Firmware Recovery

Contents

Step by Step Firmware Recovery

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Contents: How to recover a broken AirOS device

Requirements:

- UBNT device to upgrade ;-)
- A narrow tool like the pin of a headset or paper clip to press down reset button
- An Ethernet Cable
- A PC or Laptop *already* configured to access the units (es. [1] (http://www.ubnt.com/wiki/How_to_set_your_computer_up_to_talk_with_UBNT_devices))
- Network settings of PC: 192.168.1.254/255.255.255.0
- TFTP client running on PC
- AirOS firmware file (e.g. *XS2.ar2316.v3.4-rc.4351.090504.2146.bin*... you can find it on AirOS Support Page (http://ubnt.com/support/airos.php) , check for your device!)

Note: this guide refers to a PC running Windows, but is easly applicable to any other OS.

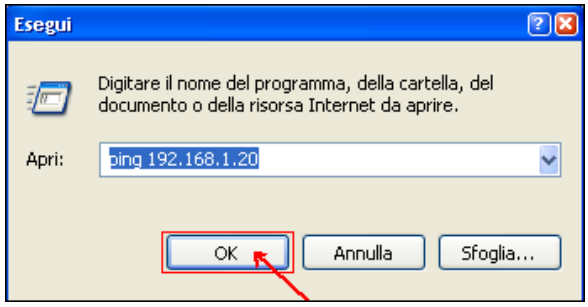
IMPORTANT!

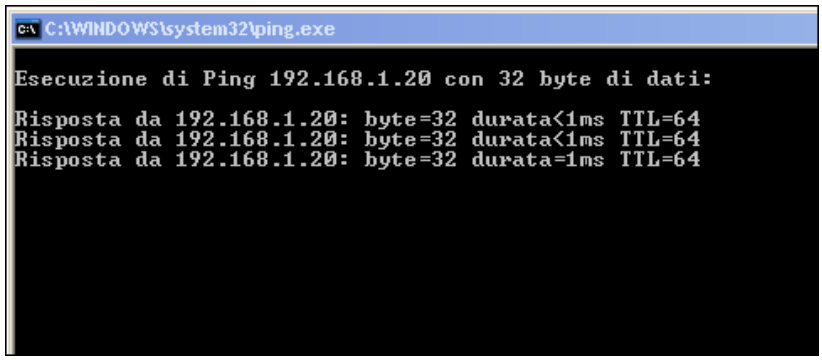
- Do **not** switch off, do **not** reboot and do **not** disconnect the device from the power supply during the firmware upgrade process, as these actions will damage the device!

Recovery procedure (applies to AirOS devices running firmware v1.5 or higher)

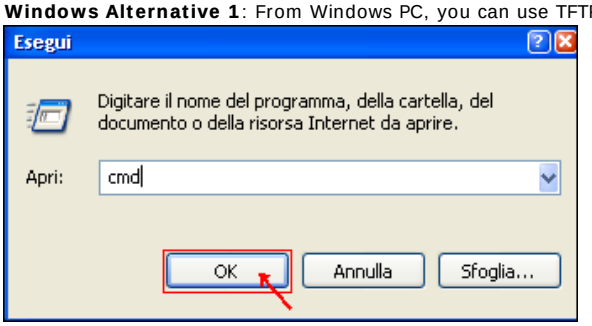
Windows Users

1. First of all, power off the device
2. Setup your PC (http://www.ubnt.com/wiki/How_to_set_your_computer_up_to_talk_with_UBNT_devices) : Windows PC's Ethernet must be configured manually with the following settings (under Network Connections):
   IP Address: 192.168.1.254, Subnet Mask : 255.255.255.0
3. Connect AirOS device to PC
4. Begin by depressing the reset button. Keep holding, then power the unit on. Wait 8 seconds then release the button (if you want to reset the unit to factory defaults, wait at least 15 seconds). Signal LEDs will be lit indicating that the device is ready for recovery
5. Make sure that AirOS device responds to pings (perform a *ping 192.168.1.20* from a DOS window), if it does not, go back to the first step



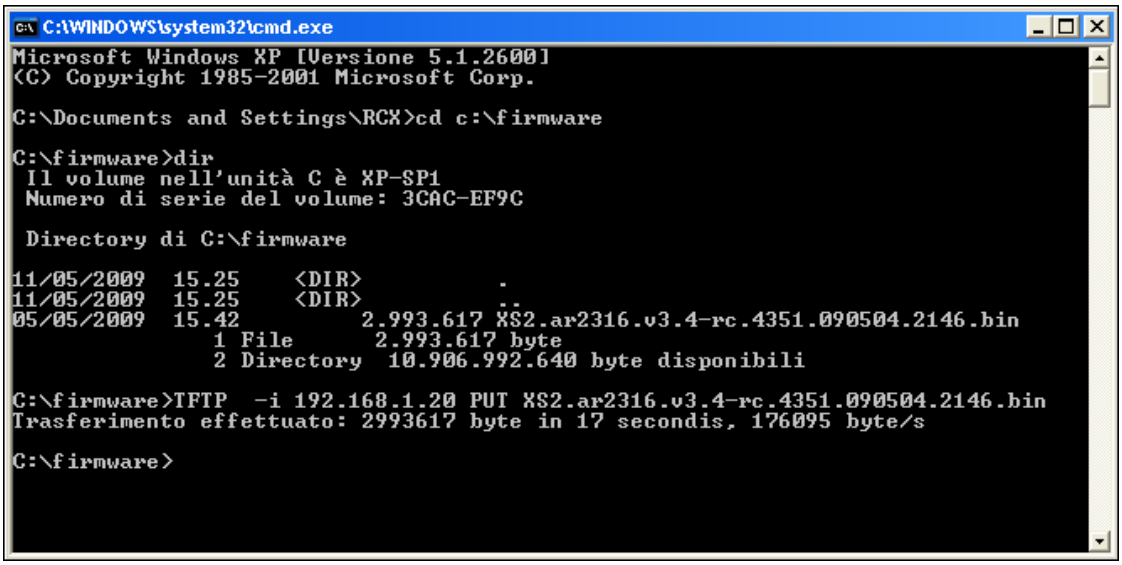


6. Upload firmware image file *.bin* to 192.168.1.20, using a TFTP client software (binary mode). Windows integrated command line TFTP client or download a third party utility to upload the AirOS firmware. Below are two examples:
   1. **Windows Alternative 1**: From Windows PC, you can use TFTP command line from a DOS window (START>>>CMD):

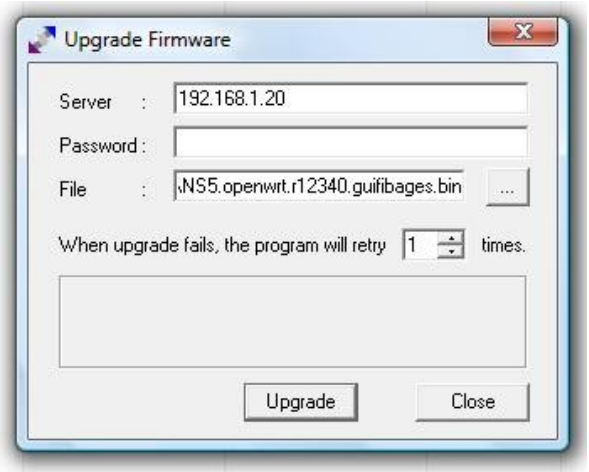


Go into the same directory structure as the firmware (e.g., assuming that you have stored the image files in *c:\firmware* directory, type the command :**`cd c:\firmware`**) and enter the following (for help type TFTP -h) , e.g.:

tftp -i 192.168.1.20 put XS2.ar2316.v3.4-rc.4351.090504.2146.bin



2. **Windows Alternative 2**: Download and execute tftp2 (http://www.dd-wrt.com/dd-wrtv2/downloads/others/tornado/Windows-TFTP/tftp2.exe) and configure it as in the image to upgrade.



7. Signal LEDs will keep blinking one by one in 4 different colors during firmware upgrade. Wait for about 7-10 minutes (devices and firmware depending) - do not power off the device during the procedure!

Linux Users

Generic Linux distributions have an integrated command line TFTP client. From a PC running Linux, you can upload via TFTP by typing into Terminal the following commands:

```
root@ubuntu:tftp 192.168.1.20
tftp> bin
tftp> trace
tftp> put XS2.ar2316.v3.4-rc.4351.090504.2146.bin
Sent 1965199 bytes in 35.2 seconds
tftp> exit
```