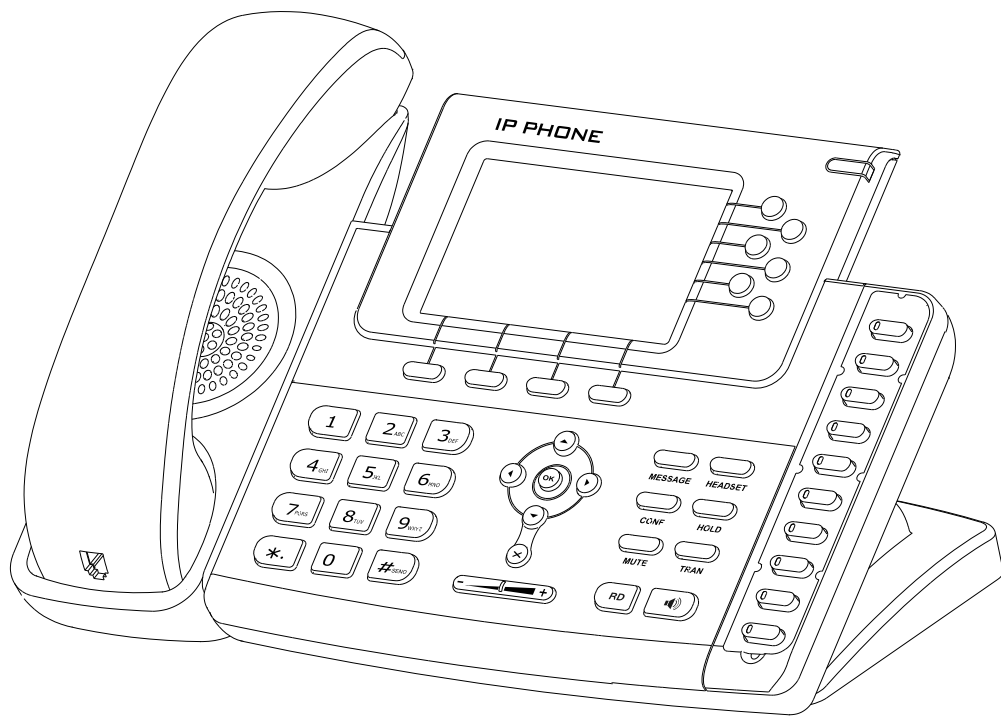


Configure Yealink IP Phones for Asterisk Phone System



Facility Manual

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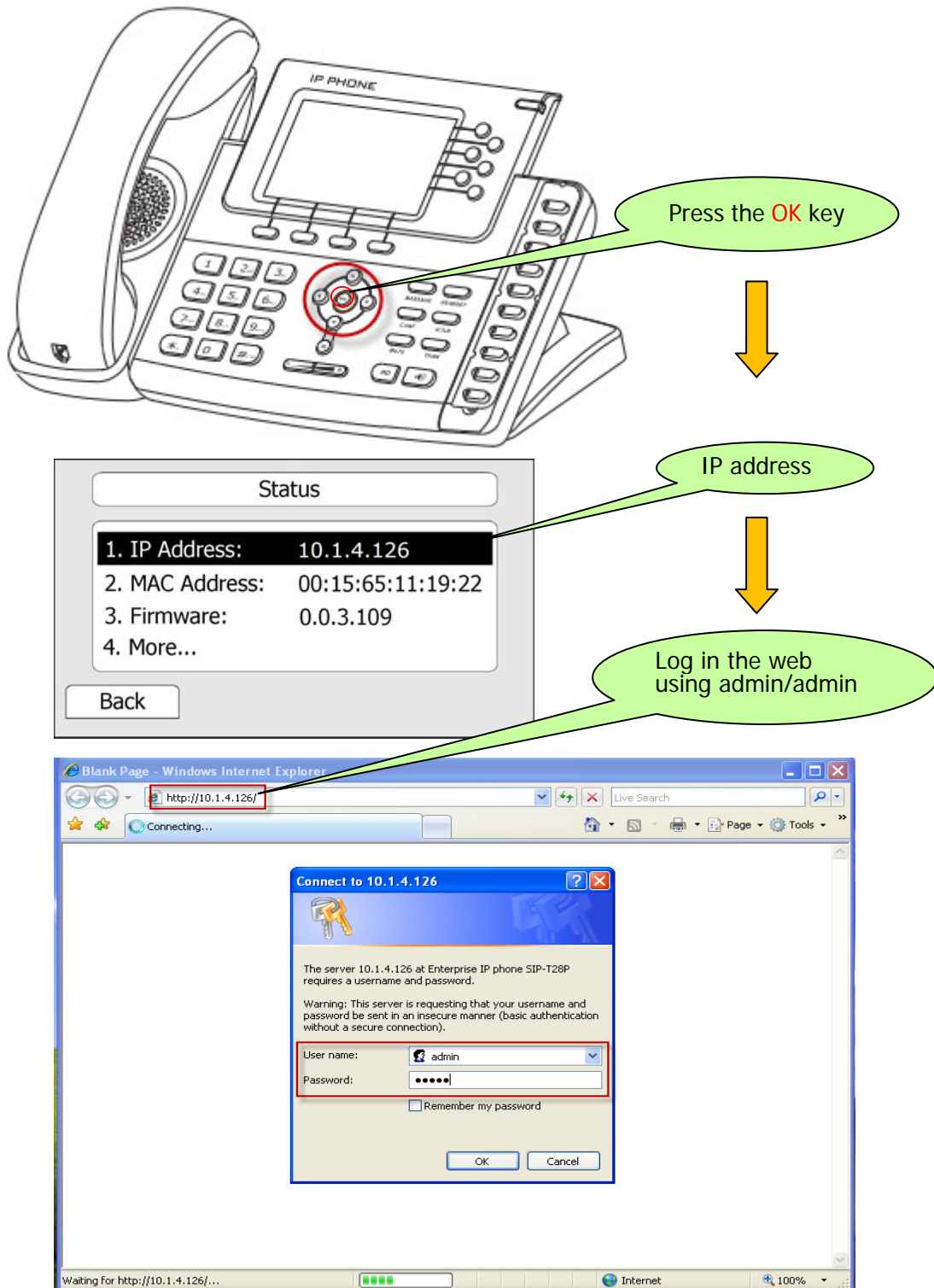
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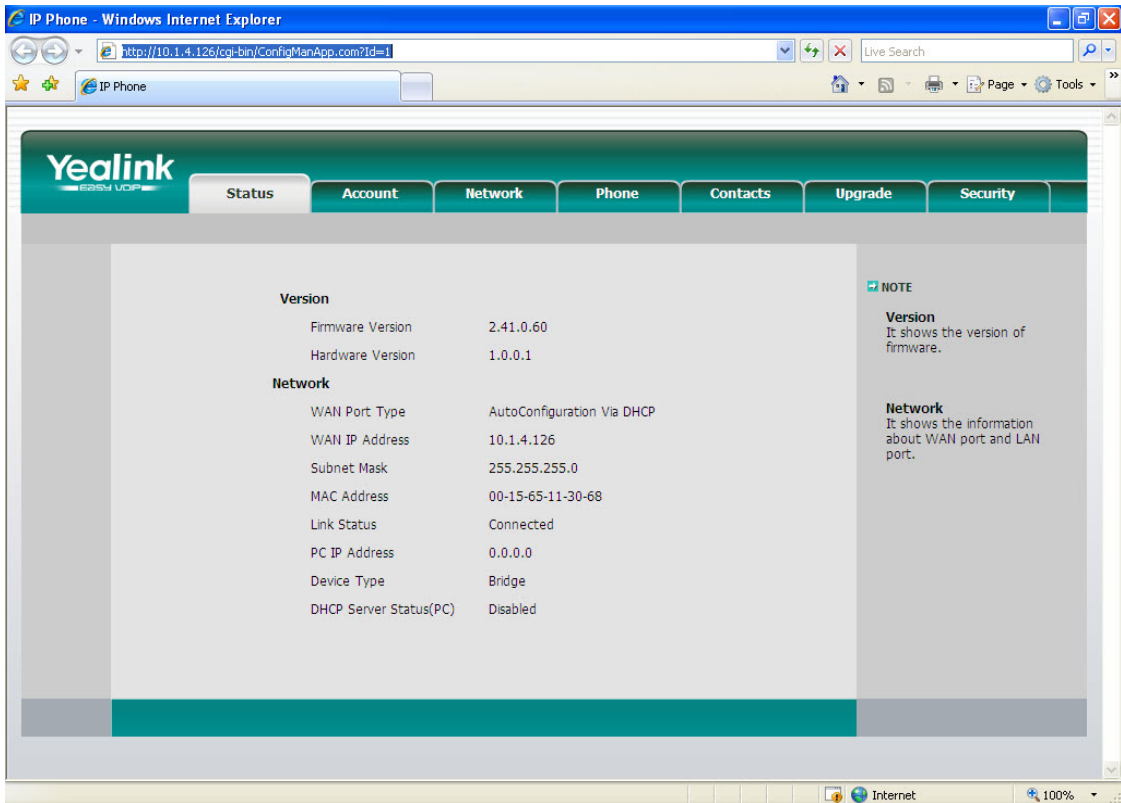
Configure Yealink IP Phones for Asterisk

This document is going to show you how to configure a Yealink phone to work with Asterisk.

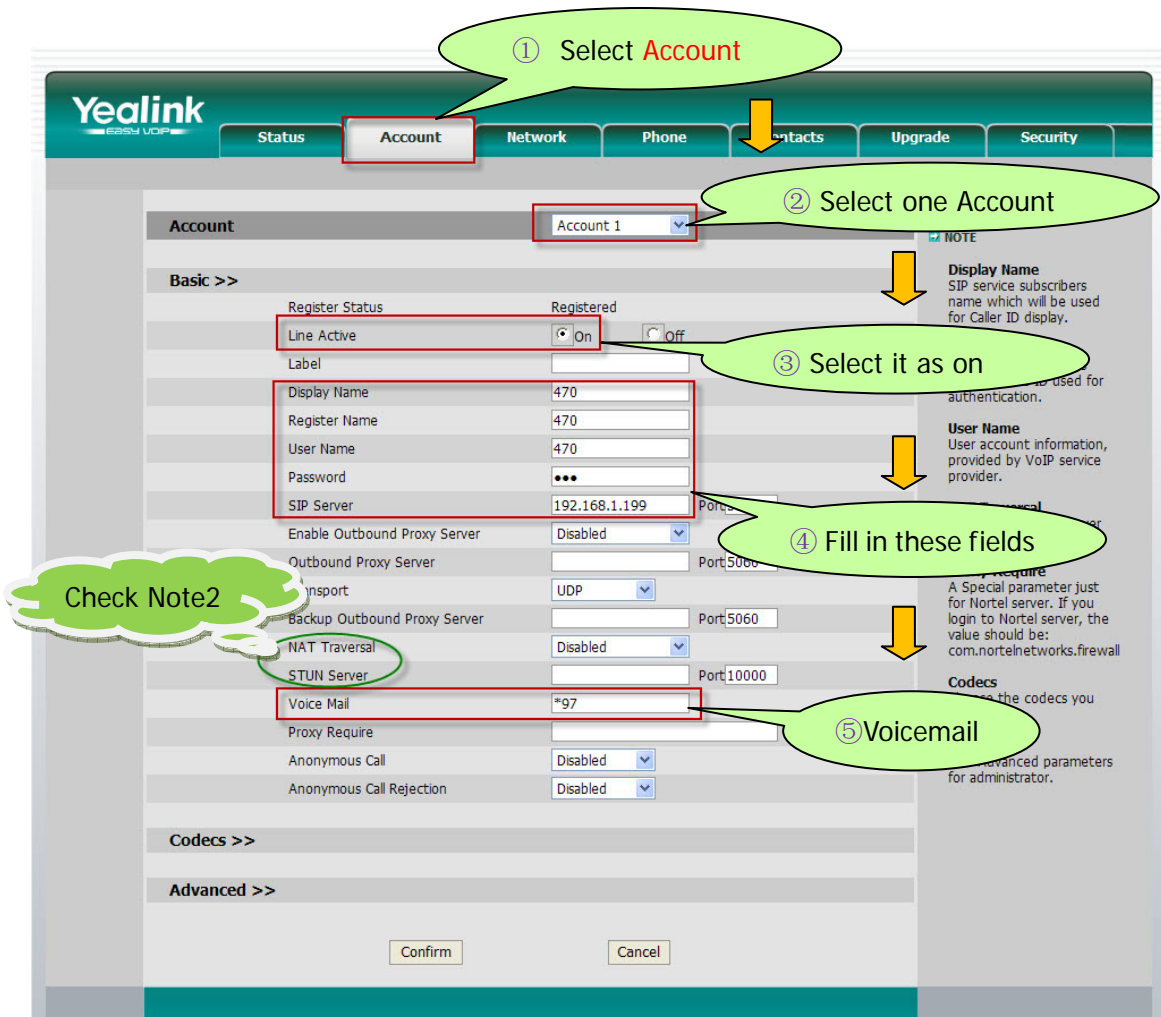
Note 1: The model we are using in this document is Yealink SIP-T28, and all the screen shots are based on its firmware version 2.41.0.60. There might be some difference between different models or firmware versions.

1. Log in the web management





2. Configure the account



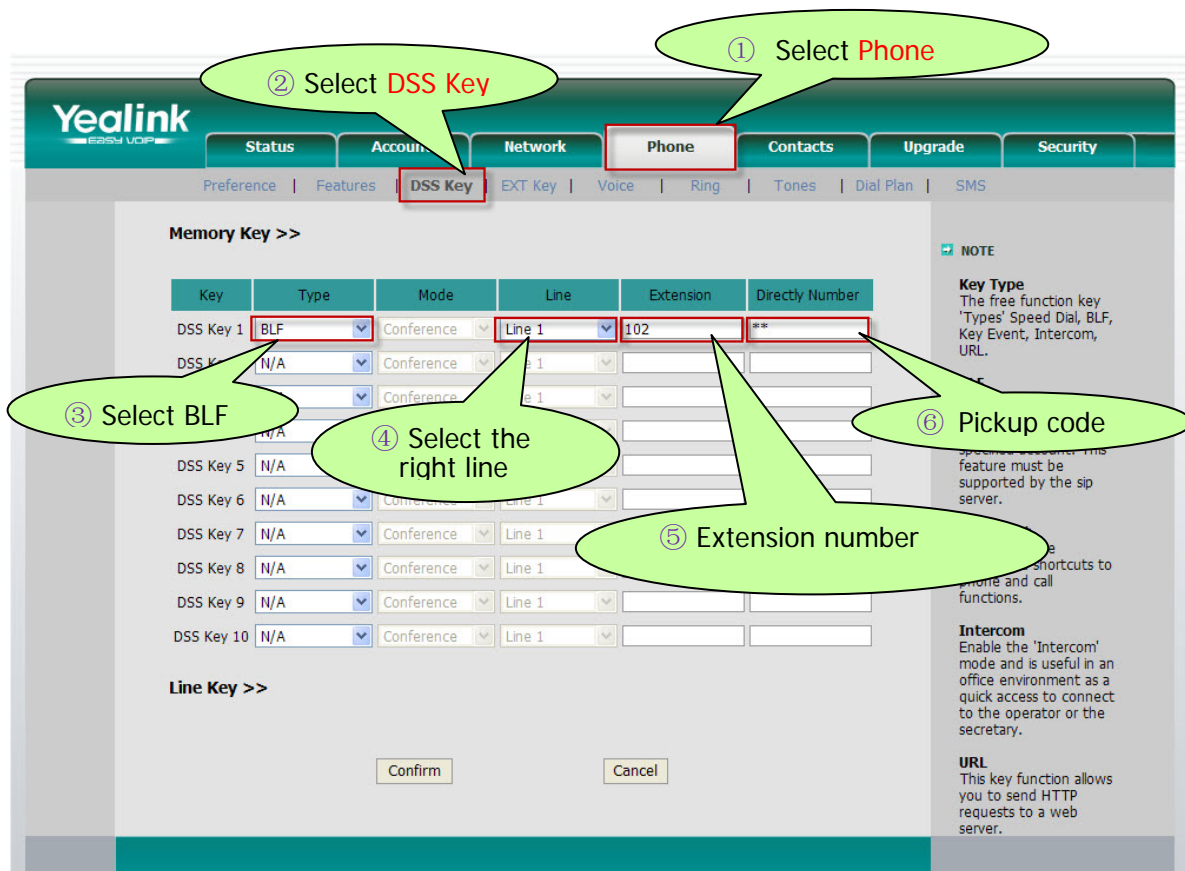
Yealink – Asterisk corresponding table for account settings:

Yealink	Asterisk
Register Name	User Extension
User Name	User Extension
Password	secret
Voice Mail	My Voicemail

After the above settings, Line 1 (Account1) must be available to make calls.

Note 2: If the SIP server is behind a NAT, you should enable “NAT Traversal” as “STUN” and then specify a STUN Server. For more details about STUN, please refer to <http://www.voip-info.org/wiki/view/STUN>. To know about NAT, you could refer to <http://www.voip-info.org/wiki/view/NAT+and+VOIP>

3. Configure the DSS Key as BLF



After the above settings, DSS Key1 is ready as BLF for Line 1 (Account1), monitoring extension 102.

4. Configure the DSS Key as Intercom

The screenshot shows the Yealink web interface with the 'Phone' tab selected. The 'DSS Key' sub-tab is active, displaying a table of DSS keys. Callout 1 points to the 'Phone' tab, callout 2 to the 'DSS Key' sub-tab, callout 3 to the 'Intercom' dropdown in the 'Type' column, callout 4 to the 'Line 1' dropdown in the 'Line' column, and callout 5 to the '*80102' text in the 'Extension' column.

Key	Type	Mode	Line	Extension	Directly Number
DSS Key 1	BLF	Conference	Line 1	102	**
DSS Key 2	KeyEvent	Call Park	Line 1	70	
DSS Key 3	Intercom	Conference	Line 1	*80102	
DSS Key 4	N/A	Conference	Line 1		
DSS Key 5	N/A	Conference	Line 1		
DSS Key 6	N/A	Conference	Line 1		
DSS Key 7	N/A	Conference	Line 1		
DSS Key 8	N/A	Conference	Line 1		
DSS Key 9	N/A	Conference	Line 1		
DSS Key 10	N/A	Conference	Line 1		

After the above settings, DSS Key3 will work as an Intercom key with extension 102.

5. How to auto provision

1) Use DHCP Option 66 to update firmware massively via HTTP

In this way, there's no need to configure at the phones.

- Specify an address(TFTP) for Option 66 in your DHCP Server

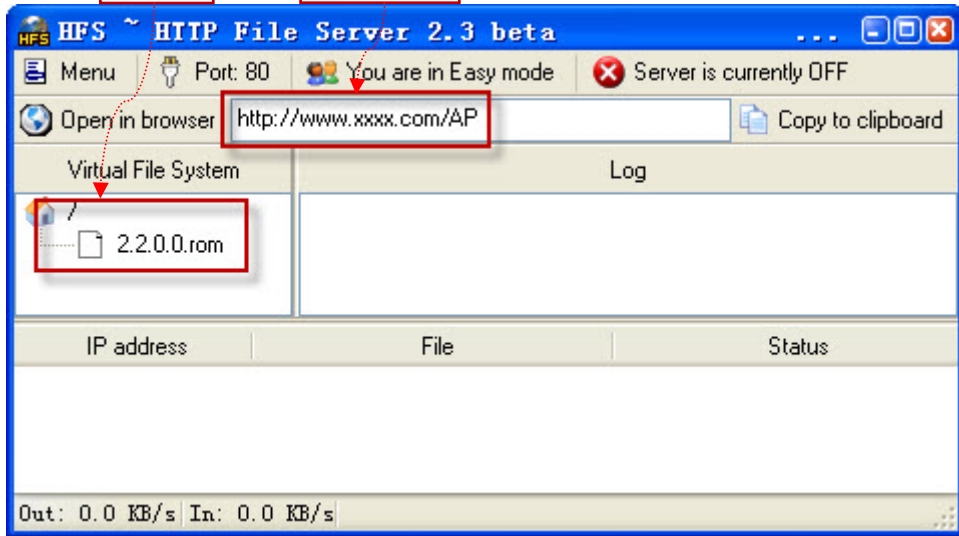
The screenshot shows a configuration window titled 'MS option 66'. The 'Address' field contains the IP address '192.168.0.231', which is highlighted by a red box and a callout bubble stating 'TFTP Server address in Option 66'. Other fields include 'Expression' (unchecked), a 'Build...' button, and 'OK', 'Cancel', and 'Advanced >>' buttons at the bottom.

- Prepare a CFG file as below

```
[ firmware ]
path = /tmp/download.cfg
server_type = http
server_port = 80
http_url = http://www.xxxx.com/AP/
firmware_name = 2.2.0.0.rom
```

Callouts:
 - HTTP Server (points to server_type = http)
 - Firmware name (points to firmware_name = 2.2.0.0.rom)
 - TFTP Server address in Option 66 (points to http_url = http://www.xxxx.com/AP/)

- ③ For T28, name the CFG file by y0000000000000.cfg and put it to TFTP server
 For T26, name the CFG file by y0000000000004.cfg and put it to TFTP server
 For T22, name the CFG file by y0000000000005.cfg and put it to TFTP server
 For T20, name the CFG file by y0000000000007.cfg and put it to TFTP server
- ④ Put the **firmware** to the **HTTP Server**



- ⑤ Power on the phones and they will download and update the firmware via HTTP

2) Configure the phone for update check when powering on

The screenshot shows the Yealink web interface with the 'Upgrade' tab selected. The 'Basic' sub-tab is active, displaying the following configuration options:

- Custom Option: (128 ~ 254)
- Custom Option Type: String
- URL: <http://www.xxxx.com/AP> (highlighted with a red box and labeled 'Provisioning server')
- Account: [Empty field]
- Password: [Empty field]
- Specified AES Key: [Empty field]
- Per-phone AES Key: [Empty field]
- PNP config: Disabled
- Check New Config: Power on (highlighted with a red box and labeled 'Select Power on')
- Click here to Autoprovision Now: Autoprovision
- Export / Import Config: [Empty field] 浏览...
- Import: [Button] Export: [Button]
- Export System Log: Local
- Export: [Button]

At the bottom, there are 'Confirm' and 'Cancel' buttons. On the right side, there is a 'Custom Option' section with explanatory text, an 'AES Key' section, a 'Click here to Autoprovision Now' button, an 'Export/Import Config' section, and a 'System Log' section.

The provisioning server must contain the CFG files. After the above settings, every time when power on, the phone will download the CFG files from <http://www.xxxx.com/AP> automatically.

Appendix

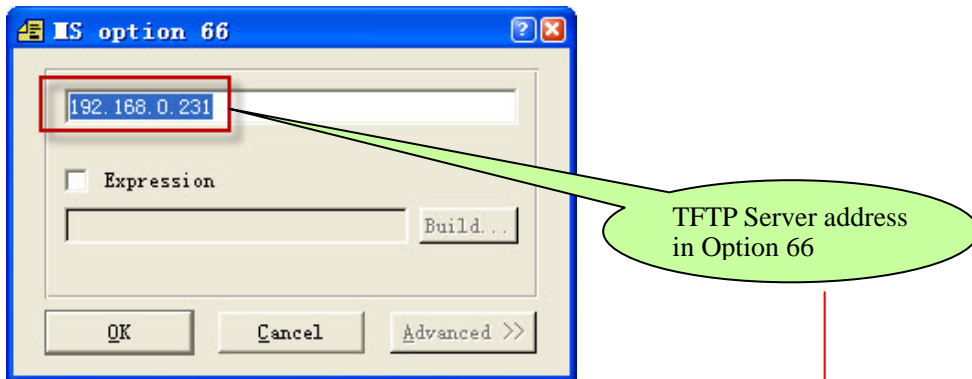
1. Default Basic Dial Code on Asterisk

Voice Mail (My Voicemail)	*97
Pickup a call	**
Intercom	*80

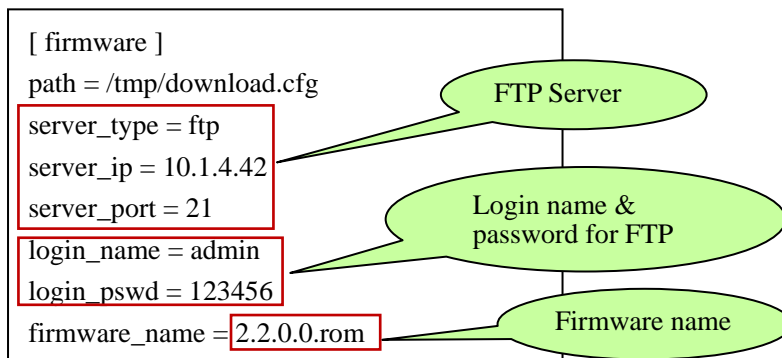
2. Use DHCP Option 66 to update firmware massively via FTP

In this way, there's no need to configure at the phones.

- Specify an address(TFTP) for Option 66 in your DHCP Server



- Prepare a CFG file as below

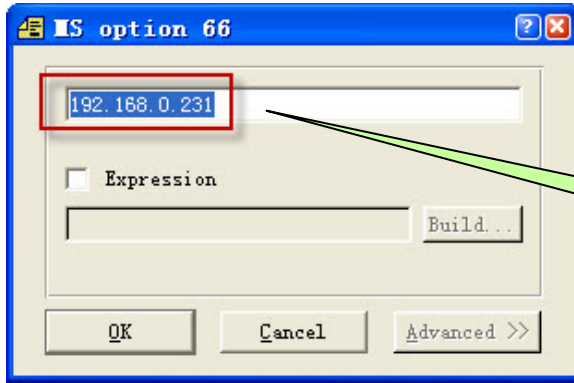


- For T28, name the CFG file by y0000000000000.cfg and put it to TFTP server
 For T26, name the CFG file by y0000000000004.cfg and put it to TFTP server
 For T22, name the CFG file by y0000000000005.cfg and put it to TFTP server
 For T20, name the CFG file by y0000000000007.cfg and put it to TFTP server
- Put the firmware to the FTP Server
- Power on the phones and they will download and update the firmware via FTP

3. Use DHCP Option 66 to update firmware massively via TFTP

In this way, there's no need to configure at the phones.

- Specify an address(TFTP) for Option 66 in your DHCP Server



TFTP Server address in Option

② Prepare a CFG file as below

```
[ firmware ]
path = /tmp/download.cfg
server_type = tftp
server_ip = 10.1.4.47
server_port = 69
firmware_name = 2.2.0.0.rom
```

TFTP Server

Firmware name

- ③ For T28, name the CFG file by y0000000000000.cfg and put it to TFTP server
- For T26, name the CFG file by y0000000000004.cfg and put it to TFTP server
- For T22, name the CFG file by y0000000000005.cfg and put it to TFTP server
- For T20, name the CFG file by y0000000000007.cfg and put it to TFTP server

④ Put the firmware to the TFTP Server

⑤ Power on the phones and they will download and update the firmware via TFTP