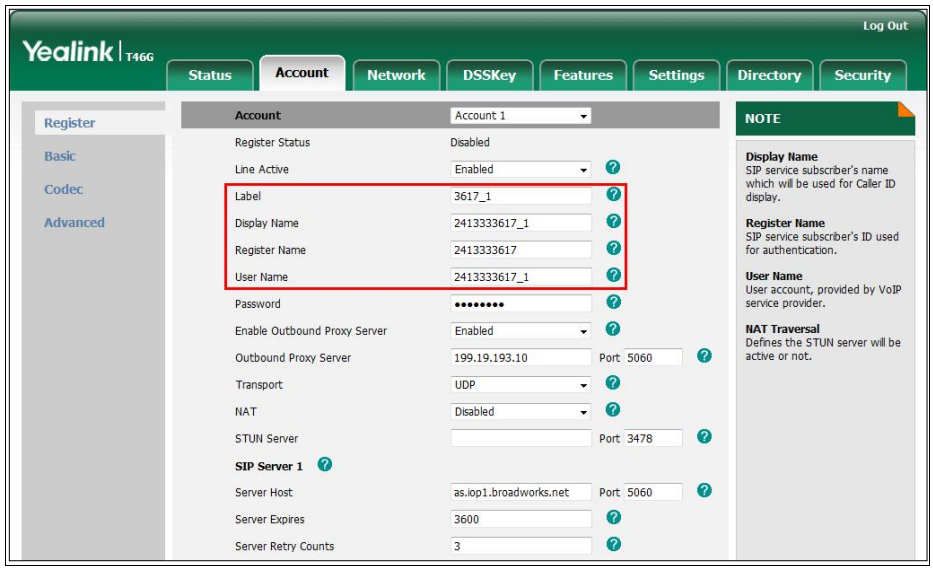

Figure 5 Account Register Page

Third, all of the advanced setting of the host and the other appearance line must enable the BroadSoft SCA feature. Browse to *Account →Advanced →Shared Line*.

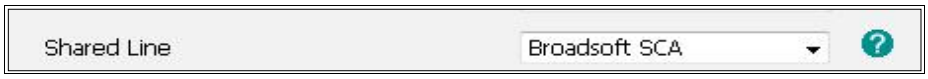

Figure 6 Shared Line Field

The following steps are used to assign multiple line keys to Line for Bob's phone.

Step	Command	Purpose
Step 1	Set DSS Key. Example: linekey.1.type =15 linekey.1.line = 1	Set memory key to line and apply this key type (line) to the shared line. key type: 15-line line ID: 0:line1 1:line1 2:line2 3:line3 4:line4 5:line5 6:line6 T40P have 3 line keys T41P/T41S/T42G/T42S have 15 line keys T46G/T46S have 27 line keys T48G/T48S/T49G have 29 line keys

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Step	Command	Purpose
Step 2	Set DSS Key. Example: linekey.2.type = 15 linekey.2.line = 1	Set memory key to line and apply this key type (line) to the shared line. key type: 15-line line ID: 0:line1 1:line1 2:line2 3:line3 4:line4 5:line5 6:line6 T40P have 3 line keys T41P/T41S/T42G/T42S have 15 line keys T46G/T46S have 27 line keys T48G/T48S/T49G have 29 line keys

The *Line Key* setting in shown in the following figure.

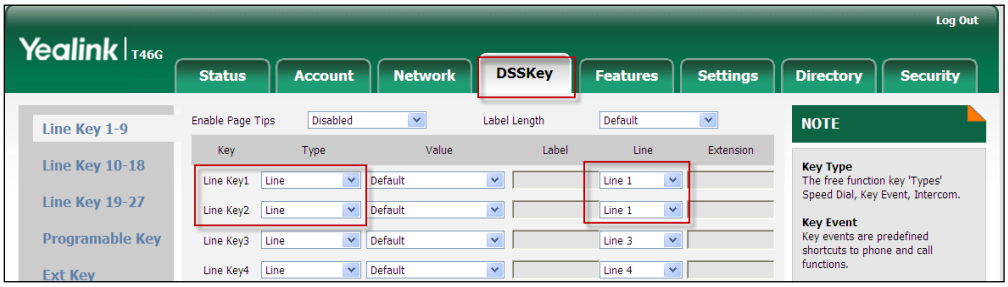

Figure 7 Line Key Fields

Via above method, you can manually set the DSS keys to shared line keys, but after version 72, Yealink phones support setting the DSS keys to shared line keys auto. If you have configured line key 1 to shared line, we need to configure 1 or 1 more free line keys as shared line keys, then you can do as follows. First, go to *Features* → *General Information*, and set the *Auto Linekeys* to "Enabled", then save the configuration.

Figure 8 Auto Line Keys

Go to *Account* → *Advanced*, input the line key number that you want to set to shared line keys, and then save the configuration. Then the first three free line keys are set to shared line keys.

Figure 9 Number of Line Key

The following steps are used to assign multiple line keys to Line for Bob's phone auto.

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Step	Command	Purpose
Step 1	features.auto_linekeys.enable = Example: features.auto_linekeys.enable = 1	Enable setting line keys to shared lines auto 0 = disable 1 = enable
Step 2	account.x.number_of_linekey = Example: account.1.number_of_linekey = 5	Set the number of line keys which you want to auto configure to shared line keys. Value range: 1 to 99999

4.3.2 Busy Lamp Field Configuration

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

Step	Command	Purpose
Step 1	Set the BLF List URI for the line. Example: account.1.blf.blf_list_uri = *u1062_blflist@as.iop1.broadworks.net*	The BLF List URI must be configured to match the BroadWorks settings.

Browse to *Account → Advanced → BLF List URI/BLF List Code/BLF List Barge In Code* to configure the BLF settings.

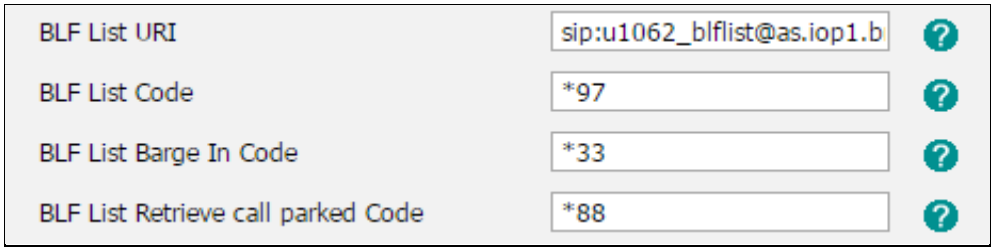

Figure 10 BLF Settings

On the BroadWorks server, browse to *Client Applications → Busy Lamp Field* and configure the settings as shown in the following figure.

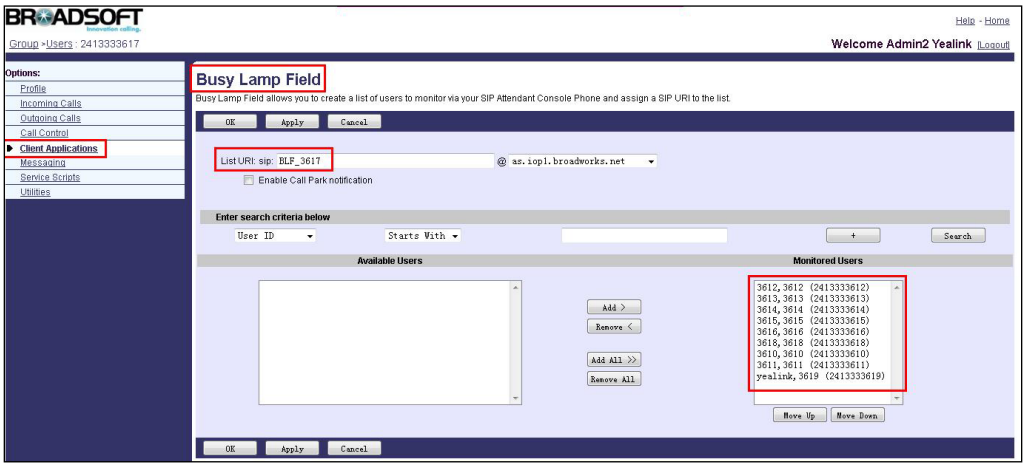

Figure 11 Busy Lamp Field Configuration Page

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Other related *autop* parameters are listed in the following table.

Parameter	Value	Purpose
bw.directory_enable	0 1	Enable BSFT feature. ▪ 0 for Disabled ▪ 1 for Enabled
account.X.blf_list_code =	String	*97 (for example)
account.X.blf_list_barge_in_code =	String	*33 (for example)
account.X.blf_list_retrieve_call_parked_code =	String	*88 (for example)
phone_setting.auto_blf_list_enable	0 1	Enable or disable auto blf list. ▪ 0 for Disabled ▪ 1 for Enabled (Default)
phone_setting.blf_list_sequence_type	0 1	Configure the priority of auto blflist. ▪ 0 for line key, exp (Default) ▪ 1 for Exp, linekey

4.3.3 Feature Key Synchronization Configuration

Feature Key Synchronization provides synchronization of phone services such as *Call Forwarding* and *Do Not Disturb* with the settings on BroadWorks for the analogous services. Configure the phone to enable Feature Key Synchronization as follows.

Step	Command	Purpose
Step 1	Enable Feature Key Synchronization. Example: bw.feature_key_sync = 1	Enable Feature Key Synchronization feature. ▪ 0 for Disabled ▪ 1 for Enabled

Browse to *Features* → *General Information* and set Feature Key Synchronization to "Enabled".

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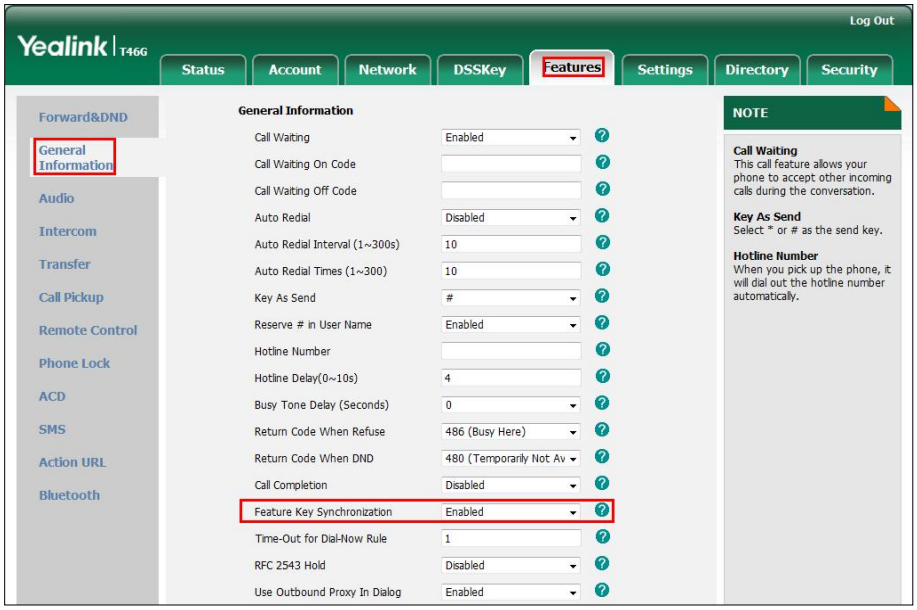

Figure 12 Feature Key Synchronization Configuration

4.3.4 Call Center Feature Configuration

This section provides configuration instructions to configure the phone to enable integration with BroadWorks Call Center features including, but not limited to, call information, hoteling, status, and disposition codes.

1) Browse to the *Call Centers* configuration page.

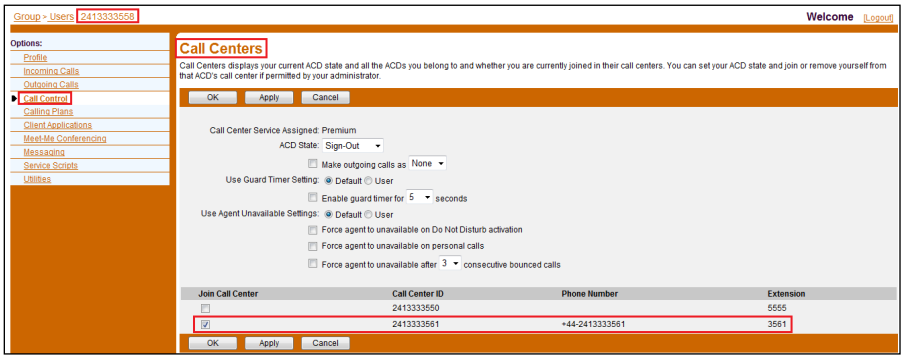

Figure 13 Call Control → Call Centers Page

2) Register the Call Center line.

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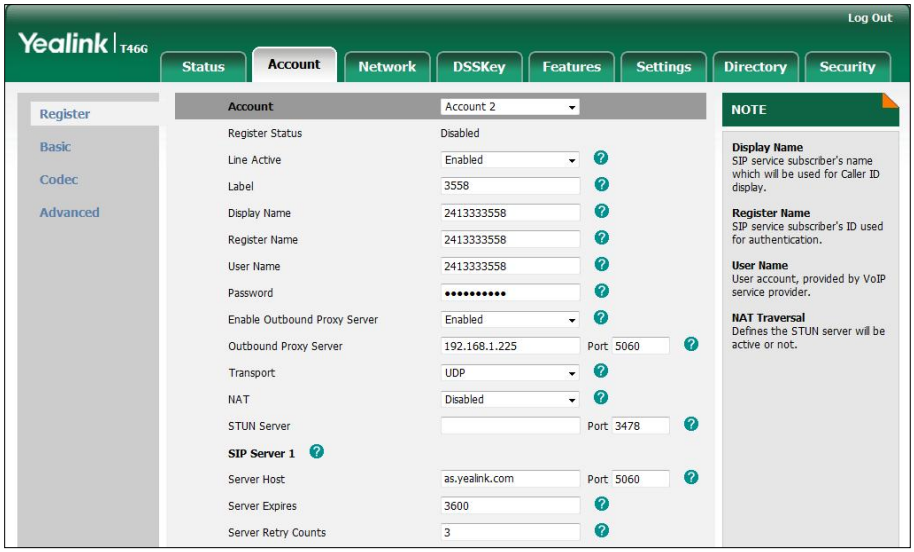

Figure 14 Account Register Page

3) Browse to the *Account* → *Advanced* page and set the SIP Server Type to "Broadsoft".

Figure 15 SIP Server Type Field

4) To configure the Call Center features listed in the following table, see the related *autop* parameters.

Step	Command	Purpose
Step 1	Enable ACD feature for the line. Example: `account.1.acd.enable =1`	Enable ACD feature. ▪ 0 for Disabled ▪ 1 for Enabled
Step 2	Set the phone to display the Unavailable and Available soft keys after logging into the ACD system for the line. Example: `account.1.acd.available = 1`	The Unavailable/Available soft key appears on the LCD screen when the phone logging to the ACD system. ▪ 0 for Disabled ▪ 1 for Enabled
Step 3	Configure the initial agent state for the line. Example `account.1.acd.initial_state = 1`	Configure the initial agent state. ▪ 1 for Available ▪ 2 for Unavailable

Step 4	Configure the unavailable code for the line.
	account.X.reason_code.Y = *code*
	account.X.reason_code_name.Y = *name*
	Example:
	`account.1.acd.unavailable_reason_enable = 1`
	`account.1.reason_code.1 = 100`
	`account.1.reason_code_name.1= rest`
		Enable unavailable code feature.
		▪ 0 for Disabled
		▪ 1 for Enable
		The unavailable code length must be within 10 characters.
		The unavailable reason length must be within 40 characters.
		Value Y must be continuous, with minimum and maximum as 1 and 100.

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Step	Command	Purpose
Step 5	Enable the hold reminder feature for the line. Example: `account.1.call center.play bw hold tone_enable = 1`	Enable the hold reminder feature. ▪ 0 for Disabled ▪ 1 for Enabled

Step 6	Configure the interval to specify how long the call center call information appears.
	Example:
	`account.1.call center.call info enable = 1`
	`account.1.call center.show call info_time = 30`
		Enable the call center call information feature.
		▪ 0 for Disabled
		▪ 1 for Enabled

Step 7	Configure the disposition code for the line.
	account.X.bw_disp_code.Y = *disposition code*
	account.X.bw_disp_code_name.Y = *disposition code name*
	Example:
	`account.1.call center.disp code enable = 1`
	`account.1.bw_disp_code.1 = 22`
	`account.1.bw_disp_code_name.1 = asleep`
		Enable account 1's disposition code feature.
		▪ 0 for Disabled
		▪ 1 for Enabled
		The disposition code must match one of the codes configured on BroadWorks.
		Value Y must be continuous, with minimum and maximum as 1 and 100.

Step 8	Configure the customer originated trace feature. Example: `account.1.call center.trace enable = 1`	Enable the customer originated trace for account 1. ▪ 0 for Disabled ▪ 1 for Enabled

Step 9	Configures the emergency escalation feature.
	account.X.supervisor_info_code_name.Y = *supervisor name*
	account.X.supervisor_info_code_name.Y = *supervisor name*
	Example:
	`account.1.call center.emergency enable = 1`
	`account.1.supervisor_info_code.1 = supervisor number`
	`account.1.supervisor info code name.1 = supervisor name`
		Enable the emergency escalation feature.
		▪ 0 for Disabled
		▪ 1 for Enabled
		The supervisor number. The supervisor number length must be within 30 characters.
		The supervisor name length must be within 99 characters.
		Value Y must be continuous, with minimum and maximum as 1 and 100.

Step 10	Configure the queue status via the Power Indicator LED.
	Example:
	`account.1.call_center.queue_status_enable = 1`
	`account.1.call_center.queue_status_light_enable = 1`
		Enable the queue status notification feature for account 1.
		▪ 0 for Disabled
		▪ 1 for Enabled

4.3.5 Call Recording Feature Configuration

Note that T4x IP Phones supports BroadWorks Call Recording features using Xsi Interface.

Centralized Call Recording feature enables you to record all active calls. You can initiate and control call recording process on your phone. The recording files are saved on the server.

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On the BroadWorks server, browse to *Call Control→Call Recording.*

Figure 16 Call Control → Call Recording

Configuration of the phone to enable Call Recording is described as follows.

Step	Command	Purpose
Step 1	Enable Call Recording. Example: bw.account.X.call_recording.enable=	Enables or disables centralized call recording feature for account. ▪ 0 for Disabled ▪ 1 for Enabled

4.3.6 Security Classification Feature Configuration

The Security Classification service allows BroadWorks to classify a user's calls with a security classification level. It enables users to be conscious of the maximum level of classified information that can be exchanged in the conversation.

On the BroadWorks server, browse to *Utilities → Security Classification.*

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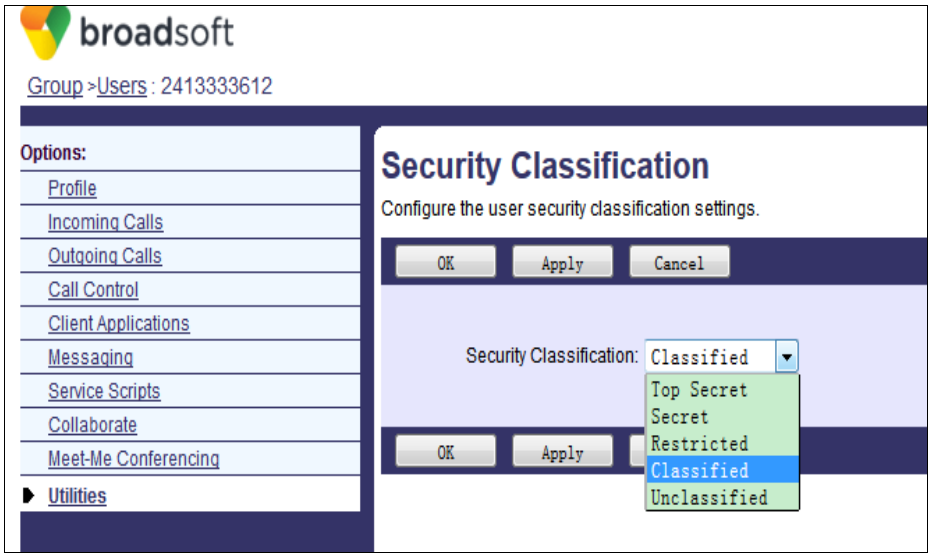

Figure 17 Utilities → Security Classification

Configuration of the phone to enable Call Recording is described as follows

Step	Command	Purpose
Step 1	Enable Security Classification. Example: account.X.security_classification.enable=	Enables or disables security classification feature for account X. ▪ 0 for Disabled ▪ 1 for Enabled

4.3.7 Emergency Call Configuration

This section provides configuration instructions to configure the device to enable emergency call headers and ringback after hang up. Configure the emergency for phone as follows:

Step	Command	Purpose
Step 1	Configure the emergency number. Example: phone_setting.emergency.number = 311	Configure the emergency number.

Browse to the *Features* → *Phone Lock* page and set the Emergency number.

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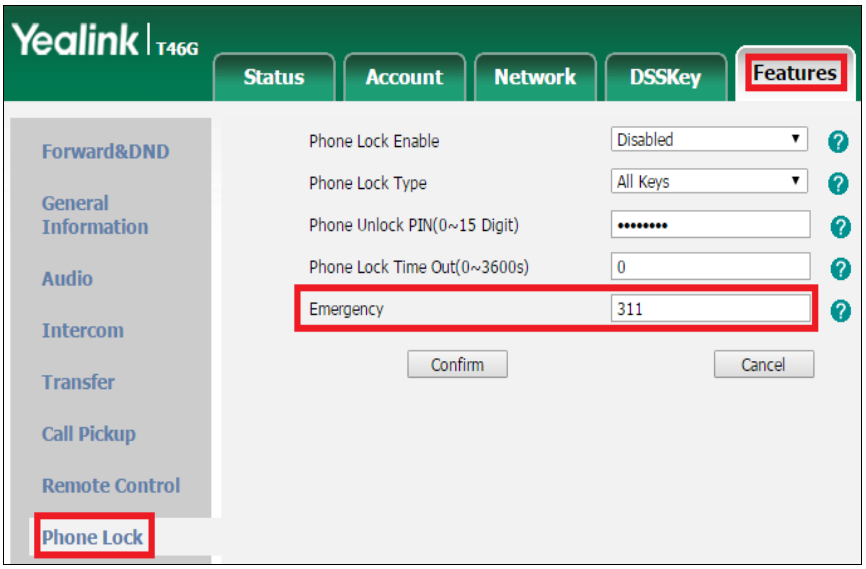

Figure 18 Emergency Configuration

4.3.8 Advice of Charge Configuration

Yealink T4x IP Phone does not support Advice of Charge feature.

4.3.9 Conference Event Configuration

Yealink T4x IP Phone does not support Conference Event.

4.3.10 Flexible Seating

Flexible seating feature has similar functionality to the BroadWorks Hoteling feature. But it uses a different licensing model and allows the device to be provisioned with the guest's profile settings. Flexible seating allows users with the flexible seating guest enabled to create an association with the host in the same group.

On the BroadWorks server, browse to *Services → Flexible Seating Host.*

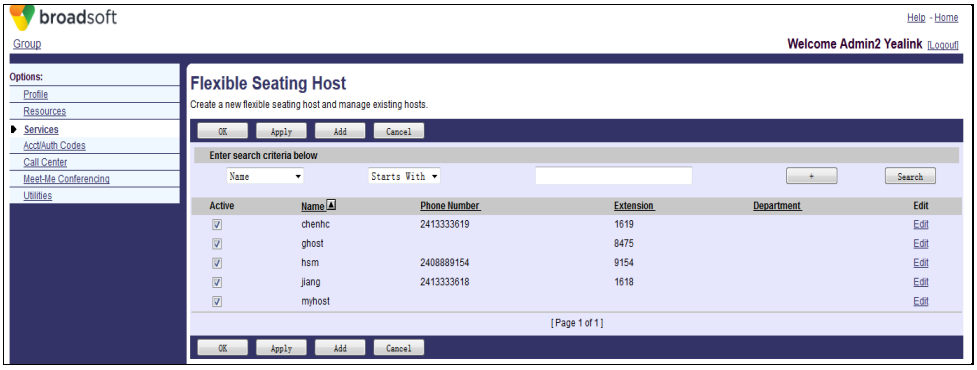

Figure 19 Flexible Host

On the BroadWorks server, browse to *Call Control → Flexible Seating Guest.*

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Figure 20 Flexible Guest

Configuration of the phone to enable Call Recording is described as follows.

Step	Command	Purpose
Step 1	Enables the flexible seating feature for account X. Example: account.1.flexible_seating.enable=1	Enables or disables the flexible seating feature. ▪ 0 for Disabled ▪ 1 for Enable
Step 2	Configures the hoteling mode for account X. Example: account.1.hoteling.mode=1	Configures the hoteling mode for account X. ▪ 0-Disabled ▪ 1-Hoteling ▪ 2-Flexible Seating Host ▪ 3-Flexible Seating Guest
Step 3	Configures the flexible seating pin for account X. Example: account.1.hoteling.pin=1234	Configures the flexible seating pin for account X.

4.4 Xtended Services Interface (Xsi) Feature Configuration

This section applies to SIP phones, soft clients, and other devices that provide a user interface.

This section provides configuration instructions for configuration of Xtended Services Interface features supported by the phone, including but not limited to, BroadWorks Directory and BroadWorks Call Logs.

For a phone to access the Xtended Services Interface features including services, directories, call logs, and so on, the SIP phone must first authenticate the user. Currently, the Yealink SIP phone supports two methods to authenticate a user: BroadWorks User Login Credentials and SIP Authentication Credentials.

BroadWorks User Login Credentials

1) Browse to the *Applications* → *Broadsoft XSI* → *XSI* Account.

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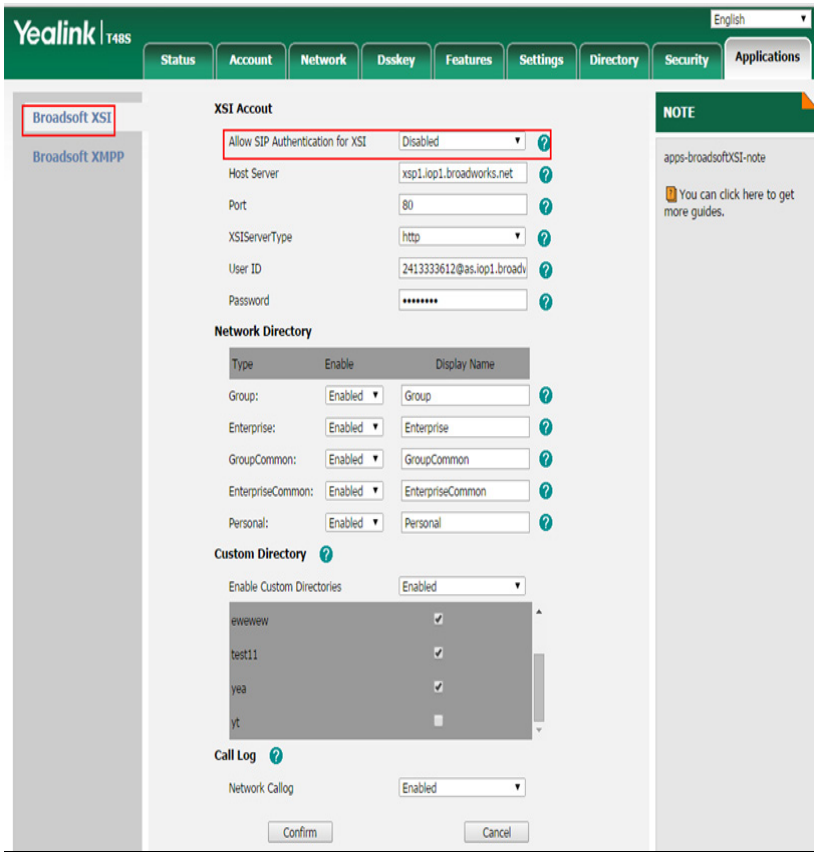

Figure 21 Xtended Services Interface Configuration

2) Type in the related parameters and then click **Confirm**.

SIP Authentication Credentials

1) Browse to the *Account → Register,* type in the correct account parameters and then click **Confirm**.

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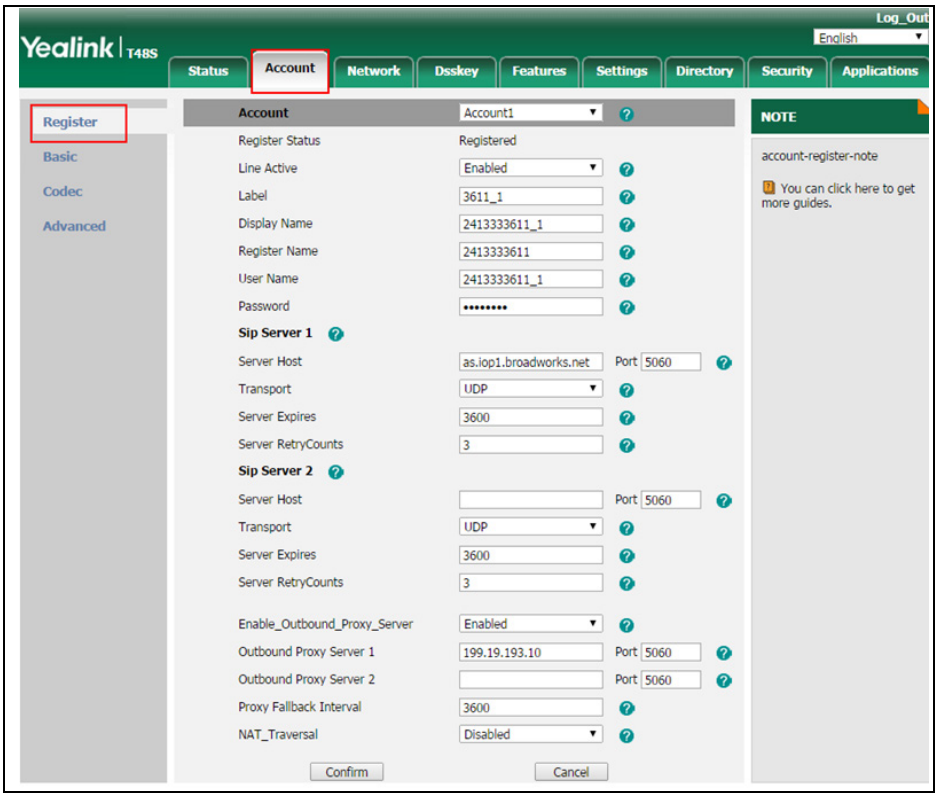

Figure 22 Xtended Services Platform Account Configuration

2) Browse to *Applications* → *Broadsoft XSI*, type in the correct parameters, then save the configuration.

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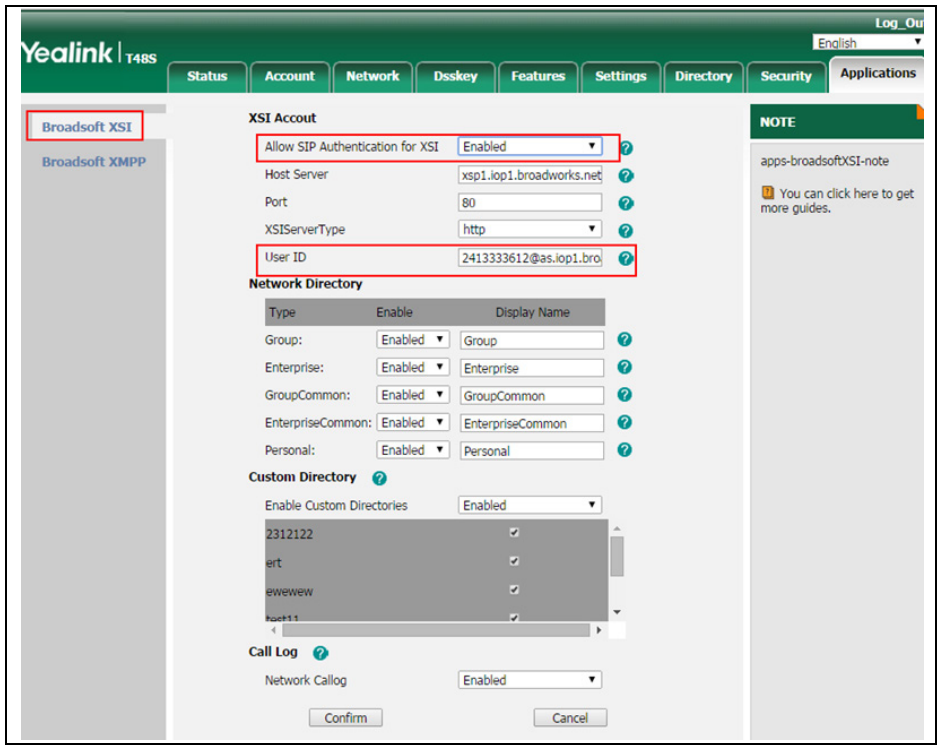

Figure 23 Xtended Services Platform Configuration

4.4.1 BroadWorks User Service Configuration

Integration with the BroadWorks Xtended Services Interface for User Service Configuration enables the phone to display and configure BroadWorks user services, such as Remote Office, BroadWorks Anywhere, Call Forwarding, and Simultaneous Ring. To enable User Service Configuration, perform the following steps.

Step	Command	Purpose
Step 1	bw.xsi.enable = Example: bw.xsi.enable = 1	Enable XSI feature. ▪ 0 for Disabled ▪ 1 for Enable
Step 2	sip.authentication_for_xsi = Example: sip.authentication_for_xsi = 1	Enable the Xsp authentication mode. ▪ 0= BroadWorks User Login credentials ▪ 1= SIP Authentication credentials
Step 3	account.1.xsi.user= account.1.xsi.password = Example: account.1.xsi.user= 2405551111 account.1.xsi.password = 123456	Set the Xsi login user name and password for line 1.
Step 4	account.1.xsi.host = Example: account.1.xsi.host =xsp1.iop1.broadworks.net	Set the IP address or domain name of the Xsp server.

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Step	Command	Purpose
Step 5	account.1.xsi.server_type = Example: account.1.xsi.server_type =http	Set the transport type for Xsi.
Step 6	account.1.xsi.port = Example: account.1.xsi.port =80	Set the transport port for Xsi.

4.4.2 BroadWorks Directory Configuration

Integration with the BroadWorks Xtended Services Interface for directories enables the phone to download personal, group, and enterprise directories from BroadWorks and makes them available to a user via the phone menus. To enable this feature, perform the following steps.

Step	Command	Purpose
Step 1	Enable the Network directory to be displayed on the IP phone. Example: `bw.xsi.directory.enable =1`	Enable the Network directory to be displayed on the IP phone. 0 = Disabled 1 = Enabled
Step 2	Enable the group directory to be displayed on the IP phone. Example: `bw_phonebook.group_enable = 1`	Enable the group directory to be displayed on the IP phone. 0 = Disabled 1 = Enabled
Step 3	Configure the group directory name displayed on the IP phone. Example: `bw_phonebook.group_displayname = Group`	Configure “Group” as the group directory name displayed on the IP phone. The default value is “Group”.
Step 4	Configure the group common directory to be displayed on the IP phone. Example: `bw_phonebook.group_common_enable = 1`	Enable the group common directory to be displayed on the IP phone. 0 = Disabled 1 = Enabled
Step 5	Configure the group common directory name displayed on the IP phone. Example: `bw_phonebook.group_common_displayname = GroupCommon`	Configure “GroupCommon” as the group common directory name displayed on the IP phone. The default value is “GroupCommon”.
Step 6	Configure the enterprise directory to be displayed on the IP phone. Example: `bw_phonebook.enterprise_enable = 1`	Enable the enterprise directory to be displayed on the IP phone. 0 = Disabled 1 = Enabled
Step 7	Configure the enterprise directory name displayed on the IP phone. Example: `bw phonebook.enterprise displayname = Enterprise`	Configure “Enterprise” as the enterprise directory name displayed on the IP phone. The default value is “Enterprise”.

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Step	Command	Purpose
Step 8	Enable the enterprise common directory to be displayed on the IP phone. Example: `bw_phonebook.enterprise_common_enable = 1`	Enable the enterprise common directory to be displayed on the IP phone. 0 = Disabled 1 = Enabled
Step 9	Configure the enterprise common directory name displayed on the IP phone. Example: `bw_phonebook.enterprise_common_displayname = EnterpriseCommon`	Configure “EnterpriseCommon” as the enterprise common directory name displayed on the IP phone. The default value is “EnterpriseCommon”.
Step 10	Enable the personal directory to be displayed on the IP phone. Example: `bw_phonebook.personal_enable = 1`	Enable the personal directory to be displayed on the IP phone. 0 = Disabled 1 = Enabled
Step 11	Configure the personal directory name displayed on the IP phone. `bw_phonebook.personal_displayname = Personal`	Configure “Personal” as the personal directory name displayed on the IP phone. The default value is “Personal”.
Step 12	Enable the custom directory feature. Example: `bw_phonebook.custom = 1`	Enable the custom directory feature. 0 = Disabled 1 = Enabled

4.4.3 BroadWorks Call Logs Configuration

Integration with the BroadWorks Xtended Services Interface for Call Logs enables the phone to get call log history (missed, placed, and received calls) from BroadWorks and make them available to a user via the phone menus. To enable this feature, perform the following step.

Step	Command	Purpose
Step 1	Enable the BroadSoft call log feature. Example: `bw.xsi.call_log_enable = 1`	Enable BroadWorks call log feature. ▪ 0 for Disabled ▪ 1 for Enabled

Configure the phone as shown in the following figure.

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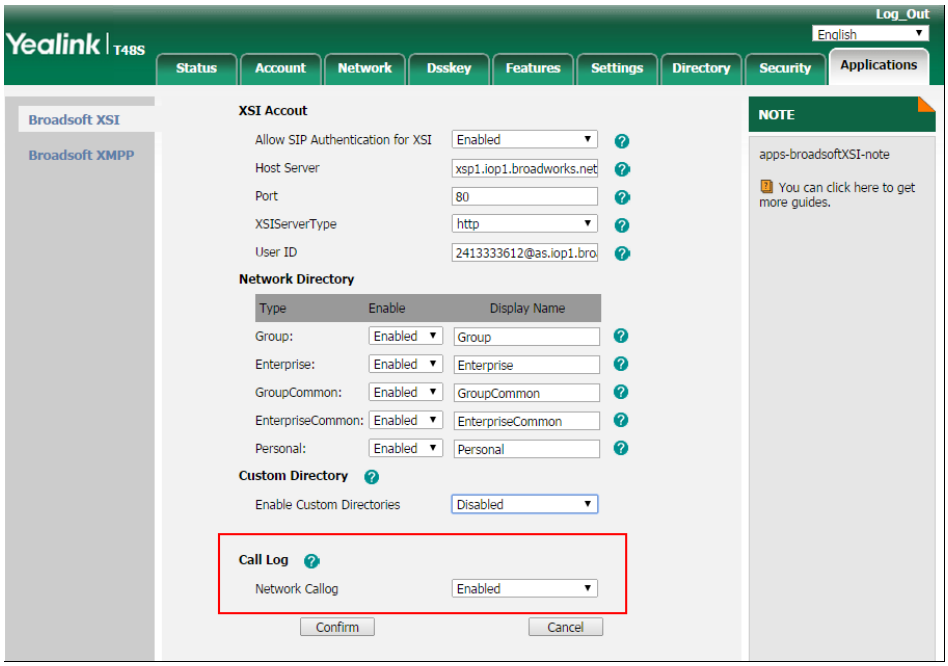

Figure 24 Call Logs Configuration

4.4.4 BroadWorks Call Park Configuration

Integration with the BroadWorks Xtended Services Interface for Call Park makes call park available to a user via the phone menus. To enable this feature, perform the following steps.

Step	Command	Purpose
Step 1	Enable call park feature for the line. Example: `account.1.callpark_enable= 1`	Enable the Call Park feature. 0 = Disabled 1 = Enabled
Step 2	Enable the phone to display the Park soft key during a call. Example: `call_park.enable = 1`	The Park soft key appears on the LCD screen during a call. 0 = Disabled 1 = Enabled
Step 3	Enable the phone to display the GPark soft key during a call. Example: `call_park.group_enable= 1`	The GPark soft key appears on the LCD screen during a call. 0 = Disabled 1 = Enabled
Step 4	Enable the phone to play a warning tone when a call is parked against its line. Example: `call_park.park_ring = 1`	Enable the phone to play a warning tone when a call is parked against its line. 0 = Disabled 1 = Enabled
Step 5	Enable the phone to display a parked indicator when a call is parked against its line. Example: `call_park.park_visual_notify_enable = 1`	Enable the phone to display a parked indicator when a call is parked against its line. 0 = Disabled 1 = Enabled

Configure the Call Park settings as shown in the following figure.

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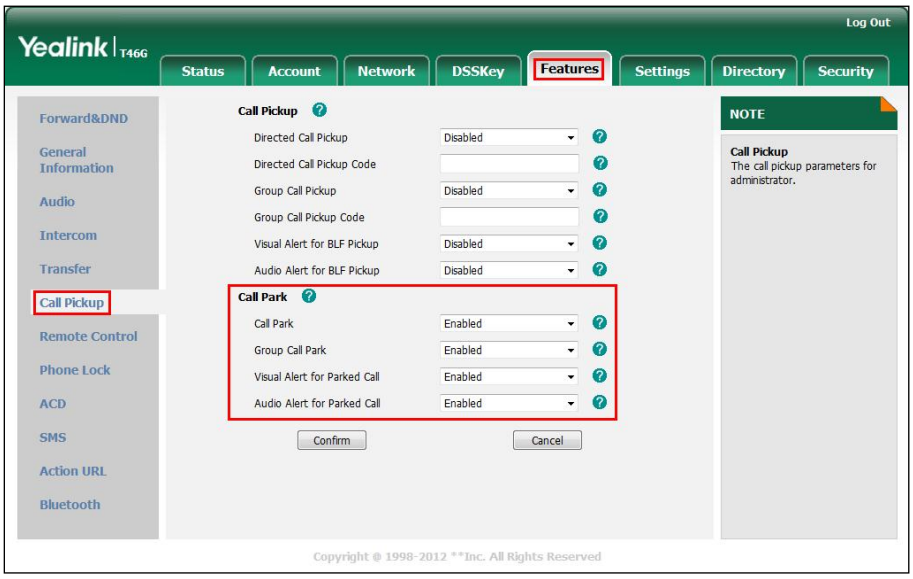

Figure 25 Call Park Configuration

4.4.5 BroadWorks Visual Voice Mail Configuration

Visual voice mail feature allows the IP phone to present the users with a list of voice/video mails, download the voice/video mail detail summary content, mark voice/video mails as read or unread, and delete voice/video mails.

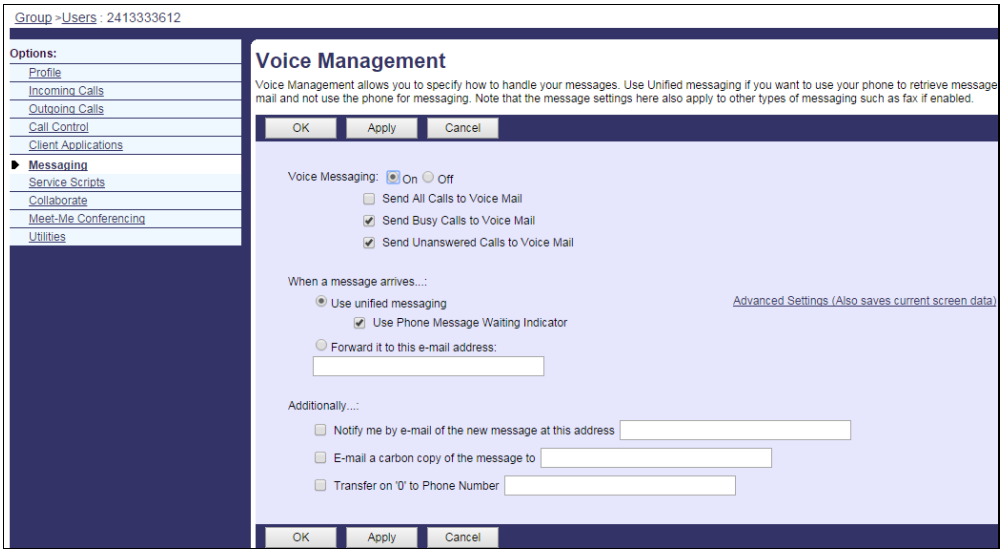

Figure 26 Visual Voice Mail

Step	Command	Purpose
Step 1	Enable visual voice mail feature. Example: `bw.voice_mail.visual.enable=1`	Enables or disables the visual voice mail feature. 0 = Disabled 1 = Enabled

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Step	Command	Purpose
Step 2	Enable the phone to display the Park soft key during a call. Example: `bw.voice_mail.visual.display_videomail.enable=1`	Enables or disables to display the video mails in the Voice Mail list. 0 = Disabled 1 = Enabled
Step 3	Enable to enter the View Voice Mail screen when pressing the MESSAGE key when the phone is idle Example: `voice_mail.message_key.mode = 1`	Enables or disables to enter the View Voice Mail screen when pressing the MESSAGE key when the phone is idle 0 = Disabled 1 = Enabled

4.5 Instant Message and Presence Configuration

This section applies to SIP phones, soft clients, and other devices that provide a user interface.

NOTE: This feature is only available on the T46G/T46S/T48G/T48S/T49G models.

First, enable the UC Active function by the follow *autop* statement:

```
bw.xmpp.enable = 1    (1 - Enabled, 0 - Disabled)
```

The other two *autop* configuration statements are as follows:

```
features.uc_username =                (The uc username)
features.uc_password =                 (The uc password)
```

Second, browse to *Applications* → *Broadsoft XMPP* and fill in the associated parameter for the UC Username and UC Password fields.

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4.6 Connected Line Presentation on UPDATE or Re-Invite

Log in to the device's web portal and enter the Caller ID Source.

Select the configuration item PAI, PAI-FROM, or PAI-RPID-FROM.

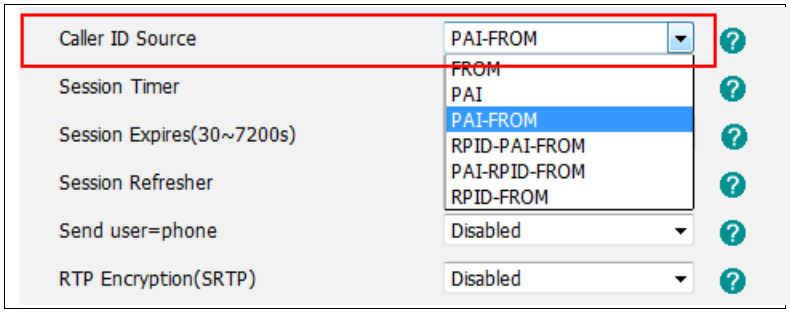

Figure 27 Connected Line Presentation on Update or Re-Invite

Alternatively, you can use the configuration parameter *account.x.cid_source*=. The available values are:

- 0 – FROM
- 1 – PAI
- 2 – PAI-FROM
- 3 – PRID-PAI-FROM
- 4 – PAI-RPID-FROM
- 5 – RPID-FROM

To make this work, you can select "1", "2", or "4".

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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 Yealink T4x IP 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 Yealink T4x IP 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 Yealink T4x IP 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 Yealink T4x IP 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	

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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	Yes	
	Inspect Device-Specific Config File	Yes	
	Inspect Other Config Files	Yes	
	Inspect Static Files	Yes	
Device Inspection	Inspect SIP Settings	Yes	
	Inspect Line Settings	Yes	
	Inspect Service Settings	Yes	
HTTP File Upload	HTTP Upload Using Xtended Services Platform IP Address	No	
	HTTP Upload Using Xtended Services Platform FQDN	No	
	HTTP Upload Using Xtended Services Platform Cluster FQDN	No	
Call Processing Sanity Tests	Register with Authentication	Yes	
	Call Origination	Yes	
	Call Termination	Yes	
	Remote Restart	Yes	
	Shared Line Origination	Yes	
	Shared Line Termination	Yes	
	Shared Line Status	Yes	
	Busy Lamp Field	Yes	
	Network-Based Conference	Yes	
Flexible Seating	Association via Voice Portal	Yes	
	Association via Phone	Yes	
No Touch Provisioning	Provision via DHCP Options Field	No*	See section *5.2.5.2.4 DHCP Server configuration (Direct DM Location) and Redirect Events.*
	No Touch Provision via DM redirect	No*	See section *5.2.5.2.3 DHCP Server Configuration (BroadWorks Default) and Redirect Events.*
	No Touch Provision via Vendor redirect	No*	See section *5.2.5.3 No Touch Provisioning via Yealink Redirect Service.*

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5.2 Device Management Configuration

This section identifies the steps required to enable the Yealink T4x IP Phone for device management. For Device Management configuration details not covered here, see the *BroadWorks Device Management Configuration Guide* [2] and the *BroadWorks CPE Kit Usage Guide* [8].

5.2.1 Configure BroadWorks Tags

The template files in Device Management use tags to represent the data stored on BroadWorks. When a configuration changes for a user, Device Management parses the template files and replaces the Device Management tags with the associated data stored on BroadWorks. There are default tags defined in the Device Management software and there are custom tags that the service provider can create/define via the web portal for use by Device Management. There are two types of custom tags that can be defined: system-default tags are common to all phones on the system; device type-specific tags are common to Yealink T4x phone models only.

The Yealink T4x IP Phone makes use of dynamic tags, which may be configured by a BroadWorks administrator as either system default or device type-specific tags. This section identifies the required tags.

5.2.1.1 Create System Default Tags

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

Tag Name	Valid Settings	Description
%SNTP_SERVER_1%	IP address/FQDN	NTP server address
%SNTP_SERVER_2%	IP address/FQDN	NTP server address alternate
%DNS_SERVER_1%	IP address	DNS server address
%DNS_SERVER_2%	IP address	DNS server address alternate
%SBC_ADDRESS%	IP address/FQDN	SBC SIP address
%SBC_PORT%	Port	SBC SIP port
%USE_SBC_BOOLEAN%	0/1	Use SBC: 1=yes, 0=no
%XSP_ADDRESS_XSI_ACTIONS%	IP address/FQDN	Xtended Services Platform server address

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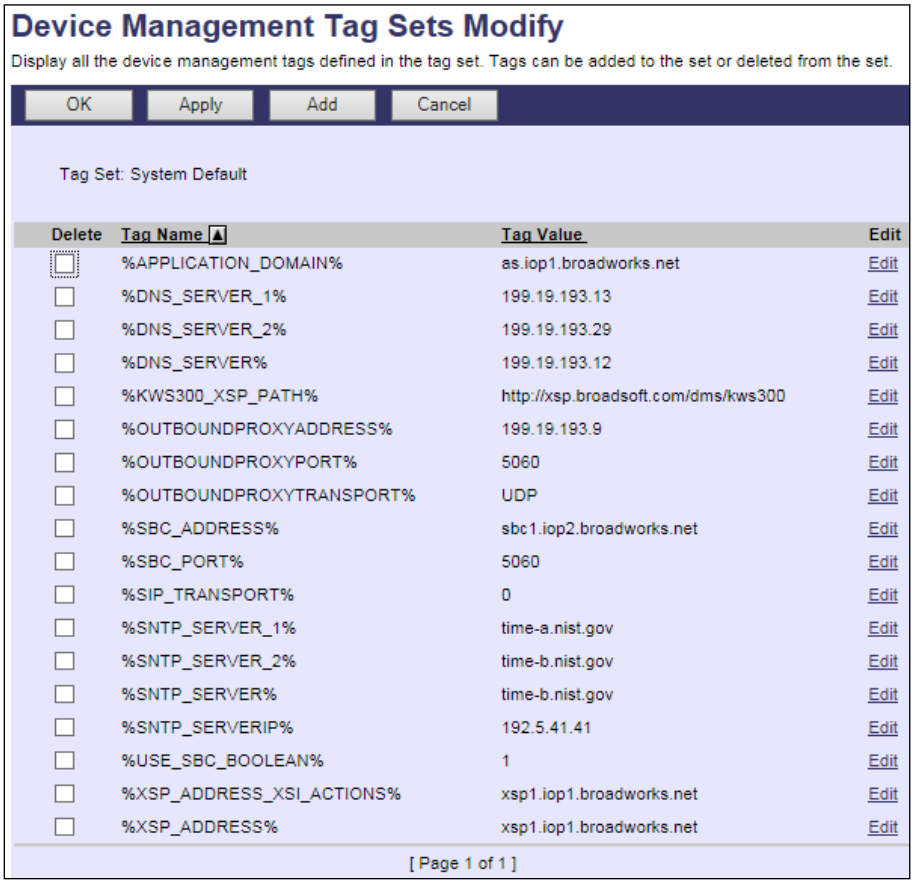
Example System Default Tag Settings



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.

OK | Apply | Add | Cancel

Tag Set: System Default

Delete	Tag Name	Tag Value	Edit
☐	%APPLICATION_DOMAIN%	as.iop1.broadworks.net	Edit
☐	%DNS_SERVER_1%	199.19.193.13	Edit
☐	%DNS_SERVER_2%	199.19.193.29	Edit
☐	%DNS_SERVER%	199.19.193.12	Edit
☐	%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	Edit
☐	%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

[Page 1 of 1]

Figure 28 System Default Tag Settings

5.2.1.2 Create Device Type-Specific Tags

Browse to *System* → *Resources* → *Device Management Tag Sets* and select *Add* to add a new tag set. Configure the tag set name using the device name appended by Tags: *Yealink T4x_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
%COUNTRY%	United States, Australia, Austria, Brazil, Belgium, China, Czech, Denmark, Finland, France, Germany, Great Britain, Greece, Hungary, Lithuania, India, Italy, Japan, Mexico, New Zealand, Netherlands, Norway, Portugal, Spain, Switzerland, Sweden, Russia, Chile, Czech ETSI	Identifies the country for standard ringtones.
%FEATURE_BW_CALL_PARK%	0 1	Enable/Disable the call park feature for the phone. ▪ 0 = Disabled ▪ 1 = Enable

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Tag Name	Valid Settings	Description
%TRANSPORT_TYPE%	0 1 2 3	Defines the SIP transport. ▪ 0 = UDP ▪ 1 = TCP ▪ 2 = TLS ▪ 3 = DNS NAPTR
%REJECT_ANONYMOUS_CALL_BINARY%	0 1	Enable/Disable the anonymous call rejection feature for each line. ▪ 0 = Disabled ▪ 1 = Enable
%CALL_WAITING_BINARY%	0 1	Enable/Disable the call waiting feature. ▪ 0 = Disabled ▪ 1 = Enable
%FEATURE_SYN%	0 1	Enable/Disable the feature key synchronization for the phone. ▪ 0 = Disabled ▪ 1 = Enable
%ACD_SYNC_BINARY%	0 1	Enable/Disable the ACD feature for the phone. ▪ 0 = Disabled ▪ 1 = Enable
%XSIPASSWORD-x%	string	Xsi login password for line x. *Leave the value as blank, this tag will be customized at each device profile level.
%TIMEZONENAME%	See Appendix B.	Defines the time zone name.
%AUTO_ANSWER_BINARY%	0 1	Enable/Disable the auto answer feature for the phone. ▪ 0 = Disabled ▪ 1 = Enable
%T40_FIRMWARE%	54.<x.x.x>.rom Example:54.81.193.15.rom	Defines the firmware version for T40 and T40P.
%T41_FIRMWARE%	36.<x.x.x>.rom Example:36.81.193.150.rom	Defines the T41P firmware version.
%T41S_FIRMWARE%	66.<x.x.x>.rom Example:66.81.193.15.rom	Defines the T41S firmware version.
%T42_FIRMWARE%	29.<x.x.x>.rom Example: 29.81.193.15.rom	Defines the T42G firmware version.
%T42S_FIRMWARE%	66.<x.x.x>.rom Example:66.81.193.15.rom	Defines the T42S firmware version.
%T46_FIRMWARE%	28.<x.x.x>.rom Example: 28.81.193.15.rom	Defines the T46G firmware version.
%T46S_FIRMWARE%	66.<x.x.x>.rom Example:66.81.193.15.rom	Defines the T46S firmware version.
%T48_FIRMWARE%	35.<x.x.x>.rom Example: 35.81.193.15.rom	Defines the T48G firmware version.

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Tag Name	Valid Settings	Description
%T48S_FIRMWARE%	66.<x.x.x>.rom Example:66.81.193.15.rom	Defines the T48S firmware version.
%BWHOTELINGMODE-x%	0 1 2 3	Configures the hoteling mode for account X. ▪ 0-Disabled ▪ 1-Hoteling ▪ 2-Flexible Seating Host 3-Flexible Seating Guest
%BWFLEXIBLESEATINGUNLOCKPIN-x%	string	Configures the flexible seating pin for account X.
%T49_FIRMWARE%	51.<x.x.x>.rom Example: 51.80.193.70.rom	Defines the T49G firmware version.

Example Device Type-specific Tag Settings

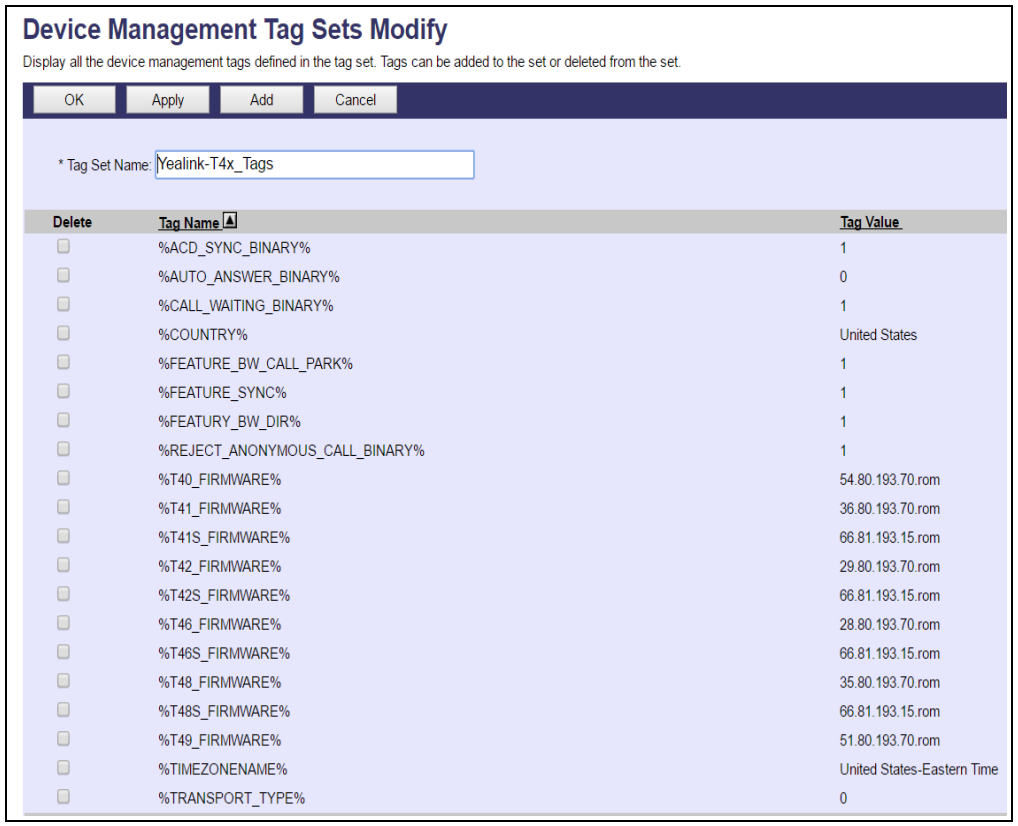

Figure 29 Device Type-specific Tag Settings

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.

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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 Yealink T4x IP Phone as a Device Management-enabled device type. Also, see the *BroadWorks CPE Kit Usage Guide* [8].

Download the Yealink T4x IP Phone CPE kit from BroadSoft Xchange at xchange.broadsoft.com. Extract the DTAF file(s) from the CPE kit. These are the import files. Repeat the following steps for each model you wish to import.

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

   After the import finishes, complete the following post-import configuration steps:
4) Browse to *System* → *Resources* → *Identity/Device Profile Types.*
5) Perform a search to find the imported Yealink device profile type, Yealink T46G.
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.

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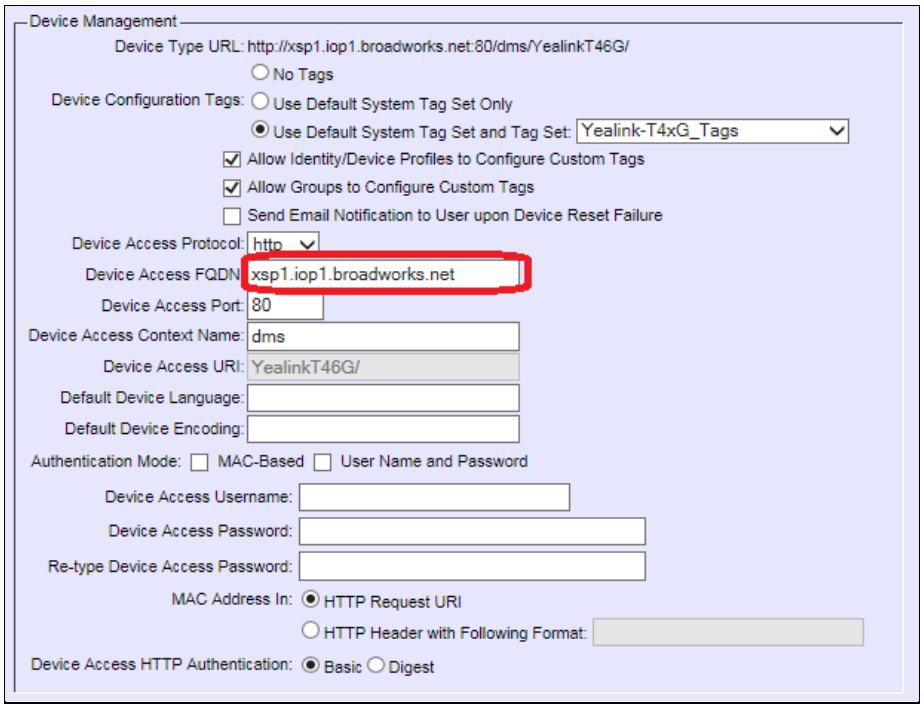

Figure 30 Device Access FQDN

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

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

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

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

9) Update the device profile type language setting according to instructions provided in section *5.2.2.2.4 Language Mapping*.

5.2.2.2 Configuration Method 2: Manual

This section identifies the basic steps necessary for an administrator to manually configure BroadWorks to add the Yealink T4x IP 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.

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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 Yealink T4x IP Phone.

Browse to *System → Resources → Identity/Device Profile Types* and perform a search to find the Yealink 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 Yealink T4x IP Phone downloads.

Configuration templates, firmware, and other files the T4x IP Phone uses must be uploaded to BroadWorks. Download the Yealink T4x IP Phone CPE kit from BroadSoft Xchange at xchange.broadsoft.com. Extract the configuration files from the *Configuration Files* folder of CPE kit. Obtain the firmware files directly from Yealink.

The following table identifies the Yealink T4x IP Phone configuration files distributed with the firmware version73 CPE kit.

File Name	CPE Kit Template File Name	File Type	Description
		System-level, Device-specific, Static, Time Zone Alias	
Examples			
BWMACADDRESS.cfg	*%BWMACADDRESS%-T4x.cfg*	Device-specific	This file contains device-specific parameters that the phone has to load.
y0000000000xx.cfg T40: xx=54 T41: xx=36 T42: xx=29 T46: xx=28 T48: xx=35 T41S:xx=68 T42S:xx=67 T46S:xx=66 T48S:xx=65 T49: xx=51	*y0000000000xx.cfg* T40: xx=54 T41: xx=36 T42: xx=29 T46: xx=28 T48: xx=35 T41S:xx=68 T42S:xx=67 T46S:xx=66 T48S:xx=65 T49: xx=51	System-level	This file contains system level parameters that the phone has to load.
contact.xml	*contact.xml*	Static	This file contains the contact information in XML format.

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File Name	CPE Kit Template File Name	File Type	Description
blacklist.xml	*blacklist.xml*	Static	This file contains the blacklist contact information in XML format.
DialPlan.xml	*DialPlan.xml*	Static	Specifies the dialing rules.
AutoDST.xml	*AutoDST.xml*	Static	Rules set of the beginning and end of daylight savings time.
TimeZoneAliasLabels_Yealink+<model>.properties	*TimeZoneAliasLabels_Yealink-<model>.properties*	Time Zone Alias	The Time Zone Alias file is a BroadWorks Device Management file used to map time zone identifiers between BroadWorks and Yealink phones. A Time Zone Alias file is required for each model.
WebItemsLevel.cfg	*WebItemsLevel.cfg*	Static	This file defines the access level of configuration items in cfg format.
CallFailed.xml	*Call Failed.xml*	Static	This file defines the soft key of the call failed state.
CallIn.xml	*CallIn.xml*	Static	This file defines the incoming call state.
Connecting.xml	*Connecting.xml*	Static	This file defines the soft key of connecting state.
Dialing.xml	*Dialing.xml*	Static	This file defines the soft key of dialing state.
favorite_setting.xml	*favorite_setting.xml*	static	This file configures desired lists of the Directory soft key.
Language files: *000.GUI.English.lang*	*000.GUI.English.lang(Phone Model)*	Static	This is the customized languages file for English.
Ring.wav	*Ring.wav*	Static	This is the ring tone in WAV format.
RingBack.xml	*RingBack(<Phone Model>).xml*	Static	This file defines the soft key of ring back state.
super_search.xml	*super_search.xml*	Static	This file configures the search source list in dialing.
Talking.xml	*Talking(<Phone Model>).xml*	Static	This file defines the soft key of talking state.

The following table identifies other files that the Yealink T4xG IP Phone downloads from the server or uploads to the server. These files are not provided in the CPE kit and must be obtained from Yealink.

File Name	File Type	Description
x.x.x.x.rom	Static	Device firmware file.
xxx.GUI.<language>.lang	Static	Customized language files.

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

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5.2.2.2.2.1 System Files

This section identifies the system-level files used by Yealink and provides instructions for defining the files and uploading for Device Management.

T4x IP Phone model downloads a model-specific system file, named as follows:

- *y0000000000xx.cfg*
- T40(P): xx=54
- T41: xx=36
- T42: xx=29
- T46: xx=28
- T48: xx=35
- T41S:xx=68
- T42S:xx=67
- T46S:xx=66
- T48S:xx=65
- T49: xx=51

Add the *y000000000028.cfg* file to the device profile type with the settings shown in *Figure 31 y000000000028.cfg File Settings.*

After creating the device profile type file, upload *y000000000028.cfg* extracted from the CPE kit. Use the **Browse** button on the file definition screen. Be sure to click **Apply** after uploading the file.

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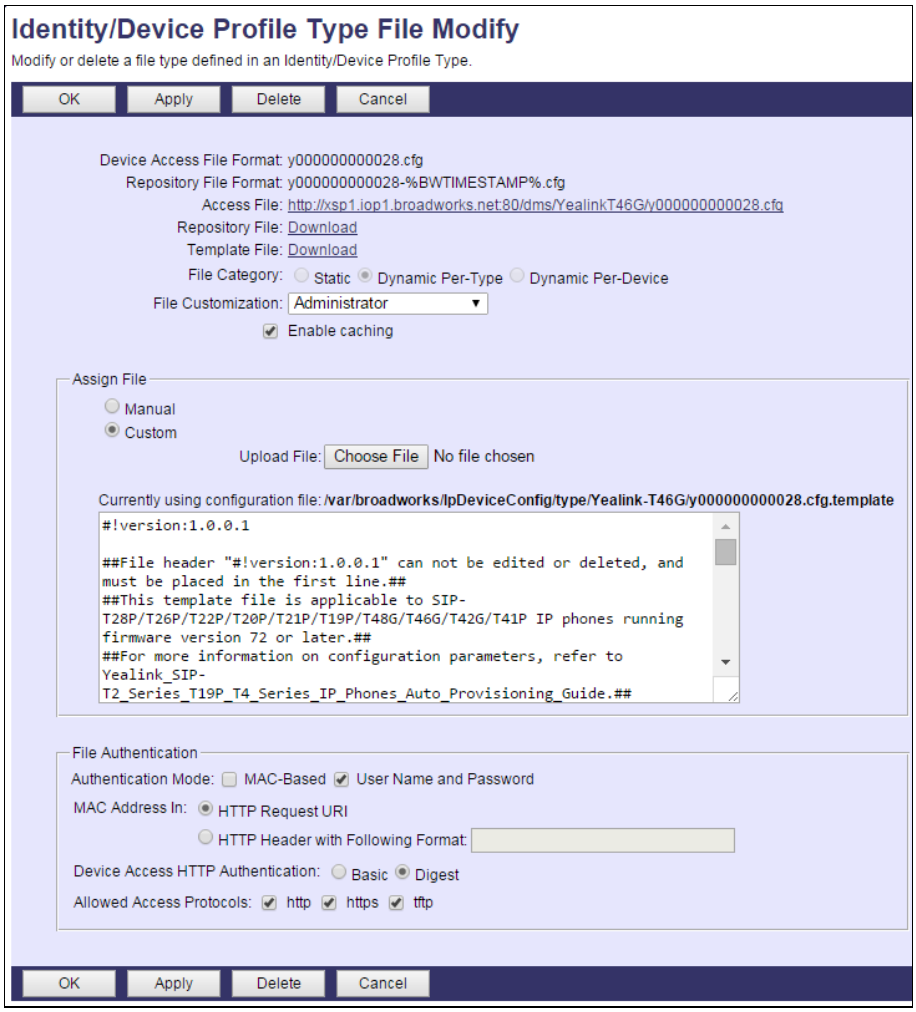

Figure 31 *y000000000028.cfg* File Settings

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5.2.2.2.2.2 Device-Specific File

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

Each T4x phone downloads a phone-specific file based on the phone's MAC address using the following file name format:

- <mac-address>.cfg

Add the <mac-address>.cfg file to the device profile type with the settings shown in *Figure 32 <mac-address>.cfg Settings*.

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

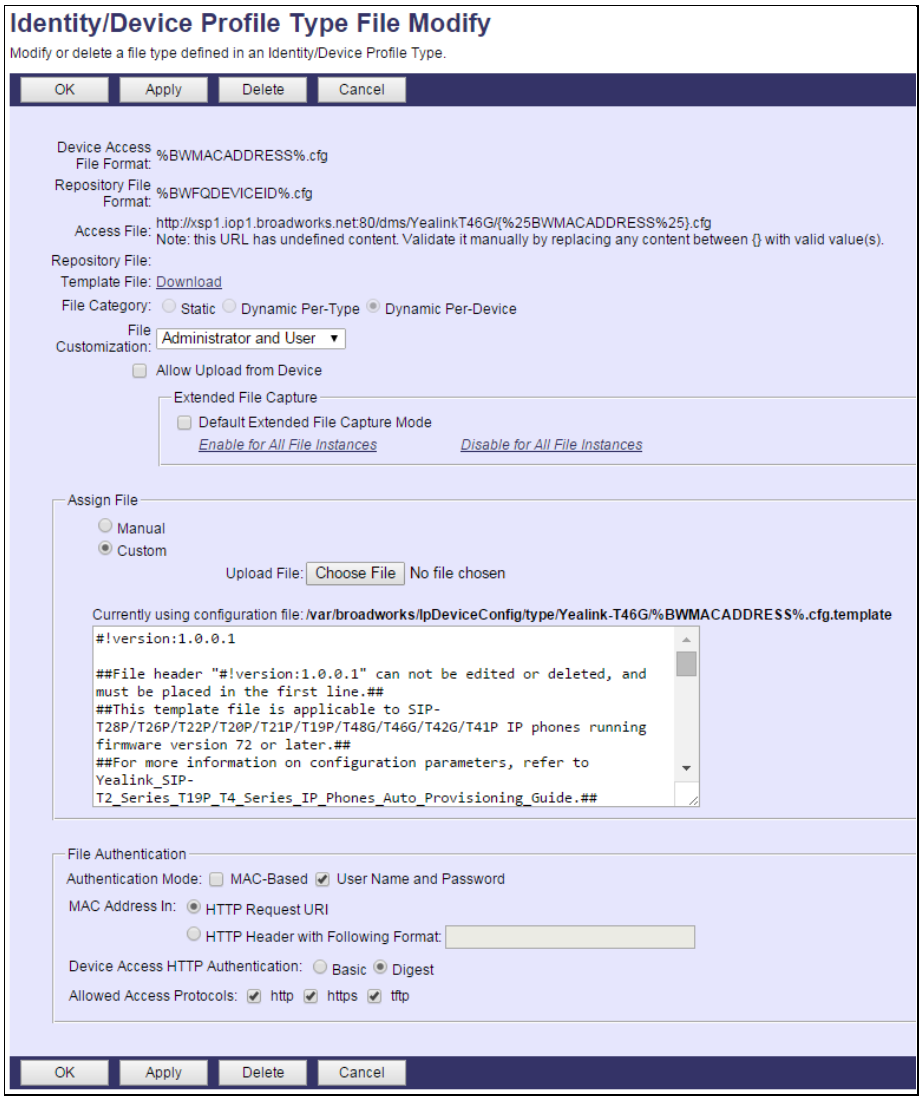

Figure 32 <mac-address>.cfg Settings

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5.2.2.2.2.3 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 Yealink T4x requires the following static files:

- <firmware-version>.rom
- *Ring1.wav*
- *000.GUI.English.lang* (GUI/WEB)
- *AutoDST.xml*
- *config.bin*
- *contact_group_list.xml*
- *contact_list.xml*
- *DialPlan.xml*
- *DialNow.xml*
- *CallFailed.xml*
- *CallIn.xml*
- *Dialing.xml*
- *Connecting.xml*
- *RingBack.xml*
- *Talking.xml*
- *super_search.xml*
- *favorite_setting.xml*
- *WebItemsLevel.cfg*

Add the static files to the device profile type with the settings shown in *Figure 33 Static File Settings*.

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

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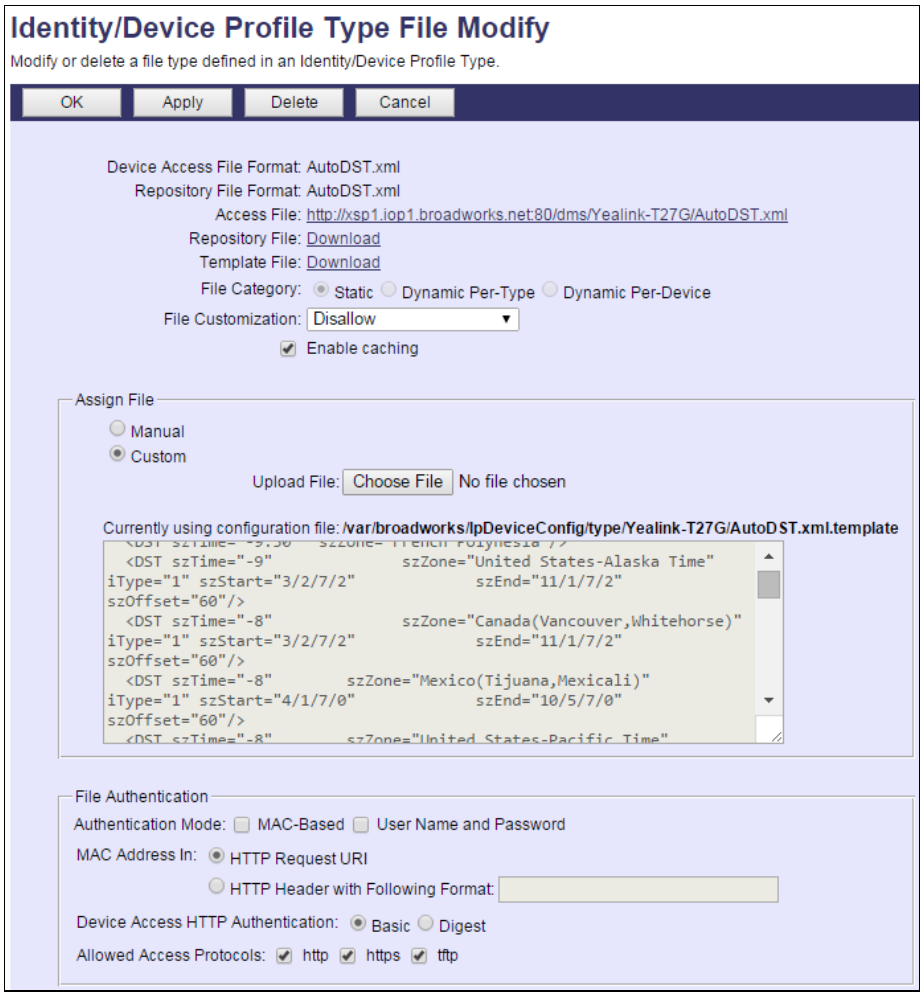

Figure 33 Static File Settings

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 *Yealink_T46G,* the time zone mapping file name must be *TimeZoneAliasLabels_Yealink_T46G.properties*. A space in the device name must be converted to a "+" in the file name. A separate *TimeZoneAlias* file must be provided for each device profile type, corresponding to each Yealink T4x IP Phone model.

The following is an example of the file contents:

```
US_ALASKA=-9 cat
US_HAWAII=-10
CANADA_PACIFIC_TIME=-8
MEXICO_PACIFIC_TIME=-8
US_PACIFIC_TIME=-8
US_ARIZONA=-7
```


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```
CANADA_MOUNTAIN_TIME=-7
MEXICO_MOUNTAIN_TIME=-7
US_MOUNTAIN_TIME=-7
CANADA_CENTRAL_TIME=-6
US_CENTRAL_TIME=-6
CANADA_EASTERN_TIME=-5
US_INDIANA=-5
US_EASTERN_TIME=-5
VENEZUELA_TIME=-4.5
CANADA_ALTANTIC_TIME=-4
CHILE_TIME=-4
CANADA_NEWFOUNDLAND=-3.5
ARGENTINA_TIME=-3
GREENWICH_MEAN_TIME=0
CENTRAL_EUROPEAN_TIME=+1
EASTERN_EUROPEAN_TIME=+2
EAST_AFRICAN_TIME=+3
IRAN_TIME=+3.5
AZERBAIJAN_TIME=+4
AFGHANISTAN_TIME=+4.5
PAKISTAN_TIME=+5
INDIA_TIME=+5.5
EASTERN_KAZAKHSTAN_TIME=+6
MYANMAR_TIME=+6.5
THAILAND_TIME=+7
CHINA_TIME=+8
JAPAN_TIME=+9
AUSTRALIAN_CENTRAL_STANDARD_TIME=+9.5
AUSTRALIAN_EASTERN_STANDARD_TIME=+10
NEWZEALAND_TIME=+12
```

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 Yealink language files. To perform the mapping, select the Yealink T4x 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	Yealink Language Mapping
English	X.GUI.English.lang (“X” is used in the order of the language on the phone. The value must be a number, starting with zero.) Example: 000.GUI.English.lang
Spain_Spanish	X.GUI.Spanish.lang (“X” is used in the order of the language on the phone. The value must be a number, starting with zero.) Example: 001.GUI.Spanish.lang
Polish	X.GUI.Polish.lang (“X” is used in the order of the language on the phone. The value must be a number, starting with zero.) Example: 002.GUI.Polish.lang

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BroadWorks Language	Yealink Language Mapping
Turkish	X.GUI.Turkish.lang (“X” is used in the order of the language on the phone. The value must be a number, starting with zero.) Example: 003.GUI.Turkish.lang
French	X.GUI.French.lang (“X” is used in the order of the language in the phone. The value must be a number, starting with zero.) Example: 004.GUI.French.lang
German	X.GUI.German.lang (“X” is used in the order of the language on the phone. The value must be a number starting with zero.) Example: 005.GUI.German.lang
Italian	X.GUI.Italian.lang (“X” is used in the order of the language in the phone. The value must be a number, starting with zero.) Example: 006.GUI.Italian.lang
Portuguese	X.GUI.Portuguese.lang (“X” is used in the order of the language in the phone. The value must be a number, starting with zero.) Example: 007.GUI.Portuguese.lang

Example language mapping:

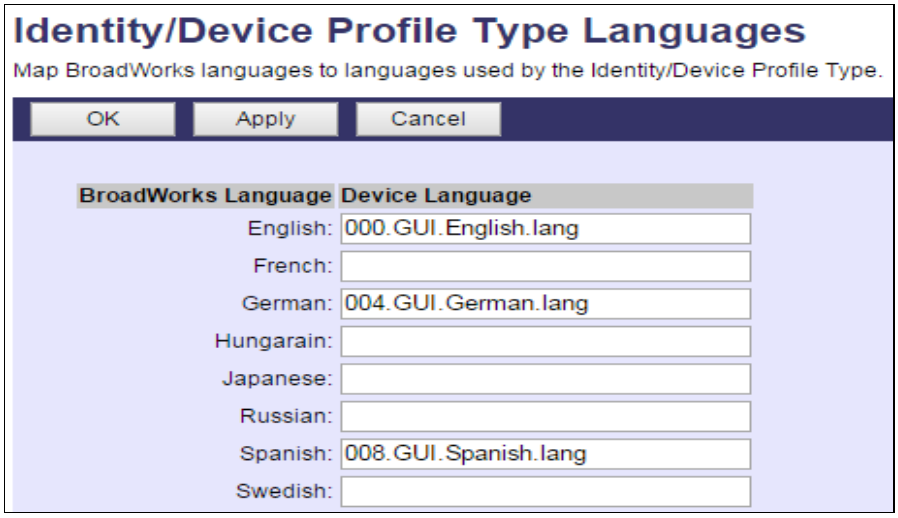

Figure 34 Language Mapping

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

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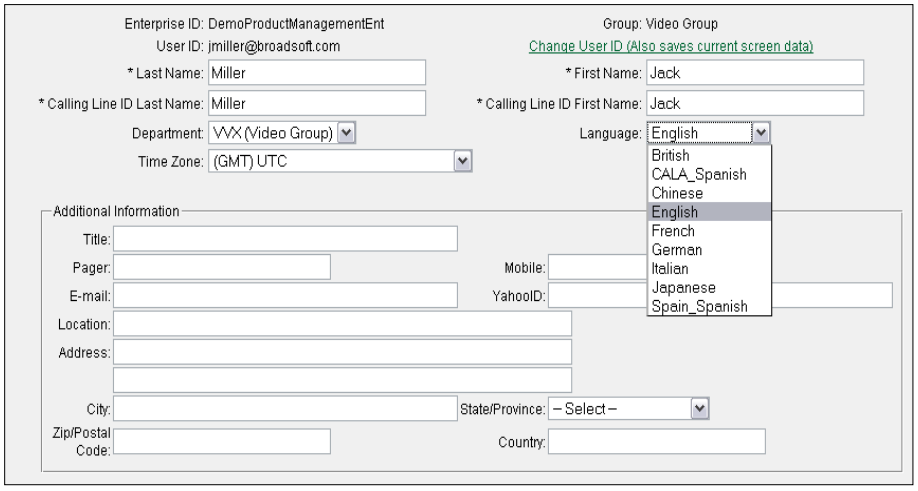

Figure 35 BroadWorks User Language Definition

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 Yealink T4x device.

Browse to the BroadWorks *<group>* → *Resources* → *Identity/Device Profiles* page and then select **Add** to add a new Yealink T4x device profile. Configure the device profile as shown in the *Figure 36 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.

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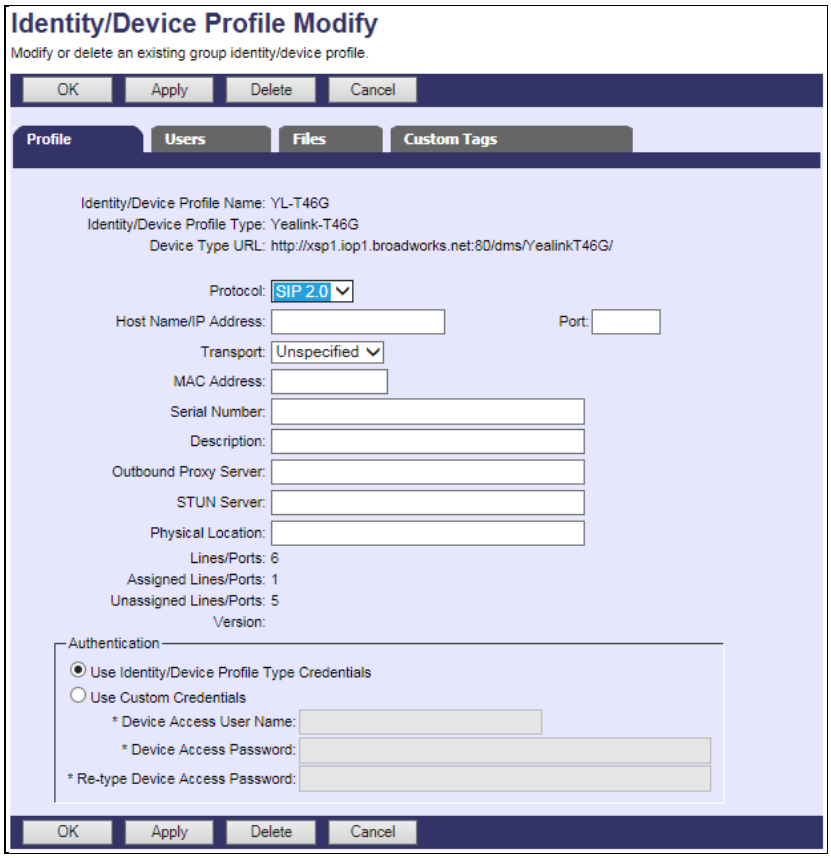

Figure 36 Device Profile Instance

5.2.4 Configure BroadWorks User

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

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

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

This section identifies custom tags used by the Yealink T4x 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.

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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 Yealink device profile (for example, Yealink_T46G).
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.

5.2.4.2 Xtended Services Interface Password

For the Xtended Services Interface feature to be authenticated, it is necessary to override the Xtended Services Interface password for each of the lines at the device profile instance level. To override custom tags at the device profile instance level, click on the *Custom Tags* tab.

Then click **Add** to add a custom tag with the following parameters:

Parameter	Value	Description/Notes
Tag Name	XSIPASSWORD-<line number> Example:	This tag provides the Xsi password of the user for the line which is assigned to the phone. Line number is an integer corresponding to the phone line in assignment.
Tag Value	The user's Xsi password. Example: 123456	

Repeat the tag adding process for each of the lines provisioned on the device.

5.2.5 Configure Yealink T4x IP Phone

This section describes the steps necessary to configure the Yealink T4x 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 Yealink Redirect Service*

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5.2.5.1 Manual Provisioning

5.2.5.1.1 Check Enterprise/Business DHCP Server Settings

The Yealink phone uses the file server parameters configured on the phone unless *Option 66* has been defined on the DHCP server. If the DHCP server returns data set for the *Option 66* parameter, then the Yealink phone uses the address defined in this field as the server address to retrieve its configuration data.

When using manual provisioning, to make sure that the phone interfaces properly with Device Management, the *Option 66* parameter must not be set on the DHCP server. If *Option 66* is defined and cannot be cleared, then the Zero Active parameter in the DHCP menu must be set to "Disabled". This parameter is set at boot time by accessing the web user interface.

1) Click the **Settings** tab.
2) In the *Zero Active* drop-down box, select *Disabled*.
3) Confirm the configuration changes and start the phone initialization.

5.2.5.1.2 Provision Manual Device Management Settings

Log in to the web user interface for the Yealink T4x IP Phone (https://<phone-ip-address>). Go to the *Settings* → *Auto Provision* web page and set the following:

- Power On – On
- URL – Device Management server (Xtended Services Platform) device address URL

  (Example: http(s)://xsp1.broadworks.net:80/dms/Yealink_T46G/)
- HTTP Authentication:

  User Name – BroadWorks Device Access (Example: yealink)

  Password – BroadWorks Device Access Password (Example: 123456)

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

Example Login (Default User Name/Password is "admin/admin")

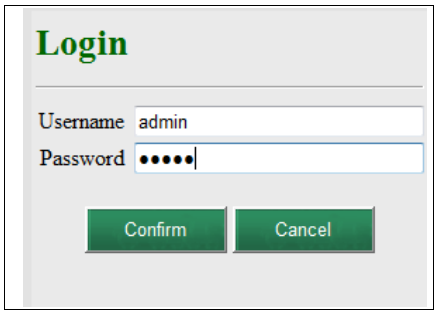

Figure 37 Login Screen

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Example Auto Provision web page

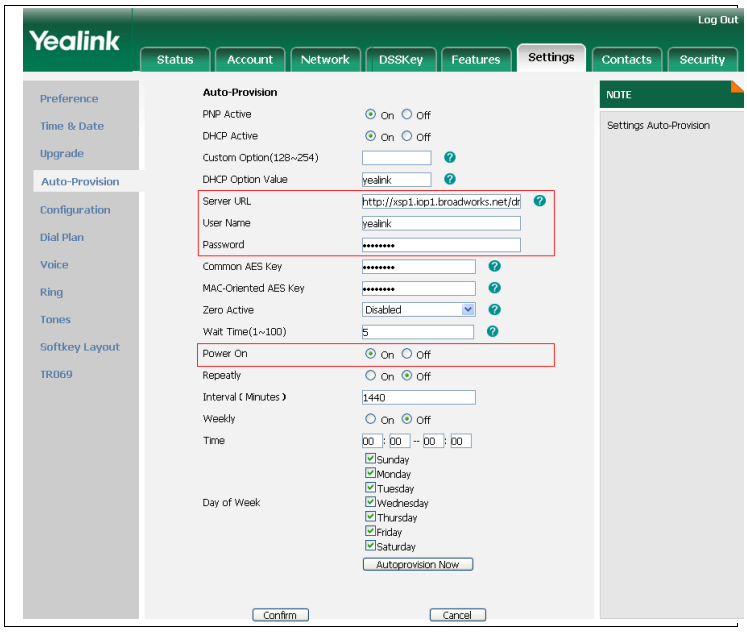

Figure 38 Upgrade Screen

After all parameters are entered, click the **Save** button. 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 No Touch Provisioning method via BroadWorks Device Management uses DHCP and Device Management default configuration files. This enables configuration of the phone out-of-the-box without pre-provisioning before sending it to a customer's site.

No Touch Provisioning is done using the DHCP options provided by the end customer's DHCP server. The steps are as follows:

1) The phones are shipped to the end customer without pre-provisioning.
2) The end customer's DHCP server is configured with *Option 66* with the default Device Management URL.
3) The phone is plugged in and it receives the default Device Management URL from the DHCP server.
4) The phone queries for the default product file from Device Management.
5) The phone receives the default device file from Device Management and provisions the phone with the physical Device Management URL for the specific device model.
6) The phone resynchronizes with Device Management and prompts Zero Touch Update.
7) The end user or administrator enters the device management credentials into the Auto Provision username and password fields.
8) The phone resynchronizes with Device Management and downloads the files associated with the credentials supplied via the above step.

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Device Management must be configured to facilitate the No Touch Provisioning method. Configuration can be performed using the Device Management import function or done manually. Each method is described in the following subsections

5.2.5.2.1 *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 Device Management Defaults device type for No Touch Provisioning.

The import method is available in BroadWorks Release 17.0 and later. For previous releases, use the manual configuration method described in the next section.

Download the Yealink T4x CPE kit from BroadSoft Xchange at www.broadsoft.com/xchange. Extract the *DeviceManagementDefaults.DTAF.zip* file from the CPE kit. This is the import file.

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

After the import finishes, the following post-import configuration steps must be completed.

Browse to *System* → *Resources* → *Identity/Device Profile Types* and perform a search to find the imported *DeviceManagementDefaults* device profile type. Browse to the *Profile* page and change the Device Management Device Access FQDN to your Xtended Services Platform or Xtended Services Platform cluster address.

Example:

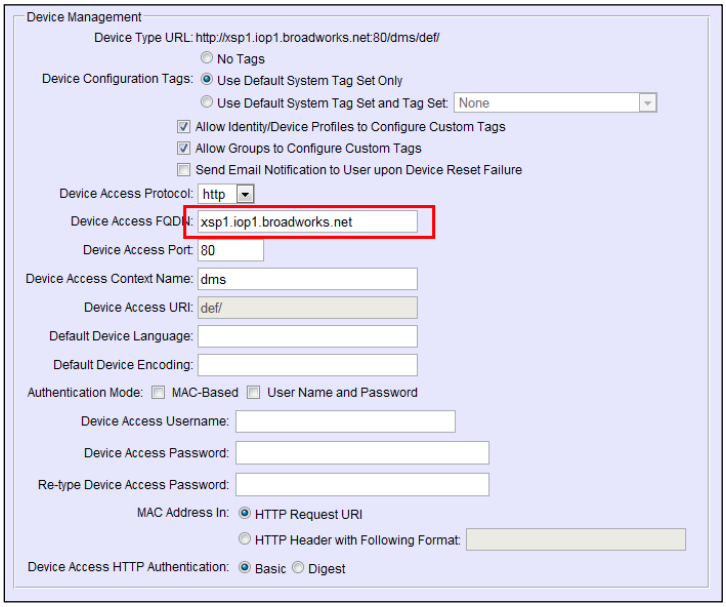

Figure 39 Device Access FQDN

Next, using the *Files and Authentication* link, select the option to rebuild all the system files.

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5.2.5.2.2 *Configuration Method 2: Manual*

This section identifies the manual steps necessary configure BroadWorks to add the Device Management Defaults device type for No Touch Provisioning

The manual method must be used for BroadWorks releases prior to Release 17.0. It is an optional method in Release 17.0 and later. 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.

5.2.5.2.2.1 *Create Default Device Profile Type*

A Device Management default device profile type must be created. This device profile type can be configured to serve default provisioning files to Yealink T4x endpoints, as well as other vendor devices.

Create a default device profile type as shown in the following figure. Only the device management settings are important in this context since the profile type is used only to serve default provisioning files. The standard and advanced settings do not matter.

5.2.5.2.2.1.1 Configure Standard Options

The device profile type name and standard options do not matter, but an example is provided for reference. All settings can be left with their default values.

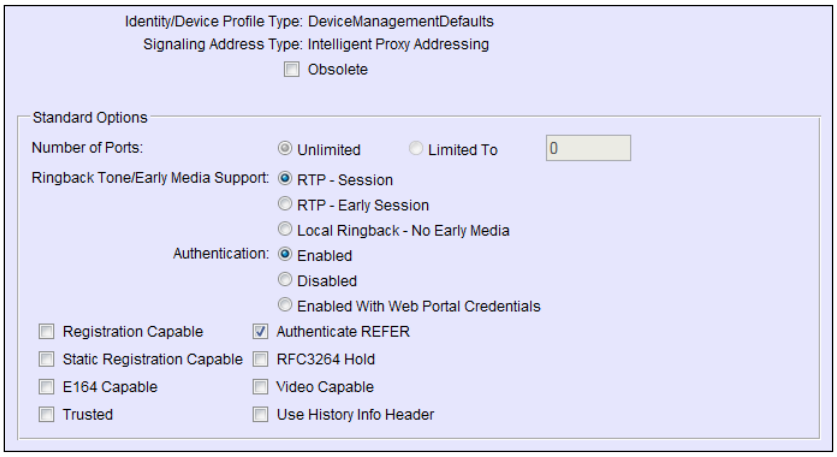

Figure 40 Default Device Profile Type

5.2.5.2.2.1.2 Configure Advanced Options

The advanced options do not matter, but an example is provided for reference. All settings can be left with their default values.

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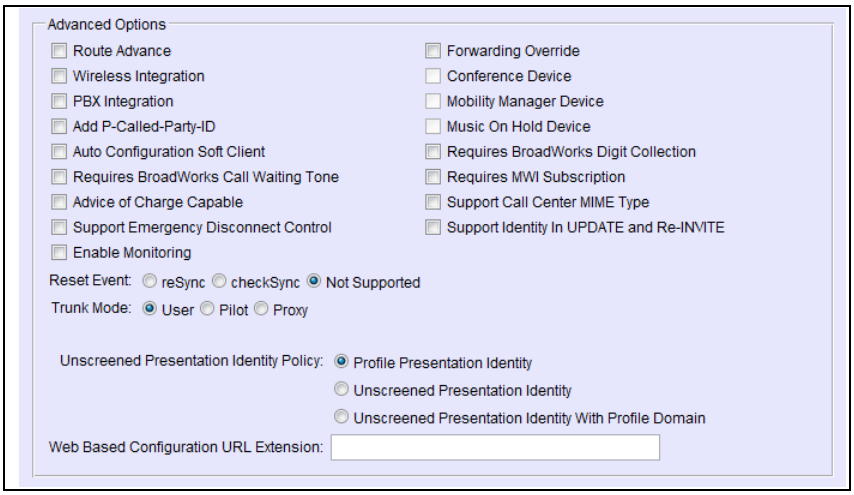

Figure 41 Configure Advanced Options

5.2.5.2.2.1.3 Configure Device Management Options

Configure the device profile type *Device Management Options* as directed in the following table. These are common settings, which apply to all devices enabled for Device Management.

Parameters not identified in the following table can usually be left with their default values.

Parameter	Value	Description
Device Configuration Tags	Use Default System Tag Set Only	
Allow Identity/Device Profiles to Configure Custom Tags	Checked	Optional
Allow Groups to Configure Custom Tags	Checked	Optional
Device Access Protocol	http	
Device Access FQDN	<BroadWorks-XSP-Cluster-Address> Example: xsp.iop1.broadworks.net	If using an Xtended Services Platform farm, set this to the Xtended Services Platform cluster FQDN. Otherwise, set it to the individual Xtended Services Platform FQDN or IP address.
Device Access Port	<BroadWorks-XSP-Port> Example: 80	This should be set to “80”.
Device Access Context Name	dms	This does not need to be defined. BroadWorks defaults to the system-defined value.
Device Access URI	def	This defines the directory the Xtended Services Platform uses to access the default configuration files.

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Example *Device Management Options* settings:

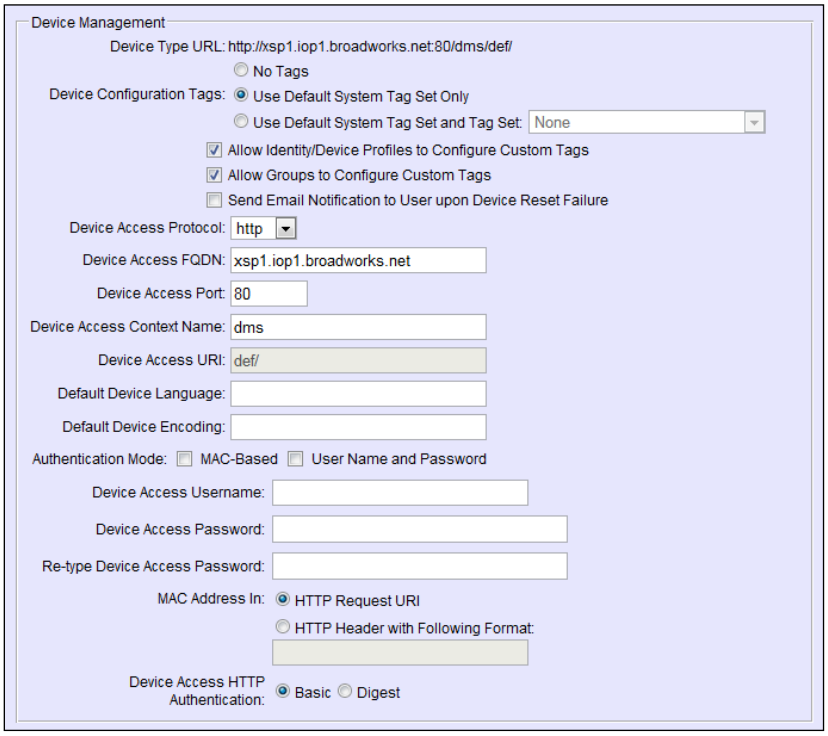

Figure 42 Device Management Options Settings

5.2.5.2.2.2 *Define Device Profile Type Files*

This section describes the BroadWorks Device Management configuration necessary to identify the configuration files used to enable the *DeviceManagementDefaults* device type for Yealink T4x devices. The files must be defined as described in the following sections:

- *y0000000000xx.cfg*
- T40(P): xx=54
- T41P: xx=36
- T42G: xx=29
- T46G: xx=28
- T48G: xx=35
- T41S: xx=68
- T42S: xx=67
- T46S: xx=66
- T48S: xx=65
- T49G: xx=51

Add the static files to the device profile type with the settings shown in the following figure.

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Figure 43 Default y000000000054.cfg

5.2.5.2.3 *DHCP Server Configuration (BroadWorks Default) and Redirect Events*

Configure the end customer's DHCP server with *Option 66/43* containing the default BroadWorks Device Management URL as *http://<Device Access FQDN>:<Device Access Port>/ <Device Access Context Name>/def*.

Example:

```
option BWRedir code 43 = string;

subnet 10.2.0.0 netmask 255.255.255.0 {
option subnet-mask 255.255.255.0;
option domain-name-servers 10.2.0.29;
option routers 10.2.0.1;
option BWRedir "http://xsp1.iop1.broadworks.net/dms/def/"
}
```


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Yealink T4x starts the provisioning process by following this default BroadWorks Device Management URL to obtain an initial configuration redirect. The following steps detail the phone's sequence to become fully provisioned on BroadWorks after receiving the redirect from BroadWorks.

1) The phone does initial resynchronization with Device Management and downloads the default file from location specified in DHCP offer.
2) After restarting the phone, it displays configuration wizard on the phone screen.
3) The end user or administrator follows the wizard and enters the device username and password using the user interface on the phone.
4) The phone resynchronizes with Device Management and downloads the file(s) associated with the credentials supplied via the previous step.

5.2.5.2.4 DHCP Server Configuration (Direct DM Location) and redirect events

Configure the end customer's DHCP server with *Option 66/43* containing the direct Yealink Device Management URL as *http://<Device Access FQDN>:<Device Access Port>/ <Device Access Context Name>/Yealink-T40P.*

Example:

```
option BWRedir code 43 = string;

subnet 10.2.0.0 netmask 255.255.255.0 {
option subnet-mask 255.255.255.0;
option domain-name-servers 10.2.0.29;
option routers 10.2.0.1;
option BWRedir "http://xsp1.iop1.broadworks.net/dms/Yealink-T40P/"
}
```

Yealink T4x starts the provisioning process by following Yealink Device Management URL to obtain the device configuration files. The following steps detail the phone's sequence to become fully provisioned on BroadWorks after receiving the direct URL from BroadWorks.

1) The phone does initial resynchronization with Device Management and downloads the configuration file from location specified in DHCP offer.
2) The end user or administrator enters the device username and password using the user interface on the phone's webGUI.
3) If secured (https) connection is needed, then install the CA certificates or set security->trusted_certificates to disable and restart the phone.
4) After restart the phone resynchronizes with Device Management and downloads additional configuration file(s) associated with the credentials supplied via the previous step.

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5.2.5.3 No Touch Provisioning via Yealink Redirect Service

Yealink Device Management Redirect is a web redirect service hosted by Yealink. It works in conjunction with the BroadWorks Device Management Redirect. Hence, prior to device deployment, the administrator is required to login to Yealink's web portal to associate each device based on the MAC address to the default BroadWorks Device Management URL. At boot time, the Yealink T4x phones automatically queries the Yealink Device Management Redirect service for the associated BroadWorks URL. The Yealink T4x finally completes the provisioning process as detailed in the previous section. For more information about the Yealink Device Management Redirect service, go to https://rps.yealink.com/.

NOTE: If a secured (HTTPS) connection is required, then install the CA certificates or set the *security → trusted_certificates* to "disable" and restart the phone.

5.3 Upgrade from Previous CPE Kits

The previous configuration sections are primarily structured around importing or manually configuring the Yealink T4x 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].

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Appendix A: Reference T4x Configuration Files

The following is a reference configuration for the T48G configured for use with BroadWorks.

NOTE: The following samples are examples and should be used as a reference only. DO NOT CUT AND PASTE THESE EXAMPLES TO GENERATE YOUR CONFIGURATION FILES. Use the configuration files obtained from Yealink with the specific release to generate your configuration files.

System Default File: y000000000054.cfg

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

```
#!version:1.0.0.1

##File header "#!version:1.0.0.1" can not be edited or deleted, and must
be placed in the first line.##
##This template file is applicable to SIP-
T21_E2P/T19_E2P/T23P/T40P/T27P/T29G/T46G/T48G/T42G/T41P/T48S/T46S/T42S/T41
S/T27G/T61/T66 IP phones running firmware version 72 or later.##
##For more information on configuration parameters, refer to Yealink_SIP-
T2_Series_T19P_T4_Series_IP_Phones_Auto_Provisioning_Guide.##

##############################################################################
#############
##                                    Hostname
##
##############################################################################
#############
static.network.dhcp_host_name =



##############################################################################
#############
##                                  Network Advanced
##
##############################################################################
#############
##It enables or disables the PC port.0-Disabled,1-Auto Negotiation.
##The default value is 1.It takes effect after a reboot.
static.network.pc_port.enable =

##It configures the transmission mode and speed of the Internet (WAN)
port.
##0-Auto Negotiate
##1-Full Duplex 10Mbps
##2-Full Duplex 100Mbps
##3-Half Duplex 10Mbps
##4-Half Duplex 100Mbps
##5-Full Duplex 1000Mbps (only applicable to SIP-T42G and SIP-T46G IP
phones)
##The default value is 0.It takes effect after a reboot.
static.network.internet_port.speed_duplex =

##It configures the transmission mode and speed of the PC (LAN) port.
```


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```
##0-Auto Negotiate
##1-Full Duplex 10Mbps
##2-Full Duplex 100Mbps
##3-Half Duplex 10Mbps
##4-Half Duplex 100Mbps
##5-Full Duplex 1000Mbps (only applicable to SIP-T42G and SIP-T46G IP
phones)
##The default value is 0.It takes effect after a reboot.
static.network.pc_port.speed_duplex =

##It enables or disables the phone to use manually configured static IPv4
DNS when Internet (WAN) port type for IPv4 is configured as DHCP.
##0-Disabled (use the IPv4 DNS obtained by DHCP)   1-Enabled
##The default value is 0.It takes effect after a reboot.
static.network.static_dns_enable =

static.network.ipv6_static_dns_enable =

###Only T41P/T42G/T46G Models support this parameter
static.network.vlan.pc_port_mode =
##It enable or disable to use A record of TTL
##The defalue value is 1;0-Disable   1-Enable

static.network.dns.ttl_enable =
##It configures the LAN MTU (Except T21D/T19D)
##The default value is 1500,.Integer from 128 to 1500.It takes effect
after a reboot.
static.network.mtu_value =


##############################################################################
#############
##                                    VLAN
##
##############################################################################
#############
static.network.vlan.internet_port_enable =
static.network.vlan.internet_port_vid =
static.network.vlan.internet_port_priority =
static.network.vlan.pc_port_enable =
static.network.vlan.pc_port_vid =
static.network.vlan.pc_port_priority =
static.network.vlan.dhcp_enable =
static.network.vlan.dhcp_option =
##It configures LLDP or manually VLAN can't obtain IP, whether to switch
to other methods of VLAN or closed VLAN to get IP
##(Except T19P/T21P Models) 0-Disable   1-Enable
static.network.vlan.vlan_change.enable =

##############################################################################
#############
##                                    WEB Port
##
##############################################################################
#############
##It configures the HTTP port for web server access.
##The default value is 80.It takes effect after a reboot.
static.network.port.http =

##It configures the HTTPS port for web server access.
##The default value is 443.It takes effect after a reboot.
static.network.port.https =
```


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```
static.wui.https_enable =
static.wui.http_enable =

##############################################################################
#############
##                                    QoS
##
##############################################################################
#############
##It configures the voice QoS.
##The default value is 46.It takes effect after a reboot.Integer from 0 to
63
static.network.qos.rtptos =

##It configures the SIP QoS.
##The default value is 26.It takes effect after a reboot.Integer from 0 to
63
static.network.qos.signaltos =

##############################################################################
#############
##                                    802.1X
##
##############################################################################
#############
static.network.802_1x.mode =
static.network.802_1x.identity =
static.network.802_1x.md5_password =
static.network.802_1x.root_cert_url =
static.network.802_1x.client_cert_url =

##It configure the mouth of the PC 802.1 x - logoff function.It takes
effect after a reboot.
##The default value is 0-Dsable ,    1-Enable
static.network.802_1x.proxy_eap_logoff.enable =
##############################################################################
#############
##                                    OpenVPN(Except T19P Model)
##
##############################################################################
#############
static.network.vpn_enable =
static.openvpn.url =

##############################################################################
#############
##                                    LLDP
##
##############################################################################
#############
static.network.lldp.enable =
static.network.lldp.packet_interval =

##############################################################################
#############
##                                    CDP
##
##############################################################################
#############
static.network.cdp.enable =
static.network.cdp.packet_interval =
```


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```
##############################################################################
#############
##                                    Span to PC
##
##############################################################################
#############
static.network.span_to_pc_port =

##############################################################################
#############
##                                    RTP Port
##
##############################################################################
#############
##It configures the maximum local RTP port.
##The default value is 11800.It takes effect after a reboot.Integer from
1024 to 65535
static.network.port.max_rtpport =

##It configures the maximum local RTP port.
##The default value is 11780.It takes effect after a reboot.Integer from
1024 to 65535
static.network.port.min_rtpport =

##############################################################################
#############
##                                    Syslog
##
##############################################################################
#############
static.syslog.mode =

##It configures the IP address or domain name of the syslog server when
exporting log to the syslog server.
##It takes effect only if the parameter ¡°static.syslog.mode¡± is
configured as Server.
##The default value is blank.It takes effect after a reboot.
static.syslog.server =

##It configures the detail level of syslog information to be exported.0
means nothing and 6 means all.
##The default value is 3.It takes effect after a reboot.Integer from 0 to
6
static.syslog.log_level =

static.syslog.bootlog_upload_wait_time =
static.syslog.ftp.append_limit_mode =
static.syslog.ftp.max_logfile =
static.syslog.ftp.post_mode =
static.syslog.log_upload_period =

##############################################################################
#############
##                                    TR069(Except T41P/T42G Models)
##
##############################################################################
#############
static.managementserver.enable =
static.managementserver.username =
static.managementserver.password =
static.managementserver.url =
static.managementserver.connection_request_username =
static.managementserver.connection_request_password =
```


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```
static.managementserver.periodic_inform_enable =
static.managementserver.periodic_inform_interval =

##############################################################################
#############
##                                    Autoprovision            ##
##
##############################################################################
#############
### It enables or disables the phone to synchronize personalized
configuration settings with the auto provisioning server.
### If it is set to 1 (Enabled), personalized configuration settings via
web/phone user interface are saved in the MAC-local.cfg file on the phone,
### and then the phone will upload the MAC-local.cfg file to the
provisioning server. During auto provisioning, the phone requests to
download the MAC-local.cfg file on the provisioning server.
### 0-Disabled, 1-Enabled. The default value is 0.
static.auto_provision.custom.sync =

### It enables or disables the phone to protect personalized configuration
settings even after auto provisioning.
### If it is set to 1 (Enabled), personalized configuration settings via
web/phone user interface will be protected and remained after auto
provisioning.
### 0-Disabled, 1-Enabled. The default value is 0.
static.auto_provision.custom.protect =

static.auto_provision.custom.upload_method=

##############################################################################
#############
##                                    Autop Mode
##
##############################################################################
#############
static.auto_provision.power_on =

##############################################################################
#############
##                                    Autop PNP
##
##############################################################################
#############
static.auto_provision.pnp_enable =

##############################################################################
#############
##                                    Autop DHCP
##
##############################################################################
#############
static.auto_provision.dhcp_option.enable =
static.auto_provision.dhcp_option.list_user_options =

##############################################################################
#############
##                                    Autop Repeat
##
##############################################################################
#############
static.auto_provision.repeat.enable =
static.auto_provision.repeat.minutes =
```


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```
##############################################################################
#############
##                                    Autop Weekly
##
##############################################################################
#############
static.auto_provision.weekly.enable =
static.auto_provision.weekly.dayofweek =
static.auto_provision.weekly.begin_time =
static.auto_provision.weekly.end_time =

##############################################################################
#############
##                                    Autop URL
##
##############################################################################
#############
static.auto_provision.server.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%


##############################################################################
#############
##                                    Autop AES Key
##
##############################################################################
#############
##It configures the AES key for decrypting the Common CFG file. The valid
characters contain: 0 ~ 9, A ~ Z, a ~ z.
##The default value is blank.
static.auto_provision.aes_key_16.com =

##It configures the AES key for decrypting the MAC-Oriented CFG file. The
valid characters contain: 0 ~ 9, A ~ Z, a ~ z.
##The default value is blank.
static.auto_provision.aes_key_16.mac =

static.auto_provision.aes_key_in_file =

##It configures the access URL of the custom MAC-Oriented CFG file.
##The default value is blank.
static.custom_mac_cfg.url =

##It configures the value (vendor name of the static) of DHCP option 60.
##The default value is yealink.
static.auto_provision.dhcp_option.option60_value =
##It configuration phone update to restart automatically.It takes effect
after a reboot.
##0-Disable    1-Enable
static.auto_provision.reboot_force.enable =

##############################################################################
#############
##                                    Autop wildcard
##
##############################################################################
#############

static.auto_provision.url_wildcard.pn =

##############################################################################
#############
```


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```
##                                        Autop Code
##
##############################################################################
#############
##It configures the name of the code for triggering auto provisioning.
##The default value is blank.It takes effect after a reboot.
static.autoprovision.1.name =

##It configures the code for triggering auto provisioning.
##Valid characters are digits, # and *.Example:static.autoprovision.1.code
= *99The default value is blank.
##It takes effect after a reboot.
static.autoprovision.1.code =

##It configures the access URL of auto provisioning server.The default
value is blank.
##It takes effect after a reboot.
static.autoprovision.1.url =

##It configures the user name for authentication during auto provisioning.
##The default value is blank.It takes effect after a reboot.
static.autoprovision.1.user =

##It configures the password for authentication during auto provisioning.
##The default value is blank.It takes effect after a reboot.
static.autoprovision.1.password =

##It configures the AES key for decrypting the Common CFG file.
##The default value is blank.It takes effect after a reboot.
static.autoprovision.1.com_aes =

##It configures the AES key for decrypting the MAC-Oriented CFG file.
##The default value is blank.It takes effect after a reboot.
static.autoprovision.1.mac_aes =

##############################################################################
#############
##                                        Watch Dog
##
##############################################################################
#############
static.watch_dog.enable =

##############################################################################
#############
##                                        SIP Advanced
##
##############################################################################
#############
sip.use_23_as_pound =
sip.rfc2543_hold =
sip.use_out_bound_in_dialog =
sip.reg_surge_prevention =
sip.send_response_by_request =
sip.notify_reboot_enable = 1
sip.disp_incall_to_info =
sip.limit_server_name =
sip.limit_server_reason =
sip.listen_port =5060
sip.tls_listen_port =
sip.trust_ctrl =
sip.nat_stun.enable =
sip.nat_stun.server =
```


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```
sip.nat_stun.port =
sip.timer_t1 =
sip.timer_t2 =
sip.timer_t4 =



##It is XSI authentication mode.0-Disable  1-Enable (Except T19P/T21P
Models)
sip.authentication_for_xsi =
##It is DSS KEY to call park type, whether the trigger BLF function.It
takes effect after a reboot.
##The default value is 0-Disable(DSS KEY to call park type,triggering BLF
function)   1-Enable
sip.call_park_without_blf =
##It is ASCII conversion into corresponding symbols.
##The defalult value is blank. 0-Disable   1-Enable
sip.escape_characters.enable =
##The default value is 0 ( said according to the transmission mode
configured to listen on port),1-
##1-said at the same time to monitor TCP and UDP
##2-said to monitor TCP and UDP at the same time, and from the BLF - the
LIST to subscribe to the contact with a transport = TCP parameters
sip.listen_mode =
##The default value is 0-Disable, 1-Enable.It takes effect after a reboot.
##0-registered according to the uri of the tectonic refer - by domain
##1-according to refer the from header fields to construct refer - by
domain

sip.refer_by_header_auto_build =
##The default is blank.The Valid characters are digits - _.! ~ * # '() &
Q462 = + R452 $,;?/ \ 0
##It is username needs to be preserved in a special notation.
sip.reserve_characters =
##The default value is 0.(contracting out the random contact, via port to
carry fixed port).It takes effect after a reboot.
##1-the out-contracting port random contact, via port to carry
##2-the out-contracting ports fixed contact, via carry fix
sip.tcp_port_random_mode =



##############################################################################
#############
##                                    Echo Cancellation
##
##############################################################################
#############
voice.vad =
voice.cng =
voice.echo_cancellation =

##############################################################################
#############
##                                    Jitter Buffer
##
##############################################################################
#############
voice.jib.adaptive =
voice.jib.min =
voice.jib.max =
voice.jib.normal =
```


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```
##############################################################################
#############
##                                    Tones
##
##############################################################################
#############

### Only T28P/T26P/T22P/T20P Models and V80 support the three parameters
voice.handfree_send =
voice.handset_send =
voice.headset_send =

##############################################################################
#############
##                                    Transfer
##
##############################################################################
#############
##It enables or disables the transferee party¡¯s phone to prompt a missed
call on the LCD screen before displaying
##the caller ID when performing a semi-attended transfer.0-Enabled,1-
Disabled
##The default value is 1.
transfer.semi_attend_tran_enable =

##It enables or disables the phone to complete the blind transfer through
on-hook.0-Disabled,1-Enabled .
##The default value is 1.
transfer.blind_tran_on_hook_enable =

##It enables or disables the phone to transfer call to the two parties
after a local conference call hangs up.
##0-Disabled,1-Enabled.
##The default value is 0.
transfer.tran_others_after_conf_enable =

##It enables or disables the phone to complete the attended transfer
through on-hook.
##0-Disabled,1-Enabled.
##The default value is 1.
transfer.on_hook_trans_enable =

##It configures the DSS key behavior during an active call when user
presses the DSS
##key and the DSS key is configured as a speed dial, transfer or BLF/BLF
list key.
##0-New Call,1-Attended Transfer,2-Blind Transfer.
##The default value is 2.
transfer.dsskey_deal_type =

###Except T20P/T41P/T42G/T46G Models
##It enables or disables the phone to enter Transfer to menu during
multiple calls when pressing the transfer soft key or TRAN key.
##0-Disabled,1-Enabled.
##The default value is 1.
transfer.multi_call_trans_enable =


##############################################################################
#############
##                                    Auto Redial
##
```


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```
#############################################################################
#############
auto_redial.enable =
auto_redial.interval =
auto_redial.times =

#############################################################################
#############
##                                    Zero Touch
##
#############################################################################
#############
static.zero_touch.enable = 0
static.zero_touch.wait_time = 10
static.zero_touch.network_fail_wait_times =
static.zero_touch.network_fail_delay_times =

#############################################################################
#############
##                                    Push XML
##
#############################################################################
#############
push_xml.server =
push_xml.block_in_calling=
push_xml.sip_notify=

#############################################################################
#############
##                                    Dial Plan
##
#############################################################################
#############
dialplan.area_code.code =
dialplan.area_code.min_len =
dialplan.area_code.max_len =
dialplan.area_code.line_id =

### X ranges from 1 to 10
###dialplan.block_out.number.x =
###dialplan.block_out.line_id.x =

dialplan.block_out.number.1 =
dialplan.block_out.line_id.1 =

###X ranges from 1 to 100
###dialplan.dialnow.rule.X =
###dialplan.dialnow.line_id.X =

dialplan.dialnow.rule.1 =
dialplan.dialnow.line_id.1 =

###X ranges from 1 to 100
###dialplan.replace.prefix.X =
###dialplan.replace.replace.X =
###dialplan.replace.line_id.X =

dialplan.replace.prefix.1 =
dialplan.replace.replace.1 =
dialplan.replace.line_id.1 =
```


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```
#dialplan_dialnow.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%dialnow.xml
phone_setting.dialnow_delay =
#dialplan_replace_rule.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%dialplan.xml


##############################################################################
#############
##                                    Remote Phonebook(Except T20P Model)
##
##############################################################################
#############
###X ranges from 1 to 5
###remote_phonebook.data.X.url =
###remote_phonebook.data.X.name =

remote_phonebook.data.1.url =
remote_phonebook.data.1.name =

###Except T41P/T42G Models
remote_phonebook.display_name =

###It enables or disables the phone to update the data of the remote phone
book at a time when accessing the remote phone book.
###0-Disabled, 1-Enabled. The default value is 0.(Except T19P/T21P Models)
features.remote_phonebook.enter_update_enable =

##It enables or disables the phone to perform a remote phone book search
when receiving an incoming call.
##0-Disabled,1-Enabled.
##The default value is 0.
features.remote_phonebook.enable =

##It configures the interval (in seconds) for the phone to update the data
of the remote phone book from the remote phone book server.
##The value 0 means the phone will not regularly update the data of the
remote phone book from the remote phone book server.
##The default value is 21600.Integer from 3600 to 2592000,and 0.
features.remote_phonebook.flash_time =

##############################################################################
#############
##                                    LDAP(Except T19P/T20P Models)
##
##############################################################################
#############
##It enables or disables LDAP feature.0-Disabled,1-Enabled.
##The default value is 0.
ldap.enable =

##It configures the criteria for searching the contact name attributes.
##Example:ldap.name_filter = (|(cn=%)(sn=%)).
##The default value is blank.
ldap.name_filter =

##It configures the criteria for searching the contact number attributes.
##Example:ldap.number_filter = (|(telephoneNumber=%)(mobile=%)(ipPhone=%))
##The default value is blank.
ldap.number_filter =
```


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```
##It configures the IP address or domain name of the LDAP server.
##The default value is blank.
ldap.host =

##It configures the port of the LDAP server.
##The default value is 389.Integer from 1 to 65535.
ldap.port =

##It configures the LDAP search base which corresponds to the location of
the LDAP phonebook.
##Example:ldap.base = dc=yealink,dc=cn.
##The default value is blank.
ldap.base =

##It configures the user name for accessing the LDAP server.
##The default value is blank.
ldap.user =

##It configures the password for accessing the LDAP server.
##The default value is blank.
ldap.password =

##It configures the maximum of the search results returned by the LDAP
server to be displayed.
##The default value is 50.Integer from 1 to 32000.
ldap.max_hits =

##It configures the name attributes of each record to be returned by the
LDAP server.
##Multiple attributes are separated by spaces.Example:ldap.name_attr =sn
cn.
##The default value is blank.
ldap.name_attr =

##It configures the number attributes of each record to be returned by the
LDAP server.
##Multiple attributes are separated by spaces.Example:ldap.numb_attr =
Mobile ipPhone.
##The default value is blank.
ldap.numb_attr =

##It configures the display name of the contact record displayed on the
LCD screen. The value of this parameter must start with ¡°%¡± symbol.
##Example:ldap.display_name = %cn
##The default value is blank.
ldap.display_name =

##It configures the LDAP version.
##The default value is 3.
ldap.version =

##It enables or disables the phone to perform an LDAP search when
receiving an incoming call.
##0-Disabled,1-Enabled.
##The default value is 0.
ldap.call_in_lookup =

##It enables or disables the phone to sort the search results in
alphabetical order or numerical order.
##0-Disabled,1-Enabled.
##The default value is 0.
ldap.ldap_sort =
```


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```
##It is the electricity + start, automatic search + 00 the beginning and
the beginning of the numbe
##The default value is 0.(0-Disable,1-Enable )(Except T19P/T21P Models)
ldap.incoming_call_special_search.enable =
##The default value is 0,value of 0 to 2, respectively the ldap, ldap +
StarTLS and ldaps
ldap.tls_mode =
ldap.call_out_lookup =

##############################################################################
#############
##                                    Features
##
##############################################################################
#############
features.normal_refuse_code =
features.auto_answer_delay =
features.allow_mute =
features.group_listen_in_talking_enable = 0
features.call_completion_enable =
features.call_num_filter =
features.direct_ip_call_enable =
features.relog_offtime =
features.ringer_device.is_use_headset =
features.factory_pwd_enable = 1
features.anonymous_response_code =
features.show_action_uri_option =
features.reset_by_long_press_enable =
features.show_anywhere_remote_office_enable =
features.upload_server =
features.call_log_show_num =
features.ldap.input_type =
features.call_invite_format =

phone_setting.logon_wizard_forever_wait =
features.transfer_type =
features.caller_name_type_on_dialing =
gui_input_method.delete =
features.off_hook_answer.enable =
features.auto_linekeys.enable = %AUTO_LINEKEYS%



##Only for T46G Models support this parameter
features.block_linekey_in_menu.enable =

features.shorten_linekey_label.enable =

features.blf_pickup_only_send_code =

##V80 do not support(T23/T27/T61/T66/T29/T46/T48/T21E2)##
##features.special_auto_answer_tone =

##It is configured in the middle of the screen shows the current default
at the bottom of the account name.
##The default is 0.CNT version 1.
features.show_default_account=

## Except T4X Models support this
features.reboot_in_talk_enable =

## Except T19P/T21P Models support this
features.barge_in_via_username.enable =
```


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```
features.flash_url_dsskey_led.enable =
static.features.default_account =
features.linekey_call_with_default_account =
features.hide_feature_access_codes.enable =

## Except T19P/T21P/T4X Models support this
##V80 do not support(T23/T27/T61/T66/T29/T46)##
##features.hide_caller_id.enable =

## Only for T4X Models support this parameter
features.hide_zero_touch_url.enable =



##############################################################################
#############
##                                    Features Forward
##
##############################################################################
#############

###Except T19P Model
features.fwd_mode =

features.fwd_diversion_enable =

##############################################################################
#############
##                                    Features DND
##
##############################################################################
#############

###Except T19P Model
features.dnd_mode =

features.dnd.enable =
features.dnd.on_code =
features.dnd.off_code =
features.dnd_refuse_code =
features.dnd.emergency_enable =
features.dnd.emergency_authorized_number =

##############################################################################
#############
##                                    Features Bluetooth(Only for T46G
model)          ##
##############################################################################
#############
features.bluetooth_enable =

##############################################################################
#############
##                                    Features BLF
##
##############################################################################
#############
##It configures BLF LED mode and provides four kinds of definition for the
BLF/BLF list key LED status.
##For more information, refer to BLF LED Mode on page 218.
##The default value is 0.
features.blf_led_mode =
```


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```
##It enables or disables the phone to deal with the Version header in the
BLF NOTIFY message sent by the server.
##0-Disabled,1-Enabled.
##The default value is 0.It takes effect after a reboot.
features.blf_list_version =

#########################################################################
#############
##                                    Features Intercom
##
#########################################################################
#############
features.intercom.allow  =
features.intercom.mute  =
features.intercom.tone  =
features.intercom.barge  =
features.intercom.led.enable =
features.intercom.subscribe.enable =

#########################################################################
#############
##                                    Features Hotline
##
#########################################################################
#############
##It configures the hotline number.
##The default value is blank.
features.hotline_number =

##It configures the delay time (in seconds) for the phone to dial out the
hotline number automatically.
##The default value of delay time is 4.Integer from 0 to 10
features.hotline_delay =

#########################################################################
#############
##                                    Features DTMF
##
#########################################################################
#############
features.dtmf.hide =

###Except T20P Model
features.dtmf.hide_delay =

features.dtmf.repetition =
features.dtmf.transfer =
features.dtmf.replace_tran =
features.dtmf.duration =
features.dtmf.volume =
features.play_local_dtmf_tone_enable =

#########################################################################
#############
##                                    Features Audio Settings
##
#########################################################################
#############
features.headset_prior =

###Except T19P/T21P Models
features.headset_training =
```


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```
features.alert_info_tone =
features.busy_tone_delay =
features.send_pound_key =
features.key_as_send =
features.send_key_tone =
features.key_tone =
features.play_hold_tone.enable =
features.play_hold_tone.delay =
features.redial_tone =
features.partition_tone =

##############################################################################
#############
##                                    Features Action URI
##
##############################################################################
#############
features.action_uri_limit_ip =


##############################################################################
#############
##                                    Features Prefix
##
##############################################################################
#############
features.password_dial.enable =
features.password_dial.prefix =
features.password_dial.length =

##############################################################################
#############
##                                    Features History
##
##############################################################################
#############
features.save_call_history =

##############################################################################
#############
##                                    Notification Popups
##
##############################################################################
#############
features.voice_mail_popup.enable=
features.missed_call_popup.enable=
features.forward_call_popup.enable=
features.text_message_popup.enable=

##############################################################################
#############
##                                    Ringtone
##
##############################################################################
#############
#ringtone.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%Ring.wav
ringtone.delete =

##############################################################################
#############
```


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```
##                                    Phone Settings
##
#############################################################################
#############
phone_setting.inter_digit_time =
phone_setting.ring_type =

phone_setting.ring_for_tranfailed =
phone_setting.is_deal180 =
phone_setting.show_code403 =


###Only T41P/T42G/T46G Models support this parameter
phone_setting.page_tip =

phone_setting.predial_autodial =
phone_setting.headsetkey_mode =
features.voice_mail_tone_enable =
##Except T19P/T21P Models support this parameter
static.phone_setting.reserve_certs_enable =
phone_setting.called_party_info_display.enable =
phone_setting.call_info_display_method =



#############################################################################
#############
##                                    Power Led Settings
##
#############################################################################
#############
phone_setting.common_power_led_enable =
phone_setting.talk_and_dial_power_led_enable =
phone_setting.mail_power_led_flash_enable =
phone_setting.ring_power_led_flash_enable =
phone_setting.mute_power_led_flash_enable=
phone_setting.hold_and_held_power_led_flash_enable =

##It configures the level of the active backlight intensity.
##For SIP-T28P IP phones and the connected EXP39:
##The default value is 2.
##For SIP-T46G IP phones and the connected EXP40:
##The default value is 8.
phone_setting.active_backlight_level =

##It configures the phone to go out or reduce intensity of the backlight
on the LCD screen after a period of inactivity.
##0-Off,1-Low.
##The default value is 1.
###Only T46G/T48G Models support this parameter
phone_setting.inactive_backlight_level =

#############################################################################
#############
##                                    Phone Setting Display
##
#############################################################################
#############

###Except T20P/T19P/T21P Models
##It configures the backlight time (in seconds).0, 1, 15, 30, 60, 120,
300, 600 or 1800.
phone_setting.backlight_time =
```


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```
###Except T20P/T22P/T41P/T42G Models
###It configures the contrast of the LCD screen.
###For SIP-T19P and SIP-T21P IP phones, it configures the LCD¡¯s contrast
of the phone only.
###For SIP-T26P IP phones, it configures the LCD¡¯s contrast of the
connected EXP39 only.
###For SIP-T28P IP phones, it configures the LCD¡¯s contrast of the IP
phone and the connected EXP39.
###For SIP-T46G IP phones, it configures the LCD¡¯s contrast of the
connected EXP40 only.
###The default value is 6.
phone_setting.contrast =

###Except T46G Model
##It configures the logo mode of the LCD screen (except for SIP-T20P IP
phones).
##For SIP-T19P/T21P/T22P/T26P/T41P/T42G IP phones:
##0-Disabled   1-System logo   2-Custom logo
##The default value is 0.
##For SIP-T28P IP phones:
##1-System logo   2-Custom logo
##The default value is 1.
##It enables or disables a text logo (for SIP-T20P IP phones).
##0-Disabled   1-Enabled
##The default value is 0.
phone_setting.lcd_logo.mode =


###Except T20P/T46G Models
lcd_logo.url =
lcd_logo.delete =

###Only T46G T48G Model supports the two parameters
###It configures the wallpaper displayed on the phone.
###Example:To configure a phone built-in picture (e.g., 1.png) to be
wallpaper, the value format is:
###phone_setting.backgrounds = Resource:1.png
###To configure a custom picture (e.g., custom1.png) to be wallpaper, the
value format is: Config:custom1.png
###The default value is Resource:Default.jpg.
phone_setting.backgrounds =

wallpaper_upload.url =

##############################################################################
#############
##                                    Phone Setting BLF
##
##############################################################################
#############
###It enables or disables the phone to automatically configure the BLF
list keys in order.
###0-Disabled,1-Enabled.
###The default value is 1.

phone_setting.auto_blf_list_enable = 1
phone_setting.blf_list_sequence_type =

##############################################################################
#############
##                                    Key Lock
##
```


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```
##############################################################################
#############

###Only T41P/T42G/T46G Models support the two parameters
###It enables or disables keypad lock feature.
###0-Disabled,1-Enabled.
###The default value is 0.
phone_setting.phone_lock.enable =

###It configures the keypad lock type.
###0-All Keys,1-Function Keys,2-Menu Key.
###The default value is 0.
phone_setting.phone_lock.lock_key_type =

###It configures the password for unlocking the keypad.
###The default value is 123.
phone_setting.phone_lock.unlock_pin =

###It configures the interval (in seconds) to automatically lock the
keypad.
###The default value is 0 (the keypad is locked only by long pressing the
pound key or pressing the keypad lock key)
phone_setting.phone_lock.lock_time_out =
phone_setting.emergency.number =

##############################################################################
#############
##                                    Multicast
##
##############################################################################
#############

###Except T19P Model
multicast.codec =

multicast.receive_priority.enable =
multicast.receive_priority.priority =

###X ranges from 1 to 10
###multicast.listen_address.X.label =
###multicast.listen_address.X.ip_address =

multicast.listen_address.1.label =
multicast.listen_address.1.ip_address =
###Except T19P/T21P Models support this parameter (£¨X:1-10£©)

multicast.paging_address.1.ip_address =
multicast.paging_address.1.label =
##############################################################################
#############
##                                    Super Search(Except T20P Model)
##
##############################################################################
#############
super_search.recent_call =
#super_search.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%super_search.xml

##############################################################################
#############
##                                    Security
##
```


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```
##############################################################################
#############
###Define the login username and password of the user, var and
administrator.
###If you change the username of the administrator from "admin" to
"admin1", your new administrator's username should be configured as:
static.security.user_name.admin = admin1.
###If you change the password of the administrator from "admin" to
"admin1pwd", your new administrator's password should be configured as:
static.security.user_password = admin1:admin1pwd.

###The following examples change the user's username to "user23" and the
user's password to "user23pwd".
###static.security.user_name.user = user23
###static.security.user_password = user23:user23pwd
###The following examples change the var's username to "var55" and the
var's password to "var55pwd".
###static.security.user_name.var = var55
###static.security.user_password = var55:var55pwd
static.security.user_name.user =
static.security.user_name.admin =
static.security.user_name.var =
static.security.user_password =

###It enables or disables the phone to only accept the certificates in the
Trusted Certificates list.
###0-Disabled,1-Enabled.
###The default value is 1.It takes effect after a reboot.
static.security.trust_certificates =

###It configures the source certificates for the phone to authenticate for
TLS connection.
###0-Default certificates,1-Custom certificates,2-All certificates.
###The default value is 0.It takes effect after a reboot.
static.security.ca_cert =

###It configures the static certificates for the phone to send for TLS
authentication.
###0-Default certificates,1-Custom certificates.
###The default value is 0.It takes effect after a reboot.
static.security.dev_cert =

###It enables or disables the phone to mandatorily validate the CommonName
or SubjectAltName of the certificate received from the connecting server.
###0-Disabled,1-Enabled.
###The default value is 0.It takes effect after a reboot.
static.security.cn_validation =


##############################################################################
#############
##                                    User Mode
##
##############################################################################
#############
###It enables or disables the 3-level permissions (admin, user, var).
###0-Disabled,1-Enabled.
###The default value is 0.It takes effect after a reboot.
static.security.var_enable =
#web_item_level.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%WebItemsLevel.cfg
```


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```
##############################################################################
#############
##                                    Trusted Certificates
##
##############################################################################
#############
#trusted_certificates.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%ca.crt
trusted_certificates.delete =

##############################################################################
#############
##                                    Server Certificates
##
##############################################################################
#############
#server_certificates.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%server.pem
server_certificates.delete =


##############################################################################
#############
##                                    Line Key
##
##############################################################################
#############
###Except T19D Model
###T21D/T20P X ranges from 1 to 2
###T22P/T26P X ranges from 1 to 3
###T28P X ranges from 1 to 6
###T41P/T42G X ranges from 1 to 15
###T46G X ranges from 1 to 27

#linekey.X.type--Customize the linekey type.
#The valid types are:

#0-NA   1-Conference   2-Forward   3-Transfer   4-Hold   5-DND   7-Call
Return   8-SMS   9-Directed Pickup   10-Call Park  11-DTMF   12-Voice Mail
13-Speed Dial
#14-Intercom   15-Line   16-BLF   17-URL   18-Group Listening  20-Private
Hold   22-XML Group   23-Group Pickup  24-Multicast Paging  25-Record
27-XML Browser
#34-Hot Desking   35-URL Record   38-LDAP   39-BLF List   40-Prefix   41-
Zero Touch   42-ACD   45-Local Group   46-Network Group   49-Custom Button
50-Keypad Lock
#55-Meet-Me Conference   56-Retrieve Park   57-Hoteling   58-ACD Grace
59-Sisp Code   60-Emergency   61-Directory

#0-NA £¨Only for T41/T42/T46)
#22-XML Group (Not support T20)
#38-LDAP (Not support T20)
#46-Network Group (Not support T20)
#8-SMS (Only support T21/T46/T22/T26/T28)
#17-URL (Only support T41/T42/T46)
#49-Custom Button (Only support T20/T22/T26/T28)

###linekey.X.line =
###linekey.X.value =
###linekey.X.pickup_value =
###linekey.X.type =
```


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```
###linekey.X.xml_phonebook =
###linekey.X.label =
###linekey.X.extension

###It configures the desired line to apply the key feature.Integer from 1
to 6
linekey.1.line =

###It configures the value of the line key feature.
###For example, when setting the key feature to BLF, it configures the
number of the monitored user.
###The default value is blank.
linekey.1.value =

###It configures the pickup code for BLF feature or conference ID followed
by the # sign for Meet-Me conference feature.
###It only applies to BLF and Meet-Me conference features.
###The default value is blank.
linekey.1.pickup_value =
linekey.1.extension

###It configures the key feature for the line key X.
linekey.1.type =

###It configures the desired local group/XML group/network group for the
line key X.
###It only applies to the Local Group, XML Group and Network Group
features.
###XML Group and Network Group features are not applicable to SIP-T20P IP
phones.
linekey.1.xml_phonebook =

###It configures the label displayed on the LCD screen for each line key.
###The default value is blank.
linekey.1.label =

##############################################################################
#############
##                                    Programable Key
##
##############################################################################
#############
###T20P X ranges from 1 to 9
###T28P/T26P X ranges from 1 to 14
###T41P/T42G/T19P/T21P X ranges from 1 to 11
###T46G/T22P X ranges from 1 to 13

#programablekey.x.type--Customize the programmable key type.
#The valid types are:
#0-NA   2-Forward   5-DND   7-Call Return   8-SMS   9-Directed Pickup
13-Speed Dial
#22-XML Group   23-Group Pickup   27-XML Browser   28-History   30-Menu
31-Switch Account   32-New SMS
#33-Status   34-Hot Desking   38-LDAP   40-Prefix   41-Zero Touch   43-
Local Directory   44-Network Directory   45-Local Group
#46-Network Group   47-XML Directory   50-Keypad Lock   51-Switch Account
Up   52-Switch Account Down   55-Meet-Me Conference   61-Directory

#40-Prefix (Not support T20)
#22-XML Group (Not support T20)
#31-Switch Account (Not support T19/T41/T42/T46)
#38-LDAP (Not support T19/T20)
#46-Network Group (Not support T20)
```


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```
#8-SMS (Not support T41/T42/T20)
#32-New SMS (Not support T41/T42/T20)
#47-XML Directory (Not support T20)
#44-Network Directory (Not support T20)
#41-Zero Touch (Not support T41/T42/T46)
#34-Hot Desking (Only support T19/T46
#51-Switch Account Up (Only support T41/T42/T46)
#52-Switch Account Down (Only support T41/T42/T46)

###programablekey.X.type =
###programablekey.X.line =
###programablekey.X.value =
###programablekey.X.xml_phonebook =
###programablekey.X.history_type =
###programablekey.X.label =
###programablekey.X.pickup_value =
###programablekey.X.extension =

###It configures the key feature for the programmable key X.
programablekey.1.type = 28
###It configures the desired line to apply the programmable key feature.
programablekey.1.line =

###It configures the value of the programmable key feature.
###For example, when configuring the key feature to be Speed Dial, it
configures the number.
###The default value is blank.
programablekey.1.value =

###It configures the desired local group/XML group/network group for the
programmable key.
###It only applies to the Local Group, XML Group and Network Group
features.
###XML Group and Network Group features are not applicable to SIP-T20P IP
phones.
programablekey.1.xml_phonebook =

###It configures the history type of programmable key.
###0-Local History,1-Network History.
###The default value is 0.
programablekey.1.history_type =

###It configures the label displayed on the LCD screen for each soft key.
###The default value is blank.
programablekey.1.label = Call Log
###It configures conference ID followed by the # sign for Meet-Me
conference feature.
###It only applies to Meet-Me conference feature.
###The default value is blank.
programablekey.1.pickup_value =

programablekey.2.type = 44
programablekey.2.line =
programablekey.2.value =
programablekey.2.xml_phonebook =
programablekey.2.history_type =
programablekey.2.label = BSFT Dir
programablekey.2.pickup_value =


##############################################################################
#############
```


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```
##                                        Expansion Key(Only for T26P/T28P/T46G
Models)    ##
##############################################################################
#############
###T46G/T28P/T26P X ranges from 1 to 6, Y ranges from 1 to 40

###expansion_module.X.key.Y.type =
###expansion_module.X.key.Y.line =
###expansion_module.X.key.Y.value =
###expansion_module.X.key.Y.pickup_value =
###expansion_module.X.key.Y.label =
###expansion_module.X.key.Y.xml_phonebook =
###expansion_module.X.key.Y.extension =

###It configures the key feature of the expansion module X key Y.
expansion_module.1.key.1.type =

###It configures the desired line to apply the expansion module key
feature.Integer from 1 to 6
expansion_module.1.key.1.line =

###It configures the value of the expansion module key feature.
###The default value is blank.
expansion_module.1.key.1.value =

###It configures the pickup code for BLF feature or conference ID followed
by the # sign for Meet-Me conference feature.
###It only applies to BLF and Meet-Me conference features.
###The default value is blank.
expansion_module.1.key.1.pickup_value =
expansion_module.1.key.1.extension =

###It configures the label displayed on the LCD screen of the expansion
module for each key.
###The default value is blank.
expansion_module.1.key.1.label =

###It only applies to the Local Group, XML Group and Network Group
features.Integer from 0 to 48.
expansion_module.1.key.1.xml_phonebook =

##############################################################################
#############
##                                      Forward Always
##
##############################################################################
#############
forward.always.enable =
forward.always.target =
forward.always.on_code =
forward.always.off_code =

##############################################################################
#############
##                                      Forward Busy
##
##############################################################################
#############
forward.busy.enable =
forward.busy.target =
forward.busy.on_code =
forward.busy.off_code =
```


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```
##############################################################################
#############
##                                    Forward No Answer
##
##############################################################################
#############
forward.no_answer.enable =
forward.no_answer.target =
forward.no_answer.timeout =
forward.no_answer.on_code =
forward.no_answer.off_code =

##############################################################################
#############
##                                    Forward International
##
##############################################################################
#############
###It enables or disables the phone to forward incoming calls to
international numbers.
###0-Disabled,1-Enabled.
###The default value is 1.
forward.international.enable =

##############################################################################
#############
##                                    ACD
##
##############################################################################
#############
acd.auto_available =
acd.auto_available_timer =

##############################################################################
#############
##                                    Hotdesking Startup
##
##############################################################################
#############
phone_setting.logon_wizard =


##############
hotdesking.startup_register_name_enable =
hotdesking.startup_username_enable =
hotdesking.startup_password_enable =
hotdesking.startup_sip_server_enable =
hotdesking.startup_outbound_enable =

##############################################################################
#############
##                                    Hotdesking Dsskey
##
##############################################################################
#############
hotdesking.dsskey_register_name_enable =
hotdesking.dsskey_username_enable =
hotdesking.dsskey_password_enable =
hotdesking.dsskey_sip_server_enable =
hotdesking.dsskey_outbound_enable =

##############################################################################
#############
```


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```
##                                    Alert Info
##
#############################################################################
#############
###X ranges from 1 to 100
###distinctive_ring_tones.alert_info.x.text =
###distinctive_ring_tones.alert_info.x.ringer =

###It configures the internal ringer text for distinctive ringtone.
###Example: distinctive_ring_tones.alert_info.1.text = Family
###The default value is blank.
distinctive_ring_tones.alert_info.1.text =

###It configures the desired ring tones for each text.
###The value ranges from 1 to 8, the digit stands for the appropriate
ringtone.
###Ring tones 6-8 are only applicable to SIP-T46G IP phones.
###The default value is 1.
distinctive_ring_tones.alert_info.1.ringer =

#############################################################################
#############
##                                    Call Waiting
##
#############################################################################
#############
call_waiting.enable = %CALL_WAITING_BINARY%
call_waiting.tone =
call_waiting.on_code =
call_waiting.off_code =

#############################################################################
#############
##                                    Action URL
##
#############################################################################
#############
action_url.setup_completed =
action_url.registered =
action_url.unregistered =
action_url.register_failed =
action_url.off_hook =
action_url.on_hook =
action_url.incoming_call =
action_url.outgoing_call =
action_url.call_established =
action_url.dnd_on =
action_url.dnd_off =
action_url.always_fwd_on =
action_url.always_fwd_off =
action_url.busy_fwd_on =
action_url.busy_fwd_off =
action_url.no_answer_fwd_on =
action_url.no_answer_fwd_off =
action_url.transfer_call =
action_url.blind_transfer_call =
action_url.attended_transfer_call =
action_url.hold =
action_url.unhold =
action_url.mute =
action_url.unmute =
action_url.missed_call =
action_url.call_terminated =
```


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```
action_url.busy_to_idle =
action_url.idle_to_busy =
action_url.ip_change =
action_url.forward_incoming_call =
action_url.reject_incoming_call =
action_url.answer_new_incoming_call =
action_url.transfer_finished =
action_url.transfer_failed =
action_url.setup_autop_finish =
action_url.held =
action_url.unheld =



##############################################################################
#############
##                                    Contact
##
##############################################################################
#############
#local_contact.data.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%contact.xml

###(Only T48G Model supports the parameter)
local_contact.image.url =
local_contact.icon.url =

###(Only T46G Model supports the parameter)
local_contact.data_photo_tar.url =

###(Except T20P Model)
directory_setting.url =

## Except T19P/T21P Model supports the parameter

directory.edit_default_input_method =
directory.search_default_input_method =
local_contact.icon_image.url =
local_contact.photo.url =

##############################################################################
#############
##                                    Custom Factory Configuration
##
##############################################################################
#############

#custom_factory_configuration.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%factory.cfg
features.custom_factory_config.enable =

##############################################################################
#############
##                                    Custom  Configuration
##
##############################################################################
#############

configuration.url =
```


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```
##############################################################################
#############
##                                    Custom Softkey(Except T20P Model)
##
##############################################################################
#############
phone_setting.custom_softkey_enable =
custom_softkey_call_failed.url =
custom_softkey_call_in.url =
custom_softkey_connecting.url =
custom_softkey_dialing.url =
custom_softkey_ring_back.url =
custom_softkey_talking.url =

##############################################################################
#############
##                                   Custom Input Method
##
##############################################################################
#############
gui_input_method.url =

##############################################################################
#############
##                                    Configure the access URL of firmware
##
##############################################################################
#############
###It configures the access URL of the firmware file.
###The default value is blank.It takes effect after a reboot.
firmware.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%%T40_FIRMWARE%

##############################################################################
#############
##                                                RTCP
##
##############################################################################
#############
phone_setting.vq_rtcpxr.interval_report.enable =
phone_setting.vq_rtcpxr.session_report.enable =
phone_setting.vq_rtcpxr.states_show_on_gui.enable =
phone_setting.vq_rtcpxr.states_show_on_web.enable =
phone_setting.vq_rtcpxr_delay_threshold_critical =
phone_setting.vq_rtcpxr_delay_threshold_warning =
phone_setting.vq_rtcpxr_display_jitter.enable =
phone_setting.vq_rtcpxr_display_jitter_buffer_max.enable =
phone_setting.vq_rtcpxr_display_local_call_id.enable =
phone_setting.vq_rtcpxr_display_local_codec.enable =
phone_setting.vq_rtcpxr_display_moscq.enable =
phone_setting.vq_rtcpxr_display_moslq.enable =
phone_setting.vq_rtcpxr_display_packets_lost.enable =
phone_setting.vq_rtcpxr_display_remote_call_id.enable =
phone_setting.vq_rtcpxr_display_remote_codec.enable =
phone_setting.vq_rtcpxr_display_round_trip_delay.enable =
phone_setting.vq_rtcpxr_display_start_time.enable =
phone_setting.vq_rtcpxr_display_stop_time.enable =
phone_setting.vq_rtcpxr_display_symm_oneway_delay.enable =
phone_setting.vq_rtcpxr_interval_period =
phone_setting.vq_rtcpxr_moslq_threshold_critical =
phone_setting.vq_rtcpxr_moslq_threshold_warning =
voice.rtcp.enable =
```


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```
voice.rtcp_intval =
voice.rtcp_xr.enable =
voice.rtcp_cname =



##############################################################################
#############
##                                    Call Display
##
##############################################################################
#############
###Only T46G/T48G Models support this parameter
phone_setting.contact_photo_display.enable =

##############################################################################
#############
##                              DNS
##
##############################################################################
#############
dns_cache_a.1.name =
dns_cache_a.1.ip =
dns_cache_a.1.ttl =
dns_cache_srv.1.name =
dns_cache_srv.1.port =
dns_cache_srv.1.priority =
dns_cache_srv.1.target =
dns_cache_srv.1.weight =
dns_cache_srv.1.ttl =
dns_cache_naptr.1.name =
dns_cache_naptr.1.flags =
dns_cache_naptr.1.order =
dns_cache_naptr.1.preference =
dns_cache_naptr.1.replace =
dns_cache_naptr.1.service =
dns_cache_naptr.1.ttl =


##############################################################################
#############
##                              V80 Add
##
##############################################################################
#############
## Add Time 2015.6.26
static.network.attempt_expired_time =
static.network.dhcp.server_mac1 =
static.network.dhcp.server_mac2 =
features.redial_via_local_sip_server.enable =
features.action_uri_force_autop =
features.call_out_history_by_off_hook.enable =
features.blf_call_out_by_number.enable =
features.save_init_num_to_history.enable =
features.action_uri.enable =
features.headset_play_phone_ringtone.enable =
features.forward.emergency.enable =
features.forward.emergency.authorized_number =
features.auto_answer_tone.enable =
features.ip_call.auto_answer.enable =
custom.features.dnd_sync.enable =
default_input_method.xml_browser_input_screen =
action_url.headset =
```


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```
action_url.handfree
action_url.cancel_callout =
action_url.remote_busy =
action_url.call_remote_canceled =
action_url.call_waiting_on =
action_url.call_waiting_off =
sip.terminate_notify_sub_delay_time =
sip.bind_local_addr_enable =
genesys.acd.after_call_work_display.enable =
voice.side_tone =
static.security.default_access_level =
static.auto_provision.attempt_expired_time =
features.text_message.enable =
phone_setting.ringback_timeout =
phone_setting.ringing_timeout =

##############################################################################
#############
##                                V80-SP1 Add
##
##############################################################################
#############
##Add Time 2015.9.2
static.wifi.enable =
static.wifi.1.label =
static.wifi.1.ssid =
static.wifi.1.security_mode =
static.wifi.1.cipher_type =
static.wifi.1.password =
static.wifi.1.priority =
features.bluetooth_adapter_name=

##############################################################################
#############
##                                V80-SP2 Add
##
##############################################################################
#############
##Add Time 2016.5.26
features.power_saving.enable=
features.power_saving.office_hour.idle_timeout =
features.power_saving.off_hour.idle_timeout =
features.power_saving.user_input_ext.idle_timeout=
features.power_saving.office_hour.monday =
features.power_saving.office_hour.tuesday =
features.power_saving.office_hour.wednesday =
features.power_saving.office_hour.thursday =
features.power_saving.office_hour.friday  =
features.power_saving.office_hour.saturday  =
features.power_saving.office_hour.sunday =
screensaver.wait_time=
screensaver.type=
screensaver.picture_change_interval=
screensaver.clock_move_interval=
screensaver.display_clock.enable =
screensaver.delete =

##############################################################################
#############
##                                V81-Alpha Add
##
##############################################################################
#############
```


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```
edk.id_mode.enable =
softkey.1.softkey_id =
features.enhanced_dss_keys.enable =
softkey.1.enable =
softkey.1.label =
softkey.1.position =
softkey.1.action =
softkey.1.use.idle =
softkey.1.use.incoming_call =
softkey.1.use.connecting =
softkey.1.use.transfer_connecting =
softkey.1.use.on_talk =
softkey.1.use.call_failed =
softkey.1.use.ring_back =
softkey.1.use.transfer_ring_back =
softkey.1.use.hold =
softkey.1.use.held =
softkey.1.use.conferenced =
softkey.1.use.dialtone =
softkey.1.use.dialing =
edk.edkprompt.1.label =
edk.edkprompt.1.enable =
edk.edkprompt.1.type =
edk.edkprompt.1.userfeedback =
edk.edklist.1.enable =
edk.edklist.1.mname =
edk.edklist.1.action =
phone_setting.call_appearance.calls_per_linekey =
phone_setting.call_appearance.transfer_via_new_linekey =
phone_setting.call_appearance.conference_via_new_linekey =
features.mute.autoanswer_mute.enable =
blf.enhanced.idle.enable =
blf.enhanced.idle.led =
blf.enhanced.idle.idle.action =
blf.enhanced.idle.callin.action =
blf.enhanced.idle.talking.action =
blf.enhanced.callin.enable =
blf.enhanced.callin.led =
blf.enhanced.callin.idle.action =
blf.enhanced.callin.callin.action =
blf.enhanced.callin.talking.action =
blf.enhanced.callout.enable =
blf.enhanced.callout.led =
blf.enhanced.callout.idle.action =
blf.enhanced.callout.callin.action =
blf.enhanced.callout.talking.action =
blf.enhanced.talking.enable =
blf.enhanced.talking.led =
blf.enhanced.talking.idle.action =
blf.enhanced.talking.callin.action =
blf.enhanced.talking.talking.action =
blf.enhanced.parked.enable =
blf.enhanced.parked.led =
blf.enhanced.parked.idle.action =
blf.enhanced.parked.callin.action =
blf.enhanced.parked.talking.action =
static.auto_provision.local_contact.backup.enable =
static.auto_provision.local_contact.backup.path =
dialplan.digitmap.apply_to.on_hook_dial =
dialplan.digitmap.apply_to.directory_dial =
dialplan.digitmap.apply_to.forward =
dialplan.digitmap.apply_to.press_send =
dialplan.digitmap.enable =
```


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```
dialplan.digitmap.string =
dialplan.digitmap.interdigit_long_timer =
dialplan.digitmap.interdigit_short_timer =
dialplan.digitmap.no_match_action =
dialplan.digitmap.active.on_hook_dialing =
bw.xsi.enable =
lcl.datetime.date.format =
bw.xsi.directory.enable =
bw.xsi.call_log.enable =
bw.xmpp.enable =
bw.voice_mail.visual.enable =
bw.voice_mail.visual.display_videomail.enable =
voice_mail.message_key.mode =
sip.requesturi.e164.addglobalprefix =
features.conference.local.enable =
features.handset_mode.enable =
features.headset_mode.enable =
features.speaker_mode.enable =
features.call.dialtone_time_out =
static.network.802_1x.anonymous_identity =
static.network.802_1x.eap_fast_provision_mode =
static.local_log.enable =
static.local_log.level =
static.local_log.max_file_size =
static.syslog.enable =
static.syslog.level =
static.syslog.transport_type =
static.syslog.prepend_mac_address.enable =
static.syslog.facility =
static.auto_provision.local_log.backup.enable =
static.auto_provision.local_log.backup.path =
static.auto_provision.local_log.backup.upload_period =
static.auto_provision.local_log.backup.append =
static.auto_provision.local_log.backup.append.limit_mode =
static.auto_provision.local_log.backup.append.max_file_size =
static.auto_provision.local_log.backup.bootlog.upload_wait_time =
static.auto_provision.flexible.enable =
static.auto_provision.flexible.interval=
static.auto_provision.flexible.begin_time  =
static.auto_provision.flexible.end_time =
static.network.dhcp.option60type =
static.auto_provision.attempt_before_failed =
static.auto_provision.retry_delay_after_file_transfer_failed =
static.auto_provision.custom.sync.path =
static.auto_provision.server.type =
static.auto_provision.user_agent_mac.enable =
static.auto_provision.update_file_mode =
features.rtp_symmetric.enable =
voice.jib.wifi.adaptive =
voice.jib.wifi.min =
voice.jib.wifi.max =
voice.jib.wifi.normal =
sip.skip_redundant_failover_addr =
sip.request_validation.source.list =
sip.request_validation.digest.list =
sip.request_validation.digest.realm =
sip.request_validation.digest.event =
sip.cid_source.preference =
ice.enable =
sip.nat_turn.enable =
sip.nat_turn.server =
sip.nat_turn.username
sip.nat_turn.password =
```


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```
sip.nat_turn.port =
sip.dns_transport_type =
sip.sdp_early_answer_or_offer =
features.dnd.large_icon.enable =
features.usb_call_recording.enable =
features.dialpad_mode_on_hold.enable =
static.auto_provision.weekly_upgrade_interval =
static.auto_provision.inactivity_time_expire =


##############################################################################
#############
##                                V81-Beta Add
##
##############################################################################
#############
static.auto_provision.encryption.config =
static.auto_provision.encryption.directory =
wui.quick_login =
features.dtmf.dtmf_flash =
sip.reliable_protocol.timerAE.enable =
static.auto_provision.dns_resolv_nosys =
static.auto_provision.dns_resolv_nretry =
static.auto_provision.dns_resolv_timeout =
multicast.listen_address.1.volume =
multicast.receive.use_speaker =
multicast.listen_address.1.channel =
multicast.paging_address.1.channel =
dialplan.emergency.asserted_id_source =
dialplan.emergency.custom_asserted_id =
dialplan.emergency.server.1.address =
dialplan.emergency.server.1.port =
dialplan.emergency.server.1.transport_type =
dialplan.emergency.1.value =
dialplan.emergency.1.server_priority =
call_waiting.mode =
phone_setting.backgrounds_with_dsskey_unfold =
phone_setting.missed_call_power_led_flash.enable =
screensaver.upload_url =
static.network.static_nat.addr =
static.network.static_nat.enable =
features.keep_mute.enable =
voice.tone.secondary_dial =

##############################################################################
#############
##                                V81-Beta SP1 Add
##
##############################################################################
#############
phone_settings.idle_dsskey_and_title.transparency =
bw.xmpp.change_presence.enable =
features.call_decline.enable =
features.dtmf.min_interval =
features.blf.ring_type =
features.power_saving.intelligent_mode =
features.blf_active_backlight.enable =
features.intercom.headset_prior.enable =
expansion_module.1.key.1.extension =
```


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Device-specific File: %BWMACADDRESS%.cfg

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

```
#!version:1.0.0.1

##File header "#!version:1.0.0.1" can not be edited or deleted, and must
be placed in the first line.##
##This template file is applicable to SIP-
T21_E2P/T19_E2P/T23P/T40P/T27P/T29G/T46G/T48G/T42G/T41P/T48S/T46S/T42S/T41
S/T27G/T61/T66 IP phones running firmware version 72 or later.##
##For more information on configuration parameters, refer to Yealink_SIP-
T2_Series_T19P_T4_Series_IP_Phones_Auto_Provisioning_Guide.##

##############################################################################
#############
##                            Account1 Basic Settings
##
##############################################################################
#############
account.1.enable = %BWLINE-BINARY-1%
account.1.label = %BWEXTENSION-1%
account.1.display_name = %BWCLID-1%
account.1.auth_name = %BWAUTHUSER-1%
account.1.user_name = %BWLINEPORT-1%
account.1.password = %BWAUTHPASSWORD-1%
account.1.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.1.outbound_proxy.1.address = %SBC_ADDRESS%
account.1.outbound_proxy.1.port = %SBC_PORT%
account.1.dial_tone =
account.1.outbound_proxy.2.address =
account.1.outbound_proxy.2.port =


##It configures the transport type for account 1. 0-UDP,1-TCP,2-TLS,3-DNS-
NAPTR
##The default value is 0.
account.1.sip_server.1.transport_type = %TRANSPORT%
account.1.sip_server.2.transport_type = %TRANSPORT%

##############################################################################
#############
##                            Failback
##
##############################################################################
#############

account.1.naptr_build =
account.1.fallback.redundancy_type =
account.1.fallback.timeout =
account.1.sip_server.1.address = %BWHOST-1%
account.1.sip_server.1.port =
account.1.sip_server.1.expires =
account.1.sip_server.1.retry_counts =
account.1.sip_server.1.failback_mode =
account.1.sip_server.1.failback_timeout =
account.1.sip_server.1.register_on_enable =

account.1.sip_server.2.address =
account.1.sip_server.2.port =
```


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```
account.1.sip_server.2.expires =
account.1.sip_server.2.retry_counts =
account.1.sip_server.2.failback_mode =
account.1.sip_server.2.failback_timeout =
account.1.sip_server.2.register_on_enable =



account.1.dns_cache_type =
account.1.static_cache_pri = %STATIC-CACHE-PRI%
account.1.register_expires_overlap =
account.1.subscribe_expires_overlap =

##############################################################################
#############
##                            Register Advanced
##
##############################################################################
#############
##It configures the SIP server type for account X.0-Default,2-BroadSoft,4-
Cosmocom,6-UCAP
##The default value is 0.

account.1.sip_server_type = 2

account.1.unregister_on_reboot =
account.1.proxy_require =
account.1.register_mac =
account.1.register_line =
account.1.reg_fail_retry_interval =

##############################################################################
############
##                      NAT Settings
##
##############################################################################
############
##It enables or disables the NAT traversal for account X.0-Disabled,1-
Enabled
##The default value is 0.
account.1.nat.nat_traversal =

##It configures the IP address or domain name of the STUN server for
account X.
##The default value is blank.

##It configures the port of the STUN server for account X.
##The default value is 3478.

##It configures the type of keep-alive packets sent by the phone to the
NAT static to keep the communication port open so that NAT can continue to
function for account X.
##0-Dsiabled,1-Default: the phone sends UDP packets to the server,2-
Option: the phone sends SIP OPTION packets to the server,3-Notify: the
phone sends SIP NOTIFY packets to the server.
##The default value is 1.
account.1.nat.udp_update_enable =

##It configures the keep-alive interval (in seconds) for account X.
##The default value is 30.Integer from 15 to 2147483647
account.1.nat.udp_update_time =
```


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```
##It enables or disables NAT Rport feature for account X.0-Disabled,1-
Enabled
##The default value is 0.
account.1.nat.rport =

##############################################################################
#############
##                              Account1 Advance Settings
##
##############################################################################
#############


##It configures the voice mail number for account X.
##The default value is blank.
voice_mail.number.1 = %BWVOICE-PORTAL-NUMBER-1%

##Except T19P/T21P Models
account.1.auto_dial_enable =
account.1.auto_dial_num =

account.1.call_id_mode =
account.1.call_info =

##############################################################################
#############
##                              Subscribe
##
##############################################################################
#############
##It enables or disables the phone to subscribe the message waiting
indicator for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.1.subscribe_mwi =


##It is configuration MWI is NOTIFY messages, whether in Terminated status
attributes.
##The default value is 0(Don't handle terminated values)
account.1.mwi_parse_terminated =

##It configures the interval (in seconds) of MWI subscription for account
X.
##The default value is 3600.
account.1.subscribe_mwi_expires =


##It enables or disables the phone to subscribe to the voice mail number
for the message waiting indicator for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.1.subscribe_mwi_to_vm =

##It configures the period (in seconds) of ACD subscription for account X.
##The default value is 1800.Except T19P/T21P Models
account.1.subscribe_acd_expires=


account.1.display_mwi.enable=

##############################################################################
#############
##                              BLF List(Except T19D Model)
##
```


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```
##############################################################################
#############
##It configures the BLF List URI to monitor a list of users for account X.
##The default value is blank.
account.1.blf.blf_list_uri = %BWBLF-URI-1%
##It configures the feature access code for directed call pickup (default:
*97) for account X.
##The default value is blank.
account.1.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-1%
##It configures the feature access code for directed call pickup with
barge-in (default: *33) for account X.
##The default value is blank.
account.1.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-
IN-1%

##It configures the period (in seconds) of the BLF subscription for
account X.
##The default value is 1800.Integer from 30 to 2147483647.
account.1.blf.subscribe_period =

##It configures the event of the BLF subscription for account X.0-
Dialog,1-Presence.
##The default value is 0.
account.1.blf.subscribe_event =

##It enables or disables the phone to handle NOTIFY messages out of the
BLF dialog for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.1.out_dialog_blf_enable =

##It configures the BLF List Retrieve call parked code for account X.
##The default value is blank
account.1.blf_list_retrieve_call_parked_code =

account.1.blf.match_host.enable=

##############################################################################
#############
##                              BLA/SCA
##
##############################################################################
#############
##It enables or disables Broadsoft SCA feature for account X.0-Disabled,1-
Broadsoft SCA.
##The default value is 0.
account.1.shared_line = %BWSHAREDLINE-BINARY-1%
##It configures the BLA number for account X.
##The default value is blank.
account.1.bla_number =

##It configures the period (in seconds) of BLA subscription for account X.
##The default value is 300.Integer from 60 to 7200
account.1.bla_subscribe_period =


##Except T19P/T21P Models
##It configures the Call Pull Feature access code for account X.
##The default value is blank.
account.1.shared_line_callpull_code =
##It configures number of linekey for line.
##The default value is 1,you should enable auto line keys first.
account.1.number_of_linekey = %NUM_OF_LINEKEYS%
```


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```
##############################################################################
#############
##                              Brosoft Callpark
##
##############################################################################
#############
##It enables or disables Broadsoft Callpark for account X.0-Disabled,1-
Broadsoft SCA.
##The default value is 0.
account.1.callpark_enable =

##############################################################################
#############
##                              Audio Codec
##
##############################################################################
#############
###T19E2/T21E2/T23E2/T61/T66/T40/T27P/T41/T42/T46/T29/T48/T27G/T41S/T42S/T
46S/T48S support  pcmu/pcma/g729/g722/ilbc/g726_16/g726_24/g726_32/g726_40
###T19E2/T21E2/T23E2/T40/T27G/T41S/T42S/T46S/T48S support opus
###T19E2/T21E2/T23E2/T61/T66/T40/T41/T42/T46/T29/T48/T41S/T42S/T46S/T48S
support g723_53/g723_63
account.1.codec.g722.enable =
account.1.codec.g722.priority =
account.1.codec.g729.enable =
account.1.codec.g729.priority =
account.1.codec.g723_53.enable =
account.1.codec.g723_53.priority =
account.1.codec.g723_63.enable =
account.1.codec.g723_63.priority =
account.1.codec.g726_16.enable =
account.1.codec.g726_16.priority =
account.1.codec.g726_16.rtpmap =
account.1.codec.g726_24.enable =
account.1.codec.g726_24.priority =
account.1.codec.g726_24.rtpmap =
account.1.codec.g726_32.enable =
account.1.codec.g726_32.priority =
account.1.codec.g726_32.rtpmap =
account.1.codec.g726_40.enable =
account.1.codec.g726_40.priority =
account.1.codec.g726_40.rtpmap =
account.1.codec.ilbc.enable =
account.1.codec.ilbc.priority =
account.1.codec.ilbc.rtpmap =
account.1.codec.opus.enable =
account.1.codec.opus.priority =
account.1.codec.opus.rtpmap =
account.1.codec.pcmu.enable =
account.1.codec.pcmu.priority =
account.1.codec.pcma.enable =
account.1.codec.pcma.priority =


##############################################################################
#############
##                              Audio Advanced
##
##############################################################################
#############
##It configures whether to use voice encryption service for account X.0-
Disabled,1-Optional,2-Compulsory.
##The default value is 0.
```


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```
account.1.srtp_encryption =

##It configures the RTP packet time for account X.0 (Disabled), 10, 20,
30, 40, 50 or 60.
##The default value is 20.
account.1.ptime =

## The default value is 0(Take a SRTP all encryption).1:Only carry AES -
80 secret key,2: Only carry AES - 32 secret key

##########################################################################
#############
##                              Anonymous Call
##
##########################################################################
#############
account.1.send_anonymous_code =
account.1.anonymous_call =
account.1.anonymous_call_oncode =
account.1.anonymous_call_offcode =
account.1.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.1.anonymous_reject_oncode =
account.1.anonymous_reject_offcode =
account.1.send_anonymous_rejection_code =


##########################################################################
#############
##                              Pickup Code
##
##########################################################################
#############
##It enables or disables the phone to pick up a call according to the SIP
header of dialog-info for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.1.dialoginfo_callpickup =

##It configures the group pickup code for account X.
##The default value is blank.
account.1.group_pickup_code = %BWFAC-CALL-PICKUP-1%
##It configures the directed pickup code for account X.
##The default value is blank.
account.1.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-1%

##########################################################################
#############
##                              DTMF
##
##########################################################################
#############
account.1.dtmf.type =
account.1.dtmf.info_type =
account.1.dtmf.dtmf_payload =

##########################################################################
#############
##                              Alert info
##
##########################################################################
#############
##It enables or disables the distinctive ringtones by the Alert-Info SIP
header for account X.0-Disabled,1-Enabled.
##The default value is 0.
```


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```
account.1.alert_info_url_enable =
##Except T19P/T21P Models
##The default value is blank.Values range 256 characters in length
account.1.alert_info =

account.1.ringtone.ring_type =

###Only for T46G Model
##It enables or disables the phone to download the picture information for
account X when receiving an incoming call or during a call.0-Disabled,1-
Enabled.
##The default value is 0.
account.1.picture_info_enable =

##########################################################################
#############
##                              Conference
##
##########################################################################
#############
##It configures the conference type for account X.0-Local Conference,2-
Network Conference.
##The default value is 0.
account.1.conf_type =

##It configures the network conference URI for account X.
##The default value is blank.
account.1.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-1%

##########################################################################
#############
##                              CID Source
##
##########################################################################
#############
account.1.cid_source =
account.1.cid_source_privacy =
account.1.cid_source_ppi =
account.1.cp_source =

##########################################################################
#############
##                              Session Timer
##
##########################################################################
#############
account.1.session_timer.enable =
account.1.session_timer.expires =
account.1.session_timer.refresher =

##########################################################################
#############
##                              Music on Hold
##
##########################################################################
#############
##It configures the way on how the phone processes Music On Hold when
placing an active call on hold for account X.
##0-Calling the music server before holding
##1-Calling the music server after holding
##The default value is 0.
account.1.music_on_hold_type =
```


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```
##It configures the URI of the Music On Hold server for account X.
##The default value is blank.
account.1.music_server_uri =

##############################################################################
#############
##                              Advanced
##
##############################################################################
#############
account.1.auto_answer = %AUTO_ANSWER_BINARY%
account.1.missed_calllog =
account.1.100rel_enable =
account.1.enable_user_equal_phone =
account.1.compact_header_enable =
account.1.custom_ua =

##############################################################################
#############
##                                    DND(Except T19 Model)
##
##############################################################################
#############
account.1.dnd.enable =
account.1.dnd.on_code =
account.1.dnd.off_code =

##############################################################################
#############
##                                  Call Forward(Except T19 Model)
##
##############################################################################
#############
account.1.always_fwd.enable =
account.1.always_fwd.target =
account.1.always_fwd.off_code =
account.1.always_fwd.on_code =
account.1.busy_fwd.enable =
account.1.busy_fwd.target =
account.1.busy_fwd.off_code =
account.1.busy_fwd.on_code =
account.1.timeout_fwd.enable =
account.1.timeout_fwd.target =
account.1.timeout_fwd.timeout =
account.1.timeout_fwd.off_code =
account.1.timeout_fwd.on_code =

##############################################################################
#############
##                                    Voice Monitoring  (Except T19P/T21P
Models)                    ##
##############################################################################
#############
account.1.vq_rtcpxr.collector_name=
account.1.vq_rtcpxr.collector_server_host=
account.1.vq_rtcpxr.collector_server_port=

##############################################################################
#############
##                                  Broadsoft Hoteling
##
##############################################################################
#############
```


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```
account.1.hoteling.enable =
account.1.hoteling.user_id =
account.1.hoteling.password =
account.1.hoteling.auto_login_enable =
account.1.flexible_seating.enable=
account.1.hoteling.mode =  %BWHOTELINGMODE-1%
account.1.hoteling.pin =  %BWFLEXIBLESEATINGUNLOCKPIN-1%

##########################################################################
#############
##                                  Broadsoft ACD
##
##########################################################################
#############
account.1.acd.enable =
account.1.acd.unavailable_reason_enable =
account.1.acd.available =
account.1.acd.initial_state =

##########################################################################
#############
##                                  Broadsoft ACD Call Center
##
##########################################################################
#############
account.1.reason_code.1 =
account.1.reason_code_name.1 =
account.1.bw_disp_code.1 =
account.1.bw_disp_code_name.1 =
account.1.supervisor_info_code.1 =
account.1.supervisor_info_code_name.1 =

##########################################################################
#############
##                                  Broadsoft Call Center
##
##########################################################################
#############
account.1.call_center.call_info_enable =
account.1.call_center.show_call_info_time =
account.1.call_center.disp_code_enable =
account.1.call_center.trace_enable =
account.1.call_center.emergency_enable =
account.1.call_center.queue_status_enable =
account.1.call_center.queue_status_light_enable =


##########################################################################
#############
##         Broadsoft XSI                      ##
##########################################################################
#############
##It configures the user name for XSI authentication for account
X.Example:account.1.xsi.user = 3502@as.iop1.broadworks.net.
##The default value is blank.
account.1.xsi.user = %BWLOGIN-ID-1%

##It configures the password for XSI authentication for account
X.Example:account.1.xsi.password = 123456.
##The default value is blank.
account.1.xsi.password = %XSIPASSWORD-1%
```


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```
##It configures the access URL of the Xtended Services Platform server for
account X.Example:account.1.xsi.host = xsp1.iop1.broadworks.net.
##The default value is blank.
account.1.xsi.host = %XSP_ADDRESS%

##It configures the server type of the Xtended Services Platform server
for account X.Example:account.1.xsi.server_type = http.
##The default value is http.
account.1.xsi.server_type =

##It configures the server port of the Xtended Services Platform server
for account X.Example:account.1.xsi.port = 80.
##The default value is 80.Integer from 1 to 65535
account.1.xsi.port =



#########################################################################
#############
##                              V80 Add
##
#########################################################################
#############
## Add Time 2015.6.26
account.1.callerid_in_support_header.enable =
account.1.acd.auto_login_enable  =
account.1.outbound_proxy_fallback_interval =
account.1.transfer_refer_to_contact_header.enable =
account.1.sub_fail_retry_interval =
account.1.update_ack_while_dialing =
account.1.end_call_when_transferred.enable =
account.1.nat.stun_refresh_timer =
account.1.contact_take_line_param.enable =

#########################################################################
#############
##                              V80-SP2 Add
##
#########################################################################
#############
account.1.acd.call_information =
account.1.acd.refresh_url =
account.1.acd.away_url =
account.1.acd.available_url =
account.1.bla.notify_with_expire.enable =
account.1.bla.subscribe_uri_build_type =
account.1.instance_id.enable =


#########################################################################
#############
##                              V81-Alpha Add
##
#########################################################################
#############
account.1.phone_setting.call_appearance.calls_per_linekey =
account.1.phone_setting.call_appearance.transfer_via_new_linekey =
account.1.phone_setting.call_appearance.conference_via_new_linekey =
account.1.sip_server.1.invite_retry_counts =
account.1.sip_server.1.only_signal_with_registered =
account.1.reg_failed_retry_min_time =
account.1.reg_failed_retry_max_time =
account.1.line_seize.expires =
```


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```
account.1.gruu.enable =
account.1.sip_server.1.failback_subscribe.enable =
account.1.hold_use_inactive =
account.1.features.usb_call_recording.enable =


##############################################################################
#############
##                            V81-Beta Add
##
##############################################################################
#############
account.1.security_classification.enable =
account.1.srtp_lifetime =
account.1.xsi.custom_url =
account.1.dialplan.digitmap.active.on_hook_dialing =
account.1.dialplan.digitmap.apply_to.directory_dial =
account.1.dialplan.digitmap.apply_to.forward =
account.1.dialplan.digitmap.apply_to.on_hook_dial =
account.1.dialplan.digitmap.apply_to.press_send =
account.1.dialplan.digitmap.enable =
account.1.dialplan.digitmap.interdigit_long_timer =
account.1.dialplan.digitmap.interdigit_short_timer =
account.1.dialplan.digitmap.no_match_action =
account.1.dialplan.digitmap.string =
account.1.hoteling.mode =
account.1.hoteling.pin =
account.1.flexible_seating.enable =

##############################################################################
#############
##                               V81-Beta SP1 Add
##
##############################################################################
#############
account.1.features.call_decline.enable =
account.1.call_recording.enable =
account.1.hoteling.expires =


##############################################################################
#############
##                            Account2 Basic Settings
##
##############################################################################
#############
account.2.enable = %BWLINE-BINARY-2%
account.2.label = %BWEXTENSION-2%
account.2.display_name = %BWCLID-2%
account.2.auth_name = %BWAUTHUSER-2%
account.2.user_name = %BWLINEPORT-2%
account.2.password = %BWAUTHPASSWORD-2%
account.2.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.2.outbound_proxy.1.address = %SBC_ADDRESS%
account.2.outbound_proxy.1.port = %SBC_PORT%
account.2.dial_tone =
account.2.outbound_proxy.2.address =
account.2.outbound_proxy.2.port =


##It configures the transport type for account 1. 0-UDP,1-TCP,2-TLS,3-DNS-
NAPTR
##The default value is 0.
```


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```
account.2.sip_server.1.transport_type = %TRANSPORT%
account.2.sip_server.2.transport_type = %TRANSPORT%

##############################################################################
#############
##                            Failback
##
##############################################################################
#############

account.2.naptr_build =
account.2.fallback.redundancy_type =
account.2.fallback.timeout =
account.2.sip_server.1.address = %BWHOST-2%
account.2.sip_server.1.port = 5060
account.2.sip_server.1.expires = 3600
account.2.sip_server.1.retry_counts =
account.2.sip_server.1.failback_mode =
account.2.sip_server.1.failback_timeout =
account.2.sip_server.1.register_on_enable =

account.2.sip_server.2.address =
account.2.sip_server.2.port =
account.2.sip_server.2.expires =
account.2.sip_server.2.retry_counts =
account.2.sip_server.2.failback_mode =
account.2.sip_server.2.failback_timeout =
account.2.sip_server.2.register_on_enable =



account.2.dns_cache_type =
account.2.static_cache_pri = %STATIC-CACHE-PRI%
account.2.register_expires_overlap =
account.2.subscribe_expires_overlap =

##############################################################################
#############
##                            Register Advanced
##
##############################################################################
#############
##It configures the SIP server type for account X.0-Default,2-BroadSoft,4-
Cosmocom,6-UCAP
##The default value is 0.

account.2.sip_server_type = 2

account.2.unregister_on_reboot =
account.2.proxy_require =
account.2.register_mac =
account.2.register_line =
account.2.reg_fail_retry_interval =

##############################################################################
############
##                      NAT Settings
##
##############################################################################
############
##It enables or disables the NAT traversal for account X.0-Disabled,1-
Enabled
##The default value is 0.
```


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```
account.2.nat.nat_traversal =

##It configures the IP address or domain name of the STUN server for
account X.
##The default value is blank.

##It configures the port of the STUN server for account X.
##The default value is 3478.

##It configures the type of keep-alive packets sent by the phone to the
NAT static to keep the communication port open so that NAT can continue to
function for account X.
##0-Dsiabled,1-Default: the phone sends UDP packets to the server,2-
Option: the phone sends SIP OPTION packets to the server,3-Notify: the
phone sends SIP NOTIFY packets to the server.
##The default value is 1.
account.2.nat.udp_update_enable =

##It configures the keep-alive interval (in seconds) for account X.
##The default value is 30.Integer from 15 to 2147483647
account.2.nat.udp_update_time =

##It enables or disables NAT Rport feature for account X.0-Disabled,1-
Enabled
##The default value is 0.
account.2.nat.rport =

##############################################################################
#############
##                              Account2 Advance Settings
##
##############################################################################
#############


##It configures the voice mail number for account X.
##The default value is blank.
voice_mail.number.2 = %BWVOICE-PORTAL-NUMBER-2%

##Except T19P/T21P Models
account.2.auto_dial_enable =
account.2.auto_dial_num =

account.2.call_id_mode =
account.2.call_info =

##############################################################################
#############
##                              Subscribe
##
##############################################################################
#############
##It enables or disables the phone to subscribe the message waiting
indicator for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.2.subscribe_mwi =


##It is configuration MWI is NOTIFY messages, whether in Terminated status
attributes.
##The default value is 0(Don't handle terminated values)
account.2.mwi_parse_terminated =
```


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```
##It configures the interval (in seconds) of MWI subscription for account
X.
##The default value is 3600.
account.2.subscribe_mwi_expires =


##It enables or disables the phone to subscribe to the voice mail number
for the message waiting indicator for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.2.subscribe_mwi_to_vm =

##It configures the period (in seconds) of ACD subscription for account X.
##The default value is 1800.Except T19P/T21P Models
account.2.subscribe_acd_expires=


account.2.display_mwi.enable=

#########################################################################
#############
##                              BLF List(Except T19D Model)
##
#########################################################################
#############
##It configures the BLF List URI to monitor a list of users for account X.
##The default value is blank.
account.2.blf.blf_list_uri = %BWBLF-URI-2%
##It configures the feature access code for directed call pickup (default:
*97) for account X.
##The default value is blank.
account.2.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-2%
##It configures the feature access code for directed call pickup with
barge-in (default: *33) for account X.
##The default value is blank.
account.2.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-
IN-2%

##It configures the period (in seconds) of the BLF subscription for
account X.
##The default value is 1800.Integer from 30 to 2147483647.
account.2.blf.subscribe_period =

##It configures the event of the BLF subscription for account X.0-
Dialog,1-Presence.
##The default value is 0.
account.2.blf.subscribe_event =

##It enables or disables the phone to handle NOTIFY messages out of the
BLF dialog for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.2.out_dialog_blf_enable =

##It configures the BLF List Retrieve call parked code for account X.
##The default value is blank
account.2.blf_list_retrieve_call_parked_code =

account.2.blf.match_host.enable=

#########################################################################
#############
##                              BLA/SCA
##
```


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```
##############################################################################
#############
##It enables or disables Broadsoft SCA feature for account X.0-Disabled,1-
Broadsoft SCA.
##The default value is 0.
account.2.shared_line = %BWSHAREDLINE-BINARY-2%
##It configures the BLA number for account X.
##The default value is blank.
account.2.bla_number =

##It configures the period (in seconds) of BLA subscription for account X.
##The default value is 300.Integer from 60 to 7200
account.2.bla_subscribe_period =


##Except T19P/T21P Models
##It configures the Call Pull Feature access code for account X.
##The default value is blank.
account.2.shared_line_callpull_code =
##It configures number of linekey for line.
##The default value is 1,you should enable auto line keys first.
account.2.number_of_linekey = %NUM_OF_LINEKEYS%

##############################################################################
#############
##                              Brosoft Callpark
##
##############################################################################
#############
##It enables or disables Broadsoft Callpark for account X.0-Disabled,1-
Broadsoft SCA.
##The default value is 0.
account.2.callpark_enable =

##############################################################################
#############
##                              Audio Codec
##
##############################################################################
#############
###T19E2/T21E2/T23E2/T61/T66/T40/T27P/T41/T42/T46/T29/T48/T27G/T41S/T42S/T
46S/T48S support  pcmu/pcma/g729/g722/ilbc/g726_16/g726_24/g726_32/g726_40
###T19E2/T21E2/T23E2/T40/T27G/T41S/T42S/T46S/T48S support opus
###T19E2/T21E2/T23E2/T61/T66/T40/T41/T42/T46/T29/T48/T41S/T42S/T46S/T48S
support g723_53/g723_63
account.2.codec.g722.enable =
account.2.codec.g722.priority =
account.2.codec.g729.enable =
account.2.codec.g729.priority =
account.2.codec.g723_53.enable =
account.2.codec.g723_53.priority =
account.2.codec.g723_63.enable =
account.2.codec.g723_63.priority =
account.2.codec.g726_16.enable =
account.2.codec.g726_16.priority =
account.2.codec.g726_16.rtpmap =
account.2.codec.g726_24.enable =
account.2.codec.g726_24.priority =
account.2.codec.g726_24.rtpmap =
account.2.codec.g726_32.enable =
account.2.codec.g726_32.priority =
account.2.codec.g726_32.rtpmap =
account.2.codec.g726_40.enable =
```


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```
account.2.codec.g726_40.priority =
account.2.codec.g726_40.rtpmap =
account.2.codec.ilbc.enable =
account.2.codec.ilbc.priority =
account.2.codec.ilbc.rtpmap =
account.2.codec.opus.enable =
account.2.codec.opus.priority =
account.2.codec.opus.rtpmap =
account.2.codec.pcmu.enable =
account.2.codec.pcmu.priority =
account.2.codec.pcma.enable =
account.2.codec.pcma.priority =


##############################################################################
#############
##                              Audio Advanced
##
##############################################################################
#############
##It configures whether to use voice encryption service for account X.0-
Disabled,1-Optional,2-Compulsory.
##The default value is 0.
account.2.srtp_encryption =

##It configures the RTP packet time for account X.0 (Disabled), 10, 20,
30, 40, 50 or 60.
##The default value is 20.
account.2.ptime =

## The default value is 0(Take a SRTP all encryption).1:Only carry AES -
80 secret key,2: Only carry AES - 32 secret key

##############################################################################
#############
##                              Anonymous Call
##
##############################################################################
#############
account.2.send_anonymous_code =
account.2.anonymous_call =
account.2.anonymous_call_oncode =
account.2.anonymous_call_offcode =
account.2.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.2.anonymous_reject_oncode =
account.2.anonymous_reject_offcode =
account.2.send_anonymous_rejection_code =


##############################################################################
#############
##                              Pickup Code
##
##############################################################################
#############
##It enables or disables the phone to pick up a call according to the SIP
header of dialog-info for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.2.dialoginfo_callpickup =

##It configures the group pickup code for account X.
##The default value is blank.
account.2.group_pickup_code = %BWFAC-CALL-PICKUP-2%
```


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```
##It configures the directed pickup code for account X.
##The default value is blank.
account.2.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-2%

##############################################################################
#############
##                              DTMF
##
##############################################################################
#############
account.2.dtmf.type =
account.2.dtmf.info_type =
account.2.dtmf.dtmf_payload =

##############################################################################
#############
##                              Alert info
##
##############################################################################
#############
##It enables or disables the distinctive ringtones by the Alert-Info SIP
header for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.2.alert_info_url_enable =
##Except T19P/T21P Models
##The default value is blank.Values range 256 characters in length
account.2.alert_info =

account.2.ringtone.ring_type =

###Only for T46G Model
##It enables or disables the phone to download the picture information for
account X when receiving an incoming call or during a call.0-Disabled,1-
Enabled.
##The default value is 0.
account.2.picture_info_enable =

##############################################################################
#############
##                              Conference
##
##############################################################################
#############
##It configures the conference type for account X.0-Local Conference,2-
Network Conference.
##The default value is 0.
account.2.conf_type =

##It configures the network conference URI for account X.
##The default value is blank.
account.2.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-2%

##############################################################################
#############
##                              CID Source
##
##############################################################################
#############
account.2.cid_source =
account.2.cid_source_privacy =
account.2.cid_source_ppi =
account.2.cp_source =
```


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```
##############################################################################
#############
##                              Session Timer
##
##############################################################################
#############
account.2.session_timer.enable =
account.2.session_timer.expires =
account.2.session_timer.refresher =

##############################################################################
#############
##                              Music on Hold
##
##############################################################################
#############
##It configures the way on how the phone processes Music On Hold when
placing an active call on hold for account X.
##0-Calling the music server before holding
##1-Calling the music server after holding
##The default value is 0.
account.2.music_on_hold_type =

##It configures the URI of the Music On Hold server for account X.
##The default value is blank.
account.2.music_server_uri =

##############################################################################
#############
##                              Advanced
##
##############################################################################
#############
account.2.auto_answer = %AUTO_ANSWER_BINARY%
account.2.missed_calllog =
account.2.100rel_enable =
account.2.enable_user_equal_phone =
account.2.compact_header_enable =
account.2.custom_ua =

##############################################################################
#############
##                                   DND(Except T19 Model)
##
##############################################################################
#############
account.2.dnd.enable =
account.2.dnd.on_code =
account.2.dnd.off_code =

##############################################################################
#############
##                                 Call Forward(Except T19 Model)
##
##############################################################################
#############
account.2.always_fwd.enable =
account.2.always_fwd.target =
account.2.always_fwd.off_code =
account.2.always_fwd.on_code =
account.2.busy_fwd.enable =
account.2.busy_fwd.target =
account.2.busy_fwd.off_code =
```


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```
account.2.busy_fwd.on_code =
account.2.timeout_fwd.enable =
account.2.timeout_fwd.target =
account.2.timeout_fwd.timeout =
account.2.timeout_fwd.off_code =
account.2.timeout_fwd.on_code =

##############################################################################
#############
##                                  Voice Monitoring  (Except T19P/T21P
Models)                    ##
##############################################################################
#############
account.2.vq_rtcpxr.collector_name=
account.2.vq_rtcpxr.collector_server_host=
account.2.vq_rtcpxr.collector_server_port=

##############################################################################
#############
##                                  Broadsoft Hoteling
##
##############################################################################
#############
account.2.hoteling.enable =
account.2.hoteling.user_id =
account.2.hoteling.password =
account.2.hoteling.auto_login_enable =
account.2.flexible_seating.enable=
account.2.hoteling.mode =  %BWHOTELINGMODE-2%
account.2.hoteling.pin =  %BWFLEXIBLESEATINGUNLOCKPIN-2%

##############################################################################
#############
##                                  Broadsoft ACD
##
##############################################################################
#############
account.2.acd.enable =
account.2.acd.unavailable_reason_enable =
account.2.acd.available =
account.2.acd.initial_state =

##############################################################################
#############
##                                  Broadsoft ACD Call Center
##
##############################################################################
#############
account.2.reason_code.1 =
account.2.reason_code_name.1 =
account.2.bw_disp_code.1 =
account.2.bw_disp_code_name.1 =
account.2.supervisor_info_code.1 =
account.2.supervisor_info_code_name.1 =

##############################################################################
#############
##                                  Broadsoft Call Center
##
##############################################################################
#############
account.2.call_center.call_info_enable =
account.2.call_center.show_call_info_time =
```


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```
account.2.call_center.disp_code_enable =
account.2.call_center.trace_enable =
account.2.call_center.emergency_enable =
account.2.call_center.queue_status_enable =
account.2.call_center.queue_status_light_enable =


##########################################################################
#############
##          Broadsoft XSI                       ##
##########################################################################
#############
##It configures the user name for XSI authentication for account
X.Example:account.2.xsi.user = 3502@as.iop1.broadworks.net.
##The default value is blank.
account.2.xsi.user = %BWLOGIN-ID-2%

##It configures the password for XSI authentication for account
X.Example:account.2.xsi.password = 123456.
##The default value is blank.
account.2.xsi.password = %XSIPASSWORD-2%

##It configures the access URL of the Xtended Services Platform server for
account X.Example:account.2.xsi.host = xsp1.iop1.broadworks.net.
##The default value is blank.
account.2.xsi.host = %XSP_ADDRESS%

##It configures the server type of the Xtended Services Platform server
for account X.Example:account.2.xsi.server_type = http.
##The default value is http.
account.2.xsi.server_type =

##It configures the server port of the Xtended Services Platform server
for account X.Example:account.2.xsi.port = 80.
##The default value is 80.Integer from 1 to 65535
account.2.xsi.port =



##########################################################################
#############
##                              V80 Add
##
##########################################################################
#############
## Add Time 2015.6.26
account.2.callerid_in_support_header.enable =
account.2.acd.auto_login_enable  =
account.2.outbound_proxy_fallback_interval =
account.2.transfer_refer_to_contact_header.enable =
account.2.sub_fail_retry_interval =
account.2.update_ack_while_dialing =
account.2.end_call_when_transferred.enable =
account.2.nat.stun_refresh_timer =
account.2.contact_take_line_param.enable =

##########################################################################
#############
##                              V80-SP2 Add
##
##########################################################################
#############
account.2.acd.call_information =
```


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```
account.2.acd.refresh_url =
account.2.acd.away_url =
account.2.acd.available_url =
account.2.bla.notify_with_expire.enable =
account.2.bla.subscribe_uri_build_type =
account.2.instance_id.enable =


##############################################################################
#############
##                              V81-Alpha Add
##
##############################################################################
#############
account.2.phone_setting.call_appearance.calls_per_linekey =
account.2.phone_setting.call_appearance.transfer_via_new_linekey =
account.2.phone_setting.call_appearance.conference_via_new_linekey =
account.2.sip_server.1.invite_retry_counts =
account.2.sip_server.1.only_signal_with_registered =
account.2.reg_failed_retry_min_time =
account.2.reg_failed_retry_max_time =
account.2.line_seize.expires =
account.2.gruu.enable =
account.2.sip_server.1.failback_subscribe.enable =
account.2.hold_use_inactive =
account.2.features.usb_call_recording.enable =


##############################################################################
#############
##                              V81-Beta Add
##
##############################################################################
#############
account.2.security_classification.enable =
account.2.srtp_lifetime =
account.2.xsi.custom_url =
account.2.dialplan.digitmap.active.on_hook_dialing =
account.2.dialplan.digitmap.apply_to.directory_dial =
account.2.dialplan.digitmap.apply_to.forward =
account.2.dialplan.digitmap.apply_to.on_hook_dial =
account.2.dialplan.digitmap.apply_to.press_send =
account.2.dialplan.digitmap.enable =
account.2.dialplan.digitmap.interdigit_long_timer =
account.2.dialplan.digitmap.interdigit_short_timer =
account.2.dialplan.digitmap.no_match_action =
account.2.dialplan.digitmap.string =
account.2.hoteling.mode =
account.2.hoteling.pin =
account.2.flexible_seating.enable =

##############################################################################
#############
##                                V81-Beta SP1 Add
##
##############################################################################
#############
account.2.features.call_decline.enable =
account.2.call_recording.enable =
account.2.hoteling.expires =
```


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```
##############################################################################
#############
##                            Account3 Basic Settings
##
##############################################################################
#############
account.3.enable = %BWLINE-BINARY-3%
account.3.label = %BWEXTENSION-3%
account.3.display_name = %BWCLID-3%
account.3.auth_name = %BWAUTHUSER-3%
account.3.user_name = %BWLINEPORT-3%
account.3.password = %BWAUTHPASSWORD-3%
account.3.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.3.outbound_proxy.1.address = %SBC_ADDRESS%
account.3.outbound_proxy.1.port = %SBC_PORT%
account.3.dial_tone =
account.3.outbound_proxy.2.address =
account.3.outbound_proxy.2.port =


##It configures the transport type for account 1. 0-UDP,1-TCP,2-TLS,3-DNS-
NAPTR
##The default value is 0.
account.3.sip_server.1.transport_type = %TRANSPORT%
account.3.sip_server.2.transport_type = %TRANSPORT%

##############################################################################
#############
##                            Failback
##
##############################################################################
#############

account.3.naptr_build =
account.3.fallback.redundancy_type =
account.3.fallback.timeout =
account.3.sip_server.1.address = %BWHOST-3%
account.3.sip_server.1.port = 5060
account.3.sip_server.1.expires = 3600
account.3.sip_server.1.retry_counts =
account.3.sip_server.1.failback_mode =
account.3.sip_server.1.failback_timeout =
account.3.sip_server.1.register_on_enable =

account.3.sip_server.2.address =
account.3.sip_server.2.port =
account.3.sip_server.2.expires =
account.3.sip_server.2.retry_counts =
account.3.sip_server.2.failback_mode =
account.3.sip_server.2.failback_timeout =
account.3.sip_server.2.register_on_enable =



account.3.dns_cache_type =
account.3.static_cache_pri = %STATIC-CACHE-PRI%
account.3.register_expires_overlap =
account.3.subscribe_expires_overlap =

##############################################################################
#############
##                            Register Advanced
##
```


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```
##############################################################################
#############
##It configures the SIP server type for account X.0-Default,2-BroadSoft,4-
Cosmocom,6-UCAP
##The default value is 0.

account.3.sip_server_type = 2

account.3.unregister_on_reboot =
account.3.proxy_require =
account.3.register_mac =
account.3.register_line =
account.3.reg_fail_retry_interval =

##############################################################################
############
##                      NAT Settings
##
##############################################################################
############
##It enables or disables the NAT traversal for account X.0-Disabled,1-
Enabled
##The default value is 0.
account.3.nat.nat_traversal =

##It configures the IP address or domain name of the STUN server for
account X.
##The default value is blank.

##It configures the port of the STUN server for account X.
##The default value is 3478.

##It configures the type of keep-alive packets sent by the phone to the
NAT static to keep the communication port open so that NAT can continue to
function for account X.
##0-Dsiabled,1-Default: the phone sends UDP packets to the server,2-
Option: the phone sends SIP OPTION packets to the server,3-Notify: the
phone sends SIP NOTIFY packets to the server.
##The default value is 1.
account.3.nat.udp_update_enable =

##It configures the keep-alive interval (in seconds) for account X.
##The default value is 30.Integer from 15 to 2147483647
account.3.nat.udp_update_time =

##It enables or disables NAT Rport feature for account X.0-Disabled,1-
Enabled
##The default value is 0.
account.3.nat.rport =

##############################################################################
#############
##                              Account3 Advance Settings
##
##############################################################################
#############


##It configures the voice mail number for account X.
##The default value is blank.
voice_mail.number.3 = %BWVOICE-PORTAL-NUMBER-3%

##Except T19P/T21P Models
```


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```
account.3.auto_dial_enable =
account.3.auto_dial_num =

account.3.call_id_mode =
account.3.call_info =

##############################################################################
#############
##                              Subscribe
##
##############################################################################
#############
##It enables or disables the phone to subscribe the message waiting
indicator for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.3.subscribe_mwi =


##It is configuration MWI is NOTIFY messages, whether in Terminated status
attributes.
##The default value is 0(Don't handle terminated values)
account.3.mwi_parse_terminated =

##It configures the interval (in seconds) of MWI subscription for account
X.
##The default value is 3600.
account.3.subscribe_mwi_expires =


##It enables or disables the phone to subscribe to the voice mail number
for the message waiting indicator for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.3.subscribe_mwi_to_vm =

##It configures the period (in seconds) of ACD subscription for account X.
##The default value is 1800.Except T19P/T21P Models
account.3.subscribe_acd_expires=


account.3.display_mwi.enable=

##############################################################################
#############
##                              BLF List(Except T19D Model)
##
##############################################################################
#############
##It configures the BLF List URI to monitor a list of users for account X.
##The default value is blank.
account.3.blf.blf_list_uri = %BWBLF-URI-3%
##It configures the feature access code for directed call pickup (default:
*97) for account X.
##The default value is blank.
account.3.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-3%
##It configures the feature access code for directed call pickup with
barge-in (default: *33) for account X.
##The default value is blank.
account.3.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-
IN-3%

##It configures the period (in seconds) of the BLF subscription for
account X.
##The default value is 1800.Integer from 30 to 2147483647.
```


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```
account.3.blf.subscribe_period =

##It configures the event of the BLF subscription for account X.0-
Dialog,1-Presence.
##The default value is 0.
account.3.blf.subscribe_event =

##It enables or disables the phone to handle NOTIFY messages out of the
BLF dialog for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.3.out_dialog_blf_enable =

##It configures the BLF List Retrieve call parked code for account X.
##The default value is blank
account.3.blf_list_retrieve_call_parked_code =

account.3.blf.match_host.enable=

#########################################################################
#############
##                              BLA/SCA
##
#########################################################################
#############
##It enables or disables Broadsoft SCA feature for account X.0-Disabled,1-
Broadsoft SCA.
##The default value is 0.
account.3.shared_line = %BWSHAREDLINE-BINARY-3%
##It configures the BLA number for account X.
##The default value is blank.
account.3.bla_number =

##It configures the period (in seconds) of BLA subscription for account X.
##The default value is 300.Integer from 60 to 7200
account.3.bla_subscribe_period =


##Except T19P/T21P Models
##It configures the Call Pull Feature access code for account X.
##The default value is blank.
account.3.shared_line_callpull_code =
##It configures number of linekey for line.
##The default value is 1,you should enable auto line keys first.
account.3.number_of_linekey = %NUM_OF_LINEKEYS%

#########################################################################
#############
##                              Brosoft Callpark
##
#########################################################################
#############
##It enables or disables Broadsoft Callpark for account X.0-Disabled,1-
Broadsoft SCA.
##The default value is 0.
account.3.callpark_enable =

#########################################################################
#############
##                              Audio Codec
##
#########################################################################
#############
```


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```
###T19E2/T21E2/T23E2/T61/T66/T40/T27P/T41/T42/T46/T29/T48/T27G/T41S/T42S/T
46S/T48S support  pcmu/pcma/g729/g722/ilbc/g726_16/g726_24/g726_32/g726_40
###T19E2/T21E2/T23E2/T40/T27G/T41S/T42S/T46S/T48S support opus
###T19E2/T21E2/T23E2/T61/T66/T40/T41/T42/T46/T29/T48/T41S/T42S/T46S/T48S
support g723_53/g723_63
account.3.codec.g722.enable =
account.3.codec.g722.priority =
account.3.codec.g729.enable =
account.3.codec.g729.priority =
account.3.codec.g723_53.enable =
account.3.codec.g723_53.priority =
account.3.codec.g723_63.enable =
account.3.codec.g723_63.priority =
account.3.codec.g726_16.enable =
account.3.codec.g726_16.priority =
account.3.codec.g726_16.rtpmap =
account.3.codec.g726_24.enable =
account.3.codec.g726_24.priority =
account.3.codec.g726_24.rtpmap =
account.3.codec.g726_32.enable =
account.3.codec.g726_32.priority =
account.3.codec.g726_32.rtpmap =
account.3.codec.g726_40.enable =
account.3.codec.g726_40.priority =
account.3.codec.g726_40.rtpmap =
account.3.codec.ilbc.enable =
account.3.codec.ilbc.priority =
account.3.codec.ilbc.rtpmap =
account.3.codec.opus.enable =
account.3.codec.opus.priority =
account.3.codec.opus.rtpmap =
account.3.codec.pcmu.enable =
account.3.codec.pcmu.priority =
account.3.codec.pcma.enable =
account.3.codec.pcma.priority =


##########################################################################
#############
##                              Audio Advanced
##
##########################################################################
#############
##It configures whether to use voice encryption service for account X.0-
Disabled,1-Optional,2-Compulsory.
##The default value is 0.
account.3.srtp_encryption =

##It configures the RTP packet time for account X.0 (Disabled), 10, 20,
30, 40, 50 or 60.
##The default value is 20.
account.3.ptime =

## The default value is 0(Take a SRTP all encryption).1:Only carry AES -
80 secret key,2: Only carry AES - 32 secret key

##########################################################################
#############
##                              Anonymous Call
##
##########################################################################
#############
account.3.send_anonymous_code =
```


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```
account.3.anonymous_call =
account.3.anonymous_call_oncode =
account.3.anonymous_call_offcode =
account.3.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.3.anonymous_reject_oncode =
account.3.anonymous_reject_offcode =
account.3.send_anonymous_rejection_code =


##########################################################################
#############
##                              Pickup Code
##
##########################################################################
#############
##It enables or disables the phone to pick up a call according to the SIP
header of dialog-info for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.3.dialoginfo_callpickup =

##It configures the group pickup code for account X.
##The default value is blank.
account.3.group_pickup_code = %BWFAC-CALL-PICKUP-3%
##It configures the directed pickup code for account X.
##The default value is blank.
account.3.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-3%

##########################################################################
#############
##                              DTMF
##
##########################################################################
#############
account.3.dtmf.type =
account.3.dtmf.info_type =
account.3.dtmf.dtmf_payload =

##########################################################################
#############
##                              Alert info
##
##########################################################################
#############
##It enables or disables the distinctive ringtones by the Alert-Info SIP
header for account X.0-Disabled,1-Enabled.
##The default value is 0.
account.3.alert_info_url_enable =
##Except T19P/T21P Models
##The default value is blank.Values range 256 characters in length
account.3.alert_info =

account.3.ringtone.ring_type =

###Only for T46G Model
##It enables or disables the phone to download the picture information for
account X when receiving an incoming call or during a call.0-Disabled,1-
Enabled.
##The default value is 0.
account.3.picture_info_enable =

##########################################################################
#############
```


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```
##                              Conference
##
###############################################################################
#############
##It configures the conference type for account X.0-Local Conference,2-
Network Conference.
##The default value is 0.
account.3.conf_type =

##It configures the network conference URI for account X.
##The default value is blank.
account.3.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-3%

###############################################################################
#############
##                              CID Source
##
###############################################################################
#############
account.3.cid_source =
account.3.cid_source_privacy =
account.3.cid_source_ppi =
account.3.cp_source =

###############################################################################
#############
##                              Session Timer
##
###############################################################################
#############
account.3.session_timer.enable =
account.3.session_timer.expires =
account.3.session_timer.refresher =

###############################################################################
#############
##                              Music on Hold
##
###############################################################################
#############
##It configures the way on how the phone processes Music On Hold when
placing an active call on hold for account X.
##0-Calling the music server before holding
##1-Calling the music server after holding
##The default value is 0.
account.3.music_on_hold_type =

##It configures the URI of the Music On Hold server for account X.
##The default value is blank.
account.3.music_server_uri =

###############################################################################
#############
##                              Advanced
##
###############################################################################
#############
account.3.auto_answer = %AUTO_ANSWER_BINARY%
account.3.missed_calllog =
account.3.100rel_enable =
account.3.enable_user_equal_phone =
account.3.compact_header_enable =
account.3.custom_ua =
```


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```
##############################################################################
#############
##                                    DND(Except T19 Model)
##
##############################################################################
#############
account.3.dnd.enable =
account.3.dnd.on_code =
account.3.dnd.off_code =

##############################################################################
#############
##                                  Call Forward(Except T19 Model)
##
##############################################################################
#############
account.3.always_fwd.enable =
account.3.always_fwd.target =
account.3.always_fwd.off_code =
account.3.always_fwd.on_code =
account.3.busy_fwd.enable =
account.3.busy_fwd.target =
account.3.busy_fwd.off_code =
account.3.busy_fwd.on_code =
account.3.timeout_fwd.enable =
account.3.timeout_fwd.target =
account.3.timeout_fwd.timeout =
account.3.timeout_fwd.off_code =
account.3.timeout_fwd.on_code =

##############################################################################
#############
##                                    Voice Monitoring  (Except T19P/T21P
Models)                    ##
##############################################################################
#############
account.3.vq_rtcpxr.collector_name=
account.3.vq_rtcpxr.collector_server_host=
account.3.vq_rtcpxr.collector_server_port=

##############################################################################
#############
##                                  Broadsoft Hoteling
##
##############################################################################
#############
account.3.hoteling.enable =
account.3.hoteling.user_id =
account.3.hoteling.password =
account.3.hoteling.auto_login_enable =
account.3.flexible_seating.enable=
account.3.hoteling.mode =  %BWHOTELINGMODE-3%
account.3.hoteling.pin =  %BWFLEXIBLESEATINGUNLOCKPIN-3%

##############################################################################
#############
##                                  Broadsoft ACD
##
##############################################################################
#############
account.3.acd.enable =
account.3.acd.unavailable_reason_enable =
```


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```
account.3.acd.available =
account.3.acd.initial_state =

##############################################################################
#############
##                                  Broadsoft ACD Call Center
##
##############################################################################
#############
account.3.reason_code.1 =
account.3.reason_code_name.1 =
account.3.bw_disp_code.1 =
account.3.bw_disp_code_name.1 =
account.3.supervisor_info_code.1 =
account.3.supervisor_info_code_name.1 =

##############################################################################
#############
##                                  Broadsoft Call Center
##
##############################################################################
#############
account.3.call_center.call_info_enable =
account.3.call_center.show_call_info_time =
account.3.call_center.disp_code_enable =
account.3.call_center.trace_enable =
account.3.call_center.emergency_enable =
account.3.call_center.queue_status_enable =
account.3.call_center.queue_status_light_enable =


##############################################################################
#############
##         Broadsoft XSI                      ##
##############################################################################
#############
##It configures the user name for XSI authentication for account
X.Example:account.3.xsi.user = 3502@as.iop1.broadworks.net.
##The default value is blank.
account.3.xsi.user = %BWLOGIN-ID-3%

##It configures the password for XSI authentication for account
X.Example:account.3.xsi.password = 123456.
##The default value is blank.
account.3.xsi.password = %XSIPASSWORD-3%

##It configures the access URL of the Xtended Services Platform server for
account X.Example:account.3.xsi.host = xsp1.iop1.broadworks.net.
##The default value is blank.
account.3.xsi.host = %XSP_ADDRESS%

##It configures the server type of the Xtended Services Platform server
for account X.Example:account.3.xsi.server_type = http.
##The default value is http.
account.3.xsi.server_type =

##It configures the server port of the Xtended Services Platform server
for account X.Example:account.3.xsi.port = 80.
##The default value is 80.Integer from 1 to 65535
account.3.xsi.port =
```


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```
##############################################################################
#############
##                              V80 Add
##
##############################################################################
#############
## Add Time 2015.6.26
account.3.callerid_in_support_header.enable =
account.3.acd.auto_login_enable  =
account.3.outbound_proxy_fallback_interval =
account.3.transfer_refer_to_contact_header.enable =
account.3.sub_fail_retry_interval =
account.3.update_ack_while_dialing =
account.3.end_call_when_transferred.enable =
account.3.nat.stun_refresh_timer =
account.3.contact_take_line_param.enable =

##############################################################################
#############
##                              V80-SP2 Add
##
##############################################################################
#############
account.3.acd.call_information =
account.3.acd.refresh_url =
account.3.acd.away_url =
account.3.acd.available_url =
account.3.bla.notify_with_expire.enable =
account.3.bla.subscribe_uri_build_type =
account.3.instance_id.enable =


##############################################################################
#############
##                              V81-Alpha Add
##
##############################################################################
#############
account.3.phone_setting.call_appearance.calls_per_linekey =
account.3.phone_setting.call_appearance.transfer_via_new_linekey =
account.3.phone_setting.call_appearance.conference_via_new_linekey =
account.3.sip_server.1.invite_retry_counts =
account.3.sip_server.1.only_signal_with_registered =
account.3.reg_failed_retry_min_time =
account.3.reg_failed_retry_max_time =
account.3.line_seize.expires =
account.3.gruu.enable =
account.3.sip_server.1.failback_subscribe.enable =
account.3.hold_use_inactive =
account.3.features.usb_call_recording.enable =


##############################################################################
#############
##                              V81-Beta Add
##
##############################################################################
#############
account.3.security_classification.enable =
account.3.srtp_lifetime =
account.3.xsi.custom_url =
account.3.dialplan.digitmap.active.on_hook_dialing =
account.3.dialplan.digitmap.apply_to.directory_dial =
```


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```
account.3.dialplan.digitmap.apply_to.forward =
account.3.dialplan.digitmap.apply_to.on_hook_dial =
account.3.dialplan.digitmap.apply_to.press_send =
account.3.dialplan.digitmap.enable =
account.3.dialplan.digitmap.interdigit_long_timer =
account.3.dialplan.digitmap.interdigit_short_timer =
account.3.dialplan.digitmap.no_match_action =
account.3.dialplan.digitmap.string =
account.3.hoteling.mode =
account.3.hoteling.pin =
account.3.flexible_seating.enable =

##############################################################################
#############
##                                V81-Beta SP1 Add
##
##############################################################################
#############
account.3.features.call_decline.enable =
account.3.call_recording.enable =
account.3.hoteling.expires =



##############################################################################
#############
##                                    Broadsoft Setting
##
##############################################################################
#############
bw.enable = %FEATURY_BW_DIR%
bw.enable =1
###It enables or disables feature key synchronization.
###0-Disabled,1-Enabled.
###The default value is 1.
bw.feature_key_sync = %FEATURE_SYNC%


##############################################################################
#############
##                                      Broadsoft Phonebook(Except T20P
model)           ##
##############################################################################
#############
###It enables or disables the phone to display the group directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.group_enable = 1

###It enables or disables the phone to display the personal directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.personal_enable = 1
###It enables or disables the phone to display the group common directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.group_common_enable = 1


###It enables or disables the phone to display the enterprise directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.enterprise_enable = 1
```


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```
###It enables or disables the phone to display the enterprise common
directory.
###0-Disabled,1-Enabled.
###The default value is 1.
bw_phonebook.enterprise_common_enable = 1
###It configures the display name on the LCD screen for the enterprise
common directory.
###The default value is EnterpriseCommon.
bw_phonebook.enterprise_common_displayname =

###It enables or disables BroadSoft call log feature.
###0-Disabled,1-Enabled.
###The default value is 0.
bw_phonebook.call_log_enable = 1


###It enables or disables custom directory feature.
###0-Disabled,1-Enabled.
###The default value is 0.
bw_phonebook.custom =

###It configures the display name on the LCD screen for the group
directory.
###The default value is Group.
bw_phonebook.group_displayname = %BWGROUPID-1%
###It configures the display name on the LCD screen for the enterprise
directory.
###The default value is Enterprise.
bw_phonebook.enterprise_displayname = %BWENTERPRISEID-
1%%BWSERVICEPROVIDERID-1%

###It configures the display name on the LCD screen for the personal
directory.
###The default value is Personal.
bw_phonebook.personal_displayname =

bw_phonebook.group_common_displayname =


##It configures the interval (in minutes) for the phone to update the data
of the BroadSoft directory from the BroadSoft server.
##The default value is 60.Integer from 2 to 43200
directory.update_time_interval =


##############################################################################
#############
##                                          BSFT UC
##
##############################################################################
#############
###Only T46G/T48G Models support these parameter
features.uc_enable = 1
features.uc_username = %BW_USER_IMP_ID-1%
features.uc_password = %BW_USER_IMP_PWD-1%
phone_setting.dsskey_directory_auto.enable =0

###V81 New Add##
bw.xmpp.enable=
bw.xmpp.change_presence.enable =

##############################################################################
#############
```


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```
##                                    Features Pickup(Except T20P model)
##
##############################################################################
#############
##It enables or disables the phone to display the GPickup soft key when
the phone is in the pre-dialing screen.
##0-Disabled,1-Enabled.
##The default value is 0.
features.pickup.group_pickup_enable =

##It configures the group call pickup code.
##The default value is blank.
features.pickup.group_pickup_code = %BWFAC-CALL-PICKUP-1%

##It enables or disables the phone to display the DPickup soft key when
the phone is in the pre-dialing screen.
##0-Disabled,1-Enabled.
##The default value is 0.
features.pickup.direct_pickup_enable =

##It configures the directed call pickup code.
##The default value is blank.
features.pickup.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-1%
##It enables or disables the phone to display a visual alert when the
monitored user receives an incoming call.
##0-Disabled,1-Enabled.
##The default value is 0.
features.pickup.blf_visual_enable =

##It enables or disables the phone to play an audio alert when the
monitored user receives an incoming call.
##0-Disabled,1-Enabled.
##The default value is 0.
features.pickup.blf_audio_enable =

##############################################################################
#############
##                                    Call Park(Except T20P model)
##
##############################################################################
#############
###You can choose which park type to use
###0-XSI call park,1-FAC call park default value is 0.
features.call_park.park_mode=
###when you select FAC park, you shold input the park FAC code
###default value is blank.
features.call_park.park_code=
###when you select FAC park, you shold input the group park FAC code
###default value is blank.
features.call_park.group_park_code=
###when you select FAC park, you shold input the retrieve park FAC code
###default value is blank.
features.call_park.park_retrieve_code=

###It enables or disables the phone to display the Park soft key during a
call.
###0-Disabled,1-Enabled.
###The default value is 0.
call_park.enable = %FEATURE_BW_CALL_PARK%
###It enables or disables the phone to display the GPark soft key during a
call.
###0-Disabled,1-Enabled.
###The default value is 0.
```


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```
call_park.group_enable = %FEATURE_BW_CALL_PARK%
###It enables or disables the phone to play a warning tone when a call is
parked against its line.
###0-Disabled,1-Enabled.
###The default value is 0.
call_park.park_ring = %FEATURE_BW_CALL_PARK%
###It enables or disables the phone to display a parked indicator when a
call is parked against its line.
###0-Disabled,1-Enabled.
###The default value is 0.
call_park.park_visual_notify_enable = %FEATURE_BW_CALL_PARK%



##############################################################################
#############
##                                  Time
##
##############################################################################
#############
##It configures the time zone.For more available time zones, refer to Time
Zones on page 215.
##The default value is +8.
local_time.time_zone = %BWTIMEZONE-1%
##It configures the time zone name.For more available time zone names,
refer to Time Zones on page 215.
##The default time zone name is China(Beijing).
local_time.time_zone_name = %TIMEZONENAME%
local_time.ntp_server1 = %SNTP_SERVER_1%
local_time.ntp_server2 = %SNTP_SERVER_2%
##It configures the update interval (in seconds) when using the NTP
server.
##The default value is 1000.Integer from 15 to 86400
local_time.interval =

##It enables or disables daylight saving time (DST) feature.
##0-Disabled,1-Enabled,2-Automatic.
##The default value is 2.
local_time.summer_time =

##It configures the way DST works when DST feature is enabled.
##0-DST By Date ,1-DST By Week.
##The default value is 0.
local_time.dst_time_type =

##It configures the start time of the DST.
##Value formats are:Month/Day/Hour (for By Date),Month/ Day of Week/ Day
of Week Last in Month/ Hour of Day (for By Week)
##The default value is 1/1/0.
local_time.start_time =

##It configures the end time of the DST.
##Value formats are:Month/Day/Hour (for By Date),Month/ Day of Week/ Day
of Week Last in Month/ Hour of Day (for By Week)
##The default value is 12/31/23.
local_time.end_time =

##It configures the offset time (in minutes).
##The default value is blank.Integer from -300 to 300
local_time.offset_time =

##It configures the time format.0-12 Hour,1-24 Hour.
##The default value is 1.
```


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```
local_time.time_format =


local_time.date_format =

##It enables or disables the phone to update time with the offset time
obtained from the DHCP server.
##It is only available to offset from GMT 0.0-Disabled,1-Enabled.
##The default value is 0.
local_time.dhcp_time =

##It configures the phone to obtain time from NTP server or manual
settings.0-Manual,1-NTP
##The default value is 1.
local_time.manual_time_enable =

##It enables or disables the phone to use manually configured NTP server
preferentially.
##0-Disabled (use the NTP server obtained by DHCP preferentially),1-
Enabled.
##The default value is 0.
local_time.manual_ntp_srv_prior =
auto_dst.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%Autodst.xml

##############################################################################
#############
##                                    Tones
##
##############################################################################
#############
voice.tone.country = %COUNTRY%
voice.tone.dial =
voice.tone.ring =
voice.tone.busy =
voice.tone.congestion =
voice.tone.callwaiting =
voice.tone.dialrecall =
voice.tone.info =
voice.tone.stutter =
voice.tone.message =
voice.tone.autoanswer =
##############################################################################
#############
##                                    Language Settings
##
##############################################################################
#############
##It configures the language of the web user interface.
##Chinese_S is only applicable to SIP-T19P, SIP-T21P and SIP-T46G IP
phones.
##Chinese_T is only applicable to SIP-T46G IP phones.
##French, Portuguese and Spanish are not applicable to SIP-T19P and SIP-
T21P IP phones.
lang.wui =

##It configures the language of the phone user interface.
##Chinese_S and Chinese_T are only applicable to SIP-T19P, SIP-T21P and
SIP-T46G IP phones.
##The default value is English.
lang.gui =
```


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```
#gui_lang.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%%BWLANGUAGE-1%
gui_lang.delete =

##Except T19P/T21P Models
wui_lang.url =
wui_lang_note.url =
wui_lang.delete =

##############################################################################
#############
##                                    Autop
##
##############################################################################
#############
auto_provision.server.username = %BWDEVICEUSERNAME%
auto_provision.server.password = %DEVICE_ACCESS_PWD%

##############################################################################
#############
##                                    NETWORK
##
##############################################################################
#############
##It configures the IP address mode.0-IPv4,1-IPv6,2-IPv4&IPv6
##The default value is 0.It takes effect after a reboot.
network.ip_address_mode =

network.ipv6_prefix =
network.ipv6_internet_port.type =
network.ipv6_internet_port.ip =
network.ipv6_internet_port.gateway =
network.ipv6_primary_dns =
network.ipv6_secondary_dns =

####Only T46G Model supports this parameter
network.ipv6_icmp_v6.enable =

network.internet_port.type =
network.internet_port.ip =
network.internet_port.mask =
network.internet_port.gateway =
network.primary_dns= %DNS_SERVER_1%
network.secondary_dns = %DNS_SERVER_2%
```

Default-System File: y000000000054.cfg.def file

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

```
#!version:1.0.0.1

auto_provision.server.url =
http://xsp1.iop1.broadworks.net:80/dms/Yealink-T40P/
auto_provision.dhcp_option.enable = 0
```


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```
#auto_provision.server.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESSURI%
#auto_provision.server.username = %BWDEVICEUSERNAME%
#auto_provision.server.password = %DEVICE_ACCESS_PWD%
```


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Appendix B: %TIMEZONENAME% Values

Time Zone	Time Zone Name
−11:00	Samoa
−10:00	United States-Hawaii-Aleutian
−10:00	United States-Alaska-Aleutian
−09:00	United States-Alaska Time
−08:00	Canada (Vancouver, Whitehorse)
−08:00	Mexico (Tijuana, Mexicali)
−08:00	United States-Pacific Time
−07:00	Canada (Edmonton, Calgary)
−07:00	Mexico (Mazatlan, Chihuahua)
−07:00	United States-Mountain Time
−07:00	United States-MST no DST
−06:00	Canada-Manitoba (Winnipeg)
−06:00	Chile (Easter Islands)
−06:00	Mexico (Mexico City, Acapulco)
−06:00	United States-Central Time
−05:00	Bahamas (Nassau)
−05:00	Canada (Montreal, Ottawa, Quebec)
−05:00	Cuba (Havana)
−05:00	United States-Eastern Time
−04:30	Venezuela (Caracas)
−04:00	Canada (Halifax, Saint John)
−04:00	Chile (Santiago)
−04:00	Paraguay (Asuncion)
−04:00	United Kingdom-Bermuda (Bermuda)
−04:00	United Kingdom (Falkland Islands)
−04:00	Trinidad and Tobago
−03:30	Canada-Newfoundland (St. Johns)
−03:00	Denmark-Greenland (Nuuk)
−03:00	Argentina (Buenos Aires)
−03:00	Brazil (no DST)
−03:00	Brazil (DST)
−02:00	Brazil (no DST)
−01:00	Portugal (Azores)
0	GMT

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Time Zone	Time Zone Name
0	Greenland
0	Denmark-Faroe Islands (Torshavn)
0	Ireland (Dublin)
0	Portugal (Lisboa, Porto, Funchal)
0	Spain-Canary Islands (Las Palmas) Administrator's Guide for SIP-T2XX IP Phones
0	United Kingdom (London)
0	Morocco
+01:00	Albania (Tirane)
+01:00	Austria (Vienna)
+01:00	Belgium (Brussels)
+01:00	Caicos
+01:00	Chad
+01:00	Croatia (Zagreb)
+01:00	Czech Republic (Prague)
+01:00	Denmark (Kopenhagen)
+01:00	France (Paris)
+01:00	Germany (Berlin)
+01:00	Hungary (Budapest)
+01:00	Italy (Rome)
+01:00	Luxembourg (Luxembourg)
+01:00	Macedonia (Skopje)
+01:00	Netherlands (Amsterdam)
+01:00	Namibia (Windhoek)
+02:00	Estonia (Tallinn)
+02:00	Finland (Helsinki)
+02:00	Gaza Strip (Gaza)
+02:00	Greece (Athens)
+02:00	Jordan (Amman)
+02:00	Latvia (Riga)
+02:00	Lebanon (Beirut)
+02:00	Moldova (Kishinev)
+02:00	Russia (Kaliningrad)
+02:00	Romania (Bucharest)
+02:00	Turkey (Ankara)
+02:00	Ukraine (Kyiv, Odessa)

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Time Zone	Time Zone Name
+03:00	East Africa Time
+03:00	Iraq (Baghdad)
+03:00	Russia (Moscow)
+03:30	Iran (Teheran)
+04:00	Armenia (Yerevan)
+04:00	Azerbaijan (Baku)
+04:00	Georgia (Tbilisi)
+04:00	Kazakhstan (Aktau)
+04:00	Russia (Samara)
+04:30	Afghanistan
+05:00	Kazakhstan (Aqtobe)
+05:00	Kyrgyzstan (Bishkek)
+05:00	Pakistan (Islamabad)
+05:00	Russia (Chelyabinsk)
+05:30	India (Calcutta)
+06:00	Kazakhstan (Astana, Almaty)
+06:00	Russia (Novosibirsk, Omsk)
+07:00	Russia (Krasnoyarsk)
+07:00	Thailand (Bangkok)
+08:00	China (Beijing)
+08:00	Singapore (Singapore)
+08:00	Australia (Perth)
+09:00	Korea (Seoul)
+09:00	Japan (Tokyo)
+09:30	Australia (Adelaide)
+09:30	Australia (Darwin)
+10:00	Australia (Sydney, Melbourne, Canberra)
+10:00	Australia (Brisbane)
+10:00	Australia (Hobart)
+10:00	Russia (Vladivostok)
+10:30	Australia (Lord Howe Islands)
+11:00	New Caledonia (Noumea)
+12:00	New Zealand (Wellington, Auckland)
+12:45	New Zealand (Chatham Islands)

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