Yealink

T48S Skype for Business® Edition User Guide

Version 9.45

Jun.2018

Copyright

Copyright © 2018 YEALINK (XIAMEN) NETWORK TECHNOLOGY

Copyright © 2018 Yealink (Xiamen) Network Technology CO., LTD. All rights reserved. No parts of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, photocopying, recording, or otherwise, for any purpose, without the express written permission of Yealink (Xiamen) Network Technology CO., LTD. Under the law, reproducing includes translating into another language or format.

When this publication is made available on media, Yealink (Xiamen) Network Technology CO., LTD. gives its consent to downloading and printing copies of the content provided in this file only for private use but not for redistribution. No parts of this publication may be subject to alteration, modification or commercial use. Yealink (Xiamen) Network Technology CO., LTD. will not be liable for any damages arising from use of an illegally modified or altered publication.

Trademarks

Yealink®, the logo and the name and marks is trademark of Yealink (Xiamen) Network Technology CO., LTD, which are registered legally in China, the United States, EU (European Union) and other countries.

All other trademarks belong to their respective owners. Without Yealink's express written permission, recipient shall not reproduce or transmit any portion hereof in any form or by any means, with any purpose other than personal use.

Warranty

(1) **Warranty**

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS GUIDE ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS GUIDE ARE BELIEVED TO BE ACCURATE AND PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF PRODUCTS.

(2) **Disclaimer**

YEALINK (XIAMEN) NETWORK TECHNOLOGY CO., LTD. MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS GUIDE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Yealink (Xiamen) Network Technology CO., LTD. shall not be liable for errors contained herein nor for incidental or consequential damages in connection with the furnishing, performance, or use of this guide.

(3) **Limitation of Liability**

Yealink and/or its respective suppliers are not responsible for the suitability of the information contained in this document for any reason. The information is provided "as is", and Yealink does not provide any warranty and is subject to change without notice. All risks other than risks caused by use of the information are borne by the recipient. In no event, even if Yealink has been suggested the occurrence of damages that are direct, consequential, incidental, special, punitive or whatsoever (Including but not limited to loss of business profit, business interruption or loss of business information), shall not be liable for these damages.

End User License Agreement

This End User License Agreement ("EULA") is a legal agreement between you and Yealink. By installing, copying or otherwise using the Products, you: (1) agree to be bounded by the terms of this EULA, (2) you are the owner or an authorized user of the device, and (3) you represent and warrant that you have the right, authority and capacity to enter into this agreement and to abide by all its terms and conditions, just as if you had signed it. The EULA for this product is available on the Yealink Support page for the product.

Patent Information

China, the United States, EU (European Union) and other countries are protecting one or more patents of accompanying products and/or patents being applied by Yealink.

Customer Feedback

We are striving to improve our documentation quality and we appreciate your feedback. Email your opinions and comments to *DocsFeedback@yealink.com*.

Technical Support

Visit Yealink WIKI (*http://support.yealink.com*) for the latest firmware, guides, FAQ, Product documents, and more. For better service, we sincerely recommend you to use Yealink Ticketing system (*https://ticket.yealink.com*) to submit all your technical issues.

GNU GPL INFORMATION

Yealink T48S Skype for Business phone firmware contains third-party software under the GNU General Public License (GPL). Yealink uses software under the specific terms of the GPL. Please refer to the GPL for the exact terms and conditions of the license.

The original GPL license, source code of components licensed under GPL and used in Yealink products can be downloaded online:
http://www.yealink.com/GPLOpenSource.aspx?BaseInfoCateId=293&NewsCateId=293&CateId=293.

About This Guide

Yealink T48S phone with the Skype for Business firmware enables a new era in unified communications. It is designed to work with the Skype for Business Server. Connecting a Yealink T48S Skype for Business phone to the Skype for Business Server allows you to place regular and Voice over Internet Protocol (VoIP) calls, answer calls, forward calls, conduct a Skype for Business conference call, and dial from your Skype for Business directory through integration with Microsoft's Active Directory.

This guide provides everything you need to quickly use your new phone. First, verify with your system administrator that the IP network is ready for phone configuration. Also be sure to read the Quick Start Guide in your phone package before you set up and use the phone. As you read this guide, keep in mind that some features should be configured by your system administrator.

Read the *Yealink Products Regulatory Notices guide* for all regulatory and safety guidance.

In This Guide

Topics provided in this guide include:

- Chapter 1 Overview
- Chapter 2 Getting Started
- Chapter 3 Customizing Your Phone
- Chapter 4 Basic Call Features
- Chapter 5 Advanced Phone Features
- Chapter 6 Using Optional Accessories with Your Phone
- Chapter 7 Troubleshooting

Summary of Changes

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

Changes for Release 9, Guide Version 9.45

Major updates have occurred to the following sections:

- Web Sign-In on page 16
- CAP Provisioning Sign-in Method on page 190

Changes for Release 9, Guide Version 9.30

The following sections are new:

- Multi-factor Authentication on page 19
- Setting Your Phone as the Default Audio Playback for Your Computer on page 201

Table of Contents

About This Guide V

In This Guide V
Summary of Changes V
Changes for Release 9, Guide Version 9.45 V
Changes for Release 9, Guide Version 9.30 VI

Table of Contents vii

Overview 1

Hardware Component Instructions 1
Icons Instructions 3
LED Instructions 5
Power LED Indicators 5
User Interfaces 5
Phone User Interface 6
Web User Interface 8
Features Configurable via Phone/Web User Interface 8
Documentations 11

Getting Started 13

Phone Initialization 13
Signing into Skype for Business 14
PIN Authentication 15
User Sign-in 15
Web Sign-In 16
Signing in via PC 19
Multi-factor Authentication 19
Binding Your Mobile Phone with Online Account 20
Passing MFA 21
Signing Out of Skype for Business 25
Presence Status 26
Changing Presence Status 28
Resetting Presence Status 29
Touch Screen Display 29
Favorites Screen 31
History Screen 32
Contacts Screen 32

Menu Screen 33
Navigating Menus and Fields 33
Entering Data and Editing Fields 34
Using the Phone Keypad 34
Using the On-screen Keyboard 37
Phone Status 39
Viewing the Phone Status 39
Basic Network Settings 41
Configuring the DHCP 41
Configuring the Static IPv4 Address 42
Configuring the Static IPv6 Address 42

Customizing Your Phone 45

General Settings 45
Remember Password 45
Account Lock 47
Always Online 48
Screen Saver 49
Power Saving 51
Backlight 54
Contrast 55
Showing Full Name 56
Language 57
Time & Date 58
Administrator Password 60
Key as Send 61
Phone Lock 62
Audio Settings 67
Volume 67
Phone's Ringtone 67
Key Tone 68
Contact Management 69
Searching for Contacts 69
Skype for Business Directory 70
Local Directory 74
Placing Calls to Contacts 85
Call History Management 85
Viewing History Records 86
Placing a Call from History Records 86
Adding Contacts from History Records 87
Deleting History Records 88
Configuring Contact Avatar 88
Disabling History Record 88
Dial Plan 89

Dial-now 89
Delay Time for Dial-Now Rule 91

Basic Call Features 93

Switching among the Handset, Speakerphone and Headset Modes 94
Placing Calls 94
Placing a Call 94
Placing Multiple Calls 95
Placing a Call from the Search Results List 95
Dialing the Hotline Number 96
Redialing Numbers 97
Answering Calls 97
Answering When Not in Another Call 97
Answering When in Another Call 98
Answering Calls Automatically 98
Configuring the Call Waiting 99
Ending Calls 101
Call Mute 101
Call Hold/Resume 102
Music on Hold 102
Call Forward 103
Static Forwarding 103
Dynamic Forwarding 110
Team-Call Group 111
Team-Call Ringtone 112
Response Groups 113
Response Group Ringtone 113
Call Queue 114
Inbound Private Line 114
Private Line Tones 115
Call Transfer 116
Blind Transfer 117
Consultative Transfer 117
Skype for Business Conference 118
Initiating a Skype for Business Conference Call 118
Viewing the Conference Information 121
Viewing the Conference Participants 121
Managing the Conference Participants 122
Calendar 127
Setting up an Appointment in Outlook 127
Setting up a Meeting in Outlook 128
Setting up an Event in Outlook 129
Setting up a Skype Conference in Outlook 130
Using the Calendar 131

Parking and Retrieving Calls on the Skype for Business Server 141
Parking Skype for Business Calls 141
Retrieving Parked Skype for Business Calls 142
Group Call Pickup 142
Shared Line Appearance(SLA) 143
Viewing Shared Line Appearances 144
Answering SLA Calls 145
Placing a SLA Call on Hold 146
Resuming Held SLA Calls 146
Missed and Received Calls on Shared Lines 147
Boss-Admin 147
Assigning/Removing Delegates 147
Viewing the Delegates Group 149
Viewing the Boss Group 150
Boss-Line Ringtone 150
Delegates-call Ringtone 151
Using the Boss-Admin Feature 152
Voicemail 158
Leaving the Voicemail 158
Managing the Voicemail 159

Advanced Phone Features 163

E911 163
E911 Location Tip 163
Adding the Location Information 165
Selecting the Default Location 165
Viewing the Location Information 166
Emergency Call 166
USB Recording 167
Recording a Call 169
Stop Recording a Call 171
Playing Back Recorded Calls 172
Deleting the Recording 173
Viewing the Storage Space 174
Intercom 174
Configuring the Intercom 175
Configuring the Target Extension Number 176
Placing an Intercom Call 178
Multicast Paging 178
Sending RTP Stream 179
Receiving RTP Stream 180
Using Multicast Paging 181
Privacy Mode 182
Modifying the Privacy Mode from the Phone 183

Modifying the Privacy Mode from the Skype for Business Client 184
Hot Desking 185
Configuring the Hot Desking 185
Signing in as the Hot Desking User 186
Signing out from the Hot Desking User 187
Common Area Phone 188
Configuring a Common Area Phone 188
Signing into a Common Area Phone Account 189
Signing Out of a Common Area Phone 192
Branch Office Resiliency 192
Better Together over Ethernet 193
Getting Started with Better Together over Ethernet 194
Installing the Yealink Better Together over Ethernet Connector 194
Pairing Your Phone with Your Computer 198
Setting Your Phone as the Default Audio Playback for Your Computer 201
Enabling Better Together over Ethernet 202
Using Better Together over Ethernet 204
Disabling BToE on Your Phone 207
Exiting BToE on Your Computer 207
Uninstalling the Yealink BToE Connector 207

Using Optional Accessories with Your Phone 209

Using a Headset 209
Using an Analog Headset 209
Using the Wireless Headset Adapter EHS36 212
Using Bluetooth Feature 212
Connecting the Bluetooth USB Dongle BT40 213
Activating the Bluetooth Mode 213
Deactivating the Bluetooth Mode 214
Pairing and Connecting the Bluetooth Headset 214
Viewing the Bluetooth headset information 216
Editing the Bluetooth Device Information 216
Deleting the Paired Bluetooth Headset 217
Disconnecting the Bluetooth Headset 218
Connecting to the Wireless Network 218
Connecting the Wi-Fi USB Dongle WF40 218
Activating the Wi-Fi Mode 219
Connecting to the Wireless Network 219
Viewing the Wireless Network Information 222
Managing the Saved Wireless Network 223
Disconnecting the Wireless Network Connection 224
Deactivating the Wi-Fi Mode 224
Using an EXP40 Expansion Module 225

Troubleshooting.....227

Troubleshooting Solutions.....227

Regulatory Notices 237

Service Agreements 237
Limitations of Liability 237
Safety Instructions 237

Appendix A - Time Zones.....239

Overview

This chapter provides the overview of the T48S Skype for Business phone. Topics include:

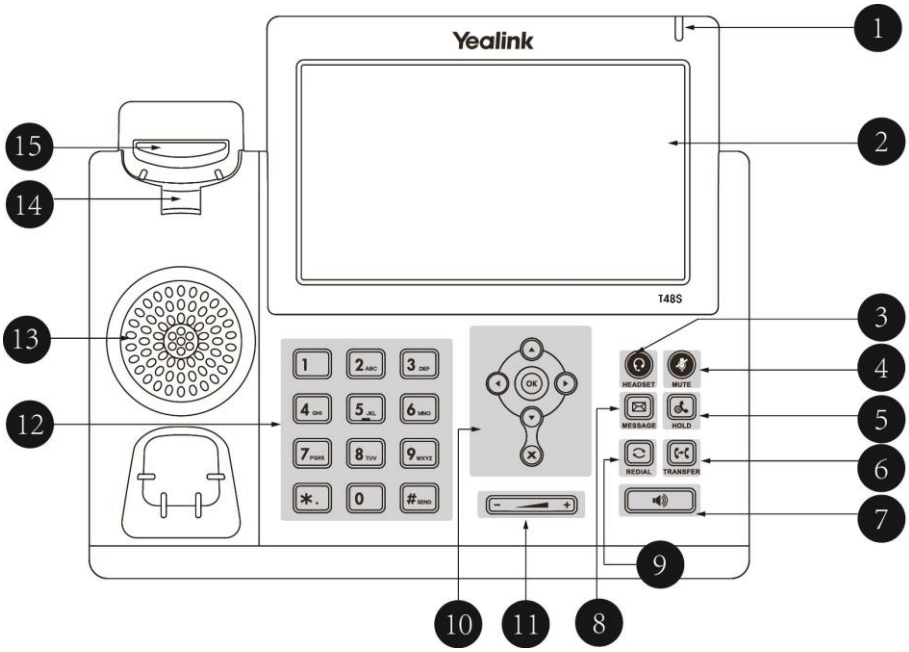
- Hardware Component Instructions
- Icons Instructions
- User Interfaces
- Documentations

For more information or assistance with your new phone, contact your system administrator.

Hardware Component Instructions

The main hardware components of the T48S Skype for Business phone are the touch screen and the keypad.

The following figure displays the hardware features on the T48S Skype for Business phone:



Hardware component instructions of the T48S Skype for Business phone are:

	Item	Description
①	Power LED Indicator	Indicates whether the phone is powered up and some feature statuses. • Receives an incoming call–Fast-flashing • Receives a voicemail–Slow-flashing
②	Touch Screen	The screen is touch-sensitive. Tap to select and highlight screen items. Shows information about your phone, such as calls, messages, soft keys, time, and date: • Default account • Call information–caller ID, call duration • Icons (for example,) • Missed call information or caller information of second incoming • Messages (for example, "Saving config file!") • Time and date
③	HEADSET Key	Toggles and indicates the headset mode. The key LED glows green when headset mode is activated.
④	MUTE Key	Toggles and indicates mute feature. The key LED glows red when the microphone is muted.
⑤	HOLD Key	Places a call on hold or resumes a held call.
⑥	TRANSFER Key	Transfers a call to another party.
⑦	Speakerphone Key	Toggles and indicates the hands-free (speakerphone) mode. The key LED glows green when hands-free (speakerphone) mode is activated.
⑧	MESSAGE Key	Accesses and manages voice mails.
⑨	REDIAL Key	Redials the most recently dialed number.
⑩	Navigation Keys	Scroll through menus, information or options displayed on the phone's screen.

	Item	Description
	OK Key	Confirms actions or answers incoming calls.
	Cancel Key	Cancels actions or rejects incoming calls.
⑪	Volume Key	Adjusts the volume of the handset, headset, speaker, ringer or media.
⑫	Dialpad	Allows you to enter numbers, letters and special characters as well as select menu items which are with index numbers.
⑬	Speaker	Provides hands-free (speakerphone) audio output.
⑭	Reversible Tab	Secures the handset in the handset cradle when the IP phone is mounted vertically. For more information on how to adjust the reversible tab, refer to *Yealink Wall Mount Quick Installation Guide for Yealink IP Phones*.
⑮	Hookswitch	• Lifts the handset from the handset cradle, then the hookswitch bounces and the phone connects to the line. • Resets the handset on the handset cradle, then the phone disconnects from the line automatically.

Icons Instructions

Phone icons displaying on the touch screen are described in the following table:

Icons	Description
	Local Favorites
	Call Mute
	Search for contacts
	Call Hold
	Invite a new call to the Skype for Business conference
	Forward incoming calls to voicemail
	Enter message center
	Received Calls
	Placed Calls

Icons	Description
	Missed Calls
	Bluetooth mode is on
	Bluetooth headset is both paired and connected
	Hands-free speakerphone mode
	Location is not set
	Voicemail
	Unread voicemail
	Read voicemail
	Auto Answer
	Enable the conference announcement
	Conference presenter
	Conference attendee
	Conference lock
	Ringer volume is 0
	Phone Lock
	Paging key
	Intercom key
	Shared Line Appearance
	USB flash drive is connected

Icons	Description
	Recording in progress
	Recording paused
	Set your phone as primary audio device for PC

LED Instructions

Power LED Indicators

Power Indicator LED

LED Status	Description
Red	The phone is initializing.
Fast-flashing red (300ms)	The phone is ringing.
Slow-flashing red (1s)	The phone receives a voicemail.
Red for 500ms and off for 3s alternately	The phone enters power-saving mode.
Off	The phone is powered off. The phone is idle. The phone is busy. The call is placed on hold. The call is muted.

Note The above introduces the default status of power LED indicator. You can configure it via web user interface. For more information, refer to *Yealink_Skype_for_Business_HD_IP_Phones_Administrator_Guide*.

User Interfaces

There are two ways to configure your IP phone:

- Via phone user interface
- Via web user interface

The phone user interface, being made up of keypad and touch screen, allows users to perform all call operations and change basic configuration settings directly on the phone. But if you want to access all configuration settings, you should use web user interface instead. In most cases, it is possible to configure your IP phone via both phone user interface and web user

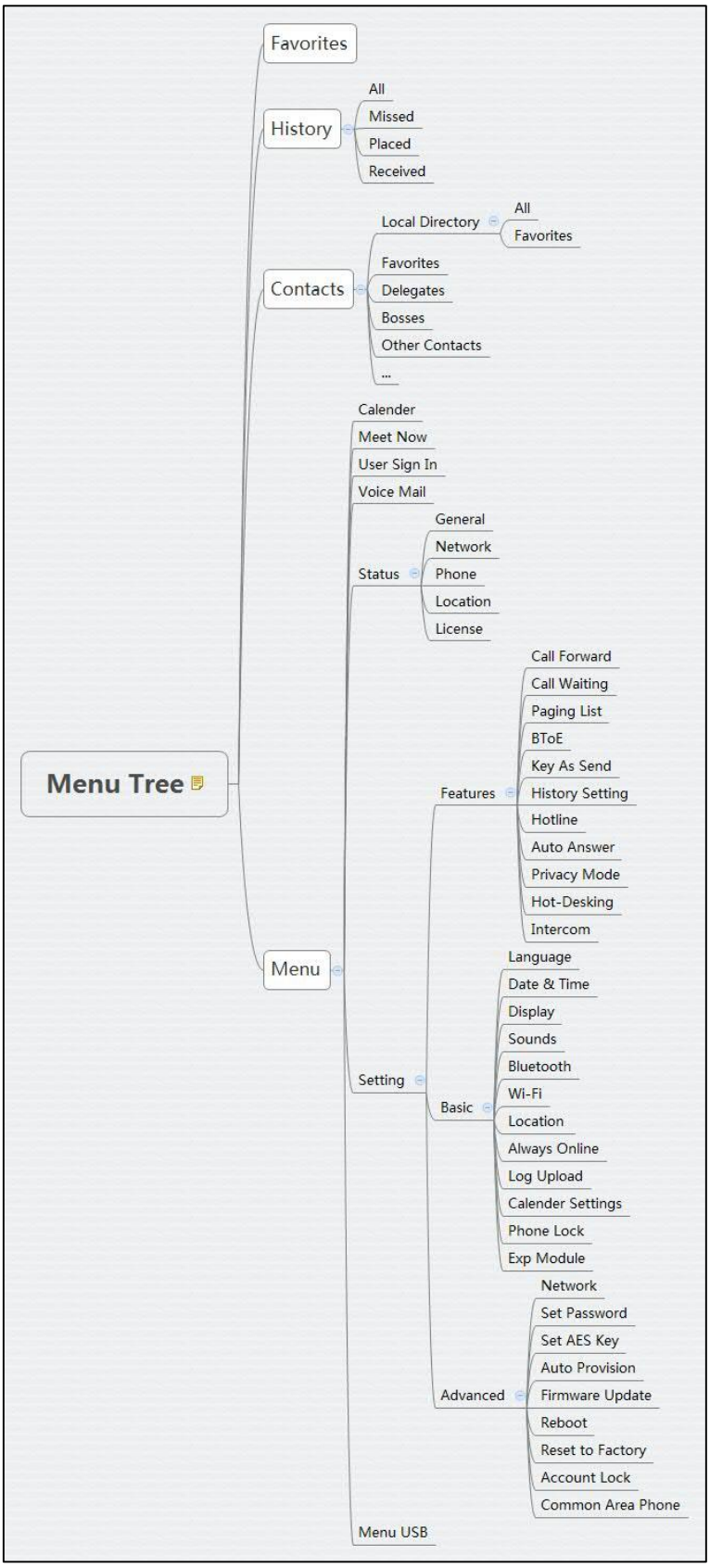
interface. While in some particular cases, only via phone user interface or via web user interface is available for you to operate or configure your IP phone. This guide mainly takes phone user interface as an example.

Phone User Interface

You can customize your phone by tapping **Menu** to access the phone user interface. The **Advanced** option is only accessible to the administrator, and the default administrator password is "admin" (case-sensitive). For more information on customizing your phone with the available options from the phone user interface, refer to Customizing Your Phone on page 45.

Menus are used to access information and configure the phone.

The figure below shows the phone's menus and submenus.



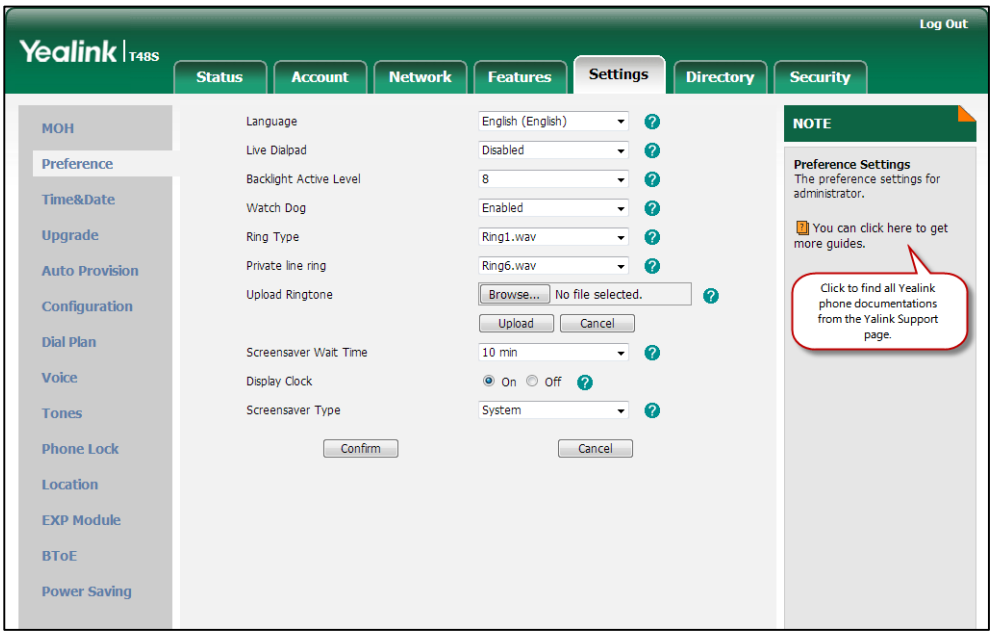
Web User Interface

In addition to the phone user interface, you can also customize your phone via web user interface. In order to access the web user interface, you need to know the IP address of your new phone by pressing the OK key on the phone when the phone is idle. Enter the IP address (for example, http://192.168.0.10 or 192.168.0.10 for IPv4; http://[2005:1:1:1:215:65ff:fe64:6e0a] or [2005:1:1:1:215:65ff:fe64:6e0a] for IPv6) in the address bar of a web browser on your PC. The default administrator user name and password are both "admin" (case-sensitive).

Navigating the Web User Interface

When you log into the web user interface successfully, the phone status is displayed on the first page of the web user interface. You can click each menu to customize or click **Log out** to log out of the web user interface.

The following figure is an example that navigates to **Settings**->**Preference**:



Features Configurable via Phone/Web User Interface

The main features you can customize for the IP phone via phone user interface and/or via web user interface are listed in the following table:

Features	Phone User Interface	We User Interface
Network Settings		
--Basic Network Settings		
--DHCP	√	√

Features	Phone User Interface	We User Interface
--IPv4	√	√
--IPv6	√	√
Registration		
--PIN Authentication	√	√
--User Sign-in	√	√
--Web Sign-in	√	√
--Sign in via PC	√	X
--CAP Provisioning	√	X
Basic Phone Settings		
--Remember Password	X	√
--Account Lock	√	√
--Always Online	√	√
--Screen Saver	√	√
--Power Saving	X	√
--Backlight	√	√
--Contrast	√	√
--Language		
--Phone Language	√	X
--Web Language	X	√
--Time & Date		
--SNTP Settings	√	√
--Manually Settings	√	√
--Time & Date Format	√	√
--Administrator Password	√	√
--Key As Send	√	√
--Phone Lock	√	√
--Audio Settings		
--Phone Ring Tone	√	√
--Key Tone	√	√
--Contact Management		

Features	Phone User Interface	We User Interface
--Local Directory	√	√
--Skype for Business Directory	√	X
--Call History Management		
--History Management	√	√
--History Settings	√	√
--Dial Now	X	√
Basic Call Features		
--Hotline	√	√
--Auto Answer	√	√
--Call Waiting	√	√
--Call Forward	√	X
--Call Transfer	√	X
--Calendar	X	√
--Call Park/Retrieve	√	X
--Voice mail	√	X
Advanced Phone Features		
--E911 Location Tip	X	√
-- USB Recording	√	X
--Intercom	√	√
--Multicast Paging		
--Paging List	√	√
--Multicast Listening	X	√
--Privacy Mode	√	X
--Hot Desking	√	√
--Common Area Phone	√	√
-Better Together over Ethernet	√	√
--Headset		
--Headset Prior	X	√
--Dual Headset	X	√

Features	Phone User Interface	We User Interface
--Bluetooth	√	√
--Wi-Fi	√	√
--Ext Keys	√	√

Note The table above lists most of the feature options. Please refer to the relevant sections for more information.

Documentations

The following table shows documentations available for the T48S Skype for Business phone.

Name	Contents	Where found	Language
Quick Start Guide	Basic call features and phone customizations	In the package/ On the website	English/Chinese
User Guide	Phone/Web user interface settings Basic call features and BToE (Better Together over Ethernet) feature	On the website	English/Chinese

Note You can download the latest documentations online: *http://support.yealink.com/documentFront/forwardToDocumentFrontDisplayPage*.

Getting Started

This chapter provides the following basic installation instructions and information for obtaining the best performance with the T48S Skype for Business phone. Topics include:

- Phone Initialization
- Signing into Skype for Business
- Signing Out of Skype for Business
- Presence Status
- Touch Screen Display
- Navigating Menus and Fields
- Entering Data and Editing Fields
- Phone Status
- Basic Network Settings

For more information or assistance with your new phone, contact your system administrator.

Phone Initialization

After your phone is powered on, the system boots up and performs the following steps:

Automatic Phone Initialization

The phone finishes the initialization by loading the saved configuration. The touch screen displays "Welcome Initializing...Please wait" during the initialization.

DHCP (Dynamic Host Configuration Protocol)

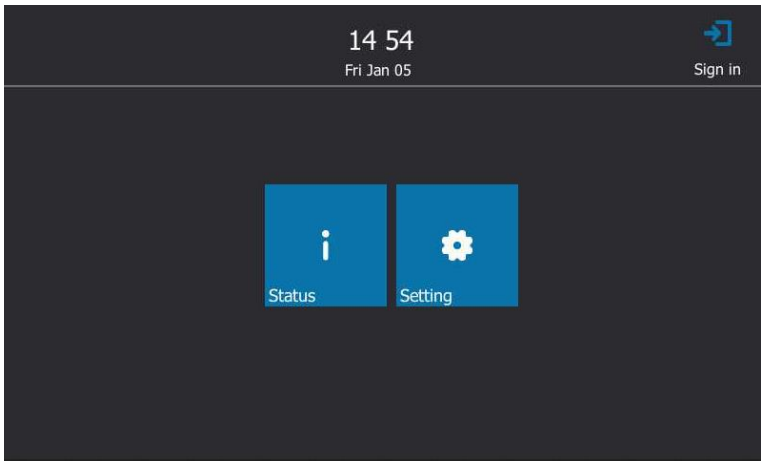
The phone attempts to contact a DHCP server in your network to obtain valid IPv4 network settings (e.g., IP address, subnet mask, default gateway address and DNS address) by default.

After the phone finishes the initialization, the sign-in screen appears on the touch screen.

Note If your network does not use DHCP, proceed to Basic Network Settings on page 41.

Signing into Skype for Business

After the initialization, the phone enters the menu screen. The touch screen will be shown as below:



In the menu screen, you can view phone status or phone settings.

Skype for Business users are authenticated by Microsoft Active Directory Domain Service. The following four sign-in methods are available:

- **PIN Authentication**: This method uses the user's phone number (or extension) and personal identification number (PIN) to sign into Skype for Business server. This sign-in method is only applicable to On-Premises account.
- **User Sign-in**: This method uses the user's credentials (sign-in address, user name, and password) to sign into Skype for Business server. This sign-in method is applicable to On-Premises account and Online account.
- **Web Sign-in:** This method uses the unique website shown on the phone to sign in. This sign-in method is only applicable to Online account.
- **Sign in via PC**: when your phone is paired to your computer using Better Together over Ethernet (BToE), use the Skype for Business client to sign in. This sign-in method is applicable to On-Premises account and Online account.

If the Skype for Business Server is configured to lock the phone. You need to configure a lock PIN at the initial sign-in. For more information, refer to Phone Lock on page 62.

Note If the phone reboots after successful login, the login credentials from the previous Sign-In will be cached. User can sign in successfully without reentering the credentials.

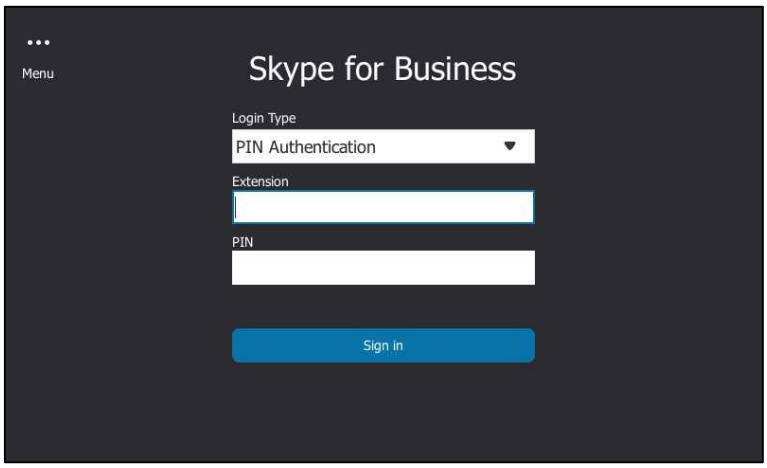
PIN Authentication

You can sign into Skype for Business on your phone with your PIN Authentication credentials. Your system administrator provides you with your PIN Authentication credentials.

Note The system administrator should configure network environment in advanced for PIN Authentication method. If not, your phone may not display this sign-in method. Contact your system administrator for more information.

To sign into Skype for Business Server using PIN Authentication method via phone user interface:

1. Tap **Sign in**.
2. Select **PIN Authentication**.



3. Tap the **Extension** field.

   The on-screen keyboard appears. For more information on how to use the on-screen keyboard, refer to Using the On-screen Keyboard on page 37.
4. Enter your phone number or extension (e.g., 4030) by the on-screen keyboard.
5. Enter your personal identification number in the **PIN** field.
6. Tap **Sign in**.

PIN Authentication method is configurable via web user interface at the path: **Account**->**Register**->**PIN Authentication**.

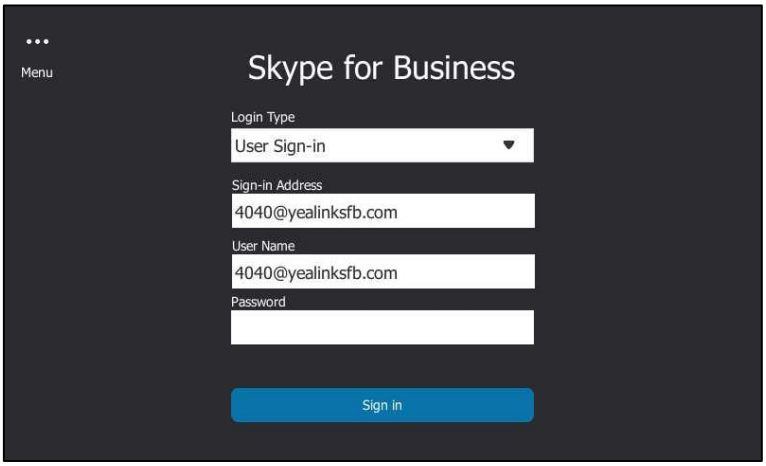
User Sign-in

You can sign into Microsoft Skype for Business on your phone with your login credentials, which includes your address, username, and password and all of these are provided by your system administrator.

To sign into the Skype for Business Server using User Sign-in method via phone user interface:

1. Tap **Sign in**.
2. Select **User Sign-in**.
3. Tap the **Sign-in Address** field.

   The on-screen keyboard appears. For more information on how to use the on-screen keyboard, refer to Using the On-screen Keyboard on page 37.
4. Enter your Skype for Business user's sign-in address (e.g., 4040@yealinksfb.com) in the **Sign-in Address** field by the on-screen keyboard.
5. Enter your Skype for Business user name (e.g., 4040@yealinksfb.com) in the **User Name** field.



6. Enter the sign-in password in the **Password** field.
7. Tap **Sign in**.

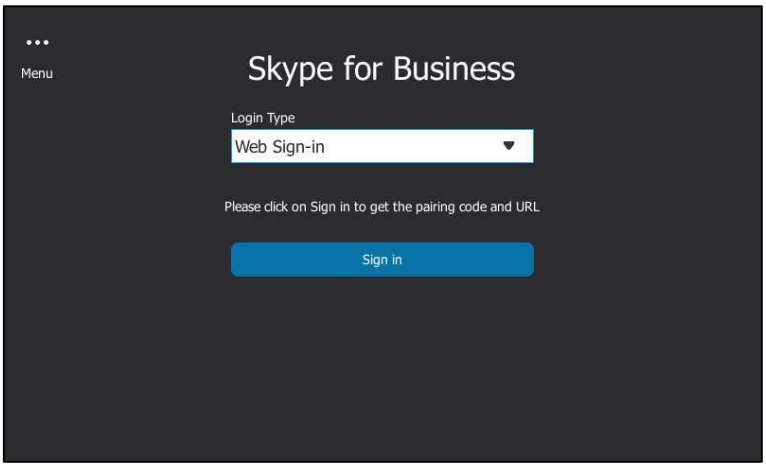
User Sign-in method is configurable via web user interface at the path: **Account**->**Register**-> **User Sign-in**.

Web Sign-In

You can sign in to a phone with your Skype for Business Online account using the Web Sign-In method via a web browser. Your system administrator provides you with your login credentials. Web Sign-In feature is enabled by default.

To sign into Skype for Business Server using Web Sign-in method via phone user interface:

1. Select **Web Sign-in** from the pull-down list of **Login Type**.

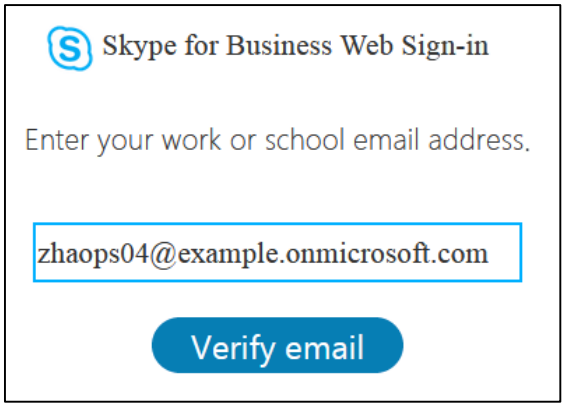


2. Tap **Sign in**.

   The pairing code and URL are shown on the screen.

3. On your computer, enter the URL into your web browser.

4. On the Skype for Business Authentication website, enter your email address (e.g., zhaops04@example.onmicrosoft.com) in the **Email address** field.

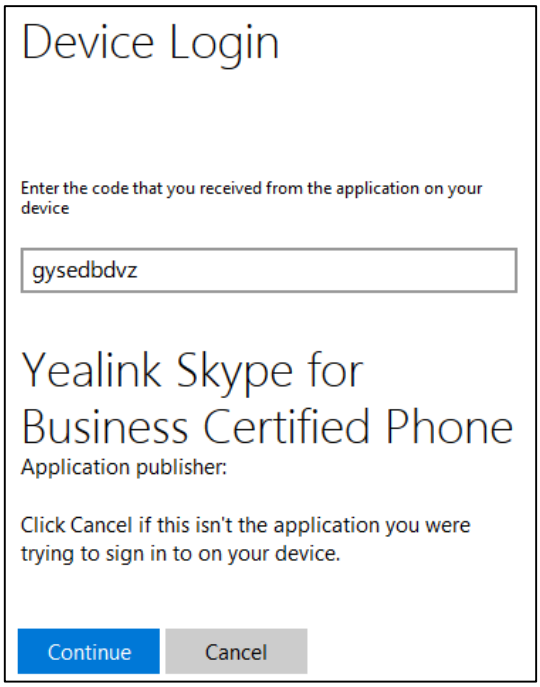


5. Click **Verify email** to verify the email address.

   The sign-in screen will appear if the email address is valid.

6. Enter your Online account and password.
7. (Optional) If you want to reduce the number of times you are asked to sign in, you can select **Yes** to stay signed in.
8. Click **Sign in**

9. Enter the pairing code generated on the phone (e.g., grvmk6bgr) into the web browser.



10. Click **Continue**.
11. Click the account to sign in.

    A confirmation message is displayed when your phone successfully signs into Skype for Business.

Web Sign-In feature is configurable via web user interface at the path: **Features**->**General Information**->**Web Sign in**.

Web Sign-In method is configurable via web user interface at the path: **Account**->**Register**->**Web Sign in**.

Signing in via PC

When your phone and your computer are paired using Better Together over Ethernet (BToE), you can sign into your phone using the Skype for Business client on your computer. For more information, refer to Using Better Together over Ethernet on page 204.

Multi-factor Authentication

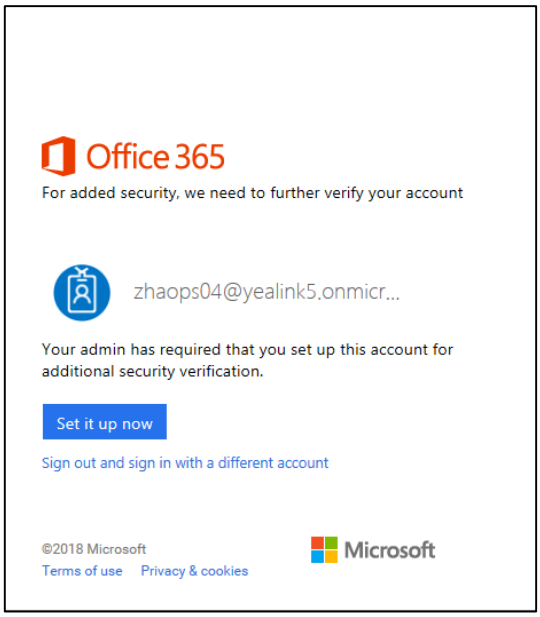
To guarantee the security of account, your system administrator may enable multi-factor authentication (MFA) feature for your online account. In this case, you need to pass a 2-step verification at the initial sign-in. It means that you should sign in with your password and a verification sent to your phone.

To use MFA feature, you should bind your mobile phone with online account first.

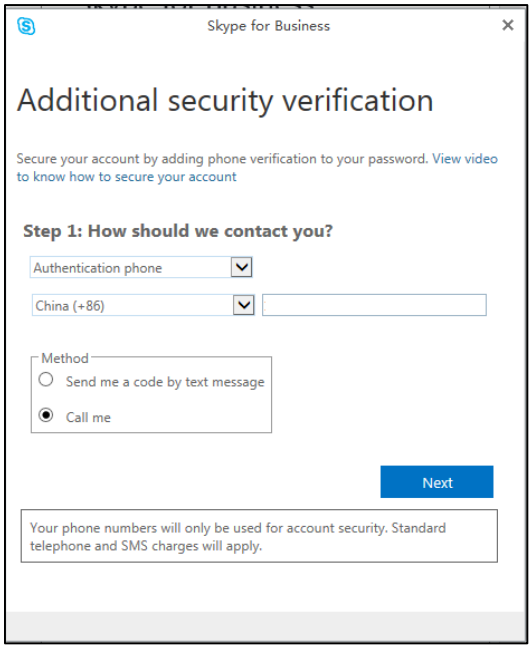
Binding Your Mobile Phone with Online Account

To bind your mobile phone with online account:

1. On the Skype for Business Client, enter your online account, and then click **Sign in**.
2. Enter your sign-in password, and then click **Sign in**.
3. Click **Set it up now**.



4. Enter your mobile phone number in the corresponding field and select an authentication method.



5. Click **Next**.
6. Depend on your choice:

- If you select **Call me**:
  1) Your mobile phone will receive a call and you need to follow the voice prompt to authenticate.
  2) Click **Done.**
- If you select **Send me a code by text message**:
  1) Enter the correct verification code received from your mobile phone in the corresponding field.
  2) Click **Verify**.

Your mobile phone will be bound with your online account.

Passing MFA

MFA applies to user Sign-in, web sign-in and sign in via PC methods. You can use Voice call verification or Text verification to log in and then use the Skype for Business phone. The Skype for Business phone will use the authentication mode you set on the Skype for Business client by default.

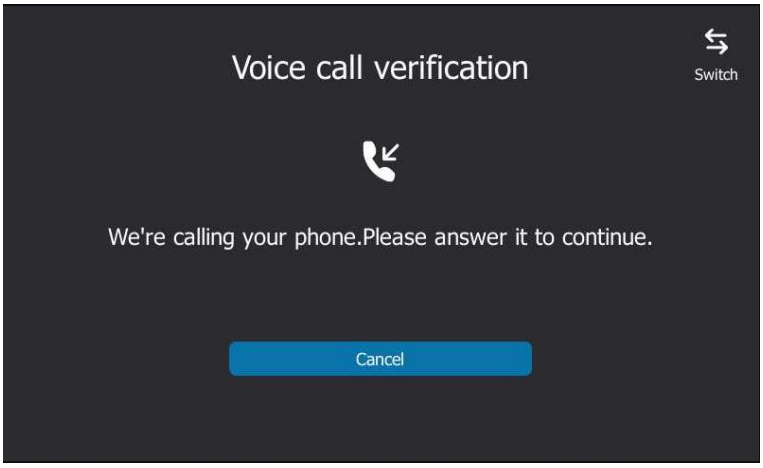
Passing MFA When Using User Sign-in or Sign in via PC

To pass MFA when using User Sign-in or Sign in via PC method via phone user interface:

1. Using **User Sign-in** or **Sign in via PC** method to sign into Skype for Business.

   For more information, refer to User Sign-in on page 15 or Signing in via PC on page 19.

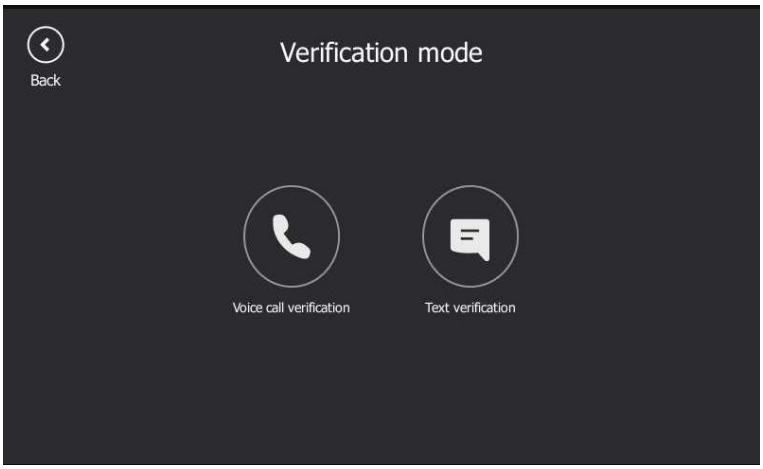
   Your phone enters the verification screen.
2. Depend on the authentication mode you selected on the Skype for Business client:
   - If you select **Call me**, your mobile phone will receive a call and the Skype for Business phone shows as following:



Answer the call and follow the voice prompt to complete authentication.

If you want to change to text verification method, do the following:

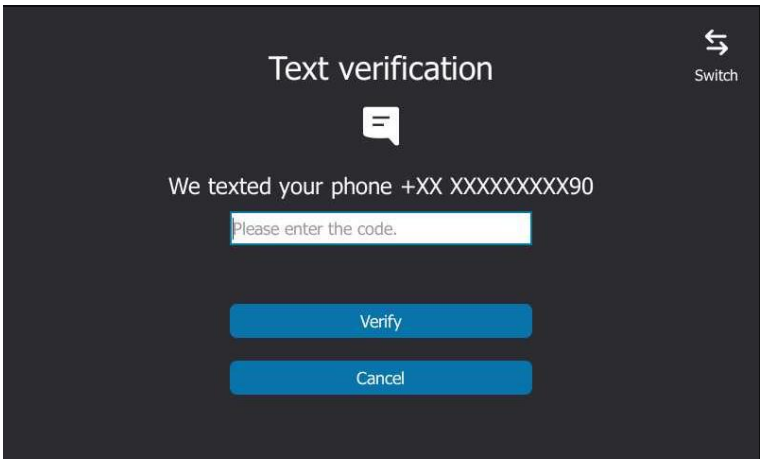
1) Tap **Switch** on the verification screen.



2) Select **Text verification**.

3) Enter the verification code received in the corresponding field and then tap **Verify**.

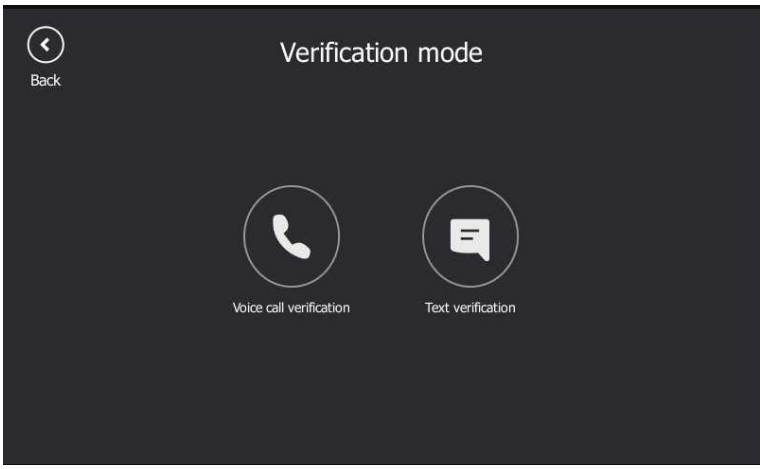
– If you select **Send me a code by text message**, your mobile phone will receive a verification code and the Skype for Business phone shows as following:



Enter the verification code received in the corresponding field and then tap **Verify**.

If you want to change to voice call verification method, do the following:

1) Tap **Switch** on the verification screen.



2) Select **Voice call verification**.

3) Answer the call and follow the voice prompt to complete authentication.

Your phone will sign into Skype for Business Server successfully.

Passing MFA When Using Web Sign-in

To pass MFA when using Web Sign-in method via web user interface:

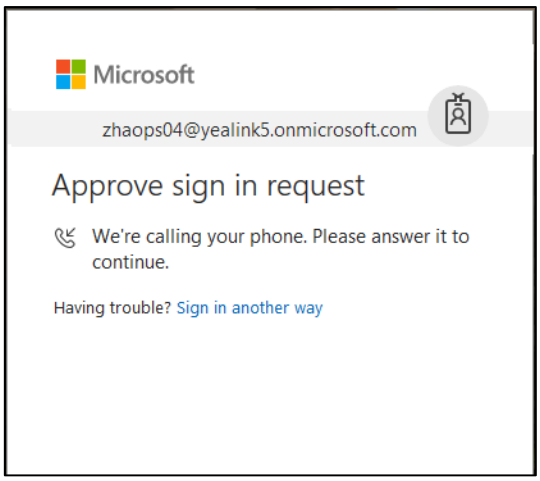
1. Using **Web Sign-in** method to sign into Skype for Business.

For more information, refer to Web Sign-In on page 16.

Your web browser enters the verification screen.

2. Depend on the authentication method you select on the Skype for Business client:

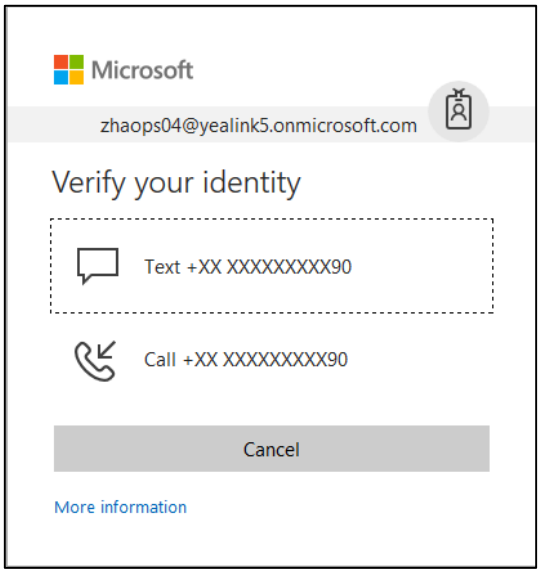
– If you select **Call me**, your mobile phone will receive a call:



Answer the call and follow the voice prompt to complete authentication.

If you want to change to text verification method, do the following:

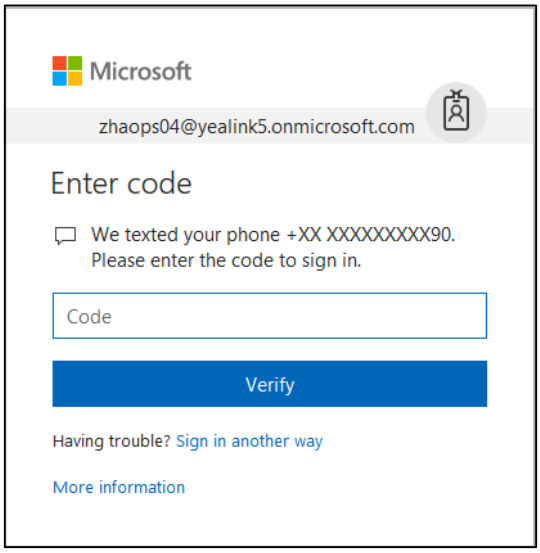
1) Click **Sign in another way** to switch authentication method.



2) Click **Text+XX XXXXXXXXX90**.

3) Enter the correct code in the corresponding field and click **Verify**.

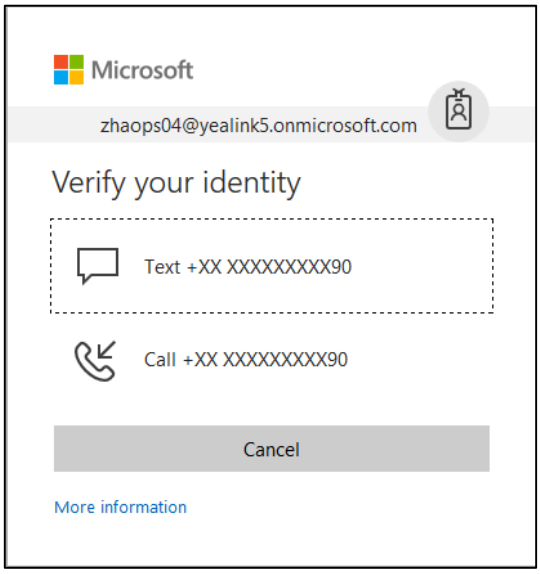
– If you select **Send me a code by text message**, your mobile phone will receive a verification code:



Enter the correct code in the corresponding field and click **Verify**.

If you want to change to voice call verification method, do the following:

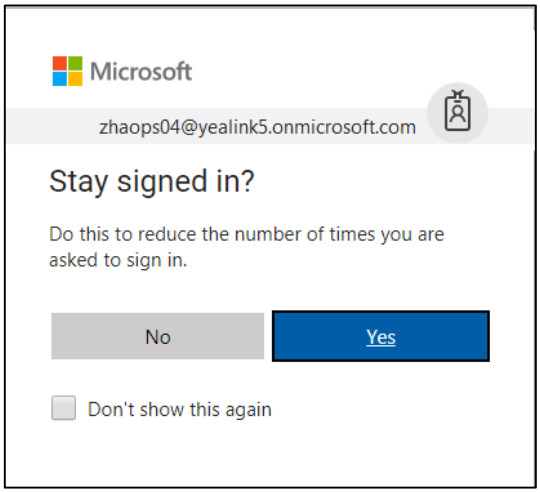
1) Click **Sign in another way** to switch authentication method.



2) Click **Call+XX XXXXXXXXX90**.

3) Answer the call and follow the voice prompt to complete authentication.

Your computer prompts the following:



3. You can click **Yes** to reduce the number of times you are asked to sign in.

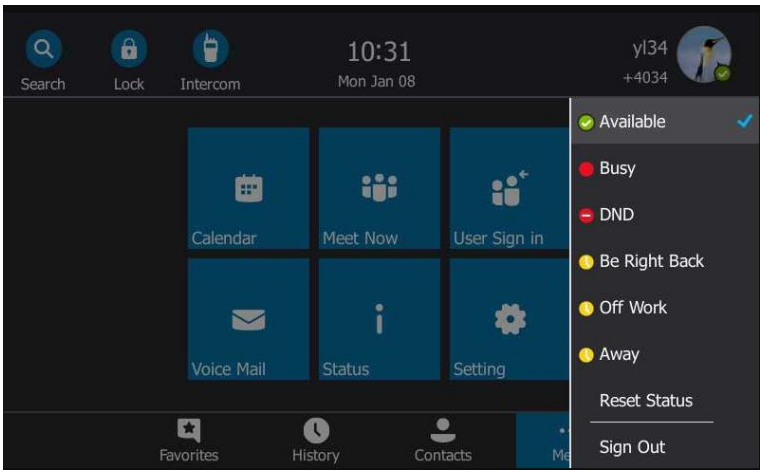
Your phone will sign into Skype for Business Server successfully.

Signing Out of Skype for Business

To sign out of Skype for Business Server:

1. Tap your avatar at the top-right corner of the touch screen.

2. Select **Sign Out** from the pull-down list of status.



The touch screen will prompt "Are you sure to sign out?".

3. Tap the **OK** soft key.

   The phone signs out of Skype for Business Server.

After you sign out of Skype for Business, the account-related features (call or view your Skype for Business contacts, etc.) are not available. However, you can still use other available features.

Signing out via web user interface at the path: **Account**->**Register**->**Sign Out**.

Presence Status

Your presence information is a quick way for other people to check your status. Presence is automatically set based on your Outlook calendar, but you can change it manually if you want to. For example, when you are busy, you can change your status to DND to avoid being disturbed.

The following table describes what each status means, and which ones you can set by yourself.

If your presence is	It means	How this status gets set
Available	You are online and available to be contacted.	Set automatically for you based on your phone activity or Outlook calendar. You can also set this status when you want others to know you're in your office.
Be Right Back	You are stepping away from the phone for a few moments.	You can set your presence to this anytime you want.
Inactive	Your phone has been idle for a specified period of time (set by you).	Set automatically for you when your phone has been idle for a specified time (5 minutes by default).
Away	Your phone has been idle for a specified	Set automatically for you when your

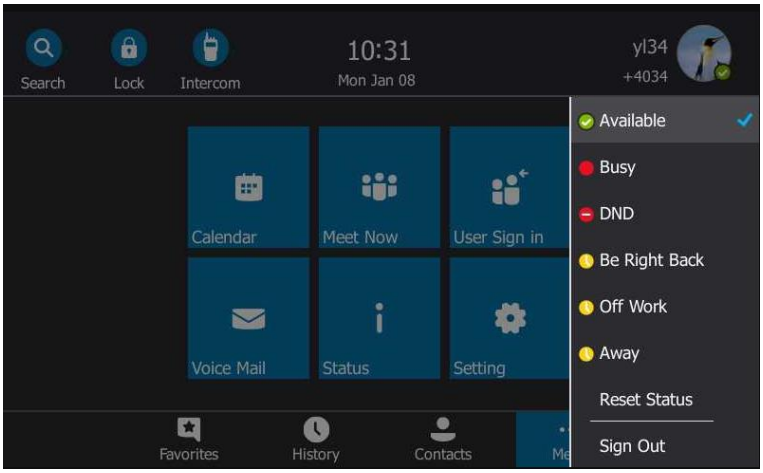
If your presence is	It means	How this status gets set
	period of time (set by you).	phone has been inactive for a specified time (5 minutes by default). You can also set your presence to this anytime you want.
Off Work	You are off duty and not available to be contacted.	You can set your presence to this anytime you want.
Busy	You are busy and don't want to be interrupted.	Set automatically for you based on your Outlook calendar. You can also set your presence to this anytime you want.
Urgent interruptions only	You are busy and only the specified contact can all you (the contact should be configured in advance).	You can see this status for a contact whose status is Do not Disturb, and the contact has configured your privacy relationship to be Workgroup.
In a call	You are in a Skype for Business call (a two-way audio call) and don't want to be disturbed.	Set automatically for you based on your phone activity.
In a meeting	You are in a meeting and don't want to be disturbed.	Set automatically for you based on your Outlook calendar.
In a conf call	You are in a Skype for Business conference call (a Skype for Business meeting with audio) and don't want to be disturbed.	Set automatically for you when you have joined a conference call or a meet now session.
Do Not Disturb	You don't want to be disturbed, but the conversation notifications sent by someone in your workgroup can still reach you.	If you manually set it to Do Not Disturb, the incoming call will be forwarded to your voicemail directly. But you can still receive calls from the workgroup. You can set your presence to this anytime you want.
Presenting	You are giving a presentation and can't be disturbed.	Set automatically for you when you are presenting using your Skype for Business client.
Blocked	You want to prevent a	You can see this status for a contact who

If your presence is	It means	How this status gets set
	contact from reaching you via Skype for Business	has assigned by you to be a blocked contact using the Skype for Business client.
Out of Office	You are out of the office.	Set automatically for you based on your Outlook calendar.
	You have set the automatic reply feature in Outlook.	Set automatically for you when you *set automatic replies in Outlook*.
Offline	You are not signed in or you'll appear as Offline to the person whom you've blocked from seeing your presence.	Set automatically for you when you log off your phone. Or you'll appear as Offline to people whom you've blocked from seeing your presence.
Unknown	Your presence can't be detected.	This status might appear to contacts who are not using Skype for Business.

Changing Presence Status

To change your presence status:

1. Tap your avatar at the top-right corner of the touch screen.



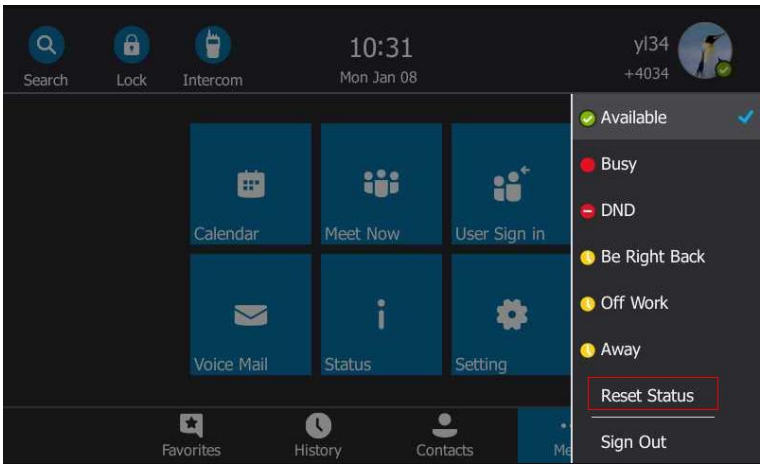
2. Select the desired status from the pull-down list.

   The presence status will be changed on the phone and be synchronized to the Skype for Business Server.

Resetting Presence Status

To reset your presence status to the default:

1. Tap your avatar at the top-right corner of the touch screen.
2. Select **Reset Status** from the pull-down list.



Your status will be reset to "Available".

Touch Screen Display

If the phone has successfully started up, and a Skype for Business user signs into the Skype for Business Server on the phone, the touch screen will be shown as below:

No.	Name	Description
1	Screen Title Area	• Shows the **Search** icon. For more information, refer to Placing a Call from the Search Results List on page 95. • Shows the **Lock** icon. For more information, refer to Phone Lock on page 62. • Shows the **Paging** icon. For more information, refer to Multicast Paging on page 178. • Shows the **Intercom** icon. For more information, refer to Intercom on page 174. • Shows the time and date. • Shows the account.
2	Main Window	Displays the **Favorites**, **History**, **Contacts** or **Menu** screen content.
3	Shortcut Keys	Tap the **Favorites** soft key to enter the **Favorites** screen and view favorite contacts. Tap the **History** soft key to enter the **History** screen and view call history. Tap the **Contacts** soft key to enter the **Contacts** screen and view contacts. Tap the **Menu** soft key to enter the **Menu** screen.

When the phone missed calls, a number icon (indicating the number of missed calls) will appear on . If you tap (indicating 1 missed call), the number icon will disappear.

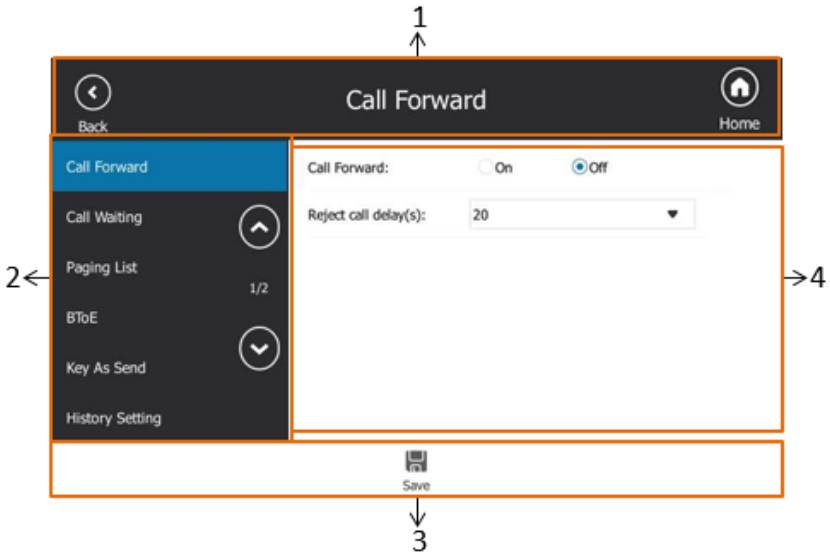
When the phone receives voicemails, a number icon (indicating the number of the voicemails you haven't retrieved) will appear on .

Note

If the phone is in the History screen when the phone missed calls, the will not appear a number icon.

If the phone is in the Menu screen when the phone receives voice mails, the will not appear a number icon.

Configuration Screen Display

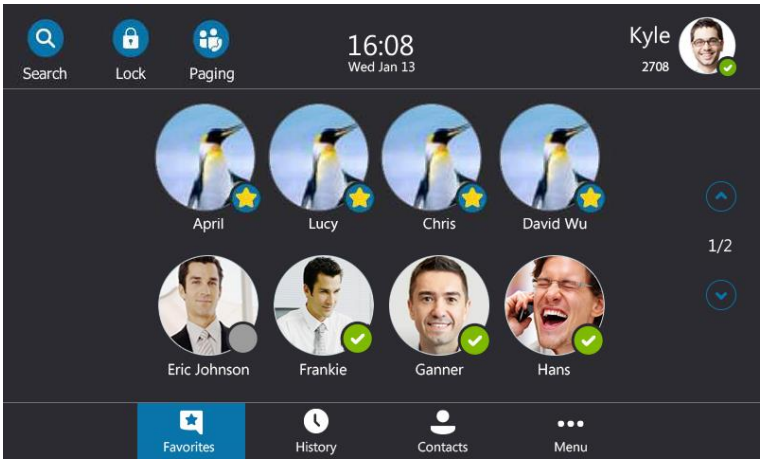


No.	Name	Description
1	Screen Title Area	• Tap to return to the previous screen • Shows the screen title • Tap to return to the idle screen
2	Menu Tree Area	Displays menu items. You can tap the desired menu item to enter the corresponding feature configuration screen.
3	Soft Keys	Label automatically to identify their context-sensitive features.
4	Configuration Area	Displays configuration items of the highlighted menu item in the menu tree area. You can configure feature settings in this area.

Favorites Screen

The phone enters the **Favorites** screen by default after login.

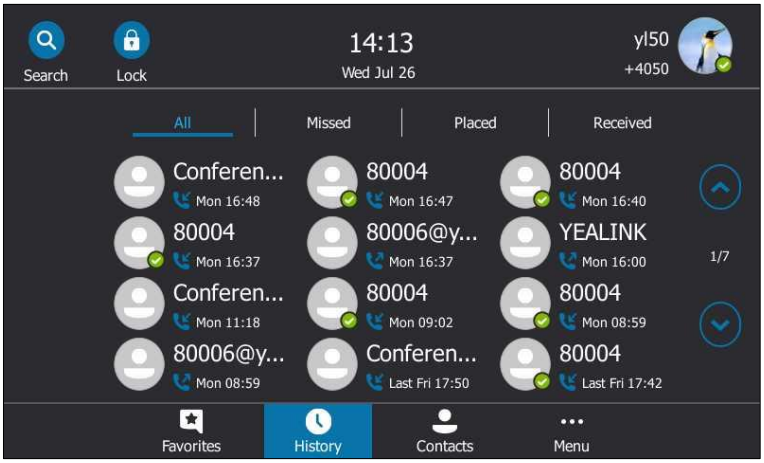
The main window displays the avatar, display name and status icon of the favorite contact. When the number of favorite contacts is more than 8, the page switch keys will appear on the right side of the main window. You can tap , or press , to turn pages to view other favorites.



History Screen

Tap the **History** soft key to enter the History screen. You can view **All**, **Missed**, **Placed** and **Received** lists.

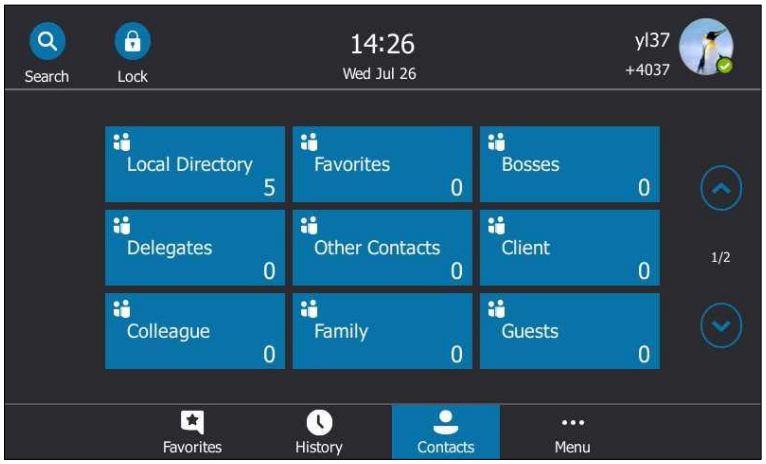
When the number of call records in each list is more than 12, the page switch keys will appear on the right side of the main window. You can tap , or press , to turn pages to view other records.



Contacts Screen

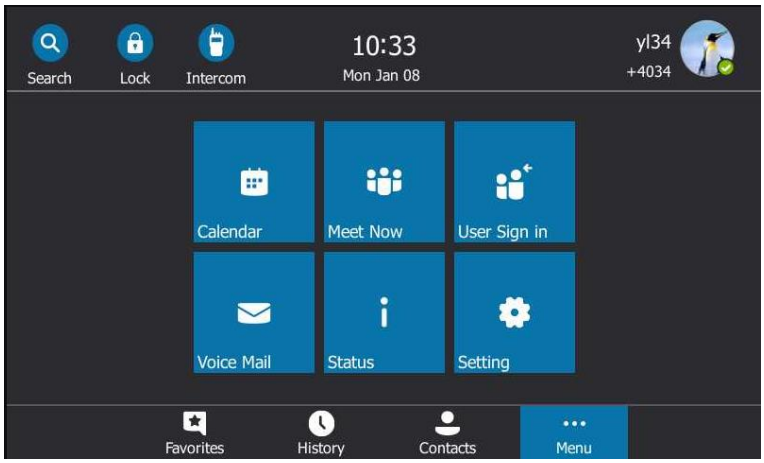
Tap the **Contacts** soft key to enter the Contacts screen.

The main window displays the groups and the number of members. When the number of groups is more than 9, the page switch keys will appear on the right side of the main window. You can tap , or press , to turn pages to view other groups.



Menu Screen

Tap the **Menu** soft key to enter the Menu screen.



Navigating Menus and Fields

To navigate menus and fields, you can:

- Tap soft keys on the touch screen.
- Tap menu items, fields, and arrows on the touch screen.
- Press keys on the phone keypad or tap the on-screen keyboard to enter desired numbers or characters.

Note The menu system will automatically exit to the idle screen after 60 seconds of inactivity.

To operate your phone, follow these tips:

If you want to	Then you can
Enter the main menu.	Tap the **Menu** soft key.
Go back to the previous menu.	Tap or press .
Select an item.	Tap the item. Scroll to the item by pressing or .
Scroll through items page by page.	Press , or tap , to scroll through items page by page.
Scroll through values for a field.	Select the field's highlighted gray box. From the pull-down list, tap or to scroll through values page by page, or press or to scroll values one by one.
Select a value for a field.	From the pull-down list, tap the value or scroll to the value and then press .

Entering Data and Editing Fields

You can enter data and edit fields using the phone keypad or using the on-screen keyboard.

Using the Phone Keypad

Phone keypad can provide different characters when using the **2aB**, **abc**, **ABC** or **123** input mode. You can change the following input modes to enter data and edit fields on your phone. When your phone keypad matches the input mode, you can press the keypad repeatedly to view the character (or numbers) options and stop to select. When the character (or numbers) you want to enter displays in the field, wait one second, and then enter the next character (or numbers).

The following table lists the input modes and character (or numbers) options for the keypad:

Input Mode / Keypad	2aB	abc	ABC	123
1	1			1
2 ABC	2abcABC	abc2äæåàá âãç	ABC2ÄÆÅÀ ÁÂÃÇ	2
3 DEF	3defDEF	def3èéêëð	DEF3ÈÉÊËÐ	3

Keypad \ Input Mode	2aB	abc	ABC	123
4 GHI	4ghiGHI	ghi4ìíîï	GHI4ÌÍÎÏ	4
5 JKL	5jklJKL	jkl5£	JKL5£	5
6 MNO	6mnoMNO	mno6öøòó ôõñ	MNO6ÖØÒ ÓÔÕÑ	6
7 PQRS	7pqrsPQRS	pqrs7ßS	PQRS7S	7
8 TUV	8tuvTUV	tuv8ùúûü	TUV8ÙÚÛÜ	8
9 WXYZ	9wxyzWXYZ	wxyz9ýÞ	WXYZ9ÝÞ	9
0	0	space	space	0
* .	*.,'?!\- ()@/:_;+&% =<> £$¥¤[]{}~^ ¡¿§#"|	*.,'?!\- ()@/:_;+&% =<> £$¥¤[]{}~^ ¡¿§#"|	*.,'?!\- ()@/:_;+&% =<> £$¥¤[]{}~^ ¡¿§#"|	.*:/@[]
# SEND	#	#	#	#

To enter or edit data:

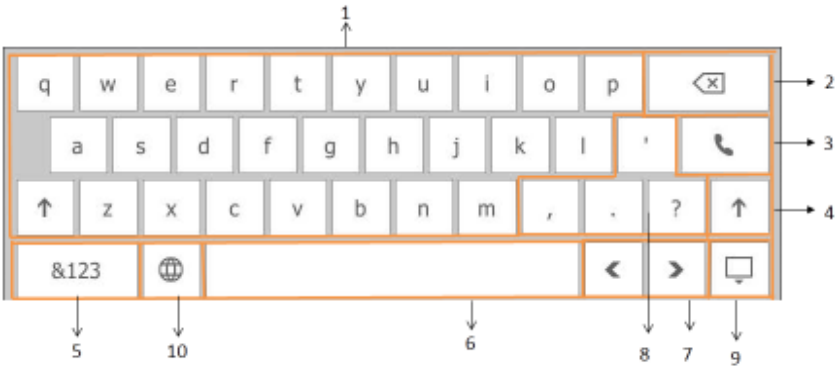
Do one of the following:

If you want to	Then you can
Enter only digits (1), uppercase (A) characters, lowercase (a) characters, or alphanumeric (2aB) characters.	Press a keypad key one or more times (depending on what input mode you're in) to enter the characters that is displayed on the keypad key. You can tap abc IME or the abc key one or more times to switch among uppercase (**ABC** soft key), alphanumeric (**2aB** soft key), numeric (**123** soft key) and lowercase (**abc** soft key) input modes. For example, if the input mode is **ABC**: - To enter "A", press 2 ABC once. - To enter "B", press 2 ABC twice quickly. - To enter "C", press 2 ABC three times quickly. - To enter "2ÄÆÅÀÁÂÃÇ", press 2 ABC more than

If you want to	Then you can
	three times quickly. **Note**: When you are in the uppercase (**ABC** soft key) or lowercase (**abc** soft key) input mode, 1 is not available.
Enter special characters.	Press the keypad key # or *. , or long press 0 . **For 0 Key:** - If it is the uppercase (**ABC** soft key), or lowercase (**abc** soft key) input mode, it will provide the space character. - If it is the numeric (**123** soft key) or alphanumeric (**2aB** soft key) input mode, it will only provide the digit 0. - Long press 0 on the pre-dialing screen will provide the special character "+". **For # key:** - It only provides the pound character "#". **For *. key:** - If it is the uppercase (**ABC** soft key), lowercase (**abc** soft key) or alphanumeric (**2aB** soft key) input mode, it will provide the following special characters: **.,?!\-()@/:_;+&%=<>£$¥¤[]{}~^¡¿§#"|**. - If it is the numeric (**123** soft key) input mode, it will provide the following special characters: **.*:/@[]**.
Delete text you entered.	Press ◀ or ▶ to position the cursor to the right of the text you want to delete, and then tap the **Delete** soft key or ✕ to delete one character at a time. You can also press ⌫ to delete one character in the sign-in screen and phone unlock screen.
Delete an entire field of data.	Swipe your finger to the left or right to select the entire field of data, so that the data is highlighted, and then tap the **Delete** soft key or ⌫ .

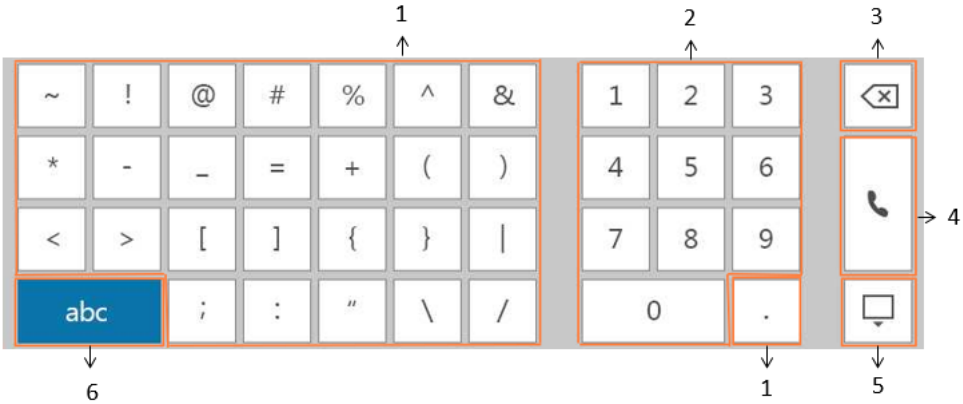
Using the On-screen Keyboard

Before using the on-screen keyboard to enter data, you need to know the function of the keys on the on-screen keyboard. The T48S Skype for Business phone supports three kinds of input modes: English, Deutsch and French mode.



No.	Item	Description
1	26 English Letters	• Tap to enter letters. • Tap and hold a key then choose one of the options to enter an alternate character.
2	Delete key	• Tap to delete the entered characters one by one. • Long tap to delete two or more characters.
3	Dial key	Place a call
4	Shift key	Switch between the uppercase input mode and the lowercase input mode
5	&123	Tap to switch to the numeric&symbolic input mode.
6	Space key	Enter spaces
7	Left and right arrow keys	Position the cursor
8	Special characters	Enter special characters
9		Hide the on-screen keyboard
10		Tap to switch among three languages in order, or long tap to select a desired language.

When you tap **&123**, the on-screen keyboard is shown as below:



No.	Item	Description
1	Special characters	Enter special characters
2	Numbers	Enter numbers
3	Delete key	• Tap to delete the entered characters one by one. • Long tap to delete two or more characters.
4	Dial key	Place a call
5		Hide the on-screen keyboard
6	abc	Tap to switch to the lowercase input mode

To enter or edit data:

1. Tap the field.

2. Do one of the following:

If you want to	Then you can
Enter lowercase characters	Tap the lowercase characters.
Enter uppercase characters	Tap ↑ to switch to the uppercase input mode, and then tap the uppercase characters.
Enter numbers	Tap **&123**, and then tap the numbers you want to enter.
Enter special characters	Tap **&123**, and then tap the characters you want to enter.
Delete text you entered.	Tap ❮ or ❯ to position the cursor to the right of the text you want to delete, and then tap ⌫ .
Delete an entire field of data.	Swipe your finger to the left or right to select the entire field of data, so that the data is

If you want to	Then you can
	highlighted, and then tap .

You can tap or to hide the on-screen keyboard, or tap to reopen the on-screen keyboard.

Phone Status

You can view phone status via phone user interface or web user interface.

Available information of phone status includes:

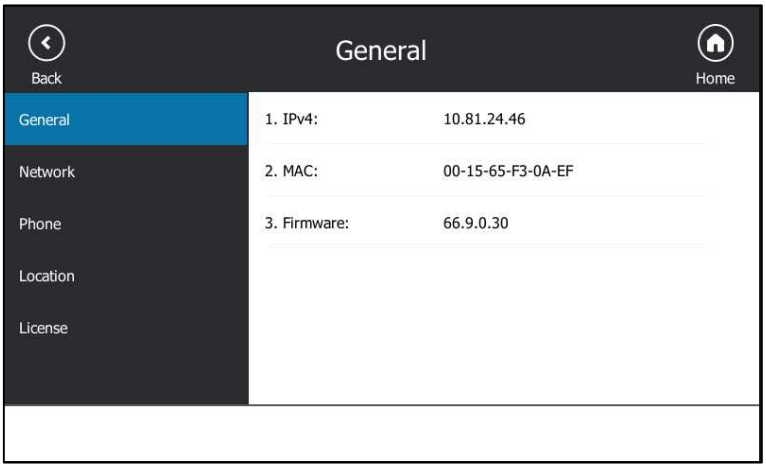
- General information (IPv4 address or IPv6 address, MAC address and firmware version).
  - IPv4 uses a 32-bit address.
  - IPv6 is an updated version of the current Internet Protocol to meet the increasing demands for unique IP addresses, using a 128-bit address.
- Network status (IPv4 status or IPv6 status, IP mode, and phone MAC address).
- Phone status (product name, hardware version, firmware version, product ID, phone MAC address and device certificate status).
- Location information (location is set to assist emergency responder)
- License (device license status and validity)

Viewing the Phone Status

You can view phone status via phone user interface or web user interface.

To view the phone status via phone user interface:

1. Press (OK), or tap **Menu**->**Status**.



2. Tap the desired item to view the specific information.

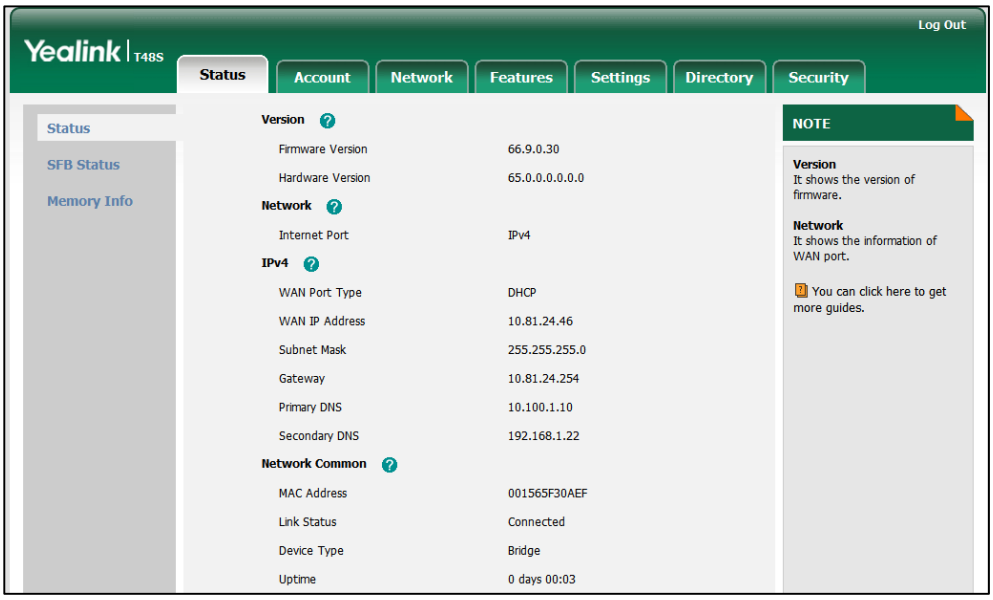
To view the phone status via web user interface:

1. Open the web browser on your PC.
2. Enter the IP address in the browser's address bar, and then press the **Enter** key.

   For example, "http://192.168.0.10" for IPv4 or "http://[2005:1:1:1:215:65ff:fe64:6e0a]" for IPv6.
3. Enter the user name (admin) and password (admin) in the login page.

4. Click **Confirm** to login.

The phone status is displayed on the first page of the web user interface.



Basic Network Settings

In order to use your phones, you must set up basic network. You can use DHCP or configure a static address to connect your phone to the network. If your phone cannot contact a DHCP server, you need to configure network settings manually. The phone can support either or both IPv4 and IPv6 addresses.

Note

The wrong network settings may result in inaccessibility of your phone and may also have an impact on your network performance. For more information on these parameters, contact your system administrator.

Configuring the DHCP

You can configure DHCP for IPv4 or IPv6. The following takes IPv4 as an example:

To configure the DHCP via phone user interface:

1. Tap **Menu->Setting**->**Advanced** (default password: admin) ->**Network**->**WAN Port**.
2. Select the desired value (**IPv4**, **IPv6** or **IPv4 & IPv6**) from the pull-down list of **IP Mode**.
3. Tap **IPv4**.
4. Select **DHCP** from the pull-down list of **Type**.
5. Tap to accept the change.

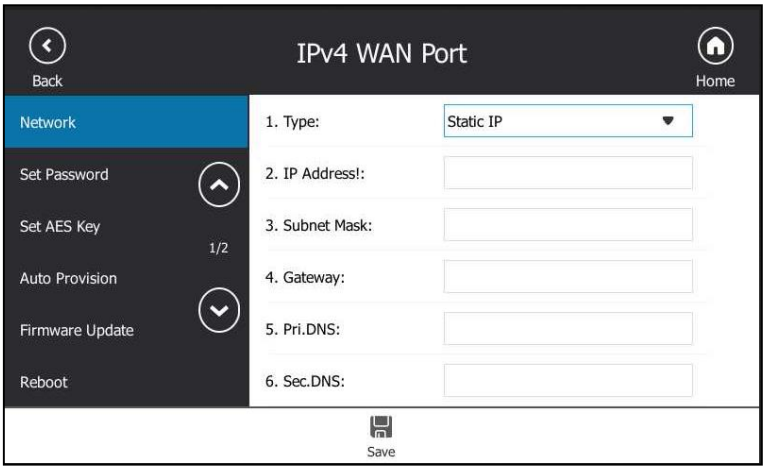
If you want to configure DHCP for IPv6, select **IPv6** or **IPv4 & IPv6** from the **IP Mode** in the step 2.

DHCP is configurable via web user interface at the path **Network**->**Basic**.

Configuring the Static IPv4 Address

To configure a static IPv4 address via phone user interface:

1. Tap **Menu->Setting**->**Advanced** (default password: admin) ->**Network**->**WAN Port**.
2. Select **IPv4** or **IPv4 & IPv6** from the pull-down list of **IP Mode**.
3. Tap **IPv4**.
4. Select **Static IP** from the pull-down list of **Type**.



5. Enter the desired value in the **IP Address**, **Subnet Mask**, **Gateway**, **Pri.DNS** and **Sec.DNS** field respectively.
6. Tap to accept the change.

   The touch screen will prompt "Reboot now?"
7. Tap the **OK** soft key.

   This configuration will take effect after a reboot.

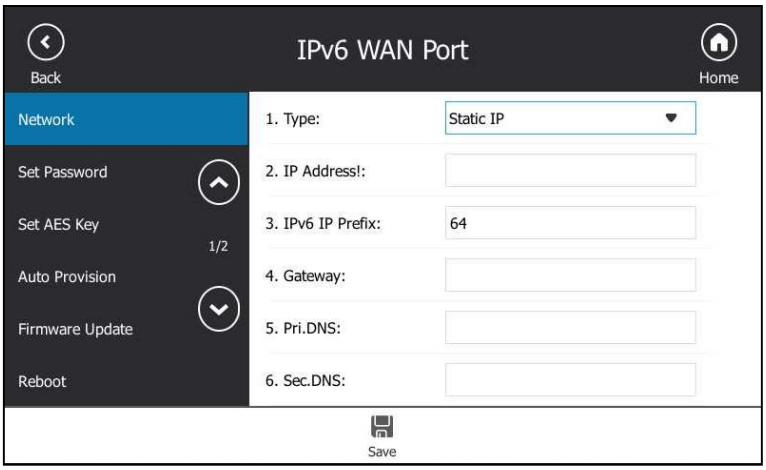
Static IPv4 address is configurable via web user interface at the path **Network**->**Basic**.

Configuring the Static IPv6 Address

To configure a static IPv6 address via phone user interface:

1. Tap **Menu->Setting**->**Advanced** (default password: admin) ->**Network**->**WAN Port**.
2. Select **IPv6** or **IPv4 & IPv6** from the pull-down list of **IP Mode**.
3. Tap **IPv6**.

4. Select **Static IP** from the pull-down list of **Type**.



5. Enter the desired value in the **IP address**, **IPv6 IP Prefix**, **Gateway**, **Pri.DNS** and **Sec.DNS** field respectively.
6. Tap to accept the change.

Network is configurable via web user interface at the path **Network**->**Basic**.

Customizing Your Phone

You can customize your T48S Skype for Business phone by personally configuring certain settings, for example, backlight, time & date, and ringtones. You can also manage the contacts and call history.

This chapter provides basic operating instructions for customizing your phone. Topics include:

- General Settings
- Audio Settings
- Contact Management
- Call History Management
- Dial Plan
- Dial-now

For more information or assistance with your new phone, contact your system administrator.

General Settings

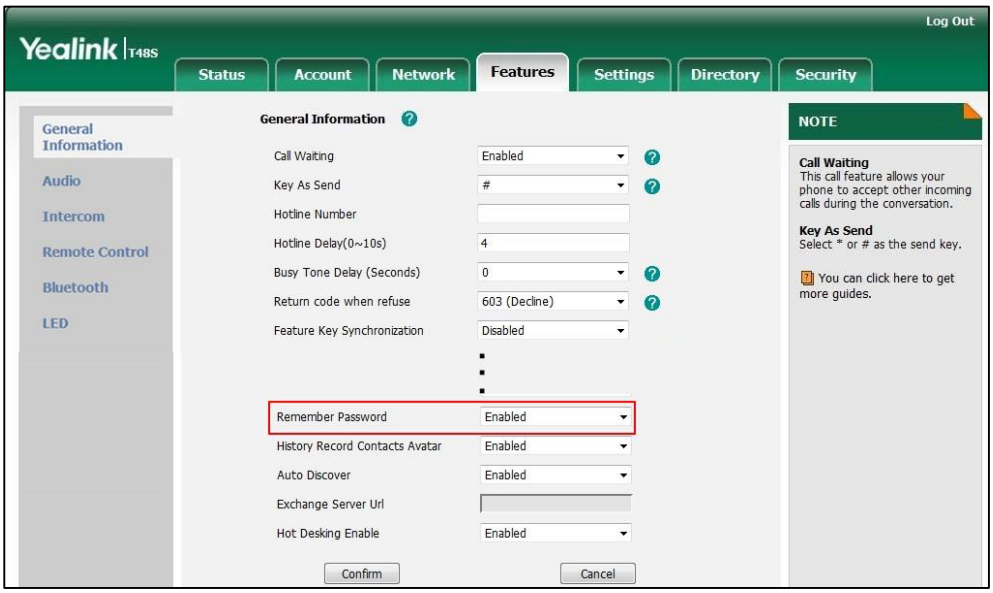
Remember Password

You can enable the remember password feature, so that a **Remember Password** option will appear on the phone login screen. Remember password feature is disabled by default, and it is configurable via web user interface only.

To configure remember password feature via web user interface:

1. Click on **Features**->**General Information**.

2. Select **Enabled** from the pull-down list of **Remember Password.**

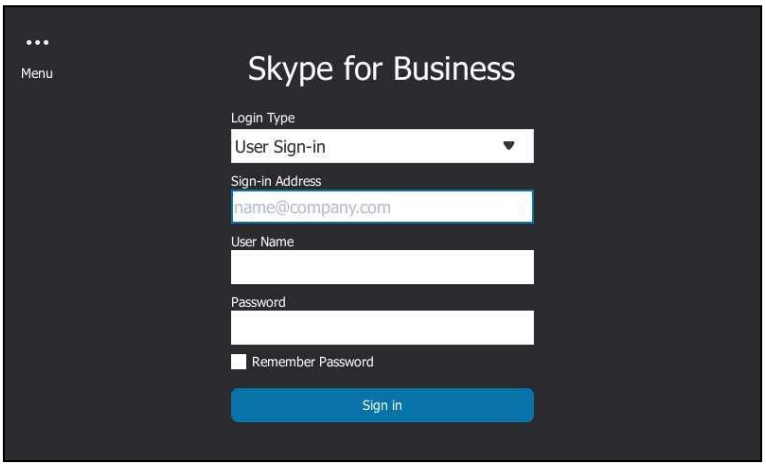


3. Click **Confirm** to accept the change.

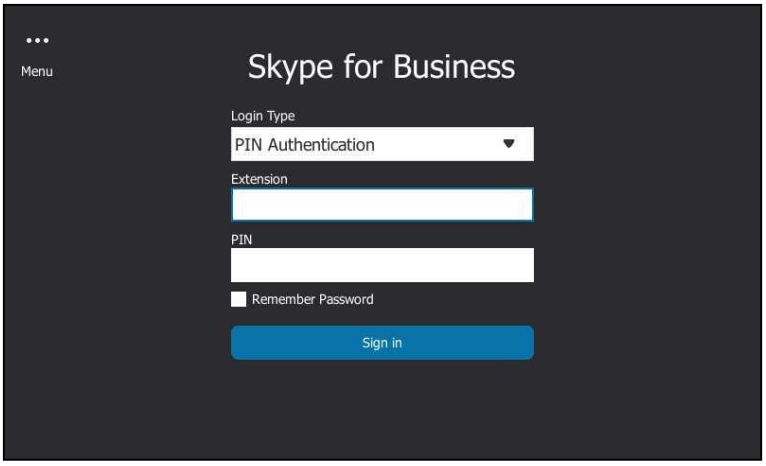
   A dialog box pops up to prompt you that this configuration will take effect after a reboot.

4. Click **OK** to reboot the phone.

The login screen will be shown as below:



(User Sign-in method)



(PIN Authentication method)

Note Remember password feature is only applicable to **PIN Authentication** and **User Sign-in** method.

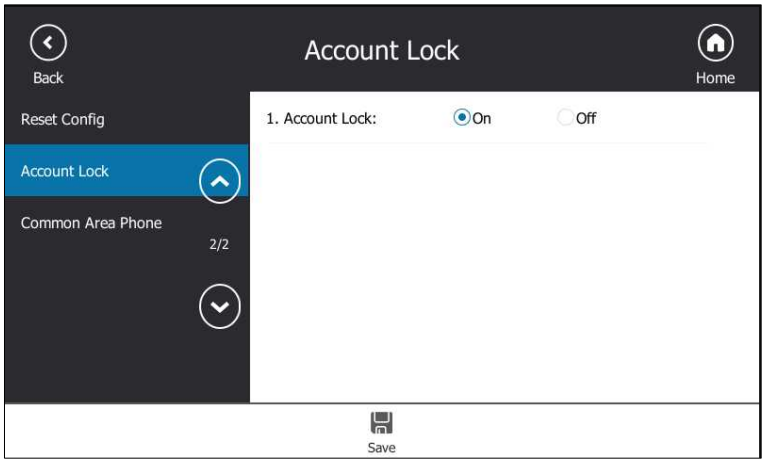
Account Lock

You can lock your account to prevent your account being signed in or signed out randomly. If account lock feature is enabled, users are prompted for administrator password to sign in or sign out.

To configure the account lock feature via phone user interface:

1. Tap **Menu->Setting**->**Advanced** (default password: admin)->**Account Lock**.

2. Tap the **On** radio box of the **Account Lock** field.



3. Tap to accept the change.

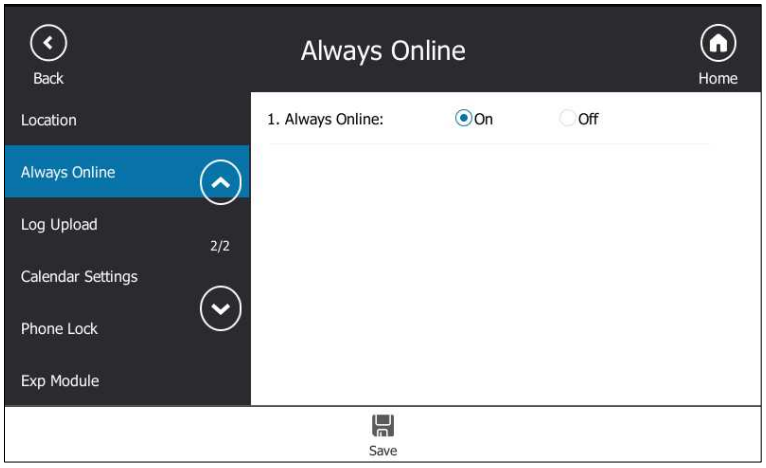
Account lock is configurable via web user interface at the path **Account**->**Basic**->**Account Lock**.

Always Online

Always online feature can keep the account to stay in available status when the phone is idle. If you enable the always online feature, your available status will not change to other status automatically until you manually change it.

To configure the always online via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Always Online**.
2. Tap the **On** radio box of the **Always Online** field.



3. Tap to accept the change.

Always online is configurable via web user interface at the path **Account**->**Basic**->**Always Online**.

Screen Saver

The screen saver will automatically start when the phone is idle for the preset waiting time. The screen saver is used to blank the screen or fill it with moving images or patterns.

The screen saver will be stopped if one of the following phone events occurs:

- Press any key.
- Tap the touch screen.
- Pick up/hang up the handset.
- Receive an incoming call.
- A new prompt (e.g., someone adds you as a delegate or you add someone to be your delegate using the Skype for Business client).

If your phone is idle again for a specified period of time, the screen saver will start again. The time & date and certain feature status icons (e.g., auto answer) will also display on the screen saver screen. For more information on the icons, refer to Icons Instructions on page 3. You can configure the phone whether to display the time & date on the screen saver screen or not.

Uploading a Custom Picture as Screen Saver

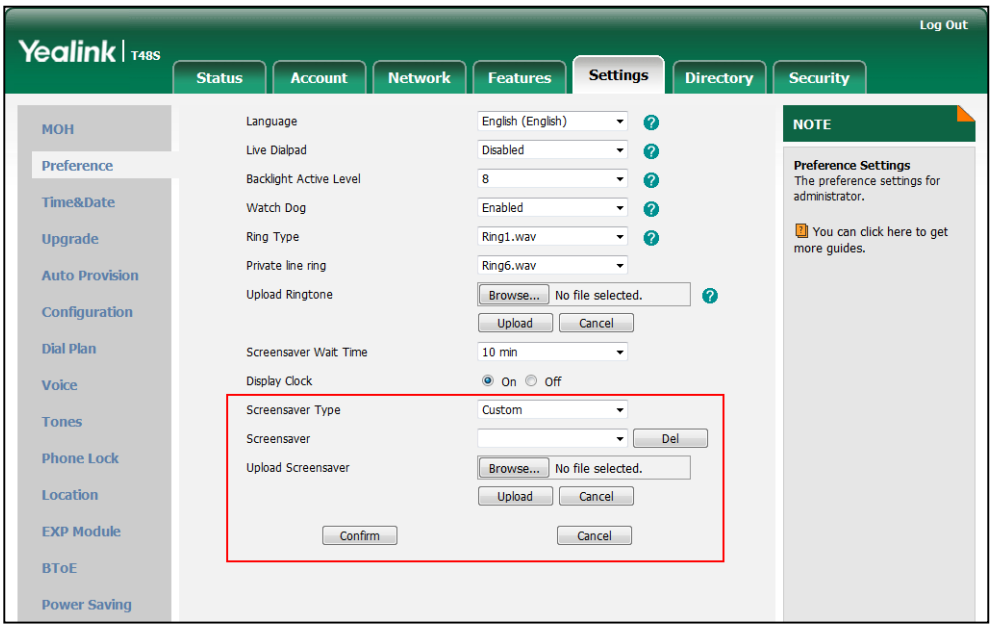
You can upload custom pictures to be the screen savers of your phone via web user interface. The custom picture must meet the following:

Phone Model	Format	Resolution	Single File Size	Screen Size
T48S	*.jpg *.png *.bmp *.jpeg	<=2.0 megapixels	<=5MB	7 inches (Resolution: 800x480)

To upload a custom picture as screen saver via web user interface:

1. Click on **Settings**->**Preference**.
2. Select **Custom** from the pull-down list of **Screensaver Type**.
3. In the **Upload Screensaver** field, click **Browse** to locate the custom picture from your local system, and then click **Upload**.

   This field appears only if **Screensaver Type** is set to **Custom**.



The custom picture appears in **Screensaver** list. You can only delete the custom picture by clicking **Del** in the **Screensaver** field.

Note You can only upload one custom image at a time via web user interface.

Configuring the Screen Saver

You can configure the screen saver wait time, screen saver type and screen saver display clock via phone user interface.

To configure the screen saver via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Display**->**Screensaver**.
2. Select the desired time from the pull-down list of **Wait Time**.
3. Tap the desired radio box of the **Display Clock** field.
4. Select the desired screen saver type from the pull-down list of **Screensaver Type**.

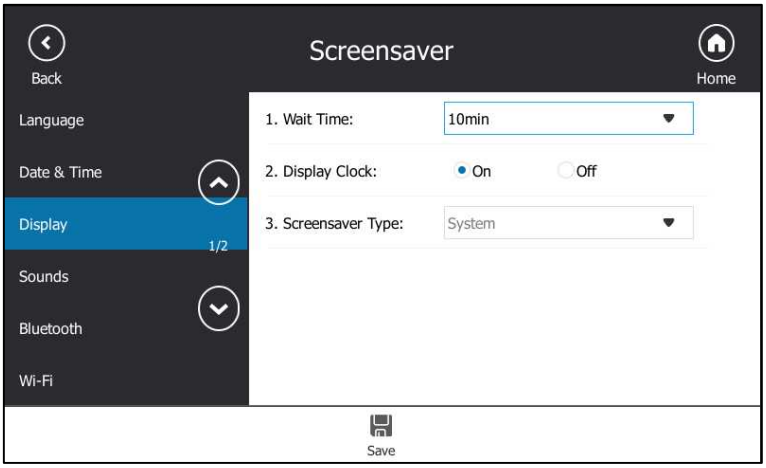
   This field is configurable only if you have uploaded a custom picture via web user interface.

   - If you select **System**.

     The phone will automatically set the built-in picture as the screen saver.

   - If you select **Custom**.

     The phone will automatically set the custom pictures you upload as the screen savers, and display these pictures alternately.



5. Tap to accept the change.

Screen saver is configurable via web user interface at the path **Settings**->**Preference**.

Power Saving

The power saving feature is used to turn off the backlight and screen to conserve energy. The phone enters power-saving mode after it has been idle for a certain period of time. In power-saving mode, the power LED glows red for 500ms and is in the off state for 3s alternately.

The phone will exit power-saving mode if one of the following phone events occurs:

- Press any key.
- Tap the touch screen.
- Pick up/hang up the handset.
- Receive an incoming call.
- A new prompt (e.g., someone adds you as a delegate or you add someone to be your

delegate using the Skype for Business client).

If the screen saver is enabled (refer to Screen Saver on page 49) on your phone, power-saving mode will still occur.

You can configure the following power-saving settings:

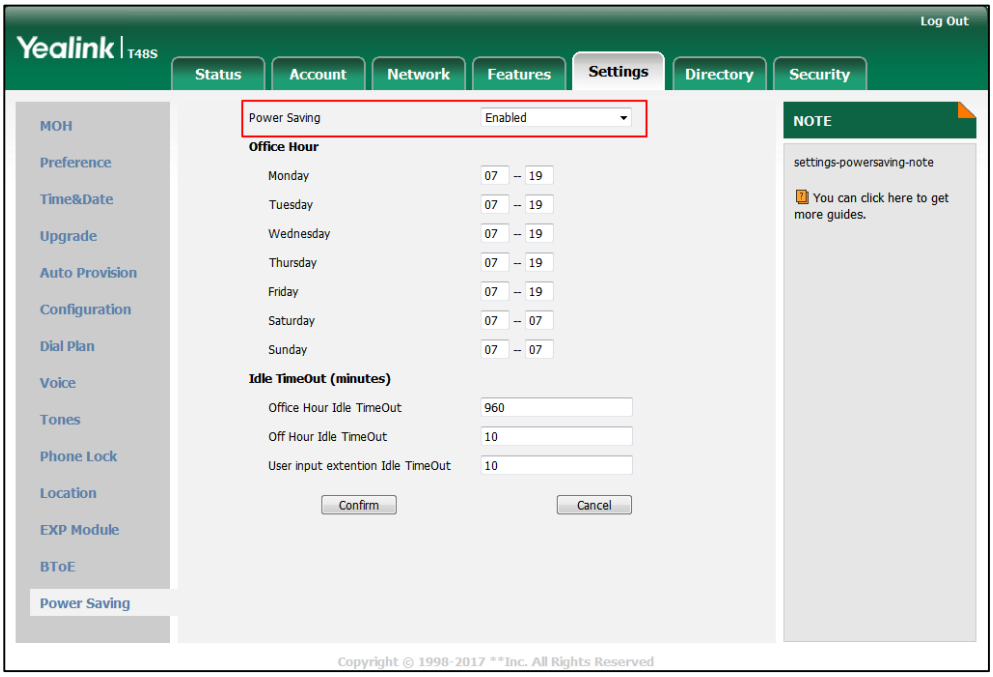
- Office Hour
- Idle Timeout (minutes)

Note Power saving is configurable via web user interface only.

Enabling the Power Saving

To enable the power saving feature via web user interface:

1. Click on **Settings**->**Power Saving**.
2. Select **Enabled** from the pull-down list of **Power Saving**.



3. Click **Confirm** to accept the change.

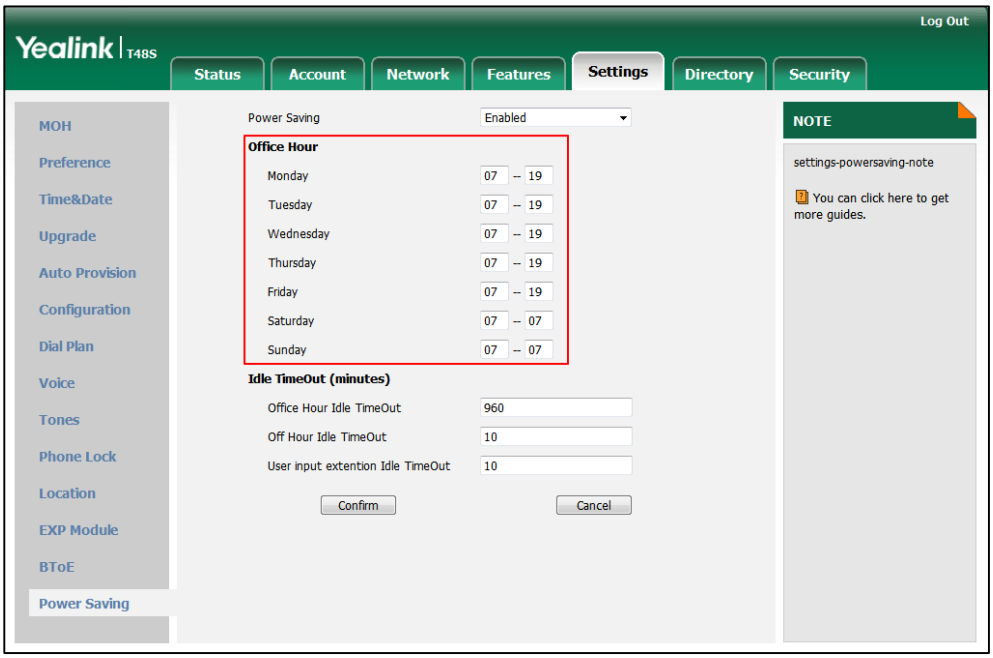
Configuring the Office Hour

Office Hour specifies the starting time and ending time of each working day.

To configure the office hour via web user interface:

1. Click on **Settings->Power Saving**.

2. Enter the starting time and ending time respectively in the desired day field.



3. Click **Confirm** to accept the change.

Configuring the Idle Timeout

Idle Timeout specifies the period of time before the phone enters power-saving mode. The following three types of idle timeout you can configure:

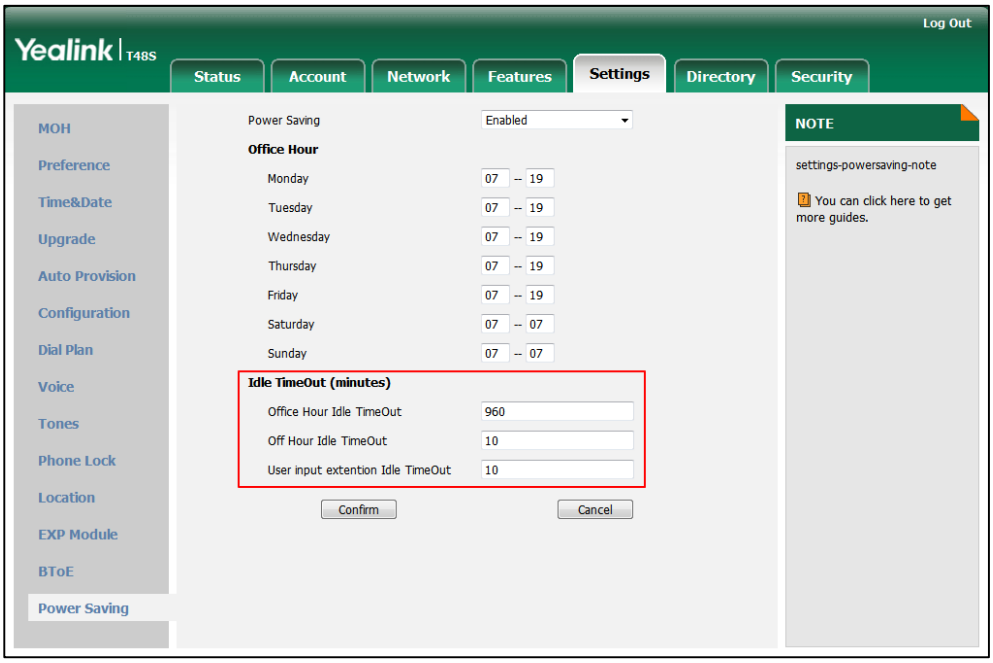
- **Office Hours Idle TimeOut**: Configures the idle timeout for office hours.
- **Off Hours Idle TimeOut**: Configures the idle timeout for non-office hours.
- **User input extension Idle TimeOut**: Configures idle timeout that applies after you use the phone (for example, press a key on the phone or pick up/hang up the handset). You can choose to set a higher User Input Extension Idle TimeOut than the Office Hours Idle TimeOut and Off Hours Idle TimeOut so that when you're actively using the phone, power-saving mode doesn't initiate too frequently.

By default, the Office Hours Idle Timeout is much longer than the Off Hours Idle TimeOut. If you use the phone, the idle timeout that applies (User Input Extension Idle Timeout or Office Hours/Off Hours Idle TimeOut) is the timeout with the highest value. If the phone has an incoming call or new message, the User Input Extension Idle TimeOut is ignored.

To configure the idle timeout via web user interface:

1. Click on **Settings->Power Saving**.
2. Enter the desired value between 1 and 960 (minutes) in the **Office Hours Idle TimeOut** field.
3. Enter the desired value between 1 and 10 (minutes) in the **Off Hours Idle TimeOut** field.

4. Enter the desired value between 1 and 30 (minutes) in the **User input extension Idle TimeOut** field.



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

Backlight

Backlight has two options:

Backlight Active Level: The intensity of the touch screen when the phone is active. You can change the intensity of the touch screen. Digits (1-10) represent different intensities. 10 is the highest intensity.

Inactive Level: The intensity of the touch screen when the phone is inactive for a designated backlight time. You can select a low intensity or turn off the backlight.

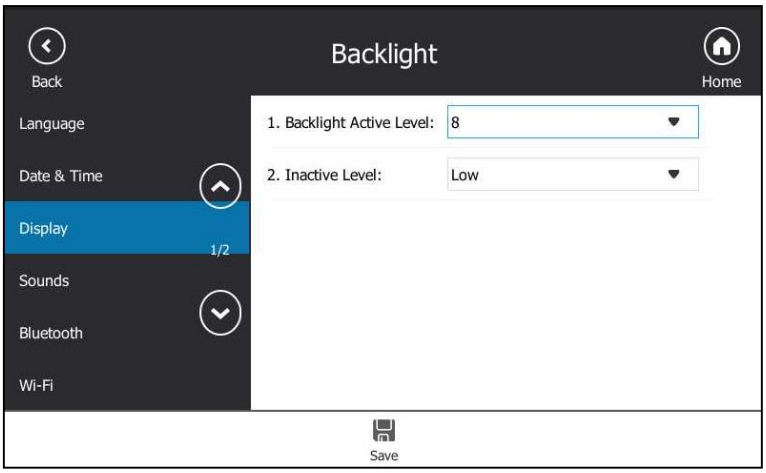
You can also change the intensity of the screen of EXP40 connected to the T48S Skype for Business phone.

Note Backlight time is configurable on Skype for Business Server only. Contact your system administrator for more information.

To configure the backlight via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Display**->**Backlight**.
2. Select the desired level from the pull-down list of **Backlight Active Level**.

3. Select the desired value from the pull-down list of **Inactive Level**.



4. Tap to accept the change.

Backlight is configurable via web user interface at the path **Settings**->**Preference**.

Contrast

You can only configure the contrast of the expansion module EXP40 connected to the T48S Skype for Business phone to a comfortable level on the phone. Ensure that the expansion module has been connected to the phone before configuration. The intensity of contrast ranges from 1 to 10 and the highest intensity is 10.

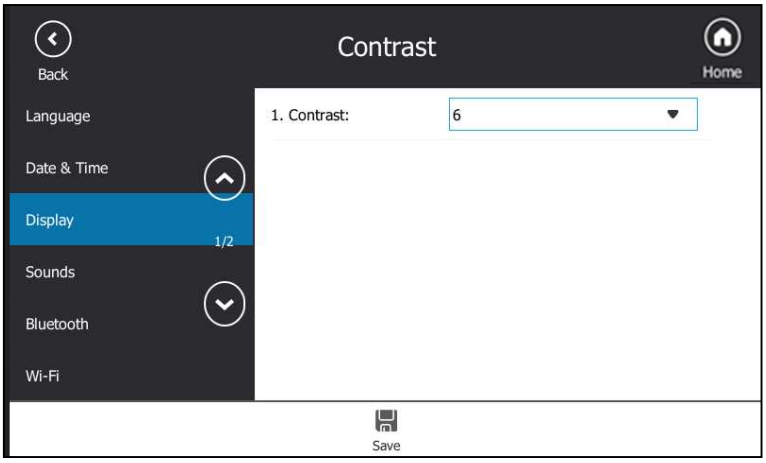
To configure the contrast via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Display**->**Contrast**.

   If EXP40 is not connected to the phone, the Contrast Setting screen displays "No EXP".

2. Select the desired value from the pull-down list of **Contrast**.

   The default contrast level is “6”.

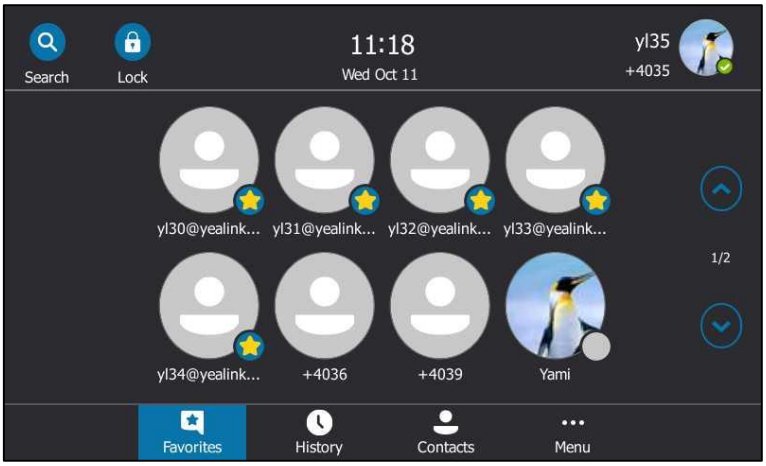


3. Tap to accept the change.

Showing Full Name

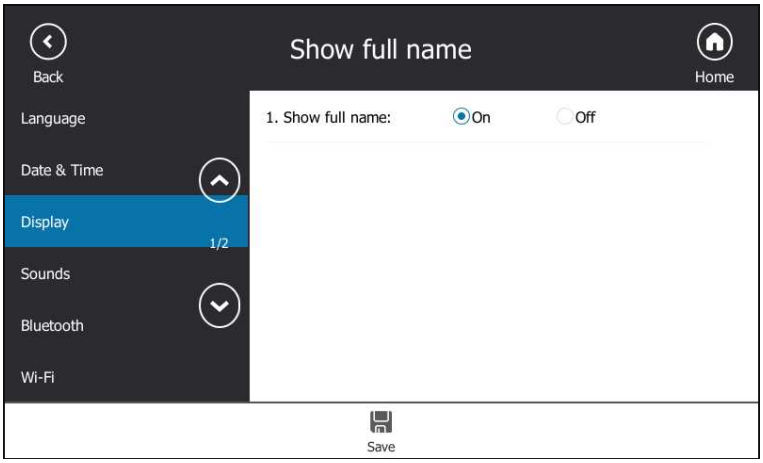
Showing full name allows the phone to extend the display length of the contacts' names.

When showing full name feature is set to off:



To configure the phone to display full name via phone user interface:

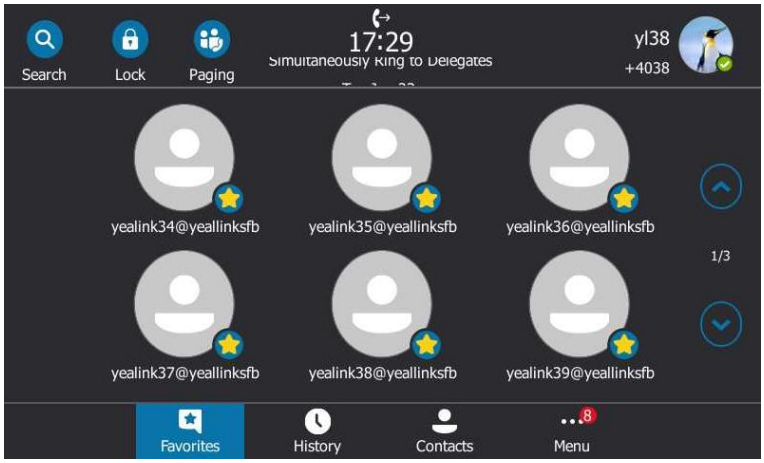
1. Tap **Menu**->**Setting**->**Basic**->**Display**->**Show full name**.
2. Select **On** from the **Show full name** field.



3. Tap to accept the change.

   A dialog box pops up to prompt you that this configuration will take effect after a reboot.

After a reboot, the display length of the contacts' names on the phone are extended.



Language

The default language of the phone user interface is English. If the language of your web browser is not supported by the phone, the web user interface will use English by default. You can change the language for the phone user interface and the web user interface respectively.

Changing the Language for the Phone User Interface

To change the language for the phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Language**.
2. Tap or to scroll through the list of available languages.
3. Tap the desired language.

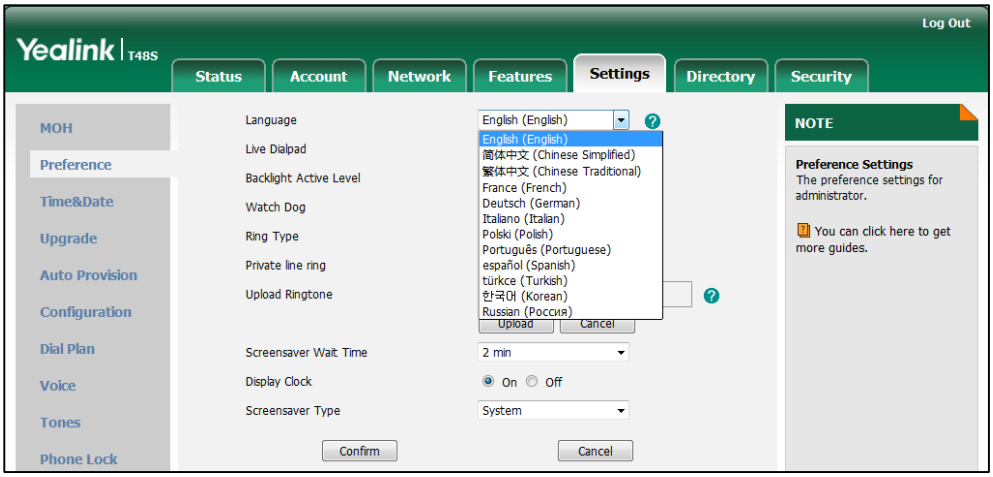
4. Tap to accept the change.

   Text displayed on the phone user interface will change to the selected language.

Changing the Language for the Web User Interface

To change the language for the web user interface:

1. Click on **Settings**->**Preference**.
2. Select the desired language from the pull-down list of **Language**.



3. Click **Confirm** to accept the change.

   Text displayed on the web user interface will change to the selected language.

Time & Date

You can configure the phone to obtain the time and date from the SNTP server automatically, or configure the time and date manually.

Configuring the SNTP Setting

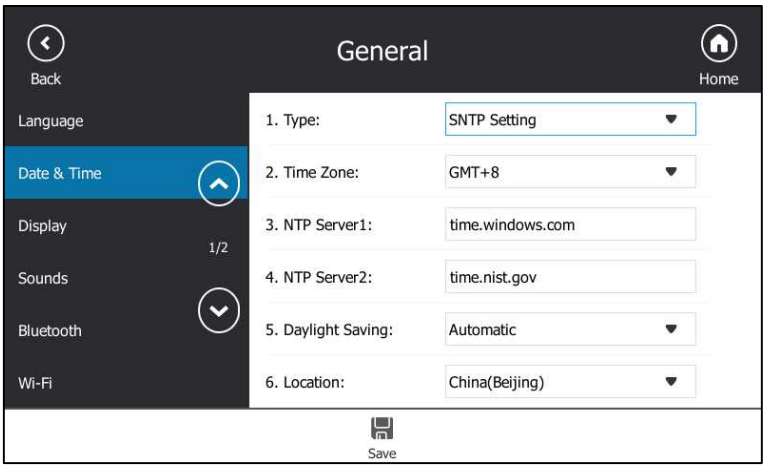
To configure the SNTP settings via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Date & Time**->**General**.
2. Select **SNTP Setting** from the pull-down list of **Type**.
3. Select the time zone that applies to your area from the pull-down list of **Time Zone**.

   The default time zone is "GMT+8".
4. Enter the domain names or IP addresses of SNTP servers in the **NTP Server1** and **NTP Server2** field respectively.
5. Select the desired value from the pull-down list of **Daylight Saving**.
6. Select the desired time zone name from the pull-down list of **Location**.

   This field appears only if **Daylight Saving** field is selected as **Automatic**.

The default time zone name is "China(Beijing)".



7. Tap to accept the change.

SNTP Setting is configurable via web user interface at the path **Settings**->**Time & Date**.

Note

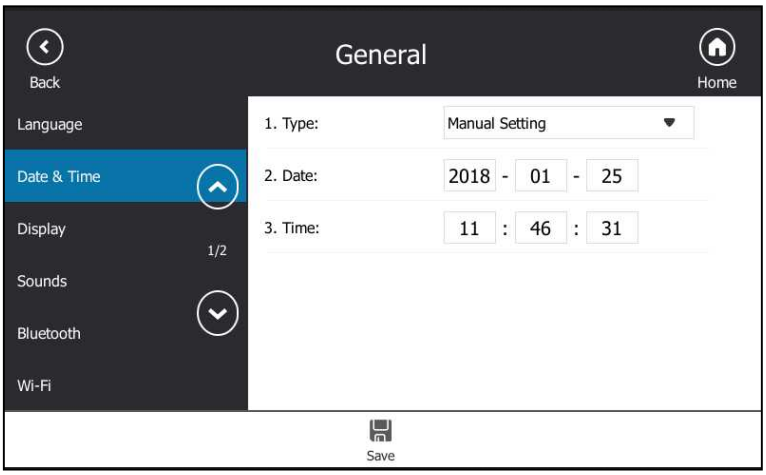
Please refer to Appendix A - Time Zones for the list of available time zones on the Skype for Business phone.

If the phone cannot obtain the time and date from the Simple Network Time Protocol (SNTP) server, contact your system administrator for more information.

Configuring the Time and Date Manually

To configure the date and time manually via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Date &Time**->**General**.
2. Tap **Manual Setting** from the pull-down list of **Type**.
3. Enter the specific date and time in the corresponding fields.



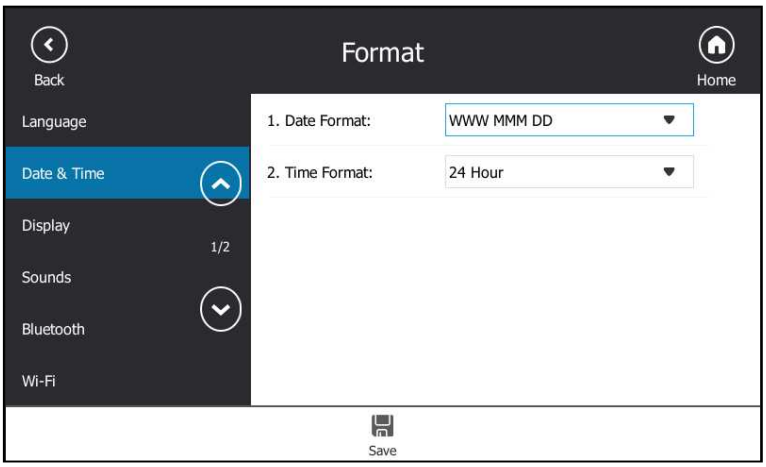
4. Tap to accept the change.

   The time and date displayed on the touch screen will change accordingly.

Configuring the Time and Date Format

To configure the time and date format via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Date & Time**->**Format**.
2. Select the desired date format from the pull-down list of **Date Format**.
3. Select the desired time format (**12 Hour** or **24 Hour**) from the pull-down list of **Time Format**.



4. Tap to accept the change.

There are 7 available date formats. For example, for the date format "WWW DD MMM", "WWW" represents the abbreviation of the week, "DD" represents the two-digit day, and "MMM" represents the first three letters of the month.

The date formats available:

Date Format	**Example** (2018-01-19)
WWW MMM DD	Fri Jan 19
DD-MMM-YY	19-Jan-18
YYYY-MM-DD	2018-01-19
DD/MM/YYYY	19/01/2018
MM/DD/YY	01/19/18
DD MMM YYYY	19 Jan 2016
WWW DD MMM	Fri 19 Jan

Time and date format is configurable via web user interface at the path **Settings**->**Time & Date**.

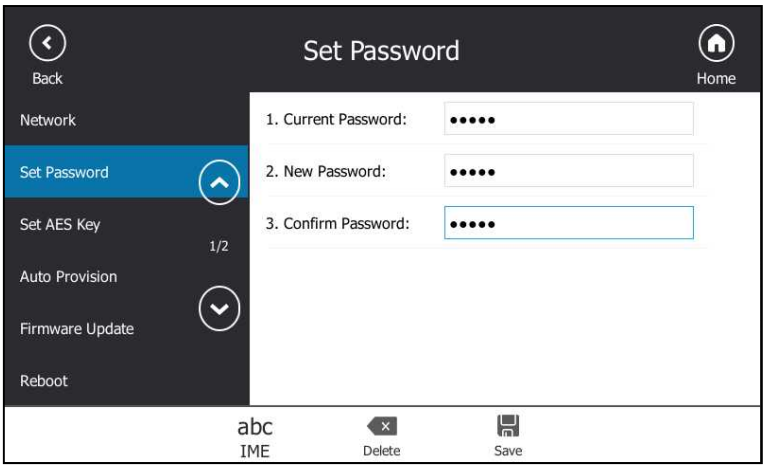
Administrator Password

The **Advanced** option is only accessible to the administrator. The default administrator

password is “admin”. For security reasons, you should change the default administrator password as soon as possible.

To change the administrator password via phone user interface:

1. Tap **Menu->Setting**->**Advanced** (default password: admin)->**Set Password**.
2. Enter the desired value in the **Current Password**, **New Password** and **Confirm Password** field respectively.



3. Tap to accept the change.

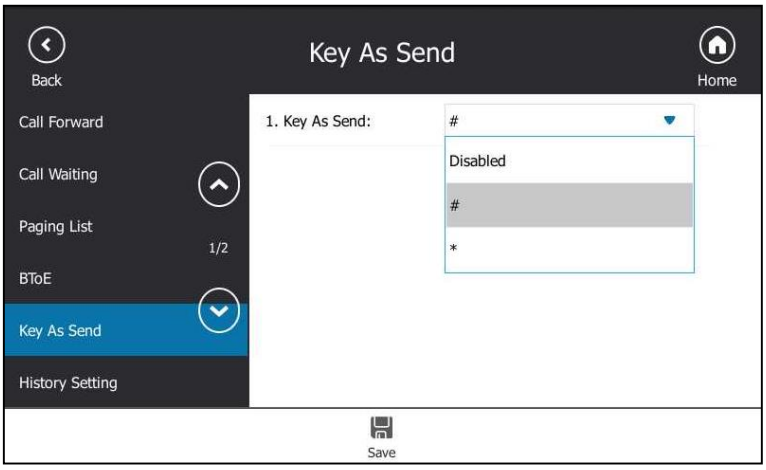
Administrator password is configurable via web user interface at the path **Security**->**Password**.

Key as Send

You can set the "#" key or "*" key to perform as a send key while dialing.

To configure key as send via phone user interface:

1. Tap **Menu->Setting**->**Features**->**Key As Send**.
2. Select **#** or ***** from the pull-down list of **Key As Send** field, or select **Disabled** to disable this feature.



3. Tap to accept the change.

Key as send is configurable via web user interface at the path **Features**->**General Information**.

Phone Lock

You can choose to lock your phone in following situations:

- Prevent unauthorized outgoing calls.
- Prevent people from viewing or modifying phone information, such as your directory and call history.

When your phone is locked, you can:

- Place calls to emergency and authorized numbers only unless your system administrator allows your phone to place other outgoing calls.
- Answer incoming calls, unless your administrator has set your phone to require a password to answer calls.

Setting a lock PIN

If the Skype for Business server is configured to forcibly lock the phone, user can use phone lock feature to lock the phone to prevent it from unauthorized use. And the Skype for Business phone will prompt the user to create a lock PIN at the initial sign-in.

To set lock PIN:

1. Enter the lock PIN in the **New PIN** field.
2. Tap the **Confirm PIN** field.
3. Enter the lock PIN again in the **Confirm PIN** field.
4. Tap **Save**.

After you set a lock PIN, you can use it to unlock your phone.

Note

The PIN's length is controlled by the server. For more information, contact your administrator.

If you do not create a lock PIN when prompted, you will be automatically signed out of the phone in a set amount of time, and you must create a lock PIN when you sign in again.

Locking Your Phone

When the phone lock feature is enabled, do one of the following to lock your phone:

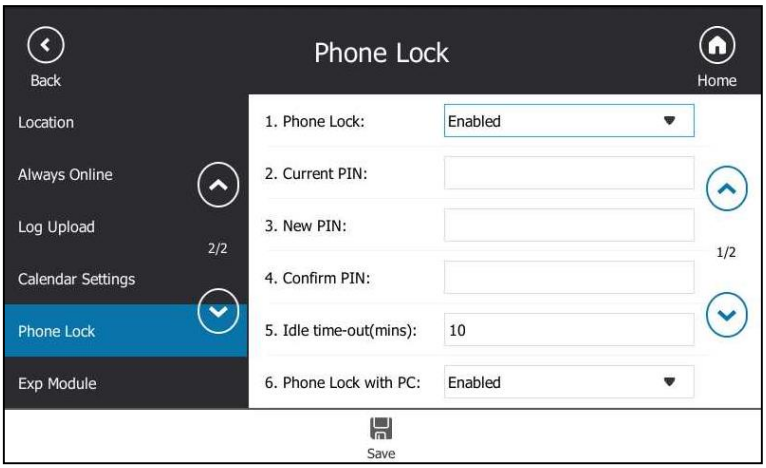
- Tap on the screen title area.
- Long press # for two seconds.
- The phone automatically locks after being idle for a set amount of time (in minutes).

Configuring the Idle Timeout for Phone Lock

To configure the time of automatic locking via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Phone Lock**.
2. Enter the integer between 1 to 1440 minutes in the **Idle time-out(mins)** field.

   The time is 10 minutes by default.



3. Tap to accept the change.

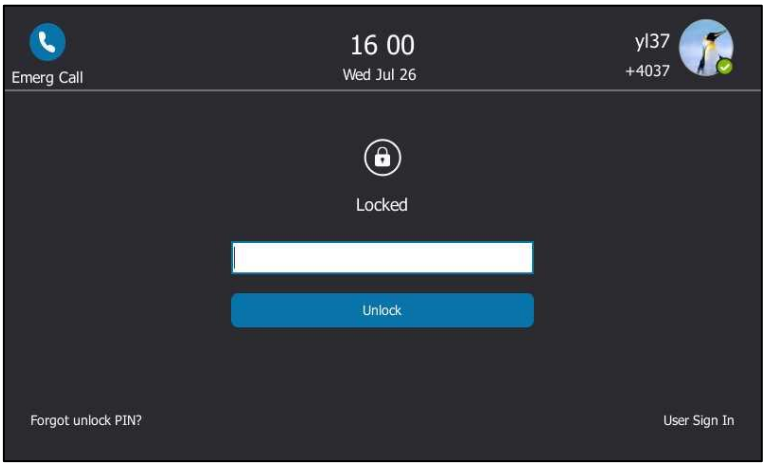
   The phone will lock automatically when it has been inactive for 10 minutes.

Unlocking Your Phone

You can unlock your phone using your lock PIN.

To unlock the phone via phone user interface:

1. Enter the lock PIN in the input field.



2. Tap **Unlock** or press OK to unlock the phone.

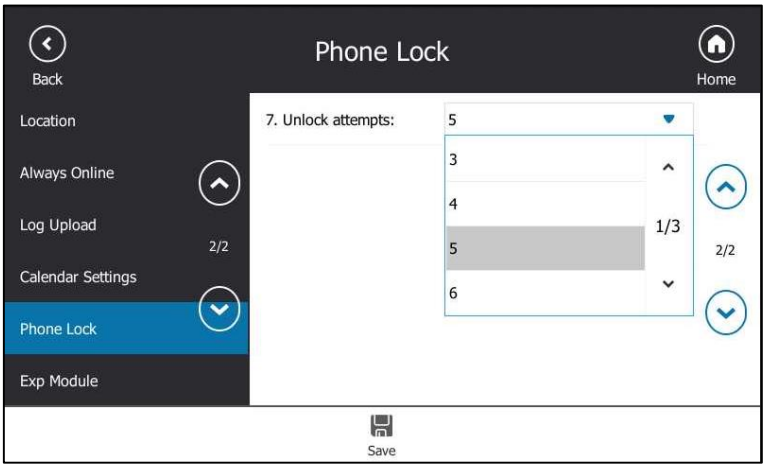
Configuring the Unlock Attempts

You can specify the maximum number of unsuccessful unlock attempts for a locked phone that is not during a call. You will be automatically signed out of the phone when the unsuccessful unlock attempts exceeds the limit.

Note The maximum number of unsuccessful unlock attempts are not limited when your phone is during a call.

To configure the unlock attempts via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Phone Lock**.
2. Select the desired value from the pull-down list of **Unlock attempts** field.



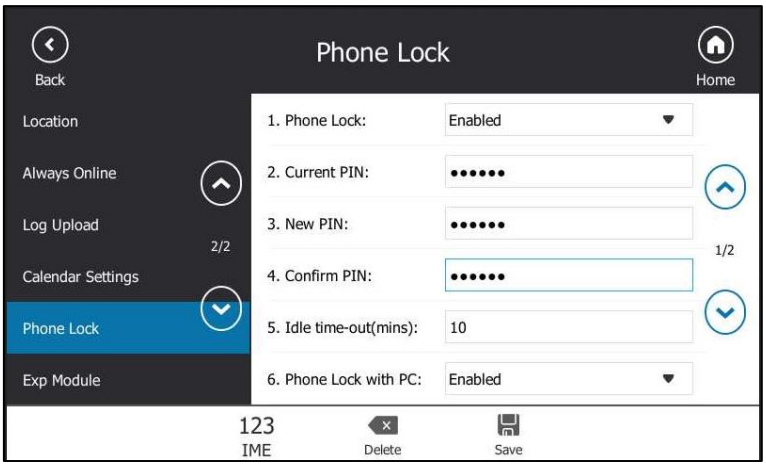
3. Tap to accept the change.

You will be automatically signed out of the phone after five unsuccessful unlock attempts.

Changing Your lock PIN

To change the phone lock PIN via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Phone Lock**.
2. Select **Enabled** from the pull-down list of **Phone Lock**.
3. Enter the lock PIN in the **Current PIN** field.
4. Enter the lock PIN in the **New PIN** field.
5. Enter the lock PIN again in the **Confirm PIN** field.



6. Tap to change the lock PIN.

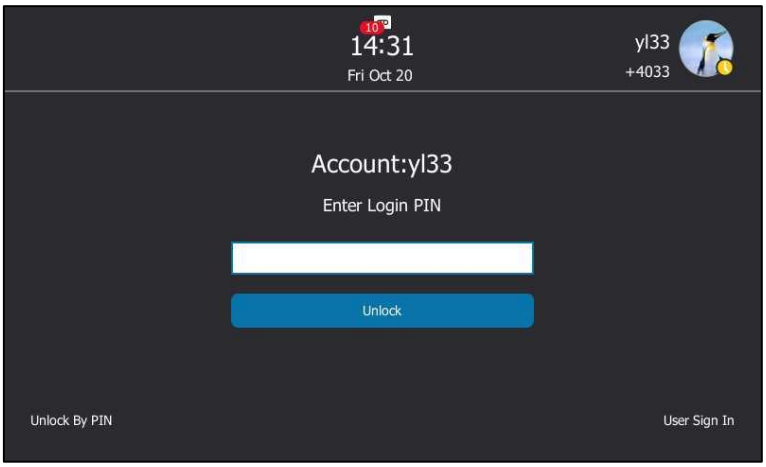
Lock PIN is configurable via web user interface at the path **Settings**->**Phone Lock**.

Resetting Your lock PIN

If you forget your lock PIN, you can reset the lock PIN from your phone using your login password.

To reset the lock PIN when the phone is locked via phone user interface:

1. Tap **Forgot unlock PIN?** on the lock screen.



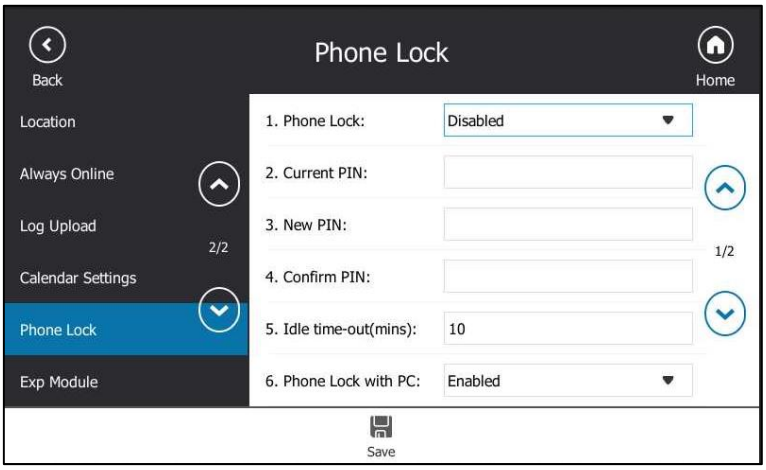
2. Enter your login password for your Skype for Business account.
3. Tap **Unlock**.
4. Enter and confirm your new lock PIN.

Disabling Phone Lock

If you do not want to lock your phone, you can disable phone lock.

To disable the phone lock feature via phone user interface:

1. Tap **Menu**->**Setting**->**Basic**->**Phone Lock**.
2. Select **Disabled** from the pull-down list of **Phone Lock**.



3. Tap to accept the change.

Phone lock is configurable via web user interface at the path **Settings**->**Phone Lock**.

Audio Settings

Volume

You can adjust the ringer volume when the phone is idle or ringing. You can also adjust the receiver volume of currently engaged audio devices (handset, speakerphone or headset) when the phone is in use.

To adjust the volume via phone user interface:

1. Press to adjust the ringer and audio volume.

   If ringer volume is adjusted to the minimum when the phone is idle, the minimum volume icon will appear on the touch screen.

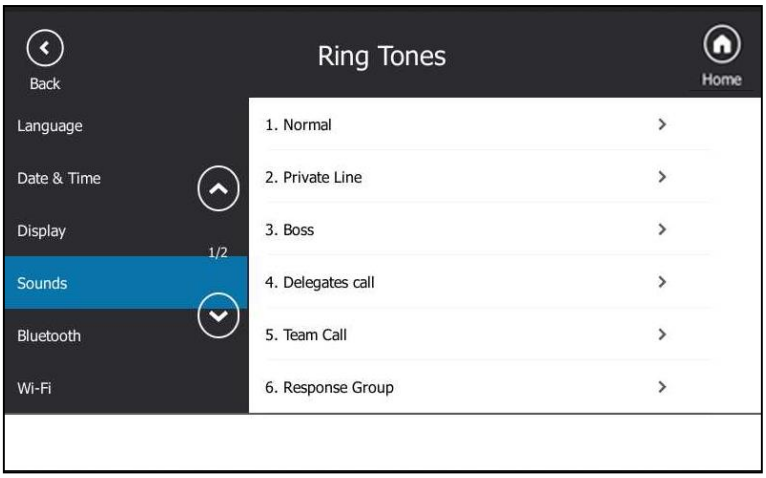
Phone's Ringtone

Phone's ringtones are used to indicate incoming calls and distinguish your phone from your neighbor's.

Selecting a Ringtone

To select a ringtone for the phone via phone user interface:

1. Tap **Menu**->**Setting**->**Basic**->**Sounds**->**Ring Tones**->**Normal**.



2. Tap the desired ringtone.
3. Tap to accept the change.

Phone's ringtone is configurable via web user interface at the path **Settings**->**Preference**->**Ring Type**.

Uploading a Custom Ringtone

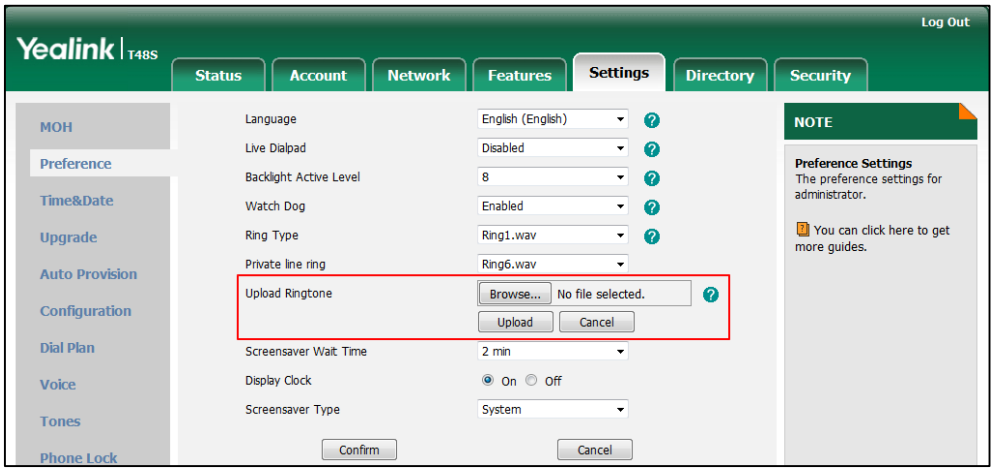
To set the custom ring tones, you need to upload the custom ring tones to the phone in advance. The ring tone format must meet the following:

Format	Total File Size	Note
.wav	<=8MB	2MB of space should be reserved for the phone.

Note The ring tone file must be in PCMU/PCMA audio format, mono channel, 8K sample rate and 16 bit resolution.

To upload a custom ringtone for the phone via web user interface:

1. Click on **Settings**->**Preference**.
2. In the **Upload Ringtone** field, click **Browse...** to locate a ringtone file (the file format must be *.wav) from your local system.



3. Click **Upload** to upload the file.
   The custom ringtone appears in the pull-down list of **Ring Type**.

Note The priority of ring tone for an incoming call on the phone is as follows: a boss/delegate ringtone (refer to Boss-Line Ringtone)>Contact ringtone (refer to Adding Local Contacts) >Phone ringtone.

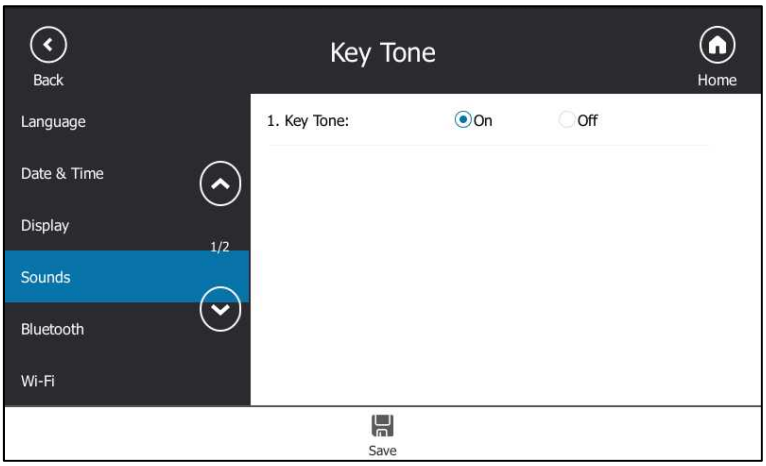
Key Tone

If you enable key tone, the phone will produce a sound when you press the keypad.

To configure key tone via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Sounds**->**Key Tone**.

2. Tap the **On** radio box of the **Key Tone** field.



3. Tap to accept the change.

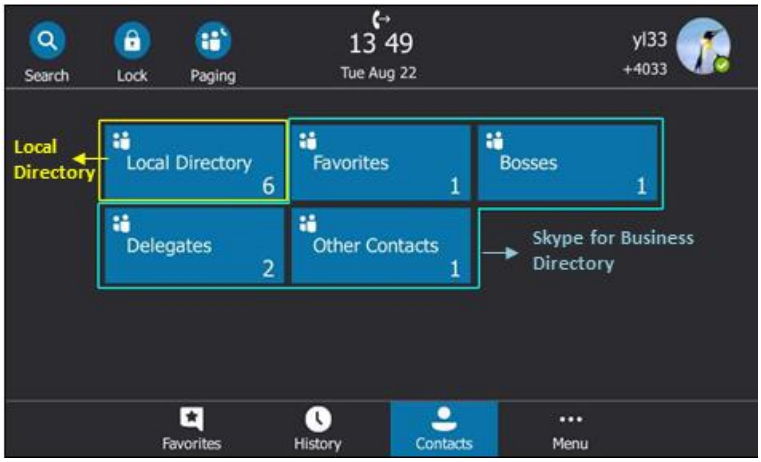
Key tone is configurable via web user interface at the path **Features**->**Audio**.

Contact Management

The phone directory contains local directory and Skype for Business directory.

- Local directory (All or Favorites)
- Skype for Business directory (e.g., Favorites, Delegates, Bosses or Other Contacts)

If boss-admin is configured, the Bosses or Delegates group appears depending on your role. For more information on boss-admin feature, refer to Boss-Admin on page 147. You can add more Skype for Business groups via Skype for Business client.



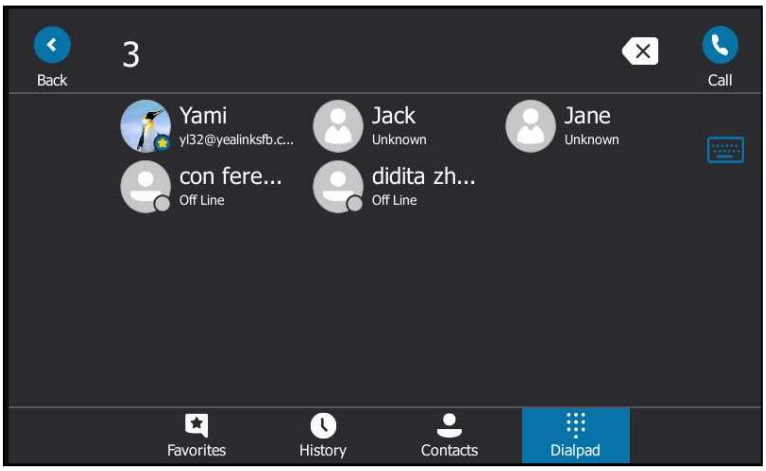
Searching for Contacts

You can search for Skype for Business contacts, local contacts and Microsoft Outlook contacts.

To search for contacts:

1. Tap .
2. Enter a few continuous characters of the contact name or continuous numbers of the contact number to search for a desired contact.

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



Note You can also search for all contacts from the dialing screen. For more information, refer to Placing a Call from the Search Results List on page 95.

Skype for Business Directory

The Skype for Business directory on your phone displays all Skype for Business contacts. You can search, add, view or delete Skype for Business contacts on the phone.

Adding Skype for Business Contacts

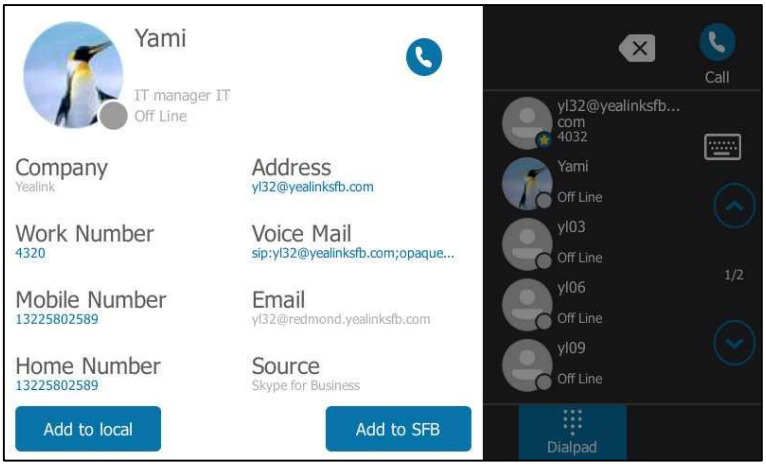
You can add contacts to the Skype for Business directory in the following ways:

- From the search results
- From local directory
- From history records. For more information, refer to Adding Contacts from History Records on page 87.

Adding Skype for Business Contacts from the Search Results

To add a Skype for Business contact from search results via phone user interface:

1. Tap the avatar of the desired contact from the search results.



2. Tap the **Add to SFB** soft key from the prompt list.
3. Tap the desired Skype for Business group.

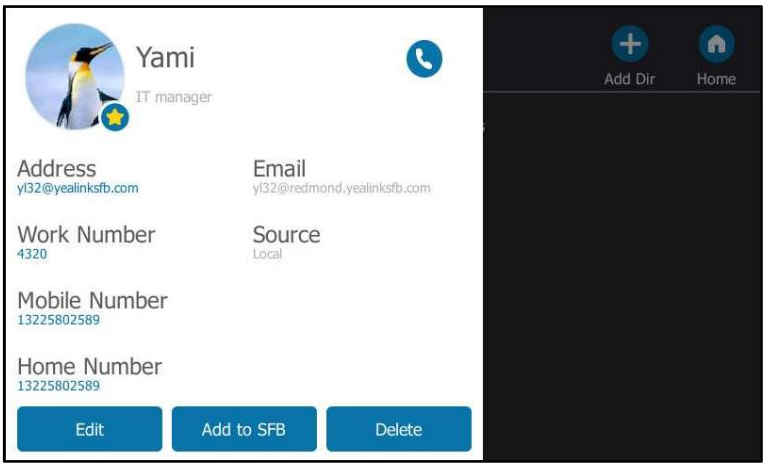
   The contact is added to your phone.

Adding Skype for Business Contacts from Local Directory

If you want to display a local contact on your Skype for Business client, you should add the local contact to the Skype for Business directory on the phone first.

To add a Skype for Business contact from local directory via phone user interface:

1. Tap **Contacts**->**Local Directory**.
2. Select the desired group (All or Favorites) that contains the desired local contact.
3. Tap the avatar of the desired contact.
4. Tap the **Add to SFB** soft key.



5. Select the desired Skype for Business group.

Viewing Skype for Business Contacts

You can view the following information about each Skype for Business contact on the phone:

- Name
- Presence Status
- Address
- Voicemail
- Email address
- Source

Note For more information on the presence status, refer to Presence Status on page 26.

Viewing Skype for Business Contacts from the Contacts Screen

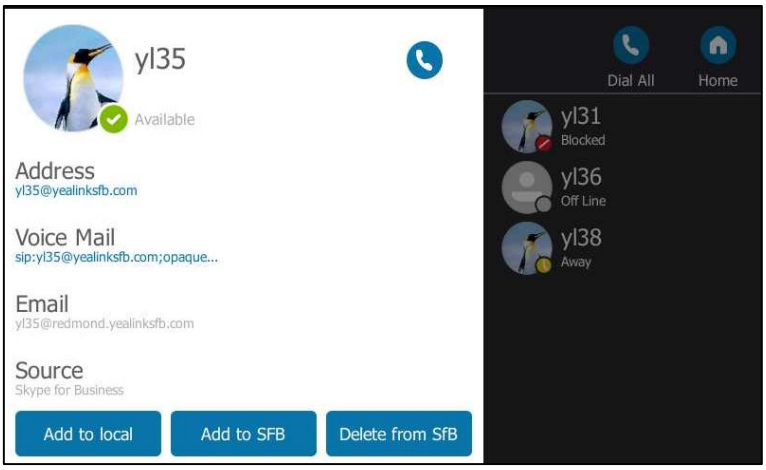
You can view all Skype for Business contacts on the **Contacts** screen.

To view the Skype for Business contacts on the Contacts screen:

1. Tap **Contacts**.
2. Tap the Skype for Business group (e.g., Favorites or Other Contacts) that contains the desired contact.

3. Tap the avatar of the desired contact.

The detailed information of the contact appears on the touch screen.



4. Tap the black area on the right side or press (×) to return to the pervious screen.

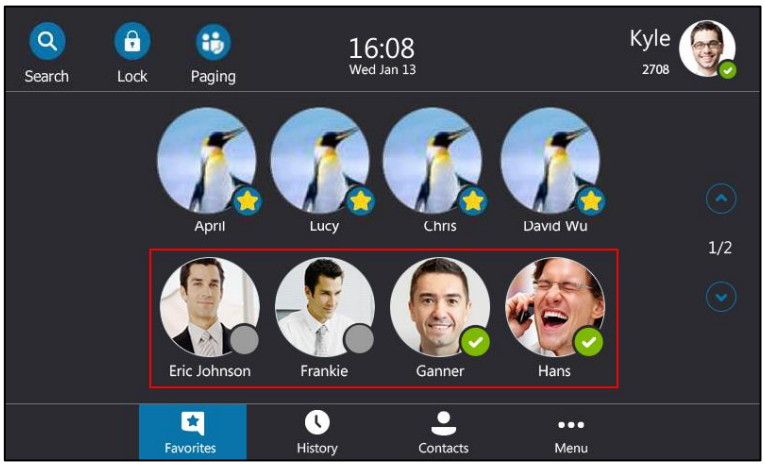
Viewing Skype for Business Favorites on the Favorites Screen

You can also view Skype for Business favorites on the **Favorites** screen.

To view the Skype for Business favorites on the Favorites screen:

1. Tap **Favorites**.

By default, Skype for Business favorites are displayed behind the local favorites on the idle screen (local favorites are indicated by the icon , Skype for Business favorites are indicated by the presence status icon).



Deleting Skype for Business Contacts

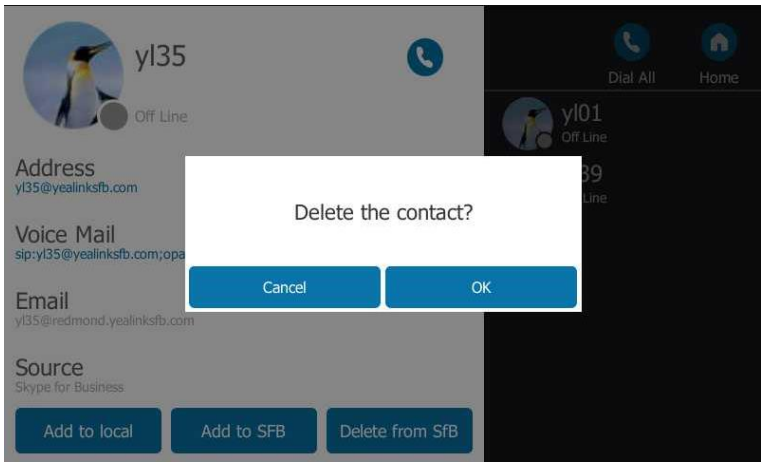
To delete a Skype for Business contact from the Skype for Business directory:

1. Tap the **Contacts** soft key.

2. Tap the Skype for Business group (e.g., Favorites or Other Contacts) that contains the desired contact.

3. Tap the avatar of the desired contact.
4. Select the **Delete from SfB** soft key.

   The touch screen prompts" Delete the contact?".



5. Tap the **OK** soft key to delete the contact.

Local Directory

Yealink Skype for Business phones also maintain a local directory. When adding a contact to the local directory, in addition to name and phone numbers, you can also specify the ringtone and group for the contact. Contacts can be added either one by one or in batch using a local contact file. Yealink Skype for Business phones support the contact files in * .xml or *.csv format.

Adding Local Contacts

You can add contacts to the local directory in the following ways:

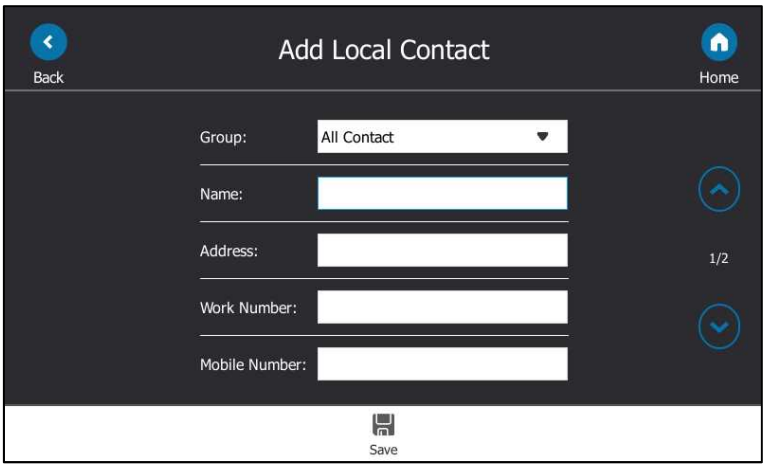
- Manually

- From Skype for Business directory
- From history records. For more information, refer to Placing a Call from History Records.

Adding Local Contacts Manually

To add a contact to the local directory manually:

1. Tap **Contacts**->**Local Directory**->**All**.
2. Tap .
3. Enter name, address, work number, mobile number, home number, title and email in the corresponding fields.



4. Select the desired ringtone from the pull-down list of **Ring**.
5. Tap to accept the change.

Note

If the contact name already exists in the directory, the touch screen will prompt "Contact name existed!"

Local directory is configurable via web user interface at the path **Directory**->**Local Directory**.

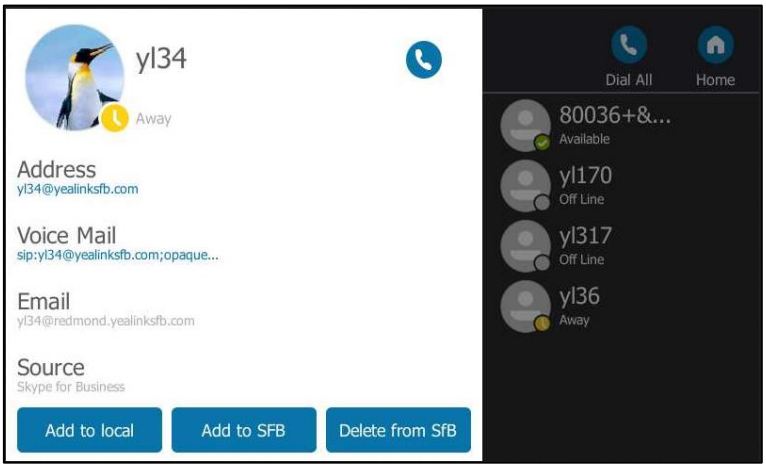
Adding Local Contacts from Skype for Business Directory

To add a local contact from Skype for Business directory via phone user interface:

1. Tap the **Contacts** soft key.

2. Tap the Skype for Business group (e.g., Favorites or Other Contacts) where contains the desired contact is in.

3. Tap the avatar of the desired contact.
4. Tap the **Add to local** soft key.



5. Edit the contact information.
6. Tap to add the contact to the local directory.

   The Skype for Business contact is successfully saved to the local directory.

Viewing Local Contacts

You can view the following information about each local contact on the phone:

- Name
- Address
- Work Number
- Mobile Number
- Home Number
- Title

- Email
- Ringtone
- Group

To view the local contacts:

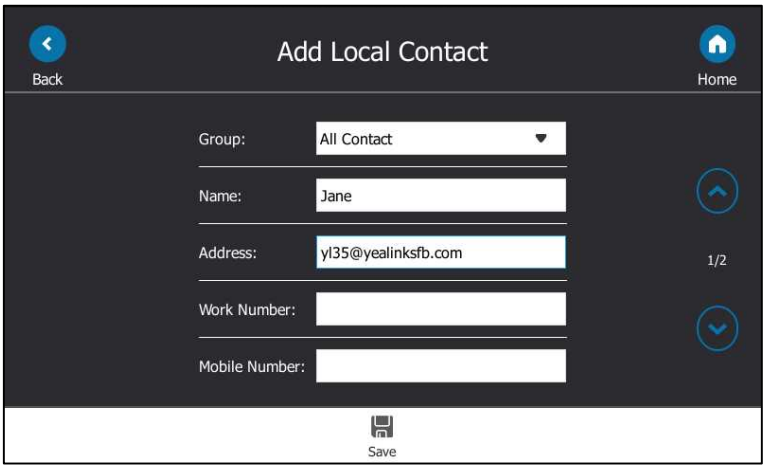
1. Tap **Contacts**->**Local Directory**.
2. Tap the desired group.
3. Tap the avatar of the desired contact.

   The detailed information of the contact appears on the touch screen.
4. Tap the black area on the right side or press ⊗ to return to the pervious screen.

Editing Local Contacts

To edit a contact in the local directory:

1. Tap **Contacts**->**Local Directory**.
2. Tap the desired group.
3. Tap the avatar of the desired contact.
4. Tap the **Edit** soft key.



5. Tap the desired field to edit the contact information.

   You can edit name, address, work number, mobile number, home number, title and email in the corresponding fields.
6. Tap to accept the change.

Local directory is configurable via web user interface at the path **Directory**->**Local Directory**.

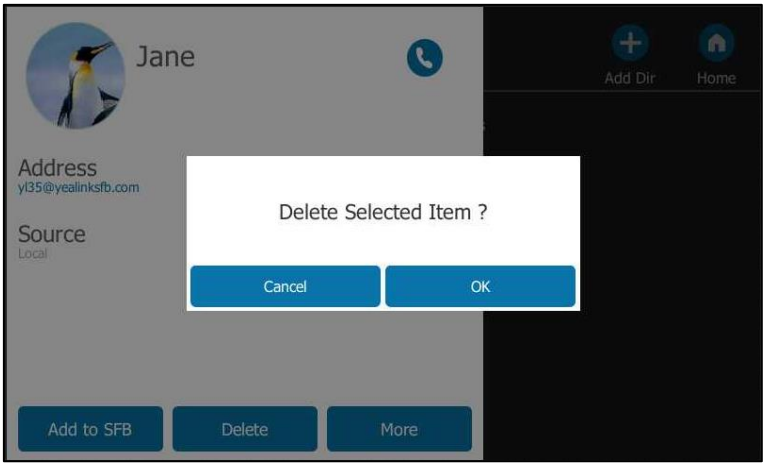
Deleting Local Contacts

To delete a contact from the local directory:

1. Tap **Contacts**->**Local Directory**.

2. Tap the desired group.
3. Tap the avatar of the desired contact.
4. Tap **Delete**.

   The touch screen prompts" Delete Selected Item?".



5. Tap the **OK** soft key to delete.

Deleting the contact is configurable via web user interface at the path **Directory**->**Local Directory**.

Note Delete all contacts is available via web user interface only.

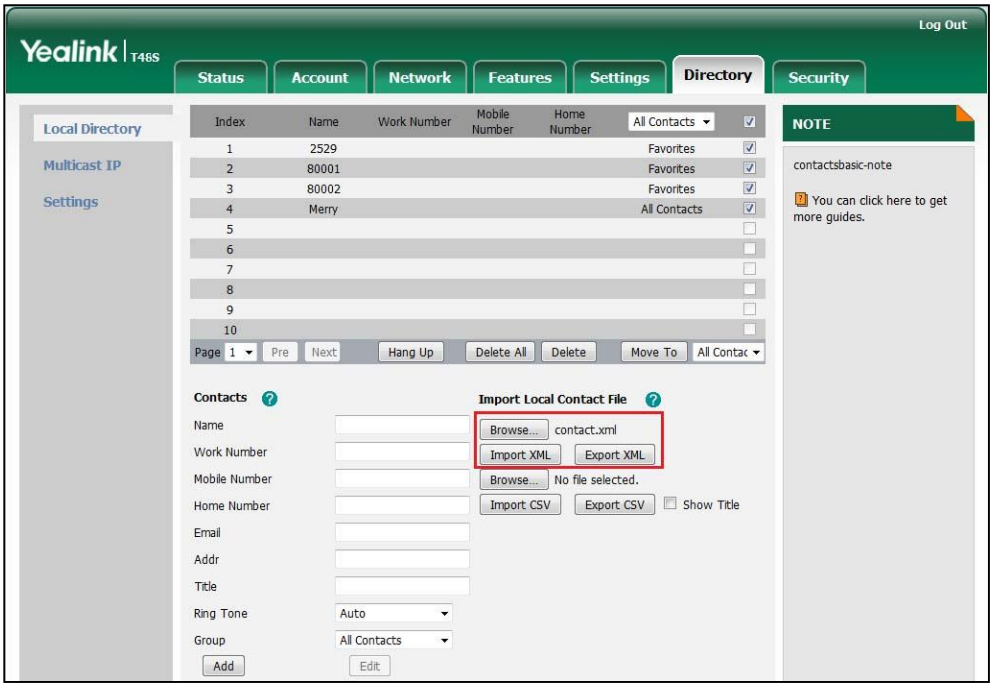
Importing/Exporting Contact Lists

You can manage your phone's local directory via phone user interface or web user interface. But you can only import or export the contact list via web user interface.

To import an XML contact list file via web user interface:

1. Click on **Directory**->**Local Directory**.
2. Click **Browse...** to locate a contact list file (the file format must be *.xml) from your local system.

3. Click **Import XML** to import the contact list.



The web user interface prompts "The original contact will be covered, continue?".

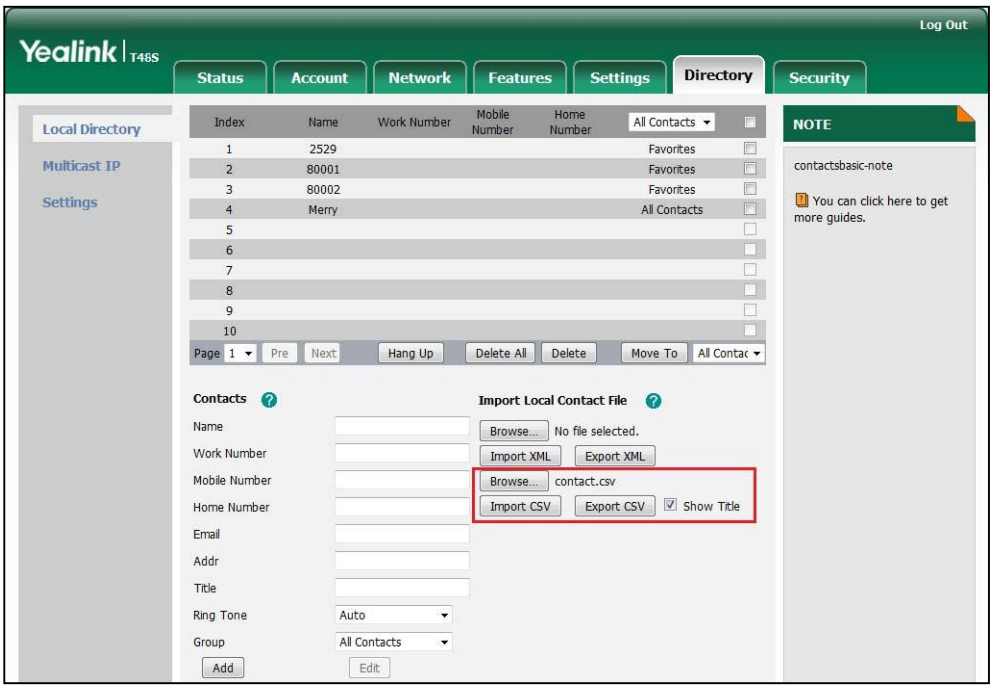
4. Click **OK** to import the contact list.

To import a CSV contact list file via web user interface:

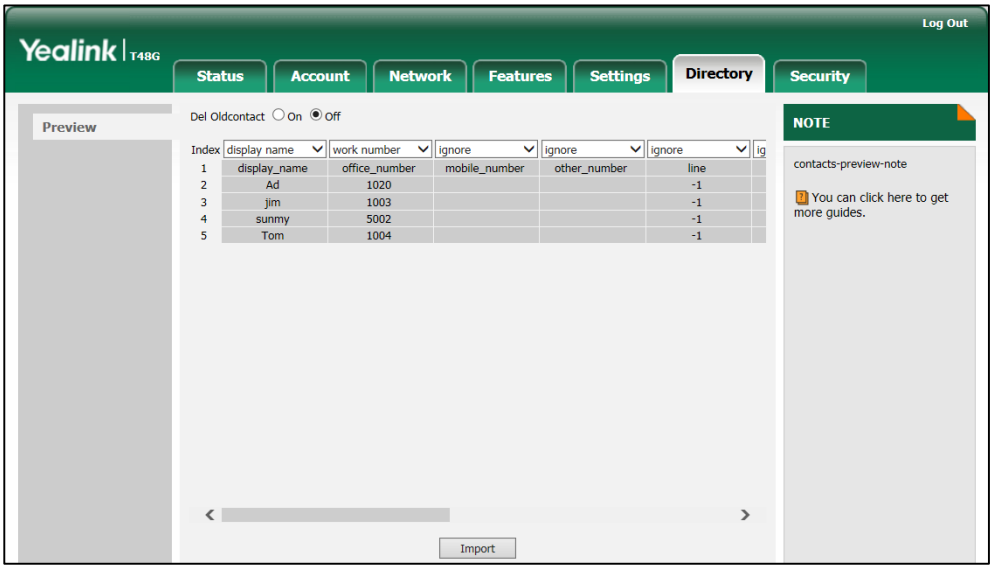
1. Click on **Directory**->**Local Directory**.
2. Click **Browse...** to locate a contact list file (the file format must be *.csv) in your local system.

3. (Optional) Check the **Show Title** checkbox.

   It will prevent importing the title of the contact information which is located in the first line of the CSV file.



4. Click **Import CSV** to import the contact list.



5. (Optional) Tap the **On** radio box of the **Del Oldcontact** field.

   It will delete all existing contacts while importing the contact list.

6. Select the contact information you want to import into the local directory from the pull-down list of **Index**.

   At least one item should be selected to be imported into the local directory.

7. Click **Import** to import the contact list.

To export a contact list via web user interface:

1. Click on **Directory**->**Local Directory**.
2. Click **Export XML** (or **Export CSV**).
3. Click **Save** to save the contact list to your local system.

Local Favorites

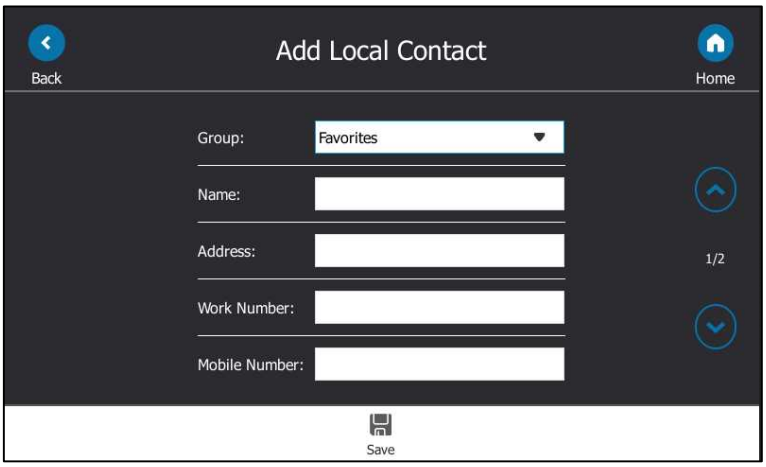
Favorites are the contacts in your directory that you're in touch with most frequently. You need to assign an index number for a local favorite contact. Local favorites display consecutively, according to their index number. The contact with the lowest index number displays first.

Adding Local Favorites

You can add the local favorites manually or add local contacts as favorites.

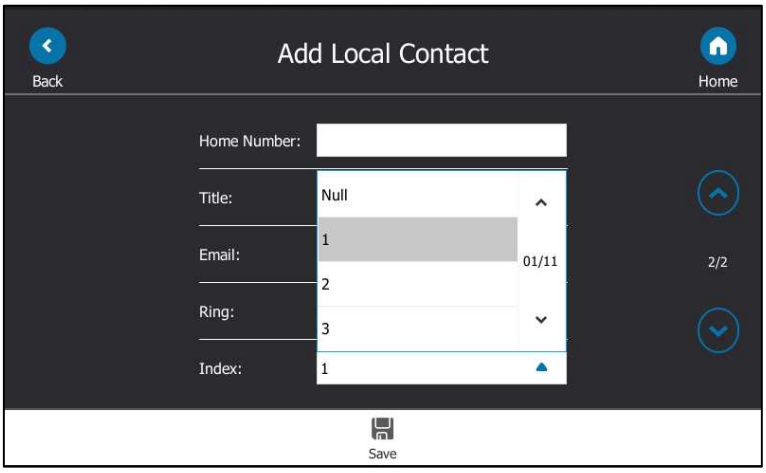
To add a local favorite via phone user interface:

1. Tap **Contacts**->**Local Directory**->**Favorites**.
2. Tap .
3. Enter the contact name, office, mobile, other numbers, Email, address and title in the corresponding fields.



4. Select the desired ringtone from the pull-down list of **Ring**.
5. Select the desired index number from the pull-down list of the **Index**.

The valid value of index number ranges from Null to 32 and the lowest number is Null. The contact with the lowest index number displays first.

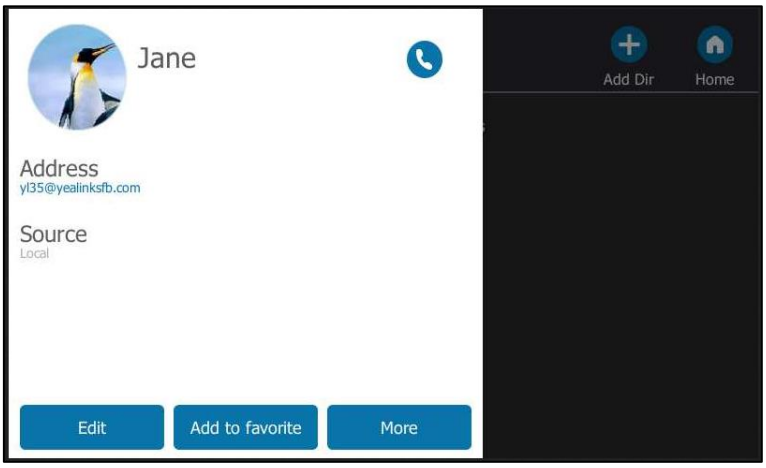


6. Tap to accept the change.

Adding a local favorite is configurable via web user interface at the path **Directory**->**Local Directory**.

To add a local contact as the local favorite via phone user interface:

1. Tap **Contacts**->**Local Directory**.
2. Tap the avatar of the desired contact.



3. Tap **Add to favorite**.
4. Select the desired index number from the pull-down list of **Index**.
5. Tap to accept the change.

   The entry is successfully saved to the local favorite.

Adding a local contact as the local favorites is configurable via web user interface at the path **Directory**->**Local Directory**.

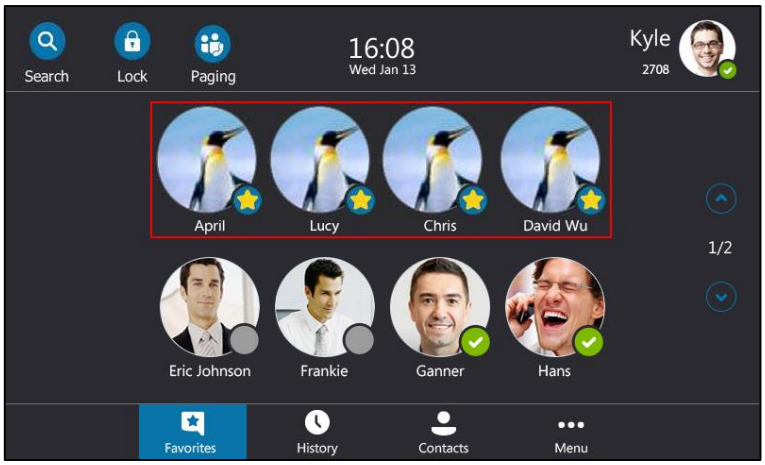
Viewing Local Favorites

You can view the local favorites on the **Favorites** screen or **Contacts** screen.

To view the local favorites on the Favorites screen:

1. Tap **Favorites**.

   The local favorite is indicated by the icon . By default, local favorites are displayed before the Skype for Business favorites.



To view the local favorites on the Contacts screen:

1. Tap **Contacts**->**Local Directory**->**Favorites**.
2. Tap the avatar of the desired contact.

   The detailed information of the contact appears on the touch screen.
3. Tap the black area on the right side or press (×) to return to the pervious screen.

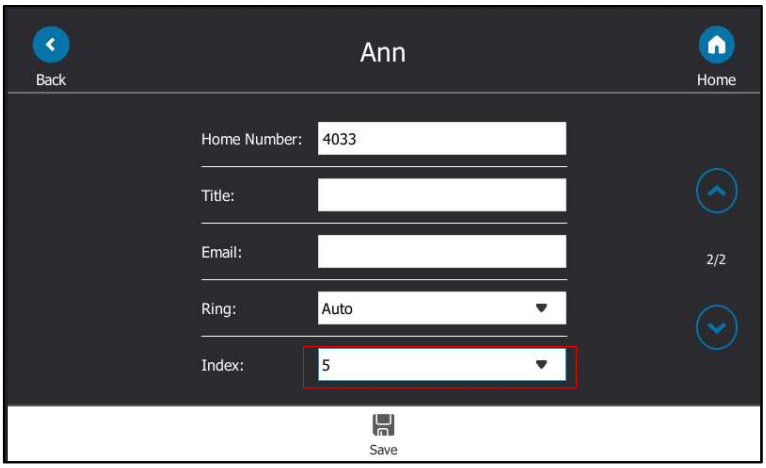
Reordering Local Favorites

To reorder your local favorites, assign the local favorite a different index number.

To reorder your local favorites:

1. Tap **Contacts**->**Local Directory**->**Favorites**.
2. Tap the avatar of the desired contact.
3. Tap the **Edit** soft key to edit the contact you selected.

4. Select the desired index number from the pull-down list of **Index**.



5. Tap to accept the change.

   The phone reorders the favorites according to the new index number.

Managing Local Favorites

On your phone, local favorites and the Skype for Business favorites are displayed on the **Favorites** screen. By default, local favorites are displayed before the Skype for Business favorites.

You can configure whether to display local favorites on the **Favorites** screen and configure the display order of the local favorites.

Example: April, Lucy, Chris and David Wu are your local favorites. Eric, Frankie, Ganner and Hans are your Skype for Business favorites.

Local favorites are indicated by the icon . Skype for Business favorites are indicated by the presence status icon. The following figure shows a sample of Favorites list on the **Favorites** screen.

You can tap , or press , to turn pages to view other favorites.

To configure the display priority of local favorite via web user interface:

1. Click on **Directory->Settings**.
2. Select the desired value from the pull-down list of **Local Favorite**.
3. Depending on your selection:
   - If **Disabled** is selected, only the Skype for Business favorites are displayed on the idle screen.
   - If **Preferential** is selected, local favorites will be displayed before the Skype for Business favorites on the idle screen.
   - If **General** is selected, the local favorites will be displayed behind the Skype for Business favorites on the idle screen.

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

Note You can configure the display priority of local favorite via web user interface only.

Placing Calls to Contacts

To place a call to favorites on the Favorites screen:

1. Tap the **Favorites** soft key.
2. Tap the avatar of the desired contact.

To place a call on the Contacts screen:

1. Tap the **Contacts** soft key.
2. Tap the group where the desired contact is in.
3. Tap the avatar of the desired contact, the detailed information of the contact appears on the touch screen.
4. Press OK or tap or tap the desired number to place a call.

Call History Management

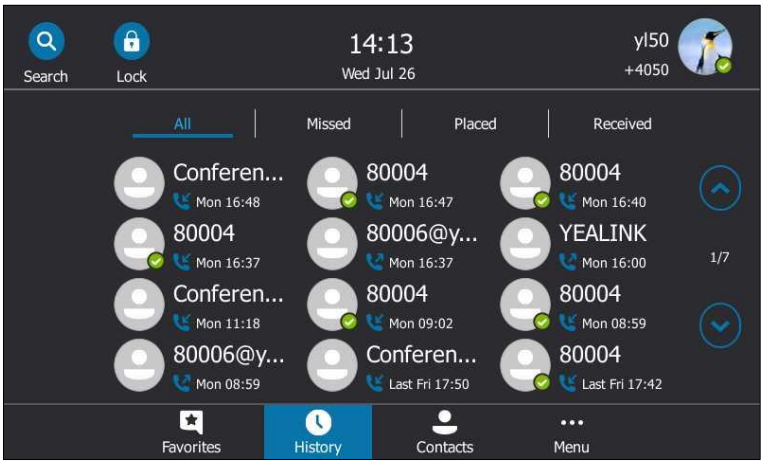
The T48S Skype for Business phone maintains call history lists of Missed, Placed and Received. Each call history list supports up to 100 entries.

Viewing History Records

To view the history records:

1. Tap the **History** soft key.

   The touch screen displays all call records.

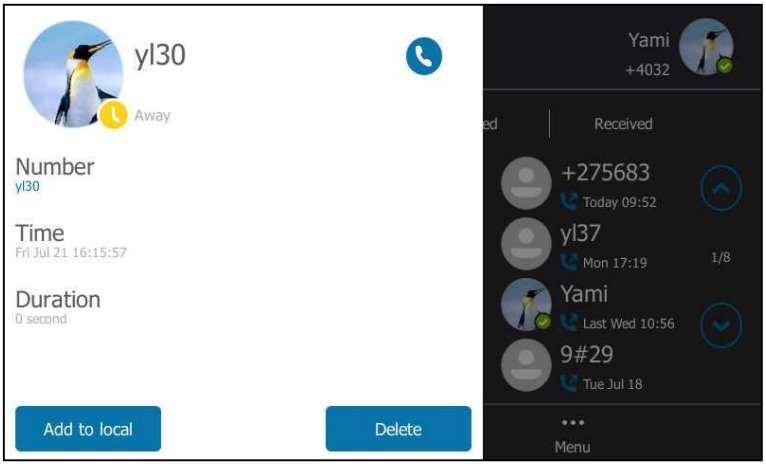


2. Tap ⌃, ⌄ or press ▲, ▼ to turn pages.

   You can tap **All**, **Missed**, **Placed** or **Received** to view entries in each call list directly.

3. Tap the desired entry.

   The detailed information of the entry appears on the touch screen.



4. Tap the black area of the right side or press ✕ to return to the pervious screen.

Placing a Call from History Records

You can place a call from the history records.

To place a call from history records:

1. Tap the **History** soft key.

   The touch screen displays all call records.

2. Tap , or press , to turn pages.

   You can tap **All**, **Missed**, **Placed** or **Received** to view entries in each call list directly.

3. Tap the desired entry.

   The detailed information of the entry appears on the touch screen.

4. Tap or press OK to place a call.

Adding Contacts from History Records

You can add local contacts and Skype for Business contacts from history records.

To add contacts from history records:

1. Tap the **History** soft key.

   The touch screen displays all call records.

2. Tap , or press , to turn pages.

   You can tap **All**, **Missed**, **Placed** or **Received** to view entries in each call list directly.

3. Tap the desired entry.

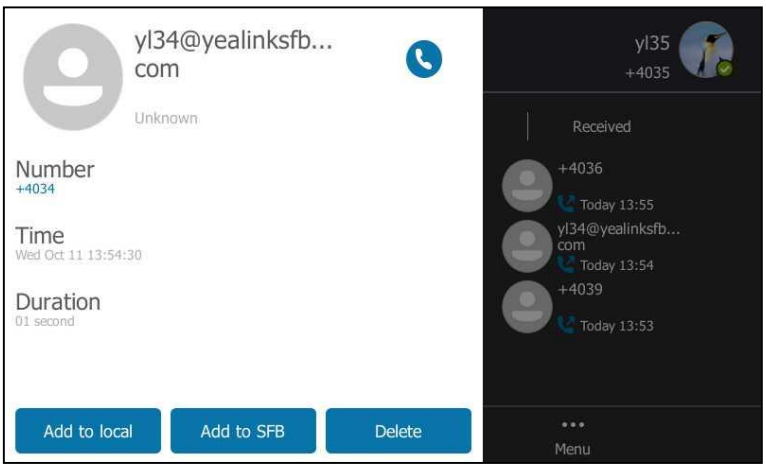
   The detailed information of the entry appears on the touch screen.

4. Depending on your selection:

   – If you select **Add to local**, edit the contact information.

     Tap to accept the change.

   – If you select **Add to SFB**, select the desired Skype for Business group.



The history record will be added to your local directory or Skype for Business directory.

Note Conference records cannot be added to local directory.

Deleting History Records

To delete a history record:

1. Tap the **History** soft key.
2. Tap , or press , to turn pages.

   You can tap **All**, **Missed**, **Placed** or **Received** to view entries in each call list directly.
3. Tap the desired entry.
4. Tap **Delete**.

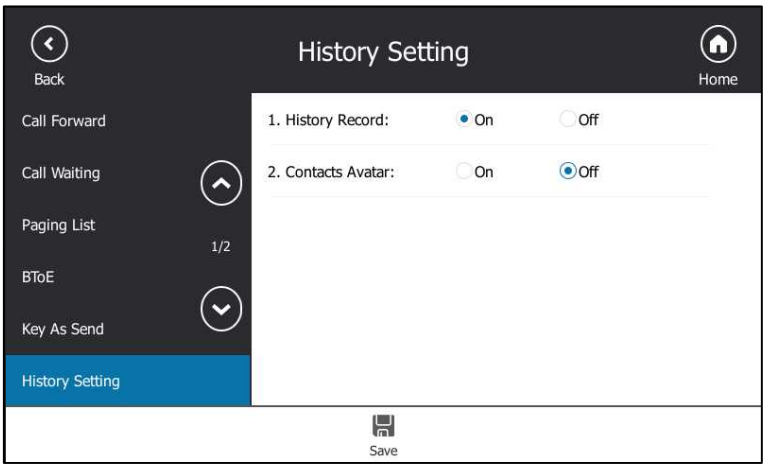
   The touch screen prompts" Delete the selected record?".
5. Tap the **OK** soft key.

Configuring Contact Avatar

Contact avatar is enabled by default that the phone will display the contact avatars in history records. You can disable this feature if you do not need.

To disable contact avatar via phone user interface:

1. Tap **Menu->Setting**->**Features**>**History Setting**.
2. Tap the **Off** radio box of the **Contact Avatar** field.



3. Tap to accept the change.

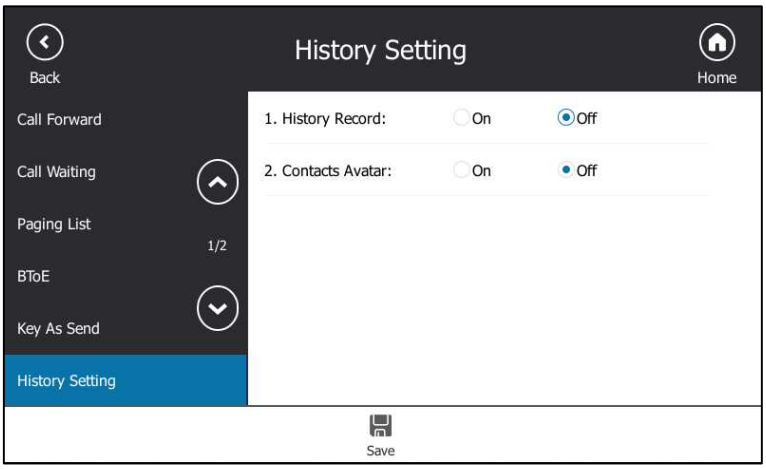
Contact avatar is configurable via web user interface at the path **Features**->**General Information**->**History Record Contacts Avatar**.

Disabling History Record

History record feature is enabled by default. If you do not want to save the call history, you can disable this feature.

To disable history record via phone user interface:

1. Tap **Menu->Setting**->**Features**>**History Setting**.
2. Tap the **Off** radio box of the **History Record** field.



3. Tap to accept the change.

Dial Plan

Dial plan is a string of characters that governs the way the phone processes the inputs received from the phone's keypads. The system administrator can use regular expression to define dial plan.

The dial plan is configured on the Skype for Business server by your system administrator, the phone can use the dial plan received from the Skype for Business server with the method of In-band provisioning. When user enters digits on the dialing screen, the phone will match the digits to a dial plan.

Dial-now

You can configure one or more dial-now rules (up to 100) on your phone. When the dialed number matches the dial-now string, the number will be dialed out automatically. For example, a dial-now rule is configured as "1xxx", any entered four-digit string beginning with 1 will then be dialed out automatically on the phone.

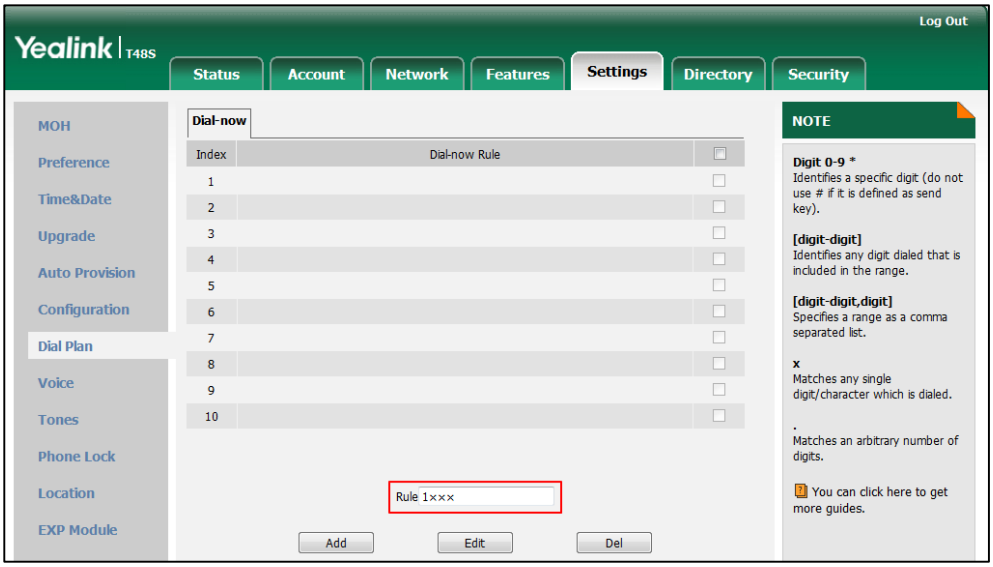
Basic expression syntaxes you need to know:

Syntax	Description
.	The dot "." can be used as a placeholder or multiple placeholders for any character. Example: "12." would match "12**3**", "12**34**", "12**345**", "12**abc**", etc.
x	An "x" can be used as a placeholder for any character. Example: "12x" would match "12**1**", "12**2**", "12**3**", "12**a**", etc.

Syntax	Description
-	Numeric ranges are allowed within the brackets: Digit "-" Digit. Example: "[5-7]" would match the number"**5**", "**6**"or "**7**".
[]	The square brackets "[]" can be used as a placeholder for a single character which matches any of a set of characters. Example: "91[5-7]1234" would match "91**5**1234", "91**6**1234", "91**7**1234".
()	The parentheses "( )" can be used to group together patterns, for instance, to logically combine two or more patterns. Example: "([1-9])([2-7])3" would match "**92**3", "**15**3", "**77**3",etc.
$	The "$" followed by the sequence number of a parenthesis means the characters placed in the parenthesis. The sequence number stands for the corresponding parenthesis. Example: A replace rule configuration, Prefix: "001(xxx)45(xx)", Replace: "9001$145$2". When you dial out "0012354599" on your phone, the Skype for Business phone will replace the number with "9001**235**45**99**". "$1" means 3 digits in the first parenthesis, that is, "235". "$2" means 2 digits in the second parenthesis, that is, "99".

To add a dial-now rule via web user interface:

1. Click on **Settings**->**Dial Plan**.
2. Enter the desired value (e.g., 1xxx) in the **Rule** field.



3. Click **Add** to add the dial-now rule.

   For example: when you enter the number "1234" using the keypad, the phone will dial out "1234" automatically without pressing any key.

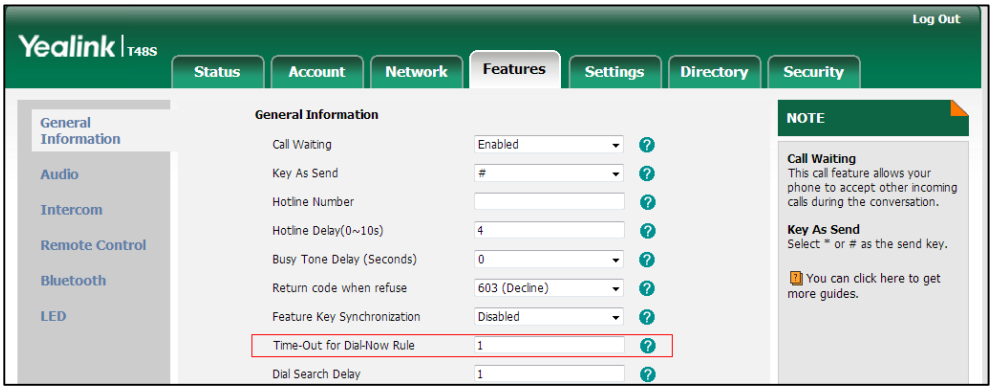
Note Dial-now rule is configurable via web user interface only.

Delay Time for Dial-Now Rule

You can configure the delay time for dial-now rules. That is, you can configure your phone to automatically dial out the phone number which matches a dial-now rule, after the designated delay time.

To configure the delay time for dial-now rule via web user interface:

1. Click on **Features**->**General Information**.
2. Enter the time between 1 and 14 (seconds) in the **Time-Out for Dial-Now Rule** field.



3. Click **Confirm** to accept the change.

For example: when you enter the number "1234" using the keypad, the phone will dial out "1234" automatically after 1 second without pressing any key.

Note Delay time for dial-now rule is configurable via web user interface only.

Basic Call Features

The T48S Skype for Business phone is as easy to use as a traditional fixed phone which is deployed on the public switched telephone network (PSTN), allowing you to place/answer/transfer a call, or conduct a Skype for Business conference call. Also, you can perform Skype for Business features, like calendar, response groups, boss-admin on this phone.

This chapter provides basic operating instructions for the T48S Skype for Business phone. Topics include:

- Switching among the Handset, Speakerphone and Headset Modes
- Placing Calls
- Answering Calls
- Ending Calls
- Call Mute
- Call Hold/Resume
- Call Forward
- Team-Call Group
- Response Groups
- Call Queue
- Inbound Private Lin
- Call Transfer
- Skype for Business Conference
- Calendar
- Parking and Retrieving Calls on the Skype for Business Server
- Group Call Pickup
- Shared Line Appearance(SLA)
- Voicemail

For more information or assistance with your new phone, contact your system administrator.

Switching among the Handset, Speakerphone and Headset Modes

You can place and answer calls on your phone in one of the three ways:

- Pick up the handset to use the handset mode.
- Press the Speakerphone key to use the speakerphone mode. The key LED glows green.
- Press the HEADSET key to use the headset mode. The key LED glows green.

You can select the desired mode before placing a call. You can also dial the number first, and then choose the way you want to speak to the other party.

You can also alternate between Speakerphone, Headset, and Handset modes by pressing the Speakerphone key, the HEADSET key, or by picking up the handset during a call.

Note To permanently use the headset mode, refer to Enabling the Headset Prior on page 210.

Placing Calls

You can place calls in many ways, including placing multiple calls, placing a call from the search result list, dialing the hotline number or redialing numbers. You can also dial an entry/contact from call history or directory. For more information, refer to Contact Management on page 69 and Call History Management on page 85.

Placing a Call

To place a call:

1. Do one of the following:
   - Pick up the handset.
   - Press the Speakerphone key.
   - Press the HEADSET key.
2. Enter a number.

   You can also select a desired contact from the search result list, favorites screen, call history or directory.
3. Tap .

   You can also press the OK key or # key on your phone.

The # key is configured as a send key by default. You can also set the * key as the send key, or set neither. For more information, refer to Key as Send on page 61.

Your system administrator can enable live dialpad feature, which enables your phone to automatically dial out the phone number after a period of time without pressing the send key.

Check with your system administrator to find out if this feature is available on your phone.

Placing Multiple Calls

The phones can handle multiple calls at a time. However, only one active call (the call that has audio associated with it) can be in progress at any time. The phones can handle the maximum of 50 calls at one time.

To place multiple calls:

1. Press or tap .
   The active call is placed on hold.
2. Tap .
3. Enter the desired number.
   You can also select a desired contact from the search result list, favorites screen, call history or directory.
4. Tap .
   You can also press the OK key or # key on your phone.

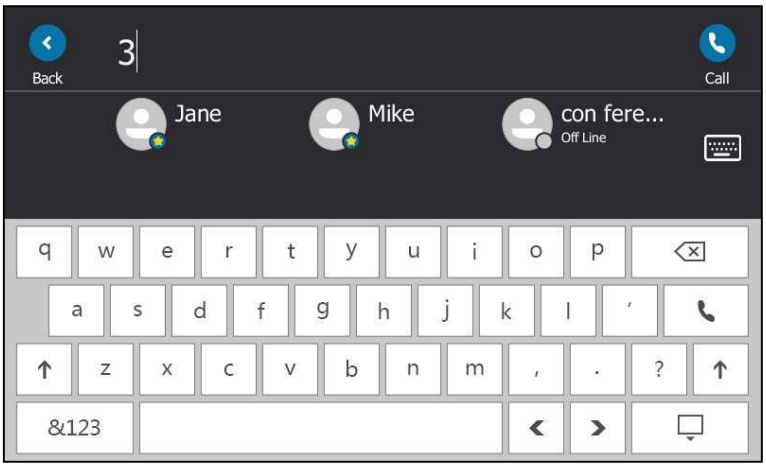
Placing a Call from the Search Results List

On the Dialing screen, you can search for Skype for Business contacts, local contacts and Microsoft Outlook contacts.

To place a call from the search results list:

1. Pick up the handset or press the Speakerphone key.
2. Enter a few continuous characters of the contact name or continuous numbers of the contact number to search for a desired contact.
3. Tap "**Click here or press the navigation key to view the results**."

The result list will appear on the touch screen:



4. Tap the desired entry from the result list, and then tap .

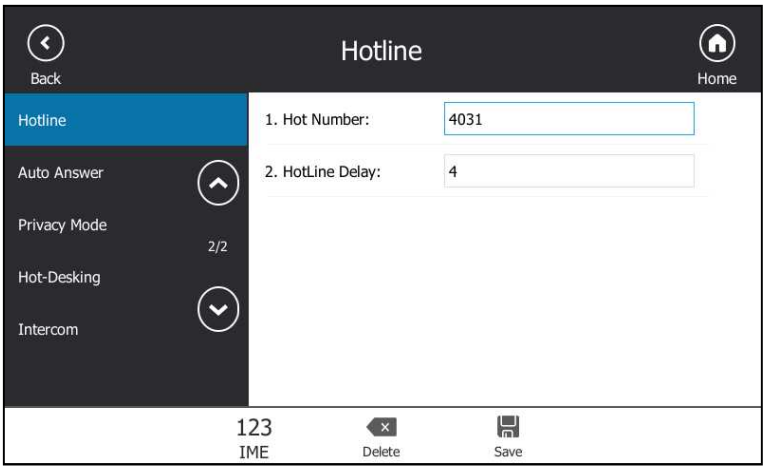
Dialing the Hotline Number

You can configure a hotline number and a delay. When you lift the handset or press the Speakerphone key, the phone will dial out the hotline number automatically after a designated period of time.

To configure the hotline number via phone user interface:

1. Tap **Menu->Setting**->**Features**->**Hotline**.
2. Enter the desired number in the **Hot Number** field.
3. Enter the desired delay time in the **HotLine Delay** field.

   The valid values range from 0 to 10 (seconds) and the default value is "4".



4. Tap to accept the change.

Hotline is configurable via web user interface at the path **Features**->**General Information**.

Redialing Numbers

To redial the last dialed number from your phone:

1. Press .

   A call to your last dialed number is attempted.

Answering Calls

When you receive an incoming call on your phone, you can choose to answer it in various ways. You can answer a call or multiple calls, or answer calls automatically.

Note

You can ignore some incoming calls to your phone by tapping or pressing . You can also change your status to DND to ignore some incoming calls without ring on your phone. For more information, refer to Changing Presence Status on page 28.

You can forward incoming calls to someone else by tapping . You can also forward incoming calls to voice mail by tapping . For more information, refer to Dynamic Forwarding on page 110.

Answering When Not in Another Call

Do one of the following:

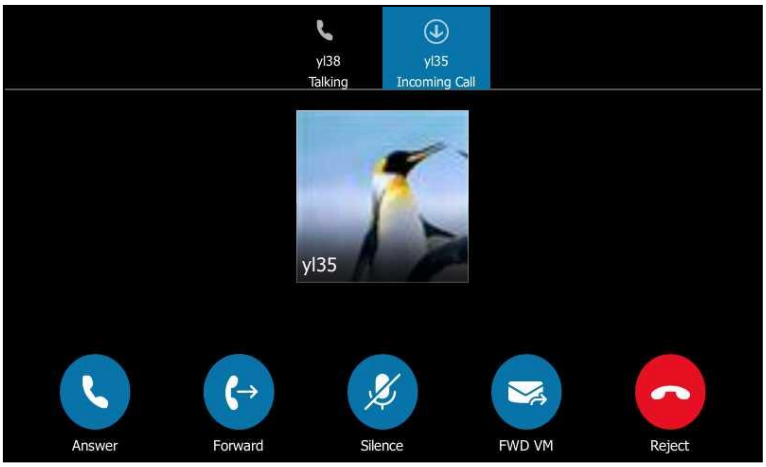
- Pick up the handset. The call is answered in handset mode.
- Press the Speakerphone key. The key LED glows green. The call is answered in hands-free (speakerphone) mode.

  With the handset on-hook and headset mode deactivated, you can tap . The call is answered in hands-free (speakerphone) mode.
- Press the HEADSET key. The key LED glows green. The call is answered in headset mode.

  With the headset mode activated, you can tap . The call is answered in headset mode.

Answering When in Another Call

If you have an active call and an incoming call arrives on the phone, the incoming call information is displayed on the touch screen.



Answering When in Another Calls

1. Tap .

   The incoming call is answered and the original call is placed on hold.

Note If call waiting is disabled, the phone that has an active call will reject other incoming calls automatically. For more information, refer to Configuring the Call Waiting on page 99.

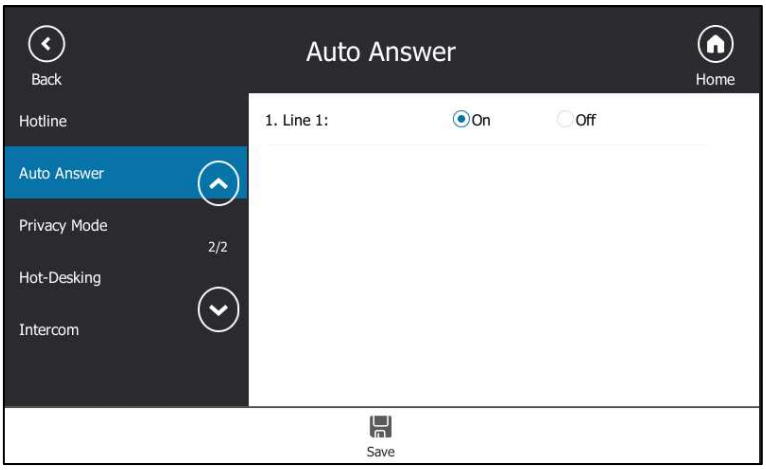
Answering Calls Automatically

You can enable auto answer feature to automatically answer an incoming call using the speakerphone.

To configure auto answer via phone user interface:

1. Tap **Menu->Setting**->**Features**->**Auto Answer**.

2. Tap the **On** radio box of the **Line1** field.



3. Tap to accept the change.

   The icon appears on the touch screen.

Auto answer is configurable via web user interface at the path **Account**->**Basic**->**Auto Answer**.

Note Auto answer is only applicable when there is no other call in progress on the phone.

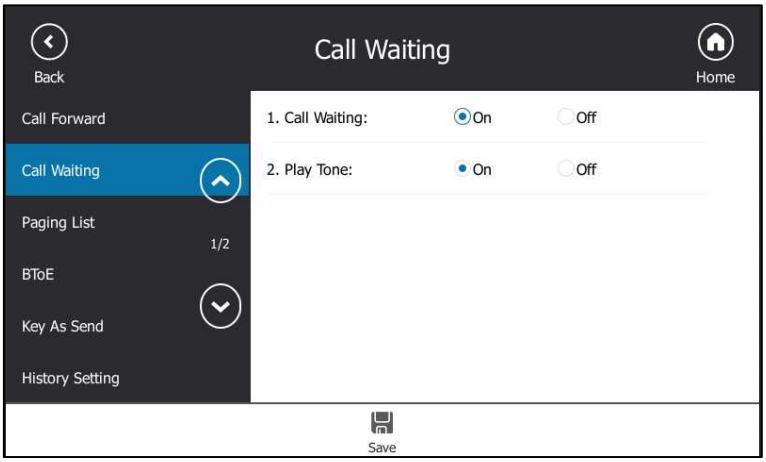
Configuring the Call Waiting

You can enable or disable call waiting on the phone. If call waiting is enabled, you can receive another call when there is already an active call on the phone. Otherwise, another incoming call is automatically rejected by the phone with a busy message when there is an active call on the phone. You can also enable or disable the phone to play a warning tone when receiving another call.

To configure call waiting via phone user interface:

1. Tap **Menu->Setting**->**Features-**>**Call Waiting**.
2. Tap the **On** radio box of the **Call Waiting** field.

3. Tap the **On** radio box of the **Play Tone** field.

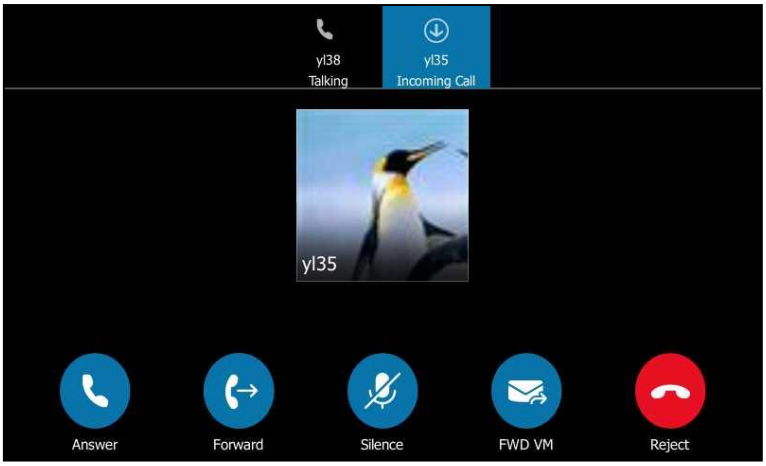


4. Tap to accept the change.

To use the call waiting:

1. When the phone receives an incoming call during a call.

   The phone touch screen displays as below:



2. Do one of the following:

   - Tap to answer the incoming call.

     The original call will be placed on hold.
   - Tap to forward the incoming call to another contact.
   - Tap to ignore the incoming call.
   - Tap to forward the incoming call to voicemail.
   - Tap to reject the incoming call.

Call waiting is configurable via web user interface at the path **Features**->**General Information**->**Call Waiting**.

Call waiting tone is configurable via web user interface at the path **Features**->**Audio**->**Call Waiting Tone**.

Ending Calls

To end a call:

Do one of the following:

- If you are using the handset, press ×, hang up the handset or tap .
- If you are using the headset, press × or tap .
- If you are using the speakerphone, press × or , or tap .

Note When a call is placed on hold, you cannot press × to end it. You should tap to resume the call, and then press × to end it.

Call Mute

You can mute the microphone of the active audio device during an active call, and then the other party cannot hear you. Call mute applies to all modes (Handset, Headset and Speakerphone).

To mute a call:

1. Press during an active call.
   The touch screen indicates that the call is muted. The mute key LED glows red when the call is muted.

To un-mute a call:

1. Press again to un-mute the call.

Call Hold/Resume

You can place an active call on hold. Only one active call can be in progress on the phone at any time. Other calls can be made and received while placing the original call on hold. If **Music on Hold** feature is enabled, the phone will play music to the callers who has been placed on hold. For more information, please refer to Music on Hold on page 102.

To place a call on hold:

1. Press or tap during a call.

   The touch screen indicates that the call is on hold.

The phone will beep softly every 30 seconds to remind you that you still have a call on hold.

To resume a held call:

1. Press or tap .

Multiple Calls on Hold:

1. If multiple calls are placed on hold, tap the desired call and then press or tap to retrieve it.

Music on Hold

Music on Hold (MoH) is the business practice of playing recorded music to fill the silence that would be heard by the party who has been placed on hold. When a call is placed on hold, the Skype for Business phone will play a music to the held party.

Users can upload a custom music to the phone or use the music received from the Skype for Business server with the method of In-band provisioning.

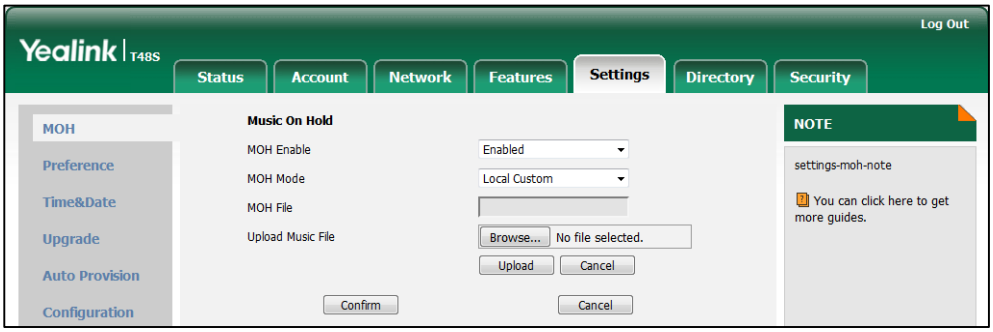
The uploaded music format must meet the following:

Format	Single File Size	Duration
.wav	1~500K	1~30s

Note The music file must be PCMU/PCMA audio format, mono channel, 8K sample rate and 16 bit resolution.

To configure music on hold via web user interface:

1. Click on **Settings**->**MOH**.
2. Select **Enabled** from the pull-down list of **MOH Enable**.



3. Select the desired mode from the pull-down list of **MOH Mode**.
   - If you select **Inband provision**, your phone will play the music received from the Skype for Business server to the held party.
   - If you select **Local Custom**, you can click **Browse** in the **Upload Music File** field to select a music file saved in your local computer.

     Click **Upload** to upload the custom music.

     The held party will hear your custom music

Call Forward

You can configure your phone to forward incoming calls to another party or to voicemail box (static forwarding). You can also forward calls while your phone is ringing (dynamic forwarding).

Static Forwarding

Static Forwarding on T48S Skype for Business phone

T48S Skype for Business phone supports the following static forwarding ways:

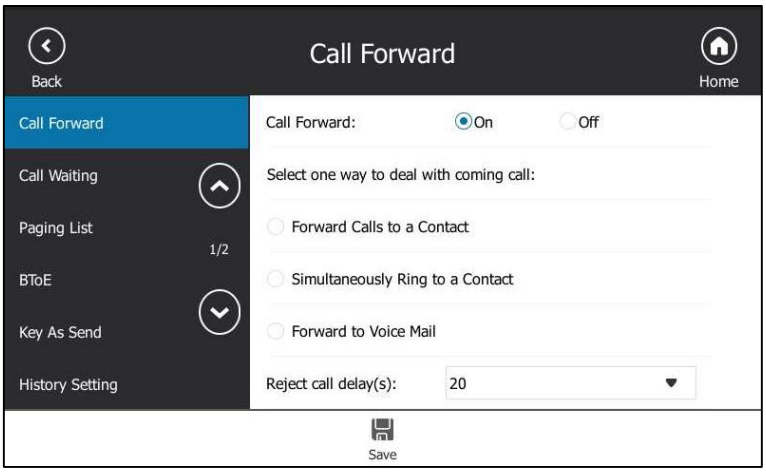
- **Forward Calls to a Contact**: Incoming calls are forwarded to the preset number or contact.

- **Simultaneously Ring to a Contact**: The preset number will ring simultaneously when you receive incoming calls.
- **Forward to Voice Mail**: Incoming calls are forwarded to voicemail.
- **Forward to Delegates**: If you have delegates assigned to your line, you can forward all incoming calls directly to your delegates.
- **Simultaneously Ring to Delegates**: If you have delegates assigned to your line, you can enable your delegates' phones to simultaneously ring when you receive incoming calls.
- **Simultaneously Ring to Team Call**: If you have a team-call group assigned to your line, you can enable all Skype for Business contacts in this group to simultaneously ring when you receive incoming calls.

To enable call forward:

1. Tap **Menu->Setting**->**Features**->**Call Forward**.

   You can also press when the phone is idle.
2. Tap the **On** radio box of the **Call Forward** field.

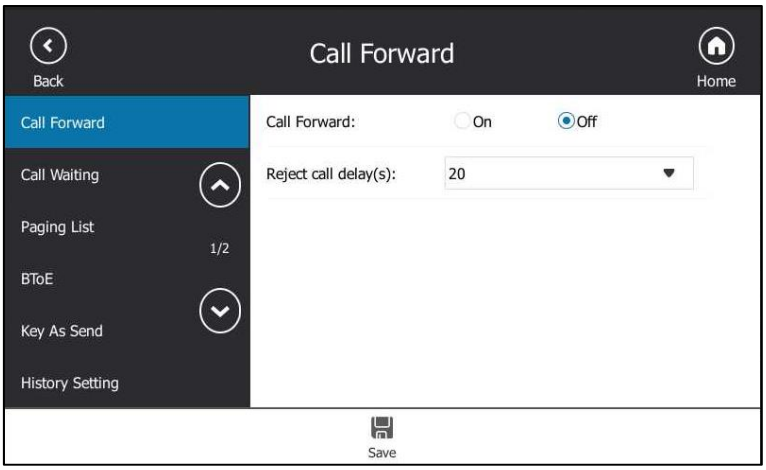


3. Tap the desired forwarding type.
4. Tap to accept the change.

To disable call forward:

1. Tap **Menu->Setting**->**Features**->**Call Forward**.

You can also press when the phone is idle.



2. Tap the **Off** radio box of the **Call Forward** field.
3. Tap to accept the change.

Static Forwarding on the Skype for Business Client

You can assign static forwarding feature using the Skype for Business client:

a) **Forward my calls to**:

- **Voicemail**: Incoming calls are forwarded to voicemail.
- **New Number or Contact**: Incoming calls are forwarded to the preset number or contact.
- **My Delegates**: If you have delegates assigned to your line, you can forward all incoming calls directly to your delegates.

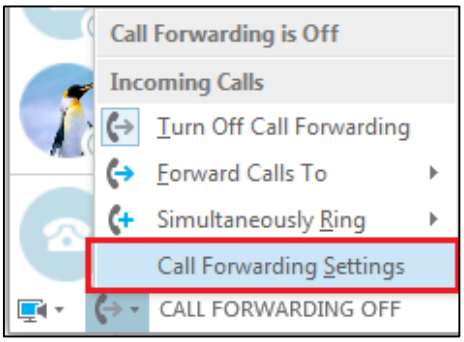
b) **Simultaneously ring**:

- **New Number**: The preset number will ring simultaneously when you receive incoming calls.
- **My delegates**: If you have delegates assigned to your line, you can enable your delegates' phones to simultaneously ring when you receive incoming calls.
- **My Team-Call Group**: If you have a team-call group assigned to your line, you can enable all Skype for Business contacts in this group to simultaneously ring when you receive incoming calls.

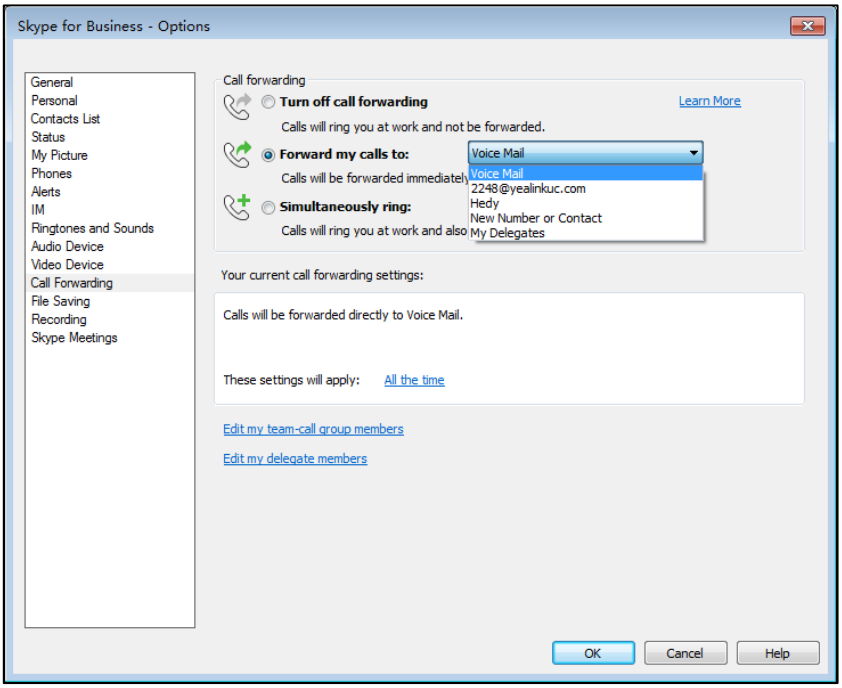
Configuring Call Forwarding on Skype for Business Client

To forward incoming calls immediately without ringing your phone:

1. In Skype for Business client, click and then select **Call Forwarding Settings**.



2. Tap the radio box of the **Forward my calls to** field.
3. Select the desired forwarding type from the pull down-list of **Forwarding my calls to.** Depending on your selection:

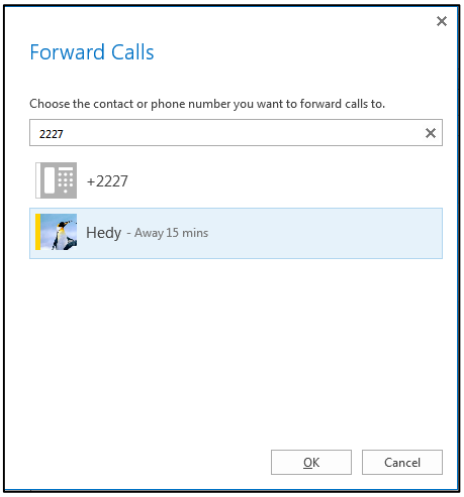


a) If you select **Voice Mail**:

Incoming calls are forwarded directly to the voicemail.

b) If you select **New Number or Contact**:

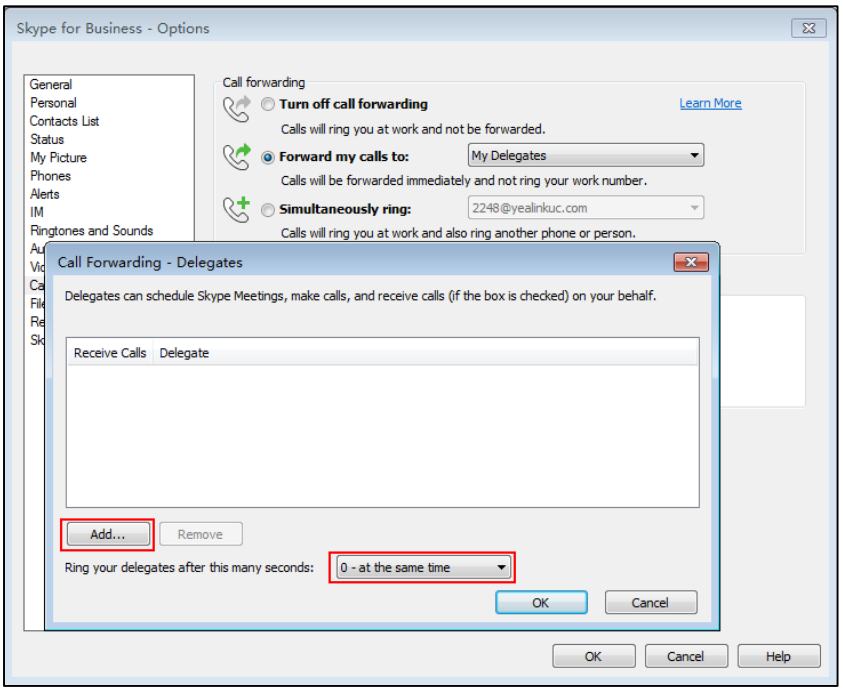
Select the contact or enter the phone number you want to forward calls to.



After configuration, incoming calls are forwarded to the preset number or contact.

c) If you select **My Delegates**:

Add the delegates you want to forward calls to when you receive an incoming call. You can also specify that after how many seconds the delegate's phone ring.

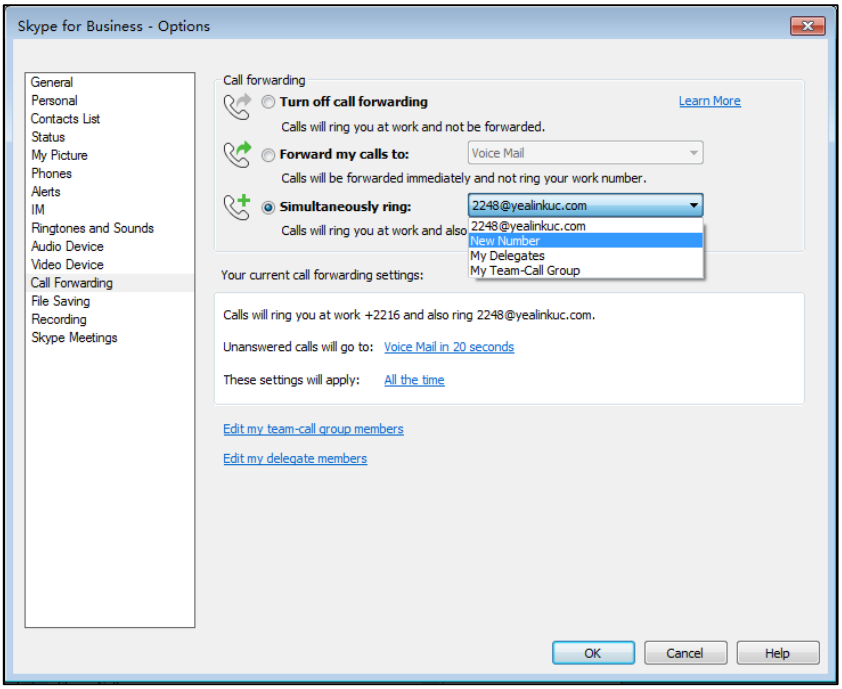


Configuring Simultaneously Ring on Skype for Business Client

To ring other phones simultaneously when your phone is ringing:

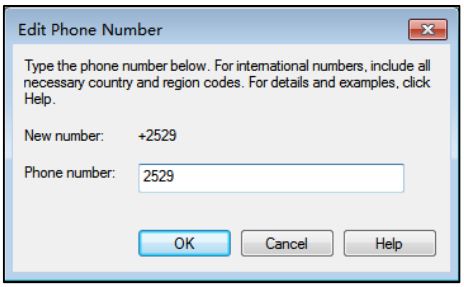
1. In Skype for Business client, click and then click **Call Forwarding Settings**.
2. Mark the radio box of the **Simultaneously ring** field.

Depending on your selection:



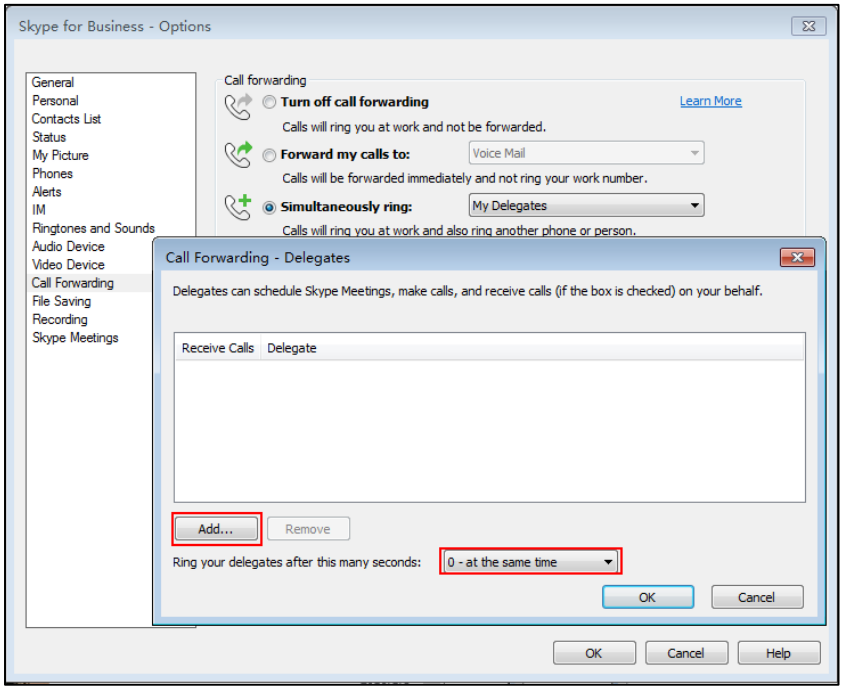
a) If you select **New Number**:

Enter the phone number in the pop-up window, and then click **OK** to accept the change. The phone with this number will ring simultaneously when you receive an incoming call.



b) If you select **My Delegates**:

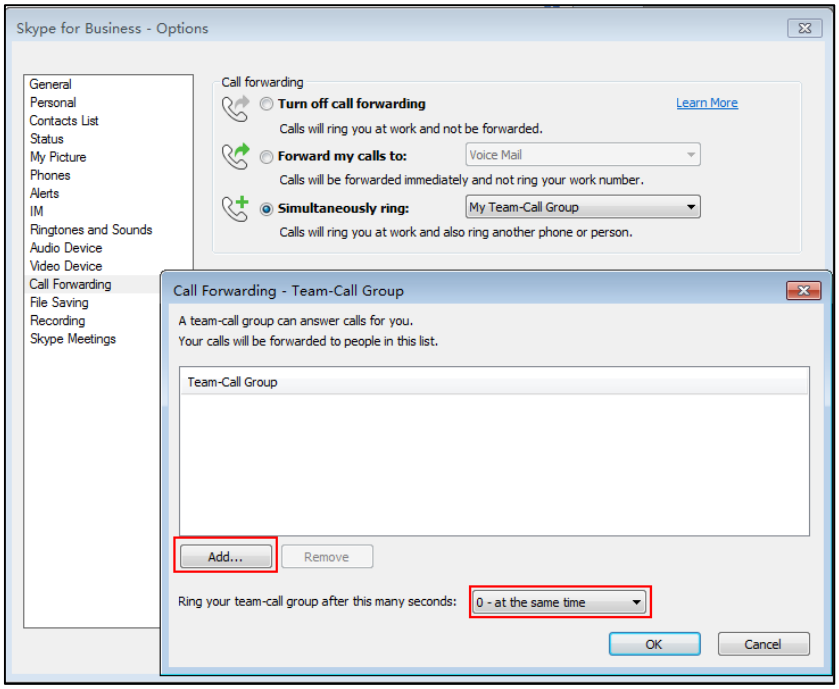
Add the delegates you want to ring simultaneously when you receive an incoming call. You can also specify that after how many seconds the delegate's phone rings.



c) If you select **My Team-Call Group**:

Add the contacts into the Team-Call Group. All members in the group will ring simultaneously when you receive an incoming call. You can also specify that after how many seconds the delegate's phone rings.

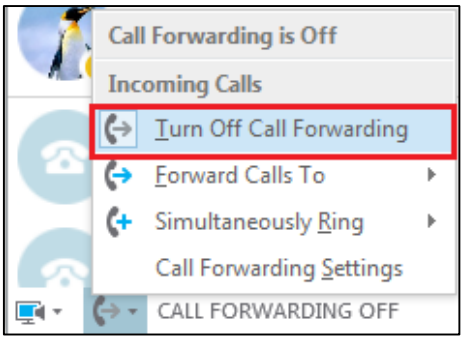
For more information on how to assign a distinct ringtone to Team-Call group, refer to Team-Call Ringtone on page 112.



If one member answers the call, other phones which in this Team-Call Group will stop ringing.

To disable the call forwarding:

1. In Skype for Business client, click and then select **Turn Off Call Forwarding**.



Configuring the Delay Time for Rejecting Incoming Calls

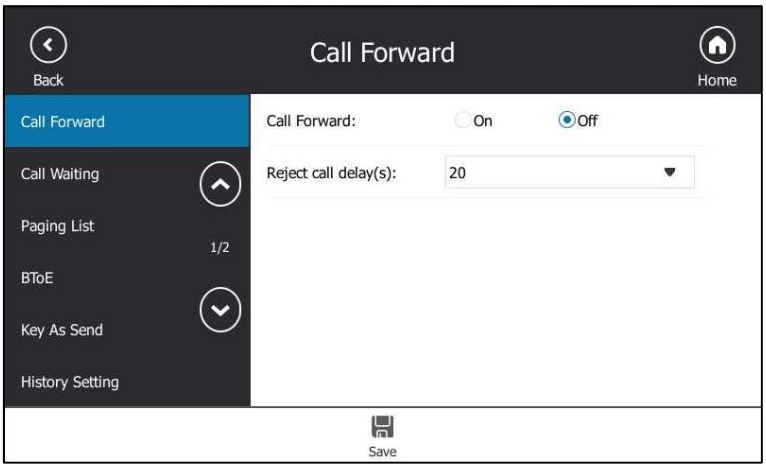
You can configure the delay time for rejecting incoming calls. That is, incoming calls are rejected if it is not answered after the designated delay time.

To configure the delay time for rejecting incoming calls:

1. Tap **Menu**->**Setting**->**Features**->**Call Forward**.

   You can also press when the phone is idle.

2. Select the desired value from the pull-down list of **Reject call delay(s)**.



3. Tap to accept the change.

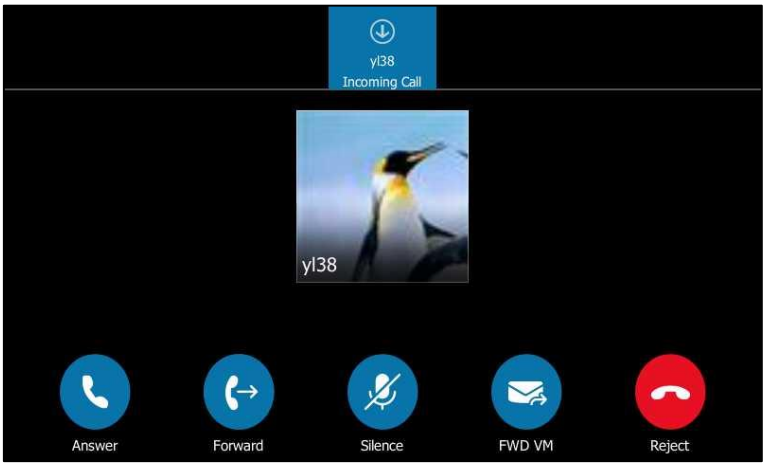
   The calls will go to your voice mail if it is not answered after 20 seconds.

Dynamic Forwarding

You can manually forward the call to another number while your phone rings.

To forward an incoming call to another party:

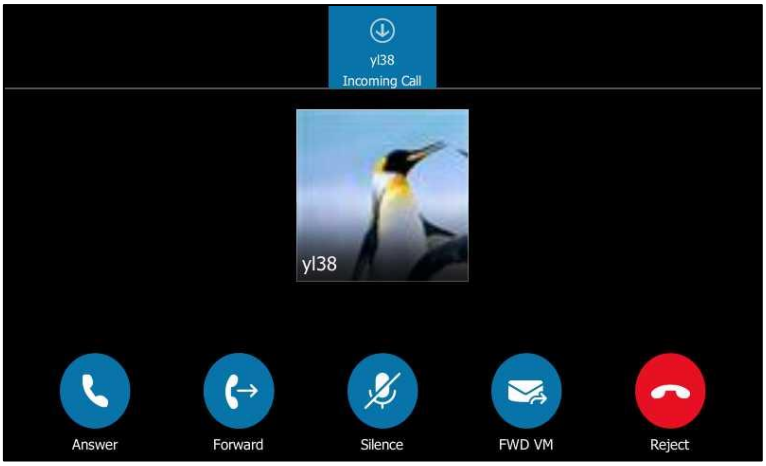
1. When the phone is ringing, tap .



2. Do one of the following:
   - Enter a number and then tap .
   - Select a desired contact from the search result list, call history or directory, and then tap .
   - Tap the avatar of the desired contact on **Favorites** screen.

To forward an incoming call to voicemail directly:

1. Tap When the phone is ringing.



The incoming call will be forwarded to your voicemail directly.

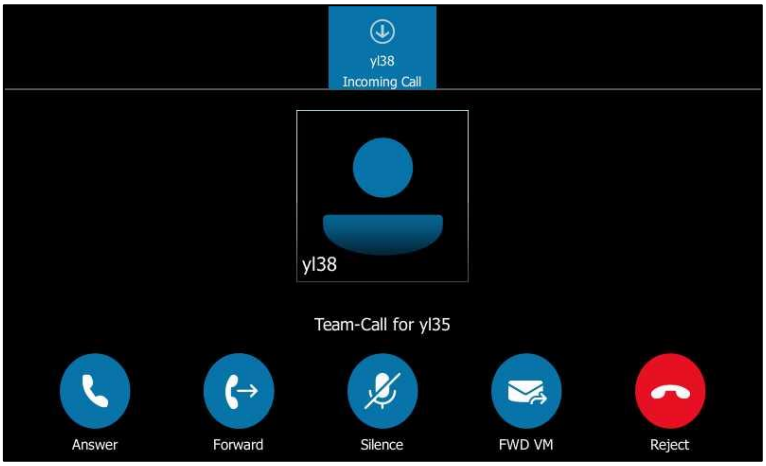
Team-Call Group

A team-call group is a team of people who can answer your work calls. You can use Skype for Business client to add or remove members, and configure when they can answer calls for you.

For more information on how to configure team-call group, refer to Configuring Simultaneously Ring on Skype for Business Client on page 107.

Assume that you have a team of people working on the same project or task. If you are out of office and your phone rings, anyone in the team-call group can answer the call for you. As soon as any one of the team members picks up the phone, the other phones stop ringing.

For example, a user (yl38) calls a user named "yl35", other members in the same team-call group of yl35 will ring too, their phones' screens are shown as below:

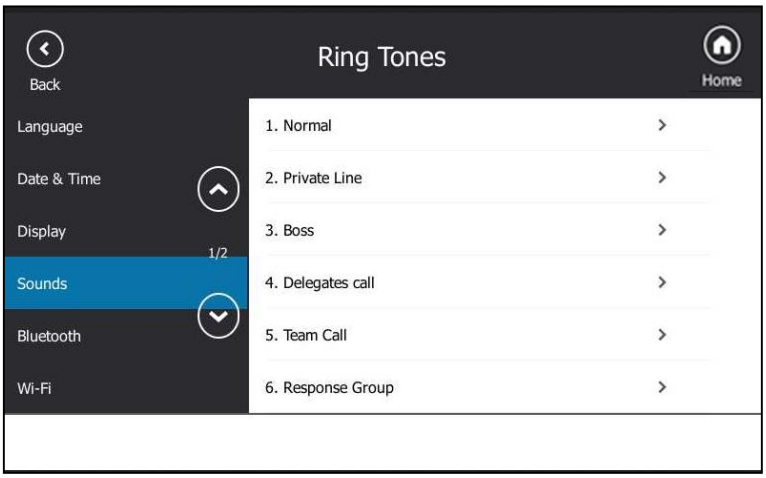


Team-Call Ringtone

Team-call ringtone feature allows the phone to play a distinct ringtone when receiving a team call.

To set a ringtone for the Team Call via phone user interface:

1. Tap **Menu**->**Setting**->**Basic**->**Sounds**-> **Ring Tones**->**Team Call**.



2. Tap the desired ringtone.
3. Tap to accept the change.

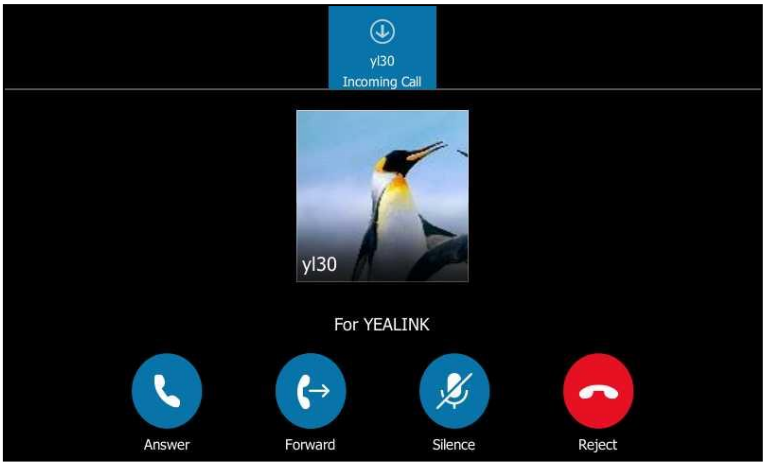
Response Groups

If you sign into the phone using On-Premises account, you can use response group feature. But the current Online environment does not support this feature.

A response group is a feature that route and queue incoming calls to group members, called agents, such as to a help desk or a customer service desk.

When someone calls a response group, the call is routed to an agent based on a hunt group or the caller's answers to interactive voice response (IVR) questions. The Response Group application uses standard response group routing methods to route the call to the next available agent. After a call agent accepts the call, other agents' phones stop ringing.

For example, you have been selected by your system administrator to be a call agent for a response group named "YEALINK". When a user named "yl30" calls your response group, your phone is shown as below:



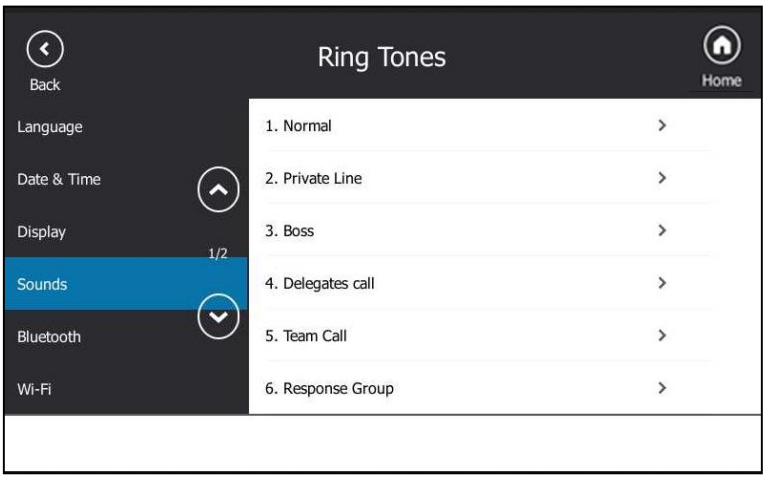
Note Response group can be configured via by Skype for Business Server only. Contact your system administrator for more information.

Response Group Ringtone

Response group ringtone feature allows the phone to play a distinct ringtone when receiving a response group calls.

To set a ringtone for the response group via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Sounds**-> **Ring Tones**->**Response Group**.



2. Tap the desired ringtone.
3. Tap to accept the change.

Call Queue

If you sign into the phone using Online account, you can use call queue feature. On-Premises environment does not support this feature.

The call queue is a feature that route and queue incoming calls to group members, called agents, such as to a help desk or a customer service desk.

When someone calls in to a phone number that is set with a call queue, they will hear a greeting first (if any is setup), and then they will be put in the queue and wait for the available call agent. The person calling in will hear music while they are placed on hold and waiting, and the call in the queue will ring all call agents at the same time. After a call agent accepts the call, other agents' phones stop ringing.

Note Call queue can be configured on Server only. Contact your system administrator for more information.

Inbound Private Line

If you sign into the phone using On-Premises account, you can use inbound private line feature. But the current Online environment does not support this feature.

In many organizations, the administrative secretary may answer the office phones for his boss sometimes. This is easily accomplished on the Skype for Business Server by using call delegation. As a result, if one person dials the primary line of the boss, the phones of the delegates will ring simultaneously.

The system administrator can assign a private line to boss if one of the following situations occurs:

- The boss doesn't want to miss important calls denied by his DND status.
- The boss doesn't want the delegate to answer some important or confidential calls for him.
- The boss wishes his friends and families to reach him directly or bypass his delegate.

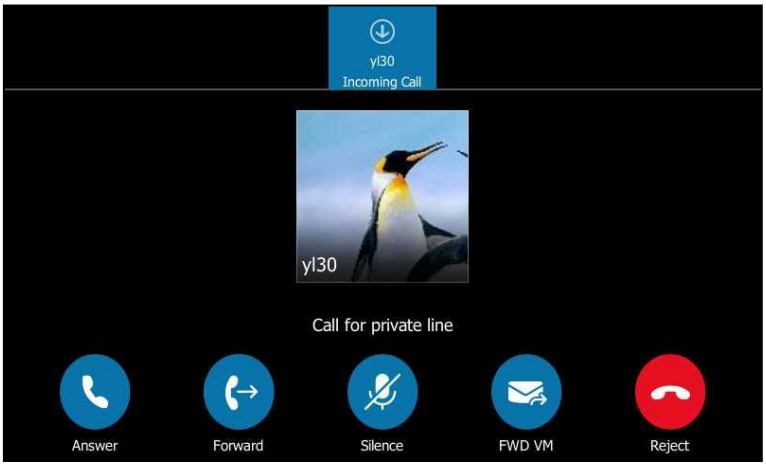
So compared with dialing the primary line of the boss, if the people dial the private line of the boss, only boss's phone rings.

Characteristics of Private Lines:

- A user can have only one private line.
- A user with a private line has only one voicemail.
- The phone receives the calls calling to the private line rings at any time. They do not follow "Do Not Disturb" rules.
- Private lines are inbound only and cannot be used to make outgoing calls.
- None of the following features are available with a private telephone line: delegation, and Response Group application.

For more information on planning for private telephone lines, refer to *Plan for private telephone lines*.

When receiving a private call, the touch screen of the phone will prompt "Call for private line":



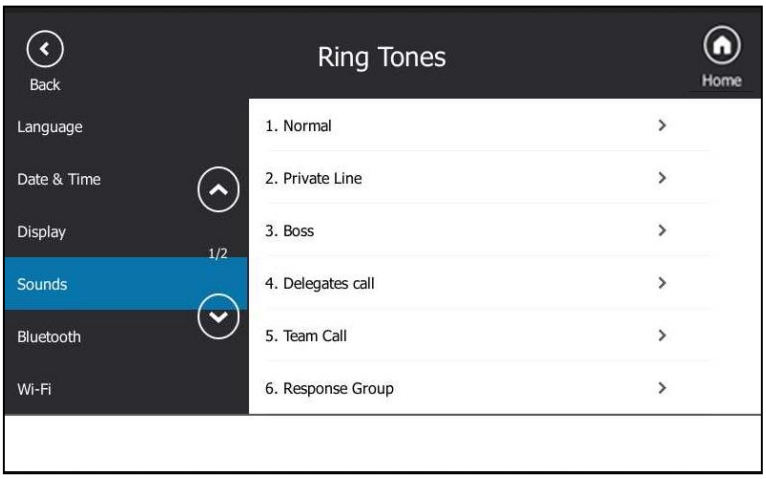
Note Private lines can be configured on the Skype for Business server only. Contact your administrator for more information.

Private Line Tones

Private line feature allows the Skype for Business phone to play a specific ringtone when receiving a private call.

To select a ringtone for the private line via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Sounds**->**Ring Tones**->**Private Line**.



2. Tap the desired ringtone.
3. Tap to accept the change.

A ringtone for the private line is configurable via web user interface at the path **Settings**->**Preference**->**Private line ring**.

Call Transfer

You can transfer a call to another party in one of the two ways:

- **Blind Transfer**: Transfer a call directly to another party without consulting.
- **Consultative Transfer**: Transfer a call with prior consulting.

Blind Transfer

To perform a blind transfer during a call:

1. Press or tap during a call.

2. Do one of the following:
   - Enter a number and then tap .
   - Select a desired contact from the search result list, call history or directory, and then tap .
   - Tap the avatar of the desired contact on **Favorites** screen.

     Then the call is connected to the number to which you are transferring.

Consultative Transfer

To perform a consultative transfer:

1. Tap during a call.

2. Do one of the following:
   - Enter a number and then tap .
   - Select a desired contact from the search result list, call history or directory, and then tap .
   - Tap the avatar of the desired contact on **Favorites** screen.
3. After the party answers the call, press or tap to complete the transfer.

Skype for Business Conference

This chapter instructs you how to manage Skype for Business conference. You can initiate a Skype for Business conference call on your phone or on the Skype for Business client. You can view or manage the conference participants (e.g., promote or demote conference participants, enable or disable announcements).

Initiating a Skype for Business Conference Call

You can initiate a Skype for Business conference call on your phone or on the Skype for Business client.

Note You can join a conference from the calendar. For more information, refer to Joining Skype Conferences from the Calendar on page 138.

Initiating a Conference Call by Meet Now

To initiate a Skype for Business conference call by meet now via phone user interface:

1. Tap **Menu**->**Meet Now**.

   You will initiate a Skype for Business conference call directly.
2. Tap .
3. Enter the desired number, and then tap .

   You can also select a desired contact from the search result list, favorites screen, call history or contacts screen.
4. Repeat steps 2-3 to add more parties to the conference.

Initiating a Conference Call during a Call

You can initiate a Skype for Business conference call by inviting contacts to the active call.

To initiate a Skype for Business conference call via phone user interface:

1. During a call, tap .
2. Enter the desired number, and then tap .

You can also select a desired contact from the search result list, favorites screen, call history or contacts screen.

3. Repeat steps 1-2 to add more parties to the conference.

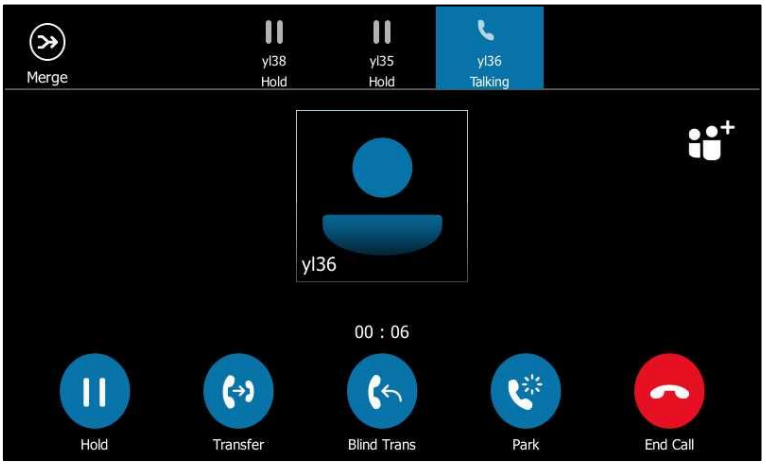
Merging Multiple Calls into a Conference Call

Merging All Calls into a Conference Call

You can merge all calls into a conference call. For more information on how to place multiple calls, refer to Placing Multiple Calls on page 95.

Merge all calls into a conference via phone user interface:

1. During multiple calls, tap .



All calls are merged into a conference call.

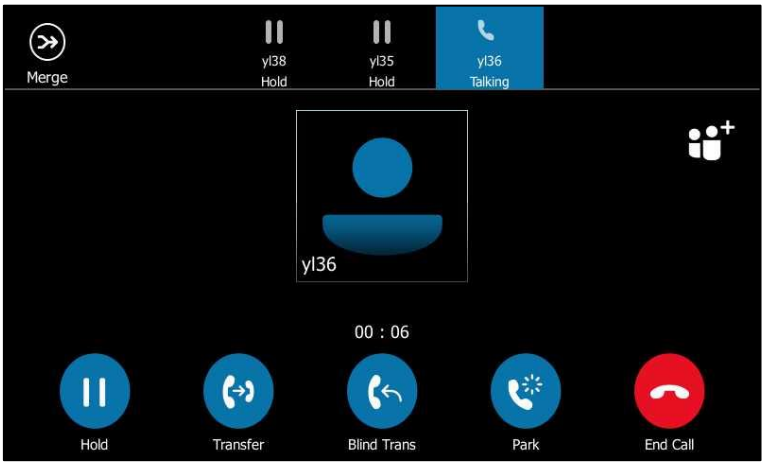
Note Multiple conferences cannot be merged into one conference call.

Merging an Active Call and a Held Call into a Conference Call

If you do not want to merge all calls, but just two individual calls into a conference call, you can do the following:

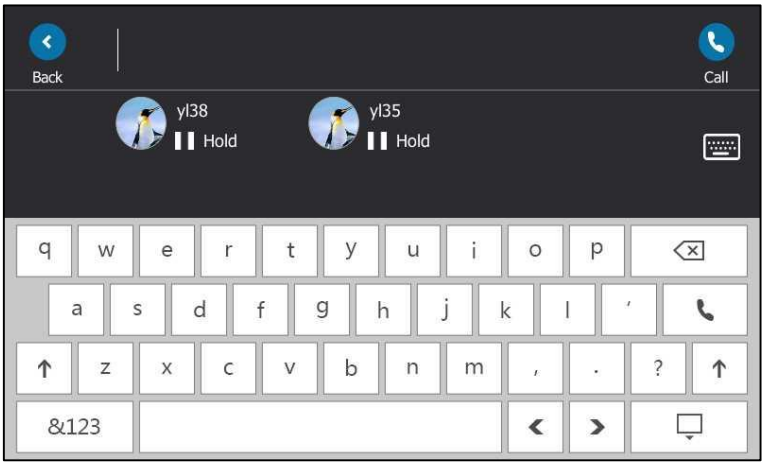
Merge an active call and a held call into a conference via phone user interface:

1. During multiple calls, tap .



2. Tap the avatar of the contact that is held.

   The active call and the selected held call are merged into a conference.



Initiating a Group Conference Call

To initiate a group conference call via phone user interface:

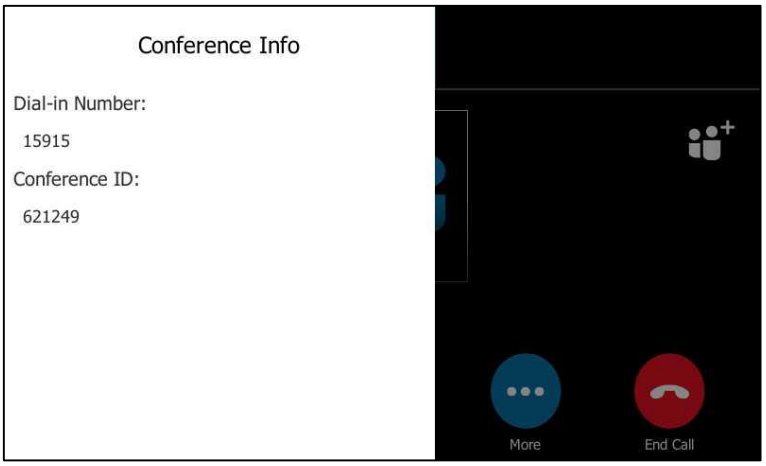
1. Tap the **Contacts** soft key.
2. Tap the desired Skype for Business group.
3. Tap to dial all contacts in the group.

Viewing the Conference Information

If you are a conference participant, you can view the conference dial-in number and PIN and then send them to the contacts who want to join the conference.

To view the dial-in number and conference ID via phone user interface:

1. During a Skype for Business conference, tap -> to view the dial-in number and conference ID.



2. Notify other parties of the dial-in number and conference ID, other parties can use the dial-in number and conference ID to join this Skype for Business conference.

If this conference is locked, anyone that tries to join the call will enter the lobby until the organizer or presenters accept(s) the call. For more information, refer to Locking or Unlocking the Conference on page 125.

Viewing the Conference Participants

When you initiate or join a conference call, you can view the conference participants.

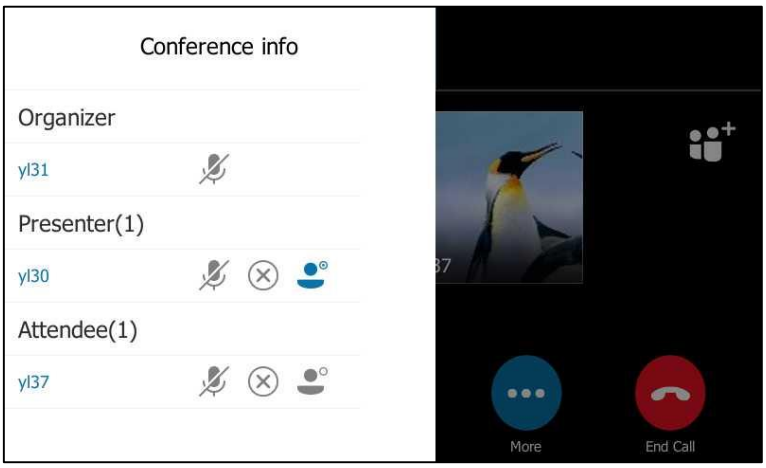
There are three roles in a conference:

- **Organizer**: A user who creates a conference. Organizer can manage the presenters and attendees.
- **Presenter** ( ): The participant who is invited to the conference will be a presenter by default. The presenter can only manage other presenters and attendees.

- **Attendee** ( ): A user who is invited to a conference but who is not authorized to act as a presenter. The attendee cannot manage other participants.

To view the conference participants via phone user interface:

1. Tap to view the conference participants' information during a conference.



   The conference information includes organizer, presenter and attendee. For more information on conference roles, refer to Joining Skype Conferences from the Calendar on page 138.

2. Tap the black area on the right side or press on your phone to return to the pervious screen.

Managing the Conference Participants

When you initiate a Skype for Business conference call, you will be an organizer and other participants are listed as presenters by default.

As an organizer or presenter, you can manage conference participants in the following ways:

- Mute all participants or individual participants.
- Remove participants from the conference call.
- Demote a presenter to an attendee or promote an attendee to presenter.
- Enable or disable conference announcements.
- Lock or unlock a conference.

These options do not display for attendees.

Muting and Unmuting All Conference Participants

The organizer or presenters can mute or unmute other conference participants.

If the organizer or presenters mute your audio, you must wait for the organizer or presenter to unmute your audio before you can speak in the conference again.

To mute all conference participants by organizer or presenters:

1. Tap .

   A notification is displayed on the participants' phones informing them that a presenter has muted the audience.

To unmute all conference participants by organizer or presenters:

1. Tap .

   A notification is displayed on the participants' phones informing them that the presenter has unmuted the audience.

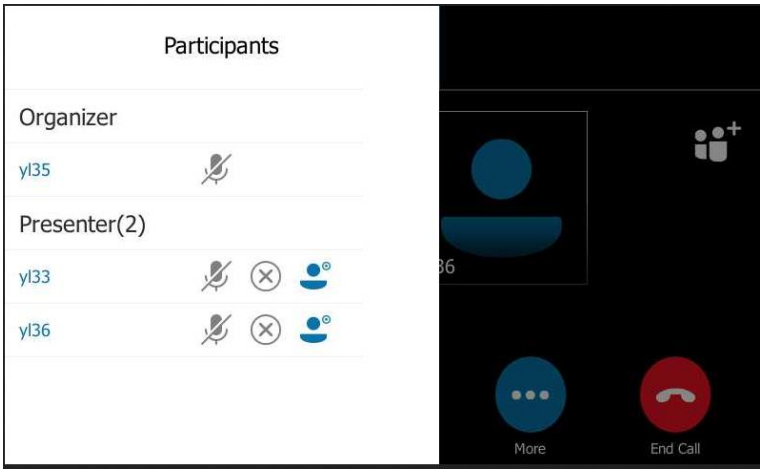
2. The muted participants press to unmute.

Muting or Unmuting Individual Conference Participants

The organizer and presenters can mute and unmute individual participants during conferences.

To mute the conference participants by organizer or presenters:

1. Tap .



2. Tap next to the participant to prevent the participant from speaking.

   A mute icon is displayed next to each person who is muted.

To unmute the conference participants by organizer or presenters:

1. Tap .
2. Tap next to the participant.
3. The muted participants press to unmute.

Promoting or Demoting Conference Participants

The organizer and presenters can promote other conference participants from attendees to presenters, or demote conference participants from presenters to attendees. But they cannot demote or promote themselves. The presenters cannot demote or promote the organizer. The attendees cannot promote or demote anyone.

To demote or promote conference participant:

1. Tap .
2. Do one of the following:
   - Tap to demote a presenter to an attendee ( ).
   - Tap to promote an attendee to a presenter ( ).

Enabling or Disabling the Announcement

Only the organizer and presenters can enable or disable the announcement. When the announcement feature is enabled, the phone will issue a voice message to announce that a participant joins or leaves the conference.

To enable or disable conference announcements:

1. During a conference call, do one of the following:
   - Tap ••• -> to enable announcements.
     An icon appears on the touch screen.
   - Tap ••• -> to disable announcement.

Locking or Unlocking the Conference

The organizer and presenters can lock a conference call to prevent other people from joining the conference call without approval.

When a conference is unlocked, anyone can join a conference call automatically with the conference dial-in number and conference ID. When the conference is locked, a contact must wait in the lobby until the organizer or presenters allow the contact to join the meeting.

To lock or unlock a conference:

1. During a conference call, do one of the following:
   - Tap ••• -> to lock the conference.
     An icon (indicating the contacts waiting in the lobby) appears on the touch screen.
   - Tap ••• -> to unlock the conference.

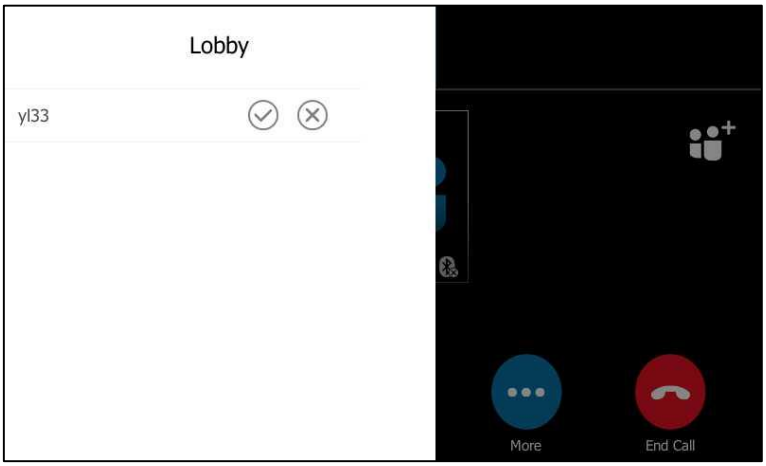
The conference is unlocked, and anyone can join the conference call.

Admitting or Denying Participants to a Locked Conference Call

The conference participants can invite participant to join a locked conference. Participant can also join locked conference by dialing dial-in number and Conference ID. For more information, please refer to Joining a Skype Conference by Dialing the Conference Dial-in Number on page 140.

The organizer or presenters admit or deny participants to join a locked conference:

1. Tap -> to view the caller waiting in the lobby.



2. Do one of the following:

   - Tap .

     The caller joins the locked conference as a presenter successfully.

   - Tap .

     The caller fails to join the locked conference, and the caller drops the call automatically.

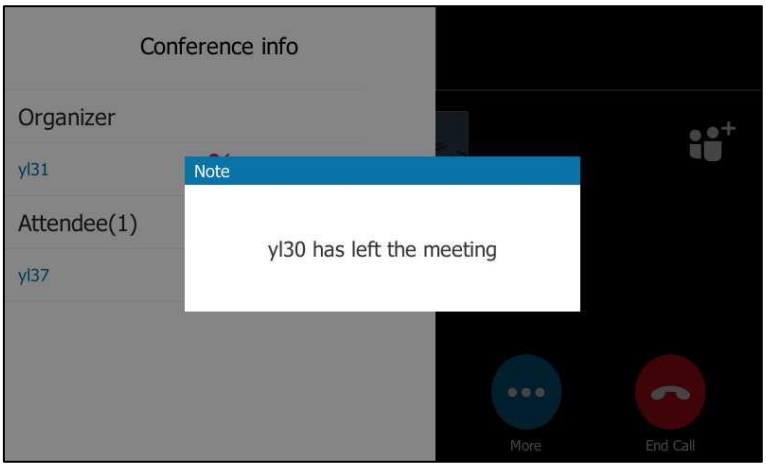
Removing Conference Participants

An organizer can remove presenters and attendees. A presenter can remove other presenters and attendees. An attendee cannot remove any other participants.

To remove a conference participant:

1. Tap .
2. Tap to remove the participant from the conference call.

A notification prompts that the participant is removed.



Leaving the Conference

All participants can leave the conference at any moment.

To leave the conference:

1. Tap to leave the conference.

   Other participants remain being connected.

Calendar

Yealink Skype for Business phones integrates with the Microsoft Exchange calendar feature. If your phone is configured to connect to the Microsoft Exchange Server, and the Microsoft® Outlook® application is installed at your site, you can view Skype conference, appointment, meeting and event, or join the Skype conference in your Microsoft Outlook application from your phone.

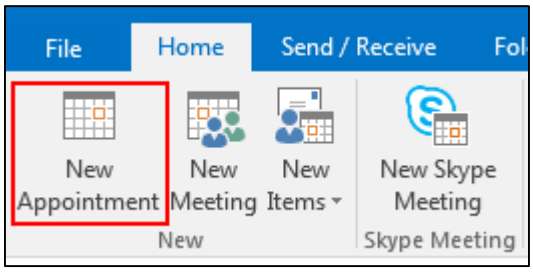
Setting up an Appointment in Outlook

Appointments are blocks of time you schedule for only yourself (as opposed to meetings, which you invite others). An appointment has a specific start time and a specific end time (as opposed to an event, which occurs for one or more or full 24-hour periods).

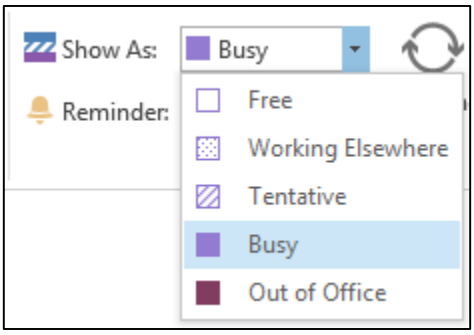
To set up an appointment in outlook:

1. Open Outlook and go to your calendar.

2. Click **Home** ->**New Appointment**.



3. Enter a subject, location, and then select the start and end time.
4. Enter the content about the appointment.
5. To show others your availability during this time, on the **Appointment** tab, click the **Show As** box and then click **Free**, **Working Elsewhere**, **Tentative**, **Busy** or **Out of Office**.



6. Click **Save & Close**.

By default, a reminder appears 15 minutes before the appointment start time.

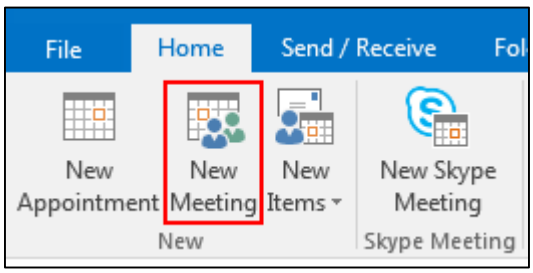
Setting up a Meeting in Outlook

You can send a meeting request to one or more people.

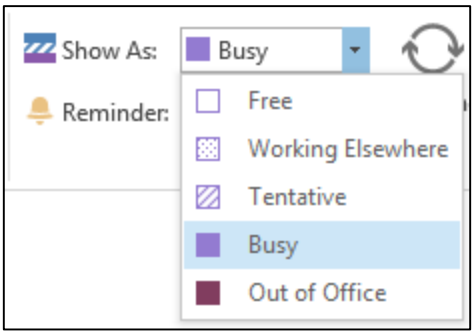
To set up a meeting in outlook:

1. Open Outlook and go to your calendar.

2. Click **Home** ->**New Meeting**.



3. Enter a subject, location, and then select the start and end time.
4. Enter the content about the meeting.
5. To add attendees, do one of the following:
   - In the **To** box, add desired attendees.
   - Click **Scheduling Assistant** to help you find the best time for your meeting by analyzing when attendees are available and then click **Add Attendees** to add attendees.
6. To show others your availability during this time, on the **Appointment** tab, click the **Show As** box and then click **Free**, **Working Elsewhere, Tentative**, **Busy** or **Out of Office**.



7. Click **Send**.

By default, a reminder appears 15 minutes before the meeting start time.

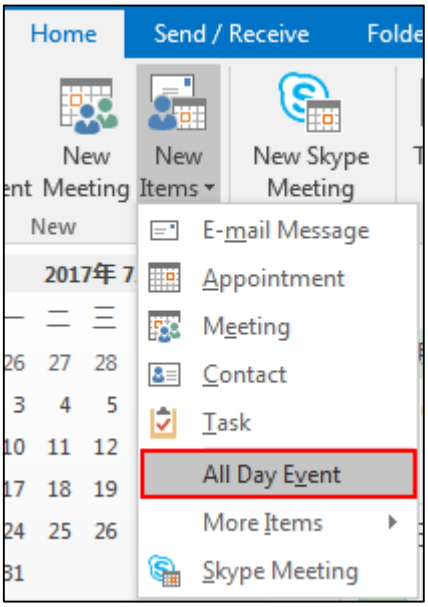
Setting up an Event in Outlook

Events are day-long blocks of time that you schedule on your Outlook calendar—for example, a birthday, a payroll day, or anything else occurring on a particular day but not at a specific time.

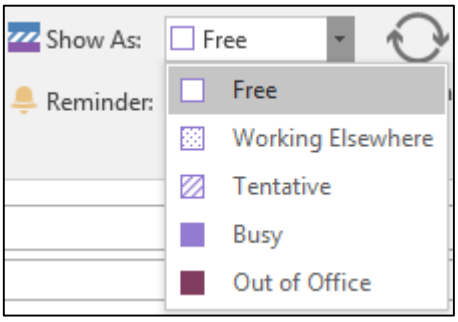
To set up an event in outlook:

1. Open Outlook and go to your calendar.

2. Click **Home** ->**New Items**->**All Day Event**.



3. Enter a subject and location.
4. Enter the content about the event.
5. To show others your availability during this time, on the **Appointment** tab, click the **Show As** box and then click **Free**, **Working Elsewhere**, **Tentative**, **Busy** or **Out of Office**.



6. Click **Save & Close**.

By default, a reminder appears 15 minutes before the event starts.

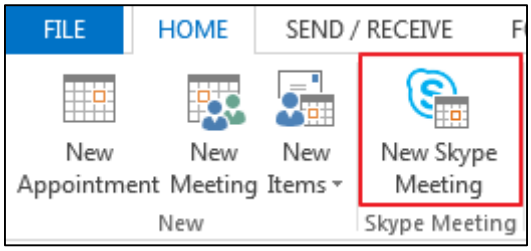
Setting up a Skype Conference in Outlook

Setting up a Skype meeting is as easy as creating a normal meeting. The Skype meeting request will automatically include call-in information (conference number and conference ID). You can choose to join the Skype meeting using your Skype for Business phone.

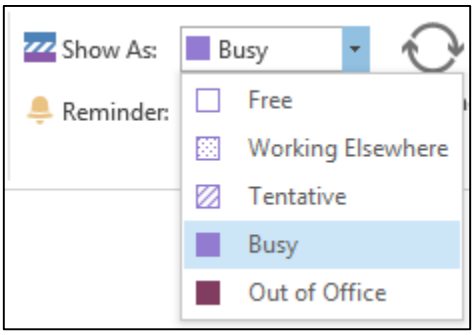
To set up a Skype conference in outlook:

1. Open Outlook and go to your calendar.

2. Click **HOME** ->**New Skype Meeting**.



3. Enter a subject, location, and then select the start and end time.
4. Enter the content about the Skype meeting.
5. To add attendees, do one of the following:
   - In the **To** box, add desired attendees.
   - Click **Scheduling Assistant** to help you find the best time for your meeting by analyzing when attendees are available and then click **Add Attendees** to add attendees.
6. To show others your availability during this time, on the **Appointment** tab, click the **Show As** box and then click **Free**, **Working Elsewhere, Tentative**, **Busy** or **Out of Office**.



7. Click **Send**.

By default, a reminder appears 15 minutes before the Skype meeting starts.

Note If you change the Skype conference content (e.g., location, subject, time) via outlook after you have sent the invitation, the phone will update the Skype conference content.

Using the Calendar

To use the calendar feature on your phone, you must sign into the phone with the method of User Sign-in, Web Sign-In or Signing in via PC. So the phones can display the Microsoft

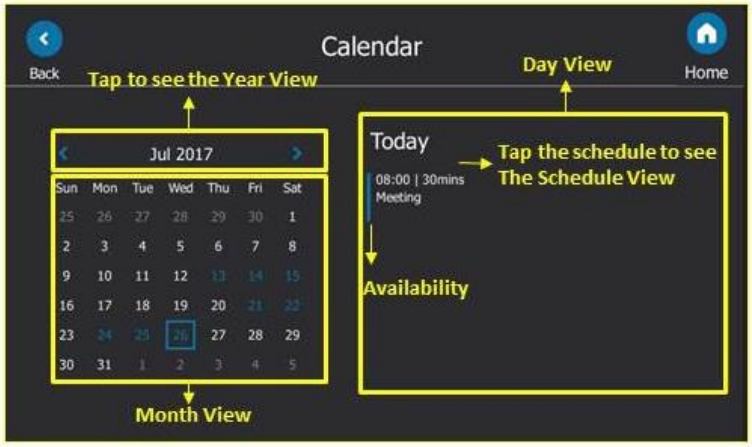
Exchange calendar which gives you quick access to Skype conference, appointment, meeting and event.

Viewing the Calendar

To view the calendar via phone user interface:

1. Tap **Menu**->**Calendar**.

   The calendar displays the schedules of today by default. You can view 2000 schedules at most on your T48S Skype for Business phone.



Name	Description	
Availability		Your availability during this time shows as **Free** or **Working Elsewhere** on the Outlook software.
		Your availability during this time shows as **Tentative** on the Outlook software.
		Your availability during this time shows as **Busy** on the Outlook software.
		Your availability during this time shows as **Out of Office** on the Outlook software.
Year View	Shows all the months in a Year. The month in a blue frame indicates a selected month.	
Month View	Shows all the days in a month. The day in blue indicates a day which has a schedule. The day in a blue frame indicates a selected day.	
Day View	Shows all schedules of the selected day, including the	

Name	Description
	subject, start and end time and location.
Schedule view	Shows the details of the selected schedule, including the subject, participants, organizer, start and end time, location and content.

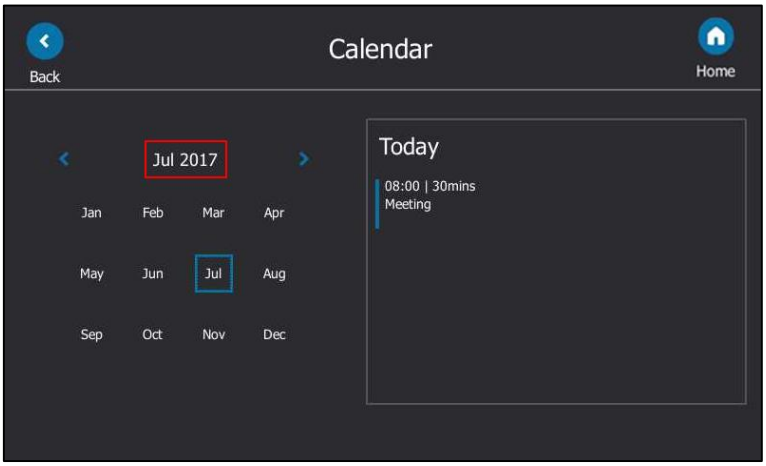
2. Tap or to close the calendar and return to the idle screen.

Navigating Year View

Year view displays all the months in a year. The selected month is always within a blue frame.

To navigate Year view:

1. Tap **Menu**->**Calendar**.
2. Tap the date at the top of the Month view.



3. Do one of the following:
   - Tap to view the previous year.
   - Tap to view the upcoming year.
   - Tap the month to select another month.
   - Tap or to close the calendar and return to the idle screen.

Navigating Month View

Month view displays all the days in a month. The days with schedules are indicated in blue and the selected day is always within a blue frame.

To navigate Month view:

1. Tap **Menu**->**Calendar**.
2. Do one of the following:

- Tap < to view the previous month.
- Tap > to view the upcoming month.
- Tap the day to select the desired day.
- Tap or to close the calendar and return to the idle screen.

Navigating Day View

Day view shows all schedules of the selected day, including the date and time, subject, start and end time, and location of each schedule.

To navigate Day view:

1. Tap **Menu**->**Calendar**.
2. Do one of the following:
   - Press to view the schedules of the previous day.
   - Press to view the schedules of the upcoming day.
   - Tap < or > to view more schedules when there are more than 3 schedules.
   - Tap the schedule to view detail for a specific schedule.
   - Tap to return to the pervious screen or tap to return to the idle screen.

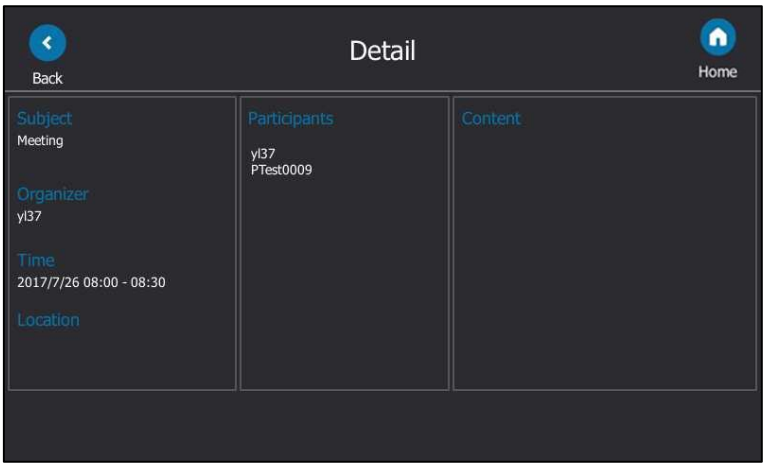
Navigating Schedule View

Schedule view displays the details of a selected schedule. You can view the schedules' subject, participants, organizer, start and end time, location and content.

To view schedules via phone user interface:

1. Tap **Menu**->**Calendar**.
2. Tap a desired month.
3. Tap a desired day.
4. Tap a desired schedule.

5. Tap or to view the schedule details.



6. Tap to return to the pervious screen or tap to return to the idle screen.

Tracking the Calendar

When an organizer schedules a Skype meeting via the Outlook software, the attendees can respond to the meeting request via Outlook software.

Attendees can send one of the following responses to the organizer:

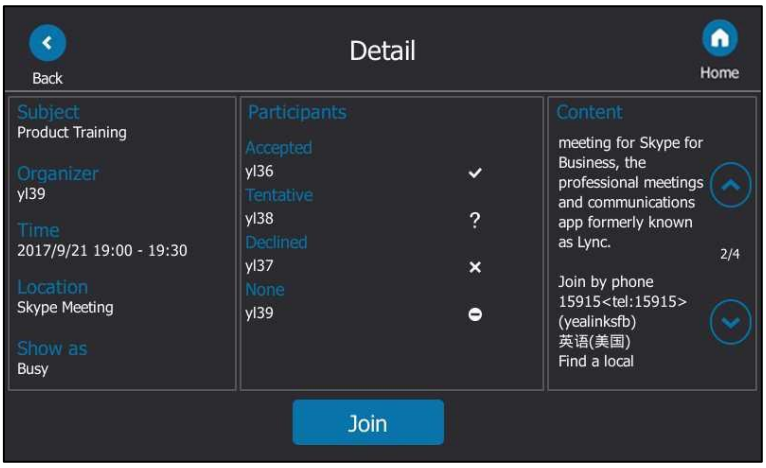
- Do not reply the invitation (show as **None** on the organizer's phone).
- Accept the invitation (show as **Accepted** on the organizer's phone)
- Tentatively accept the invitation (show as **Tentative** on the organizer's phone)
- Decline the invitation (show as **Declined** on the organizer's phone)

Organizer can verify whether all the attendees get the invitation and able to join the Skype meeting via the phone user interface.

To track the calendar via phone user interface:

1. Tap **Menu**->**Calendar**.
2. Tap a desired month.
3. Tap a desired day.

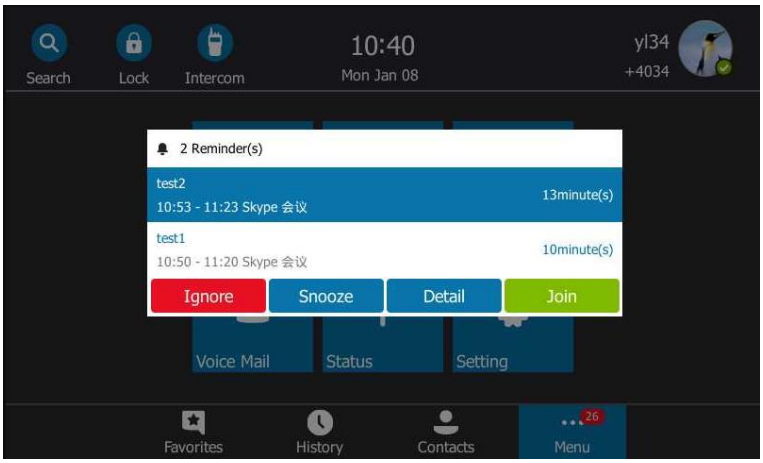
4. Tap a desired Skype meeting to view the details



5. Tap to return to the pervious screen or tap to return to the idle screen.

Working with Schedule Reminders

If you have a schedule, a reminder pop-up is displayed 15 minutes before it starts. The reminder shows the main information of the schedule, including subject, start time, end time and the rest time.



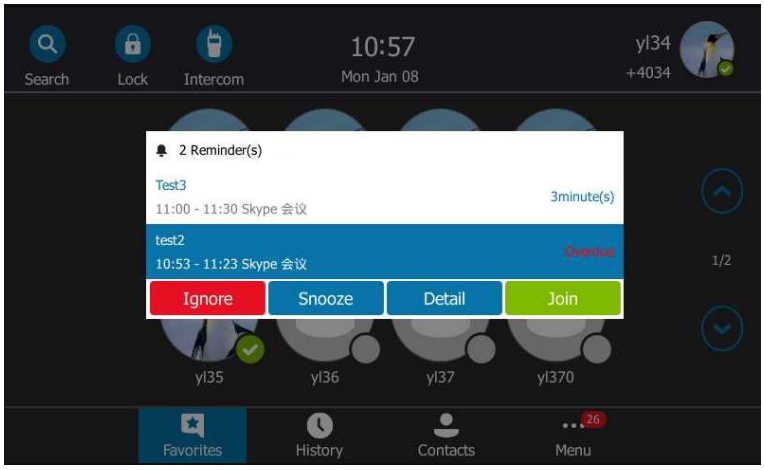
- Tap the **Ignore** soft key to permanently remove the reminder from the screen and stop all future reminders for the Skype conference.
- Tap the **Snooze** soft key to temporarily remove the reminder from the screen, until the next schedule reminder. The reminder will appear every 5 minutes by default and also appear 1 minute before the Skype conference starts. For more information on how to change the conference reminder interval, refer to Configuring the Reminder on page 137.
- Tap the **Detail** soft key to view detailed information about the Skype conference, including the Skype conference's subject, participants, organizer, start and end time, location and content.

- If you receive a Skype conference, tap the **Join** soft key to join the Skype conference.

Note

When the phone is locked, you can tap **Ignore** or **Snooze** without unlocking the phone. But you need to unlock the phone to view detailed information and join the Skype conference.

The reminder will show "overdue" when the schedule is overdue.



Note

You can press (×) on the phone to ignore all reminders.

When receiving a Skype conference reminder during a call, you can tap **Join** to join the Skype conference directly. Current call will be held and you can resume it after the Skype conference.

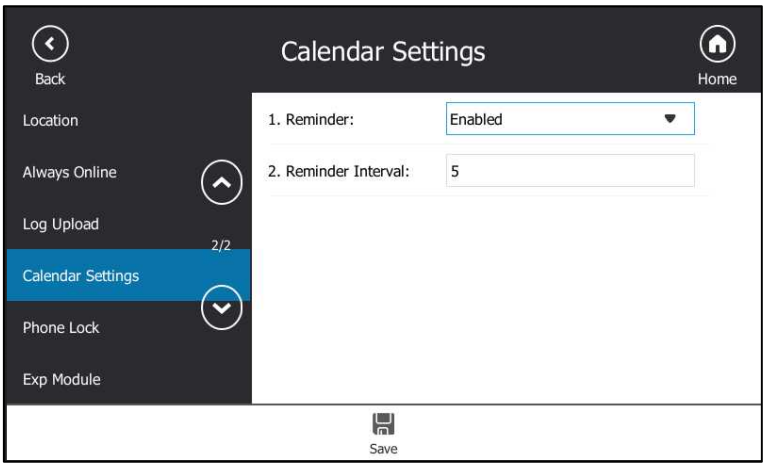
Configuring the Reminder

If you enabled the reminder feature, you can temporarily remove the reminder from the screen, you can also configure the reminder interval.

To configure the reminder via phone user interface:

1. Press **Menu->Setting**->**Basic->Calendar Settings**.
2. Select **Enabled** from the pull-down list of **Reminder**.
3. Enter the interval in the **Reminder Interval** field.

The value ranges from 1 to 15 minutes, the default value is 5 minutes.



4. Tap to accept the change.

Joining Skype Conferences from the Calendar

You can join the Skype conferences from calendar in following three ways:

- **Joining a Skype conference from a conference reminder** (Once joined, presenter and attendee will be muted automatically, organizer will not be muted).
- **Joining a Skype conference from Schedule view** (Once joined, presenter and attendee will be muted automatically, organizer will not be muted).
- **Dialing the conference dial-in number to join a Skype conference** (Once joined, presenter, attendee and organizer will not be muted).

Note

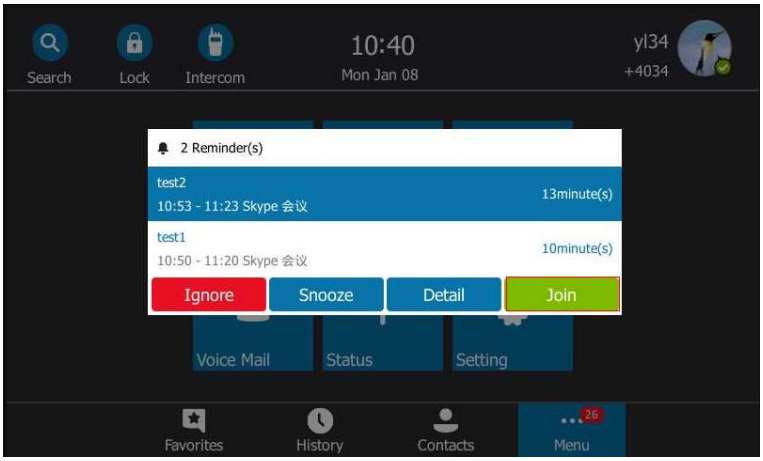
When the organizer sets up a conference in Outlook and enables **Mute all attendees** feature, all conference participants will be muted automatically once joining the Skype conferences in above ways.

Joining a Skype Conference from a Conference Reminder

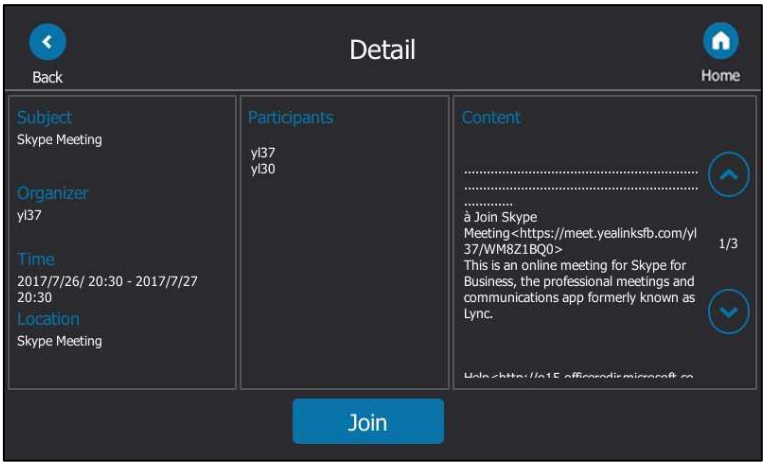
To join a Skype conference from a conference reminder:

Do one of the following:

- Tap the **Join** soft key.



- Tap the **Detail** soft key to view detail for a specific Skype conference, and then tap the **Join** soft key.



Joining a Skype Conference from Schedule View

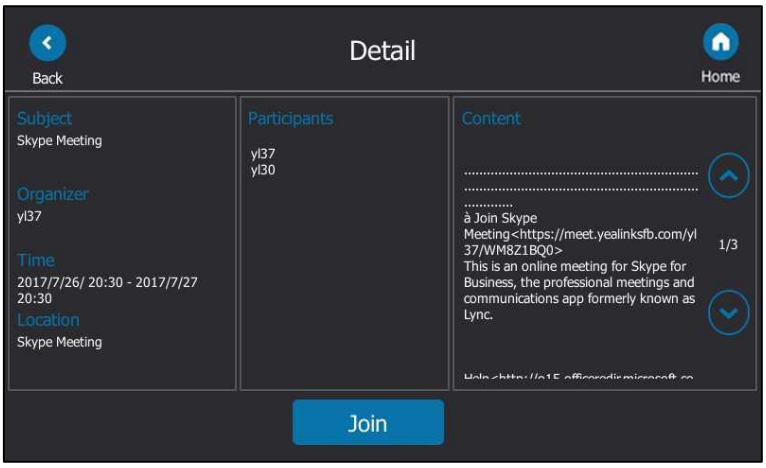
To join a Skype conference from Schedule View:

1. Tap **Menu**->**Calendar**.

   The current day is always within a blue frame.

2. Tap a desired month.
3. Tap a desired day.

4. Tap a Skype conference to view specific information.



5. Tap the **Join** soft key to join the Skype conference.

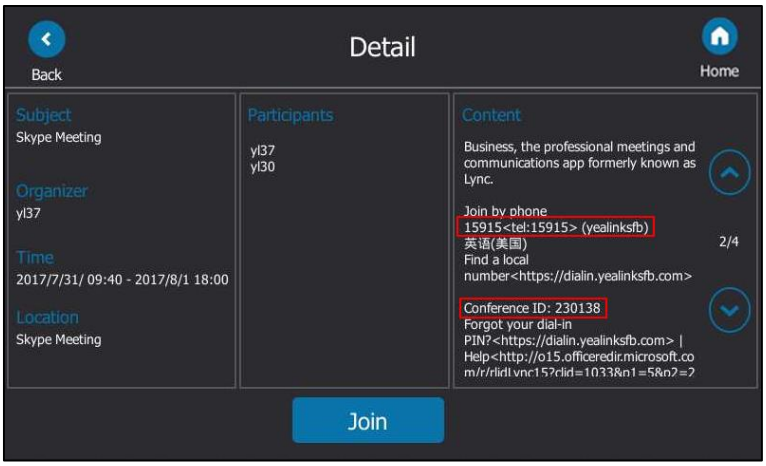
Joining a Skype Conference by Dialing the Conference Dial-in Number

If you schedule a Skype conference call via Microsoft Outlook Conferencing (Plug-In), dial-in number and Conference ID will be sent to invitees by email. They can join the Skype conference from phone by dialing dial-in number and Conference ID.

Invitees can also obtain the dial-in number and Conference ID from the phone.

To obtain the dial-in number and Conference ID form the phone:

1. Tap **Menu**->**Calendar**.
2. Tap a desired month.
3. Tap a desired day.
4. Tap a conference to view the content.
5. You can view the conference dial-in number or Conference ID.



You can also view the dial-in number and Conference ID during a conference call. For more information, refer to Viewing the Conference Information on page 121.

To join a Skype conference by dialing the conference dial-in number:

1. Dial the conference dial-in number (e.g., 15915).
2. Enter the Conference ID (e.g., 230138), and the press # to join the Skype conference.
3. More participants can repeat steps 1-2 to join the Skype conference.

For more information on managing the Skype conference participants, refer to Managing the Conference Participants the on page 122.

Parking and Retrieving Calls on the Skype for Business Server

Using the Skype for Business Call Park feature, you can park calls so that you can continue to make calls and answer other incoming calls on your phone.

Call park is different from call hold. Call hold keeps the held call on the same line, while call park places the call in a call orbit on the Skype for Business Server. Calls placed in the call orbit are given an orbit number and can be retrieved by any Skype for Business-compatible phone by accessing to the orbit.

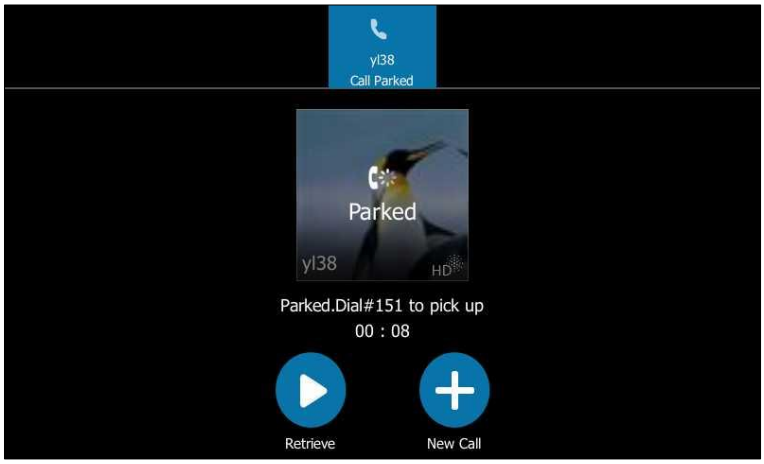
Note Call park is not available on all servers. Contact your system administrator for more information.

Parking Skype for Business Calls

To use call park:

1. During a call, tap .

   The call is placed in the call orbit and given a retrieval number.



Retrieving Parked Skype for Business Calls

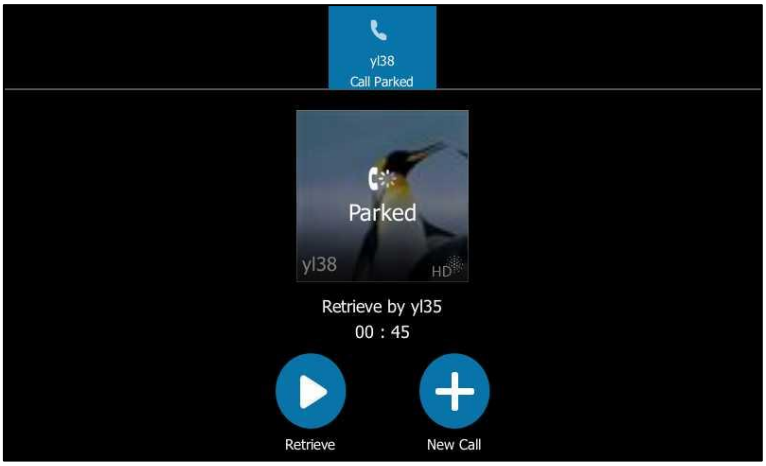
Retrieve Parked Skype for Business Calls on the Same Phone:

1. Tap .

Retrieve Parked Skype for Business Calls on Another Phone:

1. Dial the retrieval number (for example: #151).

   When someone retrieves the parked call, a notification notifying that the call was picked up by the person who parked the call.



If no one retrieves a parked call within a set time limit, the call is returned to the person who parked the call. For example, if yl33 parked a call and no one retrieves the call after a preset period of time, the server returns the call to yl33. If yl33 doesn't answer the parked call after it's returned, the call is terminated. The time limit for parked calls is set by the system administrator.

Note If the call is ended by the other party before the call is retrieved, the prompting message "Parked call ended before it can be retrieved" will be displayed on the touch screen of the person who parked the call.

Group Call Pickup

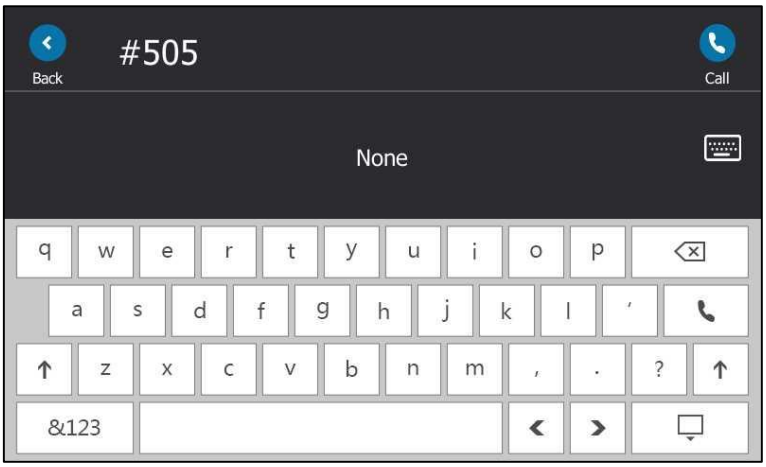
If you sign into the phone using On-Premises account, you can use group call pickup feature. Note that the current Online environment does not support this feature.

Group call pickup is used for picking up incoming calls within a pre-defined group. If the group receives many incoming calls at once, the user will pick up the first incoming call, by dialing the group pickup code. This feature depends on support from the Skype for Business Server.

Note Group and group pickup code are configurable on the Skype for Business Server only. Contact your system administrator for more information.

To use group pickup via phone user interface:

1. Enter the group pickup code (e.g., #505) on your phone when a phone number in your group receives an incoming call.



2. Tap .
   The call is answered on your phone.

Shared Line Appearance(SLA)

When your phone is registered with the Skype for Business Server, you can use the Shared Line Appearance (SLA) feature to share a single line with other contacts as a member of a group. System administrators assign members to SLA groups.

Any SLA group member can answer, hold, or resume calls on the shared line, and all group members can view the status of a call on the shared line on their phones. Each line supports up to 25 call appearances. Only one call at a time can be active on the shared line appearance. If a call is placed to the shared line with an active call in place, the incoming call is sent to another shared line.

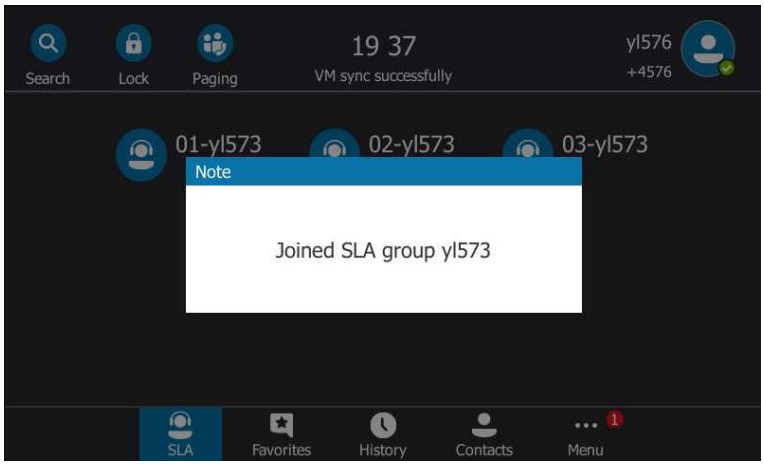
Note

SLA feature is configurable via Skype for Business server only. Contact your system administrator for more information.

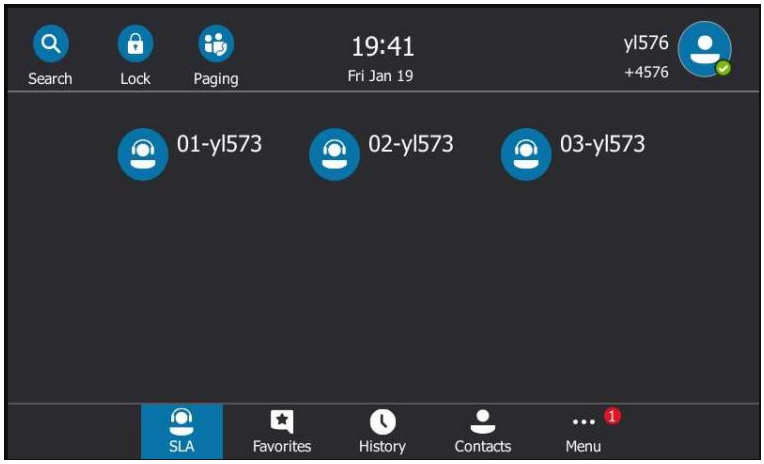
A user can be assigned to be one SLA group only. If the user has to be a delegate for multiple shared numbers, the phone will perform Boss-Admin feature to handle the delegate calls. For more information ,refer to Boss-Admin on page 147.

Viewing Shared Line Appearances

When you (group member) sign into your phone, your phone notifies that you joined a SLA group, and a SLA screen appears automatically which display all shared line appearances:

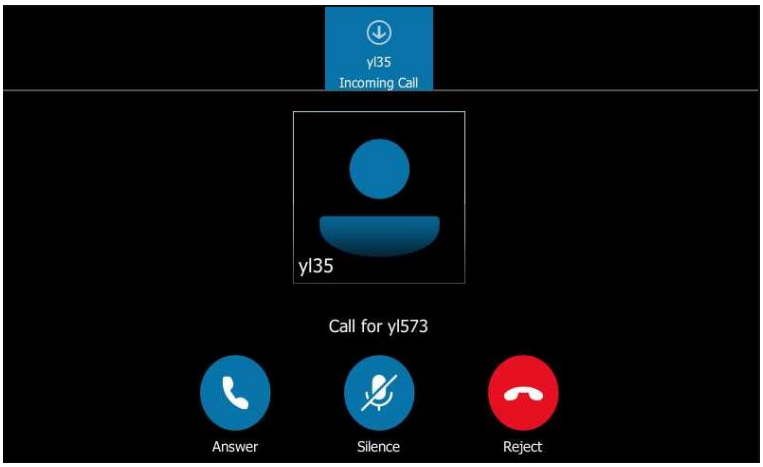


In the following figure, the phone screen of the SLA group member (yl576) display all shared line appearances. The name of the shared line appearance consists of the sequence number and the group name.



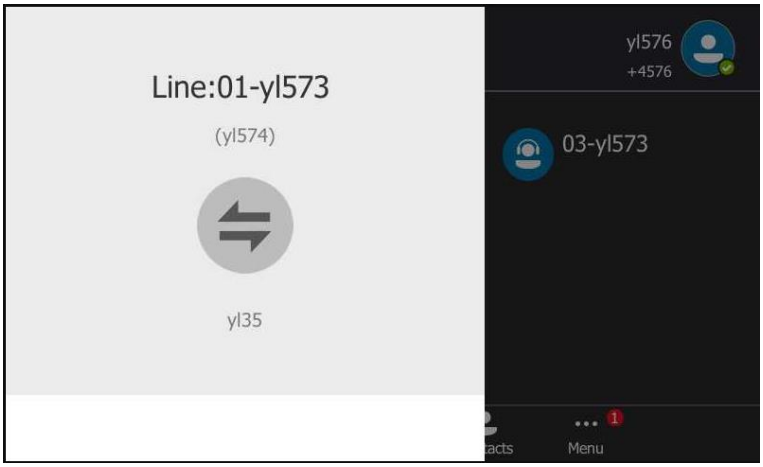
Answering SLA Calls

Any incoming call to the shared line rings on all group members' phones simultaneously. All members' phones are shown below:



Any group member can tap to answer an incoming call for the shared line. When a group member answers an incoming call, a red status bar will appear under the shared line appearance.

Other members can view the status of a call on the shared line by tapping the corresponding shared line appearance.



(Caller: yl35, Recipient: yl574)

Placing a SLA Call on Hold

To place a SLA call on hold:

1. Press or tap to place the call on hold.

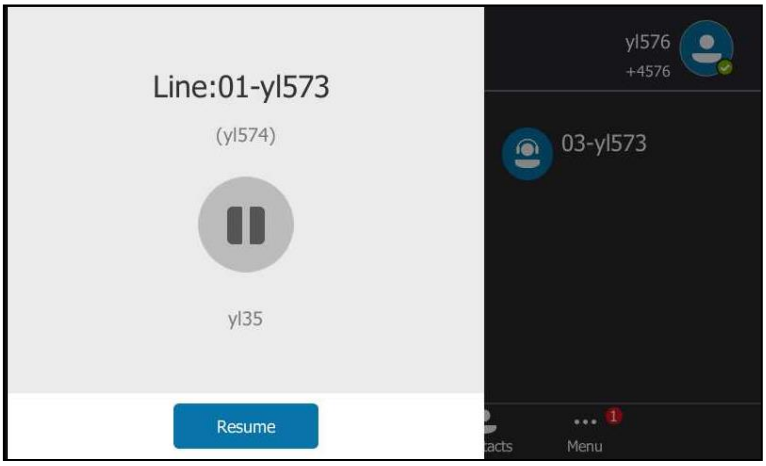
All group members are notified of the call's hold status by a flashing red status bar under the shared line appearance on all members' phones.

Resuming Held SLA Calls

Any SLA member can resume a held call on the shared line.

To resume a call on the shared line:

1. Tap the shared line appearance (flashing red status bar) to view the held call.



2. Tap the **Resume** soft key.

Missed and Received Calls on Shared Lines

If all SLA group members do not answer an incoming call, the call is logged as missed calls on all the phones.

If any SLA group member answers the incoming call, the call is logged as received calls on all the phones. The duration of the call is only shown to the receiver in the call history.

Boss-Admin

When your phone is registered on Skype for Business server, you can use the Boss-Admin feature to manage shared lines. The Boss-Admin feature enables a "boss" phone and delegates' phones to ring simultaneously when a user calls the boss. Once one party answers the call, the other phone will stop ringing. A boss can assign delegates, and delegates can manage calls on behalf of the boss's line.

Boss-Admin Scenario: The system administrator has configured user yl31 as the delegate of yl30. For more information on how to assign delegates on the Skype for Business client, refer to Boss-Admin on page 147.

- **Boss**: yl30 (phone number: 4030)
- **Delegate**: yl31 (phone number: 4031)
- **Other**: yl37 (phone number: 4037)

Note Boss-admin feature is configurable via Skype for Business client only.

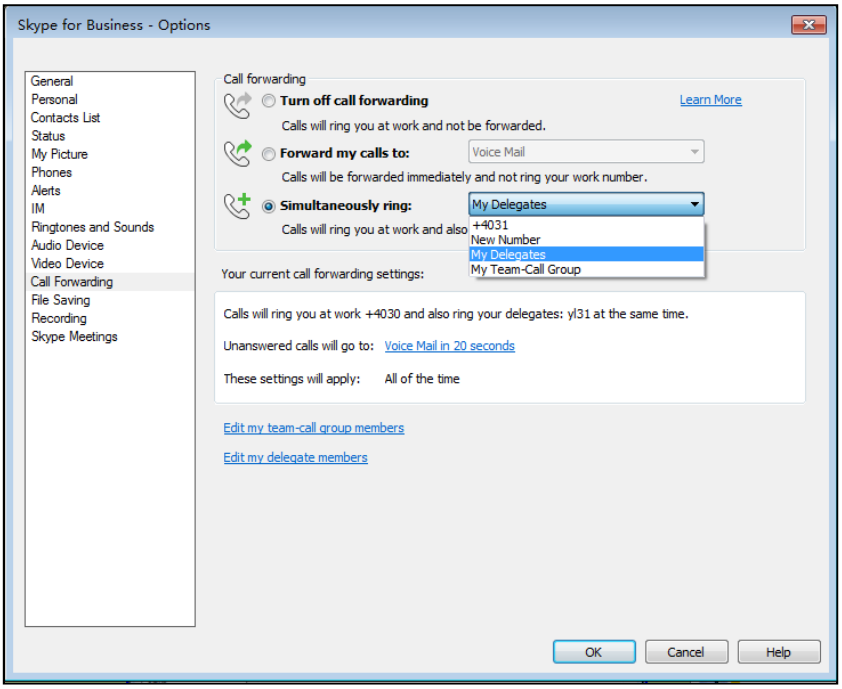
Assigning/Removing Delegates

You can assign delegates to your line using the Skype for Business client. However, you cannot assign yourself as a delegate. As a delegate, you can be assigned to multiple bosses' lines.

To assign delegates using Skype for Business client:

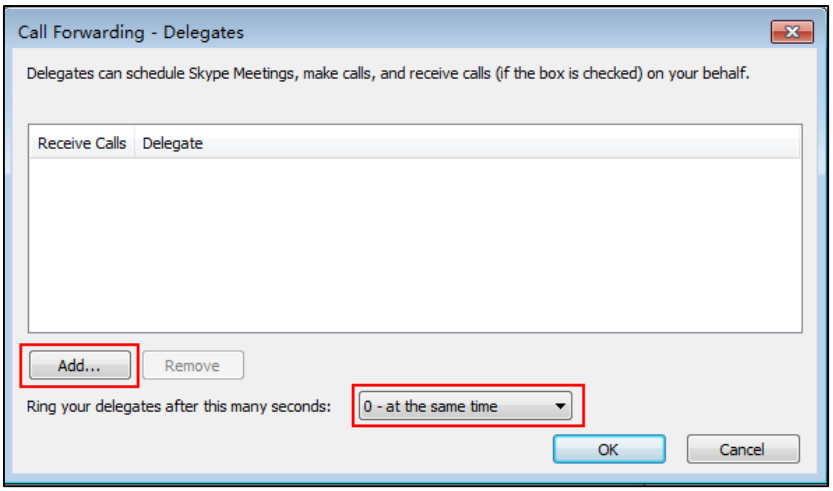
1. Open Skype for Business client.
2. Sign into Skype for Business client as the person who wants to assign a delegate.
3. Click the button, and then click **Call Forwarding Settings**.
4. Mark the radio box in **Simultaneously ring** field.

5. Select **My Delegates** from the pull-down list of **Simultaneously ring**.



6. In the **Delegate**s dialog box, click **Add**. Each delegate must be a Skype for Business contact.

7. Click the **Ring your delegates after this many seconds** pull-down list to determine when your delegates' phones ring.



8. Click **OK**.

9. Click **OK** in the **Delegates** dialog box.

10. Click **OK** in the **Options** dialog box.

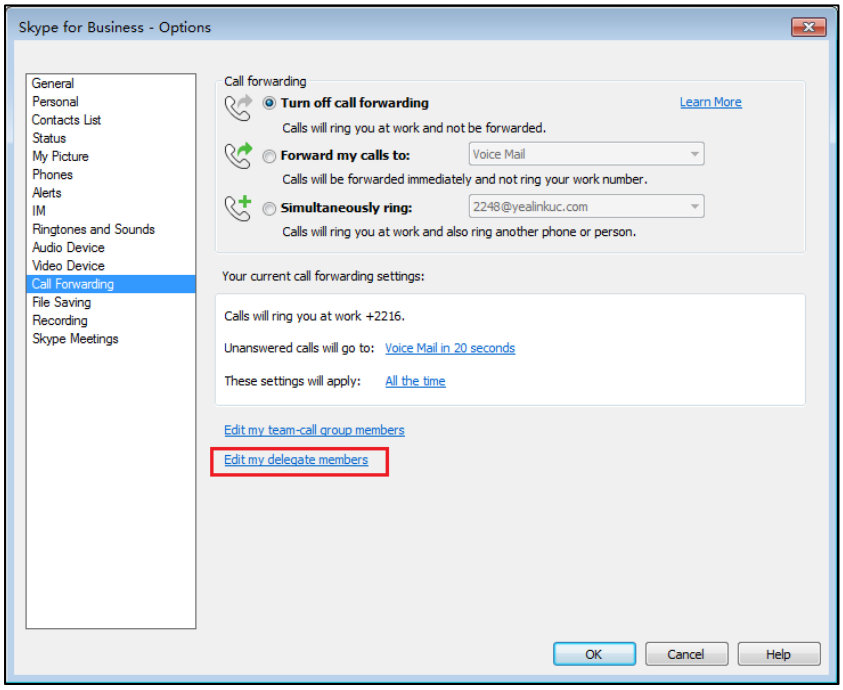
To remove a delegate from Skype for Business client:

1. Open Skype for Business client.

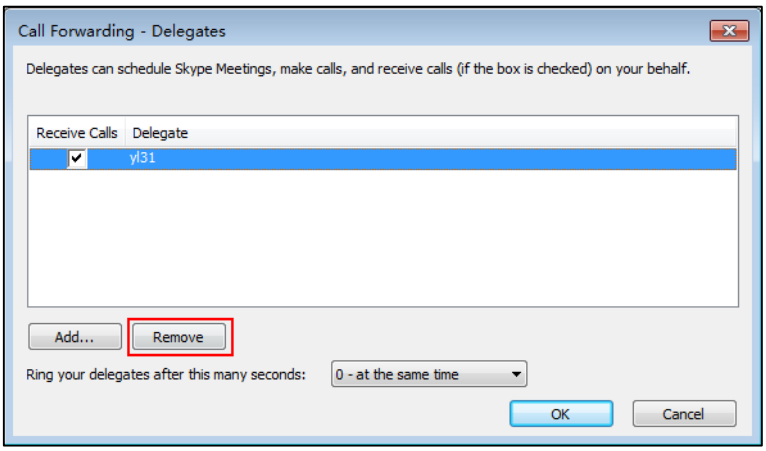
2. Sign into Skype for Business client as the person who wants to remove a delegate.

Make sure **My Delegates** option is not selected in either the **Simultaneously ring** or **Forward my calls to** list.

3. Click **Edit my delegate members**.



4. Check the checkbox of the delegate you want to remove.



5. Click **Remove**.
6. Click **OK** in the **Delegates** dialog box.
7. Click **OK** in the **Options** dialog box.

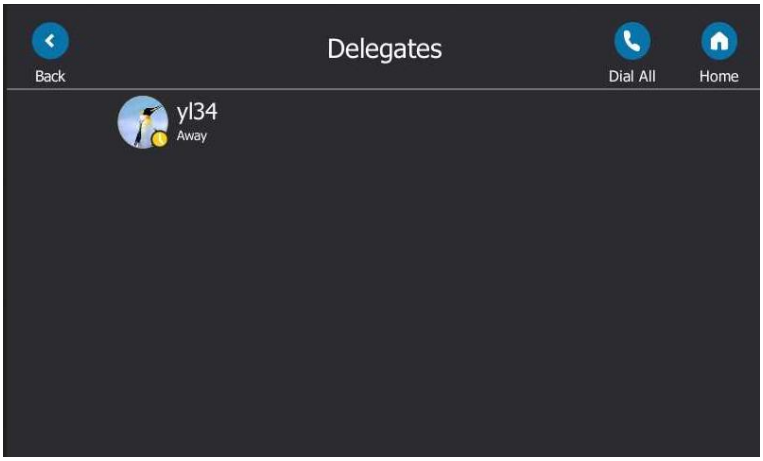
Viewing the Delegates Group

Your delegates are automatically added to the **Delegates** group on your phone and in the Skype for Business client.

To view your delegates:

1. Tap the **Contacts** soft key.
2. Tap the **Delegates** group.

   Your delegate(s) will be displayed.



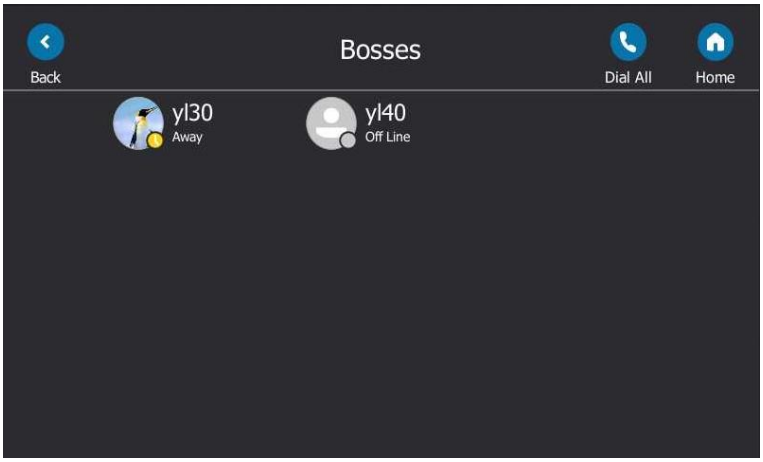
Viewing the Boss Group

You can view the contacts for which you are assigned as a delegate in the **Bosses** group on your phone and in the Skype for Business client.

To view your bosses:

1. Tap the **Contacts** soft key.
2. Tap the **Bosses** group.

   Your boss(es) will be displayed.



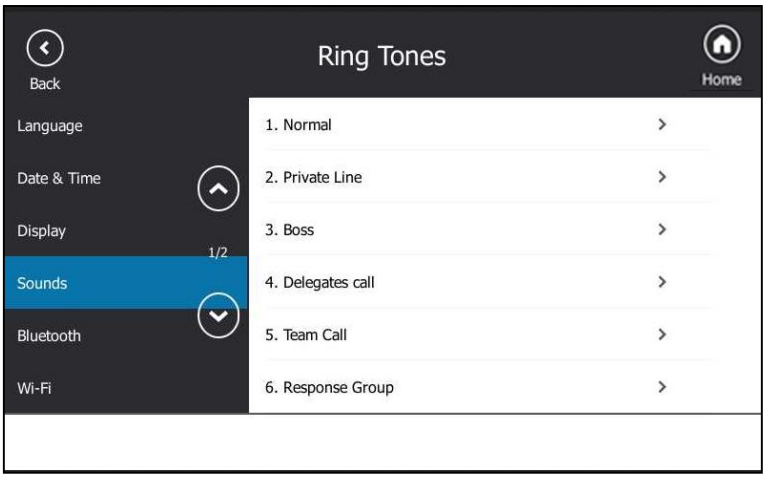
Boss-Line Ringtone

As a delegate, you can set a distinct ringtone for your assigned boss's line. When you receive incoming calls from your assigned boss or your assigned boss receives an incoming call, your

phone will play this ringtone.

To set a ringtone for the boss's line via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Sounds**-> **Ring Tones**->**Boss**.



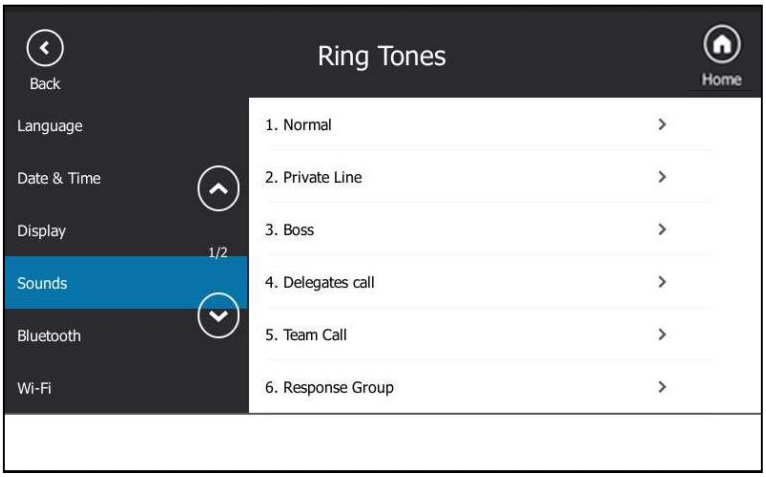
2. Tap the desired boss.
3. Tap the desired ringtone.
4. Tap to accept the change.

Delegates-call Ringtone

As a boss, you can set a distinct ringtone for incoming calls from your assigned delegate's line.

To set a ringtone for the delegate's line via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Sounds**->**Ring Tones**->**Delegates call**.



2. Tap the desired delegate.
3. Tap the desired ringtone.
4. Tap to accept the change.

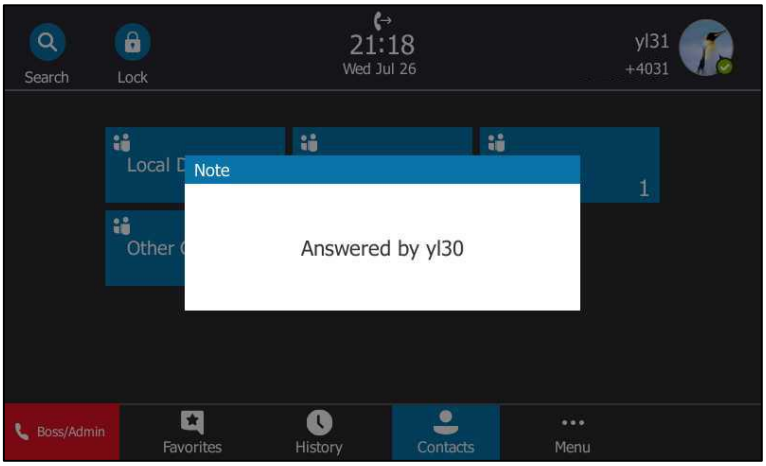
Using the Boss-Admin Feature

Answering Incoming Calls

When a user calls the boss, both boss's and delegate's phones will ring simultaneously.

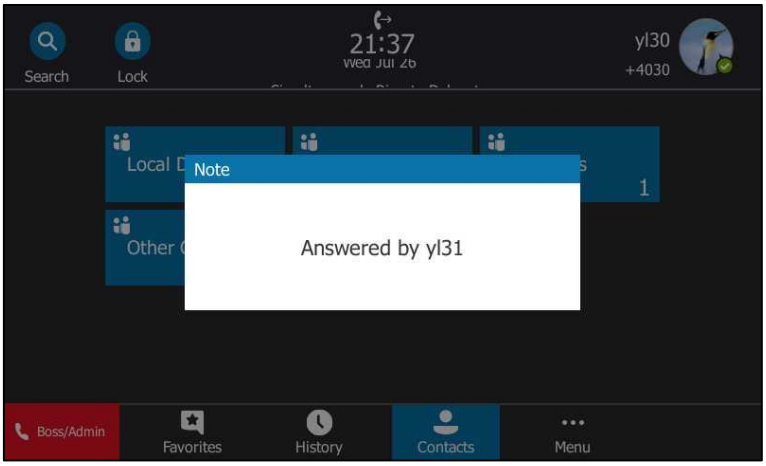
To answer an incoming call on a boss's phone:

1. Tap or press OK .
   The delegate's phone stops ringing and the touch screen of the delegate's phone is shown below:



To answer an incoming call on a delegate's phone:

1. Tap or press OK .
   The boss's phone stops ringing and the touch screen of the boss's phone is shown below:

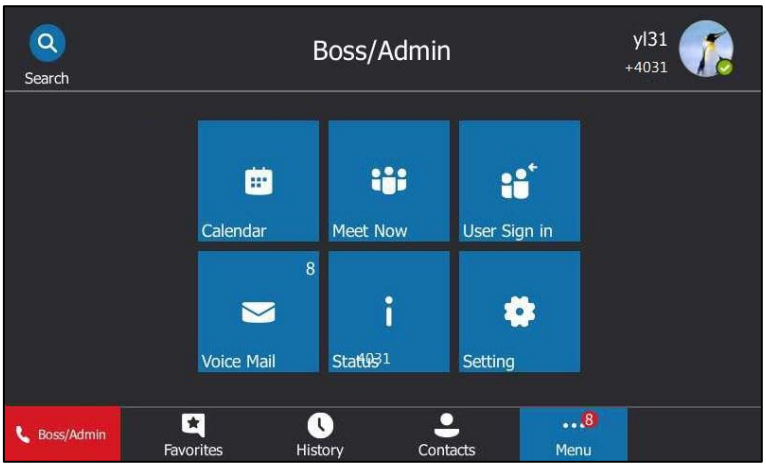


Placing the Calls on Hold

To place a call on hold on a boss's phone:

1. Tap or press to place the call on hold.

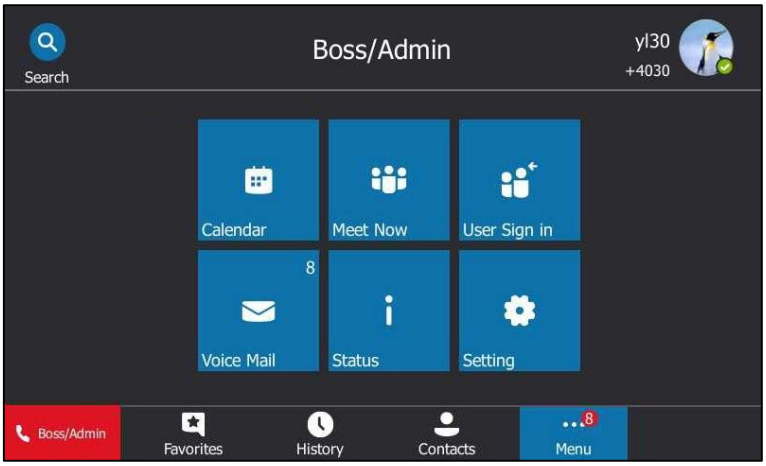
A red **Boss/Admin** soft key appears at the bottom of the delegate's phone screen.



To place a call on hold on a delegate's phone:

1. Tap or press to place the call on hold.

   A red **Boss/Admin** soft key appears at the bottom of the boss's phone screen.



Resuming the Held Calls

Either boss or delegate can resume the held call. Once one party resumes the call, the other party will drop the call automatically.

To resume a call held on a boss's phone:

Do one of the following:

- The boss taps or presses to resume the held call.
- The delegate taps the red **Boss/Admin** soft key to view the calls that are held by boss.

  Tap the avatar of the caller. The call will be resumed by the delegate, and the boss will drop the call automatically.

To resume a call held on a delegate's phone:

Do one of the following:

- The delegate taps or presses to resume the held call.
- The boss taps the red **Boss/Admin** soft key to view the calls that are held by delegate.

  Tap the avatar of the caller. The call will be resumed by boss, and the delegate will drop the call automatically.

Transferring Calls to Boss's Voicemail

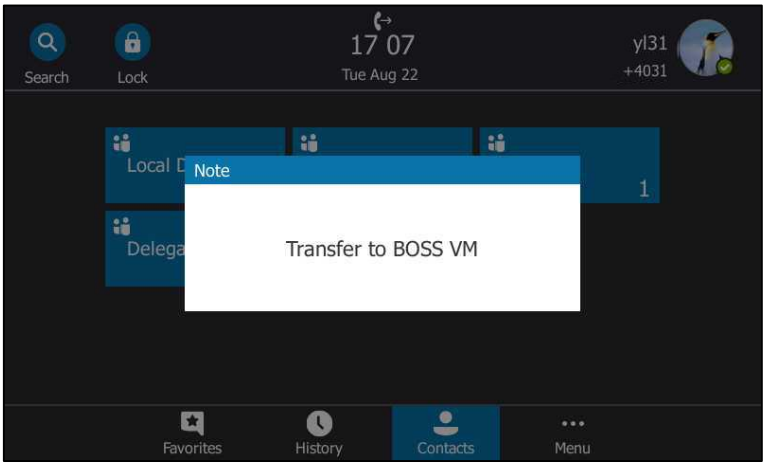
If a boss is unavailable to answer calls, delegates can transfer the calls directly to a boss's voicemail. The caller can follow the voice prompt to leave the voicemail.

To transfer a delegation call to the boss's voicemail:

Before answering the delegation call or during a delegation call:

1. Tap to forward the incoming call to boss's voicemail directly.

The touch screen of the delegate's phone is shown below:



Making a Safe Transfer to Boss

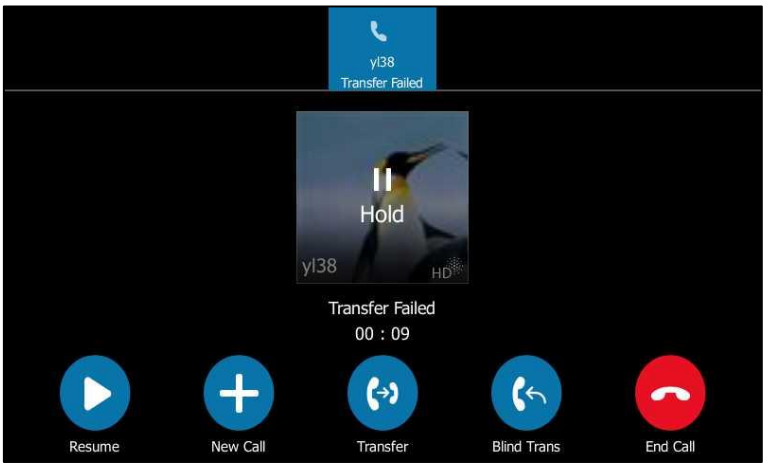
After a delegate answers the call, the delegate can transfer the call to the boss's phone using Safe Transfer, which enables the delegate to transfer the call to the boss's phone and prevent the call from going to voicemail if the boss does not answer the call.

To make a safe transfer to a boss's phone:

1. Tap -> during a call. The call is placed on hold.

When the boss answers the call, the call will be transferred to the boss successfully.

When the boss is not available to answer the transferred call or rejects the transferred call, the delegate's phone displays as "Transfer failed". The delegate can tap or press to resume the call.

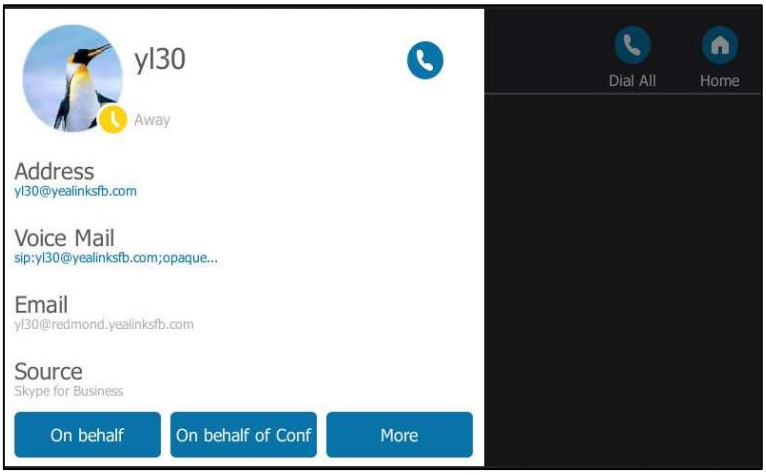


Placing a Call on Behalf of a Boss

The delegate can make calls on behalf of his assigned boss's lines.

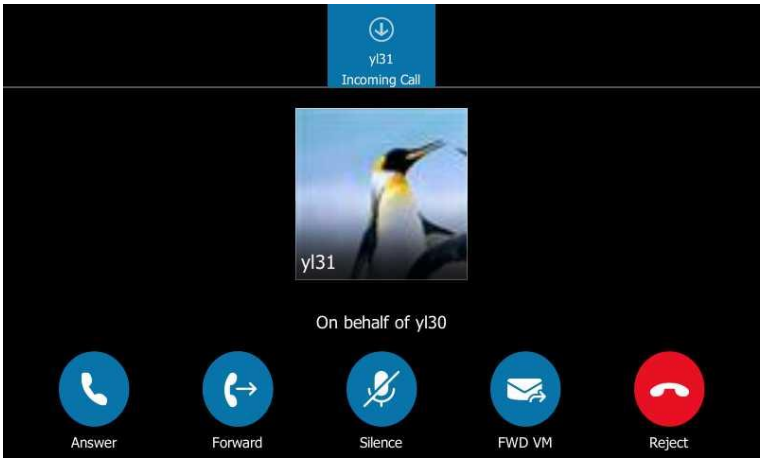
To place a call on behalf of a boss's line:

1. Tap **Contacts**->**Bosses**.
2. Tap the avatar of the desired boss.
3. Tap the **On behalf** soft key.



4. Tap the desired contact or enter the desired number, and then press OK or tap .
   You can also select a desired contact from the search result list, favorites screen, call history or contacts screen.

The delegate and third-party phones display a notification indicating that a delegate is calling on behalf of a boss.

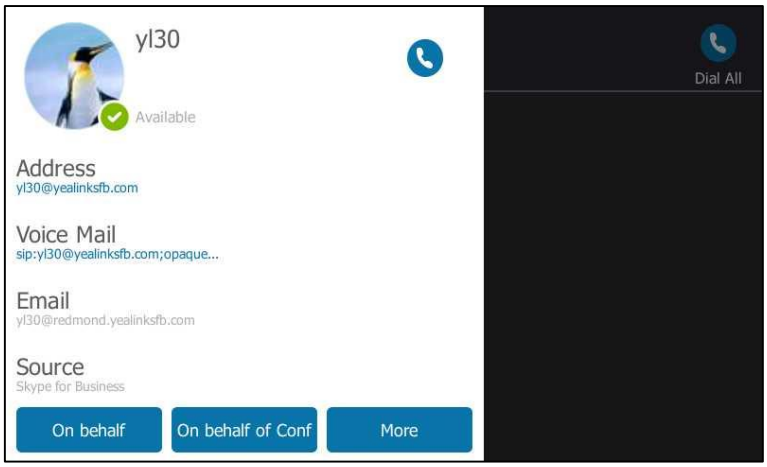


Initiating a Conference Call on Behalf of a Boss

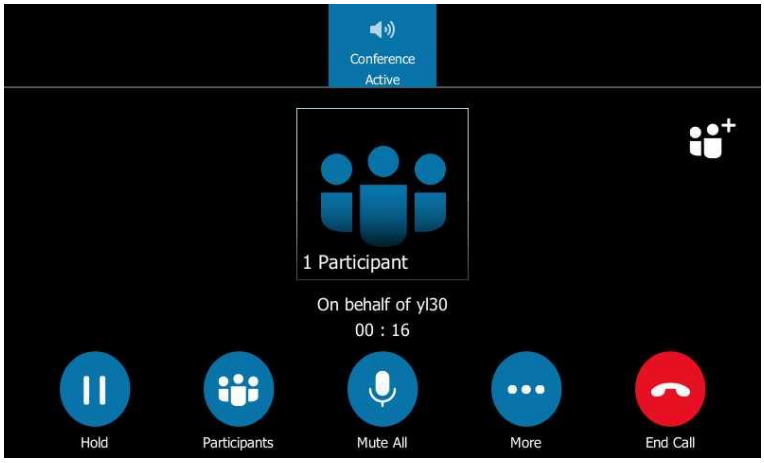
The delegate can initiate a conference call on behalf of a boss's line.

To initiate a conference call on behalf of a boss's line:

1. Tap **Contacts**->**Bosses**.
2. Tap the avatar of the desired boss.
3. Tap the **On behalf of Conf** soft key.



The delegate will initiate a Skype for Business conference call on behalf of a boss's line directly.



4. Tap to add more participants.

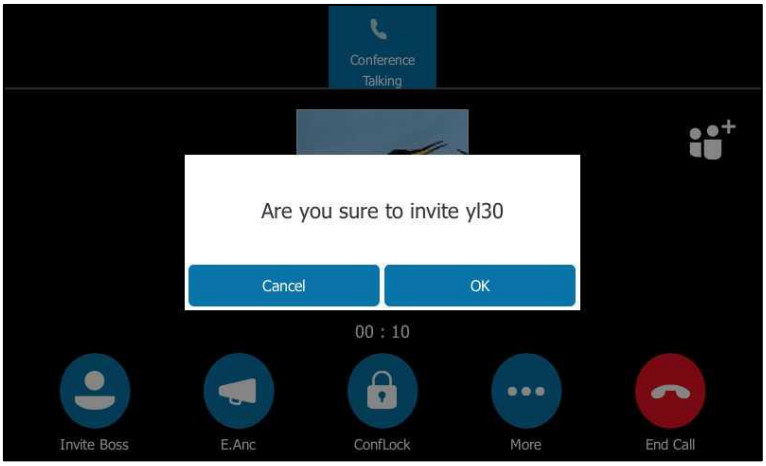
Joining Conference Calls for a Boss

The delegate can join an incoming conference call on behalf of a boss's line and add the boss to the conference call.

To add a boss's line to a conference call:

1. Tap or OK to join an incoming conference call.
2. Tap -> to add the boss's line to the conference.

   The touch screen of the delegate's phone is shown below:

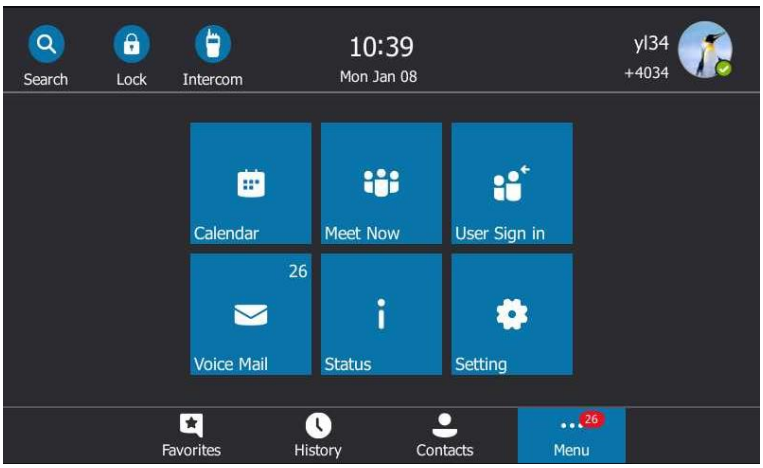


3. Tap the **OK** soft key.
4. When the boss joins the conference call, the delegate tap to leave the conference call.

Voicemail

If your phone is configured to connect to the Microsoft Exchange Server, you can leave voicemails for someone else using the T48S Skype for Business phone. You can also listen to voice messages that are stored in a voicemail. When receiving a new voicemail, the phone will play a warning tone. A number icon (indicating the number of voicemails you haven't retrieved) appears on the top-right of Menu .

Tap Menu (indicating 1 voicemail you haven't retrieved) to enter the **Menu** screen, and the number icon also appears on the **Voice Mail** menu.



Note

First time you listen to your voice mails, the message center will ask you to configure a voice mail access PIN.

When all new voice mails are retrieved, the flashing power indicator LED will go out and the number on **Voice Mail** menu icon will disappear.

Leaving the Voicemail

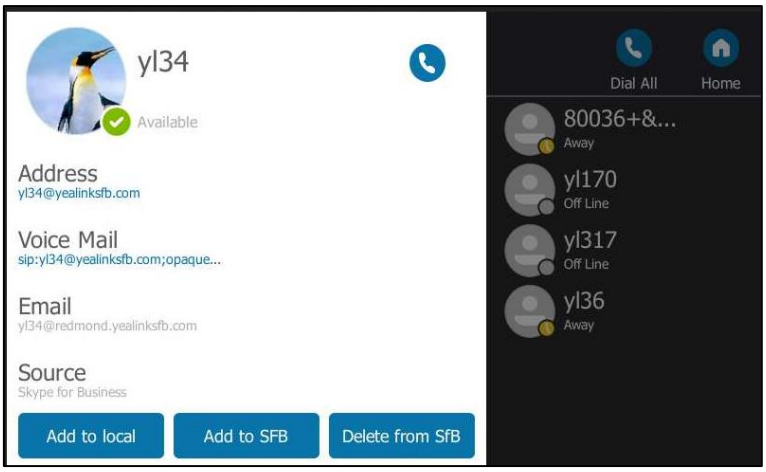
You can leave a voicemail for someone else when he/she is busy or inconvenient to answer the call. Follow the voice prompt from the system server to leave a voicemail, and then hang up.

You can also dial the voicemail address of the Skype for business contact to leave the voicemail.

To leave the voicemail via phone user interface:

1. Tap the **Contacts** soft key.
2. Select the desired Skype for business group.
3. Tap the avatar of the desired Skype for business contact.

4. Tap the voicemail to leave a voicemail.



Managing the Voicemail

PIN Authentication

When you sign into the phone via PIN Authentication method, you can follow the voice prompts to listen to voicemails.

To listen to the voicemail when sign into the phone via PIN Authentication, do the following:

1. When the phone prompts receiving a new voicemail and the power LED indicator glows red, press ✉ or tap **Menu**->**Voice Mail**.
2. Follow the voice prompt to listen to your voicemails.

User Sign-in/Web Sign-in/Sign in via PC

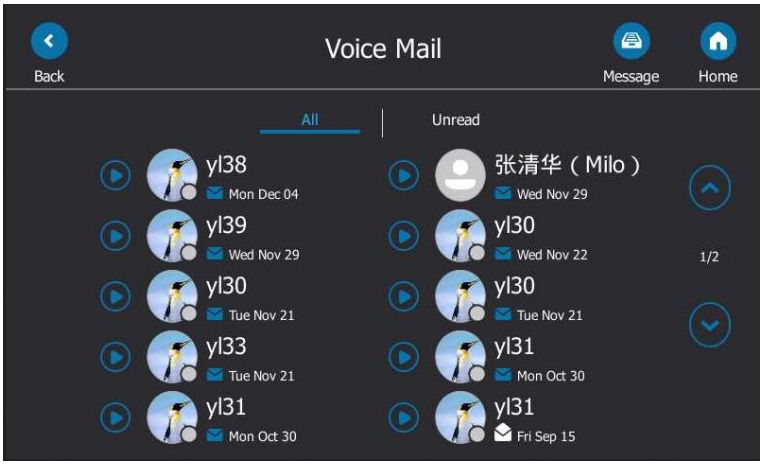
When you sign into the phone via User Sign-in, Web Sign-In or Signing in via PC method, you can manage the voicemail, including viewing a list of voicemails, call back to those who left the voicemails list, mark voicemails as read, delete voicemails and follow the voice prompts to listen to voicemails, etc.

Accessing the Message Center

To access the message center:

1. When the phone prompts receiving a new voicemail and the power LED indicator glows red, do one of the following:
   - Press ✉ .

– Tap **Menu**->**Voice Mail** ->



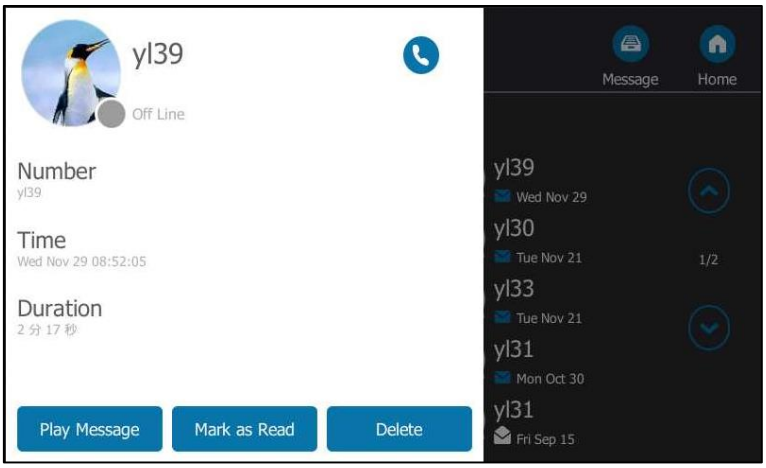
2. Follow the voice prompts to listen to your voicemails.

Listening to the Voicemail

To listen to the voicemail:

1. Tap **Menu**->**Voice Mail**.
2. Tap to play the selected voicemail.

   You can also tap the desired voicemail, and then tap the **Play Message** soft key.

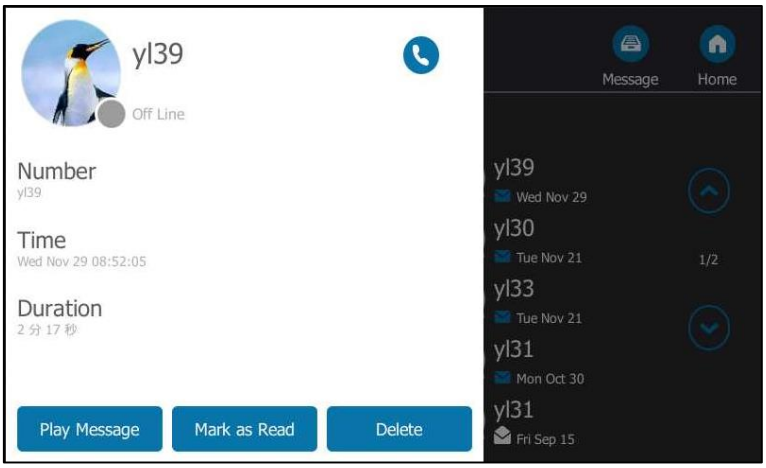


Calling a Contact from Voicemail

To call a contact from voicemail:

1. Tap **Menu**->**Voice Mail**.

2. Tap the desired voicemail.



3. Tap to call the contact.

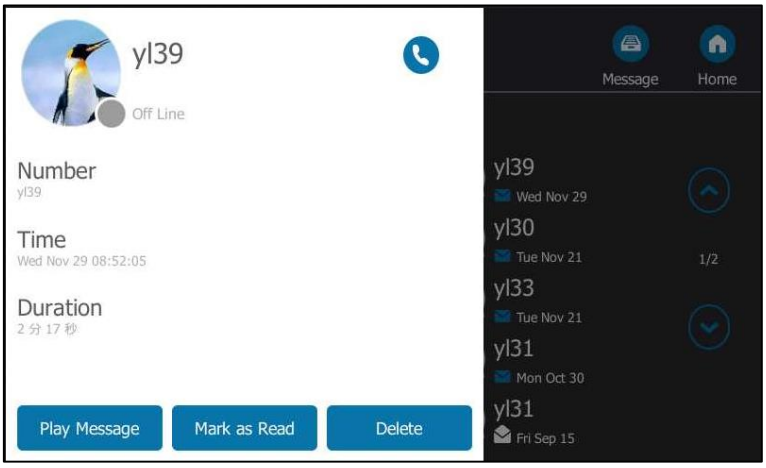
Marking the Voicemail as Read or Unread

The following icons indicate the status of the voicemail:

- **Unread voicemail**
- **Read voicemail**

To mark the voicemail as read:

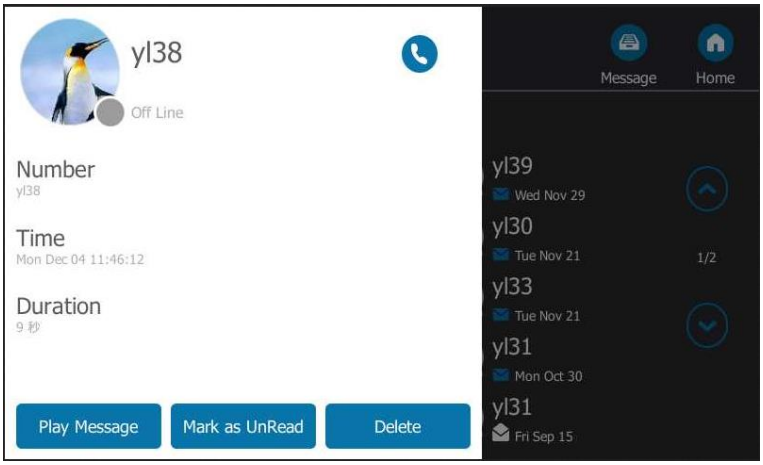
1. Tap **Menu**->**Message**.
2. Tap the **Unread** list.
3. Tap the unread voicemail.
4. Tap the **Mark as Read** soft key.



The voicemail icon will change from to .

To mark the voicemail as unread:

1. Tap **Menu**->**Message**.
2. Tap the read voicemail.
3. Tap the **Mark as Unread** soft key.

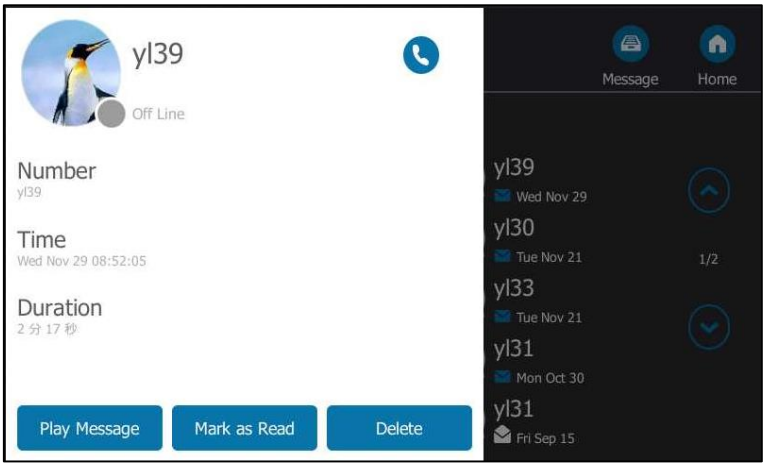


The voicemail icon will change from to .

Deleting the Voicemail

To delete the voicemail:

1. Tap **Menu**->**Voice Mail**.
2. Tap the desired voicemail.
3. Tap the **Delete** soft key.



The voicemail you selected will be deleted directly.

Advanced Phone Features

This chapter provides operating instructions for the advanced features of all phone. Topics include:

- E911
- USB Recording
- Intercom
- Multicast Paging
- Privacy Mode
- Hot Desking
- Common Area Phone
- Branch Office Resiliency
- Better Together over Ethernet

For additional information or assistance with your new phone, contact your system administrator.

E911

E911 (Enhanced 911) is a location technology that enables the called party to identify the geographical location of the calling party. For example, if a caller makes an emergency call to E911, the feature extracts the caller's information for the police department to immediately identify the caller's location.

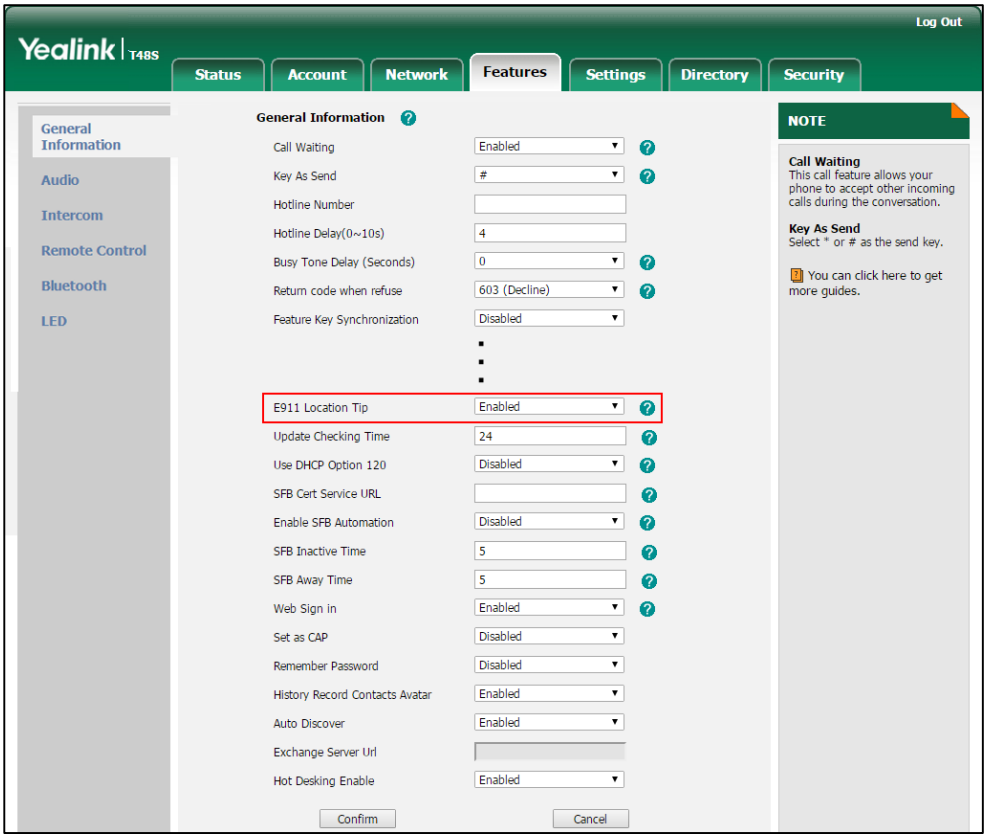
E911 Location Tip

E911 location tip will appear to prompt the user that the location of the phone is not set. E911 location tip feature is configurable via web user interface only.

To configure E911 location tip via web user interface:

1. Click on **Features**->**General information**.

2. Select desired value from the pull-down list of **E911 Location Tip**.



- If you select **Enabled**:

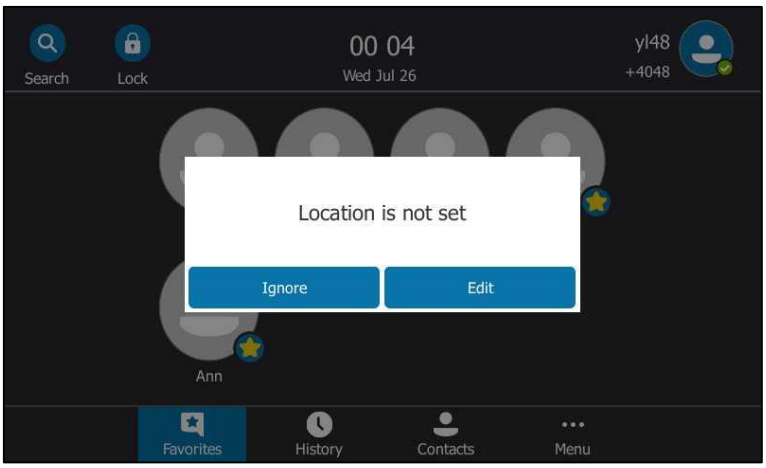
  When the location is not set, the touch screen will display a location tip.

- If you select **Disabled**:

  When the location is not set, the touch screen will not display a location tip.

3. Click **Confirm** to accept the change.

   When E911 location tip feature is enabled and the location of the phone is not set, the touch screen is shown as below after login:



You can do one of the following:

- Tap the **Ignore** soft key.

  When the parameter **Location Required** is set to **Yes** on the Skype for Business server, the phone will return to the idle screen.

  When the parameter **Location Required** is set to **Disclaimer** on the Skype for Business server, the phone will display the disclaimer configured on the Skype for Business server.

- Tap the **Edit** soft key.

  The phone will enter the **Location** screen.

Note If you ignore the location tip, an icon will appear on the **Status** menu, indicating that the location is not set.

Adding the Location Information

The location of the phone for emergency calls can be configured on the phone or on the Skype for Business server.

If your system administrator does not add location information on the Skype for Business server, you can add the location information via phone user interface.

To add the location information manually via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Location**.
2. Enter the location name in the **Set Location** field.
3. Enter the address name in the **Set Address** field.
4. Enter the building name in the **Set Building** field.
5. Enter the city name in the **Set City** field.
6. Enter the state name in the **Set State** field.
7. Enter the postcode in the **Set Postcode** field.
8. Select the country from the pull-down list of **Set Country**.
9. Tap to accept the change.

Location is configurable via web user interface at the path **Settings**->**Location**.

Note There are 24 countries' location information on T48S Skype for Business phone for you to choose. The country names are displayed in alphabetical order.

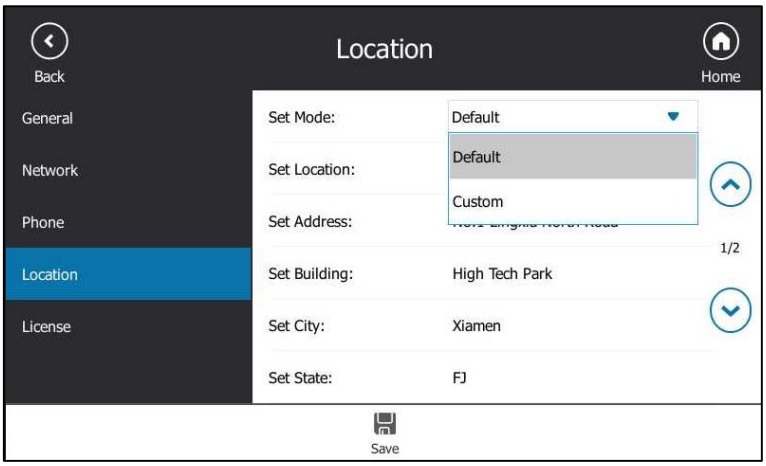
Selecting the Default Location

If your system administrator has configured a location on the Skype for Business server and you

add a location manually on the phone, you can select one of them to be the default location.

To select the default location via phone user interface:

1. Do one of the following:
   - Tap **Menu**->**Status**->**Location**, and then tap **Edit**.
   - Press (OK) -> **Location**, and then tap **Edit**.
   - Tap **Menu->Setting**->**Basic**->**Location**.
2. Select the desired value in the pull-down list of **Set Mode**.



   - If you select **Default**.

     The phone's default location will be the one configured on the Skype for Business server.
   - If you select **Custom**.

     The phone's default location will be the one configured on the phone.
3. Tap to accept the change.

Viewing the Location Information

To view the location information via phone user interface:

Do one of the following:

- Tap **Menu**->**Status-**>**Location**.
- Press (OK) ->**Location**.

Emergency Call

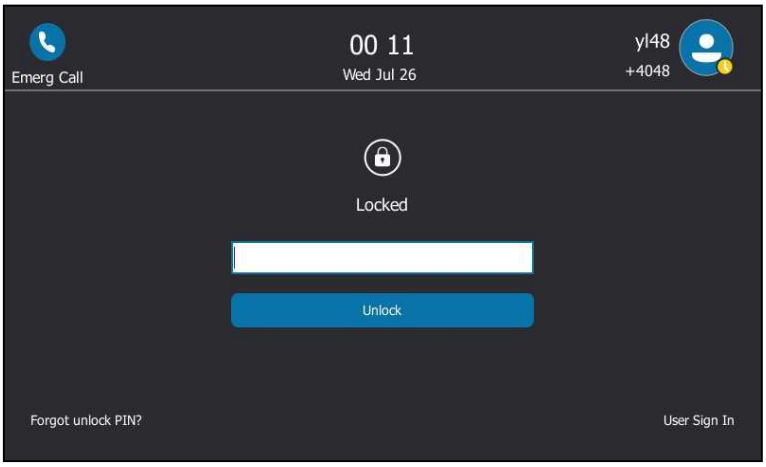
You can dial emergency numbers for assistance no matter whether you set the location or not.

You can dial an Emergency Dial String number or Emergency Dial String Mask number even if

the phone is locked. Keypad is available during an emergency call.

To place an emergency call when the phone is locked:

1. Tap (**Emerg Call** soft key).



2. Tap the desired emergency number.

If call forward feature is configured in advance, the call forward feature will be disabled automatically after calling the emergency number. If the call forward feature is not manually enabled again after the emergency call, it will be enabled automatically after two hours and its settings will also be restored.

If the phone status is DND before dialing an emergency number, then the phone status will change to available after the emergency call. And the phone status will restore to DND status in two hours. Other statuses will not be affected by the emergency call.

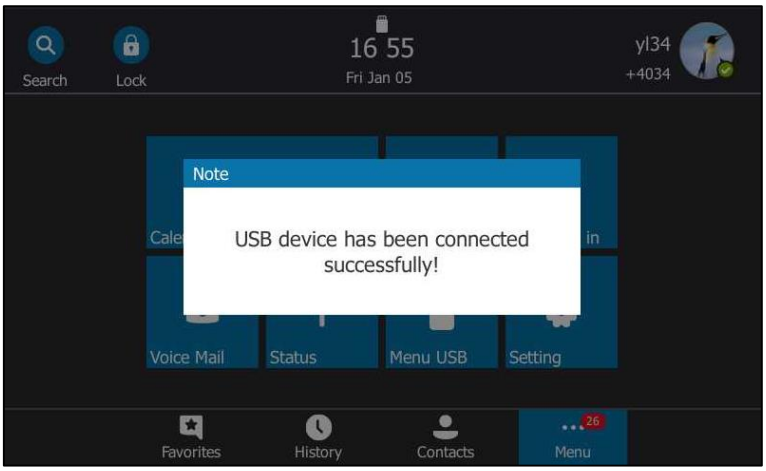
Note Emergency Dial String number and Emergency Dial String Mask number are configurable on the Skype for Business Server only. The system administrator can configure up to 5 emergency numbers. For more information, contact your system administrator.

USB Recording

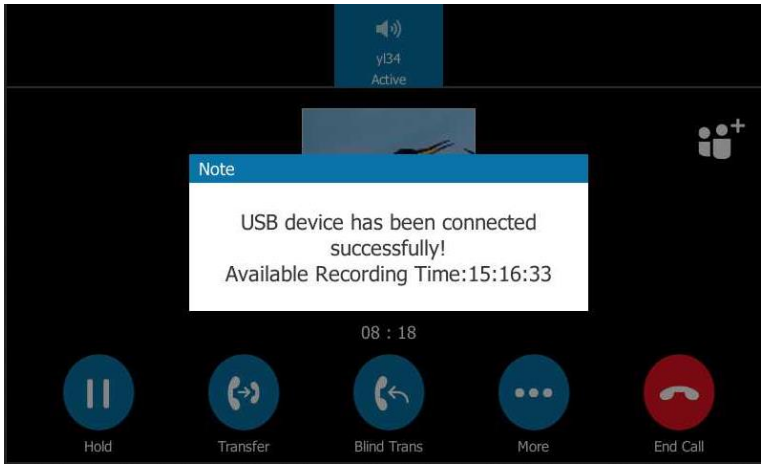
The Skype for Business phones support recording. You can record active calls onto a USB flash drive connected to your phone, and the recordings are saved as *.wav files. You can use USB recording feature only when your system administrator enables this feature.

Note Before USB recording, especially those involving PSTN, it is necessary to know about the rules and restrictions of any governing call-recording in the country where you are. It is also very important to inform all the parties that you are recording and ask for their consent before recording the conversation.

If you insert a USB flash drive to the phone when the phone is idle, the phone will detect the USB flash drive and display a flashing USB icon. After detecting the USB flash drive, the icon stops flashing and a message will display on the screen:



If you insert a USB flash drive to the phone during a call, a message will pop up to tell you how much time is available for recording. For more information on the available recording time, refer to Viewing the Storage Space on page 174.



Note The size of a single recording file should be less than 2G.

The Start REC soft key controls the recording function, and is available:

- When the free space of USB flash drive is sufficient
- When there are one or more calls connected to your phone
- During an active call
- When calls are on hold or muted
- During a consultative transfer
- During a conference call

The Start REC soft key is not available when:

- You are placing a new call during a call
- No free space of USB flash drive
- The phone prompts you to answer an incoming call
- You park the call

Recording a Call

You can record active calls or conferences.

To record a call:

1. Tap ••• -> ▶ during a call.

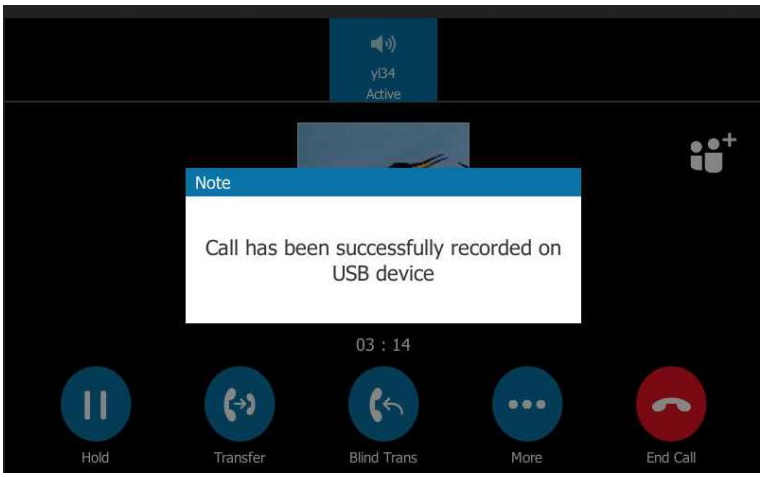
   The screen displays a recording icon and recording duration.

During the recording, you can do the following:

– Tap ••• -> ⏸. Then the pause recording icon appears on the screen and the duration stops counting. Both you and the other party are not recorded.

  Tap the ▶ soft key to continue recording.

- Tap -> . Recording stops and a message is displayed on the screen



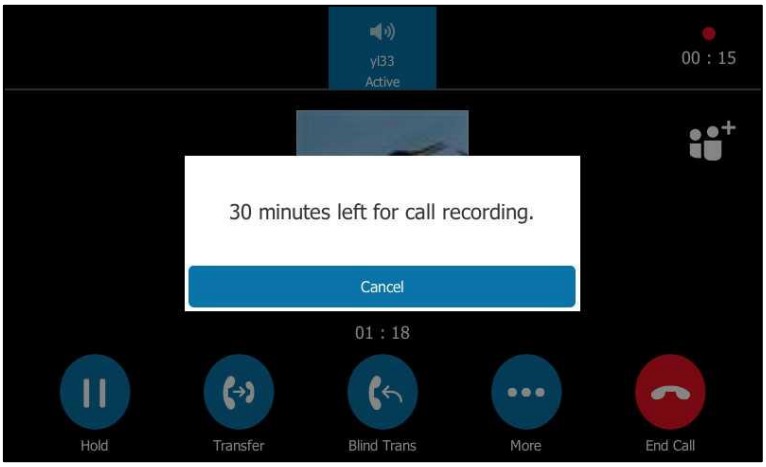
You can tap -> to start recording again, the recording will be saved as a new ".wav" file.

- Press or tap while recording, recording is paused. Then the pause recording icon appears on the touch screen and the duration stops counting. Both you and the other party are not recorded.

  Tap to resume the call, the recording is continued.

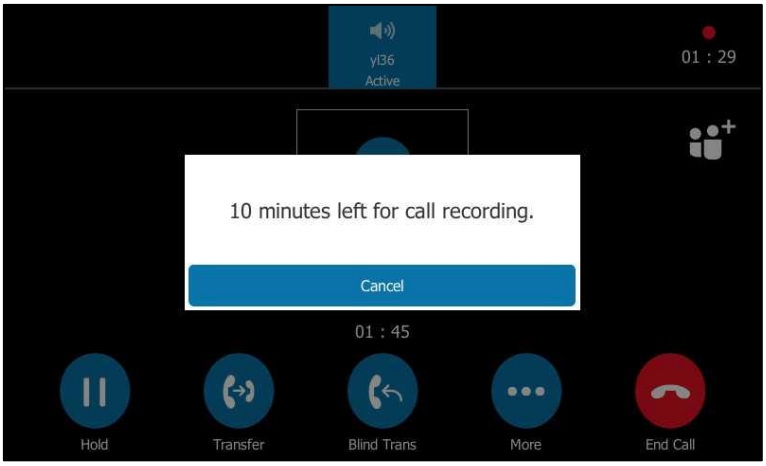
- Press the MUTE key while recording, the muted party is not recorded.

- If there is insufficient free space (30 minutes left) on the USB flash drive during recording, a message will display on the screen:



Tap the **Cancel** soft key to return to the previous screen.

– If there is insufficient free space (10 minutes left) on the USB flash drive during recording, a message will display on the screen:



Tap the **Cancel** soft key to return to the previous screen.

If no free space on the USB flash drive during recording, recording is stopped and saved on the USB flash drive automatically. The soft keys related to recording disappear. You cannot record a call unless the space of your USB flash drive is released.

Stop Recording a Call

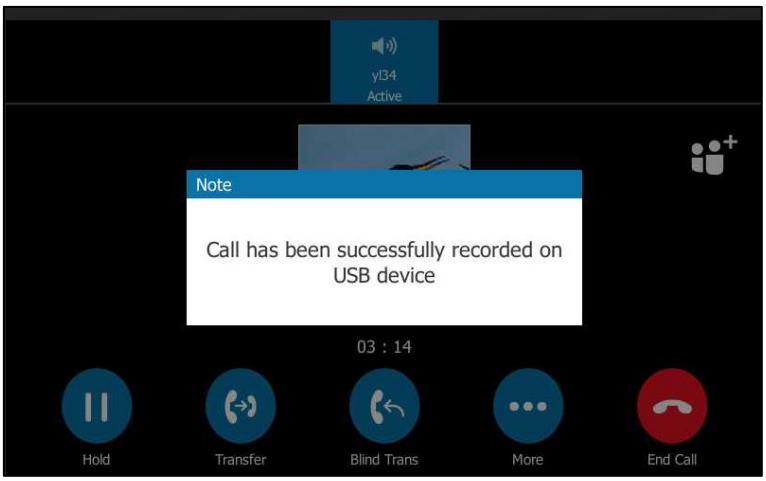
When you end a call during recording, the recording will be stopped and saved as *.wav file on the USB flash drive automatically.

To stop recording:

Do one of the following:

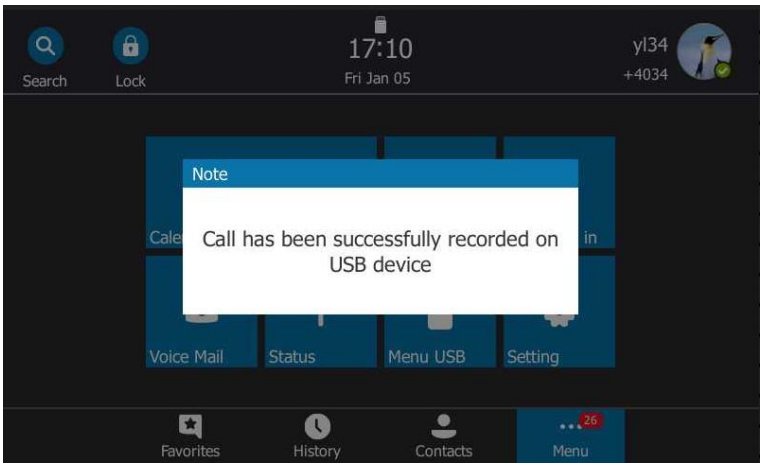
- Tap ••• -> ■ .

  The recording icon and recording duration disappears. A message is displayed on the touch screen:



- Tap .

  The recording icon and recording duration disappears, and the phone returns to the Idle screen. A message is displayed on the touch screen:



Playing Back Recorded Calls

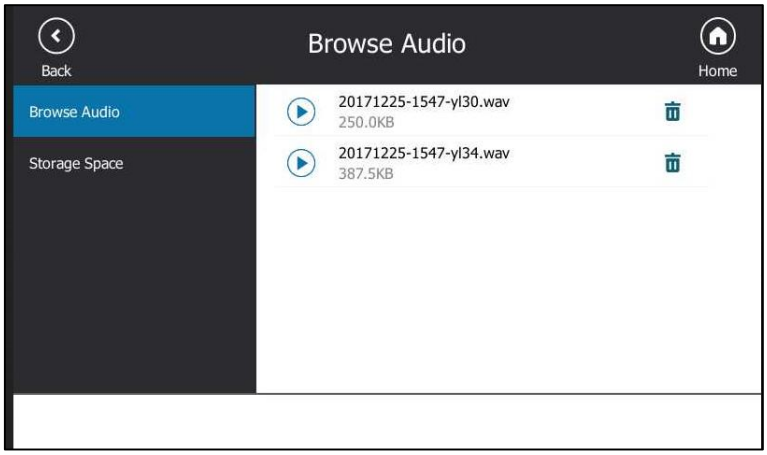
You can play back, browse and delete the recordings on your phone.

Note You can play back the recorded calls on the phone or on a computer using an application capable of playing ".wav" files.

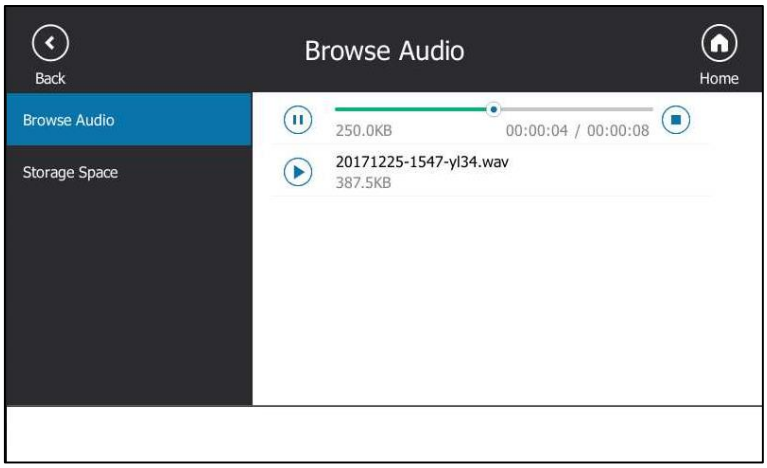
To play back recorded calls:

1. Tap **Menu**->**Menu USB->Browse Audio**.

   The touch screen shows all recorded files (file name, duration time and file size). The filename consists of the recording date & time and the other party's information (number, name or a conference call).



2. Tap the desired file or tap .



During the recording playback, you can do the following:

- Press the Speakerphone key, the HEADSET key, or pick up the handset to alternate among Speakerphone, Headset and Handset modes.
- Press the Volume key to adjust the volume of audio output.
- Tap to pause the playback. Then appears on the touch screen.
  Tap to continue the playback.
- Drag the slider to skip forward or rewind the playback.
- Tap to stop the playback.
- Tap to stop the playback and return to the idle screen.

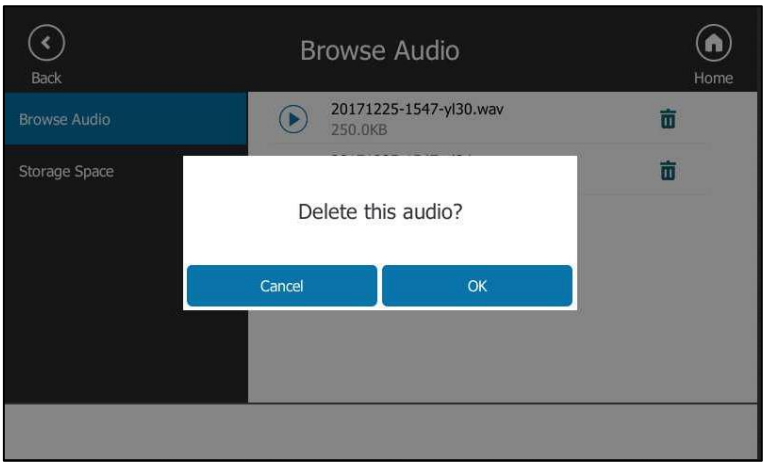
  When you receive an incoming call while playing a recording, the recording is paused automatically and the phone rings. If you reject the incoming call or after you end the call, the recording remains paused until you tap again.

Deleting the Recording

To delete the recorded calls:

1. Tap **Menu**->**Menu USB**->**Browse Audio**.

2. Tap to delete a desired file.



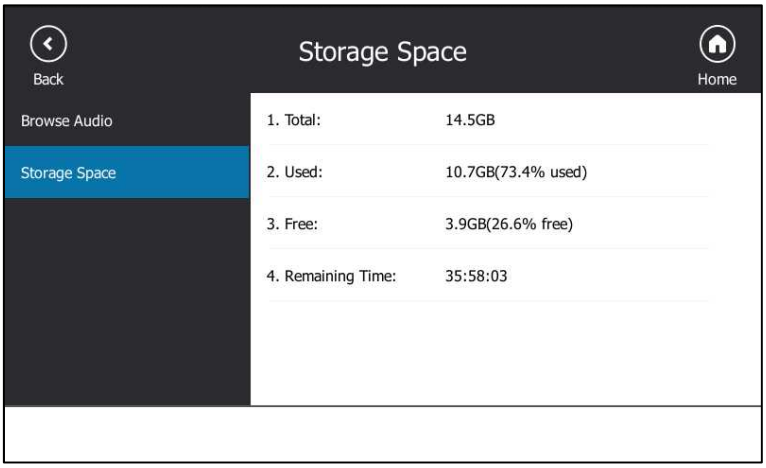
3. Tap the **OK** soft key.

Viewing the Storage Space

You can view the storage space (for example, total space, used space, free space) of the USB flash drive on the phone.

To view the storage space of the USB flash drive:

1. Tap **Menu**->**Menu USB**->**Storage Space**.



Intercom

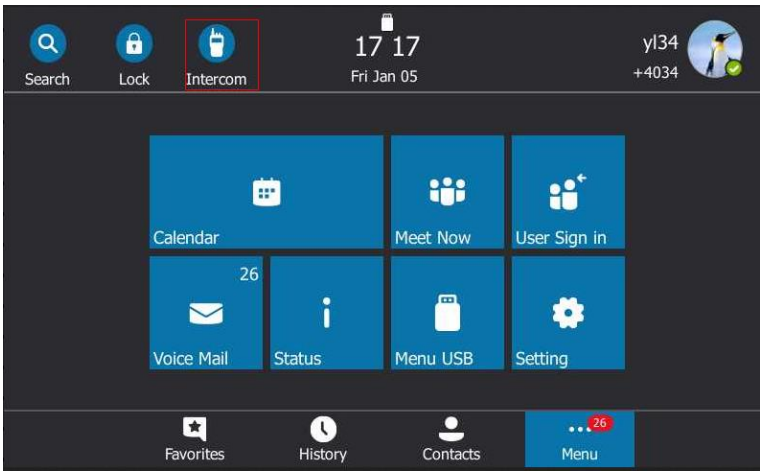
Intercom is a useful feature in an office environment to quickly connect with the operator or the secretary.

Configuring the Intercom

By default, the phone will automatically play a warning a tone and then automatically answer an incoming intercom call if an incoming intercom arrives. In addition, you can enable the phone to mute the microphone when it automatically answers an incoming intercom call. You can also enable the phone to automatically answer an incoming intercom call while there is already an active call on the phone. The active call is then placed on hold.

Outgoing Intercom

You can enable or disable the phone to use the intercom feature. If Outgoing Intercom is enabled, an Intercom icon will display on the touch screen automatically. You can tap to enter the intercom list.



Intercom Allow

You can enable or disable the phone to answer an incoming intercom call automatically. If Intercom Allow is enabled, the phone will automatically answer an incoming intercom call. If Intercom Allow is disabled, the phone will handle an incoming intercom call like a normal call instead of directly rejecting it. Intercom Allow is enabled by default.

Intercom Mute

You can mute or unmute the phone's microphone for intercom calls automatically. If Intercom Mute is enabled, the microphone will be muted for intercom calls. If Intercom Mute is disabled, the microphone will work for Intercom calls. Intercom Mute is disabled by default.

Intercom Tone

You can enable or disable the phone to play a warning tone when receiving an intercom call. If Intercom Tone is enabled, the phone will play a warning tone before answering the intercom call. If Intercom Tone is disabled, the phone will automatically answer the intercom call without warning. Intercom Tone is enabled by default.

Intercom Barge

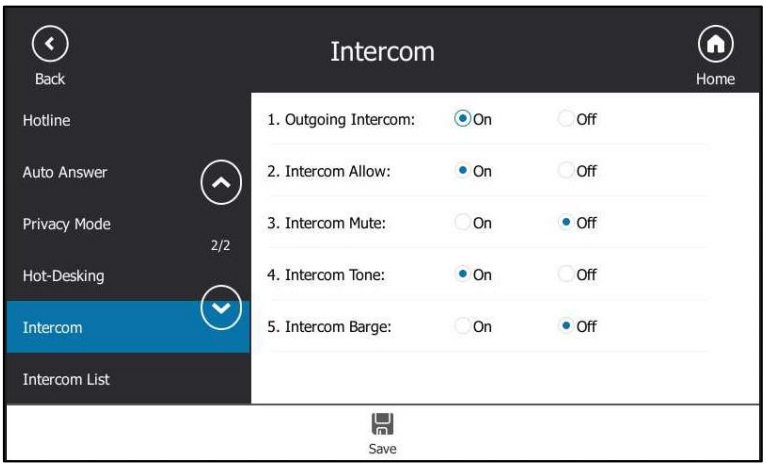
You can enable or disable the phone to automatically answer an incoming intercom call while there is already an active call on the phone. If Intercom Barge is enabled, the phone will automatically answer the intercom call and place the active call on hold. If Intercom Barge is disabled, the phone will handle an incoming intercom call like a waiting call. Intercom Barge is disabled by default.

Note

To enable the phone to receive a new incoming call when it has an active call, make sure that call waiting feature is enabled on the phone in advance. For more information, refer to Configuring the Call Waiting on page 99.

To configure the intercom feature:

1. Tap **Menu->Setting**->**Features**->**Intercom**.
2. Select the desired value.



3. Tap to accept the change.

Intercom features are configurable via web user interface at the path **Features->Intercom**.

Configuring the Target Extension Number

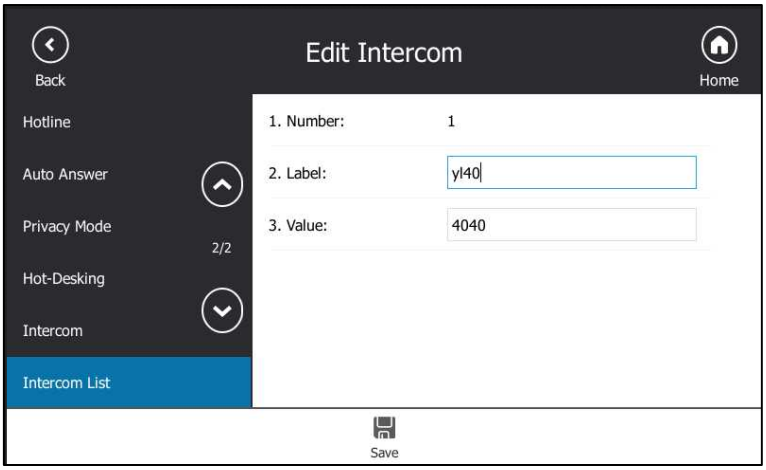
You need to configure the target extension number for outgoing intercom calls after you enable the intercom feature.

To configure the target extension number via phone user interface:

1. Do one of the following to enter the intercom list:
   - Tap .
   - Tap **Menu->Setting**->**Features**->**Intercom List**.
2. Select a desired item.

   The default tag is Empty if it is not configured before.
3. Tap the **Edit** soft key.

4. (Optional.) Enter the string that will appear on the intercom list in the **Label** field.
5. Enter the target extension number in the **Value** field.

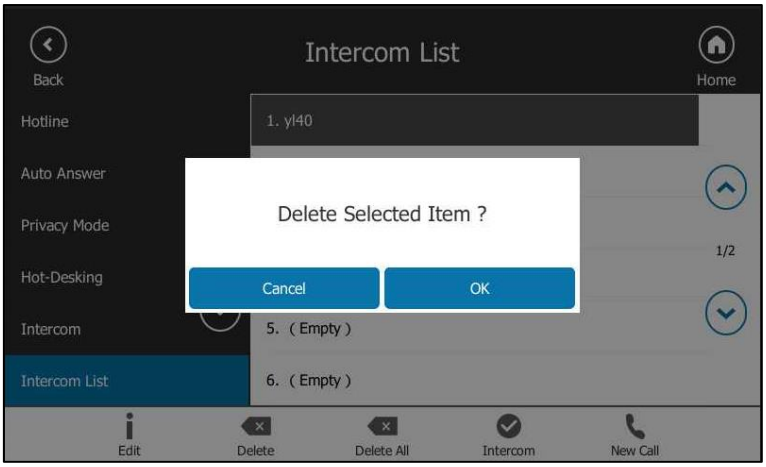


6. Tap to accept the change.
7. Repeat steps 2 to 6, you can add more target extension numbers.

To delete a target extension number via phone user interface:

1. Do one of the following to enter the intercom list:
   - Tap .
   - Tap **Menu->Setting**->**Features**->**Intercom List**.
2. Select a desired item.
3. Tap the **Delete** soft key.

   The touch screen prompts "Delete Selected Item?".



4. Tap the **OK** soft key to accept the change.

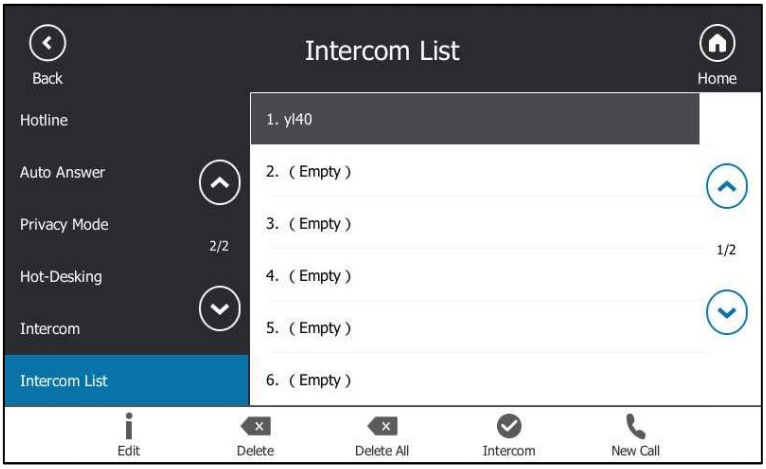
   If you want to delete all target extension numbers, you can press the **Delete All** soft key.

Intercom is configurable via web user interface at the path **Features**->**Intercom**.

Placing an Intercom Call

To place an intercom call via phone user interface:

1. Do one of the following to enter the intercom list:
   - When the phone is idle, tap or tap **Menu->Setting**->**Features**->**Intercom List**.
   - During a call, tap -> .
2. Tap a desired item, and then tap the **Intercom** soft key.



If the contact is not in the intercom list, tap the **NewCall** soft key to initiate an intercom call.

The target phone will play a warning tone and answers your intercom call automatically in the hands-free (speakerphone) mode by default.

3. Tap to end the intercom call.

Multicast Paging

You can use multicast paging to quickly and easily broadcast time-sensitive announcements to users who are listening to a specific multicast group. You can configure the paging list on the phone, which allows you to send a Real Time Transport Protocol (RTP) stream to the pre-configured multicast address(es) without involving SIP signaling. You can configure the phone to receive an RTP stream from pre-configured multicast listening address(es) without involving SIP signaling. You can specify up to 10 multicast listening addresses.

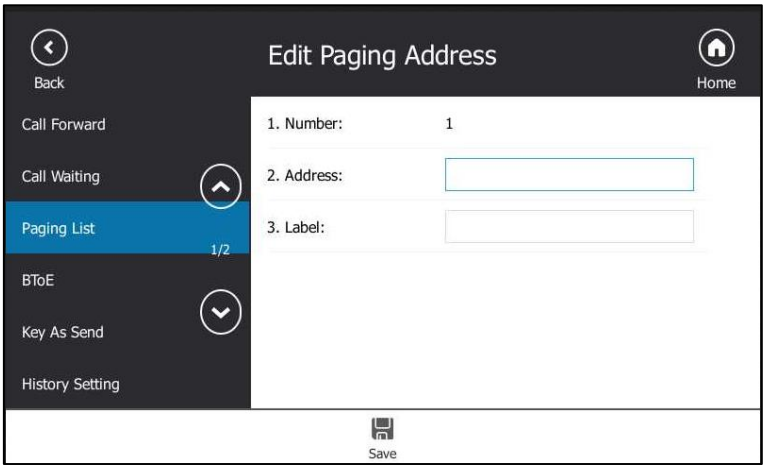
Note If G722 codec is used for multicast paging, the touch screen will display an "HD" icon to indicate that the audio you are listening to is high definition voice quality. Check with your system administrator to see if this feature is available on your phone.

Sending RTP Stream

To configure paging list via phone user interface:

1. Tap **Menu->Setting**->**Features**->**Paging List**.
2. Tap a desired paging group.

   The default tag is Empty if it is not configured before.
3. Tap the **Edit** soft key.



4. Enter the multicast IP address and port number (e.g., 224.5.6.20:10008) in the **Address** field.

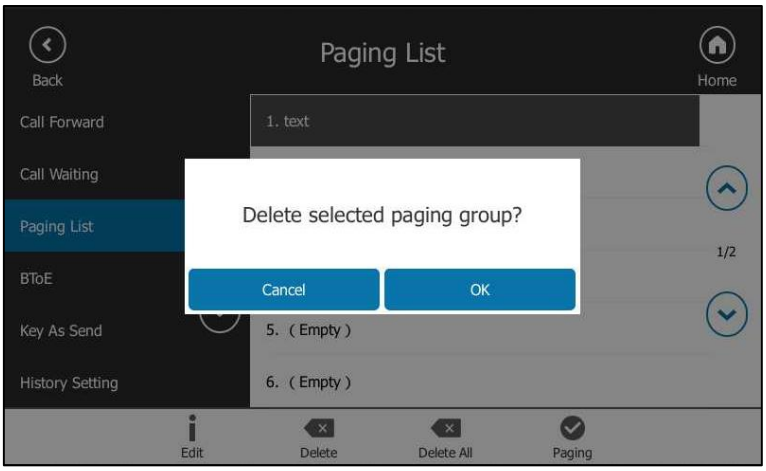
   The valid multicast IP addresses range from 224.0.0.0 to 239.255.255.255.
5. Enter the group name in the **Label** field.
6. Tap to accept the change.
7. Repeat steps 2 to 6, you can add more paging groups.

   If the paging group is configured successfully, an icon appears on the screen title area. You can tap it to enter the paging list.

To delete a paging group via phone user interface:

1. Tap or tap **Menu->Setting**->**Features**->**Paging List**.
2. Tap a desired paging group.
3. Tap the **Delete** soft key.

The touch screen prompts “Delete selected paging group?”.



4. Tap the **OK** soft key to accept the change.

   If you want to delete all paging groups, you can tap the **Delete All** soft key.

Paging list is configurable via web user interface at the path **Directory**->**Multicast IP**.

Receiving RTP Stream

You can configure the phone to receive a Real Time Transport Protocol (RTP) stream from the pre-configured multicast address(es) without involving SIP signaling. You can specify up to 10 multicast addresses that the phone listens to on the network.

How the phone handles incoming multicast paging calls depends on Paging Barge and Paging Priority Active parameters configured via web user interface.

Paging Barge

The Paging Barge parameter defines the priority of the voice call in progress. If the priority of an incoming multicast paging call is lower than that of the active call, it will be ignored automatically. If Disabled is selected from the pull-down list of Paging Barge, the voice call in progress will take precedence over all incoming multicast paging calls. Valid values in the Paging Barge field:

- **1 to 10**: Define the priority of the active call, 1 is with the highest priority, while 10 is with the lowest.
- **Disabled**: The voice call in progress will take precedence over all incoming paging calls.

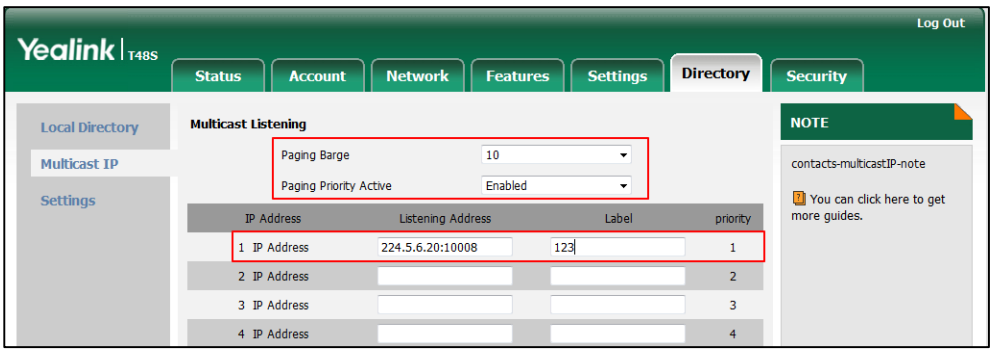
Paging Priority Active

The Paging Priority Active parameter decides how the phone handles incoming multicast paging calls when there is already a multicast paging call on the phone. If enabled, the phone will ignore incoming multicast paging calls with lower priorities, otherwise, the phone will answer incoming multicast paging calls automatically and place the previous multicast paging call on hold. If disabled, the phone will automatically ignore all incoming multicast paging calls.

To configure multicast listening addresses via web user interface:

1. Click on **Directory**->**Multicast IP**.
2. Select the desired value from the pull-down list of **Paging Barge**.
3. Select the desired value from the pull-down list of **Paging Priority Active**.
4. Enter the multicast IP address(es) and port number (e.g., 224.5.6.20:10008) which the phone listens to for incoming RTP multicast in the **Listening Address** field.
5. Enter the label in the **Label** field.

   Label will appear on the touch screen when the phone receives the multicast RTP stream.



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

Note

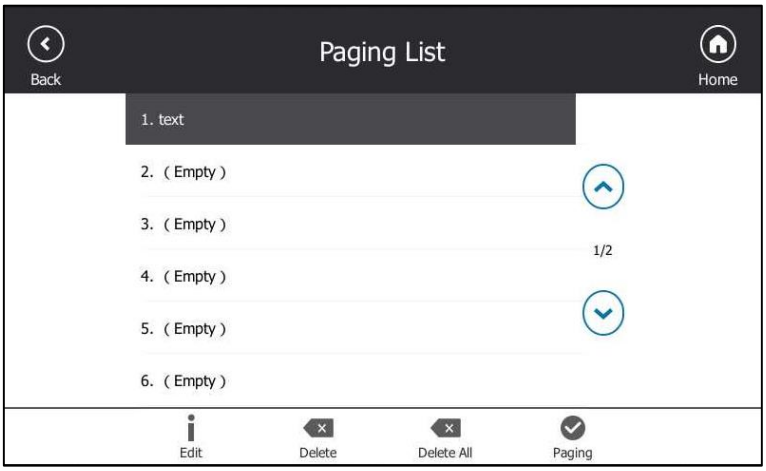
The priorities of listening addresses are predefined: 1 is with the highest priority, while 10 is with the lowest.

Multicast listening addresses are configurable via web user interface only.

Using Multicast Paging

To send RTP stream via the paging list:

1. Do one of the following to send RTP stream**:**
   - When the phone is idle, tap or tap **Menu**->**Setting**->**Features**->**Paging List**.
   - During a call, tap -> .



2. Select a desired paging group.
3. Tap the **Paging** soft key or the desired paging group or press OK to send RTP.

   Both the sender's and receiver's phones play a warning tone and the receiver automatically answers the multicast RTP session in the speakerphone mode.
4. Your can do the following:
   - To place the current multicast RTP session on hold, press or tap .

     The sender's phone places the multicast RTP session on hold and receiver's phone releases the session.
   - To resume the held multicast RTP session, press or tap .

     The multicast RTP session is established again.
   - To end the multicast RTP session, tap .

Note

Multicast RTP is one way only from the sender to the multicast address(es) (receiver). For outgoing RTP multicasts, all other existing calls on the phone will be placed on hold.

Privacy Mode

Privacy mode allows you to restrict your presence information, so that it is visible only to the contacts in your Skype for Business directory.

Note

Microsoft Active Directory includes all Skype for Business users configured by the system administrator. You can add them as your Skype for Business contacts. For more information on how to add Skype for Business contacts, refer to Adding Skype for Business Contacts on page 70.

When the privacy mode is disabled on the Skype for Business Server, you can see the following two options available on the phone/Skype for Business client:

- **Everyone Can See My Status Regardless Of System Settings/I want everyone to be able to see my presence regardless of system settings (override default settings)**: Everyone in my Microsoft Active Directory Domain can see my presence regardless of system settings.
- **Only Contacts Can See My Status If System Setting/I want the system administrator to decide**: Currently everyone can see my presence but this could be change in the future.

When the privacy mode is enabled on the Skype for Business Server, you can see the following two options available on the phone or Skype for Business client:

- **Everyone can see my status/I want everyone to be able to see my presence**: Everyone in my Microsoft Active Directory Domain can see my presence.
- **Only contacts can see my status/I only want people in Contacts to see my presence**:

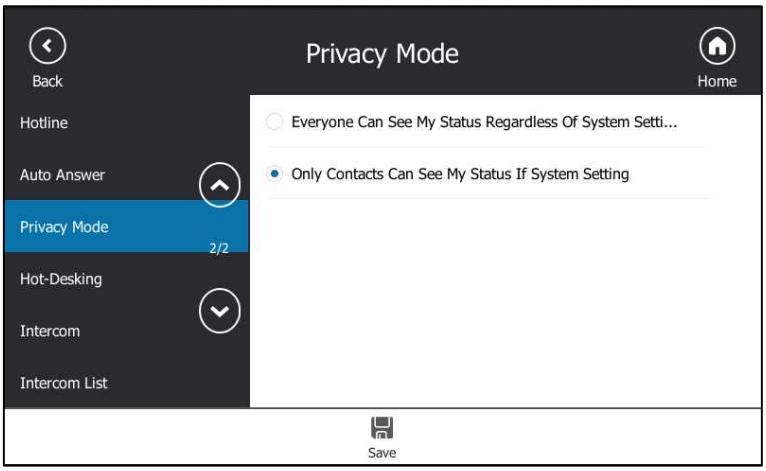
Only the contacts in my Skype for Business directory can see my presence. But my presence is offline for those contacts who are in my Microsoft Active Directory Domain.

Modifying the Privacy Mode from the Phone

To modify the privacy mode from the phone:

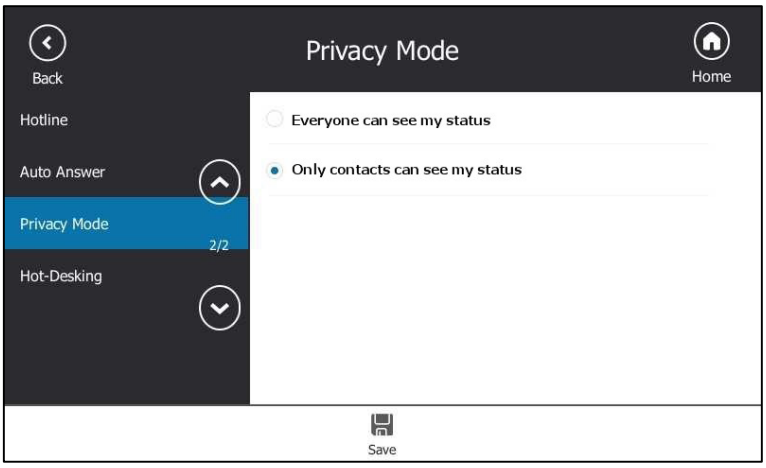
1. Tap **Menu->Setting**->**Features**->**Private Mode**.
2. Do one of the following:

   a) If the privacy mode is disabled on the Skype for Business Server, the phone touch screen displays as below:



   Tap the desired radio box.

   b) If the privacy mode is enabled on the Skype for Business Server, the phone touch screen displays as below:



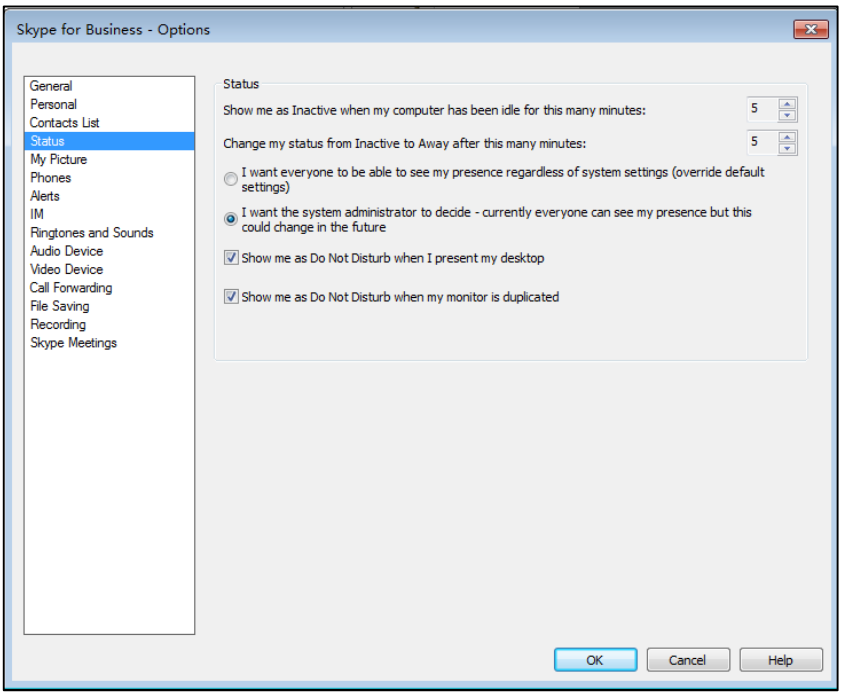
   Tap the desired radio box.

3. Tap to accept the change.

Modifying the Privacy Mode from the Skype for Business Client

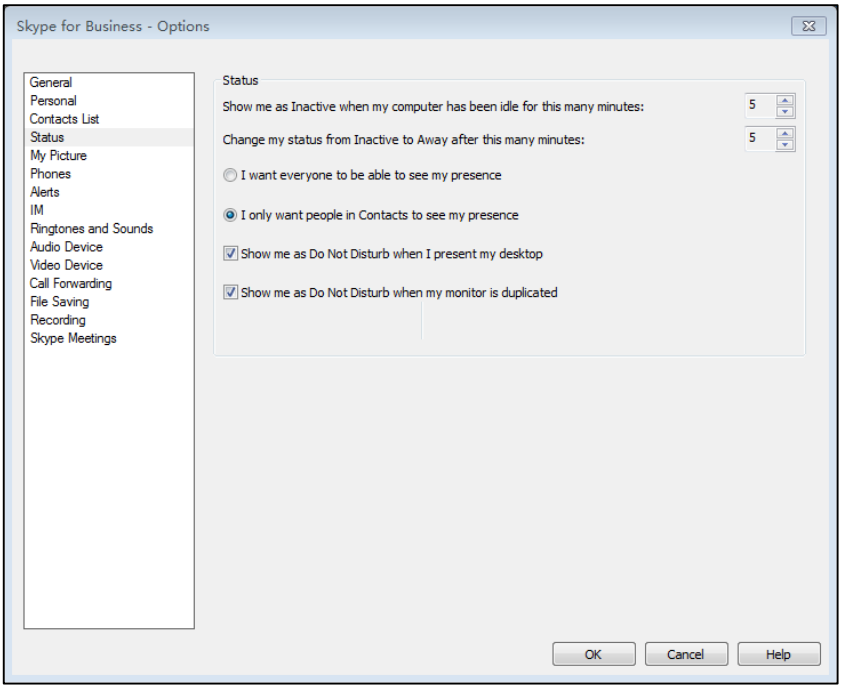
To modify the privacy mode from the Skype for Business client:

1. Open Skype for Business client.
2. Click ⚙ .
3. In the **Skype for Business - Options** dialog box, click **Status.**
4. Do one of the following: If the privacy mode is disabled on the Skype for Business Server:



Mark the desired radio box.

a) If the privacy mode is enabled on the Skype for Business Server:



Mark the desired radio box.

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

Hot Desking

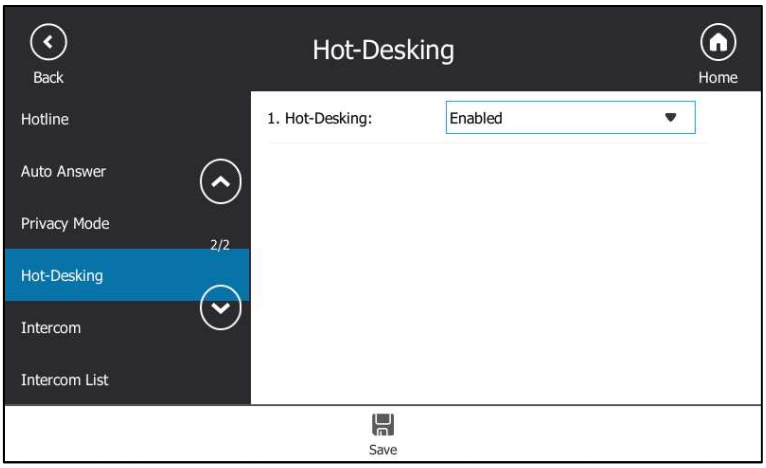
Hot desking originates from the definition of being the temporary physical occupant of a work station or surface by a particular employee. A primary motivation for hot desking is cost reduction. Hot desking is regularly used in places where not all employees are in the office at the same time, or not in the office for a long time, as a result, the offices would often be vacant and consumes valuable space and resources.

Configuring the Hot Desking

To configure hot desking feature via phone user interface:

1. Tap **Menu->Setting**->**Features**->**Hot-Desking**.
2. Select **Enabled** or **Disabled** from the pull-down list of **Hot-Desking**.

The feature is enabled by default.



3. Tap to accept the change.

Note You can configure the hot desking feature on your phone only when your system administrator has enabled this feature for your account on the Skype for Business Server.

Hot desking is configurable via web user interface at the path: **Features**->**General Information**->**Hot Desking Enable**.

Signing in as the Hot Desking User

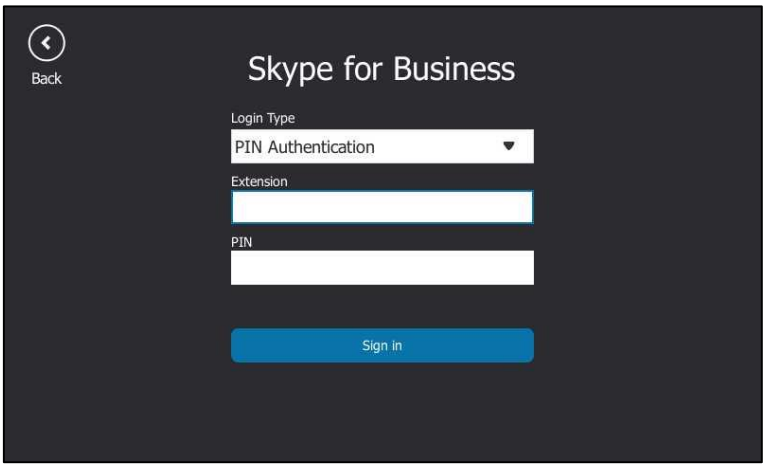
Once you enable the hot desking feature on a phone, you can sign out from the host user account and sign in as the hot desking user. The hot desking user has access to his own profile and settings.

To sign in as the hot desking user:

1. Do one of the following:
   - When the phone is locked, tap **User Sign In**.
   - When the phone is unlocked, tap **Menu**->**User sign in**.

     The touch screen prompts “Are you sure to start the hot-desking?”.
2. Tap the **OK** soft key to accept the change.

The phone is signed out from host user, and the Sign In screen displays:



3. Select the desired sign-in method, and then enter your enter your login credentials.
4. Tap **Sign in**.

   If your system administrator enables multi-factor authentication (MFA) feature for your online account, you should pass the MFA at the first sign-in. For more information, refer to Passing MFA on page 21.

   The phone is signed in as the hot desking user successfully. And the phone displays "It is in the hot-desking mode".

Signing out from the Hot Desking User

To sign out from the hot desking user manually:

1. Do one of the following:
   - When the phone is locked, tap **Sign Out**.
   - When the phone is unlocked, tap your avatar at the top-right corner of the touch screen and then tap **Sign Out**.

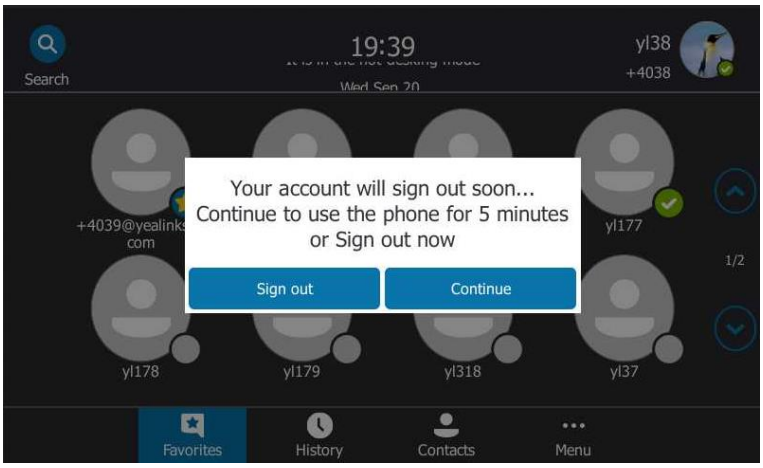
   The touch screen will prompt "Are you sure to sign out?".

2. Tap the **OK** soft key.

   The phone is signed out from hot desking user and signs in automatically with the host user account which has been signed in before.

To sign out of a shared phone automatically:

1. When the phone has been inactive for a designated time (this time is configured on the Skype for Business server), the phone will sign out of the guest profile automatically.
2. One minute before the phone logs out of the guest profile automatically, the phone will prompt you to sign out immediately or continue using the phone for 5 minutes.



   After the phone is signed out from hot desking user, it will sign in automatically with the host user account which has been signed in before.

Common Area Phone

Common area phones are those Skype for Business phones that are not associated with an individual user. Instead of being deployed in someone's office, common area phones are typically deployed in building lobbies, cafeterias, employee lounges, conference rooms, and other places where a large number of people are likely to gather. Unlike other phones on the Skype for Business Server, which are typically maintained by voice policies and dial plans that are assigned to individual users, common area phones do not have individual users assigned to them.

This chapter explains how to use the Common Area Phone. Topics include:

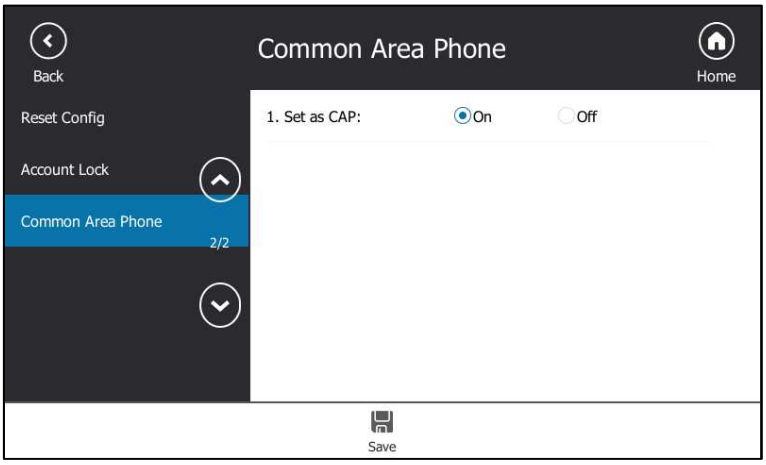
- Configuring a Common Area Phone
- Signing into a Common Area Phone Account
- Signing Out of a Common Area Phone

Configuring a Common Area Phone

You can configure an individual phone to be a Common Area Phone.

To enable the Common Area Phone feature via phone user interface:

1. Tap **Menu->Setting**->**Advanced** (default password: admin)->**Common Area Phone**.
2. Tap the **On** radio box of the **Set As CAP** field.



3. Tap to accept the change.

   This configuration will take effect after a reboot.

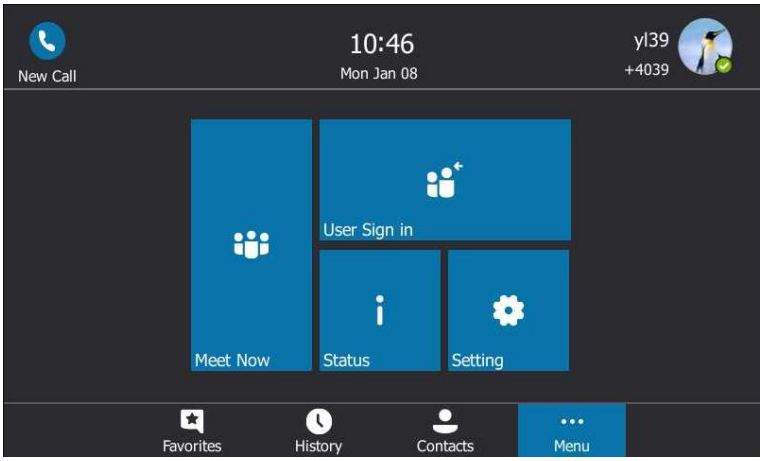
Signing into a Common Area Phone Account

You can use the following five sign-in methods to sign into a CAP.

- **PIN Authentication**
- **User Sign-in**
- **Web Sign-in**
- **Sign in via PC**
- **CAP Provisioning**

For more information on the first four sign-in methods, refer to Signing into Skype for Business on page 14. For more information on CAP Provisioning sign-in methods, refer to CAP Provisioning Sign-in Method on page 190.

After you sign into a CAP account, the idle screen is shown as below.



Users can sign into their own Skype for Business account to use their own user profile settings by tapping **User Sign In**. For more information, refer to Signing in as the Hot Desking User on page 186.

Note

Some features on the CAP are unavailable compared with individual phone. Contact your system administrator for more information.

CAP Provisioning Sign-in Method

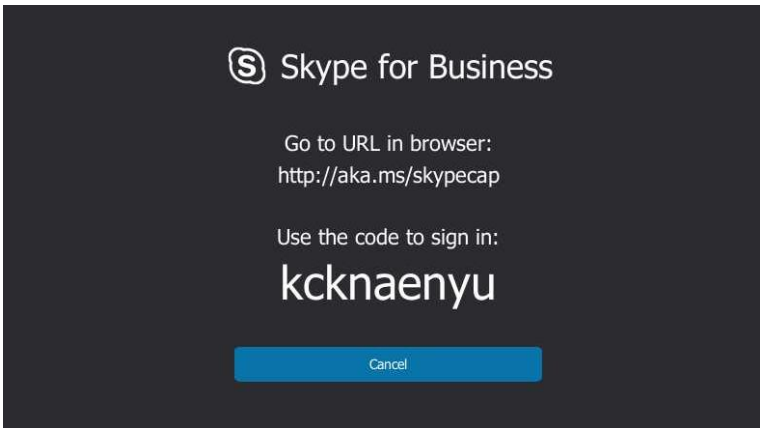
If you are the person who is given permission to provision CAP accounts. You can use a web browser to provision numerous CAPs quickly.

To sign into a CAP using the CAP Provisioning method via phone user interface:

1. Tap **Sign in**.
2. Select **CAP Provisioning**.

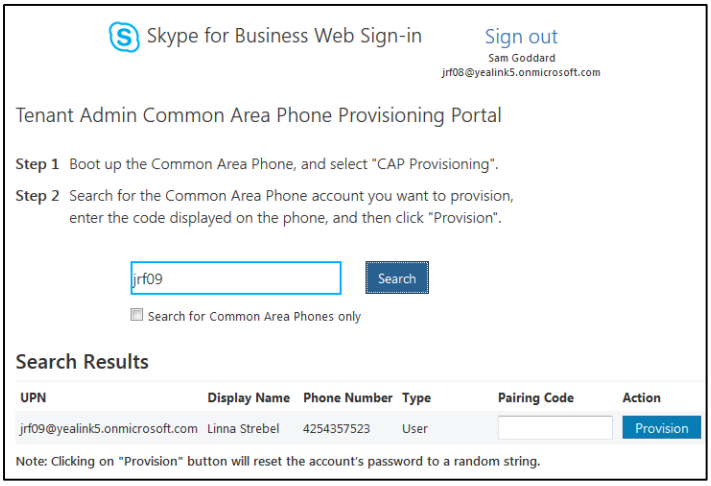
3. Tap the **Sign in** soft key.

The touch screen will show the pairing code and URL.



4. On your computer, enter the URL into your web browser.
5. Enter your Online account (make sure it has permission to provision CAP accounts) and password.
6. Click **Sign in**.
7. (Optional) If you want to reduce the number of times you are asked to sign in, you can select to stay **Yes** signed in.
8. Search for the Online account you want to provision, and then click **Search**.

   The entry matches the characters entered will appear.



9. Enter the pairing code generated on the phone (e.g.,prx4aekm7) into the web browser.
10. Click **Provision**.

    The phone will sign into this CAP account automatically.

CAP Provisioning method is configurable via web user interface at the path:
Account->**Register**->**CAP Provisioning**.

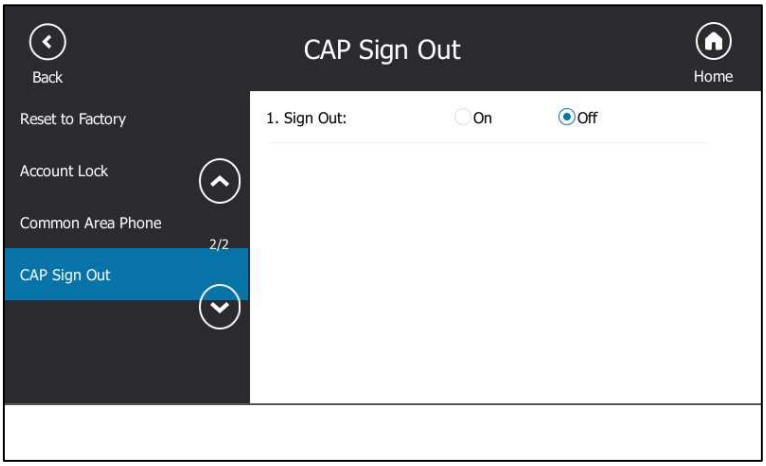
Note

You can also sign into an individual phone using a CAP account via the PIN Authentication method. The phone will act as a CAP too. Contact your system administrator for the CAP account.

Signing Out of a Common Area Phone

To sign out of a CAP account:

1. Tap **Menu**->**Setting**->**Advanced** (default password: admin or the lock PIN) ->**CAP Sign Out**.



2. Tap the **On** radio box of the **Sign Out** field.

   The touch screen will prompt "Are you sure to sign out?".

3. Tap the **OK** soft key.

   The current CAP account will sign out.

Branch Office Resiliency

If you sign into the phone using On-Premises account, you can use branch office resiliency feature. But the current Online environment does not support this feature.

Branch office resiliency is critical for multi-site deployments of Skype for Business where the control servers are located at a central site or in data center. It allows branch site users to continue to have Enterprise Voice service and voicemail (if voicemail rerouting settings are configured) when the branch site loses the connection with the central site.

When the WAN connection between the branch site and central site is unavailable, the phone goes into resiliency mode:

- Branch site user on the phone stays in signed-in status with an indication of "Limited service due to outage" and "Limit functionality" in the screen title area.
- Call between branch site users is established successfully with 2-way audio.
- Conference between branch site users can be established successfully.
- The call history cannot get modified. (Already downloaded call log entries can not be deleted).
- Calls can be placed from the call history on the phone.

- Contact list is unavailable but you can search for a contact on the phone.
- Presence icon on the phone touch screen is displayed as ● (Unknown).
- User is not able to change his presence status manually.
- User is not able to use calendar feature.
- User is not able to receive the voicemail as exchange is unreachable.
- Calls between the branch office phones can be transferred to another branch site user.
- Call forward settings cannot be changed.

When the WAN connection between the branch site and central site becomes available, the phone comes out of resiliency mode automatically. Notification of resiliency is automatically dismissed, and you can use phone features as normal.

Note For more information on branch office resiliency, contact your system administrator.

Better Together over Ethernet

Better Together over Ethernet (BToE) feature on Yealink T48S Skype for Business phones enables you to control call activity from your phones and your computer using your Skype for Business client. You can also use BToE to sign into your phone using your Skype for Business credentials. In order to use BToE, you need to download and install the Yealink BToE Connector application first.

This chapter explains how to download and install the Yealink BToE Connector application, and how to enable and use BToE feature. Topics include:

- Getting Started with Better Together over Ethernet
- Installing the Yealink Better Together over Ethernet Connector
- Pairing Your Phone with Your Computer
- Setting Your Phone as the Default Audio Playback for Your Computer
- Enabling Better Together over Ethernet
- Using Better Together over Ethernet
- Disabling BToE on Your Phone
- Exiting BToE on Your Computer
- Uninstalling the Yealink BToE Connector

For more information or assistance, contact your system administrator.

Getting Started with Better Together over Ethernet

To enable and use BToE, you need to ensure the following requirements are available on your PC:

- Skype for Business client
- A registered Skype for Business user (Obtain Skype for Business credentials from your system administrator)
- Running Windows Vista version or later/MAC 10.12 version or later
- Administrator privileges are needed to install the Yealink BToE Connector

Installing the Yealink Better Together over Ethernet Connector

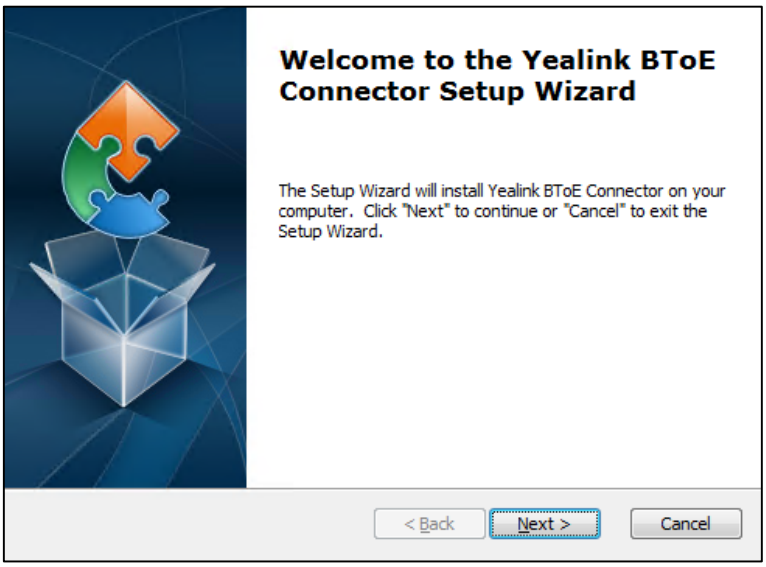
The Yealink BToE Connector enables you to use BToE feature on your Skype for Business client and T48S Skype for Business phone. You need to download, install, and launch the Yealink BToE Connector application before enabling BToE and pairing your phone with the Skype for Business client. This section shows you how to download and install the Yealink BToE Connector application on your PC.

Ask the Yealink FAE or reseller for the BToE Connector application, or download it online:

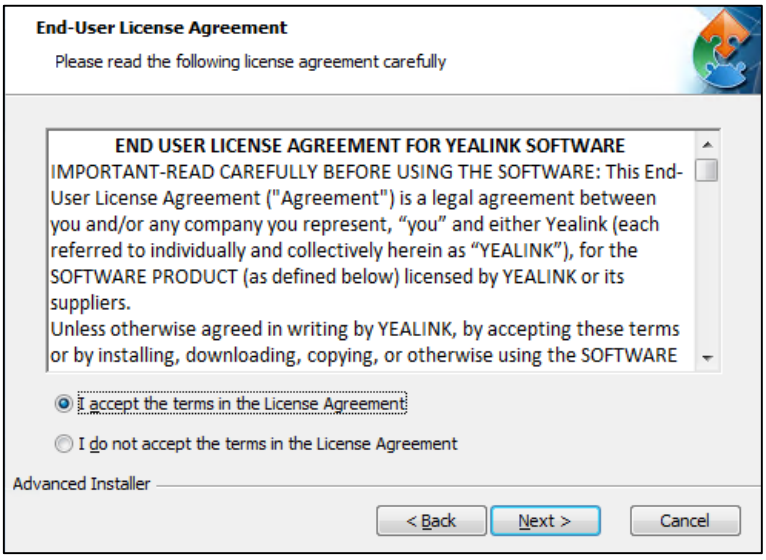
http://support.yealink.com/documentFront/forwardToDocumentFrontDisplayPage.

To install the Yealink BToE Connector on your PC:

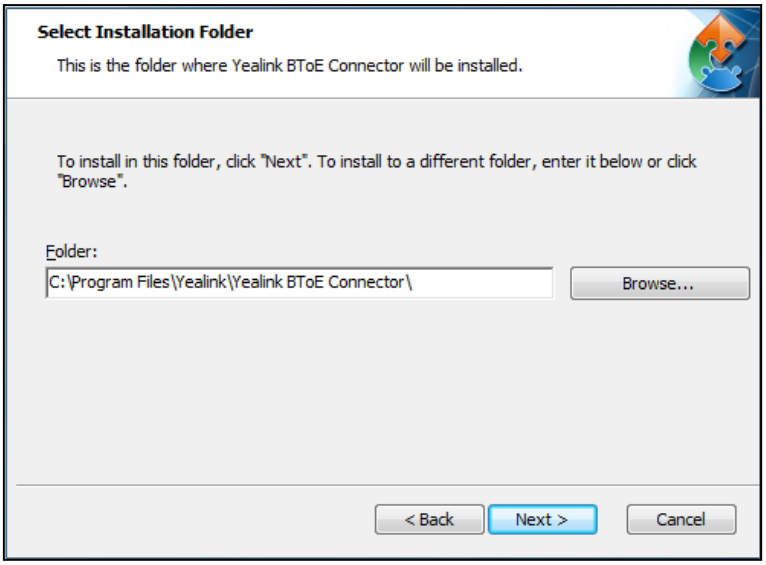
1. Unzip the downloaded file.
2. Double click the installation application **Yealink BToE Connector for Lync.msi**.



3. Click **Next** to continue.



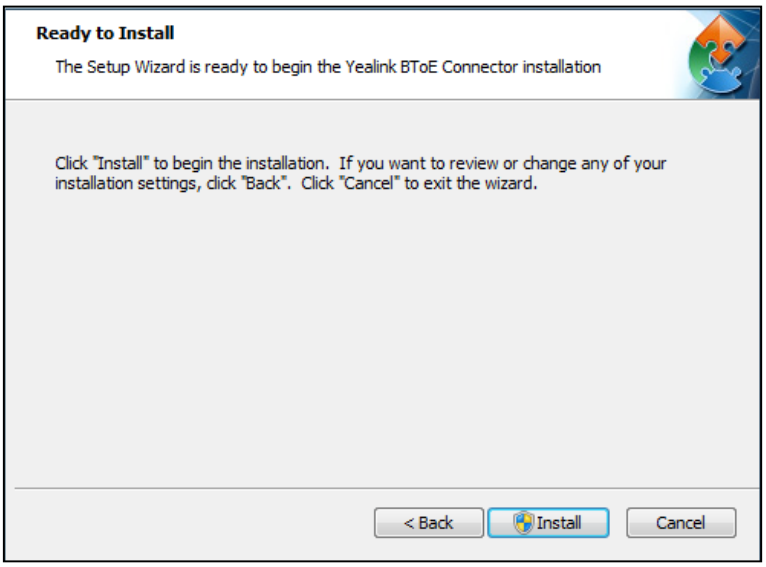
4. Mark the radio box of the **I accept the terms in the License Agreement** field, and then click **Next** to continue.



5. Click **Browse...** to select an installation folder and click **Install** to begin the installation.

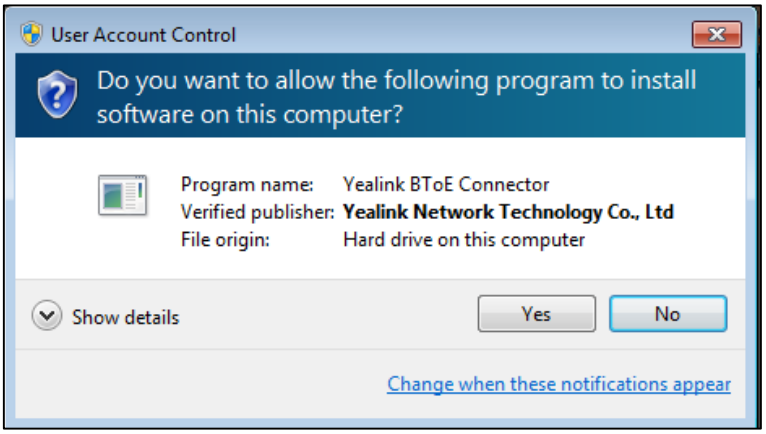
   By default, the Yealink BToE Connector application is installed in the directory C:\Program Files\Yealink\Yealink BToE Connector\.

6. Click **Next** to continue.



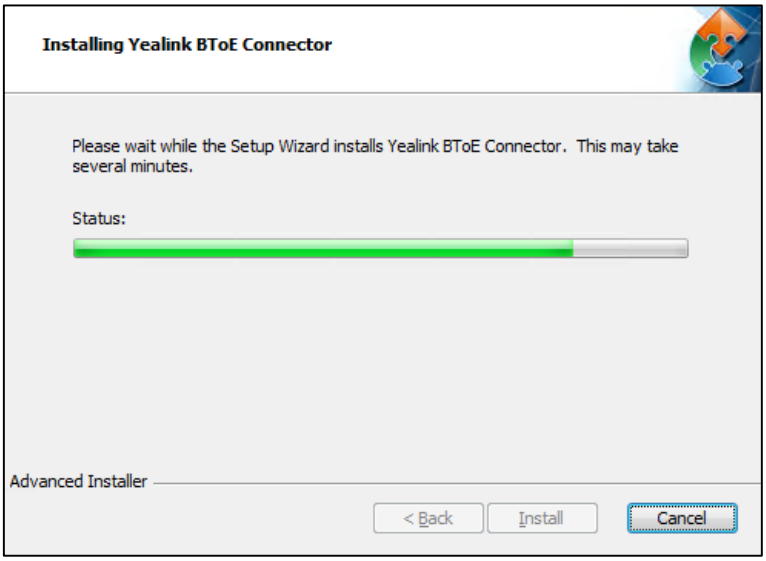
7. Click **Install**.

   A dialog is displayed as below during installation:

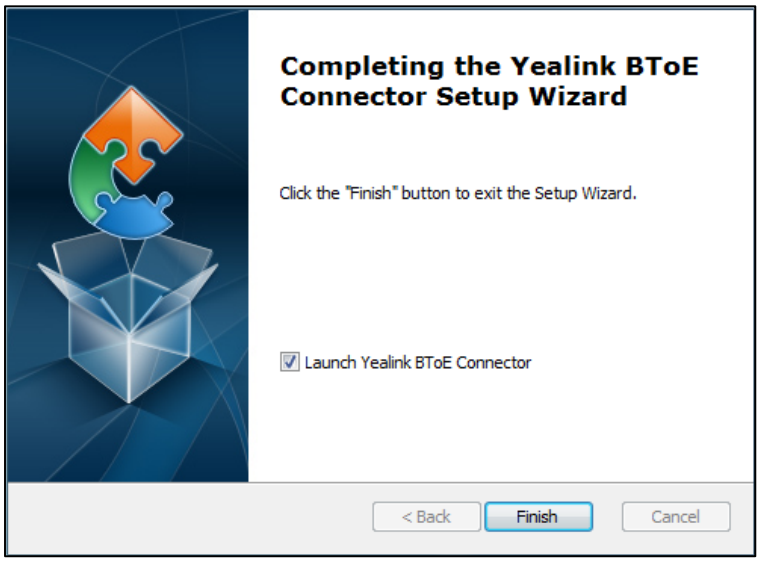


8. Click **Yes**.

The installation may take several minutes. A status bar showing the Yealink BToE Connector installation's progress is displayed as below:



After the software has installed, a dialog is displayed as below:

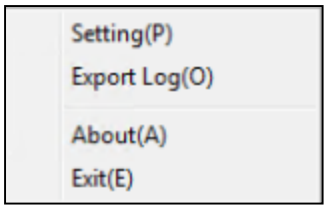


The checkbox of **Launch Yealink BToE Connector** is checked by default, as shown above. If the checkbox of **Launch Yealink BToE Connector** is not checked, you need to launch the Yealink BToE Connector manually.

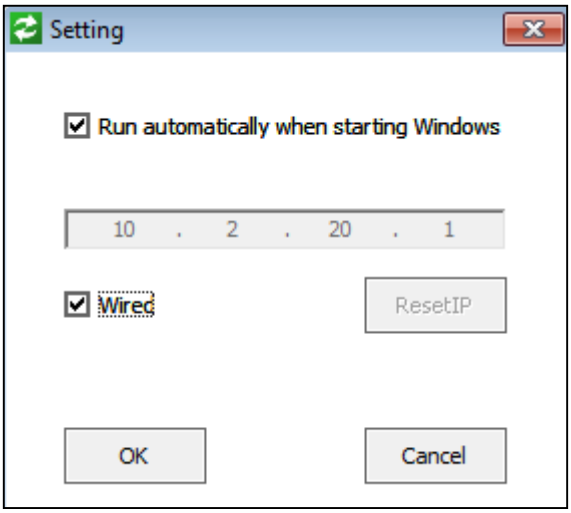
9. Click **Finish**.

To set up the Yealink BToE connector:

Right-click in the system tray, you can do the following:



- Click **Settings(P)**.



The **Run automatically when starting Windows** checkbox and **Wired** checkbox are checked by default.

If you uncheck the **Wired** checkbox, you can click **ResetIP** to clear the current IP address, and then enter the IP address of your phone manually.

- Click **Export Log(C)** to export the log file of Yealink BToE Connector, and then save the file to your local system.
- Click **about (A)** to view the information of Yealink BToE Connector.
- Click **Exit(E)** to exit Yealink BToE Connector.

Pairing Your Phone with Your Computer

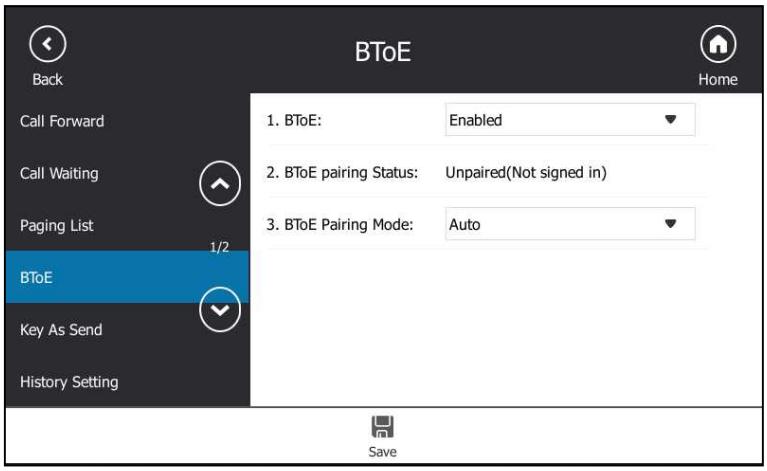
There are two BToE Pairing modes on the phone. If **BToE Pairing Mode** is **Auto**, your phone will pair with your computer directly without a pairing code. If **BToE Pairing Mode** is **Manual**, you need to use a pairing code generated by your phone to manually pair your phone with your computer.

To configure BToE feature via phone user interface:

1. Tap **Menu->Setting**->**Features**->**BToE**.
2. Select **Enabled** from the pull-down list of **BToE**.

3. Select the desired value from the pull down-list of the **BToE Pairing mode**.

The default value is **Auto**.

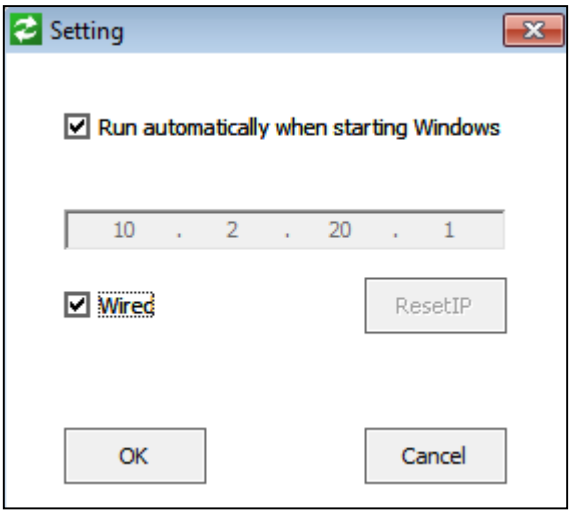


4. Tap to accept the change.

Ensure that the Yealink BToE Connector application is running on your PC. To pair your phone with your Skype for Business client, do one of the following on your PC:

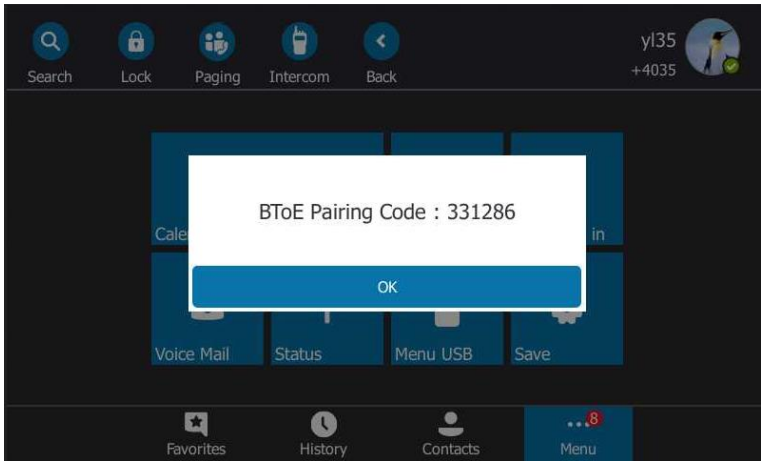
a) **Connect an Ethernet cable from your computer to the PC port on your phone (network of the PC will be provided by the PC port of the phone).**

1. As the checkbox of **Wired** is checked by default, the IP address of your phone is automatically filled.

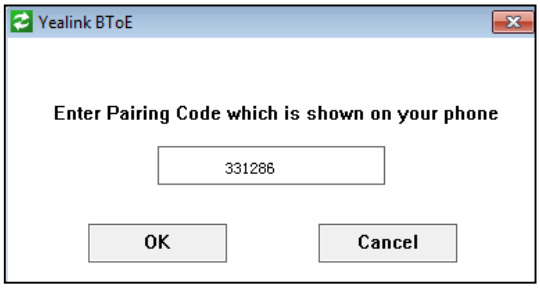


- If **BToE Pairing Mode** is **Auto**, your phone will pair with Skype for Business client directly.

- If **BToE Pairing Mode** is **Manual**, a six-digit pairing code displays. You should enter the six-digit pairing code shown on the phone into the notification on your computer.



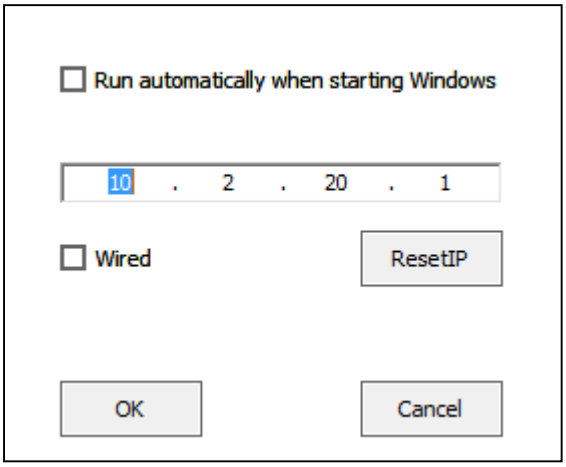
(A six-digit pairing code displays on your phone)



(Enter the pairing code shown on the phone into the notification on your computer)

b) If your PC is not connected to the PC port on your phone using an Ethernet cable, do the following:

1. Uncheck the **Wired** checkbox.
2. Enter the IP address of the phone that you want to pair.
3. Click **OK**.



- If **BToE Pairing Mode** is **Auto**, your phone will pair with Skype for Business

client directly.

- If **BToE Pairing Mode** is **Manual**, a six-digit pairing code displays. You should enter the six-digit pairing code shown on the phone into the notification on your computer.

BToE is configurable via web user interface at the path: **Settings**->**BToE**.

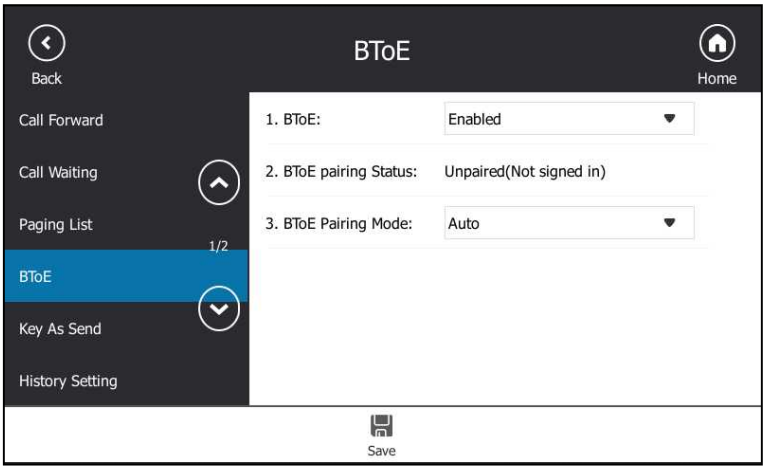
Pairing Status

You can view the pairing status via phone user interface or computer:

- **Unpaired (Not signed in)**: Your phone and your computer are not paired.
- **Paired (Not signed in):** Your phone and your computer are paired but the Skype for Business user signing on your phone differs from the one signing on the Skype for Business client.
- **Paired (Signed in)**: Your phone and your computer are paired and the Skype for Business user signing on the phone is the same as the one signing on the Skype for Business client.

To view the pairing status via phone user interface:

1. Tap **Menu->Setting**->**Features**->**BToE**.
2. View the BToE pairing status in the **BToE Pairing Status** field.



To view the paired status on computer:

1. Hover your mouse over the BToE icon in the system tray to view the BToE pairing status.

Setting Your Phone as the Default Audio Playback for Your Computer

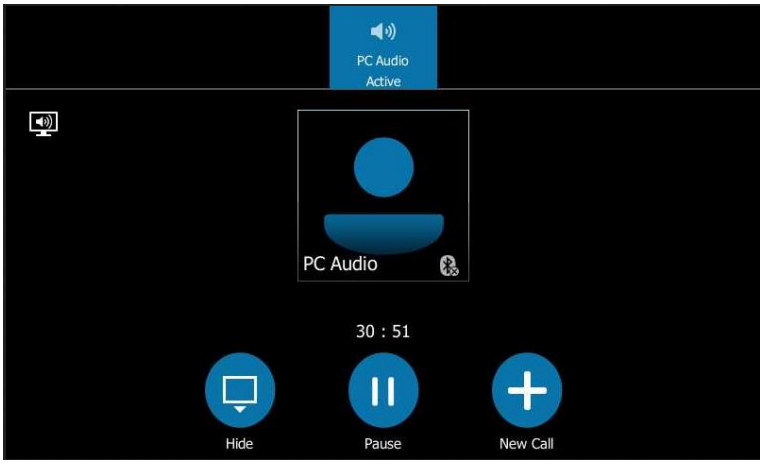
If your phone pairs with your computer successfully, you can use your phone to play audio for your computer by setting your phone as the default primary audio device for your computer.

To set the phone as the default audio playback for your computer:

1. On your computer, click **Start**->**Control Panel**->**Hardware and Sound**->**Sound.**
2. Click **Yealink USB Audio Playback**, and click **Set Default**.
3. Click **OK**.

To use your phone as primary audio device:

The PC Audio screen displays as following:



You can do one of the following:

- Tap to hide the PC Audio screen and return to the idle screen, the audio is still playing.

  You can pick up the handset, press the Speakerphone key or the HEADSET key to return to the PC Audio screen.
- Tap to pause the audio playback.

  Tap to resume the audio playback.
- Tap to place a new call and the audio playback is paused.

Note

When you set your phone as the primary audio device, some operations such as signing out, rebooting or resetting your phone are not available.

If you exit BToE, the phone will not be used as primary audio device for your computer.

Enabling Better Together over Ethernet

After your phone has paired with your computer, to enable BToE, you need to meet the following conditions:

- You have signed in the same user account on your Skype for Business client and your phone to active BToE.
- You have set your phone as your primary audio device for your Skype for Business client.

There are two ways to active BToE:

- You can sign in the same user account on your Skype for Business client and your phone manually.
- You can sign into the phone via PC.

Note

For MAC system, you can pair your computer with your Skype for Business phone, but the enabling BToE feature is not supported by the system.

Signing in via PC

To activate the BToE, you can use Sign-in via PC method to sign into in the same user accounts on your Skype for Business client and your phone.

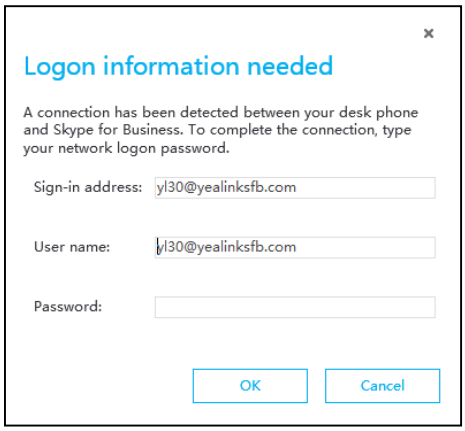
To sign into the phone via PC:

1. When your phone and your computer are paired, but your phone is not signed in, a dialog box is displayed on your computer asking for your Skype for Business login credentials.

   If the dialog box does not display on your computer, do the following:

   1) Tap **Sign In** on your phone, select **Sign in via PC**.
   2) Tap **Sign In**.

      The dialog box will display on your computer:



   If your system administrator enables multi-factor authentication (MFA) feature for your online account, you should pass the MFA at the first sign-in. For more information, refer to Passing MFA on page 21.

2. Enter your login credentials into the dialog displayed on your computer, click **OK**.

   The phone will sign into the same user account as the Skype for business client.

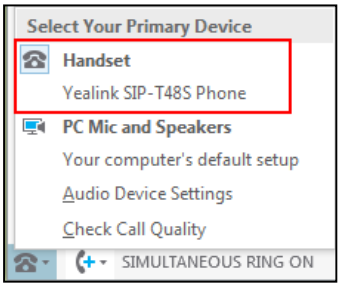
   When the same user account is signed into your phone and your Skype for Business client, and your computer and phone are paired, then the BToE is activated. The paired status changes to Paired (Sign In) and the BToE icon changes to ✅ .

Setting Your Phone as Your Primary Audio Device

Before you begin using the BToE feature, you need to ensure that your Skype for Business phone is set as your primary audio device in your Skype for Business client.

To set your phone as your primary audio device

1. In your Skype for Business client, click the audio device icon.
2. Select your phone as your primary device, as shown below.



Note

If **Yealink SIP-T48S Phone** is not selected as audio device, you will not be able to use BToE feature (for example, calls made on the Skype for Business client will not be displayed on the phone).

Using Better Together over Ethernet

This section provides instruction on how to use BToE on your phone and the Skype for Business client.

BToE enables you to call Skype for Business contacts using your Skype for Business client while providing you with high-quality audio through your phone. After BToE is enabled, you can answer, place, hold and resume calls with your Skype for Business contacts on your phone and the Skype for Business client on your PC simultaneously. What's more, your phone will be locked once paired PC is locked or entering sleep mode.

Note

For MAC system, it does not support Using Better Together over Ethernet feature.

Placing BToE Calls

Do one of the following:

- Select a contact or enter the phone number, tap on your touch screen.
- Hover the mouse over the avatar of the contact, and then click in your Skype for Business client.

  Your phone and the client are in the calling state.

Answering BToE Calls

When you receive an incoming call, the incoming call information is displayed on your phone and your Skype for Business client.

Do one of the following:

- Tap or press on your phone.
- Click in your Skype for Business client.

  The incoming call is answered both on the phone and the Skype for Business client. The established call uses the phone as audio device by default.

Pausing BToE Calls

Do one of the following:

- Tap or press on your phone.
- Click to display the control panel, and then click in your Skype for Business client.

  The call is placed on hold on your phone and your Skype for Business client.

Resuming BToE Calls

Do one of the following:

- Tap or press on your phone.
- Click to display the control panel, and then click in your Skype for Business client.

  The call is resumed on your phone and your Skype for Business client.

Moving Call Audio between Your Phone and Computer

During an active Skype for Business call, you can move the call audio from your phone to your computer or from your computer to your phone. Do the following:

1. Click to display the control panel, and then click in your Skype for Business client.
2. Click the desired audio device.
   - Click **PC MIC and Speakers** to move the call audio from your phone to your computer.

     The call on the phone will be released. The Skype for Business client uses the selected audio device to continue the call.
   - Click **Handset** to move the call audio from your computer to your phone.

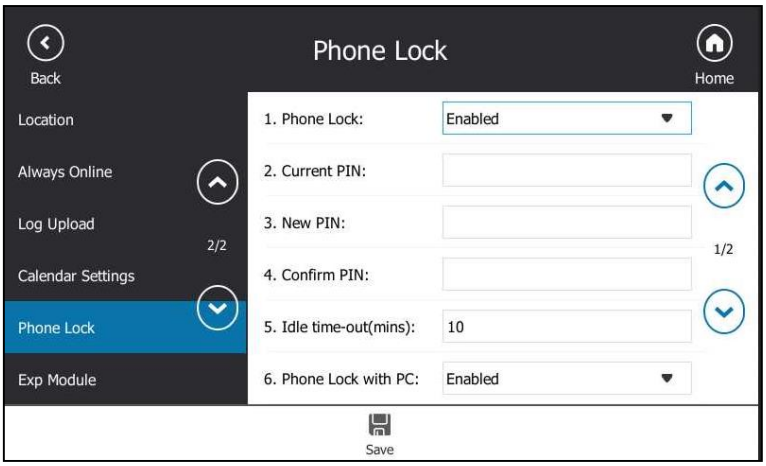
Using BToE to Lock and Unlock Your Phone

When your phone is paired with your computer and phone lock is enabled, the phone will be locked or unlocked automatically when you lock or unlock your computer by default.

To configure phone lock with PC via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Phone Lock**->**Phone Lock with PC**.
2. Select **Enabled** from pull-down list of the **Phone Lock with PC** field.

   This feature is enabled by default.



3. Tap to accept the change.

Make sure the BToE status is Paired (Sign In) and the phone lock with PC feature is enabled:

To lock you phone	To unlock you phone
The paired PC gets locked.	The paired PC gets unlocked.
The paired PC enters sleep mode.	The paired PC wakes up and is not locked.
The paired PC starts the screen saver.	The paired PC stops the screen saver and is not locked.
The account status of the Skype for Business client changes to inactive.	The account status of the Skype for Business client changes from inactive to active.
BToE status changes from **Paired (Sign In)** to **Paired (Sign Out)** or **Unpaired**.	BToE status changes from **Paired (Sign Out)** or **Unpaired** to **Paired (Sign In)**.

Disabling BToE on Your Phone

You can disable the BToE feature on your phone and unpair your phone from the computer. When you disable BToE, you can no longer use BToE functions.

Do one of the following:

- Disconnect the Ethernet cable from the PC port on your phone.
- Tap **Menu->Setting**->**Features**->**BToE** on your phone, select **Disabled** from the pull-down list of **BToE**.

  Tap to accept the change.

Exiting BToE on Your Computer

You can exit the Yealink BToE Connector at any time. When you exit the application, you can no longer use the BToE functions on your phone or computer.

To exit BToE on your computer:

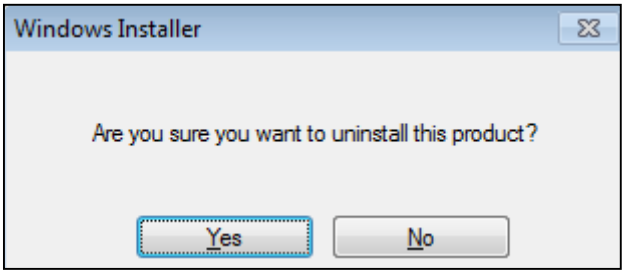
1. Right-click BToE icon ( ) in the system tray and click **Exit(E)**.

Uninstalling the Yealink BToE Connector

To uninstall the Yealink BToE connector:

1. Click the **Start** button .
2. Click **All Programs**->**Yealink BToE Connector**->**Uninstall**.

   A dialog box asking if you're sure you want to uninstall this product is displayed.



3. Click **Yes** to uninstall the Yealink BToE connector.

   A dialog box showing the progress of the application uninstallation is displayed.

Using Optional Accessories with Your Phone

This section describes the optional accessories that you can use to extend your phone's capabilities. You can do the following:

- Use a Headset
- Use Bluetooth feature
- Connect to the Wireless Network
- Use an Expansion Module

The following are the optional accessories for your phone:

- Headset YHS32/YHS33
- Wireless Headset Adapter EHS36
- Bluetooth USB Dongle BT40
- Wi-Fi USB Dongle WF40
- Expansion Module EXP40

You need to purchase them separately if required.

Note We recommend that you use the accessories provided or approved by Yealink. The use of unapproved third-party accessories may reduce the performance.

Using a Headset

You can connect an analog or USB headset to your phone and use the headset to place and answer calls. If you want to use the analog headset, you require an optional headset YHS32/YHS33. For more information on how to use your USB headset, refer to your USB headset documentation from the manufacturer.

You can also pair and connect a Bluetooth headset with your phone. For more information, refer to Pairing and Connecting the Bluetooth Headset on page 214.

Note Your system administrator can disable the headset feature. Check with your system administrator to find out if it is available on your phone.

Using an Analog Headset

If you want to use the analog headset, you require an optional headset YHS32/YHS33.

Connecting a YHS32/YHS33 Headset

To connect a YHS32/YHS33 headset

1. Simply insert the modular connector into the headset port on the back of your phone.

   For the information on how to connect headset YHS32/YHS33, refer to the user guide on the specific headset's support page on *Yealink Technical Support*.

Note If both a Bluetooth headset and an analog headset are connected, only the Bluetooth headset can be used.

Activating the Headset Mode

After connecting a headset to your phone, you can activate the headset mode and use headset when answering and placing calls.

To activate the headset mode:

1. Press the HEADSET key on the phone.

   The HEADSET key LED glows green.

   When you tap to answer an incoming call, the call is connected in headset mode automatically. For more information on using the headset to answer a call, refer to Answering Calls on page 97.

   With the handset on-hook, enter the desired number and tap , the phone will then place a call using the headset automatically. For more information on using the headset to place a call, refer to Placing Calls on page 94.

Deactivating the Headset Mode

If you don't want to use a headset when handling calls, you can deactivate the headset mode.

To deactivate the headset mode:

1. Press the HEADSET key again on the phone.

   The HEADSET key LED goes out.

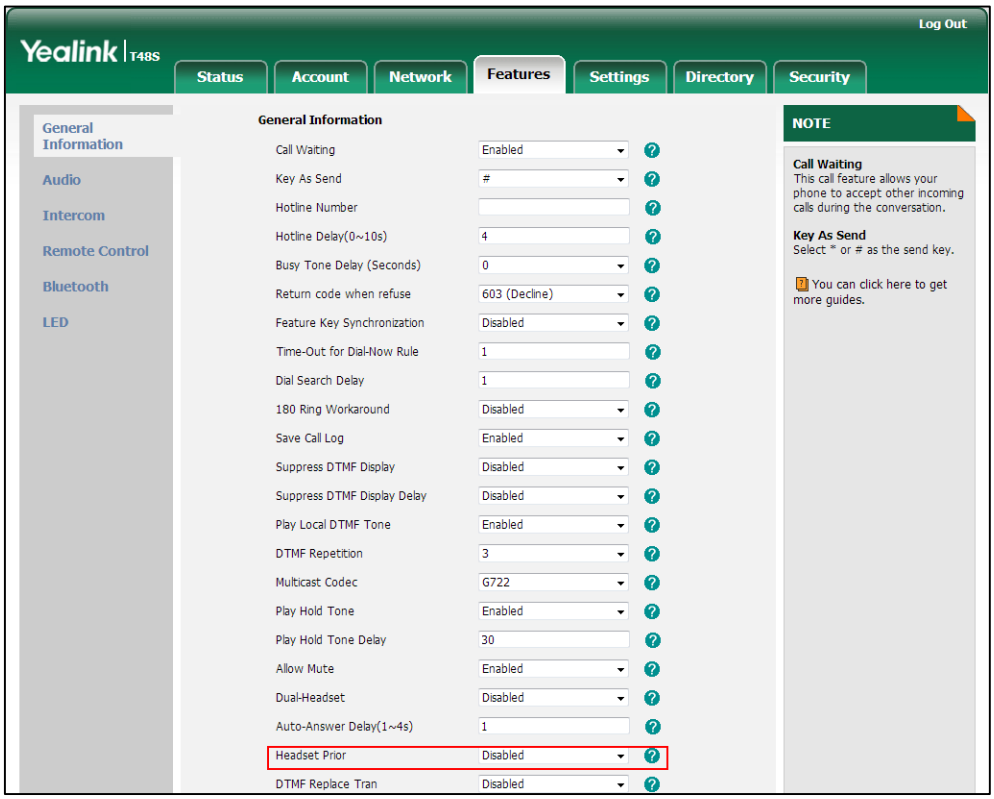
Enabling the Headset Prior

You can use headset in priority when receiving or placing calls. This feature is especially useful for permanent or full-time headset users. To use this feature, you need to enable headset prior feature in advance.

To enable the headset prior:

1. Click on **Features**->**General Information**.

2. Select **Enabled** from the pull-down list of **Headset Prior**.



3. Click **Confirm**.

Note

If headset prior is enabled, the headset mode will not be deactivated until you press the **HEADSET** key again.

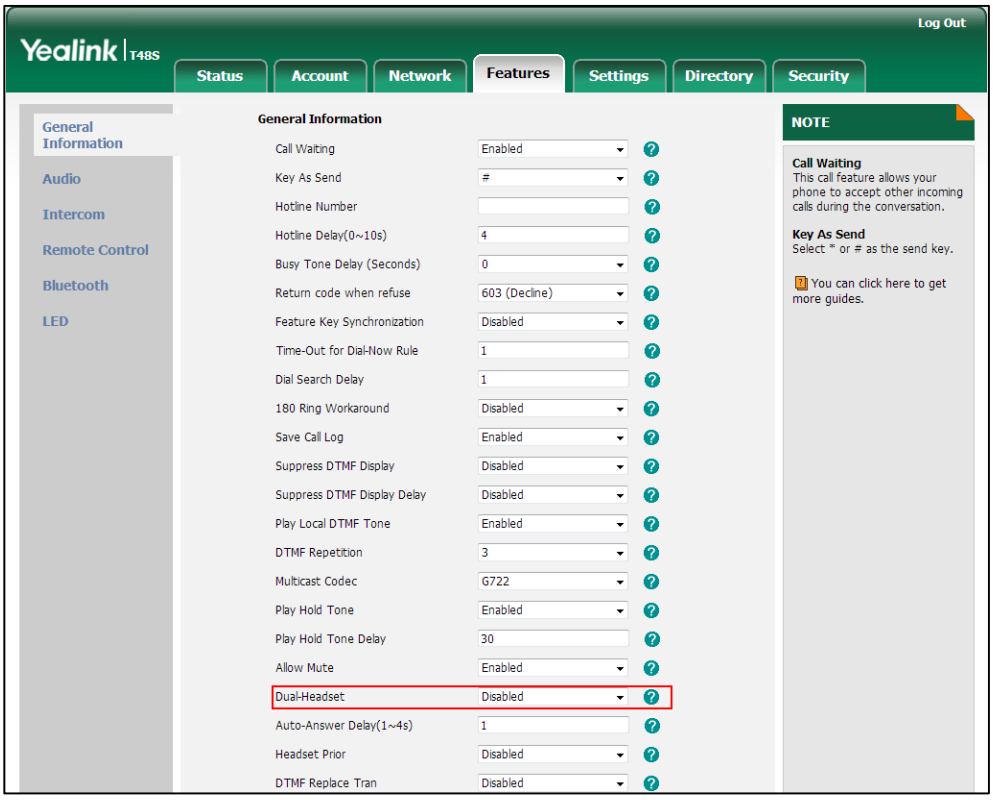
If headset prior is disabled, the headset mode can be deactivated by pressing the Speakerphone key or the **HEADSET** key.

Enabling the Dual Headset

You can use two headsets when dual headset feature is enabled. To use this feature, you must physically connect headsets to the headset jack and handset jack respectively. Once the phone connects to a call, the headset connected to the headset jack will have full-duplex capabilities, while the one connected to the handset jack will only be able to listen.

To enable dual headset via web user interface:

1. Click on **Features**->**General Information**.
2. Select **Enabled** from the pull-down list of **Dual Headset**.



3. Click **Confirm**.

Using the Wireless Headset Adapter EHS36

EHS36 provides the technical interface between your phone and an EHS-compatible wireless headset, such as Sennheiser/Jabra (GN Netcom) or Plantronics headset.

For more information on how to connect EHS36, see the EHS36 User Guide on the wireless headset adapter's support page on *Yealink Technical Support*.

After the EHS36 and your headset are connected successfully, you can use the control unit on your headset to handle calls. For how to use your headset, see your headset documentation from the manufacturer.

Using Bluetooth Feature

The T48S Skype for Business phone supports Bluetooth. Bluetooth enables low-bandwidth wireless connections within a range of 10 meters (32 feet). The best performance is in the range of 1 to 2 meters (3 to 6 feet) range. To use Bluetooth feature, you require a Bluetooth USB dongle BT40 to activate the Bluetooth mode.

Bluetooth mode is configurable via web user interface at the path **Features**->**Bluetooth**.

Connecting the Bluetooth USB Dongle BT40

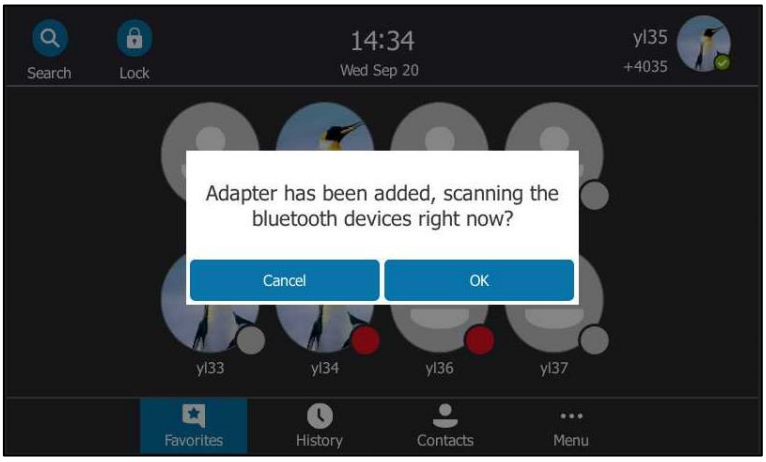
To connecting the bluetooth USB dongle BT40:

Insert the USB dongle with "TOP" facing upwards into the USB port on the back of the phone.

For more information on Bluetooth USB dongle BT40, see the user guide on the Bluetooth USB dongle BT40's support page on *Yealink Technical Support*.

Activating the Bluetooth Mode

When you insert Bluetooth USB dongle BT40 into the USB port on the back of the phone, the following prompt appears on the touch screen:



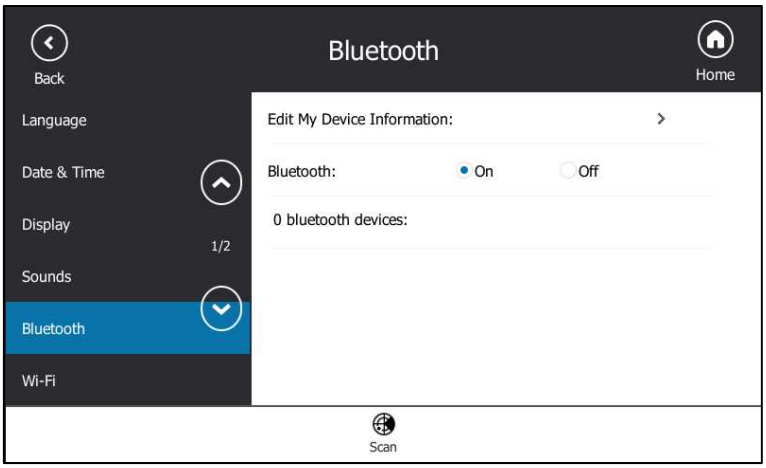
You can tap **OK** to activate Bluetooth mode directly.

If you tap **Cancel**, you can activate Bluetooth mode when you want to use the Bluetooth feature.

To activate the Bluetooth mode via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Bluetooth**.

2. Tap **On** radio box of the **Bluetooth** field.

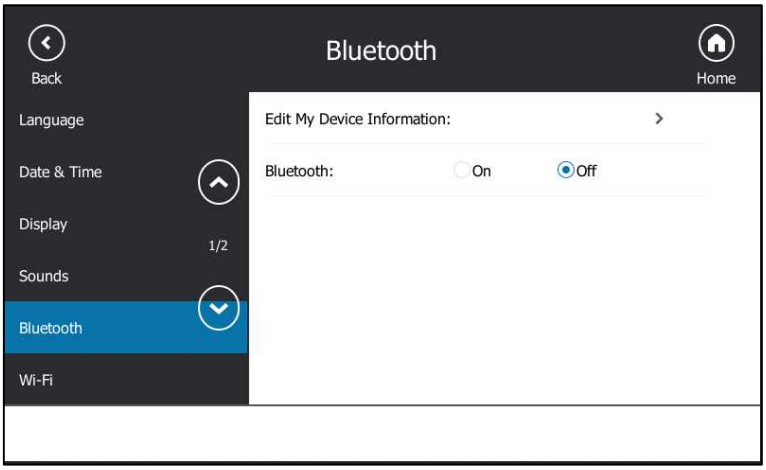


Bluetooth mode is configurable via web user interface at the path **Features**->**Bluetooth**.

Deactivating the Bluetooth Mode

To deactivate the Bluetooth mode via phone user interface:

1. Tap **Menu**->**Setting**->**Basic**->**Bluetooth**.
2. Tap the **Off** radio box of the **Bluetooth** field.



The Bluetooth headset won't be connected anymore, but it will still keep as being paired. When you activate the Bluetooth mode again, the paired Bluetooth headset will appear in the **Bluetooth Device(s)** list.

Bluetooth mode is configurable via web user interface at the path **Features**->**Bluetooth**.

Pairing and Connecting the Bluetooth Headset

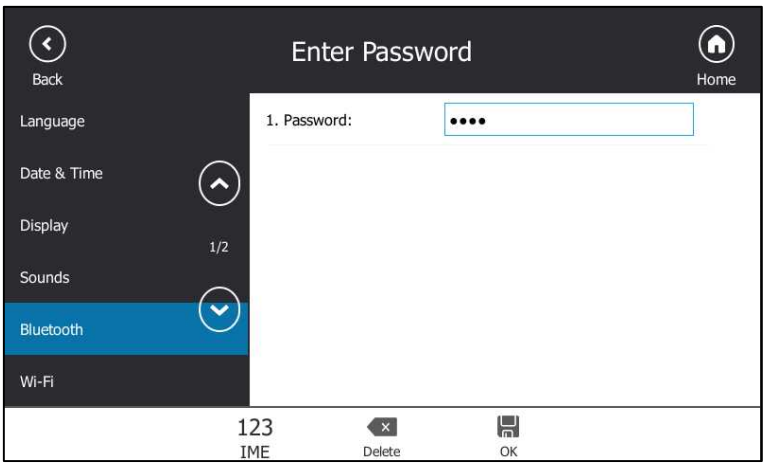
Before you pair a Bluetooth headset, check the indicator on the Bluetooth headset to make

sure that the Bluetooth headset is discoverable. For more information, refer to the documentation from the Bluetooth headset manufacturer.

To pair and connect your Bluetooth headset to your phone:

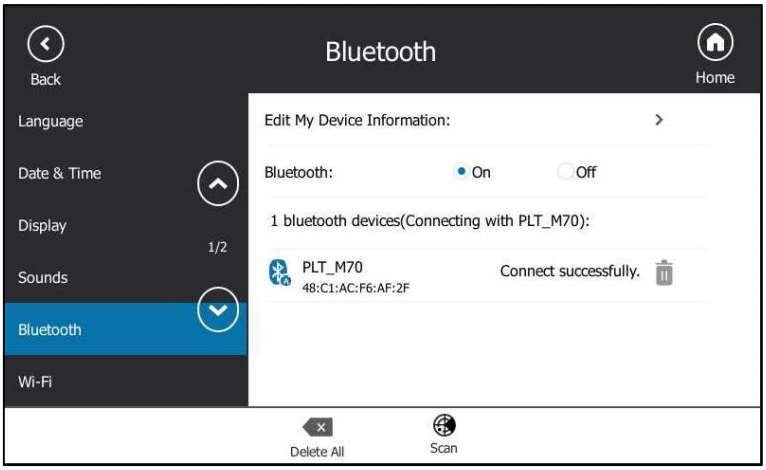
1. Tap **Menu**->**Setting**->**Basic**->**Bluetooth**.
2. Tap the Bluetooth device to connect the Bluetooth headset to your phone.

   If there is no Bluetooth device available on the touch screen, tap to search for the Bluetooth device again.
3. Enter the PIN (e.g., 0000) in the prompted **Password** field.



4. Tap to accept the change.

   The Bluetooth headset is then automatically connected to your phone. The touch screen displays as below:



   The touch screen title area shows .

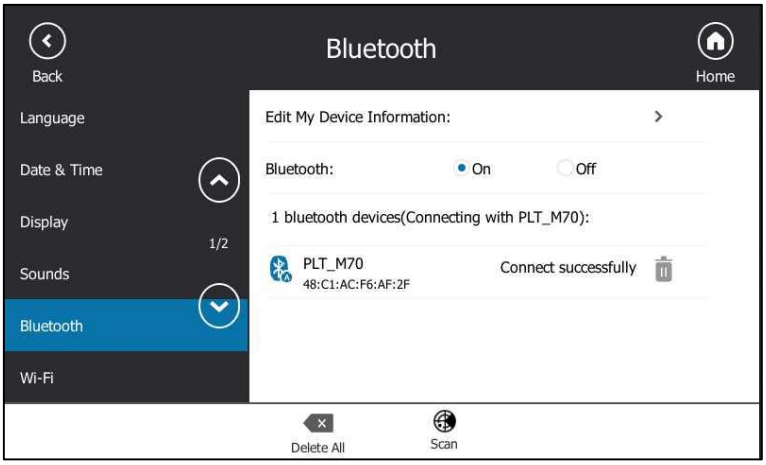
   With the Bluetooth headset paired and connected, you can use the Bluetooth headset to place and answer calls. For more information, refer to the documentation from the Bluetooth headset manufacturer.

Viewing the Bluetooth headset information

To view the Bluetooth headset information:

1. Tap **Menu**->**Setting**->**Basic**->**Bluetooth**.
2. Tap the **On** radio box of the **Bluetooth** field.

   The touch screen displays a list of Bluetooth headsets.
3. You can view the Bluetooth headset information from the Bluetooth devices field.
   - **Device Name**: the name of the Bluetooth headset.
   - **MAC Address**: the MAC address of the Bluetooth headset.
   - **Connection**: the connection status of Bluetooth headset with your phone.



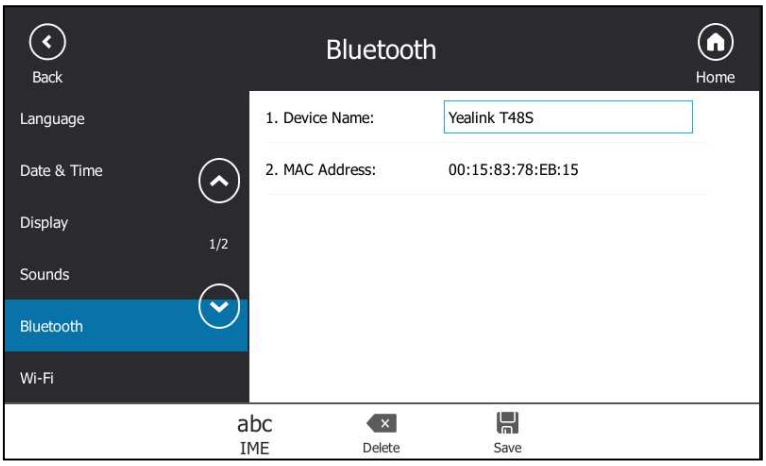
Editing the Bluetooth Device Information

To edit device information via phone user interface:

1. Tap **Menu**->**Setting**->**Basic**->**Bluetooth**.
2. Tap the **Edit My Device Information** field.

   The touch screen displays the device name and MAC address. The MAC address cannot be edited.
3. Enter the desired name in the **Device Name** field.

The default device name is "Yealink T48S".



4. Tap to accept the change.

   The preconfigured Bluetooth device name will display in scanning list of other device.

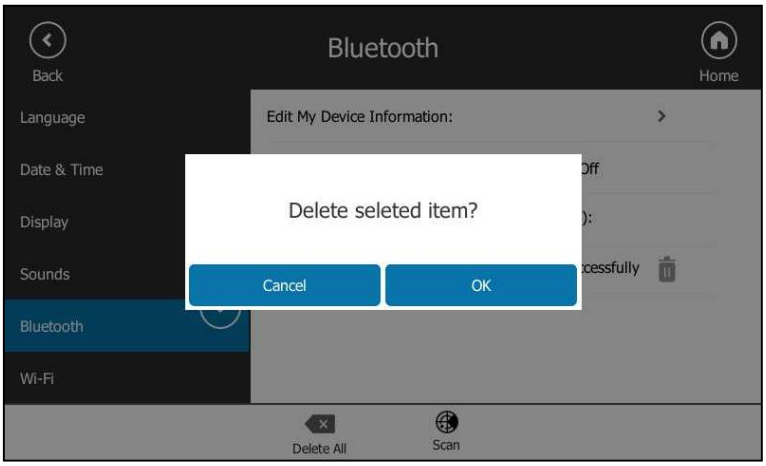
Deleting the Paired Bluetooth Headset

You can delete your Bluetooth headset from your phone. When you delete the Bluetooth headset, it disappears from the **Paired Bluetooth Device** list. To connect it to your phone again, you need to scan and connect it again.

To delete your Bluetooth headset from your phone:

1. Tap **Menu**->**Setting**->**Basic**->**Bluetooth**.
2. Tap after the desired Bluetooth headset you want to delete.

   The touch screen prompts the following warning "Delete selected item?".



3. Tap the **OK** soft key to delete.

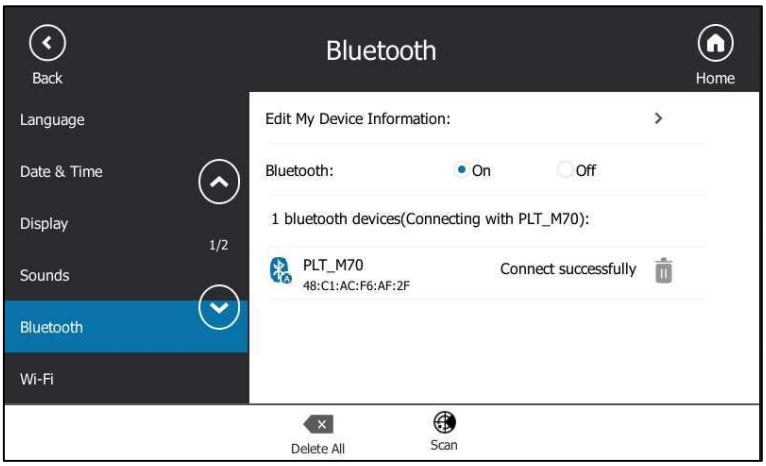
   You can also delete all headsets by tapping the **Delete All** soft key.

Disconnecting the Bluetooth Headset

You can disconnect the Bluetooth headset from your phone. After you disconnect the Bluetooth headset, it will still remain paired and be displayed in the **Paired Bluetooth Device** list. So you can easily connect it to your phone again.

To disconnect your Bluetooth headset from your phone:

1. Tap **Menu**->**Setting**->**Basic**->**Bluetooth**.
2. Tap the connected Bluetooth headset.



The Bluetooth headset is disconnected. To connect it to your phone again, tap the Bluetooth headset again.

Connecting to the Wireless Network

You can use Wi-Fi USB dongle WF40 to wirelessly connect your phone to available wireless networks.

Wi-Fi mode is configurable via web user interface at the path **Network**->**Wi-Fi**.

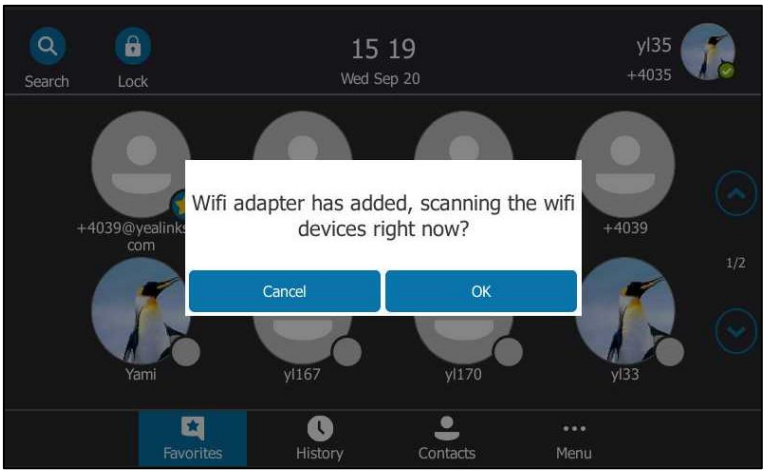
Connecting the Wi-Fi USB Dongle WF40

Insert the Wi-Fi USB Dongle WF40 into the USB port on the back of the phone.

For more information on WF40, see the Wi-Fi USB dongle WF40 user guide on *Yealink Technical Support* page.

Activating the Wi-Fi Mode

When Wi-Fi USB dongle WF40 is connected to the USB port on the back of the IP phone, a message will display on the touch screen:



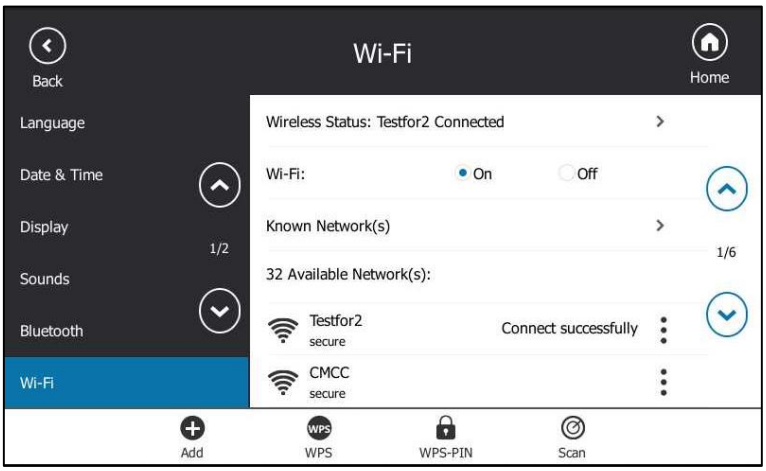
You can tap **OK** to activate Wi-Fi mode directly and scan Wi-Fi devices automatically.

If you tap **Cancel**, you can activate Wi-Fi mode manually when you want to use the Wi-Fi feature.

To activate the Wi-Fi mode via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Wi-Fi**.
2. Tap the **On** radio box of the **Wi-Fi** field.

   The IP phone scans the available wireless networks in your area.



Connecting to the Wireless Network

Three ways to connect IP phone to the wireless network:

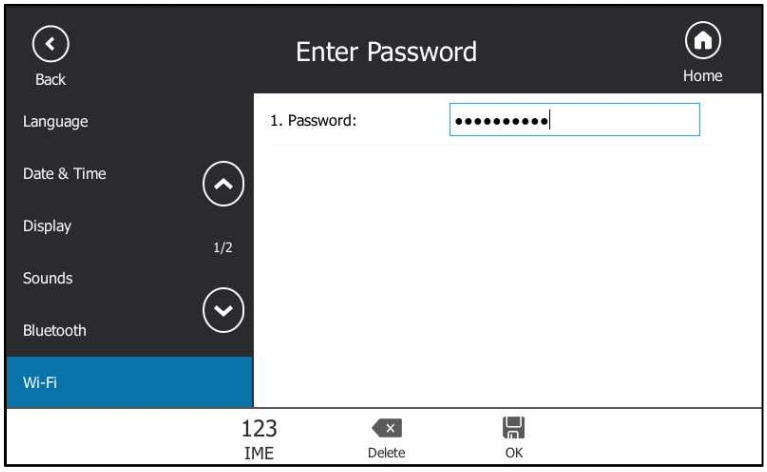
- Manually connect to an available wireless network

- Wi-Fi Protected Setup (WPS)
- Manually add a wireless network

Connecting to an Available Wireless Network Manually

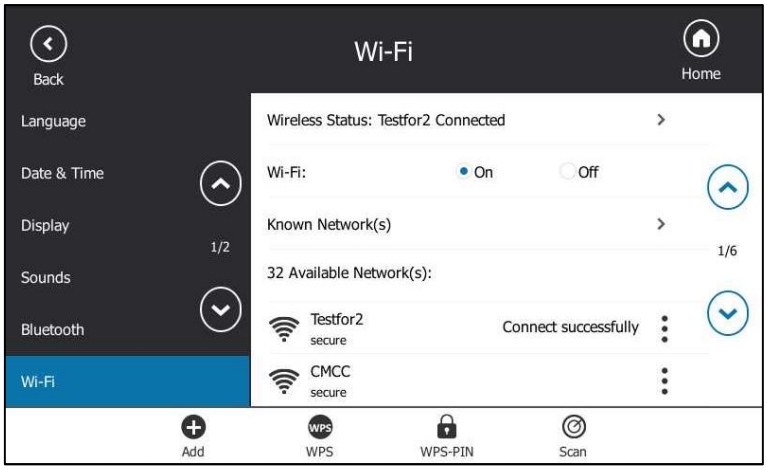
To connect to a wireless network via phone user interface manually:

1. Tap **Menu**->**Setting**->**Basic**->**Wi-Fi**.
2. Activate the Wi-Fi mode (refer to Activating the Wi-Fi Mode).
3. (Optional.) To re-search the available network, tap the **Scan** soft key.
4. Select the desired wireless network.
5. If the network is secure, enter its password.



6. Tap to accept the change.

   Once the connection completed successfully, the prompt "Connect Successfully." appears at the end of the wireless network.



Note For more information on the password of the wireless network, contact your system administrator.

Connecting to the Wireless Network Using Wi-Fi Protected Setup (WPS)

Wi-Fi Protected Setup (WPS) provides simplified mechanisms to configure secure wireless networks which can automatically configure a wireless network with a network name (SSID) and strong WPA data encryption and authentication.

Two methods supported by Yealink IP phones in the Wi-Fi protected setup:

- **Push Button Configuration (PBC)**: The user simply presses WPS key on both the IP phone and gateway/router to connect.
- **Personal Identification Number (PIN)**: The user has to enter a PIN generated randomly by the IP phone on the gateway/router to connect.

Push Button Configuration (PBC)

To connect to the wireless network using PBC method:

1. Tap **Menu->Setting**->**Basic**->**Wi-Fi**.
2. Activate the Wi-Fi mode (refer to Activating the Wi-Fi Mode).
3. Tap the **WPS** soft key.

   The touch screen prompts "WPS has opened, please connect in 120s!".
4. Long press the WPS key on your gateway/router.

   Once WPS setup has completed successfully, the touch screen will prompt "Connect Success.".

Personal Identification Number (PIN)

To connect to the wireless network using PIN method:

1. Tap **Menu->Setting**->**Basic**->**Wi-Fi**.
2. Activate the Wi-Fi mode (refer to Activating the Wi-Fi Mode).
3. Tap the **WPS-PIN** soft key**.**

   The touch screen prompts "Please input below PIN code on your WIFI router and press OK to start connecting: xxx".
4. Log into your gateway/router's web interface, and configure it to search the clients. For more information, refer to the documentation from the gateway/router manufacturer.

   Once WPS-PIN setup has completed successfully, the gateway/router's web interface will prompt success.

Note Contact your gateway/router provider for more information.

Adding a Wireless Network manually

If your gateway/router has SSID broadcast disabled, it might not appear in the scanning results. In that case, you must manually add a wireless network.

To add a wireless network:

1. Tap **Menu->Setting**->**Basic**->**Wi-Fi**.
2. Activate the Wi-Fi mode (refer to Activating the Wi-Fi Mode).
3. Tap the **Add** soft key.
4. Use the WLAN settings obtained from your gateway/router to configure this WLAN Profile on the IP phone. Do the following:
   a) If you select **None** or **WEP** from the **Security Mode** field:

      Enter the profile name, SSID and WPA shared key in the corresponding fields.

   b) If you select **WPA-PSK**, **WPA2-PSK**, **WPA-EAP** or **WPA2-EAP** from the **Security Mode** field:

      Select the desired Cipher type (**TKIP**, **AES** or **TKIP AES**) from the **Cipher Type** field.

      Enter the profile name, SSID, user name and WPA shared key in the corresponding fields.
5. Tap to accept the change.

The connected wireless networks will be saved to **Known Network(s)** list. The **Known Network(s)** list can store up to 5 wireless networks, you can specify the priority to connect to the corresponding wireless network.

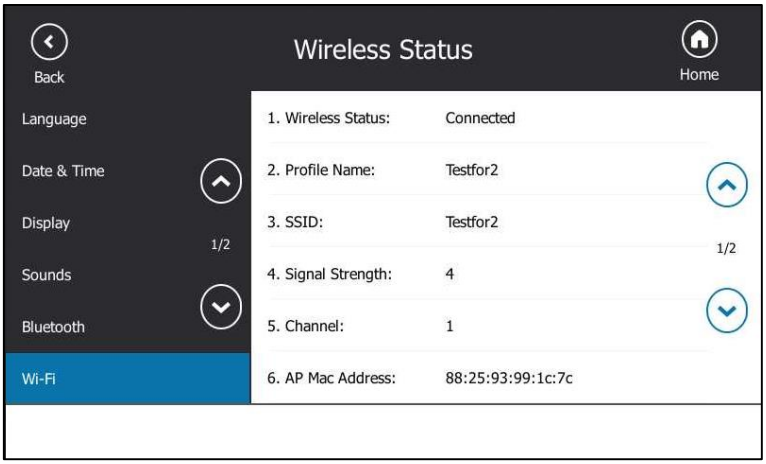
Viewing the Wireless Network Information

When Wi-Fi mode is activated, you can view the wireless network information.

To view the wireless network information via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Wi-Fi**->**X Available Network(s)** (X represents the number of available networks).
2. Tap or to select a desired wireless network.
3. Tap to view the detailed wireless network information (for example, Profile Name, SSID or Signal Strength).

If the IP phone is connected to a wireless network successfully, you can also tap **Menu->Setting**->**Basic**->**Wi-Fi**->**Wireless Status** to view the connected wireless network information.

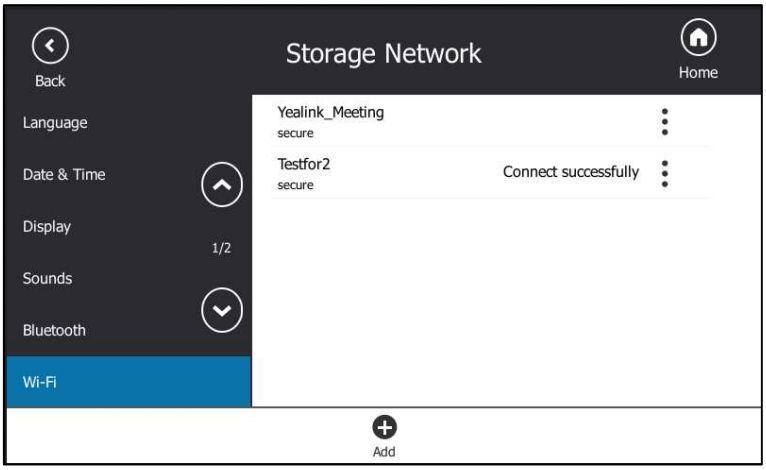


Managing the Saved Wireless Network

Once the IP phone has ever been connected to a wireless network successfully, this wireless network profile will be saved in **Known Network(s)** list. The next time you activate Wi-Fi feature, the IP phone will be automatically connected to the wireless network which has the highest priority (the top one). Up to 5 wireless network profiles can be saved in **Known Network(s)** list. If you want to add a new one when the IP phone has already saved 5 wireless network profiles, please delete an older one before adding.

To manage the known network(s) via phone user interface:

1. Tap **Menu->Setting**->**Basic**->**Wi-Fi**->**Known Network(s)**.



2. Tap ⋮ .
3. Do one of the following:
   - To edit the wireless network profile:

1) Select **Edit**.
2) Edit the desired wireless network information.
3) Tap to accept the change.

- To change the priority of the wireless network:
  1) Select **Move Up** or **Move Down** to assign higher or lower priority of the wireless network that the IP phone automatically connects to.
- To delete the saved wireless network profile:
  1) Select **Delete**.

     If you delete your wireless network profile from your phone, you need to manually connect to it next time.

Disconnecting the Wireless Network Connection

To disconnect wireless network via phone user interface:

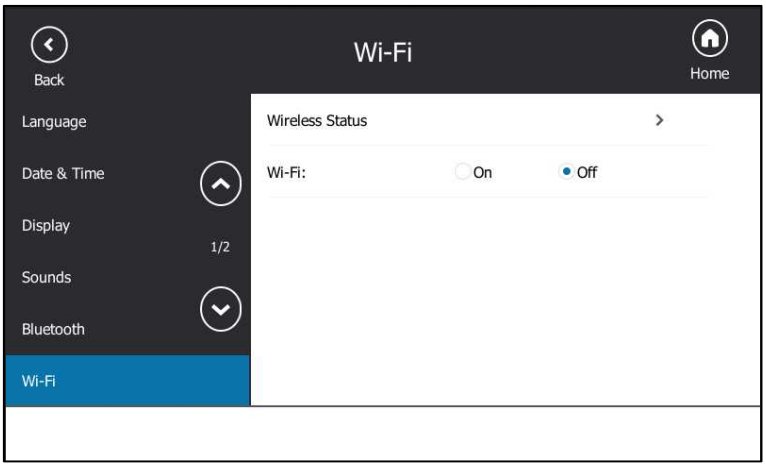
1. Tap **Menu->Setting**->**Basic**->**Wi-Fi**.
2. Do one of the following:
   - Tap the connected wireless network.
   - Tap after the connected wireless network, and then tap **Disconnect**.
   - Tap **Known Network(s)**, and then tap the connected wireless network.

   The wireless network is disconnected. You can tap it again to connect.

Deactivating the Wi-Fi Mode

To deactivate the Wi-Fi mode via phone user interface:

1. Tap to **Menu->Setting**->**Basic**->**Wi-Fi**.
2. Tap the **Off** radio box of the **Wi-Fi** field.



Using an EXP40 Expansion Module

The Yealink EXP40 is ideal for receptionists, administrative assistants, call center agents, power-users, and executives who need to place a large volume of calls on a regular basis. When your T48S is registered with a Skype for Business server, you can assign Skype for Business contacts to EXP keys on your EXP40, so that you can quickly call contact by pressing the corresponding EXP key. You can also monitor your Skype for Business contacts' presence status from your expansion module.

For more information on how to connect and use the EXP40, please refer to *Yealink_EXP40_Skype_for_Business_Edition_Quick_Start_Guide*.

Troubleshooting

This chapter provides general troubleshooting information to help you solve the problems you might encounter when using your T48S Skype for Business phone.

For more information or assistance with your new phone, contact your system administrator.

Troubleshooting Solutions

Why is the touch screen blank?

- Ensure that the phone is properly plugged into a functional AC outlet.
- Ensure that the phone is plugged into a socket controlled by a switch that is on.
- If the phone is plugged into a power strip, try to plug it directly into a wall outlet instead.
- If the phone is powered from PoE, ensure you use a PoE-compliant switch or hub.

Why does the phone display "Network Unavailable"?

- Ensure that the Ethernet cable is plugged into the Internet port on the phone and the Ethernet cable is not loose.
- Ensure that the switch or hub in your network is operational.
- Contact your system administrator for more information.

Why doesn't the phone display time and date correctly?

Check if you have configured the phone to obtain the time and date from the SNTP server automatically. If the phone fails to connect the SNTP server, contact your system administrator for more information. You can also configure the time and date manually. For more information, refer to Time & Date on page 58.

How can I find the basic information of the Skype for Business phone?

Press the (OK) key when the phone is idle to check the basic information of the Skype for Business phone, such as IP address and firmware version. For more basic information, refer to Phone Status on page 39.

How to obtain the MAC address of a phone when the phone is not powered on?

Three ways to obtain the MAC address of a phone:

- You can ask your supplier for shipping information sheet which includes MAC addresses according to the corresponding PO (Purchase Order).
- You can find the MAC address in the label of carton box.

- You can also find the MAC address from the phone's bar code on the back of the phone.

Why can't I sign into Skype for Business Server on the phone?

- Check your phone is properly connected to the switch or hub.
- Ensure your login credentials are correct.
- Ensure that DNS address is properly configured on the phone, or DHCP is configured to provide DNS address as part of DHCP response.
- Ensure that the phone can obtain the correct date and time through the NTP server.
- Ensure that the phone has obtained the license.
- Please check the Only Accept Trusted Certificates feature. If it is enabled, please disable it and try to sign in. If you sign in successfully after you disable this feature, you need to manually upload the certificate and then enable the Only Accept Trusted Certificates feature to try again.

How to check if the application driver of the Yealink BToE Connector is installed on the PC?

Do one of the following:

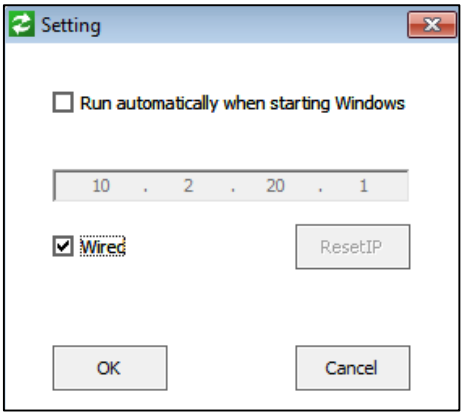
- After installation, if the Yealink BToE Connector and the application driver run successfully, the notification area of the system tray will prompt: **Device driver software installed successfully**.
- Do the following steps to check if the application driver is installed (take the Windows 2007 operating system as an example):
  1. Click the **Start** button .
  2. Click **Control Panel**->**Device Manager**.
  3. Double click **System devices**.
  4. Check if the driver **Yealink BToE Enumerator** is displayed.

     If Yealink BToE Enumerator is not displayed, reinstall the Yealink BToE Connector application, and ensure that the application driver is installed during the installation process.

How to cancel auto-start for the Yealink BToE connector?

1. Right-click in the system tray.
2. Click **Settings(P)**.

3. Uncheck **Run automatically when starting Windows** to cancel the auto-start feature. As shown below:



Why can't the phone pair with my Skype for Business client?

- Ensure that your Skype for Business client is installed on your PC and a Skype for Business user signs into Skype for Business Server successfully.
- Ensure that the user signing on the phone is the same as the one signing on the Skype for Business client.
- Re-pair the phone and Skype for Business client manually.
- Ensure that Yealink BToE Connector and application driver are successfully installed on your PC, and both of them start successfully. If the phone still cannot pair with the Skype for Business client, reboot the PC.
- After reboot, if the phone still cannot pair with the Skype for Business client, uninstall the Yealink BToE Connector and application driver, and then reinstall them.
- Ensure that Yealink BToE Connector is an allowed program in your system's firewall on your PC.

Why doesn't the phone display the Calendar menu?

- Ensure that your phone has signed in successfully.

Why doesn't the Skype conference, appointment, meeting or event set up in outlook display on the Calendar menu?

Ensure that your sign into the phone using User Sign-in, Web Sign-In or Signing in via PC method.

Why can't I get a dial tone?

- Check for any loose connections and that the phone has been installed properly.
- Switch between the Handset, Headset (if present) or Hands-Free Speakerphone to check whether the dial tone is present for one of the audio modes.

  If the dial tone exists on another audio mode, connect a different handset or headset to

isolate the problem.

Why doesn't the phone ring?

Check the ringer volume on the phone. To adjust the ringer volume setting, press the **Volume** key when the phone is on-hook and idle. For more information, refer to Volume on page 67.

Why can't I receive calls?

- Check that whether your status is DND mode, if it is, you should reset status. Refer to Presence Status on page26.
- Check that whether call forward is disabled on the phone. Refer to Call Forward on page 103.

Why doesn't my handset work?

- Check that the headset cord is fully connected to the headset jack on the phone. Refer to Phone Initialization on page 13.
- Check that the headset volume is adjusted to an appropriate level. Refer to Volume on page 67.

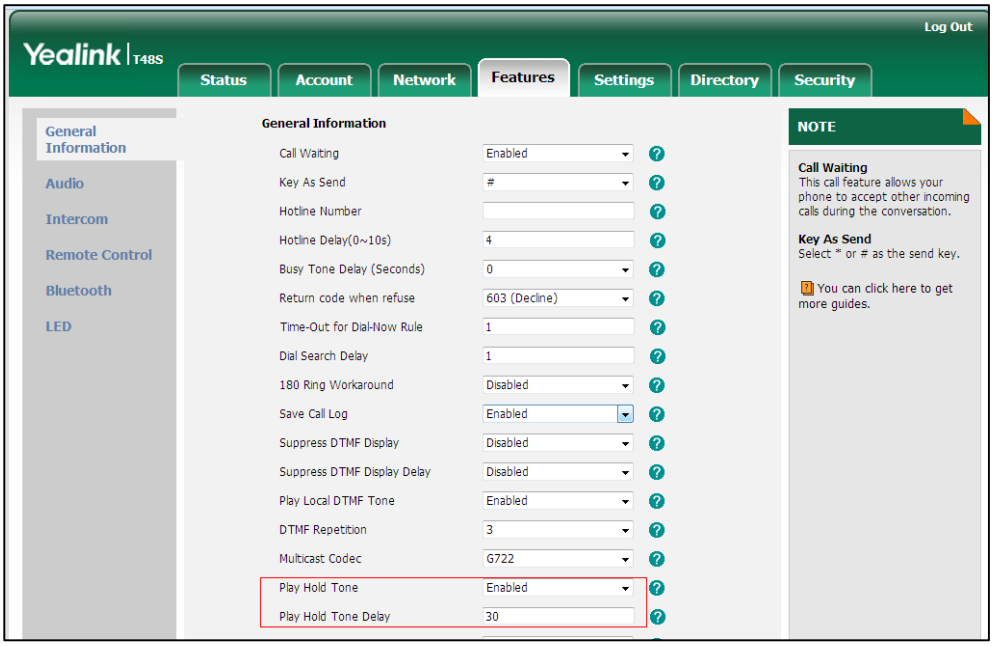
Why does the phone play a tone when there is a call on hold? How to disable it?

When there is a call on hold, the phone will play a hold tone every 30 seconds. Hold tone and the interval of playing a hold tone are configurable via web user interface only.

To configure play hold tone and play hold tone delay via web user interface:

1. Click on **Features**->**General Information**.
2. Select the desired value from the pull-down list of **Play Hold Tone**.

3. Enter the desired time in the **Play Hold Tone Delay** field.



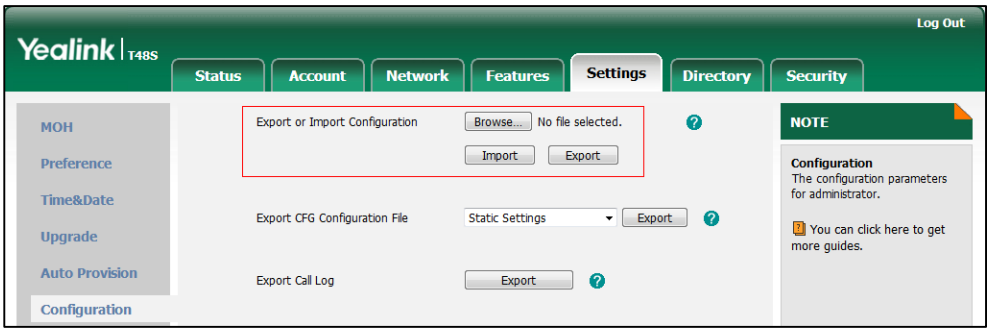
4. Click **Confirm** to accept the change.

How to export/import the phone configurations?

We may need you to export the phone configurations to help analyze problem. In some instances, you may need to import configurations to your phone.

To export the phone configurations via web user interface:

1. Click on **Settings**->**Configuration**.
2. Click **Export** to open file download window, and then save the file to your local system.



To import the phone configurations via web user interface:

1. Click on **Settings**->**Configuration**.
2. Click **Browse...** to locate a configuration file from your local system.
3. Click **Import** to import the configuration file.

Note The file format of configuration file must be *.bin.

Export All Diagnostic Files

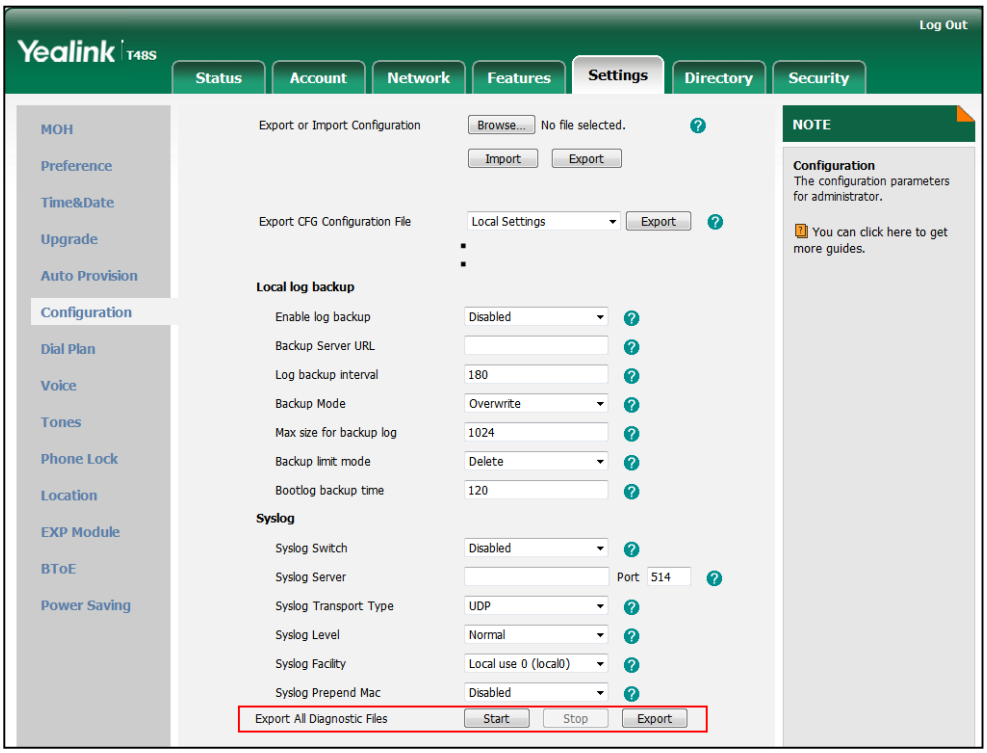
Your system administrator may ask you to export all diagnostic files to analyze your phone problem.

To export all diagnostic files via web user interface:

1. Click on **Settings**->**Configuration**.
2. Click **Start** in the **Export All Diagnostic Files** field to begin capturing signal traffic.

   The local log level will be automatically set to **Debug**.
3. Reproduce the issue.
4. Click **Stop** in the **Export All Diagnostic Files** field to stop the capture.

   The local log level will be reset to **Normal**.
5. Click **Export** to open file download window, and then save the diagnostic file to your local system.



A diagnostic file named **allconfig.tgz** is successfully exported to your local system.

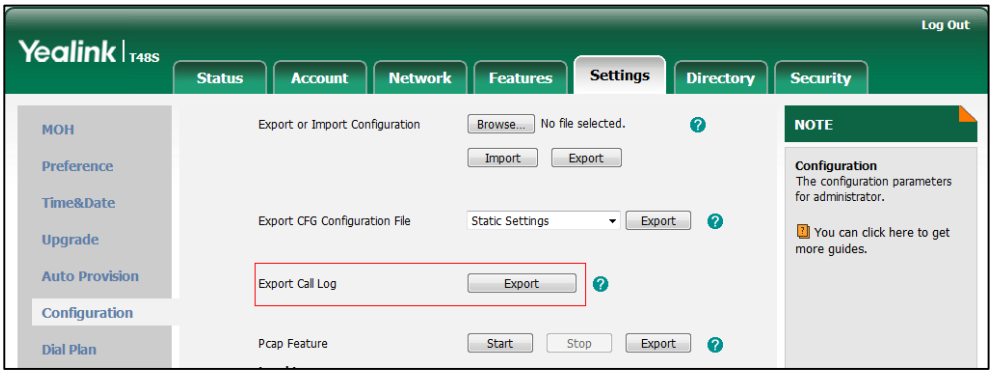
How to export call log?

User can access call logs by downloading them to the local system for diagnosis purpose.

To export the call log via web user interface:

1. Click on **Settings**->**Configuration**.

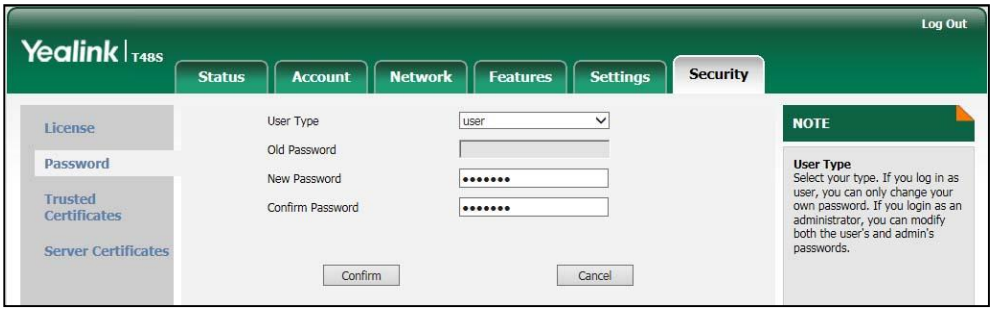
2. Click **Export** to open file download window, and then save the file to your local system.



How to change the user password?

To change the user password via web user interface:

1. Click on **Security**->**Password**.
2. Select **User** from the pull-down list of **User Type**.
3. Enter the new user password in the **New Password** field and **Confirm Password** field.



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

   You can also contact your system administrator for help.

Note

If signing into the web user interface of the phone with the user credential, you need to enter the current user password in the **Old Password** field.

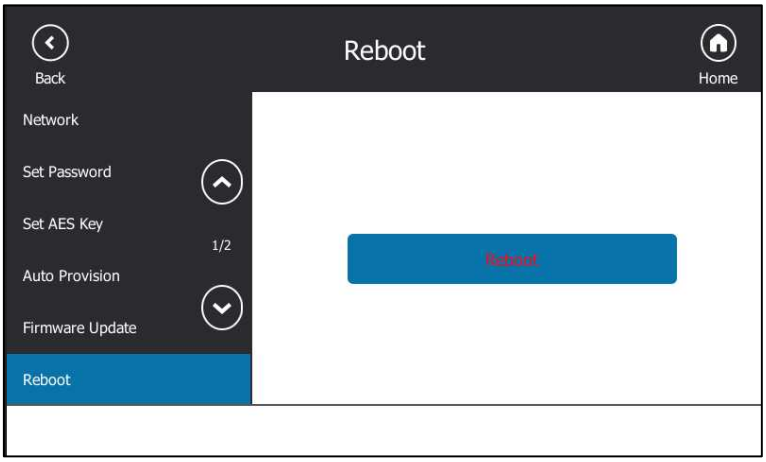
User password is configurable via web user interface only.

How to reboot the phone?

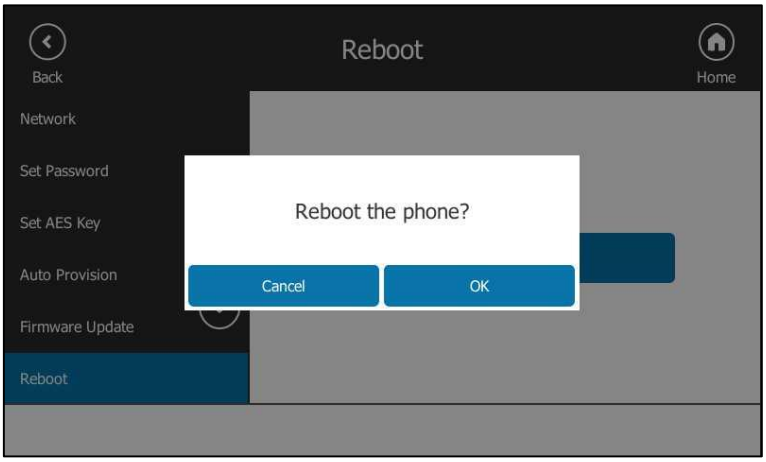
To reboot the phone via phone user interface:

1. Press **Menu->Setting**->**Advanced** (default password: admin) ->**Reboot**.

2. Tap **Reboot**.



The touch screen prompts “Reboot the phone?”.



3. Tap the **OK** soft key to reboot the phone.

Note

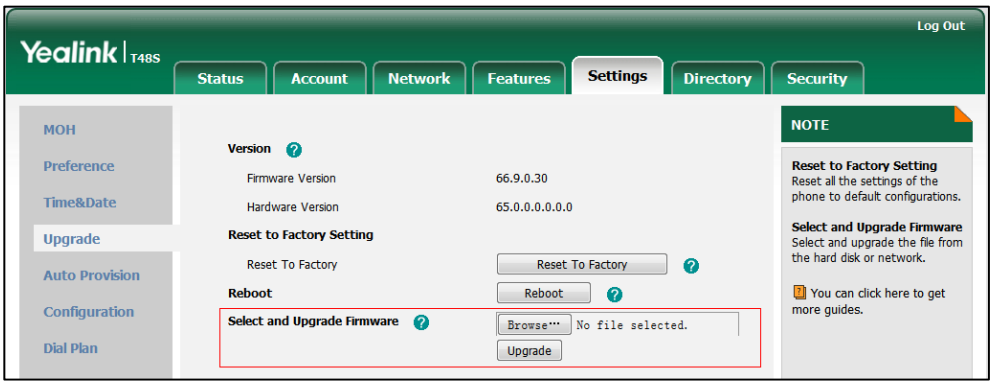
You can long press ⊗ to reboot the phone
Any reboot of your phone may take a few minutes.

How to upgrade firmware?

To upgrade firmware via web user interface:

1. Click on **Settings**->**Upgrade**.

2. Click **Browse...** to locate the firmware from your local system.



3. Click **Upgrade** to upgrade the firmware.

   The browser pops up the dialog box "Firmware of the SIP Phone will be updated. It will take 5 minutes to complete. Please don't power off!".

4. Click **OK** to confirm upgrading.

T48S Skype for Business phone can be also upgraded from the Skype for Business Server. For more information on how to upgrade the T48S Skype for Business phone from the Skype for Business Server, refer to *Updating Phone Firmware from Microsoft Skype for Busniness Server*.

How to reset the phone?

Generally, some common issues may occur while using the phone. Your system administrator may ask you to reset your phone to factory configurations after you have tried all troubleshooting suggestions but still do not solve the problem. This operation will delete all your personal configuration settings, and reset all settings to the manufacturer default setting.

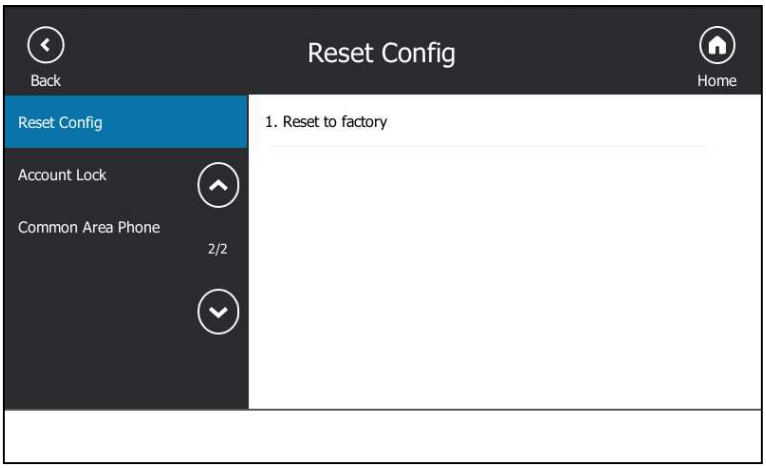
Note

Check with your system administrator if you want to keep some personal settings before resetting your phone.

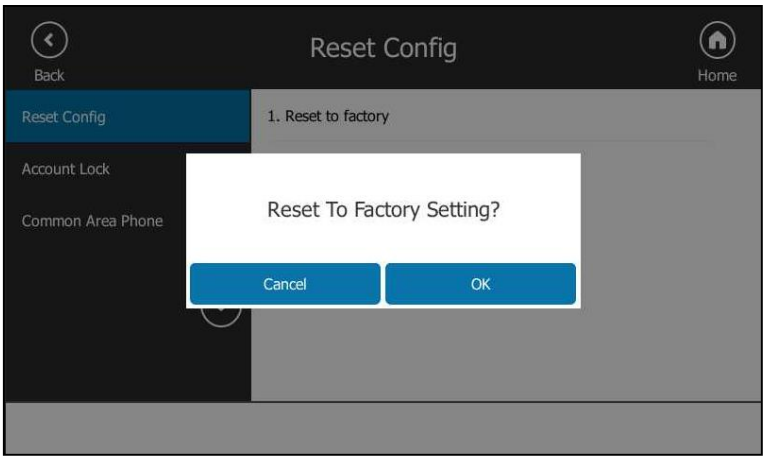
To reset the phone via phone user interface:

1. Tap **Menu->Setting**->**Advanced** (default password: admin) ->**Reset Config**.

2. Tap **Reset to factory**.



The touch screen prompts the following warning:



3. Tap the **OK** soft key.

   The phone begins resetting.

   After reset, the touch screen prompts “Welcom Initializing…Please wait”.

   The phone will be reset to factory sucessfully after startup.

Note

You can also long press the (OK) soft key to perform the full reset function when the phone is idle.

Reset of the phone may take a few minutes. Do not power off until the phone starts up successfully.

Regulatory Notices

Service Agreements

Contact your Yealink Authorized Reseller for information about service agreements applicable to your product.

Limitations of Liability

TO THE FULL EXTENT ALLOWED BY LAW, YEALINK EXCLUDES FOR ITSELFAND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE,INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS,EVEN IF YEALINK OR ITS AUTHORIZED RESELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASERICE PAID, AT YEALINK'S OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

Safety Instructions

Save these instructions. Read these safety instructions before use!

The following basic safety precautions should always be followed to reduce risk of fire, electrical shock, and other personal injury.

General Requirements

- Before you install and use the device, read the safety instructions carefully and observe the situation during operation.
- During the process of storage, transportation, and operation, please always keep the device dry and clean.
- During the process of storage, transportation, and operation, please avoid collision and crash of the device.
- Please attempt not to dismantle the device by yourself. In case of any discrepancy, please contact the appointed maintenance center for repair.
- Without prior written consent, no organization or individual is permitted to make any change to the structure or the safety design of the device. Yealink is under no circumstance liable to consequences or legal issues caused by such changes.
- Please refer to the relevant laws and statutes while using the device. Legal rights of others should be respected as well.

Environmental Requirements

- Place the device at a well-ventilated place. Do not expose the device under direct sunlight.
- Keep the device dry and free of dusts.
- Place the device on a stable and level platform.

- Please place no heavy objects on the device in case of damageand deformation caused by the heavy load.
- Keep at least 10 cm between the device and the closest object for heat dissipation.
- Do not place the device on or near any inflammable or fire-vulnerable object, such as rubber-made materials.
- Keep the device away from any heat source or bare fire, such as a candle or an electric heater.
- Keep the device away from any household appliance with strong magnetic field or electromagnetic field, such as a microwave oven or a refrigerator.

Operating Requirements

- Do not let a child operate the device without guidance.
- Do not let a child play with the device or any accessory in case of accidental swallowing.
- Please use the accessories provided or authorized by the manufacturer only.
- The power supply of the device shall meet the requirements of the input voltage of the device. Pleaseuse the provided surge protection power socket only.
- Before plugging or unplugging any cable, make sure that your hands are completely dry.
- Do not spill liquid of any kind on the product or use the equipment near water, for example, near a bathtub, washbowl, kitchen sink, wet basement or near a swimming pool.
- Do not tread on, pull, or over-bend any cable in case of malfunction of the device.
- During a thunderstorm, stop using the device and disconnect it from the power supply. Unplug the power plug and the Asymmetric Digital Subscriber Line (ADSL) twisted pair (the radio frequency cable) to avoid lightning strike.
- If the device is left unused for a rather long time, disconnect it from the power supply and unplug the power plug.
- When there is smoke emitted from the device, or some abnormal noise or smell, disconnect the device from the power supply, and unplug the power plug immediately. Contact the specified maintenance center for repair.
- Do not insert any object into equipment slots that is not part of the product or auxiliary product.
- Before connecting a cable, connect the grounding cable of the device first. Do not disconnect the grounding cable until you disconnect all other cables.

Cleaning Requirements

- Before cleaning the device, stop using it and disconnect it from the power supply.
- Use a piece of soft, dry and anti-static cloth to clean the device.
- Keep the power plug clean and dry. Using a dirty or wet power plug may lead to electric shock or other perils.

Appendix A - Time Zones

Time Zone	Time Zone Name
-11	Samoa
-10	United States-Hawaii-Aleutian, United States-Alaska-Aleutian
-9:30	French Polynesia
-9	United States-Alaska Time
-8	Canada(Vancouver,Whitehorse), Mexico(Tijuana,Mexicali), United States-Pacific Time
-7	Canada(Edmonton,Calgary), Mexico(Mazatlan,Chihuahua), United States-MST no DST, United States-Mountain Time
-6	Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Belize, Canada-Manitoba(Winnipeg), Chile(Easter Islands), Mexico(Mexico City,Acapulco), United States-Central Time
-5	Peru, Bahamas(Nassau), Canada(Montreal,Ottawa,Quebec), Cuba(Havana), United States-Eastern Time
-4:30	Venezuela(Caracas)
-4	Canada(Halifax,Saint John), Chile(Santiago), Paraguay(Asuncion), United Kingdom-Bermuda(Bermuda), United Kingdom(Falkland Islands), Trinidad&Tobago
-3:30	Canada-New Foundland(St.Johns)
-3	Argentina(Buenos Aires), Brazil(DST), Brazil(no DST), Denmark-Greenland(Nuuk)
-2:30	Newfoundland and Labrador
-2	Brazil(no DST)
-1	Portugal(Azores)
0	Denmark-Faroe Islands(Torshavn), GMT, Greenland, Ireland(Dublin), Morocco, Portugal(Lisboa,Porto,Funchal), Spain-Canary Islands(Las Palmas), United Kingdom(London)
+1	Albania(Tirane), Austria(Vienna), Belgium(Brussels), Caicos, Chad, Croatia(Zagreb), Czech Republic(Prague), Denmark(Kopenhagen), France(Paris), Germany(Berlin), Hungary(Budapest), Italy(Rome), Luxembourg(Luxembourg), Macedonia(Skopje), Namibia(Windhoek), Netherlands(Amsterdam), Spain(Madrid), Switzerland(Bern), Sweden(Stockholm)
+2	Estonia(Tallinn), Finland(Helsinki), Gaza Strip(Gaza), Greece(Athens), Israel(Tel Aviv), Jordan(Amman), Latvia(Riga), Lebanon(Beirut), Moldova(Kishinev), Romania(Bucharest), Russia(Kaliningrad), Syria(Damascus), Turkey(Ankara), Ukraine(Kyiv, Odessa)
+3	East Africa Time, Iraq(Baghdad), Russia(Moscow)
+3:30	Iran(Teheran)
+4	Armenia(Yerevan), Azerbaijan(Baku), Georgia(Tbilisi), Abu Dhabi，Kazakhstan(Aktau), Russia(Samara)
+4:30	Afghanistan(Kabul)
+5	Kazakhstan(Aqtobe), Kyrgyzstan(Bishkek), Pakistan(Islamabad), Russia(Chelyabinsk)
+5:30	India(Calcutta)
+5:45	Nepal(Katmandu)
+6	Kazakhstan(Astana, Almaty), Russia(Novosibirsk,Omsk)
+6:30	Myanmar(Naypyitaw)
+7	Russia(Krasnoyarsk), Thailand(Bangkok)
+8	Australia(Perth), China(Beijing), Russia(Irkutsk, Ulan-Ude), Singapore(Singapore)
+8:45	Eucla
+9	Japan(Tokyo), Korea(Seoul), Russia(Yakutsk,Chita)
+9:30	Australia(Adelaide), Australia(Darwin)

Time Zone	Time Zone Name
+10	Australia(Brisbane), Australia(Hobart), Australia(Sydney,Melboume,Canberra), Russia(Vladivostok)
+10:30	Australia(Lord Howe Islands)
+11	New Caledonia(Noumea), Russia(Srednekolymsk Time)
+11:30	Norfolk Island
+12	New Zealand(Wellington,Auckland), Russia(Kamchatka Time)
+12:45	New Zealand(Chatham Islands)
+13	Tonga(Nukualofa)
+13:30	Chatham Islands
+14	Kiribati