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The orig firmware is based on openwrt.

## Hardware

**THESE INSTRUCTIONS ARE FOR THE VERSION 3 MODEL ONLY!** For V2 see [HERE](#).

- Also: V1, V4, and V5 are in the [incompatible devices list](#).

Specifications:

- CPU: Atheros AR7241
- RAM: 32 MB
- Flash: 4 MB
- LAN/WAN: 4/1 (100 Mb/s)

**Max build size for flashing is 3648 KB, larger builds may fail or BRICK so verify size before flash.[1]**

## MTD Partitions

### OEM (OpenWRT-based) Boot Log:

```
U-Boot 1.1.4-g3394515c (Jun 21 2010 - 10:20:58)
WNR2000v3 (ar7241) U-boot dn11 V0.6
[...]
Kernel command line: console=ttyS0,115200 root=31:08 rootfstype=squashfs init=/etc/preinit mtdpart
[...]
Starting kernel ...
Booting AR7240(Python)...
Linux version 2.6.15 (alime@alime-laptop) (gcc version 3.4.4 (OpenWrt-2.0)) #1 Wed Sep 29 12:23:2
[...]
9 cmdlinepart partitions found on MTD device ar7240-nor0
Creating 9 MTD partitions on "ar7240-nor0":
0x00000000-0x00040000 : "u-boot"
0x00040000-0x00050000 : "u-boot-env"
0x00050000-0x003a0000 : "rootfs"
0x003a0000-0x003b0000 : "config"
```

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```
0x003b0000-0x003d0000 : "language_table"  
0x003d0000-0x003e0000 : "pot"  
0x003e0000-0x003f0000 : "traffic_meter"  
0x003f0000-0x00400000 : "ART"  
0x00050040-0x003a0000 : "mount_fs"  
mtd: partition "mount_fs" doesn't start on an erase block boundary -- force read-only
```

[1]DD-WRT flash limit: 0x3e0000 - 0x50000 = **3648 KB**

## Initial flashing instruction

For initial flashing just flash the appropriate DD-WRT overtake image file (WW (Worldwide), NA (North America)) through the web interface. After the reboot DD-WRT will answer at 192.168.1.1. Future upgrades are done through the GUI to the latest builds.

As of 2014/01/19 you can only install DD-WRT if your Netgear fw version is < 1.1.2.10 ([SVN ticket](#)). Netgear limited the orig fw size, so you will have to downgrade orig firmware to be able to flash to DD-WRT.

The latest working DD-WRT version is 20120319 build 18777 ([SVN ticket](#)) and current webflash images are to big for flashing ([SVN ticket](#))!

Steps for flashing:

1. Read this thread. All of it: <http://www.dd-wrt.com/phpBB2/viewtopic.php?t=172030>
2. Download this file. You can download without registering:  
<http://www.downloads.netgear.com/files/GDC/WNR2000V3/WNR2000v3%20Initial%20Release%20Firmware>
3. Unzip the file you just downloaded.
4. Read this wiki article and download the tftp.exe program (for windows only)  
[http://www.dd-wrt.comhttp://forum.dd-wrt.com/wiki/index.php/TFTP\\_flash](http://www.dd-wrt.comhttp://forum.dd-wrt.com/wiki/index.php/TFTP_flash)
5. Download the 18777 dd-wrt flashing file from here. Choose either the NA (North American) or WW(World Wide) depending on your location. See [Where do I download firmware?](#) for links.
6. Also, from the same location, download the webflash.bin file.
7. Attach your computer to the router with an Ethernet cable, and disable your computers wireless.
8. Do a factory reset on the router. Test this by logging into the router at 192.168.1.1. You should get a logon page that requires you to enter "admin" as the user name and "password" as the password.
9. Turn off your router and turn it on again while holding the reset button in. Hold it in till the power light blinks green. It will flash yellow first, then it will flash green. You can release the reset button. Note that the reset button is a LONG way in. You will not reach it with a pen tip. Use a paper clip.
10. The router's DHCP server has been stopped, so you will have to set a static IP of 192.168.1.9 on your computer in order to connect to the router. If you don't know how to do this, pack everything up as you should not be messing with third party firmware. Quit the process, and come back when you understand basic networking.
11. Start the tftp.exe program and set 192.168.1.1 as the server, leave password blank, and for the file, browse the file directory and select the Netgear firmware you downloaded. MAKE SURE THE FILE ENDS IN V1.0.1.26.img! (If you are using a Mac, you can use this command from Terminal to upload the firmware instead of tftp.exe: `tftp -i 192.168.1.1 PUT wnr2000v3-V1.0.1.26.img`)
12. WAIT for the file to upgrade and the lights on the router to ALL stop flashing. This will take about five to ten minutes, and if you don't wait long enough, you can brick your router. The lan port will blink for a while, then the power will go yellow, then the blue wireless light will come on, then the power will turn green. At this point you should be able to continue.

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13. Log onto the router at 192.168.1.1 and you should see that the webgui is different and there is no version number anymore.
14. Go to the Router Upgrade tab (under maintenance) and chose to upgrade the FACTORY\_NA(WW).img (CHECK TO MAKE SURE YOU ARE FLASHING THE RIGHT FIRMWARE THAT HAS wnr2000v3-factory in the NAME!!!) and then WAIT again. Using the incorrect version (NA/WW) will cause the router to never reboot, and you will need to use tftp to revert to the stock firmware before you can try again.
15. When the DD-WRT login screen appears, you have to TYPE a username and password into the boxes displayed.
16. Go to administration/firmware upgrade and change the first box to reset to default after upgrade, then choose the wnr2000v3-webflash.bin file, then hit upgrade.
17. WAIT again, until you again get the dd-wrt login screen when you browse to 192.168.1.1, retype a username and password, and then you can configure your router.
18. Don't forget to set your computer back to auto IP and auto dns.
19. DO NOT UPGRADE TO A NEWER BUILD WITHOUT CHECKING SIZE OR IT MAY BRICK YOUR ROUTER!

## Update 2016/07/19

Successfully updated to 29837 via webflash from a previous version. All more recent versions are over the 3648k file size limitation of the partitioned nvram. Multiple 30/30/30 resets caused unit to brick, but I recovered following above instructions, TFTPing Netgear stock firmware v1.1.2.2 and then upgrading to factory\_NA image, then to 29837 again. [\[1\]](#)

## Update 2017/11/17

I ran into several bugs and differences with these instructions with my unit. First of all the tftp procedure did not work. The tftp commands reported a successful file transfer but the router's power light simply kept on blinking and the router never flashed itself no matter how long I waited. However I was able to download the Netgear firmware version v1.0.1.26 directly from the Netgear website and simply use the existing Netgear GUI to downgrade it. I was running firmware version 1.1.1.58 of the Netgear firmware.

Secondly, while the overtake file wnr2000v3-factory\_NA.img version 29837 did flash properly from the Netgear GUI, the dd-wrt GUI of that version has a bug and is not able to update the router with the wnr2000v3-webflash.bin file using the webinterface. However I was able to flash it from the dd-wrt command line using the commands detailed here [\[2\]](#)

Lastly, the web GUI factory reset and the reset button do not work under version 29837 of dd-wrt. I was able to do an "erase nvram" from the dd-wrt command line, followed by a reboot, to clear the config.

as of this writing ALL later builds of dd-wrt from version 29837 are too big to fit in the flash.

## Recovery

If you have a bricked device or you want to go back to the original firmware you can flash the device using the recovery boot procedure.

- Power the router off
- Press and hold the reset button
- Turn the router back on
- Keep holding the button until the power LED begins flashing green
- Transfer the firmware with a tftp client to 192.168.1.1
- Wait until the unit reboots

## External Links

[OpenWRT](#)