

Using Ribbon Features on Yealink IP Phones

Introduction

You can deploy Ribbon's AS server as a standalone server or in combination with a Ribbon's C20 Session Server. Features vary depending on your deployment.

This guide introduces how to configure the Ribbon feature on Yealink SIP-T58A, CP960, SIP-T57W, SIP-T54W, SIP-T53W, SIP-T53, SIP-T48U, SIP-T48S, SIP-T46U, SIP-T46S, SIP-T43U, SIP-T42S, SIP-T41S, SIP-T40P/G, SIP-T27G, SIP-T23P/G, SIP-T21(P) E2, SIP-T19(P) E2 and CP920 IP phones running firmware version 84 or later.

The configurations for Ribbon features described in this guide take the Yealink SIP-T46S IP phone as an example.

Registering a Ribbon Account

Procedure

1. Add/Edit account registration parameters in the configuration template files:

Parameters	Permitted Values	Default
account.X.enable^[1]	0 or 1	0
Description: Enables or disables the account X. 0 -Disabled 1 -Enabled		
account.X.label^[1]	String	Blank
Description: Configures the label displayed on the LCD screen for a specific account.		
account.X.display_name^[1]	String	Blank
Description: Configures the display name for a specific account.		
account.X.auth_name^[1]	String	Blank

Parameters	Permitted Values	Default
Description: Configures the user name for authentication registration for a specific account.		
account.X.user_name^[1]	String	Blank
Description: Configures the register user name for a specific account.		
account.X.password^[1]	String	Blank
Description: Configures the password for register authentication for a specific account.		
account.X.sip_server.Y.address^[1]	String within 256 characters	Blank
Description: Configures the IP address or domain name of the SIP server Y that accepts the registration of a specific account.		
account.X.sip_server.Y.port^[1]	Integer from 0 to 65535	5060
Description: Configures the port of the SIP server Y that specifies registrations for a specific account.		
account.X.sip_server.Y.transport_type^[1]	0, 1, 2 or 3	0
Description: Configures the transport method the IP phone uses to communicate with the SIP server for a specific account. 0 -UDP 1 -TCP 2 -TLS 3 -DNS-NAPTR		
account.X.sip_server.Y.expires^[1]	Integer from 30 to 2147483647	3600
Description: Configures the registration expires (in seconds) of the SIP server Y for a specific account.		

Parameters	Permitted Values	Default
account.X.sip_server.Y.retry_counts^[1]	Integer from 0 to 20	3
Description: Configures the retry times for the IP phone to resend requests when the SIP server Y is unavailable or there is no response from the SIP server Y for a specific account.		
account.X.outbound_proxy_enable^[1]	0 or 1	0
Description: Enables or disables the phone to use the outbound proxy server for a specific account. 0 -Disabled 1 -Enabled		
account.X.outbound_proxy.Y.address^[1]	IP Address or Domain Name	Blank
Description: Configures the IP address or domain name of the outbound proxy server Y for a specific account.		
account.X.outbound_proxy.Y.port^[1]	Integer from 0 to 65535	5060
Description: Configures the port of the outbound proxy server Y for a specific account.		
account.X.outbound_proxy.Y.retry_counts^[1]	Integer from 0 to 20	-1
Description: Configures the retry times for the IP phone to resend requests when the outbound proxy server Y is unavailable or there is no response from the outbound proxy server Y for a specific account. If it is set to -1 , the IP phone will invoke the value of the parameter "account.X.sip_server.Y.retry_counts" to take effect. Example: account.1.outbound_proxy.1.retry_counts = 3 The IP phone moves to the next available outbound proxy server after three failed attempts.		
account.X.sip_server_type^[1]	0 or 15	0
Description:		

Parameters	Permitted Values	Default
Specifies the server-specific feature set for the line registration.		
0 -Default		
15 -Genband Standalone AS		

^[1]X is the account ID. For SIP-T58A/T57W/T54W/T48U/T48S/T46U/T46S, X=1-16; for SIP-T53W/T53/T43U/T42S, X=1-12; for SIP-T41S/T27G, X=1-6; for SIP-T40P/T40G/T23P/T23G, X=1-3; for SIP-T21(P) E2, X=1-2; for SIP-T19(P) E2/CP920/CP960, X=1.

The following shows an example of account registration parameters in the configuration file (e.g., y0000000000066.cfg):

```
##Account1 Registration
account.1.enable = 1
account.1.label = u9920040
account.1.display_name = u9920040
account.1.auth_name = u9920040
account.1.user_name = u9920040
account.1.password = 1234
account.1.sip_server.1.address = yealink.ott7.iot
account.1.sip_server.1.port = 5060
account.1.sip_server.1.expires = 3600
account.1.sip_server.1.retry_counts = 3
account.1.outbound_proxy.enable = 1
account.1.outbound_proxy.1.address = 206.165.51.38
account.1.outbound_proxy.1.port = 5060
account.1.outbound_proxy.1.retry_counts = 3
account.1.sip_server_type = 15
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Using Ribbon SCA

When the phone is registered with Ribbon server, you can use the following Ribbon SCA features:

- **SLA-SCA:** It requires you to deploy Ribbon's AS server as a standalone server.
















Ribbon SCA allows users to share a SIP line on several IP phones. Any IP phone can be used to initiate or receive calls on the shared line. An incoming call can be presented to multiple phones simultaneously, but can only be answered by one IP phone.

- **MADN-SCA (Multiple appearance directory numbers—single call appearance):** It requires you to deploy Ribbon's C20 server.

The MADN-SCA feature enables a group of users to share a single line with other contacts. Any MADN group member can place, answer, hold, resume, or bridge in an active call on a shared line. Only one call is active on the line at a time on the MADN-SCA shared line. When a call is in progress, any incoming call to the line receives a busy tone.

State Indicator of Shared Line

The local SCA phone indicates the phone is involved in an SCA call, while the monitoring SCA phone indicates the phone is not involved in the SCA call.

Line Key LED (not applicable to T58A/T57W/T48U/T48S/T19(P) E2/CP920/CP960 phones)	Icons			Description
	T58A/T57W/T 54W/CP960	T48U/T48S	T46U/T46S	
Off				The shared line is idle.
Fast-flashing green	 (Flashing)	 (Flashing)		The shared line receives an incoming call.
Solid green (for local SCA phone) Solid red (for monitoring SCA phone)	 (Flashing)	 (Flashing)		The shared line is dialing.
Solid green (for local SCA phone) Solid red (for monitoring SCA phone)				The shared line is busy or is in a call.
Slow-flashing green (for local SCA phone) Slow-flashing red (for monitoring SCA phone)				The shared line conversation is placed on hold.

Configuring SCA Feature

Procedure

1. Add/Edit SCA parameters in the configuration template files:

Parameters	Permitted Values	Default
account.X.shared_line^[1]	0 or 1	0
Description: Configures the registration line type. 0 -Disabled 1 -Shared Call Appearance Note: It works only if "account.X.sip_server_type" is set to 15 (Genband Standalone AS).		
account.X.share_line.barge_in.enable^[1]	0 or 1	1
Description: Enables or disables the users to interrupt/barge into an active call on the shared line. 0 -Disabled 1 -Enabled		
account.X.shared_line_one_touch_bargein.enable^[1]	0 or 1	0
Description: Enables or disables the phone to barge in the call between remote shared line party and the third party by pressing the line key. 0 -Disabled 1 -Enabled		
account.X.share_line.enable_private_code^[1]	String within 32 characters	Blank
Description: Configures the star code for the phone to change its status from non-private to private. Note: It works only if "account.X.shared_line" is set to 1 (Shared Call Appearance). It is only applicable to MADN-SCA.		
account.X.share_line.cancel_private_code^[1]	String within 32 characters	Blank
Description: Configures the star code for the phone to change its status from private to non-private.		

Parameters	Permitted Values	Default
Note: It works only if "account.X.shared_line" is set to 1 (Shared Call Appearance). It is only applicable to MADN-SCA.		

^[1]X is the account ID. For SIP-T58A/T57W/T54W/T48U/T48S/T46U/T46S, X=1-16; for SIP-T53W/T53/T43U/T42S, X=1-12; for SIP-T41S/T27G, X=1-6; for SIP-T40P/T40G/T23P/T23G, X=1-3; for SIP-T21(P) E2, X=1-2.

The following shows an example of MADN-SCA parameters in the configuration file (e.g., y0000000000066.cfg):

```
account.1.shared_line = 1
account.1.share_line.barge_in.enable = 1
account.1.shared_line_one_touch_bargein.enable = 1
account.1.share_line.enable_private_code = *92
account.1.share_line.cancel_private_code = *97
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Using SLA-SCA

Placing an SLA Call

Procedure

Do one of the following:

- Enter the desired number when the phone is idle. Press the OK key, # key, or the **Send** soft key.
The phone will dial the entered number using the default line key.
- Press the line key when the phone is idle to enter the dialing screen.
Enter the desired number and press the OK key, # key, or the **Send** soft key.
The phone will dial the entered number using the selected line key.

Answering an SLA Call

An incoming call alerts all the members in the SCA group simultaneously, and the call can be answered by any group member.

Procedure

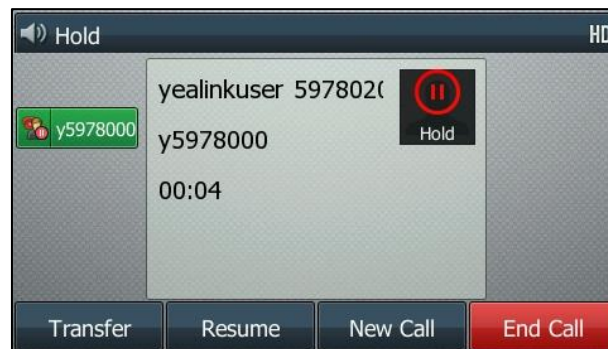
1. Press the line key, OK key or the **Answer** soft key.

Placing an SLA Call on Hold

You can place a call on hold. Any shared line can retrieve the held call.

Procedure

1. Press the **Hold** soft key.



The line key LEDs on the phone slowly flash green and the other phones of the SCA group slowly flash red when the shared line call is placed on hold.

Retrieving an SLA Call Placed on Hold

You can retrieve a held call on the local SCA phone or any of the monitoring SCA phones.

To retrieve the call on the local SCA phone:

1. Press the **Resume** soft key.

To retrieve the call on the monitoring SCA phone:

1. Press the line key whose LED indicator slowly flashes red.

Bridging In an Active SLA Call

Procedure

1. Press the line key whose LED indicator glows red.

The phone sets up a conference call with the other parties in the active call.

Using MADN-SCA

Placing an MADN Call

Any member places a call on the shared line will be notified by the line key on the other members' phones. The line key LEDs on the phone glow green and the other phones of the SCA group glow red. Only one call at a time is active on the shared line. The call fails if it is placed to the shared line with an active call in progress.

Answering an MADN Call

Any incoming call to the shared line rings on all group members' phones simultaneously. The call is displayed on all members' screens, any MADN member can answer the incoming call.

Bridging in an Active MADN Call

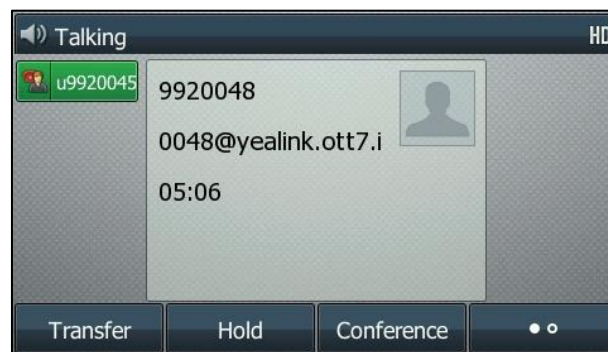
After a call is answered, any group member can bridge in the active call on the public shared line, and the call becomes a bridge call – the call between two or more MADN members and another party.

When a shared line is configured as private or when privacy is enabled for the active call, bridging is disabled and other MADN members cannot bridge in the active call on the shared line.

Procedure

1. Press the line key whose LED indicator glows red.

A bridged call is set up, and a warning tone plays notifying the other call participants that you are bridging in the call.



Leaving a Bridge Call

Any member in a bridge call can leave the call, but the call remains active.

Procedure

1. Press the **End Call** soft key.

Your connection to the bridge call is ended, and other call participations remain in the call.

Placing an MADN Call on Hold

After a call is answered, you can place the call on hold. Any MADN members can resume the held call.

Procedure

1. Press the **Hold** soft key.



The line key LEDs on the phone slowly flashes green and the other phones of the group members slowly flash red when the shared line call is placed on hold.

Resuming a Held MADN Call

When an active call is placed on hold on the shared line, the line key LEDs on all group members' phones slowly flash red. Any MADN members can resume this held call.

When a held call is resumed by another MADN member, the line key LEDs on other group members' phones glow red.

Procedure

1. Press the line key whose LED indicator slowly flashes red.

Enabling Privacy for MADN Calls

On the Ribbon server, you can configure a privacy setting that determines whether or not, after the call is answered, other members of the group can bridge in the same call.

Optionally, you can configure star codes on the server that you can dial on the phone to toggle the privacy setting during a single active call. If the line is configured for privacy by default, you can use a star code to toggle privacy on and off during an active call. If the line is configured on the server with privacy off, you can use a star code to toggle to privacy on during an active call but you cannot toggle back to privacy off during the call. When the call ends, the line resets to the default initial state.

Any MADN member can temporarily enable or disable privacy for a call on the shared line using the pre-configured soft keys.

You can use the following codes to enable and disable privacy on a shared line:

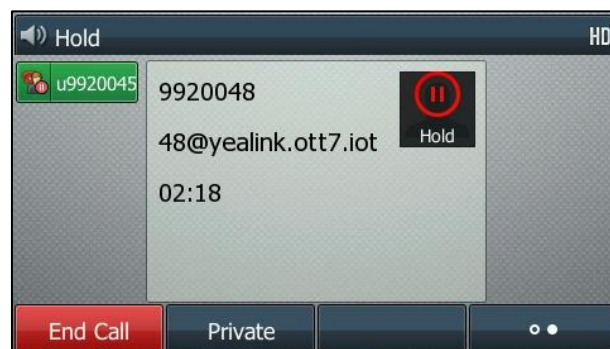
- Privacy Access (PRV) code – Enables privacy for an active call on a public line.
- Privacy Release Cancel (PRLC) code – Disables privacy for an active call on a private shared line.

Enabling Privacy

If privacy is enabled on an active call, other MADN members cannot bridge in the call.

Procedure

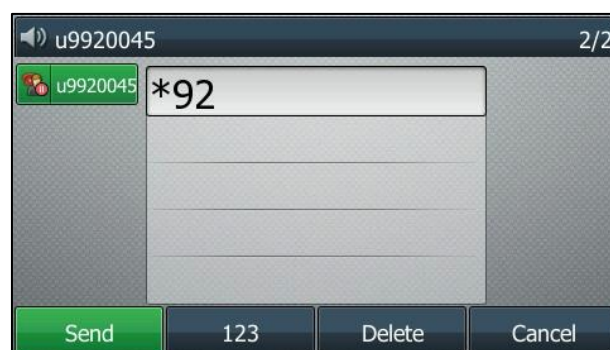
1. Do one of the following:
 - Press the **Private** soft key.

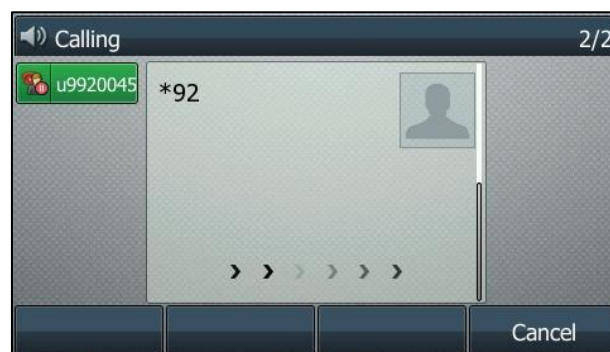


The phone dials out the Privacy Access (PRV) code to enable privacy for the active call.



- Press **Hold**->**New Call**, and then dial out the private code (for example, *92).



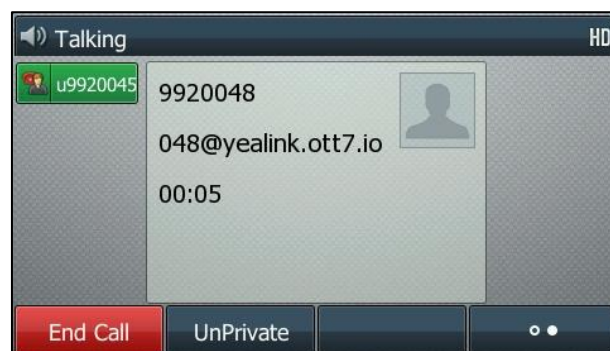


Disabling Privacy Temporarily

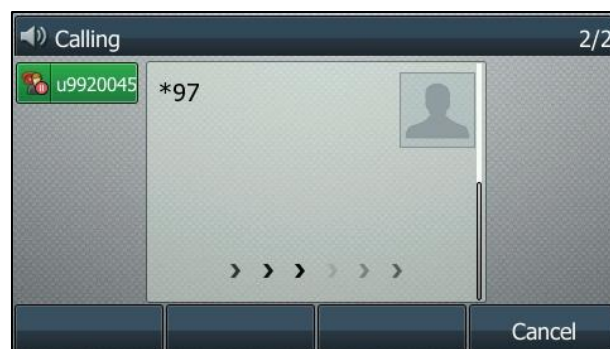
You can temporarily disable privacy for an active call to allow other MADN members to join the call.

Procedure

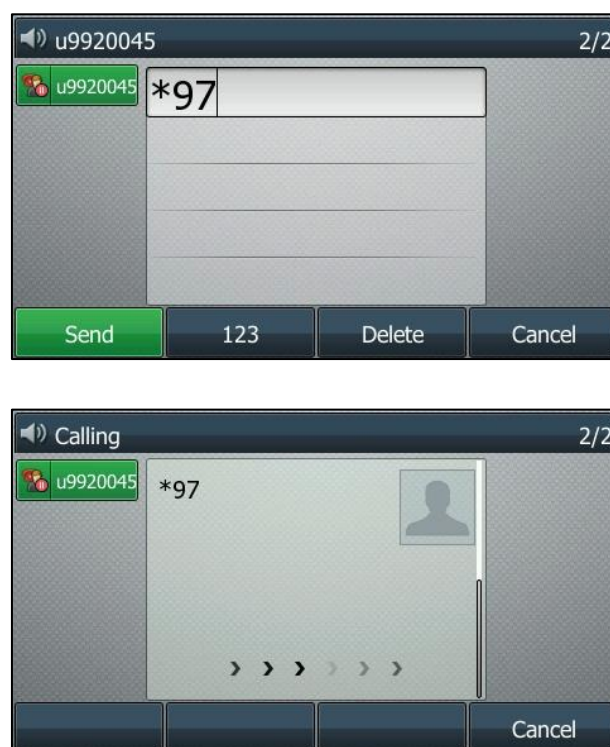
1. Do one of the following:
 - Press the **UnPrivate** soft key.



The phone dials out the Privacy Release Cancel (PRLC) code to disable privacy for the active call.



- Press **Hold**->**New Call**, and then dial out the un-private code (for example, *97).



A confirmation tone plays, and the call is resumed automatically. Privacy is disabled for the call and any member can bridge in the call.

Enabling Privacy for the Bridge Call

You can enable privacy on a bridge call to prevent additional MADN members from bridging in the call.

Procedure

1. Press the **Private** soft key or dial out the private code.

A confirmation tone plays when privacy is enabled and the call is resumed automatically. The bridge call is now private and additional MADN members are not allowed to join the call.

Using Ribbon Address Books

The Ribbon address books involve the following:

- Global Address Book (GAB): GAB is a read-only global directory managed by the Ribbon server and can co-exist with other corporate directories on the IP phone.
- Personal Address Book (PAB): PAB is managed by the Ribbon server and the PAB can be read and modified by multiple clients (IP phones, web client).

Subscriber Open Provisioning Interface (SOPI)

The Ribbon server provides a Subscriber Open Provisional Interface (SOPI) protocol for IP phones to access Ribbon address books. SOPI is an HTTP/HTTPS-based Application Programming Interface (API).

The IP phones interoperate with Ribbon SOPI using HTTP/HTTPS messages. It requires authentication when accessing the SOPI.

Configuring the SOPI

You can configure the SOPI feature for Yealink IP phones using the configuration files only.

Procedure

1. Add/Edit SOPI parameters in configuration files.

Parameters	Permitted Values	Default
gb.sopi.enable	0 or 1	0
Description: Enables or disables the SOPI feature for the IP phone. 0 -Disabled 1 -Enabled		
gb.sopi.service_url	URL within 511 characters	Blank
Description: Configures the access URL of the SOPI. The valid URL format is: [http[s]://][domain name][IP][:port]/sopi/services[/ The protocol, port number and the last "/" can be omitted. If the port number is not specified, the IP phone will use the default port number (80 when using the HTTP protocol or 443 when using https protocol). If the protocol is not specified, the IP phone will use the HTTP protocol. Example: gb.sopi.service_url = https://so-ott-pa3.genband.com:443/sopi/services Note: It works only if " gb.sopi.enable " is set to 1 (Enabled).		
gb.sopi.username	String	Blank
Description: Configures the user name for SOPI access authentication. Example: gb.sopi.username = y6211025@yealink.siot45.gbiot Note: It works only if " gb.sopi.enable " is set to 1 (Enabled).		
gb.sopi.password	String	Blank
Description:		

Parameters	Permitted Values	Default
<p>Configures the password for SOPI access authentication.</p> <p>Note: It works only if "gb.sopi.enable" is set to 1 (Enabled).</p>		

The following shows an example of SOPI configuration:

```
gb.sopi.enable = 1
gb.sopi.service_url = https://so-ott-pa3.genband.com:443/sopi/services
gb.sopi.username = y6211025@yealink.siot45.gbiot
gb.sopi.password = 1234
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Using Ribbon Global Address Book (GAB)

The Global Address Book (GAB) is a read-only directory on the IP phone. The IP phones can access a GAB using the Ribbon SOPI protocol. Once set up on the phones, the GAB can be browsed and searched. You can call numbers and save contacts from the GAB to the PAB. When you first access the GAB, there are no contacts. You should perform a search to view the contacts in the GAB.

Configuring the GAB

You can configure the GAB feature for Yealink IP phones using the configuration files only.

Procedure

1. Add/Edit GAB parameters in configuration files.

Parameters	Permitted Values	Default
gb.sopi.gab.enable	0 or 1	0
<p>Description:</p> <p>Enables or disables the GAB feature for the IP phone.</p> <p>0-Disabled</p> <p>1-Enabled</p> <p>If it is set to 1 (Enabled), the Global Address Book list will be automatically displayed on the LCD screen at the phone path Menu->Directory.</p>		
gb.sopi.gab.retain_search_filter	0 or 1	1

Parameters	Permitted Values	Default
Description: Enables or disables the IP phone to keep the last configured search criteria. 0 -Disabled 1 -Enabled If it is set to 1 (Enabled), the IP phone will automatically search for the contacts by using the last configured search criteria and display the results when accessing the GAB. If it is set to 0 (Disabled), the IP phone will not automatically search and display any contact when accessing the GAB each time. You should perform an advanced search to view the contacts if required. Note: It works only if " gb.sopi.gab.enable " is set to 1 (Enabled).		
directory_setting.gb_gab_directory.enable	0 or 1	0
Description: Enables or disables the users to access the GAB directory by pressing the Directory/Dir soft key/tapping the directory icon. 0 -Disabled 1 -Enabled Note: It works only if " gb.sopi.gab.enable " is set to 1 (Enabled).		
directory_setting.gb_gab_directory.priority	Integer greater than or equal to 0	0
Description: Configures the display priority of the GAB directory. Note: It works only if " gb.sopi.gab.enable " is set to 1 (Enabled).		

The following shows an example of GAB configuration:

```
gb.sopi.gab.enable = 1
```

```
gb.sopi.gab.retain_search_filter = 1
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Using the GAB

If the GAB feature is properly configured on the IP phone, you can:

- Access the GAB
- Search the GAB

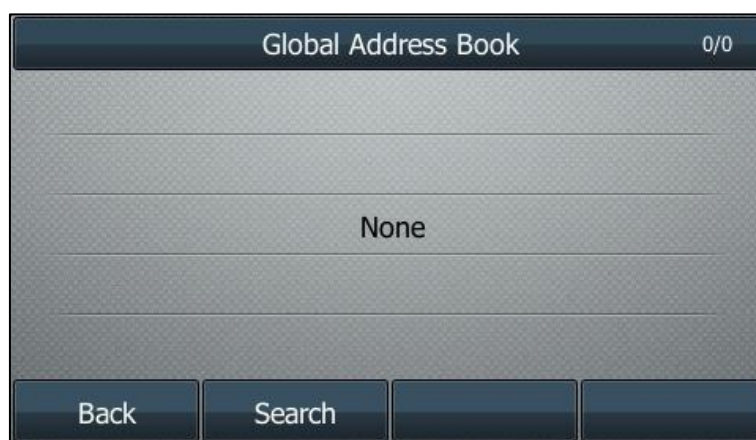
- View contacts
- Place calls to contacts
- Save contacts to PAB

Before viewing contacts, placing calls to contacts and saving contacts to PAB, you should perform an advanced search in the GAB first.

Accessing the GAB

Procedure

1. Navigate to **Menu->Directory->Global Address Book**.



There is no contact when you first access the GAB.

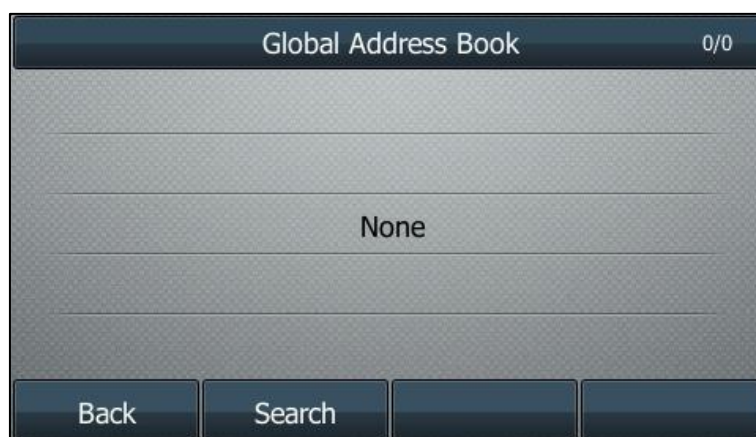
Searching the GAB

You can perform an advanced search for the contacts in GAB on your phone. An advanced search enables you to choose to search for contacts by name, first name, last name, or phone number (including business/home/mobile number).

Procedure

1. Navigate to **Menu->Directory->Global Address Book**.

There is no contact when you first access the GAB.



2. Select **Search**.
3. Highlight the desired search type, select **OK**.



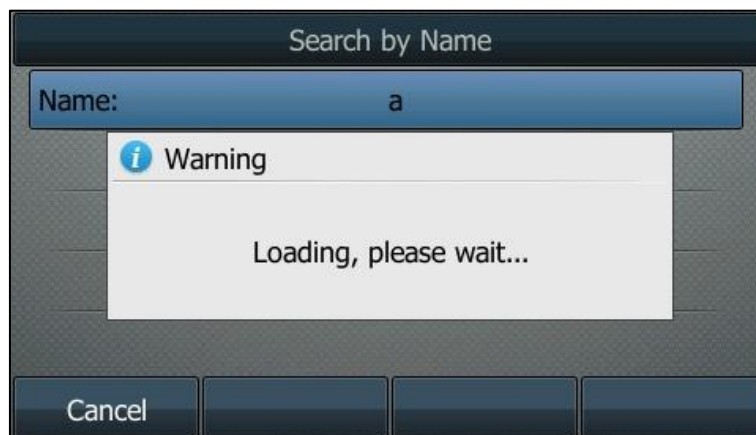
- **Search by Name** - Search the contacts by the nickname.
 - **Search by FirstName** - Search the contacts by the first name.
 - **Search by LastName** - Search the contacts by the last name.
 - **Search by Phone Number** - Search the contacts by the phone number. The IP phone will search the contacts according to the priority: business number>home number>mobile number.
4. Enter your search criteria.



By default, the filter condition will be kept. And when you access the GAB next time, the IP phone will use the filter condition to search the contacts automatically.

5. Select **Search**.

The phone screen prompts "Loading, please wait..."



Then your search results will be displayed in the **Global Address Book** list.



You can select **Option**->**Refresh** to research the contacts.

Viewing Contacts

Procedure

1. Perform an advanced search of the GAB (refer to [Searching the GAB](#)).



- Highlight the desired contact, and select **Option**->**Detail**.

The detail information of the contact will be displayed on the phone screen.



Placing Calls to Contacts

Procedure

- Perform an advanced search in the GAB (refer to [Searching the GAB](#)).



- Highlight the desired contact and select **Send**.

- If only one number for the contact is stored in the GAB, the contact number will be dialed out by using the default account.
- If multiple numbers for the contact are stored in the GAB, highlight the desired number and select **Send**.

Account:y5978020	
Business Number:	5978000
Home Number:	5978000
Mobile Number:	5978000
PrimaryContact:	y5978000
<div>Back Account Send</div>	

The contact number will be dialed out by using the default account.

You can also select **Account** and then select the desired account to dial out the number.

Choose an account	
1.2248:	Registered
2.y5978020:	Default Account
4.12323:	Registered
<div>Back OK</div>	

Saving GAB Contacts to PAB

If the PAB is enabled on the IP phone, you can save contacts from the GAB to the PAB.

Procedure

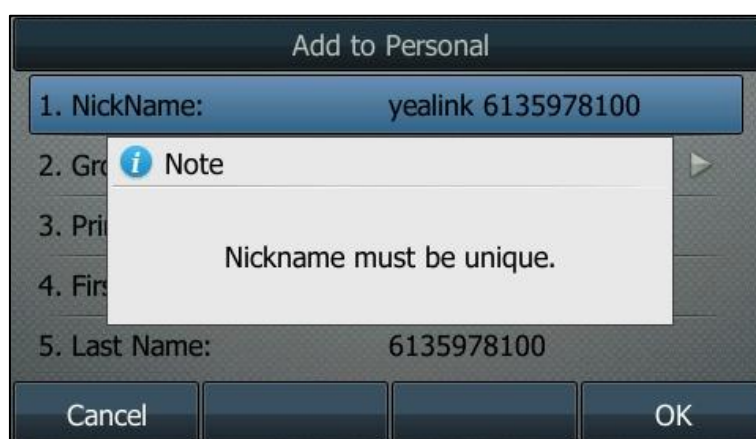
1. Perform an advanced search in the GAB (refer to [Searching the GAB](#)).



- Highlight the desired contact, and select **Option**->**Add to Personal**.
- Edit the corresponding fields.



If the contact's nickname already exists in the PAB, you cannot add the contact to PAB.



- Select **Save**.

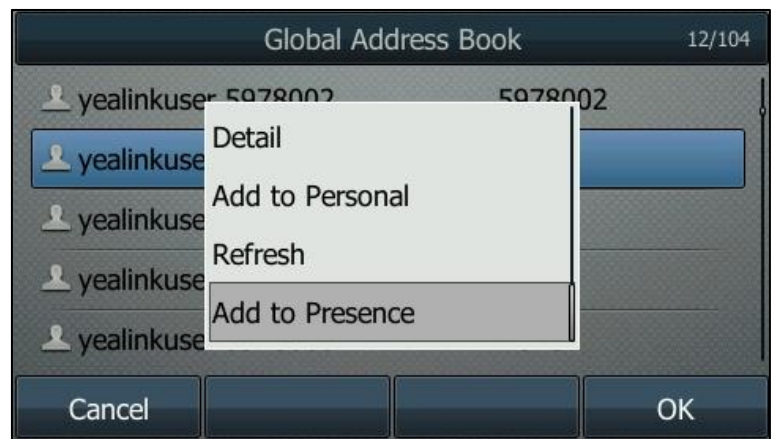
The entry is successfully saved to the PAB.

Saving GAB Contacts to Presence List

You can add GAB contacts to the presence list.

Procedure

1. Navigate to **Menu->Directory->Global Address Book**.
2. Perform an advanced search in the GAB (refer to [Searching the GAB](#)).
3. Highlight the desired contact, and then select **Option->Add to Presence**.



The contact is added to the presence list successfully.

4. Repeat step 2 to add more GAB contacts to the presence list.

Using Ribbon Personal Address Book (PAB)

The personal address book (PAB) enables users to read and modify a personal directory on their phones. Once this personal directory is set up on the phones, your PAB contacts are automatically downloaded to the IP phones.

When you modify contact information using any client (phones, web clients) accessing the SOPI with the same user, the change is made on all other clients, and you are notified immediately of the change by the Ribbon server.

The IP phones can support up to 800 contacts in the PAB.

Configuring the PAB

You can configure the PAB feature for Yealink IP phones using the configuration files only.

Procedure

1. Add/Edit PAB parameters in configuration files.

Parameters	Permitted Values	Default
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Parameters	Permitted Values	Default
gb.sopi.pab.enable	0 or 1	0
Description: Enables or disables the PAB feature for the IP phone. 0 -Disabled 1 -Enabled If it is set to 1 (Enabled), the Personal Address Book list will be automatically displayed on the LCD screen at the phone path Menu->Directory .		
Parameters	Permitted Values	Default
gb.sopi.pab.match_in_calling.enable	0 or 1	1
Description: Enables or disables the IP phone to present the caller/callee identity stored in the PAB when receiving/placing a call. 0 -Disabled 1 -Enabled Note: It works only if " gb.sopi.pab.enable " is set to 1 (Enabled).		
features.pab.enable	0 or 1	0
Description: Enables or disables the PAB subscription. 0 -Disabled 1 -Enabled, the phone sends a SUBSCRIBE message with the event "address-book". Note: It works only if " gb.sopi.pab.enable " is set to 1 (Enabled).		
features.pab.soupuser	String	Blank
Description: Configures the URI used to match the registration SIP URI information. If matched, the phone sends a SUBSCRIBE message with the event "address-book". Note: It works only if " gb.sopi.pab.enable " is set to 1 (Enabled).		
directory_setting.gb_pab_directory.enable	0 or 1	0

Parameters	Permitted Values	Default
Description: Enables or disables the users to access the PAB directory by pressing the Directory/Dir soft key/tapping the directory icon. 0 -Disabled 1 -Enabled Note: It works only if " gb.sopi.pab.enable " is set to 1 (Enabled).		
directory_setting.gb_pab_directory.priority	Integer greater than or equal to 0	0
Description: Configures the display priority of the PAB directory. Note: It works only if " gb.sopi.pab.enable " is set to 1 (Enabled).		
search_in_dialing.gb_pab_directory.enable	0 or 1	0
Description: Enables or disables the phone to automatically search entries in the PAB directory, and display results on the pre-dialing/dialing screen. 0 -Disabled 1 -Enabled Note: It works only if " gb.sopi.pab.enable " is set to 1 (Enabled).		
search_in_dialing.gb_pab_directory.priority	Integer greater than or equal to 0	0
Description: Configures the search priority of the PAB directory. Note: It works only if " gb.sopi.pab.enable " is set to 1 (Enabled).		

The following shows an example of PAB configuration:

```
gb.sopi.pab.enable = 1
gb.sopi.pab.match_in_calling.enable = 1
features.pab.enable = 1
features.pab.soupuser = y5978020@yealink.a2e01.gbiot
```

2. Upload configuration files to the root directory of the configuration server and trigger IP phones to perform an auto provisioning for configuration update.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Using the PAB

If the PAB feature is properly configured on the IP phone, you can:

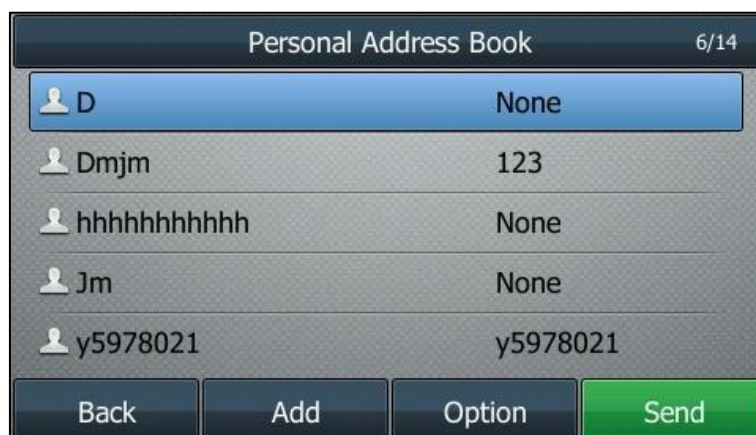
- Add groups
- Edit groups
- Delete groups
- Add contacts
- Edit contacts
- Delete contacts
- Search for contacts
- Place calls for contacts

Adding Groups

Procedure

1. Navigate to **Menu->Directory->Personal Address Book**.

The phone screen will display all contacts in the PAB.



2. Select **Option->Manage Group**.
3. Select **Add**.
4. Enter the desired group name.



1. Add Group: test

Back abc Delete Save

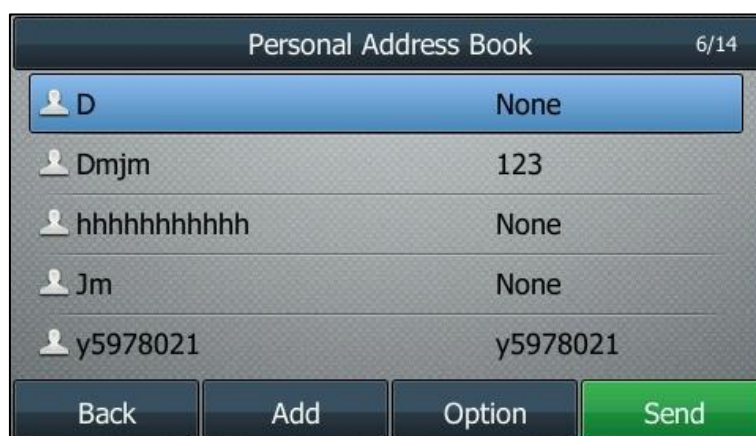
5. Select **Save**.

Editing Groups

Procedure

1. Navigate to **Menu->Directory->Personal Address Book**.

The phone screen will display all contacts in the PAB.



Name	Number
D	None
Dmjrm	123
hhhhhhhhhhh	None
Jm	None
y5978021	y5978021

Back Add Option Send

2. Select **Option->Manage Group**.
3. Highlight the desired group, and then select **Option->Rename Group**.



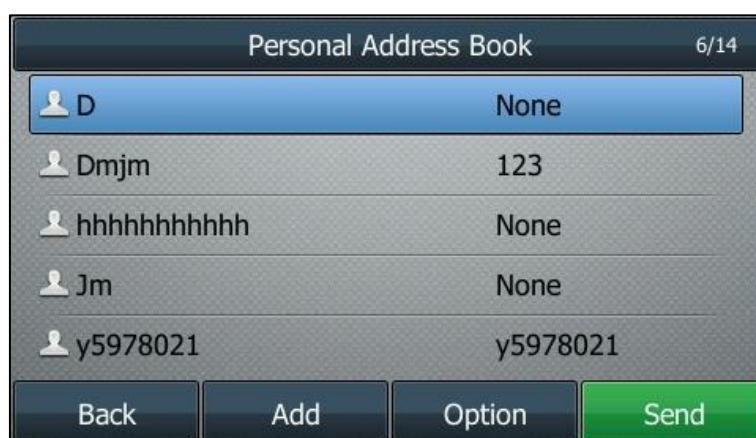
4. Edit the group name.
5. Select **Save**.

Deleting Groups

Procedure

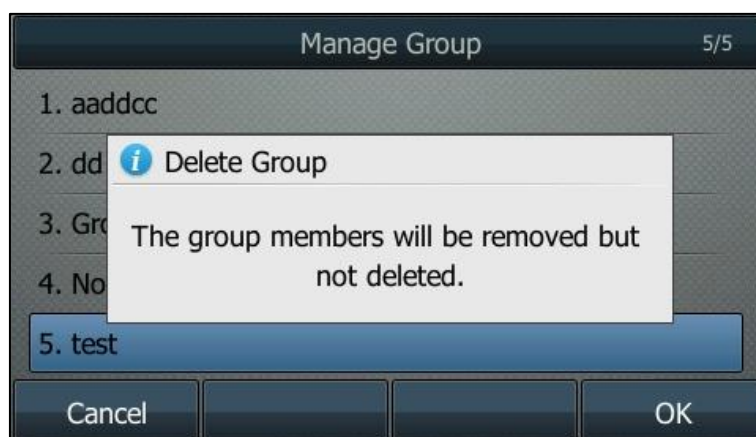
1. Navigate to **Menu->Directory->Personal Address Book**.

The phone screen will display all contacts in the PAB.



2. Select **Option->Manage Group**.
3. Highlight the desired group, and then select **Option->Delete Group**.

The phone screen prompts the following warning:



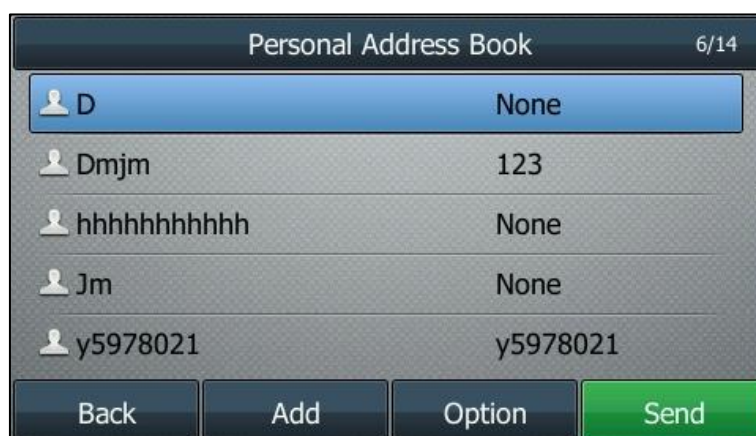
4. Select **OK** to confirm the deletion.

Adding Contacts

Procedure

1. Navigate to **Menu->Directory->Personal Address Book**.

The phone screen will display all contacts in the PAB.



2. Select **Add**.
3. (Optional.) Select the desired group from the **Group** field to add the contact to.
4. Enter the contact information in the corresponding fields.

Add PAB	
1. NickName:	ag
2. Group:	test
3. PrimaryContact:	sip:test@sip.com
4. First Name:	jhon
5. Last Name:	
<div>Back abc Delete Save</div>	

Note The nickname is used to identify the contact, which must be unique and cannot be null.
The primary contact cannot be null.

5. Select **Save**.

Editing Contacts

Procedure

1. Navigate to **Menu->Directory->Personal Address Book**.

The phone screen will display all contacts in the PAB.

Personal Address Book		6/14
	D	None
	Dmjm	123
	hhhhhhhhhhh	None
	Jm	None
	y5978021	y5978021
<div>Back Add Option Send</div>		

2. Highlight the desired contact, and then select **Option->Edit**.
3. Edit the contact information.

Áaaaaab

1. NickName: Áaaaaab

2. Group: No Group

3. PrimaryContact: 5978019

4. First Name:

5. Last Name:

Back 123 Delete Save

4. Select **Save**.

Deleting Contacts

Procedure

1. Navigate to **Menu->Directory->Personal Address Book**.

The phone screen will display all contacts in the PAB.

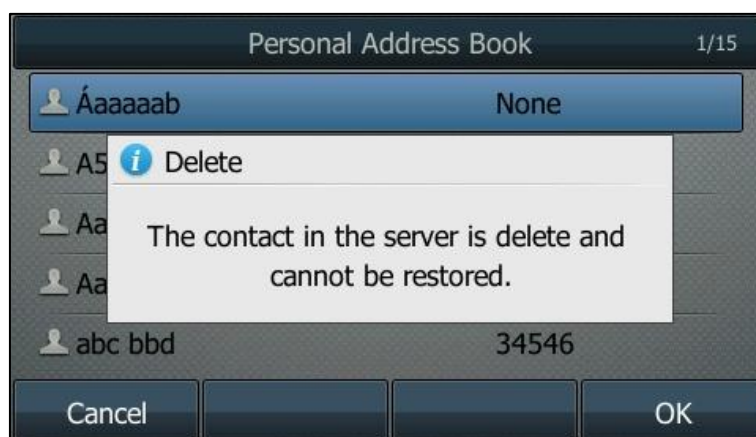
Personal Address Book 6/14

D	None
Dmjrm	123
hhhhhhhhhhh	None
Jm	None
y5978021	y5978021

Back Add Option Send

2. Highlight the desired contact, and then select **Option->Delete**.

The phone screen prompts the following warning:

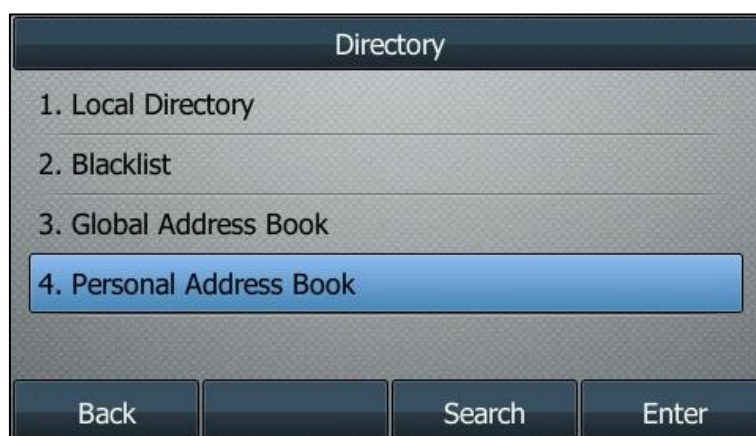


3. Select **OK** to confirm the deletion.

Searching for Contacts

Procedure

1. Navigate to **Menu->Directory**.
2. Highlight **Personal Address Book**.



3. Select **Search**.
4. Enter the search criteria.

If you enter continuous numbers of the phone number, the IP phone will search the contacts according to the priority: business number>home number>mobile number.



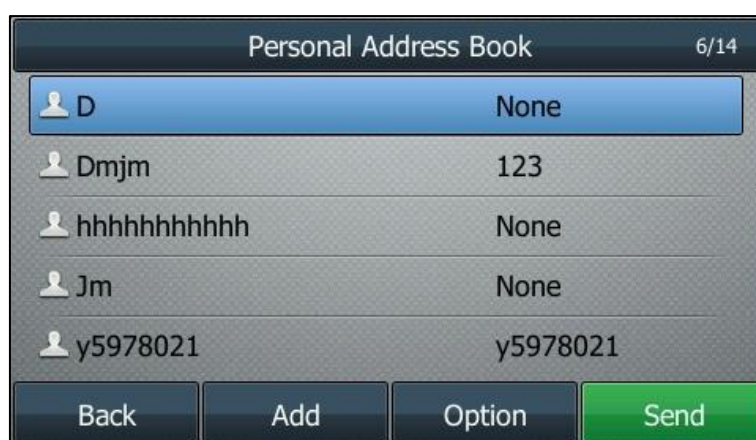
The contacts whose name or phone number matches the characters entered will appear on the phone screen.

Placing Calls to Contacts

Procedure

1. Navigate to **Menu->Directory->Personal Address Book**.

The phone screen will display all contacts in the PAB.



2. Highlight the desired contact, and then select **Send**.
 - If only one number for the contact is stored in the PAB, the contact number will be dialed out by using the default account.
 - If multiple numbers for the contact are stored in the PAB, highlight the desired number and select **Send**.

Account:y5978020	
Business Number:	y5978021
Home Number:	5978026
Mobile Number:	5978059
PrimaryContact:	3
<div> <div>Back</div> <div>Account</div> <div></div> <div>Send</div> </div>	

The contact number will be dialed out by using the default account.

You can also select **Account** and then select the desired account to dial out the number.

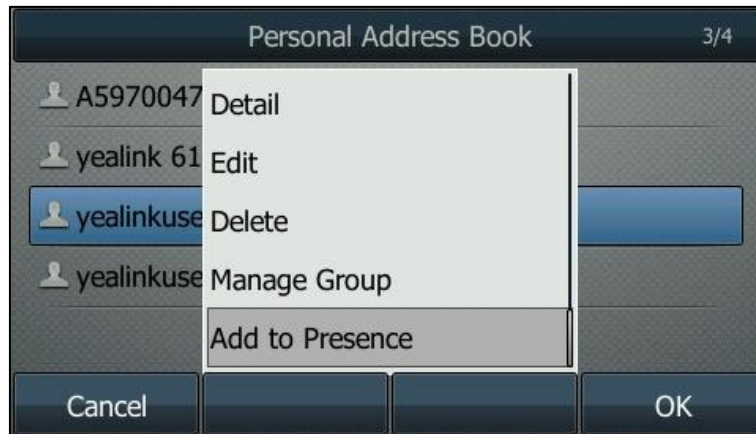
Choose an account	
1.2248:	Registered
2.y5978020:	Default Account
4.12323:	Registered
<div> <div>Back</div> <div></div> <div></div> <div>OK</div> </div>	

Saving PAB Contacts to Presence List

You can add PAB contacts to the presence list.

Procedure

1. Navigate to **Menu->Directory->Personal Address Book**.
2. Highlight the desired contact, and then select **Option->Add to Presence**.



The contact is added to the presence list successfully.

3. Repeat step 2 to add more PAB contacts to the presence list.

Using Ribbon E911

With the E911 feature, you can set the phone's location for emergency calls on the phone. When you register a Ribbon account, the phone prompts you to set a location. After that, the location is stored on the phone. When making an emergency call, the caller's location information can be identified by the emergency operator. You can make an emergency call even if your phone keypad is locked.

Obtaining Location List from ProvServer

When the phone's account is configured to retrieve E911 location information, the phone sends a service-package event SUBSCRIBE message to the server. The server then sends back a NOTIFY with the ProvServer URL in the message body. The phone can perform a SOAP request to the ProvServer for obtaining the location list. You can manually configure the period of the service-package event subscription.

Example of a SUBSCRIBE message:

```
Via: SIP/2.0/UDP 10.81.24.115:5060;branch=z9hG4bK2093144611
From: "y5978025" <sip:y5978025@yealink.a2e01.gbiot>;tag=903318596
To: <sip:y5978025@yealink.a2e01.gbiot>;tag=3723864990-1759412320
Call-ID: 4_3836799636@10.81.24.115
CSeq: 2 SUBSCRIBE
Contact: <sip:y5978025@10.81.24.115:5060>
Accept: application/com.nortelnetworks.applications.service-package+xml
Max-Forwards: 70
User-Agent: Yealink SIP-T46S 66.83.0.1
Supported: https
Expires: 0
Event: service-package
Content-Length: 0
```

Example of a NOTIFY message:

```

NOTIFY sip:y5978025@172.16.0.0:15234 SIP/2.0
Max-Forwards: 19
To: "y5978025" <sip:y5978025@yealink.a2e01.gbiot>;tag=2250208005
From: <sip:y5978025@yealink.a2e01.gbiot>;tag=3723865008-1425010731
Call-ID: 4_1111674402@10.81.24.115
CSeq: 1 NOTIFY
Allow: PUBLISH,MESSAGE,UPDATE, SUBSCRIBE,REFER,INFO,NOTIFY,REGISTER,OPTIONS,BYE,INVITE,ACK,CANCEL
Via: SIP/2.0/UDP 206.165.51.38:5060;branch=z9hG4bK3b40983916fc594fca1749c0bb190e53
Contact: <sip:y5978025@206.165.51.38:5060;maddr=206.165.51.38>
Event: service-package
Subscription-State: active;expires=118
Content-Type: application/com.nortelnetworks.applications.service-package+xml
Accept: application/com.nortelnetworks.applications.service-package+xml
User-Agent: Nortel SESM 18.0.30.1
Supported: com.nortelnetworks.firewall,p-3rdpartycontrol,nosec,join,x-nortel-sipvc,gin,com.nortelnetworks.im.encryption
P-Charging-Vector: icid-value=Umnvveo-RB;icid-generated-at=206.165.51.38
Content-Length: 78

https://so-ott-pa8.genband.com:443/prov\_clientopi/services/ClientOPI?scope=all

```

Adding Location ID to INVITE and REGISTER SIP Messages

Once the list of available locations is presented on the phone, and the user chooses an appropriate location based on the current physical location of the phone. This location ID is carried to send to the server in the INVITE and REGISTER SIP messages.

Example of a REGISTER message:

```

REGISTER sip:yealink.a2e01.gbiot:5060 SIP/2.0
Via: SIP/2.0/UDP 10.81.6.14:5060;branch=z9hG4bK1351438644
From: "y5978025" <sip:y5978025@yealink.a2e01.gbiot:5060>;tag=3146142791
To: "y5978025" <sip:y5978025@yealink.a2e01.gbiot:5060>
Call-ID: 0_3319694303@10.81.6.14
CSeq: 15 REGISTER
Contact: <sip:y5978025@10.81.6.14:5060>
Proxy-Authorization: Digest username="y5978025", realm="Realm",
nonce="MTUxNzk2NzY0NTYwNDJjMjNhODc4MjRmNzA5Mzc0NWZhZmI5NGU2ZWl4ZGI0",
uri="sip:yealink.a2e01.gbiot:5060", response="6363afdcba18998d69ade509a0e93320", algorithm=MD5,
cnonce="0a4f113b", qop=auth, nc=00000014
Allow: INVITE, INFO, PRACK, ACK, BYE, CANCEL, OPTIONS, NOTIFY, REGISTER, SUBSCRIBE, REFER, PUBLISH, UPDATE,
MESSAGE
Max-Forwards: 70
User-Agent: Yealink SIP-T46S 66.83.0.10
Expires: 0
Allow-Events: talk,hold,conference,refer,check-sync
X-Nt-Location: 284909

```

Content-Length: 0

Configuring E911 Feature

Procedure

1. Add/Edit E911 parameters in the configuration template files:

Parameters	Permitted Values	Default
dialplan.emergency.asserted_id_source	ELIN, CUSTOM or GENBAND	ELIN
<p>Description:</p> <p>Configures the precedence of the source of emergency outbound identities when placing an emergency call.</p> <p>ELIN-The outbound identity used in the P-Asserted-Identity (PAI) header of the SIP INVITE request is taken from the network using an LLDP-MED Emergency Location Identifier Number (ELIN). The custom outbound identity configured by "dialplan.emergency.custom_asserted_id" will be used if the phone fails to get the LLDP-MED ELIN value.</p> <p>CUSTOM-The custom outbound identity configured by "dialplan.emergency.custom_asserted_id" will be used; if "dialplan.emergency.custom_asserted_id" is left blank, the LLDP-MED ELIN value will be used.</p> <p>GENBAND-Ribbon E911 feature is enabled, the X-Nt-Location header with a location ID (e.g., X-Nt-Location: 284909) will be added to the INVITE and REGISTER SIP messages.</p> <p>Note: If the obtained LLDP-MED ELIN value is blank and no custom outbound identity, the PAI header will not be included in the SIP INVITE request.</p>		
dialplan.emergency.asserted_id.sip_account	Refer to the following content	1
<p>Description:</p> <p>Configures the Ribbon account to be used to retrieve E911 location information.</p> <p>Permitted Values:</p> <p>SIP-T58A/T57W/T54W/T48U/T48S/T46U/T46S: Integer from 1 to 16.</p> <p>SIP-T53W/T53/T43U/T42S: Integer from 1 to 12.</p> <p>SIP-T41S/T27G: Integer from 1 to 6.</p> <p>SIP-T40P/T40G/T23P/T23G: Integer from 1 to 3.</p> <p>SIP-T21(P) E2: Integer from 1 to 2.</p> <p>SIP-T19(P) E2/CP920/CP960: 1.</p> <p>Note: It works only if "dialplan.emergency.asserted_id_source" is set to GENBAND.</p>		

Parameters	Permitted Values	Default
dialplan.emergency.custom_asserted_id	10-25 digits, SIP URI, or TEL URI	Blank
Description: Configures the custom outbound identity when placing an emergency call. If you use a TEL URI (for example, tel:+16045558000), the full URI is included in the P-Asserted-Identity (PAI) header (for example, <tel:+16045558000>). If you use a SIP URI (for example, sip:1234567890123@abc.com), the full URI is included in the P-Asserted-Identity (PAI) header and the address will be replaced by the emergency server (for example, <sip:1234567890123@emergency.com>). If you use a number with 10 to 25 digits (for example, 1234567890), the SIP URI constructed from the number and SIP server (e.g., abc.com) is included in the P-Asserted-Identity (PAI) header (for example, <sip:1234567890@abc.com>).		
dialplan.emergency.server.X.address (X ranges from 1 to 3)	IP address or domain name	Blank
Description: Configures the IP address or domain name of the emergency server X to be used for routing calls. Note: If the account information has been configured (no matter whether the account registration succeeds or fails), the emergency calls will be dialed using the following priority: SIP server>emergency server; if not, the emergency server will be used.		
dialplan.emergency.server.X.port (X ranges from 1 to 3)	Integer from 1 to 65535	5060
Description: Configures the port of emergency server X to be used for routing calls.		
dialplan.emergency.server.X.transport_type (X ranges from 1 to 3)	0, 1, 2 or 3	0
Description: Configures the transport protocol the IP phone uses to communicate with the emergency server X. 0 -UDP 1 -TCP 2 -TLS 3 -DNS-NAPTR		
dialplan.emergency.X.value (X ranges from 1 to 255)	number or SIP URI	Refer to the following content

Parameters	Permitted Values	Default
Description: Configures the emergency number to use on your IP phone so a caller can contact emergency services in the local area when required. Default: When X = 1, the default value is 911; When X = 2-255, the default value is Blank.		
dialplan.emergency.X.server_priority (X ranges from 1 to 255)	a combination of digits 1, 2 and 3	1, 2, 3
Description: Configures the priority of which the emergency servers to be used first. Multiple values are separated by commas. The servers to be used in the order listed (left to right). The IP phone tries to make emergency calls using the emergency server with higher priority, and then with lower priority. The IP phone tries to send the INVITE request to each emergency server three times. Example: dialplan.emergency.1.server_priority = 2, 1, 3 It means the emergency calls will be dialed using the following priority: emergency server 2>emergency server 1>emergency server 3. The IP phone tries to send the INVITE request to each emergency server three times. Note: If the account information has been configured (no matter whether the account registration succeeds or fails), the emergency calls will be dialed using the following priority: SIP server>emergency server; if not, the emergency server will be used.		
account.X.blf.subscribe_period^[1]	Integer from 30 to 2147483647	1800
Description: Configures the period (in seconds) of the service-package event subscription for obtaining the location list from ProvServer. The IP phone can successfully refresh the SUBSCRIBE before the expiration of the SUBSCRIBE dialog.		

^[1]X is the account ID. For SIP-T58A/T57W/T54W/T48U/T48S/T46U/T46S, X=1-16; for SIP-T53W/T53/T43U/T42S, X=1-12; for SIP-T41S/T27G, X=1-6; for SIP-T40P/T40G/T23P/T23G, X=1-3; for SIP-T21(P) E2, X=1-2; for SIP-T19(P) E2/CP920/CP960, X=1.

The following shows an example of emergency call parameters in the configuration file (e.g., y0000000000066.cfg):

```
dialplan.emergency.asserted_id_source = GENBAND
dialplan.emergency.asserted_id.sip_account = 1
```

```
dialplan.emergency.1.value= 911
```

```
dialplan.emergency.server.1.address = 10.200.108.48
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Configuring Phone's Location

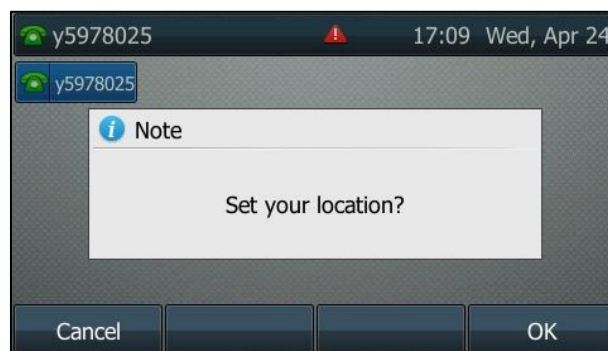
Manually Setting the Phone's Location

You can manually set your location for emergency calls on the phone.

Procedure

1. Register your Ribbon account.

The phone displays a warning message "Set your location?" for 10 seconds.



2. Select **OK** to view the list of available locations got from the server.



If you select **Cancel** or the warning message disappears, proceed to [Resetting the Phone's Location](#).

3. Select an appropriate location and then select **Next** to enter the tree navigation menu of the location.



4. Select **Save**.

Your location information is saved and displayed on the phone at the path **Menu->Basic->E911 Location**.



Note

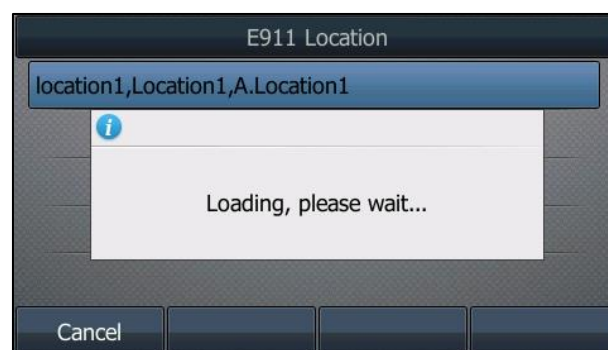
If your location has not been set, the re-registering, rebooting, upgrading or subscription expiration will also lead to a warning message "Set your location?".

Resetting the Phone's Location

If you want to reselect an address for the phone, for example, when the phone's location is changed, you can reset the phone's location.

Procedure

1. Navigate to **Menu->Basic->E911 Location**.
2. Select **Reset**.



3. Select a location to the location tree navigation menu.
4. Select **Save**.

Using Ribbon Emergency Instant Messages

Yealink IP phones can receive emergency instant text messages.

You can configure audio alerts for incoming instant messages and set the duration of time that emergency messages display.

Configuring the Emergency Instant Messages

Procedure

1. Add/Edit emergency instant messages parameters in the configuration template files:

Parameters	Permitted Values	Default
gb.emergency_instant_messages.enable	0 or 1	0
Description: Enables or disables the phone to display emergency instant messages. 0 -Disabled 1 -Enabled		
gb.emergency_instant_messages.displaytimeout	Integer from 0 to 60	1
Description: Specifies the duration (in minutes) the emergency instant messages display. If it is set to 0, the message prompt will not disappear automatically. If it is set to other values, the message prompt will disappear automatically after the designated time. The instant messages display until one of the following occurs: <ul style="list-style-type: none"> • The user presses Cancel • The user presses any key on the phone • The phone goes off-hook • Another instant message is received • A popup message displays • The phone receives an incoming call • Timeout Note: It works only if "gb.emergency_instant_messages.enable" is set to 1 (Enabled).		
features.emergency_instant_messages.ring_type	Refer to the following content	Splash.wav

Parameters	Permitted Values	Default
Description: Configures the alert tone the phone plays when an emergency instant message is received.		
Permitted Values: Ring1.wav, Ring2.wav, Ring3.wav, Ring4.wav, Ring5.wav, Ring6.wav, Ring7.wav, Ring8.wav, Silent.wav, Splash.wav or custom ring tone name (for example, CustomRingtone.wav).		

The following shows an example of emergency instant messages parameters in the configuration file (e.g., y0000000000066.cfg):

```
gb.emergency_instant_messages.enable = 1
gb.emergency_instant_messages.displaytimeout = 1
features.emergency_instant_messages.ring_type = Ring1.wav
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

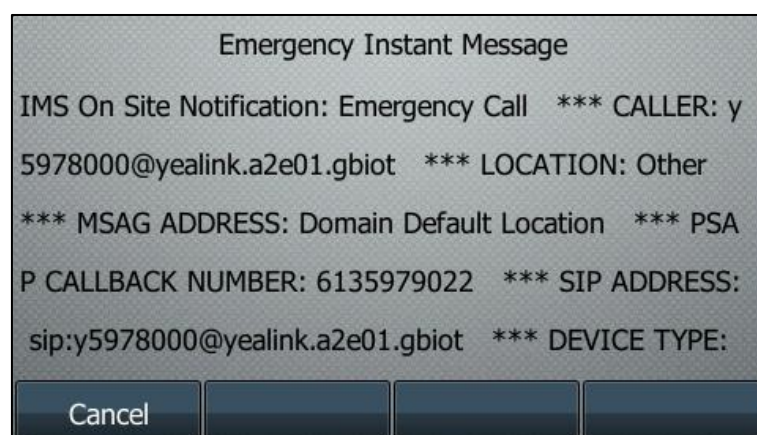
Viewing the Emergency Instant Messages

When an emergency call is made, the Ribbon server sends the emergency instant text messages to the phone that is registered a special account. The phone displays the information pushed by the server and plays the pre-configured ring tone.

Scenario

When someone places an emergency call, for example, calls 911, your phone immediately receives the emergency instant text messages, together with an audio alert.

The emergency instant text messages are displayed, as shown next:



Using Ribbon One-Touch Call Park and Retrieve

When users register the account on the Kandy server, they can use a call park key for one-touch parking and retrieving.

This feature does not apply to T19(P) E2/CP920 IP phones.

Configuring Call Park and Retrieve in FAC Mode

Procedure

1. Add/Edit call park and retrieve parameters in the configuration template files:

Parameters	Permitted Values	Default
features.call_park.park_mode	1 or 2	2
Description: Configures the call park mode. 1 -FAC, park a call through dialing the call park code. 2 -Transfer, blind transfer the call to a shared parking lot.		
features.call_park.enable	0 or 1	0
Description: Enables or disables the call park feature. 0 -Disabled 1 -Enabled		
features.call_park.park_code	String within 32 characters	Blank
Description: Configures the call park code.		
features.call_park.park_retrieve_code	String within 32 characters	Blank
Description: Configures the park retrieve code.		

The following shows an example of call park and retrieve parameters in the configuration file (e.g., y0000000000066.cfg):

```
features.call_park.park_mode = 1
features.call_park.enable = 1
```

```
features.call_park.park_code = *26
```

```
features.call_park.park_retrieve_code = *32
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Configuring a Call Park Key

Procedure

1. Add/Edit call park key parameters in the configuration template files:

Parameters	Permitted Values	Default
linekey.X.type/ programablekey.X.type/ expansion_module.X.key.Y.type/	10	Refer to the following content
<p>Description:</p> <p>Configures a DSS key X as a Call Park key on the IP phone.</p> <p>The digit 10 stands for the key type Call Park.</p> <p>For line keys:</p> <p>X ranges from 1 to 30 (for CP960)</p> <p>X ranges from 1 to 29 (for SIP-T57W/T48U/T48S)</p> <p>X ranges from 1 to 27 (For SIP-T58A/T54W/T46U/T46S)</p> <p>X ranges from 1 to 15 (for SIP-T42S/T41S)</p> <p>X ranges from 1 to 21 (for SIP-T53W/T53/T43U/T27G)</p> <p>X ranges from 1 to 3 (for SIP-T40P/T40G/T23P/T23G)</p> <p>X ranges from 1 to 2 (for SIP-T21(P) E2)</p> <p>For programmable keys:</p> <p>X=1-3 (for CP960)</p> <p>X=1-4, 12-14, 17-18 (for SIP-T58A/T57W)</p> <p>X=1-10, 12-14, 17-18 (for SIP-T54W/T48U/T48S/T46U/T46S)</p> <p>X=1-10, 13, 17-18 (for SIP-T53W/T53/T43U/T42S/T41S/T40P/T40G)</p> <p>X=1-14, 17-18 (for SIP-T27G)</p> <p>X=1-10, 14, 17-18 (for SIP-T23P/T23G/T21(P) E2)</p> <p>For ext keys:</p> <p>For SIP-T58A/T57W/T54W/T53W/T53/T48U/T46U/T43U:</p> <p>X ranges from 1 to 3, Y ranges from 1 to 60.</p>		

Parameters	Permitted Values	Default
<p>For SIP-T48S/T46S:</p> <p>X ranges from 1 to 6, Y ranges from 1 to 40.</p> <p>For SIP-T27G:</p> <p>X ranges from 1 to 6, Y ranges from 1 to 20, 22 to 40 (Ext key 21 cannot be configured).</p> <p>Default:</p> <p>For line keys:</p> <p>For CP960 IP phones:</p> <p>The default value of the line key 1 is 15, and the default value of the line key 2-30 is 0.</p> <p>For SIP-T57W/T48U/T48S IP phones:</p> <p>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-T58A/T54W/T46U/T46S IP phones:</p> <p>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-T53W/T53/T43U IP phones:</p> <p>The default value of the line key 1-12 is 15, and the default value of the line key 13-21 is 0.</p> <p>For SIP-T42S 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-T41S 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-T27G 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/T40G/T23P/T23G/T21(P) E2 IP phones:</p> <p>The default value is 15.</p> <p>For programmable keys:</p> <p>For CP960 IP phones:</p> <p>When X=1, the default value is 308 (Dial).</p> <p>When X=2, the default value is 29 (Directory).</p> <p>When X=3, the default value is 309 (Bluetooth).</p> <p>For SIP-T58A IP phones:</p> <p>When X=1-4/12/13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>When X=17/18, the default value is 0 (NA).</p> <p>For SIP-T57W 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>		

Parameters	Permitted Values	Default
<p>When X=4, the default value is 30 (Menu).</p> <p>When X=12, the default value is 0 (NA).</p> <p>When X=13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>When X=17/18, the default value is 0 (NA).</p> <p>For SIP-T54W/T48U/T48S/T46U/T46S 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=12, the default value is 0 (NA).</p> <p>When X=13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>When X=17/18, the default value is 0 (NA).</p> <p>For SIP-T53W/T53/T43U/T42S/T41S/T40P/T40G 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=10/13/17/18, the default value is 0 (NA).</p> <p>For SIP-T27G 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>		

Parameters	Permitted Values	Default
<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=11, the default value is 0 (NA).</p> <p>When X=12, the default value is 0 (NA).</p> <p>When X=13, the default value is 0 (NA).</p> <p>When X=14, the default value is 2 (Forward).</p> <p>When X=17/18, the default value is 0 (NA).</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>When X=17/18, the default value is 0 (NA).</p> <p>For ext keys:</p> <p>For SIP-T58A/T57W/T54W/T53W/T53/T48U/T46U/T43U:</p> <p>When Y= 1 to 60, the default value is 0 (NA).</p> <p>For SIP-T48S/T46S:</p> <p>When Y= 1 to 40, the default value is 0 (NA).</p> <p>For SIP-T27G:</p> <p>When Y= 1, 21, the default value is 37 (Switch).</p> <p>When Y = 2 to 20, 22 to 40, the default value is 0 (NA).</p>		
linekey.X.value/ programablekey.X.value/ expansion_module.X.key.Y.value	String within 99 characters	Blank

Parameters	Permitted Values	Default
<p>Description:</p> <p>Configures the shared parking lot you want to park the call to.</p> <p>For line keys:</p> <p>X ranges from 1 to 30 (for CP960)</p> <p>X ranges from 1 to 29 (for SIP-T57W/T48U/T48S)</p> <p>X ranges from 1 to 27 (For SIP-T58A/T54W/T46U/T46S)</p> <p>X ranges from 1 to 15 (for SIP-T42S/T41S)</p> <p>X ranges from 1 to 21 (for SIP-T53W/T53/T43U/T27G)</p> <p>X ranges from 1 to 3 (for SIP-T40P/T40G/T23P/T23G)</p> <p>X ranges from 1 to 2 (for SIP-T21(P) E2)</p> <p>For programmable keys:</p> <p>X=1-3 (for CP960)</p> <p>X=1-4, 12-14, 17-18 (for SIP-T58A/T57W)</p> <p>X=1-10, 12-14, 17-18 (for SIP-T54W/T48U/T48S/T46U/T46S)</p> <p>X=1-10, 13, 17-18 (for SIP-T53W/T53/T43U/T42S/T41S/T40P/T40G)</p> <p>X=1-14, 17-18 (for SIP-T27G)</p> <p>X=1-10, 14, 17-18 (for SIP-T23P/T23G/T21(P) E2)</p> <p>For ext keys:</p> <p>For SIP-T58A/T57W/T54W/T53W/T53/T48U/T46U/T43U:</p> <p>X ranges from 1 to 3, Y ranges from 1 to 60.</p> <p>For SIP-T48S/T46S:</p> <p>X ranges from 1 to 6, Y ranges from 1 to 40.</p> <p>For SIP-T27G:</p> <p>X ranges from 1 to 6, Y ranges from 1 to 20, 22 to 40 (Ext key 21 cannot be configured).</p>		
linekey.X.label/ programmablekey.X.label/ expansion_module.X.key.Y.label	String within 99 characters	Blank
<p>(Optional.) Configures the label displaying on the LCD screen for each dsskey.</p> <p>For line keys:</p> <p>X ranges from 1 to 30 (for CP960)</p> <p>X ranges from 1 to 29 (for SIP-T57W/T48U/T48S)</p> <p>X ranges from 1 to 27 (for SIP-T58A/T54W/T46U/T46S)</p> <p>X ranges from 1 to 15 (for SIP-T42S/T41S)</p> <p>X ranges from 1 to 21 (for SIP-T53W/T53/T43U/T27G)</p> <p>X ranges from 1 to 3 (for SIP-T40P/T40G/T23P/T23G)</p>		

Parameters	Permitted Values	Default
<p>X ranges from 1 to 2 (for SIP-T21(P) E2)</p> <p>For programmable keys:</p> <p>X ranges from 1 to 4.</p> <p>For ext keys:</p> <p>For SIP-T58A/T57W/T54W/T53W/T53/T48U/T46U/T43U:</p> <p>X ranges from 1 to 3, Y ranges from 1 to 60.</p> <p>For SIP-T48S/T46S:</p> <p>X ranges from 1 to 6, Y ranges from 1 to 40.</p> <p>For SIP-T27G:</p> <p>X ranges from 1 to 6, Y ranges from 1 to 20, 22 to 40 (Ext key 21 cannot be configured).</p>		

The following shows an example of call park key parameters in the configuration file (e.g., y0000000000066.cfg):

```
linekey.2.type = 10
linekey.2.value = 61255500026
linekey.2.label = Call Park
```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Using One-touch Call Park and Retrieve

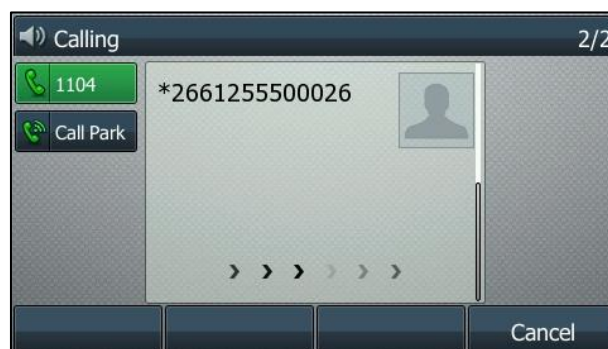
Parking a Call Using a Call Park Key

You can use the Call Park key to park a call to the parking lot quickly.

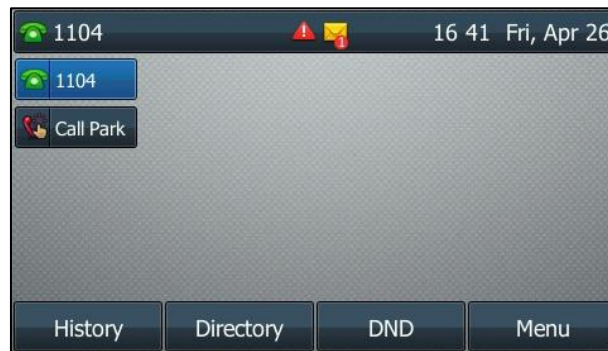
Procedure

1. Press the Call Park key during the call.

The phone dials the configured call park code and the parking lot.



If the call is parked successfully, you will hear a voice prompt confirming that the call is parked.



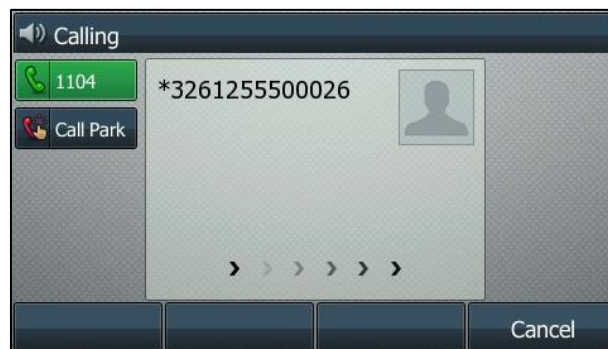
Retrieving a Parked Call Using a Call Park Key

You can use the Call Park key to retrieve a parked call quickly.

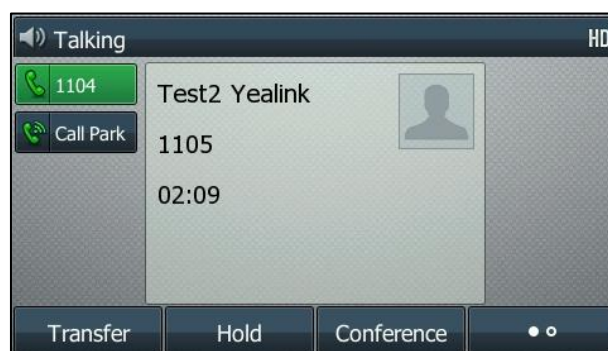
Procedure

1. Press the Call Park key in the idle screen.

The phone dials the configured park retrieve code and the parking lot.



If the parked call is retrieved successfully, you will be connected with the parked user.



If the parked call is not retrieved within a period of time assigned by the Kandy server, the phone performing call park will receive a callback.

Using Ribbon Hot Desking/Hoteling

When users register the account on the Kandy server, they can log into a guest profile to use any

available shared phone. After logging in, users have access to their guest profile and settings on the shared phone.

Configuring Hot Desking/Hoteling Feature

Procedure

1. Add/Edit hot desking/hoteling parameters in the configuration template files:

Parameters	Permitted Values	Default
static.auto_provision.server.url	URL within 511 characters	Blank
Description: Configures the access URL of the provisioning server.		
static.auto_provision.server.username	String within 32 characters	Blank
Description: Configures the user name for provisioning server access.		
static.auto_provision.server.password	String within 32 characters	Blank
Description: Configures the password for provisioning server access.		
static.auto_provision.url_change_reautop.enable	0 or 1	0
Description: Enables or disables the IP phone to perform auto provisioning immediately once the phone receives a provisioning URL. 0 -Disabled 1 -Enabled		
static.auto_provision.power_on	0 or 1	1
Description: Triggers the power on feature to on or off. 0 -Off 1 -On, the phone performs auto provisioning when powered on.		

Parameters	Permitted Values	Default
hoteling.http_request_server	String	Blank
<p>Description:</p> <p>Specifies a URL for the users to log in/log out of the shared phone.</p> <p>Yealink phones support wildcard characters in the URL. The wildcard characters are used with angle brackets.</p> <p>Valid wildcard characters:</p> <ul style="list-style-type: none"> • \$mac: it will be dynamically replaced with the phone's MAC address. • \$model: it will be dynamically replaced with the phone's model name. • \$loginuser: it will be dynamically replaced with the authentication user ID. • \$loginpassword: it will be dynamically replaced with the authentication password. <p>Note: The values of the \$loginuser and loginpassword are determined by the value "hoteling.authentication_mode".</p>		
hoteling.http_request_mode	0, 1 or 2	0
<p>Description:</p> <p>Configures the request mode of the URL for logging in/logging out of the shared phone.</p> <p>0-When logging in/logging out, the phone adds the suffix ?login/?logout to the configured URL by "hoteling.http_request_server".</p> <p>1-The phone requests using the custom URL configured by "hoteling.http_request_server".</p> <p>2-When the URL configured by "hoteling.http_request_server" does not contain a protocol http:// or https:// or tftp:// or ftp://, the phone will request the CFG file using the full path constituted by "static.auto_provision.server.url" and "hoteling.http_request_server"; when the URL contains a protocol http:// or https:// or tftp:// or ftp://, the phone will request this configured URL directly. The phone clears all non-static configurations when the user logs in/logs out.</p>		
hoteling.authentication_mode	0, 1 or 2	0
<p>Description:</p> <p>Configures the XML browser hoteling authentication mode.</p> <p>0-The phone uses the hoteling user ID and password as authentication credentials.</p> <p>1-The phone uses the provisioning user name and password as authentication credentials, and at the same time provides the hoteling user ID and password in the payload of the message for authentication credentials.</p> <p>2-The phone uses the provisioning user name and password as authentication credentials, but uses the entered hoteling user ID and password to replace the wildcard characters in the request URL configured by "hoteling.http_request_server".</p>		

Parameters	Permitted Values	Default
hoteling.password	String	Blank
Description: Configures the password used to log into the guest profile.		
hoteling.user_status	0 or 1	0
Description: Defines the current status of the hoteling user. 0 -Logout 1 -Login		
hoteling.persistent_login	0, 1 or 2	1
Description: Configures whether the user automatically logs out after phone reboots. 0 -After reboot, the phone will ask for a logout or not. 1 -After reboot, the phone will be triggered to automatically log in again. 2 -After reboot, the phone is still in the "Login" status.		
hoteling.login_status.flash_time	0, Integer from 3600 to 129600	3600
Description: Configures the number of seconds to wait while the user logs in before the phone regularly updates the status. Note: It works only if "hoteling.user_status" is set to 1 (Login).		
hoteling.only_authorized_call.enable	0 or 1	0
Description: Enables or disables the phone to only make emergency calls or dial the pre-configured authorized numbers when the user does not log in. 0 -Disabled 1 -Enabled		
hoteling.authorized_call.X.value (X ranges from 1 to 10)	Number/SIP URI,Label	Blank
Description:		

Parameters	Permitted Values	Default
Configures the authorized outgoing number and label.		
dialplan.emergency.enable	0 or 1	1
Description: Enables or disables the Emergency dialplan feature.		
dialplan.emergency.X.value (X ranges from 1 to 255)	number or SIP URI	Refer to the following content
Description: Configures the emergency number to use on your IP phone so a caller can contact emergency services in the local area when required. Default: When X = 1, the default value is 911; When X = 2-255, the default value is Blank.		
local_contact.data.delete	String	Blank
Description: Deletes all local contacts. Example: local_contact.data.delete = http://localhost/all		
hoteling.log_out_prompt.time	Integer	Blank
Description: Configures the time (in minutes) to wait in the idle state before the phone prompts users to log out of the shared phone. Multiple values are separated by commas. If it is left blank, no Logout prompt will be displayed. Example: hoteling.log_out_prompt.time = 10,20, will cause the phone to prompt after the phone is in the idle state for 10 minutes and 20 minutes.		
hoteling.log_out_prompt.duration	Integer from 0 to 1440	0
Description: Specifies the duration (in seconds) that the Logout prompt is displayed.		

Parameters	Permitted Values	Default
<p>If it is set to 0, the Logout prompt will not automatically disappear, users need to manually log out of the shared phone.</p> <p>If it is set to other values, users will automatically log out of the shared phone when there are no activities within the prompt duration.</p>		

The following shows an example of hot desking/hoteling parameters in the configuration files:

#configuration in the <MAC>.cfg file

```
static.auto_provision.server.url = http://10.82.24.69:8080/Kandy/
static.auto_provision.server.username = user
static.auto_provision.server.password = password
static.auto_provision.url_change_reautop.enable = 0
static.auto_provision.power_on = 0
hoteling.http_request_server = <$loginuser.cfg>
hoteling.http_request_mode = 2
hoteling.password = 123456
hoteling.user_status = 0
hoteling.persistent_login = 2
hoteling.login_status.flash_time = 0
hoteling.only_authorized_call.enable = 1
hoteling.authorized_call.1.value = 9726843001,Emergency1
hoteling.authorized_call.2.value = 9726843002@emnuvia.com,Emergency2
hoteling.authorized_call.3.value = 1902,Emergency3
hoteling.authorized_call.4.value = 1903,Emergency4
hoteling.authorized_call.5.value = 1904,Emergency5
hoteling.authorized_call.6.value = 1905,Emergency6
hoteling.authorized_call.7.value = 1906,Emergency7
hoteling.authorized_call.8.value = 1907,Emergency8
hoteling.authorized_call.9.value = 1908,Emergency9
hoteling.authorized_call.10.value = 1909,Emergency10
dialplan.emergency.enable = 1
dialplan.emergency.1.value = 911@emnuvia.com
hoteling.authentication_mode = 2
```

#configuration in the account.cfg file

```
hoteling.http_request_mode = 2
hoteling.http_request_server = <$mac.cfg>
hoteling.user_status = 1
```



```

hoteling.log_out_prompt.duration = 10
hoteling.persistent_login = 0
hoteling.log_out_prompt.time = 10,20
static.auto_provision.server.url = http://10.82.24.69:8080/Kandy/
auto_provision.server.username = user
auto_provision.server.password = password
auto_provision.url_change_reautop.enable = 0
static.auto_provision.power_on = 0
hoteling.authentication_mode = 2
hoteling.password = 1234

```

2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Using Hot Desking/Hoteling

Once you enable the Hoteling enhancement on a phone, you can share the phone with different users, who can log in to and out of guest profiles on the phone. This section shows you how to log in to a guest profile on a shared phone when Hoteling is enabled

Log in to a Shared Phone

Procedure

1. Select **Login**, as shown next.



2. Enter your user ID and password, and select **Login**.

The *Guest Login* screen is displayed, as shown next.



The image shows a 'Guest Login' screen on a Yealink IP phone. It has a dark header with the title 'Guest Login'. Below the header, there are two input fields: '1. User ID:' with the value '1700' and '2. Password:' with masked characters '••••'. At the bottom, there are four buttons: 'Cancel', '123', 'Delete', and 'Login'.

The phone will verify your login credentials with the Kandy server. After successful verification, the phone will display your guest profile, as shown next.



The image shows a 'Guest Account' screen on a Yealink IP phone. It has a dark header with the title 'Guest Account', a red warning icon, and the date '11 21 Fri, May 10'. Below the header, there is a 'Guest ...' button. At the bottom, there are four buttons: 'History', 'Logout', 'DND', and a menu icon (three dots).

Log out of a Shared Phone

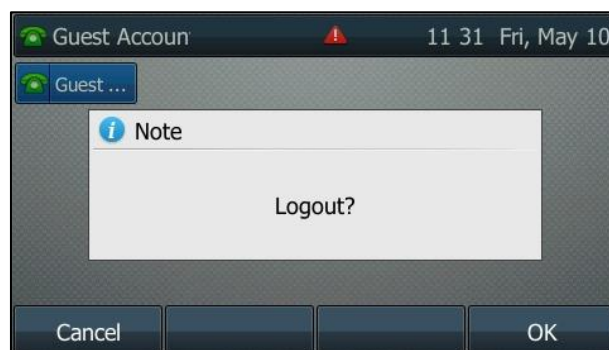
Procedure

1. Do one of the following:
 - In the idle screen, select **Logout**, as shown next.



The image shows a 'Guest Account' screen on a Yealink IP phone, identical to the one above. It has a dark header with the title 'Guest Account', a red warning icon, and the date '11 21 Fri, May 10'. Below the header, there is a 'Guest ...' button. At the bottom, there are four buttons: 'History', 'Logout', 'DND', and a menu icon (three dots).

- When the Logout prompt appears, select **OK**, as shown next.



Note If there are no activities within the prompt duration, the phone will automatically log out of the shared phone.

After logging out, your phone will display the host profile.



Placing an Authorized Call

You can only make emergency calls or dial the pre-configured authorized numbers before you log in.

Procedure

1. Do one of the following:
 - Select the desired line key.
 - Pick up the handset, press the Speakerphone key or the HEADSET key.
2. Select an authorized number in the authorized number list or enter an emergency number.



3. Select **Send**.



Using Ribbon Presence

By adding GAB/PAB contacts to a presence list, users can monitor changes in the status of GAB/PAB contacts in real time.

The IP phone synchronizes the presence status with that on the soft client. The presence status of each contact in the presence list can be also displayed real timely and synchronously.

This feature is only applicable to color-screen phones.

Configuring Presence Feature

Procedure

1. Add/Edit presence parameters in the configuration template files:

Parameters	Permitted Values	Default
gb.presence.enable	0 or 1	0
Description: Enables or disables the presence feature. 0 -Disabled 1 -Enabled		
gb.presence.line	Refer to the following content	1
Description: Configures the line the phone uses to subscribe to the presence state. Permitted Values: T58A/T57W/T54W/T48U/T48S/T46U/T46S: 1-16; T53W/T53/T43U/T42S: 1-12;		

Parameters	Permitted Values	Default
T41S/T27G: 1-6; T40P/T40G/T23P/T23G: 1-3; T21(P) E2: 1-2; T19(P) E2/CP920/CP960: 1.		
directory_setting.presence_list.enable	0 or 1	1
Description: Enables or disables the users to access the presence list by pressing the Directory soft key/tapping the directory icon. 0 -Disabled 1 -Enabled		
directory_setting.presence_list.priority	Integer greater than or equal to 0	6
Description: Configures the display priority of the Presence List.		

The following shows an example of presence parameters in the configuration files:

```
gb.presence.enable = 1
```



```
gb.presence.line = 3
```



2. Upload the configuration file to the root directory of the provisioning server and perform auto provisioning to configure the Yealink IP phones.

For more information on auto provisioning, refer to the latest Auto Provisioning Guide for your phone on [Yealink Technical Support](#).

Presence Icons and Statuses

The presence icons and the corresponding statuses are listed as below:

Presence Icon	Presence Status
T58A/CP960/T57W/T54W/T48U/T48S/T46U/T46S	
	Available
	Busy

Presence Icon	Presence Status
T58A/CP960/T57W/T54W/T48U/T48S/T46U/T46S	
	Away
	Offline/Unavailable

Using Presence List

The presence list supports up to 100 GAB/PAB contacts.

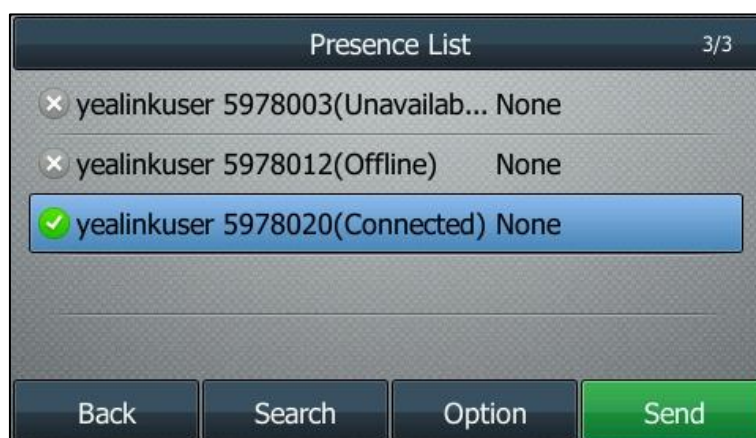
Viewing the GAB/PAB Contacts Status

Procedure

1. Navigate to **Directory->Presence List** or **Menu->Directory->Presence List**.

The phone screen will display all contacts in the presence list.

In the example below, 5978003 is unavailable, 5978012 is offline, and 5978020 is available. For more information on presence icons and statuses, refer to [Presence Icons and Statuses](#).



Searching for Contacts in the Presence List

Procedure

1. Navigate to **Directory->Presence List** or **Menu->Directory->Presence List**.
2. Select **Search**.
3. Enter the search criteria.



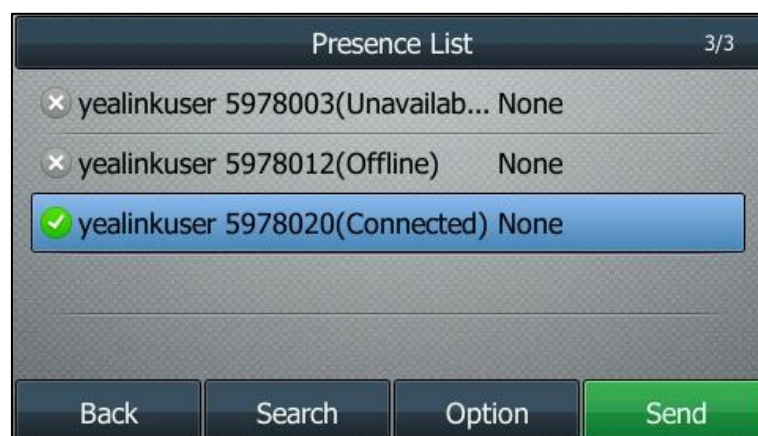
The contacts whose name or phone number matches the characters entered will appear on the phone screen.

Placing a Call from the Presence List

Procedure

1. Navigate to **Directory->Presence List** or **Menu->Directory->Presence List**.

The phone screen will display all contacts in the presence list.



2. Highlight the desired contact, and then select **Send**.
 - If only one number for the contact is stored in the list, the contact number will be dialed out by using the default account.
 - If multiple numbers for the contact are stored in the list, highlight the desired number and select **Send**.

The contact number will be dialed out by using the default account.

You can also select **Account** and then select the desired account to dial out the number.

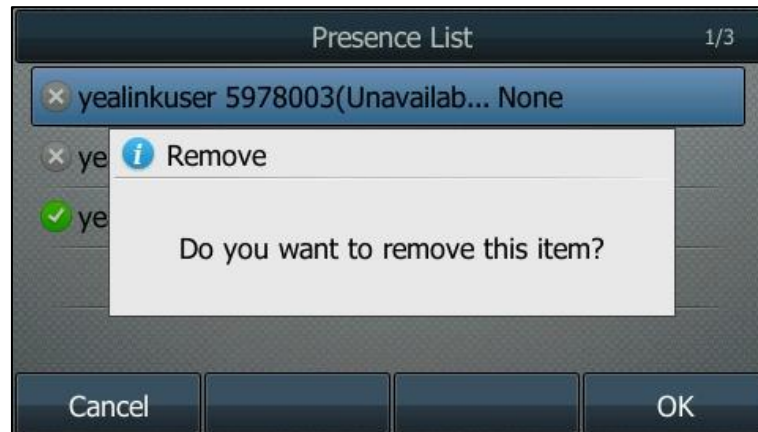
Removing Contacts from the Presence List

Procedure

1. Navigate to **Directory->Presence List** or **Menu->Directory->Presence List**.

2. Highlight the desired contact, and then select **Option->Remove**.

The phone screen prompts the following warning:



3. Select **OK** to confirm.

To remove all contacts from the list, select **Option->Remove All**.