



SayHi™

220 Series IP Phone User Manual

(firmware :V1.0.7.4)



Escene Communication Co.Ltd

www.escene.cn/en/

Tables of Contents

1. Getting Started.....	4
About.....	4
Feature Highlights:.....	4
Technical Features.....	4
2. Connecting Your Phone.....	7
3. Phone overview.....	8
Understanding Buttons and Hardware.....	8
Understanding Phone Screen Features.....	10
4. Basic Call Handling.....	11
Placing a Call.....	11
Answering a Call.....	12
Ending a Call.....	13
Using Hold and Resume (Switch Calling Line).....	13
Transfer Calls.....	13
Using Mute.....	14
Do Not Disturb.....	14
3-way Conference.....	14
5. Advanced Call Handling.....	16
Using the Phone Book.....	16
Using Call Logs.....	18
6. Keypad Instruction.....	19
SIP Account Settings.....	19
Network Setting.....	20
Customizing Rings and Volume.....	21
WIFI setting(only WS220N has this item).....	21
View status.....	22
Diagnose.....	22
7. Web Settings.....	24
Config Guide.....	24
WIFI Setting(only WS 220N has this item).....	27
WIFI Status(only WS 220N has this item).....	28
Network.....	28
Sip Account.....	32
Programmable Keys.....	35
Audio.....	36
Phone Book.....	37
Group.....	37
Contact.....	38
LDAP.....	39
BanList.....	40
Enterprise Phonebook.....	41
Advance.....	41

Phone Setting.....	41
VLAN Setting.....	45
VPN Setting.....	46
Dial Plan setting.....	47
IP Strategy.....	48
Global SIP.....	48
Phone Maintenance.....	49
Log.....	49
Default Setting.....	50
Auto Provision.....	51
TR069.....	53
FTP Upgrade.....	53
TFTP Upgrade.....	54
HTTP Upgrade.....	55
Reboot.....	56
Phone Status.....	57
System Info.....	57
About.....	58
8.Appendix:	59
Auto Provision.....	59
1.Bulid TFTP/HTTP/HTTPS/FTP Server.....	59
2. Place the configure file/software/kernel in Server.....	59
3.Configure parameters in Auto Provision Web page.....	64

1. Getting Started

About

220 Series is next-generation 2-line SIP phone, dual 10/100Mbps auto-sensing Ethernet port with integrated PoE. The 220 SERIES offers excellent voice clarity, call transfer, multi-party conferences, voice mail, Do Not Disturb and Headset etc.

Feature Highlights:

- HD Voice: HD Codec
- Support unified maintenance and auto upgrade
- Enterprise Phone Book
- Support Headset interface
- Support PoE and AC power adapter
- Support HTTP/TFTP/FTP Auto-provision/TR069 for upgrade software

Technical Features

Item	220 Series
Screen	grayscale LCD with background light
	132*48 LCD
Language	Multi-Language (e.g. CN/EN/Spain/Portugal/Poland/Turkey/French/Italy etc.)
Line	2 ,Light status: Coming call & Hold(Red flashing);Talking (Red)
Function Keys	4Navigation keys (arrow button, OK button, C button) Volume button (multiplex up and down keys) Hands-free Headset Message Menu Hold Redial Conference Transfer
VoIP Protocol	SIP 2.0
Network Protocol	HTTP, BOOTP, FTP, TFTP, IEEE 802.1Q, *IEEE 802.1X
Codec	PCMA,PCMU, G.722 ,G.729 A,G.723.1(5.3Kb/s, 6.4Kb/s),iLBC

QoS	TOS, Jiffer Buffer, VAD, CNG, G.168 (32ms)
Network	2×RJ45 10/100M Ethernet Interfaces (LAN/PC) [WIFI model is only have 1×RJ45 10/100M LAN Ethernet Interface] IP Assignment: static IP, DHCP, PPPoE PC port support Bridge and Router DNS SRV,STUN, VPN(L2TP), VLAN/QoS STUN,DTMF(In-band/RFC2833/SIP INFO)
Voice	Hands-free model available by Full-duplex Separated 9 Level Volume Adjustment
Function APP	Always Forward, Busy Forward, No-answer Forward Hotline line (Immediately/Delay) Call Waiting, Call Queuing Call Forward, Call Transfer, Call Holding, Call Pickup, *Callback Redial Phone directory speed dial, Call record direct dial 3-way conference DnD, Blacklist, SMS Voice mail, Voice Prompt, Voice Message P2P(Peer-to-Peer)
PBX	Call Transfer, Call Pick-Up, Network-Meeting, DND, Call Waiting, Call Hold. Call Barring, Call Back On Busy, Anonymous Call ,Intercom, Paging
Application	LDAP Enterprise phone directory, download with server, and it support 800 contacts Public phone directory XML Phonebook : Search /Input/ Out put Private phone directory: input/output 300 contacts, every contact can save 3 numbers and the size of number is 19 byte. Call History(600): every records is 200 with Miss Calls /Received Calls/Dialed Calls. Voice Message, Voice Mail Box, Light of Message. Ringing Update, Input, Del, *we also support to order the other APP.
Security	Login the website by password Login the LCD by password Signaling encryption(RC4) Media encryption(RC4) VPN, 802.1X, VLAN QoS(802.1pq), *LLDP TLS, MD5,AES, ROOT/USER Management
Management	Upgrade: HTTP/TFTP/FTP Auto-provision/TR069 Configurations: Phone/Http/Auto provision/TR069 Debug: Telnet/Phone/Web Keyboard Setting

Power Supply	Power adapter:AC100~240V input and DC 5V/1A output PoE(IEEE 802.af)
Specification	DSPG Chipset Storage Temperature: 0°C ~ 60°C Operating Humidity: 10%~90% Size:206mm*166mm*59mm Net weight: 1.07kg
Certifications	CE、FCC、RoHS、Avaya、Broadsoft、Alcatel、Yeastar、Digium、Metaswitch etc.

Note: “*” Sign means function has not been published yet.

2.Connecting Your Phone

Your system administrator will likely connect your new 220 Series IP Phone to the corporate IP telephony network. If that is not the case, refer to the graphic and table below to connect your phone.

1) Open the box of 220 SERIES IP Phone, carefully check the packing list as follow:

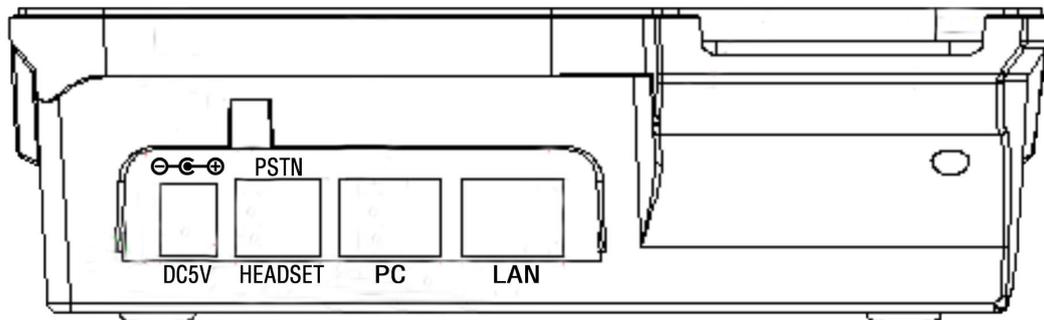
Item	Counts
IP Phone	1
Handset	1
Handset Cord	1
Power adapter	1 (Phone with PoE without Power adapter)
RJ45 cable	1
Quick Guide	1
Product certification	1

2) As shown in figure 2.1 , RJ45 cable into the LAN interface ; IP Phone will automatically start if IP Phone with POE function.

3) The phone must work together with power adapter without POE support.

4) If you want connect your computer into LAN at the same time, please connect your computer to PC interface of the phone with a RJ45 cable.

Figure2.1 Interfaces of 220 Series



3.Phone overview

Understanding Buttons and Hardware

You can identify buttons and hardware on your 220 Series from figure 3.1.

Figure 3.1 220 Series



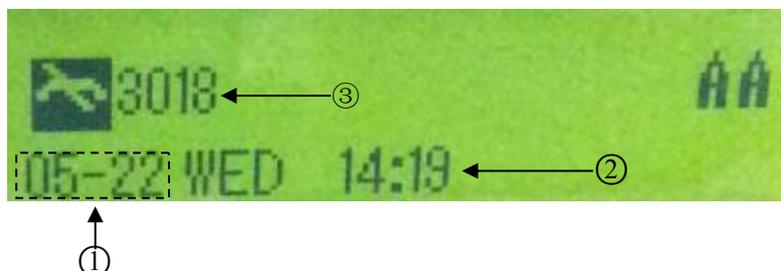
	Item	Description
1		Message button: Auto-dials your voice message service.
2		SIP line with VOIP or PSTN.
3		Headset button: Toggles the headset on or off. When the headset is on, the light is red  .
4	MENU	Menu button: Allows you to scroll through menus.
5	0-9, *, #	Basic Call Handling: press “#” send out a call by default.

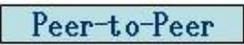
6	Navigation button	Allows you to scroll through menus and highlight items. When the phone is on-hook, it becomes a shortcut key as follow: “Up”: Adjust ring volume, operate with the “down” button “Down”: Open “Missed Calls” list; “Left”: Open “Received Calls” list; “Right”: Open “Dialed Numbers” list.
7	OK	OK button: To confirm the action.
8	C	Back button: Return to the standby interface.
9	CONFERENCE	Conference button: Connect calling / called party to the conference.
10	TRANSFER	Transfer button: Transfer redirects a connected call.
11	HOLD	Hold button: Put a call on hold.
12	REDIAL	Redial button: To dial the last number.
13	Speaker button	Speaker button: Toggles the speakerphone on or off.  Red, steady: Pick up and enter normal call.
14	Speaker	Sounds output when hands-free.
15	Handset	Use to sounds in/output.
16	Handset cord	Connects between handset and phone.
17	LCD screen	132*48 characters, grayscale LCD with background light.
18	Light strip	 Red flashing: There are incoming call;  Red, steady: Missed Calls, or phone busy;
19	Hands-free microphone	Sounds input when hands-free

Understanding Phone Screen Features

This is what your main phone screen might look like:

Figure 3.3 220 Series Phone LCD



	Screen displays	Functions
1	Date	Show current date (You can set with different sources, the more 7. Web Setting)
2	Time	Show current time (You can set with different sources, the more 7. Web Setting)
3	Line status	Show the phone line status: <ol style="list-style-type: none"> 1)  : Disconnect into network. 2)  : Only Peer-to-Peer call. 3)  : Network connected normal, but the line is not successfully registered. 4)  : Network is OK and the line is available. 5)  : Line is turned on DND.

4. Basic Call Handling

You can perform basic call-handling tasks using a range of features and services. Feature availability can vary; see your system administrator for more information.

Note: The bold type of the following text in table signifies the phone's button.

Placing a Call

Here are some easy ways to place a call on SayHi IP Phone:

If you want to...	Then...	
Place a call using the handset	Pick up the handset	--1) You can hear dial tone; --2) Enter a number; --3) Press # button (default), -or wait 5s (default), then it send the number automatically.
Place a call using a speakerphone	Press Speaker button	
Place a call using a headset	Put on your headset, active Headset button so that the status light is Red  , and then do as using speakerphone	
Redial	--Press REDIAL button to dial the last number, -or press Navigation button-Right (in Standby interface) > "Dialed number", select a number, and press Dial or OK button.	
Dial from a call log	--1) Press MENU or OK button > "Call history", you can select "Missed calls", "Received calls" and "Dialed numbers", - or press Navigation button (in Standby interface) > select "Missed calls" (down), "Received calls" (left) and "Dialed numbers" (right);	

	--2) Then press OK button or Dial .
--	---

Tips

- You can dial on-hook, without a dial tone (pre-dial). To pre-dial, enter a number, and then go off-hook by lifting the handset or pressing **Headset** or **Speaker** button.
- If you make a mistake while dialing, press **C** button to erase digits.

Answering a Call

You can answer a call by simply lifting the handset, or you can use other options if they are available on 220 Series.

If you want to...	Then...	
Answer with a handset	--1) Your phone ring;	--Pick up the handset
Answer with the speakerphone (Non-headset mode)		--Press Speaker button
Answer with the a headset		--Put on headset, press Headset button so that the status light is Red  , and then do as using speakerphone
Auto-answer	--1) Press MENU or OK button > "Function setting" > "Auto answer"; --2) Select "Enable"; --3) Your phone answers incoming calls automatically after a few rings.	

Tips

- Your system administrator configures Auto-answer to use either the speakerphone or a headset. You might use Auto-answer if you receive a high volume of incoming calls.

Ending a Call

To end a call, hang up. Here are some more details.

If you want to...	Then...
Hang up while using the Handset	-- Return the handset to its cradle
Hang up while using the speakerphone	-- Press Speaker button that is Red 
Hang up while using the Headset	--Press Handset button, (Do not keep the headset mode)

Using Hold and Resume (Switch Calling Line)

You can hold and resume calls.

If you want to...	Then...
Put a call on hold	Press HOLD button
Resume a call	Press HOLD button

Tips

- Engaging the Hold feature typically generates music or a beeping tone.

Transfer Calls

Transfer redirects a connected call. The target is the number to which you want to transfer the call.

If you want to...	Then...
Talk to the transfer recipient before transferring a call (consult transfer)	--1) Press TRANSFER button; --2) Enter number; --3) press "#" (default) , -or wait five seconds(default)then transfer the call

Using Mute

With Mute enabled, you can hear others speaking, but the others can't hear from you. You can use mute in conjunction with the handset, speakerphone, or a headset.

If you want to...	Then...
Toggle Mute on	Press Mute button, then the status light of mute is Red 
Toggle Mute off	Press Mute button, then the status light is off

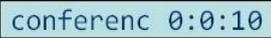
Do Not Disturb

You can use the Do Not Disturb(DND) feature to block incoming calls on your phone with a busy tone (Can also be set to their voice mail or other extension numbers, etc.).

If you want to...	Then...
Enable DND on a line	--1) Press MENU or OK button > "Function setting" > "DND" > (select line) "Enable" --2) All enabled line on the phone would changes to  status.
Disable DND	Press MENU or OK button > "Function setting" > "DND" >(select line) "Disable"

3-way Conference

You can establish a three-party conference, during the conversation three phone parties can communicate with each other.

If you want to...	Then...
Invite the transfer recipient into a conference in a transferring	--1) When the transfer recipient answer the call, press CONFERENCE button on your phone; --2) Then the held one, transfer recipient and you will be into a conference, and the LCD will display  status.

Invite the third party into a conference in a active call	--1) Press CONFERENCE button in an active call; --2) Enter the third party number; --3) After connected the third party, press CONFERENCE button again
---	--

5.Advanced Call Handling

Using the Phone Book

You can store a large number of contacts in your phone's directory. You can add, edit, delete, dial, or search for a contact in this directory. However, it only can configure the phone book on web page in 220 Series. For details, you can refer to *7.Web Settings*.

However, you can dial from Phone Book on the phone after setting phone book on web page.

If you want to...	Then...
Add Contacts	--1) Press Phone Book, -or press MENU button > "Phone book">"Personal phone book">"View All", -or press OK button > "Phone book">"Personal phone book">"View All"; --2) Select "Add contact", press OK button; --3) Use the navigation keys to select content, press OK button to set and modify: -Name: set the name of contact, -NO.1-3: you can set up 3 contacts' numbers, -Group: the contacts be divided into different user's groups --4) Press Save soft key to complete
Add group	--1) Press DIR soft key, -or press MENU button > "Phone book">"Personal phone book">"View All", -or press OK button > "Phone book">"Personal phone book">"View All"; --2) Select the "add group" then press OK button; --3) Use the navigation keys to select content, press OK button to set and modify:

	<p>-Group name: name of the group</p> <p>--4) Press Save soft key to complete</p>
Modify group	<p>--1) Press DIR soft key,</p> <p>-or press MENU button > “Phone book”>“Personal phone book>View All”,</p> <p>-or press OK button > “Phone book”>“Personal phone book>View All”;</p> <p>--2) Select the “Modify group” then press OK button ;</p> <p>--3) Select the group you want to modify, press the OK button to set and modify, press Save to save the change</p>
Delete group	<p>--1) Press DIR soft key,</p> <p>-or press MENU button > “Phone book”>“Personal phone book>View All”,</p> <p>-or press OK button > “Phone book”>“Personal phone book>View All”;</p> <p>--2) Select the “Delete group” or OK button;</p> <p>--3) Select a group you want to delete, press OK button</p>
View/Edit Contacts	<p>--1) Press DIR soft key,</p> <p>-or press MENU button > “Phone book”>“Personal phone book”,</p> <p>-or press OK button > “Phone book”>“Personal phone book”;</p> <p>--2) Select “View ALL”,</p> <p>-or select a contact who are belong to different group;</p> <p>--3) Select the contact, press the OK button or Enter (to edit the contact’s information, press OK button)</p>
LDAP	<p>--1) --1) Press DIR soft key,</p> <p>-or press MENU button > “Phone book”</p> <p>-or press OK button > “Phone book”</p> <p>--2)Select “LDAP”, press the OK button.</p>

	<p>--3)Select “Search name->name”, then input the name ,and press OK or Del.</p> <p>--4)Select “Search number->Number”, then input the number ,and press OK or Del.</p> <p>Pay attention: before you use LDAP function, you need to configure LDAP rule in the web configure page.</p>
Call from phone book	<p>--1) Press DIR soft key, -or press MENU button > “Phone book”>“Personal phone book”, -or press OK button > “Phone book”>“Personal phone book”;</p> <p>--2) Select “View ALL”, -or select a contact who are belong to different group;</p> <p>--3) Select a contact, then press Dial, (If there are multiple numbers of one contact, press Dial to enter the interface of “call options”, select the one you want to call and press Dial)</p>

Using Call Logs

Your phone maintains records of your missed, placed, and received calls.

If you want to...	Then...
View your call logs	<p>--1) Press MENU button > “Call history” > “Missed Calls”, “Received Calls”, or “Dialed numbers”</p> <p>--2) Use the navigation keys to view the call record information.</p>
Dial from a call log	Please refer to the previous part <i>4.Basic call handing – Placing a call.</i>

Tips: Each call log store up to 20 entries on 220 Series IP phone.

6.Keypad Instruction

SayHi series IP phones are can be configured in two ways. The first you can use the phone keypad where you can settings for you IP phones, the other you can log in to User Options web pages where you can settings for you IP phones.

Use phone keypad to setting. Press **MENU** or **OK** button to the main menu, Use the navigation keys to select menu, press **OK** button to confirm menu selections, press **C** button to delete input information.

NOTES: If the phone didn't have the MENU or other soft keys. Pls don't be your mind, because sometimes it only in other series, like 320/330 series etc. When you want to type "." in setting IP address with keypad, you can press * button.

SIP Account Settings

220 Series IP phone make calls based on sip accounts, 220 Series IP phones can support 1 independent SIP account, Each account can be configured to different SIP server.

If you want to...	Then...
Create an SIP account	--1) Select "System setting" > "Advanced setting"; --2) Enter the password required (The default is 159357) ; --3) Select "SIP" > "Account sip"; --4) Select one of the account you want to setting, you can configure the following parameters - Enable account* : Select Enable - Display Name : The name displayed on the screen - User Name* : the account matched with the SIP server. (extension number) , - Authen usr : the Authenticated users matched with the SIP server. (The default With the same account) - user pwd* : the user password matched with the SIP server - Description : description of this account, - SIP1* : the primary SIP server, By default all calls through the server, - SIP2 : the secondary SIP , When the primary server is

	<p>unavailable ,use the SIP server</p> <p>-Refresh time: Registration refresh interval, the minimum value is 20 The default value is 3600.</p> <p>--5) Set up the above parameters, select “Submit changes” to saves settings, Complete the account creation.</p> <p>* Note: the parameters with the * mark must be set.</p>
Disable sip account	<p>--1) Select “System setting” > “Advanced setting”;</p> <p>--2) Enter the password required (The default is 159357) ;</p> <p>--3) Select “SIP” > “Account sip”;</p> <p>--4) Select “Enable account” > “Disable”;</p> <p>--5) Select “Submit changes” to saves settings</p>

Network Setting

If you want to ...	Then...
network setting	<p>--1) Select “System setting” > “Advanced setting”;</p> <p>--2) Enter the password required (The default is 159357) ;</p> <p>--3) Select “Network”, you can configure the following parameters:</p> <p>-Type: static IP or DHCP, PPPoE.</p> <p>- DNS1: enter IP address of the primary DNS server</p> <p>- DNS2: enter IP address of the secondary DNS server</p> <p>-Web port: the default Web port is 80,if you change it(for example change it to 88),you must use IP and Web port to login the web page (for example http://192.168.0.200:88).It will take effect on next reboot.</p> <p>-Telnet port: the default Telnet port is 23, if you change it (for example change it to 2003), you must use IP and Telnet port to login the manage page (for example telnet 192.168.0.200:2003).It will take effect on next reboot.</p>

Customizing Rings and Volume

If you want to...	Then...
Change the ring tone	--1) Select "System setting" > "Phone setting" > "Ring type"; --2) Press navigation to Select ring tone
Adjust the volume level	--1) Select "System setting" > "Phone setting" > "Volume setting" --2) You can adjust the volume level of following types <ul style="list-style-type: none"> -Ring volume: Phone call ring volume, -Handset volume: Handle output volume, -Handset mic volume: Handle input volume, -Speaker volume: Hands-free speaker output volume, -Speaker mic volume: Hands-free input volume, -Headset volume: Headphone output volume, -Headset mic volume: Headset microphone input volume

WIFI setting(only WS220N has this item)

Tips: The WIFI ip phone support 802.11b/g/n, not support 802.11a.

If you want to...	This...
Set WIFI	--1)Choose "Menu">"System settings">"advanced settings">"advanced password (default is 159357)" --2) Press navigation to choose WIFI settings; --3) Press "ok" button to change the it Enable or Disable <ul style="list-style-type: none"> -Set WIFI IP: Default IP: make it default setting , Modify IP: change it what you want. Mode: mode one: change the wifi IP 10.0.X.X/8 ;mode two : change the wifi IP 1.0.X.X/8 (it can prevent IP conflict) -Current site: the wifi which the phone use now and information -WPA/WPA2: select the encryption mode(AES/TKIP)

	<p>-Site list: search site what you want to connect.</p> <p>--4) Press "site list", choose one wifi network which the phone searched</p> <p>-SSID: SSID name</p> <p>-BSSID: the mac address of the WIFI network</p> <p>-Channel:the channel of the WIFI network use</p> <p>-Type:the type of the WIFI network</p> <p>-Encrypt:the encrypt of the WIFI network</p> <p>-Signal:the signal of the WIFI network</p> <p>--5) Press "SSID",set WIFI which you choose</p> <p>-Encryption: the encryption of the WIFI network</p> <p>-Key type: the key type of the WIFI network</p> <p>-Key: the password which you should set to allow yourself to enter the WIFI network</p>
--	--

View status

If you want to see the phone status,Press **MENU** button > "view status" ,or press **OK** button > "view status",you can see the detail information of the phone.

If you want to	Then.....
Network	You can see the network detail information of the phone
Lines	You can see the SIP account
software	It include phone Mode、 software version、 kernel version、 Upgrade date、 Running time
Expansion	Can check the expansion, if your phone support this feature.

Diagnose

If you want to check the phone hardware function,Press **MENU** button > "diagnose" ,or press **OK** button > "diagnose",you can check the phone item as below.

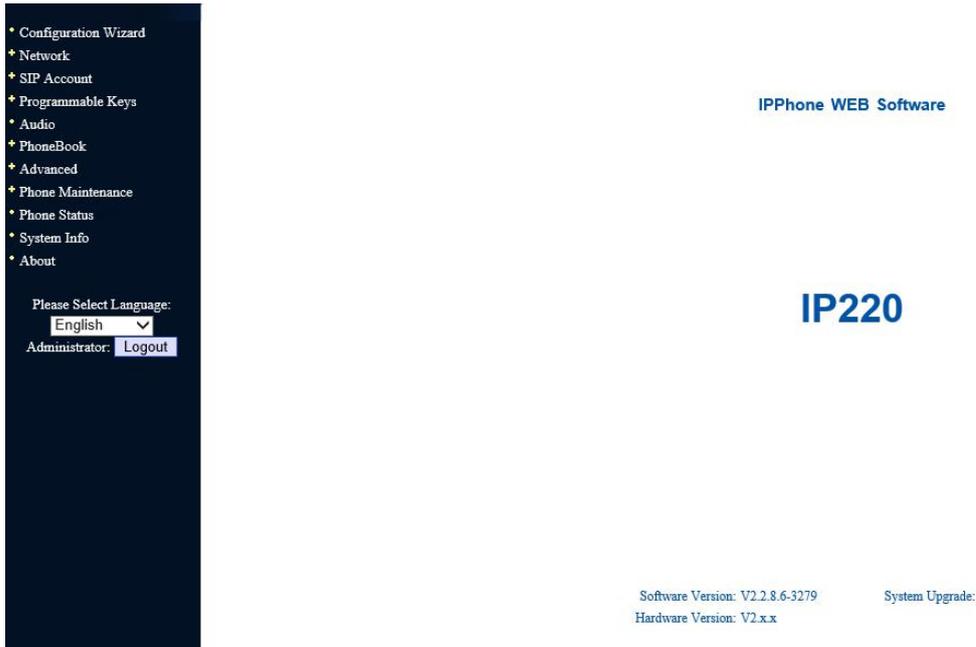
If you want to	Then

Keys	You can check the phone keys
LCD	Press OK to start, press C to exit
Lights	Press OK to start, press C to exit
Sound	Press OK to start

7.Web Settings

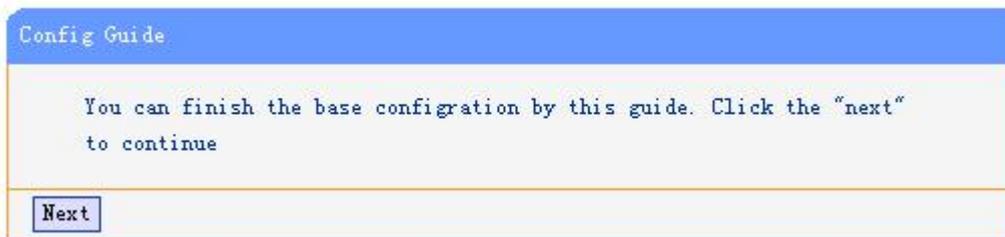
We can configure IP Phone more handy through web setting. Press OK button on the keypad of the phone to enter the status page and find out the IP address of IP phone. Enter it (for example <http://192.168.0.200>) into the address bar of web browser. The default login name root and password 159357.

As below is an example picture.



Config Guide

You can finish the base configuration step-by-step by this guide.



When press 'next', you can configure the Network parameters for the phone,

Network Wizard

IP settings

DHCP

 Hostname(Option 12):

 Manufacturer(Option 60):

Static IP

 IP Address:

 Netmask:

 Gateway:

PPPoE

 Username:

 Password:

 MTU: Default: 1500

DNS Settings

Automatic

Manual DNS

 Primary DNS:

 Secondary DNS:

MAC Address

 MAC Address: 00:26:8b:00:ee:a4

Port Management Settings

 HTTP Port:

 Telnet Port:

Socket5 Proxy Server

Socket5 Proxy Server: off on

Server IP: *

Port: *

Anonymous Login:

Username:

Password:

Paging Setting

Paging 1: off on

Group IP: Port:

Paging 2: off on

Group IP: Port:

Paging 3: off on

Group IP: Port:

Paging 4: off on

Group IP: Port:

Paging 5: off on

Group IP: Port:

Please Note: Changing the default HTTP Port (80) will require using the new port number to access the IP phone web interface. Please note that changes require a reboot. Use the following format when not using the default HTTP (<http://ip address:portnumner>).

After config the network parameter, press next, then you can config sip account for the phone.

Account Settings

SIP Settings

Username: *

Password: *

SIP Server:

Please note: More SIP configuration options can be configured using the SIP Account menu option.

Press Finish, the base configuration of the phone is complete, now you can use the phone

to call with sip.

WIFI Setting(only WS 220N has this item)

you can config the WIFI parameters for the phone on the web page.

WIFI Setting

You can enter the Wireless Network Name of AP.

Site Survey

Wireless Network Name (SSID):

SSID	BSSID	Channel	Type	Encrypt	Signal	Select

Next

If you want to search the site, you can click the

Site Survey

WIFI Setting

You can enter the Wireless Network Name of AP.

Site Survey

Wireless Network Name (SSID):

SSID	BSSID	Channel	Type	Encrypt	Signal	Select
escene	00:25:86:5c:a3:20	11 (B+G)	AP	WPA-PSK/WPA2-PSK	68	<input checked="" type="radio"/>
TP-LINK_47C57C	00:23:cd:47:c5:7e	6 (B+G+N)	AP	WPA-PSK/WPA2-PSK	48	<input type="radio"/>
escene02	00:19:a0:ac:50:58	1 (B+G)	AP	WPA-PSK/WPA2-PSK	38	<input type="radio"/>
TENDA	00:b0:0c:01:4a:31	6 (B+G)	AP	no	28	<input type="radio"/>
JINGTUO	f4:ec:38:38:99:22	9 (B+G+N)	AP	WPA-PSK/WPA2-PSK	28	<input type="radio"/>
xinxin	f4:ec:38:49:7e:34	8 (B+G+N)	AP	WPA2-PSK	26	<input type="radio"/>

Next

Choose anyone site and you will see,

WIFI Setting

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

Encryption:

Pre-Shared Key Format:

Pre-Shared Key:

WIFI Status(only WS 220N has this item)

You can know what the status of the WIFI from this function.

WIFI Status

Wireless Configuration

Mode: Infrastructure Client

Band: 2.4 GHz (B+G+N)

SSID: escene

Channel: 11

Encryption: WPA

BSSID: 00:25:86:5c:a3:20

State: Connected

Network

You can config the network parameters for the phone on the web page.

LAN Port

IP settings

DHCP

 Hostname(Option 12):

 Manufacturer(Option 60):

Static IP

 IP Address:

 Netmask:

 Gateway:

PPPoE

 Username:

 Password:

 MTU: Default: 1500

DNS Settings

Automatic

Manual DNS

 Primary DNS:

 Secondary DNS:

MAC Address

 MAC Address: 00:26:8b:00:ee:a4

Port Management Settings

 HTTP Port:

 Telnet Port:

Socket5 Proxy Server

Socket5 Proxy Server: off on

Server IP: *

Port: *

Anonymous Login:

Username:

Password:

Paging Setting

Paging 1: off on

Group IP: Port:

Paging 2: off on

Group IP: Port:

Paging 3: off on

Group IP: Port:

Paging 4: off on

Group IP: Port:

Paging 5: off on

Group IP: Port:

Please Note: Changing the default HTTP Port (80) will require using the new port number to access the IP phone web interface. Please note that changes require a reboot. Use the following format when not using the default HTTP (<http://ip address:portnumber>).

Choose network, you will find the following parameters:

Field	Descriptio
IP Setting	
DHCP	Config the phone get ip info from DHCP server
Hostname(Option12)	Set the hostname with the option.
Hostname(Option60)	Set the hostname with the option.
Static IP	Set the IP want you want to set.
IP Address	Config the ip manual for phone
Netmask	Config the netmask manual for phone
Gateway	Config the gateway manual for phone
PPPoE	Use the PPPoE to connect the network.
Username (pppoe)	The pppoe username
Password (pppoe)	The pppoe password
MTU (pppoe)	The mtu for pppoe,default is 1500
DNS Setting	
Automatic	Automatic to get the DNS.

Manual DNS	Setting the DNS want you want to set.
Primary DNS	The primary DNS server
Secondary	The secondary DNS server
MAC Address	
MAC Address	Display the MAC of the phone
Port Management Setting	
HTTP Port	The default web port is 80,if you change it(for example change it to88), You must use IP and Web port to login the web page(for example
Telnet Port	the default Telnet port is 23,if you change it(for example change it to 2003),you must use IP and Telnet port to login the manage page (for example telnet 192.168.0.200:2003).It will take effect on
Socket5 Proxy Server	
Socket5 Proxy	Enable/Disable Socket5 Proxy Server.
Server IP	Socket5 Proxy Server ip address.
Port	Socket5 Proxy Server port, default is 1080.
Anonymous Login	Enable/Disable Socket5 Proxy Server login username.
Paging Setting(NOTE: This feature priority is follow the serial number, one is highest than the others)	
Paging1	Enable/Disable Paging feature.
Group IP and Port	Group IP and Port with Paging.

PC Port

Normally choose Brigde,if you choose Router ,you need to input router IP address ,netmask.

PC Port

Brigde
 Router

IP Address: *
 Netmask: *

DHCP Server: off on

Start IP:
 End IP:

Sip Account

The phone attempts to register to the SIP server using the account/registrar data provided by the automatic or manual initialization.

Account1

SIP Settings

Enable:

Account Mode: VOIP

Display Name: 1104

Username: 1104 *

Authenticate Name: 1104

Password: ●●●●●● *

Label:

SIP Server: 192.168.0.7

Secondary server:

OutboundProxy Server:

Secondary OutboundProxy Server:

Polling Interval Time Of Registration: 32 s Default Value: 32s, Range: 20s~60s

NAT Traversal: Disable

STUN Server:

BLA: off on

BLA Number:

Call Method: SIP TEL

Subscribe Period: 1800 Default: 1800s, Min: 120s

Register Expire Time: 3600 Default: 3600s, Min: 40s

DNS-SRV: off on

SIP Transport: UDP TCP TLS

Call

Amount Of Line Account Used: (Default: 2)

Do Not Disturb: off on

Anonymous Call: off on

Anonymous Call Rejection: off on

Use Session Timer: off on

Session Timer: (min:150s)

Allow-events: off on

Registered NAT: off on

Ring Type: ▾

UDP Keep-alive Message: off on

UDP Keep-alive Interval: (15-60s)

Security

SIP Encryption: off on

RTP Encryption: off on

Encryption Algorithm: ▾

Encryption Key:

RTP Port Range: --

Choose Account, you will find the following parameters:

Field	Description
SIP Setting	
Enable	You can choose on/off to enable/disable the line.
Account Mode	You can choose VOIP/PSTN, but this model un-support PSTN, If you want to, Pls contact us or buy another model.
Display Name	It is showed as Caller ID when making a phone call
Username	It is a username provide by SIP Server
Authenticate Name	It is authenticated ID for authentication
Password	It is a password provide by SIP Server
Label	Label with this account.
SIP Server	Server for registration, provided by administrator
Secondary server	When the main server can't work, it also can register in this secondary server.
Outbound Proxy	Put into the address with the outbound proxy server.
Secondary Outbound Proxy Server	When the main out bound server can't work, it also can use this secondary server.
Poling Interval Time Of Registration	Poling Interval Time Of Registration, default is 32 s.

NAT Traversal	Defines the STUN server will be active or not
STUN Server	Session traversal utilities for NAT.
BLA	Share with the line.
BLA Number	BLA Number
Call Method	This method include SIP and TEL.
Subscribe Period	Subscribe expire time.
Register Expire Time	IP phone automatically registered every time
DNS-SRV	Enable/Disable DNS-SRV.
SIP Transport	There are UDP/TCP/TLS three options
Call	
Amount Of Line Account Used	The line key of account used, default is 2
Do Not Disturb	Enable/Disable Do Not Disturb
Anonymous Call Rejection	Enable/Disable anonymous call.
Use Session Timer	Enable/Disable refresh session function. The device will send an Invite packet to refresh the session during a call if it enable.
Session Timer	The refresh session time interval.
Allow-events	Enable/Disable Allow-events.
Registered NAT	Enable/Disable Registered to NAT
Ring Type	Set ringing type for current account.
UDP Keep-alive Message	The phone periodically sends a UDP packet to keep the port active and to avoid the server to shut down the port
UDP Keep-alive Interval	Default is 30 second.
Security	
SIP Encryption	Enable/Disable SIP encryption.
RTP Encryption	Enable/Disable RTP encryption.
Encryption Algorithm	The encryption algorithm at this time we only have RC4.
Encryption Key	The key with encryption.
RTP Port Range	The port range with RTP.

Programmable Keys

Line Keys: If you do not need more of the lines to use. you can change it to other features, like Speed Dial/ Speed Dial Prefix/ DTMF/ BLF/ BLA/ Paging/ Call Park/ Intercom.

line keys				
	Mode	Account	Name	Number
Key1:	Line	Account1		
Key2:	<ul style="list-style-type: none"> Line Speed Dial Speed Dial Prefix DTMF BLF Paging Call Park Intercom BLA 	Account1		
<input type="button" value="Submit"/>				

Function Keys: If you do not like the default setting with the function keys feature. You can change it options to what you like or normal use.

NOTE: IF THE PHONE WITHOUT THE KEY, YOU DO NOT NEED TO SET THE KEY.

Function Keys (Note:if the phone without the key,you don't need to set the key)				
	Operation	Account	Name	Number
Up:	Redial	Account1		
Down:	Default	Account1		
Left:	DND	Account1		
Right:	Contacts	Account1		
OK:	Enterprise Phonebook	Account1		
Conference:	LDAP	Account1		
Redial:	Dir	Account1		
Transfer:	Speed Dial	Account1		
Hold:	Call List	Account1		
Service:	Missed Calls	Account1		
Directories:	Dialed Calls	Account1		
Menu:	Menu	Account1		
Mute:	SMS	Account1		
Message:	Call Forward	Account1		
<input type="button" value="Submit"/>				

Soft Keys: Soft keys is the key with below display in the LCD. You can change it for your mind to the other features in many all kinds of status.

NOTE: In this US Series, it just have two soft keys, so it only can work with one and two

feature. The three and four is other Series IP phone, e.g. ES320N/ES330N etc.

Sofkey Key

Sofkey Key Enable: off on

Phone Status: Dial

ordered by position:

- Send
- Delete
- Empty
- Exit/EndCall

Up

Down

Submit

Idle

Dial

Connecting

Transfer Connecting

RingBack

Transfer RingBack

Call Fail

Call In

Taking

Hold

Transfer to Conference

Call Waiting

Audio

The IP phone supports the following voice codes: G.722, G.711A, G.711U, G.723, and G.729A.

You can enable/disable the desired codes via Web interface. Please contact your system administrator for more details about the codes.

To enable/disable the codes:

- 1) Choose Audio-> Audio Codes

Audio

Tone

Dial Tone: Ring Volume (0~9):

Output Volume (1~9) **Input Volume (1~7)**

Handset Volume: Handset Mic Volume:

SpeakerPhone Volume: SpeakerPhone Mic Volume:

Headset volume: Headset Mic Volume:

Voice Codec

Payload Length: ms High Rate of G723.1:

Other

VAD: Echo Suppression Mode:

Ring

Ring Type:

Uploading Ring Tone

((Please upload a ring tone with G711 audio coding, and the size must less than 300k.))

Audio Codecs:

enableCode

- 2) Use the navigation keys to highlight the desired one in the Enabled/Disable Codes list, and press the / to move to the other list.
- 3) Choose Submit to save the change.

Of course, you can control the voice bulk in this choose.

Phone Book

Group

You can add, edit and delete group in a phone book on web page of 220 SERIES.

1) Click “PhoneBook” > “Group”,



If you want to add a Group, you just ought to click ‘Add Group’ .

You can edit an existed Group by click .

You can delete an existed Group by click , if you want to delete all Groups, you just ought to click ‘Delete All Group’.

2) When you add a group or edit an existed group, you can set several parameters as follow:

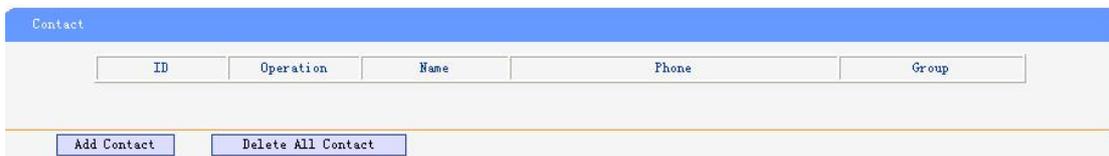


Group	
ID	Serial number of a group
Description	Description of a group
Group Name	Name of a group

Contact

You can add, edit and delete contact in a phone book on web page of 220 SERIES. The phonebook can storage 300 contact entry.

1) Click “PhoneBook” > “Contact”,



If you want to add a Group, you just ought to click ‘Add Contact’.

You can edit an existed Contact by click .

You can delete an existed Contact by click , if you want to delete all Contacts, you just ought to click ‘Delete All Contact’.

2) When you add a Contact or edit an existed Contact, you can set several parameters as follow:

Contact	
Serial Number	Serial number of a contact

First Name	The First Name of a contact
Last Name	The Last Name of a contact
Mobile Number	The Number1 phone number of a contact
Office Number	The Number2 phone number of a contact
Other Number	The Number3 phone number of a contact
Group	You can assign a contact to a specific group. If there isn't any group set on the phone, the group is None by default.
Account	Select a SIP account relating this contact, that is you can dial to the contact from this SIP account.

LDAP

1). Overview

LDAP stands for Lightweight DIRectory Access Protocol which is a client-server protocol for accessing a DIRectory service. LDAP lets you locate organizations, individuals, and other resources such as files and devices in a network, whether on the Internet or on a corporate intranet, and whether or not you know the domain name, IP address, or geographic whereabouts.

An LDAP DIRectory can be distributed among many servers on a network, then replicated and synchronized regularly.

2). Configuration

Please note that LDAP Phonebook support on ES620\ES410\ES330\ES320\ES310\ES210, the version must be V2.2.3.1-2210 and higher, then access to the web "PhoneBook>LDAP page, you can find the configured option is like following picture. the detail configure in the appendix.

LDAP

LDAP: on off

LDAP Name Filter:

LDAP Number Filter:

Server Address:

Cwmp Port:

Base:

Username:

Password:

Max. Hits (1~32000):

LDAP Name Attributes 1:

LDAP Name Attributes 2:

LDAP Name Attributes 3:

LDAP Number Attributes 1:

LDAP Number Attributes 2:

LDAP Number Attributes 3:

Protocol: Version2 Version3

Search Delay (ms) (0~2000):

LDAP Lookup For Incoming Call: on off

LDAP Lookup For PreDial/Dial: on off

BanList

You can add, edit and delete banlist in a phone book on web page of 220 SERIES..

- 1) Click "PhoneBook" > "BanList",

BanList

ID	Operation	Name	Phone	Description	Account

If you want to add a BanList, you just ought to click 'Add BanList'.

You can edit an existed BanList by click .

You can delete an existed BanList by click , if you want to delete all BanLists, you just ought to click 'Delete All BanList'.

- 2) When you add a BanList or edit an existed BanList, you can set several parameters as follow:

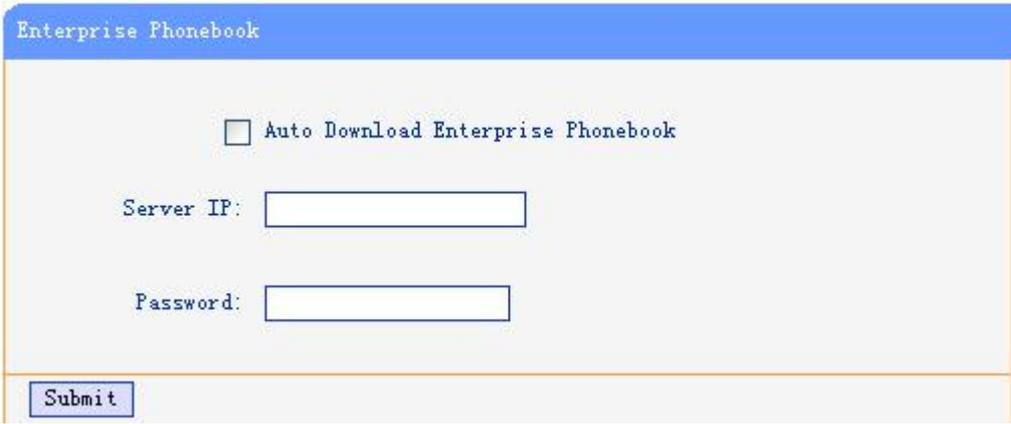
BanList

Serial Number	Serial number of a BanList
Description	Description of a BanList
First Name	The First Name of a ban contact
Last Name	The Last Name of a ban contact
Mobile Number	The number1 phone number of a ban contact
Home Number	The number2 phone number of a ban contact
Office Number	The number3 phone number of a ban contact
Account	Select a SIP account relating this ban contact, that is the ban contact can't dial to this SIP account.

Enterprise Phonebook

You can download Enterprise Phonebook from this web interface. But you should do second develop on the sip server to enable this function completely.

If the sip server no add some function to hold this option ,this option can be used.



Enterprise Phonebook

Auto Download Enterprise Phonebook

Server IP:

Password:

Submit

Advance

Phone Setting

You can use phone setting to set the time,qos,port Mirroring for the phone.

Phone Setting	
Basic	
Called No AnswerTime:	<input checked="" type="checkbox"/> <input type="text" value="70"/> s (Min:20, Max:99)
DTMF :	<input checked="" type="radio"/> RFC 2833 <input type="radio"/> Inband <input type="radio"/> SIP Info <input type="radio"/> Auto
Pound Send Method :	<input checked="" type="radio"/> # <input type="radio"/> %23
RFC 2833 PayLoad:	<input type="text" value="101"/>
BackLight:	<input type="radio"/> off <input type="radio"/> Always On <input checked="" type="radio"/> timer <input type="text" value="60"/> s (Min:1, Max:255)
Keyboard Lock:	<input type="text" value="Disabled"/> ▼
PSTN Setting	
PSTN Ring Type:	<input type="radio"/> PSTN Ring <input checked="" type="radio"/> VOIP Ring
PSTN Prefix Code:	<input type="text"/>
VOIP Prefix Code:	<input type="text"/>
Hook:	<input type="radio"/> off <input checked="" type="radio"/> on
Hook Frequency:	<input type="text" value="500"/> (Default:500 min:100 max:1600)
Qos	
SIP Qos:	<input type="text" value="26"/> (0-63)
Voice Qos:	<input type="text" value="46"/> (0-63)
Call	
Hot Line Function:	<input checked="" type="radio"/> off <input type="radio"/> Immediately Hot Line <input type="radio"/> Delay
Hot Number:	<input type="text"/>
Call Waiting:	<input type="radio"/> off <input checked="" type="radio"/> on
Call Waiting Tone:	<input checked="" type="radio"/> off <input type="radio"/> Play on currently active device Frequency: <input type="text" value="10"/> s (5-60)
Auto Answer:	<input checked="" type="radio"/> off <input type="radio"/> on <input type="radio"/> Turn On But Filter This Group: <input type="text" value="NONE"/> ▼
Auto Answer Mode:	<input checked="" type="radio"/> Hands Free <input type="radio"/> Handle <input type="radio"/> Headset
Pickup Function:	<input type="radio"/> off <input checked="" type="radio"/> on
Pickup Code:	<input type="text" value="123"/>
Message:	<input type="text" value="*97"/>
Fuzzy Search:	<input checked="" type="radio"/> off <input type="radio"/> on
Booking Voicemail:	<input type="text" value="No"/> ▼
Play Voicemail Tone:	<input checked="" type="radio"/> off <input type="radio"/> on
Miss Call Display:	<input type="radio"/> off <input checked="" type="radio"/> on
Call List Save:	<input type="radio"/> off <input checked="" type="radio"/> on
DND Softkey:	<input type="radio"/> off <input checked="" type="radio"/> on
Play Hangup Tone:	<input type="radio"/> off <input checked="" type="radio"/> on
Transfer Code :	<input checked="" type="radio"/> off <input type="radio"/> on Number: <input type="text"/>
Conference Exit Result:	<input checked="" type="radio"/> Disconnect All <input type="radio"/> Others Remain Connected
Return code when refuse:	<input type="text" value="603(Decline)"/> ▼
Return code when DND:	<input type="text" value="603(Decline)"/> ▼
Flash hook time(<\$00ms):	<input type="text" value="500"/>

VOIP Call Forward

Always : off on Number:

If Busy : off on Number:

If No Answer: off on Number:

Ring Frequency: (Default: 15s, Max: 15s)

Set Time Mode : SNTP SIP Server PSTN Manual

SNTP Server:

List

Manual

Update Interval(seconds):

Daylight Savings Time Mode: always off always on Auto

Time Format: 24 Hour 12 Hour

Date Format:

Time Zone-GMT:

Manual Setting

Year Month Day Hour Minute Second

Other

QoS: Diff-Serv or Precedence

Check When Upgrade Software: BLF Light:

Headset Mode: Normal Seat Mode

Ring Type On Seat Mode: Headset Speaker

Network Packet Mirroring:

When used Phone Setting option, you can set several parameters as follow:

Phone Setting	
Basic	
Called No Answer Time	When it has coming call and enable this feature, the caller will be request time out in the stipulated time.
DTMF	The DTMF transmitted mode, include RFC2833, Inband, SIP Info, Auto
Pound Send Method	When you to use the code looks like #28#123 or %23123, you need to setting this feature.
RFC 2833 Pay Load	Default is 101, RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals
Back Light	The backlight of the phone LCD
Key Board Lock	Lock with the phone LCD, when you enable the right password, it will auto disable this feature. if you want to use again, you need to open it again in the web management. Tips: the password is the same with the phone LCD. Default is

	<p>159357. The Menu key can open it.</p> <p>[Menu Key]: only lock the Menu function, others can normal work.</p> <p>[Function Keys]: include Menu/Redial/Transfer/Hold etc. you just can use the number keys and speaker key.</p> <p>[All keys]: as the name implies.</p> <p>[Lock & Answer]: Auto open Auto-answer and lock the keys,</p>
PSTN Setting [If your phone does not support PSTN feature, you can ignore this option]	
PSTN Ring Type	You can set the ringing type use PSTN or VOIP.
PSTN Prefix Code	Input the prefix code with PSTN
VOIP Prefix Code	Input the prefix code with VOIP
Hook Frequency	Setting the frequency with hook.
QoS	
Sip QoS	The range is 0~63,default is 26
Voice QoS	The range is 0~63,default is 46
Call	
Hot Line Function	It include Immediately Hot Line and Delay Hot Line
Hot Number	Input the number what you want to.
Call Waiting	When someone is coming a call after the call is talking, the second call will be in the queue.
Call Waiting Tone	Select the frequency with the tone call waiting.
Auto Answer	Auto-answer the coming call, it also can set with group.
Auto Answer Mode	Include Hands Free / Handle / Headset.
Pickup Function	Someone can pickup you call when you talking with some body.
Pickup Code	The code with someone want to pickup your call.
Message	The code with voice message.
Fuzzy Search	Fuzzy search someone with the phone book in the idle.
Booking Voice Mail	Open this feature, the phone light(Message) will be bright when it get message.
Play Voice Mail Tone	Open this feature, it will be ringing when it get message.
Miss Call Display	Turn on or off the display with Miss call in the phone LCD.
Call List Save	Save the call list into the phone.
DND Soft key	Display or not in the LCD.
Play Hang up Tone	The tone with hang up in busy.
Transfer Code	The code with transfer.
Conference Exit Result	Conference originator hang up the phone, hang up two ways of it.
Return Code When Refuse	Select the code you want to with the server.
Return Code When DND	Select the code you want to with the server.

Flash hook time	The time with the flash hook.
VOIP Call Forward	
All ways	All ways transfer the call to others.
If busy	If the phone was busy working, the call will be transfer to others.
If No Answer	If the phone was no answer, the call will be transfer to others.
Ring Frequency	The ring frequency with the VOIP Call Forward.
Set Time Mode	
Set Time Mode	The mode of set time for phone, include SNTP/SIP Server/PSTN/Manual
SNTP Server	You can select in the list or input owner server address.
Update Interval	The update interval with SNTP.
Daylight Saving Time Mode	Enable/disable the DST for the phone
Time Format	You can use 24 hour time format or 12 hour time format
Date Format	Normal format with date you can select in the list.
Time Zone-GMT	You can select different time zone for the phone
Manual Setting	
Manual Setting	This used to manual set time for the phone
Other	
QoS	The QoS priority, support diff-server and precedence
Check Upgrade Software	When Checking the upgrade software with MD5.
BLF Light	The light switch with BLF.
Headset Mode	Select headset mode with normal or seat.
Ring Type On Seat Mode	Select ring type mode with headset or speaker.
Network Packet Mirroring	When select on, then you can capture the phone's packet use notebook which connect to pc port of the phone

VLAN Setting

You can add the phone and PC to different VLAN used VLAN Setting option.

When used VLAN Setting option, you can set several parameters as follow:

VLAN Setting	
Enable VLAN	You can enable/disable vlan for phone and pc
VID [LAN/PC Port]	The VLAN you want the phone or pc to join

VPN Setting

IF you need to setup a VPN Setting, you should fill below options.

When used VPN Setting option, you can set several parameters as follow:

VLAN Setting	
Enable VPN	You can enable/disable VPN for phone and pc
VPN Type:	There is one choose you can choice.
VPN Server Addr	VPN server's ip
VPN User Name	VPN user's name
VPN Password	A password be used for authentication

Dial Plan setting

If you want to setup a dial plan, you can click "Dial Plan".

Click "add rule" to entry this interface.

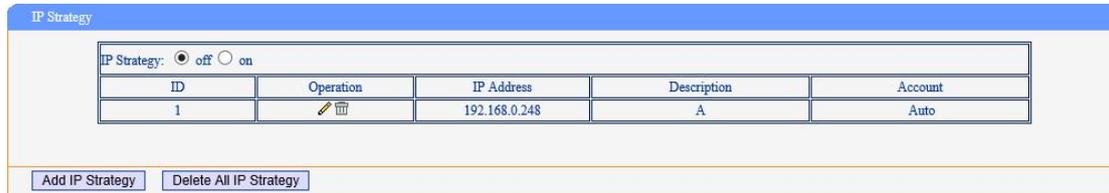
Dial Plan Setting		
ID		Dial Plan ID
IP		The ip of a phone which you want to call
prefix		The number which you need to press actually if you want to call the phone
Called Number	Insert	There have two option, Enable or Disable.
Position		Which position you want insert the number
Number		What number you want to insert
Called Number	Delete	There have two option, Enable or Disable.

(Note: When you want to add code and delete at the same time, you can add code first, after that base on the number you add, decide the position and length of the delete code.)

IP Strategy

You can use IP Strategy feature to make a list which line you want to allow make a call for your.

e.g. As following picture you can see it has 192.168.0.248 in the list. When you open this feature. It means you just allow come from this IP address meeting



IP Strategy: off on

ID	Operation	IP Address	Description	Account
1	 	192.168.0.248	A	Auto

Global SIP

You also can setup the SIP server on Global SIP.

Global SIP

SIP Settings

SIP Server:

Secondary server :

P-Asserted-Identity: off on

SIP Session Timer(seconds) T1 :

SIP Session Timer(seconds) T2 :

SIP Session Timer(seconds) T4 :

Proxy Server

OutboundProxy Server :

STUN

STUN Server:

Others

Register Expire Time: s Default: 3600s, Min: 40s

Local SIP port: (Default: 5060)

SIP Transport: UDP TCP TLS

RTP Port Range: --

SUB Expire Time :

Affiliated Port: off on

Phone Maintenance

Log

If you need to catch a debugging Level log, you need setup on this interface.

Log

No Record
 Call:
 SIP
 LCD

Log send to server: off on

Log Server Address: :

Capture Packet:

You can change the password used to login phone GUI in Password option.

Password

Username:

Old Password:

New Password:

Confirm Password:

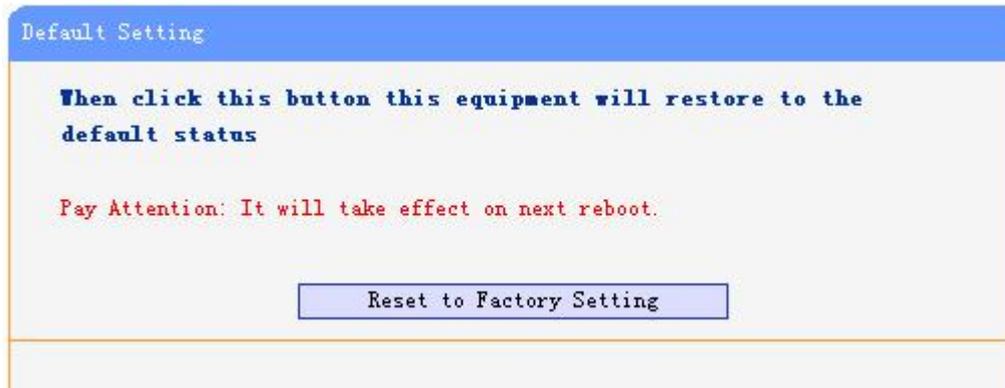
Administrator User

In Password option, you can set several parameters as follow:

Password	
Username	The login username of the web page
Old Password	The old password used to login of the web page
New Password	The new password used to login of the web page
Confirm Password	The new password used to login of the web page
Administrator	Login phone web page used administrator privileged
User	Login phone web page used general user privileged

Default Setting

You can load the phone to the factory default setting in default setting option.



Press the 'Reset to Factory Setting' option ,the phone will load to factory default setting on next reboot.

Auto Provision

When you open the auto provision function, the phone will auto provision if the phone detect a higher software or kernel which are put on the software server. The detail information about auto provision you can see the appendix.

Auto Provision: on off

Option: (Default :66, Min:1, Max:254)

Protocol: ▼

Software Server URL:

Username:

Password:

Auto Download Software

Auto Download Kernel

Auto Download Config File

Broadsoft Compatibility

Auto Download Expansion

Auto Download Enterprise Phonebook

Auto Download Personal Phonebook

Booting Checked

Disable the phone while booting checking: off on

Auto Provision Frequency: Hour (Default :7 days, Max:30 days)

Auto Provision Time: ▼

Auto Provision Next Time: Mon May 20 11:29:55 2013

AES Enable: off on

AES Key :

When use auto provision, you can set several parameters as follow:

Auto Provision	
Auto Provision	You can enable/disable auto provision by select on/off
Protocol	The protocol use for auto provision, it include tftp/http/ftp
Software Server URL	The server address of the auto provision
Username	The username provide by provision server
Password	The password provide by provision server
Auto Download Software	This used to auto download software from server
Auto Download Kernel	This used to auto download kernel from server
Auto Download Config File	This used to auto download config file from server
Broadsoft Compatibility	This used to compatible the broadsoft format's config file
Auto Download Expansion	Expansion must the phone support this feature. You can make sure or not the phone model is it support with "P", e.g. ES330N-E
Auto Download Enterprise	This used to auto download Enterprise Phonebook from

Phonebook	server
Auto Download Personal Phonebook	This used to auto download personal phonebook from server
Bootling Checked	This used to checked the auto provision when phone bootling
Disable the phone while bootling checking	Off or On
Auto Provision Frequency	This used to set the time interval for auto provision
Auto Provision Time	This used to the specific time for auto provision
Auto Provision Next Time	Reset the Auto Provision Next Upgrading time.
AES Enable	You can enable/disable AES encrypt for auto provision
AES Key	The key of the AES
Auto Provision Now	This used to do auto provision immediately

TR069

When the telegraphy want to test IMS, you can use this function.

TR069

Cwmp Enable

Protocol: HTTP

Cwmp Host URL: http://183.62.12.23:8012/service.tr069

Cwmp Port: 8012

Serial Number: 00100400YJ012050000000268b0019de

Username:

Password:

Password

New Password:

Confirm Password:
Alter Password

Submit

FTP Upgrade

You can upgrade the software, kernel and configure file for the phone use ftp.

FTP Upgrade (Attention: Do not cut off the electricity when Upgrade!!)

Server IP:

Filename:

Username:

Password:

Software Upgrade:

Kernel Upgrade:

Note: It's no necessary to input filename when backup.

Configuration:

Phone Book:

EXT Module:

When use ftp upgrade, you can set several parameters as follow:

FTP Upgrade	
Server IP	The ip address of the ftp server
Filename	The name of the file want to download from ftp server
Username	The username provide by ftp server
Password	The password provide by ftp server
Software Upgrade	Used to upgrade the software of the phone
Kernel Upgrade	Used to upgrade the kernel of the phone
Configuration	You can used update/backup to update/backup the configure file of the phone
Phone Book	You can used update/backup to update/backup the phonebook of the phone
EXT Module	You can used update/backup to update/backup the expansion of the phone

TFTP Upgrade

You can upgrade the software, kernel and configure file for the phone use tftp.

TFTP Upgrade (Attention: Do not cut off the electricity when Upgrade!!)

Server IP:

Filename:

Software Upgrade:

Kernel Upgrade:

Note: It's no necessary to input filename when backup.

Configuration:

Phone Book:

EXT Module:

When use tftp upgrade, you can set several parameters as follow:

TFTP Upgrade	
Server IP	The ip address of the tftp server
Filename	The name of the file want to download from ftp server
Software Upgrade	Used to upgrade the software of the phone
Kernel Upgrade	Used to upgrade the kernel of the phone
Configuration	You can used update/backup to update/backup the configure file of the phone
Phone Book	You can used update/backup to update/backup the phonebook of the phone
EXT Module	You can used update/backup to update/backup the expansion of the phone

HTTP Upgrade

You can upgrade the software, kernel and configure file for the phone use http.

HTTP Upgrade (Attention: Do not cut off the electricity when Upgrade!!)

HTTP Upgrade:

Select a File:

Software Upgrade:

Kernel Upgrade:

Configuration:

XML PhoneBook:

Vcard:

EXT Module:

Log:

All Config File:

When use http upgrade, you can set several parameters as follow:

HTTP Upgrade	
Select a File	Browse the software/kernel/config file you want to upgrade from http
Software Upgrade	Used to upgrade the software of the phone
Kernel Upgrade	Used to upgrade the kernel of the phone
Configuration	You can used upload/download to upload/download the configure file of the phone
XML Phone Book	You can used upload/download to upload/download the phonebook of the phone
VCARD	One of the format with Phone book
EXT Module	You can used update/backup to update/backup the expansion of the phone
Log	Debugging with IP phone
All Config File	Include Phone Book/ Config / Extern / Log/ Enterprise Phone Book

Reboot

You can use reboot option to reboot the phone.



When you press 'Reboot', the phone will reboot.

Phone Status

You can see the currently status of the phone when use Phone Status option.



System Info

You can see the system information when used System Info option.

System Info

Phone Model: IP220
 Software Version: V2.2.8.6-3279
 Hardware Version: V2.x.x
 Kernel Version: V2.6.3
 AutoProvision Server URL: TFTP://192.168.0.201
 TFTP Server IP: TFTP://192.168.0.201

Refresh

Attention:

On this interface ,you can see the software and kernel which we used for test and this user_manual is written base on this software and kernel.

This software version is V2.2.8.6-3279

This kernel version is v2.6.3

About

You can see the phone model when used About option.

Configuration Wizard
 Network
 SIP Account
 Programmable Keys
 Audio
 PhoneBook
 Advanced
 Phone Maintenance
 Phone Status
 System Info
 About

Please Select Language:
 English
 Administrator: Logout

IPPhone WEB Software

IP220

Software Version: V2.2.8.6-3279
 Hardware Version: V2.x.x
 System Upgrade:

8.Appendix:

Auto Provision

1.Bulid TFTP/HTTP/HTTPS/FTP Server

1.1 The Auto Provision Working principle

1. Bulid the FTP/HTTP/HTTPS/FTP Server
2. Place the Auto Provision related file(configure file/software/kernel) in server
3. The phone according to the the server URL and download the file to update the phone data or upgrade software/kernel
4. You can do 3 way to start Auto Provision:
 - * Booting Checked: Auto Provision when the phone booting after reboot.
 - * Auto Provision Now manually.
 - * timing Auto Provision

1.2 Bulid TFTP/HTTP/HTTPS/FTP Server

The auto provision Server don't distinguish the model of server,it only need the server can support TFTP/HTTP/HTTPS/FTP protocol.

If you already build TFTP/HTTP/HTTPS/FTP Server,so you only need place some related auto provision file in server and config the parameters in auto provision web page.

If you don't have TFTP/HTTP/HTTPS/FTP Server,we can suggest you to download the server in Internet by yourself.

Tftp server:cisco tftp or tftpdwin

Ftp server: Serv-U Server

Http server:hfs server

If you finished build your TFTP/HTTP/HTTPS/FTP Server,you can follow do this:place some related auto provision file in server and config the parameters in auto provision web page.

2. Place the configure file/software/kernel in Server

When the software or kernel auto-provision is enabled and want to run, IP

Phone will check the software and kernel version at first, so we need make some pre-configuration on the provisioning server.

2.1 Auto Provision for Software

1. Create a notepad file named “F000XXX.cfg” or “FD000XXX.cfg” (the “XXX” is decided by the model of the IP phone you are using, for example, if the model is ES620, the file name is “F000600.cfg”, the “FD” is decided by the model of the IP phone with ‘N’, for example, ES320N);

**Named rule of the file:*

F000600.cfg: for ES620, ES610 and DS622;

F000400.cfg: for ES410 and DS412;

F000300.cfg: for ES310 and DS312;

F000200.cfg: for ES210 and DS212.

F000320.cfg: for ES320

F000330.cfg: for ES330

F000118.cfg: for HS118

F000108.cfg: for HS108.

F0WS620.cfg: for WS620

F0WS320.cfg: for WS320

FD000600.cfg: for ES620N

FD000400.cfg: for ES410N

FD000330.cfg: for ES330N

FD000320.cfg: for ES320N

FD000220.cfg: for ES220N

FD000110.cfg: for IP115

FD000120.cfg: for IP125

FD000100.cfg: for US101N and US102N and US103N

FD000108.cfg: for HS108PZ

FD0WS320.cfg: for WS320N

FD0WS220.cfg: for WS220N

FD0WS100.cfg: for WS102N

2. Open the notepad file “F000XXX.cfg” or “FD000XXX.cfg” and write the new software name in it, the software file name format must like this: S(2)_Phone Model_version+Version Number. the “S2_” decided by the model of the IP phone with ‘N’, for example,
ES620: the software name is like “S_ES620_version2.2.7.5-3077”
ES320N: the software name is like “S2_ES320N_version1.1.5.0-1147”
Other Model and so on.

Write down the new version you want to upgrade and save it on your provisioning server.

**Please note that if the version is not older than (and same as) the one on your phone, auto-provision of your software would be not available.*

3. After it, upload the new software to the TFTP/HTTP/HTTPS/FTP provisioning server and complete the pre-configuration steps.

2.2 Auto Provision for Kernel

1. Create a notepad file named “K000XXX.cfg” or “KD000XXX.cfg”(the “XXX” is decided by the model of the IP phone you are using, for example, if the model is ES620, the file name is “K000600.cfg”, the “KD” is decided by the model of the IP phone with ‘N’, for example, ES320N);

**Named rule of the file:*

K000600.cfg: for ES620, ES610 and DS622 and WS620;

K000400.cfg: for ES410 and DS412;

K000300.cfg: for ES310 and DS312 and ES320 and HS118 and WS320;

K000200.cfg: for ES210 and DS212 and HS108;

K000330.cfg: for ES330;

K000100.cfg: for US101 and US102 and US103.

KD000320.cfg: for ES320N and WS320N

KD000330.cfg: for ES330N

KD000220.cfg: for ES220N and WS220N

KD000100.cfg: for US101N and US102N and US103N and WS102N

KD000108.cfg: for HS108PZ

KD000110.cfg: for IP115

KD000120.cfg: for IP125

KD000400.cfg: for ES410N

KD000600.cfg: for ES620N

2. Open the notepad file “K000X00.cfg” or “KD000XXX.cfg” and write the new kernel name in it, for example,

K_ulmage_200_version2.2.9.bin: for ES210 and DS212 and HS108;

K_ulmage_300_version2.2.9.bin: for ES310 and DS312 and ES320 and HS118
and WS320 and ES320 and ES330;

K_ulmage_400_version2.2.9.bin: or ES410 and DS412;

K_ulmage_600_version2.2.9.bin: for ES620, ES610 and DS622 and WS620;

K2_ulmage_100N_version2.6.3.bin: all the model of the IP phone with ‘N’,
ES320N and ES220N and ES330N and so on

Write the new version you want to upgrade and save it on your provisioning server.

**Please note that if the version is not older than (and same as) the one on your phone, auto-provision of your kernel would be not available.*

3. After it, upload the new kernel to the TFTP/HTTP/HTTPS/FTP provisioning server and complete the pre-configuration steps.

2.3 Auto Provision for Configure file

1. Name of configuration file:

The configuration file on the provisioning server is named as the MAC address of IP phone itself. Escene's IP phones support two different configuration files for auto-provision:

1. Normal Configuration file:

Normal Configuration file is the configuration file of your Escene IP phone. You can download it from your phone (You can see the following chapter to see how to download a configuration file from Escene IP phone) and modify by yourself.

- If the phone model with 'N', for example ES320N, please see this:

The Normal Configuration file can separate two part:

- Global parameters configuration file: for example Audio Codecs、Volume、Server URL and so on, make these global parameters to a file, and can use by different model (model name come from web or LCD menu), the filename format must be sys_model.xml

ES320N: sys_ES320N.xml

ES220N: sys_ES220N.xml



sys_ES320N.xml

Reference XML documents:

- Private parameters configuration file: for example Account configuration that different phone, the filename format must be MAC.xml, for example **00112233445.xml**.



00112233445.xml

Reference XML documents:

- If the phone model don't with 'N', or example ES620, please see this:
If the IP phone's MAC address is 00:11:22:33:44:55, the normal configuration file of it should be **00112233445.xml**.



00112233445.xml

Reference XML documents :

2. Broadsoft Configuration files:

Broadsoft Configuration files support the format of Broadsoft IP-PBX. However, you can use them for provisioning. There are two files should be set on your provisioning server, they are also named by the MAC address of your phone

1. **00112233445.cfg**: a configuration file for system settings, for example, network, audio and so on.

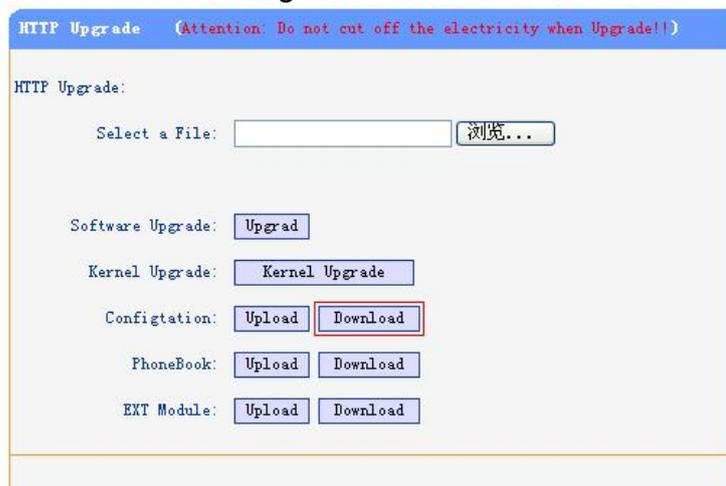
2. **001122334455.txt**: a configuration file for SIP accounts.

3. How to create the Configuration file

2. Download a configuration file from your phone:

You can download a configuration file from your phone by HTTP as follow:

1. Open the web page of your IP phone, click “Phone Maintenance”>“HTTP Upgrade”;
2. Then click “Download” of Configuration:



3. If you want to use this file to auto-provision, you just need to modify it by yourself and rename it to the MAC address of your IP Phone with .xml suffix.

3. create the Configuration file Manually

If you want to create the Configuration file Manually, you must read this *reference documents about the Configuration file format detail* and you may know the what mean parameters of the Configuration file:



Configuration file format detail

2.4 Auto Provision for Expansion

The Extern.xml includes the settings of programmable buttons on the phone and all Expansion Modules. All the phones can download the settings from a same file and they will have the same settings (for example, Speed-dial, BLF and so on).

You can't rename the file on the provisioning server. The file name is fixed to **Account1_Extern.xml. (Account1 is the first account you register)*



Reference XML documents : 1001_Extern.xml

2.5 Auto Provision for Enterprise Phonebook

Escene IP phone supports Enterprise Phonebook and Personal Phonebook. They use same XML format, you can see the reference documents.

4. Enterprise Phonebook:

Enterprise Phonebook is used for all staffs in your office. All phones will download a common phonebook for all staffs. The file's name must be ***Enterprise_Phonebook.xml*** on your provisioning server and you can not rename it.



Reference XML documents: Enterprise_Phonebook.xml

2.6 Auto Provision for Personal Phonebook

5. Personal Phonebook:

Personal Phonebook is individual for each IP phone. The file on your provisioning server is named by the first account of your IP phone. If the IP phone's first account is 1287, the Personal Phonebook of this phone is ***1287_Phonebook.xml***.



Reference XML documents: 1001_Phonebook.xml

3. Configure parameters in Auto Provision Web page

3.1 Auto Provision TFTP using DHCP Option 66

The following steps will describe auto-provision by TFTP. You also can use HTTP and FTP for auto-provision with our phones. If you don't use option 66, you can jump to 3.2 section.

DHCP Server: (Microsoft Windows 2003 server)

- 3) Start up the "DHCP Management Console";
- 4) Expand the DHCP scope which will contain the phones

- 5) Right-click on the “Scope Options” node
- 6) Select “Configure Options”
- 7) In the “General” tab, scroll down the list of options and identify the option labeled “066 Boot Server Host Name”
- 8) Enable the “066 Boot Server Host Name” and enter the string value according to the examples discussed previously

```
string value:  
192.168.0.201(TFTP Server IP Address);
```

- 9) Click the “OK” button

3.2 Configure parameters in Auto Provision Web page

- **Login in IP Phone web:**

1. Input the IP Phone’s IP Address in browser;
2. Enter user root and password 159357 then open the web page;
3. Click “Phone Maintenance” and select “Auto Provision”;
4. select like as follows:

Auto Provision

Auto Provision: on off

Option: (Default :66, Min:1, Max:254)

Protocol:

Software Server URL:

Username:

Password:

Auto Download Software

Auto Download Kernel

Auto Download Config File

Broadsoft Compatibility

Auto Download Expansion

Auto Download Enterprise Phonebook

Auto Download Personal Phonebook

Booting Checked

Disable the phone while booting checking: off on

Auto Provision Frequency: Hour (Default :7 days, Max:30 days)

Auto Provision Time:

Auto Provision Next Time: Thu Jan 8 00:11:45 1970

AES Enable: off on

AES Key:

It supports three protocols in Auto-Provision:TFTP,HTTP and FTP.

The format with provisioning server URL is:

TFTP:

TFTP://192.168.0.201(192.168.0.201 is the default Server IP address)

HTTP:

HTTP://192.168.0.201

HTTPS:

HTTPS://192.168.0.201

FTP:

FTP://192.168.0.201

Note: You only need input the URL path, don't need input the filename.

For example:

You place the 001122334455.xml in tftp://192.168.0.201/abc/, you only need input tftp://192.168.0.201/abc, please don't input

tftp://192.168.0.201/abc/
001122334455.xml.

Username: the user to login FTP/HTTP/HTTPS server

Password: the password of the user using to login FTP/HTTP/HTTPS server

**Username and password are available in FTP/HTTP/HTTPS only
(unavailable in TFTP).*

- **Auto Download Software:**

Download software from server and upgrade it automatically.

- **Auto Download Kernel:**

Download kernel from server and upgrade it automatically.

- **Auto Download Config File:**

Download configuration file from server and update it automatically.

- **BroadsoftCompatibility:**

If you select this function, you need to put two configuration files (with Broadsoft format) on the provisioning server. Otherwise, you can download the configuration file from your phone via HTTP (regarding the steps, you can refer to "Download a configuration file from your phone" in this document.), modify it and upload it to the server for auto-provision.

- **Auto Download Expansion:**

Download configuration file of the Programmable buttons on your phone or Expansion Modules automatically.

- **Auto Download Enterprise Phonebook:**

Download Enterprise Phonebook from server and update it automatically.

- **Auto Download Personal Phonebook:**

Download Personal Phonebook from server and update it automatically.

- **Bootling Checked:**

Check all items you had selected and upgrade/update them when the phone boot

- **Auto Provision Frequency:**

The auto provision Frequency which you want.

- **Auto Provision Time:**

The time you want to execute auto-provision.

- **Timing Auto Provision**

Examples of Auto Provision Frequency and Time:

1. When you set the Auto Provision Frequency and disable Auto Provision Time (set to None), the Auto Provision function will work after the Auto Provision Frequency;

2. When you set both Auto Provision Frequency and Auto Provision Time, for example:
You set the AutoProvision Frequency to 24 hours, and the Auto Provision Time to 2:00 at 8:00 today (1, Jan), it will pass 24 hours at first and work at the nearest 2:00, it means that the Auto Provision function will work at 2:00 on the day after tomorrow (3, Jan).
Therefore, if you want this function work at 23:00 tonight and it is 8:00 now, you need to set the Auto Provision Frequency to 0 hours and the Auto Provision Time to 23:00.
3. If you finished the config Auto Provision Frequency and Auto Provision Time, you can click the button of “**Reset Timing**” and timing is finished.
4. **Auto Provision Next Time** show what next time start Auto Provision.
5. The 3 and 4 point only support in the phone model with ‘N’, for example ES320N.

- **AES Encryption:**

AES encryption is used for all the setting files of your phone (include configuration file, Expansion file, Enterprise/Personal Phonebook etc. You just need to enable the AES Encryption function and input the AES Key matching the one on your server on.



Auto-provision
AES feature use I

Reference AES Encryption documents:



Escene Communication Co.Ltd

Address: Floor 4, Building C, Yuean Industrial Park, Huangcun Road No.51, Tianhe District, Guangzhou, China.

Postal Code: 510660

Tel: (+86)20-28096798

Fax: (+86)20-28096786

<http://www.escene.cn/en/>

Technical Support:

E-mail: support@escene.cn

www.escene.cn/en/

