



EMI-One Main Module Software Update Manual

v.2.0

Introduction

The following manual describes procedures to update the firmware of the EMI-One main module. It should be carried out by qualified persons only.

Apra-optinet company shall not be liable for any loss due to incorrect update process and related malfunction of the software.

Warning!

Software updates should only be installed within a stable LAN and power environment. Interrupting the update process can permanently damage the module.

When updating the module software, the computer and the EMI-One target device should operate in the same LAN subnet. It is recommended to use update files from authorised distribution only. The usage of corrupted, modified or incorrect update files can permanently damage your device !

If you have any questions or problems updating your device, please contact Apra-optinet.

Update procedure

1. After receiving a compressed folder with source files (named *EMI-One Firmware v x.x*), unpack it to a known location on your computer.
2. Check if the current software version is earlier (has a lower number) than the requested one. To do so, connect with the EMI-One device and go to the *Settings* -> *General* tab in the *System Information* section and check the current software version (Figure 1).

SYSTEM INFORMATION	
BOOTLOADER VERSION :	2.0.0
FIRMWARE VERSION :	2.1.1
FIRMWARE UPGRADE :	<input type="button" value="PROGRAMMING MODE"/>
<input type="button" value="SYSTEM RESTART"/>	

Figure 1

3. TFTP server is required for the update process. For the purpose of the Manual, we used TFTP32 server, which can be downloaded for free from the author's website at http://tftpd32.jounin.net/tftpd32_download.html.

Figure 2 shows the program window after startup.

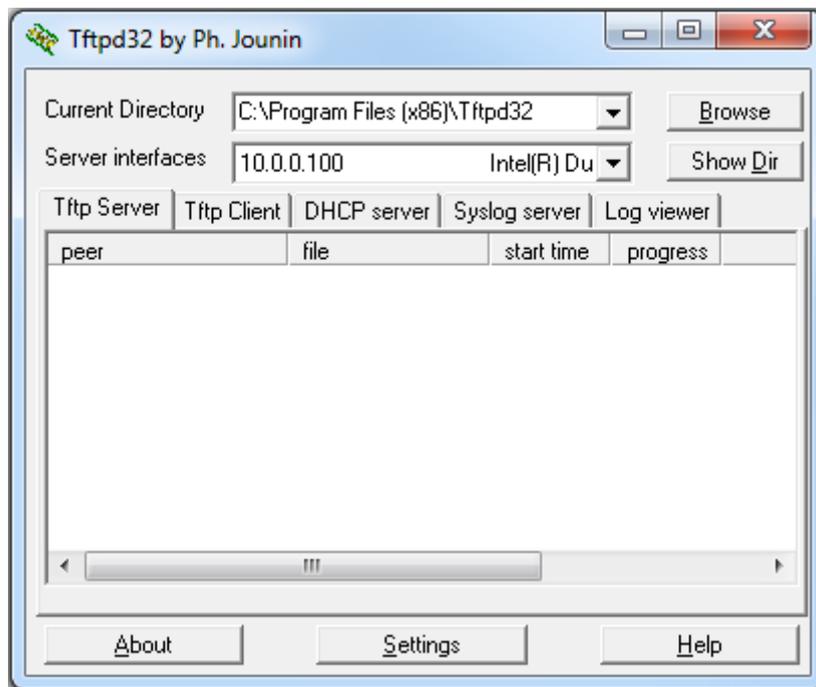


Figure 2

4. Connect to the EMI-One web interface that you want to update (default address is 192.168.1.10).

In the *Basic Settings* section, go to the *Settings -> General* tab, and in the *Server IP* field (see Figure 3) select the IP address of the computer (containing software files and running TFTP server), from which the update will be installed.

Click **SAVE & RESTART** to confirm the changes.

BASIC SETTINGS	
MAC ADDRESS :	00.08.DC.1F.00.4B
IP ADDRESS :	192.168.1.10
IP PORT :	80
SUBNET MASK :	255.255.255.0
DEFAULT GATEWAY :	192.168.1.1
DNS SERVER ADDERSS :	192.168.1.1
SERVER IP :	192.168.1.123
DEVICE LABEL :	EMI - One Web Server
DISPLAY MESSAGE BOX :	
GPS COORDINATES :	50.6840393 17.877063
CARD READER TYPE :	MIFARE
SERVER DATA PUSH (SOCKET) :	<input type="checkbox"/>
REMOTE HANDLE CONTROL :	<input checked="" type="checkbox"/>
TWO STAGE AUTHORISATION (PAIRS) :	<input type="checkbox"/>
SAVE SAVE RESTART	

Figure 3

5. In the *TFTP32* program window, in the *Tftp Server* tab, click *Browse* to change the location and then in the newly opened file explorer window, select the folder that contains the desired software image.
6. In the *System Information* section, go to the *Settings -> General* tab, select *Programming Mode* (see Figure 4) and confirm your selection.

SYSTEM INFORMATION	
BOOTLOADER VERSION :	2.0.0
FIRMWARE VERSION :	2.1.1
FIRMWARE UPGRADE :	PROGRAMMING MODE
SYSTEM RESTART	

Figure 4

Warning! Before starting the update process, make sure that there are no other tabs open that are refreshing in the background, e.g the EMI-One webserver status page.

- The module will switch to update mode and search for the server with the specified IP address. Red LEDs on the device will start flashing rapidly.
 - Finding the server and starting the update process is signalled by 2 beeps.
 - The firmware update process can take up to 30 seconds – don't disconnect the device from power while the process is running!
 - Finishing the update download is signalled by 4 beeps. The module will automatically restart and, depending on the update type, will start restoring the default settings. At this case, wait until the process is finished (until blue backlight pulses appear)!

If the update server is not found within 30 seconds of the programming mode activation, the module will terminate the process and restart in standard mode.

If the update process (software download after finding the server) started but was interrupted:

- Remove the DC plug to turn the power off,
- Follow steps 4 and 5 of this manual,
- With a thin object, for example a paper clip, press and hold the button located in the hole on the right side of the Apra logo on the module panel,
- While holding down the button, connect the power to the device and release the button after approx. 2 seconds. It will force the device into update mode. Go back to step 7.