

Recovery mode update for Yealink IP Phones

Summary: You may need to follow a recovery mode update when the phone cannot well boot up. Briefly, the procedure is to prepare a TFTP server, put the wanted firmware to the TFTP server and rename the firmware to the right form, and then enable the phone to update the firmware via the TFTP server.

Operation Procedure:

1. To start a TFTP server. (For example, the server address is 192.168.0.3)

We may use “3CDaemon” software as the TFTP server. Configurations are as below:

The screenshot displays the 3CDaemon application window. On the left, a black panel shows the TFTP Server status with several icons and text: 'TFTP Server', 'TFTP Server is started. Click here to stop it.', 'Logging to Tftpd.log. Click to stop.', 'Not debugging. Click to start.', 'Clear list.', and 'View Log/Debug files.'. A callout bubble points to the 'TFTP Server' icon with the text: 'Click here to configure the directory of the TFTP'. On the right, the '3CDaemon Configuration' dialog box is open, showing the 'TFTP Configuration' tab. The 'Upload/Download directory' field is set to 'D:\tftp' and is highlighted with a red box. A callout bubble points to this field with the text: 'Choose certain file path as the directory of the TFTP'. The dialog also shows checkboxes for 'Create directory names in incoming file requests?' (checked) and 'Allow overwrite of existing files?' (unchecked), and input fields for 'Per-packet timeout in seconds (2-15): 5', 'Maximum retries (5-20): 10', and 'Interframe transmission gap: 0'. The main window has a table with columns 'Start Time', 'Peer', 'Bytes', and 'Status', showing a single entry: 'Apr 27, 2011 15:50:30 local 0 Listening for TFTP requests on IP address: 10.1.3.227, Port 69'. At the bottom of the main window, there are buttons for 'OK', 'Cancel', and 'Apply'.

(This step can be skipped if you have your own TFTP server.)

2. To prepare a firmware for update (T38 should prepare a firmware and a .bin document) . Put it to the TFTP server's root directory.

3. Rename the firmware, following the rule:

t38.rom and t38.bin for T38

t32.rom and t32.bin for T32

t28.rom for T28

t26.rom for T26

t22.rom for T22

t20.rom for T20

t12.rom for T12

Only the above 6 Yealink models support this kind of recovery mode update.

4. To long press the Speaker button as soon as you power on the phone.

5. A prompt will display on the LCD, requesting for IP Address, Netmask, IP Gateway and TFTP server. By pressing up/down/left/right navigation keys, you could switch among the fields. As below (the value below are just for reference. Depending on your network environment, you should specify right value for each of them) :

1. IP Address: 192.168.0.222
2. Netmask: 255.255.255.0
3. IP Gateway: 192.168.0.1
4. TFTP Server: 192.168.0.3

6. After filling the right value, press OK button to go on or press cancel button to quit recovery mode. By pressing the OK button, the phone will go to download the firmware and update, during when it will show on the LCD:
(just an example, it may differ on different models)

...Updating...

Please wait...

7. If it fails, it will show:

...Update fail...

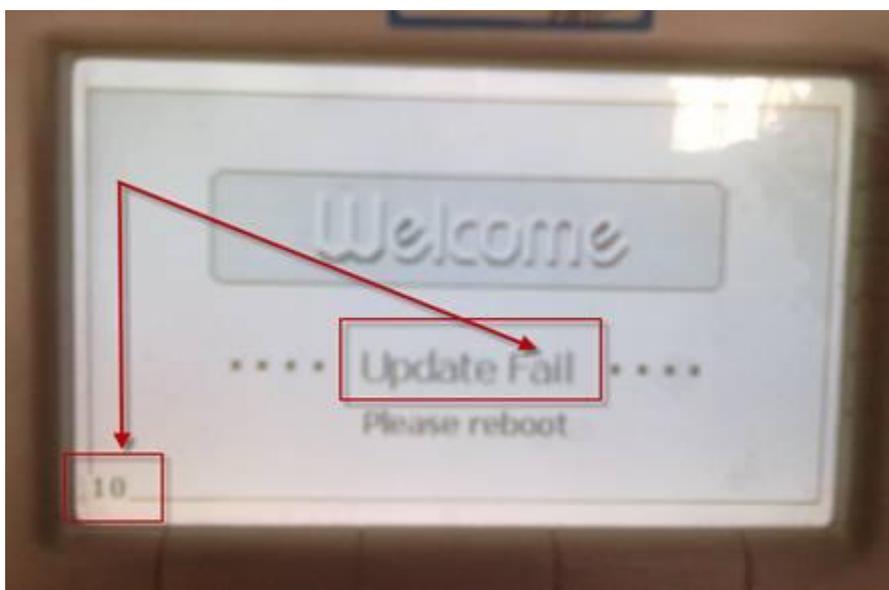
Please reboot

Normally, it is because that the TFTP server cannot be reached or there's no right firmware for update. Please check the connection and settings.

Note:

1. Comparing to a HTTP or FTP method, the TFTP behaves much slower, so it may take long time (maybe more than 10 minutes) for the entire updating.

2. Not all Yealink models support recovery mode update. (It is ensured to be ok on those units shipped after August 2009)
3. It needs the firmware support. (The version needs to be higher than x.41.x.x except T38 .)
4. Sometimes the recovery mode may also fail, please check below explanation:



1. From the picture, we can find the “Update Fail” page, and on the left corner it showing a number “10”. This is a page appears after the fail of recovery mode upgrade.
2. Regarding to the left corner number, we have 12 kinds of situations, check below:

Define	Number	Explains
#define WEB_UPD_SUCC	0	/* update successful */
#define WEB_UPD_PACKET_INVALID	1	/* illegal file */
#define WEB_UPD_TYPE_ERR	2	/* the package format is not

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compatible*/

#define WEB_UPD_LEN_ERR          3      /* LEN value is not matching
with the size of the cache data*/

#define WEB_UPD_HW_VER_ERR      4      /* The Hardware version is not
matched */

#define WEB_UPD_XOR_ERR         5      /* The vision and the
calibration error or packets */

#define WEB_UPD_MALLOC_ERR      6      /* the error of flash */

#define WEB_UPD_SUB_TYPE_ERR    7      /* the error of the subitem
data package */

#define WEB_UPD_NO_UPDATE       8      /* there is no need to update */

#define WEB_UPD_FLASH_ERR       9      /*the faulty of write/read of
flash*/

#define WEB_UPD_FAIL            10     /* update failed */

#define WEB_UPD_PROT_VER_ERR    11     /* the protocol version is faulty
*/

#define WEB_UPD_SW_PROTECT      12     /* the difference on the
Software protect symbol */

```