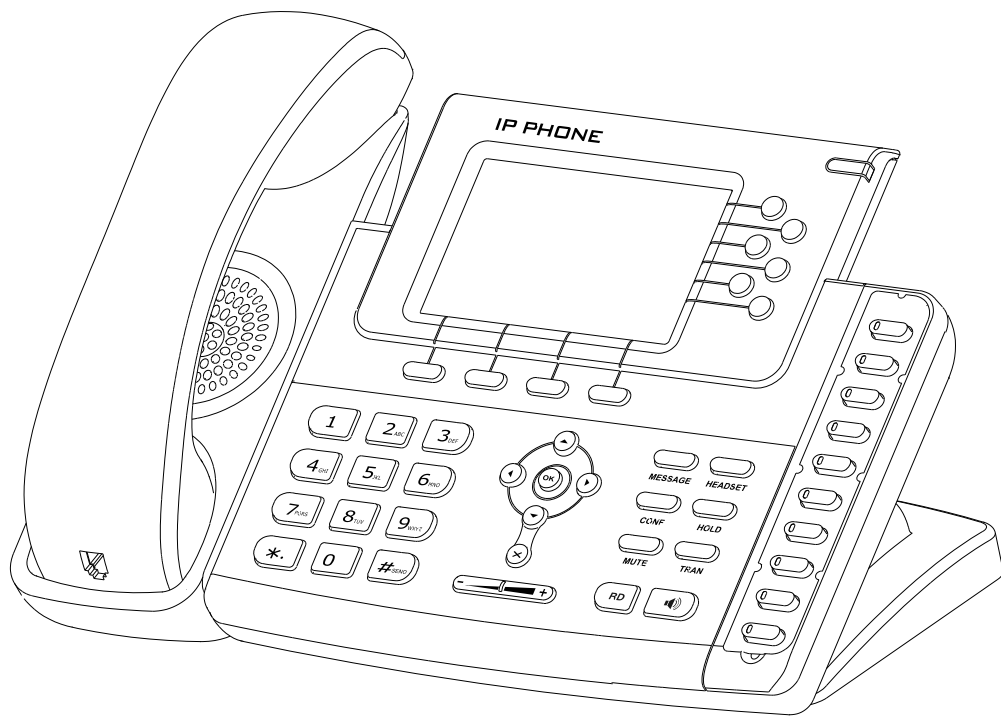


Configure Yealink IP Phones for 3CX Phone System



Facility Manual

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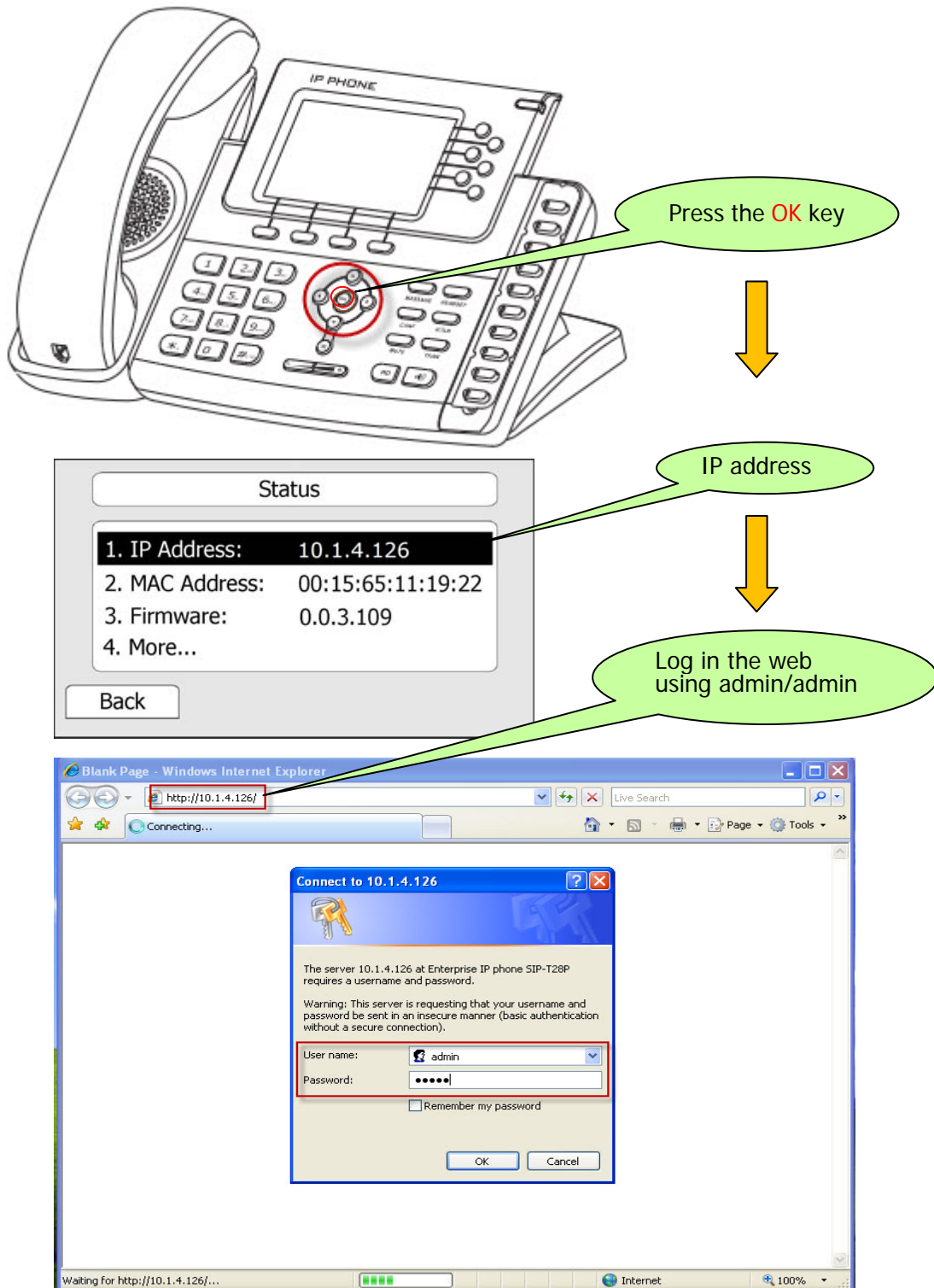
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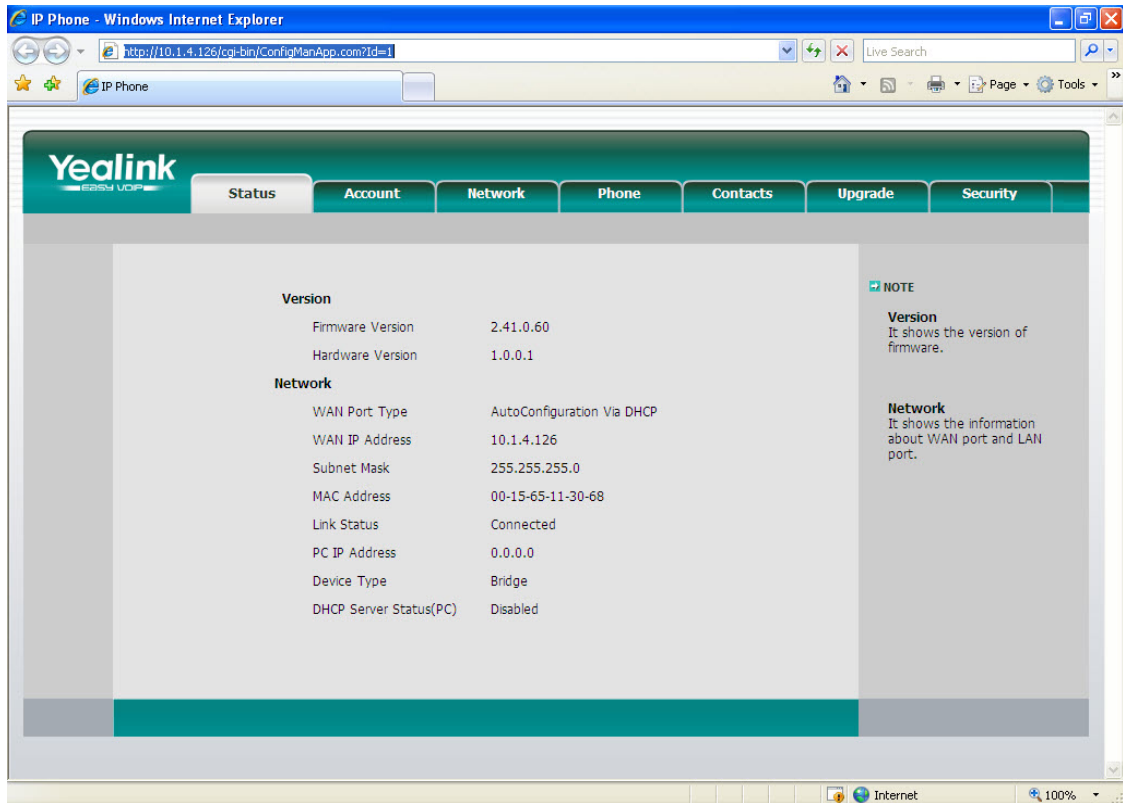
Configure Yealink IP Phones for 3CX Phone System

This document is going to show you how to configure a Yealink phone to work with 3CX Phone System.

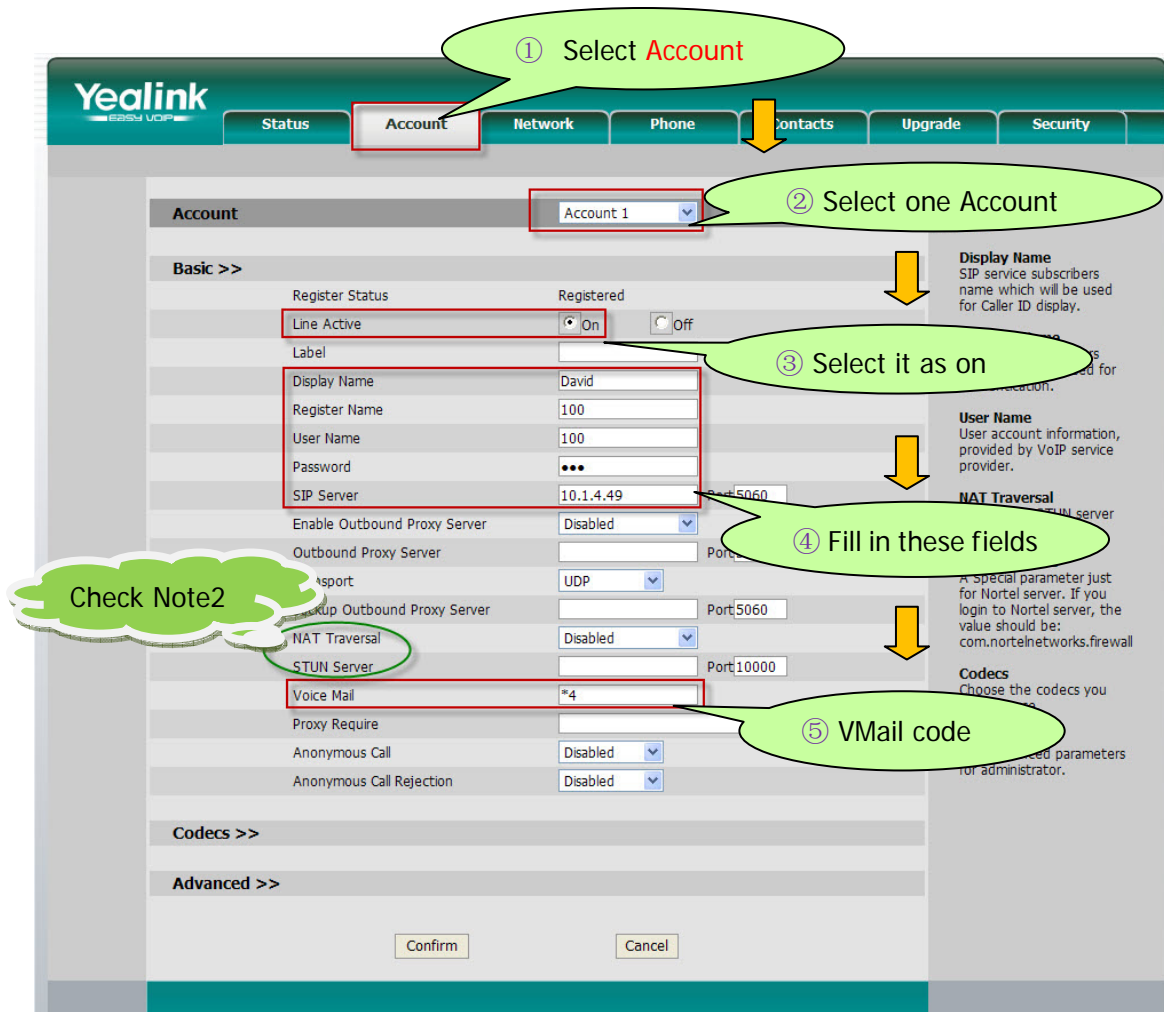
Note 1: The model we are using in this document is Yealink SIP-T28, and all the screen shots are based on its firmware version 2.41.0.60. There might be some difference between different models or firmware versions

1. Log in the web management





2. Configure the account



Yealink – 3CX corresponding table for account settings:

Yealink	3CX
Register Name	Authentication ID
User Name	Extension Number
Password	Authentication Password
Voice Mail	VMail

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

The screenshot shows the 'Phone' configuration page in the Yealink web interface. The 'DSS Key' tab is selected. A table titled 'Memory Key >>' is visible with the following data:

Key	Type	Mode	Line	Extension	Directly Number
DSS Key 1	BLF	Conference	Line 1	102	*20*
DSS Key 2	N/A	Conference	Line 1		
DSS Key 3	N/A	Conference	Line 1		
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		

Callouts in the image indicate the following steps:

- Select Phone
- Select DSS Key
- Select BLF
- Select the right line
- Extension number
- Pickup code

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 'DSS Key' configuration page in the Yealink web interface. The 'Phone' tab is selected. The 'DSS Key' sub-tab is active. A table lists DSS Key configurations:

Key	Type	Mode	Line	Extension	Directly Number
DSS Key 1	BLF	Conference	Line 1	102	*20*
DSS Key 2	KeyEvent	Call Park	Line 1	*00	
DSS Key 3	Intercom	Conference	Line 1	*9102	
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		

Callouts in the image point to: 1. 'Phone' tab, 2. 'DSS Key' sub-tab, 3. 'Intercom' dropdown, 4. 'Line 1' dropdown, and 5. '*9102' extension field.

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.

- ① Specify an address(TFTP) for Option 66 in your DHCP Server

The screenshot shows the 'option 66' configuration window. The IP address '192.168.0.231' is entered in the text field. A callout points to this field with the text 'TFTP Server address in Option 66'.

- ② Prepare a CFG file as below

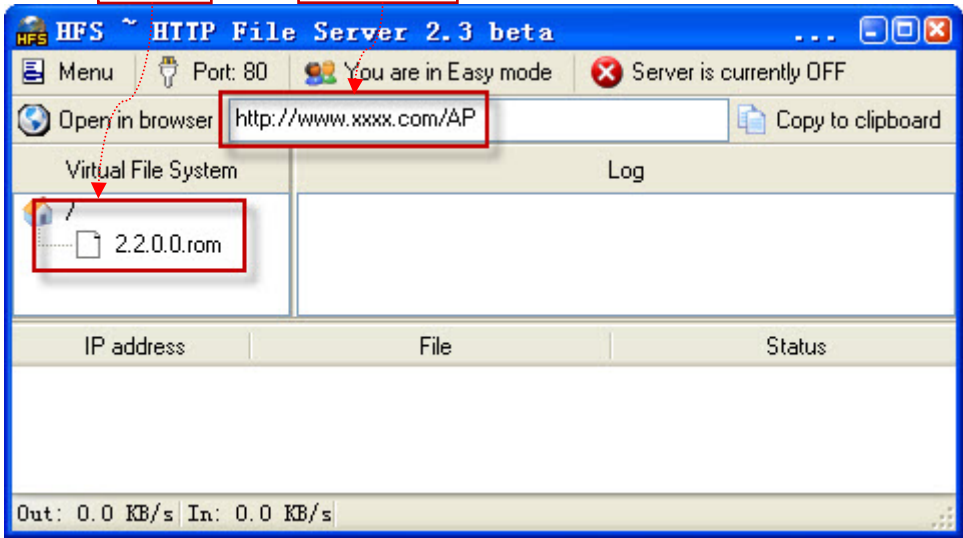
```
[ firmware ]
path = /tmp/download.cfg
server_type = http
server_port = 80
http_url = http://www.xxxx.com/AP/
firmware_name = 2.2.0.0.rom
```

HTTP Server

Firmware name

TFTP Server address in Option 66

- 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 E889 V01P web interface. The 'Upgrade' tab is selected, and the 'Basic' sub-tab is active. The 'URL' field is highlighted with a red box and labeled 'Provisioning server'. The 'Check New Config' dropdown is highlighted with a red box and labeled 'Select Power on'. The interface includes tabs for Status, Account, Network, Phone, Contacts, Upgrade, and Security. The 'Upgrade' tab is active, showing 'Basic' and 'Advanced' sub-tabs. The 'Basic' sub-tab is selected, displaying various configuration fields and buttons.

Field	Value
Custom Option	(128 ~ 254)
Custom Option Type	String
URL	http://www.xxxx.com/AP
Account	
Password	
Specified AES Key	
Per-phone AES Key	
PNP config	Disabled
Check New Config	Power on
Click here to Autoprovision Now	Autoprovision
Export / Import Config	浏览...
Export System Log	Local

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

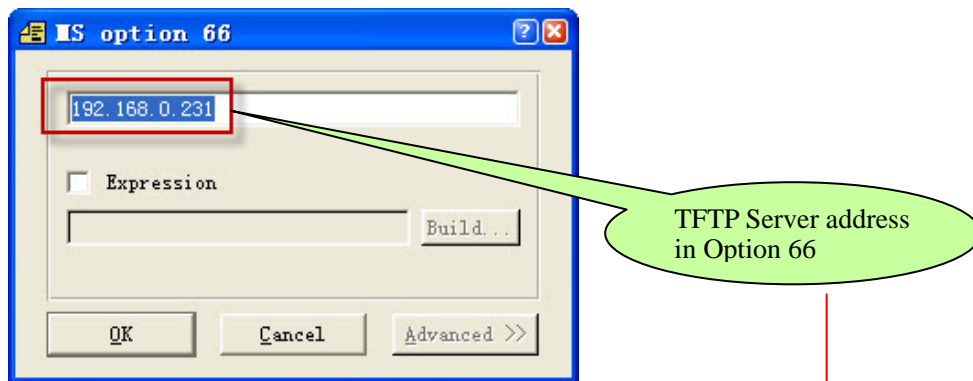
1. Default Basic Dial Code on 3CX Phone System

Voice Mail (VMail)	*4 or 999
Pickup a call	*20*
Intercom	*9

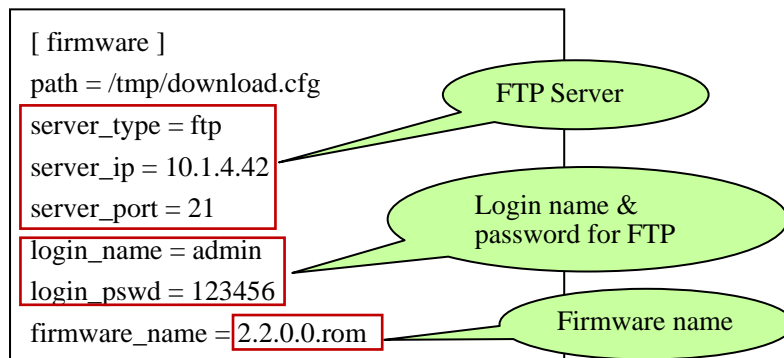
2. Use DHCP Option 66 to update firmware massively via FTP

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

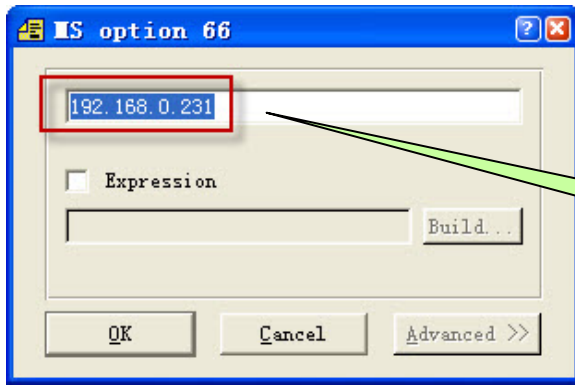


- For T28, name the CFG file by y0000000000000.cfg and put it to TFTP server
 For T26, name the CFG file by y0000000000004.cfg and put it to TFTP server
 For T22, name the CFG file by y0000000000005.cfg and put it to TFTP server
 For T20, name the CFG file by y0000000000007.cfg and put it to TFTP server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