



Yealink Technical Training



WWW.YEALINK.COM

- Y **How to Do Technical Support**
- Y **Mass Deployment**
- Y **Basic Features**
- Y **Advanced Features**

How to Do Technical Support



- ① **Find Yealink Documents**
- ② **Export trace, syslog, config.bin**

- **Firmware**
- **DataSheet**
- **Features manual**

...

Download:

[http://www.yealink.com/SupportDownloadfiles_detail.aspx?Pr
oductsID=61&CateID=184&parentcateid=](http://www.yealink.com/SupportDownloadfiles_detail.aspx?ProductsID=61&CateID=184&parentcateid=)

- **Bug**
- **New Feature Request**

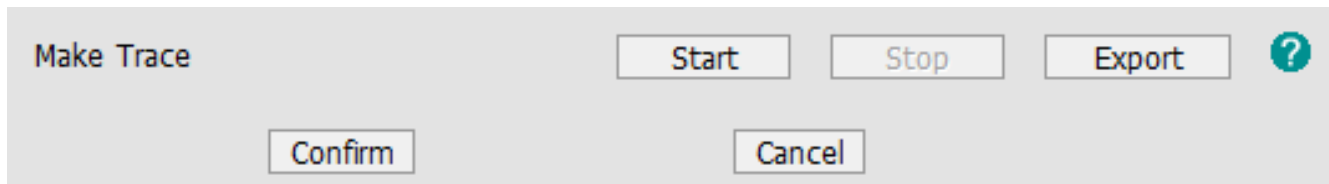


- Model
- Latest firmware
- Reset to factory default and try
- Try other models(Yealink/Other model)
- PCAP trace, syslog(level 6), config.bin
- Test accounts

- PCAP Trace
- Syslog
- Config.bin



- Export from webpage → Upgrade → Advanced



- Captured by Wireshark

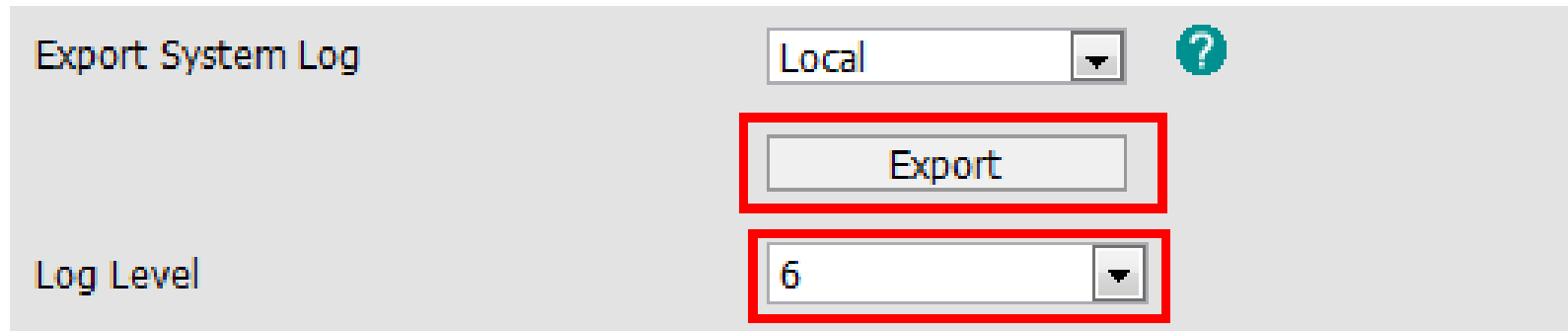
Hub/switch mirror

Wireshark.exe

How to use wireshark :

[ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/Feedback%20to%20Yealink/Wireshark/How to use Wireshark.pdf](ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/Feedback%20to%20Yealink/Wireshark/How%20to%20use%20Wireshark.pdf)

- Set Log Level to 6
- Reboot
- Reproduce



Export System Log

Local

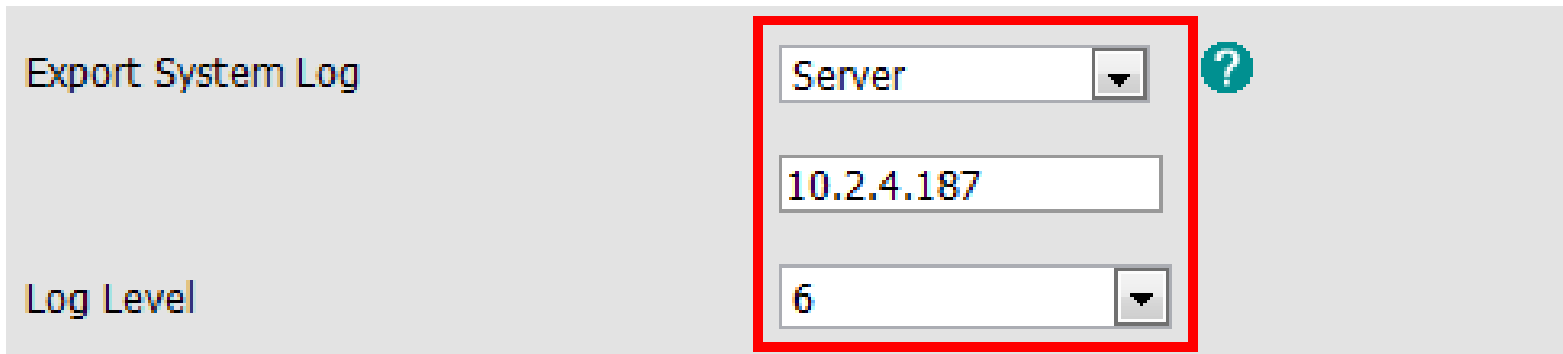
?

Export

Log Level

6

- Set Log Level to 6
- Fill in server IP address
- Reboot
- Reproduce



Export System Log

Server

10.2.4.187

Log Level

6

How to export the syslog to the server

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/Feedback%20to%20Yealink/Syslog/>

Import / Export Config

Browse...



Import

Export

Please access to webpage → Upgrade → Advanced

1.Set Log Level to 6

2.Reboot the phone

3.Click Start

4.Reproduce the issue

5.Click Stop, and export the PCAP trace, syslog, config.bin file

Import / Export Config

Import Export

Export System Log

Local

Export

Log Level

6

Make Trace

Start Stop Export

Confirm Cancel

- Application scenarios
- Other solutions
- Project progress
- Time demand
- Other brand phone support

What's the status of the project?

Pre-sale:

Bidding

First round testing

Last round testing

Deploying

After-sale:

Can't use the phone

Many customers complain

...

Mass Deployment



- **Auto Provisioning(V70)**
- **RPS**
- **TR069**

Auto Provisioning

- Mass deployment
- Plug and Play
- Common.cfg
- Mac.cfg-Account

- Zero-Sp-Touch
 - PnP Server
 - DHCP Custom Option
 - DHCP Option 66
 - DHCP Option 43
 - Phone Flash
- (HTTP/HTTPS/TFTP/FTP)

DHCP Active	Enabled
Custom Option(128 ~ 254)	
Custom Option Type	String
DHCP Option 60	
Provisioning Server	
User Name	
Password	
Common AES Key	
MAC-Oriented AES Key	
Zero Touch	Enabled
Wait Time(seconds)	5
PNP	Enabled
Check New Config	Power on
Auto Provision Now	Auto provision

Phone Model	Common Configuration File
SIP-T28(P)	y0000000000000.cfg
SIP-T26(P)	y00000000000004.cfg
SIP-T22(P)	y00000000000005.cfg
SIP-T20(P)	y00000000000007.cfg
SIP-T12(P)	y00000000000008cfg
SIP-T18(P)	y00000000000009.cfg
SIP-T38G	y00000000000038.cfg
SIP-T32G	y00000000000032.cfg
VP530	y00000000000023.cfg

- Auto Provisioning User Guide

-V61 or lower version:

http://www.yealink.com/Upload/document/YealinkT2XPT3XGVP530phonesAutoProvisioningUserGuide/YealinkSIPT2XPphonesAutoProvisionUserGuideRev_610-21130127888.zip

1. How to upgrade firmware(V61)

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/Autop/Upgrade Firmware via Auto Provision.pdf>

2. Set DSS Key 1 to BLF

- Search “BLF” in Common.cfg

4-Hold	5-DND	6-Redial	7-Call Return	8-SMS
13-SpeedDial	14-Intercom	15-Line(default for line key)	16-BLF	17-URL
22-XML Group	23-Group Pickup	24-Paging	25-Record	27-XML Browser
40-Prefix	41-Zero Touch	42-ACD	45-Local Group	46-Broadsoft Group

#Configure Memory Key1

memorykey.1.line = 0

memorykey.1.value = 102

memorykey.1.type = 16

- V70 Upgrading Manual
- Template
- CCT tool

Download:

http://www.yealink.com/Upload/document/YealinkT2XPT3XGVP530phonesAutoProvisioningUserGuide/YealinkT2XPT3XGVP530phonesAutoProvisioningUserGuideRev_700-02264277235.zip

- **M7** -Unified V70 template of T2x/T3x/VP530
- M1/ M2--- T2x/ T3x old template

M7

M1

```
0 10 20 30
1 [ account ]
2 path = /config/voip/sipAccount0.cfg
3 Enable =
4 Label =
5 DisplayName =
6 AuthName =
7 UserName =
8 password =
9 SIPServerHost =
10 SIPServerPort = 5060
```

```
0 10 20 30 40 50 60
1 #!version:1.0.0.1
2
3 ##File header "#!version:1.0.0.1" can not be edited or deleted.##
4
5 #####
6 ## Account1 Settings
7 #####
8
9 #Enable or disable the account1, 0-Disabled (default), 1-Enabled;
10 account.1.enable =
11
12 #Configure the label displayed on the LCD screen for account1.
13 account.1.label =
14
15 #Configure the display name of account1.
16 account.1.display_name =
17
18 #Configure the username and password for register authentication.
19 account.1.auth_name =
20 account.1.password =
21
22 #Configure the register user name.
23 account.1.user_name =
24
25 #Configure the SIP server address.
26 account.1.sip_server_host =
27
28 #Specify the port for the SIP server. The default value is 5060.
29 account.1.sip_server_port =
```

- ②Generate Mac.cfg files
in batch automatically

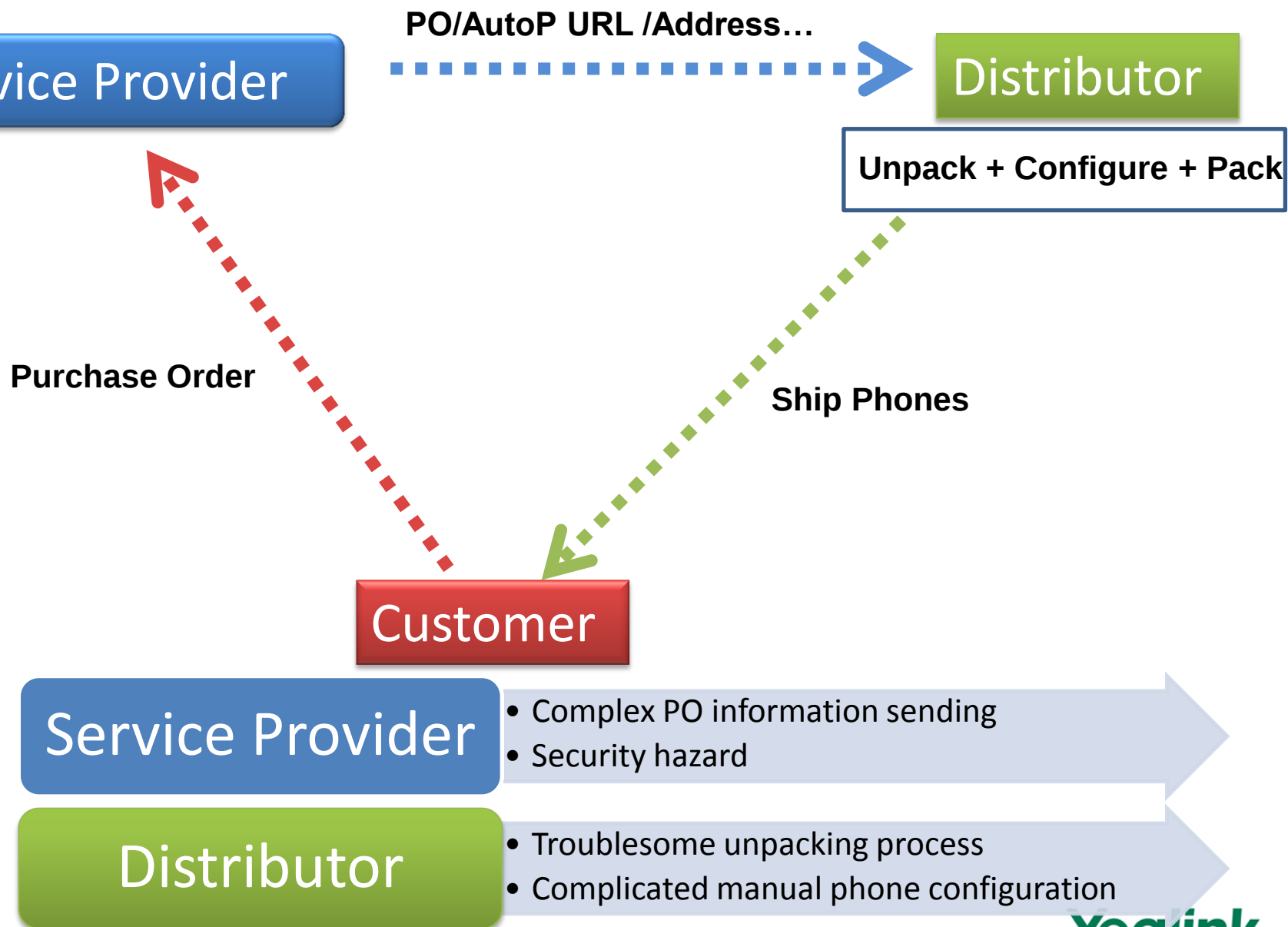


RPS

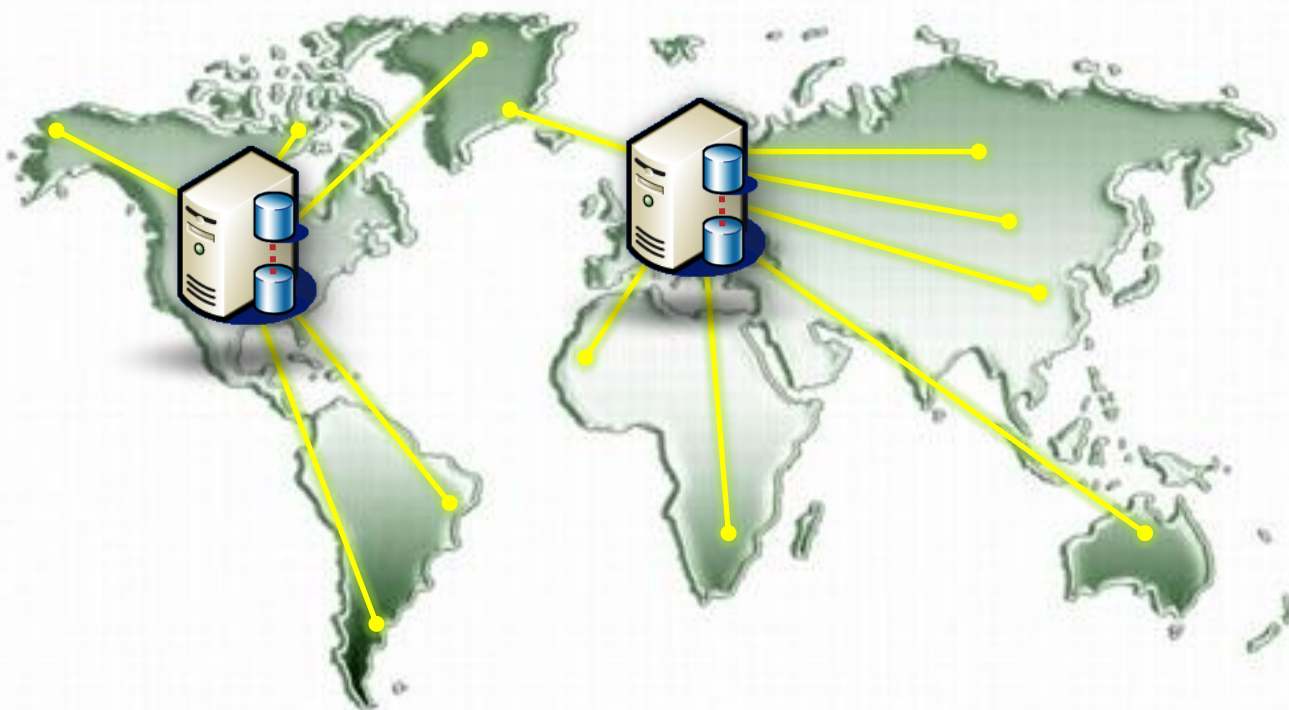
(Redirection and Provisioning Service)

Challenges in SP Market

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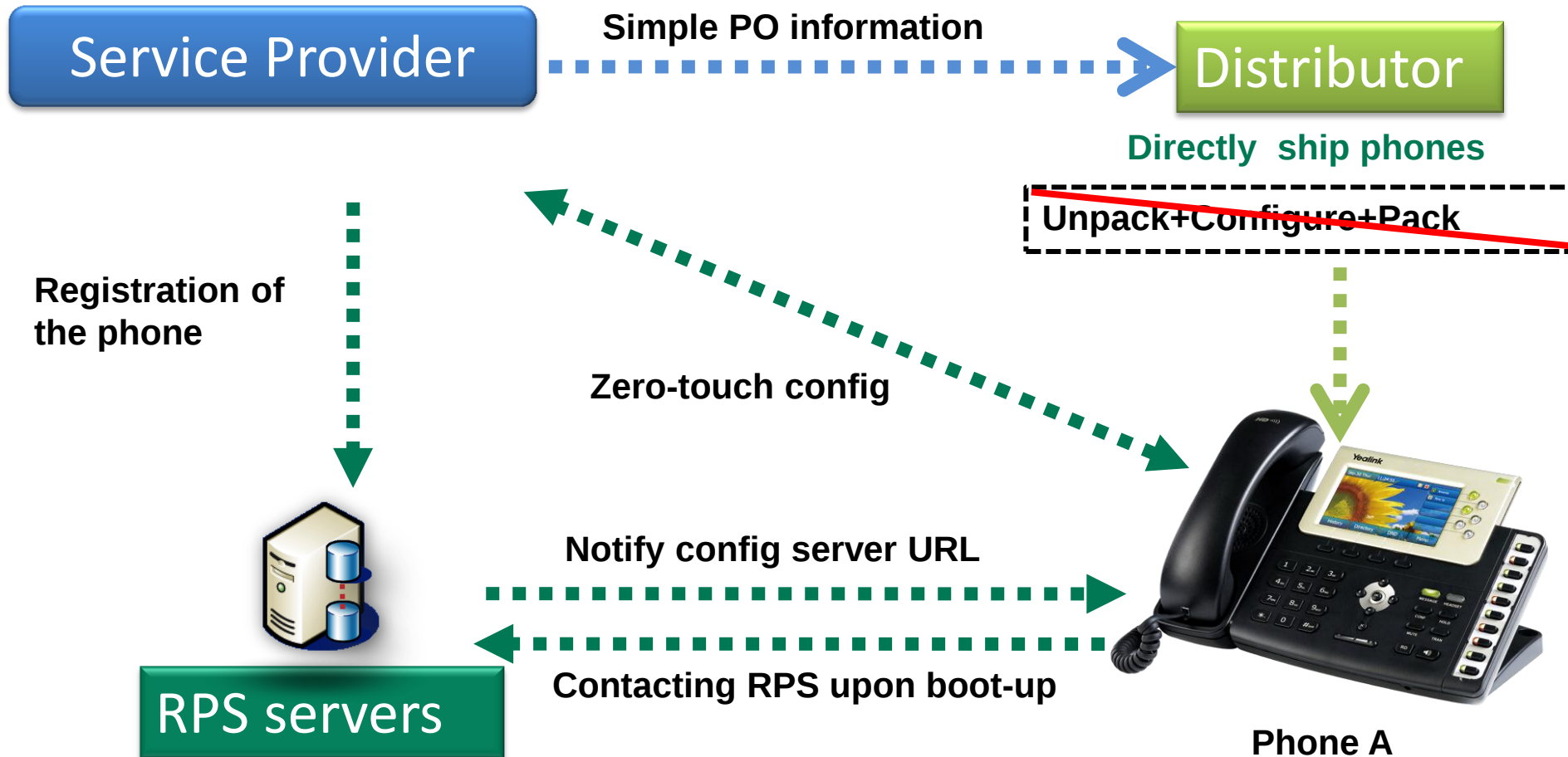
Redirection & Provisioning Service



Hosted cloud servers

How RPS works

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Simplified deployment — Customer Plug and Play installation

Savings of time and money — Direct shipping to customers

Reduced configuration errors — No manual configuration

TR069

User manual download:

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/AdvancedFeature/TR069/>

TR069 is a protocol for communication between a CPE and Auto-Configuration Server (ACS) that encompasses secure auto-configuration as well as other CPE management functions within a common framework.

IOT list-ACS:

- Avsystem
- Worksys
- Alcatel
- Finepoint
- Friendly
- ZTE
- HuaWei

- **Auto-Configuration and Dynamic Service Provisioning**
- **Software/Firmware Image Management**
- **Status and Performance Monitoring**
- **Diagnostics**

Basic Features



Basic Features

- **Call Transfer**
- **Speed Dial**
- **BLF**
- **Pick Up**
- **Call Park/Retrieve**
- **Intercom**
- **Voice Mail**
- **Call Completion**
- **SMS**
- **Multicast Paging**
- **Music on Hold**
- **...**

Scenarios: A → B → C

- Blind Transfer

B press Transfer+ C + Transfer/Hang up

- Semi-attended Transfer

Semi-Attended Transfer

Enabled

B press Transfer+ C + OK/SEND, when C is ringing, B hang up

- Attended Transfer

B press Transfer+ C + OK/SEND, after C answered, B talk with C, then B press Transfer/Hang up

Access to webpage → Phone → DSS Keys

The screenshot shows the Yealink web interface for configuring a phone. The top navigation bar includes tabs for Status, Account, Network, Phone (selected), Contacts, and Up. Below this, a sub-navigation bar shows options like Preference, Features, Softkey Layout, DSS Keys (selected), EXT Key, Action URL, Voice, Ring, and Tones. The main content area is titled 'Memory Keys >>' with a help icon. It contains a table for configuring DSS keys.

Key	Type	Value	Line	Extension
DSS Key 1	Speed Dial	100	Line 1	

Busy Lamp Field(BLF)

38

101 monitor 100

102 call 100

Basic

DSS key

Memory Keys >> ?

Key	Type	Value	Line	Extension
DSS Key 1	BLF	100	Line 1	*20*

Pick up code

Advanced(V70)

1. DSS key

Key	Type	Value	Line	Extension
DSS Key 1	BLF	100	Line 1	

2. Phone→Features→ Call Pickup

Call Pickup >>

Direct Call Pickup	Disabled
Direct Call Pickup Code	*20*
Group Call Pickup	Disabled
Group Call Pickup Code	
Visual Alert for BLF Pickup	Enabled
Audio Alert for BLF Pickup	Enabled

Calls for Pickup 1 / 1

1.6001<--6000

Pickup Dial NewCall Cancel

Direct/Group Pick Up: *20*

Incoming call → Off hook → DPickup/Gpickup → Extension → DPickup/Gpickup

Call Pickup >>

Direct Call Pickup	Enabled
Direct Call Pickup Code	*20*
Group Call Pickup	Enabled
Group Call Pickup Code	*20*
Visual Alert for BLF Pickup	Disabled
Audio Alert for BLF Pickup	Disabled

Key	Type	Value	Line	Extension
DSS Key 1	Direct Pickup	100	Line 1	
DSS Key 2	Group Pickup	100	Line 1	

Call park allows a user to park a call at a special extension and then retrieve it on any other phone in the system.

Phone A-Call Park: *01

Key	Type	Value	Line	Extension
DSS Key 1	Call Park ▼	*01	Line 1 ▼	

Phone B-Call Retrieve: *11 or dial *11 directly

Key	Type	Value	Line	Extension
DSS Key 1	Call Park ▼	*11	Line 1 ▼	

Intercom: *9

Key	Type	Value	Line	Extension
DSS Key 1	Intercom	*9100	Line 1	

Phone → Features → Intercom Settings

Intercom Settings >>

Accept Intercom

Enabled



Intercom Mute

Disabled



Warning Tone

Enabled



Intercom Barge

Disabled



Webpage → Account → Advanced

Subscribe for MWI	Enabled	▼	?
MWI Subscription Period (seconds)	3600		
Subscribe MWI to VM	Disabled	▼	

When a call fails, the call completion feature allows notifying the caller when the callee becomes available to receive a call → **Need server support**

- Not answer
- Busy
- Reject the call

Phone → Features → General Information

Call Completion	Enabled	?
-----------------	---------	---

Wait for 100? Ok/Cancel

Dial 100? Ok/Cancel

Access to webpage → Phone → SMS

The screenshot displays the Yealink web interface for configuring SMS. The top navigation bar includes tabs for Status, Account, Network, Phone (selected), Contacts, Upgrade, and Security. Below this, a secondary bar contains links for Features, Softkey Layout, DSS Keys, EXT Key, Action URL, Voice, Ring, Tones, Dial Plan, and SMS. The main content area is divided into two sections. On the left, there are three input fields: 'Account' with a dropdown menu showing '2263', 'Number' with an empty text box, and 'Message' with a large empty text area. At the bottom of this section are 'Send' and 'Cancel' buttons. On the right, a 'NOTE' section with a green arrow icon states: 'SMS Number Input the phone number which you are going to send message to.'

Users can configure a multicast paging key on the IP phone, which is used to send/receive a Real-time Transport Protocol (RTP) stream to/from the pre-configured multicast address(es) without involving SIP signaling.

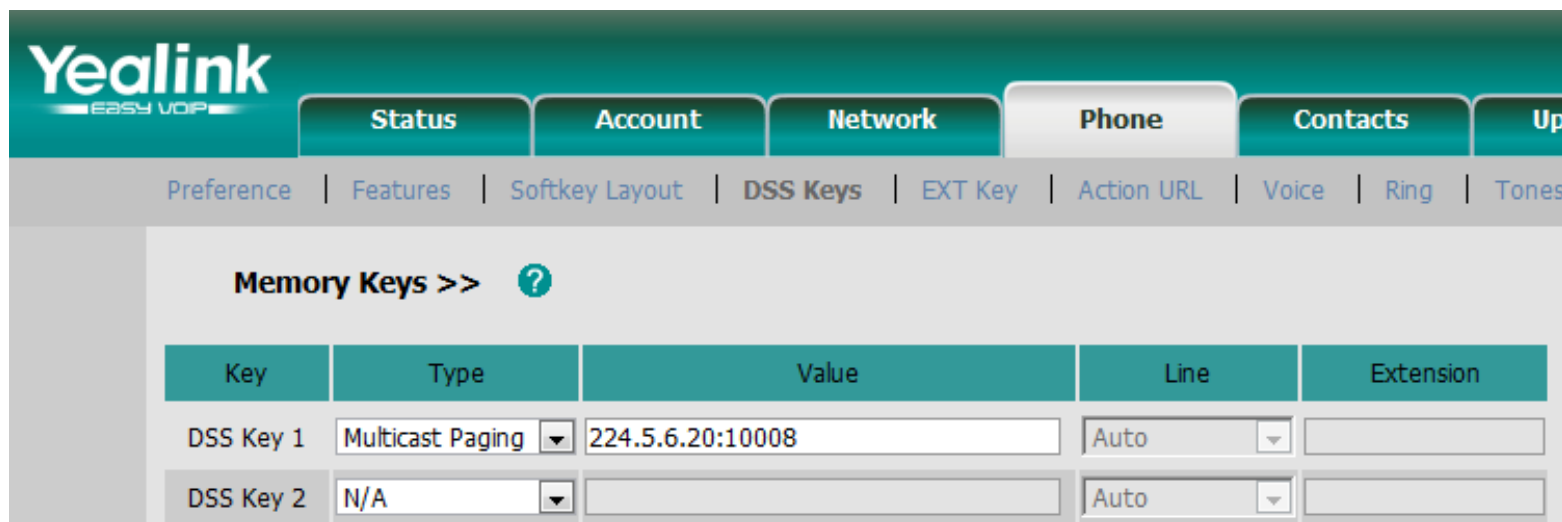
Each IP phone can listen to as many as 10 different multicast IP addresses.

Multicast Paging-Send

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DSS Key:

Access to webpage → Phone → DSS Keys → Memory Keys

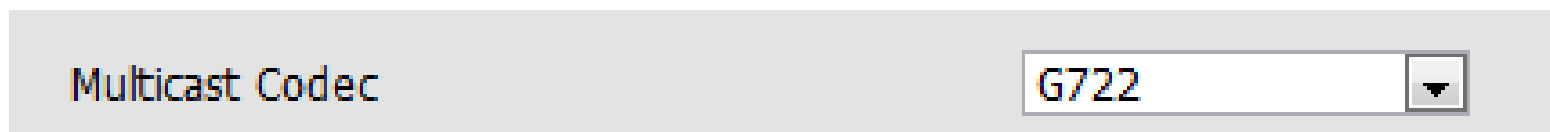


The screenshot shows the Yealink Easy VoIP web interface. The top navigation bar includes tabs for Status, Account, Network, Phone (selected), Contacts, and Up. Below the navigation bar, there is a sub-menu with links: Preference, Features, Softkey Layout, DSS Keys (selected), EXT Key, Action URL, Voice, Ring, and Tones. The main content area is titled 'Memory Keys >>' with a help icon. It contains a table with the following columns: Key, Type, Value, Line, and Extension.

Key	Type	Value	Line	Extension
DSS Key 1	Multicast Paging	224.5.6.20:10008	Auto	
DSS Key 2	N/A		Auto	

Codec:

Access to webpage → Phone → Features → General Information



The screenshot shows the 'Multicast Codec' configuration field in the Yealink Easy VoIP web interface. The field is labeled 'Multicast Codec' and contains the value 'G722'.

Access to webpage → Contacts → Multicast Paging

Yealink
EASY VOIP

[Logout](#)

Status

Account

Network

Phone

Contacts

Upgrade

Security

[Local Directory](#) | [BlackList](#) | [Remote Phone Book](#) | [Phone Call Info](#) | [LDAP](#) | [BroadSoft](#) | [Call Log](#) | [Multicast Paging](#)

Paging Barge

10

Paging Priority Active

Enabled

	Listening Address	Label	Priority
1 IP Address	224.5.6.20:10008	paging one	1
2 IP Address			2
3 IP Address			3
4 IP Address			4
5 IP Address			5
6 IP Address			6
7 IP Address			7
8 IP Address			8
9 IP Address			9
10 IP Address			10

Confirm

Cancel

NOTE

multicastipnote

Music on hold (MoH) is the business practice of playing recorded music to fill the silence that would be heard by the party who has been placed on hold.

Account → Advanced → Music on Hold Server

Music on Hold Server

<10.1.3.165>

Format:

- <10.1.3.165>
- 10.1.3.165
- <sip:moh@ucap.com>
- sip:moh@ucap.com
- <yealink.com>
- yealink.com

Advanced Features



- **Phonebook**
- **APP/API**
- **Security**
- **Call Center**

- **Local Phonebook**
- **Remote Phonebook**
- **LDAP**
- **Broadsoft Phonebook**

Local Phonebook

Webpage → Contacts → Local Directory

The screenshot shows the 'Local Phonebook' interface. On the left, the 'Contacts' section has input fields for Name, Office Number, Mobile Number, and Other Number. Below these are dropdown menus for Account (set to 'Auto'), Ring (set to 'Auto'), and Group (set to 'N/A'). At the bottom of this section are 'Add', 'Edit', and 'Search' buttons. On the right, the 'Group Setting' section has a 'Group' dropdown and a 'Ring' dropdown (set to 'Auto'). Below these are 'Add', 'Edit', 'Delete', and 'Delete All' buttons. A red box highlights the 'Import Local Contacts' section, which includes two 'Browse...' buttons, 'Import XML', 'Export XML', 'Import CSV', 'Export CSV', and a 'Show title' checkbox (checked).

Account → Basic

The screenshot shows the 'Basic' account settings page. It has a table with settings: 'Missed Call Log' (Enabled), 'Auto Answer' (Disabled), and 'Ring Tone' (Common). The 'Ring Tone' row is highlighted with a red box and a blue circle with the number 3.

Phone → Preference

The screenshot shows the 'Preference' page. It has a 'Ring Tone' dropdown menu (set to 'Ring1.wav') and a 'Delete' button. Below this is an 'Upload Ring Tone' section with a 'Browse...' button, 'Upload', and 'Cancel' buttons. At the bottom are 'Confirm' and 'Cancel' buttons. A red box highlights the 'Ring Tone' dropdown and the 'Delete' button, and a blue circle with the number 4 is next to it.

Remote(XML) Phonebook

Remote phonebook is the IP phone book maintained centrally, which is stored on the remote server. The IP phone can establish a connection with the remote server and download the entries, and then display the entries on the phone user interface.

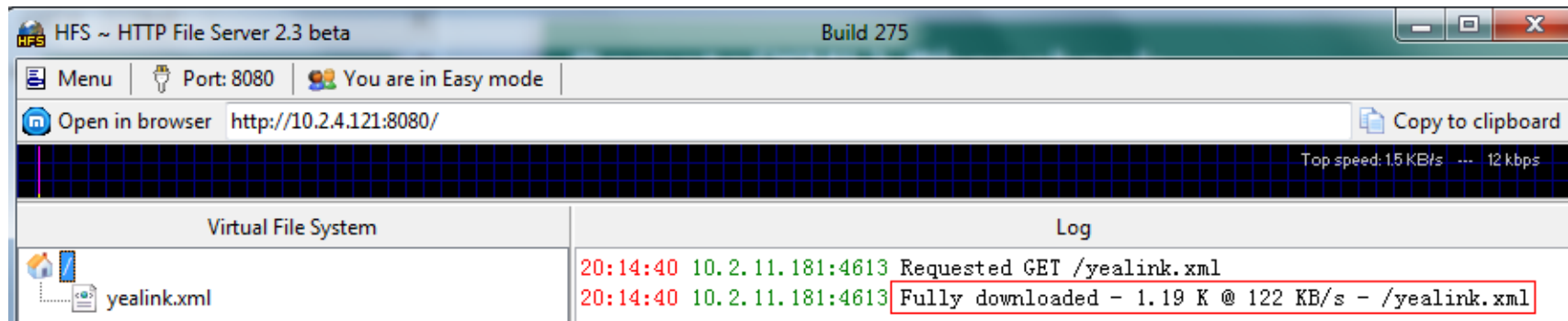
User manual download:

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/AdvancedFeature/XML%20Phonebook/>

Remote(XML) Phonebook

57

- <500kb



Index	Phone Book URL	Name
1	http://10.2.4.121:8080/yealink.xml	Yealink
2		
3		
4		
5		

- Phone → Features → General Information

SRemote Name	Enabled
SRemote Name Flash Time (seconds)	3600

- Can display the name of remote phonebook contacts
- Only VP530 support search

Sales.xml- Direct Contacts

<YealinkIPPhoneDirectory>	\\Change Company Name
<DirectoryEntry>	
<Name>Jack</Name>	\\Change Name
<Telephone>1110</Telephone>	\\Extension number
<Telephone>18676762325</Telephone>	\\Telephone number
</DirectoryEntry>	
<DirectoryEntry>	
.....	
</DirectoryEntry>	
<SoftKeyItem>	\\Shortcut Keys
<Name>0</Name>	\\Keys Number
<URL> http://10.2.4.121:8080/sales.xml </URL>	\\Server Address
</SoftKeyItem>	
</YealinkIPPhoneDirectory>	

Yealink.xml-Group Contacts

<YealinkIPPhoneMenu>	\\Change Company Name
<Title>Yealink</Title>	\\Company Name

<MenuItem>	
<Name>Sales</Name>	\\Group Name
<URL> http://10.2.4.121:8080/Sales.xml </URL>	\\Server Address
</MenuItem>	

<MenuItem>	
<Name>Marketing</Name>	\\Group Name
<URL> http://10.2.4.121:8080/Marketing.xml </URL>	\\Server Address
</MenuItem>	

.....

<SoftKeyItem>	
<Name>0</Name>	
<URL> http://10.2.4.40:9/sales.xml </URL>	
</SoftKeyItem>	

</YealinkIPPhoneMenu>

LDAP

Lightweight Directory Access Protocol

An application protocol for accessing and maintaining distributed directory information services over an Internet Protocol (IP) network.

- Support LDAP version 2 or 3
- Support Microsoft's Active Directory

User manual download:

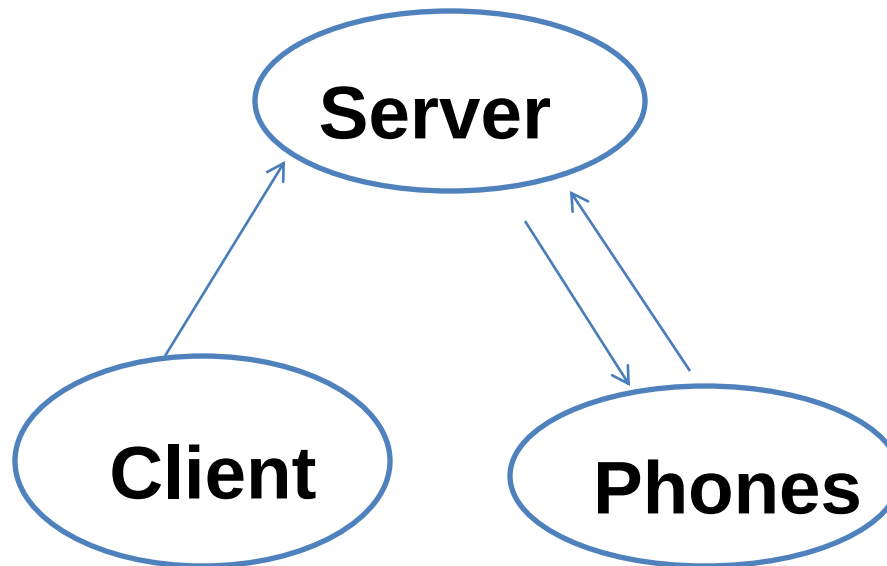
<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/AdvancedFeature/LDAP/>

Network Topology

Client: Control data

Server: Store data and search data

Phones: Require data and display data



Advantages

- Searching fast
- No limitation Contacts
- Easy to manage(modify in the server)

DSS Key:

Key	Type	Value	Line	Extension
DSS Key 1	LDAP		Auto	

Yealink
EASY VOIP

Status **Account** **Network** **Phone** **Contacts** **Upgrade** **Security**

Local Phone Book | Remote Phone Book | Phone call info | LDAP

LDAP name filter

LDAP number filter

Server Address

Port

Base

UserName

Password

Max. Hits(1~32000)

LDAP name attributes

LDAP number attributes

LDAP display name

Protocol

Search Delay(ms)(0~2000)

LDAP lookup for incoming call

LDAP sorting results

LDAP lookup for PreDial/Dial

(|(cn=%)(sn=%))

(|(telephoneNumber=%)(Mob

10.1.4.40

389

dc=yealink,dc=cn

cn=manager,dc=yealink,dc=cn

•••••

50

cn sn

telephoneNumber Mobile ipPhc

%cn

Version3

0

Disabled

Disabled

Disabled

Confirm

Cancel

NOTE

Phone Setting

Configuration Items	Description
LDAP name filter	LDAP name filter is the search criteria for name look ups.
LDAP number filter	LDAP name filter is the search criteria for number look ups.
Server Address	This setting refers to the DNS name or IP address of the LDAP server.
Port	This setting specifies the LDAP server port. The default value is 389.
Base	This setting specifies the LDAP search base (the distinguished name of the search base object) which corresponds to the location in the directory from which the LDAP search is requested to begin.
Username	This setting specifies the bind “Username” for LDAP servers.
Password	This setting specifies the bind “Password” for LDAP servers.
Max. Hits	This setting specifies how many results would return to the phone
LDAP name attributes	This setting can be used to specify the “name” attributes of each record which are to be returned in the LDAP search results.
LDAP number attributes	This setting can be used to specify the “number” attributes of each record which are to be returned in the LDAP search results by the LDAP server.
LDAP display name	This setting is for showing the entry information on the screen.

Protocol	Protocol is the protocol version for the phone when send the bind request to the server. The default value is Version 3.
Search Delay(ms)(0~2000)	This setting is for configuring the delay display time after search.
LDAP lookup for incoming call	This setting can be used to enable calling line identification using LDAP. When the setting is turned "Enable", the phone performs an LDAP number search for the incoming number and displays the name of the calling party accordingly.
LDAP Sorting Results	This setting is for sorting the search results, if make this option "Enabled", it will arrange in the first alphabetical of the name order if return the name display; if only has the number return, it will list in numerical order.
LDAP Lookup for PreDial/Dial	This setting can be used to enable call out line identification using LDAP. When the setting is turned "Enabled", the phone performs an LDAP number search for PreDial or Dial status.

BroadSoft Phonebook

BroadSoft Phonebook

- Access the BroadSoft directory through your IP phone
- Add contacts from the BroadSoft directory to your local directory
- Dial a number from the BroadSoft directory
- Access up to 6 BroadSoft directories
- Support **Enterprise Directory/ Group Directory/ Personal Directory**

Configuring BroadSoft Phonebook

Browse to webpage → **Contacts** → **BroadSoft**

Yealink EASY VOP Logout

Status **Account** **Network** **Phone** **Contacts** **Upgrade** **Security**

Local Directory | BlackList | Remote PhoneBook | Phone Call Info | LDAP | **BroadSoft** | Call Log | MulticastIP

Broadsoft Item: Item1 ?

Displayname: Broadsoft Group ?

Server: http://xsp1.iop1.broadworks.net/com.broad ?

Port: ?

User: 2413333614@as.iop1 ?

Password: ?

Confirm
Cancel

NOTE

Broadsoft Directory

This feature allows you to download contact list from the server. Input the phonebook URL, port, username, password and rename the phonebook

LCD: Press **Directory** → **Broadsoft**

Broadsoft Group 1/20

Mike	2413333611
Eric	2413333612
Lucy	2413333613
Jim	2413333614

↓

Back
Search
Option
Dial

- **XML Browser**
- **Action URI**
- **Action URL**

XML Browser

User manual download:

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/AdvancedFeature/XML%20Browser/>

Practical Applications

- Weather report
- Stock information
- Google search
- News service

...

Execute Actions

- Reboot the phone
- Reset the phone
- Changing LED status

...

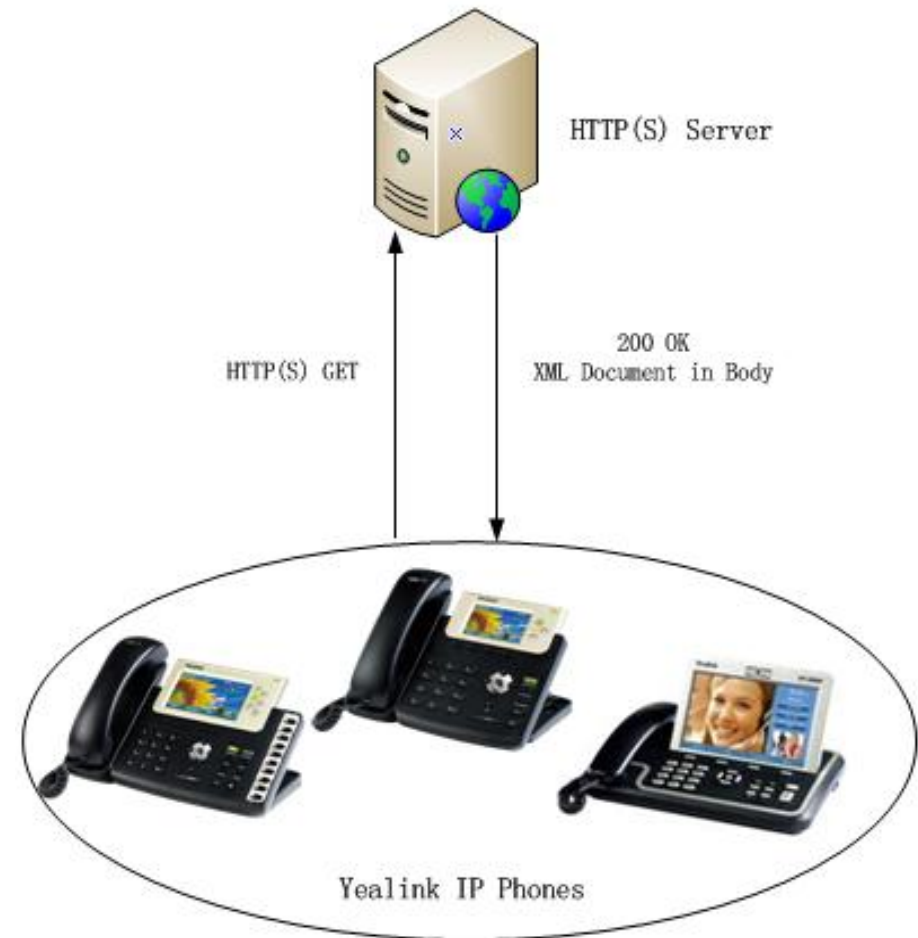
Configure Phone

Three ways

- Initiated from Phone-DSS Keys
- Initiated from Server-Push XML
- Initiated by XML SIP Notify

Initiated from Phone-DSS Keys

- HTTP(S)
- Phone-initiated application



Yealink IP phone acting as a client

Initiated from Server-Push XML

- HTTP(S)
- Server-initiated application
- Access to webpage → Phone → Features → API Security

API Security >>

Push XML Server IP		
XML SIP Notify	Enabled	
Trusted Action URI Server List	10.2.4.215	

Initiated by XML SIP Notify

- Access to **webpage** → **Phone** → **Features** → **API Security**

API Security >>

Push XML Server IP		
XML SIP Notify	Enabled	
Trusted Action URI Server List	10.2.4.215	

- When the phone receives the XML SIP NOTIFY message, the phone will display the information or execute the command in the NOTIFY message.

```

Session Initiation Protocol
  Request-Line: NOTIFY sip:202@10.2.11.185:5062 SIP/2.0
  Message Header
    Via: SIP/2.0/UDP 10.2.6.183:5060;branch=z9hg4bk7fdb2f49;rport
    Max-Forwards: /0
    From: <sip:201@10.2.1.100>;tag=as312b4b13
    To: "202" <sip:202@10.2.1.100>;tag=274335798
    Contact: <sip:201@10.2.1.100>
    Call-ID: 2146521383@10.2.11.185
    CSeq: 102 NOTIFY
    User-Agent: Asterisk PBX 1.6.2.13
    Event: yealink-xml
    Content-Type: application/xml
    Subscription-State: active
    Content-Length: 140
  Message Body
    extensible Markup Language
      <?xml
        version="1.0"
        encoding="ISO-8859-1"
        ?>
      <YealinkIPPhoneExecute>
        Beep="yes"
      <ExecuteItem/>
        URI=" Key:OK"
      </YealinkIPPhoneExecute>
  
```

2 types of XML objects

- **UI objects:** Control the display
- **Non UI objects:** Execute and configure

T3XG/VP530:

- TextMenu (UI)
- TextScreen (UI)
- InputScreen (UI)
- Directory (UI)
- FormattedTextScreen (UI)
- ImageScreen (UI)
- PhoneExecute (non UI)
- PhoneConfiguration (non UI)
- PhoneStatus (non UI)

T2X:

- TextMenu (UI)
- TextScreen (UI)
- InputScreen (UI)
- Directory (UI)
- PhoneExecute (non UI)
- PhoneConfiguration (non UI)
- PhoneStatus (non UI)

Action URL/URI

User manual download:

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/AdvancedFeature/Action%20URL-URI/>

Action URL/URI



CTI
(Computer Telephony
Integration)

Action URL

Reporting the phone actions or status
to a Server

Control SIP-Phone

Action URI



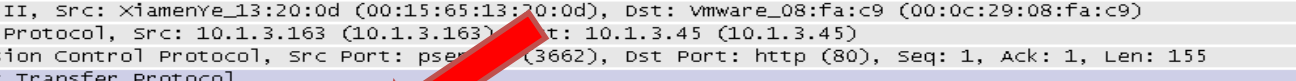
IP Phone



Server

Setup Completed		?
Log On		?
Log Off		?
Register Failed		?
Off hook	http://10.1.3.45/help.xml?mac=\$mac	?

No. .	Time	Source	Destination	Protocol	Info
6	1.574042	10.1.3.163	192.168.1.199	UDP	Source port: ca-2 Destination port: sip
8	2.517711	10.1.3.163	10.1.3.45	TCP	psrver > http [SYN] Seq=0 win=5840 Len=0 MSS=1460
11	2.519686	10.1.3.45	10.1.3.163	TCP	http > psrver [SYN, ACK] Seq=0 Ack=1 win=64240 Len=0
12	2.520466	10.1.3.163	10.1.3.45	TCP	psrver > http [ACK] Seq=1 Ack=1 win=5840 Len=0 TSV
16	2.777229	10.1.3.163	10.1.3.45	HTTP	GET /help.xml?mac=00156513200d HTTP/1.0
17	2.935125	10.1.3.45	10.1.3.163	TCP	http > psrver [ACK] Seq=1 Ack=156 win=64085 Len=0
23	3.541475	10.1.3.163	10.1.3.108	UDP	Source port: ca-2 Destination port: sip
29	4.801101	10.1.3.45	10.1.3.163	HTTP	HTTP/1.0 304 Not Modified Temporarily (text/html)
30	4.801164	10.1.3.45	10.1.3.163	TCP	http > psrver [FIN, ACK] Seq=350 Ack=156 win=64085
31	4.801881	10.1.3.163	10.1.3.45	TCP	psrver > http [ACK] Seq=156 Ack=350 win=6912 Len=0
33	4.807800	10.1.3.163	10.1.3.45	TCP	psrver > http [RST, ACK] Seq=156 Ack=351 win=6912
38	5.564769	10.1.3.163	10.1.3.45	UDP	Source port: 5063 Destination port: sip



Frame 16 (221 bytes on wire, 221 bytes captured)
 Ethernet II, Src: Xiamenye_13:20:0d (00:15:65:13:20:0d), Dst: vmware_08:fa:c9 (00:0c:29:08:fa:c9)
 Internet Protocol, Src: 10.1.3.163 (10.1.3.163), Dst: 10.1.3.45 (10.1.3.45)
 Transmission Control Protocol, Src Port: pser (3662), Dst Port: http (80), Seq: 1, Ack: 1, Len: 155
 Hypertext Transfer Protocol
 GET /help.xml?mac=00156513200d HTTP/1.0
 Request Method: GET
 Request URI: /help.xml?mac=00156513200d
 Request Version: HTTP/1.0
 Host: 10.1.3.45\r\n
 User-Agent: yealink SIP-T28P 2.60.0.80 00:15:65:13:20:0d\r\n
 Accept: */*\r\n
 Connection: Keep-Alive\r\n
 \r\n

Input URI in the web browser

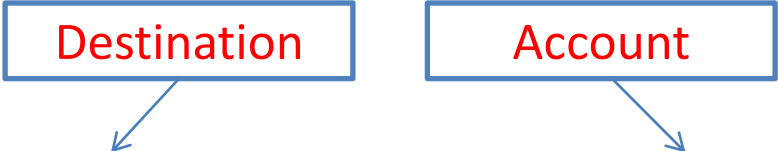
1. Trigger pressing the OK button of your phone:

<http://10.2.4.234/cgi-bin/ConfigManApp.com?key=OK>

2. Make outgoing call:

http://10.2.4.224/cgi-bin/cgiServer.exx?number=765432&outgoing_uri=123123123@10.2.1.199

Destination



Account

- **SRTP**
- **TLS**
- **OpenVPN**

SRTP

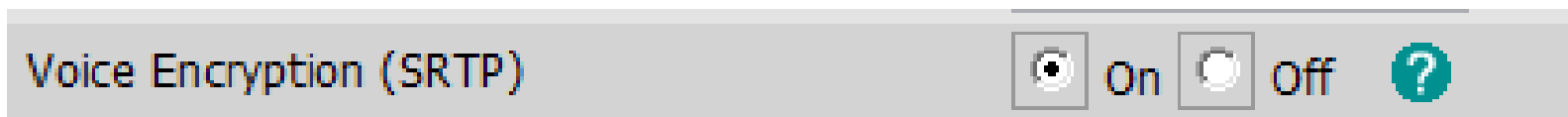
User manual download:

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/AdvancedFeature/SRTP-TLS/>

Secure Real-Time Transport Protocol (SRTP)

- It provides means of encrypting the RTP streams during VoIP phone calls to avoid interception and eavesdropping.
- The parties participating in the call should enable the SRTP feature simultaneously.
- This negotiation process is compliant with RFC 4568.

Access to webpage → Account → Advanced



- Per-account basis
- lock icon appears on the LCD screen

TLS

User manual download:

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/AdvancedFeature/SRTP-TLS/>

Transport Layer Security

- TLS is a commonly-used protocol for providing communications privacy and managing the security of message transmission.
- Prevent eavesdropping and tampering
- Encrypt SIP message
- Lock icon appears on the phone LCD screen

TLS Configuration

88

1. Account → Basic → Transport → TLS

Register Status	Registered	
Account Active	☒ On ☐ Off	
Label	102	?
Display Name	102	?
Register Name	102	?
User Name	102	?
Password	••••••••	?
SIP Server	10.2.4.2	Port 5060
Enable Outbound Proxy Server	Disabled	?
Outbound Proxy Server		Port 5060
Transport	TLS	?

2. Uploading certificates to the IP phone

Security → Trusted Certificates

Security → Server Certificates

Only Accept Trusted Certificates

Import Trusted Certificate (.crt,.cer)

Load From File:

Issued To	Issued By	Expiration	Delete
Upload Server Certificate			
		Browse...	Upload

Open VPN

User manual download:

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/AdvancedFeature/Open%20VPN/>

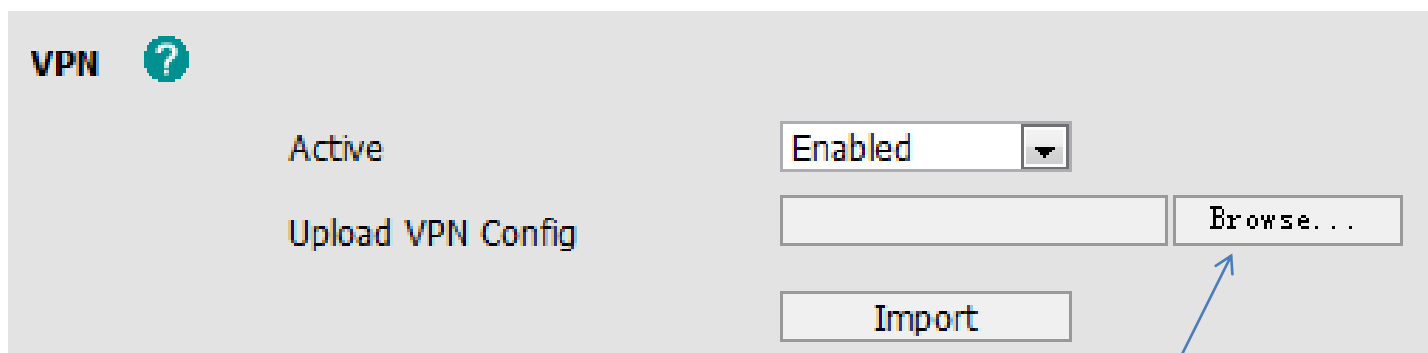
VPN (Virtual Private Network) is a secured private network connection built on top of public telecommunication infrastructure, such as the Internet. It provides remote offices or individual users with secure access to their organization's network.

- Scalability
- Reliability
- Security
- Convenience

Open VPN is a full featured **SSL** VPN software solution that creates secure connections in remote access facilities.

- Linux/ Xbsd/ Mac OS X/ Windows 2000/XP

Access to webpage → Network → Advanced



VPN ?

Active

Upload VPN Config

Click this button, and choose VPN file

Client.**tar**:

Vpn.cnf/ Ca.crt/ Client.crt/ Client.key

V70 can upload the VPN certification via auto provisioning:

`network.vpn_enable = 1`

`openvpn.url =`

- **Hot Desking**
- **ACD**
- **Feature Key Synchronization**

Hot Desking

User manual download:

<ftp://yealinkftp:yealinkftp@ftp.yealink.com/Training/AdvancedFeature/Hot%20Desking/>

Hot Desking originates from the definition of being the temporary physical occupant of a work station or surface by a particular employee.

- Delete all accounts
- Register own account
- DSS Key- Hot Desking

Automatic Call Distribution(ACD)

What is Automatic Call Distribution

Automatic Call Distribution (ACD) feature is often used in offices for customer service, such as call center.

The ACD system handles incoming calls by automatically queuing and directing calls to available agents. The ACD feature on the IP phone allows the ACD system to distribute calls from large volumes of incoming calls to the registered users.

Configuration of ACD

Access to webpage → Phone → DSS Keys → Memory Keys

Memory Keys >> 

Key	Type	Value	Line	Extension
DSS Key 1	ACD 		Line 1 	

Feature Key Synchronization

Feature Key Synchronization

Feature Key Synchronization provides the capability to synchronize the following BroadWorks feature status with the IP phone

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

Remote control the phone features

Configuring the Feature Key Synchronization

- Browse to **Phone → Features**
- Enabled **Feature Key Synchronization**

Transfer on Conference Hang up	Disabled	?
Feature Key Synchronisation	Enabled	?
Time Out for Dial-now Rule	1	?
ACD Auto Available	Disabled	?
ACD Auto Available Timer(0~120s)	60	?
RFC 2543 Hold	Disabled	?
Use Outbound Proxy In Dialog	Enabled	?
IsDeal180	Enabled	?
Logon Wizard	Disabled	?
PswPrefix		?
PswLength		?

Q&A
Thank you!