

## Use a TFTP Server to load Thomson Firmware

An explanation on how to load firmware in to SpeedTouch/Thomson/Technicolor modem-routers reliably using TFTP. *It is recommended that you read the complete document first.*

### Overview:

- 1. General requirements
- 2. Set a static IP on the computer connection
- 3. Prepare the TFTP Server + firmware
- 4. Set the router into BOOTP mode
- 5. Firmware transfer and reboot

### Requirements:

First you will have to make some preparations. You will need:

- 1. A TFTP server. You can download a TFTP server (jounin TFTPd32) from:  
<http://www.jounin.net/tftpd32.html>>

*\* The jounin server consists of 3 files - no installation needed. In this example we have used standalone version 3.28*

- 2. The Firmware file in a BOOTP version - they usually end in '.bin' or '.bli'. Make 100% sure you have the right firmware for your make and model.
- 3. A single PC/Laptop connected to the modem using an ethernet cable. Unplug the DSL line. Verify that the connection works! Turn off your firewall as necessary.

*Put all 3 jounin files together into a folder. Put the firmware file into the same folder, and make a note of the filename.*

When this is taken care of, proceed to the next steps >>

### **1 Set your LAN adapter to a static IP:**

Control Panel >> Network Connections >> (highlight) Local Area Connection (LAN) icon  
>> Properties >> (highlight) Internet Protocol (TCP/IP) >> Click 'Properties'

Click 'Use the following IP Address' & add:

IP address: 192.168.1.64

Subnet Mask: 255.255.255.0

Default Gateway IP: 192.168.1.254 < *this should be the IP address of your modem* >

Click 'OK', 'OK'

### **2 Prepare the TFTP Server + firmware:**

Start the jounin tftpd32.exe file

Click on 'Settings':

Put a tick within 'Bind DHCP to this address:' & enter '192.168.1.64'

< *this is the local IP address of the PC where the TFTP service runs* >

Press 'OK'

Enter the following into the DHCP server tab:

IP Pool starting address: 192.168.1.254

< *this should be the IP address of your modem* >

Size of pool: 1

Boot File: <name-of-firmware-file>

Mask: 255.255.255.0

Everything else blank.

Click on 'Save' to save setup

### **3 Set the Speedtouch/Thomson/Technicolor Modem into BOOTP mode:**

Press the recessed reset button on the rear of the modem using a paperclip. After a while the lights go off and power turns to red. Then the power will change to orange and the ethernet light will intermediately flash green. When the power is orange and the ethernet flashes green the device is in BOOTP mode and you have to let go of the reset button.

You should now see the requests for ip, the ip passed to the modem and the start of the firmware transfer to the modem in the TFTP server logging. See example below.

#### **4 Wait for the firmware transfer to complete.**

WARNING: !!! DO NOT SHUT OFF THE MODEM !!! If for some reason, at some point during the transfer, something goes wrong, the up- or downgrade will fail, the BOOTP mode will time-out and the modem will reboot with the old firmware still in place.

During the upload the power light will go solid and the ethernet flashes. You don't need to do anything. The speedtouch will check the file and load it into flash and reboot itself. The modem should just come up with a green power light afterwards.

Don't forget to change your local area connection ethernet back to dhcp and reactivate your firewall!

Go to the webinterface (<http://192.168.1.254>) and run the setup wizard to get your internet connection up and running!

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#### **Example log:**

```
Rcvd BootP Msg for IP 0.0.0.0, Mac 00:0E:50:CA:55:C2 [26/05 17:28:15.001]
DHCP: proposed address 10.0.0.138 [26/05 17:28:15.011]
Rcvd BootP Msg for IP 0.0.0.0, Mac 00:0E:50:CA:55:C2 [26/05 17:28:15.992]
DHCP: proposed address 10.0.0.138 [26/05 17:28:16.002]
Read request for file <zztxaa540e.bin>. Mode octet [26/05 17:28:16.233]
Using local port 1143 [26/05 17:28:16.233]
Rcvd DHCP Rqst Msg for IP 0.0.0.0, Mac 00:11:D8:BA:DB:D5 [26/05 17:28:18.736]
<zztxaa540e.bin>: sent 4100 blks, 2098763 bytes in 25 s. 0 blk resent [26/05 17:28:41.629]
```

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