



Yealink IP Phones Deployment Guide for BroadSoft UC-One Environment

About This Guide

BroadSoft UC-One is a complete Unified Communications solution, providing a comprehensive suite of services meeting both business and consumer requirements. The UC-One solution effectively leverages multiple BroadSoft products: BroadWorks, BroadTouch and BroadCloud, to provide the full UC-One User Experience. This guide describes the BroadWorks device management interface and introduces how to deploy Yealink IP phones for the administrator using the BroadWorks device management interface. In addition, the guide provides the detailed instructions for BroadSoft integrated features. The BroadCloud features are available on Yealink SIP VP-T49G/SIP-T48G/T46G/T29G IP phones running UC-One firmware version 80 or later. These features require the support from the BroadSoft BroadWorks platform with patches and BroadSoft BroadCloud services. The BroadSoft BroadWorks features are available on Yealink IP phones running UC-One firmware version 80 or later. These features require the support from the BroadSoft BroadWorks platform.

Who should use this guide?

This deployment guide is intended for system and network administrators familiar with configuring and deploying Yealink IP phones and with the components of the BroadSoft environment.

Before reading this guide, you should be familiar with the following:

- Previous knowledge of and experience with BroadSoft UC-One components
- Access to BroadSoft UC-One product documentations and relevant firmware
- Previous knowledge of and experience with Yealink IP phones
- Access to Yealink IP phones documentations and relevant firmware

In This Guide

This deployment guide includes the following chapters:

- Chapter 1, “[BroadWorks Device Management](#)” describes BroadWorks device management.
- Chapter 2, “[Configuring Device Management on BroadWorks](#)” describes how to configure device management on BroadWorks.
- Chapter 3, “[Configuring BroadSoft Integrated Features](#)” describes how to configure BroadSoft integrated features on the BroadSoft server and IP phones.

- Chapter 4, “[Upgrading Firmware](#)” describes how to upgrade the firmware of IP phones.
- Chapter 5, “[Downloading and Verifying Configurations](#)” describes how to download configuration files and verify configurations.

Summary of Changes

This section describes the changes to this guide for each release and guide version.

Changes for Release 80, Guide Version 80.62

Documentations of the newly released SIP VP-T49G IP phones have also been added.

Changes for Release 80, Guide Version 80.61

This version is updated to incorporate CP860 IP phones. Documentations of the newly released SIP-T40P IP phones have also been added.

Changes for Release 80, Guide Version 80.60

Documentations of the newly released SIP-T19(P) E2 IP phones have also been added.

Changes for Release 80, Guide Version 80.20

This version is updated to incorporate SIP-T48G, SIP-T46G, SIP-T42G and SIP-T41P phones. Documentations of the newly released SIP-T27P and SIP-T21(P) E2 IP phones have also been added.

Major updates have occurred to the following sections:

- [Xtended Services Interface](#) on page 35
- [Shared Call Appearance](#) on page 157
- [Appendix BLF LED Mode](#) on page 207
- [Troubleshooting](#) on page 205

Changes for Release 80, Guide Version 80.6

Documentations of the newly released SIP-T29G IP phones have also been added.

The following section is new:

- [BroadCloud Features](#) on page 28

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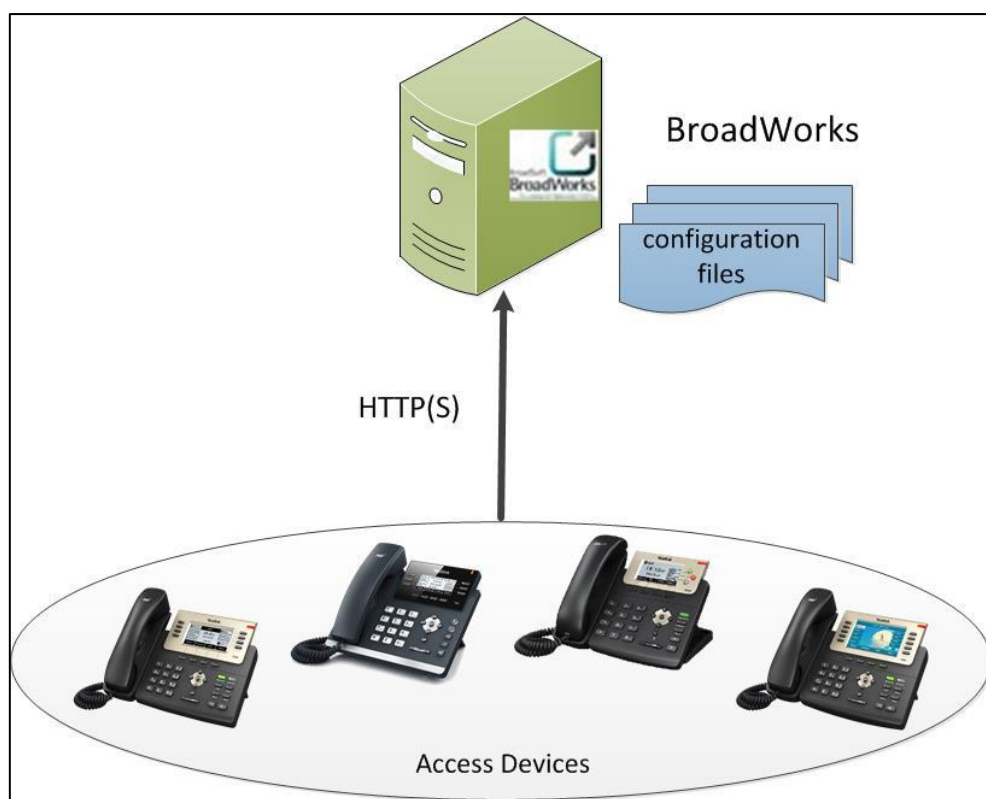
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BroadWorks Device Management

Overview

The BroadWorks Device Management is a comprehensive solution for simplifying the integration, deployment, and maintenance of access devices in your network. Access devices connect to BroadWorks to download the configuration files, firmware, and other static files required to deliver services. The administrator can manage and control all aspects of device configuration centrally in the network.



Key Concepts

To use device management, it is important to first understand a few key concepts and how they are applied to the BroadWorks server.

BroadWorks uses the following three key concepts for delivering services and managing devices:

- The Device Profile Type
- The Device Profile
- The User

Device Profile Type

When a new type of device is added to the network, a new device profile type should be created on BroadWorks to manage that type of devices. Only the system administrator can add, modify and delete the device profile type. For more information on how to create a device profile type, refer to [Creating the Device Profile Type](#) on page 8.

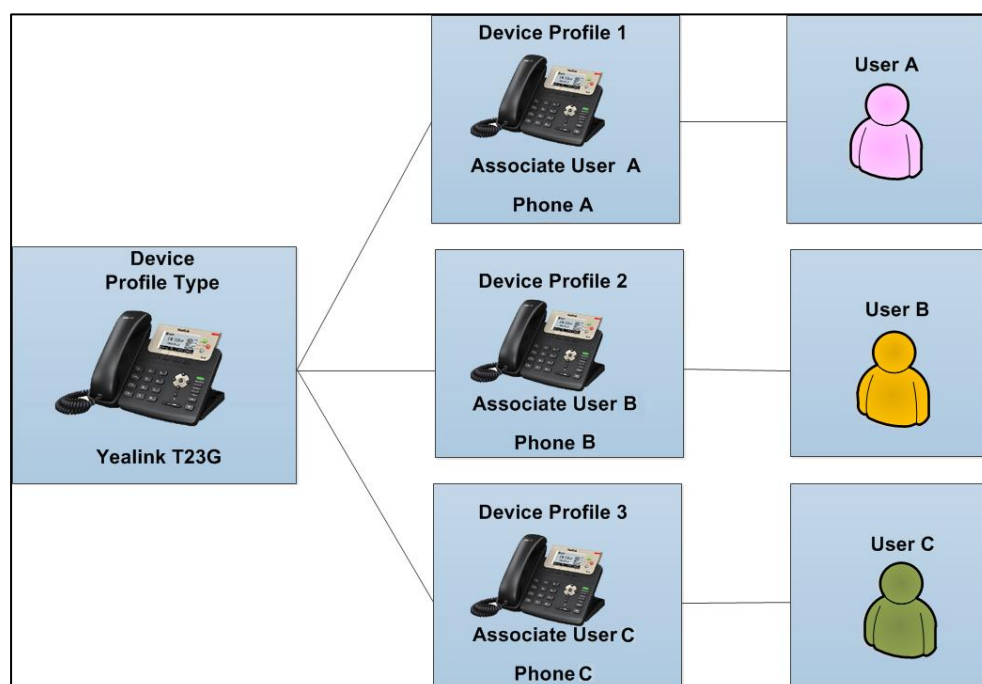
Device Profile

When a new device is added to the network, a new device profile should be created on BroadWorks to manage that device. The device profile should be created from a given device profile type. This gives the device profile a set of predefined settings that are consistent with other devices of the same type in the network. For more information on how to create a device profile, refer to [Creating the BroadWorks Device Profile](#) on page 15.

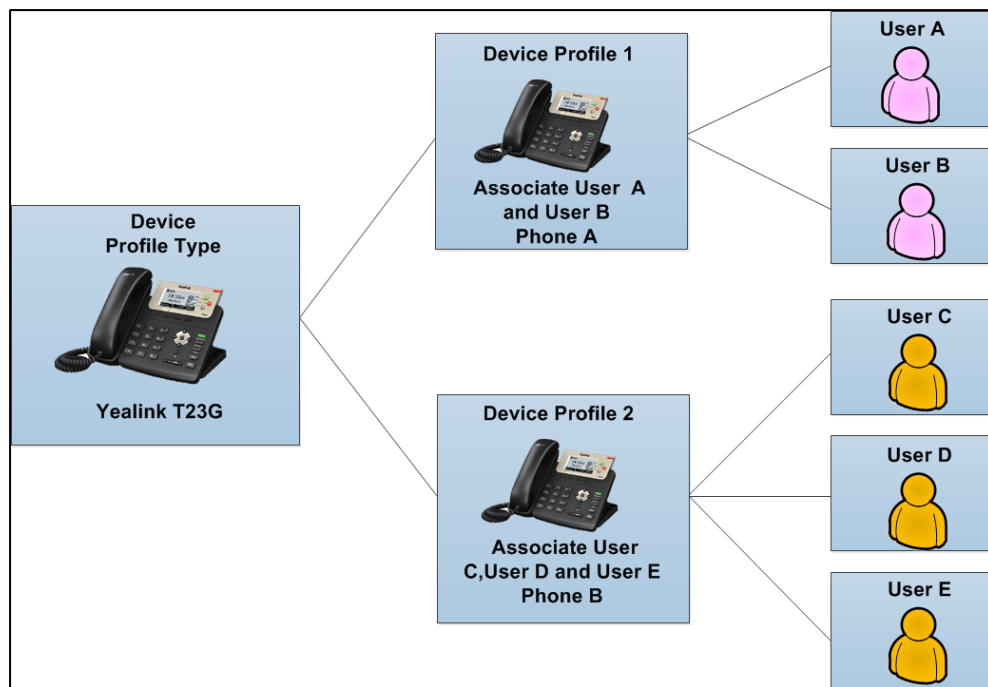
User

The administrator can assign a device profile to one user or multiple users. The number of ports attribute in the device profile type allows BroadWorks to control the maximum number of users who can be associated with a given device profile.

The following figure shows one user per phone device relationship:



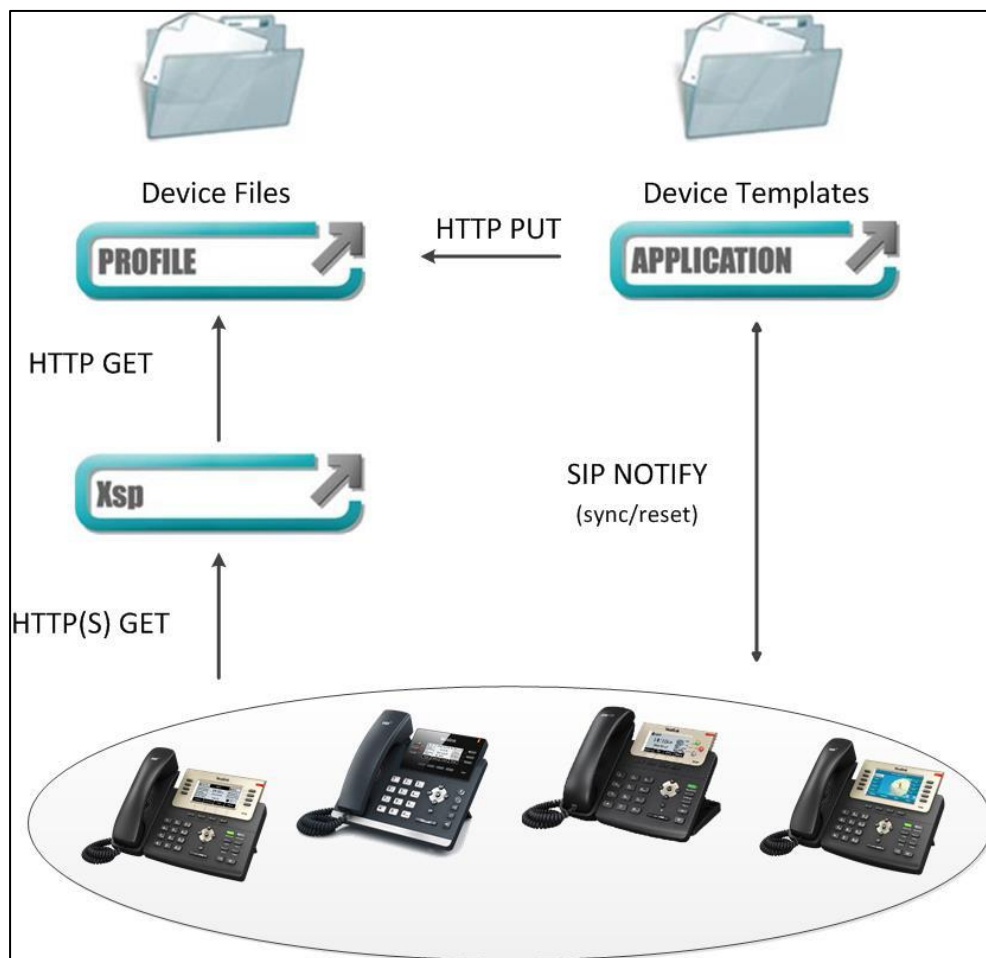
The following figure shows multiple users per phone device relationship:



Network Architecture

The device management functionality is fully integrated into the BroadWorks platform. The Xtended Services Platform (XSP) hosts the access URL and authenticates all requests made by the device. Once authenticated, the XSP will request the configuration files from the Profile server and download them to the device over HTTP(S). The Profile server stores the device configuration files which are built by the BroadWorks Application server.

The BroadWorks Application server supports ongoing device management by generating notifications to trigger the end device to synchronize its settings, and provide inventory control of devices in the field.



Configuring Device Management on BroadWorks

This chapter introduces the privileges of the system administrator and group administrator on BroadWorks. The following two sections provide a system administrator or a group administrator with step-by-step instructions on how to configure device management feature, such as customizing tags, uploading files and so on.

Log in BroadWorks as System Administrator

The following sections provide information on how to customize BroadWorks tags, create the device profile type and define the device profile type files at the system level. If you don't have the privilege of system administrator, proceed to the next section [Log in BroadWorks as Group Administrator](#) on page 15.

Customizing BroadWorks Tags

Service integration on BroadWorks is based on the concept of "Tags". Tags are variables that can be embedded in template configuration files. When BroadWorks generates a configuration file from a configuration template, the tags are replaced with actual values. Tags are delimited with a beginning and ending % sign.

There are two types of tags:

- **Dynamic Built-in Tags:** These tags are predefined by BroadWorks. The value of each built-in tag is dynamically evaluated based on the context of the device profile. A built-in tag for one device is evaluated differently from another device. All built-in tags are prefixed with "BW".

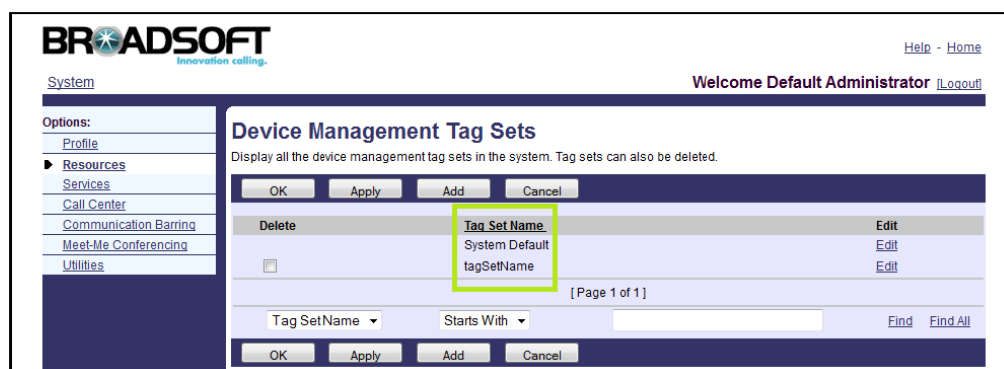
For more information on dynamic built-in tags, refer to *BroadSoft Device Management Configuration Guide*.

- **Static Tags:** These tags are defined by the administrator. For example, system default tags and device type specific tags. The value of each static tag is assigned by the administrator.

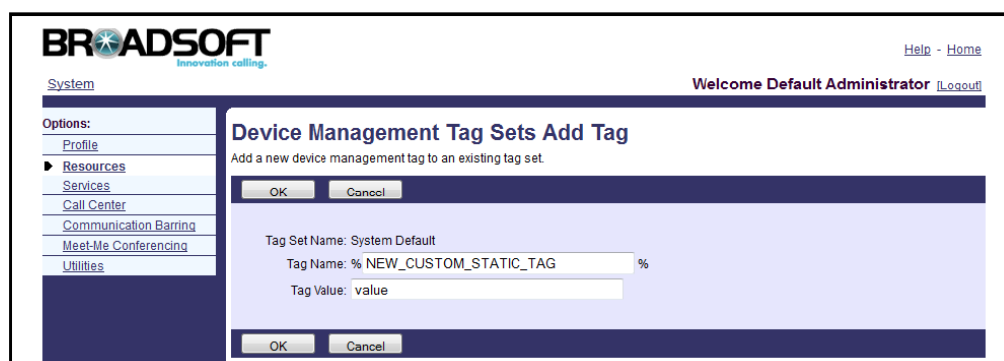
Creating System Default Tags

To create system default tags:

1. Click on **Resources->Device Management Tag Sets**.
2. Select the **System Default**.



3. Click **Add** to add a new tag.
4. Enter the desired name in the **Tag Name** field.
The tag name must not start with "BW".
5. Enter the desired value in the **Tag Value** field.
The tag in template configuration files can be replaced by the configured tag value.



6. Click **OK** to accept the change.
7. Repeat steps 3 to 6 to add more system default tags.

The following table lists some system default tags required in template configuration files.

Tag Name	Valid Value	Description
%SNTP_SERVER_1%	IP address/FQDN Example: time-a.nist.gov	The NTP server address
%SNTP_SERVER_2%	IP address/FQDN Example: time-b.nist.gov	The alternate NTP server address
%DNS_SERVER_1%	IP address Example: 199.19.193.12	The DNS server address

Tag Name	Valid Value	Description
%DNS_SERVER_2%	IP address Example: 199.19.193.39	The alternate DNS server address
%USE_SBC_BOOLEAN%	Boolean	Enables or disables the outbound proxy server
%SBC_ADDRESS%	IP address/FQDN Example: 199.19.193.9	The outbound proxy server address
%SBC_PORT%	Integer Example: 5060	The outbound proxy server port

Creating Device Type Specific Tags

To create device type specific tags:

1. Click on **Resources->Device Management Tag Sets**.
2. Click **Add**.
3. Enter the tag set name in the **Tag Set Name** field (e.g., YealinkT23-Tags).
4. Click **Add**.
5. Enter the desired name in the **Tag Name** field.
The tag name must not start with "BW".
6. Enter the desired value in the **Tag Value** field.
The tag in template configuration files can be replaced by the configured tag value.
7. Click **Apply** to accept the change.
8. Repeat steps 4 to 7 to add more device type specific tags.

The following table lists some device type specific tags required in template configuration files.

Tag Name	Valid Value	Description
%LANGUAGEWEB%	English Chinese_S Chinese_T French German Italian Polish Portuguese Spanish Turkish Russian	The language of the web user interface

Tag Name	Valid Value	Description
%LANGUAGEGUI%	English Chinese_S Chinese_T French German Italian Polish Portuguese Spanish Turkish Russian	The language of the phone user interface
%PhoneModel_FIRMWARE% (e.g., T23_FIRMWARE)	<x.x.x.x>.rom Example: 44.80.193.60.rom	The firmware version
%FEATURE_KEY_SYN%	Boolean	Enables or disables feature key synchronization

Creating the Device Profile Type

Device profile types are the templates for device profiles. They can be created, modified and deleted at the system level. Creating device profile types is a crucial step in the initial planning and deployment. Device profile types should be defined in conjunction with the services being offered to the users. Device profile type can only be deleted when there is no any reference to the device profile type, for example, no device profile is associated with the device profile type.

There are two primary steps to create a device profile type:

- **Defining the access profile:** For the aspects related to the signaling and media interoperability with BroadWorks.
- **Defining the configuration profile:** For the aspects related to the configurations of the device.

Defining the Access Profile

When adding a new device profile type to the system, the first step is to define the access profile. The access profile consists of attributes relating to the signaling and media integration with BroadWorks. These attributes tell BroadWorks how to interact with device profiles of this type. Another important configuration of the access profile is the maximum number of ports available on the device. This attribute allows BroadWorks to control the number of users who can be associated with a given device. The other related configurations of the access profile are encapsulated in the “Standard Options” and the “Advanced Options” fields.

The following table shows an example of defining the access profile. Parameters not identified in the following table can be usually left as the defaults.

Parameter	Value	Description
Identity/Device Profile Type	Yealink T23	
Signaling Address Type	Intelligent Proxy Addressing	
Standard Options		
Number of Ports	Limited To 6	Defines the number of users who can be associated with a device of this device profile.
Ringback Tone/Early Media Support	Local Ringback - No Early Media	Determines SDP handling for initial INVITE messages sent to the device.
Authentication	Enabled	Defines whether requests for a device need to be authenticated.
Registration Capable	Checked	Defines whether a device of this device profile type is allowed to be registered to the BroadWorks.
RFC3264 Hold	Checked	Defines whether the 3264 hold mechanism is used in the SIP signaling.
Advanced Options		
Reset Event	checkSync	Determines which type of notify event is sent to the device. BroadWorks reboots the remote device via a NOTIFY request with an event type of either reSync or checkSync.

Defining the Configuration Profile

When adding a new device profile type to the system, the system administrator must decide which level of configuration management is supported. There are three levels available for configuring:

- Not Supported: this is the default option. You don't need to make any configuration.
- Device Management: when the Device Management is marked, the parameters needing to be configured are summarized in the following table. Parameters not identified in the following table can usually be left as the defaults.

Parameter	Value	Description
Device Configuration Tags	Use Default System Tag Set and Tag Set. Select the tag set name (e.g., YealinkT23-Tags) from the pull-down list of Use Default System Tag Set and Tag Set .	Selects the device tag set created in the section Creating Device Type Specific Tags on page 7.
Allow Identity/Device Profiles to Configure Custom Tags	Checked	Determines whether new static tags can be customized at the profile level. For more information on how to customize static tags at the profile level, refer to Customizing a Static Tag on page 17.
Allow Groups to Configure Custom Tags	Checked	Determines whether new static tags can be customized at the group level. For more information on how to customize static tags at the group level, refer to Customizing a Static Tag on page 17.
Device Access Protocol	http	Determines the transfer protocol used by the device to get its files.
Device Access FQDN	<BroadWorks-Xsp-Cluster-Address> Example: xsp.yealink.com	Represents the FQDN of the XSP used by the device to get its files.
Device Access Port	<BroadWorks-Xsp-Port> Example: 80	Represents the port number of the XSP used by the device to get its files.
Device Access Context Name	dms	Represents the name of the Broadworks DMS web application which has been

Parameter	Value	Description
		predefined.
Device Access URI	<device-type-name> Example: YealinkT23)	Ensures the uniqueness of the URL for each device type. It typically contains the device type name.

- Legacy: when the Legacy is marked, the parameters needing to be configured are summarized in the following table:

Parameter	Value	Description
Legacy Configuration Type	2 Config File	Defines the number of configuration files for the device profile type.
CPE System File Name	y000000000044.cfg	Specifies the system file name requested by the device.
Device File Format	%BWMACADDRESS%.cfg	Specifies the device file name requested by the device.

To create a device profile type:

1. Click on **Resources->Identity/Device Profile Types**.
2. Click **Add**.

3. Make the desired change.

The screenshot shows the BroadSoft web interface for adding a new identity/device profile type. The left sidebar contains a menu with options: Profile, Resources, Services, Call Center, Communication Barring, Meet-Me Conferencing, and Utilities. The main content area is titled "Identity/Device Profile Type Add" and includes a sub-header "Add a new identity/device profile type." Below this are "OK" and "Cancel" buttons. The configuration form includes:

- * Identity/Device Profile Type: (text input field)
- Signaling Address Type: Non-intelligent Device Addressing (dropdown menu)
- Standard Options:
 - Number of Ports: ☒ Unlimited ☐ Limited To (text input)
 - 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
- Advanced Options:
 - ☐ Route Advance ☐ Forwarding Override
 - ☐ Wireless Integration ☐ Conference Device
 - ☐ PBX Integration ☐ Mobility Manager Device
 - ☐ Add P-Called-Party-ID ☐ Music On Hold Device
 - ☐ Auto Configuration Soft Client ☐ Requires BroadWorks Digit Collection
 - ☐ Requires BroadWorks Call Waiting Tone ☐ Requires MWI Subscription
 - ☐ Advice of Charge Capable ☐ Support Call Center MIME Type
 - ☐ Support Emergency Disconnect Control ☐ Support Identity In UPDATE and Re-INVITE
 - ☐ Enable Monitoring
 - Reset Event: ☐ reSync ☐ checkSync ☒ Not Supported
 - Trunk Mode: ☒ User ☐ Pilot ☐ Proxy
 - Unscreened Presentation Identity Policy: ☒ Profile Presentation Identity ☐ Unscreened Presentation Identity ☐ Unscreened Presentation Identity With Profile Domain
 - Web Based Configuration URL Extension: (text input field)
- Device Configuration Options: ☒ Not Supported ☐ Device Management ☐ Legacy

At the bottom of the form are "OK" and "Cancel" buttons.

4. Click **OK** to accept the change.

Defining Device Profile Type Files

This section describes how to define the configuration files and static files that IP phones download. There are two configuration files both of which are CFG formatted. We call them the system file and the device-specific file. The static files are required when employing some particular features on IP phones. The following provides detail information for these files.

System File

The system file will be effectual for all IP phones of the same model. The system file has a fixed name for each phone model. The names of the system files for different IP phone

models are:

- T49G: y000000000051.cfg
- T48G: y000000000035.cfg
- T46G: y000000000028.cfg
- T42G: y000000000029.cfg
- T41P: y000000000036.cfg
- T40P: y000000000054.cfg
- T29G: y000000000046.cfg
- T27P: y000000000045.cfg
- T23P/G: y000000000044.cfg
- T21(P) E2: y000000000052.cfg
- T19(P) E2: y000000000053.cfg
- CP860: y000000000037.cfg

The following table lists the parameters used to define the system file:

Parameter	Value	Description
Device Access File Format	<system-file-name>.cfg Example: y000000000044.cfg	Specifies the name of the system file.
GRepository File Format	<system-file-name>.cfg Example: y000000000044.cfg	Specifies the name of the system file stored in the Device Management repository.
File Category	Dynamic Per-Type	Specifies the type of the file.
File Customization	Administrator	Identifies who can customize the system file.
Assign File	Custom	
Authentication Mode	User Name and Password	Defines the authentication method.
Device Access HTTP Authentication	Digest	

Device-Specific File

A device-specific file is only effectual for the specific IP phone. The device-specific file is named after the MAC address of the IP phone. The file name format of the

device-specific file is as below:

<mac-address>.cfg

The following table lists the parameters used to define the device-specific file:

Parameter	Value	Description
Device Access File Format	%BWMACADDRESS%.cfg	Specifies the name of the device-specific file.
Repository File Format	%BWMACADDRESS%.cfg	Specifies the name of the device-specific file stored in the Device Management repository.
File Category	Dynamic Per-Device	Specifies the type of the file.
File Customization	Administrator and User	Identifies who can customize the device-specific file.
Assign File	Custom	
Authentication Mode	User Name and Password	Defines the authentication method.
Device Access HTTP Authentication	Digest	

Static File

In addition to configuration files, the IP phone may require static files before it can deliver service. The static files required may vary from different IP phone models. Tags cannot be added to the static files. The following lists the static files required for different IP phone models:

The Yealink SIP VP-T49G/SIP-T48G/T46G/T42G/T41P/T40P/T29G/T27P/T23P/T23G/T21(P) E2/T19(P) E2 and CP860 IP phones require the following static files:

- <firmware-version>.rom
- Ring.wav
- 000.GUI.English.lang
- contact.xml
- AutoDST.xml
- dialplan.xml
- dialnow.xml

The following table lists the parameters used to define the static file:

Parameter	Value	Description
Device Access File Format	<file-name>.cfg Example: 44.80.193.60.rom	Specifies the name of the static file.
Repository File Format	<file-name>.cfg Example: 44.80.193.60.rom	Specifies the name of the static file stored in the Device Management repository.
File Category	Static	Specifies the type of the file.
File Customization	allow	Determines whether the static files can be customized.
Assign File	Custom	
Authentication Mode	Not set	The static file is not authenticated.
Device Access HTTP Authentication	Basic	

To define the device profile type files:

1. Click on **Resources->Identity/Device Profile Types**.
2. Select the desired device profile type (e.g., Yealink T23).
3. Click on **Files and Authentication**.
4. Click **Add**.
5. Make the desired change and upload the files.
6. Click **Apply** to accept the change.

Log in BroadWorks as Group Administrator

The following sections provide information on how to customize static tags, create the device profile, upload files and so on at the group level.

Creating the BroadWorks Device Profile

Device profiles represent the devices themselves. When a new device profile is created from a device profile type, it inherits a representation of the access and configuration profiles defined at the type level.

To create a device profile:

1. Click on **Resources->Identity/Device Profiles**.
2. Click **Add**.
3. Select the desired device profile type (e.g., Yealink T23) from the pull-down list of **Identity/Device Profile Type**.

4. Set the following parameters:

Parameter	Example Value	Description
Identity/Device Profile Name	Yealink T23-Test	Defines the device profile name.
MAC Address	00156574B150	Specifies the MAC address of the device.
Authentication	Uses Custom Credentials	Specifies the authentication method.
Device Access User Name	admin	Specifies the user name.
Device Access Password	admin-password	Specifies the password.

5. Click **OK** to accept the change

Customizing a Static Tag

You can add a static tag at the group level for the specific device profile or the specific device profile type.

To add a static tag for the specific device profile:

1. Click on **Resources->Identity/Device Profiles->Search** to list all existing device profiles (Click **Next** to turn to the next page).

The screenshot shows the BroadSoft web interface. On the left is a navigation menu with options: Profile, Resources (selected), Services, Service Scripts, Acct/Auth Codes, Call Center, Calling Plan, Meet-Me Conferencing, and Utilities. The main content area is titled 'Identity/Device Profiles' and includes a search bar with 'Identity/Device Profile Name' and 'Starts With' dropdowns. Below the search bar is a table listing device profiles.

Identity/Device Profile Name	Identity/Device Profile Type	Available Ports	Host Name/IP Address	MAC Address	Status	Version	Edit
4604UC	Yealink_T48G	6			Online		Edit
Call Center_Call Inf	Yealink T23P Test2	3			Online	Yealink St...	Edit
Call Center_Call Info	Yealink T28P	Unlimited			Online	Yealink St...	Edit
T42G	Yealink-T42G	6	10.3.20.2		Online		Edit
Test_W52P	Yealink_W52P	3		0015655F9C7D	Online	Yealink St...	Edit
W52P_SCA	Yealink_W52P	5	10.3.6.155	00156540AD50	Online	Yealink St...	Edit
YealinkT23	Yealink T23P Test2	0		00156574B150	Online	Yealink St...	Edit
Yealink T23-Test	Yealink T23	4	00156574b150		Online		Edit

At the bottom of the table are links for 'First', 'Previous', and 'Next', and a page indicator '[Page 2 of 2]'.

2. Select the desired device profile (e.g., Yealink T23-Test) and then click **Edit**.
3. Click the **Custom Tags** tab.
4. Click **Add** to add a new tag.
5. Enter the desired tag name (e.g., LANGUAGEGUI) in the **Tag Name** field.
6. Enter the desired tag value (e.g., English) in the **Tag Value** field.

The screenshot shows the 'Identity/Device Profile Custom Tag Add' dialog box. It contains the following fields:

- Identity/Device Profile Name: Yealink T23-Test
- Identity/Device Profile Type: Yealink T23
- Tag Name: % LANGUAGEGUI %
- Tag Value: English

There are 'OK' and 'Cancel' buttons at the bottom of the dialog.

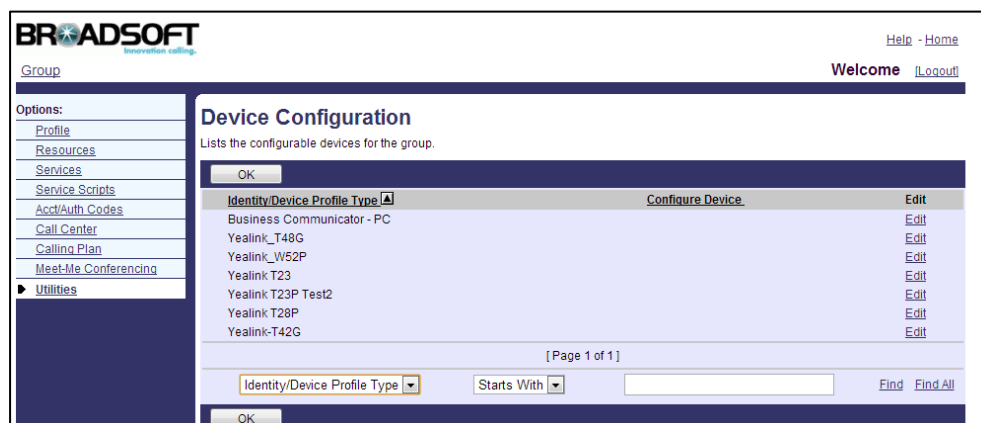
7. Click **OK** to accept the change.

After the above settings, the customized static tag will only be effectual for the device profile (e.g., Yealink T23-Test).

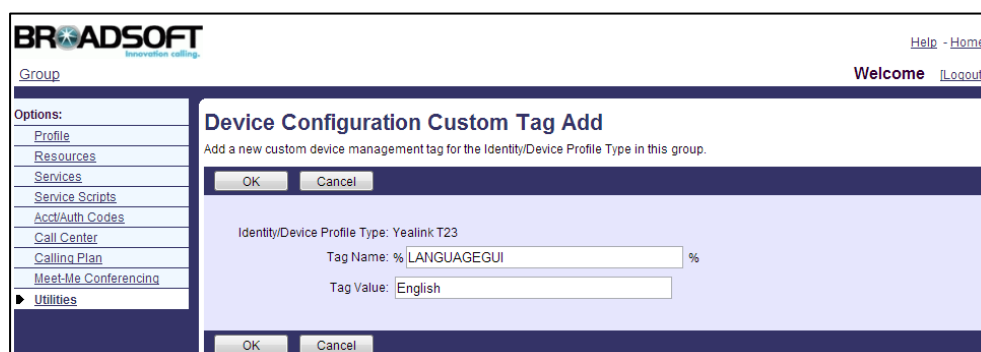
To add a static tag for the specific device profile type:

1. Click on **Utilities->Device Configuration**.

The interface lists all existing device profile types.



2. Select the desired device profile type (e.g., Yealink T23) and then click **Edit**.
3. Click the **Custom Tags** tab.
4. Click **Add** to add a new tag.
5. Enter the desired tag name (e.g., LANGUAGEGUI) in the **Tag Name** field.
6. Enter the desired tag value (e.g., English) in the **Tag Value** field.



7. Click **OK** to accept the change.

After the above settings, the customized static tag will be effectual for the device profile type (e.g., Yealink T23). All device profiles associated with this device profile type can also use the customized tag.

Uploading Device Template Configuration Files

Yealink provides two types of template configuration files: system and device-specific template configuration files. Before uploading the device template configuration files to BroadWorks, the built-in tags and static tags can be embedded in template configuration files.

The following table describes system template configuration items that are generally

required for SIP-T23G IP phone to work with BroadWorks.

Item	Description
System Template Configuration Items <e.g., y000000000044.cfg>	
network.internet_port.type = 0	Configures the WAN port to obtain IP address from DHCP server.
local_time.ntp_server1 = %SNTP_SERVER_1% local_time.ntp_server2 = %SNTP_SERVER_2%	Configures the primary and secondary NTP servers. The tags %SNTP_SERVER_1% and %SNTP_SERVER_2% are created on BroadWorks. e.g., %SNTP_SERVER_1%=time-a.nist.gov and %SNTP_SERVER_2%=time-b.nist.gov
call_waiting.enable = 1 call_waiting.tone = 1	Enables or disables call waiting and call waiting tone. 0 (Disable), 1 (Enable)
bw.feature_key_sync = %FEATURE_KEY_SYN%	Enables or disables feature key synchronization. 0 (Disable), 1 (Enable) The tag %FEATURE_KEY_SYN% is customized on BroadWorks e.g., %FEATURE_KEY_SYN%=1 or %FEATURE_KEY_SYN%=0
firmware.url = http://%BWDEVICEACCESSFQDN%: %BWDEVICEACCESSPORT%/% BWDMSCONTEXT%/%BWDEVICE ACCESSURI%T23_FIRMWARE%	Configures the access URL for downloading the firmware. e.g., %BWDEVICEACCESSFQDN%= xsp.yealink.com, %BWDEVICEACCESSPORT%=80, %BWDMSCONTEXT%=dms and %BWDEVICEACCESSURI%=YealinkT23 These tags are dynamic built-in tags, which are predefined by BroadWorks. The tag %T23_FIRMWARE% is customized on BroadWorks. e.g., %T23_FIRMWARE%= 44.80.193.60.rom

The following table describes device-specific template configuration items that are generally required for SIP-T23G IP phone to work with BroadWorks.

Item	Description
Device-specific Template Configuration Items <%BWMACADDRESS%.cfg>	
account.1.enable = %BWLINE-BINARY-1%	Enables or disables the first line. 0 (Disable), 1 (Enable)

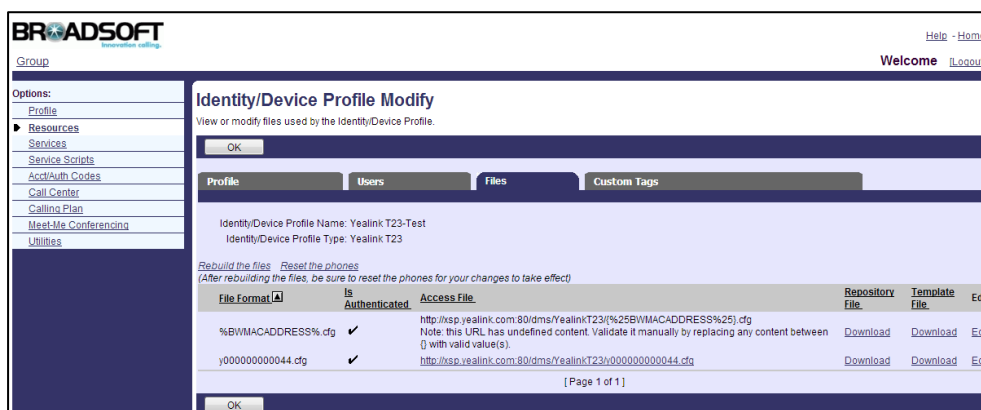
Item	Description
	“%BWLIN-BINARY-1%” identifies whether to assign a line port to the first user.
account.1.display_name = %BWCLID-1%	Configures the name to be displayed on the phone for the first line. The tag “%BWCLID-1%” will be replaced by the Calling Line ID (CLID) retrieved from the Calling Line ID First and Last Name fields in the first user’s profile on BroadWorks.
account.1.user_name = %BWLINPORT-1%	Configures the user ID for the first line. The tag “%BWLINPORT-1%” will be replaced by the line/port setting in the first user’s address on BroadWorks.
account.1.auth_name = %BWAUTHUSER-1% account.1.password = %BWAUTHPASSWORD-1%	Configures SIP authentication for the first line. If the authentication service is assigned on BroadWorks, the tags “%BWAUTHUSER-1%” and “%BWAUTHPASSWORD-1%” will be replaced by the first user’s authentication settings on BroadWorks.
account.1.blf.blf_list_uri = %BWBLF-URI-1%	Configures the BLF List for the first line. The tag “%BWBLF-URI-1%” will be replaced by the Busy Lamp Field (BLF) List URI for the first user. e.g., %BWBLF-URI-1%=sip:myblf@pbx.yealink.com If BLF List feature is not configured for the first user, this will be left blank.
account.1.shared_line = %BWSHAREDLIN-BINARY-1%	Configures the first line as a private or shared line. 0 (Private), 1 (Shared) %BWSHAREDLIN-BINARY-1% indicates whether the first line is shared.
account.1.conf_type = 2 account.1.conf_uri = %BWNETWORK-CONFERENCE-SIPURI-1%	Configures network conference for the first line. “%BWNETWORK-CONFERENCE-SIPURI-1%” will be replaced by the network conference SIP URI for the first user. e.g., %BWNETWORK-CONFERENCE-SIPURI-1%=Conference01@pbx.yealink.com

You can upload device template configuration files at the profile level or at the group level.

To upload device template configuration files at the profile level:

1. Click on **Resources->Identity/Device Profiles->Search** to list all existing device profiles.
2. Select the desired device profile (e.g., Yealink T23-Test) and then click **Edit**.
3. Click the **Files** tab.

The interface lists all existing template configuration files.



4. Select the desired template configuration file (e.g., %BWMACADDRESS%.cfg) and then click **Edit**.
5. Mark the **Custom** radio box in the **Assign File** block.
6. Click **Browse** to upload the desired template configuration file.



7. Click **Apply** to accept the change.

After the above settings, template configuration files will only be effectual for the device profile (e.g., Yealink T23-Test).

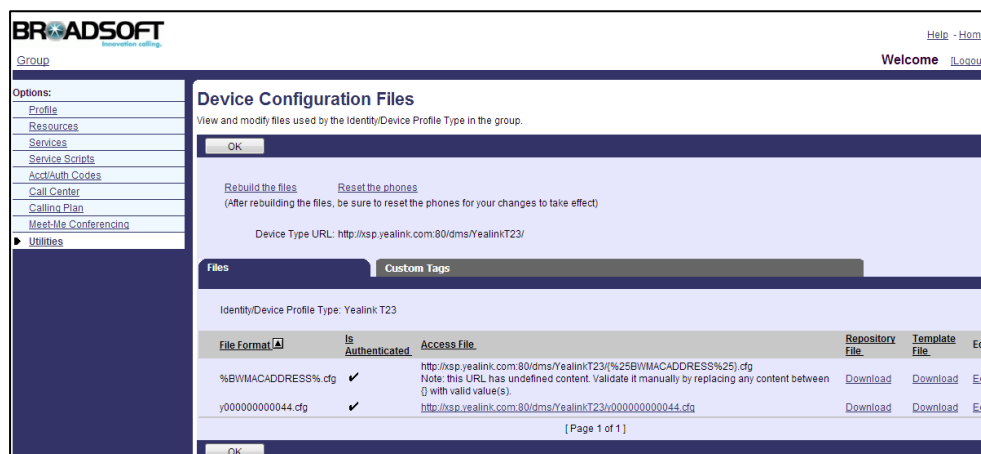
To upload device profile type template configuration files at the group level:

1. Click on **Utilities->Device Configuration**.

The interface lists all existing device profile types.

2. Select the desired device profile type (e.g., Yealink T23) and then click **Edit**.
3. Click the **Files** tab.

The interface lists all existing template configuration files.



4. Select the desired template configuration file (e.g., y000000000044.cfg) and then click **Edit**.
5. Mark the **Custom** radio box in the **Assign File** block.
6. Click **Browse** to upload the desired template configuration file.
7. Click **Apply** to accept the change.

After the above settings, template configuration files will be effectual for the device profile type (e.g., Yealink T23). All device profiles associated with this device profile type can download the configuration files.

Note

Commonly, template configuration files for each phone model have been uploaded by the system administrator. At the group level, you can upload the new template configuration files for the specified phone to override the old template configuration files. For more information on how to define template configuration files, refer to [Defining Device Profile Type Files](#) on page 12.

Uploading Static Files

You can upload static files at the profile level or at the group level.

To upload static files at the profile level:

1. Click on **Resources->Identity/Device Profiles->Search** to list all existing device profiles (Click **Next** to turn to the next page).
2. Select the desired device profile (e.g., Yealink T23-Test) and then click **Edit**.

3. Click the **Files** tab.

The interface lists all existing files.

4. Select the desired static file (e.g., 44.80.193.60.rom) and then click **Edit**.
5. Mark the **Custom** radio box in the **Assign File** block.
6. Click **Browse** to upload the desired static file.
7. Click **Apply** to accept the change.

After the above settings, the static files will only be effectual for the device profile (e.g., Yealink T23-Test).

To upload static files at the group level:

1. Click on **Utilities->Device Configuration**.

The interface lists all existing device profile types.

2. Select the desired device profile type (e.g., Yealink T23) and then click **Edit**.
3. Click the **Files** tab.

The interface lists all static files.

4. Select the desired static file to edit (e.g., 44.80.193.60.rom).
5. Mark the **Custom** radio box in the **Assign File** block.
6. Click **Browse** to upload the desired static file.
7. Click **Apply** to accept the change.

After the above settings, the static files will be effectual for the device profile type (e.g., Yealink T23). All device profiles associated with this device profile type can download the static files.

Note

Commonly, static files for each phone model have been uploaded by the system administrator. At the group level, you can upload the new static files for the specified phone to override the old static files. For more information on how to define static files, refer to [Defining Device Profile Type Files](#) on page 12.

Assigning the Device Profile to the User

To assign the device profile to the user:

1. Click on **Profile->Users->Search** to list all existing users.
2. Select the desired user.
3. Click on **Addresses**.
4. Mark the **Identity/Device Profile** radio box.
5. In the **Identity/Device profile** block, select the created device profile (e.g., Yealink T23-Test) from the pull-down list of **Identity/Device Profile Name**.
6. Enter the register's user name in the **Line/Port** field.

7. Select the domain name (e.g., pbx.yealink.com) from the pull-down list after the sign @.

BROADSOFT
Group: Users : 4609

Options:
 Profile
 Incoming Calls
 Outgoing Calls
 Call Control
 Calling Plans
 Client Applications
 Messaging
 Service Scripts
 Utilities

Addresses
Addresses allows you to view and maintain your phone number and other identities that are used to make and receive calls.

OK Apply Cancel

Phone Number: 4609 Activated
 Extension: 4609

☒ Identity/Device Profile ☐ Trunking ☐ None

Identity/Device Profile Name: Yealink T23-Test (Group)
 * Line/Port: 4609 @ pbx.yealink.com Advanced Settings

Aliases: sip: 4609@pbx.yealink.com
 sip: @ pbx.yealink.com
 sip: @ pbx.yealink.com
 sip: @ pbx.yealink.com

OK Apply Cancel

8. Click **Apply** to accept the change.

To check the users assigned the device profile:

1. Click on **Resources->Identity/Device Profiles**.
2. Click **Search** to display all existing device profiles (Click **Next** to turn to the next page).

BROADSOFT
Group

Options:
 Profile
 Resources
 Services
 Service Scripts
 Acct/Auth Codes
 Call Center
 Calling Plan
 Meet-Me Conferencing
 Utilities

Identity/Device Profiles
Add or modify group level identity/device profiles. Displays all the identity/device profiles defined at group level.

OK Add Cancel

Enter search criteria below
 Identity/Device Profile Name Starts With Search

Identity/Device Profile Name	Identity/Device Profile Type	Available Ports	Host Name/IP Address	MAC Address	Status	Version	Edit
4604UC	Yealink_T48G	6			Online		Edit
Call Center_Call Inf	Yealink T23P Test2	3			Online	Yealink SL...	Edit
Call Center_Call Info	Yealink T28P	Unlimited			Online	Yealink SL...	Edit
T42G	Yealink-T42G	6	10.3.20.2		Online		Edit
Test_W52P	Yealink_W52P	3		0015655F9C7D	Online	Yealink SL...	Edit
W52P_SCA	Yealink_W52P	5	10.3.6.155	00156540AD50	Online	Yealink SL...	Edit
YealinkT23	Yealink T23P Test2	1		00156574B150	Online	Yealink SL...	Edit
Yealink T23-Test	Yealink T23	3	00156574b150		Online		Edit

First Previous [Page 2 of 2]

OK Add Cancel

3. Select the desired device profile (e.g., Yealink T23-Test) and then click **Edit**.
4. Click the **Users** tab.

5. Click **Search** to display all users assigned to the device profile.

The screenshot shows the BroadSoft web interface for the 'Identity/Device Profile Modify' page. The left sidebar contains a navigation menu with options like Profile, Resources, Service Scripts, and others. The main content area has tabs for Profile, Users, Files, and Custom Tags. The 'Users' tab is active, displaying a search bar and a table of users assigned to the profile. The table has columns for Primary Line/Port, Line/Port, Port, Endpoint Type, Dn Type, User ID, Last Name, First Name, Phone Number, Extension, and Department. A single user is listed: 4609@pbx.yealink.com, Port 1, Primary, Main, User ID 4609, Last Name Yealink, First Name 4609, Phone Number 4609, Extension 4609, and Department Edit. The page is labeled '[Page 1 of 1]'.

Primary Line/Port	Line/Port	Port	Endpoint Type	Dn Type	User ID	Last Name	First Name	Phone Number	Extension	Department	Edit
<input type="checkbox"/>	4609@pbx.yealink.com	1	Primary	Main	4609	Yealink	4609	4609	4609		Edit

As shown in the above figure, only the user 4609 has been assigned to the device profile Yealink (T23-Test).

Configuring BroadSoft Integrated Features

This chapter provides the detail instructions and configurations for the following BroadSoft integrated features:

- [BroadCloud Features](#)
- [Xtended Services Interface](#)
- [Simultaneous Ring Personal](#)
- [Line ID Blocking](#)
- [Anonymous Call Rejection](#)
- [BroadWorks Anywhere](#)
- [Remote Office](#)
- [BroadSoft Directory](#)
- [BroadSoft Call Log](#)
- [Call Park](#)
- [Group Paging](#)
- [Instant Group Call](#)
- [Hunt Group](#)
- [CommPilot Call Manager](#)
- [Automatic Callback](#)
- [Authentication](#)
- [Authorization/Account Codes](#)
- [Call Waiting](#)
- [Diversion Inhibitor](#)
- [Do Not Disturb](#)
- [Call Forward](#)
- [Alternate Numbers](#)
- [Sequential Ring](#)
- [Call Transfer](#)
- [Feature Key Synchronization](#)
- [Network Conference](#)
- [Call Pickup](#)
- [Calling Line ID Presentation](#)
- [Calling Line ID Blocking Override](#)

- [Connected Line Identification Presentation](#)
- [Connected Line Identification Restriction](#)
- [Meet-Me Conferencing](#)
- [Busy Lamp Field List](#)
- [Shared Call Appearance](#)
- [Music/Video on Hold](#)
- [Priority Alert](#)
- [Voice Messaging](#)
- [Automatic Call Distribution](#)
- [Hoteling](#)

To configure the above features on Yealink IP phones, check whether BroadSoft active feature is enabled and the SIP server type is set to BroadSoft. Contact Yealink field application engineer for more information.

BroadCloud Features

BroadCloud is an Extensible Messaging and Presence Protocol (XMPP)-based collaboration service. This service can interoperate with Yealink SIP VPT49G/SIP-T48G/T46G/T29G IP phones that support XMPP.

The following shows BroadCloud features available on SIP VPT49G/SIP-T48G/T46G/T29G IP phones:

- **BroadCloud Buddies:** It enables users to share information of buddies with the BroadTouch Business Communicator (BTBC) client application.
- **BroadCloud Favorites:** It enables users to mark buddies as favorites with BroadTouch Business Communicator (BTBC) client application.
- **BroadCloud Presence:** It enables users to share presence information with the BroadTouch Business Communicator (BTBC) client application.

The BroadCloud features require the support from the BroadSoft BroadWorks platform with patches and BroadSoft BroadCloud services. You must set up the BroadWorks server and BroadCloud services. For more information, refer to <http://xchange.broadsoft.com/php/xchange/support>.

All BroadCloud information are stored in the cloud and synchronized among all clients (BTBC and IP phones). When a client changes its BroadCloud information, it informs the cloud server of the changes, and then the cloud server notifies all clients.

Configuring Yealink IP Phones

BroadCloud features are configurable using template configuration files or via web user interface.

To configure BroadCloud features using template configuration files:

1. Add/Edit BroadCloud parameters in template configuration files:

Parameters	Permitted Values	Default
features.uc_enable	0 or 1	1
Description: Enables or disables UC feature. 0 -Disabled 1 -Enabled Note: If you change this parameter, the IP phone will reboot to make the change take effect.		
features.uc_username	String within 99 characters	Blank
Description: Configures the user name for UC authentication.		
features.uc_password	String within 32 characters	Blank
Description: Configures the password for UC authentication.		
features.config_dsskey_length	0 or 1	0
Description: Enables or disables extended length of the label displayed on the idle LCD screen for the line key. 0 -Disabled 1 -Enabled		
phone_setting.dsskey_directory_auto.enable	0 or 1	1
Description: Enables or disables Auto Favorite feature. 0 -Disabled 1 -Enabled If enabled, the IP phone will download information of favorites from the cloud server and automatically configure UC Favorite keys from the first unused line key (the line key is configured as N/A). If a line key is used, the IP phone will skip to the next unused line key.		

The following shows an example of BroadCloud configurations in a template

configuration file (e.g., %BWMACADDRESS%.cfg):

```
features.uc_enable = 1

features.uc_username = abc@demo.bc.im

features.uc_password = abc123

phone_setting.dsskey_directory_auto.enable = 1

features.config_dsskey_length = 0
```

The user can access BroadCloud features using phone menu or pressing DSS keys. The user can change his/her presence status using a My Status key. For more information, refer to [Yealink IP Phone Features Integrated with BroadSoft UC-One User Guide](#).

2. Add/Edit the DSS key parameters in template configuration files:

You can configure a line key as a Network Favorite/UC Favorite/Buddies/My Status key.

The “X” is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VP-T49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27).

Parameters	Permitted Values	Default
linekey.X.type	Integer	Refer to the following content
Description: Configures the line key type. 62 -Network Favorite 63 -UC Favorite (if Auto Favorite feature is disabled, you need to configure UC Favorite keys manually, and then the downloaded information of favorites will be applied to these keys) 64 -Buddies 65 -My Status For SIP VP-T49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0. For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-27 is 0.		
linekey.X.line	Integer from 1 to 16	Refer to the following content
Description: Configures the line to apply the line key. Permitted Values:		

Parameters	Permitted Values	Default
1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G) 1-Line1 2-Line2 3-Line3 ... 16-Line16 When X=1, the default value is 1. When X=2, the default value is 2. When X=3, the default value is 3. When X=16, the default value is 16.		
linekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each line key.		

The following shows an example of a Buddies key configuration in a template configuration file (e.g., y000000000046.cfg):

```
linekey.1.type = 64
```

You can configure a programmable key as a Buddies/My Status key. The “X” is an integer which specifies the sequence number of the programmable key. X ranges from 1 to 14.

Parameters	Permitted Values	Default
programmablekey.X.type	55	Refer to the following content
Description: Configures the programmable key type. 64-Buddies 65-My Status For SIP VP-T49G IP phones: When X=1, the default value is 28 (History). When X=2, the default value is 61 (Directory). When X=3, the default value is 5 (DND). When X=4, the default value is 30 (Menu). When X=12/13, the default value is 0 (NA).		

Parameters	Permitted Values	Default
<p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T48G/T46G IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T29G IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/11/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p>		
programmablekey.X.line	Integer from 1 to 16	1
<p>Description:</p> <p>Configures the line to apply the programmable key.</p> <p>Valid values are:</p> <p>1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G)</p> <p>1-Line1</p> <p>2-Line2</p> <p>3-Line3</p> <p>...</p> <p>16-Line16</p>		

Parameters	Permitted Values	Default
programablekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each soft key. Note: It is applicable when the value of X ranges from 1 to 4.		

The following shows an example of a Buddies key configuration in a template configuration file (e.g., y000000000046.cfg):

```
programablekey.5.type = 64
```

3. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can find the web user interface of the SIP-T29G IP phone is similar to the ones shown as below:

The screenshot shows the Yealink T29G web interface with the 'Directory' tab selected. The 'XSI' section is visible, containing fields for 'Allow SIP Authentication for XSI' (Disabled), 'Host Server', 'Port' (80), 'XSI Server Type' (http), 'User ID', 'Password', 'UC Username' (abc@demo.bc.im), and 'UC Password' (*****). The 'UC Username' and 'UC Password' fields are highlighted with a red box. A 'NOTE' section on the right explains the XSI and Network Directory features.

Field	Value
Allow SIP Authentication for XSI	Disabled
Host Server	
Port	80
XSI Server Type	http
User ID	
Password	*****
UC Username	abc@demo.bc.im
UC Password	*****

The screenshot shows the Yealink T29G web interface with the 'DSSKey' tab selected. The 'Line Key' configuration table is visible, showing settings for Line Key1 through Line Key9. The 'Line Key1' row is highlighted with a red box, showing 'Buddies' as the type and 'N/A' as the value. A 'NOTE' section on the right explains the Line Keys feature.

Key	Type	Value	Label	Line	Extension
Line Key1	Buddies			N/A	
Line Key2	Line	Default		Line 2	
Line Key3	Line	Default		Line 3	
Line Key4	Line	Default		Line 4	
Line Key5	Line	Default		Line 5	
Line Key6	Line	Default		Line 6	
Line Key7	Line	Default		Line 7	
Line Key8	Line	Default		Line 8	
Line Key9	Line	Default		Line 9	

The screenshot shows the Yealink T29G web interface with the 'Features' tab selected. The 'General Information' section is visible, containing fields for 'Call Waiting' (Enabled), 'Auto Redial' (Disabled), 'Auto Redial Interval (1~300s)' (10), 'Auto Redial Times (1~300)' (10), 'Key As Send' (#), 'Reserve # in User Name' (Enabled), 'Hotline Number', 'Hotline Delay (0~10s)' (4), 'Busy Tone Delay (Seconds)' (0), 'Reboot in Talking' (Disabled), 'Enable Auto Favorite' (Enabled), 'Hide Feature Access Codes' (Disabled), 'Display Method on Dialing' (User Name), and 'Auto Linekeys' (Disabled). The 'Enable Auto Favorite' field is highlighted with a red box. A 'NOTE' section on the right explains the Call Waiting, Auto Redial, Key As Send, Hotline, and Call Completion features.

Field	Value
Call Waiting	Enabled
Auto Redial	Disabled
Auto Redial Interval (1~300s)	10
Auto Redial Times (1~300)	10
Key As Send	#
Reserve # in User Name	Enabled
Hotline Number	
Hotline Delay (0~10s)	4
Busy Tone Delay (Seconds)	0
Reboot in Talking	Disabled
Enable Auto Favorite	Enabled
Hide Feature Access Codes	Disabled
Display Method on Dialing	User Name
Auto Linekeys	Disabled

When Auto Favorite feature is enabled, the IP phone will download information of favorites from the cloud server and automatically configure UC Favorite keys from the first unused line key (the line key is configured as N/A). If a line key is used, the IP phone will skip to the next unused line key.

Key	Type	Value	Label	Line	Extension
Line Key10	Line	Default		Line 10	
Line Key11	Line	Default		Line 11	
Line Key12	Line	Default		Line 12	
Line Key13	Line	Default		Line 13	
Line Key14	Line	Default		Line 14	
Line Key15	Line	Default		Line 15	
Line Key16	Line	Default		Line 16	
Line Key17	UC Favorite			Line 1	
Line Key18	UC Favorite			Line 1	

Xtended Services Interface

The Xtended Services Interface (XSI) is an HTTP-based, REST-ful Application Programming Interface (API) available over BroadWorks, targeted to end-user functionalities such as call control, call log lists, directories and end-user service configurations. IP phones interoperate with BroadWorks XSI using HTTP messages.

IP phones interoperating with BroadWorks XSI support the following features:

- Simultaneous Ring Personal
- Line ID Blocking
- Anonymous Call Rejection
- BroadWorks Anywhere
- Remote Office
- BroadSoft Directory
- BroadSoft Call Log
- Call Park

Note

Before configuring the features above, make sure that the authentication information for XSI access has been properly configured on IP phones.

For the IP phone to access XSI features, the Xtended Services Platform (XSP) must first authenticate the XSI user.

The SIP VP-T49G/SIP-T48G/T46G/T42G/T41P/T40P/T29G/T27P/T23P/T23G/T21(P) E2/T19(P) E2 and CP860 IP phones running firmware version 73 or later support two XSI

authentication methods:

- **User Login Credentials for XSI Authentication:** The IP phone uses the XSI user login credentials (web portal login user ID and password) for XSI authentication. If no custom tag is configured for the XSI user password, the XSI user password will be not available from the Device Management configuration file. In this case, the end user needs to manually configure it on the IP phone or enter the password in the login screen.
- **SIP Credentials for XSI Authentication:** As of BroadWorks release 20.0, the IP phone can use the XSI user ID along with SIP authentication credentials for XSI authentication. SIP authentication credentials are the register name and password of the SIP account registered on the phone, which can be obtained through Device Management configuration file. No end user input or manual configuration is required.

You can configure the authentication method the phone uses for XSI access. For more information on how to configure the phone, refer to the following section.

Note

The lock state of SIP credentials is not taken into account for the SIP credentials for XSI authentication scheme. For example, the IP phone can be locked out for signaling but can still use its locked SIP credentials for XSI authentication and to be authenticated successfully.

To use SIP Credentials for XSI Authentication, ensure that the SIP register name and password of the corresponding user are properly pre-configured on the phone.

Configuring Yealink IP Phones

The XSI is configurable using template configuration files or via web user interface.

To configure the XSI using template configuration files:

1. Add/Edit XSI parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G, X ranges from 1 to 16; For SIP-T42G, X ranges from 1 to 12; For SIP-T41P/T27P, X ranges from 1 to 6; For SIP-T40P/T23P/T23G, X ranges from 1 to 3, For SIP-T21(P) E2, X ranges from 1 to 2; For SIP-T19(P) E2 and CP860, X is equal to 1).

Parameters	Permitted Values	Default
sip.authentication_for_xsi	0 or 1	0
Description: Configures the authentication mechanism for the XSI.		

Parameters	Permitted Values	Default
0 -User Login Credentials for XSI Authentication 1 -SIP Credentials for XSI Authentication If it is set to 0 (User Login Credentials for XSI Authentication), the IP phone uses the XSI user ID and password for XSI authentication. If it is set to 1 (SIP Credentials for XSI Authentication), the IP phone uses the XSI user ID, the register name and password of the corresponding SIP account for XSI authentication.		
account.X.xsi.user	%BWLOGIN-ID-X%	Blank
Description: Configures the user ID for XSI access authentication.		
account.X.auth_name	%BWAUTHUSER-X%	Blank
Description: Configures the register name for account X. Note: It is required only when the value of the parameter "sip.authentication_for_xsi" is set to 1.		
account.X.password	%BWAUTHPASSWORD-X%	Blank
Description: Configures authentication password for account X. Note: It is required only when the value of the parameter "sip.authentication_for_xsi" is set to 1.		
account.X.xsi.password	%XSIPASSWORD-X%	Blank
Description: Configures the password for XSI access authentication. Note: It is required only when the value of the parameter "sip.authentication_for_xsi" is set to 0.		
account.X.xsi.host	%XSP_ADDRESS%	Blank

Parameters	Permitted Values	Default
Description: Configures the IP address of the Xtended Services Platform server for account X.		
account.X.xsi.server_type	http or https	http
Description: Configures the access protocol of the Xtended Services Platform server for account X.		
account.X.xsi.port	Integer from 1 to 65535	80
Description: Configures the port of the Xtended Services Platform server for account X.		

The following shows example configurations for user login credentials for XSI authentication for account 1 in the template configuration file (e.g., %BWMACADDRESS%.cfg):

```
sip.authentication_for_xsi = 0
account.1.xsi.user = %BWLOGIN-ID-X%
account.1.xsi.password = %XSIPASSWORD-X%
account.1.xsi.host = %XSP_ADDRESS%
account.1.xsi.server_type = http
account.1.xsi.port = 80
```

2. Customize the static tags on BroadWorks.

The following table shows an example:

Tag Name	Value
%XSIPASSWORD-1%	yealink
%XSP_ADDRESS%	xsp.yealink.com

For more information, refer to [Customizing a Static Tag](#) on page 17.

Please contact your BroadSoft reseller for the actual values of these tags.

3. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tags in the template file will be replaced by the actual parameter values. An example for the XSI authentication mechanism is shown as

below:

```
account.1.xsi.user = 4609@pbx.yealink.com
account.1.xsi.password = yealink
account.1.xsi.host = xsp.yealink.com
```

After successful update, user can find the web user interface of the SIP-T23G.

IP phone is similar to the one shown as below if the user selects the XSI authentication mechanism:

XSI

Allow SIP Authentication for XSI: Disabled

Host Server: xsp.yealink.com

Port: 80

XSI Server Type: http

User ID: 4609@yealink.pbx.com

Password: *****

Network Directory

Type	Enabled	Display Name
Group	Enabled	Group
Enterprise	Enabled	Enterprise
Group Common	Enabled	GroupCommon
Enterprise Common	Enabled	EnterpriseCommon
Personal	Enabled	Personal

Custom Directory

NOTE

XSI
The Xtended Services Interface (XSI) is an HTTP-based, RESTful Application Programming Interface (API) available over BroadWorks, targeted to end-user functionalities such as call control, call log lists, directories, and end-user service configurations.

Network Directory
You can access the BroadSoft directory through the IP phone. The contacts included in the directory are determined by your system administrator. You can dial or search for a contact in the BroadSoft directory. The BroadSoft directory allows you to search for a contact and dial the stored numbers in the following directories: Enterprise Directory, Group Directory, Enterprise Common Directory, Group Common Directory, Personal Directory and Custom Directory.

The following shows example configurations for SIP credentials for XSI authentication for account 1 in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
sip.authentication_for_xsi = 1
account.1.xsi.user = %BWLOGIN-ID-X%
account.1.auth_name = %BWAUTHUSER-X%
account.1.password = %BWAUTHPASSWORD-X%
account.1.xsi.host = %XSP_ADDRESS%
account.1.xsi.server_type = http
account.1.xsi.port = 80
```

After editing the configuration file, upload it to BroadWorks. The tags in the template file will be replaced by the actual parameter values. An example is shown as below:

```
account.1.xsi.user = 4609@pbx.yealink.com
account.1.auth_name = 4609
account.1.password = yealink#1105
account.1.xsi.host = xsp.yealink.com
```

After successful update, user can find the web user interface of the SIP-T23G IP phone is similar to the one shown as below if the user selects the SIP authentication mechanism:

The screenshot displays the Yealink T23G web interface. The top navigation bar includes tabs for Status, Account, Network, DSSKey, Features, Settings, Directory, and Security. The left sidebar lists options like Local Directory, Remote Phone Book, Phone Call Info, LDAP, Network Directory, Multicast IP, and Setting. The main content area is titled 'Directory' and contains three sections: XSI, Network Directory, and Custom Directory. The XSI section is highlighted with a red rectangle and contains the following fields:

Field	Value
Allow SIP Authentication for XSI	Enabled
Host Server	xsp.yealink.com
Port	80
XSI Server Type	http
User ID	4609@yealink.pbx.com

The Network Directory section contains a table with the following data:

Type	Enabled	Display Name
Group	Enabled	Group
Enterprise	Enabled	Enterprise
Group Common	Enabled	GroupCommon
Enterprise Common	Enabled	EnterpriseCommon
Personal	Enabled	Personal

The Custom Directory section has a single field: 'Enable Custom Directory' set to 'Disabled'.

A 'NOTE' box on the right explains XSI and Network Directory functionality.

Simultaneous Ring Personal

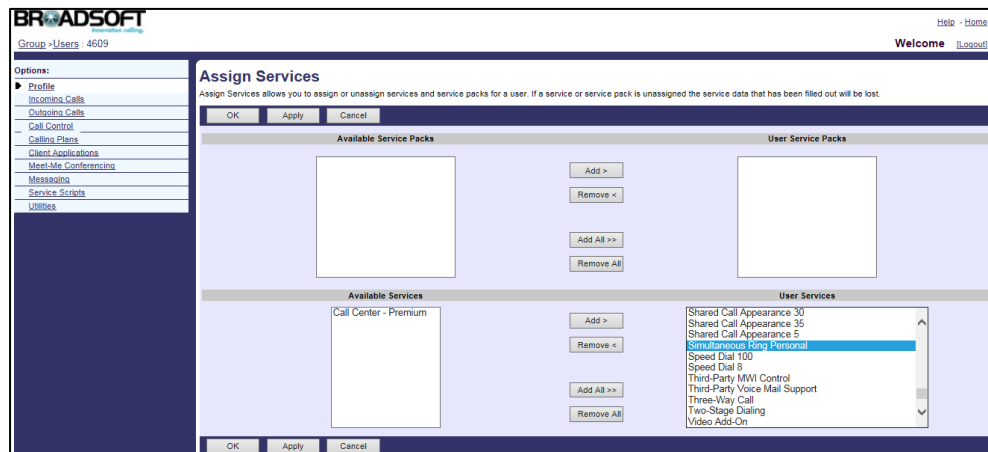
Simultaneous ring personal allows a user to have up to 10 secondary locations to be alerted simultaneously in addition to the user's primary location, when receiving an incoming call that matches the pre-defined criteria. The call is connected to the user who answers the call first. The enhancement, Answer Confirmation, allows simultaneous ringing personal to prompt the callee to enter a digit to confirm the acceptance of the call.

Configuring the BroadSoft Server

To assign the simultaneous ring personal service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609).
4. Click on **Assign Services**.

- In the **Available Services** box, select **Simultaneous Ring Personal** and then click **Add>**.



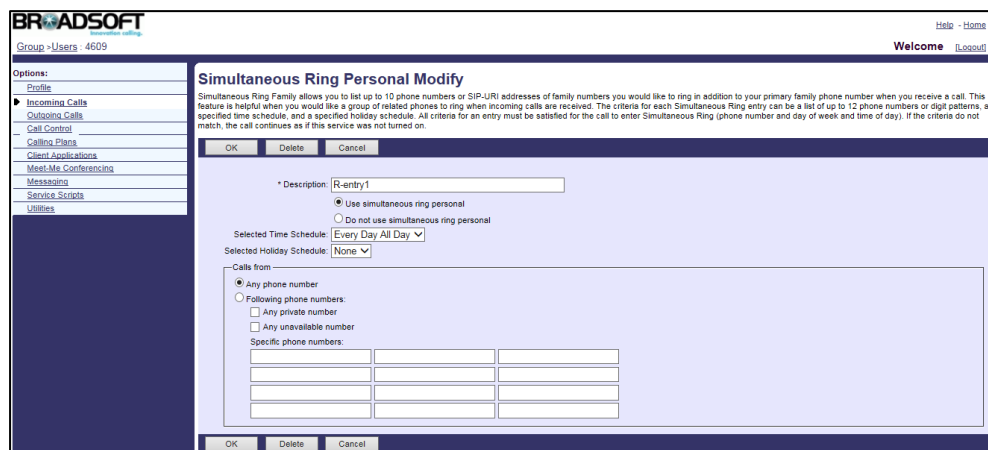
- Click **Apply** to accept the change.

To configure simultaneous ring personal for a user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4609), who has been assigned the simultaneous ring personal service.
- Click on **Incoming Calls->Simultaneous Ring Personal**.
- Click **Add** to add a new simultaneous ring personal entry.
- Set the parameters of the simultaneous ring personal criteria.

The following shows an example:

Description:	R-entry1
Use simultaneous ring personal:	Selected
Selected Time Schedule:	Every Day All Day
Selected Holiday Schedule:	None
Calls from:	Any phone number



7. Click **OK** to accept the change.
8. Configure the following parameters for simultaneous ring personal.

Parameter	Description
Simultaneous Ring Personal	Specifies whether to use the simultaneous ring personal service.
Do not ring my Simultaneous Ring Numbers if I'm already on a call	Specifies whether secondary phone numbers or URIs should be alerted while the primary location is already on a call.
Answer confirmation required	Allows simultaneous ring personal to prompt the answering party to enter a digit to confirm the acceptance of the call.
Phone Number / SIP-URI	Specifies the phone number or SIP URI of the location.

The following shows an example:

Simultaneous Ring Personal: Selected

Do not ring my Simultaneous Ring Numbers if I'm already on a call: Selected

Continue the search process if the base location is busy: Selected

Enable caller to skip search process: Selected

Answer confirmation required: Selected

Phone Number / SIP-URI: 4607 4608

9. Click **Apply** to accept the change.

For more information on simultaneous ring personal, refer to *BroadWorks Web Interface Administrator Guide*.

Note

If the BroadWorks XSI is configured on the IP phone, the simultaneous ring personal configurations can be synchronized between the IP phone and the BroadWorks server. For more information on BroadWorks XSI, refer to [Xtended Services Interface](#) on page 35.

Line ID Blocking

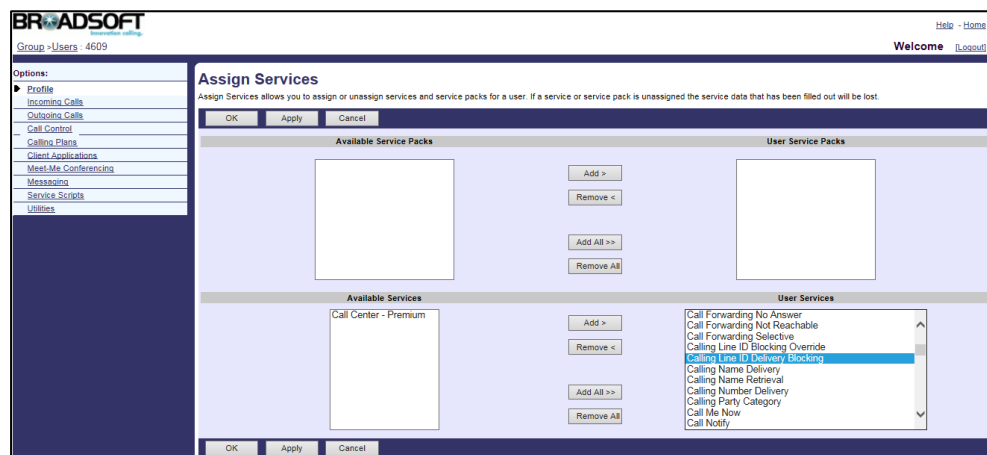
Line ID blocking allows a user to block his identity from showing up when placing a call. When a user with this feature enabled places a call, the BroadWorks sends an INVITE to the callee with From header: From:

"Anonymous" <sip:anonymous@anonymous.invalid>. The callee's phone LCD screen presents "anonymous" instead of the caller's identity. This feature does not apply to calls from within a group.

Configuring the BroadSoft Server

To assign the calling line ID delivery blocking service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Calling Line ID Delivery Blocking** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure line ID blocking for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609), who has been assigned the calling line ID delivery blocking service.
4. Click on **Outgoing Calls->Line ID Blocking**.

5. Mark the **On** radio box in the **Block Calling Line ID on Outgoing Calls** field.

The screenshot shows the BroadSoft web interface. On the left is a navigation menu with options like Profile, Incoming Calls, Outgoing Calls, Call Control, Calling Plans, Client Applications, Meet-Me Conferencing, Messaging, Service Scripts, and Utilities. The main content area is titled 'Calling Line ID Delivery Blocking'. It contains a description: 'Calling Line ID Delivery Blocking allows you to block your number from being shown when calling other numbers. Members of your group can still see your number when they are called. You have the choice of turning it on or off for all calls and then selectively turning it back on or off using the feature access codes.' Below this is a form with three buttons: OK, Apply, and Cancel. The 'Block Calling Line ID on Outgoing Calls' field has two radio buttons: 'On' (which is selected) and 'Off'.

6. Click **Apply** to accept the change.

For more information on line ID blocking, refer to *BroadWorks Web Interface Administrator Guide*.

Note

Before configuring line ID blocking feature, make sure that the XSI has been configured. If the BroadWorks XSI is configured on the IP phone, the line ID blocking configurations can be synchronized between the IP phone and the BroadWorks server. For more information on BroadWorks XSI, refer to [Xtended Services Interface](#) on page 35.

Anonymous Call Rejection

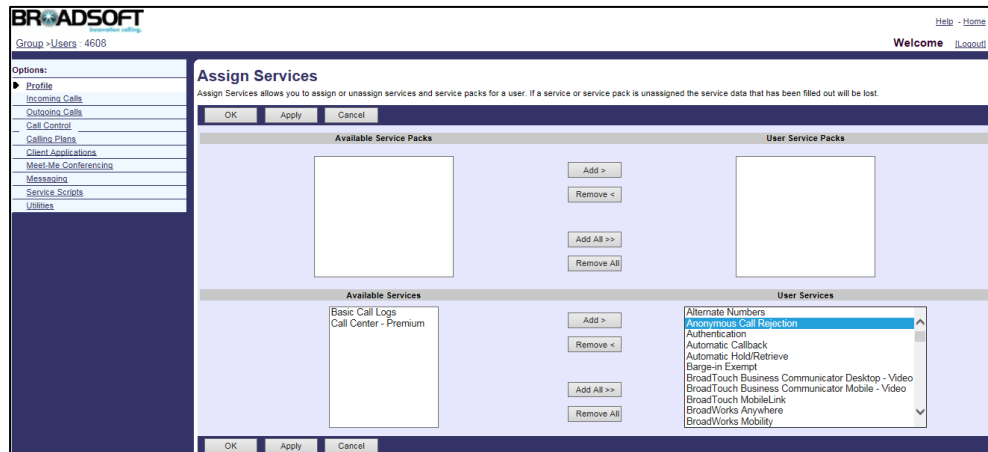
Anonymous call rejection allows a user to automatically reject incoming calls from callers who deliberately block their identities from showing up. This feature does not apply to calls from within a group.

Configuring the BroadSoft Server

To assign the anonymous call rejection service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4608).
4. Click on **Assign Services**.

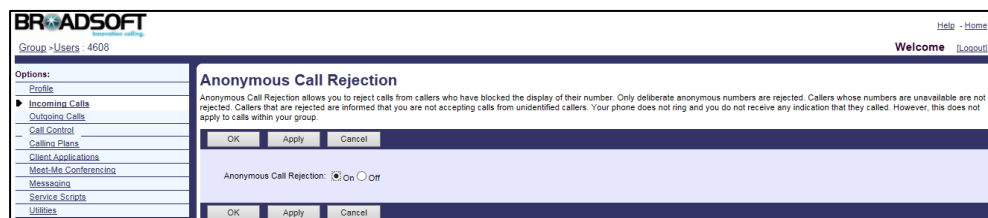
- In the **Available Services** box, select **Anonymous Call Rejection** and then click **Add>**.



- Click **Apply** to accept the change.

To configure anonymous call rejection for a user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4608), who has been assigned the anonymous call rejection service.
- Click on **Incoming Calls->Anonymous Call Rejection**.
- Mark the **On** radio box in the **Anonymous Call Rejection** field.



- Click **Apply** to accept the change.

For more information on anonymous call rejection, refer to *BroadWorks Web Interface Administrator Guide*.

Note

If the BroadWorks XSI is configured on the IP phone, the anonymous call rejection configurations can be synchronized between the IP phone and the BroadWorks server. For more information on BroadWorks XSI, refer to [Xtended Services Interface](#) on page 35.

BroadWorks Anywhere

BroadWorks anywhere is useful for users demanding the flexibility with their fixed and mobile devices. This feature allows users to designate a single phone number for incoming and outgoing calls, regardless of which phone they are currently using. For example, IP desk phone, mobile phone or home phone.

Note

Before configuring the BroadWorks anywhere feature, make sure that remote office is turned off. For more information on remote office, refer to [Remote Office](#) on page 50.

Configuring the BroadSoft Server

To add a BroadWorks anywhere portal:

1. Log into the web portal as a group administrator.
2. Click on **Services->BroadWorks Anywhere**.
3. Click **Add**.
4. Set the BroadWorks anywhere portal parameters.

The following shows an example:

BroadWorks Anywhere ID:	Portal1
Name:	Anywhere Portal1
Calling Line ID Last Name:	Portal1
Calling Line ID First Name:	Anywhere

The screenshot shows the 'BroadWorks Anywhere Add' form in the BroadSoft web portal. The form is titled 'Create a BroadWorks Anywhere Portal' and has 'OK' and 'Cancel' buttons at the top and bottom. The form fields are as follows:

- * BroadWorks Anywhere ID: Portal1 (with a dropdown arrow)
- * Name: Anywhere Portal1
- * Calling Line ID Last Name: Portal1
- * Calling Line ID First Name: Anywhere
- Department: None (with a dropdown arrow)
- Time Zone: (GMT+08:00) Asia/Shanghai (with a dropdown arrow)
- Language: English (with a dropdown arrow)
- Can Be Used By: ☐ Users in Enterprise ☒ Users in Group
- Prompt to Confirm Calling Location: ☐ Never Prompt ☐ Always Prompt ☒ Prompt if Not Available
- ☐ Silent Prompt Mode
- ☒ Prompt For Passcode

5. Click **OK** to accept the change.
6. Select the anywhere portal added above and then click **Edit**.
7. Click on **Addresses**.
8. Select the phone number from the pull-down list of **Phone Number**.

- Enter the extension in the **Extension** field.

BroadWorks Anywhere Addresses
Addresses allows you to view and maintain your phone number and other identities that are used to make and receive calls.

Phone Number: 4604 Activated
Extension: 4604

Aliases : sip: @pbx.yealink.com
sip: @pbx.yealink.com
sip: @pbx.yealink.com

- Click **Apply** to accept the change.

To assign the BroadWorks anywhere service to a user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4609).
- Click on **Assign Services**.
- In the **Available Services** box, select **BroadWorks Anywhere** and then click **Add>**.

Assign Services
Assign Services allows you to assign or unassign services and service packs for a user. If a service or service pack is unassigned the service data that has been filled out will be lost.

Available Service Packs

User Service Packs

Available Services

User Services

Call Center - Premium

BroadWorks Anywhere

Basic Call Logs
BroadTouch Business Communicator Desktop - Video
BroadTouch Business Communicator Mobile - Video
BroadTouch MobileLink
BroadWorks Mobility
Busy Lamp Field
Call Forwarding Always
Call Forwarding Busy
Call Forwarding No Answer
Call Forwarding Not Reachable

- Click **Apply** to accept the change.

To add BroadWorks anywhere locations for the user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4609), who has been assigned the BroadWorks anywhere service.
- Click on **Call Control->BroadWorks Anywhere**.
- Check the **Alert all locations for Click-to-Dial calls** checkbox.

6. Check the **Alert all locations for Group Paging calls** checkbox.

7. Click **Apply** to accept the change.

8. Click **Add** to add a BroadWorks anywhere location.

9. Enter the phone number (e.g., a mobile phone number) in the **Phone Number** field.

10. Enter the description (e.g., John Mobile) in the **Description** field.

11. Check the **Enable this Location** checkbox, which enables this location for BroadWorks anywhere.

12. Configure the advanced options:

- **Outbound Alternate Phone Number/SIP URI:** Enter the phone number/SIP URI in this field and this phone number will ring when the IP phone rings.
- **Enable Diversion Inhibitor:** Checking this checkbox prevents a call from being forwarded to another location if you have call forward activated.
- **Require Answer Confirmation:** Checking this checkbox enables the Broadworks server to prompt an answer confirmation when a call to this anywhere location is answered by the user.
- **Use BroadWorks-based Call Control Services:** Checking this checkbox enables call control services to be performed by BroadWorks anywhere location.

13. Click on the **Selective Criteria** tab.

14. Click **Add** to add the criterion for the phone number.

15. Click **OK** to accept the change.

16. Repeat steps 14 to 15 to add more criteria for the phone number.

To change anywhere portal password for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4607), who has been assigned BroadWorks anywhere locations.
4. Click on **Profile->Passwords**.
5. Mark the **Set portal password** radio box.
6. Enter the new password in the **Type new password** field.
7. Re-enter the new password in the **Re-type new password** field.

8. Click **Apply** to accept the change.

For more information on BroadWorks anywhere, refer to *BroadWorks Web Interface Administrator Guide*.

Note

If the BroadWorks XSI is configured on the IP phone, the BroadWorks anywhere configurations can be synchronized between the IP phone and the BroadWorks server. For more information on BroadWorks XSI, refer to [Xtended Services Interface](#) on page 35.

Remote Office

Remote office is especially useful for telecommuters and mobile workers, as it enables them to use all of their phones' features while working remotely (for example, extension dialing, transfers, conference calls, Outlook Integration, directories and so on).

Configuring the BroadSoft Server

To assign the remote office service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Remote Office** and then click **Add>**.

6. Click **Apply** to accept the change.

To configure remote office for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609).
4. Click on **Call Control->Remote Office**.
5. Mark the **On** radio box in the **Remote Office** field.
6. Enter the remote phone number in the **Remote Phone Number/SIP-URI** field.

7. Click **Apply** to accept the change.

For more information on remote office, refer to *BroadWorks Web Interface Administrator Guide*.

Note

If the BroadWorks XSI is configured on the IP phone, the remote office configurations can be synchronized between the IP phone and the BroadWorks server. For more information on BroadWorks XSI, refer to [Extended Services Interface](#) on page 35.

BroadSoft Directory

IP phones support to access the BroadSoft directory locally. The BroadWorks server provides six types of directories: Enterprise Directory, Group Directory, Enterprise Common Directory, Group Common Directory, Personal Directory and Custom Directory.

- Enterprise Directory: It contains a list of all users in the enterprise. Each entry in the enterprise directory contains the name, user ID, extension, group, department, etc. The enterprise directory is created automatically from BroadWorks. The user has just read-only access.
- Group Directory: It contains a list of all users in the group. Each entry in the group directory contains the name, user ID, extension, department, etc. The group directory is created automatically from BroadWorks. The user has just read-only access.
- Enterprise Common Directory: It contains a list of common contacts in the enterprise. Each entry in the directory contains the name and phone number. Only the enterprise administrator can add a new contact to the enterprise common directory. The enterprise common directory is shared with all users within the same enterprise. The user has just read-only access.
- Group Common Directory: It contains a list of common contacts in the group. Each entry in the directory contains the name and phone number. The group administrator can add a new contact to the group common directory. The group common directory is shared with all users within the same group. The user has just read-only access.
- Personal Directory: It contains a list of personal contacts of the user. Each entry in the directory contains the name and phone number. The user can add a new contact to the personal directory.
- Custom Directory: It contains a subset of the users in the group or enterprise. The administrator can add a custom directory, such as an Executive Directory, containing the desired users.

Configuring the BroadSoft Server

To view the group directory:

1. Log into the web portal as a group administrator.
2. Click on **Utilities->Group Directory**.
3. Click **Search** to display a list of all users in the group.

BROADSOFT

Group Directory

Displays the group directory listing. A summary of the group directory can be generated, which can be easily printed and a detailed phone list can be generated.

Enter search criteria below

Last Name Starts With

Search

Name (A)	User ID	Phone Number	Extension	Department	Mobile	E-mail Address	YahooID	IMPP ID
3514,3514	2413333514	+44-2413333514	3514					
Anywhere Portal1 (BroadWorks...)	Portal1							
CallCenter (Call Center)	CallCenter	+44-2413333511	3511					
Hunt Group (Hunt Group)	HuntGroup1							
Ins (Instant Group Call)	2413333650	+44-2413333515	3515					
Instant Group (Instant Group...)	Instantgroup1							
Meet-Me-Conference (Meet-Me C...)	Meet-Me-Conference	+44-2413333512	3512					
Paging Group1 (Group Paging)	1234567	+44-2413333501	3501					
Paging Group2 (Group Paging)	PagingGroup2							
Pgroup (Group Paging)	2413333701							
Voice Portal (Voice Portal)	232319244_VMR	+44-2413333513	3513					
yealink,3501	2413333501							
yealink,3502	2413333502	+44-2413333502	3502					
yealink,3503	2413333503	+44-2413333503	3503					
yealink,3504	2413333504							
yealink,3505	2413333505	+44-2413333505	3505					
yealink,3506	2413333506	+44-2413333506	3506					
yealink,3507	2413333507	+44-2413333507	3507					
yealink,3508	2413333508	+44-2413333508	3508					
yealink,3509	2413333509	+44-2413333509	3509					

[Page 1 of 2]

Next Last

4. To display the summary of group directory, click **Group Directory Summary**. A printable summary page appears in a separate browser window.

Phone List								
Name	User Id	Number	Extension	Department	Mobile	Email Address	IMP Id	
3514,3514	2413333514	+44-2413333514	3514					
Anywhere Portal1 (BroadWorks Anywhere)	Portal1							
CallCenter (Call Center)	CallCenter	+44-2413333511	3511					
Hunt Group (Hunt Group)	HuntGroup1							
Ins (Instant Group Call)	2413333650	+44-2413333515	3515					
Instant Group (Instant Group Call)	Instantgroup1							
Meet-Me-Conference (Meet-Me Conferencing)	Meet-Me-Conference	+44-2413333512	3512					
Paging Group1 (Group Paging)	1234567	+44-2413333501	3501					
Paging Group2 (Group Paging)	PagingGroup2							
Pgroup (Group Paging)	2413333701							
Voice Portal (Voice Portal)	232319244_VMR	+44-2413333513	3513					
yealink,3501	2413333501							
yealink,3502	2413333502	+44-2413333502	3502					
yealink,3503	2413333503	+44-2413333503	3503					
yealink,3504	2413333504							
yealink,3505	2413333505	+44-2413333505	3505					
yealink,3506	2413333506	+44-2413333506	3506					
yealink,3507	2413333507	+44-2413333507	3507					
yealink,3508	2413333508	+44-2413333508	3508					
yealink,3509	2413333509	+44-2413333509	3509					
yealink,3510	2413333510	+44-2413333510	3510					

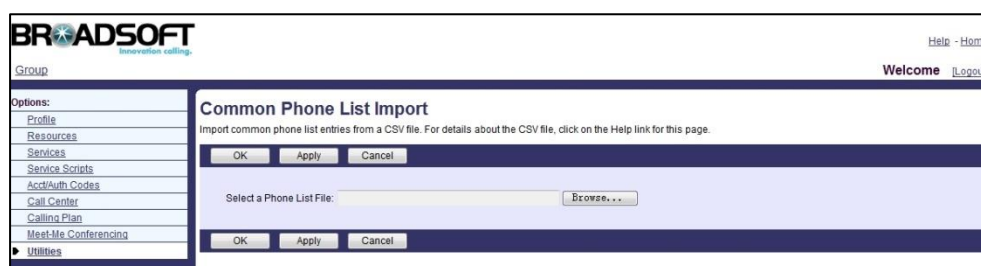
- Click **OK** to accept the change.

Then the contact appears in the group common directory.

You can also import common contacts from an existing comma-delimited text file (file format must be *.csv). To produce a comma-delimited text file, refer to the instructions for a program such as TXT.

To import a comma-delimited text file:

- Log into the web portal as a group administrator.
- Click on **Utilities->Common Phone List**.
- Click on **Import Phone List**.
- Click **Browse** to locate the CSV file from your local system. The first line of the CSV file must define two columns: *Name* and *Number*.



- Click **Apply** to accept the change.

Then the contacts in the CSV file appear in the group common directory.

The following shows an example of the contacts in an import list created in a text file before the file is converted to a CSV file. Each value in an import list created in a text file must enclose in quotation marks and separate by a comma.

```
"Name", "Number"
"Bob", "8003"
"Jony", "8001"
"Jane", "8005"
"John", "8009"
```

To add a contact to the personal directory:

- Log into the web portal with the user credential.
- Click on **Outgoing Calls->Personal Phone List**.
- Click **Add**.
- Enter the name in the **Name** field.

- Enter the phone number in the **Phone Number** field.

- Click **OK** to accept the change.

Then the contact appears in the user's personal directory.

You can also import personal contacts from an existing comma-delimited text file (file format must be *.csv). For more information, refer to the introduction above.

To add a custom directory:

- Log into the web portal as a group administrator.
- Click on **Utilities->Custom Contact Directories**.
- Click **Add**.
- Enter the name in the **Directory Name** field.
- Click **Search** to display all available users.
- In the **Available Users** box, select the desired user and then click **Add>** to assign the user to the directory.
- Repeat the step 6 to add more users.

- Click **OK** to accept the change.

For more information on BroadSoft directory, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

The BroadSoft directory is configurable using template configuration files or via web user interface. XSI authentication must be pre-configured for the first account.

To configure the BroadSoft directory using template configuration files:

1. Add/Edit BroadSoft directory parameters in template configuration files:

Parameters	Permitted Values	Default
bw_phonebook.group_enable	Boolean	1
Description: Enables or disables the IP phone to display the group directory. 0-Disabled 1-Enabled		
bw_phonebook.group_displayname	%BWGROUP-1 %	Group
Description: Configures the group directory name displayed on the IP phone.		
bw_phonebook.group_common_enable	Boolean	1
Description: Enables or disables the IP phone to display the group common directory. 0-Disabled 1-Enabled		
bw_phonebook.group_common_displayname	String within 99 characters	GroupCo mmon
Description: Configures the group common directory name displayed on the IP phone.		
bw_phonebook.enterprise_enable	Boolean	1
Description: Enables or disables the IP phone to display the enterprise directory. 0-Disabled 1-Enabled		
bw_phonebook.enterprise_displayname	%BWENTERPRISE-1%	Enterpris e
Description: Configures the enterprise directory name displayed on the IP phone.		

Parameters	Permitted Values	Default
bw_phonebook.enterprise_common_enable	Boolean	1
Description: Enables or disables the IP phone to display the enterprise common directory. 0-Disabled 1-Enabled		
bw_phonebook.enterprise_common_displayname	String within 99 characters	EnterpriseCommon
Description: Configures the enterprise common directory name displayed on the IP phone.		
bw_phonebook.personal_enable	Boolean	1
Description: Enables or disables the IP phone to display the personal directory. 0-Disabled 1-Enabled		
bw_phonebook.personal_displayname	String within 99 characters	Personal
Description: Configures the personal directory name displayed on the IP phone.		
bw_phonebook.custom	Boolean	0
Description: Enables or disables custom directory feature. 0-Disabled 1-Enabled		
directory.update_time_interval	Integer from 60 to 43200	60
Description: Configures the interval (in minutes) for the IP phone to update the data of the BroadSoft directory from the BroadSoft server.		

The following shows an example of BroadSoft directory configurations in a template file (e.g., %BWMACADDRESS%.cfg):

```
bw_phonebook.group_enable = 1
bw_phonebook.group_displayname = %BWGROUP-1%
bw_phonebook.group_common_enable = 1
bw_phonebook.group_common_displayname = GroupCommon
bw_phonebook.enterprise_enable = 1
bw_phonebook.enterprise_displayname = %BWENTERPRISE-1%
bw_phonebook.enterprise_common_enable = 1
bw_phonebook.enterprise_common_displayname = EnterpriseCommon
bw_phonebook.personal_enable = 1
bw_phonebook.personal_displayname = Personal
bw_phonebook.custom = 1
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tags in the template file will be replaced by the actual parameter values. An example is shown as below:

```
bw_phonebook.group_displayname = Group
bw_phonebook.enterprise_displayname = Enterprise
```

After successful update, user can access the BroadSoft directory by pressing the **Directory** soft key or pressing **Menu->Directory->Network Directory** via phone user interface. The following shows an example of network directory list:



The IP phone connects to load the desired directory, and then displays contacts of this directory on the LCD screen.

You can also configure BroadSoft directory via web user interface at the path **Directory->Network Directory**.

BroadSoft Call Log

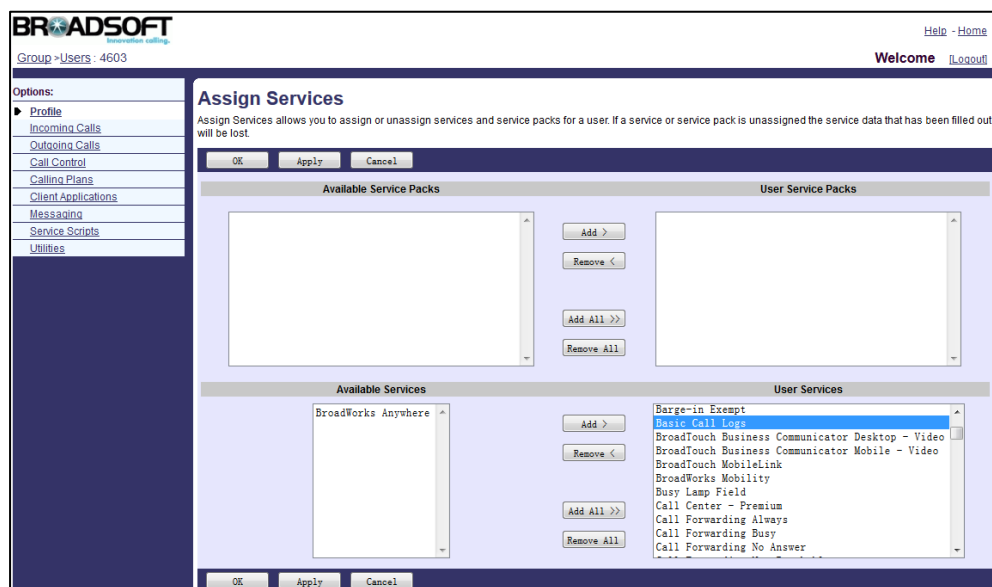
IP phones support to access the BroadSoft call log locally. The BroadSoft call log allows users to view and dial the stored numbers in the following lists: Missed Calls, Received Calls, Placed Calls and All Calls. Each call log entry contains call information such as

remote party identification, time and date.

Configuring the BroadSoft Server

To assign the call log service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4603).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Basic Call Logs** and then click **Add>**.

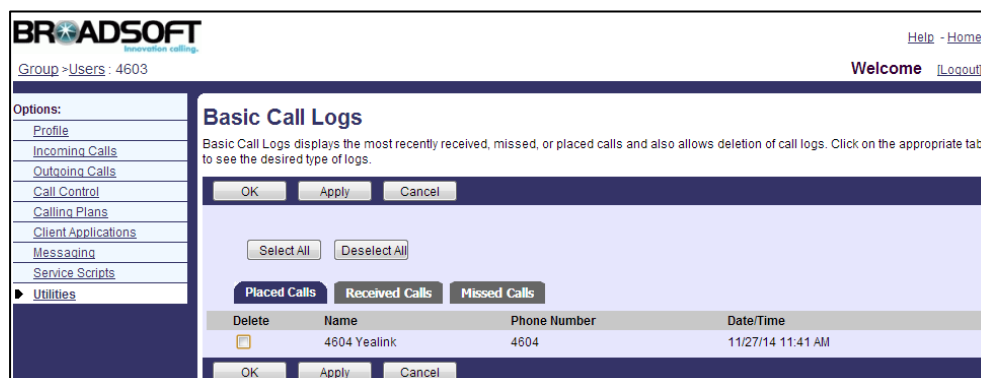


6. Click **Apply** to accept the change.

To view the call logs:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4603).

- Click on **Utilities->Basic Call Logs**.



Configuring Yealink IP Phones

The BroadSoft call log is configurable using template configuration files or via web user interface. XSI authentication must be pre-configured for the first account.

To configure the BroadSoft call log using template configuration files:

- Add/Edit BroadSoft call log parameters in template configuration files:

Parameters	Permitted Values	Default
bw_phonebook.call_log_enable	Boolean	1
Description: Enables or disables BroadSoft call log feature. 0-Disabled 1-Enabled		

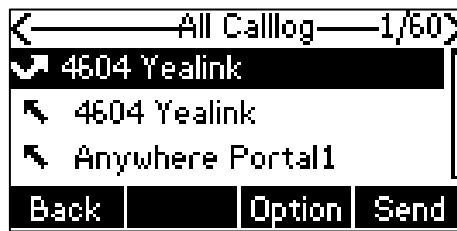
The following shows an example of the BroadSoft call log configuration in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
bw_phonebook.call_log_enable = 1
```

- Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can access the BroadSoft call log list by pressing the **History** soft key or pressing **Menu->History->Network CallLog** via phone user interface. The following shows an example of call log list:



The IP phone connects to load the desired call log list, and then displays call log entries of this list on the LCD screen.

You can also configure BroadSoft call log via web user interface at the path **Directory->Network Directory**.

Call Park

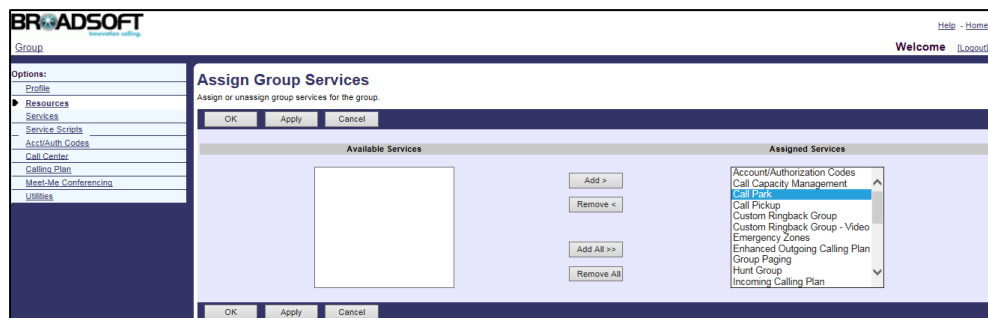
Call park allows a user to park a call against an extension and then retrieve it on another phone. Group call park hunts for the first available user in the call park group and parks the call there. If a parked call is not retrieved after the pre-configured time, the BroadWorks server will alert the designated user depending on the server configurations.

IP phones support Call Park Notification using a SUBSCRIBE/NOTIFY mechanism for communicating to the BroadWorks server when a call is parked against the extension of the IP phone. The IP phone provides a visual indicator for the parked call and turns off the indicator after the parked call is retrieved.

Configuring the BroadSoft Server

To assign the call park service to the group:

1. Log into the web portal as a group administrator.
2. Click on **Resources->Assign Group Services**.
3. In the **Available Services** box, select **Call Park** and then click **Add>**.



4. Click **Apply** to accept the change.

To add a call park group:

1. Log into the web portal as a group administrator.
2. Click on **Services->Call Park**.

The call park parameters are described as below:

Parameter	Description
Settings for Call Park	<p>Determines which user to be alerted if the parked call is not retrieved when the recall timer expires.</p> <p>Alert parking user only: Only alerts the user who parked the call.</p> <p>Alert parking user first, then alternate user: First alerts the user who parked the call, and then alerts the alternate user if the parking user does not answer the recall.</p> <p>Alert alternate user only: Only alerts the alternate user.</p> <p>The setting is initially set to Alert parking user only. You can only change the setting after you assign an alternate recall user.</p>
Settings for Group Call Park	<p>Display Timer: Specifies how long the server waits before automatically releasing the call. It is used to park a call on the call park group.</p> <p>Enable Parked Destination Announcement: Determines whether to notify the parking user of the destination extension against which the call has been parked.</p>
Settings for All Parked Calls	<p>Ring Pattern for Recalled Calls: Specifies the ring tone for the recall calls, which allows users to distinguish between new and recall calls.</p> <p>Recall Timer: Configures the time after which the parked call is recalled.</p> <p>Alert Alternate Recall User Wait Time: Configures the time after which the alternate user (if configured) is called.</p>

3. Make the desired change.

4. Click **Add**.
5. Enter the desired group name in the **Group Name** field.
6. Click **Search** to display all available users.
7. In the **Available Users** box, select the desired user and then click **Add>** to assign the user to the call park group.
8. Repeat the step 7 to add more users.

9. Click **Apply** to accept the change.

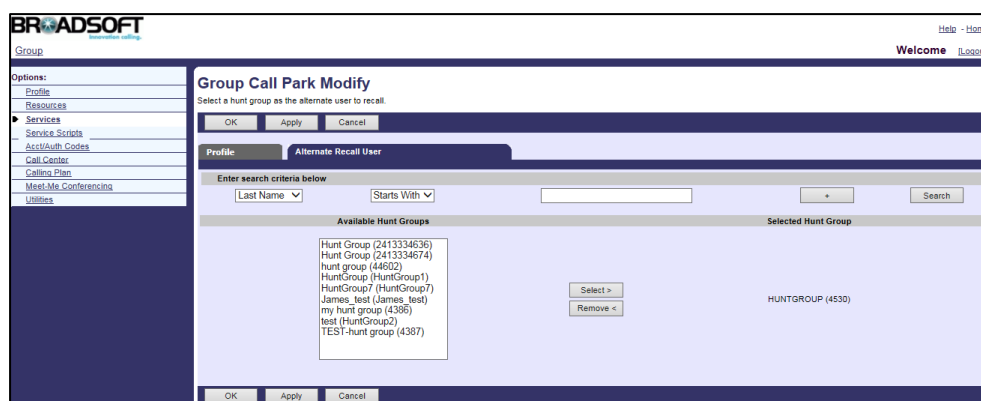
To assign alternate recall users for the call park group:

1. Log into the web portal as a group administrator.
2. Click on **Services->Call Park**.
3. Select the desired call park group and then click **Edit**.
4. Click on the **Alternate Recall User** tab.

Make sure the hunt groups have been created on the BroadWorks server. For more information on how to add a hunt group, refer to [Hunt Group](#) on page 77.

5. Click **Search** to display all available hunt groups.

- In the **Available Hunt Groups** box, select the desired hunt group and then click **Select>**.



- Click **Apply** to accept the change.

For more information on call park, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

You can configure call park feature on the phone using the FAC mode or the XSI mode. If the XSI mode is used, you need configure XSI feature on the phone in advance. In the XSI mode, call park can be performed via the call park soft key successfully when the IP phone passes the XSI authentication. The FAC mode is designated for the user to park a call using the call park soft key when XSI feature is not configured on the phone. Call park key can be used under the FAC mode and XSI mode.

Note

If the call park code or park retrieve code has been configured for the call park soft key or the retrieve park soft key in the FAC mode, you don't need to configure the call park code or the park retrieve code for the call park key or the retrieve park key.

Call park is configurable using template configuration files or via web user interface.

To configure call park using template configuration files:

- Add/Edit call park mode parameter in template configuration files to decide the call park mode:

Parameters	Permitted Values	Default
features.call_park.park_mode	Boolean	0
Description: Configures the call park mode.		

Parameters	Permitted Values	Default
0-XSI 1-FAC		
call_park.enable	Boolean	0
Description: Enables or disables the IP phone to display the Park soft key during a call. 0-Disabled 1-Enabled Note: If it is set to 1, the Retrieve soft key will also be displayed on the pre-dialing screen.		
call_park.group_enable	Boolean	0
Description: Enables or disables the IP phone to display the GPark soft key during a call. 0-Disabled 1-Enabled Note: If it is set to 1, the Retrieve soft key will also be displayed on the pre-dialing screen.		
call_park.park_visual_notify_enable	Boolean	0
Description: Enables or disables the IP phone to display an indicator when a call is parked against its line. 0-Disabled 1-Enabled		
call_park.park_ring	Boolean	0
Description: Enables or disables the IP phone to play a warning tone when a call is parked against its line. 0-Disabled 1- Enabled Note: It works only if the value of the parameter "call_park.park_visual_notify_enable" is set to 1.		
FAC Mode		
features.call_park.park_code	String with 32 characters	Blank

Parameters	Permitted Values	Default
Description: Configures the call park code for the call park key and the Park soft key when the call park mode is configured as FAC. Note: It works only if the value of the parameter "features.call_park.park_mode" is set to 1.		
features.call_park.group_park_code	String with 32 characters	Blank
Description: Configures the group call park code for the call park key and the GPark soft key when the call park mode is configured as FAC. Note: It works only if the value of the parameter "features.call_park.park_mode" is set to 1.		
features.call_park.park_retrieve_code	String with 32 characters	Blank
Description: Configures the park retrieve code for the park retrieve key and the Retrieve soft key when the call park mode is configured as FAC. Note: It works only if the value of the parameter "features.call_park.park_mode" is set to 1.		

The following shows an example of call park configurations using the XSI mode in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
features.call_park.park_mode = 0
call_park.enable = 1
call_park.group_enable = 1
call_park.park_visual_notify_enable = 1
call_park.park_ring = 1
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:

The screenshot displays the Yealink T236 web interface. The top navigation bar includes 'Status', 'Account', 'Network', 'DSSKey', 'Features' (selected), 'Settings', 'Directory', and 'Security'. A left sidebar lists various features: Forward&DND, General Information, Audio, Intercom, Transfer, Call Pickup, Remote Control, Phone Lock, ACD, SMS, Action URL, Power LED, and Notification Popups. The main content area is titled 'Call Park' and contains the following configuration options:

Feature	Value
Directed Call Pickup	Disabled
Directed Call Pickup Code	
Group Call Pickup	Disabled
Group Call Pickup Code	
Visual Alert for BLF Pickup	Disabled
Audio Alert for BLF Pickup	Disabled
Call Park Mode	XSI
Call Park	Enabled
Group Call Park	Enabled
Visual Alert for Parked Call	Enabled
Audio Alert for Parked Call	Enabled

Below the configuration options are 'Confirm' and 'Cancel' buttons. A 'NOTE' section on the right provides additional information:

- Directed Call Pickup**: Picks up an incoming call on a specific extension.
- Directed Call Pickup**: Picks up incoming calls within a pre-defined group.
- Visual Alert for BLF Pickup**: It allows the supervisor's phone to display a visual prompt when the monitored user receives an incoming call.
- Audio Alert for BLF Pickup**: It allows the supervisor's phone to play an alert tone when the monitored user receives an incoming call.

A link at the bottom of the note states: 'You can click here to get more guides.'

The following shows an example of call park configurations using the FAC mode in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
features.call_park.park_mode = 1
call_park.enable = 1
features.call_park.park_code= *68
call_park.group_enable = 1
features.call_park.group_park_code= #58
features.call_park.park_retrieve_code = *88
call_park.park_visual_notify_enable = 1
call_park.park_ring = 1
```

Upload template configuration files to BroadWorks. After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:

To configure a call park key using the template configuration files:

1. Add/Edit DSS key parameters in template configuration files:

You can configure a line key as a call park key (not applicable to SIP-T19(P) E2 and CP860 IP phones).

The “X” is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VP-T49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G X ranges from 1 to 3; For SIP-T21(P) E2, X ranges from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	10	Refer to the following content
Description: Configures the line key type. 10-Call Park For SIP VP-T49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0. For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-27 is 0.		

Parameters	Permitted Values	Default
<p>For SIP-T42G IP phones:</p> <p>The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0.</p> <p>For SIP-T41P IP phones:</p> <p>The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0.</p> <p>For SIP-T27P IP phones:</p> <p>The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0.</p> <p>For SIP-T40P/T23P/T23G/T21(P) E2 IP phones:</p> <p>The default value is 15.</p>		
linekey.X.value	String with 99 characters	Blank
<p>Description:</p> <p>Configures the extension you want to park the call against.</p> <p>Note: If the call park code is not already configured via the parameter “features.call_park.park_code”, you need to configure the value of the key to be the call park code followed by the extension for the FAC mode.</p>		
linekey.X.line	Refer to the following content	Refer to the following content
<p>Description:</p> <p>Configures the line to apply the call park key.</p> <p>Permitted Values:</p> <p>1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G)</p> <p>1 to 12 (For SIP-T42G)</p> <p>1 to 6 (For SIP-T41P/T27P)</p> <p>1 to 3 (For SIP-T40P/T23P/T23G)</p> <p>1 to 2 (For SIP-T21(P) E2)</p> <p>1-Line1</p> <p>2-Line2</p> <p>3-Line3</p> <p>...</p> <p>16-Line16</p> <p>When X=1, the default value is 1.</p>		

Parameters	Permitted Values	Default
When X=2, the default value is 2. When X=3, the default value is 3. When X=16, the default value is 16.		
linekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each line key.		

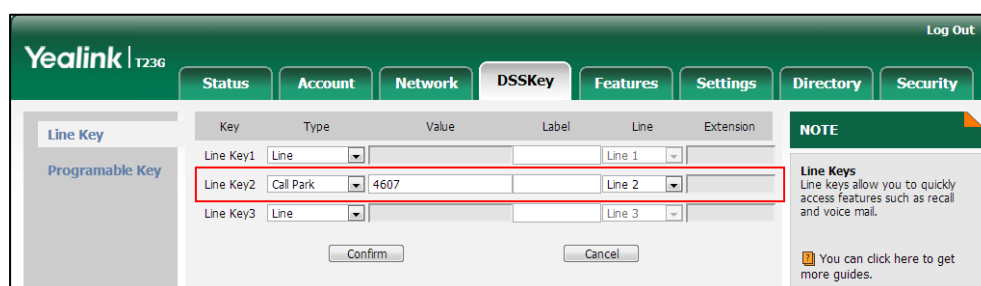
The following shows an example of call park key (line key) configurations in a template configuration file (e.g., y000000000044.cfg):

```
linekey.2.type = 10
linekey.2.value = 4607
linekey.2.line = 2
```

2. Upload the template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:



To configure a retrieve park key using the template configuration files:

1. Add/Edit DSS key parameters in template configuration files:

You can configure a line key as a retrieve park key (not applicable to SIP-T19(P) E2 and CP860 IP phones).

The “X” is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VP-T49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G, X ranges from 1 to 3; For SIP-T21(P) E2, X ranges from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	56	Refer to the following content
Description: Configures the line key type. 56-Retrieve Park For SIP VP-T49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0. For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-27 is 0. For SIP-T42G IP phones: The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0. For SIP-T41P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0. For SIP-T27P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0. For SIP-T40P/T23P/T23G/T21(P) E2 IP phones: The default value is 15.		
linekey.X.value	String within 99 characters	Blank
Description: Configures the extension where you want to retrieve the call from. Note: If the park retrieve code is not already configured via the parameter “features.call_park.park_retrieve_code”, you need to configure the value of the key to be the park retrieve code followed by the extension for the FAC mode.		
linekey.X.line	Refer to the following content	Refer to the

Parameters	Permitted Values	Default
		following content
Description: Configures the line to apply the retrieve park key. Permitted Values: 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G) 1 to 12 (For SIP-T42G) 1 to 6 (For SIP-T41P/T27P) 1 to 3 (For SIP-T40P/T23P/T23G) 1 to 2 (For SIP-T21(P) E2) 1-Line1 2-Line2 3-Line3 ... 16-Line16 When X=1, the default value is 1. When X=2, the default value is 2. When X=3, the default value is 3. When X=16, the default value is 16.		
linekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each line key.		

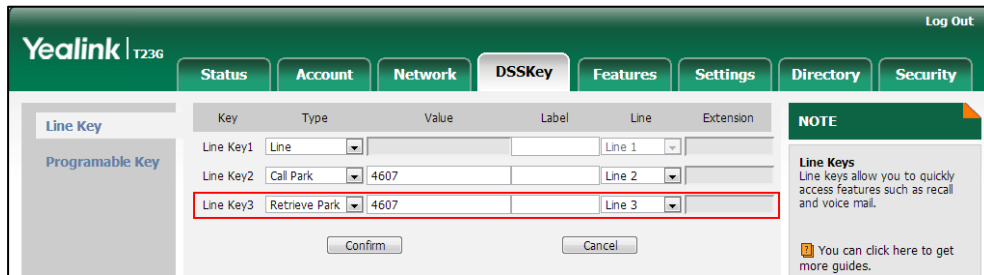
The following shows an example of retrieve park key (line key) configurations in a template configuration file (e.g., y000000000044.cfg):

```
linekey.3.type = 56
linekey.3.value = 4607
linekey.3.line = 3
```

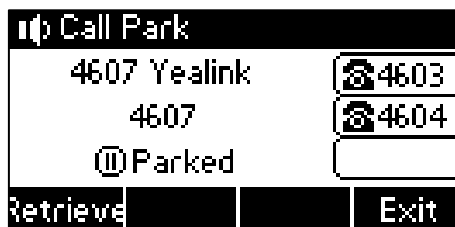
2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:



User can park a call using the **Park** soft key or the call park key and retrieve the parked call using the **Retrieve** soft key or the retrieve park key. When a call is parked against the extension of the IP phone, the IP phone LCD screen is similar to the one shown as below:



Call park is also configurable via web user interface at the path **Features->Call Pickup**.

Group Paging

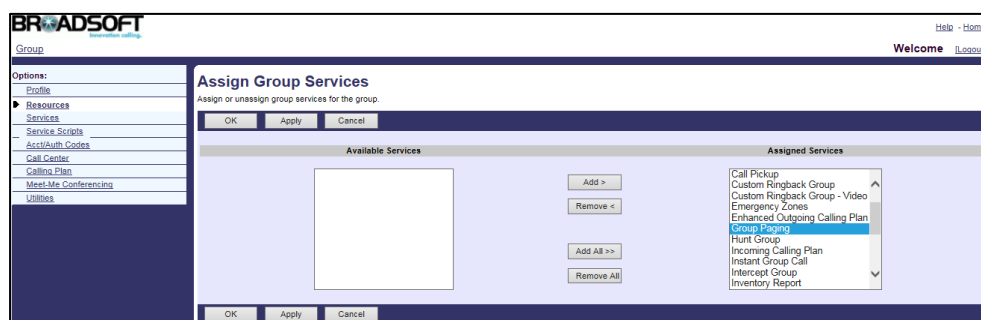
Group paging allows authorized users (originators) to broadcast one-way audio announcements to a group of users (targets) by dialing a paging group number or extension. Group paging originator is the subscriber who may originate pages for this paging group. Group paging target is the subscriber whom the pages from this group will be sent to.

Configuring the BroadSoft Server

To assign the group paging service to the group:

1. Log into the web portal as a group administrator.
2. Click on **Resource->Assign Group Services**.

3. In the **Available Services** box, select **Group Paging** and then click **Add>**.



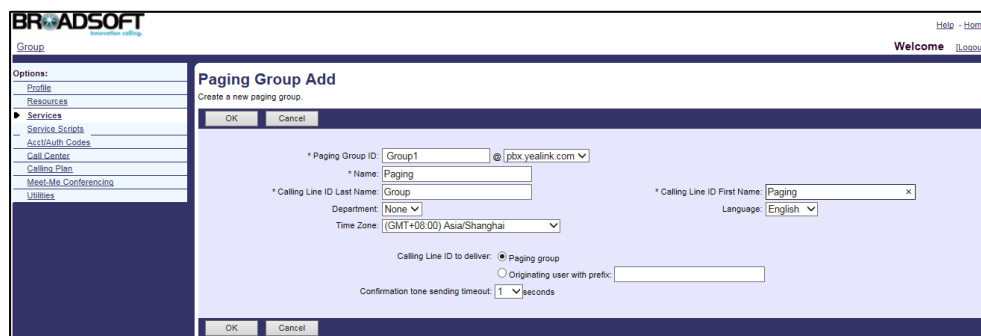
4. Click **Apply** to accept the change.

To add a paging group:

1. Log into the web portal as a group administrator.
2. Click on **Services->Group Paging**.
3. Click **Add**.
4. Set the parameters of paging group.

The following shows an example:

Paging Group ID: Group1
 Name: Paging
 Calling Line ID Last Name: Group
 Calling Line ID First Name: Paging



5. Click **OK** to accept the change.
6. Select the paging group added above and then click **Edit**.
7. Click on **Addresses**.
8. Select the phone number from the pull-down list of **Phone Number**.

- Enter the extension in the **Extension** field.

BROADSOFT
Group > Paging Groups > Group1

Options:
Profile

Paging Group Addresses
Addresses allows you to view and maintain your phone number and other identities that are used to make and receive calls.

OK Apply Cancel

Phone Number: 4604 Activated
Extension: 4604

Aliases : sip: pbx.yealink.com
sip: pbx.yealink.com
sip: pbx.yealink.com

OK Apply Cancel

- Click **Apply** to accept the change.

To configure the originator and targets for the paging group:

- Log into the web portal as a group administrator.
- Click on **Services->Group Paging**.
- Select the paging group added above and then click **Edit**.
- Click on **Originators**.
- Click **Search** to display all available users.
- In the **Available Originators** box, select the desired user and then click **Add>**.

BROADSOFT
Group > Paging Groups > Group1

Options:
Profile

Paging Group Originators
Create and manage the list of subscribers who may originate calls to the paging group.

OK Apply Cancel

Enter search criteria below
User ID Starts With Search

Available Originators

- 111qq.111qq (335566)
- 12341.12341 (12341)
- 21.43 (4321)
- 22.43 (4322)
- 26.26 (4356)
- 40004980.40004980 (40004980)
- 40004981.40004981 (40004981)
- 4011.4011 (4011)
- 4300.4300 (4300)
- 4301Value.123 (4301)
- 4302.4302 (4302)

Add > Remove < Add All >> Remove All

Assigned Originators

- Yealink.4609 (4609)

OK Apply Cancel

- Click **OK** to accept the change.
- Click on **Targets**.
- Click **Search** to display all available users.
- In the **Available Targets** box, select the desired users and then click **Add>**.

BROADSOFT
Group > Paging Groups > Group1

Options:
Profile

Paging Group Targets
Create and manage the list of subscribers who will be paged upon calls to the paging group.

OK Apply Cancel

Enter search criteria below
User ID Starts With Search

Available Targets

- 111qq.111qq (335566)
- 12341.12341 (12341)
- 21.43 (4321)
- 22.43 (4322)
- 26.26 (4356)
- 40004980.40004980 (40004980)
- 40004981.40004981 (40004981)
- 4011.4011 (4011)
- 4300.4300 (4300)
- 4301Value.123 (4301)
- 4302.4302 (4302)

Add > Remove < Add All >> Remove All

Assigned Targets

- Yealink.4607 (4607)
- Yealink.4608 (4608)

OK Apply Cancel

- Click **Apply** to accept the change.

For more information on group paging, refer to *BroadWorks Web Interface Administrator Guide*.

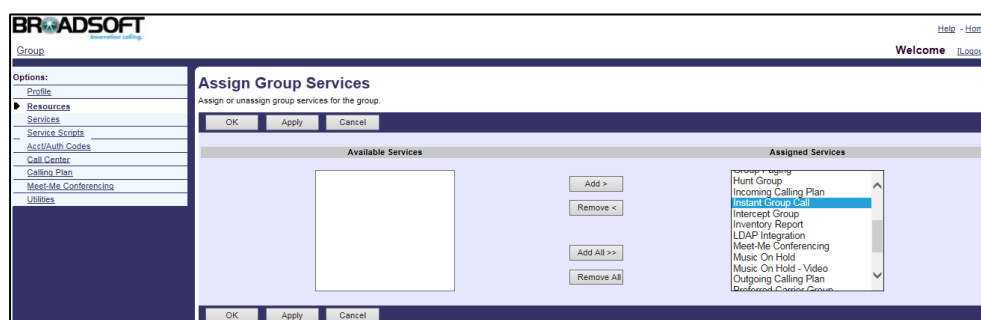
Instant Group Call

Instant group call allows users to instantly call a pre-defined group of users for an ad hoc conference call by dialing a phone number or an extension. The originators can be part of the same group or external users.

Configuring the BroadSoft Server

To assign the instant group call service to the group:

1. Log into the web portal as a group administrator.
2. Click on **Resource->Assign Group Services**.
3. In the **Available Services** box, select **Instant Group Call** and then click **Add>**.



4. Click **Apply** to accept the change.


To add an instant group call:

1. Log into the web portal as a group administrator.
2. Click on **Services->Instant Group Call**.
3. Click **Add**.
4. Set the parameters of the instant group.

The following shows an example:

Instant Group Call ID:	Instantgroup1
Name:	Instant Group
Calling Line ID Last Name:	Group
Calling Line ID First Name:	Instant

Instant Group Call User List: 4607
4608
4609



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Options:

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[Account/Auth Codes](#)
[Call Center](#)
[Callings Plan](#)
[Meet Me Conferencing](#)
[Utilities](#)

Instant Group Call Add

Create a new instant group call.

OK

Cancel

* Instant Group Call ID: @

* Name:

* Calling Line ID Last Name:

* Calling Line ID First Name:

Department:

Language:

Time Zone:

☐ Enable Maximum Call Time for Unanswered Calls Minutes

Instant Group Call User List

Specify Phone Number/SIP_URI:

4607		
4608		
4609		

OK

Cancel

5. Click **OK** to accept the change.
6. Select the instant group call added above and then click **Edit**.
7. Click on **Addresses**.
8. Select the phone number from the pull-down list of **Phone Number**.
9. Enter the extension in the **Extension** field.

BRADSOFT

[Home](#)
[Help](#)

[Group > Instant Group Call](#) > Instantgroup1

Welcome

Logout

Options:

[Profile](#)
[Calling Plans](#)

Instant Group Call Addresses

Addresses allows you to view and maintain your phone number and other identities that are used to make and receive calls.

OK

Apply

Cancel

Phone Number: 4604 ▼ Activated

Extension: 4604

Aliases: sip:

pbx.yealink.com ▼

pbx.yealink.com ▼

pbx.yealink.com ▼

OK

Apply

Cancel

10. Click **Apply** to accept the change.

For more information on instant group call, refer to *BroadWorks Web Interface Administrator Guide*.

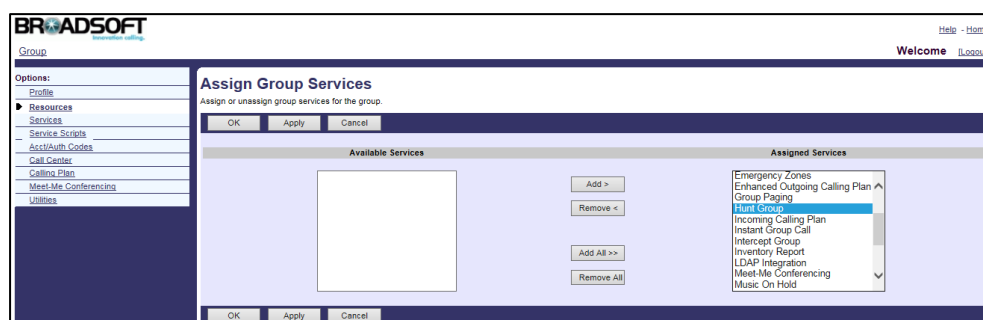
Hunt Group

Hunt group allows incoming calls to a central phone number to be distributed among a group of users according to a hunting policy.

Configuring the BroadSoft Server

To assign the hunt group service to the group:

1. Log into the web portal as a group administrator.
2. Click on **Resources->Assign Group Services**.
3. In the **Available Services** box, select **Hunt Group** and then click **Add>**.



4. Click **Apply** to accept the change.

To add a hunt group:

1. Log into the web portal as a group administrator.
2. Click on **Services->Hunt Group**.
3. Click **Add**.
4. Set the parameters of hunt group:

The following shows an example:

Hunt Group ID: HuntGroup1

Name: Hunt Group

Calling Line ID Last Name: Group

Calling Line ID First Name: Hunt

5. Mark the desired radio box in the **Group Policy** field.
 - **Circular:** Sends incoming calls to users according to their position in a list. After a call has been sent to the last user in the list, the next call is sent to the user at the top of the list.
 - **Regular:** Sends incoming calls to the next available user in the hunt group.
 - **Simultaneous:** Sends incoming calls to all users at the same time. The call is connected to the user who answers the call first.
 - **Uniform:** Sends incoming call to the user who has been idle for the longest time. The user who has answered a call will be moved to the bottom of the call queue.
 - **Weighted Call Distribution:** Sends incoming calls randomly to users according to their relative weight. Users with a higher weight are assigned more

incoming calls than users with lower weights.

6. Click **Search** to display all available users.
7. In the **Available Users** box, select the desired user and then click **Add>** to assign it to the hunt group.

BroadSoft integrated calling

Group: [Home](#) [Welcome](#) [Logout](#)

Hunt Group Add
Create a new hunt group.

OK Cancel

* Hunt Group ID: @ pbx.yealink.com

* Name:

* Calling Line ID Last Name: * Calling Line ID First Name:

Department: Language:

Time Zone:

☐ Allow Call Waiting on agents

Group Policy: ☐ Circular ☒ Regular ☐ Simultaneous ☐ Uniform ☐ Weighted Call Distribution

No Answer Settings

☐ Skip to next agent after Rings

☐ Forward call after waiting seconds

Call Forward to:

Not Reachable Settings

☐ Enable Call Forwarding Not Reachable

Call Forward to:

☐ Make Hunt Group busy when all available agents are not reachable

Calling Line ID Settings

☒ Use the system default CLID configuration (currently including the Hunt Group Name in the CLID)

☐ Customize the CLID for this Hunt Group

☒ Include the Hunt Group Name in the CLID

Enter search criteria below

User ID: Starts With: Search

Available Users

111qq.111qq (335566)
12341.12341 (12341)
21.43 (4321)
22.43 (4322)
25.25 (4358)
40004980.40004980 (40004980)
40004981.40004981 (40004981)
4011.4011 (4011)
4200.4200 (4200)
4301Value.123 (4301)
4302.4302 (4302)

Add > Remove < Add All >> Remove All

Assigned Users

Yealink.4602 (4602)
Yealink.4603 (4603)
Yealink.4604 (4604)
Yealink.4605 (4605)
Yealink.4606 (4606)
Yealink.4607 (4607)
Yealink.4608 (4608)
Yealink.4609 (4609)

Move Up Move Down

OK Cancel

8. Click **OK** to accept the change.
9. Select the hunt group added above and then click **Edit**.
10. Click on **Addresses**.
11. Select the phone number from the pull-down list of **Phone Number**.
12. Enter the extension in the **Extension** field.

BroadSoft integrated calling

Group > Hunt Groups > HuntGroup1 [Home](#) [Welcome](#) [Logout](#)

Hunt Group Addresses
Addresses allows you to view and maintain your phone number and other identities that are used to make and receive calls.

OK Apply Cancel

Phone Number: Activated

Extension:

Aliases: sip: @ pbx.yealink.com

sip: @ pbx.yealink.com

sip: @ pbx.yealink.com

OK Apply Cancel

13. Click **Apply** to accept the change.

To configure weighted call distribution:

1. Log into the web portal as a group administrator.
2. Click on **Services->Hunt Group**.
3. Select the hunt group added above and then click **Edit**.

4. Click on **Profile->Weighted Call Distribution**. This link appears only if you enabled the weighted call distribution policy for this hunt group.
5. Enter the desired percentage values in the corresponding fields.

Weighted Call Distribution

Configure assigned users' weighted call distribution allocation. With weighted call distribution, any incoming calls to the Hunt Group are dispatched to the agents randomly according to specified percentage weight of each agent.

Agent	Percentage
* Yealink, 4602 (4602)	12 %
* Yealink, 4603 (4603)	12 %
* Yealink, 4604 (4604)	12 %
* Yealink, 4605 (4605)	12 %
* Yealink, 4606 (4606)	12 %
* Yealink, 4607 (4607)	12 %
* Yealink, 4608 (4608)	12 %
* Yealink, 4609 (4609)	16 %
Total	100%

6. Click **Apply** to accept the change.

For more information on hunt group, refer to *BroadWorks Web Interface Administrator Guide*.

CommPilot Call Manager

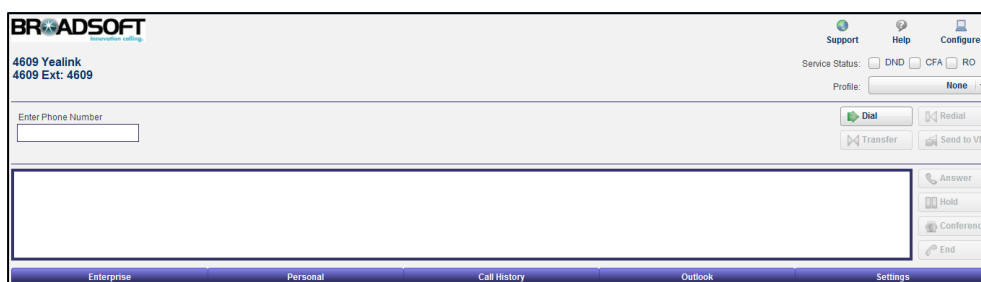
CommPilot call manager allows users to use a web-based tool for service invocation and call control. It provides users with a visual, graphical user interface to initiate, manipulate, and release calls. It also provides the following functions:

- Navigation, support, help – Useful links include support (to send an e-mail to the applicable support service), help (to display a context-sensitive help web page), and configure (to jump to the CommPilot Personal web portal).
- User information – Presents the name, phone number, and extension of the user of the CommPilot call manager.
- Service link area – Provides status and configuration for commonly used services.
- Call display – Presents the user with information on active calls and allows the user to select calls with the mouse.
- Directories – Provides access to the user directories, including the group and the personal.
- Call History – Provides access to the user call log.
- Settings – Allows the user to configure the CommPilot call manager.

To log into the call manager:

1. Log into the web portal with the user credential.
2. Select the **Call Manager/Attendant Console** from the pull-down list on the upper right corner.

The CommPilot call manager is shown as below:



Note

Before logging into the call manager, check whether the version of web browser and flash player installed on your computer is proper. For more information, contact your BroadSoft reseller.

To initiate, manipulate and release a call via the call manager:

1. Enter the phone number in the **Enter Phone Number** field
2. Click **Dial** to make a call.

The caller's IP phone is alerted first. After the caller answers the incoming call on his IP phone, the callee's IP phone is alerted. After the callee answers the incoming call on his phone, the two-way voice is established between two parties.

3. Click **Hold** to place the active call on hold.
4. Click **Answer** to retrieve the held call.
5. Click **End** to release the call.

For more information on CommPilot call manager, refer to *BroadWorks Web Interface Administrator Guide*.

Automatic Callback

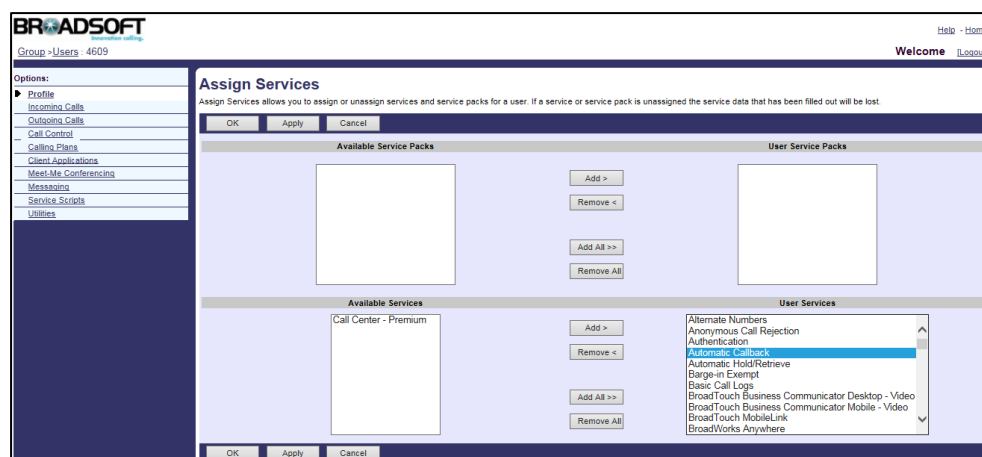
Automatic callback allows a user to monitor a busy party and automatically establish a call when the busy party becomes idle. The user receives a notification when the busy party becomes available.

Configuring the BroadSoft Server

To assign the automatic callback service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609).
4. Click on **Assign Services**.

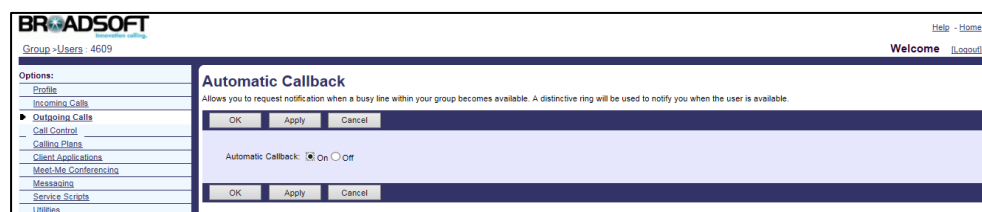
5. In the **Available Services** box, select **Automatic Callback** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure automatic callback for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609), who has been assigned the automatic callback service.
4. Click on **Outgoing Calls->Automatic Callback**.
5. Mark the **On** radio box in the **Automatic Callback** field.



6. Click **Apply** to accept the change.

For more information on automatic callback, refer to *BroadWorks Web Interface Administrator Guide*.

Authentication

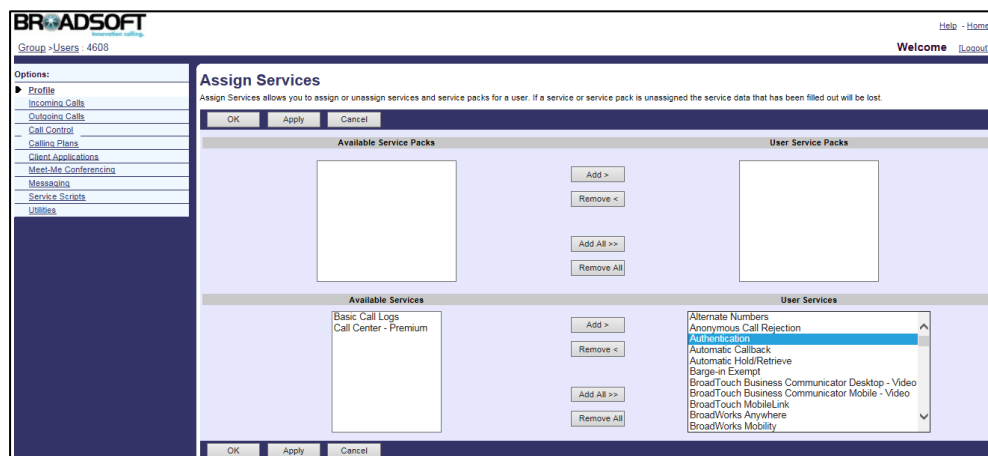
Authentication provides authentication of sessions for SIP IP phones to prevent unauthorized access to the system. Authentication is performed on registrations (SIP REGISTERs), redirections (SIP REFERs) as well as incoming calls (SIP INVITEs). Standard MD5 digest authentication is used.

Configuring the BroadSoft Server

To use authentication service, make sure the authentication service is assigned to the user, the user ID and password for authentication are configured.

To assign the authentication service to a user:

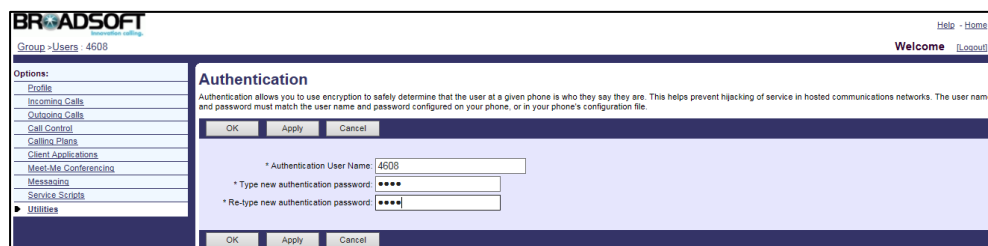
1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4608).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Authentication** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure the user ID and password for a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4608), who has been assigned the authentication service.
4. Click on **Utilities->Authentication**.
5. Enter the user ID in the **Authentication User Name** field.
6. Enter the password in the **Type new authentication password** and **Re-type new authentication password** fields.



7. Click **Apply** to accept the change.

For more information on authentication, refer to *BroadWorks Web Interface Administrator Guide*.

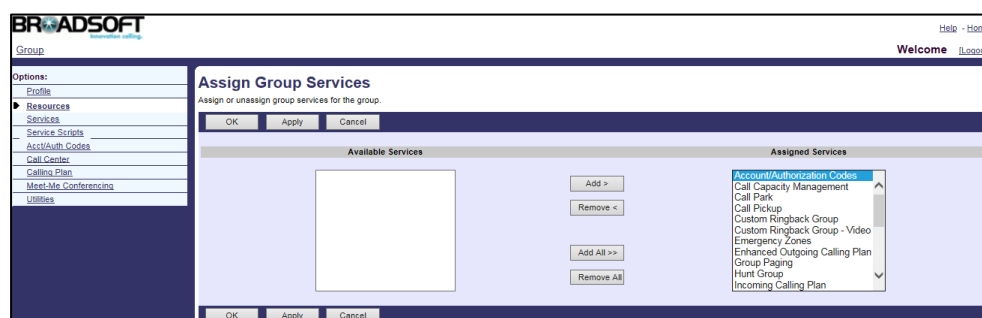
Authorization/Account Codes

Authorization/Account codes allow users to use authorization and account codes for outgoing calls. Authorization code allows authorization of calls made outside the group by prompting users for an authorization code. Calls are not connected unless a valid code is entered. Account code allows tracking of calls made outside the group by prompting users for an account code. Account codes have a fixed length, as configured by the group administrator. When prompted for an account code, the user is informed of the digits to enter, which match the length of the account codes.

Configuring the BroadSoft Server

To assign the authorization/account codes service to the group:

1. Log into the web portal as a group administrator.
2. Click on **Resources->Assign Group Services**.
3. In the **Available Services** box, select **Authorization/Account Codes** and then click **Add>**.



4. Click **Apply** to accept the change.

To configure the type of code for the group:

1. Log into the web portal as a group administrator.
2. Click on **Acct/Auth Codes->Administration**.
3. Set the parameters of account/authorization codes.

The following shows an example:

Type: Authorization Code

Number of Digits: 4

Allow Local and Toll-Free Calls without Account/Authorization Code: Selected

Restricted Users: 4602@pbx.yealink.com
 4604@pbx.yealink.com
 4605@pbx.yealink.com

4. Click **Apply** to accept the change.

To configure the authentication code:

1. Log into the web portal as a group administrator.
2. Click on **Acct/Auth Codes->Codes Management**.
3. Click **Add** to add the authentication codes.
4. Enter the configured number of digits in the **Account/Authentication Code** field.
5. Enter the desired description in the **Description** field.

6. Click **OK** to accept the change.

For more information on authorization/account codes, refer to *BroadWorks Web Interface Administrator Guide*.

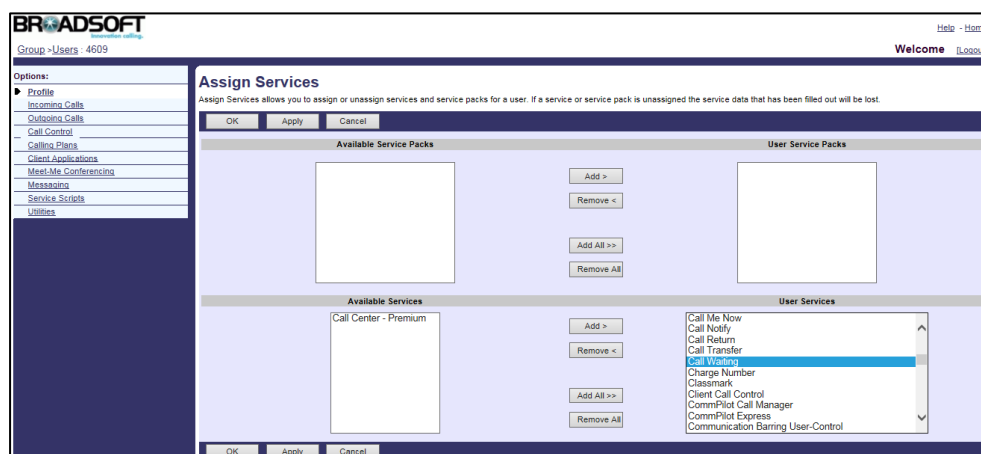
Call Waiting

Call waiting allows users to receive another call while already engaged in a call. Call waiting tone enables the IP phone to play a short tone when receiving another incoming call during a call. Call waiting tone works only if call waiting is enabled.

Configuring the BroadSoft Server

To assign the call waiting service to a user:

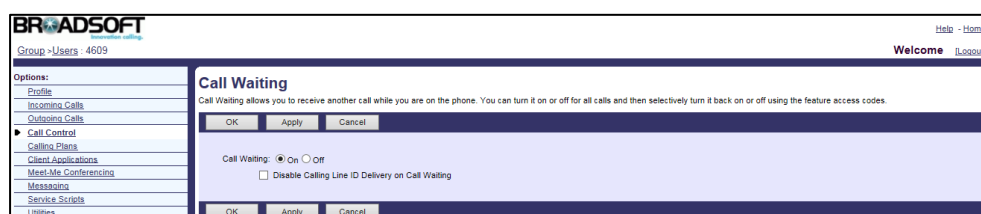
1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609).
4. In the **Available Services** box, select **Call Waiting** and then click **Add>**.



5. Click **Apply** to accept the change.

To configure call waiting for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609), who has been assigned the call waiting service.
4. Click on **Call Control->Call Waiting**.
5. Mark the **On** radio box in the **Call Waiting** field.



6. Click **Apply** to accept the change.

For more information on call waiting, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

Call waiting and call waiting tone are configurable using template configuration files, via web user interface or phone user interface.

To configure call waiting and call waiting tone using template configuration files:

1. Add/Edit call waiting and call waiting tone parameters in template configuration files:

Parameters	Permitted Values	Default
call_waiting.enable	%CALL_WAITING_BINARY%	1
Description: Enables or disables call waiting. 0 -Disabled 1 -Enabled		
call_waiting.tone	Boolean	1
Description: Enables or disables call waiting tone. 0 -Disabled 1 -Enabled		

The following shows an example of call waiting configurations in a template configuration file (e.g., y000000000044.cfg):

```
call_waiting.enable = %CALL_WAITING_BINARY%
call_waiting.tone = 1
```

2. Customize the static tag on BroadWorks. The tag name is %CALL_WAITING_BINARY% and the tag value is 1.

For more information, refer to [Customizing a Static Tag](#) on page 17.

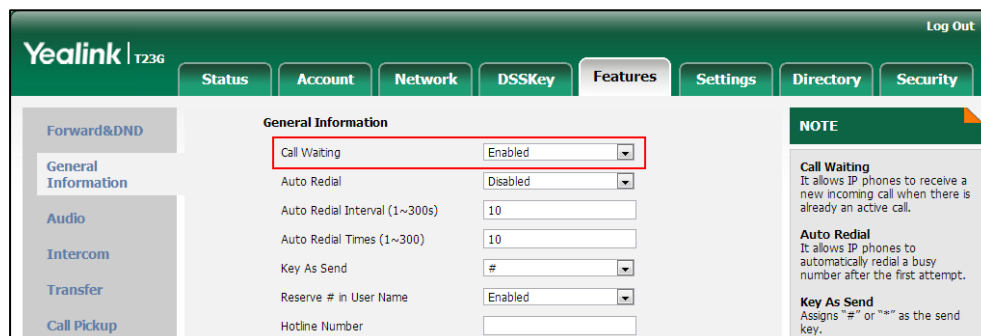
3. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tag in the template file will be replaced by the actual parameter value. An example is shown as below:

```
call_waiting.enable = 1
```

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:



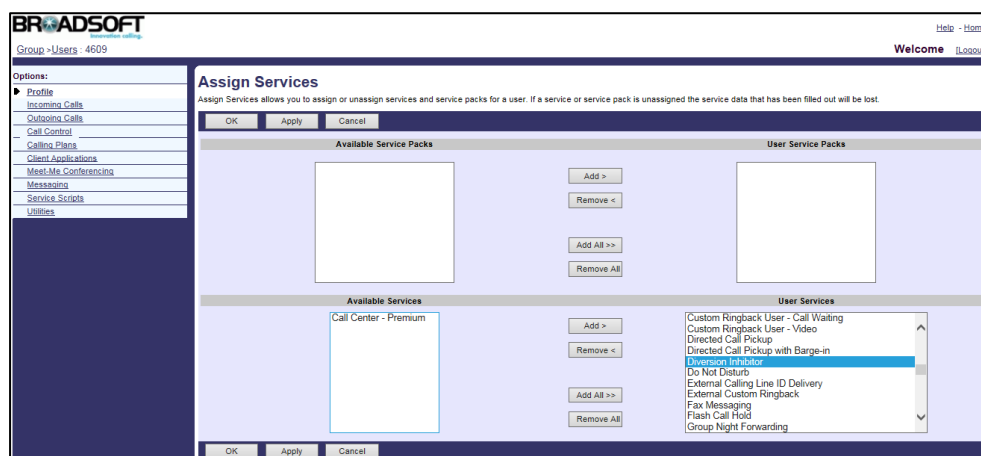
Diversion Inhibitor

Diversion inhibitor prevents calls from being redirected by the callee. When receiving the INVITE message sent by BroadWorks with “diversion-inhibited” in the diversion or history-info header, the callee is forbidden to forward the call even if call forward is enabled on the callee’s phone. The user can activate diversion inhibitor by dialing the feature access code (FAC) as a dial prefix when making a call.

Configuring the BroadSoft Server

To assign the diversion inhibitor service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Diversion Inhibitor** and then click **Add>**.



6. Click **Apply** to accept the change.

To check the Diversion Inhibitor FAC:

1. Log into the web portal as a group administrator.
2. Click on **Utilities->Feature Access Codes**.
3. Check the Diversion Inhibitor FAC.

Administrator can modify the code in the **Main (Required)** field or enter an alternate code in the **Alternate (Optional)** field.

For more information on diversion inhibitor, refer to *BroadWorks Web Interface Administrator Guide*.

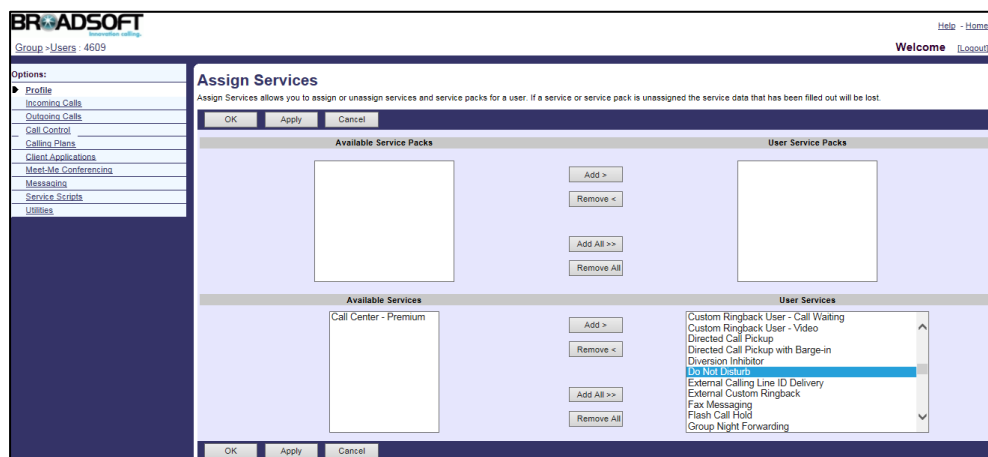
Do Not Disturb

Do Not Disturb (DND) allows all incoming calls to be rejected automatically. The BroadWorks server provides an option to play a ring splash reminder on the IP phone when the incoming call is rejected.

Configuring the BroadSoft Server

To assign the DND service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Do Not Disturb** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure DND for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.

3. Select the desired user (e.g., 4609), who has been assigned the DND service.
4. Click on **Incoming Calls->Do Not Disturb**.
5. Mark the **On** radio box in the **Do Not Disturb** field.
6. Check the **Play Ring Reminder when a call is blocked** checkbox.

7. Click **Apply** to accept the change.

For more information on DND, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

There are two DND modes: Phone (default) and Custom. The DND mode is configurable using the configuration files or via web user interface. DND key is configurable using template configuration files, via web user interface or phone user interface. A user can activate or deactivate DND feature on the IP phone using the DND soft key or a DND key.

To configure DND using template configuration files:

1. Add/Edit DND parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIPT48G/T46G/T29G, X ranges from 1 to 16; For SIPT42G, X ranges from 1 to 12; For SIPT41P/T27P, X ranges from 1 to 6; For SIPT40P/T23P/T23G, X ranges from 1 to 3, For SIPT21(P) E2, X ranges from 1 to 2).

If the user (e.g., 4609) is the second user assigned to the device profile, replace “X” by “2”.

Parameters	Permitted Values	Default
features.dnd_mode	Integer	0
Description: Configures the mode for the IP phone to handle DND. 0 -Phone 1 -Custom Note: It is not applicable to SIPT19(P) E2 and CP860 IP phones.		

Parameters	Permitted Values	Default
features.dnd.enable	Boolean	0
Description: Triggers the DND feature to on or off. 0 -Disabled 1 -Enabled Note: It works only if the value of the parameter “features.dnd_mode” is set to 0.		
account.X.dnd.enable	%BWDND-BINARY-X%	0
Description: Enables or disables DND on a per-account basis. 0 -Disabled 1 -Enabled Note: It works only if the value of the parameter “features.dnd_mode” is set to 1. It is not applicable to SIP-T19(P) E2 and CP860 IP phones.		

The following shows an example of DND configurations for account 2 in a template configuration file (e.g., y000000000044.cfg):

```
features.dnd_mode = 1
account.2.dnd.enable = %BWDND-BINARY-2%
```

2. Upload template configuration files.

After the above configurations, the tags in the template file will be replaced by the actual parameter values. An example is shown as below:

```
account.2.dnd.enable = 1
```

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:

The screenshot shows the Yealink T23G web interface with the 'Features' tab selected. The 'Forward' section is expanded, showing various forwarding options. The 'DND' section is also expanded, and the 'Mode' and 'Account' settings are highlighted with a red box. The 'NOTE' section on the right provides additional information about the features.

To configure a DND key using template configuration files:

1. Add/Edit DSS key parameters in template configuration files:

You can configure a line key as a DND key (not applicable to SIP-T19(P) E2 and CP860 IP phones).

The "X" is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VPT49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G, X ranges from 1 to 3; For SIP-T21(P) E2, X ranges from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	5	Refer to the following content
Description: Configures the line key type. 5-DND For SIP VPT49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0. For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key		

Parameters	Permitted Values	Default
17-27 is 0. For SIP-T42G IP phones: The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0. For SIP-T41P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0. For SIP-T27P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0. For SIP-T40P/T23P/T23G/T21(P) E2 IP phones: The default value is 15.		
linekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each line key.		

The following shows an example of the DND key (line key) configuration in a template configuration file (e.g., y000000000044.cfg):

```
linekey.2.type = 5
```

You can also configure a programmable key as a DND key.

The “X” is an integer which specifies the sequence number of the programmable key. X ranges from 1 to 14.

Parameters	Permitted Values	Default
programmablekey.X.type	5	Refer to the following content
Description: Configures the programmable key type. 5-DND For SIP VP-T49G IP phones: When X=1, the default value is 28 (History). When X=2, the default value is 61 (Directory). When X=3, the default value is 5 (DND). When X=4, the default value is 30 (Menu). When X=12/13, the default value is 0 (NA).		

Parameters	Permitted Values	Default
<p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T48G/T46G IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T42G/T41P/T40P IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/13, the default value is 0 (NA).</p> <p>For SIP-T29G/T27P IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/11/12/13, the default value is 0 (NA).</p>		

Parameters	Permitted Values	Default
<p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T23P/T23G/T21(P) E2 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T19(P) E2 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 0 (NA).</p> <p>When X=8, the default value is 0 (NA).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For CP860 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=13, the default value is 0 (NA).</p>		

Parameters	Permitted Values	Default
<code>programablekey.X.label</code>	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each soft key. Note: It is applicable when the value of X ranges from 1 to 4.		

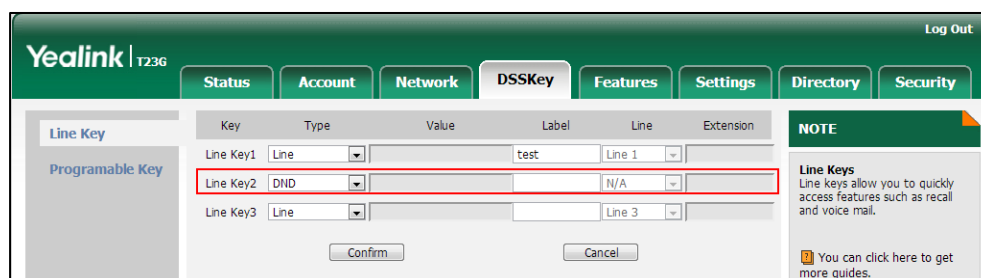
The following shows an example of the DND key configuration in a template configuration file (e.g., y000000000044.cfg):

```
programablekey.3.type = 5
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:



Call Forward

Call forward allows users to redirect incoming calls to another destination. When an incoming call is forwarded, the BroadWorks server sends the INVITE request containing the Diversion or History-info header to the destination party. The following describes three call forward behaviors:

- **Call Forwarding Always:** Incoming calls are immediately forwarded.
- **Call Forwarding Busy:** Incoming calls are immediately forwarded if the IP phone is busy.
- **Call Forwarding No Answer:** Incoming calls are forwarded if not answered after a period of time.

Configuring the BroadSoft Server

To assign the call forward service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Call Forwarding Always**, **Call Forwarding Busy** and **Call forwarding No Answer** and then click **Add>**.

6. Click **Apply** to accept the change.

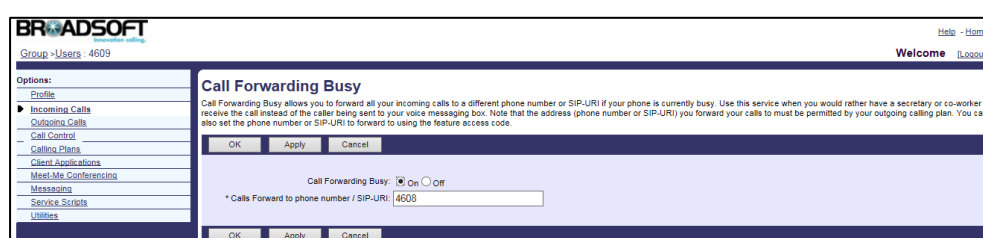
To configure call forwarding always for a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609), who has been assigned the call forward service.
4. Click on **Incoming Calls->Call Forwarding Always**.
5. Mark the **On** radio box in the **Call Forwarding Always** field.
6. Enter the destination number or SIP-URI in the **Calls Forward to phone number / SIP-URI** field.
7. Check the **Play Ring Reminder when a call is forwarded** checkbox.

8. Click **Apply** to accept the change.

To configure call forwarding busy for a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609), who has been assigned the call forward service.
4. Click on **Incoming Calls->Call Forwarding Busy**.
5. Mark the **On** radio box in the **Call Forwarding Busy** field.
6. Enter the destination number or SIP-URI in the **Calls Forward to phone number / SIP-URI** field.



7. Click **Apply** to accept the change.

To configure call forwarding No Answer for a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4609), who has been assigned the call forward service.
4. Click on **Incoming Calls->Call Forwarding No Answer**.
5. Mark the **On** radio box in the **Call Forwarding No Answer** field.
6. Enter the destination number or SIP-URI in the **Calls Forward to phone number / SIP-URI** field.
7. Select the desired value from the pull-down list of **Number of rings before forwarding**.



8. Click **Apply** to accept the change.

For more information on call forward, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

There are two call forward modes: Phone (default) and Custom. The call forward mode and the presentation of diversion information are configurable using the configuration files or via web user interface. Call forward is configurable using the configuration files, via web user interface or phone user interface.

To configure call forward using template configuration files:

1. Add/Edit call forward parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G, X ranges from 1 to 16; For SIP-T42G, X ranges from 1 to 12; For SIP-T41P/T27P, X ranges from 1 to 6; For SIP-T40P/T23P/T23G, X ranges from 1 to 3, For SIP-T21(P) E2, X ranges from 1 to 2).

If the user (e.g., 4609) is the second user assigned to the device profile, replace “X” by “2”.

Parameters	Permitted Values	Default
features.fwd_mode	Integer	0
Description: Configures the call forward mode. 0 -Phone 1 -Custom Note: For Yealink IP phones (except SIP-T19(P) E2 and CP860), it works only if the value of the parameter “features.fwd_mode” is set to 0.		
forward.always.enable	Boolean	0
Description: Enables or disables always call forward on a phone basis. 0 -Disabled 1 -Enabled Note: It works only if the value of the parameter “features.fwd_mode” is set to 0.		
forward.always.target	String within 32 characters	Blank
Description: Configures the destination number of always call forward. Note: It works only if the value of the parameter “features.fwd_mode” is set to 0.		

Parameters	Permitted Values	Default
forward.busy.enable	Boolean	0
Description: Enables or disables busy call forward on a phone basis. 0 -Disabled 1 -Enabled Note: It works only if the value of the parameter “features.fwd_mode” is set to 0.		
forward.busy.target	String within 32 characters	Blank
Description: Configures the destination number of busy call forward. Note: It works only if the value of the parameter “features.fwd_mode” is set to 0.		
forward.no_answer.enable	Boolean	0
Description: Enables or disables no answer call forward on a phone basis. 0 -Disabled 1 -Enabled Note: It works only if the value of the parameter “features.fwd_mode” is set to 0.		
forward.no_answer.target	String within 32 characters	Blank
Description: Configures the destination number of no answer call forward. Note: It works only if the value of the parameter “features.fwd_mode” is set to 0.		
forward.no_answer.timeout	Integer from 0 to 20	2
Description: Configures ring times (N) to wait before forwarding incoming calls. Incoming calls are forwarded when not answered after N*6 seconds. Note: It works only if the value of the parameter “features.fwd_mode” is set to 0.		

Parameters	Permitted Values	Default
account.X.always_fwd.enable	%BWCFA-BINARY-X%	0
Description: Enables or disables always call forward on a per-account basis. 0 -Disabled 1 -Enabled Note: It works only if the value of the parameter “features.fwd_mode” is set to 1 and is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
account.X.always_fwd.target	String within 32 characters	Blank
Description: Configures the destination number of always call forward for account X. Note: It works only if the value of the parameter “features.fwd_mode” is set to 1 and is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
account.X.busy_fwd.enable	Boolean	0
Description: Enables or disables busy call forward on a per-account basis. 0 -Disabled 1 -Enabled Note: It works only if the value of the parameter “features.fwd_mode” is set to 1 and is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
account.X.busy_fwd.target	String within 32 characters	Blank
Description: Configures the destination number of busy call forward for account X. Note: It works only if the value of the parameter “features.fwd_mode” is set to 1 and is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
account.X.timeout_fwd.enable	Boolean	0
Description: Enables or disables no answer call forward on a per-account basis. 0 -Disabled 1 -Enabled Note: It works only if the value of the parameter “features.fwd_mode” is set to 1 and is not applicable to SIP-T19(P) E2 and CP860 IP phones.		

Parameters	Permitted Values	Default
account.X.timeout_fwd.timeout	Integer from 0 to 20	2
Description: Configures ring times (N) to wait before forwarding incoming calls for account X. Incoming calls are forwarded when not answered after N*6 seconds. Note: It works only if the value of the parameter "features.fwd_mode" is set to 1 and is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
account.X.timeout_fwd.target	String within 32 characters	Blank
Description: Configures the destination number of no answer call forward for account X. Note: It works only if the value of the parameter "features.fwd_mode" is set to 1 and is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
features.fwd_diversion_enable	Boolean	1
Description: Enables or disables the IP phone to present the diversion information when the call is forwarded to your IP phone. 0-Disabled 1-Enabled		

The following shows an example of always call forward configurations for account 2 in a template configuration file (e.g., y0000000000044.cfg):

```
features.fwd_mode = 1
account.2.always_fwd.enable = %BWFAC-CFA- BINARY-2%
account.2.always_fwd.target = 4609
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tags in template configuration files will be replaced by the actual parameter values. An example is shown as below:

```
account.2.always_fwd.enable = 1
```

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:

The screenshot shows the Yealink T236 web interface. The 'Forward' section is highlighted with a red box. It includes settings for 'Forward Emergency' (Disabled), 'Forward Authorized Numbers' (empty), 'Mode' (Phone/Custom), 'Account' (4608), 'Always Forward' (On/Off), 'Target' (4609), 'Busy Forward' (On/Off), 'Target' (empty), 'No Answer Forward' (On/Off), 'After Ring Time(0~120s)' (108), and 'Target' (empty). A 'NOTE' section on the right explains 'Call Forward' and 'Do Not Disturb (DND)' features.

Alternate Numbers

Alternate numbers allow a user to have up to ten alternate phone numbers or extensions in addition to the main phone number or extension. The user can be reached through any of the phone numbers or extensions. Calls to the main number result in the normal ring pattern. Calls to an alternate number result in a distinctive ring pattern configured for that number. Each alternate phone number or extension can be assigned one of four distinctive ring patterns.

Normal Ring Pattern

Calls to the main number alert the user with the normal ring pattern as shown in the following table:

Bellcore Tone	Ring Pattern	Cadence	Minimum Duration (ms)	Nominal Duration (ms)	Maximum Duration (ms)
Bellcore-dr1 (standard)	Ringing	2s On	1800	2000	2200
	Silent	4s Off	3600	4000	4400

Long-Long Ring Pattern

Selecting this pattern results in the following distinctive ring pattern:

Bellcore Tone	Ring Pattern	Cadence	Minimum Duration (ms)	Nominal Duration (ms)	Maximum Duration (ms)
Bellcore-dr2	Ringing	Long	630	800	1025
	Silent		315	400	525
	Ringing	Long	630	800	1025

Bellcore Tone	Ring Pattern	Cadence	Minimum Duration (ms)	Nominal Duration (ms)	Maximum Duration (ms)
	Silent		3475	4000	4400

Short-Long Ring Pattern

Selecting this pattern results in the following distinctive ring pattern:

Bellcore Tone	Ring Pattern	Cadence	Minimum Duration (ms)	Nominal Duration (ms)	Maximum Duration (ms)
Bellcore-dr3	Ring	Short	315	400	525
	Silent		145	200	525
	Ring	Short	315	400	525
	Silent		145	200	525
	Ring	Long	630	800	1025
	Silent		2975	4000	4400

Short-Long-Short Ring Pattern

Selecting this pattern results in the following distinctive ring pattern:

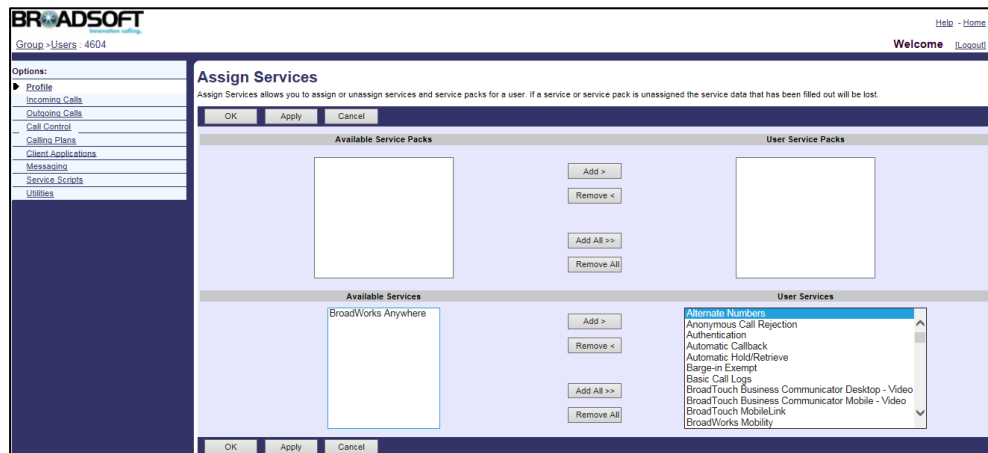
Bellcore Tone	Ring Pattern	Cadence	Minimum Duration (ms)	Nominal Duration (ms)	Maximum Duration (ms)
Bellcore-dr4	Ring	Short	200	300	525
	Silent		145	200	525
	Ring	Long	800	1000	1100
	Silent		145	200	525
	Ring	Short	200	300	525
	Silent		2975	4000	4400

Configuring the BroadSoft Server

To assign the alternate numbers service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.

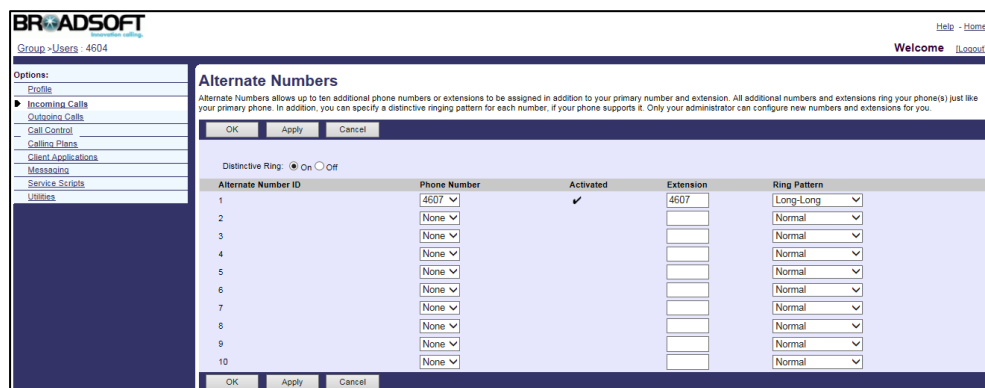
5. In the **Available Services** box, select **Alternate Numbers** and then click **Add>**.



6. Click **Apply** to accept the change.

To assign alternate numbers and extensions to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the alternate number service.
4. Click on **Incoming Calls->Alternate Numbers**.
5. Mark the **On** radio box in the **Distinctive Ring** field.
6. Select the alternate number from the pull-down list of **Phone Number**.
7. Enter the extension in the **Extension** field.
8. Select the desired ring pattern from the pull-down list of **Ring Pattern**.



9. Repeat steps 6 to 8 to assign more alternate numbers to the user.
10. Click **Apply** to accept the change.

For more information on alternate numbers, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

To use alternate number, distinctive ring feature should be enabled on the IP phone. Distinctive ring is configurable using template configuration files.

To configure distinctive ring using template configuration files:

1. Add/Edit distinctive ring parameters in template configuration files:

Parameters	Permitted Values	Default
features.alert_info_tone	Boolean	0
Description: Enables and disables the IP phone to map the keywords in the Alert-info header to the specified Bellcore ring tones. 0-Disabled 1-Enabled		

The following shows an example of distinctive ring configurations in a template configuration file (e.g., y000000000044.cfg):

```
features.alert_info_tone = 1
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

Sequential Ring

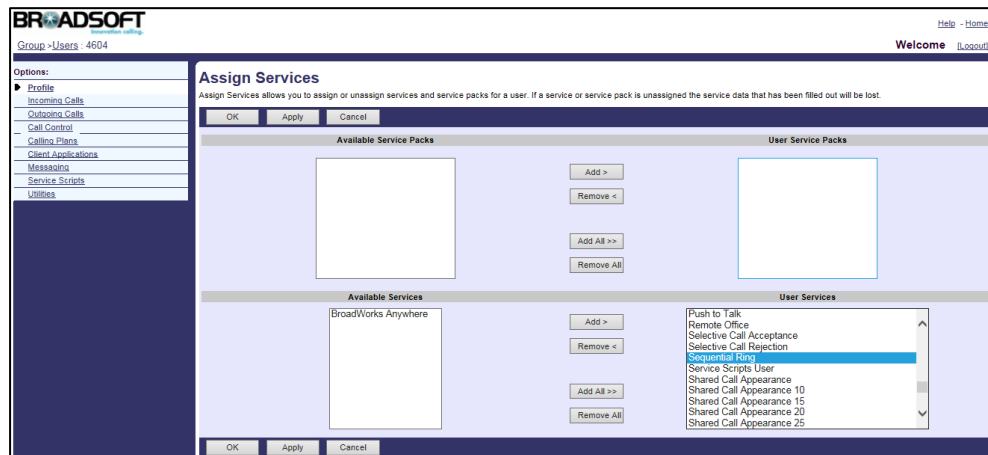
Sequential ring allows a user to have up to five secondary locations, which are alerted sequentially upon receiving an incoming call that matches a set of criteria. Each secondary location can be either a phone number or SIP-URI. This service attempts to call the user by ringing the phone numbers or URIs in the sequential ring list (starting with the user's base location, if enabled) one after the other until the call is answered. The enhancement, Answer Confirmation, allows sequential ring to prompt the callee to enter a digit to confirm the acceptance of the call.

Configuring the BroadSoft Server

To assign the sequential ring service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).

- Click on **Assign Services**.
- In the **Available Services** box, select **Sequential Ring** and then click **Add>**.



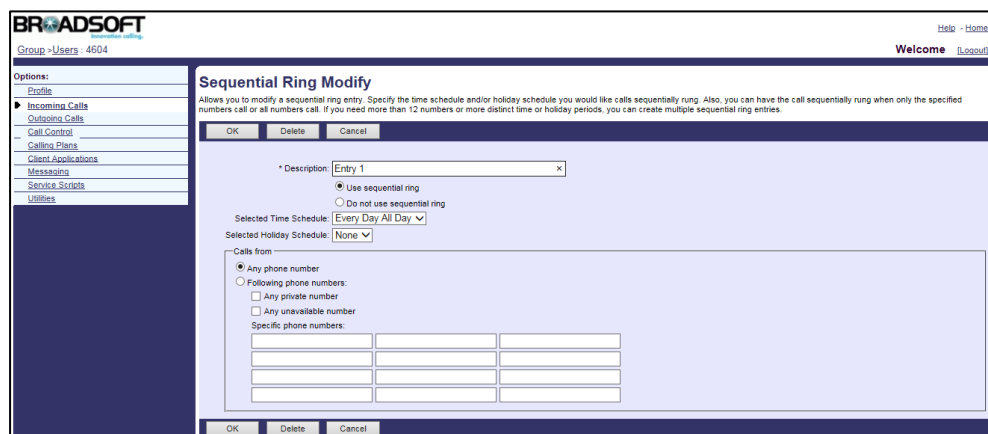
- Click **Apply** to accept the change.

To configure a sequential ring list for a user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4604), who has been assigned the sequential ring service.
- Click on **Incoming Calls->Sequential Ring**.
- Click **Add** to add a new sequential ring entry.
- Set the following parameters to add a sequential ring entry.

The following shows an example:

Description: Entry 1
 Use sequential ring: Selected
 Selected Time Schedule: Every Day All Day
 Selected Holiday Schedule: None
 Calls from: Any phone number



7. Click **OK** to accept the change.
8. Configure the following parameters for sequential ring.

Parameter	Description
Use Base Location first	Specifies whether to alert the base location when receiving an incoming call.
Number of rings for Base Location	Configures the number of rings for the base location.
Continue the search process if the base location is busy	Specifies whether to continue the search process if the base location is busy.
Enable caller to skip search process. Assumes forwarding or messaging is enabled	Specifies whether to skip the search process when the forwarding or voice messaging is activated.
Phone Number / SIP-URI	Specifies the phone number or SIP URI of the secondary location.
Number of rings	Configures the number of rings for the secondary location.
Answer confirmation required	Allows sequential ring to prompt the secondary location to enter a digit to confirm the acceptance of the call

The following shows an example:

Use Base Location first: Selected

Number of rings for Base Location: 3

Continue the search process if the base location is busy: Selected

Enable caller to skip search process: Selected

Phone Number / SIP-URI: 4607 4608

Number of rings: 3

Answer confirmation required: Selected

Sequential Ring

Sequential Ring allows you to sequentially ring up to 5 locations in addition to the base location for a specified number of rings. The 5 locations can be either a phone number or a SIP-URI. The feature applies to calls matching your pre-defined criteria. Use this service to ring calls from your manager, a family member, or an important customer on your cell phone, alternate business phone, or home phone. The criteria for each Sequential Ring entry can be a list of up to 12 phone numbers or digit patterns, a specified time schedule, and a specified holiday schedule. All criteria for an entry must be satisfied for the call to enter Sequential Ring (phone number and day of week and time of day). If the criteria do not match, the call continues as if this service was not turned on.

Options:

- ☒ Use Base Location first
- ☒ Continue the search process if the base location is busy.
- ☒ Enable caller to skip search process. Assumes forwarding or messaging is enabled.

Number of rings for Base Location: 3

Location	Phone Number / SIP-URI	Number of rings	Answer confirmation required
1	4607	3	<input checked="" type="checkbox"/>
2	4608	3	<input checked="" type="checkbox"/>
3		3	<input type="checkbox"/>
4		3	<input type="checkbox"/>
5		3	<input type="checkbox"/>

Active	Description	Ring Sequentially	Calls from	Edit
<input checked="" type="checkbox"/>	Entry 1	Yes	All calls	Edit

9. Click **Apply** to accept the change.

For more information on sequential ring, refer to *BroadWorks Web Interface Administrator Guide*.

Call Transfer

Call transfer allows a user to transfer an existing call to another party. IP phones support call transfer using the REFER method specified in RFC 3515. The following describes three call transfer behaviors:

- **Blind Transfer:** Transfer a call directly to another party without consulting. There is no dialog between the user and the transfer-to party before transfer. Blind transfer is implemented by a simple REFER method without Replaces in the REFER-TO header.
- **Attended Transfer After Answer:** Transfer a call with consulting. There is a confirmed dialog between the user and the transfer-to party before transfer. Attended transfer after answer is implemented by a REFER method with Replaces in the REFER-TO header.
- **Attended Transfer Before Answer:** Transfer a call after hearing the ringback tone. The transfer-to party has been called by the user, but the transfer-to party has not answered yet before transfer. Attended transfer before answer is implemented by a REFER method with Replaces in the REFER-TO header.

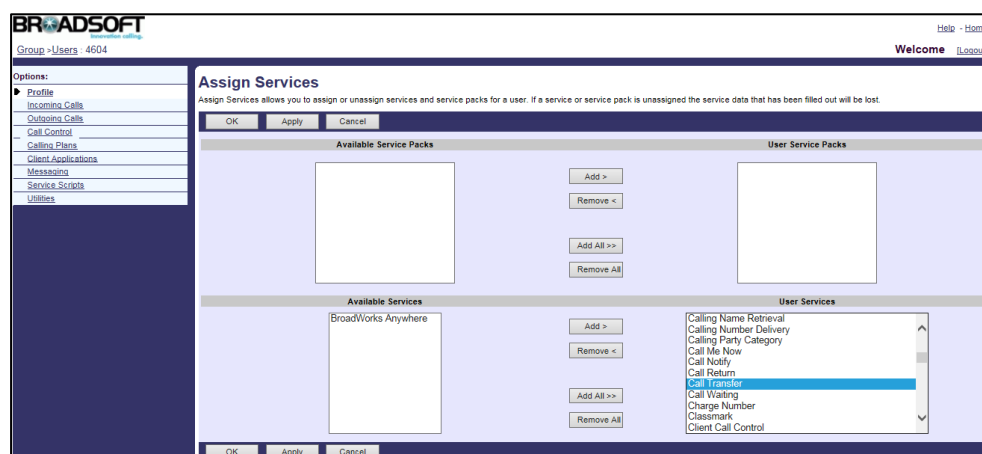
BroadWorks provides two options for call transfer: Busy Camp On and Call Transfer Recall. Busy Camp On allows users to camp the call against a busy destination. Call Transfer Recall allows users to be recalled if the transferred call is not answered for any reason. Busy Camp On only applies to the blind call transfer.

Configuring the BroadSoft Server

To assign the call transfer service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.

5. In the **Available Services** box, select **Call Transfer** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure call transfer for a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the call transfer service.
4. Click on **Call Control->Call Transfer**.
5. Configure the following parameters of call transfer.

Parameter	Description
Call Transfer Recall	This option allows a transferred call to be reconnected to the transferring party if it reaches a failure or no-answer condition after transfer. Enables or disables Call Transfer Recall.
Number of rings before recall	Specifies the number of rings before Call Transfer Recall is automatically triggered.
Enable Busy Camp On seconds	This option allows users to camp the call against a busy destination and recall the transferring user after the specified time. Enables or disables Busy Camp On and specifies the time after which the transferring user should be recalled.
Use Diversion Inhibitor for Blind Transfer	This option allows users to prevent blind transferred calls from being redirected. Enables or disables the use of diversion inhibitor for blind transferred calls.
Use Diversion Inhibitor for Consultative Calls	This option allows users to prevent attended transferred calls from being

Parameter	Description
	<p>redirected.</p> <p>Enables or disables the use of diversion inhibitor for calls transferred with consultation.</p>

The following shows an example:

Call Transfer Recall: Selected

Number of rings before recall: 4

Enable Busy Camp On seconds: Selected 120

Use Diversion Inhibitor for Blind Transfer: On

Use Diversion Inhibitor for Consultative Calls: On

6. Click **Apply** to accept the change.

For more information on call transfer, refer to *BroadWorks Web Interface Administrator Guide*.

Feature Key Synchronization

Feature key synchronization provides the capability to synchronize the status of the following features between the IP phone and the BroadWorks server:

- Do Not Disturb
- Call Forwarding Always (CFA)
- Call Forwarding Busy (CFB)
- Call Forwarding No Answer (CFNA)
- ACD state

If feature key synchronization is enabled, a user changes the status of one of these features on BroadWorks, the BroadWorks server notifies the phone of synchronizing the status. Conversely, if the user changes the feature status on the phone, the IP phone notifies the BroadWorks server of synchronizing the status.

Configuring Yealink IP Phones

Feature key synchronization is configurable using template configuration files or via web user interface.

To configure feature key synchronization using template configuration files:

1. Add/Edit feature key synchronization parameters in template configuration files:

Parameters	Permitted Values	Default
bw.feature_key_sync	%FEATURE_KEY_SYN%	1
Description: Enables or disables feature key synchronization. 0-Disabled 1-Enabled		

2. Customize the static tag on BroadWorks. The tag name is % FEATURE_KEY_SYN % and the tag value is 1.

For more information, refer to [Customizing a Static Tag](#) on page 17.

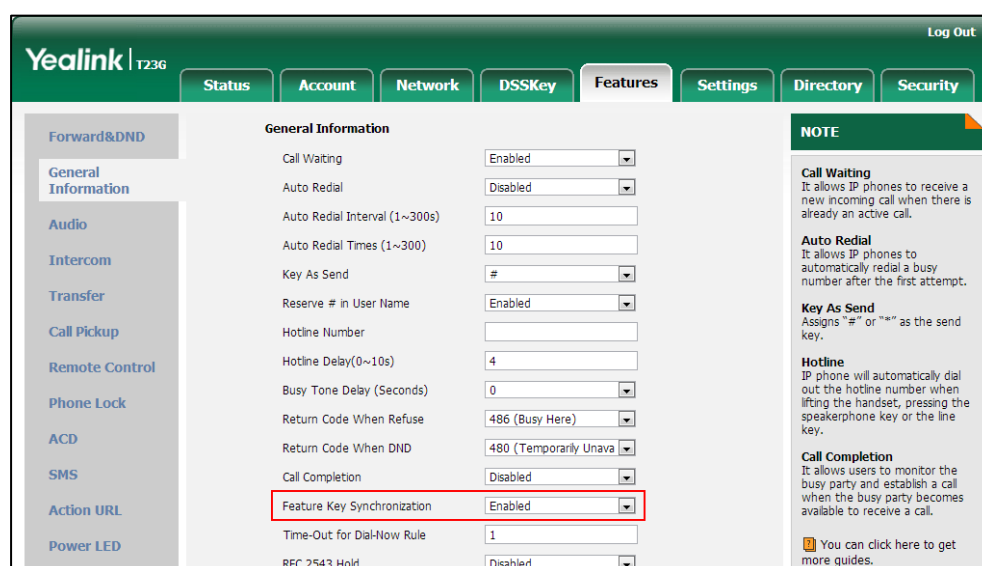
3. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tag in the template file will be replaced by the actual parameter value. An example is shown as below:

```
bw.feature_key_sync = 1
```

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:



Network Conference

Network conference allows a user to conduct a conference with more than three participants. The maximum of the participants depends on the BroadWorks server. The network conference is implemented using a conference URI, which is used to identify a request for a BroadWorks conference resource. IP phones support network conference using the REFER method as specified in RFC 4579.

Note

The conference URI can be configured on the BroadWorks server via the command line interface. The command line interface access may be restricted on the BroadWorks server. Contact your BroadSoft reseller for the conference URI.

Configuring Yealink IP Phones

Network conference is configurable using template configuration files or web user interface.

To configure network conference using template configuration files:

1. Add/Edit network conference parameters in template configuration files:

The "X" in the parameter is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIPT48G/T46G/T29G, X ranges from 1 to 16; For SIPT42G, X ranges from 1 to 12; For SIPT41P/T27P, X ranges from 1 to 6; For SIPT40P/T23P/T23G, X ranges from 1 to 3, For SIPT21(P) E2, X ranges from 1 to 2, For SIPT19(P) E2 and CP860, X is equal to 1).

If the user (e.g., 4604) is the first user assigned to the device profile, replace the "X" by "1".

Parameters	Permitted Values	Default
account.X.conf_type	Integer	0
Description: Configures the conference type for account X. 0-Local Conference 2-Network Conference		
account.X.conf_uri	%BWNWORK-CONFERENCE-SIPURI-X%	Blank
Description: Configures the URI of the network conference for account X.		

The following shows an example of network conference configurations in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
account.1.conf_type = 2
account.1.conf_uri = %BWNWORK-CONFERENCE-SIPURI-1%
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tag in the template file will be replaced by the actual parameter value. An example is shown as below:

```
account.1.conf_uri = Conference01@pbx.yealink.com
```

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:

The screenshot displays the Yealink T236 web interface. The 'Account' tab is selected, showing various configuration fields. The 'Conference Type' is set to 'Network Conference' and the 'Conference URI' is 'Conference01@pbx.yealink.com'. These two fields are highlighted with a red rectangular box. The interface includes a top navigation bar with tabs for Status, Account, Network, DSSKey, Features, Settings, Directory, and Security. A left sidebar contains links for Register, Basic, Codec, and Advanced. A right sidebar contains a 'NOTE' section with information about DTMF, Session Timer, Busy Lamp Field/BLF List, Shared Call Appearance (SCA)/ Bridge Line Appearance (BLA), Network Conference, and VQ-RTCPXR.

Call Pickup

IP phones support two call pickup behaviors: Directed Call Pickup and Group Call Pickup. Directed call pickup allows users to pick up an incoming call on a specific extension. Group call pickup allows users to pick up an incoming call within a pre-defined group. BroadWorks also provides two enhanced services: Directed Call Pickup with Barge-in (DPUBI) and Barge-in Exempt.

DPUBI allows users to dial a FAC followed by an extension to pick up a call directed to

another user, or barge in the call if it was already answered. When a barge-in occurs, a three-way call is established between the parties with the DPUBI user as the controller. Barge-in exempt allows users to block barge-in attempts from other users with DPUBI. Barge-in exempt does not block pickup attempts.

Configuring the BroadSoft Server

To assign the call pickup service to the group:

1. Log into the web portal as a group administrator.
2. Click on **Resource->Assign Group Services**.
3. In the **Available Services** box, select **Call Pickup** and then click **Add>**.



4. Click **Apply** to accept the change.

To add a call pickup group and assign users to the call pickup group:

1. Log into the web portal as a group administrator.
2. Click on **Services->Call Pickup**.
3. Click **Add**.
4. Enter a name in the **Group Name** field.
5. Click **Search** to display all available users.

- In the **Available Users** box, select the desired user and then click **Add>** to assign the user to the call pickup group.

- Click **OK** to accept the change.
- Repeat steps 6 to 7 to assign more users to the call pickup group.

To assign the directed call pickup and directed call pickup with barge-in services to a user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4604).
- Click on **Assign Services**.
- In the **Available Services** box, select **Directed Call Pickup** and **Directed Call Pickup with Barge-in**, and then click **Add>**.

- Click **Apply** to accept the change.

To configure directed call pickup with barge-in for a user:

- Log into the web portal as a group administrator.

2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the directed call pickup with barge-in service.
4. Click on **Call Control->Directed Call Pickup with Barge-in**.
5. Configure the following parameters for directed call pickup with barge-in.

Parameter	Description
Barge-in Warning Tone	Specifies whether a warning tone is played to the picked up user when a barge-in occurs. The default state is "On".
Automatic Target Selection	Enables or disables the user with DPUBI service to initiate a pickup or barge-in by dialing the DPBUI FAC without an extension. When this option is enabled, the user can initiate a pickup or barge-in by dialing the FAC alone if only one user is active (on a call or ringing). The default state is "Off".

The following shows an example:

Simultaneous Ring Personal: On

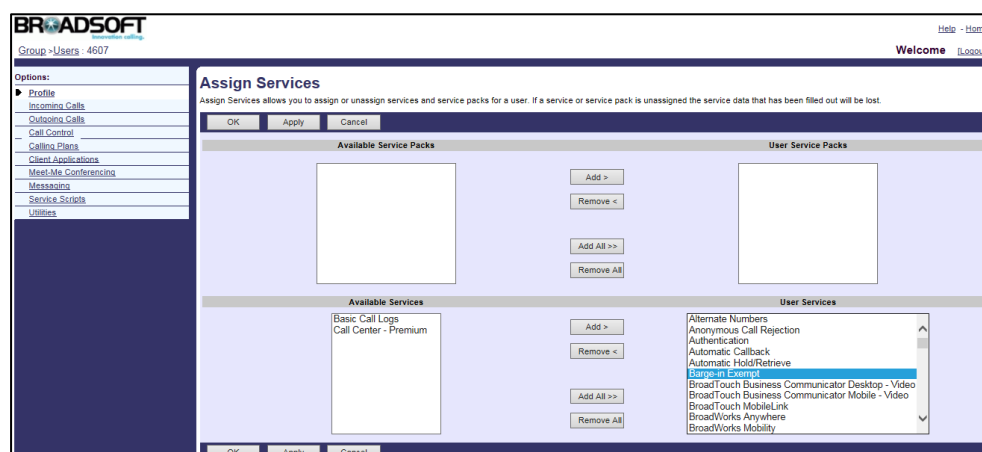
Automatic Target Selection: On

6. Click **Apply** to accept the change.

To assign the barge-in exempt service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4607).
4. Click on **Assign Services**.

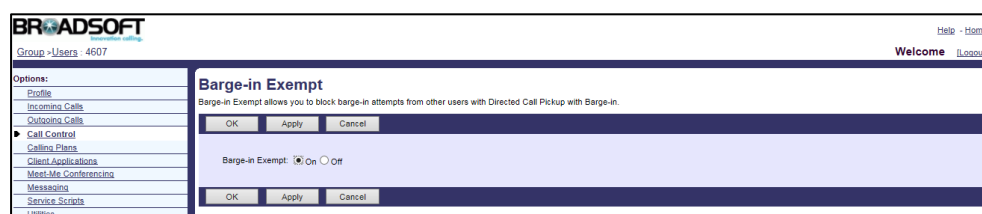
5. In the **Available Services** box, select **Barge-in Exempt** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure barge-in exempt for a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4607), who has been assigned the barge-in exempt service.
4. Click on **Call Control->Barge-in Exempt**.
5. Mark the **On** radio box in the **Barge-in Exempt** field.



6. Click **Apply** to accept the change.

For more information on call pickup, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

In addition to picking up a call by dialing the FACs, a user can pick up the incoming call using call pickup keys or call pickup soft keys. Call pickup keys are configurable using template configuration files, via web user interface or phone user Interface. Call pickup soft keys are configurable using template configuration files or via web user Interface.

Note

We recommend that you should not configure the **DPickup** soft key and directed call pickup key simultaneously. If you do, the directed call pickup key will not be used correctly.

To configure call pickup using template configuration files:

1. Add/Edit directed call pickup parameters in template configuration files:

The "X" is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIPT48G/T46G/T29G, X ranges from 1 to 16; For SIPT42G, X ranges from 1 to 12; For SIPT41P/T27P, X ranges from 1 to 6; For SIP-T40P/T23P/T23G, X ranges from 1 to 3, For SIPT21(P) E2, X ranges from 1 to 2; For SIPT19(P) E2 and CP860, X is equal to 1).

Parameters	Permitted Values	Default
features.pickup.direct_pickup_enable	Boolean	0
Description: Enables or disables the IP phone to display the DPickup soft key on the pre-dialing screen. 0-Disabled 1-Enabled		
features.pickup.direct_pickup_code	%BWFAC-DIRECTED-CALL-PICKUP-1%	Blank
Description: Configures the Directed Call Pickup FAC (default: *97) on a phone basis.		
account.X.direct_pickup_code	String within 32 characters	Blank
Description: Configures the Directed Call Pickup FAC (default: *97) on a per-account basis for account X. The Directed Call Pickup FAC configured on a per-account basis takes precedence over that configured on a phone basis. We recommend that you just configure the FAC either on a phone basis or on a per-account basis.		

2. Add/Edit group call pickup parameters in template configuration files:

The "X" is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIPT48G/T46G/T29G, X ranges from 1 to 16; For SIPT42G, X ranges from 1 to 12; For SIPT41P/T27P, X ranges from 1 to 6; For SIP- T40P/T23P/T23G, X ranges from 1 to 3, For SIPT21(P) E2, X ranges from 1 to 2; For SIPT19(P) E2 and CP860, X is equal to 1).

Parameters	Permitted Values	Default
features.pickup.group_pickup_enable	Boolean	0

Parameters	Permitted Values	Default
Description: Enables or disables the IP phone to display the GPickup soft key on the pre-dialing screen. 0 -Disabled 1 - Enabled		
features.pickup.group_pickup_code	%BWFAC-CALL-PICKUP-1%	Blank
Description: Configures the Call Pickup FAC (default: *98) on a phone basis.		
account.X.group_pickup_code	String within 32 characters	Blank
Description: Configures the Call Pickup FAC (default: *98) on a per-account basis for account X. The Call Pickup FAC configured on a per-account basis takes precedence over that configured on a phone basis. We recommend that you just configure the FAC either on a phone basis or on a per-account basis.		

The following shows an example of call pickup configurations in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
#Directed call pickup
features.pickup.direct_pickup_enable = 1
features.pickup.direct_pickup_code = %BWFAC-DIRECTED-CALL-PICKUP-1%

#Group call pickup
features.pickup.group_pickup_enable = 1
features.pickup.group_pickup_code = %BWFAC-CALL-PICKUP-1%
```

3. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tags in the template file will be replaced by the actual parameter value. An example is shown as below:

```
features.pickup.direct_pickup_code = *97
features.pickup.group_pickup_code = *98
```


After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:

To configure the call pickup keys using template configuration files:

1. You can configure a line key as a directed call pickup key using the following parameters in the configuration file (not applicable to SIP-T19(P) E2 and CP860 IP phones).

The "X" is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VP-T49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G, X ranges from 1 to 3; For SIP-T21(P) E2, X ranges from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	9	Refer to the following content
Description: Configures the line key type. 9-Direct Pickup For SIP VP-T49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0. For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-27 is 0. For SIP-T42G IP phones: The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0. For SIP-T41P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is		

Parameters	Permitted Values	Default
<p>0.</p> <p>For SIP-T27P IP phones:</p> <p>The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0.</p> <p>For SIP-T40P/T23P/T23G/T21(P) E2 IP phones:</p> <p>The default value is 15.</p>		
linekey.X.value	String within 99 characters	Blank
<p>Description:</p> <p>Configures the Directed Call Pickup FAC (default: *97) followed by a specific extension.</p>		
linekey.X.line	Refer to the following content	Refer to the following content
<p>Description:</p> <p>Configures the line to apply the directed call pickup key.</p> <p>Permitted Values:</p> <p>1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G)</p> <p>1 to 12 (For SIP-T42G)</p> <p>1 to 6 (For SIP-T41P/T27P)</p> <p>1 to 3 (For SIP-T40P/T23P/T23G)</p> <p>1 to 2 (For SIP-T21(P) E2)</p> <p>1-Line1</p> <p>2-Line2</p> <p>3-Line3</p> <p>...</p> <p>16-Line16</p> <p>When X=1, the default value is 1.</p> <p>When X=2, the default value is 2.</p> <p>When X=3, the default value is 3.</p> <p>....</p> <p>When X=16, the default value is 16.</p>		
linekey.X.label	String within 99 characters	Blank
<p>Description:</p> <p>(Optional.) Configures the label displayed on the LCD screen for each line key.</p>		

The following shows an example of directed call pickup key (line key) configurations in a template configuration file (e.g., y000000000044.cfg):

```
linekey.2.type = 9
linekey.2.value = *974607
linekey.2.line = 1
```

You can also configure a programmable key as a directed call pickup key.

The "X" is an integer which specifies the sequence number of the programmable key. X ranges from 1 to 14.

Parameters	Permitted Values	Default
programmablekey.X.type	9	Refer to the following content
<p>Description:</p> <p>Configures the programmable key type.</p> <p>9- Direct Pickup</p> <p>For SIP VP-T49G IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T48G/T46G IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T42G/T41P/T40P IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p>		

Parameters	Permitted Values	Default
<p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/13, the default value is 0 (NA).</p> <p>For SIP-T29G/T27P IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/11/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T23P/T23G/T21(P) E2 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T19(P) E2 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p>		

Parameters	Permitted Values	Default
<p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 0 (NA).</p> <p>When X=8, the default value is 0 (NA).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For CP860 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=13, the default value is 0 (NA).</p>		
programablekey.X.line	Integer from 1 to 16	Refer to the following content
<p>Description:</p> <p>Configures the line to apply the directed call pickup key.</p> <p>Valid values are:</p> <p>1 to 16 (For SIP VPT49G/SIPT48G/T46G/T29G)</p> <p>1 to 12 (For SIPT42G)</p> <p>1 to 6 (For SIPT41P/T27P)</p> <p>1 to 3 (For SIPT40P/T23P/T23G)</p> <p>1 to 2 (For SIPT21(P) E2)</p> <p>1-Line1</p> <p>2-Line2</p> <p>3-Line3</p> <p>...</p> <p>16-Line16</p> <p>Note: It is not applicable to SIPT19(P) E2 and CP860 IP phones.</p>		

Parameters	Permitted Values	Default
programmablekey.X.value	String within 99 characters	Blank
Description: Configures the Directed Call Pickup FAC (default: *97) followed by a specific extension.		
programmablekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each soft key. Note: It is applicable when the value of X ranges from 1 to 4.		

The following shows an example of the directed call pickup key (programmable key) configuration in a template configuration file (e.g., y000000000044.cfg):

```
programmablekey.5.type = 9
programmablekey.5.line = 1
programmablekey.5.value = *974607
```

- You can configure a line key as a group call pickup key using the following parameters in the configuration file (not applicable to SIP-T19(P) E2 and CP860 IP phones).

The "X" is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VP-T49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G, X ranges from 1 to 3; For SIP-T21(P) E2, X ranges from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	23	Refer to the following content
Description: Configures the line key type. 23-Group Pickup For SIP VP-T49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0. For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key		

Parameters	Permitted Values	Default
<p>17-27 is 0.</p> <p>For SIP-T42G IP phones:</p> <p>The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0.</p> <p>For SIP-T41P IP phones:</p> <p>The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0.</p> <p>For SIP-T27P IP phones:</p> <p>The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0.</p> <p>For SIP-T40P/T23P/T23G/T21(P) E2 IP phones:</p> <p>The default value is 15.</p>		
linekey.X.value	String within 99 characters	Blank
<p>Description:</p> <p>Configures the Call Pickup FAC (default: *98).</p>		
linekey.X.line	Refer to the following content	Refer to the following content
<p>Description:</p> <p>Configures the line to apply the group call pickup key.</p> <p>Permitted Values:</p> <p>1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G)</p> <p>1 to 12 (For SIP-T42G)</p> <p>1 to 6 (For SIP-T41P/T27P)</p> <p>1 to 3 (For SIP-T40P/T23P/T23G)</p> <p>1 to 2 (For SIP-T21(P) E2)</p> <p>1-Line1</p> <p>2-Line2</p> <p>3-Line3</p> <p>...</p> <p>16-Line16</p> <p>When X=1, the default value is 1.</p> <p>When X=2, the default value is 2.</p> <p>When X=3, the default value is 3.</p> <p>....</p> <p>When X=16, the default value is 16.</p>		
linekey.X.label	String within 99	Blank

Parameters	Permitted Values	Default
	characters	
Description: (Optional.) Configures the label displayed on the LCD screen for each line key.		

The following shows an example of group call pickup key (line key) configurations in a template configuration file (e.g., y000000000044.cfg):

```
linekey.3.type = 23
linekey.3.value = *98
linekey.3.line = 1
```

You can also configure a programmable key as a group call pickup key.

The “X” is an integer which specifies the sequence number of the programmable key. X ranges from 1 to 14.

Parameters	Permitted Values	Default
programmablekey.X.type	23	Refer to the following content
Description: Configures the programmable key type. 23-Group Pickup For SIP VP-T49G IP phones: When X=1, the default value is 28 (History). When X=2, the default value is 61 (Directory). When X=3, the default value is 5 (DND). When X=4, the default value is 30 (Menu). When X=12/13, the default value is 0 (NA). When X=14, the default value is 2 (Forward). For SIP-T48G/T46G IP phones: When X=1, the default value is 28 (History). When X=2, the default value is 61 (Directory). When X=3, the default value is 5 (DND). When X=4, the default value is 30 (Menu). When X=5, the default value is 28 (History). When X=6, the default value is 61 (Directory). When X=7, the default value is 51 (Switch Account Up). When X=8, the default value is 52 (Switch Account Down).		

Parameters	Permitted Values	Default
<p>When X=9, the default value is 33 (Status).</p> <p>When X=10/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T42G/T41P/T40P IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/13, the default value is 0 (NA).</p> <p>For SIP-T29G/T27P IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/11/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T23P/T23G/T21(P) E2 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p>		

Parameters	Permitted Values	Default
<p>When X=9, the default value is 33 (Status).</p> <p>When X=10, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T19(P) E2 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 0 (NA).</p> <p>When X=8, the default value is 0 (NA).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For CP860 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=13, the default value is 0 (NA).</p>		
programmablekey.X.line	Integer from 1 to 16	Refer to the following content
<p>Description:</p> <p>Configures the line to apply the group call pickup key.</p> <p>Valid values are:</p> <p>1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G)</p> <p>1 to 12 (For SIP-T42G)</p> <p>1 to 6 (For SIP-T41P/T27P)</p> <p>1 to 3 (For SIP-T40P/T23P/T23G)</p> <p>1 to 2 (For SIP-T21(P) E2)</p> <p>1-Line1</p> <p>2-Line2</p>		

Parameters	Permitted Values	Default
3-Line3 ... 16-Line16 Note: It is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
programablekey.X.value	String within 99 characters	Blank
Description: Configures the Call Pickup FAC (default: *98).		
programablekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each soft key. Note: It is applicable when the value of X ranges from 1 to 4.		

The following shows an example of the group call pickup key (programable key) configuration in a template configuration file (e.g., y000000000044.cfg):

```

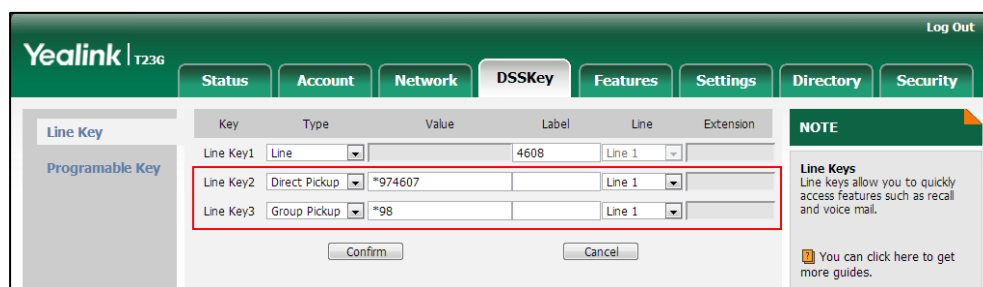
programablekey.6.type = 23
programablekey.6.line = 1
programablekey.6.value = *98

```

3. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:



Calling Line ID Presentation

Calling Line ID Presentation (CLIP) allows the IP phone to display the caller's identity, derived from a SIP header carried in the INVITE request, when receiving an incoming call. The caller's identity consists of the calling line ID last name, calling line ID first name, and phone number. The BroadWorks server provides external calling line ID delivery

and internal calling line ID delivery services. External calling line ID delivery allows the calling line ID for callers from outside your group or enterprise to be displayed. Internal calling line ID delivery allows the calling line ID for callers from inside your group to be displayed.

Calling Name Presentation

Calling Name Presentation allows the IP phone to display the caller's name, derived from a SIP header contained in the INVITE request, when receiving an incoming call. The caller's name consists of the calling line ID last name and calling line ID first name. The BroadWorks server provides external calling name delivery and Internal calling name delivery services. External calling name delivery allows the name for callers from outside your group or enterprise to be displayed. Internal calling name delivery allows the name for callers from inside your group to be displayed.

Calling Number Presentation

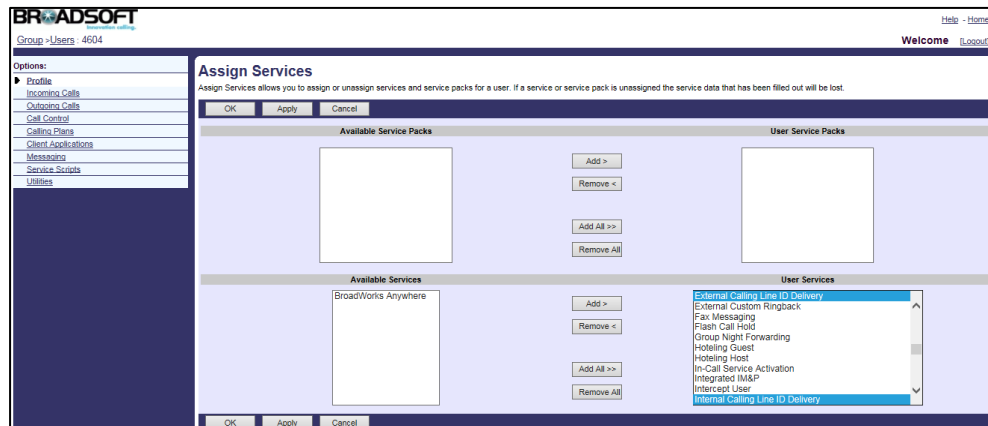
Calling Number Presentation allows the IP phone to display the caller's phone number, derived from a SIP header contained in the INVITE request, when receiving an incoming call. The BroadWorks server provides external calling number delivery and internal calling number delivery services. External calling number delivery allows the number for callers from outside your group or enterprise to be displayed. Internal calling number delivery allows the number for callers from inside your group to be displayed.

Configuring the BroadSoft Server

To assign the calling line ID delivery service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.

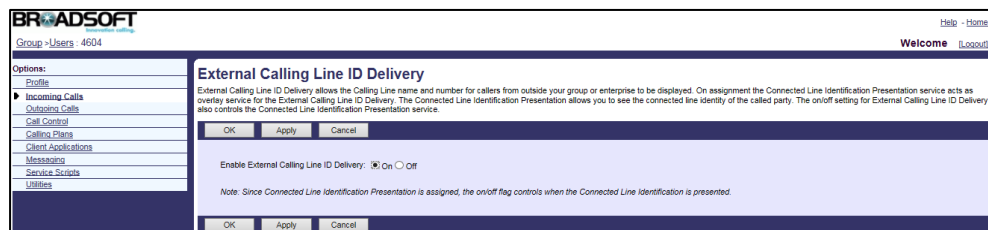
- In the **Available Services** box, select **External Calling Line ID Delivery** and **Internal Calling Line ID Delivery**, and then click **Add>**.



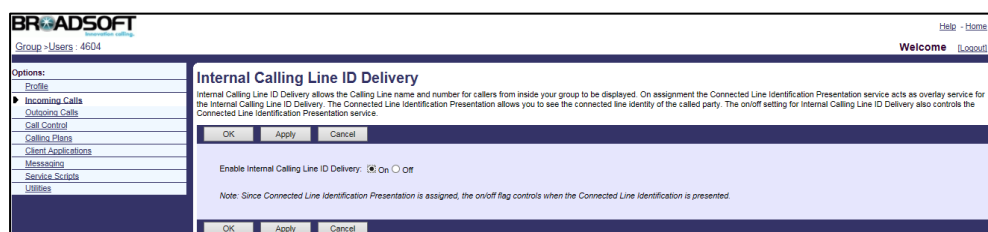
- Click **Apply** to accept the change.

To configure calling line ID presentation for the user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4604), who has been assigned the calling line ID delivery service.
- Click on **Incoming Calls->External Calling Line ID Delivery**.
- Mark the **On** radio box in the **Enable External Calling Line ID Delivery** field.



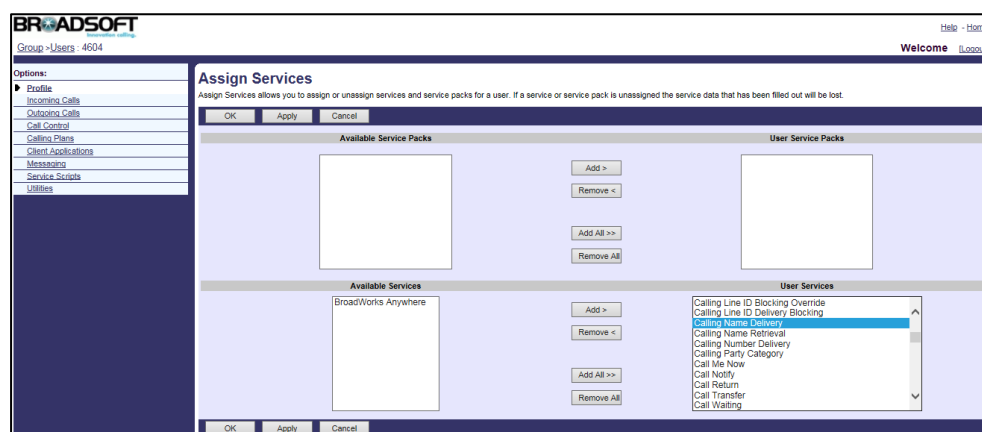
- Click **OK** to accept the change.
- Click on **Incoming Calls->Internal Calling Line ID Delivery**.
- Mark the **On** radio box in the **Enable Internal Calling Line ID Delivery** field.



- Click **Apply** to accept the change.

To assign the calling name delivery service to a user:

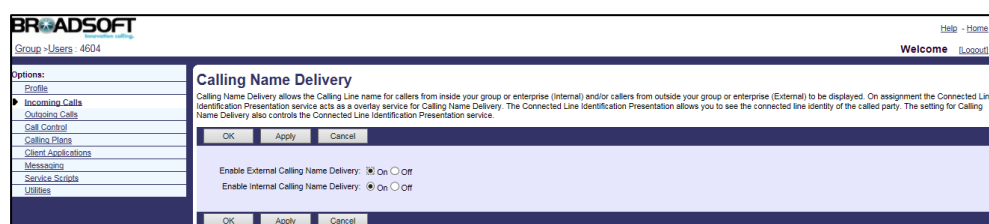
1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Calling Name Delivery** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure calling name presentation for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the calling name delivery service.
4. Click on **Incoming Calls-> Calling Name Delivery**.
5. Mark the **On** radio box in the **Enable External Calling Name Delivery** field.
6. Mark the **On** radio box in the **Enable Internal Calling Name Delivery** field.

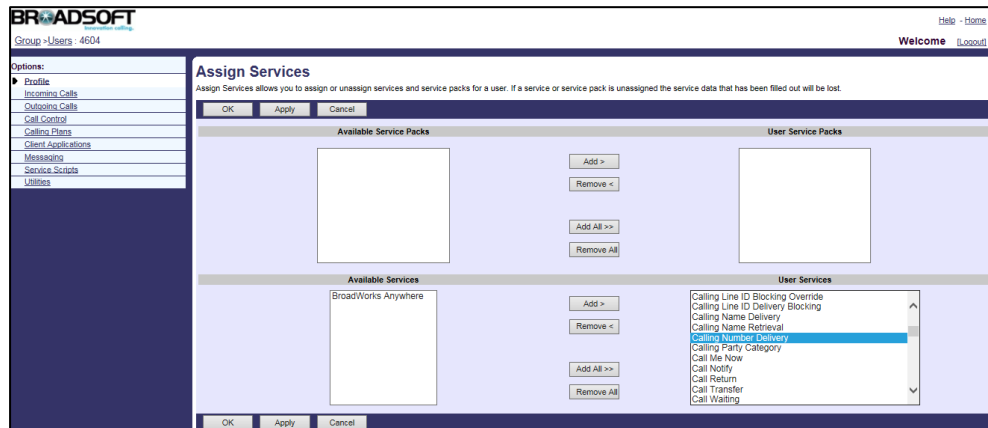


7. Click **Apply** to accept the change.

To assign the calling number delivery service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).

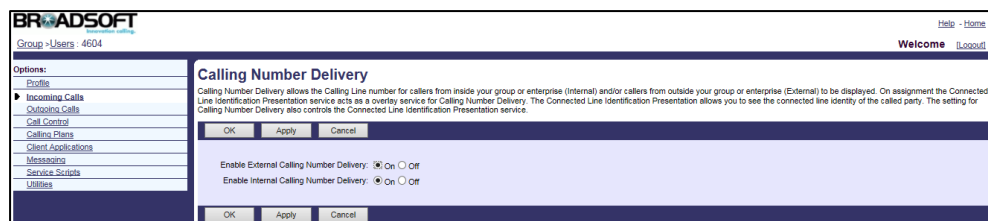
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Calling Number Delivery** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure calling number presentation for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the calling number delivery service.
4. Click on **Incoming Calls-> Calling Number Delivery**.
5. Mark the **On** radio box in the **Enable External Calling Number Delivery** field.
6. Mark the **On** radio box in the **Enable Internal Calling Number Delivery** field.



7. Click **Apply** to accept the change.

Note

The internal calling line ID delivery and external calling line ID delivery services have precedence over calling name/number delivery service. If you have either the internal calling line ID delivery or external calling line ID delivery service assigned, the assignment and configuration of the calling name/number delivery service has no effect.

For more information on CLIP, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

IP phones support to derive calling line ID from the FROM, P-Preferred-Identity, P-Asserted-Identity and Remote-Party-ID SIP headers in the INVITE request. The calling line ID source is configurable using template configuration files or via web user interface.

To configure the calling line ID source using template configuration files:

1. Add/Edit calling line ID source parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G, X ranges from 1 to 16; For SIP-T42G, X ranges from 1 to 12; For SIP-T41P/T27P, X ranges from 1 to 6; For SIP-T40P/T23P/T23G, X ranges from 1 to 3, For SIP-T21(P) E2, X ranges from 1 to 2; For SIP-T19(P) E2 and CP860, X is equal to 1).

Parameters	Permitted Values	Default
account.X.cid_source	Integer from 0 to 5	0
Description: Configures the calling line ID source for account X. 0-FROM (Derives the name and number of the caller from the “From” header). 1-PAI (Derives the name and number of the caller from the “PAI” header. If the server does not send the “PAI” header, displays “anonymity” on the callee’s phone). 2-PAI-FROM (Derives the name and number of the caller from the “PAI” header preferentially. If the server does not send the “PAI” header, derives from the “From” header). 3-RPID-PAI-FROM 4-PAI-RPID-FROM 5-RPID-FROM		

The following shows an example of the calling line ID source configuration in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
account.1.cid.source = 1
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:

The screenshot shows the Yealink T236 web interface. The top navigation bar includes 'Status', 'Account', 'Network', 'DSSKey', 'Features', 'Settings', 'Directory', and 'Security'. The 'Account' tab is selected. On the left, there is a sidebar with 'Register', 'Basic', 'Codec', and 'Advanced' options. The main content area displays various account settings for 'Account 1'. The 'Caller ID Source' is highlighted with a red box and is set to 'FROM'. Other settings include 'Keep Alive Type' (Default), 'Keep Alive Interval(Seconds)' (30), 'RPort' (enable direct process), 'Subscribe Period(Seconds)' (1800), 'DTMF Type' (RFC2833), 'DTMF Info Type' (DTMF-Relay), 'DTMF Payload Type(96~127)' (101), 'Retransmission' (Disabled), 'Subscribe Register' (Disabled), 'Subscribe for MWI' (Disabled), 'MWI Subscription Period(Seconds)' (3600), 'Subscribe MWI To Voice Mail' (Disabled), 'Voice Mail' (empty), 'Voice Mail Display' (Enabled), and 'Caller ID Source' (FROM). A 'NOTE' section on the right provides information about DTMF, Session Timer, Busy Lamp Field/BLF List, and Shared Call Appearance (SCA)/ Bridge Line Appearance (BLA).

Calling Line ID Blocking Override

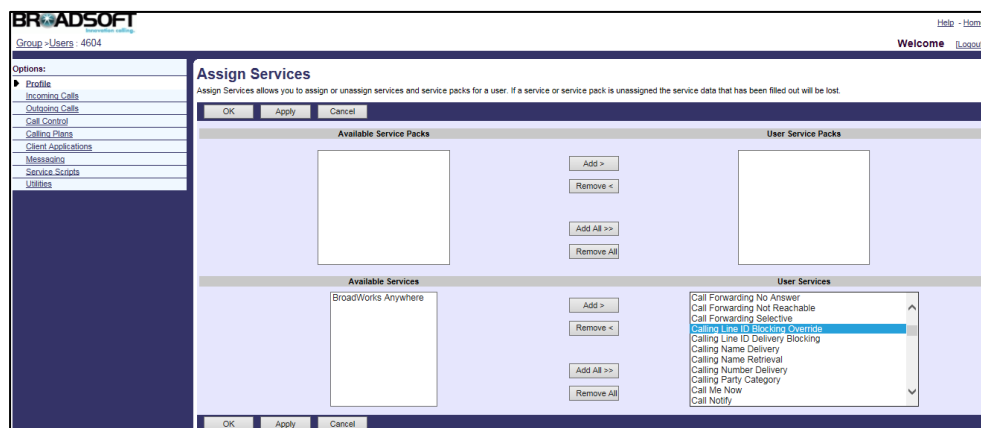
Calling Line ID Blocking Override allows the IP phone to always display the caller's identity, regardless of whether it is blocked by the caller.

Configuring the BroadSoft Server

To assign the calling line ID blocking override service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.

- In the **Available Services** box, select **Calling Line ID Blocking Override** and then click **Add>**.



- Click **Apply** to accept the change.

To configure calling line ID blocking override for the user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4604), who has been assigned the calling line ID blocking override service.
- Click on **Incoming Calls->Calling Line ID Blocking Override**.
- Mark the **On** radio box in the **Enable Calling Line ID Blocking Override** field.



- Click **Apply** to accept the change.

For more information on calling line ID blocking override, refer to *BroadWorks Web Interface Administrator Guide*.

Connected Line Identification Presentation

Connected Line Identification Presentation (COLP) allows the IP phone to display the callee's identity specified for outgoing calls. The callee's identity consists of the calling line ID last name, calling line ID first name and phone number.

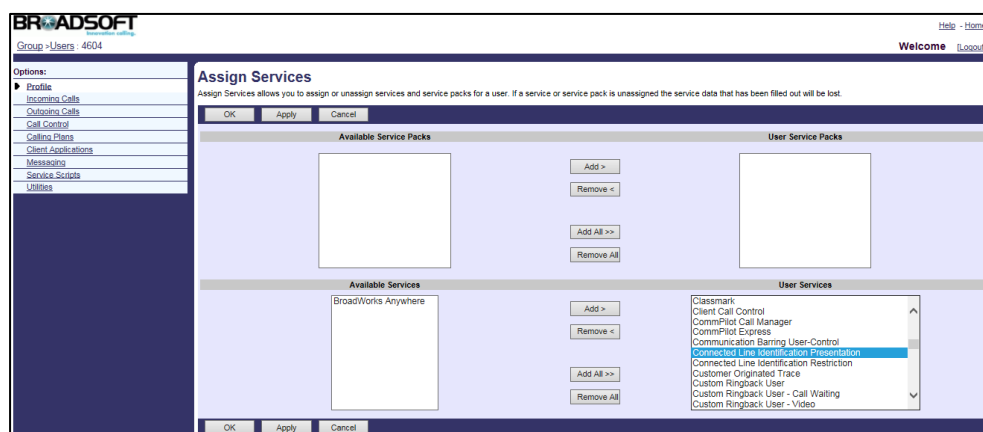
Note

Before configuring the COLP feature, make sure the necessary calling line ID delivery service for a call is set to "On" on the BroadWorks server.

Configuring the BroadSoft Server

To assign the connected line identification presentation service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Connected Line Identification Presentation** and then click **Add>**.



6. Click **Apply** to accept the change.

For more information on COLP, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

IP phones support to display the dialed digits, or the identity from a SIP header (Remote-Party-ID or P-Asserted-Identity) carried in the 18x or 200 OK response, or the identity from the From header carried in the UPDATE message as described in RFC 4916. The connected line identification source is configurable using template configuration files.

To configure the connected line identification source using template configuration files:

1. Add/Edit connected line identification source parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G, X ranges from 1 to 16; For SIP-T42G, X ranges from 1 to 12; For SIP-T41P/T27P, X ranges from 1 to 6; For SIP-T40P/T23P/T23G, X ranges from 1 to 3, For SIP-T21(P) E2, X ranges from 1 to 2; For SIP-T19(P) E2 and CP860, X is equal to 1).

Parameters	Permitted Values	Default
account.X.cp_source	Integer from 0 to 2	0
Description: Configures the connected line identification source for account X. 0 -PAI-RPID (Derives the name and number of the callee from the “PAI” header preferentially. If the server does not send the “PAI” header, derives from the “RPID” header). 1 -Dialed Digits 2 -RFC 4916 (Derives the identity of the callee from “From” header in the UPDATE message).		

The following shows an example of the connected line identification source configuration in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
account.1.cp.source = 2
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

Connected Line Identification Restriction

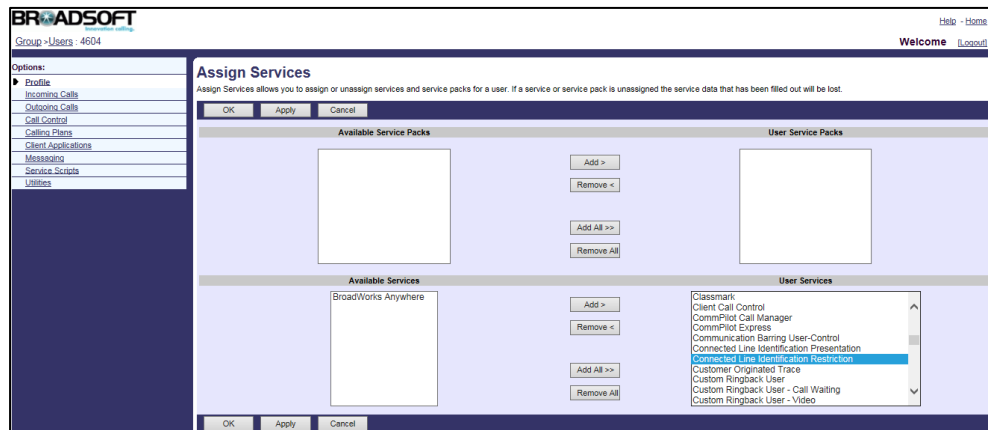
Connected Line Identification Restriction (COLR) allows a user to block his identity from showing up when receiving a call. When placing a call to the user with COLR enabled, the 18x response from BroadWorks to the caller contains a Privacy header set to “id”. The caller’s phone LCD screen updates the callee’s identity and displays “anonymous”. This feature does not apply to calls from within a group.

Configuring the BroadSoft Server

To assign the connected line identification restriction service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.

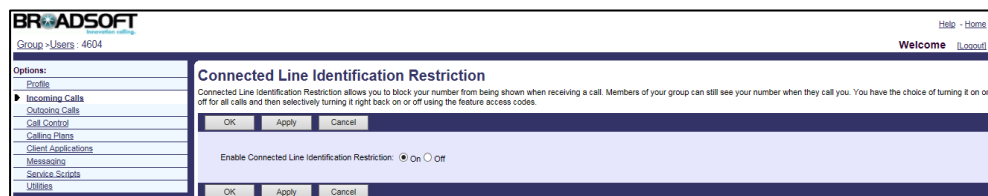
- In the **Available Services** box, select **Connected Line Identification Restriction** and then click **Add>**.



- Click **Apply** to accept the change.

To configure the connected line identification restriction for a user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4604).
- Click on **Incoming Calls->Connected Line Identification Restriction**.
- Mark the **On** radio box in the **Enable Connected Line Identification Restriction** field.



- Click **Apply** to accept the change.

For more information on COLR, refer to *BroadWorks Web Interface Administrator Guide*.

Meet-Me Conferencing

Meet-Me conferencing provides the ability to schedule conference calls, where the moderator (who has control of the conference) and other participants calling into the conference are connected at the appropriate time. IP phones support high-definition audio conference.

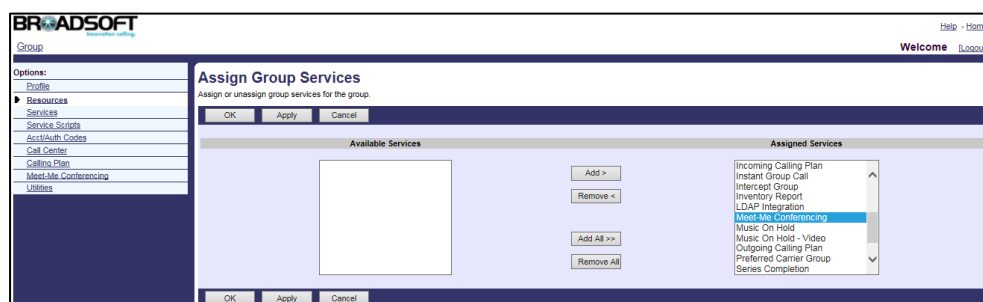
A group administrator creates a conference bridge and designates BroadWorks users who can host conferences on that bridge. Hosts can create scheduled and reservationless conferences. When a conference is created, there is a moderator PIN generated along with the conference ID. Any participant who joins the conference using the moderator PIN has special privileges for that instance of the conference. Within a

conference, moderators can invoke functions such as recording, locking a conference, and inviting a new participant. There can be multiple moderators for an instance of a conference.

Configuring the BroadSoft Server

To assign the Meet-Me conferencing service to the group:

1. Log into the web portal as a group administrator.
2. Click on **Resources->Assign Group Services**.
3. In the **Available Services** box, select **Meet-Me Conferencing** and then click **Add>**.



4. Click **Apply** to accept the change.

To add a Meet-Me conference bridge:

1. Log into the web portal as a group administrator.
2. Click on **Meet-Me Conferencing->Meet-Me Conference Bridges**.
3. Click **Add**.
4. Set the Meet-Me conference bridge parameters.

The following shows an example:

Conference Bridge ID:	Bridgeone
Name:	Meet-Me Conference
Calling Line ID Last Name:	Conference
Calling Line ID First Name:	Meet-Me
Allocated Ports To This Bridge:	2

Click **Search** to display all available users.

- In the **Available Users** box, select the desired user and then click **Add>** to assign the user to the conference bridge.

BROADSOFT
Group > Meet-Me Conference Bridges > Bridgeone

Options:
Profile
Calling Plans

Meet-Me Conference Bridge Profile
Modify the selected Meet-Me conference bridge.

OK Apply Delete Cancel

Conference Bridge ID: Bridgeone

* Name: Meet-Me Conference

* Calling Line ID Last Name: Conference

Department: None

Time Zone: (GMT+08:00) Asia/Shanghai

Security Pin Length: 6 digits

Operator Phone Number / SIP-URI:

Maximum Ports Available For This Bridge: 3

* Allocated Ports To This Bridge: 2

☒ Allow Individual Outdial

☐ Play Warning Prompt: 10 minutes before the conference and

☐ Maximum Conference Duration: 3 hours 00 minutes

Maximum Scheduled Conference Duration: 23 hours 45 minutes

Enter search criteria below

User ID Starts With Search

Available Users

11100,11100 (335566)
12341,12341 (12341)
21,43 (4321)
22,43 (4322)
20,20 (4355)
40004980,40004980 (40004980)
40004981,40004981 (40004981)
4011,4011 (4011)
4200,4200 (4200)
430TValue,123 (4301)
4302,4302 (4302)

Add > Remove < Add All >> Remove All

Conference Hosts

Yealink,4604 (4604)
Yealink,4608 (4608)

OK Apply Delete Cancel

- Click **OK** to accept the change.
- Select the desired conference bridge added above and then click **Edit**.
- Click on **Addresses**.
- Select the phone number from the pull-down list of **Phone Number**.
- Enter the extension in the **Extension** field.

BROADSOFT
Group > Meet-Me Conference Bridges > Bridgeone

Options:
Profile
Calling Plans

Meet-Me Conference Bridge Addresses
Addresses allows you to view and maintain your phone number and other identities that are used to make and receive calls.

OK Apply Cancel

Phone Number: 4607 Activated

Extension: 4607

Aliases: sip: @pbx.yealink.com

sip: @pbx.yealink.com

sip: @pbx.yealink.com

OK Apply Cancel

- Click **Apply** to accept the change.

To add a new conference:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all available users.
- Select the desired user (e.g., 4604), who has been assigned to the Meet-Me conference bridge.
- Click on **Meet-Me Conferencing->Conferences**.
- Click **Add**.
- Set the Meet-Me conference parameters.

The main parameters are described as below:

Parameter	Description
Estimated number of participants	Specifies the number of participants the conference may have. Note: The number is not higher than the maximum number of ports available on the bridge on which this conference is hosted.
When attendees join/leave	Specifies how to notify the conference participants when other participants join or leave the conference.
Type	Specifies the type of conference you want to create. One Time: The conference happens once, on the scheduled date and time, and is not repeated. Recurring (Daily, Weekly, Monthly, or Yearly): This is a scheduled conference that happens regularly at specified intervals. It can be ongoing or have an end-date. Reservationless: The conference is not scheduled for any particular time and can be started at any time.

The following shows an example:

Title: Myconference
 Estimated number of participants: 2
 Type: Reservationless
 Schedule Start Date: Select today's date
 Schedule End Date: Never

BROADSOFT
Group: Users 4604

Options:
 Profile
 Incoming Calls
 Outgoing Calls
 Call Control
 Calling Plans
 Client Applications
 Meet-Me Conferencing
 Messaging
 Service Scripts
 Utilities

Meet-Me Conference Add
 Create a new conference

OK Cancel

Bridge: Meet-Me Conference
 * Title: Myconference
 Account Code:
 Estimated number of participants: 2
☐ Restrict number of participants to:
☐ Mute all attendees on entry
☐ End conference when moderator departs
☐ Moderator required to start conference
☐ Enable security pin
☐ Allow Unique Identifier

When attendees join/leave: ☒ Play tone ☐ Play recorded name ☐ No notification
 Type: ☐ One Time ☐ Recurring ☒ Reservationless

Scheduling Details
 Conference Time:
 Start Date: 10/15/2014 (mm/dd/yyyy)
 * End Date: ☒ Never ☐ Date: 11/15/2014 (mm/dd/yyyy)

OK Cancel

- Click **OK** to accept the change.

After the conference is created, select the conference created above and note the Conference ID and Moderator PIN.

For more information on Meet-Me conferencing, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

The Meet-Me Conference key is configurable using the configuration file, via web user interface or phone user interface. When a Meet-Me Conference key is configured on the IP phone, the user can join in the conference by pressing the Meet-Me Conference key directly.

To configure a Meet-Me Conference key using the configuration files:

- Add/Edit DSS key parameters in template configuration files:

You can configure a line key as a Meet-Me conference key (not applicable to SIP-T19(P) E2 and CP860 IP phones).

The "X" is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VP-T49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G, X ranges from 1 to 3; For SIP-T21(P) E2, X ranges from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	55	Refer to the following content
<p>Description: Configures the line key type.</p> <p>55-Meet-Me Conference</p> <p>For SIP VP-T49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0.</p> <p>For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-27 is 0.</p> <p>For SIP-T42G IP phones: The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0.</p> <p>For SIP-T41P IP phones:</p>		

Parameters	Permitted Values	Default
<p>The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0.</p> <p>For SIP-T27P IP phones:</p> <p>The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0.</p> <p>For SIP-T40P/T23P/T23G/T21(P) E2 IP phones:</p> <p>The default value is 15.</p>		
linekey.X.line	Refer to the following content	Refer to the following content
<p>Description:</p> <p>Configures the line to apply the Meet-Me conference key.</p> <p>Permitted Values:</p> <p>1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G)</p> <p>1 to 12 (For SIP-T42G)</p> <p>1 to 6 (For SIP-T41P/T27P)</p> <p>1 to 3 (For SIP-T40P/T23P/T23G)</p> <p>1 to 2 (For SIP-T21(P) E2)</p> <p>1-Line1</p> <p>2-Line2</p> <p>3-Line3</p> <p>...</p> <p>16-Line16</p> <p>When X=1, the default value is 1.</p> <p>When X=2, the default value is 2.</p> <p>When X=3, the default value is 3.</p> <p>....</p> <p>When X=16, the default value is 16.</p>		
linekey.X.value	String within 99 characters	Blank
<p>Description:</p> <p>Configures the Meet-Me conference bridge number.</p>		
linekey.X.pickup_value	String within 256 characters	Blank
<p>Description:</p> <p>Configures the conference ID or Moderator PIN followed by the # sign.</p>		

Parameters	Permitted Values	Default
linekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each line key.		

The following shows an example of Meet-Me conference key (line key) configurations in a template configuration file (e.g., y000000000044.cfg):

```
linekey.2.type = 55
linekey.2.line = 1
linekey.2.value = 4607
linekey.2.pickup_value = 382855#
```

You can also configure a programmable key as a Meet-Me conference key.

The “X” is an integer which specifies the sequence number of the programmable key. X ranges from 1 to 14.

Parameters	Permitted Values	Default
programmablekey.X.type	55	Refer to the following content
Description: Configures the programmable key type. 55-Meet-Me Conference For SIP VP-T49G IP phones: When X=1, the default value is 28 (History). When X=2, the default value is 61 (Directory). When X=3, the default value is 5 (DND). When X=4, the default value is 30 (Menu). When X=12/13, the default value is 0 (NA). When X=14, the default value is 2 (Forward). For SIP-T48G/T46G IP phones: When X=1, the default value is 28 (History). When X=2, the default value is 61 (Directory). When X=3, the default value is 5 (DND). When X=4, the default value is 30 (Menu). When X=5, the default value is 28 (History). When X=6, the default value is 61 (Directory).		

Parameters	Permitted Values	Default
<p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T42G/T41P/T40P IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/13, the default value is 0 (NA).</p> <p>For SIP-T29G/T27P IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10/11/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T23P/T23G/T21(P) E2 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p>		

Parameters	Permitted Values	Default
<p>When X=7, the default value is 51 (Switch Account Up).</p> <p>When X=8, the default value is 52 (Switch Account Down).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=10, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For SIP-T19(P) E2 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=7, the default value is 0 (NA).</p> <p>When X=8, the default value is 0 (NA).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>For CP860 IP phones:</p> <p>When X=1, the default value is 28 (History).</p> <p>When X=2, the default value is 61 (Directory).</p> <p>When X=3, the default value is 5 (DND).</p> <p>When X=4, the default value is 30 (Menu).</p> <p>When X=5, the default value is 28 (History).</p> <p>When X=6, the default value is 61 (Directory).</p> <p>When X=9, the default value is 33 (Status).</p> <p>When X=13, the default value is 0 (NA).</p>		
programablekey.X.line	Integer from 1 to 16	1
<p>Description:</p> <p>Configures the line to apply the Meet-Me conference key.</p> <p>Valid values are:</p> <p>1 to 16 (For SIP VPT49G/SIP-T48G/T46G/T29G)</p> <p>1 to 12 (For SIP-T42G)</p> <p>1 to 6 (For SIP-T41P/T27P)</p> <p>1 to 3 (For SIP-T40P/T23P/T23G)</p> <p>1 to 2 (For SIP-T21(P) E2)</p>		

Parameters	Permitted Values	Default
1-Line1 2-Line2 3-Line3 ... 16-Line16 Note: It is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
programmablekey.X.value	String within 99 characters	Blank
Description: Configures the Meet-Me conference bridge number.		
programmablekey.X.pickup_value	String within 256 characters	Blank
Description: Configures the conference ID or Moderator PIN followed by the # sign.		
programmablekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each soft key. Note: It is applicable when the value of X ranges from 1 to 4.		

The following shows an example of the Meet-Me conference key (programmable key) configuration in a template configuration file (e.g., y000000000044.cfg):

```
programmablekey.5.type = 55
programmablekey.5.line = 1
programmablekey.5.value = 4607
programmablekey.5.pickup_value = 382855#
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can find the web user interface of the IP phone is similar to the one shown as below:

Key	Type	Value	Label	Line	Extension
Line Key1	Line		4608	Line 1	
Line Key2	Meet-Me Cont	4607		Line 1	*****
Line Key3	Line			Line 3	

NOTE
Line Keys
 Line Keys allow you to quickly access features such as recall and voice mail.
 You can click here to get more guides.

Busy Lamp Field List

Busy Lamp Field (BLF) List allows a user to monitor a list of specific extensions for status changes on the IP phone. It enables the monitoring phone to subscribe to a list of users, and receive notifications of the status of monitored users. Different indicators on the monitoring phone show the status of monitored users. The monitoring user can also be notified about calls being parked/no longer parked against any monitored user. IP phones support BLF list using a SUBSCRIBE/NOTIFY mechanism as specified in RFC 3265. When a monitored user is idle, the monitoring user presses the BLF list key to dial out the phone number. When a monitored user receives an incoming call, the monitoring user presses the BLF list key to pick up the call directly. When a monitored user is during a conversation, the monitoring user presses the BLF list key to barge in and set up a conference call.

This feature is not applicable to SIP-T19(P) E2 and CP860 IP phones.

Note

To use barge-in, make sure Barge-In Exempt for the monitored user is set to "Off" on the BroadWorks server. For more information on Barge-In Exempt, refer to [Call Pickup](#) on page 114.

Configuring the BroadSoft Server

To assign the BLF service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.

5. In the **Available Services** box, select **Busy Lamp Field** and then click **Add>**.

BRADSOFT

[Help](#) - [Home](#)

Group - Users - 4604

Welcome

Logout

Options:

Profile

Incoming Calls

Outgoing Calls

Call Control

Online Plans

Client Applications

Meet-Me Conferencing

Messaging

Service Scripts

Utilities

Assign Services

Assign Services allows you to assign or unassign services and service packs for a user. If a service or service pack is unassigned the service data that has been filled out will be lost.

OK

Apply

Cancel

Available Service Packs

Add >

Remove <

Add All >>

Remove All

User Service Packs

Available Services

BroadWorks Anywhere

Add >

Remove <

Add All >>

Remove All

User Services

Basic Call Logs

BroadTouch Business Communicator Desktop - Video

BroadTouch Business Communicator Mobile - Video

BroadTouch MobileLink

BroadWorks Mobility

Buoy Link and

Call Center - Premium

Call Forwarding Always

Call Forwarding Buys

Call Forwarding No Answer

Call Forwarding Not Reachable

6. Click **Apply** to accept the change.

To configure BLF List for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the Busy Lamp Field service.
4. Click on **Client Applications->Busy Lamp Field**.
5. Enter the BLF List URI (e.g., 4604) in the **List URI** field.
6. Select the domain name (e.g., pbx.yealink.com) from the pull-down list after the sign @.
7. Check the **Enable Call Park notification** checkbox.
8. Click **Search** to display all available users.
9. In the **Available Users** box, select the desired users and then click **Add>**.
10. Repeat the step 9 to add more users to the **Monitored Users** box.

BRADSOFT

Group - Users : 4604

Welcome [Name]

Options:

- Profile
- Incoming Calls
- Outgoing Calls
- Call Control
- Callina Plans
- > Client Applications
 - Meet Me Conferencing
 - Messaging
 - Service Scripts
 - Utilities

Busy Lamp Field

Busy Lamp Field allows you to create a list of users to monitor via your SIP Attendant Console Phone and assign a SIP URI to the list.

OK Apply Cancel

List URI: sip:4604 @ pbx.yealink.com ▼
☒ Enable Call Park notification

Enter search criteria below
 User ID ▼ Starts With ▼ Search

Available Users	Monitored Users
111qq,111qq (335566) 12341, 12341 (12341) 21.43 (4321) 22.43 (4322) 76.20 (4356) 40004980,40004980 (40004980) 40004981,40004981 (40004981) 4011.4011 (4011) 4200.4200 (4200) 4301Value_123 (4301) 4302.4302 (4302)	Yealink.4607 (4607) Yealink.4608 (4608)

Add >>
Remove <<
Add All >>>
Remove All

Move Up Move Down

OK Apply Cancel

11. Click **Apply** to accept the change.

For more information on BLF List, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

BLF List is configurable using template configuration files or via web user interface.

To configure BLF list using template configuration files:

1. Add/Edit BLF List parameters in template configuration files.

The "X" in the parameter is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G, X ranges from 1 to 16; For SIP-T42G, X ranges from 1 to 12; For SIP-T41P/T27P, X ranges from 1 to 6; For SIP-T40P/T23P/T23G, X ranges from 1 to 3, For SIP-T21(P) E2, X ranges from 1 to 2).

If the user (e.g., 4604) is the first user assigned to the device profile, replace the "X" by "1".

Parameters	Permitted Values	Default
phone_setting.auto_blf_list_enable	Boolean	1
Description: Enables or disables the IP phone to automatically configure the BLF list keys in order. 0-Disabled 1-Enabled		
account.X.blf.blf_list_uri	%BWBLF-URI-X %	Blank
Description: Configures the BLF List URI to monitor the users for account X.		
account.X.blf_list_code	%BWFAC-DIRECTED-CALL-PICKUP-X%	Blank
Description: Configures the Directed Call Pickup FAC (default: *97) for account X.		
account.X.blf_list_barge_in_code	%BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-IN-X%	Blank
Description: Configures the Directed Call Pickup with Barge-in FAC (default: *33) for account X.		
account.X.blf_list_retrieve_call_parked_code	String within 32	Blank

Parameters	Permitted Values	Default
	characters	
Description: Configures Call Park Retrieve FAC (default: *88) for account X.		
phone_setting.blf_list_sequence_type	0 or 1	0
Description: Configures the order of BLF list keys to be assigned automatically. 0-Line Key->Ext Key 1-Ext Key->Line Key Note: It works only if the value of the parameter "phone_setting.auto_blf_list_enable" is set to 1. As EXP keys are only applicable to SIP-T48G/T46G/T29G/T27P IP phones, this parameter will be only applicable to SIP-T48G/T46G/T29G/T27P IP phones.		
features.blf_led_mode	0, 1, 2 or 3	0
Description: Configures BLF LED mode and provides four kinds of definition for the BLF list key LED status. For more information, refer to Appendix BLF LED Mode on page 207. Note: It is not applicable to SIP VP-T49G, SIP-T19(P) E2 and CP860 IP phones.		

The following shows an example of configuring BLF List in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
account.1.blf.blf_list_uri = %BWBLF-URI-1%
account.1.blf_list_code = %BWFAC-DIRECTED-CALL-PICKUP-1%
account.1.blf_list_barge_in_code
= %BWFAC-DIRECTED-CALL-PICKUP-WITH-BARGE-IN-1%
account.1.blf_list_retrieve_call_parked_code = *88
phone_setting.blf_list_sequence_type = 0
phone_setting.auto_blf_list_enable = 1
features.blf_led_mode = 1
```

If the parameter "phone_setting.auto_blf_list_enable" is set to 0, you need to configure the BLF list keys manually. Configure DSS keys to be BLF List keys using the following parameters in template configuration files (e.g., y000000000044.cfg). The number of BLF List keys to be configured depends on the number of monitored users configured on BroadWorks.

You can configure line keys to be BLF List keys.

The "X" is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VP-T49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G, X ranges from 1 to 3; For SIP-T21(P) E2, X ranges from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	39	Refer to the following content
Description: Configures the line key type. 39-BLF List. For SIP VP-T49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0. For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-27 is 0. For SIP-T42G IP phones: The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0. For SIP-T41P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0. For SIP-T27P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0. For SIP-T40P/T23P/T23G/T21(P) E2 IP phones: The default value is 15.		
linekey.X.line	Refer to the following content	Refer to the following content
Description: Configures the line to apply the BLF List key. Permitted Values: 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G) 1 to 12 (For SIP-T42G) 1 to 6 (For SIP-T41P/T27P) 1 to 3 (For SIP-T40P/T23P/T23G) 1 to 2 (For SIP-T21(P) E2)		

Parameters	Permitted Values	Default
1-Line1 2-Line2 3-Line3 ... 16-Line16 When X=1, the default value is 1. When X=2, the default value is 2. When X=3, the default value is 3. When X=16, the default value is 16.		
linekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each line key.		

The following shows an example of BLF List keys (line keys) configurations in a template configuration file (e.g., y0000000000044.cfg):

```
linekey.2.line = 1
linekey.2.type = 39
linekey.3.line = 1
linekey.3.type = 39
```

2. Upload template configuration files.

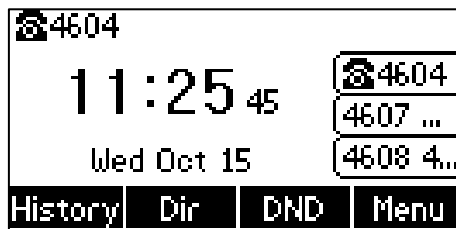
For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tags in the template file (e.g., %BWMACADDRESS%.cfg) will be replaced by the actual parameter values. An example is shown as the following:

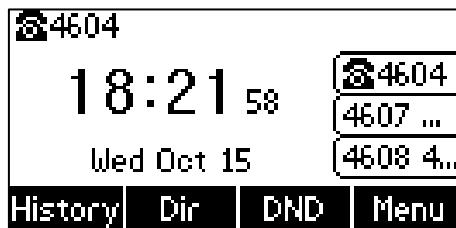
```
account.1.blf.blf_list_uri = 4604@pbx.yealink.com
account.1.blf_list_code = *97
account.1.blf_list_barge_in_code= *33
```

If you select to configure the BLF lists key automatically, after downloading the configuration files, the IP phone will automatically configure the BLF List keys from the first unused DSS key (Line Key->Ext Key), according to the response message from the BroadWorks server. When a DSS key is used, the IP phone will skip to the next unused DSS key.

The IP phone LCD screen is similar to the one shown as below:



If you select to configure the BLF list key manually, after downloading the configuration files, the IP phone will configure the line keys according to the configurations in the configuration file.



BLF List feature is configurable via web user interface at the path **Account->Advanced**.

Shared Call Appearance

Shared Call Appearance (SCA) allows users to share a SIP line on several IP phones. Any IP phone can be used to originate or receive calls on the shared line. An incoming call can be presented to multiple phones simultaneously. The incoming call can be answered on any IP phone but not all. A call that is active on one IP phone will be presented visually to other IP phones that share the call appearance. All SCA phones can also be notified about calls being parked/no longer parked against any SCA phone's extension.

IP phones support SCA using a SUBSCRIBE/NOTIFY mechanism as specified in RFC 3265. The events used are:

- "call-info" for call appearance state notification
- "line-seize" for the IP phone to ask to seize the line

SCA feature also has private hold capability. When putting a shared line call on private hold, the user can retrieve it on the hold phone only. Retrieve attempts on other phones are rejected.

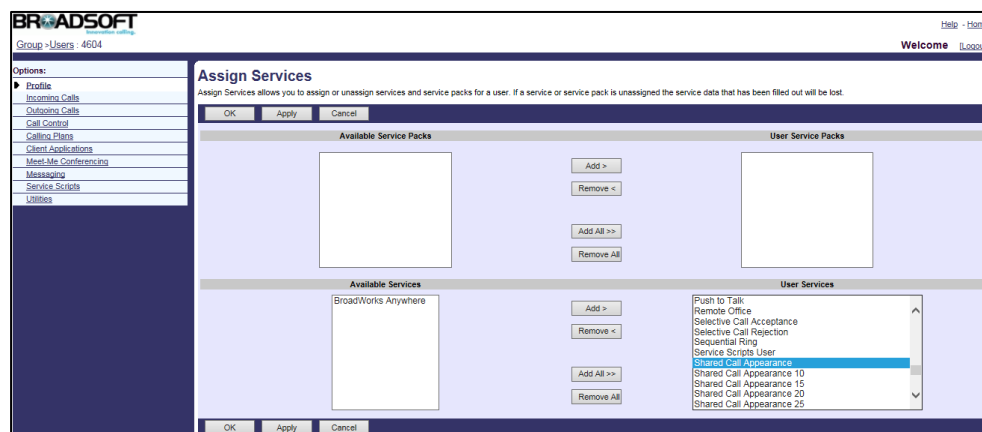
Configuring the BroadSoft Server

To assign the SCA service to a user:

1. Log into the web portal as a group administrator.

- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4604).
- Click on **Assign Services**.

In the **Available Services** box, select **Shared Call Appearance** and then click **Add>**.



- Click **Apply** to accept the change.

To configure SCA for the user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4604), who has been assigned the Shared Call Appearance service.
- Click on **Call Control->Shared Call Appearance**.

The main SCA parameters are described as below:

Parameter	Description
Alert all appearances for Click-to-Dial calls	Allows alerting all the locations sharing the call appearance when a location places a call from the CommPilot Call Manager.
Allow Call Retrieve from another location	Allows the other location sharing the call appearance to retrieve a call by dialing a call retrieve FAC.
Multiple Call Arrangement	Provides the ability for multiple calls to be handled concurrently on different SCA locations for a user.
Allow bridging between locations	Allows SCA locations to barge in on an active call involving another location.
Enable Call Park notification	Alerts all shared call appearance locations when a call is parked against the user's extension.
Bridge Warning tone	Determines whether to play a warning

Parameter	Description
	<p>tone when a shared location barges in on an active call.</p> <p>None: disables warning tone feature.</p> <p>Barge-in only: enables the warning tone feature.</p> <p>Barge-in and repeat every 30 seconds: enables warning tone feature and the warning tone repeats periodically every 30 seconds.</p>

The following shows an example:

Alert all appearances for Click-to-Dial calls: Selected

Alert all appearances for Group Paging calls: Selected

Allow Call Retrieve from another location: Selected

Multiple Call Arrangement: On

Allow bridging between locations: Selected

Enable Call Park notification: Selected

Bridge Warning tone: Barge-in only

BROADSOFT
Group » Users: 4604

Options:
 Profile
 Incoming Calls
 Outgoing Calls
 Call Control
 Calling Plans
 Client Applications
 Meet-Me Conferencing
 Messaging
 Service Scripts
 Utilities

Shared Call Appearance
 Shared Call Appearance allows administrators to allocate additional devices or lines to you. These devices or lines also ring just like your primary phone. Define the line policy on Device Policies page.

OK Apply Add Cancel

☒ Alert all appearances for Click-to-Dial calls
☒ Alert all appearances for Group Paging calls
☒ Allow Call Retrieve from another location
 Multiple Call Arrangement: ☒ On ☐ Off
☒ Allow bridging between locations
☒ Enable Call Park notification
 Bridge Warning tone: ☐ None
☒ Barge-in only
☐ Barge-in and repeat every 30 seconds
 Device Policies: [Configure device policies](#)

Delete	Identity/Device Profile Type [a]	Identity/Device Profile Name	Line/Port	Edit
No Entries Present				

[Page 1 of 1]

Identity/Device Profile Type Starts With Find Find All

OK Apply Add Cancel

- Click **Apply** to accept the change.
- Click **Add**.
- Select the desired device profile name (e.g., Yealink T23-Test) from the pull-down list of **Identity/Device Profile Name**. Make sure the selected device profile has been created, and note this device profile.
- Enter the alternate phone number (e.g., 4604_1) in the ***Line/Port** field.

- Select the domain name (e.g., pbx.yealink.com) from the pull-down list after the sign @.

- Click **OK** to accept the change.
- Repeat steps 6 to 10 to configure more alternate locations.

For more information on SCA, refer to *BroadWorks Web Interface Administrator Guide*.

Note

The primary account and the alternate accounts should be assigned to different device profiles.

Configuring Yealink IP Phones

SCA is configurable using template configuration files or via web user interface.

To register the primary account and configure SCA on the primary phone using template configuration files:

- Add/Edit primary account parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G, X ranges from 1 to 16; For SIP-T42G, X ranges from 1 to 12; For SIP-T41P/T27P, X ranges from 1 to 6; For SIPT40P/T23P/T23G, X ranges from 1 to 3, For SIP-T21(P) E2, X ranges from 1 to 2; For SIP-T19(P) E2 and CP860, X is equal to 1).

If the primary account (e.g., 4604) is the second user assigned to the device profile, replace “X” by “2”.

Parameters	Permitted Values	Default
account.X.enable	%BWLIN-BINARY-X %	0
Description: Enables or disables the line X. 0-Disabled 1-Enabled		

Parameters	Permitted Values	Default
account.X.label	%BWEXTENSION-X%	Blank
Description: Configures the label to be displayed on the phone for account X when the phone is idle.		
account.X.display_name	%BWCLID-X%	Blank
Description: Configures the name to be displayed on the callee's phone for account X.		
account.X.auth_name	%BWAUTHUSER-X%	Blank
Description: Configures authentication ID for account X.		
account.X.password	%BWAUTHPASSWORD-X%	Blank
Description: Configures authentication password for account X.		
account.X.user_name	%BWLINEPORT-X%	Blank
Description: Configures the user ID for account X.		
account.X.sip_server.Y.address (Y ranges from 1 to 2.)	%BWHOST-X%	Blank
Description: Configures the IP address of SIP server Y for account X.		
account.X.sip_server.Y.port (Y ranges from 1 to 2.)	5060	5060
Description: Configures the port of SIP server Y for account X.		

Parameters	Permitted Values	Default
account.X.outbound_proxy_enable	%USE_SBC_BOOLE AN%	0
Description: Enables or disables the outbound proxy server for account X. 0-Disabled 1-Enabled		
account.X.outbound_host	%SBC_ADDRESS%	Blank
Description: Configures the domain name or the IP address of the outbound proxy server 1 for account X.		
account.X.outbound_port	%SBC_PORT%	5060
Description: Configures the port of the outbound proxy server 1 for account X.		
account.X.backup_outbound_host	IP address or domain name	Blank
Description: Configures the IP address or domain name of the outbound proxy server 2 for account X.		
account.X.backup_outbound_port	Integer from 0 to 65535	5060
Description: Configures the port of the outbound proxy server 2 for account X.		

The following shows an example of the primary account configuration in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```

account.2.enable = %BWLINE-BINARY-2%
account.2.label = %BWEXTENSION-2%
account.2.display_name = %BWCLID-2%
account.2.auth_name = %BWAUTHUSER-2%
account.2.password = %BWAUTHPASSWORD-2%
account.2.user_name = %BWLINEPORT-2%
account.2.sip_server.1.address= %BWHOST-2%
account.2.sip_server.1.port= 5060

```

```

account.2.outbound_proxy_enable = %USE_SBC_BOOLEAN%

account.2.outbound_host = %SBC_ADDRESS%

account.2.outbound_port = %SBC_PORT%

```

2. Add/Edit SCA parameters in template configuration files:

The "X" in the parameter is an integer which specifies the line number on the phone. If the primary account (e.g., 4604) is the second user assigned to the device profile, replace "X" by "2".

Parameters	Permitted Values	Default
account.X.shared_line	%BWSHAREDLINE-BINARY-X%	0
Description: Configures the line to be private or shared. 0-Private line 1-Shared line		
features.auto_linekeys.enable	%AUTO_LINEKEYS%	0
Description: Enables or disables the DSS keys to be assigned with Line type automatically. The number of the DSS keys is determined by the value of the parameter "account.X.number_of_linekey". 0-Disabled 1-Enabled Note: It is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
account.X.number_of_linekey	%NUM_OF_LINEKEYS%	1
Description: Configures the number of DSS keys to be assigned with Line type automatically from the first unused one (unused one means the DSS key is configured as N/A or Line). If a DSS key is used, the IP phone will skip to the next unused DSS key. The order of DSS key assigned automatically is Line Key->Ext Key. Note: It works only if the value of the parameter "features.auto_linekeys.enable" is set to 1 and it is not applicable to SIP-T19(P) E2 and CP860 IP phones.		
account.X.shared_line_callpull_code	String within 32 characters	Blank
Description: Configures the shared line call pull FAC (default: *11) for account X.		

Parameters	Permitted Values	Default
Note: It works only if the value of the parameter “account.X.shared_line” is set to 1.		

The following shows an example of the SCA configuration in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
account.2.shared_line = %BWSHAREDLINE-BINARY-2%
features.auto_linekeys.enable = %AUTO_LINEKEYS%
account.2.number_of_linekey = %NUM_OF_LINEKEYS%
account.2.shared_line_callpull_code = *11
```

3. Customize the static tag on BroadWorks.

The following table shows an example:

Tag Name	Value
%USE_SBC_BOOLEAN%	1
%SBC_ADDRESS%	10.1.8.11
%SBC_PORT%	5060
%AUTO_LINEKEYS%	1
%NUM_OF_LINEKEYS%	2

For more information, refer to [Customizing a Static Tag](#) on page 17.

4. Upload template configuration files.

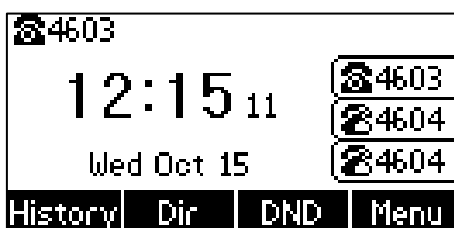
For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tags in the template file will be replaced by the actual parameter values. An example is shown as below:

```
account.2.enable = 1
account.2.label = 4604
account.2.display_name = 4604 Yealink
account.2.auth_name = 4604
account.2.password = 4604
account.2.user_name = 4604
account.2.sip_server.1.address= pbx.yealink.com
account.2.sip_server.1.port= 5060
account.2.outbound_proxy_enable = 1
account.2.outbound_host = 10.1.8.11
account.2.outbound_port = 5060
account.2.shared_line = 1
```

```
features.auto_linekeys.enable = 1
account.2.number_of_linekey = 2
account.2.shared_line_callpull_code = *11
```

After successful update, user can find the primary phone LCD screen is similar to the one shown as below:



The first line is private and the second line and the third line are associated with the shared line.

To register the alternate accounts and configure SCA on the alternate phones using template configuration files:

1. Add/Edit alternate account parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number on the IP phone. If the user is the second user assigned to the device profile, replace the “X” by “2”.

```
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.password = %BWAUTHPASSWORD-2%
account.2.user_name = %BWLINPORT-2%
account.2.sip_server.1.address= %BWHOST-2%
account.2.sip_server.1.port= 5060
account.2.outbound_proxy_enable = %USE_SBC_BOOLEAN%
account.2.outbound_host = %SBC_ADDRESS%
account.2.outbound_port = %SBC_PORT%
```

2. Add/Edit SCA parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number on the IP phone. If the user is the second user assigned to the device profile, replace the “X” by “2”.

```
account.2.shared_line = %BWSHAREDLINE-BINARY-2%
features.auto_linekeys.enable = %AUTO_LINEKEYS%
account.2.number_of_linekey = %NUM_OF_LINEKEYS%
account.2.shared_line_callpull_code = *11
```

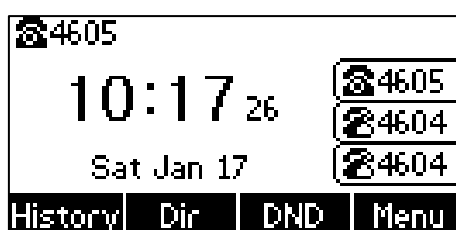
3. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tags in the template file will be replaced by the actual parameter values. An example is shown as below:

```
account.2.enable = 1
account.2.label = 4604
account.2.display_name = 4604 Yealink
account.2.auth_name = 4604
account.2.password = 4604
account.2.user_name = 4604_1
account.2.sip_server.1.address= pbx.yealink.com
account.2.sip_server.1.port= 5060
account.2.outbound_proxy_enable = 1
account.2.outbound_host = 10.1.8.11
account.2.outbound_port = 5060
account.2.shared_line = 1
features.auto_linekeys.enable = 1
account.2.number_of_linekey = 2
account.2.shared_line_callpull_code = *11
```

After successful update, user can find the alternate IP phone LCD screen is similar to the one shown as below:



The first line is private and the second line and the third line are associated with the shared line.

- Repeat steps 1 to 3 to register more alternate accounts and configure SCA on other alternate phones using template configuration files.

To configure a private hold key using the template configuration files:

- Add/Edit DSS key parameters in template configuration files:

You can configure a line key as a private hold key (not applicable to SIP-T19(P) E2 and CP860 IP phones).

The "X" is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VP-T49G, SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X

ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G, X ranges from 1 to 3; For SIP-T21(P) E2, X ranges from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	20	Refer to the following content
Description: Configures the line key type. 20-Private Hold For SIP VP-T49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0. For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-27 is 0. For SIP-T42G IP phones: The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0. For SIP-T41P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0. For SIP-T27P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0. For SIP-T40P/T23P/T23G/T21(P) E2 IP phones: The default value is 15.		
linekey.X.label	String within 99 characters	Blank
Description: (Optional.) Configures the label displayed on the LCD screen for each line key.		

The following shows an example of private hold key (line key) configurations in a template configuration file (e.g., y000000000044.cfg):

```
linekey.3.type = 20
```

2. Upload the template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After successful update, user can find the web user interface of the IP phone is similar to

the one shown as below:

Key	Type	Value	Label	Line	Extension
Line Key1	Line	4608		Line 1	
Line Key2	Line			Line 2	
Line Key3	Private Hold			N/A	

SCA feature is configurable via web user interface at the path **Account->Advanced**.

Music/Video on Hold

Music/Video on Hold allows an audio or video source to be played to held parties in various scenarios (Call Park, Call Hold, and Busy Camp On).

Configuring the BroadSoft Server

To assign the Music/Video on Hold service to the group:

1. Log into the web portal as a group administrator.
2. Click on **Resources->Assign Group Services**.
3. In the **Available Services** box, select **Music On Hold** and **Music On Hold-Video**, and then click **Add>**.

4. Click **Apply** to accept the change.

To configure Music/Video on Hold for a department:

1. Log into the web portal as a group administrator.
2. Click on **Services->Music/Video On Hold**.
3. Click **Add**.
4. Select the desired department from the pull-down list of **Department**.
5. Configure the Music on/Video on Hold for individual services:
 - **Enable music/video during Call Hold:** Checking this checkbox enables the IP

phone to play an audio or video file for held callers.

- **Enable music/video during Call Park:** Checking this checkbox enables the IP phone to play an audio or video file for parked callers.
 - **Enable music/video during Busy Camp On:** Checking this checkbox enables the IP phone to play an audio or video file for camped callers.
6. Configure the source of the Music/Video on Hold message to play.
 7. Click **Apply** to accept the change.

To modify Music/Video on Hold for a group/department:

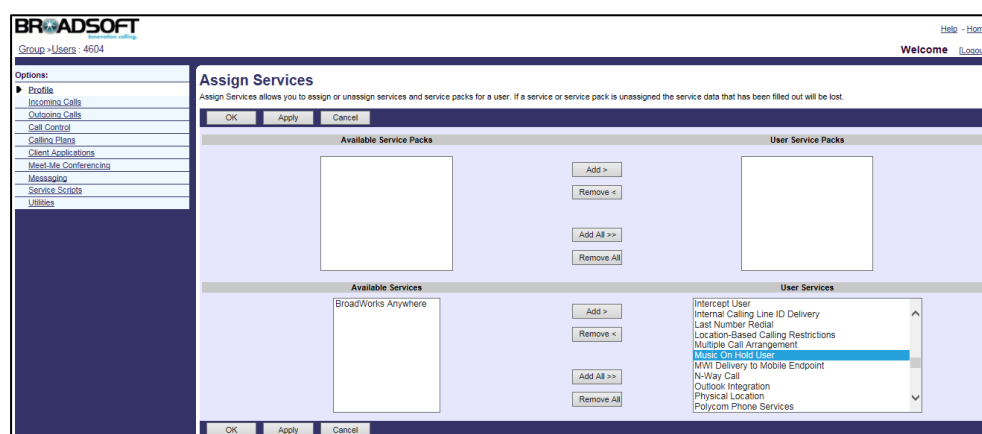
1. Log into the web portal as a group administrator.
2. Click on **Services->Music/Video On Hold**.
3. Select the desired group/department and then click **Edit**.
4. Make the desired change.

5. Click **Apply** to accept the change.

To assign the Music/Video on Hold User service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.

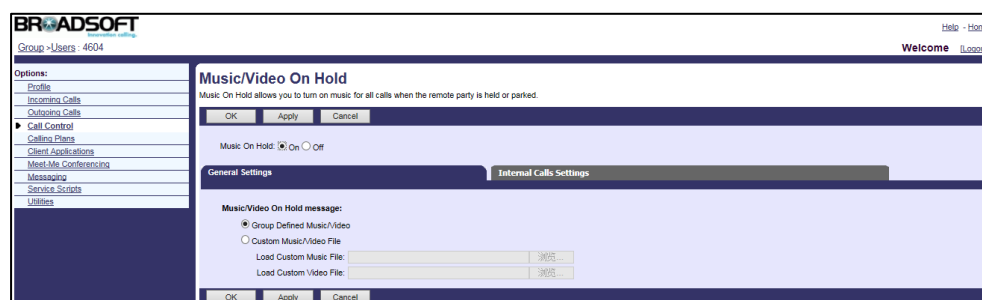
- In the **Available Services** box, select **Music On Hold User** and then click **Add>**.



- Click **Apply** to accept the change.

To configure Music/Video on Hold for the user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4604), who has been assigned the Music on Hold User service.
- Click on **Call Control->Music/Video On Hold**.
- Mark the **On** radio box in the **Music On Hold** field.
- Configure the source of the Music/Video on Hold message to play.



- Click **Apply** to accept the change.

For more information on Music/Video on Hold, refer to *BroadWorks Web Interface Administrator Guide*.

Priority Alert

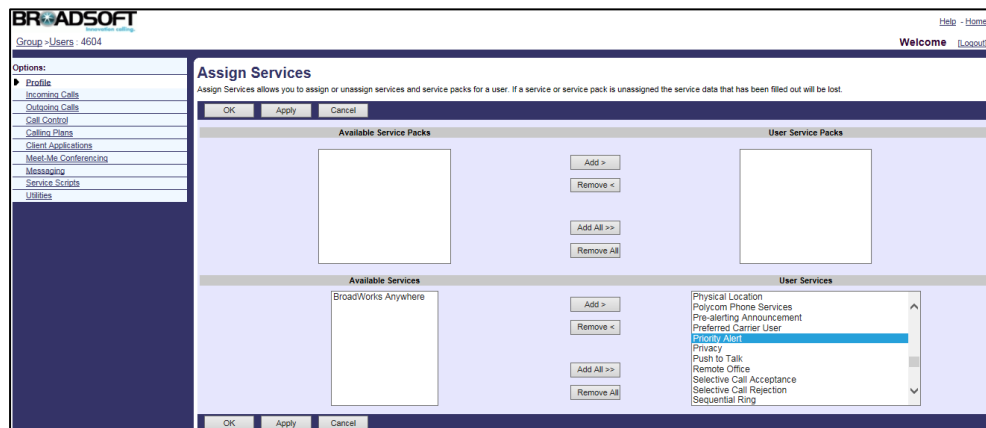
Priority alert allows users to define criteria to have certain incoming calls trigger distinctive alerting. Criteria can be defined based on the incoming phone numbers or digit patterns, the time schedule, and the holiday schedule. When the incoming call matches the pre-defined criteria, the BroadWorks server sends an INVITE request to the

callee with “Alert-Info” header. The priority alert service can be also assigned to hunt groups and call centers. In this case, the analysis of the incoming call against the set of criteria is done at the hunt group level or the call center level, and then affects the ringing pattern of all agents.

Configuring the BroadSoft Server

To assign the priority alert service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Priority Alert** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure priority alert for a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the priority alert service.
4. Click on **Incoming Calls->Priority Alert**.
5. Click **Add** to add a new priority alert entry.
6. Set the parameters of priority alert.

The following shows an example:

Description: D-Ring

Use Priority Alert: Selected

Select Time Schedule: Every Day All Day

Select Holiday Schedule: None

Any external phone number: Selected

BROADSOFT
Group > Users > 4604

Options:
 Profile
 Incoming Calls
 Outgoing Calls
 Call Control
 Calling Plans
 Client Applications
 Meet-Me Conferencing
 Messaging
 Service Scripts
 Utilities

Priority Alert Add
 Allows you to add a priority alert entry. Specify the time schedule and/or holiday schedule you would like a priority alert to occur. Also, you can have a priority alert occur when only specified numbers call or all external numbers call. If you need more than 12 numbers or more distinct time or holiday periods, you can create multiple priority alert entries.

OK Cancel

* Description: D-Ring x

☒ Use priority alert
☐ Do not use priority alert

Selected Time Schedule: Every Day All Day v

Selected Holiday Schedule: None v

Calls from:
☒ Any external phone number
☐ Following phone numbers:
☐ Any private number
☐ Any unavailable number

Specific phone numbers:

OK Cancel

7. Click **OK** to accept the change.

To configure priority alert for a hunt group:

1. Log into the web portal as a group administrator.
2. Click on **Services->Hunt Group**.
3. Select the desired group and then click **Edit**.
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Priority Alert** and then click **Add>**.

BROADSOFT
Group > Hunt Groups > HuntGroup1

Options:
 Profile
 Calling Plans

Assign Services
 Assign Services allows you to assign or unassign services for a user. If a service is unassigned the service data that has been filled out will be lost.

OK Apply Cancel

Available Services		User Services
Alternate Numbers	Add > Remove < Add All >> Remove All	Priority Alert
Anonymous Call Rejection		
Basic Call Logs		
Call Forwarding Always		
Call Forwarding Busy		
Call Forwarding Selective		
Calling Line ID Delivery Blocking		
Calling Name Retrieval		
Call Me Now		
Call Notify		
Connected Line Identification Restriction		

OK Apply Cancel

6. Click **OK** to accept the change.
7. Click on **Incoming Calls->Priority Alert**.
8. Click **Add** to add a new priority alert entry.
9. Set the parameters of priority alert.

The following shows an example:

Description: G-ring

Use Priority Alert: Selected

Select Time Schedule: Every Day All Day

Select Holiday Schedule: None

Following phone numbers: Selected

Any private number: Selected

10. Click **OK** to accept the change.

To configure priority alert for call center:

1. Log into the web portal as a group administrator.
2. Click on **Call Center->Call Centers**.
3. Select the desired call center and then click **Edit**.
4. Click on **Assign Services**.
5. In the **Available Services** box, select **Priority Alert** and then click **Add>**.

6. Click **OK** to accept the change.
7. Click on **Incoming Calls->Priority Alert**.
8. Click **Add** to add a new priority alert entry.
9. Set the parameters of priority alert.

The following shows an example:

Description: C-ring

Use Priority Alert: Selected

Select Time Schedule: Every Day All Day

Select Holiday Schedule: None

Following phone numbers: Selected

Specific phone numbers: 4607 4608

10. Click **OK** to accept the change.

For more information on priority alert, refer to *BroadWorks Web Interface Administrator Guide*.

To use priority alert, distinctive ring feature should be enabled on the IP phone. For more information, refer to [Alternate Numbers](#) on page 103.

Voice Messaging

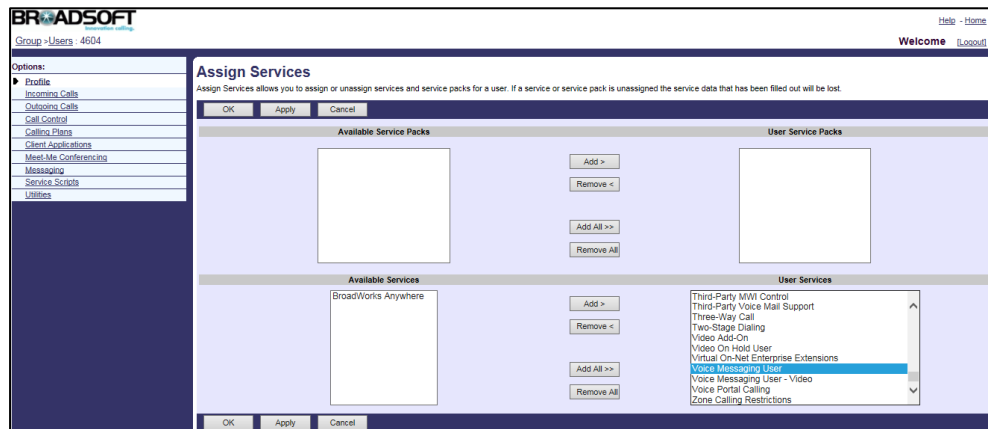
Voice messaging service allows users to record messages from callers for calls that are not answered within a specified number of rings, or for calls that receive a busy condition. BroadWorks also provides two options for voice messaging: Distribution List and Voice Portal Calling. Distribution List allows users to send voice messages to the pre-defined list of numbers in bulk. Voice Portal Calling allows users to originate calls from the voice portal.

Configuring the BroadSoft Server

To assign the voice messaging service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.

5. In the **Available Services** box, select **Voice Messaging User** and then click **Add>**.



6. Click **Apply** to accept the change.

To add a distribution list for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the voice messaging service.
4. Click on **Messaging->Distribution Lists**.
5. Click the desired distribution list number.
6. Enter the description of the distribution list in the **Description** field.
7. Enter the number or the SIP-URI in the **Phone Number / SIP-URI** field and then click **Add**.



8. Repeat steps 7 to 8 to add more numbers.
9. Click **Apply** to accept the change.

To configure voice messaging for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the voice messaging service.

4. Click on **Messaging->Voice Management**.
5. Set the parameters of voice messaging.

The following shows an example:

Voice Messaging: On

Send Busy Calls to Voice Mail: Selected

Send Unanswered Calls to Voice Mail: Selected

Use unified Messaging: Selected

Use Phone Message Waiting Indicator: Selected

BROADSOFT
Group: Users : 4604

Options:
 Profile
 Incoming Calls
 Outgoing Calls
 Call Control
 Calling Plans
 Client Applications
 Meet-Me Conferencing
Messaging
 Service Scripts
 Utilities

Voice Management
 Voice Management allows you to specify how to handle your messages. Use Unified messaging if you want to use your phone to retrieve messages. You can also just choose to send the message to your e-mail and not use the phone for messaging. Note that the message settings here also apply to other types of messaging such as fax if enabled.

OK Apply Cancel

Voice Messaging: ☒ On ☐ Off
☐ Send All Calls to Voice Mail
☒ Send Busy Calls to Voice Mail
☒ Send Unanswered Calls to Voice Mail

When a message arrives...:
☒ Use unified messaging [Advanced Settings \(Also saves current screen data\)](#)
☒ Use Phone Message Waiting Indicator
☐ Forward it to this e-mail address:

Additionally...:
☐ Notify me by e-mail of the new message at this address:
☐ E-mail a carbon copy of the message to:
☐ Transfer on '9' to Phone Number:

OK Apply Cancel

6. Click **Apply** to accept the change.

To configure voice portal calling for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604), who has been assigned the voice messaging service.
4. Click on **Messaging->Voice Portal Calling**.
5. Mark the **On** radio box in the **Voice Portal Calling** field.

BROADSOFT
Group: Users : 4604

Options:
 Profile
 Incoming Calls
 Outgoing Calls
 Call Control
 Calling Plans
 Client Applications
 Meet-Me Conferencing
Messaging
 Service Scripts
 Utilities

Voice Portal Calling
 Voice Portal Calling allows you to originate calls from the Voice Portal. Once you have dialed in to the Voice Portal and authenticated yourself, select the Make Call menu option and enter the destination digits.

OK Apply Cancel

Voice Portal Calling: ☒ On ☐ Off

OK Apply Cancel

6. Click **Apply** to accept the change.

For more information on voice messaging, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

Voice messaging is configurable using template configuration files.

To configure voice messaging using template configuration files:

1. Add/Edit voice messaging parameters in template configuration files:

The "X" in the parameter is an integer which specifies the line number on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G, X ranges from 1 to 16; For SIP-T42G, X ranges from 1 to 12; For SIP-T41P/T27P, X ranges from 1 to 6; For SIP-T40P/T23P/T23G, X ranges from 1 to 3, For SIP-T21(P) E2, X ranges from 1 to 2; For SIP-T19(P) E2 and CP860, X is equal to 1).

If the user (e.g., 4604) is the first user assigned to the device profile, replace "X" by "1".

Parameters	Permitted Values	Default
voice_mail.number.X	%BWVOICE-PORTAL-NUMBER-X%	Blank
Description: Configures the voice mail number.		

The following shows an example of the voice messaging configuration in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
voice_mail.number.1 = %BWVOICE-PORTAL-NUMBER-1%
```

2. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tag in the template file will be replaced by the actual parameter values. An example is shown as below:

```
voice_mail.number.1 = 4602

#The number "4602" is the voice portal number provided on the BroadWorks
server.
```

Automatic Call Distribution

Automatic Call Distribution (ACD) is often used in offices for customer service, such as call center. The ACD system handles incoming calls by automatically queuing and directing calls to available registered IP phone users (agents). The primary benefit of ACD is to reduce customer waiting time and improve the quality of service.

Once ACD is enabled on the IP phone, the user can log into the ACD system by pressing the **Login** soft key. After logging in the ACD system, the ACD system monitors the ACD

status on the user's phone and then decides whether to assign an incoming call to it. The user can change the ACD status on the IP phone. You can configure a reason for changing the agent state to unavailable (e.g., on lunch, in the bathroom, taking a coffee break or a personal break).

Hold Reminder

If a call center call has been on hold after the pre-configured time, BroadWorks sends an INVITE with an Alert-Info header with the ring splash cadence to alert the agent. BroadWorks then sends a CANCEL for the ring splash INVITE. The CANCEL request contains a Reason header indicating ring splash which tells the IP phone that the call must not be identified as a missed call. The IP phone does not add the call to the missed calls list.

Call Information

When the agent receives an incoming call, the call center call information is shown on the agent's phone LCD screen. Call center call information includes wait time, call center name, call center phone number and number of calls in queue. BroadWorks provides the capability to send additional call center call information via a call center MIME type carried in the INVITE SDP. In order for BroadWorks to send the call center call information in the INVITE SDP, the Support Call Center MIME Type option must be selected on the BroadWorks device profile.

Disposition Code

Disposition Code is an additional attribute that enables calls to be identified with promotions, consults and other tags. BroadWorks provides the capability to obtain a call center call disposition code entered by the user via the IP phone. During a call, the disposition code is communicated from the IP phone to BroadWorks by use of an INFO message. During wrap-up, the code is communicated via the INVITE message from the IP phone to BroadWorks. This feature is implemented using the Disp Code soft key or a Disp Code key on the IP phone.

Customer Originated Trace

Customer Originated Trace is used to trace the origin of an obscene, harassing, or threatening call. BroadWorks provides the capability for the call center agent to invoke a customer originated trace during the call or wrap-up. During a call, the request for customer originated trace is communicated from the IP phone to BroadWorks by use of an INFO message. During wrap-up, the request is communicated via INVITE from the IP phone to BroadWorks. This feature is implemented using the Trace soft key or an ACD Trace key on the IP phone.

Emergency Escalation

BroadWorks provides the capability for the call center agent to immediately escalate a

call to a supervisor by pressing a key on the phone. The supervisor is immediately joined into the call. During a call, the request for emergency escalation is communicated from the IP phone to BroadWorks by use of an INFO message. This feature is implemented using the Emergency soft key or an Emergency key on the IP phone.

Queue Status Notification

Queue Status Notification enables the agent to view the status of the call center queue on the IP phone. The queue can be in one of the following three states:

- **empty:** Indicates that no calls are currently in the queue.
- **Q'ing:** Indicates that one or more calls are currently in the queue.
- **ALERT:** Indicates that the call queue has reached the maximum number of calls, or that a call has been in the queue for too long. The Power Indicator LED will also flash. The LED will stop flashing once the call queue status returns to empty or Q'ing status.

Configuring the BroadSoft Server

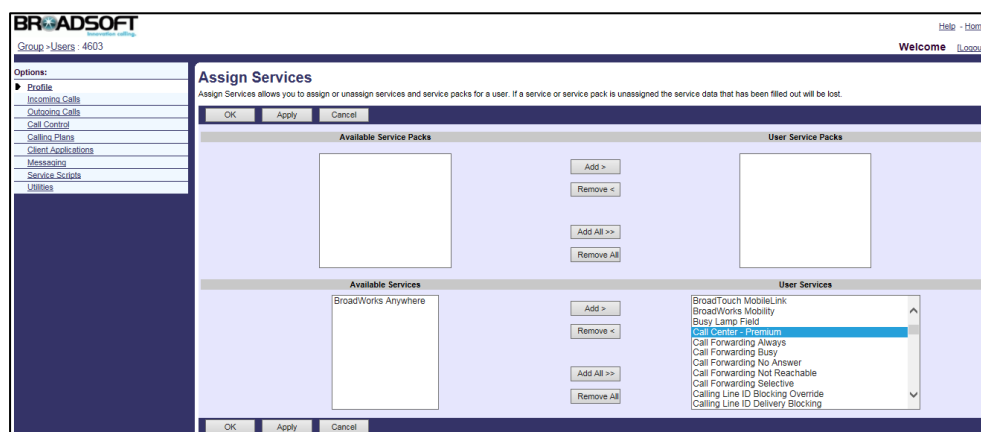
To add a premium call center:

1. Log into the web portal as a group administrator.
2. Click on **Call Center->Call Centers->Add Premium**.
3. After creating the call center, go back to **Call Center->Call Centers** and check the **Active** checkbox for the call center.

To assign the call center service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4603).
4. Click on **Assign Services**.

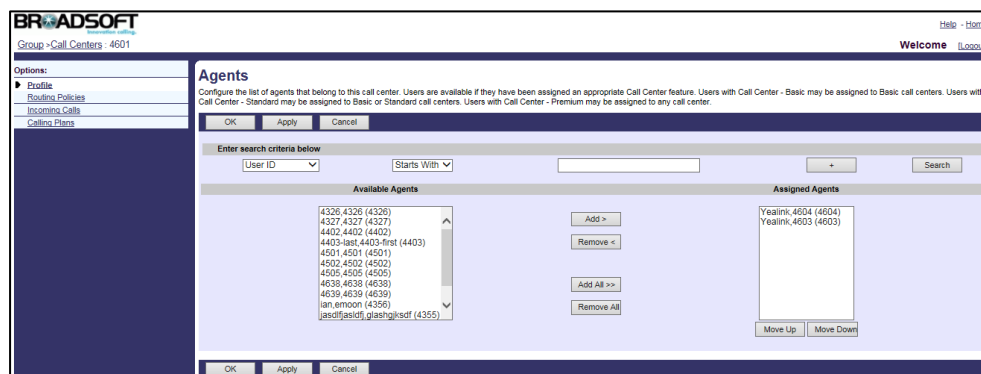
5. In the **Available Services** box, select **Call Center-Premium**, and then click **Add>**.



6. Click **Apply** to accept the change.

To assign users to the call center on the BroadWorks server:

1. Log into the web portal as a group administrator.
2. Click on **Call Center->Call Centers**.
3. Select the call center added above and then click **Edit**.
4. Click on **Agents**.
5. Click **Search** to display all available users, who have been assigned the call center service.
6. In the **Available Agents** box, select the desired agent and then click **Add>**.



7. Repeat the step 6 to assign more agents to the call center.
8. Click **Apply** to accept the change.

To change the agent state:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users**.
3. Click **Search** to display all available users.
4. Select the desired agent (e.g., 4603).

5. Click on **Call Control -> Call Centers**.

Call Centers

Call Centers displays your current ACD state and all the ACDs you belong to and whether you are currently joined in their call centers. You can set your ACD state and join or remove yourself from that ACD's call center if permitted by your administrator.

OK Apply Cancel

Call Center Service Assigned: Premium

ACD State: **Available**

Agent Threshold Profile: **Default Agent Threshold Profile**

☐ Make outgoing calls as **None**

Use Guard Timer Setting: ☒ Default ☐ User

☐ Enable guard timer for **5** seconds

Use Agent Unavailable Settings: ☒ Default ☐ User

☐ Force agent to unavailable on Do Not Disturb activation

☐ Force agent to unavailable on personal calls

☐ Force agent to unavailable after **5** consecutive bounced calls

☐ Force agent to unavailable on not reachable

Join Call Center	Call Center ID	Phone Number	Extension	Routing Type	Skill Level
<input checked="" type="checkbox"/>	4501	4501	4501	Priority Based	

OK Apply Cancel

6. Select the desired state from the pull-down list of **ACD State**.

7. Click **Apply** to accept the change.

Note

Make sure the **Join Call Center** checkbox is checked.

Unavailable Codes

To configure unavailable codes:

1. Log into the web portal as a group administrator.
2. Click on **Call Center->Agent Unavailable Codes**.
3. Check **Enable Agent Unavailable Codes** checkbox.
4. Click **Apply** to accept the change.
5. Click **Add**.
6. Enter the desired unavailable code and unavailable code name in the **Code** and **Description** fields respectively.
7. Check the **Active** checkbox.

Agent Unavailable Codes Add

Agent Unavailable Codes Add allows you to add a new Unavailable Code entry. Specify the code and description you would like for it.

OK Cancel

☒ Active

* Code: **500**

Description: **On Lunch**

OK Cancel

8. Click **OK** to accept the change.

9. Repeat steps 5 to 8 to add more unavailable codes.

Hold Reminder

To configure hold reminder:

1. Log into the web portal as a group administrator.
2. Click on **Call Center->Call Centers**.
3. Select the call center added above and then click **Edit**.
4. Click on **Routing Policies->Bounced Calls**.
5. Check the **Alert agent if call is on hold for longer than <number>seconds** checkbox, and enter the amount of time (in seconds) if you want agents to be alerted about long-held calls.
6. Check the **Bound Bounce calls after being on hold by agent for longer than <number> seconds** checkbox, and enter the number of time (in seconds) to bounce calls that are on hold longer than the specified number of seconds.

7. Click **Apply** to accept the change.

Call Information

To configure call information:

1. Log into the web portal as a group administrator.
2. Create a device profile. Make sure the selected device profile type supports Call Center MIME Type.

- Assign the call center agent to the device profile. Make sure the selected device profile is the one created above.

BROADSOFT
Group > Users : 4603

Options:
 Profile
 Incoming Calls
 Outgoing Calls
 Call Control
 Calling Plans
 Client Applications
 Messaging
 Service Scripts
 Utilities

Addresses
 Addresses allows you to view and maintain your phone number and other identities that are used to make and receive calls.

OK Apply Cancel

Phone Number: 4603 Activated
 Extension: 4603
☒ Identity/Device Profile ☐ Trunking ☐ None

Identity/Device Profile Name: Call Center_Call Inf (Group)
 * LinePort: 4603 @ pbx.yealink.com | [Advanced Settings](#)
 Contact: sip:
 sip:
 sip:
 sip:
 sip:

Aliases: sip: 4603@pbx.yealink.com
 sip: @ pbx.yealink.com
 sip: @ pbx.yealink.com
 sip: @ pbx.yealink.com

OK Apply Cancel

- Click **Apply** to accept the change.

Disposition Code

To configure disposition codes:

- Log into the web portal as a group administrator.
- Click on **Call Center->Call Centers**.
- Select the call center added above and then click **Edit**.
- Click on **Call Disposition Codes**.
- Check **Enable call disposition codes** checkbox.

BROADSOFT
Group > Call Centers : 4601

Options:
 Profile
 Routing Policies
 Incoming Calls
 Outgoing Calls
 Call Control
 Calling Plans
 Client Applications
 Messaging
 Utilities

Call Disposition Codes
 Add or Modify Call Disposition Codes. Disposition Codes are attributes applied to a call to identify marketing promotions or other topics pertaining to a call.

OK Apply Add Cancel

☒ Enable call disposition codes
☒ Use enterprise codes in addition to call center codes
☐ Force use of call disposition codes with default code: None

Active	Code	Description	Level	Edit
<input checked="" type="checkbox"/>	100	Promotion A	Queue	Edit

[Page 1 of 1]

Code Starts With Find Find All

OK Apply Add Cancel

- Click **Apply** to accept the change.

To configure disposition codes:

- Log into the web portal as a group administrator.
- Click on **Call Center->Call Disposition Codes**.
- Click **Add**.
- Enter the desired disposition code and disposition name in the **Code** and **Description** fields respectively.

5. Check the **Active** checkbox.

6. Click **OK** to accept the change.
7. Repeat steps 3 to 5 to add more disposition codes.

Customer Originated Trace

To configure customer originated trace for the agent:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users**.
3. Click **Search** to display all available users.
4. Select the desired agent (e.g., 4603).
5. Click on **Assign Services**.
6. In the **Available Services** box, select **Customer Originated Trace** and then click **Add>**.

7. Click **Apply** to accept the change.

Emergency Escalation

To assign supervisors to the call center:

1. Log into the web portal as a group administrator.
2. Click on **Call Center->Call Centers**.
3. Select the call center added above and then click **Edit**.

4. Click on **Supervisors**.
5. Click **Search** to display all available supervisors.
6. In the **Available Supervisors** box, select the desired supervisor and then click **Add>**.

7. Repeat the step 6 to assign more supervisors to the call center.
8. Click on the **Assign Agents** tab.
9. Select the desired supervisor from the pull-down list of **Supervisors**.
10. Click **Search** to display all available agents for the supervisor.
11. In the **Available Agents** box, select the desired agent and then click **Add>**.

12. Click **Apply** to accept the change.

Queue Status Notification

To configure queue status notification:

1. Log into the web portal as a group administrator.

2. Click on **Call Center->Call Centers**
3. Select the call center added above and then click **Edit**.
4. Click on **Queue Status Notification**.
5. Check the **Enable notification of queue status to agent devices** checkbox.
6. Check the **Number of calls in queue: <number>** checkbox, and enter a threshold on the number of calls in queue.
7. Check **Longest waiting time: <number> seconds** checkbox, and enter a threshold on the longest waiting time.

8. Click **Apply** to accept the change.

For more information on ACD, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

To configure ACD using template configuration files:

1. Add/Edit ACD parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number of the host user on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G, X ranges from 1 to 16; For SIP-T42G, X ranges from 1 to 12; For SIP-T41P/T27P, X ranges from 1 to 6; For SIP-T40P/T23P/T23G, X ranges from 1 to 3, For SIP-T21(P) E2, X ranges from 1 to 2; For SIP-T19(P) E2 and CP860, X is equal to 1).

If the primary account (e.g., 4603) is the first user assigned to the device profile, replace “X” by “1”.

Parameters	Permitted Values	Default
account.X.acd.enable	%ACD_LINE_BINARY %	0
Description: Enables or disables ACD feature for account X. 0 -Disabled 1 -Enabled		

Parameters	Permitted Values	Default
account.X.acd.initial_state	Integer	1
Description: Configures the initial agent state for account X. 1-Available 2-Unavailable		
account.X.acd.available	Boolean	0
Description: Enables or disables the IP phone to display the Unavail and Available soft keys for account X after logging into the ACD system. 0-Disabled 1-Enabled		
Unavailable Code		
account.X.acd.unavailable_reason_enable	0 or 1	0
Description: Enables or disables unavailable code feature for account X. 0-Disabled 1-Enabled		
account.X.reason_code.Y (Y ranges from 1 to 100.)	Integer from 1 to 2147483647	blank
Description: Configures the unavailable code which must match one of the codes configured on BroadWorks for account X. Multiple unavailable codes can be configured starting with Y=1,2,3...100. At most 100 unavailable codes can be configured, and the value of Y must be continuous.		
account.X.reason_code_name.Y (Y ranges from 1 to 100.)	String within 99 characters	blank
Description: Configures the unavailable reason which must match one of the reasons configured on BroadWorks for account X. Multiple unavailable reasons can be configured starting with Y=1,2,3...100. At most 100 unavailable reasons can be configured, and the value of Y must be continuous.		

Parameters	Permitted Values	Default
Call Information		
account.X.call_center.call_info_enable	Boolean	0
Description: Enables or disables call center call information feature for account X. 0-Disabled 1-Enabled		
account.X.call_center.show_call_info_time	Integer	30
Description: Configures the interval (in seconds) to specify how long the call center call information displays for account X.		
Disposition Code		
account.X.call_center.disp_code_enable	Boolean	0
Description: Enables or disables the disposition code feature for account X. 0-Disabled 1-Enabled		
account.X.bw_disp_code.Y (Y ranges from 1 to 100.)	Integer from 1 to 2147483647	Blank
Description: Configures the disposition code which must match one of the codes configured on BroadWorks for account X. Multiple disposition codes can be configured starting with Y=1,2,3...100. At most 100 disposition codes can be configured, and the value of Y must be continuous.		
account.X.bw_disp_code_name.Y (Y ranges from 1 to 100.)	String within 99 characters	Blank
Description: Configures the disposition code name which must match one of the names configured on BroadWorks for account X. Multiple disposition code names can be configured starting with Y=1,2,3...100. At most 100 disposition code names can be configured, and the value of Y must be continuous.		
Customer Originated Trace		

Parameters	Permitted Values	Default
account.X.call_center.trace_enable	Boolean	0
Description: Enables or disables the customer originated trace feature for account X. 0 -Disabled 1 -Enabled		
Emergency Escalation		
account.X.call_center.emergency_enable	Boolean	0
Description: Enables or disables the emergency escalation feature for account X. 0 -Disabled 1 -Enabled		
account.X.supervisor_info_code.Y (Y ranges from 1 to 100.)	Integer from 1 to 2147483647	Blank
Description: Configures the supervisor number for account X. Multiple supervisor numbers can be configured starting with Y=1,2,3...100. At most 100 supervisor numbers can be configured, and the value of Y must be continuous.		
account.X.supervisor_info_code_name.Y (Y ranges from 1 to 100.)	String within 99 characters	Blank
Description: Configures the supervisor name for account X. Multiple supervisor names can be configured starting with Y=1,2,3...100. At most 100 supervisor names can be configured, and the value of Y must be continuous.		
Queue Status Notification		
account.X.call_center.queue_status_enable	Boolean	0
Description: Enables or disables the queue status notification feature for account X. 0 -Disabled 1 - Enabled		

Parameters	Permitted Values	Default
account.X.call_center.queue_status_light_enable	Boolean	0
Description: Enables or disables the power indicator LED to flash when the ACD call queue has reached the maximum number of calls for account X. 0-Disabled (power indicator LED does not flash) 1-Enabled (power indicator LED fast flashes (300ms))		

The following shows an example of ACD configurations in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
account.1.acd.enable = %ACD_LINE_BINARY%
account.1.acd.initial_state = 1
account.1.acd.available = 1
account.1.acd.unavailable_reason_enable = 1
account.1.reason_code.1 = 500
account.1.reason_code_name.1 = On Lunch
account.1.call_center.call_info_enable = 1
account.1.call_center.show_call_info_time = 30
account.1.call_center.disp_code_enable = 1
account.1.bw_disp_code.1 = 100
account.1.bw_disp_code_name.1 = Promotion A
account.1.call_center.trace_enable = 1
account.1.call_center.emergency_enable = 1
account.1.supervisor_info_code.1 = 4604
account.1.supervisor_info_code_name.1 = Supervisor A
account.1.call_center.queue_status_enable = 1
account.1.call_center.queue_status_light_enable = 1
```

2. Add/Edit feature key synchronization parameters in template configuration files (e.g., y000000000044.cfg):

```
bw.feature_key_sync = 1
```

3. Add/Edit DSS key parameters in template configuration files:

You can configure a line key as an ACD key, a Disp Code key, an ACD Trace key or an Emergency key (not applicable to SIP-T19(P) E2 and CP860 IP phones).

The "X" is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VPT49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G, X ranges from 1 to 3; For SIP-T21(P) E2, X ranges

from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	Integer	Refer to the following content
<p>Description: Configures the line key type. 42-ACD 58-ACD Trace 59-Disp Code 60-Emergency</p> <p>For SIP VP-T49G/SIPT48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0.</p> <p>For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-27 is 0.</p> <p>For SIP-T42G IP phones: The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0.</p> <p>For SIP-T41P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0.</p> <p>For SIP-T27P IP phones: The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0.</p> <p>For SIP-T40P/T23P/T23G/T21(P) E2 IP phones: The default value is 15.</p>		
linekey.X.value	Integer	Blank
<p>Description: Configures the value for the Disp Code key or the Emergency key.</p>		
linekey.X.label	String within 99 characters	Blank
<p>Description: (Optional.) Configures the label displayed on the LCD screen for each line key.</p>		

The following shows an example of the ACD Trace key (line key) configuration in a template configuration file (e.g., y0000000000044.cfg):

```
linekey.2.type = 58
```

4. Customize the static tag on BroadWorks. The tag name is %ACD_LINE_BINARY% and the tag value is 1.

For more information, refer to [Customizing a Static Tag](#) on page 17.

5. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tag in the template file will be replaced by the actual parameter value. An example is shown as below:

```
account.1.acd.enable = 1
```

Hoteling

Hoteling enables users to use any available host (shared) phone by logging in with user credentials. After logging in, users have access to their own guest profile on the host phone. This is accomplished via a SUBSCRIBE/NOTIFY mechanism with the x-broadworks-hoteling event. Hoteling can be used on a private line only.

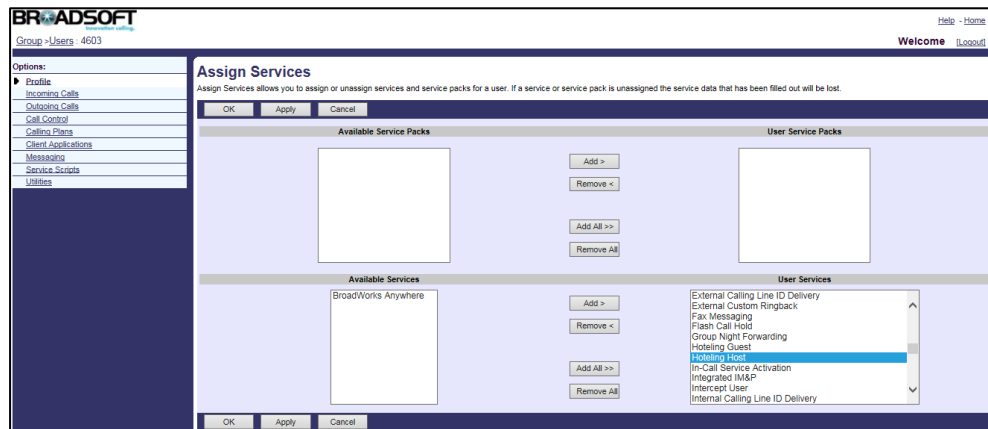
Configuring the BroadSoft Server

To use hoteling, you need to first enable hoteling on the BroadWorks server by creating a host profile and a guest profile. The host profile is the shared phone's default configuration. You can assign guest profiles to users who require hot desking.

To assign the hoteling host service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4603).
4. Click on **Assign Services**.

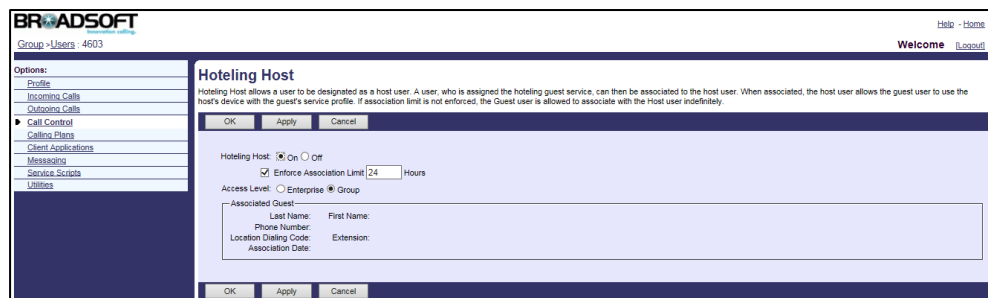
5. In the **Available Services** box, select **Hoteling Host** and then click **Add>**.



6. Click **Apply** to accept the change.

To configure a host profile for the user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4603), who has been assigned the hoteling host service.
4. Click on **Call Control->Hoteling Host**.
5. Mark the **On** radio box in the **Hoteling Host** field.
6. Check the **Enforce Association Limit <number> Hours** checkbox, and enter the number of hours to use the hoteling guest profile. If unchecked, the hoteling guest is allowed to associate with the hoteling host indefinitely.

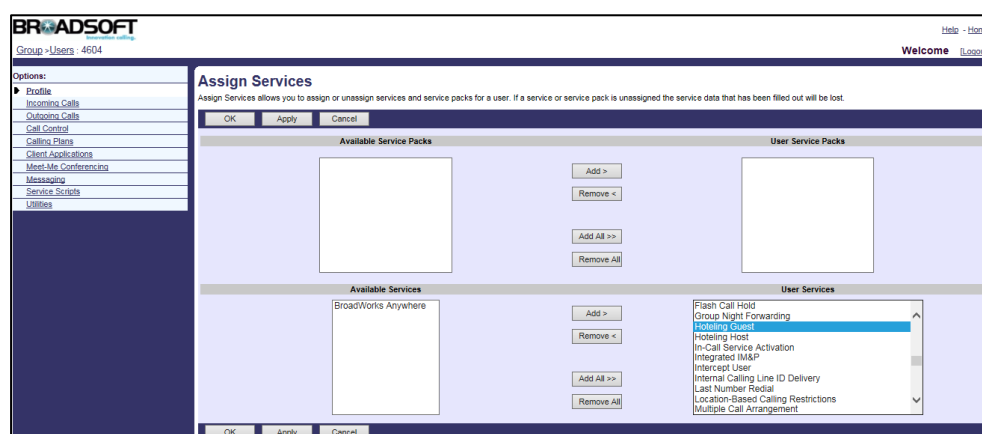


7. Click **Apply** to accept the change.

To assign the hoteling guest service to a user:

1. Log into the web portal as a group administrator.
2. Click on **Profile->Users->Search** to display all existing users.
3. Select the desired user (e.g., 4604).
4. Click on **Assign Services**.

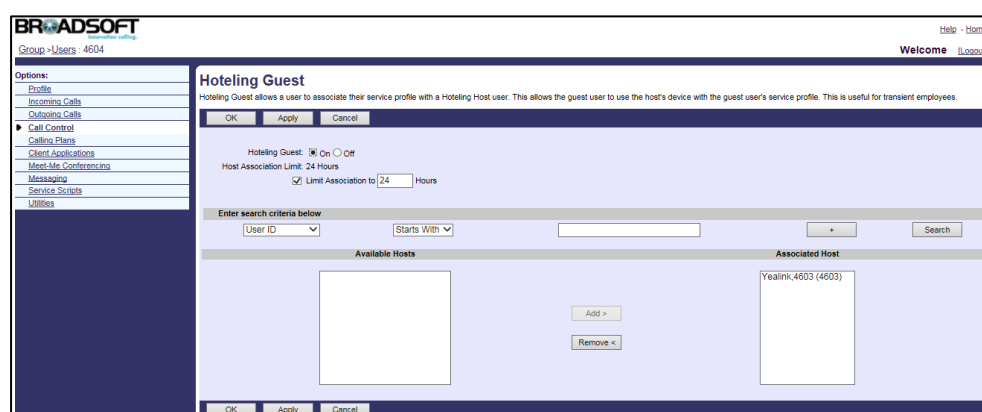
- In the **Available Services** box, select **Hoteling Guest** and then click **Add>**.



- Click **Apply** to accept the change.

To configure a guest profile for the user:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.
- Select the desired user (e.g., 4604), who has been assigned the hoteling guest service.
- Click on **Call Control->Hoteling Guest**.
- Mark the **On** radio box in the **Hoteling Guest** field.
- Check the **Limit Association to <number> Hours** checkbox, and enter the number of hours to associate with the hoteling host. The number of hours must be equal or less than the association limit of the hoteling host.
- Click **Search** to display all available hoteling hosts.
- In the **Available Hosts** box, select the desired host and then click **Add>**.



- Click **Apply** to accept the change.

To change a hoteling guest password:

- Log into the web portal as a group administrator.
- Click on **Profile->Users->Search** to display all existing users.

3. Select the hoteling guest added above and then click **Edit**.
4. Click on **Profile->Passwords**.
5. Mark the **Set portal password** radio box.
6. Enter the new password in the **Type new password** field.
7. Re-enter the new password in the **Re-type new password** field.

8. Click **Apply** to accept the change.

For more information on hoteling, refer to *BroadWorks Web Interface Administrator Guide*.

Configuring Yealink IP Phones

After setting up hoteling on the BroadWorks, you need to configure hoteling on the IP phone. Hoteling is configurable using template configuration files.

To configure hoteling using template configuration files:

1. Add/Edit hoteling parameters in template configuration files:

The “X” in the parameter is an integer which specifies the line number of the host user on the IP phone. X ranges from 1 to 16 (For SIP VP-T49G/SIP-T48G/T46G/T29G, X ranges from 1 to 16; For SIP-T42G, X ranges from 1 to 12; For SIP-T41P/T27P, X ranges from 1 to 6; For SIP-T40P/T23P/T23G, X ranges from 1 to 3, For SIP-T21(P) E2, X ranges from 1 to 2; For SIP-T19(P) E2 and CP860, X is equal to 1).

Parameters	Permitted Values	Default
account.X.hoteling.enable	Boolean	0
Description: Enables or disables hoteling feature for account X. 0-Disabled 1-Enabled		
account.X.hoteling.auto_login_enable	Boolean	0
Description: Enables or disables the IP phone to save login credentials automatically for		

Parameters	Permitted Values	Default
account X when logging into the guest profile. 0 -Disabled 1 -Enabled		
account.X.hoteling.user_id	String within 99 characters	Blank
Description: Configures the user ID used to log into the guest profile for account X.		
account.X.hoteling.password	String within 99 characters	Blank
Description: Configures the password used to log into the guest profile for account X.		

The following shows an example of the hoteling configuration in a template configuration file (e.g., %BWMACADDRESS%.cfg):

```
account.1.hoteling.enable = 1
account.1.hoteling.auto_login_enable = 0
```

2. Add/Edit DSS key parameters in template configuration files:

You can configure a line key as a hoteling key (not applicable to SIP-T19(P) E2 and CP860 IP phones).

The "X" is an integer which specifies the sequence number of the line key. X ranges from 1 to 29 (For SIP VP-T49G/SIP-T48G, X ranges from 1 to 29; For SIP-T46G/T29G, X ranges from 1 to 27; For SIP-T42G/T41P, X ranges from 1 to 15; For SIP-T27P, X ranges from 1 to 21; For SIP-T40P/T23P/T23G, X ranges from 1 to 3; For SIP-T21(P) E2, X ranges from 1 to 2).

Parameters	Permitted Values	Default
linekey.X.type	57	Refer to the following content
Description: Configures the line key type. 57 -Hoteling. For SIP VP-T49G/SIP-T48G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key 17-29 is 0. For SIP-T46G/T29G IP phones: The default value of the line key 1-16 is 15, and the default value of the line key		

Parameters	Permitted Values	Default
<p>17-27 is 0.</p> <p>For SIP-T42G IP phones:</p> <p>The default value of the line key 1-12 is 15, and the default value of the line key 13-15 is 0.</p> <p>For SIP-T41P IP phones:</p> <p>The default value of the line key 1-6 is 15, and the default value of the line key 7-15 is 0.</p> <p>For SIP-T27P IP phones:</p> <p>The default value of the line key 1-6 is 15, and the default value of the line key 7-21 is 0.</p> <p>For SIP-T40P/T23P/T23G/T21(P) E2 IP phones:</p> <p>The default value is 15.</p>		
linekey.X.label	String within 99 characters	Blank
<p>Description:</p> <p>(Optional.) Configures the label displayed on the LCD screen for each line key.</p>		

The following shows an example of the hoteling key (line key) configuration in a template configuration file (e.g., y0000000000044.cfg):

```
linekey.2.type = 57
```

3. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After downloading the configuration files, the IP phone with host user registered can be shared to the guest (e.g., 4604), who can log in to and out of the guest profile on the IP phone. Once users have logged into the guest profile, the shared phone acts exactly like their own phone.

Upgrading Firmware

To upgrade firmware using template configuration files:

1. Add/Edit firmware URL in template configuration files (e.g., y000000000044.cfg):
`firmware.url=http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%%T23_FIRMWARE%`
2. Customize the static tag on BroadWorks. The tag name is %T23_FIRMWARE% and the tag value is the firmware version (e.g., 44.80.193.60.rom).
 For more information, refer to [Customizing a Static Tag](#) on page 17.
3. Upload the firmware (e.g., 44.80.193.60.rom).
 For more information, refer to [Uploading Static Files](#) on page 22.
4. Upload template configuration files.

For more information, refer to [Uploading Device Template Configuration Files](#) on page 18.

After the above configurations, the tags in the template file will be replaced by the actual parameter values. An example is shown as below:

```
firmware.url = http://xsp.yealink.com:80/dms/YealinkT23/44.80.193.60.rom
```

You can also upgrade the firmware via web user interface at the path

Settings->Upgrade. For more information on how to upgrade the firmware, refer to [Yealink_SIP-T2 Series_T19\(P\) E2_T4 Series_CP860_IP_Phones_Administrator_Guide](#).

Downloading and Verifying Configurations

Downloading Configuration Files

Once obtaining the access URL, the phone will connect to the BroadWorks server and download the configuration files. You should check the BroadWorks server settings and configure Yealink IP phones in advance.

To check the BroadWorks server settings:

1. Log into the web portal as a group administrator.
2. Click on **Resources->Identity/Device Profiles**.
3. Click **Search** to display all existing device profiles (Click **Next** to turn to the next page).

BROADSOFT
BroadWorks Server

Group: [Group] Help - Home Welcome [Logout]

Options:
[Profile](#)
[Resources](#)
[Services](#)
[Service Scripts](#)
[Acct/Auth Codes](#)
[Call Center](#)
[Calling Plan](#)
[Meet-Me Conferencing](#)
[Utilities](#)

Identity/Device Profiles
 Add or modify group level identity/device profiles. Displays all the identity/device profiles defined at group level.

OK Add Cancel

Enter search criteria below

Identity/Device Profile Name Starts With Search

Identity/Device Profile Name	Identity/Device Profile Type	Available Ports	Host Name/IP Address	MAC Address	Status	Version	Edit
4604UC	Yealink_T48G	6			Online		Edit
Call Center_Call Inf	Yealink T23P Test2	3			Online	Yealink SL...	Edit
Call Center_Call Info	Yealink T28P	Unlimited			Online	Yealink SL...	Edit
T42G	Yealink-T42G	6	10.3.20.2		Online		Edit
Test_W52P	Yealink_W52P	3		0015655F9C7D	Online	Yealink SL...	Edit
W52P_SCA	Yealink_W52P	5	10.3.6.155	00156540AD50	Online	Yealink SL...	Edit
YealinkT23	Yealink T23P Test2	1		00156574B150	Online	Yealink SL...	Edit
Yealink T23-Test	Yealink T23	3	00156574b150		Online	Yealink SL...	Edit

First Previous [Page 2 of 2]

OK Add Cancel

4. Select the desired device profile (e.g., Yealink T23-Test) to edit.
5. Click on the **Profile** tab.

- Check the parameters: URL, MAC address, user name and password in the corresponding fields.

BROADSOFT

Group: _____

Options: Profile, Resources, Services, Service Scripts, Acct/Auth Codes, Call Center, Calling Plan, MeetMe Conferencing, Utilities

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: Yealink T23-Test
Identity/Device Profile Type: Yealink T23
Device Type URL: http://xsp.yealink.com:80/dms/YealinkT23/

Protocol: SIP 2.0
Host Name/IP Address: _____ Port: _____
Transport: Unspecified

MAC Address: 00156574b150
Serial Number: _____
Description: _____
Outbound Proxy Server: _____
STUN Server: _____
Physical Location: _____
Lines/Ports: 4
Assigned Lines/Ports: 0
Unassigned Lines/Ports: 4
Version: _____

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

OK Apply Delete Cancel

To configure the IP phone via web user interface:

- Log into the web user interface as an administrator.
- Click on **Settings->Auto Provision**.
- Enter the parameters: URL, user name and password in the corresponding fields.
- Mark the **On** radio box in the **Power On** field.

Yealink T236 Log Out

Status Account Network DSSKey Features Settings Directory Security

Preference
Time & Date
Call Display
Upgrade
Auto Provision
Configuration
Dial Plan
Voice
Ring
Tones
Softkey Layout
TR069
Voice Monitoring
STP

Auto Provision
PNP Active ☒ On ☐ Off
DHCP Active ☒ On ☐ Off
Custom Option(128~254) _____
DHCP Option Value yealink
Server URL http://xsp.yealink.com:80/dms/YealinkT
User Name admin
Password *****
Attempt Expired Time(s) 5
Common AES Key *****
MAC-Oriented AES Key *****
Zero Active Disabled
Wait Time(1~100s) 5
Power On ☒ On ☐ Off
Repeatedly ☐ On ☒ Off
Interval(Minutes) 1440
Weekly ☐ On ☒ Off

NOTE
Auto Provision
The IP phone can interoperate with provisioning server using auto provisioning for deploying the IP phones.
When the IP phone triggers to perform auto provisioning, it will request to download the configuration files from the provisioning server. During the auto provisioning process, the IP phone will download and update configuration files to the phone flash.
You can click here to get more guides.

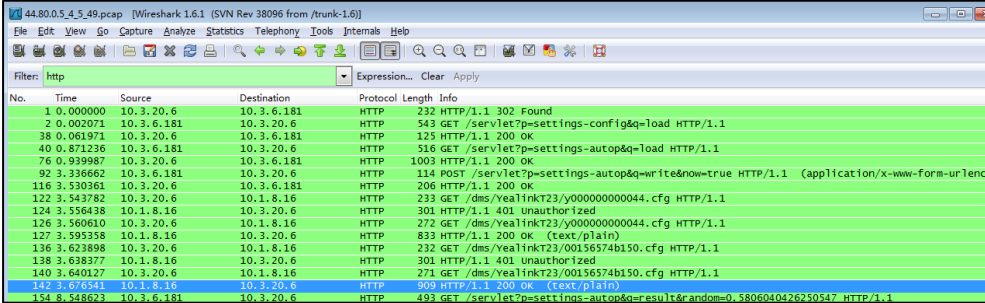
- Click **Confirm** to save the setting.

After the above configurations, reboot the IP phone. The IP phone will try to download the configuration files from the BroadWorks server.

Verifying Configurations

After auto provisioning, the IP phone reboots in some cases. You can verify the configurations via phone user interface or web user interface of the phone. During the auto provisioning process, you can monitor the downloading request and response message by a WinPcap tool.

Example: Yealink SIP-T23P/G IP phone downloads configuration files by HTTP.



No.	Time	Source	Destination	Protocol	Length	Info
1	0.000000	10.3.20.6	10.3.6.181	HTTP	232	HTTP/1.1 302 Found
2	0.002071	10.3.6.181	10.3.20.6	HTTP	543	GET /servlet?p=settings-config&q=load HTTP/1.1
38	0.061971	10.3.20.6	10.3.6.181	HTTP	125	HTTP/1.1 200 OK
40	0.871236	10.3.6.181	10.3.20.6	HTTP	516	GET /servlet?p=settings-autop&q=load HTTP/1.1
76	0.939987	10.3.20.6	10.3.6.181	HTTP	1003	HTTP/1.1 200 OK
92	3.336662	10.3.6.181	10.3.20.6	HTTP	114	POST /servlet?p=settings-autop&q=write&now=true HTTP/1.1 (application/x-www-form-urlencoded)
116	3.530361	10.3.20.6	10.3.6.181	HTTP	206	HTTP/1.1 200 OK
122	3.543782	10.3.20.6	10.1.8.16	HTTP	233	GET /dms/YealinkT23/y0000000000044.cfg HTTP/1.1
124	3.556438	10.1.8.16	10.3.20.6	HTTP	301	HTTP/1.1 401 unauthorized
126	3.560610	10.3.20.6	10.1.8.16	HTTP	272	GET /dms/YealinkT23/y0000000000044.cfg HTTP/1.1
127	3.595358	10.1.8.16	10.3.20.6	HTTP	833	HTTP/1.1 200 OK (text/plain)
136	3.623898	10.3.20.6	10.1.8.16	HTTP	232	GET /dms/YealinkT23/00156574b150.cfg HTTP/1.1
138	3.638377	10.1.8.16	10.3.20.6	HTTP	301	HTTP/1.1 401 unauthorized
140	3.640127	10.3.20.6	10.1.8.16	HTTP	271	GET /dms/YealinkT23/00156574b150.cfg HTTP/1.1
142	3.676541	10.1.8.16	10.3.20.6	HTTP	909	HTTP/1.1 200 OK (text/plain)
154	8.548623	10.3.6.181	10.3.20.6	HTTP	493	GET /servlet?p=settings-autop&q=result&random=0_5806040426250547 HTTP/1.1

Troubleshooting

This chapter provides general troubleshooting information to help to solve the problems you might encounter when you deploy Yealink IP phones in the BroadWorks environment.

Why does the phone fail to download configuration files using BroadWorks Device Management?

1. Ensure that the provisioning URL, user name and password configured on the phone are correct.
2. Ensure that the MAC address of the phone is configured when creating a device profile.
3. If the phone is triggered to download configuration files via a SIP NOTIFY request with event check-sync or resync, ensure the account configured on the phone is correct in addition to the above configuration.

How to view the configuration files on the BroadSoft server?

1. Click on **Resources->Identity/Device Profiles->Search** to list all existing device profiles.
2. Select the desired device profile (e.g., Yealink T23-Test) and then click **Edit**.
3. Click the **Files** tab.
4. Click the access file URL to view the desired configuration file.

If you want to view the device-specific file, ensure that the MAC address of the phone is configured under the **Profile** tab.



Why can't the tag in the template file be replaced by the actual parameter values?

1. Check if the tag is static tag or dynamic built-in tag.
 - If the tag is static tag, ensure that the tag names configured on the phone and server are the same.
 - If the tag is dynamic built-in tag, ensure that the tag is correct. You don't need to make any configuration on the BroadSoft server.

Appendix BLF LED Mode

BLF LED Mode provides four kinds of definition for the BLF list key LED status. The following table lists the LED statuses of the BLF list key when BLF LED Mode is set to 0, 1, 2 or 3 respectively (not applicable to SIP VP-T49G/SIP-T19(P) E2 and CP860 IP phones).

Line key LED (configured as a BLF List key and BLF LED Mode is set to 0)

LED Status	Description
Solid green	The monitored user is idle.
Fast flashing red (200ms)	The monitored user receives an incoming call.
Solid red	The monitored user is dialing. The monitored user is talking. The monitored user's conversation is placed on hold (This LED status requires server support).
Slow flashing red (1s)	The call is parked against the monitored user's phone number.
Off	The monitored user does not exist.

Line key LED (configured as a BLF List key and BLF LED Mode is set to 1)

LED Status	Description
Fast flashing red (200ms)	The monitored user receives an incoming call.
Solid red	The monitored user is dialing. The monitored user is talking. The monitored user's conversation is placed on hold (This LED status requires server support).
Slow flashing red (1s)	The call is parked against the monitored user's phone number.
Off	The monitored user is idle. The monitored user does not exist.

Line key LED (configured as a BLF List key and BLF LED Mode is set to 2)

LED Status	Description
Fast flashing red (200ms)	The monitored user receives an incoming call.
Solid red	The monitored user is dialing. The monitored user is talking. The monitored user's conversation is placed on hold (This LED status requires server support).
Slow flashing red (1s)	The call is parked against the monitored user's

LED Status	Description
	phone number.
Off	The monitored user is idle. The monitored user does not exist.

Line key LED (configured as a BLF List key and BLF LED Mode is set to 3)

LED Status	Description
Fast flashing green (200ms)	The monitored user receives an incoming call.
Solid red	The monitored user is dialing. The monitored user is talking. The monitored user's conversation is placed on hold (This LED status requires server support).
Slow flashing red (1s)	The call is parked against the monitored user's phone number.
Off	The monitored user is idle. The monitored user does not exist.