



Cisco IP Phone Configuration Guide

Version 1.0

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Yeastar Information Technology Co. Ltd.

Introduction

This guide introduces how to configure Cisco IP phones with Yeastar VoIP PBX. You have multiple ways to configure the Cisco phone:

- [Registering to Yeastar S-Series Manually](#)
- [Provisioning Cisco Phones via DHCP](#)

Supported Phone Models

- Cisco SPA series: 301, 303, 501G, 502G, 508G, 509G, 512G, 514G, 525G5
- Cisco CP7821

Note: different IP phone firmware versions may have different web GUI with different settings.

Registering to Yeastar S-Series Manually

If you choose registering Cisco to Yeastar S-Series manually, you have to log in each phone, and configure one by one.

1. Start up the phone and check IP address. Press the menu key, go to the “Network” option and press “Select”.
2. Type the phone IP address in your browser, click “Enter” key to access the phone’s web user interface.
3. Click “Admin Login” link, and next click on the “Advanced” link at the top of the page to the phone’s advanced administrator page.



4. Choose one account to configure. Here we click “EXT1” to configure account 1. Configure the account as follows:

- 1) Set the “Line Enable” field to “yes”.

- 2) In the “Proxy and Registration” section, set the “Proxy” field to Yeastar S-Series PBX’s IP address.

- 3) In the “Subscriber Information” section:

- **Display Name:** set the name you want to appear on other phone’s display

when calling other phones.

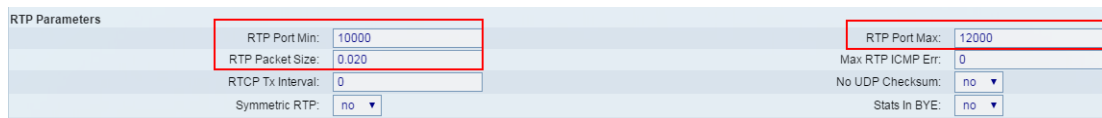
- **User ID:** fill in the extension number.
- **Password:** fill in the extension's "Registration Password".
- **Use Auth ID:** set to "Yes".
- **Auth ID:** fill in the extension's "Register Name".

5. In the "Dial Plan" section, set the "Dial Plan" field to "[*]." (without the quotes).



Dial Plan:	[*]
Caller ID Map:	
Enable IP Dialing:	yes

6. Click "Phone" tab and set the "Voice Mail Number" field to "*2". The default "Check Voicemail" feature code on S-Series PBX is *2.
7. Adjust the audio parameters. Click "SIP" tab and in the "RTP Parameters" section, change the RTP port range to 10000-12000, and set the "RTP Packet Size" to 0.020. (The default RTP port range in Yeastar S-Series PBX is 10000-12000).



RTP Port Min:	10000	RTP Port Max:	12000
RTP Packet Size:	0.020	Max RTP ICMP Err:	0
RTCP Tx Interval:	0	No UDP Checksum:	no
Symmetric RTP:	no	Stats In BYE:	no

8. Click "Submit All Changes" at the bottom of the page. Your phone will restart. After rebooting, the phone will register to Yeastar S-Series PBX. You can check the extension status on S-Series "PBX Monitor" page.

Configuration for Remote Extensions

If you want to register a remote extension on Cisco IP phone, you need to set the “Proxy” field to the Yeastar S-Series PBX’s public IP address, and also configure the following settings.

1. Click one EXT account to configure the account settings.
2. Go to the “NAT Settings” section.
3. Set the “NAT Mapping Enable” field to “yes”.
4. Set the “NAT Keep Alive Enable” field to “yes”.

NAT Mapping Enable:	<input type="text" value="yes"/>	NAT Keep Alive Enable:	<input type="text" value="yes"/>
NAT Keep Alive Msg:	<input type="text" value="SNOTIFY"/>	NAT Keep Alive Dest:	<input type="text" value="SPROXY"/>

5. Click “SIP” tab, go to the “NAT Support Parameters” section.
6. Set the “Handle VIA rport” field to “yes”
7. Set the “Insert VIA rport” field to “yes”
8. Set the “STUN Enable” field to “yes”
9. Set the “STUN Server” field to “stunserver.org” – to allow the phone to discover its external IP Address, and the port mappings that will be applied to the traffic sent and received by the phone.

Handle VIA received:	<input type="text" value="no"/>	Handle VIA rport:	<input type="text" value="yes"/>
Insert VIA received:	<input type="text" value="no"/>	Insert VIA rport:	<input type="text" value="yes"/>
Substitute VIA Addr:	<input type="text" value="no"/>	Send Resp To Src Port:	<input type="text" value="no"/>
STUN Enable:	<input type="text" value="yes"/>	STUN Test Enable:	<input type="text" value="no"/>
STUN Server:	<input type="text" value="stunserver.org"/>	EXT IP:	<input type="text"/>
EXT RTP Port Min:	<input type="text"/>	NAT Keep Alive Intvl:	<input type="text" value="15"/>

10. Click the "Submit All Changes" button at the bottom of the page. Your phone will restart.

Provisioning Cisco Phones via DHCP

Before provisioning the phones, you must reset the phones to factory defaults in case that the phones have residual settings of a previous configurations.

1. Connect the phone to the same network with Yeastar S-Series PBX.
2. Disable local DHCP server in your local network, e.g. disable DHCP server on Linksys router.

The screenshot shows the Linksys Basic Setup page for an Etherfast Cable/DSL Router (BEFSR41). The page is divided into several sections: Internet Setup, Network Setup, and Basic Setup. The Local DHCP Server settings are highlighted with a red box, showing the 'Disable' option selected.

LINKSYS
A Division of Cisco Systems, Inc. Firmware Version: 1.04.06

Etherfast® Cable/DSL Router BEFSR41

Setup

Setup | Security | Applications & Gaming | Administration | Status

Basic Setup | DDNS | MAC Address Clone | Advanced Routing

Internet Setup

Internet Connection Type: Obtain an IP automatically

Optional Settings (required by some ISPs)

Host Name:

Domain Name:

MTU: Enable Disable Size: 1500

Network Setup

Router IP

Local IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

Local DHCP Server: Enable Disable

Start IP Address: 192.168.1.100

Number of Address: 50

DHCP Address Range: 192.168.1.100 to 192.168.1.149

Client Lease Time: 0 minutes (0 means one day)

Static DNS 1: 0.0.0.0

Static DNS 2: 0.0.0.0

Static DNS 3: 0.0.0.0

WINS: 0.0.0.0

Basic Setup

The Basic Setup screen is where basic configuration is performed. Some ISPs (Internet Service Providers) will require that you enter the DNS information. These settings can be obtained from your ISP. After you have configured these settings, you should set a router password from the Administration->Management screen.

Completing the Internet Setup section is all that is required to set up for your specific ISP. Please look at the table below to configure the Router for your Internet connection.

[More...](#)

Save Settings Cancel Changes

CISCO SYSTEMS

3. Enable DHCP server on Yeastar S-Series and configure the DHCP server settings according to your local network. (Settings > System > Security > Service)

Enable DHCP Server DHCP is running.

Gateway ⓘ:

Subnet Mask ⓘ:

Preferred DNS Server ⓘ:

Alternate DNS Server ⓘ:

DHCP Address Range ⓘ: -

TFTP Server ⓘ:

NTP Server ⓘ:

4. Go to “Auto Provisioning” App. Click “Scan”, all the phones in the local network will show up on the page.
5. Search the phone by MAC address or IP address, and click “edit”.

Auto Provisioning

Device List | Upload Files | Phonebook | Firmware Upgrade

MAC Address, Extension, Name, IP Address

<input type="checkbox"/>	MAC Address	Extension	Name	IP Address	Manufacturer	Model	Edit	Delete
<input type="checkbox"/>	e05fb9828558	Not Configured	Not Configured	192.168.1.3	Cisco	SPA509G		

6. Choose the phone Model, active a line and assign an extension for the phone.

Edit Device

Manufactures: MAC Address:

Model:

Account | Line Keys Settings | Features | Preference | Codec

<input checked="" type="checkbox"/> Line1	Extension:	<input type="text" value="1000"/>	Label:	<input type="text" value="1000"/>	<input checked="" type="checkbox"/> Line Active
<input checked="" type="checkbox"/> Line2	Extension:	<input type="text" value="1001"/>	Label:	<input type="text" value="1001"/>	<input checked="" type="checkbox"/> Line Active
<input type="checkbox"/> Line3	Extension:	<input type="text" value="1000"/>	Label:	<input type="text"/>	<input checked="" type="checkbox"/> Line Active
<input type="checkbox"/> Line4	Extension:	<input type="text" value="1000"/>	Label:	<input type="text"/>	<input checked="" type="checkbox"/> Line Active

7. Assign Line keys for the accounts. For example, assign LineKey 1 for account 1, assign LineKey 2 for account 2.

Edit Device

Manufactures: Cisco MAC Address: e05fb9828558

Model: SPA509G

Account **Line Keys Settings** Features Preference Codec

Key	Extension	Share Call Appearance	Extended Function
<input checked="" type="checkbox"/> LineKey1	line1	private	
<input checked="" type="checkbox"/> LineKey2	line2	private	

8. Click "Save".
9. The system prompts you to reboot the phone, click "OK".
10. Reboot the phone manually, the phone will restart, then reboot again automatically to apply the configurations.