

# Yealink SIP-T2 Series IP Phones Auto Provisioning Guide

# **Table of Contents**

Table of Contents	iii
Introduction	1
Getting Started	3
Obtaining Configuration Information	3
Obtaining Configuration Files	3
Obtaining Phone Information	4
Managing Configuration Files	4
Editing Common CFG File	4
Editing MAC-Oriented CFG File	6
Managing MAC-local CFG File	7
Encrypting Configuration Files	10
Customizing Resource Files	10
Configuring a TFTP Server	27
Preparing a Root Directory	27
Configuring a TFTP Server	28
Obtaining the Provisioning Server Address	29
Zero Touch	29
Plug and Play (PnP) Server	31
DHCP Options	32
Phone Flash	34
Configuring Wildcard of the Provisioning Server URL	35
Configuring the Update Mode	37
Power On	37
Repeatedly	38
Weekly	39
Auto Provision Now	40
Multi-mode Mixed	41
SIP NOTIFY Message	41
Auto Provisioning via Activation Code	42

Downloading and Verifying Configurations	45
Downloading Configuration Files	45
Resolving and Updating Configurations	45
Downloading and Updating <mac>-local.cfg File</mac>	
Verifying Configurations	46
Specific Scenarios	48
Configuration Parameters	48
Scenario A Protect personalized configuration settings	50
Scenario B Clear personalized configuration settings	52
Scenario C Protect personalized settings after factory reset	53
Scenario D Import or export the local configuration file	55
Troubleshooting	59
Glossary	61
Appendix	63
Configuring an FTP Server	63
Preparing a Root Directory	63
Configuring an FTP Server	64
Configuring an HTTP Server	67
Preparing a Root Directory	67
Configuring an HTTP Server	68
Configuring a DHCP Server	71
Customizing a Ring Tone Using Cool Edit Pro	77
Customizing a Logo File Using PictureExDemo	79
Auto Provisioning Flowchart (Protect personalized configuration settings)	80
Description of Configuration Parameters in CFG Files	81
Programmable Keys	310
Time Zones	312
BLF LED Mode	315

# Introduction

Yealink IP phones are full-featured telephones that can be plugged directly into an IP network and can be used easily without manual configuration.

This guide provides instructions on how to provision Yealink IP phones with the minimum settings required. Yealink IP phones support FTP, TFTP, HTTP, and HTTPS protocols for auto provisioning and are configured by default to use the TFTP protocol.

The purpose of this guide is to serve as a basic guidance for provisioning Yealink IP phones, including:

- Yealink SIP-T23
- Yealink SIP-T23P
- Yealink SIP-T23G

The auto provisioning process outlined in this guide applies to Yealink SIP-T23 (P/G) IP phones running firmware version X.80.0.5 or later. We recommend that IP phones running the latest firmware CANNOT be downgraded to an earlier firmware version. The new firmware is compatible with old configuration parameters, but not vice versa.

# **Getting Started**

This section provides instructions on how to get ready for auto provisioning. The auto provisioning process discussed in this guide uses the TFTP server as the provisioning server.

To begin the auto provisioning process, the following steps are required:

- Obtaining Configuration Information
- Managing Configuration Files

# **Obtaining Configuration Information**

## **Obtaining Configuration Files**

Before beginning provisioning, you need to obtain configuration files. There are two configuration files both of which are CFG-formatted. We call these two files Common CFG file and MAC-Oriented CFG file. The IP phone tries to download these CFG files from the server during auto provisioning.

IP phones also support a local configuration file named as <MAC>-local.cfg. When a user modifies configurations via web user interface or phone user interface, the configurations will be automatically saved to the MAC-local CFG file on the IP phone.

The MAC-Oriented and MAC-local CFG files are only effectual for the specific phone. They use the 12-digit MAC address of the IP phone as the file name. For example, if the MAC address of the IP phone is 0015651130F9, the MAC-Oriented CFG and MAC-local CFG files have to be named as 0015651130F9.cfg and 0015651130F9-local.cfg respectively. However, the Common CFG file is effectual for all phones of the same model. It uses a fixed name "y000000000XX.cfg" as the file name, where "XX" equals to the first two digits of the hardware version of the IP phone model.

The names of the Common CFG file for the phone model is:

Phone Model	Common CFG File
SIP-T23 (P/G)	y00000000044.cfg

The IP phones can only recognize configuration files using UTF-8 or ANSI encoding.

The <MAC>-local.cfg can be exported/imported via web user interface. For more information on how to export/import the <MAC>-local.cfg file, refer to Scenario D Import or export the local configuration file on page 55.

You can ask the distributor or Yealink FAE for Common CFG and MAC-Oriented files. You can also obtain the Common CFG file and MAC-Oriented file online:

http://www.yealink.com/DocumentDownload.aspx?CateId=142&flag=142

#### To download Common CFG and MAC-Oriented files:

- Go to Yealink Document Download Page and select the desired phone model under the Documents and Download tab.
- 2. Download and uncompress the combined configuration files to your local system.
- **3.** Open the folder you uncompressed to and identify the files you will edit according to the table introduced above.

## **Obtaining Phone Information**

Before beginning provisioning, you also need the IP phone information. For example, MAC address and the SIP account information of the IP phone.

**MAC Address**: The unique 12-digit serial number of the IP phone. You can obtain it from the bar code on the back of the IP phone.

**SIP Account Information**: This may include SIP credentials such as user name, password and IP address of the SIP server. Ask your system administrator for SIP account information.

# **Managing Configuration Files**

Auto provisioning enables Yealink IP phones to update themselves automatically via downloading Common CFG and MAC-Oriented CFG files. Before beginning provisioning, you may need to edit and customize your configuration files. Open each configuration file with a text editor such as UltraEdit. For more information on configuration parameters in configuration files, refer to Description of Configuration Parameters in CFG Files on page 81

## **Editing Common CFG File**

Common CFG file contains configuration parameters which apply to phones with the same model, such as language and volume.

The following figure shows a portion of the common CFG file:

```
##File header "#!version:1.0.0.1" can not be edited or deleted, and must be placed in the first line.
##This template file is applicable to SIP-T28P/T26P/T23(P/G)/T22P/T20P/T21P/T19P/T46G/T42G/T41P IP pho
##For more information on configuration parameters, refer to Yealink_SIP-T2_Series_T19P_T4_Series_IP_F
......
## Hostname ##
etwork.dhcp host name
## PPPoE(Except T41P/T42G Models) ##
network.pppoe.user =
network.pppoe.password
Network Advanced
##It enables or disables the PC port.0-Disabled,1-Auto Negotiation.
##The default value is 1.It takes effect after a reboot.
etwork.pc_port.enable =
##It configures the transmission mode and speed of the Internet (WAN) port.
##0-Auto negotiate
##1-Full duplex 10Mbps
##2-Full duplex 100Mbps
##3-Half duplex 10Mbps
##4-Half duplex 100Mbps
#5-Full duplex 1000Mbps (only applicable to SIP-T23(P/G), SIP-T42G and SIP-T46G IP phones)
##The default value is 0.It takes effect after a reboot.
```

The line beginning with "#" is considered to be a comment.

The file header "#!version:1.0.0.1" is not a comment and must be placed in the first line. It cannot be edited or deleted.

The partial parameters in the Common CFG file are described as follows:



```
##The default value is 1.lt takes effect after a reboot.
network.pc_port.enable =

##It configures the transmission mode and speed of the Internet (WAN) port.
##0-Auto negotiate
##1-Full duplex 10Mbps
##2-Full duplex 100Mbps
##3-Half duplex 10Mbps
##4-Half duplex 100Mbps
##5-Full duplex 100Mbps
(only applicable to SIP-T23 (P/G), SIP-T42G and SIP-T46G IP phones)
##The default value is 0.lt takes effect after a reboot.
network.internet port.speed duplex =
```

# **Editing MAC-Oriented CFG File**

MAC-Oriented CFG file contains configuration parameters which are expected to be updated per phone, such as the registration information.

The following figure shows a portion of the MAC-Oriented CFG file:

The partial parameters in the MAC-Oriented CFG file are described as follows:

```
##
          MAC-Oriented CFG File
                                             ##
#!version:1.0.0.1
##File header "#!version:1.0.0.1" cannot be edited or deleted, and must be placed in
the first line. This template file is applicable to SIP-T28P/T26P/T23
(P/G)/T22P/T21P/T20P/T19P/ T48G/T46G/T42G/T41P IP phones running firmware version 72
or later. For more information on configuration parameters, refer to
Yealink SIP-T2 Series T19P T4 Series IP Phones Auto Provisioning Guide. ##
##
                 Account 1 Basic Settings
                                               ##
```

```
account.1.enable =
account.1.label =
account.1.display name =
account.1.auth_name =
account.1.user_name =
account.1.password =
account.1.outbound_proxy_enable =
account.1.outbound_host =
account.1.outbound_port =
account.1.dial tone =
account.1.update_sip_call_id =
##It configures the transport type for account 1. 0-UDP,1-TCP,2-TLS,3-DNS-NAPTR
##The default value is 0.
account.1.sip_server.1.transport_type =
account.1.sip_server.2.transport_type =
SIP-T23/T23P/T23G IP phones support 3 accounts.
```

# Managing MAC-local CFG File

MAC-local CFG file is automatically filled with configurations modified via web user interface or phone user interface. The file is stored locally on the IP phone and can also be uploaded to the provisioning server.

If your IP phone's current firmware version doesn't support generating a <MAC>-local.cfg file, the IP phone will automatically generate a MAC-local CFG file after it is upgraded to the latest firmware.

#### Uploading and downloading the <MAC>-local.cfg file

You can configure whether the IP phone periodically uploads the <MAC>-local.cfg file to the provisioning server to back up this file, and downloads the <MAC>-local.cfg file from the provisioning server during auto provisioning to override the one stored on the phone. This process is controlled by the value of the parameter

"auto provision.custom.sync". When the value of the parameter

"auto\_provision.custom.sync" is set to 1, the IP phone will periodically upload the configuration files to the provisioning server, and download the configuration files from the provisioning server during auto provisioning.

For more information on how to configure this parameter, refer to Configuration Parameters on page 48.

#### Updating the <MAC>-local.cfg file

You can configure whether the IP phone updates configurations in the <MAC>-local.cfg file during auto provisioning. This process is controlled by the value of the parameter "auto\_provision.custom.protect". When the value of the parameter "auto\_provision.custom.protect" is set to 1, the IP phone will update the configurations in the <MAC>-local.cfg file during auto provisioning. The configurations in the <MAC>-local.cfg file take precedence over the ones in the downloaded Common CFG file or <MAC>.cfg file. As a result, the personalized settings of the phone configured via the phone or web user interface can be remained after auto provisioning.

For more information on how to configure this parameter, refer to Configuration Parameters on page 48.

**Note:** The following configurations are defined never to be saved to the <MAC>-local.cfg file, even if a user modifies the configurations via web user interface or phone user interface:

Configurations associated with the password.

For example,

#Configure the password for PPPoE connection.

network.pppoe.password =

For more information on the specific configurations which associated with the password, refer to Description of Configuration Parameters in CFG Files on page 81.

Configurations requiring a reboot during auto provisioning.

For example,

#Configure the IP address mode.

network.ip\_address\_mode=

For more information on the specific configurations which require a reboot during auto provisioning, refer to Description of Configuration Parameters in CFG Files on page 81.

• The following configuration parameters.

#Configure always forward feature.

forward.always.enable =

forward.always.target =

forward.always.on\_code =

forward.always.off\_code =

#Configure busy forward feature.

forward.busy.enable =

forward.busy.target =

forward.busy.on code =

```
forward.busy.off_code =
#Configure no answer forward feature.
forward.no_answer.enable =
forward.no_answer.target =
forward.no_answer.timeout =
forward.no_answer.on_code =
forward.no_answer.off_code =
#Configure DND feature.
features.dnd.enable =
features.dnd.on code =
features.dnd.off_code =
#Configure always forward feature for account X.
account.X.always fwd.enable =
account.X.always fwd.target =
account.X.always_fwd.on_code =
account.X.always fwd.off code =
#Configure busy forward feature for account X.
account.X.busy_fwd.enable =
account.X.busy_fwd.target =
account.X.busy_fwd.on_code =
account.X.busy fwd.off code =
#Configure no answer forward feature for account X.
account.X.timeout_fwd.enable =
account.X.timeout_fwd.target =
account.X.timeout_fwd.timeout =
account.X.timeout_fwd.on_code =
account.X.timeout fwd.off code =
#Configure DND feature for account X.
account.X.dnd.enable =
account.X.dnd.on code =
account.X.dnd.off code =
#Configure the access URL of the firmware file.
firmware.url =
#Configure the access URL of configuration files.
auto_provision.server.url=
```

**Note:** The following configurations are defined to be bundled together. If a user modifies one of the configurations in a bundled group via web user interface or phone user

interface, the other configurations in this group can also be saved to the <MAC>-local.cfg file (if the parameter isn't configured, the value of this parameter will be written by "%NULL%") in addition to the modified configuration.

```
#Group1: Configure line key.

linekey.X.line =
linekey.X.value =
linekey.X.pickup_value =
linekey.X.type =
linekey.X.xml_phonebook =
linekey.X.label =
#Group2: Configure programable key.
programablekey.X.type =
programablekey.X.line =
programablekey.X.value =
programablekey.X.value =
programablekey.X.xml_phonebook =
programablekey.X.history_type =
programablekey.X.label =
```

We recommend you do not edit the MAC-local CFG file. If you really want to edit MAC-local CFG file, you can export and then edit it. For more information on how to export this file, refer to Scenario D Import or export the local configuration file on page 55. For more information on how to edit this file, refer to Editing Common CFG File on page 4 and Editing MAC-Oriented CFG File on page 6.

# **Encrypting Configuration Files**

To protect against unauthorized access and tampering of sensitive information (e.g., login password, registration information), you can encrypt configuration files using Yealink Configuration Encryption Tool. AES keys must be 16 characters and the supported characters contain:  $0 \sim 9$ ,  $A \sim Z$ ,  $a \sim z$  and the following special characters are also supported: #\$ % \* +, - . : = ? @ [] ^ \_ {} ~. For more information on how to encrypt configuration files, refer to Yealink Configuration Encryption Tool User Guide.

# **Customizing Resource Files**

When configuring some particular features, you may need to upload resource files to IP phones, such as personalized ring tone file, language package file and logo file. Yealink supplies some resource file templates for the particular features. Ask the distributor or Yealink FAE for resource file templates. The following provides information on how to customize resource files and specify the access URL for the resource files.

## **Customizing a Ring Tone**

Yealink IP phones have built-in system ring tones. You can change the ring type, or customize a ring tone and upload it to the IP phone via auto provisioning.

The ring tone file must meet the following:

Phone Model	File Format	Single File Size	Total Files Size
SIP-T23 (P/G)	.wav	<=100KB	<=100KB

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

For more information on customizing a ring tone file, refer to Customizing a Ring Tone Using Cool Edit Pro on page 77.

#Specify the access URL of the custom ring tone.

ringtone.url =

For example, enter "tftp://192.168.1.100/Customring.wav" in the "ringtone.url =" field. During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the ring tone file "Customring.wav".

To use the custom ring tone for the IP phone, you also need to configure the following parameter:

#Configure the custom ring tone (e.g., Customring.wav) for the IP phone.

phone\_setting.ring\_type = Customring.wav

To use the custom ring tone for the desired account, you also need to configure the following parameter:

#Configure the custom ring tone (e.g., Customring.wav) for account 1.

account.1.ringtone.ring\_type = Customring.wav

#Delete all custom ring tones.

ringtone.delete = http://localhost/all

For more information on these parameters, refer to Description of Configuration Parameters in CFG Files on page 81.

## **Customizing a Language**

You can modify the existing language translation for phone and web user interface. You can also add a new language (not included in the available language list) to IP phones.

# **Customizing a Language for Phone User Interface**

The following table lists available languages and the associated language files for phone user interface:

Available Language	Associated Language File
English	000.GUI.English.lang
Simplified Chinese	001.GUI.Chinese_S.lang
Traditional Chinese	002.GUI.Chinese_T.lang
German	003.GUI.German.lang
French	004.GUI.French.lang
Italian	005.GUI.ltalian.lang
Polish	006.GUI.Polish.lang
Portuguese	007.GUI.Portuguese.lang
Spanish	008.GUI.Spanish.lang
Turkish	009.GUI.Turkish.lang
Russian	010.GUI.Russian.lang

The following figure shows a portion of a lang formatted English language file:

```
1 [ Lang ]
  " Conference "="Conference "
  "'*' or '#' as send"="Key as send"
 5 "(Empty)"="(Empty)"
 6 "12 Hour"="12 Hour"
7 "120s"="120s"
8 "15s"="15s"
9 "1800s"="1800s"
10 "24 Hour"="24 Hour"
11 "300s"="300s"
12 "30s"="30s"
13 "600s"="600s"
14 "60s"="60s"
15 "802.1x Mode"="802.1x Mode"
16 "802.1x Settings"="802.1x Settings"
17 "ACD Login"="ACD Login"
18 "ACD State"="ACD State"
19 "ACD Status"="ACD Status"
20 "ACD Trace"="Trace"
21 "ACD"="ACD"
22 "ALERT"="ALERT"
23 "AM"="AM"
24 "Account ID"="Account ID"
25 "Account Not Usable!"="Account Not Usable!"
26 "Account Status"="Account Status"
27 "Account"="Account"
28 "Accounts"="Accounts"
29 "Activation"="Activation"
30 "Active Line"="Active Line"
31 "Add Contact"="Add Contact"
32 "Add Group SoftKey"="AddGroup"
33 "Add Group"="Add Group"
```

## 

gui lang.url =

If you want to modify the existing language translation for the IP phone user interface, edit the language translation and then configure the parameter "gui\_lang.url =" in the configuration file, for example:

```
gui_lang.url = tftp://192.168.1.100/000.GUI.English.lang
```

During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the language file "000.GUI.English.lang". The language translation will be changed accordingly.

If you want to add a new language "wuilan" to SIP-T23G IP phones, prepare the language file named as 011.GUI.wuilan.lang for downloading and configure the parameter "gui\_lang.url =" in the configuration file, for example:

gui\_lang.url = tftp://192.168.1.100/011.GUI.wuilan.lang

During the auto provisioning process, the SIP-T23G IP phone connects to the provisioning server "192.168.1.100", and downloads the language file "011.GUI.wuilan.lang". After update, you will find a new language selection "wuilan" on the IP phone user interface: Menu->Settings->Basic Settings->Language.

To use the custom language for the IP phone, you also need to configure the following parameter:

#Configure the custom language (e.g., English) for the phone user interface.

lang.gui = English

#Delete all custom languages.

gui\_lang.delete = http://localhost/all

For more information on these parameters, refer to Description of Configuration Parameters in CFG Files on page 81.

For existing language files, "X" ranges from 000 to 010. For custom language files, X must start from 011. "Y" means the language name.

Available languages may vary between different firmware versions.

To modify translation of an existing language, do not rename the language file.

## **Customizing a Language for Web User Interface**

The note information is integrated in the icon ? of the web user interface. When you add a new language for the web user interface, you also need to add the note language.

The following table lists available languages and the associated language files for web user interface:

Available Language	Associated Language Pack	Associated Note Language Pack
English	1.English.js	1.English_note.xml
Simplified Chinese	2.Chinese_S.js	2.Chinese_S_note.xml
Traditional Chinese	3.Chinese_T.js	3.Chinese_T_note.xml
German	4.French.js	4.French_note.xml
French	5.German.js	5.German_note.xml
Italian	6.ltalian.js	6.ltalian_note.xml

Available Language	Associated Language Pack	Associated Note Language Pack
Polish	7.Polish.js	7.Polish_note.xml
Portuguese	8.Portuguese.js	8.Portuguese_note.xml
Spanish	9.Spanish.js	9.Spanish_note.xml
Turkish	10.Turkish.js	10.Turkish_note.xml
Russian	11.Russian.js	11.Russian_note.xml

The following figure shows a portion of a js formatted English language file:

```
1.English.js ×
     2 = {
3 | "0":"0",
4 | "1":"1",
     "10min":"10min",
     "1min":"1min",
     "2":"2",
"2min":"2min",
     "3":"3",
     "30min":"30min",
10
     "4":"4",
11
     "404 (Not found)":"404 (Not Found)",
"480 (Temporarily not available)":"480 (Temporarily Not Available)",
"486 (Busy here)":"486 (Busy Here)",
12
     "5":"5",
15
     "5min":"5min",
16
     "6":"6",
     "603 (Decline)":"603 (Decline)",
     "account": "Account",
     "Account": "Account",
     "account-adv-note": "\d> Advanced </b> <br/> The Advanced parameters for administrator.
     "account-basic-note":"<b>Basic</b><br>The basic parameters for administrator.<br>"account-codec-note":"<b>Codecs</b><br>Choose the codecs you want to use. ",<br/>"account-register-note":"<b>Display Name</b><br>SIP service subscriber's name whi
23
24
     "Account1": "Account 1",
25
     "Account2": "Account 2",
26
     "Account3": "Account 3",
28
     "Account4": "Account 4",
     "Account5": "Account 5",
```

The following figure shows a portion of an xml formatted English note language file:

```
1.English_note.xml ×
    2 - <notedata>
4 F <status>
     <note name = "version">
Displays current firmware version and hardware version of the device
       <note name = "network">
8
      Shows details of the phone network configuration
11  <note name = "network-ipv4">
12
      Shows details of the phone network configuration
     </note>
    <note name = "network-ipv6">
      Shows details of the phone network configuration
     </note>
   <note name = "network-common">
       Shows details of the phone network configuration
     </note>
        <note name = "AccountStatus">
        According to current state of each account
     </note>
     <note name = "Ext">
      Shows software version and hardware version details of the Expansion LCD Modules
     </note>
   </status>
```

#### 

#Specify the access URL of the custom web language file.

wui\_lang.url =

#Specify the access URL of the custom note language file.

wui\_lang\_note.url =

If you want to modify the existing language translation for the web user interface, edit the language translation and then configure the parameter "wui\_lang.url =" in the configuration file, for example:

wui lang.url = tftp://192.168.1.100/1.English.js

During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the language file "1.English.js". The language translation will be changed accordingly.

If you want to add a new language "wuilan" to IP phones, prepare the language file named as 12.wuilan.js and 12.wuilan\_note.xml for downloading and configure the parameter "gui\_lang.url =" and "wui\_lang\_note.url" in the configuration files, for example:

```
gui_lang.url = tftp://192.168.1.100/12.wuilan.js
```

wui lang note.url = tftp://192.168.1.100/12.wuilan note.xml

During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the language files "12.wuilan.js" and

"12.wuilan\_note.xml". After update, you will find a new language selection "wuilan" on the web user interface: **Setting->Preference->Language**, and new note information is integrated in the icon when the new language is selected.

To use the custom language for the IP phone, you also need to configure the following parameter:

#Configure the custom language (e.g., English) for the web user interface.

lang.wui = English

#Delete all custom languages.

gui\_lang.delete = http://localhost/all

For existing language files, "X" ranges from 1 to 11. For custom language files, X must start from 12 "Y" means the language name.

To modify translation of an existing language, do not rename the language file.

## **Customizing an LCD Logo**

Yealink IP phones allow you to customize the logo displayed on the LCD screen. These two IP phone models use the wallpaper instead.

The following table lists the supported logo file format and resolution for each phone model:

Phone Model	Logo File Format	Resolution
SIP-T23 (P/G)	.dob	<=132*64 2 gray scale

For more information on customizing a logo file, refer to Customizing a Logo File Using PictureExDemo on page 79.

You can customize a \*.dob logo file, upload the logo file to the provisioning server and then specify the access URL in configuration files:

#Specify the access URL of the custom Logo File.

lcd\_logo.url =

For example, enter "tftp://192.168.1.100/logo.dob" in the "lcd\_logo.url =" field. During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the logo file "logo.dob".

To use the custom logo, you also need to configure the following parameter:

#Configure the logo mode.

#0-Disabled, 1-System logo, 2-Custom logo

phone\_setting.lcd\_logo.mode = 2

After auto provisioning, you will find that the custom logo or text logo appears on the LCD screen.

#Delete all custom logo files.

lcd\_logo.delete = http://localhost/all

For more information on these parameters, refer to Description of Configuration Parameters in CFG Files on page 81.

## **Customizing a Local Contact File**

Yealink IP phones allow you to upload contact data in batch via auto provisioning. You can create multiple contacts using the supplied local contact template file. The existing local contacts on the IP phones will be overwritten by the downloaded local contacts.

Yealink IP phones support both \*.xml and \*.csv formats.

When editing the local contact template file, learn the following:

- Add groups between <root\_group> and </root\_group>.
- At most 48 groups (including the default groups) can be stored on SIP-T23 (P/G) IP phones.
- Add local contacts between <root\_contact> and </root\_contact>.
- At most 1000 local contacts can be added to IP phones.
- When specifying a desired line for a contact, valid values are 0~3. Multiple line IDs are separated by commas.

The following table lists valid values for each phone model.

Phone Model	Values	Description
SIP-T23 (P/G)	0~3	0 stands for Auto (the first registered line) 1~3 stand for line1~line3

- When specifying a ring tone for a contact, valid values are Auto,
  Resource:Silent.wav, Resource:Splash.wav or Resource:RingN.wav (system ring
  tone, integer N ranges from 1 to 5 and Custom:Name.wav (custom ring tone). To
  specify a custom ring tone for a contact, you need to upload the ring tone in
  advance. For more information on customizing a ring tone, refer to Customizing a
  Ring Tone on page 11.
- When specifying a group for a contact, valid values are the group names (built-in or custom groups).

#### To customize a local contact file:

- 1. Open the template file using an ASCII editor.
- 2. For each group that you wish to add, add the following string to the file. Each starts on a separate line:

```
<group display_name="" ring=""/>
Where:
```

display\_name="" specifies the name of the group.

ring="" specifies the ring tone for this group.

**3.** For each contact that you wish to add, add the following string to the file. Each starts on a separate line:

```
<contact display_name="" office_number="" mobile_number="" other_number=""
line="" ring="" group_id_name=""/>
```

#### Where:

display\_name="" specifies the name of the contact (This value cannot be blank or duplicated).

office\_number="" specifies the office number of the contact.

mobile\_number="" specifies the mobile number of the contact.

other\_number="" specifies the other number of the contact.

line="" specifies the line for the contact.

ring="" specifies the ring tone for the contact.

group\_id\_name="" specifies the group you want to add the contact to.

- 4. Specify the values within double quotes.
- **5.** Save the change.

After editing the local contact template file, upload it to the provisioning server and then specify the access URL in configuration files.

The following shows an example of a local contact file used for SIP-T23 (P/G) IP phones:

```
<root_group>
<group display_name="All Contacts" ring=""/>
<group display_name="Family" ring="Resource:Ring1.wav"/>
<group display_name="Friend" ring="Auto"/>
</root_group>
<root_contact>
<contact display_name="Mary" office_number="123" mobile_number="456"
other_number="2201" line="0" ring="Auto" group_id_name="Family"/>
<contact display_name="Damy" office_number="124" mobile_number="789"
other_number="2202" line="1" ring="Resource:Ring2.wav" group_id_name=""/>
<contact display_name="Jack" office_number="125" mobile_number="234"
other_number="2203" line="2" ring="Custom:lin.wav" group_id_name="Family"/>
<contact display_name="Ada" office_number="8800" mobile_number="1234"
other_number="0000" line="0" ring="" group_id_name=""/>
</root_contact>
```

# Specify the access URL of the custom local contact file.

 $local\_contact.data.url =$ 

For example, enter "tftp://192.168.1.100/contact.xml" in the "local\_contact.data.url =" field. During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the contact file "contact.xml".

For more information on these parameters, refer to Description of Configuration Parameters in CFG Files on page 81.

## **Customizing a Replace Rule File**

You can create replace rules directly in configuration files, or create multiple replace rules using the supplied replace rule template file. The existing replace rules on the IP phones will be overwritten by the downloaded replace rules.

When editing the replace rule template file, learn the following:

- <DialRule> indicates the start of the template file and </DialRule> indicates the
  end of the template file.
- Create replace rules between <DialRule> and </DialRule>.
- When specifying the desired line(s) to apply the replace rule, valid values are 0

and line ID. The digit 0 stands for all lines. Multiple line IDs are separated by commas.

- At most 100 replace rules can be added to the IP phone.
- For the basic expression syntax of the replace rule, refer to Yealink phone-specific user guide.

#### To customize a replace rule file:

- Open the template file using an ASCII editor.
- 2. For each replace rule you wish to add, add the following string to the file. Each starts on a separate line:

```
<Data Prefix="" Replace="" LineID=""/>
```

Where:

Prefix="" specifies the numbers to be replaced.

Replace="" specifies the alternate string.

LineID="" specifies the desired line(s) for this rule. When you leave it blank or enter 0, this replace rule will apply to all lines.

- 3. Specify the values within double quotes.
- 4. Save the change.

The following shows an example of a replace rule file:

#### #Specify the access URL of the custom replace rule file.

dialplan\_replace\_rule.url =

For example, enter "tftp://192.168.1.100/DialPlan.xml" in the "dialplan\_replace\_rule.url =" field. During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the replace rule file "DialPlan.xml".

For more information on the parameter, refer to Description of Configuration Parameters in CFG Files on page 81.

## **Customizing a Dial-now File**

You can create dial-now rules directly in configuration files, or create multiple dial-now rules using the supplied dial-now rule template file. The existing dial-now rules on the IP phones will be overwritten by the downloaded dial-now rules.

When editing a dial-now file, learn the following:

<DialNow> indicates the start of the template file and </DialNow> indicates the
end of the template file.

- Create dial-now rules between < DialNow> and </DialNow>.
- When specifying the desired line(s) for the dial-now rule, valid values are 0 and line ID. The digit 0 stands for all lines. Multiple line IDs are separated by commas.
- At most 100 dial-now rules can be added to the IP phone.
- For the basic expression syntax of the dial-now rule, refer to Yealink phone-specific user guide.

#### To customize a dial-now file:

- Open the template file using an ASCII editor.
- 2. For each dial-now rule you wish to add, add the following string to the file. Each starts on a separate line:

```
<Data DialNowRule="" LineID=""/>
```

Where:

DialNowRule=""/ rule="" specifies the dial-now rule.

LineID=""/ lines="" specifies the desired line(s) for this rule. When you leave it blank or enter 0, this dial-now rule will apply to all lines.

- 3. Specify the values within double quotes.
- 4. Save the change.

The following shows an example of a dial-now file:

```
<DialNow>
  <Data DialNowRule="1234" LineID="1"/>
  <Data DialNowRule="52[0-6]" LineID="1"/>
  <Data DialNowRule="xxxxxx" LineID=""/>
  </DialNow>
```

#### #Specify the access URL of the custom dial-now file.

dialplan\_dialnow.url =

For example, enter "tftp://192.168.1.100/DialNow.xml" in the "dialplan\_dialnow.url =" field. During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the dial-now file "DialNow.xml".

For more information on the parameter, refer to Description of Configuration Parameters in CFG Files on page 81.

## **Customizing a Directory Template**

Directory provides easy access to frequently used lists. You can access lists by pressing the Directory soft key when the IP phone is idle. The lists may contain Local Directory, History, Remote Phone Book, LDAP and Network Directory. You can add the desired list(s) to Directory using the supplied directory template (favorite\_setting.xml). After setup, place the directory template to the provisioning server and specify the access URL in the configuration files.

When editing a directory template, learn the following:

- Do not rename the directory template.
- <root\_favorite\_set> indicates the start of a template and </root\_favorite\_set> indicates the end of a template.
- The default display names of directory lists are Local Directory, History, Remote Phone Book, LDAP and Network Directory.
- When specifying the display priority of the directory list, the valid values are 1, 2, 3 and 4. 1 is the highest priority, 4 is the lowest.
- When enabling or disabling the desired directory list for Directory, the valid values are 0 and 1. 0 stands for Disabled, 1 stands for Enabled.

#### To customize a directory template:

- 1. Open the template file using an ASCII editor.
- 2. For each directory list that you want to configure, edit the corresponding string in the file. For example, you want to configure the local directory list, edit the following strings:

```
<item id_name="localdirectory" display_name="Local Directory" priority="1" enable="1" />
```

#### Where:

id\_name="" specifies the directory list (id\_name = "localdirectory" specifies the local directory list). Do not edit this field.

display\_name="" specifies the display name of the directory list. We recommend you do not edit this field.

priority="" specifies the display priority of the directory list.

enable="" enables or disables the directory list for Directory.

- 3. Edit the values within double quotes.
- 4. Place this file to the provisioning server.

The following shows an example of a directory template:

```
<root_favorite_set>
<item id_name="localdirectory" display_name="Local Directory"
priority="1" enable="1" />
<item id_name="history" display_name="History" priority="2"
  enable="0" />
<item id_name="remotedirectory" display_name="Remote Phone Book"
  priority="3" enable="0" />
<item id_name="ldap" display_name="LDAP" priority="4" enable="0" />
<item id_name="networkdirectory" display_name="Network Directories"
  priority="5" enable="0" />
</root_favorite_set>
```

#### ## Specify the access URL of the custom directory template.

directory setting.url =

For example, enter "tftp://192.168.1.100/favorite\_setting.xml" in the "directory\_setting.url =" field. During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the contact file "favorite setting.xml".

For more information on the parameter, refer to Description of Configuration Parameters in CFG Files on page 81.

### **Customizing a Super Search Template**

Search source list in dialing allows the IP phone to search for entries from the desired lists when the IP phone is in the dialing screen, and then the user can select the desired entry to dial out quickly. The lists may contain Local Directory, History, Remote Phone Book, LDAP and Network Directory. You can configure the search source list in dialing using the supplied super search template (super\_search.xml). After setup, place the super search template to the provisioning server and specify the access URL in the configuration files.

When editing a super search template, learn the following:

- Do not rename the super search template.
- <root\_super\_search> indicates the start of a template and </root\_super\_search> indicates the end of a template.
- The default display names of directory lists are Local Directory, History, Remote Phone Book, LDAP and Network Directory.
- When specifying the priority of search results, the valid values are 1, 2, 3, 4 and 5. 1 is the highest priority, 5 is the lowest.
- When enabling or disabling the IP phone to search the desired directory list, the valid values are 0 and 1. 0 stands for Disabled, 1 stands for Enabled.

#### To customize a super search template:

- 1. Open the template file using an ASCII editor.
- 2. For each directory list that you want to configure, edit the corresponding string in the file. For example, you want to configure the local directory list, edit the following strings:

```
<item id_name="local_directory_search" display_name="Local Directory" priority="1" enable="1" />
```

Where:

id\_name="" specifies the directory list (id\_name = "local\_directory\_search" specifies the local directory list). Do not edit this field.

display\_name="" specifies the display name of the directory list. We recommend you do not edit this field.

priority="" specifies the priority of search results.

enable="" enables or disables the IP phone to search the directory list.

- 3. Edit the values within double quotes.
- 4. Place this file to the provisioning server.

The following shows an example of a super search template:

#### ##Specify the access URL of the custom super search template.

```
super_search.url =
```

For example, enter "tftp://192.168.1.100/super\_search.xml" in the "super\_search.url =" field. During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the contact file "super\_search.xml".

For more information on the parameter, refer to Description of Configuration Parameters in CFG Files on page 81.

## **Upgrading Firmware**

Yealink IP phones allow you to upgrade firmware manually via web user interface, or upgrade firmware in batch via auto provisioning.

The following table lists the firmware name for the phone model (X is replaced by the actual firmware version):

Phone Model	Firmware Name
SIP-T23 (P/G)	44.x.x.x.rom

To upgrade the IP phones' firmware in batch via auto provisioning, ask the distributor for the firmware file, upload it to the provisioning server, and then specify the access URL in configuration files.

##Specify the access URL of the firmware file.

firmware.url =

For example, enter "tftp://admin:password@192.168.1.100/44.80.0.1.rom" ("admin" is replaced by the authentication user name and "password" is replaced by the authentication password) in the "firmware.url =" field. During the auto provisioning process, the IP phone connects to the provisioning server "192.168.1.100", and downloads the firmware file "44.80.0.5.rom".

For more information on the parameter, refer to Description of Configuration Parameters in CFG Files on page 81.

# **Configuring a TFTP Server**

Yealink IP phones support using FTP, TFTP, HTTP and HTTPS protocols to download configuration files. You can use one of these protocols for provisioning. The TFTP protocol is used by default. The following section provides instructions on how to configure a TFTP server.

We recommend that you use 3CDaemon or TFTPD32 as a TFTP server. 3CDaemo and TFTPD32 are free applications for Windows. You can download 3CDaemon online: http://www.oldversion.com/3Com-Daemon.html and TFTPD32 online: http://tftpd32.jounin.net/.

For more information on how to configure FTP and HTTP servers, refer to Configuring an FTP Server on page 63 and Configuring an HTTP Server on page 67.

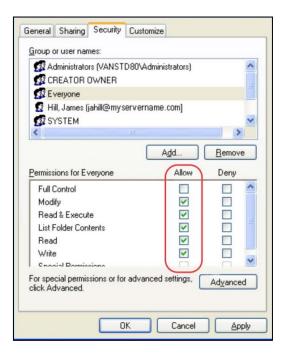
## **Preparing a Root Directory**

#### To prepare a root directory:

- 1. Create a TFTP root directory on the local system.
- 2. Place configuration files to this root directory.
- 3. Set security permissions for the TFTP directory folder.

You need to define a user or a group name, and set the permissions: read, write or modify. Security permissions vary by organizations.

An example of configuration on the Windows platform is shown as below:

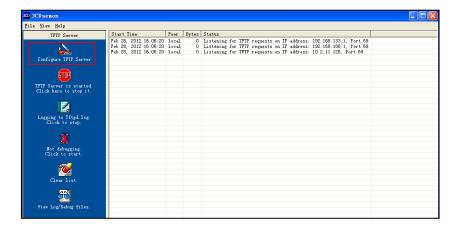


# **Configuring a TFTP Server**

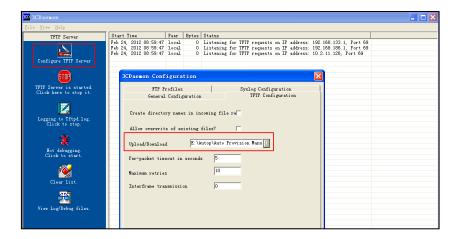
If you have a 3CDaemon application installed on your local system, use it directly. Otherwise, download and install it.

#### To configure a TFTP server:

 Double click 3CDaemon.exe to start the application. A configuration page is shown as below:



2. Select **Configure TFTP Server**. Click the button to locate the TFTP root directory from your local system:



3. Click the **Confirm** button to finish configuring the TFTP server.

The server URL "tftp://IP/" (Here "IP" means the IP address of the provisioning server, for example, "tftp://192.168.1.100/") is where the IP phone downloads configuration files from.

# **Obtaining the Provisioning Server Address**

Yealink IP phones support obtaining the provisioning server address in the following ways:

- Zero Touch
- Plug and Play (PnP) Server
- DHCP Options
- Phone Flash
- Configuring Wildcard of the Provisioning Server URL

The priority of obtaining the provisioning server address is as follows: Zero Touch-->PnP Server-->DHCP Options (Custom option-->option 66-->option 43) -->Phone Flash.

The following sections detail the process of each way (take the SIP-T28P IP phone as an example).

## **Zero Touch**

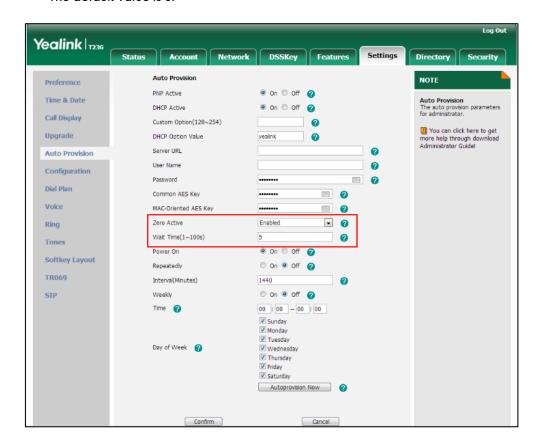
Zero Touch allows you to configure the network parameters and provisioning server address via phone user interface during startup. This feature is helpful when there is a system failure on the IP phone. To use Zero Touch, make sure this feature is enabled.

To configure Zero Touch via web user interface:

- 1. Click on **Settings**->**Auto Provision**.
- 2. Select Enabled from the pull-down list of Zero Active.

3. Configure the wait time in the Wait Time (0~100s) field.

The default value is 5.



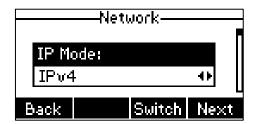
4. Click **Confirm** to accept the change.

When Zero Touch is enabled, there will be a configuration wizard during startup:



Press the **OK** soft key.

The network parameters are configurable via phone user interface:



Press the **Next** soft key after finishing network settings.

Configure the provisioning server address, authentication user name (optional) and password (optional) in the **Auto Provision** screen.

An example of screenshot is shown as below:

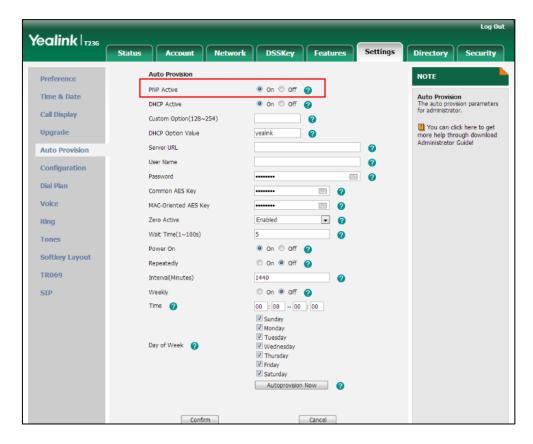


# Plug and Play (PnP) Server

Yealink IP phones support obtaining the provisioning server address from the PnP server. The IP phone broadcasts the PnP SUBSCRIBE message to obtain the provisioning server address during startup. To use Plug and Play, make sure this feature is enabled.

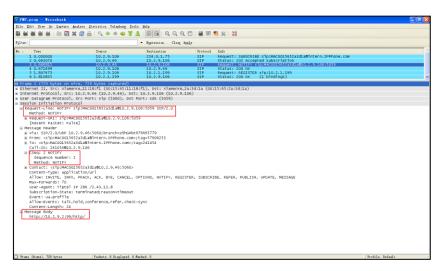
#### To configure PnP via web user interface:

- 1. Click on Settings->Auto Provision.
- 2. Mark the On radio box in the PNP Active field.



3. Click Confirm to accept the change.

Any PnP server activated in the network responses with a **SIP NOTIFY** message, and an address of the provisioning server is contained in the message body. Then the IP phone can connect to the provisioning server and perform the auto provisioning process.



# **DHCP Options**

Yealink IP phones support obtaining the provisioning server address by detecting DHCP options.

The phone will automatically detect the option 66 and option 43 for obtaining the provisioning server address. DHCP option 66 is used to identify the TFTP server. DHCP option 43 is a vendor-specific option, which is used to transfer the vendor-specific information. You can configure the phone to obtain the provisioning server address via a custom DHCP option. To obtain the provisioning server address via a custom DHCP option, make sure the DHCP option is properly configured on the phone.

The custom DHCP option must be in accordance with the one defined in the DHCP server. For more information on how to configure a DHCP server, refer to Configuring a DHCP Server on page 71.

To configure the DHCP option via web user interface:

- 1. Click on Settings->Auto Provision.
- 2. Mark the On radio box in the DHCP Active field.
- 3. Enter the desired value in the Custom Option (128~254) field.
- 4. Enter the desired value in the DHCP Option Value field.

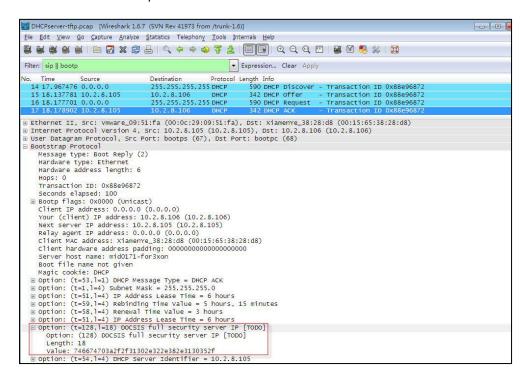
Yealink | T236 Status Account Network DSSKey Features Auto Provision NOTE Preference PNP Active Time & Date DHCP Active On ○ Off 
 ② Call Display Custom Option(128~254) 0 2 You can click here to get more help through download Administrator Guide! Upgrade DHCP Option Value 0 Server URL 0 Auto Provision User Name 0 Configuration Password 0 Dial Plan Common AES Key illa: Voice MAC-Oriented AES Key 1111 · ? Zero Active Enabled Ring Wait Time(1~100s) ● On ○ Off ? Power On **Softkey Layout** On Off (2) Repeatedly TR069 On Off 00 : 00 -- 00 : 00 Time 🕜 Sunday ✓ Monday Tuesday Day of Week 🕜 Wednesday ✓ Thursday✓ Friday Saturday Autoprovision Now

The default value is yealink.

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

The phone will broadcast DHCP request with DHCP options for obtaining the provisioning server address. The provisioning server address will be found in the received DHCP response message.

The following figure shows the example messages of obtaining the TFTP server address from a custom DHCP option:



Right click the root node of the custom option (e.g., option 128) shown on the above figure, and select **Copy->Bytes->Printable Text Only**. Paste the copied text in your favorite text editor to check the address, for example, tftp://192.168.1.100/.

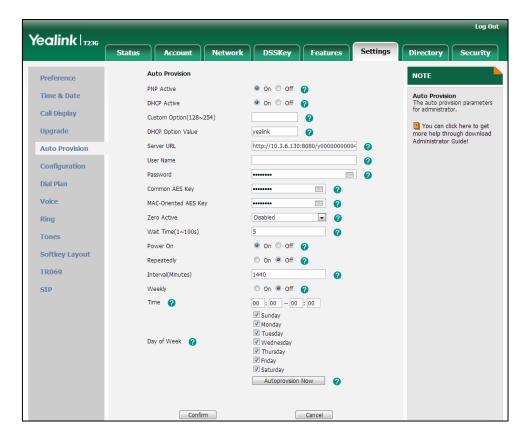
### **Phone Flash**

Yealink IP phones support obtaining the provisioning server address from the IP phone flash. To obtain the provisioning server address by reading the IP phone flash, make sure the configuration is set properly.

To configure the IP phone Flash via web user interface:

1. Click on **Settings**->**Auto Provision**.

Enter the URL, user name and password of the provisioning server in the Server
 URL, User Name and Password fields (the user name and password are optional).



Click Confirm to accept the change.

### **Configuring Wildcard of the Provisioning Server URL**

Normally, many phone models may be deployed in your environment. To deploy many phone models using a unified provisioning server, it is convenient for the administrator to configure a unified provisioning server URL for different phone models. On the provisioning server, many directories need to be configured for different phone models, each with a unique directory name. Yealink IP phones support the following wildcards in the provisioning server URL:

- **\$PN**: it is used to identify the directory name of the provisioning server directory where the corresponding configuration files are located
- \$MAC: it is used to identify the MAC address of the IP phone.

The parameter "auto\_provision.url\_wildcard.pn" is used to configure the directory name the configuration files located. For more information on the parameter, refer to Description of Configuration Parameters in CFG Files on page 81.

When the IP phone obtains a provisioning server URL containing the wildcard \$PN, it automatically replaces the character \$PN with the value of the parameter "auto\_provision.url\_wildcard.pn" configured on the IP phone. When the IP phone is triggered to perform auto provisioning, it will request to download the configuration files

from the identified directory on the provisioning server.

The value of the parameter "auto\_provision.url\_wildcard.pn" must be configured in accordance with the directory name of the provisioning server directory where the configuration files of the IP phones are located.

The following example assists in explaining the wildcard feature:

You want to deploy SIP-T23G IP phones in your environment. IP phones are configured to obtain the provisioning server address via DHCP options. The following details how to deploy the SIP-T23G IP phones using wildcard feature.

- 1. Create two directories on the root directory of provisioning server.
- 2. Configure the directory name of this directory to be "T23G".
- 3. Place the associated configuration files to the directory created above.
- **4.** Configure the provisioning server URL on the DHCP server as: tftp://192.168.1.100/\$PN.
- 5. Configure the value of the parameter "auto provision.url wildcard.pn".

The default value of the parameter "auto\_provision.url\_wildcard.pn" is "T23G" for the SIP-T23G IP phones. If the default value is different from the directory name, you need to configure the value of this parameter to be the directory name on the IP phones in advance.

During startup, IP phones obtain the provisioning server URL "tftp://192.168.1.100/\$PN" via DHCP option, and then replace the character "\$PN" in the URL with "T23G" for the SIP-T23G IP phones. When performing auto provisioning, the SIP-T23G IP phones request to download configuration files (y00000000044.cfg and <MAC>.cfg files ) from the provisioning server address "tftp://192.168.1.100/T23G".

If the URL is configured as "tftp://192.168.1.100/\$PN/\$MAC.cfg" on the DHCP server, the SIP-T23G IP phones will replace the characters "\$PN" with "T23G", and replace the characters "\$MAC" with their MAC addresses. For example, the MAC address of one SIP-T23G IP phone is 00156574B150. When performing auto provisioning, the IP phone will only request to download the 00156574B150.cfg file from the provisioning server address "tftp://192.168.1.100/T23G".

# **Configuring the Update Mode**

The update mode is used to set the desired time to trigger the IP phone to perform the auto provisioning process. This chapter introduces the following update modes in detail:

- Power On
- Repeatedly
- Weekly
- Auto Provision Now
- Multi-mode Mixed
- SIP NOTIFY Message
- Auto Provisioning via Activation Code

When there is an active call on the IP phone during auto provisioning, the auto provisioning process will detect the call status every 30 seconds. If the call is released within 2 hours, the auto provisioning process will be performed normally. Otherwise, the process will end, due to timeout.

### **Power On**

The IP phone performs the auto provisioning process when the IP phone is powered on.

To activate the Power On mode via a web user interface:

1. Click on **Settings**->**Auto Provision**.

Log Out Yealink 1236 Auto Provision NOTE Preference On 
 Off PNP Active Auto Provision
The auto provision parameters
for administrator. on off Call Display Custom Option(128~254) 0 2 You can click here to get more help through download Administrator Guide! Upgrade DHCP Option Value Server URL Auto Provision User Name 2 Configuration Password = 0 Dial Plan Common AES Key Oliv 0 Voice MAC-Oriented AES Key ----0 · 0 Ring Wait Time(1~100s) Tones On Off Power On **Softkey Layout** On Off 🕜 Repeatedly TR069 Interval(Minutes) 1440 2 Weekly On Off SIP 00 : 00 -- 00 : 00 ✓ Sunday ✓ Monday

✓ Tuesday Day of Week 🕜 ✓ Wednesday✓ Thursday ▼ Friday Autoprovision Now

2. Mark the On radio box in the Power On field.

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

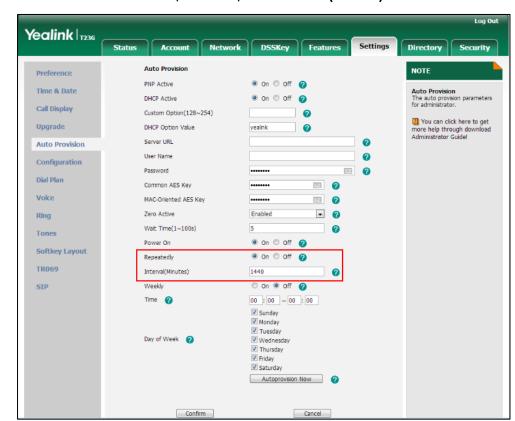
# Repeatedly

The IP phone performs the auto provisioning process at regular intervals. You can configure the interval for the Repeatedly mode. The default interval is 1440 minutes.

Cancel

To activate the Repeatedly mode via web user interface:

- 1. Click on Settings->Auto Provision.
- 2. Mark the On radio box in the Repeatedly field.



3. Enter the interval time (in minutes) in the Interval (Minutes) field.

4. Click Confirm to accept the change.

# Weekly

The IP phone performs the auto provisioning process at the fixed time every week. You can configure what time of the day and which day of the week to trigger the IP phone to perform the auto provisioning process. For example, you can configure the IP phone to check and update new configuration between 2 to 3 o'clock every Friday and Sunday.

#### To activate the Weekly mode via web user interface:

- 1. Click on **Settings**->**Auto Provision**.
- 2. Mark the On radio box in the Weekly field.
- 3. Enter the desired time in the **Time** field.

Yealink 1236 Auto Provision NOTE Preference ● On ○ Off PNP Active Time & Date On Off Call Display Custom Option(128~254) 0 2 You can click here to get more help through download Administrator Guide! Upgrade DHCP Option Value 0 Server URL Auto Provision User Name 2 Configuration Password === Dial Plan Çilki 0 Voice MAC-Oriented AES Key === 0 • 0 Ring Wait Time(1~100s) ● On ○ Off ? Power On **S**oftkey Layout On Off Repeatedly TR069 Interval(Minutes) 1440 SIP 00 : 00 -- 00 : 00 Sunday ✓ Monday Day of Week 🕜 ✓ Wednesday✓ Thursday✓ Friday Saturday Autoprovision Now

4. Mark one or more checkboxes in the **Day of Week** field.

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

### **Auto Provision Now**

You can use Auto Provision Now mode to manually trigger the IP phone to perform the auto provisioning process immediately.

To use the Auto Provision Now mode via web user interface:

1. Click on **Settings**->**Auto Provision**.

#### Yealink | T236 Network DSSKey Features Auto Provision NOTE Preference PNP Active Time & Date Call Display Custom Option(128~254) You can click here to get more help through download Administrator Guide! Upgrade DHCP Option Value Server URI Auto Provision User Name 2 Configuration Password Dial Plan Common AES Key 2 Voice ----0 Ring Tones Power On On Off ● On ○ Off 🕢 Repeatedly TR069 1440 Interval(Minutes) On Off Weekly SIP 00 : 00 -- 00 : 00 ✓ Sunday Tuesday Day of Week ✓ Wednesday✓ Thursday ✓ Friday Saturda Autoprovision Now

#### 2. Click Autoprovision Now.

The IP phone will perform the auto provisioning process immediately.

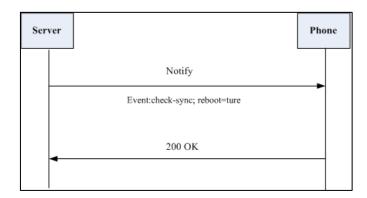
### **Multi-mode Mixed**

You can activate more than one update mode for auto provisioning. For example, you can activate the "Power On" and "Repeatedly" modes simultaneously. The IP phone will perform the auto provisioning process when it is powered on and at a specified interval.

# **SIP NOTIFY Message**

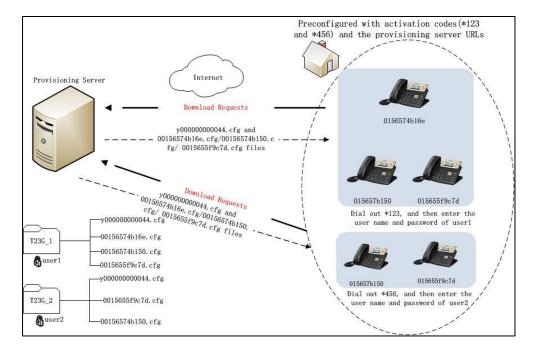
The IP phone will perform the auto provisioning process when receiving a SIP NOTIFY message which contains the header "Event: check-sync". If the header of the SIP NOTIFY message contains an additional string "reboot=true", the IP phone will reboot immediately and then perform the auto provisioning process. This update mode requires server support.

The following figure shows the message flow:



# **Auto Provisioning via Activation Code**

In addition to the updating modes introduced above, users can trigger IP phones to perform auto provisioning by dialing an activation code. To use this method, the activation code and the provisioning server address need to be pre-configured on the IP phones. This method is normally used for IP phones distributed by retail sales. It has the advantage that the IP phones do not need to be handled (e.g., registering account) before sending them to end-users.



The following lists the processes for triggering auto provisioning via activation code:

- 1. Create multiple directories (e.g., two directories) on the provisioning server.
- 2. Store a common CFG file and multiple <MAC>.cfg files to each directory on the provisioning server.
- Configure a user name and password for each directory.
   The user name and password provides a means of conveniently partitioning the

configuration files for different IP phones. To access the specified directory, you need to provide the correct user name and password configured for the directory.

4. Configure unique activation codes and the provisioning server URLs on IP phones.

The activation code can be numeric string and special characters "\* #" with a maximum of 32 characters.

The following are example configurations in the configuration file for IP phones:

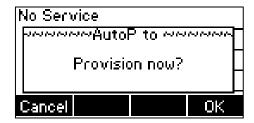
autoprovision.1.code = \*123

autoprovision.1.url = tftp://192.168.1.30/T23G\_1/

autoprovision.2.code = \*456

autoprovision.2.url = tftp://192.168.1.30/T23G 2/

- **5.** Send the IP phone, specified activation code and associated user name and password to each end-user.
- 6. Set up the IP phone, and then input the activation code after the phone startup.
  The LCD screen will prompt the following dialog box:



7. Press the **OK** soft key to trigger the IP phone to perform auto provisioning.

The LCD screen will prompt the following input box:



**8.** Enter the user name and password in the **User Name** and **Password** field respectively.

The entered user name and password must correspond to the directory where the configuration files of the IP phone are located. If you enter invalid user name or password, the LCD screen will prompt the message "Wrong user name or password!". The prompt message will disappear in two seconds, and the LCD screen will return to the idle screen. You need to input the activation code again to trigger the auto provisioning process.

The IP phone downloads the Common CFG file and the corresponding <MAC>.cfg files from the provisioning server to complete phone configurations.

The entered user name and password will be saved to the IP phone for next auto provisioning via activation code and auto provisioning via update modes.

The LCD screen will not prompt for user name and password if the provisioning server does not require authentication, or the user name and password are already saved on the IP phone.

The following parameters are used to configure the auto provisioning via activation code method (X ranges from 1 to 50):

#### #Configure the auto provisioning name.

autoprovision.X.name

#### #Configure the activation code.

autoprovision.X.code

#### #Configure the URL of the provisioning server.

autoprovision.X.url

#### #Configure the username and password for downloading configuration files.

autoprovision.X.user

autoprovision.X.password

# **Downloading and Verifying Configurations**

# **Downloading Configuration Files**

After obtaining the provisioning server address in one of the ways introduced above, the phone will request to download the configuration files from the provisioning server when it is triggered to perform auto provisioning. During the auto provisioning process, the IP phone will try to download the Common CFG file firstly, and then try to download the MAC-Oriented CFG file from the provisioning server. If the access URLs of the resource files have been specified in the configuration files, the phone will try to download the resource files.

### **Resolving and Updating Configurations**

After downloading, the phone resolves the configuration files and resource files (if specified in the configuration files), and then updates the configurations and resource files to the phone flash. Generally, updated configurations will automatically take effect after the auto provisioning process is completed. For update of some specific configurations which require a reboot before taking effect, for example, network configurations, the IP phone will reboot to make the configurations effective after the auto provisioning process is completed.

The IP phone calculates the MD5 values of the downloaded files before updating them. If the MD5 values of the Common and MAC-Oriented configuration files are the same as those of the last downloaded configuration files, this means these two configuration files on the provisioning server are not changed. The IP phone will complete the auto provisioning without repeated update. This is used to avoid unnecessary restart and impact of phone use. On the contrary, the IP phone will update configurations.

The latest values to be applied to the IP phone are the values that take effect.

The phone only reboots when there is at least a specific configuration requiring a reboot after auto provisioning. If you want to force the IP phone to perform a reboot after auto provisioning, you can configure "auto\_provision.reboot\_force.enable = 1" in the configuration file.

For more information on the specific configurations which require a reboot during auto provisioning and the parameter "auto\_provision.reboot\_force.enable", refer to Description of Configuration Parameters in CFG Files on page 81.

If configuration files have been AES encrypted, the IP phone will uses the Common AES key to decrypt the Common CFG file and the MAC-Oriented AES key to decrypt the <MAC>.cfg file after downloading the configuration files. For more information on how the IP phone decrypts configuration files, refer to *Yealink Configuration Encryption Tool User Guide*.

# Downloading and Updating <MAC>-local.cfg File

You can configure the IP phone whether to download the <MAC>-local.cfg file from the provisioning server, and update configurations in the <MAC>-local.cfg file to protect personalized settings after auto provisioning.

If the IP phone is configured to download the <MAC>-local.cfg file from the provisioning server, it will download the <MAC>-local.cfg file after downloading the Common CFG file and the MAC-Oriented CFG file.

If the IP phone is configured to protect personalized settings, it will update configurations in the <MAC>-local.cfg file. The IP Phone updates configuration files during auto provisioning in sequence: Common>MAC-Oriented>MAC-local. So when configuration items in the <MAC>-local.cfg file are duplicated with the ones in the downloaded Common CFG file or the MAC-Oriented CFG file, the settings in the <MAC>-local.cfg file will take effect.

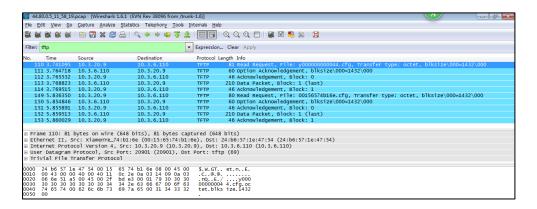
For more information on how to configure the IP phone, refer to Scenario A Protect personalized configuration settings on page 50.

# **Verifying Configurations**

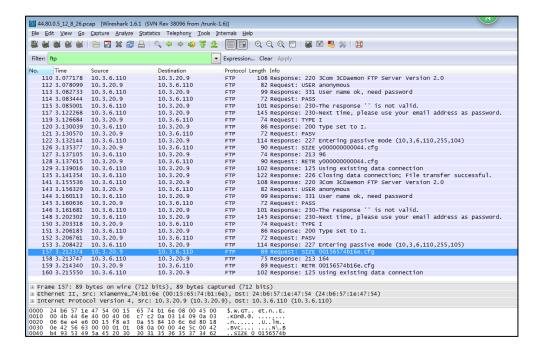
After auto provisioning, you can then verify the update via phone user interface or web user interface of the phone. For more information, refer to Yealink phone-specific user guide.

During the auto provisioning process, you can monitor the downloading requests and response messages by a WinPcap tool. The following shows some examples.

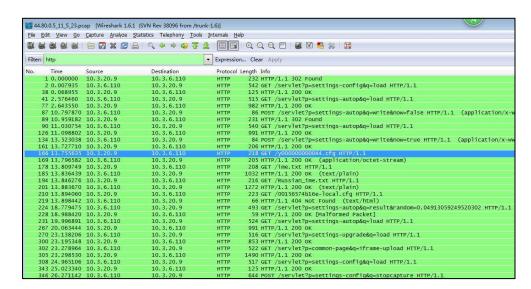
**Example1:** Yealink SIPT23G IP phone downloads configuration files from the TFTP server.



Example 2: Yealink SIP-T23G IP phone downloads configuration files from the FTP server.



**Example 3:** Yealink SIP-T23G IP phone downloads configuration files from the HTTP server.



### **Specific Scenarios**

Generally, the administrator deploys phones in batch via auto provisioning, yet some users would like to remain the personalized settings (e.g., ringtones, dial plan and DSS keys), after auto provisioning. These specific scenarios are applicable to SIP-T23 (P/G) IP phones running firmware version X.80.0.5 or later. The following demonstrated specific scenarios are taking SIP-T23G IP phones as example for reference.

Yealink IP phones support FTP, TFTP, HTTP and HTTPS protocols for uploading the MAC-local CFG file. This section takes the TFTP protocol as an example. Before performing the following, make sure the provisioning server supports uploading.

If you are using the HTTP(S) server, you can specify the way the IP phone uploads the MAC-local CFG file to the provisioning server. It is determined by the value of the parameter "auto\_provision.custom.upload\_method". For more information on description of this parameter, refer to Description of Configuration Parameters in CFG Files on page 81.

### **Configuration Parameters**

The following table lists the configuration parameters used to determine the phone behavior for protecting personalized settings:

Parameters	Permitted Values	Default
auto_provision.custom.protect	0 or 1	0

#### Description:

Enables or disables the IP phone to protect personalized settings after auto provisioning.

**0**-Disabled

1-Enabled

If it is set to 1 (Enabled), personalized settings configured via web or phone user interface will be protected and remained after auto provisioning.

auto_provision.custom.sync	0 or 1	0

#### Description:

Enables or disables the IP phone to periodically (every 5 minutes) upload the <MAC>-local.cfg file to the provisioning server, and download the <MAC>-local.cfg file from the provisioning server during auto provisioning.

**0**-Disabled

1-Enabled

If it is set to 1 (Enabled), the IP phone will periodically upload the <MAC>-local.cfg file to

Parameters F	Permitted Values	Default
--------------	------------------	---------

the provisioning server to back up this file. During auto provisioning, the IP phone will download the <MAC>-local.cfg file from the provisioning server to override the one stored on the phone.

If it is set to 0 (Disabled), the IP phone will not upload the <MAC>-local.cfg file to the provisioning server. During auto provisioning, the IP phone will not download the <MAC>-local.cfg file from the provisioning server.

auto_provision.custom.upload_method	0 or 1	0
		I

#### Description:

Configures the way the IP phone uploads the <MAC>-local.cfg file to the provisioning server (for HTTP/HTTPS server only).

**0**-PUT

1-POST

**Note**: It works only if the value of the parameter "auto\_provision.custom.sync" is set to 1 (Enabled).

For more information on how to configure these parameters in different scenarios, refer to the following introduced scenarios.

### **Scenario A Protect personalized configuration settings**

The administrator wishes to upgrade firmware from the old version to the latest version. Meanwhile, protect personalized settings after auto provisioning and upgrade.

#### **Scenario Conditions:**

- SIP-T23G IP phone current firmware version: 44.80.0.1. This firmware supports
  protecting personalized settings and generating a <MAC>-local.cfg file.
- SIP-T23G IP phone target firmware version: 44.80.0.5. This firmware supports support protecting personalized settings and generating a <MAC>-local.cfg file.
- SIP-T23G IP phone MAC: 00156574b150
- Provisioning server URL: tftp://192.168.1.211
- Place the target firmware to the root directory of the provisioning server.

The old firmware version supports protecting personalized settings and generating a <MAC>-local.cfg file. To protect personalized settings after auto provisioning and upgrade, you need to configure the value of the parameter "auto\_provision.custom.protect" to 1 in the configuration file.

#### Do one of the following operations:

#### Scenario Operations I:

1. Add/Edit the following parameters in the y00000000044.cfg file or 00156574b150.cfg file you want the IP phone to download:

```
auto_provision.custom.protect=1
```

auto provision.custom.sync=1

#### #Configure the access URL of the firmware file.

firmware.url = tftp://192.168.1.211/44.80.0.5.rom

Trigger the IP phone to perform the auto provisioning process. For more information
on how to trigger auto provisioning process, refer to Configuring the Update Mode
on Page 37.

During auto provisioning, the IP phone first downloads the y00000000044.cfg file, and then downloads firmware from the root directory of the provisioning server.

The IP phone reboots to complete firmware upgrade, and then starts auto provisioning process again which is triggered by phone reboot (the power on mode is enabled by default). It downloads the y000000000044.cfg, 00156574b150.cfg and the 00156574b150-local.cfg file in sequence from the provisioning server, and then updates configurations in these downloaded configuration files orderly to the IP phone system. The IP phone starts up successfully, and the personalized settings in the 00156574b150-local.cfg file are remained after auto provisioning.

When a user customizes feature configurations via web/phone user interface, the IP

phone will save the personalized configuration settings to the 00156574b150-local.cfg file on the IP phone, and then periodically (every 5 minutes) upload this file to the provisioning server.

If a configuration item is both in the downloaded MAC-local.cfg file and Common CFG file/ MAC-Oriented CFG file, setting of the configuration item in the MAC-local CFG file will be written and saved to the IP phone system.

#### Scenario Operations II:

1. Add/Edit the following parameters in the y000000000044.cfg file or 00156574b150.cfg file you want the IP phone to download:

```
auto\_provision.custom.protect = 1
```

auto\_provision.custom.sync=0

#Configure the access URL of the firmware file.

firmware.url = tftp://192.168.1.211/44.80.0.5.rom

Trigger the IP phone to perform the auto provisioning process. For more information
on how to trigger auto provisioning process, refer to Configuring the Update Mode
on Page 37.

During auto provisioning, the IP phone first downloads the y00000000044.cfg file, and then downloads firmware from the root directory of the provisioning server.

The IP phone reboots to complete firmware upgrade, and then starts auto provisioning process again which is triggered by phone reboot (the power on mode is enabled by default). It downloads the y000000000044.cfg and 00156574b150.cfg files in sequence, and then updates configurations in the downloaded configuration files orderly to the IP phone system. As the value of the parameter "auto\_provision.custom.protect" is set to 1, configurations in the 00156574b150-local.cfg file saved on the IP phone are also updated.

The IP phone starts up successfully, and personalized settings are remained after auto provisioning. When a user customizes feature configurations via web/phone user interface, the IP phone will save the personalized settings to the 00156574b150-local.cfg file on the IP phone only.

In this scenario, the IP phone will not upload the MAC-local.cfg file to provisioning server and request to download the MAC-local.cfg file from provisioning server during auto provisioning.

If a configuration item is both in the MAC-local.cfg file on the IP phone and Common CFG file/ MAC-Oriented CFG file downloaded from auto provisioning server, setting of the configuration item in the MAC-local CFG file will be written and saved to the IP phone system.

If value of the parameter "auto\_provision.custom.protect" is set to 0, the personalized settings in the 00156574b150-local.cfg file will be overridden after auto provisioning, no

matter what the value of the parameter "auto\_provision.custom.sync" is.

If a configuration is modified via both web user interface and phone user interface, the later modification will prevail.

For more information on the flowchart of protect personalized configuration settings, refer to Auto Provisioning Flowchart (Protect personalized configuration settings) on page 80.

### Scenario B Clear personalized configuration settings

The administrator or user wishes to clear personalized configuration settings via phone user interface.

#### **Scenario Conditions:**

- SIP-T23G IP phone MAC: 00156574b150
- The current firmware of the phone is 44.80.0.5 or later.
- Provisioning server URL: tftp://192.168.1.211
- auto\_provision.custom.protect = 1

The **Reset Local Configuration** option on the web/phone user interface is available only if the value of the parameter "auto provision.custom.protect" was set to 1.

If the value of the parameter "auto\_provision.custom.sync" was set to 1, the configurations in the 00156574b150-local.cfg file on the provisioning server will be also cleared after resetting personalized settings of the phone.

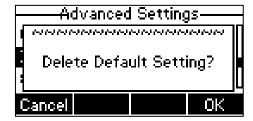
#### **Scenario Operations:**

You can clear the personalized settings of the phone via the phone or web user interface.

To clear personalized configuration settings via phone user interface:

- 1. Press Menu->Settings->Advanced Settings (password: admin).
- 2. Select Reset Local Configuration.

The LCD screen prompts "Delete Default Setting?".



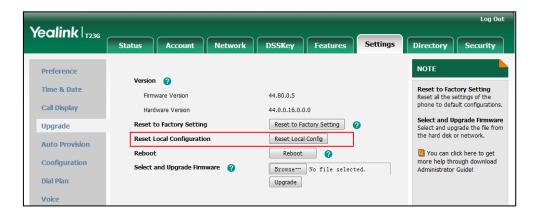
3. Press the **OK** soft key.

The LCD screen prompts "Deleted successfully".

#### To clear personalized configuration settings via web user interface:

- 1. Click on Settings->Upgrade.
- 2. Click Reset Local Config.

The web user interface prompts "Are you sure to reset the local configuration?".



#### 3. Click OK.

Configurations in the 00156574b150-local.cfg file saved on the phone will be cleared. If the IP phone is triggered to perform auto provisioning after resetting local configuration file, it will download the configuration files from the provisioning server and update the configurations to the phone system. As there is no configuration in the 00156574b150-local.cfg file, configurations in the y000000000044.cfg/<00156574b150>.cfg file will take effect.

### Scenario C Protect personalized settings after factory reset

The IP phone requires factory reset when it has a breakdown, but the user wishes to remain personalized settings of the phone after factory reset.

#### **Scenario Conditions:**

- SIP-T23G IP phone MAC: 00156574b150
- Provisioning server URL: tftp://192.168.1.211
- auto\_provision.custom.sync = 1
- auto\_provision.custom.protect=1

As the parameter "auto\_provision.custom.sync" was set to 1, the 00156574b150-local.cfg file on the IP phone will be uploaded to the provisioning server at tftp://192.168.1.211.

#### **Scenario Operations:**

You can protect the personalized settings of the phone after factory reset via phone or web user interface.

#### To reset the phone to factory via phone user interface:

- 1. Press Menu->Settings->Advanced Settings (password: admin).
- 2. Select Reset to Factory.

The LCD screen prompts "Reset To Factory Setting?".



#### 3. Press the **OK** soft key.

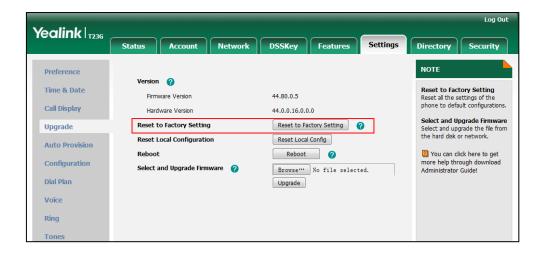
The LCD screen prompts "Resetting to factory please Wait...".

The LCD screen prompts "Welcome Initializing...please wait".

#### To reset the phone to factory via web user interface:

- 1. Click on Settings->Upgrade.
- 2. Click **Reset to Factory Setting** to reset the phone.

The web user interface prompts "Do you want to reset to factory?".



#### 3. Click OK.

After startup, all configurations of the phone will be reset to factory defaults. Configurations in the 00156574b150-local.cfg file saved on the IP phone will also be cleared. But configurations in the 00156574b150-local.cfg file stored on the provisioning server (tftp://192.168.1.211) will not be cleared after reset.

#### To retrieve personalized settings of the phone after factory reset:

- Set the values of the parameters "auto\_provision.custom.sync" and "auto\_provision.custom.protect" to be 1 in the configuration file (y000000000044.cfg or 00156574b150.cfg).
- 2. Trigger the phone to perform the auto provisioning process.

The IP phone will download the 00156574b150-local.cfg file from the provisioning server, and then update configurations in it during auto provisioning. As a result, the personalized settings of the phone are retrieved after factory reset.

### Scenario D Import or export the local configuration file

The administrator or user can export the local configuration file to check the personalized settings of the phone configured by the user, or import the local configuration file to configure or change settings of the phone.

#### **Scenario Conditions:**

- SIP-T23G IP phone MAC: 00156574b150
- The current firmware of the phone is 44.80.0.5 or later.
- Provisioning server URL: tftp://192.168.1.211

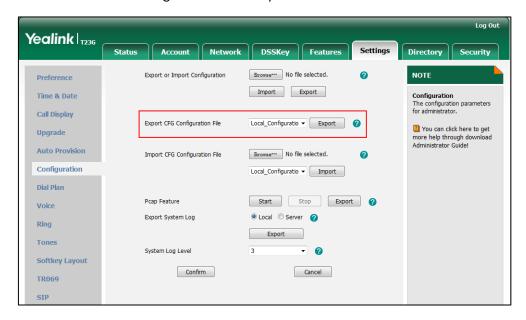
As the personalized settings of the base station cannot be changed via auto provisioning when the value of the parameter "auto\_provision.custom.protect" is set to 1, it is cautious to change the settings in the <MAC>-local.cfg file before importing it.

#### **Scenario Operations:**

To export local configuration file via web user interface:

1. Click on **Settings**->**Configuration**.

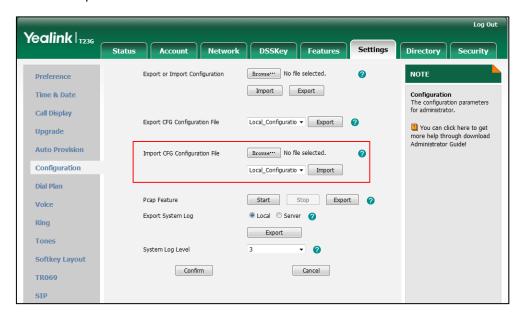
2. Select Local\_Configuration from the pull down list of Export CFG Configuration File field, and then click Export to open file download window, and then save the 00156574b150-local.cfg file to the local system.



The administrator or user can edit the 00156574b150-local.cfg file after exporting.

#### To import local configuration file via web user interface:

- 1. Click on **Settings**->**Configuration**.
- In the Import CFG Configuration File field, click Browse to locate the 00156574b150-local.cfg file from your local system and select Local\_Configuration from the pull down list.



3. Click Import.

The existing local configuration file will be overridden by the imported one after importing. The configurations in the importing 00156574b150-local.cfg file will be saved to the phone flash and take effect.

If the administrator or user deletes the configurations in the 00156574b150-local.cfg file and then import the file to the phone, the IP phone will remain the original configurations. But the configurations can be change via next auto provisioning.

If the value of the parameter "auto\_provision.custom.sync" is set to 1, and the 00156574b150-local.cfg file is successfully imported, the imported 00156574b150-local.cfg file will be uploaded to the provisioning server and overrides the existing one on the server.

# **Troubleshooting**

This chapter provides general troubleshooting information to help you solve problems you might encounter when deploying phones.

If you require additional information or assistance with the deployment, contact your system administrator.

#### Why does the IP phone fail to download configuration files?

- Ensure that auto provisioning feature is configured properly.
- Ensure that the provisioning server and network are reachable.
- Ensure that authentication credentials configured on the IP phone are correct.
- Ensure that configuration files exist on the provisioning server.

#### Why does the provisioning server return HTTP 404?

- Ensure that the provisioning server is properly set up.
- Ensure that the access URL is correct.
- Ensure that the requested files exist on the provisioning server.

#### Why does the IP phone display "Network Unavailable"?

- Ensure that the Ethernet cable is plugged into the Internet port on the IP phone and the Ethernet cable is not loose.
- Ensure that the switch or hub in your network is operational.
- Ensure that the configurations of network are properly set in the configuration files.

# Why is the permission denied when uploading files to the root directory of the FTP server?

- Ensure that the complete path to the root directory of the FTP server is authorized.
- Check security permissions on the root directory of the FTP server, if necessary, change the permissions.

#### Why doesn't the IP phone obtain the IP address from the DHCP server?

- Ensure that settings are correct on the DHCP server.
- Ensure that the IP phone is configured to obtain the IP address from the DHCP server.

#### Why doesn't the IP phone download the ring tone?

- Ensure that the file format of the ring tone is \*.wav.
- Ensure that the size of the ring tone file is no larger than that the IP phone supports.
- Ensure that the properties of the ring tone for the IP phone are correct.
- Ensure that the network is available and the root directory is right for downloading.
- Ensure that the ring tone file exists on the provisioning server.

#### Why doesn't the IP phone update configurations?

- Ensure that the configuration files are different from the last ones.
- Ensure that the IP phone has downloaded the configuration files.
- Ensure that the parameters are correctly set in the configuration files.

# **Glossary**

**MAC Address:** A Media Access Control address (MAC address) is a unique identifier assigned to network interfaces for communications on the physical network segment.

MD5: The MD5 Message-Digest Algorithm is a widely used cryptographic hash function that produces a 128-bit (16-byte) hash value.

**DHCP:** Dynamic Host Configuration Protocol (DHCP) is a network configuration protocol for hosts on Internet Protocol (IP) networks. Computers that are connected to IP networks must be configured before they can communicate with other hosts.

**FTP:** File Transfer Protocol (FTP) is a standard network protocol used to transfer files from one host to another host over a TCP-based network, such as the Internet. It is often used to upload web pages and other documents from a private development machine to a public web-hosting server.

**HTTP:** The Hypertext Transfer Protocol (HTTP) is an application protocol for distributed, collaborative, hypermedia information systems. HTTP is the foundation of data communication for the World Wide Web.

**HTTPS:** Hypertext Transfer Protocol Secure (HTTPS) is a combination of Hypertext Transfer Protocol (HTTP) with SSL/TLS protocol. It provides encrypted communication and secure identification of a network web server.

**TFTP:** Trivial File Transfer Protocol (TFTP) is a simple protocol to transfer files. It has been implemented on top of the User Datagram Protocol (UDP) using port number 69.

**AES:** Advanced Encryption Standard (AES) is a specification for the encryption of electronic data.

**URL:** A uniform resource locator or universal resource locator (URL) is a specific character string that constitutes a reference to an Internet resource.

**XML:** Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.

# **Appendix**

# **Configuring an FTP Server**

Wftpd and FileZilla are free FTP application softwares for Windows. This section mainly provides instructions on how to configure an FTP server using wftpd for Windows. You can download wftpd online: http://www.wftpd.com/products/products.html or FileZilla online: https://filezilla-project.org.

We recommend that you use vsftpd as a FTP server for Linux platform if required.

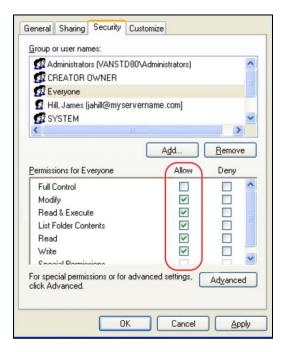
### **Preparing a Root Directory**

#### To prepare a root directory:

- 1. Create an FTP root directory on the local system.
- 2. Place the configuration files to this root directory.
- 3. Set the security permissions for the FTP directory folder.

You need to define a user or group name, and set the permissions: read, write, and modify. Security permissions vary by organizations.

An example of configuration on the Windows platform is shown as below:

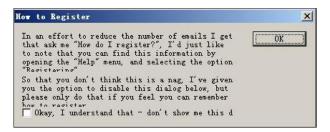


### **Configuring an FTP Server**

#### To configure a wftpd server:

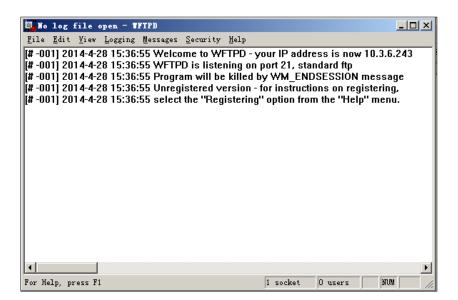
- Download the compressed file of the wftpd application to your local directory and extract it.
- 2. Double click the WFTPD.EXE.

The dialogue box of how to register is shown as below:

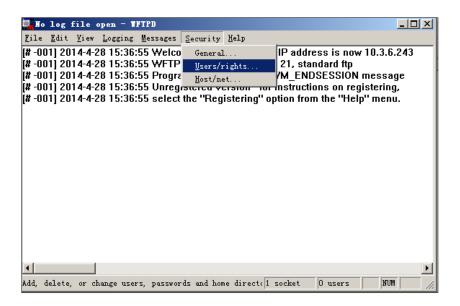


3. Check the check box and click **OK** in the pop-up dialogue box.

The log file of the wftpd application is shown as below:



4. Click Security->Users/rights.



5. Click New User.



6. Enter a user name (e.g., test1) in the **User Name** field and then click **OK**.



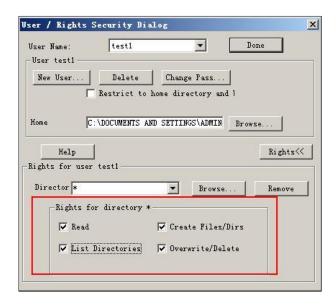
7. Enter the password of the user (e.g., test1) created above in the **New Password** and **Verify Password** fields respectively, and then click **OK**.



8. Click **Browse** to locate the FTP root directory from your local system.



- Click Rights>> and assign the desired permission for the user (e.g., test1) created above.
- Check the check boxes of Read, Create Files/Dirs, List Directories and
   Overwrite/Delete to make sure the FTP user has the read and write permission.



11. Click **Done** to save the settings and finish the configurations.

The server URL "ftp://username:password@IP/" (Here "IP" means the IP address of the provisioning server, "username" and "password" are the authentication for FTP download. For example, "ftp://test1:123456@10.3.6.234/") is where the IP phone

downloads configuration files from.

Before configuring a wftpd server, ensure that no other FTP servers exist in your local system.

# **Configuring an HTTP Server**

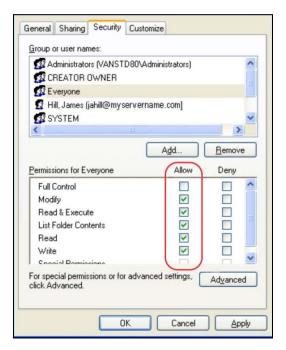
This section provides instructions on how to configure an HTTP server using HFS tool. You can download the HFS software online: http://www.snapfiles.com/get/hfs.html.

### **Preparing a Root Directory**

#### To prepare a root directory:

- 1. Create an HTTP root directory on the local system.
- 2. Place configuration files to this root directory.
- 3. Set the security permissions for the HTTP directory folder.
  You need to define a user or group name and set the permissions: read, write, and modify. Security permissions vary by organizations.

An example of configuration on the Windows platform is shown as below:



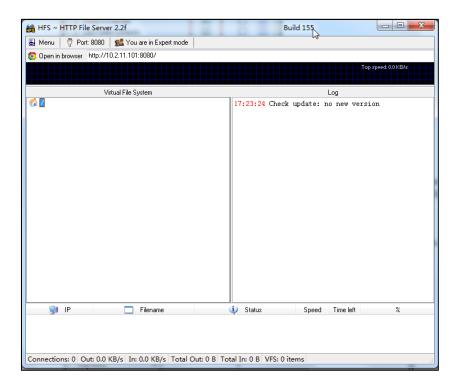
# **Configuring an HTTP Server**

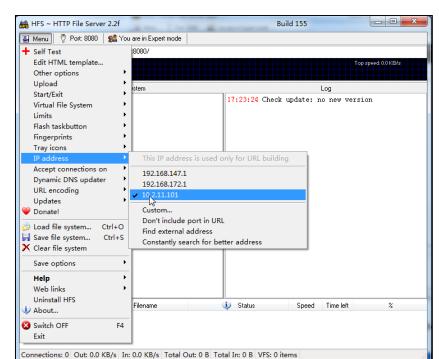
HFS tool is an executable application, so you don't need to install it.

#### To configure an HTTP server:

1. Download the application file to your local directory, double click the hfs.exe.

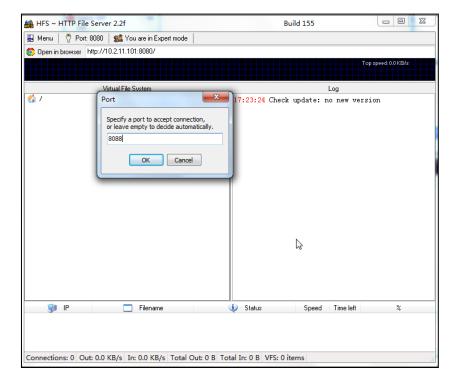
The main configuration page is shown as below:



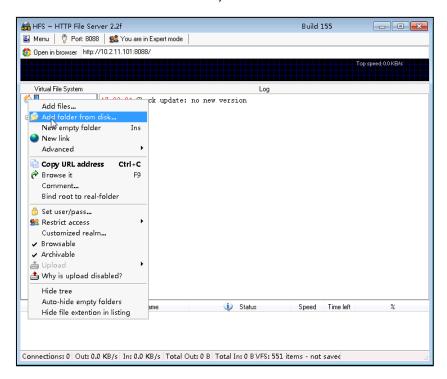


2. Click Menu in the main page and select the IP address of the PC from IP address.

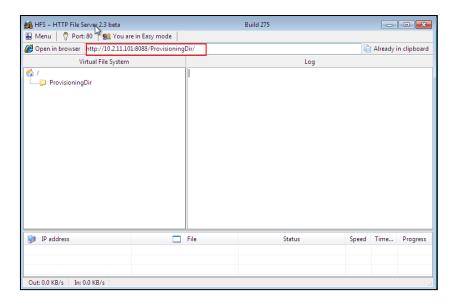
The default HTTP port is 8080. You can also reset the HTTP port (make sure there is no port conflict).



3. Right click the icon on the left of the main page, select Add folder from disk to add the HTTP Server root directory.



4. Locate the root directory from your local system.



5. Check the server URL (e.g., http:// 10.2.11.101:8088/ProvisioningDir) by clicking "Open in browser".

Yealink IP phones also support the Hypertext Transfer Protocol with SSL/TLS (HTTPS) protocol for auto provisioning. HTTPS protocol provides the encrypted communication and secure identification. For more information on installing and configuring an Apache HTTPS Server, refer t the network resource.

## **Configuring a DHCP Server**

This section provides instructions on how to configure a DHCP server for Windows using DHCP Turbo. You can download this software online:

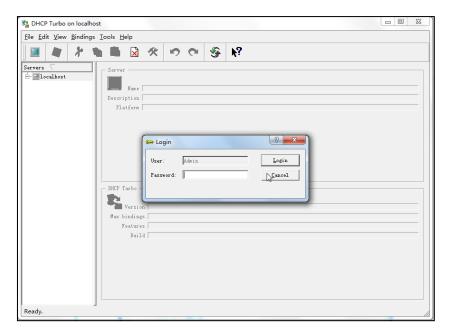
http://www.tucows.com/preview/265297 and install it following the setup wizard.

Before configuring the DHCP Turbo, make sure:

- The firewall on the PC is disabled.
- There is no DHCP server in your local system.

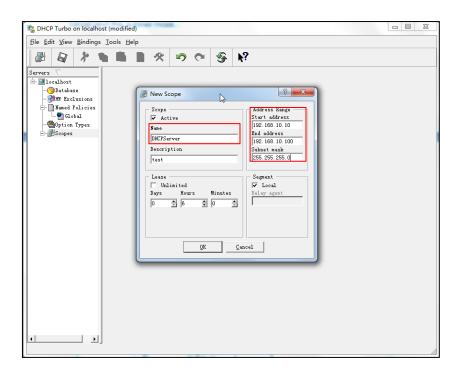
#### To configure the DHCP Turbo:

- 1. To start the DHCP Turbo application, double click localhost.
- 2. Click the Login button (the login password is blank) to log in.

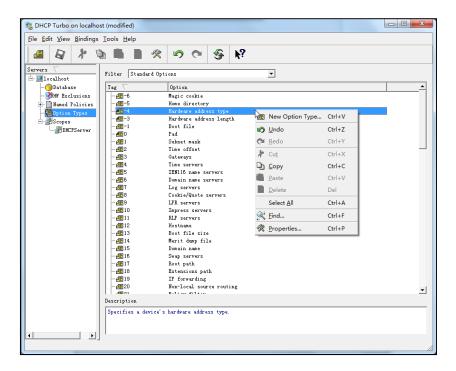


- 3. Right click **Scopes** and select **New Scope**.
- 4. Configure the DHCP server name, the DHCP IP range and the subnet mask.

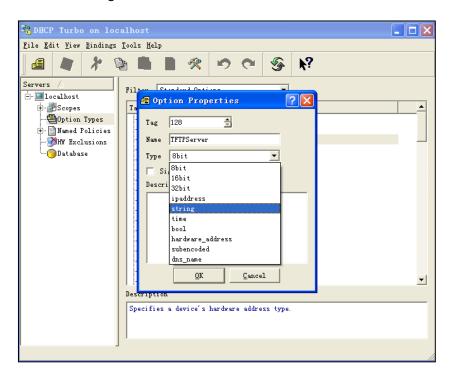
5. Click **OK** to accept the change.



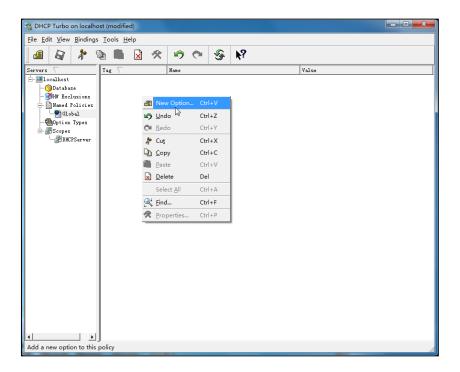
**6.** You can add a custom option via DHCP Turbo. Select **Option Types**, right click one of the options on the right of the main page, and then select **New Option Type**.



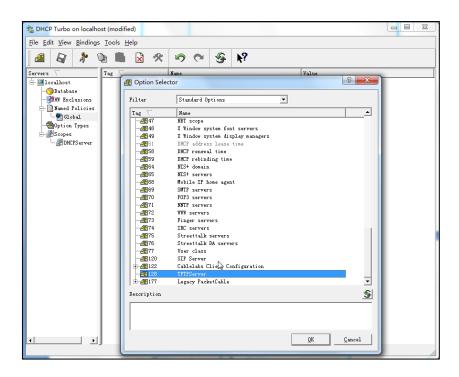
7. Set the custom DHCP option (custom DHCP option tag number ranges from 128 to 254) and select the option type (Yealink supports **String** and **IP Address** option types only). Click the **OK** button to finish setting the option properties. Click save the change.



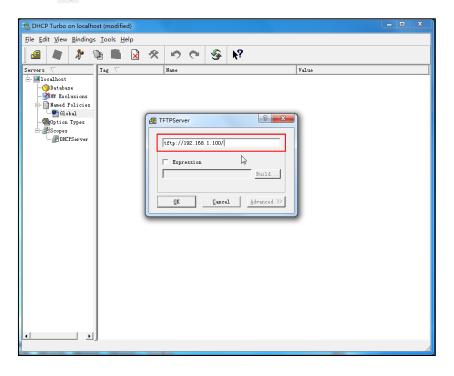
**8.** Click **Named Policies-->Global**, right click the blank area on the right of the main page and then select **New Option**.



9. Scroll down and double click the custom option 128.

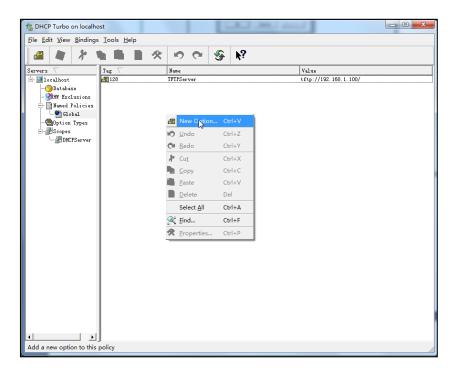


- 10. Fill the provisioning server address in the input field.
- 11. Click the **OK** button to finish setting a custom option.
- 12. Click 🔊 to save the change.

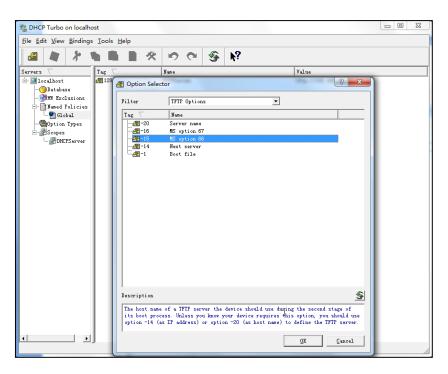


You can add the option 66 via DHCP Turbo. The following shows the detailed processes.

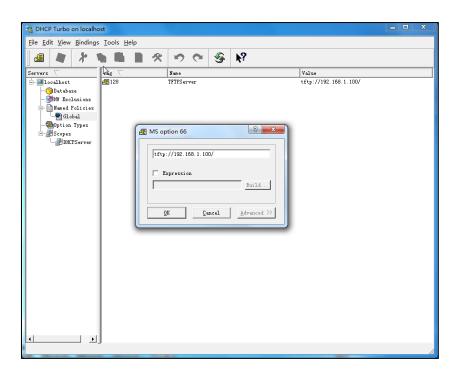
 Click Named Policies-->Global, right click the blank area on the right of the main page and then select New Option.



- 2. Select TFTP Options from the pull-down list of Filter.
- 3. Scroll down and double click MS option 66.



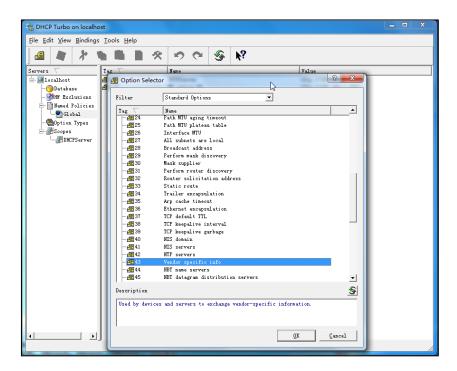
4. Fill the provisioning server address in the input field.

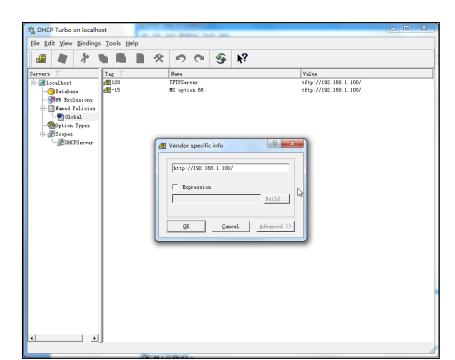


- 5. Click the **OK** button to finish setting a custom option.
- 6. Click 📓 to save the change.

You can also add the option 43. The following shows the detailed processes.

- 1. Click **Named Policies**-->**Global**, right click the blank area on the right of the main page and then select **New Option**.
- 2. Select the Standard Options from the pull-down list of Filter.
- 3. Scroll down and double click 43.





4. Fill the provisioning server address in the input field.

- 5. Click the **OK** button to finish setting a custom option.
- 6. Click 🔊 to save the change.

### **Customizing a Ring Tone Using Cool Edit Pro**

If you have installed the Cool Edit application, double click to open it. Otherwise, you can download the installation package online:

http://www.toggle.com/lv/group/view/kl36218/Cool\_Edit\_Pro.htm and install it.

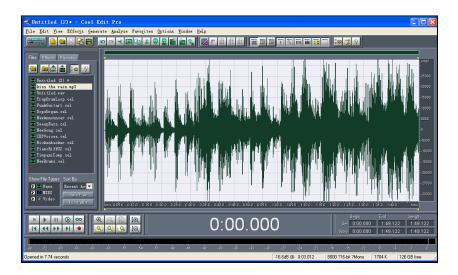
#### To customize a ring tone using Cool Edit Pro:

- 1. Open the Cool Edit Pro application.
- 2. Click File to open an audio file.
- **3.** Locate the ring tone file, click **Open**, the file is uploaded as follows.

A sample audio file loaded is shown as below:



- 4. Select and copy the audio waveform.
- Select File->New to create a new file, set the channels as Mono, the sample rate as 8000 and the resolution as 16-bit.
- 6. Paste the audio waveform to the new file.

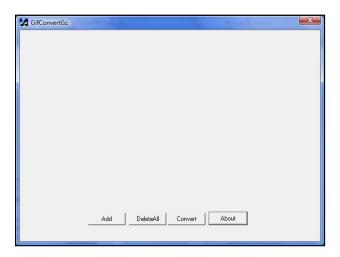


7. Select File->Save as to save the new audio file. On the Save waveform page, select the file format as A/mu-law wave.

## **Customizing a Logo File Using PictureExDemo**

The original picture format must be \*.bmp or \*.gif. We recommend placing all files and the PictureExDemo application to the root directory of the PC. You can ask the distributor or Yealink FAE for the PictureExDemo application.

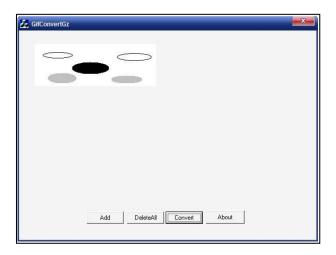
1. Double click the PictureExDemo.exe.



2. Click Add button to open a \*.bmp or \*.gif file.

You can repeat the second step to add multiple original picture files.

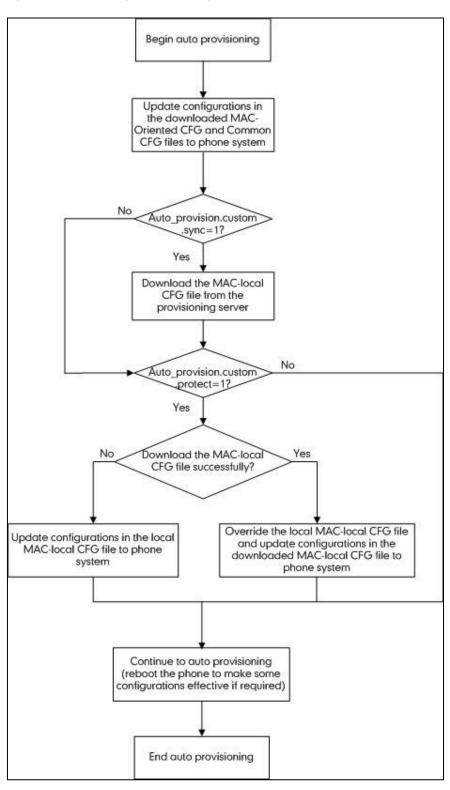
3. Click the Convert button.



Then you can find the **DOB** logo files in the **adv** directory.

# Auto Provisioning Flowchart (Protect personalized configuration settings)

The following shows auto provisioning flowchart for Yealink IP phones when a user wishes to protect personalized configuration settings.



## **Description of Configuration Parameters in CFG Files**

If you want to reset the configuration of a parameter, set the value of the parameter to !NULL! or %NULL%. For example, local\_time.ntp\_server1 = %NULL%. After the auto provisioning process is completed, the NTP server 1 will be reset to "cn.pool.ntp.org".

Parameter	Permitted Values	Descriptions	Web Setting Path
network.ip_address_mode	0, 1 or 2	It configures the IP address mode.  0-IPv4  1-IPv6  2-IPv4&IPv6  The default value is 0.  It takes effect after a reboot.	Network->Basic->Internet Port-> Mode (IPv4/IPv6)
network.internet_port.type	0, 1 or 2	It configures the Internet (WAN) port type for IPv4 when the IP address mode is configured as IPv4 or IPv4&IPv6.  0-DHCP 1-PPPoE 2-Static IP Address The default value is 0. It takes effect after a reboot.	Network->Basic->IPv4 Config

Parameter	Permitted Values	Descriptions	Web Setting Path
network.static_dns_enable	0 or 1	It enables or disables the IP phone to use manually configured static IPv4 DNS when the Internet (WAN) port type for IPv4 is configured as DHCP.  O-Disabled (use the IPv4 DNS obtained by DHCP)  1-Enabled  The default value is 0.  It takes effect after a reboot.	Network->Basic->IPv4 Config->Static DNS
network.internet_port.ip	IPv4 address	It configures the IPv4 address when the IP address mode is configured as IPv4 or IPv4&IPv6, and the Internet (WAN) port type for IPv4 is configured as Static IP Address.  The default value is blank.  It takes effect after a reboot.	Network->Basic->IPv4 Config->Static IP Address->IP Address
network.internet_port.mask	Subnet Mask	It configures the IPv4 subnet mask when the IP address mode is configured as IPv4 or IPv4&IPv6, and the Internet (WAN) port type for IPv4 is configured as Static IP Address.  The default value is blank.  It takes effect after a reboot.	Network->Basic->IPv4 Config->Static IP Address->Subnet Mask

Parameter	Permitted Values	Descriptions	Web Setting Path
network.internet_port.gateway	IPv4 address	It configures the IPv4 default gateway when the IP address mode is configured as IPv4 or IPv4&IPv6, and the Internet (WAN) port type for IPv4 is configured as Static IP Address.  The default value is blank.  It takes effect after a reboot.	Network->Basic->IPv4 Config->Static IP Address->Gateway
network.primary_dns	IPv4 address	It configures the primary IPv4 DNS server when the IP address mode is configured as IPv4 or IPv4&IPv6, and the Internet (WAN) port type for IPv4 is configured as Static IP Address or static IPv4 DNS is configured as Enabled.  The default value is blank.  It takes effect after a reboot.	Network->Basic->IPv4 Config->Static IP Address->Primary DNS
network.secondary_dns	IPv4 address	It configures the secondary IPv4 DNS server when the IP address mode is configured as IPv4 or IPv4&IPv6, and the Internet (WAN) port type for IPv4 is configured as Static IP Address or static IPv4 DNS is configured as Enabled.  The default value is blank.  It takes effect after a reboot.	Network->Basic->IPv4 Config->Static IP Address->Secondary DNS

Parameter	Permitted Values	Descriptions	Web Setting Path
network.pppoe.user	String within 32 characters	It configures the user name for PPPoE connection when the IP address mode is configured as IPv4 or IPv4&IPv6, and the Internet port type is configured as PPPoE.  The default value is blank.  It takes effect after a reboot.	Network->Basic->IPv4 Config-> PPPoE->User Name
network.pppoe.password	String within 99 characters	It configures the password for PPPoE connection when the IP address mode is configured as IPv4 or IPv4&IPv6, and the Internet port type is configured as PPPoE. The default value is blank. It takes effect after a reboot.	Network->Basic->IPv4 Config-> PPPoE->Password
network.ipv6_internet_port.type	0 or 1	It configures the Internet (WAN) port type for IPv6 when the IP address mode is configured as IPv6 or IPv4&IPv6.  0-DHCP  1-Static IP Address The default value is 0.  It takes effect after a reboot.	Network->Basic->IPv6 Config
network.ipv6_static_dns_enable	0 or 1	It enables or disables the IP phone to use manually configured static IPv6 DNS when	Network->Basic->IPv6 Config->IPv6

Parameter	Permitted Values	Descriptions	Web Setting Path
		Internet (WAN) port type for IPv6 is configured as DHCP.	Static DNS
		0-Disabled (use the IPv6 DNS obtained by DHCP)  1-Enabled	
		The default value is 0.  It takes effect after a reboot.	
network.ipv6_prefix	Integer from 0 to 128	It configures the IPv6 prefix when the IP address mode is configured as IPv6 or IPv4&IPv6, and the Internet (WAN) port type for IPv6 is configured as Static IP Address.  The default value is 64.  It takes effect after a reboot.	Network->Basic->IPv6 Config->Static IP Address->IPv6 Prefix (0~128)
network.ipv6_internet_port.ip	IPv6 address	It configures the IPv6 address when the IP address mode is configured as IPv6 or IPv4&IPv6, and the Internet (WAN) port type for IPv6 is configured as Static IP Address.  The default value is blank.  It takes effect after a reboot.	Network->Basic->IPv6 Config->Static IP Address->IP Address
network.ipv6_internet_port.gateway	IPv6 address	It configures the IPv6 default gateway when the IP address mode is configured as IPv6 or	Network->Basic->IPv6 Config->Static IP Address->Gateway

Parameter	Permitted Values	Descriptions	Web Setting Path
		IPv4&IPv6, and the Internet (WAN) port type for IPv6 is configured as Static IP Address.  The default value is blank.  It takes effect after a reboot.	
network.ipv6_primary_dns	IPv6 address	It configures the primary IPv6 DNS server when the IP address mode is configured as IPv6 or IPv4&IPv6, and the Internet (WAN) port type for IPv6 is configured as Static IP Address or static IPv6 DNS is configured as Enabled.  The default value is blank.  It takes effect after a reboot.	Network->Basic->IPv6 Config->Static IP Address->Primary DNS
network.ipv6_secondary_dns	IPv6 address	It configures the secondary IPv6 DNS server when the IP address mode is configured as IPv6 or IPv4&IPv6, and the Internet (WAN) port type for IPv6 is configured as Static IP Address or static IPv6 DNS is configured as Enabled.  The default value is blank.  It takes effect after a reboot.	Network-> Basic-> IPv6 Config->Static IP Address-> Secondary DNS
network.pc_port.enable	0 or 1	It enables or disables the PC (LAN) port. <b>0</b> -Disabled <b>1</b> -Auto Negotiation	Network->PC Port->PC Port Active

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.  It takes effect after a reboot.	
network.internet_port.speed_duplex	0, 1, 2, 3, 4 or 5	It configures the transmission method and speed of the Internet (WAN) port.  0-Auto negotiate  1-Full duplex 10Mbps  2-Full duplex 100Mbps  3-Half duplex 100Mbps  4-Half duplex 100Mbps  5-Full duplex 1000Mbps  The default value is 0.  It takes effect after a reboot.  Note: It cannot be configured via web user interface and 1000Mbps is only applicable to SIP-T23G IP phones.	Network->Advanced->Port Link-> WAN Port Link
network.pc_port.speed_duplex	0, 1, 2, 3, 4 or 5	It configures the transmission method and speed of the PC (LAN) port.  0-Auto negotiate  1-Full duplex 10Mbps  2-Full duplex 100Mbps	Network->Advanced->Port Link->PC Port Link

Parameter	Permitted Values	Descriptions	Web Setting Path
		3-Half duplex 10Mbps	
		4-Half duplex 100Mbps	
		5-Full duplex 1000Mbps	
		The default value is 0.	
		It takes effect after a reboot.	
		Note: It cannot be configured via web user	
		interface and 1000Mbps is only applicable to	
		SIP-T23G IP phones.	
	0 or 1	It enables or disables VLAN for the Internet	
		(WAN) port.	
network.vlan.internet_port_enable		<b>0</b> -Disabled	Network->Advanced->VLAN->WAN
network.vidn.internet_port_endble		1-Enabled	Port->Active
		The default value is 0.	
		It takes effect after a reboot.	
		It configures VLAN ID for the Internet (WAN)	
	Integer from 1	port.	Network-> Advanced->VLAN ->WAN
network.vlan.internet_port_vid	to 4094	The default value is 1.	Port->VID (1-4094)
		It takes effect after a reboot.	
	Integer from 0	It configures VLAN priority for the Internet	Network->Advanced->VLAN->WAN
network.vlan.internet_port_priority	to 7	(WAN) port.	Port->Priority

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 0.  It takes effect after a reboot.	
network.vlan.pc_port_enable	0 or 1	It enables or disables VLAN for the PC (LAN) port.  0-Disabled  1-Enabled  The default value is 0.  It takes effect after a reboot.	Network->Advanced->VLAN->PC Port->Active
network.vlan.pc_port_vid	Integer from 1 to 4094	It configures VLAN ID for the PC (LAN) port.  The default value is 1.  It takes effect after a reboot.	Network-> Advanced->VLAN->PC Port->VID (1-4094)
network.vlan.pc_port_priority	Integer from 0 to 7	It configures VLAN priority for the PC (LAN) port.  The default value is 0.  It takes effect after a reboot.	Network->Advanced->VLAN->PC Port->Priority
network.vlan.dhcp_enable	0 or 1	It enables or disables DHCP VLAN discovery feature on the IP phone.  0-Disabled 1-Enabled	Network->Advanced->VLAN->DHCP VLAN->Active

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.  It takes effect after a reboot.	
network.vlan.dhcp_option	Integer from 128 to 254	It configures the DHCP option from which the IP phone will obtain the VLAN settings. You can configure at most five DHCP options and separate them by commas.  The default value is 132.  It takes effect after a reboot.	Network->Advanced->VLAN->DHCP VLAN->Option(128-254)
network.vlan.vlan_change.enable	0 or 1	It enables or disables the IP phone to obtain IP address with lower preference of VLAN assignment method or disable VLAN feature when the IP phone cannot obtain IP address with the current VLAN assignment method.  0-Disabled 1-Enabled The default value is 0.	
network.dhcp_host_name	String within 99 characters	It configures the client host name for DHCP option 12.  The default value is SIP-T23  It takes effect after a reboot.	Features->General Information-> DHCP Hostname

Parameter	Permitted Values	Descriptions	Web Setting Path
network.dns.ttl_enable	0 or 1	It enables or disables the phone to use TTL in the A record.  O-Disabled  1-Enabled  The default value is 1.  It takes effect after a reboot.	
network.mtu_value	Integer from 128 to 1500	It configures the MTU of network card. The default value is 1500. It takes effect after a reboot.	
wui.http_enable	0 or 1	It enables or disables the user to access web user interface of the IP phone using the HTTP protocol.  0-Disabled 1-Enabled The default value is 1.  It takes effect after a reboot.	Network->Advanced->Web Server->HTTP
wui.https_enable	0 or 1	It enables or disables the user to access web user interface of the IP phone using the HTTPS protocol.  0-Disabled	Network->Advanced->Web Server->HTTPS

Parameter	Permitted Values	Descriptions	Web Setting Path
		1-Enabled  The default value is 1.  It takes effect after a reboot.	
network.port.http	Integer from 1 to 65535	It configures the HTTP port for the user to access web user interface of the IP phone using the HTTP protocol.  The default value is 80.  It takes effect after a reboot.	Network->Advanced->Web Server->HTTP Port (1~65535)
network.port.https	Integer from 1 to 65535	It configures the HTTPS port for the user to access web user interface of the IP phone using the HTTPS protocol.  The default value is 443.  It takes effect after a reboot.	Network-> Advanced->Web Server->HTTPS Port (1~65535)
network.port.max_rtpport	Integer from 1024 to 65535	It configures the maximum local RTP port.  The default value is 12780.  It takes effect after a reboot.  Note: The value of the maximum local RTP port can't be less than that of the minimum local RTP port.	Network->Advanced->Local RTP Port->Max RTP Port (1024~65535)

Parameter	Permitted Values	Descriptions	Web Setting Path
network.port.min_rtpport	Integer from 1024 to 65535	It configures the minimum local RTP port.  The default value is 11780.  It takes effect after a reboot.	Network->Advanced->Local RTP Port->Min RTP Port (1024~65535)
network.qos.rtptos	Integer from 0 to 63	It configures the DSCP for voice packets.  The default value is 46 (Expedited Forwarding).  It takes effect after a reboot.	Network->Advanced->Voice QoS (0~63)
network.qos.signaltos	Integer from 0 to 63	It configures the DSCP for SIP packets.  The default value is 26 (Assured Forwarding).  It takes effect after a reboot.	Network->Advanced->SIP QoS (0~63)
phone_setting.unregister_account_block_out.enable	0 or 1	It enables or disables the phone to forbid the calling function without an account.  O-Disabled  1-Enabled  The default value is 0.	
phone_setting.rtcp_xr_report.enable	0 or 1	It enables or disables the IP phone to periodically send RTCP-XR packets to another participating phone during a call.  The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
network.802_1x.mode	0, 1, 2, 3, 4, 5, 6 or 7	It configures the 802.1x authentication method.  0-Disabled  1-EAP-MD5  2-EAP-TLS  3-EAP-PEAP/MSCHAPv2  4-EAP-TTLS/EAP-MSCHAPv2  5-EAP-PEAP/GTC  6-EAP-TTLS/EAP-GTC  7-EAP-FAST  The default value is 0.  It takes effect after a reboot.	Network->Advanced->802.1x->802.1 x Mode
network.802_1x.identity	String within 32 characters	It configures the user name for 802.1x authentication.  The default value is blank.  It takes effect after a reboot.	Network->Advanced->802.1x->Identi ty
network.802_1x.md5_password	String within 32 characters	It configures the password for 802.1x authentication.  The default value is blank.  It takes effect after a reboot.	Network->Advanced->802.1x->MD5 Password

Parameter	Permitted Values	Descriptions	Web Setting Path
		<b>Note:</b> It is required for all 802.1x authentication methods except EAP-TLS.	
network.802_1x.root_cert_url	URL within 511 characters	It configures the access URL of the CA certificate when the 802.1x authentication method is configured as EAP-TLS, EAP-PEAP/MSCHAPV2, EAP-TTLS/EAP-MSCHAPV2, EAP-PEAP/GTC, EAP-TTLS/EAP-GTC or EAP-FAST. The default value is blank. It takes effect after a reboot.  Note: The format of the certificate must be *.pem, *.crt, *.cer or *.der. It is only applicable to EAP-TLS, EAP-PEAP/MSCHAPV2, EAP-TTLS/EAP-MSCHAPV2, EAP-PEAP/GTC, EAP-TTLS/EAP-MSCHAPV2, EAP-PEAP/GTC,	Network-> Advanced->802.1x->CA Certificates
network.802_1x.client_cert_url	URL within 511 characters	It configures the access URL of the device certificate when the 802.1x authentication method is configured as EAP-TLS.  The default value is blank.  It takes effect after a reboot.  Note: The format of the certificate must be	Network->Advanced->802.1x->Devic e Certificates

Parameter	Permitted Values	Descriptions	Web Setting Path
		*.pem or *.cer.	
network.802_1x.proxy_eap_logoff.enable	0 or 1	It enables or disables 802.1x-logoff feature for the PC port.  0-Disabled  1-Enabled  The default value is 0.  It takes effect after a reboot.	
network.vpn_enable	0 or 1	It enables or disables OpenVPN feature on the IP phone.  0-Disabled  1-Enabled  The default value is 0.  It takes effect after a reboot.	Network->Advanced->VPN->Active
openvpn.url	URL within 511 characters	It configures the access URL of the *.tar file for OpenVPN.  The default value is blank.	Network->Advanced->VPN->Upload VPN Config
network.lldp.enable	0 or 1	It enables or disables LLDP feature on the IP phone. <b>0</b> -Disabled <b>1</b> -Enabled	Network->Advanced->LLDP->Active

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.	
		It takes effect after a reboot.	
		It configures the interval (in seconds) for the IP phone to send the LLDP request.	
	lata as a facility	The default value is 60.	Notice de Ademica de UDDo Desder
network.lldp.packet_interval	Integer from 1 to 3600	It takes effect after a reboot.	Network->Advanced->LLDP->Packet Interval (1~3600s)
		Note: It works only if the value of the	
		parameter "network.lldp.enable" is set to 1 (Enabled).	
	0 or 1	It enables or disables CDP feature on the IP	
		phone. <b>0</b> -Disabled	
network.cdp.enable		1-Enabled	Network->Advanced->CDP->Active
		The default value is 0.	
		It takes effect after a reboot.	
network.cdp.packet_interval		It configures the interval (in seconds) for the IP	
	Integer from 1 to 3600	phone to send the CDP request.  The default value is 60.	Network->Advanced->CDP->Packet
		It takes effect after a reboot.	Interval (1~3600s)
		Note: It works only if the value of the	

Parameter	Permitted Values	Descriptions	Web Setting Path
		parameter "network.cdp.enable" is set to 1 (Enabled).	
network.span_to_pc_port	0 or 1	It enables or disables the IP phone to span data packets received from the WAN (Internet) port to the PC (LAN) port. If it is enabled, all packets from WAN port can be received by PC port.  O-Disabled  1-Enabled  The default value is 0.  It takes effect after a reboot.	Network->Advanced->Span to PC->Span to PC Port
sip.reg_surge_prevention	Integer from 0 to 60	It configures the waiting time (in seconds) for account register after startup.  The default value is 0.  It takes effect after a reboot.	Network->Advanced->Registration Random->Registration Random (0~60s)
sip.send_response_by_request	0 or 1	It configures where the IP phone retrieves the destination address for response. The IP phone will then send all SIP response messages to the destination address.  O-from VIA header in the request message  1-from source address of the request	

Parameter	Permitted Values	Descriptions	Web Setting Path
		message The default value is 1.	
		It takes effect after a reboot.	
sip.notify_reboot_enable	0, 1or 2	It configures the IP phone behavior when receiving a SIP NOTIFY message which contains the header "Event: check-sync".  0-The IP phone will reboot only if the SIP NOTIFY message contains an additional string "reboot=true".  1-The IP phone will be forced to reboot.  2-The IP phone will ignore the SIP NOTIFY message.  The default value is 1.	
sip.disp_incall_to_info	0 or 1	It enables or disables notifying the GUI of the information in the To field when receiving an incoming call.  0-Disabled 1-Enabled The default value is 0.	
sip.limit_server_name	String within	It configures the string that must be contained	

Parameter	Permitted Values	Descriptions	Web Setting Path
	256 characters	in the SIP server address.	
		The default value is blank.	
		It configures the string returned as the reason of the register failure due to misconfiguration	
	String within	of the SIP server (not contains the string	
sip.limit_server_reason	256 characters	configured by the parameter	
		"sip.limit_server_name").	
		The default value is blank.	
		It enables or disables the IP phone to convert	
	0 or 1	ASCII characters.	
sip.escape_characters.enable		<b>0</b> -Disabled	
		1-Enabled	
		The default value is 0.	
	0, 1or 2	It configures the listening mode.	
		0-according to the transport protocol	
sip.listen_mode		1-listening TCP and UDP	
		2-listening TCP and UDP, and subscribe for BLF	
		List containing transport=TCP in the contact	
		header.	
		The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
sip.refer_by_header_auto_build	0 or 1	It configures the constitution of the refer-bye header.  0-URI in the registration message  1-From header in the refer message  The default value is 0.  It takes effect after a reboot.	
sip.reserve_characters	!~*#'()&=+ \$,;?\\0	It configures the special characters reserved in the user name.  The default value is blank.	
sip.tcp_port_random_mode	0, 1 or 2	It configures the listening port mode.  0-random source port (non 506x), fixed ports (506x) carried in the contact, via header.  1-random source port (non 506x) and other ports (non 506x) carried in the contact, via header.  2-fixed source port (506x) and other ports (506x) carried in the contact, via header.  The default value is 0.  It takes effect after a reboot.	

Parameter	Permitted Values	Descriptions	Web Setting Path
sip.listen_port	Integer from 1024 to 65535	It configures the local SIP port.  The default value is 5060.	Settings->SIP->Local SIP Port
sip.tls_listen_port	Integer from 1024 to 65535	It configures the local TLS listen port. The default value is 5061.	Settings->SIP->Local SIP Port
sip.trust_ctrl	0 or 1	It enables or disables the IP phone to only accept the message from the trusted server.  O-Disabled  1-Enabled  The default value is 0.	
sip.nat_stun.enable	0 or 1	It enables or disables STUN feature on the IP phone.  0-Disabled  1-Enabled  The default value is 0.	Network->Advanced->NAT->Activ
sip.nat_stun.server	IP address or domain name	It configures the IP address or domain name of the STUN server.  The default value is blank.	Network->Advanced->NAT->STUN Server
sip.nat_stun.port	Integer from 1024 to 65000	It configures the port of the STUN server. The default value is 3478.	Network->Advanced->NAT->Port

Parameter	Permitted Values	Descriptions	Web Setting Path
sip.timer_t1	Float from 0.5 to 10s	It configures the SIP session timer T1 (in seconds).  T1 is an estimate of the Round Trip Time (RTT) of transactions between a SIP client and SIP server.  The default value is 0.5.	Settings->SIP->SIP Session Timer T1 (0.5~10s)
sip.timer_t2	Float from 2 to 40s	It configures the SIP session timer T2 (in seconds).  T2 represents the maximum retransmit interval for non-INVITE requests and INVITE responses.  The default value is 4.	Settings->SIP->SIP Session Timer T2 (2~40s)
sip.timer_t4	Float from 2.5 to 60s	It configures the SIP session timer T4 (in seconds).  T4 represents the maximum duration a message will remain in the network.  The default value is 5.	Settings->SIP->SIP Session Timer T4 (2.5~60s)
syslog.mode	0 or 1	It configures the IP phone to export log files to a syslog server or the local system. <b>0</b> -Local	Settings->Configuration->Export System Log

Parameter	Permitted Values	Descriptions	Web Setting Path
		1-Server The default value is 0. It takes effect after a reboot.	
syslog.server	IP address or domain name	It configures the IP address or domain name of the syslog server when exporting log to the syslog server.  The default value is blank.  It takes effect after a reboot.  Note: It works only if the value of the parameter "syslog.mode" is set to 1 (Server).	Settings->Configuration->Server Name
syslog.log_level	Integer from 0 to 6	It configures the detail level of syslog information to be exported. It takes effect after a reboot.  0: system is unusable 1: action must be taken immediately 2: critical condition 3: error conditions 4: warning conditions 5: normal but significant condition 6: informational	Settings-> Configuration-> System Log Level

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 3.	
auto_provision.url_wildcard.pn	String within 32 characters	It configures the characters to replace the wildcard \$PN in the received URL of the provisioning server.  Note: The configured characters must be in accordance with the actual directory name of the provisioning server.  For SIP-T23 (P/G) IP phones, the default value is T23.	
auto_provision.custom.protect	0 or 1	It enables or disables the IP phone to protect personalized settings after auto provisioning.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), personalized settings via web or phone user interface will be protected and remained after auto provisioning.  The default value is 0.	
auto_provision.custom.sync	0 or 1	It enables or disables the IP phone to periodically (every 5 minutes) upload the	

Parameter	Permitted Values	Descriptions	Web Setting Path
		<mac>-local.cfg file to the provisioning</mac>	
		server, and download the <mac>-local.cfg</mac>	
		file from the provisioning server during auto	
		provisioning.	
		0-Disabled	
		1-Enabled	
		If it is set to 1 (Enabled), the IP phone will	
		periodically upload the <mac>-local.cfg file</mac>	
		to the provisioning server. During auto	
		provisioning, the IP phone will download the	
		<mac>-local.cfg file from the provisioning</mac>	
		server.	
		If it is set to 0 (Disabled), the IP phone will not	
		upload the <mac>-local.cfg file to the</mac>	
		provisioning server. During auto provisioning,	
		the IP phone will not download the	
		<mac>-local.cfg file from the provisioning</mac>	
		server.	
		The default value is 0.	
		It configures the way the IP phone uploads	
auto_provision.custom.upload_method	0 or 1	the <mac>-local.cfg file to provisioning</mac>	
		server (for HTTP/HTTPS server only).	

Parameter	Permitted Values	Descriptions	Web Setting Path
		<b>0</b> -Put	
		1-Post	
		The default value is 0.	
		Note: It works only if the value of the	
		parameter "auto_provision.custom.sync" is	
		set to 1 (Enabled).	
		It enables or disables the IP phone to reboot	
		after auto provisioning when there is no	
	0 or 1	specific configuration requiring a reboot. It is especially useful when there is no specific	
		configuration requiring reboot in the	
auto_provision.reboot_force.enable		configuration files, but you want to force the IP	
		phone to reboot after auto provisioning.	
		0-Disabled	
		1-Enabled	
		The default value is 0.	
		It enables or disables the IP phone to perform	
auto_provision.power_on		an auto provisioning process when powered	
	0 or 1	on.	Settings->Auto Provision->Power On
		0-Disabled	
		1-Enabled	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.	
		Note: The old parameter	
		"auto_provision.mode" is also applicable to	
		IP phones.	
		It enables or disables Plug and Play (PnP)	
		feature. If it is enabled, the IP phone will	
		broadcast PnP SUBSCRIBE messages to	
auto_provision.pnp_enable	0 or 1	request a provisioning server address after startup.	Settings->Auto Provision->PNP Active
		0-Disabled	
		1-Enabled	
		The default value is 1.	
	0 or 1	It enables or disables the IP phone to perform	
		an auto provisioning process weekly.	
auto_provision.weekly.enable		0-Disabled	Settings->Auto provision->Weekly
		1-Enabled	
		The default value is 0.	
auto_provision.weekly.dayofweek	0,1,2,3,4,5,6	It configures the days of the week for the IP	
	or a	phone to perform an auto provisioning	Settings->Auto provision->Day of
	combination	process weekly.	week
	of these	<b>0</b> -Sunday	

Parameter	Permitted Values	Descriptions	Web Setting Path
	digits	1-Monday	
		<b>2</b> -Tuesday	
		3-Wednesday	
		<b>4</b> -Thursday	
		5-Friday	
		6-Saturday	
		Example:	
		auto_provision.weekly.dayofweek = 01	
		means the IP phone will perform an auto	
		provisioning process every Sunday and	
		Monday.	
		The default value is 0123456.	
		<b>Note</b> : It works only if the value of the	
		parameter "auto_provision.weekly.enable" is	
		set to 1 (Enabled).	
		It configures the begin time of the day for the	
auto_provision.weekly.begin_time		IP phone to perform an auto provisioning	
	Time from	process weekly.	Settings->Auto provision->Time
	00:00 to 23:59	The default value is 00:00.	
		Note: It works only if the value of the	
		parameter "auto_provision.weekly.enable" is	

Parameter	Permitted Values	Descriptions	Web Setting Path
		set to 1 (Enabled). The old parameter "auto_provision.schedule.time_from" is also applicable to IP phones.	
auto_provision.weekly.end_time	Time from 00:00 to 23:59	It configures the end time of the day for the IP phone to perform an auto provisioning process weekly.  The default value is 00:00.  Note: It works only if the value of the parameter "auto_provision.weekly.enable" is set to 1 (Enabled). The old parameter "auto_provision.schedule.time_to" is also applicable to IP phones.	Settings->Auto provision->Time
auto_provision.repeat.enable	0 or 1	It enables or disables the IP phone to perform an auto provisioning process repeatedly.  O-Disabled  1-Enabled  The default value is 0.	Settings->Auto provision-> Repeatedly
auto_provision.repeat.minutes	Integer from 1 to 43200	It configures the interval (in minutes) for the IP phone to perform an auto provisioning process repeatedly.  The default value is 1440.	Settings->Auto provision->Interval (minutes)

Parameter	Permitted Values	Descriptions	Web Setting Path
		Note: It works only if the value of the parameter "auto_provision.weekly.enable" is set to 1 (Enabled).The old parameter "auto_provision.schedule.periodic_minute" is also applicable to IP phones.	
auto_provision.dhcp_option.enable	0 or 1	It enables or disables the IP phone to request the provisioning server address by detecting DHCP options.  O-Disabled  1-Enabled  The default value is 1.	Settings->Auto Provision->DHCP Active
auto_provision.dhcp_option.list_user_options	Integer from 128 to 254	It configures the custom DHCP option for requesting provisioning server address.  The default value is blank.	Settings->Auto Provision->Custom Option (128~254)
auto_provision.server.url	URL within 511 characters	It configures the access URL of the provisioning server.  The default value is blank.	Settings->Auto Provision->Server URL
auto_provision.server.username	String within 32 characters	It configures the user name for provisioning server access.  The default value is blank.	Settings->Auto Provision->User Name

Parameter	Permitted Values	Descriptions	Web Setting Path
auto_provision.server.password	String within 32 characters	It configures the password for provisioning server access.  The default value is blank.	Settings->Auto Provision->Password
auto_provision.dhcp_option.option60_value	String within 99 characters	It configures the value (vendor name of the device) of DHCP option 60.  The default value is yealink.	Settings->Auto Provision->DHCP Option Value
auto_provision.aes_key_in_file	0 or 1	It enables or disables the IP phone to decrypt configuration files using the encrypted AES keys.  O-Disabled  1-Enabled  If it is set to 1, the IP phone will download <y0000000000xx_security>.enc and <mac_security>.enc files during auto provisioning, and then decrypts these files into the plaintext keys (e.g., key2, key3) respectively using the IP phone built-in key (e.g., key1). The IP phone then decrypts the encrypted configuration files using corresponding key (e.g., key2, key3).  The default value is 0.</mac_security></y0000000000xx_security>	

Parameter	Permitted Values	Descriptions	Web Setting Path
		For more information, refer to <i>Yealink</i> Configuration Encryption Tool User Guide.	
auto_provision.aes_key_16.com	16 characters	It configures the plaintext AES key for decrypting the Common CFG file.  The valid characters contain: 0 ~ 9, A ~ Z, a ~ z and the following special characters are also supported: # \$ % * +, : = ? @ [] ^ _ { } ~.  The default value is blank.  Note: It works only if the value of the parameter "auto_provision.aes_key_in_file" is set to 0 (Disabled).  For more information, refer to Yealink  Configuration Encryption Tool User Guide.	Settings->Auto Provision->Common AES Key
auto_provision.aes_key_16.mac	16 characters	It configures the plaintext AES key for decrypting the MAC-Oriented CFG file.  The valid characters contain: 0 ~ 9, A ~ Z, a ~ z and the following special characters are also supported: # \$ % * +, : = ? @ [] ^ _ { } ~.  The default value is blank.	Settings->Auto Provision-> MAC-Oriented AES Key

Parameter	Permitted Values	Descriptions	Web Setting Path
		Note: It works only if the value of the parameter "auto_provision.aes_key_in_file" is set to 0 (Disabled).  For more information, refer to Yealink  Configuration Encryption Tool User Guide.	
autoprovision.X.name (X ranges from 1 to 50)	String within 64 characters	It configures the code name for triggering auto provisioning.  The default value is blank.  It takes effect after a reboot.	
autoprovision.X.code (X ranges from 1 to 50)	String	It configures the activation code to trigger auto provisioning.  The activation code must be a combination of numeric characters and special characters #  *.  The default value is blank.  It takes effect after a reboot.  For more information, refer to Auto  Provisioning via Activation Code on page 42.	
autoprovision.X.url (X ranges from 1 to 50)	URL within 511 characters	It configures the access URL of the provisioning server for the IP phone to perform auto provisioning which is triggered	

Parameter	Permitted Values	Descriptions	Web Setting Path
		by activation code.	
		The default value is blank.	
		It takes effect after a reboot.	
		For more information, refer to Auto	
		Provisioning via Activation Code on page 42.	
		It configures the authentication user name for	
		provisioning server access for auto	
		provisioning which is triggered by activation	
autoprovision.X.user	String within	code.	
(X ranges from 1 to 50)	64 characters	The default value is blank.	
		It takes effect after a reboot.	
		For more information, refer to Auto	
		Provisioning via Activation Code on page 42.	
		It configures the password for authentication	
		during auto provisioning which is triggered by	
automa iria V annual		activation code.	
autoprovision.X.password	String within	The default value is blank.	
(X ranges from 1 to 50)	32 characters	It takes effect after a reboot.	
		For more information, refer to Auto	
		Provisioning via Activation Code on page 42.	

Parameter	Permitted Values	Descriptions	Web Setting Path
autoprovision.X.com_aes (X ranges from 1 to 50)	16 characters	It configures the plaintext AES key for decrypting the Common CFG file.  If it is configured, it has a higher priority than the value configured in the parameter "auto_provision.aes_key_16.com".  The default value is blank.  It takes effect after a reboot.  For more information, refer to Auto  Provisioning via Activation Code on page 42.	
autoprovision.X.mac_aes (X ranges from 1 to 50)	16 characters	It configures the plaintext AES key for decrypting the MAC-Oriented CFG file.  If it is configured, it has a higher priority than the value configured in the parameter "auto_provision.aes_key_16.mac".  The default value is blank.  It takes effect after a reboot.	
sip.use_23_as_pound	0 or 1	It enables or disables the IP phone to reserve the pound sign when dialing out.  0-Disabled (convert the pound sign into "%23")  1-Enabled	Features->General Information-> Reserve # in User Name

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.	
sip.rfc2543_hold	0 or 1	It enables or disables the IP phone to use RFC 2543 (c=0.0.0.0) outgoing hold signaling. <b>0</b> -Disabled <b>1</b> -Enabled  If it is set to 0 (Disabled), SDP media direction attributes (such as a=sendonly) per RFC 3264 is used when placing a call on hold.  If it is set to 1 (Enabled), SDP media connection address c=0.0.0.0 per RFC 2543 is used when placing a call on hold.  The default value is 0.	Features->General Information->RFC 2543 Hold
sip.use_out_bound_in_dialog	0 or 1	It enables or disables the IP phone to keep sending SIP requests to the outbound proxy server in a dialog.  O-Disabled  1-Enabled  If it is set to 1 (Enabled), all the SIP request messages from the IP phone will be forced to send to the outbound proxy server in a	Features->General Information->Use Outbound Proxy In Dialog

Parameter	Permitted Values	Descriptions	Web Setting Path
		dialog.	
		The default value is 1.	
		It takes effect after a reboot.	
		It enables or disables the phone to close BLF	
		monitoring feature for call park key.	
		0-Disabled	
sip.call_park_without_blf	0 or 1	1-Enabled	
		The default value is 0.	
		It takes effect after a reboot.	
		It enables or disables Watch Dog feature.	
	0 or 1	0-Disabled	
		1-Enabled	
watch_dog.enable		If it is set to 1 (Enabled), the IP phone will	Settings->Preference->WatchDog
		reboot automatically when the system is	
		broken down.	
		The default value is 1.	
managementserver.enable		It enables or disables TR069 feature.	
	0 or 1	0-Disabled	Cattings a TDO/O a Facility TDO/O
		1-Enabled	Settings->TR069->Enable TR069
		The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
managementserver.username	String within 128 characters	It configures the user name for the IP phone to authenticate with the ACS (Auto Configuration Servers). This string is set to the empty string if no authentication is required.  The default value is blank.	Settings->TR069->ACS Username
managementserver.password	String within 64 characters	It configures the password for the IP phone to authenticate with the ACS (Auto Configuration Servers). This string is set to the empty string if no authentication is required.  The default value is blank.	Settings->TR069->ACS Password
managementserver.url	URL within 511 characters	It configures the access URL of the ACS (Auto Configuration Servers).  The default value is blank.	Settings->TR069->ACS URL
managementserver.periodic_inform_enable	0 or 1	It enables or disables the IP phone to periodically report its configuration information to the ACS (Auto Configuration Servers).  0-Disabled 1-Enabled The default value is 1.	Settings->TR069-> Enable Periodic Inform

Parameter	Permitted Values	Descriptions	Web Setting Path
managementserver.periodic_inform_interval	Integer from 5 to 4294967295	It configures the interval (in seconds) for the IP phone to report its configurations to the ACS (Auto Configuration Servers).  The default value is 60.	Settings->TR069->Periodic Inform Interval (seconds)
managementserver.connection_request_username	String within 128 characters	It configures the user name for the IP phone to authenticate the incoming connection requests.  The default value is blank.	Settings->TR069->Connection Request Username
managementserver.connection_request_password	String within 64 characters	It configures the password for the IP phone to authenticate the incoming connection requests.  The default value is blank.	Settings->TR069->Connection Request Password
transfer.semi_attend_tran_enable	0 or 1	It enables or disables the transferee party's phone to prompt a missed call on the LCD screen before displaying the caller ID when performing a semi-attended transfer.  0-Disabled 1-Enabled The default value is 1.	Features->Transfer->Semi-Attend Transfer
transfer.blind_tran_on_hook_enable	0 or 1	It enables or disables the IP phone to complete the blind transfer through on-hook	Features->Transfer->Blind Transfer On

Parameter	Permitted Values	Descriptions	Web Setting Path
		besides pressing the Transfer/Tran soft key or TRAN/TRANSFER key.  0-Disabled  1-Enabled The default value is 1.	Hook
transfer.on_hook_trans_enable	0 or 1	It enables or disables the IP phone to complete the semi-attended/attended transfer through on-hook besides pressing the Transfer/Tran soft key or TRAN/TRANSFER key.  0-Disabled 1-Enabled The default value is 1.	Features->Transfer->Attend Transfer On Hook
features.off_hook_answer.enable	0 or 1	It configures the way of answering an incoming call for the IP phone.  0-Press the corresponding line key after off-hook or pressing the speakerphone key  1-Off-hook or press the speakerphone key The default value is 1.	
transfer.dsskey_deal_type	0, 1 or 2	It configures the DSS key behavior during an active call when user presses the DSS key and the DSS key is configured as a speed	Features->Transfer->Transfer Mode Via Dsskey

Parameter	Permitted Values	Descriptions	Web Setting Path
		dial, transfer or BLF/BLF list key.  0-New Call  1-Attended Transfer  2-Blind Transfer  The default value is 2.	
transfer.multi_call_trans_enable	0 or 1	It enables or disables the IP phone to select transferee's call (a new call or another existing call) during multiple calls when user presses the Tran/Transfer soft key or TRAN/TRANSFER key.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), the user can select to transfer the active call to a new call or another existing call during multiple calls when the user presses the Tran/Transfer soft key or TRAN/TRANSFER key.  If it is set to 0 (Disabled), the user can transfer the active call to a new call during multiple calls when the user presses the Tran/Transfer soft key or TRAN/TRANSFER key.	Features->General Information-> Allow Trans Exist Call

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.	
transfer.tran_others_after_conf_enable	0 or 1	It enables or disables the IP phone to transfer the local conference call to the other two parties after the conference initiator drops the local conference call.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), the other two parties remain connected when the conference initiator drops the conference call.  The default value is 0.  Note: It is only applicable to the local conference.	Features->Transfer->Transfer on Conference Hang up
features.transfer_type	0 or 1	It enables or disables the IP phone to transfer the call by a special INVITE message.  0-Disabled (Refer message)  1-Enabled (Specially for the Panasonic server)	
voice.vad	0 or 1	It enables or disables VAD (Voice Activity Detection) feature.	Settings->Voice->Echo Cancellation ->VAD

Parameter	Permitted Values	Descriptions	Web Setting Path
		0-Disbaled 1-Enabled The default value is 0. For more information on VAD, refer to Yealink IP Phones Administrator Guide.	
voice.cng	0 or 1	It enables or disables CNG (Comfortable Noise Generator) feature.  0-Disabled 1-Enabled The default value is 1. For more information on CNG, refer to Yealink IP Phones Administrator Guide.	Settings->Voice->Echo Cancellation ->CNG
voice.echo_cancellation	0 or 1	It enables or disables AEC (Acoustic Echo Canceller) feature.  0-Disabled 1-Enabled The default value is 1. For more information on AEC, refer to Yealink IP Phones Administrator Guide.	Settings->Voice->Echo Cancellation ->ECHO

Parameter	Permitted Values	Descriptions	Web Setting Path
voice.jib.adaptive	0 or 1	It configures the type of jitter buffer.  0-Fixed  1-Adaptive The default value is 1. For more information on jitter buffer, refer to Yealink IP Phones Administrator Guide.	Settings->Voice->JITTER BUFFER-> Type
voice.jib.min	Integer from 0 to 400	It configures the minimum delay time (in milliseconds) of jitter buffer.  The default value is 60.  Note: It works only if the value of the parameter "voice.jib.adaptive" is set to 1 (Adaptive).	Settings->Voice->JITTER BUFFER-> Min Delay
voice.jib.max	Integer from 0 to 400	It configures the maximum delay time (in milliseconds) of jitter buffer.  The default value is 240.  Note: It works only if the value of the parameter "voice.jib.adaptive" is set to 1 (Adaptive).	Settings->Voice->JITTER BUFFER-> Max Delay
voice.jib.normal	Integer from 0 to 400	It configures the normal delay time (in milliseconds) of jitter buffer.	Settings->Voice->JITTER BUFFER-> Normal

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 120.	
		<b>Note</b> : It works only if the value of the	
		parameter "voice.jib.adaptive" is set to 0	
		(Fixed).	
	Custom,		
	Australia,		
	Austria, Brazil,		
	Belgium,		Settings->Tones-> Select Country
	China, Czech,		
	Denmark,		
	Finland,	It configures the country tone for the IP phone.	
	France,		
	Germany,		
voice.tone.country	Great Britain,	The default value is Custom.	
	Greece,	The default value is Custom.	
	Hungary,		
	Lithuania,		
	India, Italy,		
	Japan,		
	Mexico, New		
	Zealand,		
	Netherlands,		
	Norway,		

Parameter	Permitted Values	Descriptions	Web Setting Path
	Portugal,		
	Spain,		
	Switzerland,		
	Sweden,		
	Russia, United States, Chile,		
	Czech ETSI		
		It customizes the dial tone.	
		tonelist = element[,element] [,element]	
		Where	
		<pre>element = [!]Freq1[+Freq2][+Freq3][+Freq4] /Duration</pre>	
	String	Freq: the frequency of the tone (ranges from	
		200 to 7000 Hz). If it is set to 0Hz, it means the	
voice.tone.dial		tone is not played. A tone is comprised of at	Settings->Tones-> Dial
		most four different frequencies.	
		<b>Duration</b> : the duration (in milliseconds) of the	
		dial tone, ranges from 0 to 30000ms.	
		You can configure at most eight different	
		tones for one condition, and separate them	
		by commas. (e.g., 250/200, 0/1000,	
		200+300/500, 600+700+800+1000/2000).	

Parameter	Permitted Values	Descriptions	Web Setting Path
		If you want the IP phone to play tones once, add an exclamation mark "!" before tones (e.g., !250/200, 0/1000, 200+300/500, 600+700+800+1000/2000).  The default value is blank.  Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	
voice.tone.ring	String	It customizes the ringback tone.  The value format is Freq/Duration. For more information on the value format, refer to the parameter "voice.tone.dial".  The default value is blank.  Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	Settings->Tones->Ring Back
voice.tone.busy	String	It customizes the tone when the callee is busy.  The value format is Freq/Duration. For more information on the value format, refer to the parameter "voice.tone.dial".  The default value is blank.	Settings->Tones->Busy

Parameter	Permitted Values	Descriptions	Web Setting Path
		Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	
voice.tone.congestion	String	It customizes the tone when the network is congested.  The value format is Freq/Duration. For more information on the value format, refer to the parameter "voice.tone.dial".  The default value is blank.  Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	Settings->Tones->Congestion
voice.tone.callwaiting	String	It customizes the call waiting tone.  The value format is Freq/Duration. For more information on the value format, refer to the parameter "voice.tone.dial".  The default value is blank.  Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	Settings->Tones->Call Waiting

Parameter	Permitted Values	Descriptions	Web Setting Path
voice.tone.dialrecall	String	It customizes the call back tone.  The value format is Freq/Duration. For more information on the value format, refer to the parameter "voice.tone.dial".  The default value is blank.  Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	Settings->Tones->Dial Recall
custom.features.redial_via_local_sip_server.enable	0 or 1	It configures the IP phone to redial via local SIP server or remote SIP server.  0-Local SIP Server  1-Remote SIP Server  The default value is 0.	
voice.tone.info	String	It customizes the info tone. The phone will play the info tone with the special information, for example, the number you are calling is not in service.  The value format is Freq/Duration. For more information on the value format, refer to the parameter "voice.tone.dial".  The default value is blank.	Settings->Tones-> Info

Parameter	Permitted Values	Descriptions	Web Setting Path
		Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	
voice.tone.stutter	String	It customizes the tone when the IP phone receives a voice mail.  The value format is Freq/Duration. For more information on the value format, refer to the parameter "voice.tone.dial".  The default value is blank.  Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	Settings->Tones-> Stutter
voice.tone.message	String	It customizes the tone when the IP phone receives a text message or voice message.  The value format is Freq/Duration. For more information on the value format, refer to the parameter "voice.tone.dial".  The default value is blank.  Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	Settings->Tones->Message

Parameter	Permitted Values	Descriptions	Web Setting Path
voice.tone.autoanswer	String	It customizes the warning tone for auto answer.  The value format is Freq/Duration. For more information on the value format, refer to the parameter "voice.tone.dial".  The default value is blank.  Note: It works only if the value of the parameter "voice.tone.country" is set to Custom.	Settings->Tones->Auto Answer
voice.group_spk_vol	Integer from 1 to 15	It configures the receiving volume of the group listening mode.  The default value is 8.	
voice.ring_vol	Integer from 1 to 15	It configures the volume of ringer.  The default value is 8.	
voice.handfree.spk_vol	Integer from 1 to 15	It configures the receiving volume of speaker during a call.  The default value is 8.	
voice.handfree.tone_vol	Integer from 1 to 15	It configures the dial tone or ringback tone volume of the speaker.  The default value is 8.	

Parameter	Permitted Values	Descriptions	Web Setting Path
voice.handset.spk_vol	Integer from 1 to 15	It configures the receiving volume of the handset during a call.  The default value is 8.	
voice.handset.tone_vol	Integer from 1 to 15	It configures the dial tone or ringback tone volume of the handset.  The default value is 8.	
voice.headset.spk_vol	Integer from 1 to 15	It configures the receiving volume of the headset during a call.  The default value is 8.	
voice.headset.tone_vol	Integer from 1 to 15	It configures the dial tone or ringback tone volume of the headset.  The default value is 8.	
voice.handfree_send	Integer from 1 to 53	It configures the sending volume of the speaker.  The default value is 35.  It takes effect after a reboot.	Features->Audio->Handfree Send Volume (1~53)
voice.handset_send	Integer from 1 to 53	It configures the sending volume of the handset.  The default value is 25.  It takes effect after a reboot.	Features->Audio->Handset Send Volume (1~53)

Parameter	Permitted Values	Descriptions	Web Setting Path
voice.headset_send	Integer from 1 to 53	It configures the sending volume of the headset.  The default value is 30.  It takes effect after a reboot.	Features->Audio->Headset Send Volume (1~53)
security.trust_certificates	0 or 1	It enables or disables the IP phone to only trust the server certificates in the Trusted Certificates list.  0-Disabled  1-Enabled  If it is set to 0 (Disabled), the IP phone will trust the server no matter whether the certificate sent by the server is valid or not.  If it is set to 1 (Enabled), the IP phone will authenticate the server certificate based on the trusted certificates list. Only when the authentication succeeds, the IP phone will trust the server.  The default value is 1.  It takes effect after a reboot.	Security->Trusted Certificates->Only Accept Trusted Certificates
security.ca_cert	0, 1 or 2	It configures the type of certificates in the Trusted Certificates list for the IP phone to	Security->Trusted Certificates->CA Certificates

Parameter	Permitted Values	Descriptions	Web Setting Path
		authenticate for TLS connection.  0-Default certificates  1-Custom certificates  2-All certificates  The default value is 2.  It takes effect after a reboot.	
security.cn_validation	0 or 1	It enables or disables the IP phone to mandatorily validate the CommonName or SubjectAltName of the certificate sent by the server.  0-Disabled 1-Enabled The default value is 0. It takes effect after a reboot.	Security->Trusted Certificates->Common Name Validation
security.dev_cert	0 or 1	It configures the type of the device certificates for the IP phone to send for TLS authentication.  O-Default certificates  1-Custom certificates  The default value is 0.	Security->Server Certificates->Device Certificates

Parameter	Permitted Values	Descriptions	Web Setting Path
		It takes effect after a reboot.	
security.user_name.user	String within 32 characters	It configures the user name of the user for phone's web user interface access.  The default value is user.	
security.user_name.admin	String within 32 characters	It configures the user name of the administrator for phone's web user interface access.  The default value is admin.	
security.user_name.var	String within 32 characters	It configures the user name of the var for phone's web user interface access.  The default value is var.	
security.user_password	String within 32 characters	It configures the password of the user, var and administrator for phone's web user interface access.  The valid value format is username:new password.  Example: security.user_password = user:123 means setting the password of administrator (current user name is "user") to password123.	Security->Password

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is blank.	
		Note: IP phones support ASCII characters	
		32-126(0x20-0x7E) in passwords. You can set	
		the password to be empty via web user	
		interface only.	
		It enables or disables the 3-level permissions	
		(admin, user, var).	
		<b>0</b> -Disabled	
	0 or 1	1-Enabled	
security.var_enable		The default value is 0.	
		It takes effect after a reboot.	
		For more information, refer to Yealink IP	
		phones Configuration Guide for User Access	
		Level.	
		It configures the access URL of the file, which	
		defines 3-level access permissions.	
web_item_level.url	LIDIishin E44	The default value is blank.	
	URL within 511 characters	It takes effect after a reboot.	
		For more information, refer to Yealink IP	
		phones Configuration Guide for User Access	
		Level.	

Parameter	Permitted Values	Descriptions	Web Setting Path
phone_setting.custom_softkey_enable	0 or 1	It enables or disables custom soft keys layout feature.  0-Disabled 1-Enabled The default value is 0.	Settings->Softkey Layout->Custom Softkey
custom_softkey_call_failed.url	URL within 511 characters	It configures the access URL of the custom file for the soft key presented on the LCD screen when in the Call Failed state.  Example:  The following example uses HTTP to download the CallFailed state file from the "XMLfiles" directory on provisioning server 10.2.8.16 using 8080 port.  custom_softkey_call_failed.url = http://10.2.8.16:8080/XMLfiles/CallFailed.xml  The default value is blank.	
custom_softkey_call_in.url	URL within 511 characters	It configures the access URL of the custom file for the soft key presented on the LCD screen when in the Call In state.  Example: The following example uses HTTP to	

Parameter	Permitted Values	Descriptions	Web Setting Path
		download the CallIn state file from the "XMLfiles" directory on provisioning server 10.2.8.16 using 8080 port.  custom_softkey_call_in.url = http://10.2.8.16:8080/XMLfiles/CallIn.xml  The default value is blank.	
custom_softkey_connecting.url	URL within 511 characters	It configures the access URL of the custom file for the soft key presented on the LCD screen when in the Connecting state.  Example:  The following example uses HTTP to download the Connecting state file from the "XMLfiles" directory on provisioning server 10.2.8.16 using 8080 port.  custom_softkey_connecting.url = http://10.2.8.16:8080/XMLfiles/Connecting.xml The default value is blank.	
custom_softkey_dialing.url	URL within 511 characters	It configures the access URL of the custom file for the soft key presented on the LCD screen when in the Dialing state.  Example:	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The following example uses HTTP to download the Dialing state file from the "XMLfiles" directory on provisioning server 10.2.8.16 using 8080 port.  custom_softkey_dialing.url = http://10.2.8.16:8080/XMLfiles/Dialing.xml	
custom_softkey_ring_back.url	URL within 511 characters	The default value is blank.  It configures the access URL of the custom file for the soft key presented on the LCD screen when in the Ringback state.  Example:  The following example uses HTTP to download the RingBack state file from the "XMLfiles" directory on provisioning server 10.2.8.16 using 8080 port.  custom_softkey_ring_back.url = http://10.2.8.16:8080/XMLfiles/RingBack.xml  The default value is blank.	
custom_softkey_talking.url	URL within 511 characters	It configures the access URL of the custom file for the soft key presented on the LCD screen when in the Talking state.	

Parameter	Permitted Values	Descriptions	Web Setting Path
		Example: The following example uses HTTP to download the Talking state file from the "XMLfiles" directory on provisioning server 10.2.8.16 using 8080 port. custom_softkey_talking.url = http://10.2.8.16:8080/XMLfiles/Talking.xml The default value is blank.	
linekey.X.type (X ranges from 1 to 3)	Integer	It configures the key feature for the line key X.  Valid values are:  0-N/A  1-Conference  2-Forward  3-Transfer  4-Hold  5-DND  7-Call Return  8-SMS  9-Directed Pickup  10-Call Park	DSSKey->Line Key->Line KeyX->Type

Parameter	Permitted Values	Descriptions	Web Setting Path
		11-DTMF	
		12-Voice Mail	
		13-Speed Dial	
		14-Intercom	
		15-Line	
		16-BLF	
		<b>17</b> -URL	
		18-Group Listening	
		20-Private Hold	
		22-XML Group	
		23-Group Pickup	
		24-Multicast Paging	
		25-Record	
		27-XML Browser	
		<b>34</b> -Hot Desking	
		35-URL Record	
		<b>38</b> -LDAP	
		<b>39</b> -BLF List	
		<b>40</b> -Prefix	
		41-Zero Touch	

Parameter	Permitted Values	Descriptions	Web Setting Path
		42-ACD	
		45-Local Group	
		46-Network Group	
		<b>50</b> -Keypad Lock	
		55-Meet-Me Conference	
		<b>56</b> -Retrieve Park	
		57-Hoteling	
		<b>58</b> -ACD Trace	
		<b>59</b> -Disp Code	
		60-Emergency	
		61-Directory	
		The default value is 15.	
		It configures the desired line to apply the key	
		feature.	
		1-Line 1	
linekey.X.line	Integer from 1	<b>2</b> -Line 2	DCCKov a line Kov a line Kov V a line
(X ranges from 1 to 3)	to 16	<b>3</b> -Line 3	DSSKey->Line Key->Line KeyX->Line
		When X=1, the default value is 1.	
		When X=2, the default value is 2.	
		When X=3, the default value is 3.	

Parameter	Permitted Values	Descriptions	Web Setting Path
linekey.X.value (X ranges from 1 to 3)	String within 99 characters	It configures the value of the line key feature.  For example, when the key feature is configured as BLF, it configures the phone number of the monitored user.  The default value is blank.	DSSKey->Line Key->Line KeyX->Value
linekey.X.pickup_value (X ranges from 1 to 3)	String within 256 characters	It configures the pickup code for BLF feature or conference ID followed by the # sign for Meet-Me conference feature.  It only applies to BLF and Meet-Me conference features.  The default value is blank.	DSSKey->Line Key->Line KeyX->Extension
linekey.X.xml_phonebook (X ranges from 1 to 3)	Integer from 0 to 5	It configures the desired local group/XML group/network group for the line key X.  It only applies to the Local Group, XML Group and Network Group features.  When the key feature is configured as Local Group, valid values are:  0-All contacts  1-First local group  2-Second local group	DSSKey->Line Key->Line KeyX->Line

Parameter	Permitted Values	Descriptions	Web Setting Path
		3-Third local group	
		<b>4</b> -Fourth local group	
		5-Fifth local group	
		When the key feature is configured as XML	
		Group (remote phone book), valid values	
		are:	
		0-First XML group	
		1-Second XML group	
		2-Third XML group	
		<b>3-</b> Fourth XML group	
		4-Fifth XML group	
		When the key feature is configured as	
		Network Group, valid values are:	
		0-All contacts	
		1-Group	
		2-Enterprise	
		<b>3</b> -GroupCommon	
		4-EnterpriseCommon	
		5-Personal	
		The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
linekey.X.label (X ranges from 1 to 3)	String within 99 characters	It configures the label displayed on the LCD screen for each line key.  The default value is blank.	DSSKey->Line Key->Line KeyX->Label
programablekey.X.type (X=1-10, 14.) For more information, refer to Programmable Keys on page 310.	Integer	It configures the key feature for the programmable key X.  Valid values are:  0-N/A  2-Forward  5-DND  7-Call Return  8-SMS  9-Directed Pickup  13-Spead Dial  22-XML Group  23-Group Pickup  27-XML Browser  28-History  30-Menu  31-Switch Account  32-New SMS	DSSKey->Programmable Key->Type

Parameter	Permitted Values	Descriptions	Web Setting Path
		33-Status	
		<b>38</b> -LDAP	
		40-Prefix	
		41-Zero Touch	
		43-Local Directory	
		44-Network Directory	
		45-Local Group	
		46-Network Group	
		47-XML Directory	
		<b>50</b> -Keypad Lock	
		51-Switch Account Up	
		52-Switch Account Down	
		55-Meet-Me Conference	
		61-Directory	
		It configures the desired line to apply the	
programablekey.X.line		programmable key feature.	
(X=1-10, 14.)	Integer from 1	1-Line 1	DCCK Drawnana
For more information, refer to Programmable Keys on	to 16	<b>2</b> -Line 2	DSSKey->Programmable Key->Line
page 310.		<b>3</b> -Line 3	
		The default value is not applicable.	

Parameter	Permitted Values	Descriptions	Web Setting Path
programablekey.X.value (X=1-10, 14.) For more information, refer to Programmable Keys on page 310.	String within 99 characters	It configures the value of the programmable key feature.  For example, when the key feature is configured as Speed Dial, it configures the number you want to dial out.  The default value is blank.	DSSKey->Programmable Key->Value
programablekey.X.xml_phonebook (X=1-10, 14.) For more information, refer to Programmable Keys on page 310.	Integer from 0 to 5	It configures the desired local group/XML group/network group for the programmable key.  It only applies to the Local Group, XML Group and Network Group features.  When the key feature is configured as Local Group, valid values are:  0-All contacts  1-First local group  2-Second local group  3-Third local group  4-Fourth local group  5-Fifth local group  When the key feature is configured as XML Group (remote phone book), valid values	DSSKey->Programmable Key->Line

Parameter	Permitted Values	Descriptions	Web Setting Path
		are:  0-First XML group  1-Second XML group  2-Third XML group  3-Fourth XML group  4-Fifth XML group  When the key feature is configured as Network Group, valid values are:  0-All contacts  1-Group  2-Enterprise  3-GroupCommon  4-EnterpriseCommon  5-Personal  The default value is 0.	
programablekey.X.history_type (X=1-10, 14.) For more information, refer to Programmable Keys on page 310.	Integer	It configures the history type of programmable key.  0-Local History  1-Network History  The default value is 0.	DSSKey->Programmable Key->Line

Parameter	Permitted Values	Descriptions	Web Setting Path
programablekey.X.label (X=1-4.) For more information, refer to Programmable Keys on page 310.	String within 99 characters	It configures the label displayed on the LCD screen for each soft key.  The default value is blank.	DSSKey->Programmable Key->Label
programablekey.X.pickup_value (X=1-10, 14.) For more information, refer to Programmable Keys on page 310.	String within 256 characters	It configures conference ID followed by the # sign for Meet-Me conference feature.  It only applies to Meet-Me conference feature.  The default value is blank.	DSSKey->Programmable Key->Extension
forward.always.enable	0 or 1	It enables or disables always forward feature.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), incoming calls are forwarded to the destination number immediately.  The default value is 0.	Features->Forward &DND->Always Forward->On/Off
forward.always.target	String within 32 characters	It configures the destination number the IP phone forwards all incoming calls to.  The default value is blank.	Features->Forward &DND->Always Forward->Target

Parameter	Permitted Values	Descriptions	Web Setting Path
forward.always.on_code	String within 32 characters	It configures the always forward on code to activate the server-side always forward feature. The IP phone will send the always forward on code and the pre-configured destination number to the server when you activate always forward feature on the IP phone.  The default value is blank.	Features->Forward &DND->Always Forward->On Code
forward.always.off_code	String within 32 characters	It configures the always forward off code to deactivate the server-side always forward feature. The IP phone will send the always forward off code to the server when you deactivate always forward feature on the IP phone.  The default value is blank.	Features->Forward &DND->Always Forward->Off Code
forward.busy.enable	0 or 1	It enables or disables busy forward feature.  O-Disabled  1-Enabled  If it is set to 1 (Enabled), incoming calls are forwarded to the destination number when the callee is busy.	Features->Forward &DND->Busy Forward->On/Off

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 0.	
forward.busy.target	String within 32 characters	It configures the destination number the IP phone forwards incoming calls to when busy.  The default value is blank.	Features->Forward &DND->Busy Forward->Target
forward.busy.on_code	String within 32 characters	It configures the busy forward on code to activate the server-side busy forward feature. The IP phone will send the busy forward on code and the pre-configured destination number to the server when you activate busy forward feature on the IP phone.  The default value is blank.	Features->Forward &DND->Busy Forward->On Code
forward.busy.off_code	String within 32 characters	It configures the busy forward off code to deactivate the server-side busy forward feature. The IP phone will send the busy forward off code to the server when you deactivate busy forward feature on the IP phone.  The default value is blank.	Features->Forward &DND->Busy Forward->Off Code
forward.no_answer.enable	0 or 1	It enables or disables no answer forward feature.	Features->Forward &DND->No Answer Forward->On/Off

Parameter	Permitted Values	Descriptions	Web Setting Path
		O-Disabled  1-Enabled  If it is set to 1 (Enabled), incoming calls are forwarded to the destination number after a period of ring time.  The default value is 0.	
forward.no_answer.target	String within 32 characters	It configures the destination number the IP phone forwards incoming calls to after a period of ring time.  The default value is blank.	Features->Forward &DND->No Answer Forward->Target
forward.no_answer.timeout	Integer from 0 to 20	It configures ring times (N) to wait before forwarding incoming calls.  Incoming calls are forwarded when not answered after N*6 seconds.  The default value is 2.	Features->Forward &DND->No Answer Forward->After Ring Time (0~120s)
forward.no_answer.on_code	String within 32 characters	It configures the no answer forward on code to activate the server-side no answer forward feature. The IP phone will send the no answer forward on code and the pre-configured destination number to the server when you activate no answer forward feature on the IP	Features->Forward &DND->No Answer Forward->On Code

Parameter	Permitted Values	Descriptions	Web Setting Path
		phone.  The default value is blank.	
forward.no_answer.off_code	String within 32 characters	It configures the no answer forward off code to deactivate the server-side no answer forward feature. The IP phone will send the no answer forward off code to the server when you deactivate no answer forward feature on the IP phone.  The default value is blank.	Features->Forward &DND->No Answer Forward->Off Code
forward.international.enable	0 or 1	It enables or disables the IP phone to forward incoming calls to international numbers (the prefix is 00).  0-Disabled 1-Enabled The default value is 1.	Features->General Information->Fwd International
acd.auto_available	0 or 1	It enables or disables the IP phone to automatically change the status of the ACD agent to available after the designated time.  0-Disabled 1-Enabled The default value is 0.	Features->ACD->ACD Auto Available

Parameter	Permitted Values	Descriptions	Web Setting Path
acd.auto_available_timer	Integer from 0 to 120	It configures the length of time (in seconds) before the status of the ACD agent is automatically changed to available. The default value is 60.  Note: It works only if the value of the parameter "acd.auto_available" is set to 1 (Enabled).	Features->ACD->ACD Auto Available Timer (0~120s)
action_url.setup_completed	URL within 511 characters	It configures the action URL the IP phone sends after startup.  The value format is: http(s)://IP address of server/help.xml? variable name=variable value.  Valid variable values are:  • \$mac  • \$ip  • \$model  • \$firmware  • \$active_url  • \$active_user  • \$active_host	Features->Action URL->Setup Completed

Parameter	Permitted Values	Descriptions	Web Setting Path
		• \$local	
		• \$remote	
		\$display_local	
		\$display_remote	
		• \$call_id	
		Example:	
		action_url. setup_completed =	
		http://192.168.0.20/help.xml?IP=\$ip	
		The default value is blank.	
		It configures the action URL the IP phone	
		sends after an account is registered.	
		Example:	
action_url.registered	URL within 511	action_url.registered =	Features->Action URL->Registered
	characters	http://192.168.0.20/help.xml?IP=\$ip	and the second s
		The default value is blank.	
		Note: The old parameter "action_url.log_on"	
		is also applicable to IP phones.	
	URL within 511	It configures the action URL the IP phone	
action_url.unregistered	characters	sends after an account is unregistered.	Features->Action URL->Unregistered
		Example:	

Parameter	Permitted Values	Descriptions	Web Setting Path
		action_url.unregistered = http://192.168.0.20/help.xml?IP=\$ip The default value is blank. Note: The old parameter "action_url.log_off" is also applicable to IP phones.	
action_url.register_failed	URL within 511 characters	It configures the action URL the IP phone sends after a register failed.  Example: action_url.register_failed = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Register Failed
action_url.off_hook	URL within 511 characters	It configures the action URL the IP phone sends when off hook.  Example: action_url.off_hook = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Off Hook
action_url.on_hook	URL within 511 characters	It configures the action URL the IP phone sends when on hook. <b>Example</b> :	Features->Action URL->On Hook

Parameter	Permitted Values	Descriptions	Web Setting Path
		action_url.on_hook =  http://192.168.0.20/help.xml?IP=\$ip  The default value is blank.	
action_url.incoming_call	URL within 511 characters	It configures the action URL the IP phone sends when receiving an incoming call.  Example: action_url.incoming_call = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Incoming Call
action_url.outgoing_call	URL within 511 characters	It configures the action URL the IP phone sends when placing a call.  Example: action_url.outgoing_call = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Outgoing Call
action_url.call_established	URL within 511 characters	It configures the action URL the IP phone sends when establishing a call.  Example:  action_url.call_established =  http://192.168.0.20/help.xml?IP=\$ip	Features->Action URL->Established

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is blank.	
action_url.call_terminated	URL within 511 characters	It configures the action URL the IP phone sends when terminating a call.  Example: action_url.call_terminated = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Terminated
action_url.dnd_on	URL within 511 characters	It configures the action URL the IP phone sends when DND feature is enabled.  Example: action_url.dnd_on = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Open DND
action_url.dnd_off	URL within 511 characters	It configures the action URL the IP phone sends when DND feature is disabled.  Example: action_url.dnd_off = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Close DND

Parameter	Permitted Values	Descriptions	Web Setting Path
action_url.always_fwd_on	URL within 511 characters	It configures the action URL the IP phone sends when always forward feature is enabled.  Example: action_url.always_fwd_on = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Open Always Forward
action_url.always_fwd_off	URL within 511 characters	It configures the action URL the IP phone sends when always forward feature is disabled.  Example: action_url.always_fwd_off = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Close Always Forward
action_url.busy_fwd_on	URL within 511 characters	It configures the action URL the IP phone sends when busy forward feature is enabled.  Example: action_url.busy_fwd_on = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Open Busy Forward

Parameter	Permitted Values	Descriptions	Web Setting Path
action_url.busy_fwd_off	URL within 511 characters	It configures the action URL the IP phone sends when busy forward feature is disabled.  Example: action_url.busy_fwd_off = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Close Busy Forward
action_url.no_answer_fwd_on	URL within 511 characters	It configures the action URL the IP phone sends when no answer forward feature is enabled.  Example: action_url.no_answer_fwd_on = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Open NoAnswer Forward
action_url.no_answer_fwd_off	URL within 511 characters	It configures the action URL the IP phone sends when no answer forward feature is disabled.  Example: action_url.no_answer_fwd_off = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Close NoAnswer Forward

Parameter	Permitted Values	Descriptions	Web Setting Path
action_url.transfer_call	URL within 511 characters	It configures the action URL the IP phone sends when performing a transfer.  Example: action_url.transfer_call = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Transfer Call
action_url.blind_transfer_call	URL within 511 characters	It configures the action URL the IP phone sends when performing a blind transfer.  Example: action_url.blind_transfer_call = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Blind Transfer
action_url.attended_transfer_call	URL within 511 characters	It configures the action URL the IP phone sends when performing an attended/semi-attended transfer.  Example: action_url.attended_transfer_call = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Attended Transfer
action_url.hold	URL within 511	It configures the action URL the IP phone	Features->Action URL->Hold

Parameter	Permitted Values	Descriptions	Web Setting Path
	characters	sends when placing a call on hold.	
		Example:	
		action_url.hold =	
		http://192.168.0.20/help.xml?IP=\$ip	
		The default value is blank.	
		It configures the action URL the IP phone	
		sends when resuming a held call.	
action_url.unhold	URL within 511	Example:	Features->Action URL->UnHold
	characters	action_url.unhold =	
		http://192.168.0.20/help.xml?IP=\$ip	
		The default value is blank.	
		It configures the action URL the IP phone	
		sends when a call is held.	
action_url.held	URL within 256 characters	Example:	
	characters	action_url.outgoing_call = http://192.168.0.20/help.xml?IP=\$ip	
		The default value is blank.	
action_url.unheld	URL within 256	It configures the action URL the IP phone sends when a call being held is resumed.	
	characters	_	
		Example:	

Parameter	Permitted Values	Descriptions	Web Setting Path
		action_url.outgoing_call = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	
action_url.mute	URL within 511 characters	It configures the action URL the IP phone sends when muting a call.  Example: action_url.mute = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Mute
action_url.unmute	URL within 511 characters	It configures the action URL the IP phone sends when un-muting a call.  Example: action_url.unmute = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->UnMute
action_url.missed_call	URL within 511 characters	It configures the action URL the IP phone sends when missing a call.  Example:  action_url.missed_call = http://192.168.0.20/help.xml?IP=\$ip	Features->Action URL->Missed Call

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is blank.	
action_url.busy_to_idle	URL within 511 characters	It configures the action URL the IP phone sends when changing the state of the IP phone from busy to idle.  Example: action_url.busy_to_idle = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Busy To Idle
action_url.idle_to_busy	URL within 511 characters	It configures the action URL the IP phone sends when changing the state of the IP phone from idle to busy.  Example: action_url.idle_to_busy = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Idle To Busy
action_url.ip_change	URL within 511 characters	It configures the action URL the IP phone sends when changing the IP address of the IP phone.  Example: action_url.ip_change =	Features->Action URL->IP Changed

Parameter	Permitted Values	Descriptions	Web Setting Path
		http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	
action_url.forward_incoming_call	URL within 511 characters	It configures the action URL the IP phone sends when forwarding an incoming call.  Example: action_url.forward_incoming_call = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Forward Incoming Call
action_url.reject_incoming_call	URL within 511 characters	It configures the action URL the IP phone sends when rejecting an incoming call.  Example: action_url.reject_incoming_call = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Reject Incoming Call
action_url.answer_new_incoming_call	URL within 511 characters	It configures the action URL the IP phone sends when answering a new incoming call.  Example: action_url.answer_new_incoming_call = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Answer New-In Call

Parameter	Permitted Values	Descriptions	Web Setting Path
action_url.transfer_finished	URL within 511 characters	It configures the action URL the IP phone sends when completing a call transfer.  Example: action_url.transfer_finished = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Transfer Finished
action_url.transfer_failed	URL within 511 characters	It configures the action URL the IP phone sends when failing to transfer a call.  Example: action_url.transfer_failed = http://192.168.0.20/help.xml?IP=\$ip The default value is blank.	Features->Action URL->Transfer Failed
lang.wui	English, Chinese_S, Chinese_T, German, French, Italian, Spanish, Turkish , Polish, Portuguese, or Russian	It configures the language used on the web user interface.  Note: The default language used on the web user interface depends on the language preferences of your browser. If the language of your browser is not supported by the IP phone, the web user interface will use English by default.	Settings->Preference->Language

Parameter	Permitted Values	Descriptions	Web Setting Path
lang.gui	English, Chinese_S, Chinese_T, German, French, Turkish, Italian, Polish, Spanish, Russian or Portuguese	It configures the language used on the IP phone user interface. The default value is English.	
local_time.time_zone	-11 to +14	It configures the time zone.  For more available time zones, refer to Time  Zones on page 312.  The default value is +8.	Settings->Time & Date->Time Zone
local_time.time_zone_name	String within 32 characters	It configures the time zone name.  The default time zone name is China (Beijing).  The available time zone names depend on the time zone configured by the parameter "local_time.time_zone". For more information on the available time zone names for each time zone, refer to Time Zones on page 312.  Note: It works only if the value of the	Settings->Time & Date->Time Zone

Parameter	Permitted Values	Descriptions	Web Setting Path
		parameter "local_time.summer_time" is set to 2 (Automatic).	
local_time.manual_time_enable	0 or 1	It configures the IP phone to obtain time from NTP server or manual settings.  0-NTP  1-Manual The default value is 0.	Settings->Time & Date->Manual Time
local_time.manual_ntp_srv_prior	0 or 1	It enables or disables the IP phone to use manually configured NTP server preferentially.  O-Disabled (use the NTP server obtained by DHCP preferentially)  1-Enabled(use the NTP server configured manually preferentially)  The default value is 0.	Settings->Time & Date->NTP By DHCP Priority
local_time.ntp_server1	IP address or domain name	It configures the IP address or domain name of the NTP server 1.  The default value is cn.pool.ntp.org.	Settings->Time & Date->Primary Server
local_time.ntp_server2	IP address or domain name	It configures the IP address or domain name of the NTP server 2. If the NTP server 1 is not configured or cannot be accessed, the IP	Settings->Time & Date->Secondary Server

Parameter	Permitted Values	Descriptions	Web Setting Path
		phone will request the time and date from the NTP server 2.  The default value is cn.pool.ntp.org.	
local_time.interval	Integer from 15 to 86400	It configures the interval (in seconds) to update time and date from the NTP server.  The default value is 1000.	Settings->Time & Date->Synchronism (15~86400s)
local_time.summer_time	0, 1 or 2	It configures Daylight Saving Time (DST) feature.  0-Disabled 1-Enabled 2-Automatic The default value is 2.	Settings->Time & Date->Daylight Saving Time
local_time.dst_time_type	0 or 1	It configures the DST time type.  0-DST By Date  1-DST By Week  The default value is 0.  Note: It works only if the value of the parameter "local_time.summer_time" is set to 1 (Enabled).	Settings->Time & Date->Fixed Type

Parameter	Permitted Values	Descriptions	Web Setting Path
local_time.start_time	Time	It configures the start time of the DST.  Value formats are:  Month/Day/Hour (for By Date)  Month/ Day of Week/ Day of Week Last in Month/ Hour of Day (for By Week)  If "local_time.dst_time_type" is set to 0 (By Date), use the mapping:  Month: 1=Jan, 2=Feb,, 12=Dec  Day:1=the first day in a month,, 31= the last day in a month  Hour:0=0am, 1=1am,, 23=11pm  If "local_time.dst_time_type" is set to 1 (By Week), use the mapping:  Month: 1=Jan, 2=Feb,, 12=Dec  Day of Week: 1=Mon, 2=Tues,, 7=Sun  Day of Week Last in Month: 1=the first week in a month,, 5=the last week in a month  Hour of Day: 0=0am, 1=1am,, 23=11pm  The default value is 1/1/0.  Note: It works only if the value of the parameter "local_time.summer_time" is set to	For DST By Date: Settings->Time & Date->Start Date For DST By Week: Settings->Time & Date->DST Start Month/DST Start Day of Week/DST Start Day of Week Last in Month/ Start Hour of Day

Parameter	Permitted Values	Descriptions	Web Setting Path
		1 (Enabled).	
local_time.end_time	Time	It configures the end time of the DST.  Value formats are:  Month/Day/Hour (for By Date)  Month/ Day of Week/ Day of Week Last in Month/ Hour of Day (for By Week)  If "local_time.dst_time_type" is set to 0 (By Date), use the mapping:  Month: 1=Jan, 2=Feb,, 12=Dec  Day:1=the first day in a month,, 31= the last day in a month  Hour:0=0am, 1=1am,, 23=11pm  If "local_time.dst_time_type" is set to 1 (By Week), use the mapping:  Month: 1=Jan, 2=Feb,, 12=Dec  Day of Week: 1=Mon, 2=Tues,, 7=Sun  Day of Week Last in Month: 1=the first week in a month,, 5=the last week in a month  Hour of Day: 0=1am, 1=1am,, 23=11pm	For DST By Date: Settings->Time & Date-> End Date For DST By Week: Settings ->Time & Date->DST Stop Month/DST Stop Day of Week/DST Stop Day of Week Last in Month/Stop Hour of Day

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 12/31/23.  Note: It works only if the value of the parameter "local_time.summer_time" is set to 1 (Enabled).	
local_time.offset_time	Integer from -300 to 300	It configures the offset time (in minutes) of DST.  The default value is blank.  Note: It works only if the value of the parameter "local_time.summer_time" is set to 1 (Enabled).	Settings->Time & Date->Offset (minutes)
local_time.time_format	0 or 1	It configures the time format.  0-12 Hour  1-24 Hour  If it is set to 0 (12 Hour), the time will be displayed in 12-hour format with AM or PM specified.  If it is set to 1 (24 Hour), the time will be displayed in 24-hour format (eg., 2:00 PM displays as 14:00).  The default value is 1.	Settings->Time & Date->Time Format

Parameter	Permitted Values	Descriptions	Web Setting Path
local_time.date_format	0, 1, 2, 3, 4, 5 or 6	It configures the date format.  0-WWW MMM DD  1-DD-MMM-YY  2-YYYY-MM-DD  3-DD/MM/YYYY  4-MM/DD/YY  5-DD MMM YYYY  6-WWW DD MMM  The default value is 0.  "WWW" represents the abbreviation of the week, "DD" represents a two-digit day, "MMM" represents the first three letters of the month, "YYYY" represents a four-digit year, and "YY" represents a two-digit year.	Settings->Time & Date->Date Format
local_time.dhcp_time	0 or 1	It enables or disables the IP phone to update time with the offset time obtained from the DHCP server.  It is only available to offset time from GMT 0.  0-Disabled  1-Enabled	Settings->Time & Date->DHCP Time

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 0.	
hotdesking.startup_register_name_enable	0 or 1	It enables or disables the IP phone to provide input field of register name on the hot desking login wizard during startup.  0-Disabled 1-Enabled The default value is 0.	
hotdesking.startup_username_enable	0 or 1	It enables or disables the IP phone to provide input field of user name on the hot desking login wizard during startup.  0-Disabled 1-Enabled The default value is 1.	
hotdesking.startup_password_enable	0 or 1	It enables or disables the IP phone to provide input field of password on the hot desking login wizard during startup.  0-Disabled 1-Enabled The default value is 1.	

Parameter	Permitted Values	Descriptions	Web Setting Path
hotdesking.startup_sip_server_enable	0 or 1	It enables or disables the IP phone to provide input field of SIP server on the hot desking login wizard during startup.  0-Disabled 1-Enabled The default value is 0.	
hotdesking.startup_outbound_enable	0 or 1	It enables or disables the IP phone to provide input field of outbound server on the hot desking login wizard during startup.  0-Disabled 1-Enabled The default value is 0.	
hotdesking.dsskey_register_name_enable	0 or 1	It enables or disables the IP phone to provide input field of register name on the hot desking login wizard when pressing the Hot Desking key.  0-Disabled 1-Enabled The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
hotdesking.dsskey_username_enable	0 or 1	It enables or disables the IP phone to provide input field of user name on the hot desking login wizard when pressing the Hot Desking key.  0-Disabled 1-Enabled The default value is 1.	
hotdesking.dsskey_password_enable	0 or 1	It enables or disables the IP phone to provide input field of password on the hot desking login wizard when pressing the Hot Desking key.  0-Disabled 1-Enabled The default value is 1.	
hotdesking.dsskey_sip_server_enable	0 or 1	It enables or disables the IP phone to provide input field of SIP server on the hot desking login wizard when pressing the Hot Desking key.  0-Disabled 1-Enabled The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
hotdesking.dsskey_outbound_enable	0 or 1	It enables or disables the IP phone to provide input field of outbound server on the hot desking login wizard when pressing the Hot Desking key.  0-Disabled 1-Enabled The default value is 0.	
distinctive_ring_tones.alert_info.X.text (X ranges from 1 to 10)	String within 32 characters	It configures the internal ringer text to map the keywords contained in the Alert-Info header.  Example: distinctive_ring_tones.alert_info.1.text = Family The default value is blank. For more information, refer to Yealink IP phones Administrator Guide.	Settings->Ring->Internal Ringer Text
distinctive_ring_tones.alert_info.X.ringer (X ranges from 1 to 10)	Integer from 1 to 10	It configures the desired ring tone for each text. The value ranges from 1 to 7, the digit stands for the appropriate ring tone.  The default value is 1.  For more information, refer to Yealink IP	Settings->Ring->Internal Ringer File

Parameter	Permitted Values	Descriptions	Web Setting Path
		phones Administrator Guide.	
auto_redial.enable	0 or 1	It enables or disables the IP phone to automatically redial the dialed number when the callee is temporarily unavailable.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), the IP phone will dial the previous dialed out number automatically when the dialed number is temporarily unavailable.  The default value is 0.	Features->General Information->Auto Redial
auto_redial.interval	Integer from 1 to 300	It configures the interval (in seconds) for the IP phone to wait between redials.  The IP phone redials the dialed number at regular intervals till the callee answers the call.  The default value is 10.	Features->General Information->Auto Redial Interval (1~300s)
auto_redial.times	Integer from 1 to 300	It configures the auto redial times when the callee is temporarily unavailable.  The IP phone tries to redial the callee as many times as configured till the callee answers the	Features->General Information->Auto Redial Times (1~300)

Parameter	Permitted Values	Descriptions	Web Setting Path
		call. The default value is 10.	
zero_touch.enable	0 or 1	It enables or disables zero touch for the IP phone to configure the network parameters and provisioning server address via phone user interface during startup.  0-Disabled 1-Enabled The default value is 0. For more information, refer to Zero Touch on page 29.	Settings->Auto Provision->Zero Active
zero_touch.wait_time	Integer from 1 to 100	It configures the duration time (in seconds) for the IP phone to display Zero Touch screen during startup. You can press the OK soft key to enter configuration screen or the Cancel soft key to return to the idle screen.  The default value is 5.	Settings->Auto Provision->Wait Time (1~100s)
zero_touch.network_fail_wait_times	Integer greater than1	It configures the reconnection times when zero touch module fails to obtain network parameters.  The default value is 5.	

Parameter	Permitted Values	Descriptions	Web Setting Path
zero_touch.network_fail_delay_times	Integer greater than 1000	It configures the duration time (in milliseconds) of every reconnection when zero touch module fails to obtain network parameters.  The default value is 1000.	
push_xml.server	IP address	It configures the IP address of the push XML server.  The default value is blank.  For more information, refer to Yealink IP Phones XML Browser Developer's Guide.	Features->Remote Control->Push XML Server IP Address
push_xml.block_in_calling	0 or 1	It enables or disables the IP phone to block XML applications during a call.  0-Disabled 1-Enabled The default value is 0. For more information, refer to Yealink IP Phones XML Browser Developer's Guide.	Features->Remote Control->Block XML In Calling
push_xml.sip_notify	0 or 1	It enables or disables the IP phone to process the push XML via SIP NOTIFY message. <b>0</b> -Disabled	Features->Remote Control->SIP Notify

Parameter	Permitted Values	Descriptions	Web Setting Path
		1-Enabled	
		The default value is 0.	
		For more information, refer to Yealink IP Phones XML Browser Developer's Guide.	
		It configures the IP address of the server from which the IP phone receives the action URI requests.	
features.action_uri_limit_ip	IP address or any	Multiple IP addresses are separated by commas.	
		If it is set to any, the IP phone will receive action URI requests from any server.	Features->Remote Control->Action URI allow IP List
		If it is left blank, the IP phone will reject action URI requests.	
		The default value is blank.	
		For more information, refer to Yealink IP Phones Administrator Guide.	
features.show_action_uri_option		It enables or disables the phone to pop up the Allow Remote Control prompt when it	
	0 or 1	receives the action URI requests.	
		0-Disabled	
		1-Enabled	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 0.	
action_url.show_msgbox	0 or 1	It enables or disables the phone to pop up the Allow Remote Control prompt using remote control.  0-Disabled 1-Enabled The default value is 0.	
phone_setting.logon_wizard_forever_wait	0 or 1	It enables or disables the IP phone to remain at the hot desking logon wizard even though timeout.  0-Disabled 1-Enabled The default value is 0.	
features.reboot_in_talk_enable	0 or 1	It enables or disables the phone to reboot during a call when it receives a NOTIFY message.  0-Disabled 1-Enabled The default value is 0.	
features.call_invite_format	0 or 1	It configures the format of callee field in the	

Parameter	Permitted Values	Descriptions	Web Setting Path
		SIP_MSG_CALL_INVITE message.  0- sip:XXX  1- tel:Number  The default value is 0.	
dialplan.area_code.code	String within 16 characters	It configures the area code to be added before the entered numbers when dialing out.  The default value is blank.  Note: The length of the entered number must be between the minimum length configured by the parameter  "dialplan.area_code.min_len" and the maximum length configured by the parameter "dialplan.area_code. max_len".  For more information, refer to Yealink IP Phones Administrator Guide.	Settings->Dial Plan->Area Code->Code
dialplan.area_code.min_len	Integer from 1 to 15	It configures the minimum length of the entered numbers.  The default value is 1.  For more information, refer to Yealink IP Phones Administrator Guide.	Settings->Dial Plan->Area Code->Min Length (1-15)
dialplan.area_code.max_len	Integer from 1	It configures the maximum length of the	Settings->Dial Plan->Area

Parameter	Permitted Values	Descriptions	Web Setting Path
	to 15	entered numbers.  The default value is 15.  Note: The value must be larger than the minimum length.  For more information, refer to Yealink IP Phones Administrator Guide.	Code->Max Length (1-15)
dialplan.area_code.line_id	Integer	It configures the desired line to apply the area code rule. The digit 0 stands for all lines. If it is left blank, the area code rule will apply to all lines on the IP phone.  0 to 3 (for SIP-T23 (P/G))  Multiple line IDs are separated by commas.  The default value is blank.  For more information, refer to Yealink IP  Phones Administrator Guide.	Settings->Dial Plan->Area Code->Account
dialplan.block_out.number.X (X ranges from 1 to 10)	String within 32 characters	It configures the block out numbers.  Example: dialplan.block_out.number.1 = 1003 When you dial the number "1003" on your phone, the dialing will fail and the LCD screen will prompt "Forbidden Number".	Settings->Dial Plan->Block Out->BlockOut NumberX

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is blank.  For more information, refer to Yealink IP  Phones Administrator Guide.	
dialplan.block_out.line_id.X (X ranges from 1 to 10)	Integer	It configures the desired line to apply the block out rule. The digit 0 stands for all lines. If it is left blank, the block out rule will apply to all lines on the IP phone.  0 to 3 (for SIP-T23 (P/G))  Multiple line IDs are separated by commas.  The default value is blank.  For more information, refer to Yealink IP  Phones Administrator Guide.	Settings->Dial Plan->Block Out->Account
dialplan.dialnow.rule.X (X ranges from 1 to 100)	String within 511 characters	It configures the dial-now rule (the string used to match the numbers entered by the user).  When entered numbers match the predefined dial-now rule, the IP phone will automatically dial out the numbers without pressing the send key.  The default value is blank.  For more information, refer to Yealink IP Phones Administrator Guide.	Settings->Dial Plan->Dial-now->Rule

Parameter	Permitted Values	Descriptions	Web Setting Path
dialplan.dialnow.line_id.X (X ranges from 1 to 100)	Integer	It configures the desired line to apply the dial-now rule. The digit 0 stands for all lines. If it is left blank, the dial-now rule will apply to all lines on the IP phone.  0 to 3 (for SIP-T23 (P/G))  Multiple line IDs are separated by commas.  The default value is blank.  For more information, refer to Yealink IP Phones Administrator Guide.	Settings->Dial Plan->Dial-now->Account
dialplan_dialnow.url	URL within 511 characters	It configures the access URL of the dial-now rule template file.  The default value is blank.  For more information on a dial-now rule template file, refer to Customizing a Dial-now File on page 21.	
phone_setting.dialnow_delay	Integer from 1 to 14	It configures the delay time (in seconds) for the dial-now rule. When entered numbers match the predefined dial-now rule, the IP phone will automatically dial out the entered number after the designated delay time.  The default value is 1.	Features->General Information->Time-Out for Dial-Now Rule

Parameter	Permitted Values	Descriptions	Web Setting Path
dialplan.replace.prefix.X (X ranges from 1 to 100)	String within 32 characters	It configures the entered number to be replaced.  Example: dialplan.replace.prefix.1 = 1 and dialplan.replace.replace.1 = 254245  When you enter the number "1" and press the send key, the entered number "1" will be replaced by the number "254245".  The default value is blank.	Settings->Dial Plan->Replace Rule->Prefix
dialplan.replace.replace.X (X ranges from 1 to 100)	String within 32 characters	It configures the alternate number to replace the entered number.  Example:  dialplan.replace.prefix.1 = 1 and dialplan.replace.replace.1 = 254245  When you enter the number "1" and press the send key, the number "254245" will replace the entered number "1".  The default value is blank.	Settings->Dial Plan->Replace Rule->Replace
dialplan.replace.line_id.X (X ranges from 1 to 100)	Integer	It configures the desired line to apply the replace rule. The digit 0 stands for all lines. If it is left blank, the replace rule will apply to all	Settings->Dial Plan->Replace Rule-> Account

Parameter	Permitted Values	Descriptions	Web Setting Path
		lines on the IP phone.  0 to 3 (for SIP-T23 (P/G))  Multiple line IDs are separated by commas.	
		The default value is blank.	
dialplan_replace_rule.url	URL within 511 characters	It configures the access URL of the replace rule template file.  The default value is blank.  For more information on a replace rule template file, refer to Customizing a Replace Rule File on page 20.	
remote_phonebook.data.X.url (X ranges from 1 to 5)	URL within 511 characters	It configures the access URL of the remote phone book.  The default value is blank.	Directory->Remote Phone Book-> Remote URL
remote_phonebook.data.X.name (X ranges from 1 to 5)	String within 99 characters	It configures the display name of the remote phone book item.  The default value is blank.	Directory->Remote Phone Book-> Display Name
remote_phonebook.display_name	String within 99 characters	It configures the display name of the remote phone book.  If it is left blank, Remote Phone Book is displayed on the LCD screen at the path	

Parameter	Permitted Values	Descriptions	Web Setting Path
		Menu->Directory.  The default value is blank.	
features.remote_phonebook.enable	0 or 1	It enables or disables the IP phone to perform a remote phone book search for an incoming or outgoing call and display the matched call on the LCD screen.  0-Disabled 1-Enabled The default value is 0.	Directory->Remote Phone Book-> Incoming/Outgoing Call lookup
features.remote_phonebook.flash_time	0, Integer from 3600 to 2592000	It configures how often to refresh the local cache of the remote phone book. If it is set to 3600, the IP phone will refresh the local cache of the remote phone book every 3600 seconds.  The value 0 means that the IP phone will not regularly refresh the local cache of the remote phone book.  The default value is 21600.	Directory->Remote Phone Book-> Update Time Interval (seconds)
features.remote_phonebook.enter_update_enable	0 or 1	It enables or disables the IP phone to refresh the local cache of the remote phone book at a time when accessing the remote phone	

Parameter	Permitted Values	Descriptions	Web Setting Path
ldap.enable	0 or 1	book.  0-Disabled  1-Enabled  The default value is 0.  It enables or disables LDAP feature on the IP phone.  0-Disabled  1-Enabled  The default value is 0.	Directory->LDAP->Enable LDAP
ldap.name_filter	String within 99 characters	It configures the criteria for searching the LDAP contact name attributes. The "*" symbol in the filter stands for any character. The "%" symbol in the filter stands for the entered string used as the prefix of the filter condition.  Example:  Idap.name_filter = ( (cn%)(sn%))  When the name prefix of the cn or sn of the contact record matches the search criteria, the record will be displayed on the LCD screen.  The default value is blank.	Directory->LDAP->LDAP Name Filter

Parameter	Permitted Values	Descriptions	Web Setting Path
		For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	
ldap.number_filter	String within 99 characters	It configures the criteria for searching the LDAP contact number attributes.  The "*" symbol in the filter stands for any character. The "%" symbol in the filter stands for the entering string used as the prefix of the filter condition.  Example:  Idap.number_filter =  ( (telephoneNumber=%)(Mobile=%)(ipPhon e=%))  When the number prefix of the telephoneNumber, Mobile or ipPhone of the contact record matches the search criteria, the record will be displayed on the LCD screen.  The default value is blank.  For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	Directory->LDAP->LDAP Number Filter
ldap.tls_mode	0, 1 or 2	It configures the connection mode between	Directory->LDAP->LDAP TLS Mode

Parameter	Permitted Values	Descriptions	Web Setting Path
		the LDAP server and the IP phone.	
		<b>0</b> -LDAP—LDAP connection between LDAP	
		server and the IP phone.	
		1-LDAP TLS Start—TLS/SSL connection	
		between LDAP server and the IP phone (No	
		alternative port is necessary).	
		2-LDAPs— TLS/SSL connection between LDAP	
		server and the IP phone (an alternative port is	
		necessary).	
		The default value is 0.	
		For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	
		It configures the IP address or domain name	
	IP address or domain name	of the LDAP server.	
ldap.host		The default value is blank.	Directory->LDAP->Server Address
		For more information on LDAP feature, refer to	
		LDAP Phonebook on Yealink IP Phones.	
ldap.port		It configures the port of the LDAP server.	
	Integer from 1 to 65535	The default value is 389.	Directory->LDAP->Port
		For more information on LDAP feature, refer to	
		LDAP Phonebook on Yealink IP Phones.	

Parameter	Permitted Values	Descriptions	Web Setting Path
ldap.base	String within 99 characters	It configures the LDAP search base which corresponds to the location of the LDAP phonebook from which the LDAP search request begins. The search base narrows the search scope and decreases directory search time.  Example:  Idap.base = dc=yealink,dc=cn The search scope of the IP phone will be "dc=yealink,dc=cn".  The default value is blank.  For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	Directory->LDAP->Base
ldap.user	String within 99 characters	It configures the user name used to login the LDAP server.  This parameter can be left blank in case the server allows anonymous to login. Otherwise you will need to provide the user name to login the LDAP server.  The default value is blank.  For more information on LDAP feature, refer to	Directory->LDAP->Username

Parameter	Permitted Values	Descriptions	Web Setting Path
		LDAP Phonebook on Yealink IP Phones.	
ldap.password	String within 99 characters	It configures the password to login the LDAP server.  The default value is blank.  For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	Directory->LDAP->Password
ldap.max_hits	Integer from 1 to 32000	It configures the maximum number of search results to be returned by the LDAP server. If the value of the "Max.Hits" is blank, the LDAP server will return all searched results. Please note that a very large value of the "Max. Hits" will slow down the LDAP search speed, therefore it should be configured according to the available bandwidth.  The default value is 50.  For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	Directory->LDAP->Max. Hits (1~32000)
ldap.name_attr	String within 99 characters	It configures the name attributes of each record to be returned by the LDAP server. It compresses the search results. You can configure multiple name attributes separated	Directory->LDAP->LDAP Name Attributes

Parameter	Permitted Values	Descriptions	Web Setting Path
		by spaces.	
		Example:	
		ldap.name_attr = cn sn	
		This requires the "cn" and "sn" attributes set	
		for each contact record on the LDAP server.	
		The default value is blank.	
		For more information on LDAP feature, refer to	
		LDAP Phonebook on Yealink IP Phones.	
		It configures the number attributes of each	
		record to be returned by the LDAP server. You	
		can configure multiple number attributes	
		separated by spaces.	
		Example:	
	String within	ldap.numb_attr = Mobile ipPhone	Directory->LDAP->LDAP Number
idap.nomb_diti	99 characters	This requires the "Mobile" and "ipPhone"	Attributes
		attributes set for each contact record on the	
		LDAP server.	
		The default value is blank.	
		For more information on LDAP feature, refer to	
		LDAP Phonebook on Yealink IP Phones.	

Parameter	Permitted Values	Descriptions	Web Setting Path
ldap.display_name	String within 99 characters	It configures the display name of the contact record displayed on the LCD screen. The value of this parameter must start with "%" symbol.  Example:  Idap.display_name = %cn  The cn of the contact record is displayed on the LCD screen.  The default value is blank.  For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	Directory->LDAP->LDAP Display Name
ldap.version	2 or 3	It configures the LDAP protocol version supported by the IP phone. Make sure the protocol value corresponds with the version assigned on the LDAP server.  The default value is 3.  For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	Directory->LDAP->Protocol
ldap.call_in_lookup	0 or 1	It enables or disables the IP phone to perform an LDAP search when receiving an incoming call.	Directory->LDAP->LDAP Lookup For Incoming Call

Parameter	Permitted Values	Descriptions	Web Setting Path
		0-Disabled 1-Enabled The default value is 0. For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	
dap.call_out_lookup	0 or 1	It enables or disables the IP phone to perform an LDAP search when dialing an outgoing a call.  0-Disabled  1-Enabled  The default value is 1.  For more information on LDAP feature, refer to LDAP Phonebook on Yealink IP Phones.	Directory->LDAP->LDAP Lookup For Callout
ldap.ldap_sort	0 or 1	It enables or disables the IP phone to sort the search results in alphabetical order or numerical order.  0-Disabled 1-Enabled The default value is 0. For more information on LDAP feature, refer to	Directory->LDAP->LDAP Sorting Results

Parameter	Permitted Values	Descriptions	Web Setting Path
		LDAP Phonebook on Yealink IP Phones.	
dap.incoming_call_special_search.enable	0 or 1	It enables or disables the phone to search for special numbers.  0-Disabled  1-Enabled  The default value is 0.	
features.ldap.input_type	0,1,2 or 3	It configures the input method type when performing an LDAP search.  0 - 2aB  1 - 123  2 - abc  3 - ABC  The default value is 1.	
features.call_num_filter	String within 99 characters	It configures the characters the IP phone filters when dialing.  If the dialed number contains configured characters, the IP phone will automatically filter these characters when dialing.  The default value is ",-".	Features->General Information->Call Number Filter

Parameter	Permitted Values	Descriptions	Web Setting Path
features.dnd_refuse_code	404, 480 or 486	It configures a return code and reason of SIP response messages when the IP phone rejects an incoming call by DND. A specific reason is displayed on the caller's phone LCD screen.  404-No Found  480-Temporarily not available  486-Busy here  If it is set to 486 (Busy here), the caller's phone LCD screen will display the reason "Busy here" when the callee enables DND feature.  The default value is 480.	Features->General Information-> Return Code When DND
features.normal_refuse_code	404, 480 or 486	It configures a return code and reason of SIP response messages when the IP phone rejects an incoming call. A specific reason is displayed on the caller's phone LCD screen.  404-No Found  480-Temporarily not available  486-Busy here  If it is set to 486 (Busy here), the caller's phone LCD screen will display the message "Busy	Features->General Information-> Return Code When Refuse

Parameter	Permitted Values	Descriptions	Web Setting Path
		here" when the callee rejects the incoming call.  The default value is 486.	
features.call_completion_enable	0 or 1	It enables or disables call completion feature.  If a user places a call and the callee is temporarily not available to answer the call, call completion feature allows notifying the user when the callee becomes available to receive a call.  O-Disabled  1-Enabled  If it is set to 1 (Enabled), the caller is notified when the callee becomes available to receive a call.  The default value is 0.	Features->General Information->Call Completion
features.fwd_mode	0 or 1	It configures the call forward mode for the IP phone.  0-Phone  1-Custom  If it is set to 0 (Phone), call forward feature is effective for the IP phone.	Features-> Forward&DND->Forward->Mode

Parameter	Permitted Values	Descriptions	Web Setting Path
		If it is set to 1 (Custom), you can configure call forward feature for each account.  The default value is 0.	
features.dnd_mode	0 or 1	It configures the DND mode for the IP phone.  0-Phone  1-Custom  If it is set to 0 (Phone), DND feature is effective for the IP phone.  If it is set to 1 (Custom), you can configure DND feature for each account.  The default value is 0.	Features-> Forward&DND-> DND->Mode
features.dnd.enable	0 or 1	It enables or disables DND feature when the DND mode is configured as Phone.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), the IP phone will reject incoming calls on all accounts.  The default value is 0.	Features-> Forward&DND-> DND->DND Status
features.dnd.on_code	String within 32 characters	It configures the DND on code to activate the server-side DND feature when the DND mode	Features-> Forward&DND-> DND->DND On Code

Parameter	Permitted Values	Descriptions	Web Setting Path
features.dnd.off_code	String within 32 characters	is configured as Phone. The IP phone will send the DND on code to the server when you activate DND feature on the IP phone.  The default value is Blank.  It configures the DND off code to deactivate the server-side DND feature when the DND mode is configured as Phone. The IP phone will send the DND off code to the server when you deactivate DND feature on the IP phone.	Features-> Forward&DND-> DND->DND Off Code
features.dnd.emergency_enable	0 or 1	The default value is Blank.  It enables or disables the IP phone to receive incoming calls from authorized numbers when DND feature is enabled.  0-Disabled  1-Enabled The default value is 0.	Features->Forward&DND->DND Emergency
features.dnd.emergency_authorized_number	String within 511 characters	It configures the authorized numbers the IP phone will receive incoming calls from when DND feature is enabled.  Multiple numbers are separated by commas.  The default value is blank.	Features-> Forward&DND->DND Authorized Numbers

Parameter	Permitted Values	Descriptions	Web Setting Path
features.fwd_diversion_enable	0 or 1	It enables or disables the IP phone to present the diversion information when an incoming call is forwarded to your IP phone.  0- Disabled  1-Enabled The default value is 1.	Features->General Information-> Diversion/History-Info
call_waiting.enable	0 or 1	It enables or disables call waiting feature.  0-Disabled  1-Enabled  If it is set to 0 (Disabled), a new incoming call is automatically rejected by the IP phone with a busy message while during a call.  If it is set to 1 (Enabled), the LCD screen will present a new incoming call while during a call.  The default value is 1.	Features->General Information->Call Waiting
call_waiting.tone	0 or 1	It enables or disables the IP phone to play the call waiting tone when the IP phone receives an incoming call during a call. <b>0</b> -Disabled	Features->Audio-> Call Waiting Tone

Parameter	Permitted Values	Descriptions	Web Setting Path
		1-Enabled  If it is set to 1 (Enabled), the IP phone will perform an audible indicator when receiving a new incoming call during a call.  The default value is 1.  Note: It works only if the value of the parameter "call_waiting.enable" is set to 1 (Enabled).	
call_waiting.on_code	String within 32 characters	It configures the call waiting on code to activate the server-side call waiting feature.  The IP phone will send the call waiting on code to the server when you activate call waiting feature on the IP phone.  The default value is blank.	Features->General Information->Call Waiting On Code
call_waiting.off_code	String within 32 characters	It configures the call waiting off code to deactivate the server-side call waiting feature. The IP phone will send the call waiting off code to the server when you deactivate call waiting feature on the IP phone.  The default value is blank.	Features->General Information->Call Waiting Off Code

Parameter	Permitted Values	Descriptions	Web Setting Path
features.intercom.allow	0 or 1	It enables or disables the IP phone to automatically answer an incoming intercom call.  O-Disabled  1-Enabled  If it is set to 0 (Disabled), the IP phone will reject incoming intercom calls and send a busy signal to the caller.  If it is set to 1 (Enabled), the IP phone will automatically answer an incoming intercom call.  The default value is 1.	Features->Intercom->Accept Intercom
features.intercom.mute	0 or 1	It enables or disables the IP phone to mute the microphone when automatically answering an intercom call.  O-Disabled  1-Enabled  If it is set to 1 (Enabled), the microphone is muted for intercom calls, and then the other party cannot hear you.  The default value is 0.	Features->Intercom->Intercom Mute

Parameter	Permitted Values	Descriptions	Web Setting Path
		Note: It works only if the value of the parameter "features.intercom.allow" is set to 1 (Enabled).	
features.intercom.tone	0 or 1	It enables or disables the IP phone to play a warning tone when automatically answering an intercom call.  0-Disabled  1-Enabled  The default value is 1.  Note: It works only if the value of the parameter "features.intercom.allow" is set to 1 (Enabled).	Features->Intercom->Intercom Tone
features.intercom.barge	0 or 1	It enables or disables the IP phone to automatically answer an incoming intercom call while there is already an active call on the IP phone.  0-Disabled 1-Enabled If it is set to 0 (Disabled), the IP phone will handle an incoming intercom call like a waiting call while there is already an active	Features->Intercom->Intercom Barge

Parameter	Permitted Values	Descriptions	Web Setting Path
		call on the IP phone.  If it is set to 1 (Enabled), the IP phone will automatically answer the intercom call while there is already an active call on the IP phone and place the active call on hold.  The default value is 0.  Note: It works only if the value of the parameter "features.intercom.allow" is set to 1 (Enabled).	
features.hotline_number	String within 32 characters	It configures the hotline number that the IP phone automatically dials out when lifting the handset, pressing the speakerphone key or the line key. Leaving it blank disables hotline feature.  The default value is blank.	Features->General Information-> Hotline Number
features.hotline_delay	Integer from 0 to 10	It configures the waiting time (in seconds) for the IP phone to automatically dial out the hotline number.  If it is set to 0 (0s), the IP phone will immediately dial out the preconfigured hotline number when you lift the handset, press the speakerphone key or press the line	Features->General Information-> Hotline Delay (0~10s)

Parameter	Permitted Values	Descriptions	Web Setting Path
		key.  If it is set to a value greater than 0, the IP phone will wait the designated seconds before dialing out the predefined hotline number when you lift the handset, press the speakerphone key or press the line key.  The default value is 4.  It configures the account information	
features.caller_name_type_on_dialing	1, 2 or 3	displayed on the top left corner of the LCD screen the when the IP phone is in the pre-dialing or dialing screen.  1-Label  2-Display Name  3-User Name  The default value is 1.	Features->General Information-> Display Method on Dialing
account.X.auto_dial_enable (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to first dial out a pre-configured number when a user dials out a call using account X.  O-Disabled 1-Enabled If it is set to 1(Enabled), the phone will first	

Parameter	Permitted Values	Descriptions	Web Setting Path
		dial out a pre-configured number (configured by the parameter "account.X.auto_dial_num") when a user dials out a call using account X.  The default value is 0.  Note: The server may prompt the user to enter an activation code to use this account for call service. This feature requires support from the SIP server.	
account.X.auto_dial_num (X ranges from 1 to 3)	String within 32 characters	It configures the number that the IP phone first dials out when a user dials out a call using account X.  The default value is blank.  Note: It works only if the value of the parameter "account.X.auto_dial_enable" is set to 1 (Enabled).	
features.dtmf.hide	0 or 1	It enables or disables the IP phone to suppress the display of DTMF digits during an active call.  0-Disabled 1-Enabled	Features->General Information->Suppress DTMF Display

Parameter	Permitted Values	Descriptions	Web Setting Path
		If it is set to 1 (Enabled), the DTMF digits are displayed as asterisks.  The default value is 0.	
features.dtmf.hide_delay	0 or 1	It enables or disables the IP phone to display the DTMF digits for a short period before displaying asterisks during an active call.  0-Disabled  1-Enabled  The default value is 0.  Note: It works only if the value of the parameter "features.dtmf.hide" is set to 1 (Enabled).	Features->General Information->Suppress DTMF Display Delay
features.dtmf.repetition	1, 2 or 3	It configures the repetition times for the IP phone to send the end RTP EVENT packet during an active call.  The default value is 3.	Features->General Information->DTMF Repetition
features.dtmf.replace_tran	0 or 1	It enables or disables the IP phone to send DTMF sequences for transfer function when pressing the transfer soft key or the TRAN key.  0-Disabled 1-Enabled	Features->General Information->DTMF Replace Tran

Parameter	Permitted Values	Descriptions	Web Setting Path
		If it is set to 0 (Disabled), the IP phone will perform the transfer as normal when pressing the transfer key during a call.  If it is set to 1 (Enabled), the IP phone will transmit the designated DTMF digits to the server for performing call transfer when pressing the transfer key during a call.  The default value is 0.	
features.dtmf.transfer	String within 32 characters	It configures the DTMF digits to be transmitted to perform call transfer. Valid values are: 0-9, *, # and A-D.  Note: It works only if the value of the parameter "features.dtmf.replace_tran" is set to 1 (Enabled).  The default value is blank.	Features->General Information->Tran Send DTMF
features.dtmf.volume	Integer from -10 to -2	It configures the frequency level of DTMF digits (in db). The default value is -10.	
features.dtmf.duration	Integer from 40 to 300	It configures the duration time (in milliseconds) for DTMF.  The default value is 80.	

Parameter	Permitted Values	Descriptions	Web Setting Path
features.headset_prior	0 or 1	It enables or disables headset prior feature.  0-Disabled  1-Enabled  If it is set to 1 (enabled), the headset mode will not be deactivated until you press the HEADSET key again. You need to press the HEADSET key to activate the headset mode in advance.  The default value is 0.	Features->General Information-> Headset Prior
features.headset_training	0 or 1	It enables or disables dual headset feature.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), users can use two headsets on one phone. When the IP phone joins in a call, the users with the headset connected to the headset jack have a full-duplex conversation, while the users with the headset connected to the handset jack are only allowed to listen to.  The default value is 0.	Features->General Information->Dual-Headset

Parameter	Permitted Values	Descriptions	Web Setting Path
features.play_local_dtmf_tone_enable	0 or 1	It enables or disables the IP phone to play a local DTMF tone.  0-Disabled  1-Enabled The default value is 1.	Features->General Information->Play Local DTMF Tone
features.busy_tone_delay	0, 3 or 5	It configures the duration time (in seconds) for the busy tone. When one party releases the call, a busy tone is audible to the other party indicating that the call connection breaks.  If it is set to 3 (3s), a busy tone is audible for 3 seconds on the IP phone.  The default value is 0.	Features->General Information->Busy Tone Delay (Seconds)
features.reset_by_long_press_enable	0 or 1	It enables or disables the IP phone to reset to factory by long pressing OK.  0-Disabled  1-Enabled  The default value is 1.	
features.send_pound_key	0 or 1	It configures whether to send one pound key by only pressing the pound key twice when the pound key is configured as a send key.	Features->General Information->Send Pound Key

Parameter	Permitted Values	Descriptions	Web Setting Path
		0-Send one pound key by pressing double #	
		1-Do not send any pound key when pressing double  The default value is 0.	
features.key_as_send	0, 1 or 2	It configures the "#" or "*" key as a send key.  0-Disabled  1-# key  2-* key  If it is set to 0 (Disabled), neither "#" nor "*" can be used as a send key.  If it is set to 1 (# key), the pound key is used as the send key.  If it is set to 2 (* key), the asterisk key is used as the send key.  The default value is 1.	Features->General Information->Key As Send
		Note: The old parameter  "features.pound_key.mode" is also applicable to IP phones.	
features.send_key_tone	0 or 1	It enables or disables the IP phone to play a key tone when a user presses a send key.	Features->Audio->Send Sound

Parameter	Permitted Values	Descriptions	Web Setting Path
		0-Disabled	
		1-Enabled	
		If it is set to 1 (Enabled), the IP phone will play	
		a key tone when a user presses a send key.	
		The default value is 1.	
		Note: It works only if the value of the	
		parameter "features.key_tone" is set to 1	
		(Enabled).	
		It enables or disables the IP phone to play a	
	0 or 1	key tone when a user presses any key on your phone keypad.	
		<b>0</b> -Disabled	
factures key tops		1-Enabled	Features->Audio->Key Tone
features.key_tone			reatures->Audio->key ione
		If it is set to 1 (Enabled), the IP phone will play a key tone when a user presses any key on	
		your phone keypad.	
		The default value is 1.	
features.play_hold_tone.enable		It enables or disables the IP phone to play a	
	0 or 1	warning tone when there is a call on hold.	Features->General Information->Play
		0-Disabled	Hold Tone
		1-Enabled	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.	
features.play_hold_tone.delay	Integer from 3 to 3600	It configures the interval (in seconds) at which the IP phone plays a hold tone.  If it is set to 30 (30s), the IP phone will play a hold warning tone every 30 seconds when there is a call on hold.  The default value is 30.  Note: It works only if the value of the parameter "features.play_hold_tone.enable" is set to 1 (Enabled).	Features->General Information->Play Hold Tone Delay
features.redial_tone	Integer within 6 digits	It configures the IP phone to continue to play the dial tone after inputting the preset numbers in the pre-dialing screen.  Example: features.redial_tone = 125 The IP phone will continue to play the dial tone after inputting "125" in the pre-dialing screen.  If it is left blank, the IP phone will not play the dial tone after inputting numbers in the	Features->Audio->Redial Tone

Parameter	Permitted Values	Descriptions	Web Setting Path
		pre-dialing screen.  The default value is blank.	
features.partition_tone	0 or 1	It enables or disables the IP phone with active accounts to play tones in the dialing screen differently from the IP phone with no active accounts.  0-Disabled 1-Enbaled The default value is 0.	
features.password_dial.enable	0 or 1	It enables or disables password dial feature for the IP phone.  0-Disabled  1-Enabled  The default value is 0.	Features->General Information->PswDial
features.password_dial.prefix	String within 32 characters	It configures the prefix of the password-dial number.  For example, set the prefix to 12 and the length to 3, when you want to dial the number 123456, the entered number is displayed as 12***6 on the LCD screen.	Features->General Information-> PswPrefix

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is blank.	
features.password_dial.length	Integer from 0 to 99	It configures the number of digits to be hidden.  The hidden digits are displayed as asterisks on the LCD screen.  The default value is blank.	Features->General Information-> PswLength
features.save_call_history	0 or 1	It enables or disables the IP phone to save the call log.  0-Disabled  1-Enabled  If it is set to 0 (Disabled), the IP phone cannot log the placed calls, received calls, missed calls and the forwarded calls in the call log lists.  The default value is 1.	Features->General Information->Save Call Log
phone_setting.common_power_led_enable	0 or 1	It enables or disables the power indicator LED to be turned on.  O-Disabled (power indicator LED is off)  1-Enabled (power indicator LED is solid red)  The default value is 0.	Features->Power LED->Common Power Light On

Parameter	Permitted Values	Descriptions	Web Setting Path
phone_setting.ring_power_led_flash_enable	0 or 1	It enables or disables the power indicator LED to flash when the IP phone receives an incoming call.  O-Disabled (power indicator LED does not flash)  1-Enabled (power indicator LED fast flashes (300ms) red)  If it is set to 0, the status of the power indicator LED is determined by the value of the parameter  "phone_setting.common_power_led_enable"  .  The default value is 1.	Features->Power LED->Ring Power Light Flash
phone_setting.mail_power_led_flash_enable	0 or 1	It enables or disables the power indicator LED to flash when the IP phone receives a voice mail or a text message.  O-Disabled (power indicator LED does not flash)  1-Enabled (power indicator LED slow flashes (1000ms) red)  The default value is 1.	Features->Power LED->Voice/Text Mail Power Light Flash

Parameter	Permitted Values	Descriptions	Web Setting Path
		If it is set to 0, the status of the power indicator LED is determined by the value of the parameter "phone_setting.common_power_led_enable" .	
phone_setting.mute_power_led_flash_enable	0 or 1	It enables or disables the power indicator LED to flash when a call is mute.  0-Disabled (power indicator LED does not flash)  1-Enabled (power indicator LED fast flashes (300ms) red)  The default value is 0.  If it is set to 0, the status of the power indicator LED is determined by the value of the parameter  "phone_setting.common_power_led_enable"  .	Features->Power LED->Mute Power Light Flash
phone_setting.hold_and_held_power_led_flash_enable	0 or 1	It enables or disables the power indicator LED to flash when a call is placed on hold or is held.  O-Disabled (power indicator LED does not flash)	Features->Power LED->Hold/Held Power Light Flash

Parameter	Permitted Values	Descriptions	Web Setting Path
		1-Enabled ( power indicator LED fast flashes (500ms) red) The default value is 0. If it is set to 0, the status of the power indicator LED is determined by the value of the parameter "phone_setting.common_power_led_enable" .	
phone_setting.talk_and_dial_power_led_enable	0 or 1	It enables or disables the power indicator LED to be turned on when the IP phone is busy.  0-Disabled (power indicator LED is off)  1-Enabled (power indicator LED is solid red)  The default value is 0.  If it is set to 0, the status of the power indicator LED is determined by the value of the parameter  "phone_setting.common_power_led_enable"  .	Features->Power LED->Talk/Dial Power Light On
features.voice_mail_popup.enable	0 or 1	It enables or disables the IP phone to display the pop-up message when the phone receives a new voice mail.	Features->Notification Popups->Display Voice Mail Popup

Parameter	Permitted Values	Descriptions	Web Setting Path
features.voice_mail_tone.enable	0 or 1	O-Disabled     1-Enabled     The default value is 1.  It enables or disables the IP phone to play a warning tone when it receives a new voice mail.  O-Disabled 1-Enabled	
features.missed_call_popup.enable	0 or 1	The default value is 1.  It enables or disables the IP phone to display the pop-up message when the phone misses a call.  0-Disabled 1-Enabled The default value is 1.	Features->Notification Popups-> Display Missed Call Popup
features.forward_call_popup.enable	0 or 1	It enables or disables the IP phone to display the pop-up message when the phone forwards an incoming call to other party.  0-Disabled 1-Enabled	Features->Notification Popups->Display Forward Call Popup

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.	
features.text_message_popup.enable	0 or 1	It enables or disables the IP phone to display the pop-up message when the phone receives a new text message.  0-Disabled 1-Enabled The default value is 1.	Features->Notification Popups->Display Text Message Popup
features.relog_offtime	Integer from 1 to 1000	It configures the timeout interval (in minutes) for web access authentication.  Example:  features.relog_offtime = 5  If you have not performed any actions via web user interface during 5 minutes, you will be forced to log out and have to be authenticated again by re-entering username and password.  The default value is 5.  It takes effect after a reboot.	Features->General Information->Auto-Logout Time (1~1000min)
features.direct_ip_call_enable	0 or 1	It enables or disables the IP phone to place a call using the IP address.	Features->General Information-> Allow IP Call

Parameter	Permitted Values	Descriptions	Web Setting Path
		0-Disabled 1-Enabled The default value is 1.	
features.allow_mute	0 or 1	It enables or disables the IP phone to mute an active call.  0-Disabled  1-Enabled  The default value is 1.	Features->General Information->Allow Mute
features.group_listen_in_talking_enable	0 or 1	It enables or disables the IP phone to enter into the group listening mode by pressing the speakerphone key when it is in talking using the handset.  0-Disabled 1-Enabled The default value is 1.	
features.ringer_device.is_use_headset	0, 1 or 2	It configures the ringer device for the IP phone.  0-Use Speaker  1-Use Headset  2-Use Headset & Speaker	Features->Audio->Ringer Device for Headset

Parameter	Permitted Values	Descriptions	Web Setting Path
		If the ringer device is set to Headset or Headset&Speaker, the headset should be connected with the IP phone and the headset mode also should be activated in advance. The default value is 0.	
features.factory_pwd_enable	0 or 1	It enables or disables the IP phone to prompt for the administrator password when you long press the OK key to perform factory reset.  0-Disabled 1-Enabled The default value is 0.	
features.export_cfg_erase_pwd	0, 1 or 2	It configures the type of the password which exists in the config file when the IP phone exports the config file.  0-Encrypted 1-Blank 2-Plaintext The default value is 1.	
features.pickup.group_pickup_enable	0 or 1	It enables or disables the IP phone to display the GPickup soft key when the IP phone is in the pre-dialing screen.	Features->Call Pickup->Group Call Pickup

Parameter	Permitted Values	Descriptions	Web Setting Path
		<ul><li><b>0</b>-Disabled</li><li><b>1</b>-Enabled</li><li>The default value is 0.</li></ul>	
features.pickup.group_pickup_code	String within 32 characters	It configures the group call pickup code on a phone basis.  The default value is blank.  Note: The group call pickup code configured on a per-line basis takes precedence over that configured on a phone basis.	Features->Call Pickup->Group Call Pickup Code
features.pickup.direct_pickup_enable	0 or 1	It enables or disables the IP phone to display the DPickup soft key when the IP phone is in the pre-dialing screen.  0-Disabled  1-Enabled  The default value is 0.	Features->Call Pickup->Directed Call Pickup
features.pickup.direct_pickup_code	String within 32 characters	It configures the directed call pickup code on a phone basis.  The default value is blank.  Note: The directed call pickup code configured on a per-line basis takes precedence over that configured on a phone	Features->Call Pickup->Directed Call Pickup Code

Parameter	Permitted Values	Descriptions	Web Setting Path
		basis.	
features.pickup.blf_visual_enable	0 or 1	It enables or disables the IP phone to display a visual alert when the monitored user receives an incoming call.  0-Disabled 1-Enabled The default value is 0.	Features->Call Pickup->Visual Alert for BLF Pickup
features.pickup.blf_audio_enable	0 or 1	It enables or disables the IP phone to play an audio alert when the monitored user receives an incoming call.  0-Disabled 1-Enabled The default value is 0.	Features->Call Pickup->Audio Alert for BLF Pickup
features.blf_led_mode	0, 1, 2 or 3	It configures BLF LED mode and provides four kinds of definition for the BLF/BLF list key LED status.  The default value is 0.  Note: The old parameter  "features.blf_and_callpark_idle_led_enable" is also applicable to IP phones.	Features->General Information->BLF LED Mode

Parameter	Permitted Values	Descriptions	Web Setting Path
		For more information, refer to BLF LED Mode on page 315.	
features.blf_list_version	0 or 1	It enables or disables the IP phone to deal with the Version header in the BLF NOTIFY message sent by the server.  0-Disabled 1-Enabled The default value is 0. It takes effect after a reboot.	
features.blf_pickup_only_send_code	0 or 1	It enables or disables the phone to dial out feature access code of directed pick up only when preforming BLF pickup.  O-Disabled  1-Enabled  If it is set to 1 (0), the phone will dial out feature access code of directed pick up plus value configured for BLF key when performing BLF pickup.  The default value is 1.	
features.default_account	Integer from 1 to 3	It configures default account.	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.	
bw.feature_key_sync	0 or 1	It enables or disables feature key synchronization.  0-Disabled  1-Enabled  The default value is 0.	Features->General Information-> Feature Key Synchronization
multicast.codec	PCMU, PCMA, G729, G722, G726-32	It configures the codec of multicast paging.  The default value is G722.	Features->General Information-> Multicast Code.
multicast.paging_address.X.ip_address (X ranges from 1 to 10)	String within 99 characters	It configures the multicast IP address and port number for a paging list key.  The default value is blank.	Directory->Multicast IP->Paging List->Paging Address
multicast.paging_address.X.label (X ranges from 1 to 10)	String	It configures the multicast paging group name for a paging list key.  The default value is blank.	Directory->Multicast IP->Paging List->Label
account.X.blf.blf_list_uri (X ranges from 1 to 3.)	SIP URI within 256 characters	It configures the BLF List URI to monitor a list of users for account X.  The default value is blank.	Account->Advanced->BLF List URI

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.blf_list_code (X ranges from 1 to 3.)	String within 32 characters	It configures the feature access code for directed call pickup (default: *97) for account X.  The default value is blank.	Account->Advanced->BLF List Code
account.X.blf_list_barge_in_code (X ranges from 1 to 3.)	String within 32 characters	It configures the feature access code for directed call pickup with barge-in (default: *33) for account X.  The default value is blank.	Account->Advanced->BLF List Barge In Code
account.X.blf_list_retrieve_call_parked_code (X ranges from 1 to 3.)	String within 32 characters	It configures the feature access code for the Call Park Retrieve (default: *88) for account X.  The default value is blank.	Account->Advanced->BLF List Retrieve call parked Code
phone_setting.auto_blf_list_enable	0 or 1	It enables or disables the IP phone to automatically configure the BLF list keys in order.  O-Disabled 1-Enabled The default value is 1.	
features.barge_in_via_username.enable	0 or 1	It enables or disables the INVITE request with the user name of the account when this account barges in an active call.	

Parameter	Permitted Values	Descriptions	Web Setting Path
		0-Disabled	
		1-Enabled	
		The default value is 0.	
		It enables or disables Broadsoft SCA feature	
account.X.shared_line		for account X.	
(X ranges from 1 to 3)	0 or 1	0-Disabled	Account->Advanced->Shared Line
(X runges nom 1 to 3)		1-Broadsoft SCA	
		The default value is 0.	
	Integer from 1 to 14	It configures the time (in seconds) for the IP	
		phone to automatically dial out the entered	
		digits without pressing a send key.	Settings->Preference->Inter Digit
phone_setting.inter_digit_time		The default value is 4.	Time (1~14s)
		Note: It works only if the value of the	
		parameter "phone_setting.predial_autodial"	
		is set to 1 (Enabled).	
		It enables or disables phone lock feature.	
phone_setting.phone_lock.enable		0-Disabled	Features->Phone Lock->Keypad Lock
	0 or 1	1-Enabled	Enable
		The default value is 0.	
		For more information, refer to Yealink IP Phone	

Parameter	Permitted Values	Descriptions	Web Setting Path
		Family Administrator Guide	
phone_setting.phone_lock.lock_key_type	0, 1 or 2	It configures the type of phone lock.  0-All Keys  1-Function Keys  2-Menu Key  The default value is 0.  For more information, refer to Yealink IP Phone Family Administrator Guide	Features->Phone Lock->Keypad Lock Type
phone_setting.phone_lock.unlock_pin	characters within 15 digits	It configures the password for unlocking the keypad.  The default value is 123.	Features->Phone Lock->Phone Unlock PIN (0~15 Digit)
phone_setting.phone_lock.lock_time_out	Integer from 0 to 3600	It configures the interval (in seconds) to automatically lock the keypad.  The default value is 0 (the keypad is locked only by long pressing the pound key or pressing the keypad lock key).  Note: It works only if the type of phone lock is preset.	Features->Phone Lock->Phone Lock Time Out (0~3600s)
phone_setting.ring_type	Ring1.wav, Ring2.wav,	It configures the ring tone for the IP phone. <b>Example</b> :	Settings->Preference->Ring Type

Parameter	Permitted Values	Descriptions	Web Setting Path
	Ring3.wav,	phone_setting.ring_type = Ring1.wav	
	Ring4.wav,	The default value is Ring1.wav.	
	Ring5.wav		
	Silent.wav		
	Splash.wav		
phone_setting.contrast	Integer from 1 to 10	It configures the contrast of the LCD screen.  Note: We recommend that you set the contrast of the LCD screen to 6 as a more comfortable level.	Settings->Preference->Contrast
phone_setting.called_party_info_display.enable	0 or 1	It enables or disables the IP phone to display the called contact information when it receives an incoming call.  0-Disabled 1-Enabled The default value is 0.	Setting->Call Display->Display Called Party Information
phone_setting.call_info_display_method	0, 1, 2, 3 or 4	It configures the call information display method when the IP phone receives an incoming call, dials an outgoing call or engages in a call.  0-Name+Number 1-Number+Name	Setting->Call Display-> Call Information Display Method

Parameter	Permitted Values	Descriptions	Web Setting Path
		<ul><li>2-Name</li><li>3-Number</li><li>4-Full Contact Info (display name<sip:xxx@domain.com>)</sip:xxx@domain.com></li><li>The default value is 0.</li></ul>	
phone_setting.lcd_logo.mode	0, 1 or 2	It configures the logo mode of the LCD screen.  0-Disabled  1-System logo  2-Custom logo  The default value is 0.	Features->General Information->Use Logo
lcd_logo.url	URL within 511 characters	It configures the access URL of custom logo file.  The default value is blank.  For more information, refer to Customizing an LCD Logo on page 17.	Features->General Information-> Upload Logo
lcd_logo.delete	URL within 511 characters	It deletes all custom logo files.  The valid value is: http://localhost/all  The default value is blank.  For more information, refer to Customizing an LCD Logo on page 17	

Parameter	Permitted Values	Descriptions	Web Setting Path
phone_setting.backlight_time	0, 15, 30, 60, 120, 300, 600 or 1800	It configures the delay time (in seconds) to turn off the backlight when the IP phone is inactive.  If it is set to 60 (60s), the LCD backlight is turned off when the IP phone is inactive for 60 seconds.  0-Always on 15-15s 30-30s 60-60s 120-120s 300-300s 600-600s 1800-1800s The default value is 0.	Settings->Preference->Backlight Time (seconds)
phone_setting.ring_for_tranfailed	Ring1.wav Ring2.wav Ring3.wav Ring4.wav Ring5.wav	It configures the ring tone when the IP phone fails to transfer a call.  The default value is Ring1.wav.	

Parameter	Permitted Values	Descriptions	Web Setting Path
	Silent.wav		
	Splash.wav		
phone_setting.logon_wizard	0 or 1	It enables or disables the IP phone to provide the logon wizard during startup.  0-Disabled  1-Enabled  The default value is 0.	Features->General Information-> Logon Wizard
features.auto_exit_logon_wizard.enable	0 or 1	It enables or disables the IP phone to automatically quit the logon wizard after timeout.  O-Disabled  1-Enabled  The default value is 1.	
phone_setting.is_deal180	0 or 1	It enables or disables the IP phone to deal with the 180 SIP message received after the 183 SIP message.  O-Disabled  1-Enabled  If it is set to 1 (Enabled), the IP phone will resume and play the local ringback tone	Features->General Information->180 Ring Workaround

Parameter	Permitted Values	Descriptions	Web Setting Path
		upon a subsequent 180 message received.  The default value is 1.	
phone_setting.headsetkey_mode	0 or 1	It configures headset mode precedence during a call.  0-Always use (pressing the Speakerphone key and picking up the handset are not effective when the headset mode is activated)  1-Use as normal The default value is 1.	
phone_setting.emergency.number	String within 99 characters	It configures emergency numbers.  Multiple emergency numbers are separated by commas.  The default value is 112,911,120.	Features->Phone Lock->Emergency
phone_setting.show_code403	String within 99 characters	It configures the display message on the LCD screen when receiving a 403 message.  If it is left blank, the IP phone will display the value sent from the server when receiving the 403 message.  The default value is blank.	

Parameter	Permitted Values	Descriptions	Web Setting Path
		It takes effect after a reboot.	
super_search.recent_call	0 or 1	It enables or disables recent call in dialing feature. If it is enabled, you can see the placed calls list when the IP phone is in the pre-dialing screen.  0-Disabled 1-Enabled The default value is 0.	Directory->Setting->Recent Call In Dialing
directory_setting.url	URL within 511 characters	It configures the access URL of the directory template file.  Example: directory_setting.url = http://192.168.1.20/favorite_setting.xml The default value is blank. For more information on the directory template file, refer to Customizing a Directory Template on page 22.	Directory->Setting->Directory
super_search.url	URL within 511 characters	It configures the access URL of the super search template file.  Example: super_search.url =	Directory->Setting->Search Source List In Dialing

Parameter	Permitted Values	Descriptions	Web Setting Path
		http://192.168.1.20/super_search.xml	
		The default value is blank.	
		For more information on the super search	
		template file, refer to Customizing a Super	
		Search Template on page 24.	
		It configures the access URL of the firmware	
		file.	
firmware.url		Example:	
	URL within 511	firmware.url = http://192.168.1.20/2.72.0.1.rom	Settings->Upgrade->Select and
	characters	The default value is blank.	Upgrade Firmware
		It takes effect after a reboot.	
		For more information on upgrading firmware,	
		refer to Upgrading Firmware on page 26.	
		It configures the access URL of the custom ring	
		tone file.	
ringtone.url	URL within 511	Example:	Cottings > Drofevenes > Links ad
	characters	ringtone.url = tftp://192.168.1.100/Ring1.wav	Settings->Preference->Upload Ringtone
	Characters	The default value is blank.	9.52
		For more information, refer to Customizing a	
		Ring Tone on page 11.	

Parameter	Permitted Values	Descriptions	Web Setting Path
ringtone.delete	URL within 511 characters	It deletes all custom ring tone files.  The valid value is: http://localhost/all  The default value is blank.  For more information, refer to Customizing a  Ring Tone on page 11.	
gui_lang.url	URL within 511 characters	It configures the access URL of the custom LCD language file for phone user interface.  Example: gui_lang.url = tftp://192.168.1.100/lang+English.lang. The default value is blank. For more information, refer to Customizing a Language on page 11.	
gui_lang.delete	URL within 511 characters	It deletes all custom LCD language files for phone user interface.  The valid value is: http://localhost/all  The default value is blank.  For more information, refer to Customizing a Language on page 11.	
wui_lang.url	URL within 511	It configures the access URL of the custom	

Parameter	Permitted Values	Descriptions	Web Setting Path
	characters	language file for web user interface.	
		Example:	
		wui_lang.url = tftp://192.168.1.100/1.English.js.	
		The default value is blank.	
		For more information, refer to Customizing a	
		Language on page 11.	
wui_lang.delete	http://localhost /all or http://localhost /Y.name.js	It deletes all custom web language files and note language files for web user interface.  Delete all customized language packs: wui_lang.delete = http://localhost/all  Delete a customized language pack (e.g., 11.Russian.js) of the web user interface. wui_lang.delete = http://localhost/11.Russian.js  The default value is blank.  For more information, refer to Customizing a Language on page 11.	
wui_lang_note.url	URL within 511 characters	It configures the access URL of the custom note file for web user interface.  The default value is blank.	

Parameter	Permitted Values	Descriptions	Web Setting Path
gui_input_method.url	URL within 511 characters	It configures the access URL of the custom input method file for phone user interface.  The default value is blank.	
gui_input_method.delete	http://localhost /all or http://localhost /name.txt	It deletes all custom input method file for phone user interface.  Delete all customized input method files: gui_input_method.delete = http://localhost/all  Delete a customized input method file (e.g., ime.txt) for the phone: gui_input_method.delete = http://localhost/all  The valid value is: http://localhost/all  The default value is blank.	
directory.search_default_input_method	Abc, 2aB, 123, abc or ABC	It configures the default input method when the user searches for contacts in the local directory, LDAP, remote phone book, blacklist or Broadsoft Directory.  The default value is Abc.	
directory.edit_default_input_method	Abc, 2aB, 123, abc or ABC	It configures the default input method when the user edits contacts in the local directory, LDAP, remote phone book, blacklist or	

Parameter	Permitted Values	Descriptions	Web Setting Path
		Broadsoft Directory.  The default value is Abc.	
trusted_certificates.url	URL within 511 characters	It configures the access URL of the custom trusted certificate used to authenticate the connecting server.  Example:  trusted_certificates.url = http://192.168.1.20/tc.crt  The default value is blank.  Note: The certificate you want to upload must be in *.pem, *.crt, *.cer or *.der format.  For more information, refer to Yealink IP Phones Administrator Guide.	Security->Trusted Certificates->Load trusted certificates file
trusted_certificates.delete	URL within 511 characters	It deletes all uploaded trusted certificates.  The valid value is: http://localhost/all  The default value is blank.  For more information, refer to Yealink IP  Phones Administrator Guide.	
server_certificates.url	URL within 511 characters	It configures the access URL of the certificate the IP phone sends for authentication.	Security->Server Certificates->Load server cer file

Parameter	Permitted Values	Descriptions	Web Setting Path
		Example:	
		server_certificates.url =	
		http://192.168.1.20/ca.pem	
		The default value is blank.	
		<b>Note</b> : The certificate you want to upload must	
		be in *.pem or *.cer format.	
		For more information, refer to Yealink IP	
		Phones Administrator Guide.	
	URL within 511 characters	It deletes all uploaded server certificates.	
		The valid value is: http://localhost/all	
server_certificates.delete		The default value is blank.	
		For more information, refer to Yealink IP	
		Phones Administrator Guide.	
		It enables or disables the IP phone to reserve	
		custom certificates after it is reset to factory	
phone_setting.reserve_certs_enable		defaults.	
	0 or 1	<b>0</b> -Disabled	
		1-Enabled	
		The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
local_contact.data.url	URL within 511 characters	It configures the access URL of the local contact file.  Example:  local_contact.data.url = http://192.168.10.25/contact.xml  The default value is blank.	Directory->Local Directory->Import Local Directory File
auto_dst.url	URL within 511 characters	It configures the access URL of the DST file (AutoDST.xml).  The default value is blank.  Note: It works only if the value of the parameter "local_time.summer_time" is set to 2 (Automatic).	
custom_factory_configuration.url	URL within 511 characters	It configures the access URL of the custom factory configuration files.  The default value is blank.	
features.custom_factory_config.enable	0 or 1	It enables or disables Import Factory Configuration feature.  0-Disabled 1-Enabled If it is set to 1 (Enabled), Import Factory	

Parameter	Permitted Values	Descriptions	Web Setting Path
		Configuration item will be displayed on the IP phone's web user interface at the path  Settings->Configuration. You can import a custom factory configuration file or delete the user-defined factory configuration via web user interface.  The default value is 0.	
configuration.url	URL within 511 characters	It configures the access URL for the custom config files.  The default value is blank.  It takes effect after a reboot.	Settings->Configuration-> Export or Import Configuration
custom_mac_cfg.url	URL within 511 characters	It configures the access URL of the custom MAC-Oriented CFG file. The default value is blank.	
account.X.out_dialog_blf_enable (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to handle NOTIFY messages out of the BLF dialog for account X.  O-Disabled 1-Enabled The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.enable (X ranges from 1 to 3)	0 or 1	It enables or disables the account X.  0-Disabled  1-Enabled  The default value is 0.	Account->Register->Line Active
account.X.label (X ranges from 1 to 3)	String within 99 characters	It configures the label to be displayed on the LCD screen for account X.  The default value is blank.	Account->Register->Label
account.X.display_name (X ranges from 1 to 3)	String within 99 characters	It configures the display name for account X.  The default value is blank.	Account->Register->Display Name
account.X.auth_name (X ranges from 1 to 3)	String within 99 characters	It configures the user name for register authentication for account X.  The default value is blank.	Account->Register->Register Name
account.X.user_name (X ranges from 1 to 3)	String within 32 characters	It configures the register user name for account X.  The default value is blank.	Account->Register->User Name
account.X.password (X ranges from 1 to 3)	String within 99 characters	It configures the password for register authentication for account X.  The default value is blank.	Account->Register->Password
account.X.sip_server.Y.transport_type	0, 1, 2 or 3	It configures the type of transport protocol for	Account->Register->SIP Server

Parameter	Permitted Values	Descriptions	Web Setting Path
(X ranges from 1 to 3)		account X.	1/2->Transport
		0-UDP	
		1-TCP	
		2-TLS	
		3-DNS-NAPTR	
		The default value is 0.	
account.X.naptr_build (X ranges from 1 to 3)	0 or 1	It configures the way of SRV query for the IP phone to be performed when no result is returned from NAPTR query for account X.  0-SRV query using UDP only 1-SRV query using UDP, TCP and TLS. The default value is 0. For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.fallback.redundancy_type (X ranges from 1 to 3)	0 or 1	It configures the registration mode for account X in fallback mode.  0-Concurrent registration  1-Successive registration  The default value is 0.  For more information, refer to Server	

Parameter	Permitted Values	Descriptions	Web Setting Path
		Redundancy on Yealink IP Phones.	
account.X.fallback.timeout (X ranges from 1 to 3)	Integer from 10 to 2147483647	It configures the time interval (in seconds) for the IP phone to detect whether the working server is available by sending the registration request for account X after the fallback server takes over call control.  It is only applicable to successive registration mode.  The default value is 120.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.sip_server.Y.address 这里 (X ranges from 1 to 3, Y ranges from 1 to 2.)	IP address or domain name	It configures the IP address or domain name of the SIP server Y for account X.  Example: account.1.sip_server.1.address = 10.2.1.128 The default value is blank.  Note: The old parameter "account.X.sip_server_host" is also applicable to IP phones.	Account->Register->SIP Server Y-> Server Host
account.X.sip_server.Y.port	Integer from 0	It configures the port of SIP server Y for	Account->Register->SIP Server Y->

Parameter	Permitted Values	Descriptions	Web Setting Path
(X ranges from 1 to 3, Y ranges from 1 to 2.)	to 65535	account X.  The default value is 5060.  Note: The old parameter  "account.X.sip_server_port" is also applicable to IP phones.	Port
account.X.sip_server.Y.expires (X ranges from 1 to 3, Y ranges from 1 to 2.)	Integer from 30 to 2147483647	It configures the registration expiration time (in seconds) of SIP server Y for account X.  The default value is 3600.	Account->Register->SIP Server Y-> Server Expires
account.X.sip_server.Y.retry_counts (X ranges from 1 to 3, Y ranges from 1 to 2.)	Integer from 0 to 20	It configures the retry times for the IP phone to resend requests when the SIP server Y is unavailable or there is no response from the SIP server Y for account X.  The default value is 3.  For more information, refer to Server Redundancy on Yealink IP Phones.	Account->Register->SIP Server Y ->Server Retry Counts
account.X.sip_server.Y.failback_mode (X ranges from 1 to 3, Y ranges from 1 to 2.)	0, 1, 2 or 3	It configures the mode for the IP phone to retry the primary server in failover mode for account X.  O-newRequests: all requests are forwarded to the primary server first, regardless of the last used server.	

Parameter	Permitted Values	Descriptions	Web Setting Path
		1-DNSTTL: the IP phone retries to send	
		requests to the primary server after the	
		timeout of the DNSTTL configured for the	
		server that the IP phone is registered to.	
		2-Registration: the IP phone retries to send	
		REGISTER requests to the primary server	
		when registration renewal.	
		3-duration: the IP phone retries to send	
		requests to the primary server after the	
		timeout defined by the parameter	
		"account.X.failback_timeout".	
		The default value is 0.	
		For more information, refer to <i>Server</i>	
		Redundancy on Yealink IP Phones.	
		It configures the timeout (in seconds) for the IP	
		phone to retry to send requests to the primary	
		server after failing over to the current working	
account.X.sip_server.Y.failback_timeout	Integer 0, from	server for account X when the parameter	
(X ranges from 1 to 3, Y ranges from 1 to 2.)	60 to 65535	"account.X.sip_server.Y.failback_mode" is set	
		to 3 (duration).	
		If you set the parameter to 0, the IP phone will	
		not send requests to the primary server until a	

Parameter	Permitted Values	Descriptions	Web Setting Path
		failover event occurs with the current working server.  If you set the parameter between 1 and 59, the timeout will be 60 seconds.  The default value is 3600.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.sip_server.Y.register_on_enable (X ranges from 1 to 3, Y ranges from 1 to 2.)	0 or 1	It enables or disables the IP phone to send registration requests to the secondary server for account X when encountering a failover.  0-Disabled  1-Enabled  The default value is 0. For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.static_cache_pri (X ranges from 1 to 3)	0 or 1	It configures whether preferentially to use the static DNS cache for domain name resolution of the SIP server for account X.  0-Use domain name resolution from server preferentially  1-Use static DNS cache preferentially	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 0.  For more information, refer to Server  Redundancy on Yealink IP Phones.	
account.X.dns_cache_type (X ranges from 1 to 3)	0, 1 or 2	It configures the content that the DNS cache records for account X.  O-perform real-time DNS query rather than using DNS cache.  1-Use DNS cache, but do not record the additional records.  2-Use DNS cache and record the additional records.  The default value is 1.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.dns_cache_a.Y.name  (X ranges from 1 to 3, Y ranges from 1 to 2.)	Domain name	It configures the domain name in A record Y for account X.  The default value is blank.  It takes effect after a reboot.  For more information, refer to Server Redundancy on Yealink IP Phones.	

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.dns_cache_a.Y.ip (X ranges from 1 to 3, Y ranges from 1 to 2.)	IP address	It configures the IP address that the domain name in A record Y maps to for account X.  The default value is blank.  It takes effect after a reboot.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.dns_cache_a.Y.ttl  (X ranges from 1 to 3, Y ranges from 1 to 2.)	Integer from 30 to 2147483647	It configures the time interval (in seconds) that A record Y may be cached before the record should be consulted again for account X. The default value is 300. It takes effect after a reboot. For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.dns_cache_srv.Y.name (X ranges from 1 to 3, Y ranges from 1 to 2.)	Domain name	It configures the domain name in SRV record Y for account X. It takes effect after a reboot. For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.dns_cache_srv.Y.port (X ranges from 1 to 3, Y ranges from 1 to 2.)	Integer from 0 to 65535	It configures the port to be used in SRV record Y for account X.	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 0.	
		It takes effect after a reboot.	
		For more information, refer to Server	
		Redundancy on Yealink IP Phones.	
		It configures the priority for the target host in	
		SRV record Y for account X. Lower priority is	
account.X.dns_cache_srv.Y.priority	Integer from 0	more preferred.	
(X ranges from 1 to 3, Y ranges from 1 to 2.)	to 65535	The default value is 0.	
		It takes effect after a reboot.	
		For more information, refer to <i>Server</i>	
		Redundancy on Yealink IP Phones.	
		It configures the domain name of the target	
		host for an A query in SRV record Y for	
account.X.dns_cache_srv.Y.target		account X.	
(X ranges from 1 to 3, Y ranges from 1 to 2.)	Domain name	The default value is blank.	
		It takes effect after a reboot.	
		For more information, refer to Server	
		Redundancy on Yealink IP Phones.	
account.X.dns_cache_srv.Y.weight	Integer from 0 to 65535	It configures the weight of the target host in	
(X ranges from 1 to 3, Y ranges from 1 to 2.)		SRV record Y for account X.	
, , , ,		When priorities are equal, weight is used to	

Parameter	Permitted Values	Descriptions	Web Setting Path
		differentiate the preference.	
		Higher weight is more preferred.	
		The default value is 0.	
		It takes effect after a reboot.	
		For more information, refer to Server	
		Redundancy on Yealink IP Phones.	
account.X.dns_cache_srv.Y.ttl  (X ranges from 1 to 3, Y ranges from 1 to 2.)	Integer from 30 to 2147483647	It configures the time interval (in seconds) that SRV record Y may be cached before the record should be consulted again for account X.  The default value is 300.  It takes effect after a reboot.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.dns_cache_naptr.Y.name (X ranges from 1 to 3, Y ranges from 1 to 2.)	Domain name	It configures the domain name to which NAPTR record Y refers for account X. The default value is blank. It takes effect after a reboot. For more information, refer to Server Redundancy on Yealink IP Phones.	

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.dns_cache_naptr.Y.flags (X ranges from 1 to 3, Y ranges from 1 to 2.)	S, A, U or P	It configures the flag of NAPTR record Y for account X. (Always "s" for SIP, which means to do an SRV lookup on whatever is in the replacement field)  S-Do an SRV lookup next.  A-Do an A lookup next.  U-No need to do a DNS query next.  P-Service customized by the user  The default value is blank.  It takes effect after a reboot.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.dns_cache_naptr.Y.order  (X ranges from 1 to 3, Y ranges from 1 to 2.)	Integer from 0 to 65535	It configures the order of NAPTR record Y for account X. NAPTR record with lower order is more preferred.  The default value is 0.  It takes effect after a reboot.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.dns_cache_naptr.Y.preference (X ranges from 1 to 3, Y ranges from 1 to 2.)	Integer from 0 to 65535	It configures the preference of NAPTR record Y for account X. NAPTR record with lower	

Parameter	Permitted Values	Descriptions	Web Setting Path
		preference is more preferred.	
		The default value is 0.	
		It takes effect after a reboot.	
		For more information, refer to Server	
		Redundancy on Yealink IP Phones.	
account.X.dns_cache_naptr.Y.replace (X ranges from 1 to 3, Y ranges from 1 to 2.)	Domain name	It configures a domain name to be used for the next SRV query in NAPTR record Y for account X.  The default value is blank.  It takes effect after a reboot.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.dns_cache_naptr.Y.service (X ranges from 1 to 3, Y ranges from 1 to 2.)	String within 32 characters	It configures the transport protocol available for the SIP server in NAPTR record Y for account X.  The default value is blank.  It takes effect after a reboot.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.dns_cache_naptr.Y.ttl	Integer from	It configures the time interval (in seconds)	
(X ranges from 1 to 3, Y ranges from 1 to 2.)	30 to	that NAPTR record Y may be cached before	

Parameter	Permitted Values	Descriptions	Web Setting Path
	2147483647	the record should be consulted again for account X.  The default value is 300.  It takes effect after a reboot.  For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.srv_ttl_timer_enable (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to refresh the DNS-SRV query records at the regular time for account X.  0-Disabled 1-Enabled The default value is 0. It takes effect after a reboot. For more information, refer to Server Redundancy on Yealink IP Phones.	
account.X.outbound_proxy_enable (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to send requests to the outbound proxy server for account X.  O-Disabled  1-Enabled	Account->Register->Enable Outbound Proxy Server

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 0.	
account.X.outbound_host (X ranges from 1 to 3)	IP address or domain name	It configures the IP address or domain name of the outbound proxy server for account X.  The default value is blank.	Account->Register->Outbound Proxy Server
account.X.outbound_port (X ranges from 1 to 3)	Integer from 0 to 65535	It configures the port of the outbound proxy server for account X.  The default value is 5060.	Account->Register->Outbound Proxy Server->Port
account.X.dial_tone (X ranges from 1 to 3)	0,1 or 2	It configures the dial tone for the IP phone.  0-Default (depend on the selection of country tone)  1-A specified tone  2-Mute  The default value is 0.	
voice_mail.number.X (X ranges from 1 to 3)	String within 99 characters	It configures the voice mail number for account X.  The default value is blank.  Note: It works only if the value of the parameter "account.x.subscribe_mwi_to_vm" is set to 1 (Enabled).	Account->Advanced->Voice Mail

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.proxy_require (X ranges from 1 to 3)	String within 256 characters	It configures the proxy server for account X.  The default value is blank.	Account->Basic->Proxy Require
account.X.anonymous_call (X ranges from 1 to 3)	0 or 1	It enables or disables anonymous call feature for account X.  O-Disabled  1-Enabled  If it is set to 1 (Enabled), the IP phone will block its identity from showing up to the callee when placing a call. The callee's phone LCD screen presents anonymous instead of the caller's identity.  The default value is 0.	Account->Basic->Local Anonymous
account.X.send_anonymous_code (X ranges from 1 to 3)	0 or 1	It configures the IP phone to send anonymous on/off code to activate/deactivate the server-side anonymous call feature for account X.  O-Off Code  1-On Code  If it is set to 0 (Off Code), the IP phone will send anonymous off code to deactivate the server-side anonymous call feature.	Account->Basic->Send Anonymous Code

Parameter	Permitted Values	Descriptions	Web Setting Path
		If it is set to 1 (On Code), the IP phone will send anonymous on code to activate the server-side anonymous call feature.  The default value is 0.	
account.X.anonymous_call_oncode (X ranges from 1 to 3)	String within 32 characters	It configures the anonymous call on code to activate the server-side anonymous call feature for account X.  The default value is blank.  Note: It works only if the value of the parameter  "account.X.send_anonymous_code" is set to 1  (On Code).	Account->Basic->Send Anonymous Code->On Code
account.X.anonymous_call_offcode (X ranges from 1 to 3)	String within 32 characters	It configures the anonymous call off code to deactivate the server-side anonymous call feature for account X.  The default value is blank.  Note: It works only if the value of the parameter  "account.X.send_anonymous_code" is set to 0  (Off Code).	Account->Basic->Send Anonymous Code->Off Code
account.X.reject_anonymous_call	0 or 1	It enables or disables anonymous call	Account->Basic->Local Anonymous

Parameter	Permitted Values	Descriptions	Web Setting Path
(X ranges from 1 to 3)		rejection feature for account X.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), the IP phone will automatically reject incoming calls from users enabled anonymous call feature. The anonymous user's phone LCD screen presents "Anonymity Disallowed".  The default value is 0.	Rejection
account.X.send_anonymous_rejection_code (X ranges from 1 to 3)	0 or 1	It configures the IP phone to send anonymous call rejection on/off code to activate/deactivate the server-side anonymous call rejection feature for account X.  0-Off Code 1-On Code If it is set to 0 (Off Code), the IP phone will send anonymous rejection off code to deactivate the server-side anonymous call rejection feature. If it is set to 1 (On Code), the IP phone will send anonymous rejection on code to	Account->Basic->Send Anonymous Rejection Code

Parameter	Permitted Values	Descriptions	Web Setting Path
		activate the server-side anonymous call rejection feature.  The default value is 0.	
account.X.anonymous_reject_oncode (X ranges from 1 to 3)	String within 32 characters	It configures the anonymous call rejection on code to activate the server-side anonymous call rejection feature for account X. The IP phone will send the anonymous call rejection on code to the server when you activate anonymous call rejection feature for account X on the IP phone.  The default value is blank.	Account->Basic->Send Anonymous Rejection Code->On Code
account.X.anonymous_reject_offcode (X ranges from 1 to 3)	String within 32 characters	It configures the anonymous call rejection off code to deactivate the server-side anonymous call rejection feature for account X. The IP phone will send the anonymous call rejection off code to the server when you deactivate anonymous call rejection feature for account X on the IP phone.  The default value is blank.	Account->Basic->Send Anonymous Rejection Code->Off Code
account.X.dnd.enable (X ranges from 1 to 3)	0 or 1	It enables or disables DND feature for account X when the DND mode is configured as Custom.	Features->Forward& DND->DND ->DND Status

Parameter	Permitted Values	Descriptions	Web Setting Path
		0-Disabled 1-Enabled If it is set to 1 (Enabled), the IP phone will reject incoming calls on account X. The default value is 0.	
account.X.dnd.on_code (X ranges from 1 to 3)	String within 32 characters	It configures the DND on code to activate the server-side DND feature for account X when the DND mode is configured as Custom. The IP phone will send the DND on code to the server when you activate DND feature for account X on the IP phone.  The default value is blank.	Features->Forward& DND->DND On Code
account.X.dnd.off_code (X ranges from 1 to 3)	String within 32 characters	It configures the DND off code to deactivate the server-side DND feature for account X when the DND mode is configured as Custom. The IP phone will send the DND off code to the server when you deactivate DND feature for account X on the IP phone.  The default value is blank.	Features->Forward& DND->DND Off Code
account.X.always_fwd.enable (X ranges from 1 to 3)	0 or 1	It enables or disables always forward feature for account X when the call forward mode is	Features->Forward& DND->Always Forward->On/Off

Parameter	Permitted Values	Descriptions	Web Setting Path
		configured as Custom.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), incoming calls to the account X are forwarded to the destination number immediately.	
account.X.always_fwd.target (X ranges from 1 to 3)	String within 32 characters	The default value is 0.  It configures the destination number of the always forward for account X when the call forward mode is configured as Custom.  The default value is blank.	Features->Forward& DND->Always Forward->Target
account.X.always_fwd.on_code (X ranges from 1 to 3)	String within 32 characters	It configures the always forward on code to activate the server-side always forward feature for account X when the call forward mode is configured as Custom. The IP phone will send the always forward on code and the pre-configured destination number to the server when you activate always forward feature for account X on the IP phone.  The default value is blank.	Features->Forward& DND->Always Forward->On Code

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.always_fwd.off_code (X ranges from 1 to 3)	String within 32 characters	It configures the always forward off code to deactivate the server-side always forward feature for account X when the call forward mode is configured as Custom. The IP phone will send the always forward off code to the server when you deactivate always forward feature for account X on the IP phone.  The default value is blank.	Features->Forward& DND->Always Forward ->Off Code
account.X.busy_fwd.enable (X ranges from 1 to 3)	0 or 1	It enables or disables busy forward feature for account X when the call forward mode is configured as Custom.  O-Disabled  1-Enabled  If it is set to 1 (Enabled), incoming calls to the account X are forwarded to the destination number when the callee is busy.  The default value is 0.	Features->Forward& DND->Busy Forward->On/Off
account.X.busy_fwd.target (X ranges from 1 to 3)	String within 32 characters	It configures the destination number of the busy forward for account X when the call forward mode is configured as Custom.  The default value is blank.	Features->Forward& DND->Busy Forward->Target

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.busy_fwd.on_code (X ranges from 1 to 3)	String within 32 characters	It configures the busy forward on code to activate the server-side busy forward feature for account X when the call forward mode is configured as Custom. The IP phone will send the busy forward on code and the pre-configured destination number to the server when you activate busy forward feature for account X on the IP phone.  The default value is blank.	Features->Forward& DND->Busy Forward->On Code
account.X.busy_fwd.off_code (X ranges from 1 to 3)	String within 32 characters	It configures the busy forward off code to deactivate the server-side busy forward feature for account X when the call forward mode is configured as Custom. The IP phone will send the busy forward off code to the server when you deactivate busy forward feature for account X on the IP phone.  The default value is blank.	Features->Forward& DND->Busy Forward ->Off Code
account.X.timeout_fwd.enable (X ranges from 1 to 3)	0 or 1	It enables or disables no answer forward feature for account X when the call forward mode is configured as Custom.  O-Disabled  1-Enabled	Features->Forward& DND->No Answer Forward->On/Off

Parameter	Permitted Values	Descriptions	Web Setting Path
		If it is set to 1 (Enabled), incoming calls to the account X are forwarded to the destination number after a period of ring time.  The default value is 0.	
account.X.timeout_fwd.target (X ranges from 1 to 3)	String within 32 characters	It configures the destination number of the no answer forward for account X when the call forward mode is configured as Custom.  The default value is blank.	Features->Forward& DND->No Answer Forward->Target
account.X.timeout_fwd.timeout (X ranges from 1 to 3)	Integer from 0 to 20	It configures ring times (N) to wait before forwarding incoming calls for account X when the call forward mode is configured as Custom.  Incoming calls will be forwarded when not answered after N*6 seconds.  The default value is 2.	Features->Forward& DND->No Answer Forward->After Ring Time (0~120s)
account.X.timeout_fwd.on_code (X ranges from 1 to 3)	String within 32 characters	It configures the no answer forward on code to activate the server-side no answer forward feature for account X when the call forward mode is configured as Custom. The IP phone will send the no answer forward on code and the pre-configured destination number to the server when you activate no answer forward	Features->Forward& DND->No Answer Forward->On Code

Parameter	Permitted Values	Descriptions	Web Setting Path
		feature for account X on the IP phone.  The default value is blank.	
account.X.timeout_fwd.off_code (X ranges from 1 to 3)	String within 32 characters	It configures the no answer forward off code to deactivate the server-side no answer forward feature for account X when the call forward mode is configured as Custom. The IP phone will send the no answer forward off code to the server when you deactivate no answer forward feature for account X on the IP phone.  The default value is blank.	Features->Forward& DND->No Answer Forward->Off Code
account.X.100rel_enable (X ranges from 1 to 3)	0 or 1	It enables or disables the 100 reliable retransmission feature for account X.  0-Disabled  1-Enabled  The default value is 0.	Account->Advanced-> Retransmission
account.X.subscribe_mwi (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to subscribe the message waiting indicator for account X.  O-Disabled  1-Enabled	Account->Advanced->Subscribe for MWI

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.subscribe_mwi_expires (X ranges from 1 to 3)	Integer from 0 to 84600	If it is set to 1 (Enabled), the IP phone will send a SUBSCRIBE message to the server for message-summary updates.  The default value is 0.  It configures MWI subscribe expiry time (in seconds) for account X. The IP phone is able to successfully refresh the SUBSCRIBE for message-summary events before expiration of the SUBSCRIBE dialog.  The default value is 3600.  Note: It works only if the value of the parameter "account.X.subscribe_mwi" is set to 1 (Enabled).	Account->Advanced->MWI Subscription Period (Seconds)
account.X.display_mwi.enable	0 or 1	It enables or disables the IP phone to present audio and visual MWI when it receives new voice mails.  0-Disabled 1-Enabled The default value is 1.	Account->Advanced->Voice Mail Display
account.X.cid_source (X ranges from 1 to 3)	0, 1, 2, 3, 4 or 5	It configures the presentation of the caller identity when receiving an incoming call for	Account->Advanced->Caller ID Source

Parameter	Permitted Values	Descriptions	Web Setting Path
		account X.  0-FROM (Derives the name and number of the caller from the "From" header).  1-PAI (Derives the name and number of the caller from the "PAI" header. If the server does not send the "PAI" header, it will display "anonymity" on the callee's phone).  2-PAI-FROM (Derives the name and number of the caller from the "PAI" header preferentially. If the server does not send the "PAI" header, it will derive from the "From" header).  3-PRID-PAI-FROM  4-PAI-RPID-FROM,  5-RPID-FROM  The default value is 0.	
account.X.cid_source_privacy (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to deal with PRIVACY header field in the 180 or 200 OK message for account X.  0-Disabled 1-Enabled	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1.	
account.X.cid_source_ppi (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to process the P-Preferred-Identity header for caller identity presentation when receiving an incoming call for account X.  0-Disabled 1-Enabled The default value is 1.	
account.X.cp_source (X ranges from 1 to 3)	0, 1 or 2	It configures the presentation of the callee's identity for account X.  O-PAI-RPID (Derives the name and number of the callee from the "PAI" header preferentially. If the server does not send the "PAI" header, it will derive from the "RPID" header).  1-Dialed Digits (Preferentially displays the dialed digits on the caller's phone).  2-RFC4916 (Derives the name and number of the callee from "From" header in the Update message).	

Parameter	Permitted Values	Descriptions	Web Setting Path
		When the RFC 4916 is enabled on the IP phone, the caller sends the SIP request message which contains the from-change tag in the Supported header. The caller then receives an UPDATE message from the callee, and displays the identity in the From header. The default value is 0.	
account.X.session_timer.enable (X ranges from 1 to 3)	0 or 1	It enables or disables the session timer for account X.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), the IP phone will send periodic re-INVITE requests to refresh the session during a call.  The default value is 0.	Account->Advanced->Session Timer
account.X.session_timer.expires (X ranges from 1 to 3)	Integer from 30 to 7200	It configures the interval (in seconds) for refreshing the SIP session during a call for account X.  If it is set to 1800 (1800s), the IP phone will refresh the session during a call before 1800 seconds.	Account->Advanced->Session Expires (30~7200s)

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 1800.	
account.X.session_timer.refresher (X ranges from 1 to 3)	0 or 1	It configures the refresher of the session timer for account X.  0-Uac (Refreshing the session is performed by the IP phone).  1-Uas (Refreshing the session is performed by a SIP server).  The default value is 0.	Account->Advanced->Session Refresher
account.X.enable_user_equal_phone (X ranges from 1 to 3)	0 or 1	It enables or disables the "userphone" carried in the INVITE message for account X.  0-Disabled  1-Enabled The default value is 0.	Account->Advanced->Send user=phone
account.X.srtp_encryption (X ranges from 1 to 3)	0, 1 or 2	It configures whether to use voice encryption service for account X.  0-Disabled 1-Optional 2-Compulsory If it is set to 1 (Optional), the IP phone will negotiate with the other IP phone what type	Account->Advanced->RTP Encryption (SRTP)

Parameter	Permitted Values	Descriptions	Web Setting Path
		of encryption to utilize for the session.  If it is set to 2 (Compulsory), the IP phone is forced to use SRTP during a call.  The default value is 0.	
account.X.ptime (X ranges from 1 to 3)	0 (Disabled), 10, 20, 30, 40, 50 or 60	It configures the ptime (in milliseconds) for the codec for account X.  The default value is 20.	Account->Advanced->PTime (ms)
account.X.bla_number (X ranges from 1 to 3)	String within 99 characters	It configures the BLA number for account X.  The default value is blank.	Account->Advanced->BLA Number
account.X.bla_subscribe_period (X ranges from 1 to 3)	Integer from 60 to 7200	It configures the period (in seconds) of BLA subscription for account X.  The default value is 300.	Account->Advanced->BLA Subscription Period
account.X.register_mac (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to carry the MAC address in the REGISTER message for account X.  0-Disabled 1-Enabled The default value is 0.	Account->Advanced->SIP Send MAC
account.X.register_line (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to carry the line number in the REGISTER message for	Account-> Advanced->SIP Send Line

Parameter	Permitted Values	Descriptions	Web Setting Path
		account X.	
		0-Disabled	
		1-Enabled	
		The default value is 0.	
		It enables or disables the IP phone to pick up a call according to the SIP header of dialog-info for account X. <b>0</b> -Disabled	
account.X.dialoginfo_callpickup		1-Enabled	Account->Advanced->Dialog Info
(X ranges from 1 to 3)	0 or 1	If it is set to 1 (Enabled), call pickup is implemented through SIP signals.	Call Pickup
		The default value is 0.	
		For more information, refer to Yealink IP Phones Administrator Guide.	
		It configures the group pickup code for account X.	
account.X.group_pickup_code	String within	The default value is blank.	Account->Advanced->Group Call
(X ranges from 1 to 3)	32 characters	Note: The group call pickup code configured on a per-line basis takes precedence over that configured on a phone basis.	Pickup Code

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.direct_pickup_code (X ranges from 1 to 3)	String within 32 characters	It configures the directed call pickup code for account X.  The default value is blank.  Note: The directed call pickup code configured on a per-line basis takes precedence over that configured on a phone basis.	Account->Advanced->Directed Call Pickup Code
account.X.auto_answer (X ranges from 1 to 3)	0 or 1	It enables or disables auto answer feature for account X.  0-Disabled  1-Enabled  If it is set to 1 (Enabled), the IP phone can automatically answer an incoming call.  The default value is 0.  Note: The IP phone cannot automatically answer the incoming call during a call even if auto answer is enabled.	Account->Basic->Auto Answer
features.special_auto_answer_tone	0 or 1	It enables or disables the phone to play a warning tone when an incoming call is automatically answered. <b>0</b> -Disabled	

Parameter	Permitted Values	Descriptions	Web Setting Path
		1-Enabled The default value is 1.	
features.auto_answer_delay	Integer from 1 to 4	It configures the delay time (in seconds) before the IP phone automatically answers an incoming call. The default value is 1.	
account.X.missed_calllog (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to record missed calls for account X.  0-Disabled  1-Enabled  If it is set to 0 (Disabled), there is no indicator displaying on the LCD screen, the IP phone does not log the missed call in the Missed Calls list.  If it is set to 1 (Enabled), a prompt message " <number> New Missed Call(s)" along with an indicator icon is displayed on the IP phone idle screen when the IP phone misses calls.  The default value is 1.</number>	Account->Basic->Missed Call Log
account.X.subscribe_mwi_to_vm (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to subscribe the message waiting indicator to	Account->Advanced->Subscribe  MWI To Voice Mail

Parameter	Permitted Values	Descriptions	Web Setting Path
		the voice mail number for account X.	
		<b>0</b> -Disabled	
		1-Enabled	
		Note: It works only if the value of the	
		parameters "account.X.subscribe_mwi" is set	
		to 1 (Enabled) and "voice_mail.number.X" is	
		configured.	
		The default value is 0.	
		It configures the interval (in seconds) for the IP	
account.X.reg_fail_retry_interval	Integer from 0	phone to retry to register account X when	Account->Advanced->SIP
(X ranges from 1 to 3)	to 1800	registration fails.	Registration Retry Timer (0~1800s)
		The default value is 30.	
		It configures the conference type for account	
		X.	
account.X.conf_type		<b>0</b> -Local Conference (Conferences are set up	Account->Advanced->Conference
(X ranges from 1 to 3)	0 or 2	on the IP phone locally).	Туре
,		2-Network Conference (Conferences are set	
		up by the server).	
		The default value is 0.	
account.X.conf_uri	SIP URI within	It configures the network conference URI for	Account->Advanced->Conference
	511 characters	account X.	URI

Parameter	Permitted Values	Descriptions	Web Setting Path
(X ranges from 1 to 3)		The default value is blank.  Note: It works only if the value of the parameter "account.X.conf_type" is set to 2 (Network Conference).	
account.X.blf.subscribe_period (X ranges from 1 to 3)	Integer from 30 to 2147483647	It configures the period (in seconds) of the BLF subscription for account X.  The default value is 1800.	
account.X.blf.subscribe_event (X ranges from 1 to 3)	0 or 1	It configures the event of the BLF subscription for account X.  0-Dialog  1-Presence  The default value is 0.	
account.X.sip_server_type (X ranges from 1 to 3)	0, 2, 4 or 6	It configures the type of the IP server for account X.  0-Default  2-BroadSoft  4-Cosmocom  6-UCAP  The default value is 0.	Account->Advanced->SIP Server Type
account.X.music_server_uri	SIP URI within	It configures the address of the Music On	Account->Advanced->Music Server

Parameter	Permitted Values	Descriptions	Web Setting Path
(X ranges from 1 to 3)	256 characters	Hold server for account X. Examples for valid values: <10.1.3.165>, 10.1.3.165, sip:moh@sip.com, <sip:moh@sip.com>, <yealink.com> or yealink.com.  The default value is blank.  Note: The DNS query in this parameter only supports A query.</yealink.com></sip:moh@sip.com>	URI
account.X.dtmf.type (X ranges from 1 to 3)	0, 1, 2 or 3	It configures the DTMF type for account X.  0-INBAND (DTMF digits are transmitted in the voice band).  1-RFC2833 (DTMF digits are transmitted by RTP Events compliant to RFC 2833).  2-SIP INFO (DTMF digits are transmitted by the SIP INFO messages).  3-AUTO or SIP INFO (the IP phone negotiates with the other end to use INBAND or RFC 2833, if there is no negotiation, using SIP INFO by default).  The default value is 1.	Account->Advanced->DTMF Type
account.X.dtmf.dtmf_payload (X ranges from 1 to 3)	Integer from 96 to 127	It configures the RFC 2833 payload type for account X.	Account->Advanced->DTMF Payload Type (96~127)

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 101.	
account.X.dtmf.info_type (X ranges from 1 to 3)	1, 2 or 3	It configures the DTMF info type when the DTMF type is configured as "SIP INFO", "AUTO or SIP INFO" for account X.  0-Disabled  1-DTMF-Relay  2-DTMF  3-Telephone-Event The default value is 0.	Account->Advanced->DTMF Info Type
account.X.nat.nat_traversal (X ranges from 1 to 3)	0 or 1	It enables or disables the NAT traversal for account X.  0-Disabled  1-STUN  The default value is 0.  Note: It works only if the value of the parameter "sip.nat_stun.enable" is set to 1 (Enabled).	Account->Register->NAT
account.X.nat.udp_update_enable (X ranges from 1 to 3)	0, 1, 2 or 3	It configures the type of keep-alive packets sent by the IP phone to the NAT device to keep the communication port open so that	Account->Advanced->Keep Alive Type

Parameter	Permitted Values	Descriptions	Web Setting Path
		NAT can continue to function for account X.  0-Dsiabled  1-Default (the IP phone sends UDP packets to the server).  2-Option (the IP phone sends SIP OPTION packets to the server).  3-Notify (the IP phone sends SIP NOTIFY packets to the server).  The default value is 1.	
account.X.nat.udp_update_time (X ranges from 1 to 3)	Integer from 15 to 2147483647	It configures the keep-alive interval (in seconds) for account X.  The default value is 30.	Account->Advanced->Keep Alive Interval (Seconds)
account.X.nat.rport (X ranges from 1 to 3)	0 or 1	It enables or disables NAT Rport feature for account X.  0-Disabled  1-Enabled  The default value is 0.	Account->Advanced->RPort
account.X.alert_info_url_enable (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to download the ring tone from the URL contained in the Alert-Info header for account	Account->Advanced->Distinctive Ring Tones

Parameter	Permitted Values	Descriptions	Web Setting Path
		X.  0-Disabled  1-Enabled  The default value is 0.	
features.alert_info_tone	0 or 1	It enables and disables the IP phone to map the keywords in the Alert-Info header to the specified Bellcore ring tones.  0-Disabled 1-Enabled The default value is 0.  It enables or disables the phone screen to	
features.show_anywhere_remote_office_enable	0 or 1	display any where and remote office. <b>0</b> -Disabled <b>1</b> -Enabled  The default value is 1.	
features.anonymous_response_code	Integer from 0 to 65535	It configures the code the phone responds with to the server when it receives an anonymous call.  The default value is 433.	
account.X.ringtone.ring_type	Common,	It configures a ring tone for account X.	Account->Basic->Ring Type

Parameter	Permitted Values	Descriptions	Web Setting Path
(X ranges from 1 to 3)	Ring1.wav, Ring2.wav, Ring3.wav Ring4.wav Ring5.wav Silent.wav	Example:  account.1.ringtone.ring_type = Ring3.wav means configuring Ring3.wav for account1.  account.1.ringtone.ring_type = Common means account1 will use the ring tone selected for the IP phone.  The default value is Common.	
account.X.codec.Y.payload_type  (X ranges from 1 to 3, Y ranges from 1 to 9.)	PCMU PCMA G729 G722 G726-16 G726-24 G726-32 G726-40 iLBC	It configures the codec for account X.  When Y=1, the default value is G722;  When Y=2, the default value is PCMU;  When Y=3, the default value is PCMA;  When Y=4, the default value is G729  When Y=5, the default value is iLBC;  When Y=6, the default value is G726-16;  When Y=7, the default value is G726-24;  When Y=8, the default value is G726-32;  When Y=9, the default value is G726-40.	Account->Codec
account.X.codec.Y.enable (X ranges from 1 to 3, Y ranges from 1 to 9.)	0 or 1	It enables or disables the specified codec for account X. <b>0</b> -Disabled	Account->Codec

Parameter	Permitted Values	Descriptions	Web Setting Path
		1-Enabled	
		Example:	
		account.1.codec.1.enable = 1	
		This means that the codec PCMU is enabled	
		on the IP phone.	
		When Y=1, the default value is 1;	
		When Y=2, the default value is 1;	
		When Y=3, the default value is 1;	
		When Y=4, the default value is 1;	
		When Y=5, the default value is 0;	
		When Y=6, the default value is 0;	
		When Y=7, the default value is 0;	
		When Y=8, the default value is 0;	
		When Y=9, the default value is 0.	
		It configures the priority of the enabled codec	
		for account X.	
account.X.codec.Y.priority	Integer from 0 to 9	Example:	
(X ranges from 1 to 3, Y ranges from 1 to 9.)		account.1.codec.1.priority = 1	Account->Codec
		When Y=1, the default value is 1;	
		When Y=2, the default value is 2;	

Parameter	Permitted Values	Descriptions	Web Setting Path
		When Y=3, the default value is 3;	
		When Y=4, the default value is 4;	
		When Y=5, the default value is 0;	
		When Y=6, the default value is 0;	
		When Y=7, the default value is 0;	
		When Y=8, the default value is 0;	
		When Y=9, the default value is 0.	
		It configures the rtpmap of the audio codec	
		for account X.	
		Example:	
		When Y=1, the default value is 9;	
		When Y=2, the default value is 0;	
account.X.codec.Y.rtpmap	Integer	When Y=3, the default value is 8;	
(X ranges from 1 to 3, Y ranges from 1 to 9.)	from 0 to 127	When Y=4, the default value is 18;	
		When Y=5, the default value is 106;	
		When Y=6, the default value is 103;	
		When Y=7, the default value is 104;	
		When Y=8, the default value is 102;	
		When Y=9, the default value is 105.	

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.unregister_on_reboot (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to un-register account X before a reboot.  0-Disabled  1-Enabled  The default value is 0.	Account->Advanced->Unregister When Reboot
account.X.compact_header_enable (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to support compact SIP header for account X.  0-Disabled  1-Enabled  The default value is 0.	
account.X.music_on_hold_type (X ranges from 1 to 3)	0 or 1	It configures the way on how the IP phone processes Music On Hold when placing an active call on hold for account X.  O-Calling the music server before holding  1-Calling the music server after holding  The default value is 0.	
account.X.acd.enable (X ranges from 1 to 3)	0 or 1	It enables or disables ACD feature for account X.  0-Disabled 1-Enabled	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is 0.	
account.X.acd.available (X ranges from 1 to 3)	0 or 1	It enables or disables the IP phone to display the available and unavailable soft keys for account X after the IP phone logs into the ACD system.  0-Disabled 1-Enabled The default value is 0.	
account.X.subscribe_acd_expires (X ranges from 1 to 3)	Integer from 120 to 3600	It configures the period (in seconds) of ACD subscription for account X.  The default value is 3600.	Account->Advanced->ACD Subscrip Period (120~3600s)
account.X.alert_info (X ranges from 1 to 3)	String within 256 characters	It configures the Alert-Info header. The default value is blank.	
account.X.mwi_parse_terminated (X ranges from 1 to 3)	0 or 1	It enables or disables the phone to parse the Terminated attribute in the received MWI NOTIFY message.  0-Disabled 1-Enabled The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.ringback_duration_time (X ranges from 1 to 3)	Integer from 64 to +∞	It configures the duration time (in seconds) in the ringback state.  If it is set to 180, the phone will cancel the dialing or reject the incoming call if the call is not answered within 180s.  The default value is 180.	
account.X.call_info	String within	It configures the Call-Info header.	
(X ranges from 1 to 3)	256 characters	The default value is blank.	
account.X.call_id_mode (X ranges from 1 to 3)	0, 1 or 2	It configures the constitution of call ID.  0-Use random digits  1-Use the combination of the digits and letters  2-Use random digits plus MAC address  The default value is 2.	
account.X.subscribe_expires_overlap (X ranges from 1 to 3)	Positive integer	It configures the renewal time away from the registration lease.  The default value is -1.  It takes effect after a reboot.	
account.X.register_expires_overlap	Positive	It configures the renewal time (in seconds)	
(X ranges from 1 to 3)	integer	away from the subscription lease.	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is -1.	
		It takes effect after a reboot.	

The following table lists configuration parameters that are integrated with BroadSoft platform. For more information on BroadSoft features, refer to Yealink\_IP\_Phones\_Deployment\_Guide\_for\_BroadSoft\_UC-One\_Environment.

Parameter	Permitted Values	Descriptions	Web Setting Path
bw.enable	0 or 1	It enables or disables BroadSoft features for IP phones.  0-Disabled  1-Enabled  The default value is 0.  It takes effect after a reboot.	
features.linekey_call_with_default_account	0 or 1	It enables or disables the phone to dial out using the default account when pressing the line key.  0-Disabled  1-Enabled  The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
features.hide_caller_id.enable	0 or 1	It enables or disables the phone to hide caller ID when it receives an incoming call.  0-Disabled  1-Enabled  The default value is 0.	
features.hide_feature_access_codes.enable	0 or 1	It enables or disables the IP phone to display feature name instead of the feature access code when dialing and in talk.  O-Disabled  1-Enabled  The default value is 0.  The following feature access codes will be instead when this features is enabled:  Voice Mail  Pick up  Group Pick up  Barge In Retrieve  Call Park  Group Park	Features->General Information->Hide Feature Access Codes

Parameter	Permitted Values	Descriptions	Web Setting Path
features.flash_url_dsskey_led.enable	0 or 1	It enables or disables 5 seconds delay for the LED flashing of the URL DSS key.  0-Disabled  1-Enabled  The default value is 1.	
features.upload_server	IP address	It configures the server address which the DssKey.cfg file is uploaded to when the phone receives an XML command (Command:UploadSystemInfo).	
phone_setting.label_scroll_interval_time	Integer from 200 to 1000	It configures the scrolling period of text display (in milliseconds) for LDPA search result. The default value is 300.	
sip.authentication_for_xsi	0 or 1	It configures the authentication mechanism for the XSI access.  0-User Login Credentials for XSI Authentication 1-SIP Credentials for XSI Authentication  If it is set to 0 (User Login Credentials for XSI Authentication), the IP phone uses the XSI user ID and password for XSI authentication.  If it is set to 1 (SIP Credentials for XSI Authentication), the IP phone uses the XSI user ID,	Directory-> Network Directory-> Allow SIP Authentication for XSI

Parameter	Permitted Values	Descriptions	Web Setting Path
		the user name and password of the SIP account for XSI authentication.  The default value is 0.	
account.X.xsi.host (X ranges from 1 to 3.)	IP address or domain name	It configures the IP address or domain name of the Xtended Services Platform server for account X.  Example: account.1.xsi.host = xsp1.iop1.broadworks.net The default value is blank.	Directory-> Network Directory->Host Server
account.X.xsi.port (X ranges from 1 to 3.)	Integer from 1 to 65535	It configures the port of the Xtended Services Platform server for account X.  Example: account.1.xsi.port = 80 The default value is 80.	Directory-> Network Directory->Port
account.X.xsi.server_type (X ranges from 1 to 3.)	"http" or "https"	It configures the access protocol of the Xtended Services Platform server for account X.  Example: account.1.xsi.server_type = http The default value is http.	Directory-> Network Directory->XSI Server Type

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.xsi.user (X ranges from 1 to 3.)	String within 99 characters	It configures the user name for XSI authentication for account X.  Example: account.1.xsi.user = 3502@as.iop1.broadworks.net The default value is blank.	Directory-> Network Directory->User ID
account.X.xsi.password (X ranges from 1 to 3.)	String within 99 characters	It configures the password for XSI authentication for account X.  Example: account.1.xsi.password = 123456 The default value is blank.	Directory-> Network Directory-> Password
bw_phonebook.group_enable	0 or 1	It enables or disables the IP phone to display the group directory.  0-Disabled  1-Enabled  The default value is 1.  Note: It works only if XSI is configured for account 1.	Directory-> Network Directory->Group
bw_phonebook.group_displayname	String within 99 characters	It configures the display name on the LCD screen for the group directory.	Directory-> Network Directory->Group

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is Group.  Note: It works only if XSI is configured for account  1.	
bw_phonebook.enterprise_enable	0 or 1	It enables or disables the IP phone to display the enterprise directory.  O-Disabled  1-Enabled  The default value is 1.  Note: It works only if XSI is configured for account 1.	Directory-> Network Directory->Enterprise
bw_phonebook.enterprise_displayname	String within 99 characters	It configures the display name on the LCD screen for the enterprise directory.  The default value is Enterprise.  Note: It works only if XSI is configured for account 1.	Directory-> Network Directory->Enterprise
bw_phonebook.group_common_enable	0 or 1	It enables or disables the IP phone to display the group common directory.  O-Disabled  1-Enabled  The default value is 1.	Directory-> Network Directory->Group Common

Parameter	Permitted Values	Descriptions	Web Setting Path
		Note: It works only if XSI is configured for account  1.	
bw_phonebook.group_common_displayname	String within 99 characters	It configures the display name on the LCD screen for the group common directory.  The default value is GroupCommon.  Note: It works only if XSI is configured for account 1.	Directory-> Network Directory-> Group Common
bw_phonebook.enterprise_common_enable	0 or 1	It enables or disables the IP phone to display the enterprise common directory.  0-Disabled  1-Enabled  The default value is 1.  Note: It works only if XSI is configured for account 1.	Directory-> Network Directory->Enterprise Common
bw_phonebook.enterprise_common_displayname	String within 99 characters	It configures the display name on the LCD screen for the enterprise common directory.  The default value is EnterpriseCommon.  Note: It works only if XSI is configured for account 1.	Directory-> Network Directory->Enterprise Common

Parameter	Permitted Values	Descriptions	Web Setting Path
bw_phonebook.personal_enable	0 or 1	It enables or disables the IP phone to display the personal directory.  0-Disabled  1-Enabled  The default value is 1.  Note: It works only if XSI is configured for account 1.	Directory-> Network Directory-> Personal
bw_phonebook.personal_displayname	String within 99 characters	It configures the display name on the LCD screen for the personal directory.  The default value is Personal.  Note: It works only if XSI is configured for account 1.	Directory-> Network Directory-> Personal
bw_phonebook.custom	0 or 1	It enables or disables custom directory feature.  0-Disabled  1-Enabled  The default value is 0.  Note: It works only if XSI is configured for account  1.	Directory-> Network Directory->Enable Custom Directory
directory.update_time_interval	Integer from 2 to 43200	It configures the interval (in minutes) for the IP phone to update the data of the BroadSoft	

Parameter	Permitted Values	Descriptions	Web Setting Path
		directory from the BroadSoft server.	
		The default value is 60.	
		It enables or disables BroadSoft call log feature.	
		0-Disabled	
bw_phonebook.call_log_enable	0 or 1	1-Enabled	
bw_phonebook.edii_log_enable	0 01 1	The default value is 0.	
		Note: It works only if XSI is configured for account	
		1.	
	0 or 1	It enables or disables the IP phone to show the	
		caller's phone number in the call history list.	
		0-Disabled	
features.call_log_show_num		1-Enabled	Features->General Information->Call
redictes.cdii_log_silow_ilolii		The default value is 0.	List Show Number
		Note: The old parameter	
		"features.records_show_num" is also applicable	
		to IP phones.	
features.call_park.park_mode		It configures the call park mode.	
	0 or 1	0-XSI	Features->Call Pickup->Call Park
		1-FAC	Mode
		The default value is 0.	

Parameter	Permitted Values	Descriptions	Web Setting Path
call_park.enable	0 or 1	It enables or disables the IP phone to display the Park soft key during a call.  0-Disabled  1-Enabled  The default value is 0.	Features->Call Pickup->Call Park
features.call_park.park_code	String within 32 characters	It configures the call park code when call park mode is configured as FAC.  The default value is blank.  Note: It works only if the value of the parameter "features.call_park.park_mode" is set to 1.	Features->Call Pickup->Call Park Code
call_park.group_enable	0 or 1	It enables or disables the IP phone to display the GPark soft key during a call.  0-Disabled  1-Enabled  The default value is 0.	Features->Call Pickup->Group Call Park
features.call_park.group_park_code	String within 32 characters	It configures the group call park code when call park mode is configured as FAC.  The default value is blank.  Note: It works only if the value of the parameter "features.call_park.park_mode" is set to 1.	Features->Call Pickup->Group Call Park Code

Parameter	Permitted Values	Descriptions	Web Setting Path
features.call_park.park_retrive_code	String within 32 characters	It configures the park retrieve code when call park mode is configured as FAC.  The default value is blank.  Note: It works only if the value of the parameter "features.call_park.park_mode" is set to 1.	Features->Call Pickup->Park Retrieve Code
call_park.park_visual_notify_enable	0 or 1	It enables or disables the IP phone to display a parked indicator when a call is parked against its line.  0-Disabled 1-Enabled The default value is 0.	Features->Call Pickup->Visual Alert for Parked Call
call_park.park_ring	0 or 1	It enables or disables the IP phone to play a warning tone when a call is parked against its line.  O-Disabled 1-Enabled The default value is 0.	Features->Call Pickup->Audio Alert for Parked Call
features.dsskey_blind_tran	0 or 1	It enables or disables the phone to perform a blind transfer during a call by pressing the predefined DSS key (BLF, BLF List, Speed Dial, Transfer).	

Parameter	Permitted Values	Descriptions	Web Setting Path
		<ul><li><b>0</b>-Disabled</li><li><b>1</b>-Enabled</li><li>The default value is 1.</li></ul>	
account.X.callpark_enable (X ranges from 1 to 3.)	0 or 1	It enables or disables call park subscription for account X.  O-Disabled  1-Enabled  The default value is 0.	
account.X.shared_line_number_of_linekey (X ranges from 1 to 3.)	String within 32 characters	It configures the number of DSS keys to associate with the shared line from the first unused DSS key (The default order of shared line keys assigned automatically is Line Key->Memory Key->Ext Key).  The default value is 1.  Note: It works only if the value of the parameter "account.X.shared_line" is set to 1 (Shared line).  The default value is 1.	Account->Advanced->Number of line key
account.x.shared_line_callpull_code (X ranges from 1 to 3.)	String within 32 characters	It configures the call pull feature access code to retrieve an existing call from another shared location for account X.	Account->Advanced->Call Pull Feature access code

Parameter	Permitted Values	Descriptions	Web Setting Path
		The default value is *11.  Note: It works only if the value of the parameter "account.X.shared_line" is set to 1 (Shared line).  The default value is 1.	
account.X.acd.initial_state (X ranges from 1 to 3.)	1 or 2	It configures the initial agent state for account X.  1-Avaliable  2-Unavailable  The default value is 1.	
account.X.acd.unavailable_reason_enable (X ranges from 1 to 3.)	0 or 1	It enables or disables unavailable reason code feature for account X.  0-Disabled  1-Enabled  The default value is 0.	
account.X.reason_code.Y (X ranges from 1 to 3, Y ranges from 1 to 100)	Integer from 1 to 2147483647	It configures the unavailable code which must match one of the codes configured on BroadWorks for account X.  The value Y must be continuous.  The default value is blank.	
account.X.reason_code_name.Y (X ranges from 1 to 3, Y ranges from 1 to 100)	String within 99 characters	It configures the unavailable reason which must match one of the reasons configured on	

Parameter	Permitted Values	Descriptions	Web Setting Path
		BroadWorks for account X.  The value Y must be continuous.  The default value is blank.	
account.X.call_center.call_info_enable (X ranges from 1 to 3.)	0 or 1	It enables or disables call center call information feature for account X.  O-Disabled  1-Enabled  The default value is 0.	
account.X.call_center.show_call_info_time (X ranges from 1 to 3.)	Integer from 1 to 86400	It configures the interval (in seconds) to specify how long the call center call information displays for account X.  The default value is 30 seconds.	
account.X.call_center.disp_code_enable (X ranges from 1 to 3.)	0 or 1	It enables or disables disposition code feature for account X.  O-Disabled  1-Enabled  The default value is 0.	
account.X.bw_disp_code.Y (X ranges from 1 to 3.)	Integer from 1 to 2147483647	It configures the disposition code which must match one of the codes configured on BroadWorks for account X.	

Parameter	Permitted Values	Descriptions	Web Setting Path
		The value Y must be continuous.	
		The default value is blank.	
account.X.bw_disp_code_name.Y (X ranges from 1 to 3.)	String within 99 characters	It configures the disposition code name which must match one of the names configured on BroadWorks for account X.  The value Y must be continuous.  The default value is blank.	
account.X.call_center.trace_enable (X ranges from 1 to 3.)	0 or 1	It enables or disables customer originated trace feature for account X.  O-Disabled  1-Enabled  The default value is 0.	
account.X.call_center.emergency_enable (X ranges from 1 to 3.)	0 or 1	It enables or disables the emergency escalation feature for account X.  O-Disabled  1-Enabled  The default value is 0.	
account.X.supervisor_info_code.Y  (X ranges from 1 to 3, Y ranges from 1 to 100)	Integer from 1 to 2147483647	It configures the supervisor number for account X.  The value Y must be continuous.  The default value is blank.	

Parameter	Permitted Values	Descriptions	Web Setting Path
account.X.supervisor_info_code_name.Y  (X ranges from 1 to 3, Y ranges from 1 to 100)	String within 99 characters	It configures the supervisor name for account X.  The value Y must be continuous.  The default value is blank.	
account.X.call_center.queue_status_enable (X ranges from 1 to 3.)	0 or 1	It enables or disables the queue status notification feature for account X.  O-Disabled  1-Enabled  The default value is 0.	
account.X.call_center.queue_status_light_enable (X ranges from 1 to 3.)	0 or 1	It enables or disables the power indicator LED to flash when the ACD call queue has reached the maximum number of calls for account X.  O-Disabled (power indicator LED does not flash)  1-Enabled (power indicator LED fast flashes (300ms) green)  If it is set to 0, the status of the power indicator LED is determined by the value of the parameter "phone_setting.common_power_led_enable".  The default value is 0.	
account.X.hoteling.enable (X ranges from 1 to 3.)	0 or 1	It enables or disables hoteling feature for account X.	

Parameter	Permitted Values	Descriptions	Web Setting Path
		O-Disabled  1-Enabled  The default value is 0.  It takes effect after a reboot.	
account.X.hoteling.auto_login_enable (X ranges from 1 to 3.)	0 or 1	It enables or disables the IP phone to save login credentials automatically when logging into the guest profile for account X.  O-Disabled 1-Enabled The default value is 0.	
account.X.hoteling.user_id (X ranges from 1 to 3.)	String within 99 characters	It configures the user ID used to log into the guest profile for account X.  The default value is blank.	
account.X.hoteling.password (X ranges from 1 to 3.)	String within 99 characters	It configures the password used to log into the guest profile for account X.  The default value is blank.	

# **Programmable Keys**

The following tables list relationship between the values of X in the following parameters and programmable keys for each phone model.

```
# X ranges from 1 to 10, 14.

programablekey.X.type =

programablekey.X.line =

programablekey.X.value =

programablekey.X.xml_phonebook =

programablekey.X.history_type =

programablekey.X.pickup_value =

# X ranges from 1 to 4.

programablekey.X.label =
```

Phone Model X	SIPT23 (P/G)
1	SoftKey1
2	SoftKey2
3	SoftKey3
4	SoftKey4
5	Up
6	Down

Phone Model X	SIPT23 (P/G)
7	Left
8	Right
9	OK
10	Cancel
14	TRAN

# **Time Zones**

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

	Time Zone Name
0	Portugal(Lisboa, Porto, Funchal)
0	Spain-Canary Islands(Las Palmas)
0	United Kingdom(London)
0	Morocco
+01:00	Albania(Tirane)
+01:00	Austria(Vienna)
+01:00	Belgium(Brussels)
+01:00	Caicos
+01:00	Chad
+01:00	Spain(Madrid)
+01:00	Croatia(Zagreb)
+01:00	Czech Republic(Prague)
+01:00	Denmark(Kopenhagen)
+01:00	France(Paris)
+01:00	Germany(Berlin)
+01:00	Hungary(Budapest)
+01:00	Italy(Rome)
+01:00	Luxembourg(Luxembourg)
+01:00	Macedonia(Skopje)
+01:00	Netherlands(Amsterdam)
+01:00	Namibia(Windhoek)
+02:00	Estonia(Tallinn)
+02:00	Finland(Helsinki)
+02:00	Gaza Strip(Gaza)
+02:00	Greece(Athens)
+02:00	Israel(Tel Aviv)
+02:00	Jordan(Amman)
+02:00	Latvia(Riga)
+02:00	Lebanon(Beirut)
+02:00	Moldova(Kishinev)
+02:00	Russia(Kaliningrad)
+02:00	Romania(Bucharest)
+02:00	Syria(Damascus)
+02:00	Turkey(Ankara)
+02:00	Ukraine(Kyiv, Odessa)
+03:00	East Africa Time
+03:00	Iraq(Baghdad)
+03:00	Russia(Moscow)
+03:30	Iran(Teheran)
+04:00	Armenia(Yerevan)
+04:00	Azerbaijan(Baku)
+04:00	Georgia(Tbilisi)

Time Zone	Time Zone Name
+04:00	Kazakhstan(Aktau)
+04:00	Russia(Samara)
+04:30	Afghanistan(Kabul)
+05:00	Kazakhstan(Aqtobe)
+05:00	Kyrgyzstan(Bishkek)
+05:00	Pakistan(Islamabad)
+05:00	Russia(Chelyabinsk)
+05:30	India(Calcutta)
+05:45	Nepal(Katmandu)
+06:00	Kazakhstan(Astana, Almaty)
+06:00	Russia(Novosibirsk, Omsk)
+06:30	Myanmar(Naypyitaw)
+07:00	Russia(Krasnoyarsk)
+07:00	Thailand(Bangkok)
+08:00	China(Beijing)
+08:00	Singapore(Singapore)
+08:00	Australia(Perth)
+08:45	Eucla
+09:00	Korea(Seoul)
+09:00	Japan(Tokyo)
+09:30	Australia(Adelaide)
+09:30	Australia(Darwin)
+10:00	Australia(Sydney, Melbourne, Canberra)
+10:00	Australia(Brisbane)
+10:00	Australia(Hobart)
+10:00	Russia(Vladivostok)
+10:30	Australia(Lord Howe Islands)
+11:00	New Caledonia(Noumea)
+11:30	Norfolk Island
+12:00	New Zealand(Wellington, Auckland)
+12:45	New Zealand(Chatham Islands)
+13:00	Tonga(Nukualofa)
+13:30	Chatham Islands
+14:00	Kiribati

## **BLF LED Mode**

BLF LED Mode provides four kinds of definition for the BLF/BLF list key LED status. The following tables list the LED statuses of the BLF/BLF list key when BLF LED Mode is set to 0, 1, 2 or 3 respectively. The default value of the BLF LED Mode is 0.

Line key LED (configured as a BLF/BLF list key and BLF LED Mode is set to 0)

LED Status	Description
Solid green	The monitored user is idle.
Fast flashing green (200ms)	The monitored user receives an incoming call.
Slow flashing green (500ms)	The monitored user is dialing.  The monitored user is talking.  The monitored user's conversation is placed on hold.
Slow flashing green (1s)	The call is parked against the monitored user's phone number.
Off	The monitored user does not exist.

#### Line key LED (configured as a BLF/BLF list key and BLF LED Mode is set to 1)

LED Status	Description
Fast flashing green (200ms)	The monitored user receives an incoming call.
Solid green	The monitored user is dialing. The monitored user is talking.
Slow flashing green (500ms)	The monitored user's conversation is placed on hold.
Slow flashing green (1s)	The call is parked against the monitored user's phone number.
Off	The monitored user is idle.  The monitored user does not exist.

#### Line key LED (configured as a BLF/BLF list key and BLF LED Mode is set to 2)

LED Status	Description
Fast flashing green (200ms)	The monitored user receives an incoming call.
Slow flashing green (500ms)	The monitored user is dialing. The monitored user is talking. The monitored user's conversation is placed on hold.
Slow flashing green (1s)	The call is parked against the monitored user's phone number.
Off	The monitored user is idle.

LED Status	Description
	The monitored user does not exist.

### **Line key LED** (configured as a BLF/BLF list key and BLF LED Mode is set to 3)

LED Status	Description
Fast flashing green (200ms)	The monitored user receives an incoming call.
	The monitored user is dialing.
Solid green	The monitored user is talking.
	The monitored user's conversation is placed on hold.
Slow flashing green (1s)	The call is parked against the monitored user's phone
	number.
Off	The monitored user is idle.
	The monitored user does not exist.

## **Customer Feedback**

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