

[Skip to forum content](#)

[OpenWrt](#)

Wireless Freedom

- [Index](#)
- [User list](#)
- [Search](#)
- [Register](#)
- [Login](#)

You are not logged in. Please login or register.

[Active topics](#) [Unanswered topics](#)

[ASUS WL-500gP + Speedtouch 330 USB](#)

[OpenWrt](#) → [General Discussion](#) → ASUS WL-500gP + Speedtouch 330 USB

Pages 1

You must [login](#) or [register](#) to post a reply

[RSS topic feed](#)

Posts: 4

1 Topic by [kenjiru 2007-04-04 20:18:41](#) (edited by [kenjiru 2007-04-09 17:29:30](#))

- [kenjiru](#)
- Member
- Offline

- From: **Romania**
- Registered: **2007-03-31**
- Posts: **106**

Topic: ASUS WL-500gP + Speedtouch 330 USB

I want to use Speedtouch 330 ADSL modem on USB with a ASUS WL-500gP. I've just flashed my router with a fresh image of kamikaze compiled from svn. Everything works fine so far, but I have some problems with the modem.

I've compiled everything I though was necessary as modules:

```
hotplug2 - 0.9-1 -
kmod-atm - 2.6.19.2-brcm47xx-1 -
kmod-usb-core - 2.6.19.2-brcm47xx-1 -
kmod-usb-speedtouch - 2.6.19.2-brcm47xx-1 -
kmod-usb-uhci - 2.6.19.2-brcm47xx-1 -
udevtrigger - 106-1 -
```

At boot dmesg says something like this (only relevant stuff):

```
ssb: Core 3 found: USB 1.1 Hostdev (cc 0x808, rev 0x02, vendor 0x4243)
[...]
usbcore: registered new interface driver usbfs
usbcore: registered new interface driver hub
usbcore: registered new device driver usb
[...]
USB Universal Host Controller Interface driver v3.0
PCI: Enabling device 0000:00:03.0 (0000 -> 0001)
PCI: Fixing up device 0000:00:03.0
uhci_hcd 0000:00:03.0: UHCI Host Controller
uhci_hcd 0000:00:03.0: new USB bus registered, assigned bus number 1
uhci_hcd 0000:00:03.0: irq 6, io base 0x0000100
usb usb1: configuration #1 chosen from 1 choice
hub 1-0:1.0: USB hub found
hub 1-0:1.0: 2 ports detected
PCI: Enabling device 0000:00:03.1 (0000 -> 0001)
PCI: Fixing up device 0000:00:03.1
uhci_hcd 0000:00:03.1: UHCI Host Controller
uhci_hcd 0000:00:03.1: new USB bus registered, assigned bus number 2
uhci_hcd 0000:00:03.1: irq 6, io base 0x0000120
usb usb2: configuration #1 chosen from 1 choice
hub 2-0:1.0: USB hub found
hub 2-0:1.0: 2 ports detected
usbcore: registered new interface driver speedtch
```

When I plug the modem I get the following from dmesg:

```
usb 1-2: new full speed USB device using uhci_hcd and address 2
usb 1-2: configuration #1 chosen from 1 choice
usb 1-2: reset full speed USB device using uhci_hcd and address 2
speedtch 1-2:1.0: speedtch_find_firmware: no stage 1 firmware found!
```

My modem is rev. 4.0 (black ones). I've uploaded the firmware in the right location:

```
root@OpenWrt:~# ls -al /lib/firmware/
-rw-r--r-- 1 root root 935 Jan 1 00:12 speedtch-1.bin
-rw-r--r-- 1 root root 775545 Jan 1 00:12 speedtch-2.bin
```

Here is the output from lspci:

```
root@OpenWrt:~# lspci
00:00.0 Host bridge: Broadcom Corporation BCM4704 PCI to SB Bridge
00:02.0 Network controller: Broadcom Corporation BCM4318 [AirForce One 54g] 802.11g Wireless LAN Controller (rev 02)
00:03.0 USB Controller: VIA Technologies, Inc. VT82xxxxx UHCI USB 1.1 Controller (rev 61)
00:03.1 USB Controller: VIA Technologies, Inc. VT82xxxxx UHCI USB 1.1 Controller (rev 61)
00:03.2 USB Controller: VIA Technologies, Inc. USB 2.0 (rev 63)
root@OpenWrt:~# lspci -s 00:03.0 -G -v
Trying method 1.....cannot open /sys/bus/pci...No.
Trying method 2.....using /proc/bus/pci...OK
Decided to use Linux-proc
00:03.0 USB Controller: VIA Technologies, Inc. VT82xxxxx UHCI USB 1.1 Controller (rev 61) (prog-if 00 [UHCI])
Subsystem: VIA Technologies, Inc. VT82xxxxx UHCI USB 1.1 Controller
Flags: bus master, medium devsel, latency 22, IRQ 6
I/O ports at 0100 [size=32]
Capabilities: [80] Power Management version 2

root@OpenWrt:~# lspci -s 00:03.1 -G -v
Trying method 1.....cannot open /sys/bus/pci...No.
Trying method 2.....using /proc/bus/pci...OK
Decided to use Linux-proc
00:03.1 USB Controller: VIA Technologies, Inc. VT82xxxxx UHCI USB 1.1 Controller (rev 61) (prog-if 00 [UHCI])
Subsystem: VIA Technologies, Inc. VT82xxxxx UHCI USB 1.1 Controller
Flags: bus master, medium devsel, latency 22, IRQ 6
I/O ports at 0120 [size=32]
Capabilities: [80] Power Management version 2
```

<http://kenjiru.ro>

[kenjiru's Website](#)

2 Reply by [kenjiru 2007-04-09 16:19:47](#) (edited by [kenjiru 2007-04-10 13:38:47](#))

- [kenjiru](#)
- Member
- Offline

- From: **Romania**
- Registered: **2007-03-31**
- Posts: **106**

Re: ASUS WL-500gP + Speedtouch 330 USB

Since I'm using hotplug2 I think this application is responsible for not loading the firmware. So I've done a little investigation about how hotplug2 works on openwrt. Here is what I've found.

First, in /etc/init.d/boot there are some lines that starts hotplug2 as a daemon at boot:

```
/sbin/hotplug2 --persistent --max-children 1 &
echo /sbin/hotplug-call > /proc/sys/kernel/hotplug
```

The script /sbin/hotplug-call is called whenever the kernel detects a new device. Now I've modified this script to get some debugging messages.

```
#!/bin/sh
# Copyright (C) 2006 OpenWrt.org

export HOTPLUG_TYPE="$1"

# bypass the normal hotplug path for firmware loading
# would otherwise cause problems with drivers like bcm43xx
[ "$HOTPLUG_TYPE" = "firmware" -a "$ACTION" = "add" ] && {
    echo "/sbin/hotplug-call :: $FIRMWARE :: $DEVPATH">>/var/log/mesaje
    [ -f "/lib/firmware/$FIRMWARE" ] && {
        echo "/sbin/hotplug-call :: /lib/firmware/$FIRMWARE exists">>/var/log/mesaje
        echo 1 > "/sys$DEVPATH/loading"
        cp "/lib/firmware/$FIRMWARE" "/sys$DEVPATH/data"
        echo 0 > "/sys$DEVPATH/loading"
    }
    exit 0
}

. /etc/functions.sh

PATH=/bin:/sbin:/usr/bin:/usr/sbin
LOGNAME=root
USER=root
export PATH LOGNAME USER
```

```
[ \! -z "$1" -a -d /etc/hotplug.d/$1 ] && {
    for script in $(ls /etc/hotplug.d/$1/* 2>&-); do (
        [ -f $script ] && . $script
    ); done
}
```

After plugging the modem I get the following output in the file /var/log/mesaje:

```
root@OpenWrt:~# cat /var/log/mesaje
/sbin/hotplug-call :: speedtch-1.bin.4.00 :: /class/firmware/1-2:1.0
/sbin/hotplug-call :: speedtch-1.bin.4 :: /class/firmware/1-2:1.0
/sbin/hotplug-call :: speedtch-1.bin :: /class/firmware/1-2:1.0
/sbin/hotplug-call :: /lib/firmware/speedtch-1.bin exists
```

So everything looks fine, except there is no file /sys/class/firmware/1-2:1.0/loading created.

I've solved this problem. It seems the sys file system didn't get mounted. So I've add the following line in /etc/init.d/boot:

```
mount -t sysfs sysfs /sys
```

<http://kenjiru.ro>

[kenjiru's Website](#)

3 Reply by [kenjiru 2007-04-10 13:52:32](#) (edited by [kenjiru 2007-04-10 16:25:49](#))

- [kenjiru](#)
- Member
- Offline
- From: **Romania**
- Registered: **2007-03-31**
- Posts: **106**

Re: ASUS WL-500gP + Speedtouch 330 USB

Now it finds the firmware and detects the line:

```
usbcore: registered new interface driver speedtch
speedtch 1-2:1.0: found stage 1 firmware speedtch-1.bin
speedtch 1-2:1.0: found stage 2 firmware speedtch-2.bin
ATM dev 0: ADSL line is synchronising
ATM dev 0: ADSL line is up (2560 kb/s down | 512 kb/s up)
```

But I can't connect using pppoe:

```
root@OpenWrt:~# /etc/init.d/dial
/etc/rc.common: /etc/init.d/dial: 2: modprobe: not found
ATM dev 0: ADSL line is up (2560 kb/s down | 512 kb/s up)
ATM dev 0: ADSL line is up (2560 kb/s down | 512 kb/s up)
ATM dev 0: ADSL line is up (2560 kb/s down | 512 kb/s up)
RFC1483/2684 bridge: Interface "nas0" (mtu=1500, payload=bridged) created sucessfully
```

```
RFC1483/2684 bridge: Communicating over ATM 0.0.35, encapsulation: LLC
```

```
RFC1483/2684 bridge: Could not configure interface:Invalid argument
RTNETLINK answers: File exists
Plugin rp-pppoe.so loaded.
Timeout waiting for PADO packets
Unable to complete PPPoE Discovery
```

The /etc/init.d/dial file contains:

```
root@OpenWrt:~# cat /etc/init.d/dial
#!/bin/sh /etc/rc.common
modprobe speedtch

count=0
while [[ $(($count++)) -lt 40 ]]
do
    if dmesg | grep 'ADSL line is up'
    then
        br2684ctl1 -b -c 0 -a 0.35
        sleep 5
        ip addr add 192.168.5.5/32 dev nas0
        ip link set nas0 up
        sleep 10
        pppd call speedtch
        exit 0
    fi
    sleep 1
done
echo "The SpeedTouch firmware did not load"
```

The peer file looks like this:

```
root@OpenWrt:~# cat /etc/ppp/peers/speedtch
noipdefault
defaultroute
```

```
user 'username'

noauth
updetach
usepeerdns
plugin rp-pppoe.so
nas0

debug
```

The pap-secrets and chap-secrets contains:

```
root@OpenWrt:~# cat /etc/ppp/pap-secrets
# Secrets for authentication using CHAP
# client      server  secret          IP addresses
"username"   *      "password"      "
```

With the 'username' and 'password' provided by me ISP.

<http://kenjiru.ro>

[kenjiru's Website](#)

4 Reply by [kenjiru 2007-04-22 20:23:55](#) (edited by [kenjiru 2007-04-22 20:25:03](#))

- [kenjiru](#)
- Member
- Offline

- From: **Romania**
- Registered: **2007-03-31**
- Posts: **106**

Re: ASUS WL-500gP + Speedtouch 330 USB

Problem solved.

This is the bug report:

<https://dev.openwrt.org/ticket/1609>

This is the fix:

<https://dev.openwrt.org/changeset/7011>

I want to thank **nbd** for his help on IRC.

<http://kenjiru.ro>

[kenjiru's Website](#)

Posts: 4

Pages 1

You must [login](#) or [register](#) to post a reply

[OpenWrt](#) → [General Discussion](#) → ASUS WL-500gP + Speedtouch 330 USB

Jump to forum:

Powered by [PunBB](#), supported by [Informer Technologies, Inc.](#)