Flashing TM-AC1900 to RT-AC68U/P

Here's the simplest method I know of for flashing a TM-AC1900 to a RT-AC68U or RT-AC68P. As this is a free resource please write questions in the comments below – **do not call or email my business or use contact form**.

WARNING: Do not update to new Asus or Merlin builds without executing code for fixing mtd5 partition.

How to flash AC1900 to AC68U:

1. Install WinSCP, Putty, and a file archiver (click this link for ez). Install the Asus Restore Utility, mirror.
2. Create a folder on your desktop, name it "router".
3. Download this file and extract it to the newly made router folder. It contains a firmware to downgrade to, a firmware to upgrade to, and mtd-write.
4. Set static IP for PC.
   start > run > ncpa.cpl > double click Ethernet > properties > IPV4 >
   IP: 192.168.29.5
   Subnet: Default (255.255.255.0)
   Gateway: 192.168.29.1
5. Place router into Recovery/Restore mode
   Hold reset button 10 seconds
   Power off router (keep holding reset)
   Wait 10 seconds, keep holding reset
   Power on router holding reset for 10 more seconds
6. Go to 192.168.29.1 in a web browser
   If Mini-CFE webpage won't load use Asus Restore Utility

If having trouble with this step perform NVRam Reset and try #6 again (see step #20)

7. Flash TM-AC1900_3.0.0.4_376_1703-g0ffdbba.trx
8. Wait for reboot <5 mins – WiFi lights on router will turn on when boot is complete
9. Log in to router (admin:password)
10. Go to Administration > System > Enable SSH > Yes > Apply
    Ezlink: http://192.168.29.1/Advanced_System_Content.asp
11. Open Putty and WinSCP and connect them to 192.168.29.1 using a admin:admin or admin:password
    Tip: In WinSCP select SCP as file protocol, in Putty SSH
12. In putty type:
    ```
    cat /dev/mtd0 > original_cfe.bin
    ```
13. In WinSCP refresh the window on the right side and note that original_cfe.bin is present
14. Copy original_cfe.bin to a local drive
15. Upload original_cfe.bin to https://cfeditor.pipeline.sh/ > Select 1.0.2.0 US AiMesh as Source CFE > Download the new .bin > rename it to new_cfe.bin
16. Upload **new_cfe.bin** & **mtd-write** & **FW_RT_AC68U_30043763626.trx** to router through WinSCP
17. In Putty type:
    ```
    chmod u+x mtd-write
    ```
18. In Putty type:
    ```
    ./mtd-write new_cfe.bin boot
    ```
19. In Putty type:
    ```
    mtd-write2 FW_RT_AC68U_30043763626.trx linux
    ```
20. Perform NVRAM Reset, wait for reboot <5 mins
    a. Power off router
    b. Wait 10 seconds
    c. Press and hold WPS button
    d. Power up the router and continue to hold WPS button for 15-20 seconds until power LED starts blinking very quickly.

21. Reset PC IP back to default
22. Log in to router using 192.168.1.1 and the router is now an AC68U with 64MB jffs username:/password is now: admin:admin
23. Enable SSH (see #10) and execute the code for fixing MTD5 partition that is listed below.
    Ezlink: http://192.168.1.1/Advanced_System_Content.asp
24. You can now flash Asus, Merlin, Advanced Tomato, Tomato, and DD-WRT firmwares.

Code for fixing MTD5 partition so you can update to latest firmware:
(this is entered in Putty after enabling SSH on the router)

```
cat /dev/mtd5 > /jffs/mtd5_backup.bin
mkdir /tmp/asus_jffs
mount -t jffs2 /dev/mtdblock5 /tmp/asus_jffs
```

```
rm -rf /tmp/asus_jffs/*
sync && umount /tmp/asus_jffs
rm -rf /jffs/.sys/RT-AC68U
nvram unset fw_check && nvram commit && reboot
```

Video Example:

- *Windows*
- *Mac*

References Used:

- Snbforums.com flash instructions: flashInstructions_cDec04_16.pdf
- Bootymonger from slickdeals: slickdeals.net
- Wherever I found https://cfeditor.pipeline.sh/
- Comment from Albert Lee

Flashable Operating Systems:

- Merlin AC68U Builds
- Official Builds
- Advanced Tomato
- Tomato by Shibby
- DD-WRT

Helpful information:

- Asus Rebadger is a script that automates this process on a Windows 10 PC.
- If you have a fast connection you may benefit from Merlin or official builds as they have enabled hardware acceleration which allows the router to handle higher speeds.
- You may check router cpu speed at http://192.168.1.1/Tools_Sysinfo.asp
- If the 30/30/30 reset doesn't work try this:
  1. power off device
  2. hold reset 20 seconds
  3. power on device holding reset until power light blinks slowly
- If you can't get Mini-CFE or Asus Restore utility to work try the method outlined in this comment: https://www.bayareatechpros.com/ac1900-to-ac68u/#comment-5679
- There is discussion on the topic at whirlpool forums.

Directions for rolling back to AC68 after AC1900 rollback:

- comment-1665
- Direct Google Docs Link
- Mega.nz Mirror