

SETTING UP A IGATE /DIGIPEATER ON AN ASUS WL500GP

APRX & OPENWRT

Windows open WRT installation guidance for Asus WL-500gp

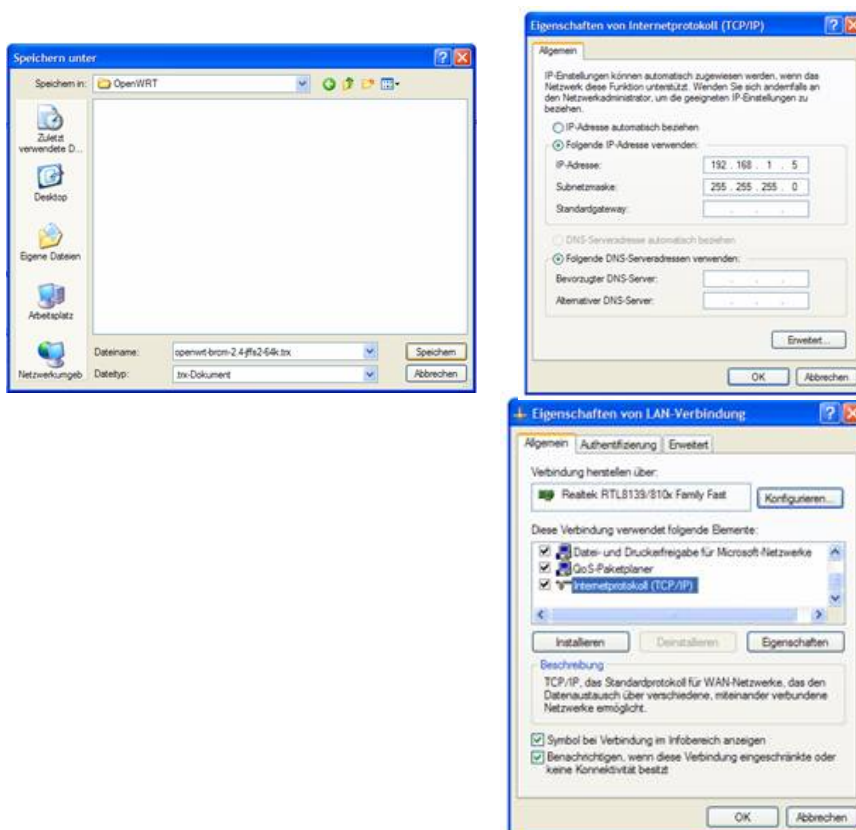
Download firmware

The firmware file is available under the download section to download to your PC.

The firmware name ends on trx for the ASUS WL500 series.

If you have a old grey modem, use the kamikaze version. If you have the white WL500gP then use the backfire or trunk version. For Linksys routers, use the bin files.

Configure the 10/100 network interface of your PC to a fixed IP address of 192.168.1.5.



Connect the PC LAN socket to LAN1 (one of network ports) on the router.

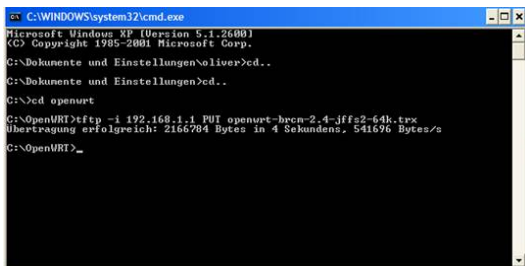


Press the Restore button (the recessed black button on the back) on the router and turn on the router (connect the power).



If everything is connected correctly the LED for the LAN1 interface and the power LED flash in tandem. You can now ping the router to make sure that everything is connected correctly and that the router network is available.

ping -t -w 10 192.168.1.1



Transfer the firmware file using tftp :

tftp -i 192.168.1.1 PUT {name - of - the - firmware.trx}

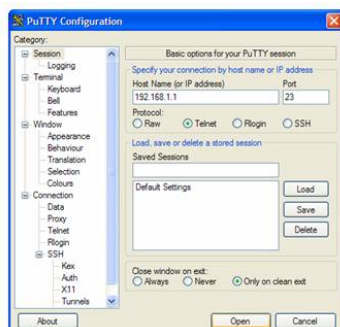
Whilst the firmware file is being transferred the LAN interface LED will flicker but the power LED stops flashing (i.e. it is solidly on or off).

You must wait 5-6 minutes; go grab a coffee or a beer!

If you restart the router before the 6 minutes has elapsed, there is a chance that the firmware will not have loaded properly. In this situation you have "bricked" your router. It is dead, it has ceased to be. There is nothing more you can do to save it. Be patient! ***I take no responsibility, if something goes wrong !***

The best way to make sure that the 6 minutes has elapsed is by using the TFTP programme time - there is no substitute for a clock. Again, better late than sorry.....

- restart the router (disconnect the power pack, wait 5 seconds and plug it back in) then wait another 30 seconds for the router to boot.
- connect to the router using Putty (via a fixed IP address 192.168.1.1 on the LAN port). Note: Select "telnet" when starting Putty.



You should get the welcome screen for the current version of Openwrt.....

I have used the trunk version as an example. (dated 5 march 2014)

```
BusyBox v1.19.4 (2013-11-25 02:28:07 CET) built-in shell (ash)
Enter 'help' for a list of built-in commands.
```

BARRIER BREAKER (Bleeding Edge, r39555)

```
* 1/2 oz Galliano      Pour all ingredients into
* 4 oz cold Coffee     an irish coffee mug filled
* 1 1/2 oz Dark Rum    with crushed ice. Stir.
* 2 tsp. Creme de Cacao
```

```
root@PA0ESH-10:~#
```

set root password

Use the `passwd` command to set root account password. You will need this password in the future to if you want to access the router by SSH. Once the password is set you can't get back in using telnet so make sure you keep an note of it. Many people write the password on the router itself to be safe!

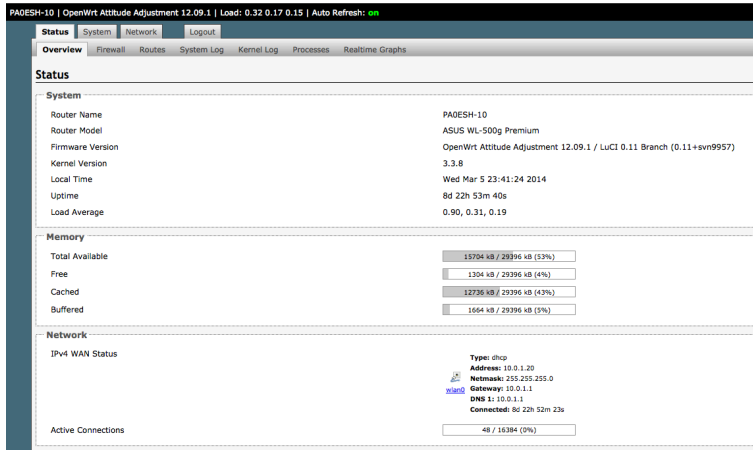
To change the password:

```
root@OpenWrt: /# passwd Changing password for roots
```

```
New passwords:  xxxxx password: too weak  Retype password: Password for roots changed by roots
```

```
root@OpenWrt: /#
```

As you can see, the `passwd` program suggested that the selected password was too weak, even though it ultimately accepted it. It would be better to use a stronger password.



You can now also access the router through a web interface. Point your browser to the address 192.168.1.1 and you will see the welcome page of the web interface.

Connect your router to the internet

Once the root password is set, the WAN interface (individual network interface on the back) can be connected with the local area network (DSL and/or WLAN routing). If the router is attached to the local area network by DHCP, the router will get an IP address from the existing DSL or WLAN source. (Be sure that the internet modem or router has DHCP activated.)

You can test whether the DHCP has been successful and whether the router is connecting to the Internet by pinging a known address:

```
root@OpenWrt: ~# ping -C 5 www.google.com
```

If you see answers then all is well.

Congratulations, open WRT is now installed and operational via WLAN routing. Please read the Openwrt website for other settings, such as wireless network, firewall etc etc.