



BroadSoft Partner Configuration Guide

Yealink SIP-T2XX IP Phone

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9737 Washingtonian Boulevard, Suite 350
Gaithersburg, MD USA 20878
Tel +1 301.977.9440

WWW.BROADSOFT.COM

BroadWorks® Guide

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1.1	Introduced document for Yealink T2XX series IP Phone version x.80.193.25 validation with BroadWorks Release 21.sp1
1.2	Edited and published document. Verified <i>Table of Figures</i> .
1.3	Added T19xE2 as supported models.
1.4	Edited changes and published document.
1.5	Introduced document for Yealink T2XX series IP Phone version x.81.193.15 validation with BroadWorks Release 21.sp1.
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Table of Contents

1	Overview	7
2	Interoperability Status	8
2.1	Verified Versions.....	8
2.2	Interface Capabilities Supported.....	9
2.2.1	SIP Interface Capabilities	9
2.2.1	Other Interface Capabilities.....	14
2.3	Known Issues	15
3	BroadWorks Configuration	17
3.1	BroadWorks Device Profile Type Configuration	17
3.2	BroadWorks Configuration Steps	18
4	T2XX IP Phone Configuration	19
4.1	Configuration Method	19
4.2	System Level Configuration	19
4.3	Subscriber Level Configuration.....	20
4.4	SIP Advanced Feature Configuration.....	21
4.4.1	Shared Call Appearance Configuration.....	21
4.4.2	Busy Lamp Field Configuration.....	28
4.4.3	Feature Key Synchronization Configuration	30
4.4.4	Call Center Feature Configuration	30
4.4.5	Call Recording Feature Configuration	33
4.4.6	Security Classification Feature Configuration	35
4.4.7	Emergency Call Configuration	35
4.4.8	Advice of Charge Configuration.....	36
4.4.9	Conference Event Configuration	36
4.4.10	Flexible Seating	36
4.5	Extended Services Interface (Xsi) Feature Configuration	37
4.5.1	BroadWorks User Service Configuration	40
4.5.2	BroadWorks Directory Configuration.....	41
4.5.3	BroadWorks Call Logs Configuration	42
4.5.4	BroadWorks Call Park Configuration.....	43
4.5.5	BroadWorks Visual Voice Mail Configuration	44
4.6	Instant Message and Presence Configuration.....	45
4.7	Connected Line Presentation on UPDATE or Re-Invite	46
5	Device Management	47
5.1	Device Management Capabilities Supported	47
5.2	Device Management Configuration	49
5.2.1	Configure BroadWorks Tags	49
5.2.2	Configure BroadWorks Device Profile Type	52
5.2.3	Create Device Profile Instance	63

5.2.4	Configure BroadWorks User	65
5.2.5	Configure Edge Device	65
5.2.6	Configure Yealink T2XX IP Phone	65
5.3	Upgrade from Previous CPE Kits	74
	Appendix A: Reference T2XX Configuration Files	75
	Appendix B: %TIMEZONENAME% Values	167
	References	170

Table of Figures

Figure 1 Device Identity/Profile Type.....	18
Figure 2 Shared Call Appearance Configuration.....	22
Figure 3 Shared Call Appearance configuration Page.....	25
Figure 4 Account Register Page.....	25
Figure 5 Account Register Page.....	26
Figure 6 Shared Line Field.....	26
Figure 7 Line Key Fields.....	27
Figure 8 Auto Linekeys.....	27
Figure 9 Number of Line Key.....	27
Figure 10 BLF Settings.....	28
Figure 11 Busy Lamp Field Configuration Page.....	29
Figure 12 Feature Key Synchronization Configuration.....	30
Figure 13 Call Control → Call Centers Page.....	31
Figure 14 Account Register Page.....	31
Figure 15 SIP Server Type Field.....	31
Figure 16 Call Control → Call Recording.....	34
Figure 17 Utilities → Security Classification.....	35
Figure 18 Emergency Configuration.....	36
Figure 19 Flexible Seating Host.....	36
Figure 20 Flexible Seating Guest.....	37
Figure 21 Xtended Services Interface Configuration.....	38
Figure 22 Xtended Services Platform Account Configuration.....	39
Figure 23 Xtended Services Platform Configuration.....	40
Figure 24 Call Logs Configuration.....	43
Figure 25 Call Park Configuration.....	44
Figure 26 Visual Voice Mail.....	44
Figure 27 Connected Line Presentation on Update or Re-Invite.....	46
Figure 28 System Default Tag Settings.....	50
Figure 29 Device Type-specific Tag Settings.....	52
Figure 30 Device Access FQDN.....	54
Figure 31 y000000000045.cfg System File.....	57
Figure 32 %BWMACADDRESS%.cfg File.....	58
Figure 33 Static File Settings.....	59
Figure 34 Language Mapping.....	62
Figure 35 BroadWorks User Language Definition.....	62
Figure 36 Device Profile Instance.....	63
Figure 37 Device Profile Instance Custom Tags Override.....	64
Figure 38 Device Profile Instance Custom Tags Add.....	64
Figure 39 Login Screen.....	66
Figure 40 Upgrade Screen.....	67
Figure 41 Device Access FQDN.....	68
Figure 42 Default Device Profile Type.....	69
Figure 43 Configure Advanced Options.....	70
Figure 44 Device Management Options Settings.....	71
Figure 45 Default y000000000045.cfg.....	72

1 Overview

This guide describes the configuration procedures required for the Yealink T2XX Series for interoperability with BroadWorks. This includes the following models:

- T19 E2
- T19P E2
- T21 E2
- T21P E2
- T23P
- T23G
- T27P
- T27G
- T29G

The T2XX 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 T2XX IP Phone. For those details, see the *Yealink T2XX IP Phone User Guide* [\[1\]](#) supplied by Yealink.

2 Interoperability Status

This section provides the known interoperability status of the Yealink T2XX 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 T2XX 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 T2XX IP Phone versions which the partner has identified as compatible and 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	T2XX IP Phone Verified Version	T2XX IP Phone Compatible Versions
12/2016	Release 21.sp1	T29G: 46.81.193.15 T27P: 45.81.193.15 T27G: 69.81.193.15 T23P: 44.81.193.15 T23G: 44.81.193.15 T21 E2: 52.81.193.15 T21P E2: 52.81.193.15 T19 E2: 53.81.193.15 T19P E2: 53.81.193.15	None
07/2015	Release 21.sp1	T29G: 46.80.193.50 T27P: 45.80.193.50 T23P: 44.80.193.50 T23G: 44.80.193.50 T21 E2: 52.80.193.50 T21P E2: 52.80.193.50 T19 E2: 53.80.193.50 T19P E2: 53.80.193.50	None

Verified Versions			
Date (mm/yyyy)	BroadWorks Release	T2XX IP Phone Verified Version	T2XX IP Phone Compatible Versions
04/2015	Release 20.sp1	T29G: 46.80.193.25 T27P: 45.80.193.25 T23P: 44.80.193.25 T23G: 44.80.193.25 T21 E2: 52.80.193.25 T21P E2: 52.80.193.25	None

2.2 Interface Capabilities Supported

This section identifies interface capabilities that have been verified through testing as supported by Yealink T2XX IP Phone.

The *Supported* column in the tables in this section identifies the Yealink T2XX 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 T2XX 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 T2XX 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	
	Ringback	Yes	

BroadWorks SIP Phone Interoperability Test Plan Support Table

Test Plan Package	Test Plan Package Items	Supported	Comments
	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		
Call Waiting	Yes		

BroadWorks SIP Phone Interoperability Test Plan Support Table

Test Plan Package	Test Plan Package Items	Supported	Comments
DUT Services – Call Control Services	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	Except for T19xE2 models.
	Call Park Notification	Yes	Except for T19xE2 models.
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	
	Security Classification	Yes	

BroadWorks SIP Phone Interoperability Test Plan Support Table

Test Plan Package	Test Plan Package Items	Supported	Comments
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	Except for T19xE2 models.
	Call-Info/Lamp Management	Yes	Except for T19xE2 models.
	Public Hold	Yes	Except for T19xE2 models.
	Private Hold	Yes	Except for T19xE2 models.
	Hybrid Key System	Yes	Except for T19xE2 models.
	Multiple Call Arrangement	Yes	Except for T19xE2 models.
	Bridge Active Line	Yes	Except for T19xE2 models.
	Bridge Active Line – Silent Monitor	Yes	Except for T19xE2 models.
	Call Park Notification	Yes	Except for T19xE2 models.
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	
Advanced Phone Services – Call Recording Video	Basic Call	NA	
	Record Local Conference	NA	
	Record Network Conference	NA	

BroadWorks SIP Phone Interoperability Test Plan Support Table			
Test Plan Package	Test Plan Package Items	Supported	Comments
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	NA	
	Call Termination	NA	
	Call Hold	NA	
	Call Waiting	NA	
	Call Transfer	NA	
Video – BroadWorks Video Services	Auto Attendant	NA	
	Auto Attendant – HD	NA	
	Voice Messaging	NA	
	Voice Messaging – HD	NA	
	Custom Ringback	NA	
Video – BroadWorks Video Conference	Network-based Conference	NA	
	Network-based Conference – HD	NA	
	Collaborate – Video	NA	
	Collaborate – Video – HD	NA	
TCP	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
IPV6	Call Origination	NT	
	Call Termination	NT	
	Session Audit	NT	

BroadWorks SIP Phone Interoperability Test Plan Support Table

Test Plan Package	Test Plan Package Items	Supported	Comments
	Ringback	NT	
	Codec Negotiation/Renegotiation	NT	
	Voice Message Deposit/Retrieval	NT	
	Call Control	NT	
	Registration with Authentication	NT	
	Busy Lamp Field	NT	Except for T19xE2 models.
	Redundancy	NT	
	SBC	NT	
	Video	NA	
	Dual Stack with Alternate Connectivity	No	

2.2.1 Other Interface Capabilities

The Yealink T2XX IP Phone 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.
	Call Forwarding Busy	No	Supported via FKS feature.
	Call Forwarding No Answer	No	Supported via FKS feature.
Xsi Features – Directories	Enterprise Directory	Yes	
	Enterprise Common Phone List	Yes	

BroadWorks Xtended Services Interface (Xsi) and BroadCloud IM&P Support Table			
Interface	Feature	Supported	Comments
	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 T29G models.
	Favorites	Yes	Only T29G models.
	Groups	Yes	Only T29G models.
	Non-XMPP Contacts	No	
	Conferences	No	
XMPP Features – Presence	Login Invisible	No	
	Presence State	Yes	Only T29G models.
	Presence Status	No	.
	Contact's Presence State	Yes	Except in Call History. Only T29G models.

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.80.193.50	X.80.193.25	
66775	Click-to-Answer; Call Waiting. The DUT cannot answer the second call using CM. This is due to the second call is not the focus interface. Workaround: None.			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	X	

3 BroadWorks Configuration

This section identifies the required BroadWorks device profile type for the Yealink T2XX IP Phone as well as any other unique BroadWorks configuration required for interoperability with the T2XXG IP Phone.

3.1 BroadWorks Device Profile Type Configuration

This section identifies the device profile type to use when deploying the Yealink T2XX IP Phone with BroadWorks.

Create a device profile type for the Yealink T2XX IP Phone with settings as shown in the following example. A separate device profile type should be created for each Yealink T2XX IP Phone model. The settings shown are recommended for use when deploying the Yealink T27P IP Phone with BroadWorks. For an explanation of the profile parameters, see the *BroadWorks Device Management Configuration Guide* [2].

The device profile type shown below provides the *Number of Ports* (number of SIP lines) setting for Yealink T27P IP Phone. For other T2XX 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
T19 E2	1 SIP accounts, no line keys
T19P E2	1 SIP accounts, no line keys
T21 E2	2 SIP accounts, 2 line keys
T21P E2	2 SIP accounts, 2 line keys
T23P	3 SIP accounts, 3 line keys
T23G	3 SIP accounts, 3 line keys
T27P	6 SIP accounts, 21 line keys
T27G	6 SIP accounts, 21 line keys
T29G	16 SIP accounts, 27 line keys

Identity/Device Profile Type Modify

Modify an existing identity/device profile type.

OK
Apply
Delete
Export
Cancel

Identity/Device Profile Type: Yealink-T27P
 Signaling Address Type: Intelligent Proxy Addressing
 Obsolete

Standard Options

Number of Ports: Unlimited Limited To

Ringback Tone/Early Media Support: RTP - Session
 RTP - Early Session
 Local Ringback - No Early Media

Authentication: Enabled
 Disabled
 Enabled With Web Portal Credentials

Hold Normalization: Unspecified Address
 Inactive
 RFC3264

Registration Capable Authenticate REFER
 Static Registration Capable Video Capable
 E164 Capable Use History Info Header
 Trusted

Advanced Options

<input type="checkbox"/> Route Advance	<input type="checkbox"/> Forwarding Override
<input type="checkbox"/> Wireless Integration	<input type="checkbox"/> Conference Device
<input type="checkbox"/> PBX Integration	<input type="checkbox"/> Mobility Manager Device
<input type="checkbox"/> Add P-Called-Party-ID	<input type="checkbox"/> Music On Hold Device
<input type="checkbox"/> Auto Configuration Soft Client	<input type="checkbox"/> Requires BroadWorks Digit Collection
<input type="checkbox"/> Requires BroadWorks Call Waiting Tone	<input type="checkbox"/> Requires MWI Subscription
<input type="checkbox"/> Advice of Charge Capable	<input type="checkbox"/> Support Call Center MIME Type
<input type="checkbox"/> Support Emergency Disconnect Control	<input type="checkbox"/> Support Identity In UPDATE and Re-INVITE
<input type="checkbox"/> Enable Monitoring	<input type="checkbox"/> Support RFC 3398
<input type="checkbox"/> Static Line/Port Ordering	<input type="checkbox"/> Support Client Session Info
<input type="checkbox"/> Support Call Info Conference Subscription URI	<input type="checkbox"/> Support Remote Party Info
<input type="checkbox"/> Support Visual Device Management	<input type="checkbox"/> Bypass Media Treatment
<input type="checkbox"/> Support Cause Parameter	

Reset Event: reSync checkSync Not Supported

Trunk Mode: User Pilot Proxy

Hold Announcement Method: Inactive Bandwidth Attributes

Unscreened Presentation Identity Policy: Profile Presentation Identity
 Unscreened Presentation Identity
 Unscreened Presentation Identity With Profile Domain

Web Based Configuration URL Extension:

Device Configuration Options: Not Supported Device Management Legacy

Figure 1 Device Identity/Profile Type

3.2 BroadWorks Configuration Steps

No additional BroadWorks configuration steps are required.

4 T2XX IP Phone Configuration

This section describes the configuration settings required for the T2XX IP Phone integration with BroadWorks, primarily focusing on the SIP interface configuration. The T2XX IP Phone configuration settings identified in this section have been derived and verified through interoperability testing with BroadWorks. For configuration details not covered in this section, see the *Yealink T2XX IP Phone User Guide* [1].

4.1 Configuration Method

The capabilities of the T2XX 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 T2XXG IP Phone User Guide* [1].

Configuration Files

Files Provided by Partner	Level	Description
y000000000<xx>.cfg	system configuration file	"y000000000xx.cfg", where "xx" is associated with the hardware version of Yealink Device.
<MACADDRESS>.cfg	device-specific configuration file	

4.2 System Level Configuration

This section describes system-wide configuration items that are generally required for each T2XX IP Phone to work with BroadWorks. Subscriber-specific settings are described in the next section.

Step	Command	Purpose
System Configuration Items y000000000<xx>.cfg		
Step 1	Set SIP Proxy/Domain. account.1.sip_server_host = as.broadworks.net account.1.SIPServerPort = 5060 account.1.sip_server_type = 2	Set the T2XXG 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. Set the SIP server type of T2XX serials: Default=0 Broadsoft=2
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 T2XXG 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	Command	Purpose
System Configuration Items y000000000<xx>.cfg		
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.
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 T2XXG 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 T2XXG 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 T2XXG 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) Transport = 3 (DNS-SRV)
Step 11	Enable Feature Key Sync. bw.feature_key_sync = 1	Enable Feature Key Sync (except T18). 1 = Enabled 0 = Disabled

4.3 Subscriber Level Configuration

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 T2XXG IP Phone to be used.

Step	Command	Purpose
Subscriber parameters for the <MACADDRESS>.cfg		
Step 2	Configure display name for a line. Example: <pre>account.1.display_name = Joe</pre>	For the line, configure the name to be displayed on the device.
Step 3	Set Register User ID for a line. Example: <pre>account.1.user_name = 2405551111</pre>	The <i>register user ID</i> must correspond with the line/port setting on BroadWorks.
Step 4	Enable SIP Authentication for a line. Example: <pre>account.1.auth_name = 2405551111 account.1.password = 123456</pre>	If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
Step 5	Configure Network Phonebook. <pre>account.1.xsi.host = xsp1.iopl.broad works.net account.1.xsi.user = 2413333601@as.iopl. broadworks.net account.1.xsi.password = yealink</pre>	This configures the phone to use the BroadWorks Xsi interface to retrieve the group phone directory. Host: This is the identity of the BroadWorks 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.

4.4 SIP Advanced Feature Configuration

This section provides configuration instructions for advanced SIP features supported by the phone including but not limited to Shared Call Appearance (SCA), Busy Lamp Field, Feature Key Synchronization, Call Center, and Emergency Call.

4.4.1 Shared Call Appearance Configuration

NOTE: T19xE2 models have no line keys, so there are no lamps and indicators for SCA.

The Shared Call Appearance 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.

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 that the phone number plus an index (<phoneNumber>_<index>) is used when provisioning the unique address of record (AoR) for each shared line. For example: 2405551111_2. If a phone number does not exist, the MAC address plus an index could be used (<macAddress>_<index>).

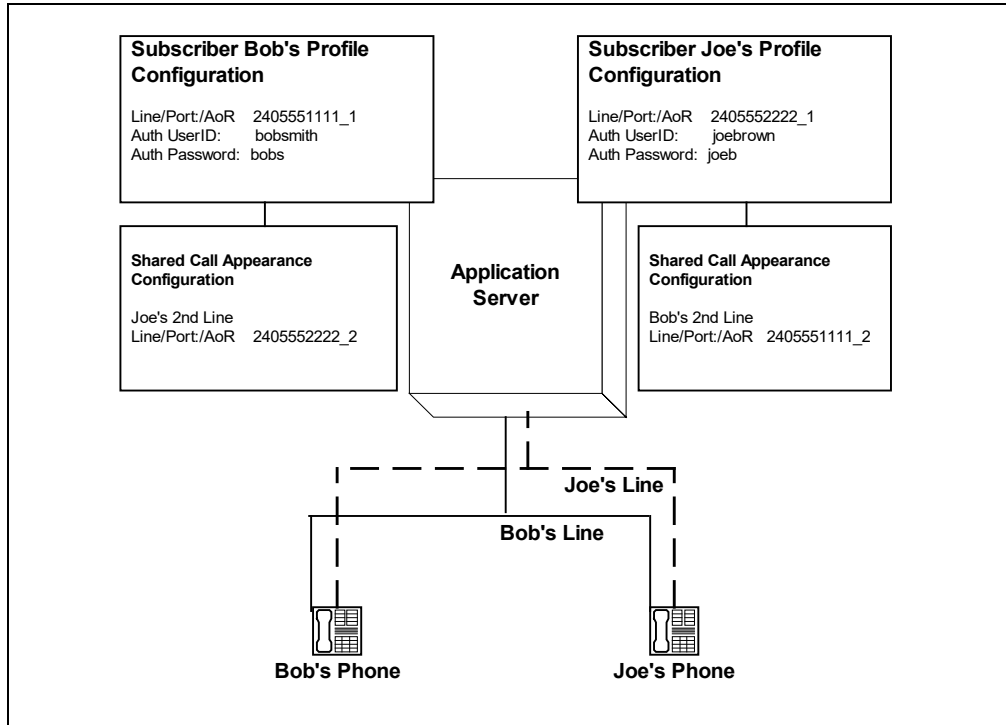


Figure 2 Shared Call Appearance Configuration

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

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

Step	Command	Purpose
Step 3	Enable SIP Authentication. Example: <pre>account.1.auth_name = bobsmith; account.1.password = bobs;</pre>	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: <pre>account.1.display_name = Bob Smith;</pre>	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. <pre>account.2.shared_line = 1;</pre>	Configure the line as "shared" (as opposed to "private").
Step 2	Set Register User ID. Example: <pre>account.2.user_name = 2405551111_2;</pre>	The register user ID must correspond with the line/port setting on BroadWorks.
Step 3	Enable SIP Authentication. Example: <pre>account.2.auth_name = joebrown; account.2.password = joeb;</pre>	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: <pre>account.2.display_name = Joe Brown;</pre>	Configure the name to be displayed on the device for this line.

4.4.1.2 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. <pre>account.1.shared_line = 1;</pre>	Configure the line as "shared" (as opposed to "private").
Step 2	Set Register User ID. Example: <pre>account.1.user_name = 2405552222_1;</pre>	The register user ID must correspond with the line/port setting on BroadWorks.
Step 3	Enable SIP Authentication. Example: <pre>account.1.Auth_Name = joebrown; account.1.password = joeb;</pre>	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	Command	Purpose
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.

4.4.1.3 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.

NOTE: T19(P) E2 does not support this feature.

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

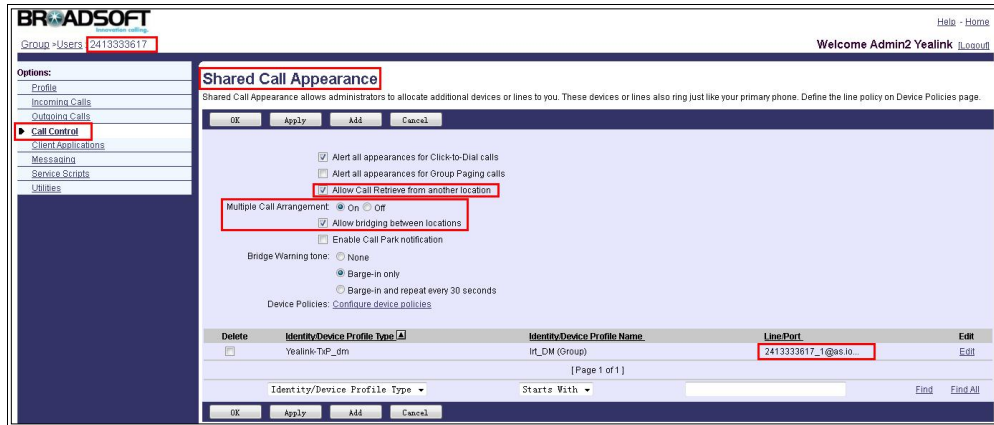


Figure 3 Shared Call Appearance configuration Page

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

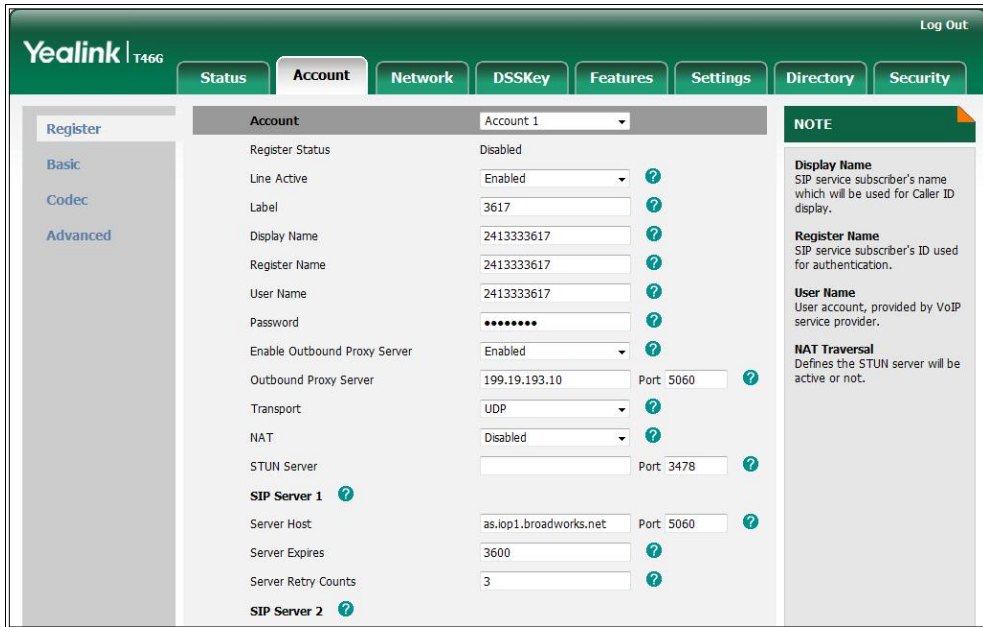


Figure 4 Account Register Page

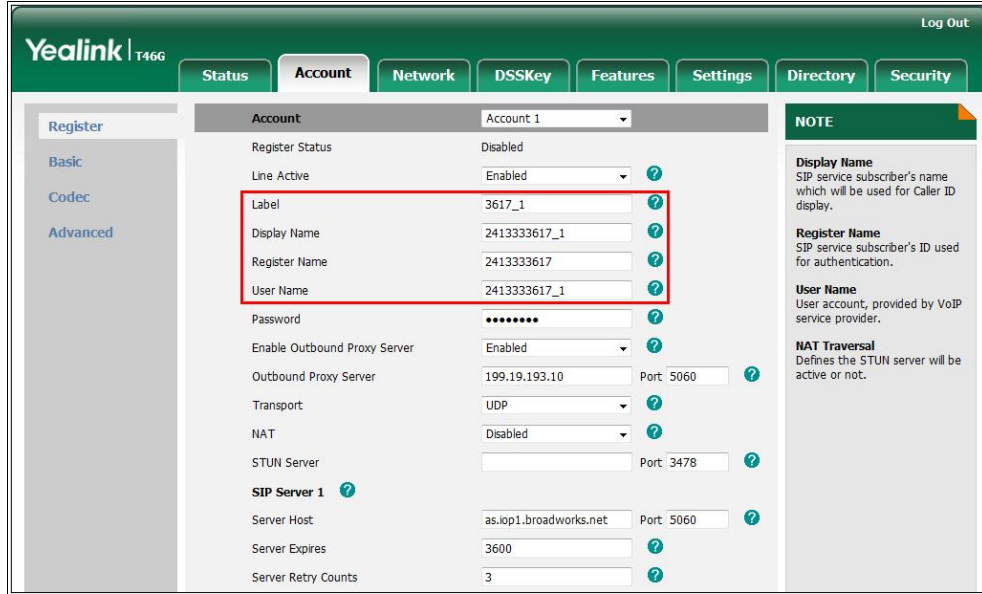


Figure 5 Account Register Page

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*.

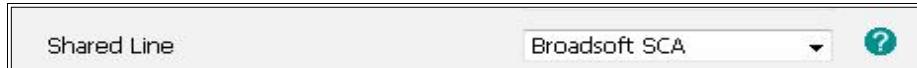


Figure 6 Shared Line Field

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: <pre>linekey.1.type =15 linekey.1.line = 1</pre>	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 T21(P)E2 have 2 lines T23 have 3 line keys T27 have 21 line keys T29G have 27 line keys

Step	Command	Purpose
Step 2	Set DSS Key. Example: <pre>linekey.2.type = 15 linekey.2.line = 1</pre>	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 T21(P)E2 have 2 lines T23 have 3 line keys T27 have 21 line keys T29G have 27 line keys

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

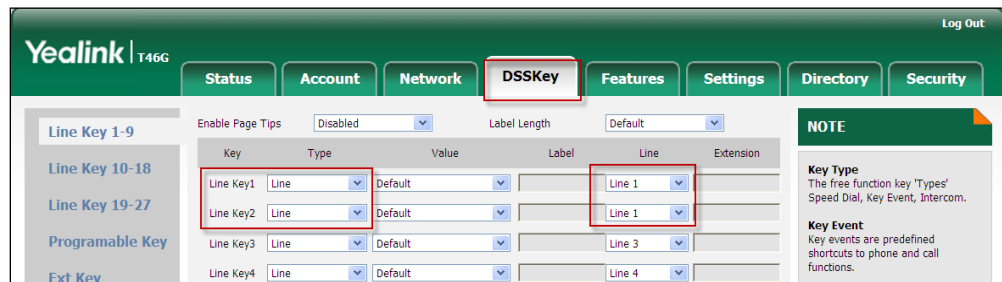


Figure 7 Line Key Fields

Via above method, we 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 we have configured line key 1 to shared line, we need to configure 1 or 1 more free line keys as shared line keys, then we can do as follows. First, browse to *Features* → *General Information*, set the *Auto Linekeys* to “Enable”, and then save the configuration.



Figure 8 Auto Linekeys

Second, browse to *Account* → *Advanced*, input the line key number that you want to set to shared line keys, and then save the configuration. The first three free line keys will be set to shared line keys.



Figure 9 Number of Line Key

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

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

4.4.2 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.

NOTE: T19XE2 models do not support this feature.

Step	Command	Purpose
Step 1	Set the BLF List URI for the line. Example: <pre>account.1.blf.blf_list_uri =</pre> <pre>u1062_bflist@as.iop1.broadworks.net</pre>	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.





BLF List URI	<input type="text" value="sip:u1062_bflist@as.iop1.b"/>	
BLF List Code	<input type="text" value="*97"/>	
BLF List Barge In Code	<input type="text" value="*33"/>	
BLF List Retrieve call parked Code	<input type="text" value="*88"/>	

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.

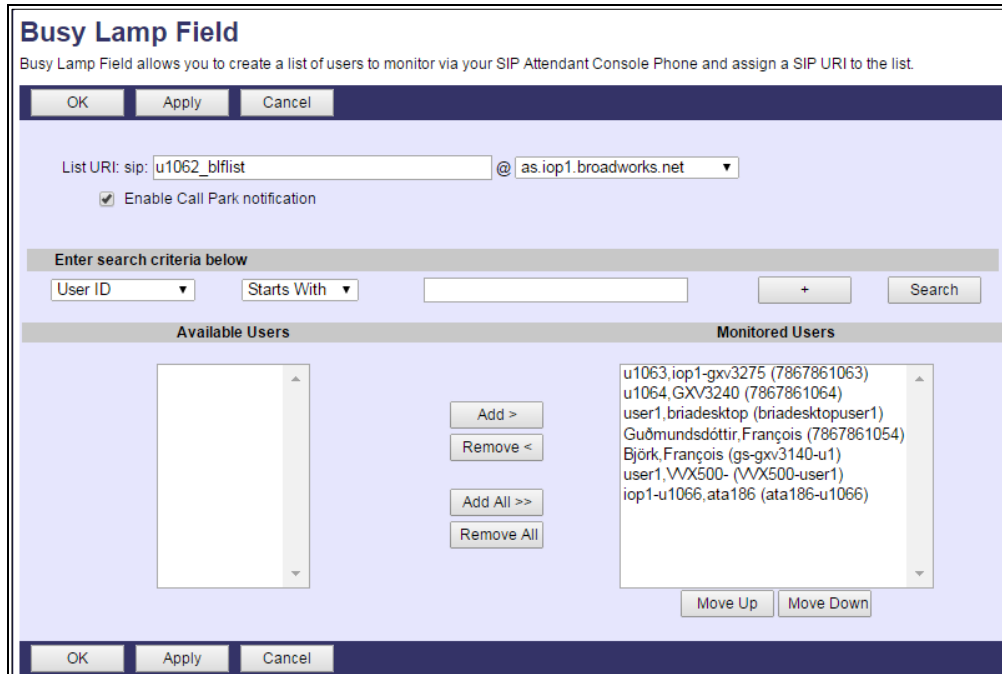


Figure 11 Busy Lamp Field Configuration Page

Other related “autop” parameters are listed in the following table.

Parameter	Value	Purpose
<i>bw.enable=</i>	0 1	Enable BSFT feature. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled
<i>account.X.blf_list_code =</i>	String	*97 (For example)
<i>account.X.blf_list_barge_in_code =</i>	String	*33 (For example)
<i>account.X.blf_list_retrieve_call_parked_code =</i>	String	*88 (For example)
<i>phone_setting.auto_blf_list_enable</i>	0 1	Enable or disable auto blf list. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled (Default)
<i>phone_setting.blf_list_sequence_type</i>	0 1	Configure the priority of auto blf list. <ul style="list-style-type: none"> ▪ 0 for linekey, exp (Default) ▪ 1 for Exp, linekey

4.4.3 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 the Feature Key Synchronization feature. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled

Go to *Features* → *General Information* and set *Feature Key Synchronization* to “Enabled”.

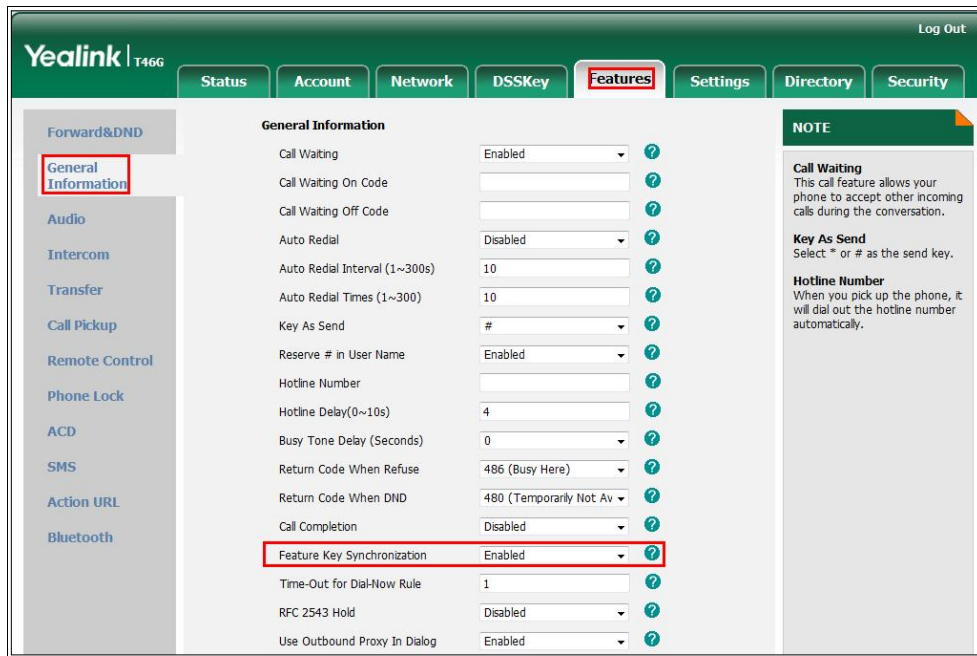


Figure 12 Feature Key Synchronization Configuration

4.4.4 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.

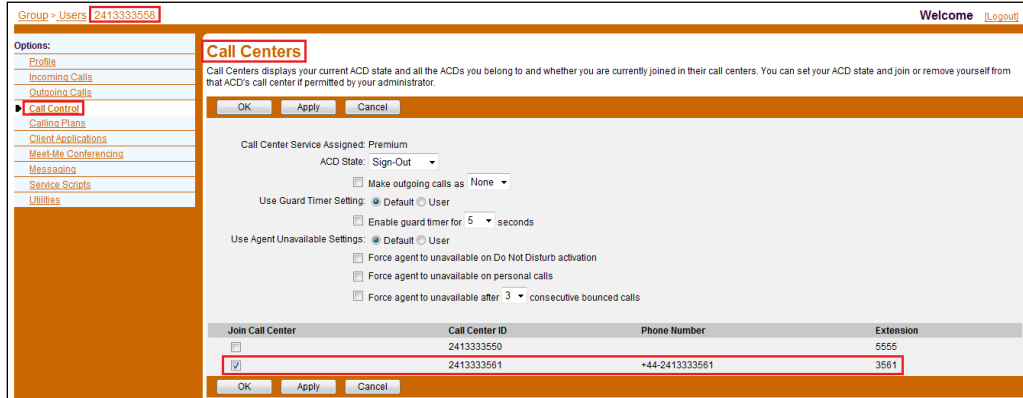


Figure 13 Call Control → Call Centers Page

2) Register the Call Center line.

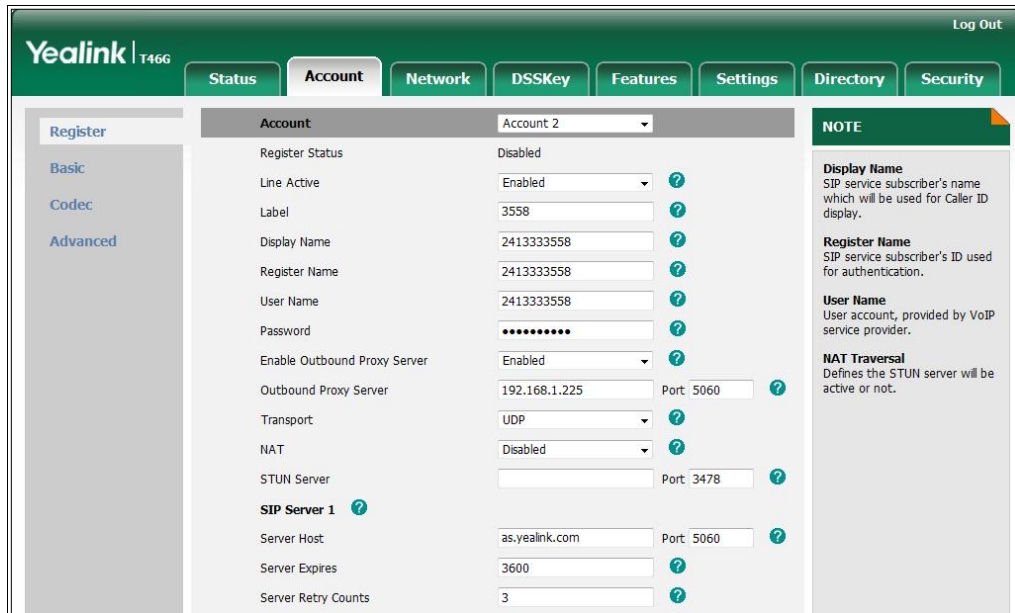


Figure 14 Account Register Page

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



Figure 15 SIP Server Type Field

4) Go to the related “autop” parameters to configure the Call Center features listed in the following table.

Step	Command	Purpose
Step 1	Enable ACD feature for the line. Example: account.1.acd.enable =1	Enable the ACD feature. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled

Step	Command	Purpose
Step 2	<p>Set the phone to display the Unavailable and Available soft keys after logging into the ACD system for the line.</p> <p>Example</p> <pre>account.1.acd.available = 1</pre>	<p>The Unavailable/Available soft key appears on the LCD screen when the phone logging to the ACD system.</p> <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled
Step 3	<p>Configure the initial agent state for the line.</p> <p>Example</p> <pre>account.1.acd.initial_state = 1</pre>	<p>Configure the initial agent state.</p> <ul style="list-style-type: none"> ▪ 1 for Available ▪ 2 for Unavailable
Step 4	<p>Configure the unavailable code for the line.</p> <pre>account.X.reason_code.Y = code account.X.reason_code_name.Y=name</pre> <p>Example:</p> <pre>account.1.acd.unavailable_reason_enable = 1 account.1.reason_code.1 = 100 account.1.reason_code_name.1= rest</pre>	<p>Enable the unavailable code feature.</p> <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled <p>The unavailable code length must be within 10 characters.</p> <p>The unavailable reason length must be within 40 characters.</p> <p>Value Y must be continuous, with minimum and maximum as 1 and 100.</p>
Step 5	<p>Enable the hold reminder feature for the line.</p> <p>Example:</p> <pre>account.1.call_center.play_bw_hold_tone_enable = 1</pre>	<p>Enable the hold reminder feature.</p> <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled
Step 6	<p>Configure the interval to specify how long the call center call information displays.</p> <p>Example:</p> <pre>account.1.call_center.call_info_enable = 1 account.1.call_center.show_call_info_time = 30</pre>	<p>Enable the call center call information feature.</p> <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled
Step 7	<p>Configure the disposition code for the line.</p> <pre>account.X.bw_disp_code.Y = disposition code account.X.bw_disp_code_name.Y = disposition code name</pre> <p>Example:</p> <pre>account.1.call_center.disp_code_enable = 1 account.1.bw_disp_code.1 = 22 account.1.bw_disp_code_name.1 = asleep</pre>	<p>Enable account 1's disposition code feature.</p> <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled <p>The disposition code which must match one of the codes configured on BroadWorks.</p> <p>Value Y must be continuous, with minimum and maximum as 1 and 100.</p>
Step 8	<p>Configure the customer originated trace feature.</p> <p>Example:</p> <pre>account.1.call_center.trace_enable = 1</pre>	<p>Enable the customer originated trace for account 1.</p> <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled

Step	Command	Purpose
Step 9	<p>Configures the emergency escalation feature.</p> <pre>account.X.supervisor_info_code_name. Y = supervisor name</pre> <pre>account.X.supervisor_info_code_name. Y = supervisor name</pre> <p>Example:</p> <pre>account.1.call_center.emergency enable = 1</pre> <pre>account.1.supervisor_info_code.1 = supervisor number</pre> <pre>account.1.supervisor_info_code_name. 1 = supervisor name</pre>	<p>Enable the emergency escalation feature.</p> <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled <p>The supervisor number. The supervisor number length must be within 30 characters.</p> <p>The supervisor name length must be within 99 characters.</p> <p>Value Y must be continuous, with minimum and maximum as 1 and 100.</p>
Step 10	<p>Configure the queue status via the Power Indicator LED.</p> <p>Example:</p> <pre>account.1.call_center.queue_status_enable = 1</pre> <pre>account.1.call_center.queue_status_light_enable = 1</pre>	<p>Enable the queue status notification feature for account 1.</p> <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled

4.4.5 Call Recording Feature Configuration

Yealink T2XX IP Phone supports Xsi-based Call Recording feature.

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

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

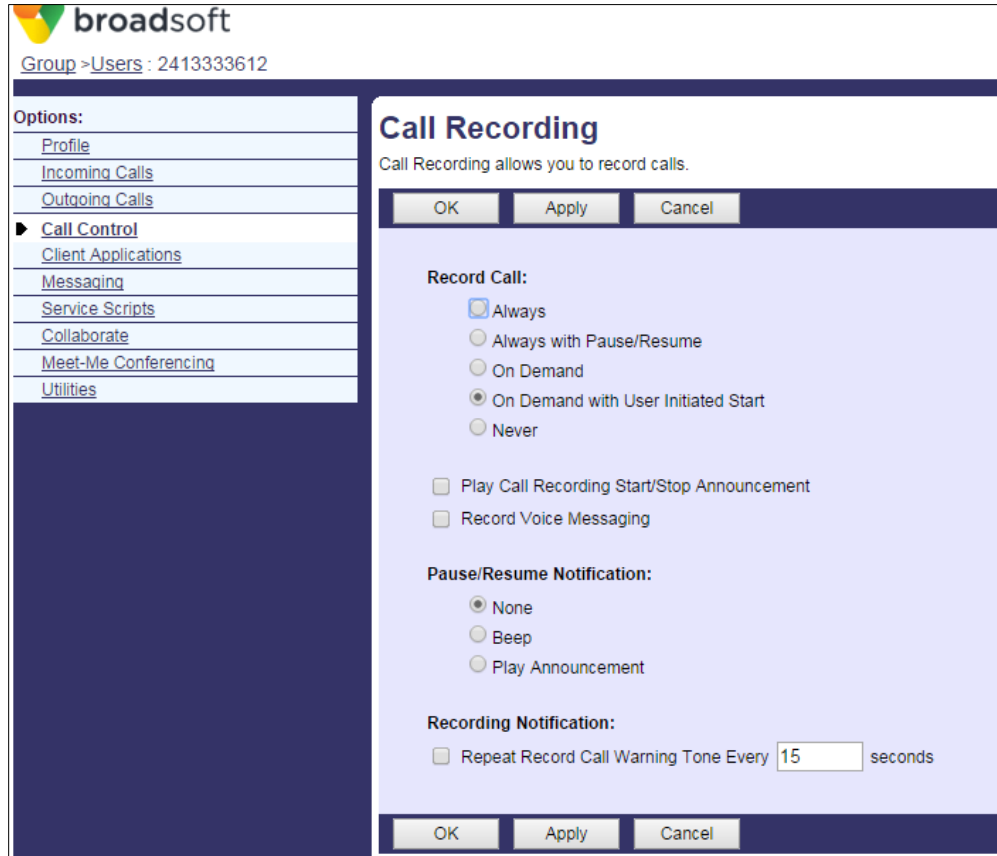


Figure 16 Call Control → Call Recording

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

Step	Command	Purpose
Step 1	Enable Call Recording. Example: <code>account.X.call_recording.enable</code> =	Enables or disables the centralized call recording feature for the account. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled

4.4.6 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*.



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: <code>account.X.security_classification.enable=</code>	Enables or disables the security classification feature for account X. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled

4.4.7 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 number for the phone as follows.

Step	Command	Purpose
Step 1	Configure the emergency number. Example: <code>phone_setting.emergency.number = 311</code>	Configure the emergency number.

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

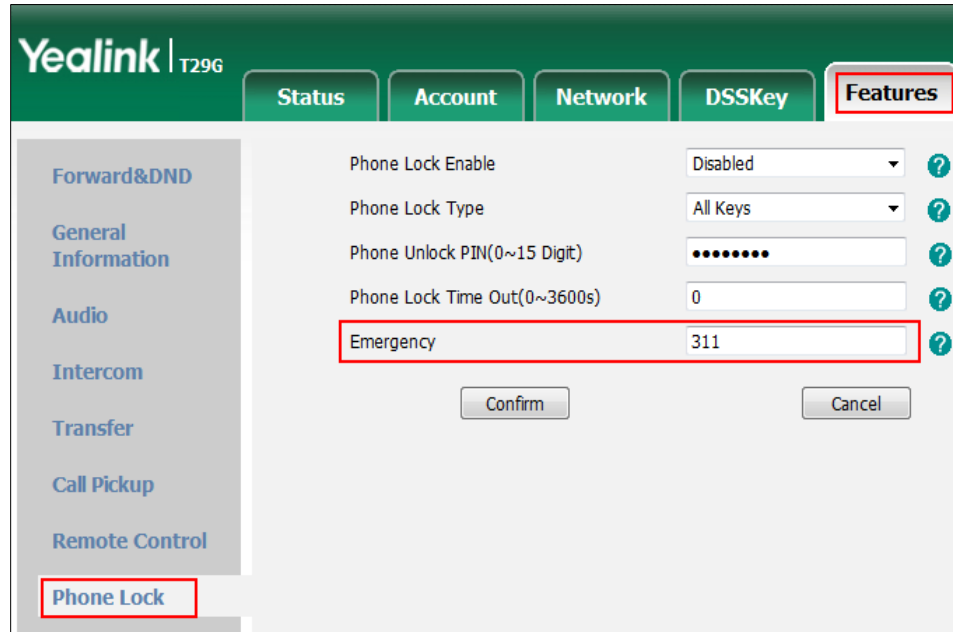


Figure 18 Emergency Configuration

4.4.8 Advice of Charge Configuration

Yealink T2XX IP Phone does not support the Advice of Charge feature.

4.4.9 Conference Event Configuration

Yealink T2XX IP Phone does not support Conference Event.

4.4.10 Flexible Seating

The Flexible Seating feature has similar functionality to the BroadWorks Hoteling feature. However, 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*.

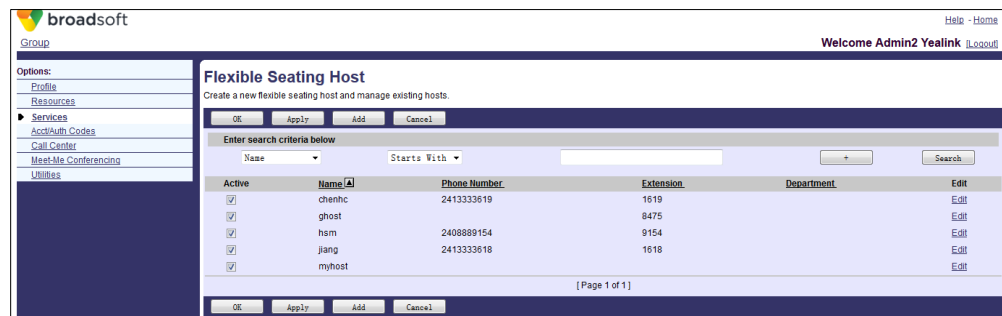


Figure 19 Flexible Seating Host

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



Figure 20 Flexible Seating 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: <code>account.1.flexible_seating.enable=1</code>	Enables or disables the flexible seating feature. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled
Step 2	Configures the hoteling mode for account X. Example: <code>account.1.hoteling.mode=1</code>	Configures the hoteling mode for account X. <ul style="list-style-type: none"> 0-Disabled 1-Hoteling 2-Flexible Seating Host 3-Flexible Seating Guest
Step 3	Configures the flexible seating pin for account X. Example: <code>account.1.hoteling.pin=1234</code>	Configures the flexible seating pin for account X.

4.5 Xtended Services Interface (Xsi) Feature Configuration

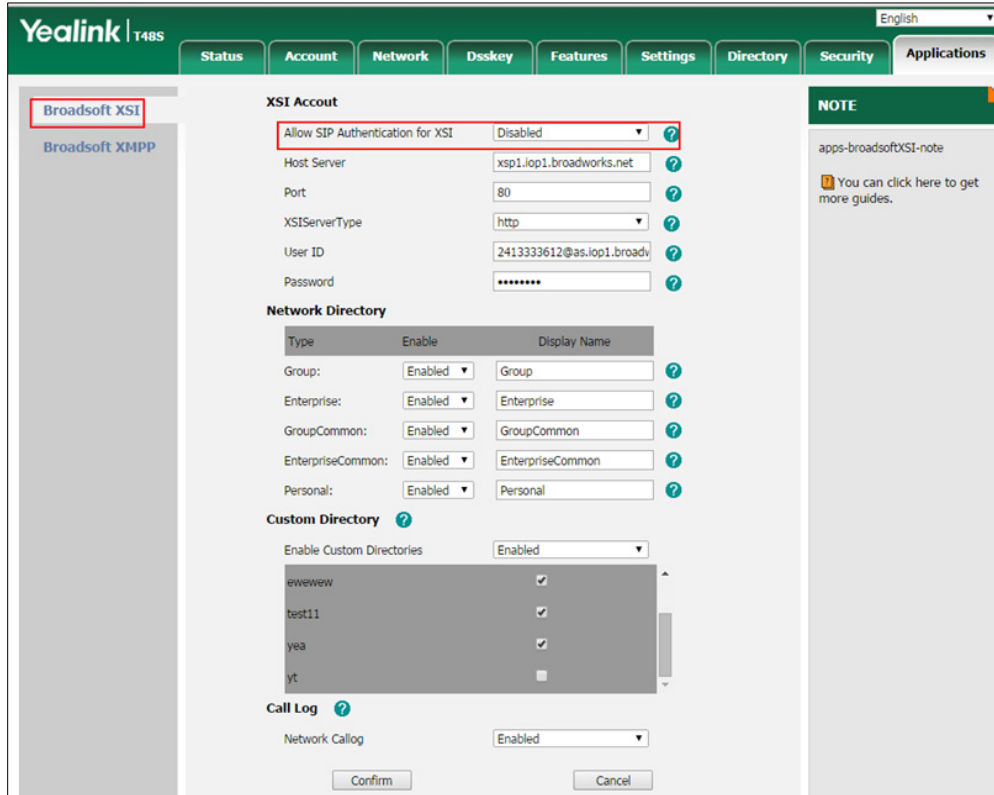
This section applies to SIP phones, soft clients, and other devices that provide a user interface.

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 Xtended Services Interface features including services, directories, call logs, and so on, the SIP phone must first authenticate the user. At present, the Yealink SIP phone supports two methods for authenticating the user: BroadWorks User Login Credentials and SIP Authentication Credentials.

BroadWorks User Login Credentials

- 1) Browse to the *Applications* → *XSI* settings.



The screenshot shows the Yealink T48S configuration interface. The 'Applications' tab is selected, and the 'XSI Account' section is active. The 'Allow SIP Authentication for XSI' dropdown menu is highlighted with a red box and is currently set to 'Disabled'. Other fields include Host Server (xsp1.lop1.broadworks.net), Port (80), XSI Server Type (http), User ID (2413333612@as.lop1.broadv), and Password (masked with asterisks). Below this is the 'Network Directory' section with a table of directory types and their enablement status.

Type	Enable	Display Name
Group:	Enabled	Group
Enterprise:	Enabled	Enterprise
GroupCommon:	Enabled	GroupCommon
EnterpriseCommon:	Enabled	EnterpriseCommon
Personal:	Enabled	Personal

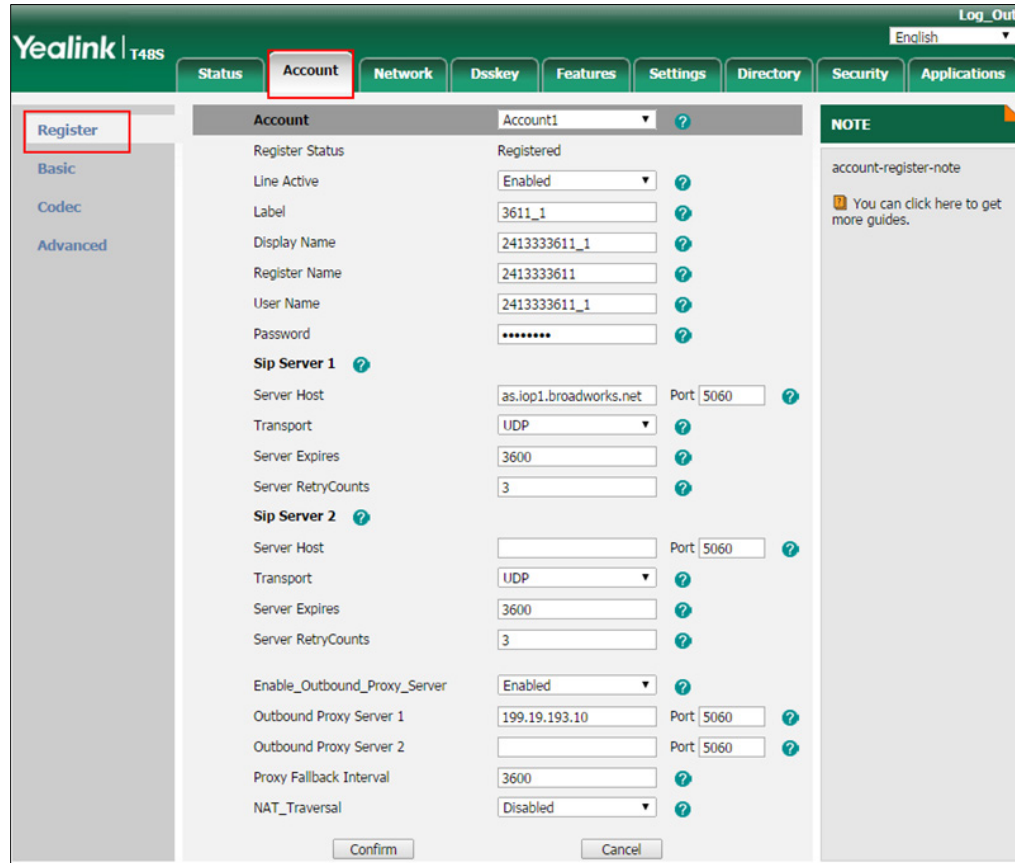
The 'Custom Directory' section is also visible, with 'Enable Custom Directories' set to 'Enabled'. A list of custom directories is shown with checkboxes: ewewew (checked), test11 (checked), yea (checked), and yt (unchecked). At the bottom, the 'Call Log' section has 'Network Callog' set to 'Enabled'. 'Confirm' and 'Cancel' buttons are at the bottom of the form.

Figure 21 Xtended Services Interface Configuration

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

SIP Authentication Credentials

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



The screenshot shows the Yealink T48S web interface with the 'Account' tab selected. The 'Register' sub-tab is also highlighted. The configuration is for 'Account1'. The 'Register Status' is 'Registered'. The 'Line Active' is 'Enabled'. The 'Label' is '3611_1'. The 'Display Name' is '2413333611_1'. The 'Register Name' is '2413333611'. The 'User Name' is '2413333611_1'. The 'Password' is masked with asterisks. There are two SIP servers configured: 'Sip Server 1' and 'Sip Server 2'. 'Sip Server 1' has a host of 'as.iop1.broadworks.net', transport of 'UDP', expires of '3600', and retry counts of '3'. 'Sip Server 2' has a host of 'as.iop1.broadworks.net', transport of 'UDP', expires of '3600', and retry counts of '3'. There are also outbound proxy servers and NAT traversal settings.

Field	Value
Account	Account1
Register Status	Registered
Line Active	Enabled
Label	3611_1
Display Name	2413333611_1
Register Name	2413333611
User Name	2413333611_1
Password	*****
Sip Server 1	
Server Host	as.iop1.broadworks.net
Port	5060
Transport	UDP
Server Expires	3600
Server RetryCounts	3
Sip Server 2	
Server Host	as.iop1.broadworks.net
Port	5060
Transport	UDP
Server Expires	3600
Server RetryCounts	3
Enable_Outbound_Proxy_Server	Enabled
Outbound Proxy Server 1	199.19.193.10
Port	5060
Outbound Proxy Server 2	
Port	5060
Proxy Fallback Interval	3600
NAT_Traversal	Disabled

Figure 22 Xtended Services Platform Account Configuration

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

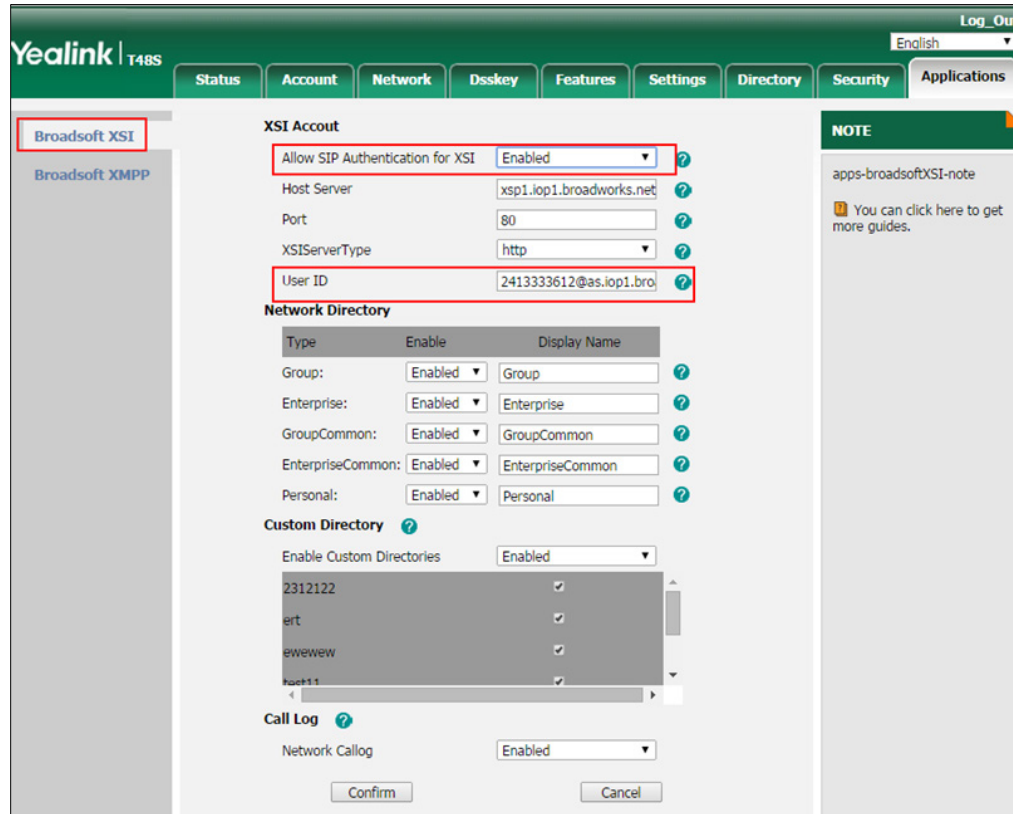


Figure 23 Xtended Services Platform Configuration

4.5.1 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	<pre>bw.xsi.enable = Example: bw.xsi.enable = 1</pre>	Enable Xsi feature. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled
Step 2	<pre>sip.authentication_for_xsi = Example: sip.authentication_for_xsi = 1</pre>	Enable the Xsp authentication mode. 0= BroadWorks User Login credentials 1= SIP Authentication credentials
Step 3	<pre>account.1.xsi.user= account.1.xsi.password = Example: account.1.xsi.user= 2405551111 account.1.xsi.password = 123456</pre>	Set the Xsi login user name and password for line 1.

Step	Command	Purpose
Step 3	<pre>account.1.xsi.host = Example: account.1.xsi.host =xsp1.iop1.broadworks.net</pre>	Set the IP address or domain name of the Xsp Server.
Step 4	<pre>account.1.xsi.server_type = Example: account.1.xsi.server_type =http</pre>	Set the transport type for Xsi.
Step 5	<pre>account.1.xsi.port = Example: account.1.xsi.port =80</pre>	Set the transport port for Xsi.

4.5.2 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	<pre>Enable the Network directory to be displayed on the IP phone. Example: bw.xsi.directory.enable =1</pre>	Enable the Network directory to be displayed on the IP phone. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled
Step 2	<pre>Enable the group directory to be displayed on the IP phone. Example: bw_phonebook.group_enable = 1</pre>	Enable the group directory to be displayed on the IP phone. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled
Step 3	<pre>Configure the group directory name displayed on the IP phone. Example: bw_phonebook.group_displayname = Group</pre>	Configure “Group” as the group directory name displayed on the IP phone. The default value is “Group”.
Step 4	<pre>Configure the group common directory to be displayed on the IP phone. Example: bw_phonebook.group_common_enable = 1</pre>	Enable the group common directory to be displayed on the IP phone. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled
Step 5	<pre>Configure the group common directory name displayed on the IP phone. Example: bw_phonebook.group common displayname = GroupCommon</pre>	Configure “GroupCommon” as the group common directory name displayed on the IP phone. The default value is “GroupCommon”.
Step 6	<pre>Configure the enterprise directory to be displayed on the IP phone. Example: bw_phonebook.enterprise_enable = 1</pre>	Enable the enterprise directory to be displayed on the IP phone. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled

Step	Command	Purpose
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".
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. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled
Step 9	Configure the enterprise common directory name displayed on the IP phone. Example: bw_phonebook.enterprise common display name = 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. <ul style="list-style-type: none"> 0 for Disabled 1 for 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. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled

4.5.3 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 the BroadWorks call log feature. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled

Configure the phone as shown in the following figure.

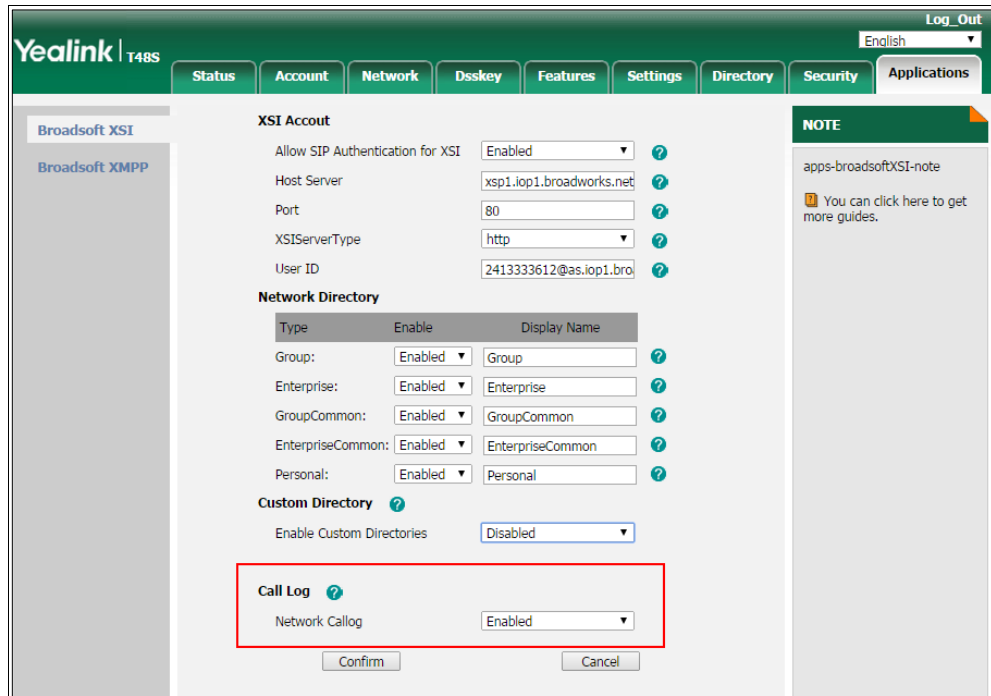


Figure 24 Call Logs Configuration

4.5.4 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. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled
Step 2	Enable the phone to display the Park soft key during a call. Example: features.call_park.enable = 1	The Park soft key appears on the LCD screen during a call. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled
Step 3	Enable the phone to display the GPark soft key during a call. Example: features.call_park.group_enable= 1	The GPark soft key appears on the LCD screen during a call. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled
Step 4	Enable the phone to play a warning tone when a call is parked against its line. Example: features.call_park.park_ring = 1	Enable the phone to play a warning tone when a call is parked against its line. <ul style="list-style-type: none"> 0 for Disabled 1 for Enabled

Step	Command	Purpose
Step 5	Enable the phone to display a parked indicator when a call is parked against its line. Example: <pre>features.call_park.park_visual_notif y_enable = 1</pre>	Enable the phone to display a parked indicator when a call is parked against its line. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled

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

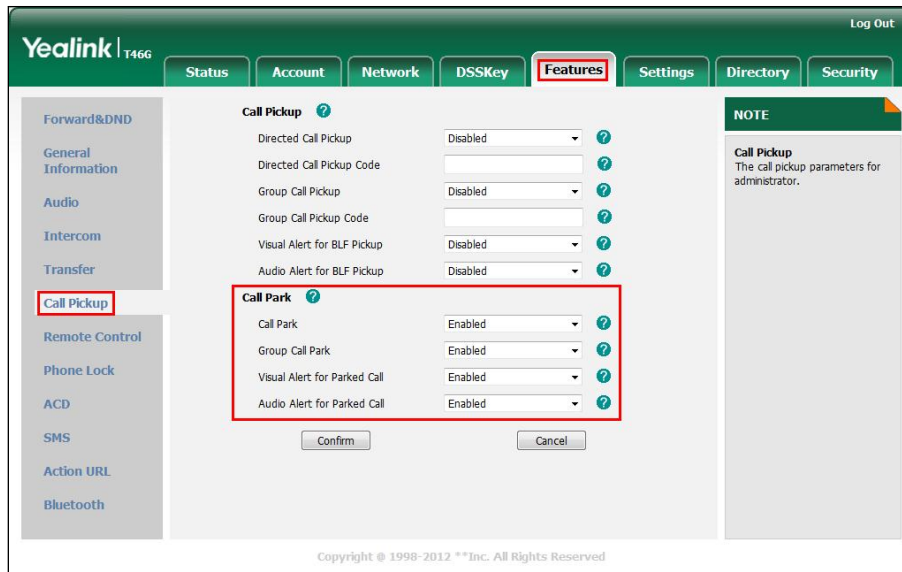


Figure 25 Call Park Configuration

4.5.5 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.

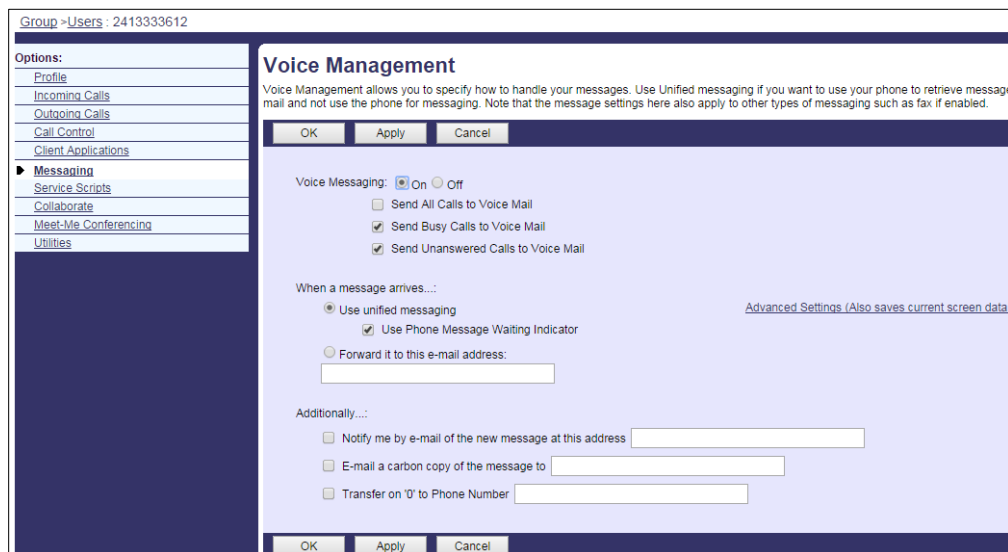


Figure 26 Visual Voice Mail

Step	Command	Purpose
Step 1	Enable the visual voice mail feature. Example: bw.voice_mail.visual.enable=1	Enables or disables the visual voice mail feature. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled
Step 2	Enable the phone to display the Park soft key during a call. Example: bw.voice_mail.visual.display_videoma il.enable=1	Enables or disables to display the video mails in the Voice Mail list. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for 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. <ul style="list-style-type: none"> ▪ 0 for Disabled ▪ 1 for Enabled

4.6 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 T29G model.

First, enable the UC Active function by the following *autop* statement.

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

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

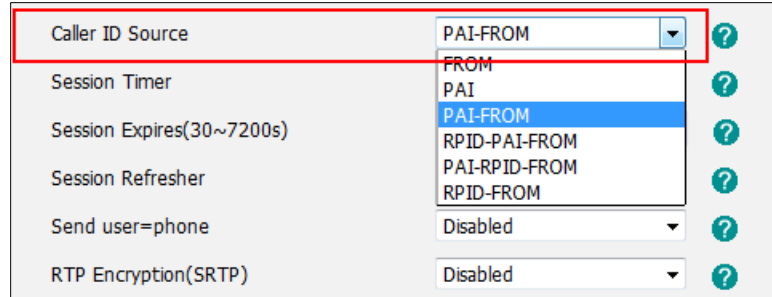
```
features.uc_username =          (The uc username)
features.uc_password =          (The uc password)
```

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

4.7 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.



Caller ID Source	PAI-FROM	?
Session Timer	FROM	?
Session Expires(30~7200s)	PAI	?
Session Refresher	PAI-FROM	?
Send user=phone	RPID-PAI-FROM	?
RTP Encryption(SRTP)	PAI-RPID-FROM	?
	RPID-FROM	?
	Disabled	?
	Disabled	?

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”.

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 T2XX 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 T2XX 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 T2XX 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

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 T2XX 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	
	HTTPS Download Using Xtended Services Platform Cluster FQDN	Yes	

BroadWorks Device Management Interoperability Test Plan Support Table			
Test Plan Package	Test Plan Package Items	Supported	Comments
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	Except for T19XE2 models
	Network-Based Conference	Yes	
Flexible Seating	Association via Voice Portal	Yes	
	Association via Phone	Yes	
No Touch Provisioning	No Touch Provision using DHCP with Direct DM location	No*	See section 5.2.6.2.4 DHCP Server Configuration (Direct DM Location) and Redirect Events .
	No Touch Provision using DHCP with BroadWorks Default DM location	No*	See section 5.2.6.2.3 DHCP Server Configuration (BroadWorks Default) and Redirect Events .
	No Touch Provision via Vendor redirect	No*	See section 5.2.6.3 No Touch Provisioning via Yealink Redirect Service .

5.2 Device Management Configuration

This section identifies the steps required to enable the Yealink T2XX 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 T2XX phone models only.

The Yealink T2XX 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_ACTI ONS%	IP address/FQDN	Xtended Services Platform server address

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
<input type="checkbox"/>	%APPLICATION_DOMAIN%	as.iop1.broadworks.net	Edit
<input type="checkbox"/>	%DNS_SERVER_1%	199.19.193.13	Edit
<input type="checkbox"/>	%DNS_SERVER_2%	199.19.193.29	Edit
<input type="checkbox"/>	%DNS_SERVER%	199.19.193.12	Edit
<input type="checkbox"/>	%KWS300_XSP_PATH%	http://xsp.broadsoft.com/dms/kws300	Edit
<input type="checkbox"/>	%OUTBOUNDPROXYADDRESS%	199.19.193.9	Edit
<input type="checkbox"/>	%OUTBOUNDPROXYPORT%	5060	Edit
<input type="checkbox"/>	%OUTBOUNDPROXYTRANSPORT%	UDP	Edit
<input type="checkbox"/>	%SBC_ADDRESS%	sb1.iop2.broadworks.net	Edit
<input type="checkbox"/>	%SBC_PORT%	5060	Edit
<input type="checkbox"/>	%SIP_TRANSPORT%	0	Edit
<input type="checkbox"/>	%SNTP_SERVER_1%	time-a.nist.gov	Edit
<input type="checkbox"/>	%SNTP_SERVER_2%	time-b.nist.gov	Edit
<input type="checkbox"/>	%SNTP_SERVER%	time-b.nist.gov	Edit
<input type="checkbox"/>	%SNTP_SERVERIP%	192.5.41.41	Edit
<input type="checkbox"/>	%USE_SBC_BOOLEAN%	1	Edit
<input type="checkbox"/>	%XSP_ADDRESS_XSI_ACTIONS%	xsp1.iop1.broadworks.net	Edit
<input type="checkbox"/>	%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

Go 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 T2XX_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. <ul style="list-style-type: none"> ▪ 0 = Disabled ▪ 1 = Enabled

Tag Name	Valid Settings	Description
%TRANSPORT_TYPE%	0 1 2 3	Defines the SIP transport. <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 0 = Disabled 1 = Enabled
%CALL_WAITING_BINARY%	0 1	Enable/Disable the call waiting feature. <ul style="list-style-type: none"> 0 = Disabled 1 = Enabled
%FEATURE_SYNC%	0 1	Enable/Disable the feature key synchronization for the phone. <ul style="list-style-type: none"> 0 = Disabled 1 = Enabled
%ACD_SYNC_BINARY%	0 1	Enable/Disable the ACD feature for the phone. <ul style="list-style-type: none"> 0 = Disabled 1 = Enabled
%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. <ul style="list-style-type: none"> 0 = Disabled 1 = Enable
%BWHOTELINGMODE-x%	0 1 2 3	Configures the hoteling mode for account X. <ul style="list-style-type: none"> 0 = Disabled 1 = Hoteling 2 = Flexible Seating Host 3 = Flexible Seating Guest
%BWFLEXIBLESEATINGUNLOCKPIN-x%	string	Configures the flexible seating pin for account X.
%T21_E2_FIRMWARE%	52.<x.x.x>.rom Example: 52.81.193.15.rom	Defines the firmware version for T21P E2 and T21 E2.
%T19_E2_FIRMWARE%	53.<x.x.x>.rom Example: 53.81.193.15.rom	Defines the firmware version for T19P E2 and T19 E2.
%T23_FIRMWARE%	44.<x.x.x>.rom Example: 44.81.193.15.rom	Defines the firmware version for T23G and T23P.
%T27_FIRMWARE%	45.<x.x.x>.rom Example: 45.81.193.15.rom	Defines the firmware version for T27P.

Tag Name	Valid Settings	Description
%T27G_FIRMWARE%	69.<x.x.x>.rom Example: 69.81.193.15.rom	Defines the firmware version for T27G.
%T29_FIRMWARE%	46.<x.x.x>.rom Example:46.81.193.15.rom	Defines the firmware version for T29G.

Example Device Type-specific Tag Settings

Device Management Tag Sets Modify

Display all the device management tags defined in the tag set. Tags can be added to the set or deleted from the set.

OK
Apply
Add
Cancel

* Tag Set Name:

Delete	Tag Name ▲	Tag Value
<input type="checkbox"/>	%ACD_SYNC_BINARY%	0
<input type="checkbox"/>	%AUTO_ANSWER_BINARY%	0
<input type="checkbox"/>	%CALL_WAITING_BINARY%	1
<input type="checkbox"/>	%COUNTRY%	United States
<input type="checkbox"/>	%DEVICE_ACCESS_PWD%	
<input type="checkbox"/>	%FEATURE_BW_CALL_LOG%	0
<input type="checkbox"/>	%FEATURE_BW_CALL_PARK%	0
<input type="checkbox"/>	%FEATURE_SYNC%	1
<input type="checkbox"/>	%FEATURY_BW_DIR%	0
<input type="checkbox"/>	%REJECT_ANONYMOUS_CALL_BINARY%	0
<input type="checkbox"/>	%T19_E2_FIRMWARE%	53.81.193.15.rom
<input type="checkbox"/>	%T21_E2_FIRMWARE%	52.81.193.15.rom
<input type="checkbox"/>	%T23_FIRMWARE%	44.81.193.15.rom
<input type="checkbox"/>	%T27_FIRMWARE%	45.81.193.15.rom
<input type="checkbox"/>	%T27G_FIRMWARE%	69.81.193.15.rom
<input type="checkbox"/>	%T29_FIRMWARE%	46.81.193.15.rom
<input type="checkbox"/>	%TIMEZONENAME%	United States-Eastern Time
<input type="checkbox"/>	%TRANSPORT_TYPE%	0
<input type="checkbox"/>	%XSIPASSWORD-1%	

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.

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

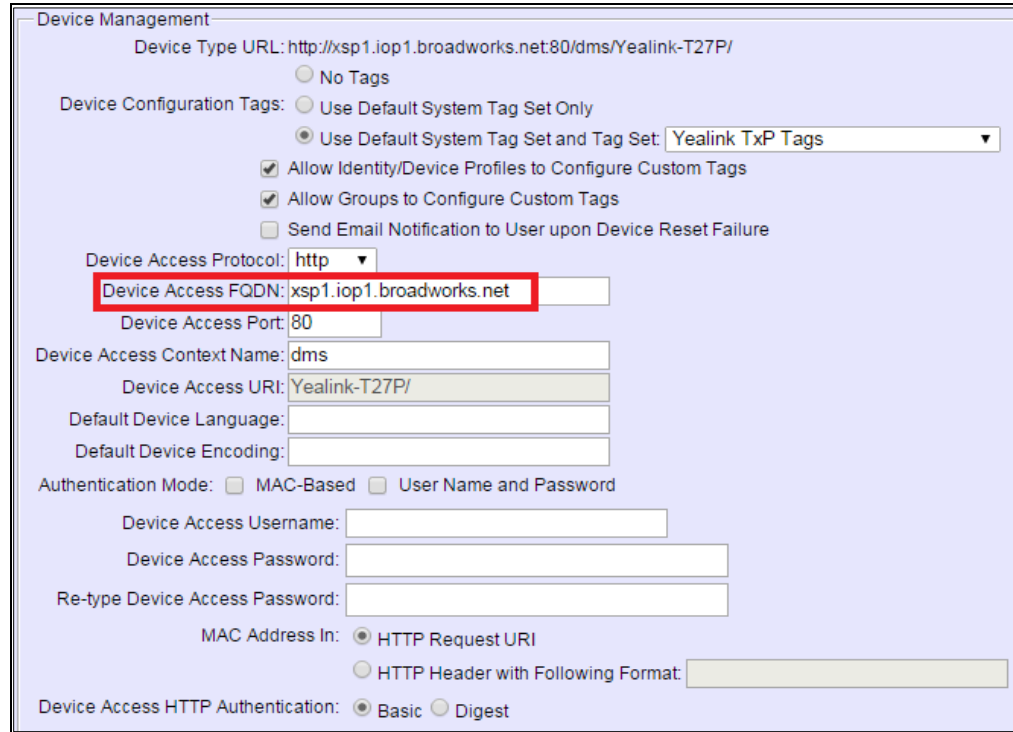
This section identifies the steps necessary to make use of the Device Management import feature to configure BroadWorks to add the Yealink T2XX IP Phone as a Device Management-enabled device type. Also, see the *BroadWorks CPE Kit Usage Guide* [8].

Download the Yealink T2XX CPE kit from BroadSoft Xchange at xchange.broadsoft.com. If you have trouble with the Xchange link, copy and paste it into a web browser. Extract the DTAF file(s) from the CPE kit. These are the import files. Repeat the following steps for each model you want 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 T2XX.
- 6) Browse to the *Profile* page and change the Device Management Device Access FQDN to your Xtended Services Platform (Xsp) or Xtended Services Platform cluster address.



Device Management

Device Type URL: `http://xsp1.iop1.broadworks.net:80/dms/Yealink-T27P/`

No Tags

Device Configuration Tags: Use Default System Tag Set Only
 Use Default System Tag Set and Tag Set: **Yealink TxP Tags**

Allow Identity/Device Profiles to Configure Custom Tags
 Allow Groups to Configure Custom Tags
 Send Email Notification to User upon Device Reset Failure

Device Access Protocol: **http**

Device Access FQDN: xsp1.iop1.broadworks.net

Device Access Port: 80

Device Access Context Name: dms

Device Access URI: Yealink-T27P/

Default Device Language:

Default Device Encoding:

Authentication Mode: MAC-Based User Name and Password

Device Access Username:

Device Access Password:

Re-type Device Access Password:

MAC Address In: HTTP Request URI
 HTTP Header with Following Format:

Device Access HTTP Authentication: Basic Digest

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 [5.2.2.2.3 Static Files](#) to define the static firmware files and to upload the firmware.

NOTE: The non-firmware static files in section [5.2.2.2.3 Static Files](#) are 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 [5.2.2.2.5.2 Language Mapping](#).

5.2.2.2 Configuration Method 2: Manual

This section identifies the manual steps necessary to configure BroadWorks to add the Yealink T2XX 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 instruction on manual configuration, see the *BroadWorks CPE Kit Usage Guide* [8] and the *BroadWorks Device Management Configuration Guide* [2].

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

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

5.2.2.2.1 Create or Modify Device Profile Type

This section identifies the BroadWorks device profile type settings relevant to Device Management for the Yealink T2XXG 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 T2XX IP Phone downloads.

To define the files, configuration templates, firmware and other files the T2XX IP Phone uses, they must be uploaded to BroadWorks. Download the Yealink T2XX 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 configuration files distributed with the version 80 CPE kit.

File Name	CPE Kit Template File Name	File Type	Description
		System-level, Device-specific, Static, Time Zone Alias	
Examples			
<i>BWMACADDRESS</i> <i>.cfg</i>	<i>%BWMACADDRESS%-</i> <i>T2XX.cfg</i>	Device-specific	This file contains device specific parameters that the phone needs to load.
<i>y000000000xx.cfg</i> T29G: xx=46 T27G:xx=69 T27P: xx=45 T23: xx=44 T21xE2: xx=52 T19xE2: xx=53	<i>y000000000xx.cfg</i> T29G: xx=46 T27G:xx=69 T27P: xx=45 T23: xx=44 T21xE2: xx=52 T19xE2: xx=53	System-level	This file contains system level parameters that the phone needs to load.
<i>Contact_list.xml</i>	<i>Contact_list.xml</i>	Static	This file contains the contact information in XML format.
<i>DialPlan.xml</i>	<i>DialPlan.xml</i>	Static	Specifies the dialing rules.
<i>AutoDST.xml</i>	<i>AutoDST.xml</i>	Static	Rules set of the beginning and end of Day Light Savings Time.

File Name	CPE Kit Template File Name	File Type	Description
<i>TimeZoneAliasLabels_Yealink+<model>.properties</i>	<i>TimeZoneAliasLabels_Yealink-<model>.properties</i>	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.
<i>WebItemsLevel.cfg</i>	<i>WebItemsLevel.cfg</i>	Static	This file defines the access level of configuration items in cfg format.
<i>CallFailed.xml</i>	<i>Call Failed.xml</i>	Static	This file defines the softkey of the call failed state.
<i>CallIn.xml</i>	<i>CallIn.xml</i>	Static	This file defines the softkey of the incoming call state.
<i>Connecting.xml</i>	<i>Connecting.xml</i>	Static	This file defines the softkey of the connecting state.
<i>Dialing.xml</i>	<i>Dialing.xml</i>	Static	This file defines the softkey of the dialing state.
<i>favorite_setting.xml</i>	<i>favorite_setting.xml</i>	static	This file configures desired lists of the Directory softkey.
<i>000.GUI.English.lan g</i>	<i>000.GUI.English.lan g</i>	Static	Customized language file for English.
<i>Ring1.wav</i>	<i>Ring1.wav</i>	Static	Ring tone in WAV format.
<i>RingBack.xml</i>	<i>RingBack.xml</i>	Static	This file defines the softkey of the ring back state.
<i>super_search.xml</i>	<i>super_search.xml</i>	Static	This file configures the search source list in dialing.
<i>Talking.xml</i>	<i>Talking.xml</i>	Static	This file defines the softkey of the talking state.

The following table identifies other files that the Yealink T2XXG 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
<i>x.x.x.x.rom</i>	Static	Device firmware file.
<i>xxx.GUI.<Language>.lan g</i>	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.

5.2.2.2.1 System Files

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

T2XX IP Phone model downloads a model-specific system file, named as follows:

- *y000000000xx.cfg*

T29: xx=46

T27P: xx=45

T27G: xx=69

T23: xx=44

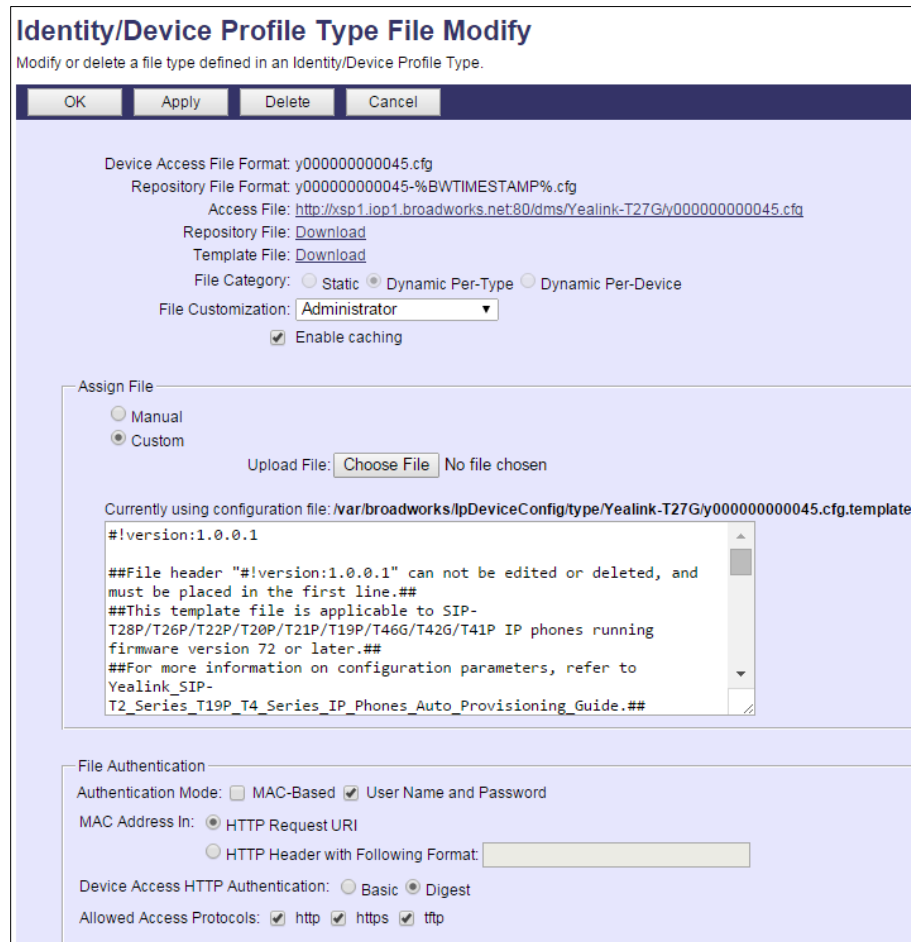
T21xE2: xx=52

T19xE2: xx=53

Add the `y000000000xx.cfg` file to the device profile type with the settings shown in the following figure.

After creating the device profile type file, upload `y000000000xx.cfg` extracted from the CPE kit. Use the **Browse** button on the file definition screen. Be sure to click **Apply** after uploading the file.

Example System File Settings



Identity/Device Profile Type File Modify
Modify or delete a file type defined in an Identity/Device Profile Type.

OK Apply Delete Cancel

Device Access File Format: y000000000045.cfg
Repository File Format: y000000000045-%BWTIMESTAMP%.cfg
Access File: <http://xsp1.iop1.broadworks.net:80/dms/Yealink-T27G/y000000000045.cfg>
Repository File: [Download](#)
Template File: [Download](#)
File Category: Static Dynamic Per-Type Dynamic Per-Device
File Customization: Administrator
 Enable caching

Assign File
 Manual
 Custom
Upload File: No file chosen

Currently using configuration file: /var/broadworks/lpDeviceConfig/type/Yealink-T27G/y000000000045.cfg.template

```
#!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-
T28P/T26P/T22P/T20P/T21P/T19P/T46G/T42G/T41P 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.##
```

File Authentication
Authentication Mode: MAC-Based User Name and Password
MAC Address In: HTTP Request URI
 HTTP Header with Following Format:
Device Access HTTP Authentication: Basic Digest
Allowed Access Protocols: http https tftp

Figure 31 y000000000045.cfg System File

5.2.2.2.2.2 Device-specific Files

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

Each T2XXG phone downloads a phone-specific file based on the phone's MAC address using the following file name format:

<mac-address>.cfg

Add a BroadWorks device profile type file to Yealink T2XX device profile with the settings shown in the following figure.

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.

Example Device-specific File Settings

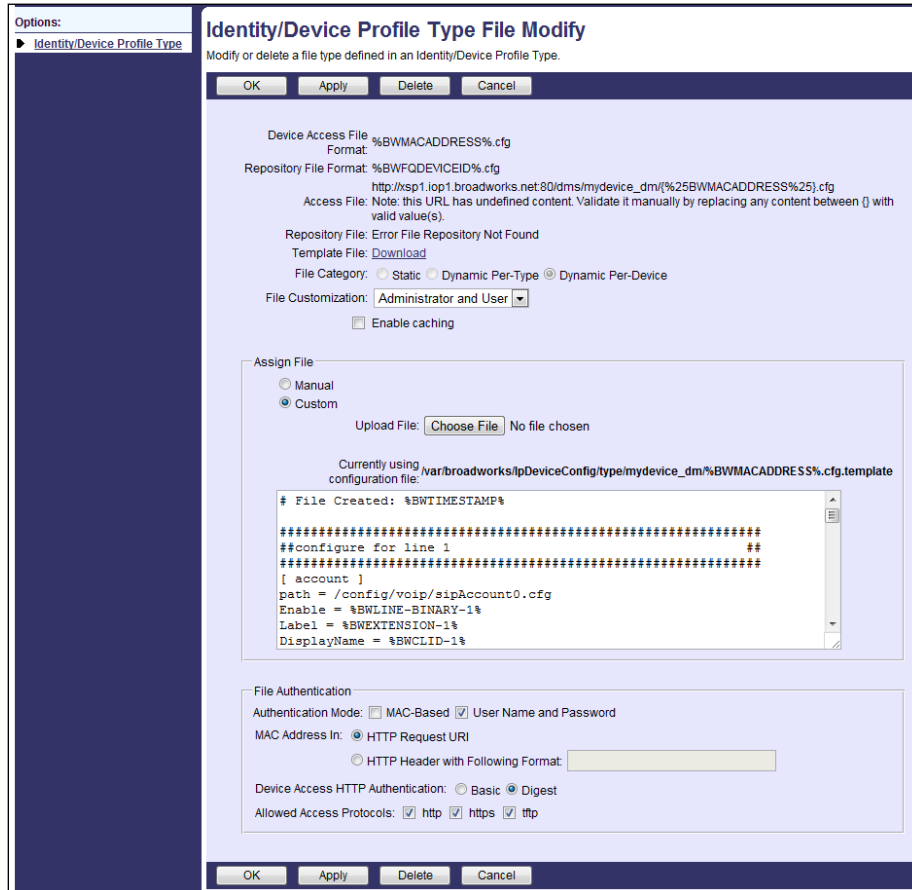


Figure 32 %BWMACADDRESS%.cfg File

5.2.2.2.3 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 T2XX requires the following static files:

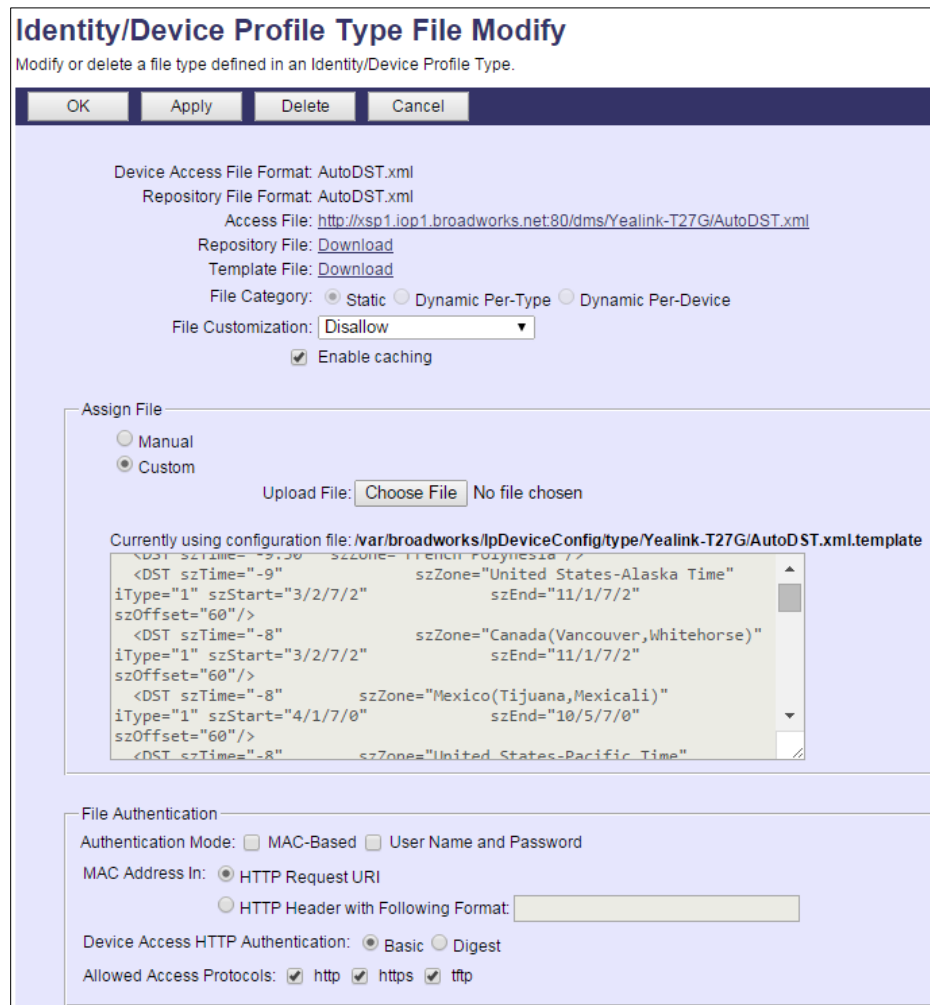
- `<firmware-version>.rom`
- `Ring1.wav`
- `000.GUI.English.lang` (GUI/WEB)
- `Contact_list.xml`
- `config.bin`
- `AutoDST.xml`
- `DialPlan.xml`
- `DialNow.xml`

- *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 the following figure.

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

Example Static File settings



Identity/Device Profile Type File Modify
 Modify or delete a file type defined in an Identity/Device Profile Type.

OK Apply Delete Cancel

Device Access File Format: AutoDST.xml
 Repository File Format: AutoDST.xml
 Access File: <http://xsp1.iop1.broadworks.net:80/dms/Yealink-T27G/AutoDST.xml>
 Repository File: [Download](#)
 Template File: [Download](#)
 File Category: Static Dynamic Per-Type Dynamic Per-Device
 File Customization:
 Enable caching

Assign File
 Manual
 Custom
 Upload File: No file chosen

Currently using configuration file: `/var/broadworks/lpDeviceConfig/type/Yealink-T27G/AutoDST.xml.template`

```

<DST szTime="-9"          szZone="United States-Alaska Time"
iType="1" szStart="3/2/7/2"      szEnd="11/1/7/2"
szOffset="60"/>
<DST szTime="-8"          szZone="Canada(Vancouver,Whitehorse)"
iType="1" szStart="3/2/7/2"      szEnd="11/1/7/2"
szOffset="60"/>
<DST szTime="-8"          szZone="Mexico(Tijuana,Mexicali)"
iType="1" szStart="4/1/7/0"      szEnd="10/5/7/0"
szOffset="60"/>
<DST szTime="-8"          szZone="United States-Pacific Time"
  
```

File Authentication
 Authentication Mode: MAC-Based User Name and Password
 MAC Address In: HTTP Request URI
 HTTP Header with Following Format:
 Device Access HTTP Authentication: Basic Digest
 Allowed Access Protocols: http https tftp

Figure 33 Static File Settings

5.2.2.2.4 Time Zone Alias File

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_T27P`, the time zone mapping file name must be `TimeZoneAliasLabels_Yealink-T27P.properties`. A space in the device name must be converted to a "+" in the file name.

The file must contain the mapping of BroadWorks time zones values to Yealink time zone values. 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
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
```

This file should contain all the time zones supported by the Service Provider's BroadWorks system. The Application server must be restarted to load this file.

The BroadWorks Application Server must be restarted for the `TimeZoneAlias` files to be picked up by the system.

5.2.2.2.5 Language Provisioning

Language provisioning is necessary if using languages other than English. There are two aspects to language provisioning. First, the T2XX must be enabled to download the T2XX language files. Second, a mapping is required between the BroadWorks and T2XX language identifiers.

5.2.2.2.5.1 Language Files

The language dictionaries other than English that the device supports must be uploaded from Device Management. The language files are static and can be obtained from Yealink.

To enable language file download, follow the steps in section [5.2.2.2.3 Static Files](#). Repeat the instructions in this section for each language to be loaded.

5.2.2.2.5.2 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 T2XX 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	Example: 000.GUI.English.lang
Spain_Spanish	Example: 008.GUI.Spanish.lang
Polish	Example: 006.GUI.Polish.lang
Turkish	Example: 009.GUI.Turkish.lang
French	Example: 003.GUI.French.lang
German	Example: 004.GUI.German.lang
Italian	Example: 005.GUI.Italian.lang
Portuguese	Example: 007.GUI.Portuguese.lang
Russian	Example: 010.GUI.Russian.lang

Example language mapping

Identity/Device Profile Type Languages

Map BroadWorks languages to languages used by the Identity/Device Profile Type.

OK
Apply
Cancel

BroadWorks Language	Device Language
English:	<input type="text" value="000.GUI.English.lang"/>
French:	<input type="text"/>
German:	<input type="text" value="004.GUI.German.lang"/>
Hungarain:	<input type="text"/>
Japanese:	<input type="text"/>
Russian:	<input type="text"/>
Spanish:	<input type="text" value="008.GUI.Spanish.lang"/>
Swedish:	<input type="text"/>

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 (see the following figure).

Profile

Profile allows you to view and maintain your profile information. The information filled in specifies your primary phone number, extension, and device that handling calls. Filling in the additional information section allows your mobile phone, pager, and other information to be visible to other group members in phone list. Some of this information can only be modified by your administrator.

OK
Apply
Delete
Cancel

Service Provider ID: Interoperability

User ID: 2408889140

* Last Name:

* Calling Line ID Last Name:

Name Dialing Last Name:

Department:

Time Zone:

Group: Yealink_secondary

[Change User ID \(Also saves current screen data\)](#)

* First Name:

* Calling Line ID First Name:

Name Dialing First Name:

Language:

Network Class of Service:

Additional Information

Title:

Pager:

E-mail:

Location:

Address:

City: State/Province:

Zip/Postal Code:

Mobile:

YahooID:

Figure 35 BroadWorks User Language Definition

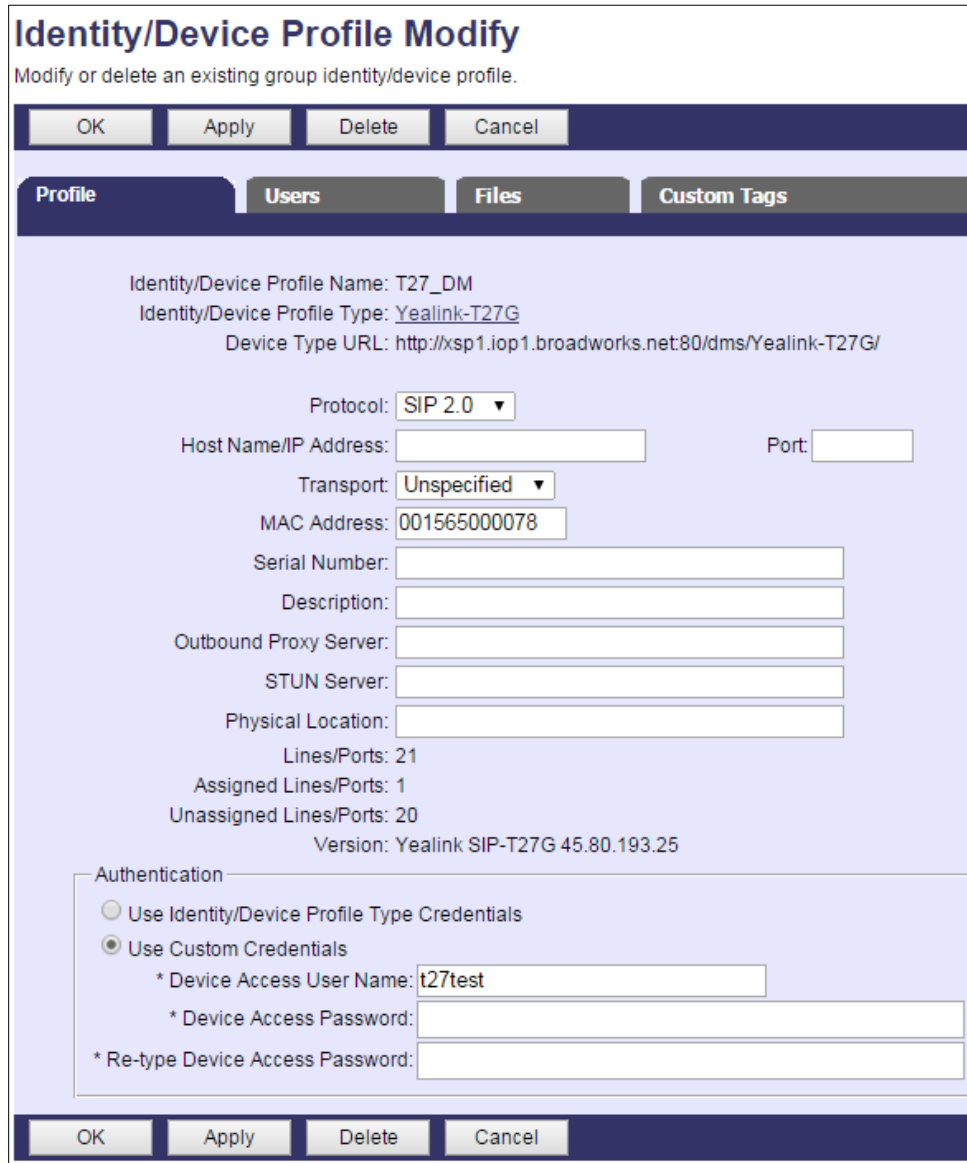
5.2.3 Create Device Profile Instance

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 phone deployed at a user's desk.

Browse to the BroadWorks <group> → Resources → Identity/Device Profiles and select *Add* to add a new Yealink T2XX IP Phone device profile. Configure the device profile as shown in the example in the following figure.

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.

Example Identity/Device Profile Settings



Identity/Device Profile Modify
Modify or delete an existing group identity/device profile.

OK Apply Delete Cancel

Profile Users Files Custom Tags

Identity/Device Profile Name: T27_DM
Identity/Device Profile Type: [Yealink-T27G](#)
Device Type URL: <http://xsp1.iop1.broadworks.net:80/dms/Yealink-T27G/>

Protocol: SIP 2.0 ▼
Host Name/IP Address: Port:
Transport: Unspecified ▼
MAC Address: 001565000078
Serial Number:
Description:
Outbound Proxy Server:
STUN Server:
Physical Location:
Lines/Ports: 21
Assigned Lines/Ports: 1
Unassigned Lines/Ports: 20
Version: Yealink SIP-T27G 45.80.193.25

Authentication

Use Identity/Device Profile Type Credentials
 Use Custom Credentials
* Device Access User Name:
* Device Access Password:
* Re-type Device Access Password:

OK Apply Delete Cancel

Figure 36 Device Profile Instance

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.

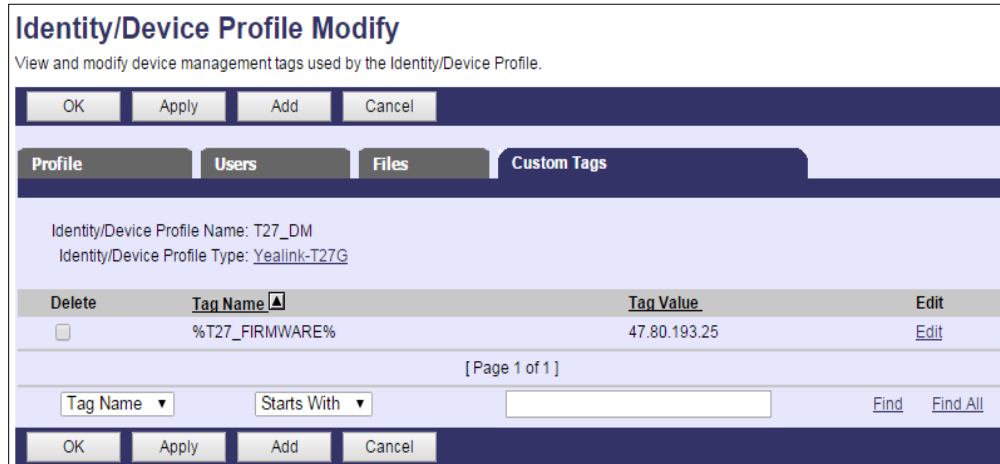


Figure 37 Device Profile Instance Custom Tags Override

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	

Example device profile custom tag setting

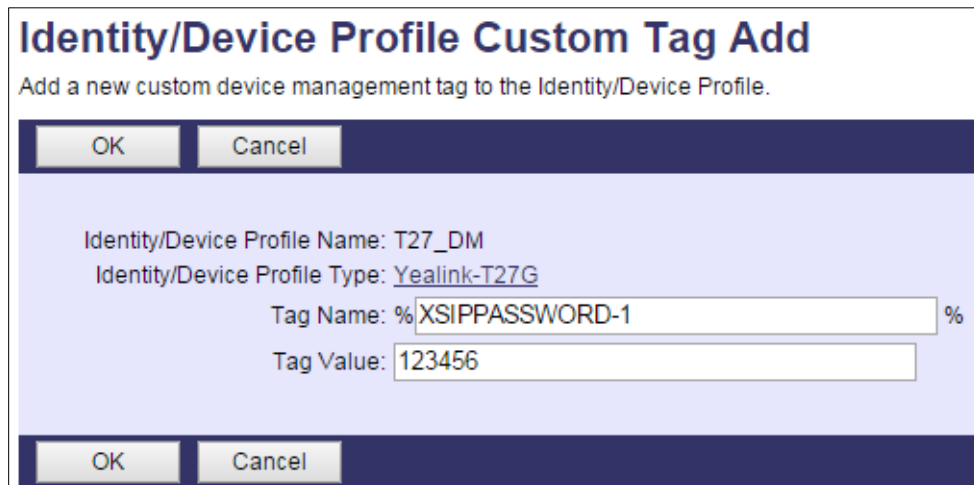


Figure 38 Device Profile Instance Custom Tags Add

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

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, go to *BroadWorks <user> → Addresses*.

5.2.5 Configure Edge Device

In many deployments, an edge device is deployed on the enterprise edge. Configure the edge device SIP server setting with the service provider's Session Border Controller IP address or FQDN. If there is no edge device and the phones communicate directly with the service provider's SBC, skip this section.

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. At the *Group → Utilities → Device Configuration* page, select the Yealink device profile (example: Yealink-T27P). Perform the following steps.

- 1) Click on the *Custom Tags* tab.
- 2) Click the **Add** button.
- 3) Add the *SBC* tag.
- 4) Enter "SBC_ADDRESS" as the tag.
- 5) Enter the IP address as the value (edge device LAN IP address).
- 6) Click **OK** to save the tag data.

This Tag/Value is applied to all Yealink T2XX phones in the group using the modified *Device Profile Type*.

5.2.6 Configure Yealink T2XX IP Phone

This section describes the steps necessary to configure the Yealink T2XX 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 accomplished as described in the following sections:

- [5.2.6.1 Manual Provisioning](#)
- [5.2.6.2 No Touch Provisioning via BroadWorks Device Management](#)
- [5.2.6.3 No Touch Provisioning via Yealink Redirect Service](#)

5.2.6.1 Manual Provisioning

5.2.6.1.1 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.

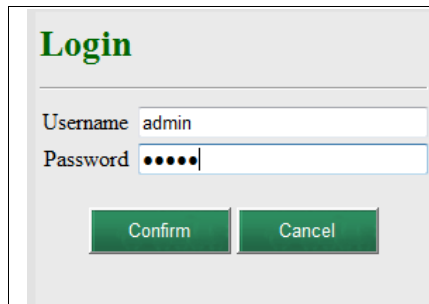
5.2.6.1.2 Provision Manual Device Management Settings

Log in to the web user interface for the Yealink T2x 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(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”)



The screenshot shows a web-based login interface. At the top, the word "Login" is displayed in a green, serif font. Below this, there are two input fields. The first is labeled "Username" and contains the text "admin". The second is labeled "Password" and contains five black dots. At the bottom of the form, there are two green buttons: "Confirm" on the left and "Cancel" on the right.

Figure 39 Login Screen

Example Auto Provision web page

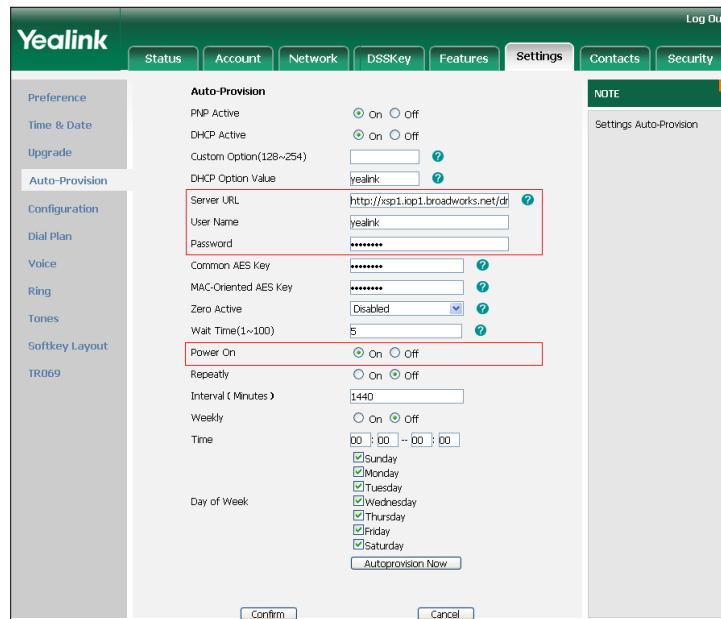


Figure 40 Upgrade Screen

After all parameters are entered, click the **Save** button. Allow the phone to reboot and retrieve the new configuration parameters from Device Management.

5.2.6.2 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 previous step.

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.

5.2.6.2.1 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.

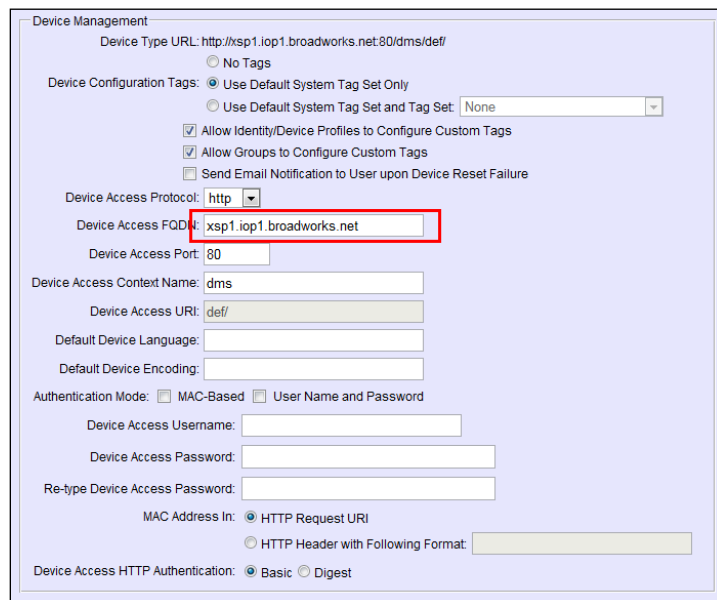
Download the Yealink T2XX CPE kit from BroadSoft Xchange at www.broadsoft.com/xchange. If you have trouble with the Xchange link, copy and paste it into a web browser. Extract the *DeviceManagementDefaults.DTAF.zip* file from the CPE kit. This is the import file.

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 then 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



The screenshot shows the 'Device Management' configuration page. The 'Device Type URL' is set to 'http://xsp1.iop1.broadworks.net:80/dms/def/'. Under 'Device Configuration Tags', 'Use Default System Tag Set Only' is selected. 'Allow Identity/Device Profiles to Configure Custom Tags' and 'Allow Groups to Configure Custom Tags' are checked. 'Device Access Protocol' is set to 'http'. The 'Device Access FQDN' field is highlighted with a red box and contains 'xsp1.iop1.broadworks.net'. Other fields include 'Device Access Port' (80), 'Device Access Context Name' (dms), 'Device Access URI' (def/), and 'Device Access HTTP Authentication' set to 'Basic'.

Figure 41 Device Access FQDN

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

5.2.6.2.2 Configuration Method 2: Manual

This section identifies the manual steps necessary to 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.

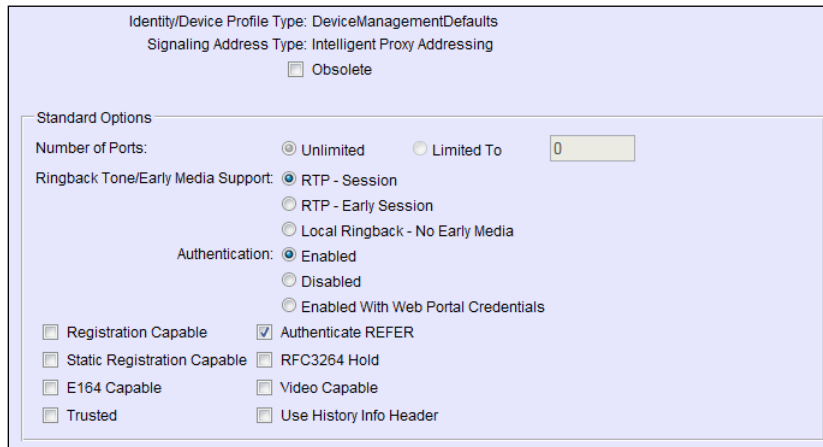
5.2.6.2.2.1 Create Default Device Profile Type

A Device Management default device profile type must be created. This device profile type can be configured to serve default provisioning files to Yealink T2x 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.

5.2.6.2.2.1.1 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.



Identity/Device Profile Type: DeviceManagementDefaults
 Signaling Address Type: Intelligent Proxy Addressing
 Obsolete

Standard Options

Number of Ports: Unlimited Limited To

Ringback Tone/Early Media Support: RTP - Session
 RTP - Early Session
 Local Ringback - No Early Media

Authentication: Enabled
 Disabled
 Enabled With Web Portal Credentials

Registration Capable Authenticate REFER
 Static Registration Capable RFC3264 Hold
 E164 Capable Video Capable
 Trusted Use History Info Header

Figure 42 Default Device Profile Type

5.2.6.2.2.1.2 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.

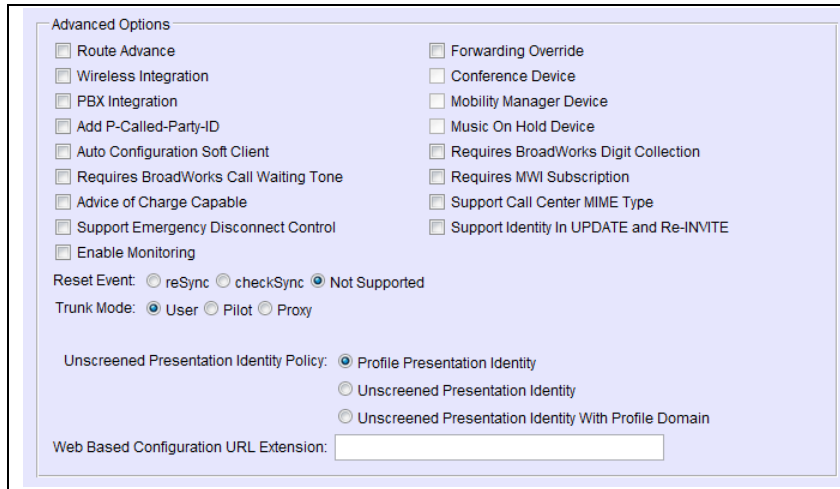


Figure 43 Configure Advanced Options

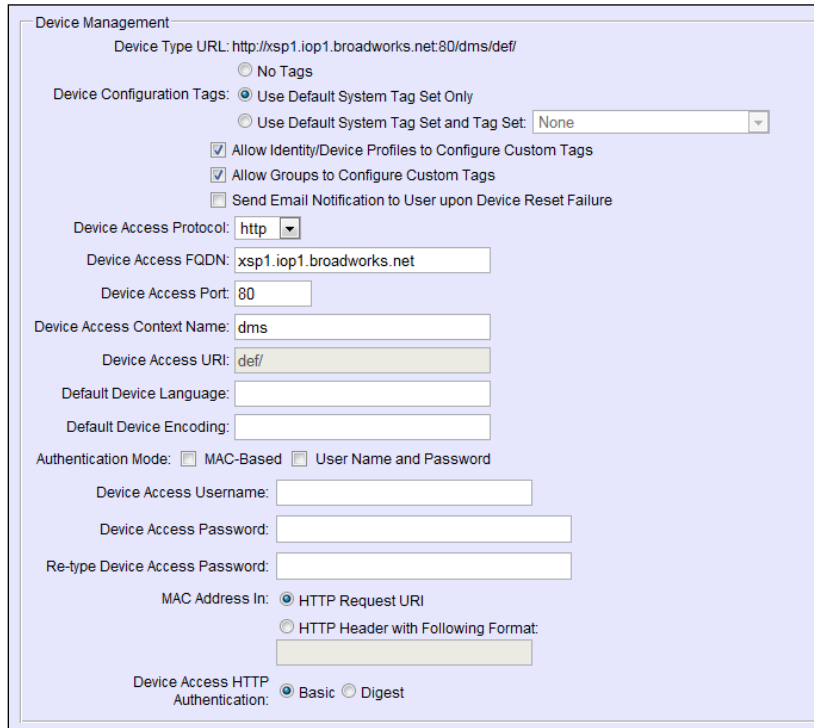
5.2.6.2.2.1.3 Configure Device Management Options

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.

Example Device Management options settings



The screenshot shows the 'Device Management' configuration page. Key settings include:

- Device Type URL:** `http://xsp1.iop1.broadworks.net:80/dms/def/`
- Device Configuration Tags:**
 - No Tags
 - Use Default System Tag Set Only
 - Use Default System Tag Set and Tag Set: `None`
- Allow Identity/Device Profiles to Configure Custom Tags
- Allow Groups to Configure Custom Tags
- Send Email Notification to User upon Device Reset Failure
- Device Access Protocol:** `http`
- Device Access FQDN:** `xsp1.iop1.broadworks.net`
- Device Access Port:** `80`
- Device Access Context Name:** `dms`
- Device Access URI:** `def/`
- Default Device Language:** (empty)
- Default Device Encoding:** (empty)
- Authentication Mode:**
 - MAC-Based
 - User Name and Password
- Device Access Username:** (empty)
- Device Access Password:** (empty)
- Re-type Device Access Password:** (empty)
- MAC Address In:**
 - HTTP Request URI
 - HTTP Header with Following Format: (empty)
- Device Access HTTP Authentication:**
 - Basic
 - Digest

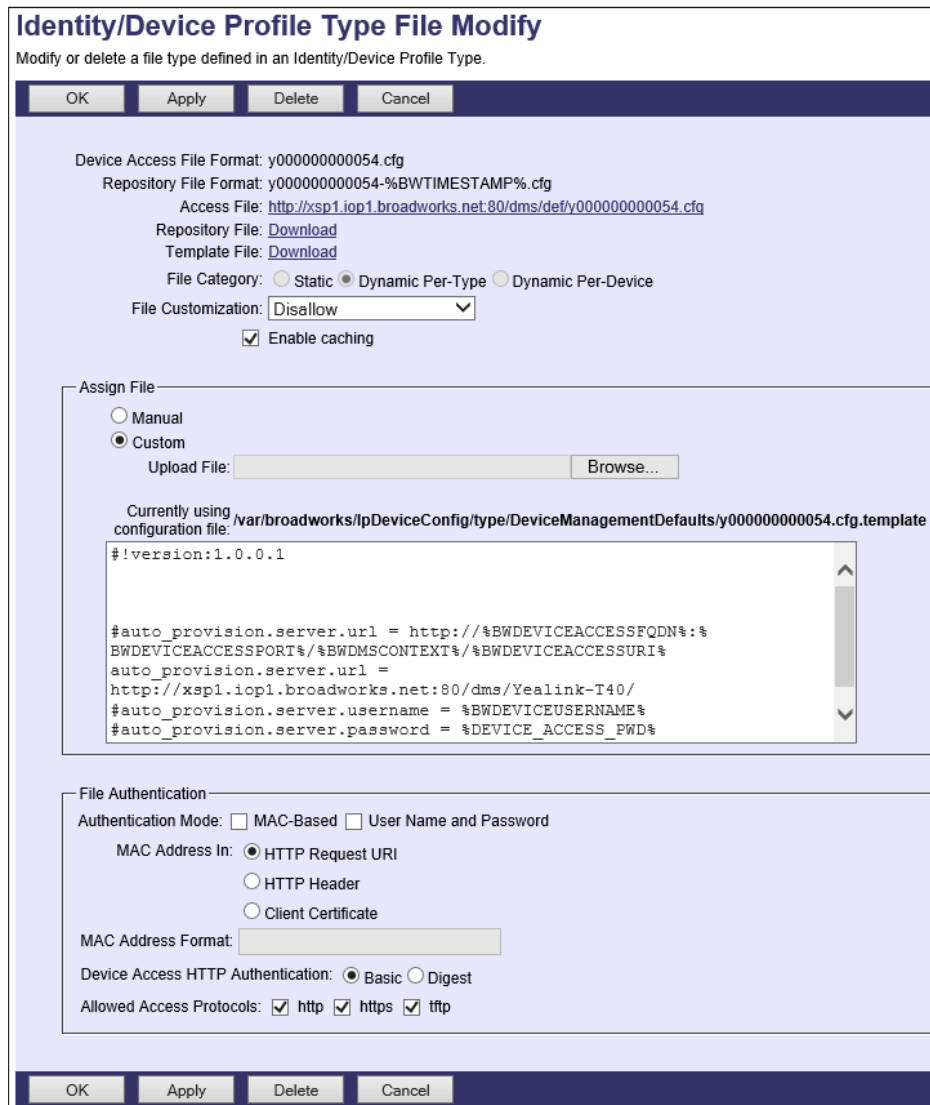
Figure 44 Device Management Options Settings

5.2.6.2.2 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 T2x devices. The files must be defined as described in the following sections.

- `y000000000xx.cfg`
- T29G: xx=46
- T27G:xx=69
- T27P: xx=45
- T23: xx=44
- T21xE2: xx=52
- T19xE2: xx=53

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



Identity/Device Profile Type File Modify
Modify or delete a file type defined in an Identity/Device Profile Type.

OK Apply Delete Cancel

Device Access File Format: y000000000054.cfg
Repository File Format: y000000000054-%BWTIMESTAMP%.cfg
Access File: <http://xsp1.iopl.broadworks.net/80/dms/def/y000000000054.cfg>
Repository File: [Download](#)
Template File: [Download](#)
File Category: Static Dynamic Per-Type Dynamic Per-Device
File Customization: Disallow
 Enable caching

Assign File
 Manual
 Custom
Upload File: Browse...

Currently using configuration file: /var/broadworks/ipDeviceConfig/type/DeviceManagementDefaults/y000000000054.cfg.template

```
#!version:1.0.0.1

#auto_provision.server.url = http://%BWDEVICEACCESSFQDN%:%
BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%
auto_provision.server.url =
http://xsp1.iopl.broadworks.net:80/dms/Yealink-T40/
#auto_provision.server.username = %BWDEVICEUSERNAME%
#auto_provision.server.password = %DEVICE_ACCESS_PWD%
```

File Authentication
Authentication Mode: MAC-Based User Name and Password
MAC Address In: HTTP Request URI
 HTTP Header
 Client Certificate
MAC Address Format:
Device Access HTTP Authentication: Basic Digest
Allowed Access Protocols: http https tftp

OK Apply Delete Cancel

Figure 45 Default y000000000054.cfg

5.2.6.2.3 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.iopl.broadworks.net/dms/def/"
}
```


Yealink T2XX 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.

5.2.6.2.4 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-T27P*.

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.iopl.broadworks.net/dms/Yealink-T27P/"
}
```

Yealink T2XX 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 web GUI.
- 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.

5.2.6.3 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 T2XX phones automatically queries the Yealink Device Management Redirect service for the associated BroadWorks URL. The Yealink T2XX 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 T2XX device profile types for the first time. Many of the steps are unnecessary when upgrading to a new firmware release or CPE kit version.

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

Appendix A: Reference T2XX Configuration Files

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: y00000000045.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" cannot be edited or deleted, and must be
placed in the first line.##
##This template file is applicable to SIP-
T28P/T26P/T22P/T20P/T21P/T19P/T46G/T42G/T41P 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
##
#####
#####
network.dhcp_host_name =

#####
#####
##
##                               PPPoE (Except T41P/T42G Models)
##
#####
#####
network.pppoe.user =
network.pppoe.password =

#####
#####
##
##                               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.
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 100Mbps (only applicable to SIP-T42G and SIP-T46G IP phones)
##The default value is 0.It takes effect after a reboot.
network.internet_port.speed_duplex =

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

network.ipv6_static_dns_enable =

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

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.
network.mtu_value =

#####
#####
##
##
##
#####
#####
network.vlan.internet_port_enable =
network.vlan.internet_port_vid =
network.vlan.internet_port_priority =
network.vlan.pc_port_enable =
network.vlan.pc_port_vid =
network.vlan.pc_port_priority =
network.vlan.dhcp_enable =
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
network.vlan.vlan_change.enable =

#####
#####
##
##
##
#####
#####
##It configures the HTTP port for web server access.
##The default value is 80.It takes effect after a reboot.
```

```
network.port.http =

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

wui.https_enable =
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
network.qos.rtpptos =

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

#####
#####
##
##                               802.1X
##
#####
#####
network.802_1x.mode =
network.802_1x.identity =
network.802_1x.md5_password =
network.802_1x.root_cert_url =
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
network.802_1x.proxy_eap_logoff.enable =
#####
#####
##
##                               OpenVPN(Except T19P Model)
##
#####
#####
network.vpn_enable =
openvpn.url =

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

#####
#####
##
##                               CDP
##
```

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

#####
#####
##                               Span to PC
##
#####
#####
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
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
network.port.min_rtpport =

#####
#####
##                               Syslog
##
#####
#####
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 ;°syslog.mode;± is configured as
Server.
##The default value is blank.It takes effect after a reboot.
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
syslog.log_level =

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

#####
#####
##                               TR069(Except T41P/T42G Models)
##
#####
#####
managementserver.enable =
```

```
managementserver.username =
managementserver.password =
managementserver.url =
managementserver.connection_request_username =
managementserver.connection_request_password =
managementserver.periodic_inform_enable =
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.
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.
auto_provision.custom.protect =

##V80 do not support(T23/T27/T61/T66/T29/T46)##
auto_provision.custom.upload_method=

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

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

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

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

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

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

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

#####
#####
##                                     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.
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.
auto_provision.aes_key_16.mac =

auto_provision.aes_key_in_file =

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

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

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



```
##                                     Autop wildcard
##
#####
#####

auto_provision.url_wildcard.pn =

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

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

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

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

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

#####
#####
##                                     Watch Dog
##
#####
#####
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 =
sip.disp_incall_to_info =
sip.limit_server_name =
sip.limit_server_reason =
sip.listen_port =
sip.tls_listen_port =
sip.trust_ctrl =
sip.nat_stun.enable =
sip.nat_stun.server =
sip.nat_stun.port =
sip.timer_t1 =
sip.timer_t2 =
sip.timer_t4 =
custom.features.redial_via_local_sip_server.enable =

##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 default 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 =

#####
#####
##                                     Volume
##
#####
#####
##V80 do not support(T23/T27/T61/T66/T29/T46)##
voice.handfree.spk_vol =
voice.handfree.tone_vol =
voice.handset.spk_vol =
voice.handset.tone_vol =
voice.headset.spk_vol =
voice.headset.tone_vol =
voice.ring_vol=
voice.group_spk_vol =

### Only T28P/T26P/T22P/T20P Models 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
##
#####
#####
auto_redial.enable =
auto_redial.interval =
auto_redial.times =

#####
#####
##                               Zero Touch
##
#####
#####
zero_touch.enable = 1
zero_touch.wait_time = 10
zero_touch.network_fail_wait_times =
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 =

dialplan_dialnow.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%dialnow.xml
phone_setting.dialnow_delay =
dialplan_replace_rule.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%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.
##The default value is blank.
ldap.name_filter =

##It configures the criteria for searching the contact number attributes.
##The default value is blank.
ldap.number_filter =

##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 iPhone.
##The default value is blank.
ldap.numb_attr =

##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 =
##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.export_cfg_erase_pwd =
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 =
action_url.show_msgbox =
features.save_init_num_to_history.enable =
features.action_uri_force_autop =
phone_setting.logon_wizard_forever_wait =
features.transfer_type =
features.caller_name_type_on_dialing =
phone_setting.unregister_account_block_out.enable=
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.dsskey_blind_tran =
```

```
features.blf_pickup_only_send_code =
features.caller_name_type_on_dialing =

##V80 do not support(T23/T27/T61/T66/T29/T46)##
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 =

features.flash_url_dsskey_led.enable =
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 =

## Only T46G Models support this parameter
features.config_dsskey_length =

#####
#####
##                               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 =

##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 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 =
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 =

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

phone_setting.ring_for_tranfailed =
phone_setting.is_deall180 =
phone_setting.show_code403 =

phone_setting.ringback_timeout =
phone_setting.ringing_timeout =

###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
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 =

###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_i's contrast
of the phone only.
###For SIP-T26P IP phones, it configures the LCD_i's contrast of the
connected EXP39 only.
###For SIP-T28P IP phones, it configures the LCD_i's contrast of the IP
phone and the connected EXP39.
###For SIP-T46G IP phones, it configures the LCD_i'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 =

###Only T20P Model supports this parameter
##It configures a text logo.
##The default value is Yealink.
phone_setting.lcd_logo.text =

###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

###Only T26P/T28P/T46G Models support the parameter
###It configures the order of BLF list keys assigned automatically.
###0-Line Keys->Memory Keys->Extension Keys
###1-Extension Keys->Memory Keys->Line Keys
###Memory keys are not applicable to SIP-T46G IP phones.
###The default value is 0.
phone_setting.blf_list_sequence_type =

#####
#####
##                               Key Lock
##
#####
#####
##Except T41P/T42G/T46G Models
phone_setting.lock =

###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%/%BWDEVICEACCESSURI%super_search.xml

#####
#####
##
##                               Security
##
#####
#####
###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:
security.user_name.admin = admin1.
###If you change the password of the administrator from "admin" to
"adminlpwd", your new administrator's password should be configured as:
security.user_password = admin1:adminlpwd.

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

###It configures the device 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.
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.
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.
security.var_enable =
web_item_level.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEA
CCESURI%WebItemsLevel.cfg

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

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

#####
#####
##
##                               Line Key
##
#####
###Except T19D Model
###T23G(P) X ranges from 1 to 3
###T27P X ranges from 1 to 21
```

```
###T29G X ranges from 1 to 27
###T66G X ranges from 1 to 21
###T61P X ranges from 1 to 6

#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 £ for T41/T42/T46/T48/T61P/T66G/T23G(P)/T27/T29G)
#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/T48/T61P/T66G/T23G(P)/T27/T29G)
#49-Custom Button (Only support T20/T22/T26/T28)

###linekey.X.line =
###linekey.X.value =
###linekey.X.pickup_value =
###linekey.X.type =
###linekey.X.xml_phonebook =
###linekey.X.label =

###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 =

###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 =

#####
#####
##                                     Programmable 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/T48G/T66G X ranges from 1 to 13
###T27P/T29G/T61P X ranges from 1 to 14

#programmablekey.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)
#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)

###programmablekey.X.type =
###programmablekey.X.line =
###programmablekey.X.value =
###programmablekey.X.xml_phonebook =
###programmablekey.X.history_type =
###programmablekey.X.label =
###programmablekey.X.pickup_value =

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

#####
#####
##                               Expansion Key(Only for T26P/T28P/T46G Models)  ##
#####
#####
###T27P/T29G/T66G/T46G/T48G 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 =

###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 =

###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 =

#####
#####
##                               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 =
##The default value is 1.Except T19P/T21P
features.auto_exit_logon_wizard.enable =
#####
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 =

#####
#####
##                               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 =
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

```

```
##V80 do not support (T23/T27/T61/T66/T29/T46)##
directory.edit_default_input_method =
directory.search_default_input_method =

phone_setting.dsskey_directory_auto.enable =

#####
#####
##
##                               Custom Factory Configuration
##
#####
##V80 do not support (T23/T27/T61/T66/T29/T46)##
custom_factory_configuration.url =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%factory.cfg
features.custom_factory_config.enable =

#####
#####
##
##                               Custom Configuration
##
#####
##V80 do not support (T23/T27/T61/T66/T29/T46)##
configuration.url =

#####
#####
##
##                               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%/%BWDEVICEACCESSURI%%T27_FIRMWARE%
```

```
#####  
#####  
##                                RTCP  
##  
#####  
#####  
phone_setting.rtcp_xr_report.enable =  
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_mosclq.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 =  
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 =
```

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" cannot be edited or deleted, and must be
placed in the first line.##
##This template file is applicable to SIP-
T28P/T26P/T22P/T20P/T21P/T19P/T46G/T42G/T41P 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 = %BWLIN-BINARY-1%
account.1.label = %BWEXTENSION-1%
account.1.display_name = %BWCLID-1%
account.1.auth_name = %BWAUTHUSER-1%
account.1.user_name = %BWLINPORT-1%
account.1.password = %BWAUTHPASSWORD-1%
account.1.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.1.outbound_host = %SBC_ADDRESS%
account.1.outbound_port = %SBC_PORT%
account.1.dial_tone =

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

#####
#####
##
##                               Failback
##
#####
#####
account.1.naptr_build =
account.1.failback.redundancy_type =
account.1.failback.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 =
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 =
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.srv_ttl_timer_enable =
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.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.1.nat.stun_server =

##It configures the port of the STUN server for account X.
##The default value is 3478.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.1.nat.stun_port =
```

```
##It configures the type of keep-alive packets sent by the phone to the
NAT device to keep the communication port open so that NAT can continue to
function for account X.
##0-Disabled,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 =

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

#####
#####
##
##
##
#####
#####

##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 =

#####
#####
##
##
##
#####
#####
##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)
##
#####
#####
##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%

##It config whether you can retrieve the remote hold call through line key
##The default value is 1
account.1.shared_line_one_touch_retrieve.enable=

##It config whether you can barge in the active call through line key
##The default value is 1
account.1.shared_line_one_touch_bargein.enable =
#####
#####
##
##                               BroadSoft 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
##
#####
#####
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P/T41P/T42G/T46G support codec1~codec11

account.1.codec.1.enable =
account.1.codec.1.payload_type =
account.1.codec.1.priority =
account.1.codec.1.rtpmap =

account.1.codec.2.enable =
account.1.codec.2.payload_type =
account.1.codec.2.priority =
account.1.codec.2.rtpmap =

account.1.codec.3.enable =
account.1.codec.3.payload_type =
account.1.codec.3.priority =
account.1.codec.3.rtpmap =

account.1.codec.4.enable =
account.1.codec.4.payload_type =
account.1.codec.4.priority =
account.1.codec.4.rtpmap =

account.1.codec.5.enable =
account.1.codec.5.payload_type =
```

```
account.1.codec.5.priority =
account.1.codec.5.rtpmap =

account.1.codec.6.enable =
account.1.codec.6.payload_type =
account.1.codec.6.priority =
account.1.codec.6.rtpmap =

account.1.codec.7.enable =
account.1.codec.7.payload_type =
account.1.codec.7.priority =
account.1.codec.7.rtpmap =

account.1.codec.8.enable =
account.1.codec.8.payload_type =
account.1.codec.8.priority =
account.1.codec.8.rtpmap =

account.1.codec.9.enable =
account.1.codec.9.payload_type =
account.1.codec.9.priority =
account.1.codec.9.rtpmap =

account.1.codec.10.enable =
account.1.codec.10.payload_type =
account.1.codec.10.priority =
account.1.codec.10.rtpmap =

account.1.codec.11.enable =
account.1.codec.11.payload_type =
account.1.codec.11.priority =
account.1.codec.11.rtpmap =

#####
#####
##                               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.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
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.1.srtp_auth_tag_mode =

#####
#####
##                               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.
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 = %BNETWORK-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 =

##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
##
#####
#####
account.1.hoteling.enable =
account.1.hoteling.user_id =
account.1.hoteling.password =
account.1.hoteling.auto_login_enable =

#####
#####
##                               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.iopl.broadworks.net.
##The default value is blank.
account.1.xsi.user =

##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 =

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

##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 =

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

```
##                                     Account2 Basic Settings
##
#####
#####
account.2.enable = %BWLIN-BINARY-2%
account.2.label = %BWEXTENSION-2%
account.2.display_name = %BWCLID-2%
account.2.auth_name = %BWAUTHUSER-2%
account.2.user_name = %BWLINPORT-2%
account.2.password = %BWAUTHPASSWORD-2%
account.2.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.2.outbound_host = %SBC_ADDRESS%
account.2.outbound_port = %SBC_PORT%
account.2.dial_tone =

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

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

account.2.naptr_build =
account.2.failback.redundancy_type =
account.2.failback.timeout =
account.2.sip_server.1.address = %BWHOST-2%
account.2.sip_server.1.port =
account.2.sip_server.1.expires =
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 =
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.srv_ttl_timer_enable =
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.
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.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.2.nat.stun_server =

##It configures the port of the STUN server for account X.
##The default value is 3478.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.2.nat.stun_port =

##It configures the type of keep-alive packets sent by the phone to the
NAT device to keep the communication port open so that NAT can continue to
function for account X.
##0-Disabled,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 =

#####
#####
##
##                               Account1 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 =

##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=

#####
#####
##
##
##
#####
#####
##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%

##It config whether you can retrieve the remote hold call through line key
##The default value is 1
account.2.shared_line_one_touch_retrieve.enable=

##It config whether you can barge in the active call through line key
##The default value is 1
account.2.shared_line_one_touch_bargein.enable =
#####
#####
##
##
##
#####
#####
##
##
##
#####
#####
##
##
##
#####
#####
##
##
##
#####
#####

```

```
#####  
#####  
##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  
##  
#####  
#####  
###T19D/T21D support codecl~codec8  
###T20P/T22P/T26P/T28P/T41P/T42G/T46G support codecl~codec11  
  
account.2.codec.1.enable =  
account.2.codec.1.payload_type =  
account.2.codec.1.priority =  
account.2.codec.1.rtpmap =  
  
account.2.codec.2.enable =  
account.2.codec.2.payload_type =  
account.2.codec.2.priority =  
account.2.codec.2.rtpmap =  
  
account.2.codec.3.enable =  
account.2.codec.3.payload_type =  
account.2.codec.3.priority =  
account.2.codec.3.rtpmap =  
  
account.2.codec.4.enable =  
account.2.codec.4.payload_type =  
account.2.codec.4.priority =  
account.2.codec.4.rtpmap =  
  
account.2.codec.5.enable =  
account.2.codec.5.payload_type =  
account.2.codec.5.priority =  
account.2.codec.5.rtpmap =  
  
account.2.codec.6.enable =  
account.2.codec.6.payload_type =  
account.2.codec.6.priority =  
account.2.codec.6.rtpmap =  
  
account.2.codec.7.enable =  
account.2.codec.7.payload_type =  
account.2.codec.7.priority =  
account.2.codec.7.rtpmap =  
  
account.2.codec.8.enable =  
account.2.codec.8.payload_type =  
account.2.codec.8.priority =  
account.2.codec.8.rtpmap =  
  
account.2.codec.9.enable =  
account.2.codec.9.payload_type =  
account.2.codec.9.priority =  
account.2.codec.9.rtpmap =  
  
account.2.codec.10.enable =
```

```
account.2.codec.10.payload_type =
account.2.codec.10.priority =
account.2.codec.10.rtpmap =

account.2.codec.11.enable =
account.2.codec.11.payload_type =
account.2.codec.11.priority =
account.2.codec.11.rtpmap =

#####
#####
##                               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
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.2.srtp_auth_tag_mode =

#####
#####
##                               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%
##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 =
```



```
#####  
#####  
##                               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 =
```

```
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_rtcp_xr.collector_name=
account.2.vq_rtcp_xr.collector_server_host=
account.2.vq_rtcp_xr.collector_server_port=

#####
#####
##                               BroadSoft Hoteling
##
#####
#####
account.2.hoteling.enable =
account.2.hoteling.user_id =
account.2.hoteling.password =
account.2.hoteling.auto_login_enable =

#####
#####
##                               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 =
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.iopl.broadworks.net.
##The default value is blank.
account.2.xsi.user =

##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 =

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

##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 =

#####
#####
##                                Account3 Basic Settings
##
#####
#####
account.3.enable = %BWLIN-BINARY-3%
account.3.label = %BWEXTENSION-3%
account.3.display_name = %BWCLID-3%
account.3.auth_name = %BWAUTHUSER-3%
account.3.user_name = %BWLINPORT-3%
account.3.password = %BWAUTHPASSWORD-3%
account.3.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.3.outbound_host = %SBC_ADDRESS%
account.3.outbound_port = %SBC_PORT%
account.3.dial_tone =

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

```
#####
#####
##                               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 =
account.3.sip_server.1.expires =
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 =
account.3.register_expires_overlap =
account.3.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.3.sip_server_type = 2

account.3.unregister_on_reboot =
account.3.proxy_require =
account.3.srv_ttl_timer_enable =
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.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.3.nat.stun_server =

##It configures the port of the STUN server for account X.
##The default value is 3478.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.3.nat.stun_port =

##It configures the type of keep-alive packets sent by the phone to the
NAT device 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 =

#####
#####
##                               Account1 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
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.
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%

##It config whether you can retrieve the remote hold call through line key
##The default value is 1
account.3.shared_line_one_touch_retrieve.enable=

##It config whether you can barge in the active call through line key
##The default value is 1
account.3.shared_line_one_touch_bargein.enable =
#####
#####
##                               BroadSoft 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
##
#####
#####
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P/T41P/T42G/T46G support codec1~codec11

account.3.codec.1.enable =
account.3.codec.1.payload_type =
account.3.codec.1.priority =
account.3.codec.1.rtpmap =

account.3.codec.2.enable =
account.3.codec.2.payload_type =
account.3.codec.2.priority =
account.3.codec.2.rtpmap =

```

```
account.3.codec.3.enable =
account.3.codec.3.payload_type =
account.3.codec.3.priority =
account.3.codec.3.rtpmap =

account.3.codec.4.enable =
account.3.codec.4.payload_type =
account.3.codec.4.priority =
account.3.codec.4.rtpmap =

account.3.codec.5.enable =
account.3.codec.5.payload_type =
account.3.codec.5.priority =
account.3.codec.5.rtpmap =

account.3.codec.6.enable =
account.3.codec.6.payload_type =
account.3.codec.6.priority =
account.3.codec.6.rtpmap =

account.3.codec.7.enable =
account.3.codec.7.payload_type =
account.3.codec.7.priority =
account.3.codec.7.rtpmap =

account.3.codec.8.enable =
account.3.codec.8.payload_type =
account.3.codec.8.priority =
account.3.codec.8.rtpmap =

account.3.codec.9.enable =
account.3.codec.9.payload_type =
account.3.codec.9.priority =
account.3.codec.9.rtpmap =

account.3.codec.10.enable =
account.3.codec.10.payload_type =
account.3.codec.10.priority =
account.3.codec.10.rtpmap =

account.3.codec.11.enable =
account.3.codec.11.payload_type =
account.3.codec.11.priority =
account.3.codec.11.rtpmap =

#####
#####
##                               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
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.3.srtp_auth_tag_mode =

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

#####
#####
##
##
##
#####
#####
##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 = %BWNWORK-CONFERENCE-SIPURI-3%

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

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

#####
#####
##
##
##
#####
#####
##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 =  
  
#####  
#####  
##                               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_rtcp_xr.collector_name=  
account.3.vq_rtcp_xr.collector_server_host=  
account.3.vq_rtcp_xr.collector_server_port=  
  
#####  
#####  
##                               BroadSoft Hoteling  
##  
#####  
#####  
account.3.hoteling.enable =  
account.3.hoteling.user_id =  
account.3.hoteling.password =  
account.3.hoteling.auto_login_enable =
```

```

#####
#####
##                               BroadSoft ACD
##
#####
#####
account.3.acd.enable =
account.3.acd.unavailable_reason_enable =
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.iopl.broadworks.net.
##The default value is blank.
account.3.xsi.user =

##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 =

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

##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 =

#####
#####
##                               Account4 Basic Settings
##
#####
#####
account.4.enable = %BWLIN-BINARY-4%
account.4.label = %BWEEXTENSION-4%
account.4.display_name = %BWCLID-4%
account.4.auth_name = %BWAUTHUSER-4%
account.4.user_name = %BWLINPORT-4%
account.4.password = %BWAUTHPASSWORD-4%
account.4.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.4.outbound_host = %SBC_ADDRESS%
account.4.outbound_port = %SBC_PORT%
account.4.dial_tone =

##It configures the transport type for account 1. 0-UDP,1-TCP,2-TLS,3-DNS-
NAPTR
##The default value is 0.
account.4.sip_server.1.transport_type =
##It configures the backup server transport type for account 1. 0-UDP,1-
TCP,2-TLS,3-DNS-NAPTR
##The default value is 0.
account.4.sip_server.2.transport_type =

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

account.4.naptr_build =
account.4.fallback.redundancy_type =
account.4.fallback.timeout =
account.4.sip_server.1.address = %BWHOST-4%
account.4.sip_server.1.port =
account.4.sip_server.1.expires =
account.4.sip_server.1.retry_counts =
account.4.sip_server.1.failback_mode =
account.4.sip_server.1.failback_timeout =
account.4.sip_server.1.register_on_enable =

account.4.sip_server.2.address =
account.4.sip_server.2.port =
account.4.sip_server.2.expires =
account.4.sip_server.2.retry_counts =
account.4.sip_server.2.failback_mode =
account.4.sip_server.2.failback_timeout =
account.4.sip_server.2.register_on_enable =
```

```
account.4.dns_cache_type =
account.4.static_cache_pri =
account.4.register_expires_overlap =
account.4.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.4.sip_server_type = 2

account.4.unregister_on_reboot =
account.4.proxy_require =
account.4.srv_ttl_timer_enable =
account.4.register_mac =
account.4.register_line =
account.4.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.4.nat.nat_traversal =

##It configures the IP address or domain name of the STUN server for
account X.
##The default value is blank.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.4.nat.stun_server =

##It configures the port of the STUN server for account X.
##The default value is 3478.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.4.nat.stun_port =

##It configures the type of keep-alive packets sent by the phone to the
NAT device to keep the communication port open so that NAT can continue to
function for account X.
##0-Disabled,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.4.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.4.nat.udp_update_time =

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

```
account.4.nat.rport =

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

##It configures the voice mail number for account X.
##The default value is blank.
voice_mail.number.4 = %BWVOICE-PORTAL-NUMBER-4%

##Except T19P/T21P Models
account.4.auto_dial_enable =
account.4.auto_dial_num =

account.4.call_id_mode =
account.4.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.4.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.4.mwi_parse_terminated =

##It configures the interval (in seconds) of MWI subscription for account
X.
##The default value is 3600.
account.4.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.4.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.4.subscribe_acd_expires=

account.4.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.4.blf.blf_list_uri = %BWBLF-URI-4%
##It configures the feature access code for directed call pickup (default:
*97) for account X.
##The default value is blank.
account.4.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-4%
##It configures the feature access code for directed call pickup with
barge-in (default: *33) for account X.
##The default value is blank.
account.4.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-
IN-4%

##It configures the period (in seconds) of the BLF subscription for
account X.
##The default value is 1800.Integer from 30 to 2147483647.
account.4.blf.subscribe_period =

##It configures the event of the BLF subscription for account X.0-
Dialog,1-Presence.
##The default value is 0.
account.4.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.4.out_dialog_blf_enable =

##It configures the BLF List Retrieve call parked code for account X.
##The default value is blank
account.4.blf_list_retrieve_call_parked_code =

account.4.blf.match_host.enable=

#####
#####
##
##
##
#####
#####
##It enables or disables BroadSoft SCA feature for account X.0-Disabled,1-
BroadSoft SCA.
##The default value is 0.
account.4.shared_line = %BWSHAREDLINE-BINARY-4%
##It configures the BLA number for account X.
##The default value is blank.
account.4.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.4.bla_subscribe_period =

##Except T19P/T21P Models
##It configures the Call Pull Feature access code for account X.
##The default value is blank.
account.4.shared_line_callpull_code =
##It configures number of linekey for line.
##The default value is 1,you should enable auto line keys first.
account.4.number_of_linekey = %NUM_OF_LINEKEYS%

##It config whether you can retrieve the remote hold call through line key
##The default value is 1
account.4.shared_line_one_touch_retrieve.enable=
```



```
##It config whether you can barge in the active call through line key
##The default value is 1
account.4.shared_line_one_touch_bargein.enable =
#####
#####
##                               BroadSoft Callpark
##
#####
#####
##It enables or disables BroadSoft Callpark for account X.0-Disabled,1-
BroadSoft SCA.
##The default value is 0.
account.4.callpark_enable =

#####
#####
##                               Audio Codec
##
#####
#####
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P/T41P/T42G/T46G support codec1~codec11

account.4.codec.1.enable =
account.4.codec.1.payload_type =
account.4.codec.1.priority =
account.4.codec.1.rtpmap =

account.4.codec.2.enable =
account.4.codec.2.payload_type =
account.4.codec.2.priority =
account.4.codec.2.rtpmap =

account.4.codec.3.enable =
account.4.codec.3.payload_type =
account.4.codec.3.priority =
account.4.codec.3.rtpmap =

account.4.codec.4.enable =
account.4.codec.4.payload_type =
account.4.codec.4.priority =
account.4.codec.4.rtpmap =

account.4.codec.5.enable =
account.4.codec.5.payload_type =
account.4.codec.5.priority =
account.4.codec.5.rtpmap =

account.4.codec.6.enable =
account.4.codec.6.payload_type =
account.4.codec.6.priority =
account.4.codec.6.rtpmap =

account.4.codec.7.enable =
account.4.codec.7.payload_type =
account.4.codec.7.priority =
account.4.codec.7.rtpmap =

account.4.codec.8.enable =
account.4.codec.8.payload_type =
account.4.codec.8.priority =
```

```
account.4.codec.8.rtpmap =

account.4.codec.9.enable =
account.4.codec.9.payload_type =
account.4.codec.9.priority =
account.4.codec.9.rtpmap =

account.4.codec.10.enable =
account.4.codec.10.payload_type =
account.4.codec.10.priority =
account.4.codec.10.rtpmap =

account.4.codec.11.enable =
account.4.codec.11.payload_type =
account.4.codec.11.priority =
account.4.codec.11.rtpmap =

#####
#####
##                               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.4.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.4.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
##V80 do not support (T23/T27/T61/T66/T29/T46)##
account.4.srtp_auth_tag_mode =

#####
#####
##                               Anonymous Call
##
#####
#####
account.4.send_anonymous_code =
account.4.anonymous_call =
account.4.anonymous_call_oncode =
account.4.anonymous_call_offcode =
account.4.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.4.anonymous_reject_oncode =
account.4.anonymous_reject_offcode =
account.4.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.4.dialoginfo_callpickup =

##It configures the group pickup code for account X.
##The default value is blank.
account.4.group_pickup_code = %BWFAC-CALL-PICKUP-4%
##It configures the directed pickup code for account X.
##The default value is blank.
account.4.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-4%

#####
#####
##
##
##
#####
#####
account.4.dtmf.type =
account.4.dtmf.info_type =
account.4.dtmf.dtmf_payload =

#####
#####
##
##
##
#####
#####
##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.4.alert_info_url_enable =
##Except T19P/T21P Models
##The default value is blank. Values range 256 characters in length
account.4.alert_info =

account.4.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.4.picture_info_enable =

#####
#####
##
##
##
#####
#####
##It configures the conference type for account X.0-Local Conference,2-
Network Conference.
##The default value is 0.
account.4.conf_type =

##It configures the network conference URI for account X.
##The default value is blank.
account.4.conf_uri = %BWNWORK-CONFERENCE-SIPURI-4%

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

```

##                               CID Source
##
#####
#####
account.4.cid_source =
account.4.cid_source_privacy =
account.4.cid_source_ppi =
account.4.cp_source =

#####
#####

##                               Session Timer
##
#####
#####
account.4.session_timer.enable =
account.4.session_timer.expires =
account.4.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.4.music_on_hold_type =

##It configures the URI of the Music On Hold server for account X.
##The default value is blank.
account.4.music_server_uri =

#####
#####

##                               Advanced
##
#####
#####
account.4.auto_answer = %AUTO_ANSWER_BINARY%
account.4.missed_calllog =
account.4.100rel_enable =
account.4.enable_user_equal_phone =
account.4.compact_header_enable =
account.4.custom_ua =

#####
#####

##                               DND(Except T19 Model)
##
#####
#####
account.4.dnd.enable =
account.4.dnd.on_code =
account.4.dnd.off_code =

#####
#####

##                               Call Forward(Except T19 Model)
##

```

```
#####
#####
account.4.always_fwd.enable =
account.4.always_fwd.target =
account.4.always_fwd.off_code =
account.4.always_fwd.on_code =
account.4.busy_fwd.enable =
account.4.busy_fwd.target =
account.4.busy_fwd.off_code =
account.4.busy_fwd.on_code =
account.4.timeout_fwd.enable =
account.4.timeout_fwd.target =
account.4.timeout_fwd.timeout =
account.4.timeout_fwd.off_code =
account.4.timeout_fwd.on_code =

#####
#####
##                               Voice Monitoring   (Except T19P/T21P
Models)                               ##
#####
#####
account.4.vq_rtcp_xr.collector_name=
account.4.vq_rtcp_xr.collector_server_host=
account.4.vq_rtcp_xr.collector_server_port=

#####
#####
##                               BroadSoft Hoteling
##
#####
#####
account.4.hoteling.enable =
account.4.hoteling.user_id =
account.4.hoteling.password =
account.4.hoteling.auto_login_enable =

#####
#####
##                               BroadSoft ACD
##
#####
#####
account.4.acd.enable =
account.4.acd.unavailable_reason_enable =
account.4.acd.available =
account.4.acd.initial_state =

#####
#####
##                               BroadSoft ACD Call Center
##
#####
#####
account.4.reason_code.1 =
account.4.reason_code_name.1 =
account.4.bw_disp_code.1 =
account.4.bw_disp_code_name.1 =
account.4.supervisor_info_code.1 =
account.4.supervisor_info_code_name.1 =

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

```

##                               BroadSoft Call Center
##
#####
#####
account.4.call_center.call_info_enable =
account.4.call_center.show_call_info_time =
account.4.call_center.disp_code_enable =
account.4.call_center.trace_enable =
account.4.call_center.emergency_enable =
account.4.call_center.queue_status_enable =
account.4.call_center.queue_status_light_enable =

#####
#####
##                               BroadSoft XSI                               ##
#####
#####
##It configures the user name for XSI authentication for account
X.Example:account.4.xsi.user = 3502@as.iopl.broadworks.net.
##The default value is blank.
account.4.xsi.user =

##It configures the password for XSI authentication for account
X.Example:account.4.xsi.password = 123456.
##The default value is blank.
account.4.xsi.password =

##It configures the access URL of the Xtended Services Platform server for
account X.Example:account.4.xsi.host = xspl.iopl.broadworks.net.
##The default value is blank.
account.4.xsi.host =

##It configures the server type of the Xtended Services Platform server
for account X.Example:account.4.xsi.server_type = http.
##The default value is http.
account.4.xsi.server_type =

##It configures the server port of the Xtended Services Platform server
for account X.Example:account.4.xsi.port = 80.
##The default value is 80.Integer from 1 to 65535
account.4.xsi.port =
#####
#####
##                               Account5 Basic Settings                               ##
##
#####
#####
account.5.enable = %BWLIN-BINARY-5%
account.5.label = %BWEXTENSION-5%
account.5.display_name = %BWCLID-5%
account.5.auth_name = %BWAUTHUSER-5%
account.5.user_name = %BWLINPORT-5%
account.5.password = %BWAUTHPASSWORD-5%
account.5.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.5.outbound_host = %SBC_ADDRESS%
account.5.outbound_port = %SBC_PORT%
account.5.dial_tone =

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

```

```
##The default value is 0.
account.5.sip_server.1.transport_type =
##It configures the backup server transport type for account 1. 0-UDP,1-
TCP,2-TLS,3-DNS-NAPTR
##The default value is 0.
account.5.sip_server.2.transport_type =

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

account.5.naptr_build =
account.5.fallback.redundancy_type =
account.5.fallback.timeout =
account.5.sip_server.1.address = %BWHOST-5%
account.5.sip_server.1.port =
account.5.sip_server.1.expires =
account.5.sip_server.1.retry_counts =
account.5.sip_server.1.failback_mode =
account.5.sip_server.1.failback_timeout =
account.5.sip_server.1.register_on_enable =

account.5.sip_server.2.address =
account.5.sip_server.2.port =
account.5.sip_server.2.expires =
account.5.sip_server.2.retry_counts =
account.5.sip_server.2.failback_mode =
account.5.sip_server.2.failback_timeout =
account.5.sip_server.2.register_on_enable =

account.5.dns_cache_type =
account.5.static_cache_pri =
account.5.register_expires_overlap =
account.5.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.5.sip_server_type = 2

account.5.unregister_on_reboot =
account.5.proxy_require =
account.5.srv_ttl_timer_enable =
account.5.register_mac =
account.5.register_line =
account.5.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.5.nat.nat_traversal =

##It configures the IP address or domain name of the STUN server for
account X.
##The default value is blank.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.5.nat.stun_server =

##It configures the port of the STUN server for account X.
##The default value is 3478.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.5.nat.stun_port =

##It configures the type of keep-alive packets sent by the phone to the
NAT device 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.5.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.5.nat.udp_update_time =

##It enables or disables NAT Rport feature for account X.0-Disabled,1-
Enabled
##The default value is 0.
account.5.nat.rport =

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

##It configures the voice mail number for account X.
##The default value is blank.
voice_mail.number.5 = %BWVOICE-PORTAL-NUMBER-5%

##Except T19P/T21P Models
account.5.auto_dial_enable =
account.5.auto_dial_num =

account.5.call_id_mode =
account.5.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.5.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.5.mwi_parse_terminated =

##It configures the interval (in seconds) of MWI subscription for account
X.
##The default value is 3600.
account.5.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.5.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.5.subscribe_acd_expires=

account.5.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.5.blf.blf_list_uri = %BWBLF-URI-5%
##It configures the feature access code for directed call pickup (default:
*97) for account X.
##The default value is blank.
account.5.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-5%
##It configures the feature access code for directed call pickup with
barge-in (default: *33) for account X.
##The default value is blank.
account.5.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-
IN-5%

##It configures the period (in seconds) of the BLF subscription for
account X.
##The default value is 1800.Integer from 30 to 2147483647.
account.5.blf.subscribe_period =

##It configures the event of the BLF subscription for account X.0-
Dialog,1-Presence.
##The default value is 0.
account.5.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.5.out_dialog_blf_enable =

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

```
account.5.blf_list_retrieve_call_parked_code =

account.5.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.5.shared_line = %BWSHAREDLINE-BINARY-5%
##It configures the BLA number for account X.
##The default value is blank.
account.5.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.5.bla_subscribe_period =

##Except T19P/T21P Models
##It configures the Call Pull Feature access code for account X.
##The default value is blank.
account.5.shared_line_callpull_code =
##It configures number of linekey for line.
##The default value is 1,you should enable auto line keys first.
account.5.number_of_linekey = %NUM_OF_LINEKEYS%

##It config whether you can retrieve the remote hold call through line key
##The default value is 1
account.5.shared_line_one_touch_retrieve.enable=

##It config whether you can barge in the active call through line key
##The default value is 1
account.5.shared_line_one_touch_bargein.enable =
#####
#####
##                               BroadSoft Callpark
##
#####
#####
##It enables or disables BroadSoft Callpark for account X.0-Disabled,1-
BroadSoft SCA.
##The default value is 0.
account.5.callpark_enable =

#####
#####
##                               Audio Codec
##
#####
#####
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P/T41P/T42G/T46G support codec1~codec11

account.5.codec.1.enable =
account.5.codec.1.payload_type =
account.5.codec.1.priority =
account.5.codec.1.rtpmap =
```

```
account.5.codec.2.enable =
account.5.codec.2.payload_type =
account.5.codec.2.priority =
account.5.codec.2.rtpmap =

account.5.codec.3.enable =
account.5.codec.3.payload_type =
account.5.codec.3.priority =
account.5.codec.3.rtpmap =

account.5.codec.4.enable =
account.5.codec.4.payload_type =
account.5.codec.4.priority =
account.5.codec.4.rtpmap =

account.5.codec.5.enable =
account.5.codec.5.payload_type =
account.5.codec.5.priority =
account.5.codec.5.rtpmap =

account.5.codec.6.enable =
account.5.codec.6.payload_type =
account.5.codec.6.priority =
account.5.codec.6.rtpmap =

account.5.codec.7.enable =
account.5.codec.7.payload_type =
account.5.codec.7.priority =
account.5.codec.7.rtpmap =

account.5.codec.8.enable =
account.5.codec.8.payload_type =
account.5.codec.8.priority =
account.5.codec.8.rtpmap =

account.5.codec.9.enable =
account.5.codec.9.payload_type =
account.5.codec.9.priority =
account.5.codec.9.rtpmap =

account.5.codec.10.enable =
account.5.codec.10.payload_type =
account.5.codec.10.priority =
account.5.codec.10.rtpmap =

account.5.codec.11.enable =
account.5.codec.11.payload_type =
account.5.codec.11.priority =
account.5.codec.11.rtpmap =

#####
#####
##                               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.5.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.5.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
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.5.srtp_auth_tag_mode =

#####
#####
##
##           Anonymous Call
##
#####
#####
account.5.send_anonymous_code =
account.5.anonymous_call =
account.5.anonymous_call_oncode =
account.5.anonymous_call_offcode =
account.5.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.5.anonymous_reject_oncode =
account.5.anonymous_reject_offcode =
account.5.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.5.dialoginfo_callpickup =

##It configures the group pickup code for account X.
##The default value is blank.
account.5.group_pickup_code = %BWFAC-CALL-PICKUP-5%
##It configures the directed pickup code for account X.
##The default value is blank.
account.5.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-5%

#####
#####
##
##           DTMF
##
#####
#####
account.5.dtmf.type =
account.5.dtmf.info_type =
account.5.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.5.alert_info_url_enable =
##Except T19P/T21P Models
##The default value is blank.Values range 256 characters in length
account.5.alert_info =

account.5.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.5.picture_info_enable =

#####
#####
##
##                               Conference
##
#####
#####
##It configures the conference type for account X.0-Local Conference,2-
Network Conference.
##The default value is 0.
account.5.conf_type =

##It configures the network conference URI for account X.
##The default value is blank.
account.5.conf_uri = %BNETWORK-CONFERENCE-SIPURI-5%

#####
#####
##
##                               CID Source
##
#####
#####
account.5.cid_source =
account.5.cid_source_privacy =
account.5.cid_source_ppi =
account.5.cp_source =

#####
#####
##
##                               Session Timer
##
#####
#####
account.5.session_timer.enable =
account.5.session_timer.expires =
account.5.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.5.music_on_hold_type =
```

```
##It configures the URI of the Music On Hold server for account X.
##The default value is blank.
account.5.music_server_uri =

#####
#####
##                               Advanced
##
#####
#####
account.5.auto_answer = %AUTO_ANSWER_BINARY%
account.5.missed_calllog =
account.5.100rel_enable =
account.5.enable_user_equal_phone =
account.5.compact_header_enable =
account.5.custom_ua =

#####
#####
##                               DND(Except T19 Model)
##
#####
#####
account.5.dnd.enable =
account.5.dnd.on_code =
account.5.dnd.off_code =

#####
#####
##                               Call Forward(Except T19 Model)
##
#####
#####
account.5.always_fwd.enable =
account.5.always_fwd.target =
account.5.always_fwd.off_code =
account.5.always_fwd.on_code =
account.5.busy_fwd.enable =
account.5.busy_fwd.target =
account.5.busy_fwd.off_code =
account.5.busy_fwd.on_code =
account.5.timeout_fwd.enable =
account.5.timeout_fwd.target =
account.5.timeout_fwd.timeout =
account.5.timeout_fwd.off_code =
account.5.timeout_fwd.on_code =

#####
#####
##                               Voice Monitoring (Except T19P/T21P
Models)                               ##
#####
#####
account.5.vq_rtcp_xr.collector_name=
account.5.vq_rtcp_xr.collector_server_host=
account.5.vq_rtcp_xr.collector_server_port=

#####
#####
##                               BroadSoft Hoteling
##
#####
#####
```

```

account.5.hoteling.enable =
account.5.hoteling.user_id =
account.5.hoteling.password =
account.5.hoteling.auto_login_enable =

#####
#####
##                               BroadSoft ACD
##
#####
#####
account.5.acd.enable =
account.5.acd.unavailable_reason_enable =
account.5.acd.available =
account.5.acd.initial_state =

#####
#####
##                               BroadSoft ACD Call Center
##
#####
#####
account.5.reason_code.1 =
account.5.reason_code_name.1 =
account.5.bw_disp_code.1 =
account.5.bw_disp_code_name.1 =
account.5.supervisor_info_code.1 =
account.5.supervisor_info_code_name.1 =

#####
#####
##                               BroadSoft Call Center
##
#####
#####
account.5.call_center.call_info_enable =
account.5.call_center.show_call_info_time =
account.5.call_center.disp_code_enable =
account.5.call_center.trace_enable =
account.5.call_center.emergency_enable =
account.5.call_center.queue_status_enable =
account.5.call_center.queue_status_light_enable =

#####
#####
##                               BroadSoft XSI                               ##
#####
#####
##It configures the user name for XSI authentication for account
X.Example:account.5.xsi.user = 3502@as.iopl.broadworks.net.
##The default value is blank.
account.5.xsi.user =

##It configures the password for XSI authentication for account
X.Example:account.5.xsi.password = 123456.
##The default value is blank.
account.5.xsi.password =

##It configures the access URL of the Xtended Services Platform server for
account X.Example:account.5.xsi.host = xsp1.iopl.broadworks.net.
##The default value is blank.
account.5.xsi.host =

```

```
##It configures the server type of the Xtended Services Platform server
for account X.Example:account.5.xsi.server_type = http.
##The default value is http.
account.5.xsi.server_type =

##It configures the server port of the Xtended Services Platform server
for account X.Example:account.5.xsi.port = 80.
##The default value is 80.Integer from 1 to 65535
account.5.xsi.port =

#####
#####
##
##                               Account6 Basic Settings
##
#####
#####
account.6.enable = %BWLIN-BINARY-6%
account.6.label = %BWEXTENSION-6%
account.6.display_name = %BWCLID-6%
account.6.auth_name = %BWAUTHUSER-6%
account.6.user_name = %BWLINPORT-6%
account.6.password = %BWAUTHPASSWORD-6%
account.6.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.6.outbound_host = %SBC_ADDRESS%
account.6.outbound_port = %SBC_PORT%
account.6.dial_tone =

##It configures the transport type for account 1. 0-UDP,1-TCP,2-TLS,3-DNS-
NAPTR
##The default value is 0.
account.6.sip_server.1.transport_type =
##It configures the backup server transport type for account 1. 0-UDP,1-
TCP,2-TLS,3-DNS-NAPTR
##The default value is 0.
account.6.sip_server.2.transport_type =

#####
#####
##
##                               Failback
##
#####
#####
account.6.naptr_build =
account.6.failback.redundancy_type =
account.6.failback.timeout =
account.6.sip_server.1.address = %BWHOST-6%
account.6.sip_server.1.port =
account.6.sip_server.1.expires =
account.6.sip_server.1.retry_counts =
account.6.sip_server.1.failback_mode =
account.6.sip_server.1.failback_timeout =
account.6.sip_server.1.register_on_enable =

account.6.sip_server.2.address =
account.6.sip_server.2.port =
account.6.sip_server.2.expires =
account.6.sip_server.2.retry_counts =
account.6.sip_server.2.failback_mode =
```



```
account.6.sip_server.2.failback_timeout =
account.6.sip_server.2.register_on_enable =

account.6.dns_cache_type =
account.6.static_cache_pri =
account.6.register_expires_overlap =
account.6.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.6.sip_server_type = 2

account.6.unregister_on_reboot =
account.6.proxy_require =
account.6.srv_ttl_timer_enable =
account.6.register_mac =
account.6.register_line =
account.6.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.6.nat.nat_traversal =

##It configures the IP address or domain name of the STUN server for
account X.
##The default value is blank.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.6.nat.stun_server =

##It configures the port of the STUN server for account X.
##The default value is 3478.
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.6.nat.stun_port =

##It configures the type of keep-alive packets sent by the phone to the
NAT device 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.6.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.6.nat.udp_update_time =
```

```
##It enables or disables NAT Rport feature for account X.0-Disabled,1-
Enabled
##The default value is 0.
account.6.nat.rport =

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

##It configures the voice mail number for account X.
##The default value is blank.
voice_mail.number.6 = %BWVOICE-PORTAL-NUMBER-6%

##Except T19P/T21P Models
account.6.auto_dial_enable =
account.6.auto_dial_num =

account.6.call_id_mode =
account.6.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.6.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.6.mwi_parse_terminated =

##It configures the interval (in seconds) of MWI subscription for account
X.
##The default value is 3600.
account.6.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.6.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.6.subscribe_acd_expires=

account.6.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.6.blf.blf_list_uri = %BWBLF-URI-6%
##It configures the feature access code for directed call pickup (default:
*97) for account X.
##The default value is blank.
account.6.blf.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-6%
##It configures the feature access code for directed call pickup with
barge-in (default: *33) for account X.
##The default value is blank.
account.6.blf.blf_list_barge_in_code = %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-
IN-6%

##It configures the period (in seconds) of the BLF subscription for
account X.
##The default value is 1800.Integer from 30 to 2147483647.
account.6.blf.subscribe_period =

##It configures the event of the BLF subscription for account X.0-
Dialog,1-Presence.
##The default value is 0.
account.6.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.6.out_dialog_blf_enable =

##It configures the BLF List Retrieve call parked code for account X.
##The default value is blank
account.6.blf_list_retrieve_call_parked_code =

account.6.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.6.shared_line = %BWSHAREDLINE-BINARY-6%
##It configures the BLA number for account X.
##The default value is blank.
account.6.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.6.bla_subscribe_period =

##Except T19P/T21P Models
##It configures the Call Pull Feature access code for account X.
##The default value is blank.
account.6.shared_line_callpull_code =
##It configures number of linekey for line.
##The default value is 1,you should enable auto line keys first.

```

```
account.6.number_of_linekey = %NUM_OF_LINEKEYS%

##It config whether you can retrieve the remote hold call through line key
##The default value is 1
account.6.shared_line_one_touch_retrieve.enable=

##It config whether you can barge in the active call through line key
##The default value is 1
account.6.shared_line_one_touch_bargein.enable =
#####
#####
##
##                               BroadSoft Callpark
##
#####
#####
##It enables or disables BroadSoft Callpark for account X.0-Disabled,1-
BroadSoft SCA.
##The default value is 0.
account.6.callpark_enable =

#####
#####
##
##                               Audio Codec
##
#####
#####
###T19D/T21D support codec1~codec8
###T20P/T22P/T26P/T28P/T41P/T42G/T46G support codec1~codec11

account.6.codec.1.enable =
account.6.codec.1.payload_type =
account.6.codec.1.priority =
account.6.codec.1.rtpmap =

account.6.codec.2.enable =
account.6.codec.2.payload_type =
account.6.codec.2.priority =
account.6.codec.2.rtpmap =

account.6.codec.3.enable =
account.6.codec.3.payload_type =
account.6.codec.3.priority =
account.6.codec.3.rtpmap =

account.6.codec.4.enable =
account.6.codec.4.payload_type =
account.6.codec.4.priority =
account.6.codec.4.rtpmap =

account.6.codec.5.enable =
account.6.codec.5.payload_type =
account.6.codec.5.priority =
account.6.codec.5.rtpmap =

account.6.codec.6.enable =
account.6.codec.6.payload_type =
account.6.codec.6.priority =
account.6.codec.6.rtpmap =

account.6.codec.7.enable =
account.6.codec.7.payload_type =
account.6.codec.7.priority =
```

```
account.6.codec.7.rtpmap =

account.6.codec.8.enable =
account.6.codec.8.payload_type =
account.6.codec.8.priority =
account.6.codec.8.rtpmap =

account.6.codec.9.enable =
account.6.codec.9.payload_type =
account.6.codec.9.priority =
account.6.codec.9.rtpmap =

account.6.codec.10.enable =
account.6.codec.10.payload_type =
account.6.codec.10.priority =
account.6.codec.10.rtpmap =

account.6.codec.11.enable =
account.6.codec.11.payload_type =
account.6.codec.11.priority =
account.6.codec.11.rtpmap =

#####
#####
##                               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.6.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.6.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
##V80 do not support(T23/T27/T61/T66/T29/T46)##
account.6.srtp_auth_tag_mode =

#####
#####
##                               Anonymous Call
##
#####
#####
account.6.send_anonymous_code =
account.6.anonymous_call =
account.6.anonymous_call_oncode =
account.6.anonymous_call_offcode =
account.6.reject_anonymous_call = %REJECT_ANONYMOUS_CALL_BINARY%
account.6.anonymous_reject_oncode =
account.6.anonymous_reject_offcode =
account.6.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.6.dialoginfo_callpickup =

##It configures the group pickup code for account X.
##The default value is blank.
account.6.group_pickup_code = %BWFAC-CALL-PICKUP-6%
##It configures the directed pickup code for account X.
##The default value is blank.
account.6.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-6%

#####
#####
##                               DTMF
##
#####
#####
account.6.dtmf.type =
account.6.dtmf.info_type =
account.6.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.6.alert_info_url_enable =
##Except T19P/T21P Models
##The default value is blank.Values range 256 characters in length
account.6.alert_info =

account.6.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.6.picture_info_enable =

#####
#####
##                               Conference
##
#####
#####
##It configures the conference type for account X.0-Local Conference,2-
Network Conference.
##The default value is 0.
account.6.conf_type =

##It configures the network conference URI for account X.
##The default value is blank.
account.6.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-6%

```

```
#####
#####
##                               CID Source
##
#####
#####
account.6.cid_source =
account.6.cid_source_privacy =
account.6.cid_source_ppi =
account.6.cp_source =

#####
#####
##                               Session Timer
##
#####
#####
account.6.session_timer.enable =
account.6.session_timer.expires =
account.6.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.6.music_on_hold_type =

##It configures the URI of the Music On Hold server for account X.
##The default value is blank.
account.6.music_server_uri =

#####
#####
##                               Advanced
##
#####
#####
account.6.auto_answer = %AUTO_ANSWER_BINARY%
account.6.missed_calllog =
account.6.100rel_enable =
account.6.enable_user_equal_phone =
account.6.compact_header_enable =
account.6.custom_ua =

#####
#####
##                               DND(Except T19 Model)
##
#####
#####
account.6.dnd.enable =
account.6.dnd.on_code =
account.6.dnd.off_code =
```

```
#####
#####
##                               Call Forward(Except T19 Model)
##
#####
#####
account.6.always_fwd.enable =
account.6.always_fwd.target =
account.6.always_fwd.off_code =
account.6.always_fwd.on_code =
account.6.busy_fwd.enable =
account.6.busy_fwd.target =
account.6.busy_fwd.off_code =
account.6.busy_fwd.on_code =
account.6.timeout_fwd.enable =
account.6.timeout_fwd.target =
account.6.timeout_fwd.timeout =
account.6.timeout_fwd.off_code =
account.6.timeout_fwd.on_code =

#####
#####
##                               Voice Monitoring (Except T19P/T21P
Models)                               ##
#####
#####
account.6.vq_rtcp_xr.collector_name=
account.6.vq_rtcp_xr.collector_server_host=
account.6.vq_rtcp_xr.collector_server_port=

#####
#####
##                               BroadSoft Hoteling
##
#####
#####
account.6.hoteling.enable =
account.6.hoteling.user_id =
account.6.hoteling.password =
account.6.hoteling.auto_login_enable =

#####
#####
##                               BroadSoft ACD
##
#####
#####
account.6.acd.enable =
account.6.acd.unavailable_reason_enable =
account.6.acd.available =
account.6.acd.initial_state =

#####
#####
##                               BroadSoft ACD Call Center
##
#####
#####
account.6.reason_code.1 =
account.6.reason_code_name.1 =
account.6.bw_disp_code.1 =
account.6.bw_disp_code_name.1 =
account.6.supervisor_info_code.1 =
```



```

account.6.supervisor_info_code_name.1 =

#####
#####
##                               BroadSoft Call Center
##
#####
#####
account.6.call_center.call_info_enable =
account.6.call_center.show_call_info_time =
account.6.call_center.disp_code_enable =
account.6.call_center.trace_enable =
account.6.call_center.emergency_enable =
account.6.call_center.queue_status_enable =
account.6.call_center.queue_status_light_enable =

#####
#####
##                               BroadSoft XSI                               ##
#####
#####
##It configures the user name for XSI authentication for account
X.Example:account.6.xsi.user = 3502@as.iopl.broadworks.net.
##The default value is blank.
account.6.xsi.user =

##It configures the password for XSI authentication for account
X.Example:account.6.xsi.password = 123456.
##The default value is blank.
account.6.xsi.password =

##It configures the access URL of the Xtended Services Platform server for
account X.Example:account.6.xsi.host = xspl.iopl.broadworks.net.
##The default value is blank.
account.6.xsi.host =

##It configures the server type of the Xtended Services Platform server
for account X.Example:account.6.xsi.server_type = http.
##The default value is http.
account.6.xsi.server_type =

##It configures the server port of the Xtended Services Platform server
for account X.Example:account.6.xsi.port = 80.
##The default value is 80.Integer from 1 to 65535
account.6.xsi.port =

#####
#####
##                               BroadSoft Setting
##
#####
#####
bw.enable =

###It enables or disables feature key synchronization.
###0-Disabled,1-Enabled.
###The default value is 1.
bw.feature_key_sync = 1

```

```
#####  
#####  
##                               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  
###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 =

#####
#####
##
##                               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 should input the park FAC code
###default value is blank.
features.call_park.park_code=
###when you select FAC park, you should input the group park FAC code
###default value is blank.
features.call_park.group_park_code=
###when you select FAC park, you should 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.
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.
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
CCESURI%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 =

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

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

#####
#####
##                               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%
```

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

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 (Copenhagen)
+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)
+03:00	East Africa Time

Time Zone	Time Zone Name
+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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