

## Blog Export: Rasmus' Toys Page, <http://toys.lerdorf.com/>

Tuesday, November 11. 2003

### 802.11g Netgear WG511 and Linux

I picked up a cheap Netgear WG511 the other day. Got it for \$35, probably because they have recently released the WG511T which uses the Atheros super-G chipset. The older WG511 uses the Prism Duetto chipset which isn't officially supported on Linux by anybody. I say officially, because some code has snuck out and there is a new site out there devoted to it. Have a look at <http://prism54.org/>. I haven't tried that driver yet, but I will update this when I do. [Update - Feb.18/2004] I am now using the driver from prism54.org compiled into my 2.6.3 kernel on my Thinkpad and it works nicely.

For now I wanted to give the Linuxant Driverloader a whirl to see if I could use the native Windows XP drivers directly on my Thinkpad with a very recent 2.4.22 kernel. It worked amazingly well. See the extended entry for the step-by-step screenshots.

Of course, the whole point of going with 802.11g over 802.11b is to go faster. I haven't done any real performance tests yet with this Windows driver running on Linux. Hopefully I will get some time to test it against the native driver soon. Step 1 was to plug my Thinkpad into a wired port. How old-fashioned! And then plug the new Netgear PCMCIA card in. My kernel obviously didn't know what to do with it at this point.

I then grabbed the driverloader-1.38.tar.gz tarball, ran "make install" and then the dldrconfig command as shown:

From then on it was a web-based install. Cool!

So the first hurdle was to find the Windows XP drivers for the WG511 and actually get the .inf, .sys and .arm files out of the annoying executable Netgear provides. I cheated and used an XP box to install them and just copied them over from the drivers directory. They are probably also on the CD that came with the card, but I wanted the latest. You then feed the web interface the .inf file.

It figures out that I need the .sys and .arm files as well.

It has ingested the Windows driver and reads the MAC off of my card.

Ah, an Advanced button. I like those. You always find all the essential settings that the vendors think you are too dumb to understand there.

Here we find that we can enable the power saving features of the driver.

Next I need a free trial license to activate it. Clicking through (remember I have a wired interface up still) is easy enough. Just enter the email address and license string you get from the Linuxant site:

And you are done!

Now just use your standard iwconfig tool like with any other wireless driver and it just works!

Posted by Rasmus in WIFI Toys at 23:10

Now there is a official native linux driver look at <http://www.larsen-b.com/archives/000073.html> for more informations.  
Anonymous on Dec 24 2003, 05:29

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After much tinkering I have been able to get the Linksys 802.11g PCMCIA card working :)

One thing to note -- read the man pages, man. iwconfig key s: -- to set a key by passphrase doesn't work. it's talked about everywhere like it works -- but in the iwconfig man page its stated as unfinished :) Use the uberlong hex instead...

Anonymous on Jan 27 2004, 00:07

could you please provide the steps you took (detail) to get the wg511 working with 2.6.3?

Anonymous on Mar 1 2004, 13:08

What are you stuck on? Just grab the latest 2.6 patch from prism54.org and patch your kernel sources. Then "make oldconfig" and when CONFIG\_PRISM54 comes up tell it to either build a module (m) or to build it into your kernel (y) and continue on with building the kernel as you normally would.

Anonymous on Mar 1 2004, 15:14

thanks Rasmus---I followed these instructions provided by someone else on prism54 but don't know what it means when they say: xconfig.... ---so I did a make menuconfig as i did when i got core 1 to work and just saved the file. I restarted the machine and plugged the wg511 card in but no light comes on. Plus I did not know whether you have to issue: make modules and make install like i did with core 1. So I just need to know the final steps.

```
cd /usr/src/linux-2.6.2
wget http://prism54.org/pub/linux/snapshot/kernel/v2.6/patch-2.6-prism54-cvs-latest.bz2
bzip2 -cd ../patch-2.6-prism54-cvs-latest.bz2 | patch -p1
cd /etc/hotplug
wget http://prism54.org/~hvr/firmware.agent
chmod +x /etc/hotplug/firmware.agent
mkdir /sys
echo "none /sys sysfs defaults 0 0" >> /etc/fstab
mkdir -p /usr/lib/hotplug/firmware
cd /usr/lib/hotplug/firmware
wget http://prism54.org/firmware/isl3890
```

```
cd /usr/src/linux-2.6.2
```

```
xconfig....
```

Anonymous on Mar 1 2004, 17:20

by xconfig he must be talking about "make xconfig" the X configuration step which does the same as "make menuconfig" but graphically.

Anonymous on Mar 4 2004, 06:18

Hi guys

I installed the driver for WG511 on linux everything went fine till the last step. the iwconfig is showing everyhting ok but its not pinging my gateway. mean cannot go to internet. any ideas what is going on?? Any help would be great

Aman

Anonymous on Mar 5 2004, 01:26

Maybe your network configuration is not done...

Did you set your gateway and dns and others stuff ?

BTW, I'm also running the linuxant drivers, with my mandrake 9.1. It works fine. But I tried to use the prism one. It compiled fine. But I can't load it at boot.

Anonymous on Mar 5 2004, 01:41

Hi guys

It is working now. But when i disable WEP key setting from my router. I have a key assigned to access my wireless router. Any idead how to specify key in linuxant.

Anonymous on Mar 5 2004, 03:51

Can't you just set the key directly with iwconfig? As in:  
iwconfig eth1 mode Managed essid foo key 3132333435

That would be the hex equivalent of the string 12345 key. I bet s:12345 works as well.

Like I said, I am using the prism54 driver now instead and it is working fine.

Anonymous on Mar 5 2004, 14:44

Where could I find the .arm file ? I installed drivers on windows but in the drivers folder there was only W511ICB.sys not W511DCB.ARM.

Anonymous on Apr 15 2004, 05:42

I have the same problem, I can't find the \*.ARM file. In which directory the file is installed on XP?

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Anonymous on Apr 15 2004, 12:05

You guys are all blind. Seek, and ye shall find luke.

Of course it requires iq power stronger than the lightly toasted type.

Anonymous on Apr 17 2004, 03:32

Finnally I found the key ! I must install the 1.6 version and not the last one (2.1) which strangly doesn't provide the file.

Anonymous on Apr 17 2004, 04:41

I have a Netgear WG121 (same chipset as the WG511) USB wireless device. Is this likely to work for my device too? I'm using KNOPPIX 3.3. Does anyone know if KNOPPIX 3.4 has support for this Prism GT chipset?

Anonymous on Jun 9 2004, 03:26

Luc, the problem is that the USB and PCMCIA chipsets may be the same, but they load differently, so no, it will not work properly, although Knoppix does include the Prism54.org Wifi.

Anonymous on Jun 9 2004, 16:27

Tony, do you think a solution for my WG121 exists anywhere? I've been looking for one everywhere but nothing yet... surely some engineer at Netgear/Prism must know how to get this working with Linux?

Anonymous on Jun 28 2004, 16:22

Hi guys, could anyone please tell me where could I find how to install the driver for Netgear wg511 for linux suse 9.0 on my laptop.

Thanks, Petra

Anonymous on Jul 8 2004, 06:26

See <http://prism54.org>

Anonymous on Jul 27 2004, 06:26

Hi all

I am a total newbie with Linux and bought Red Hat Linux 8. It is on my laptop and I have a Netgear WG511 card. I tried doing as shown here by installing Linuxant etc - I got to the point where I had to upload the driver - the first problem I had was that it only asked me for the SYS file - it never asked me for an ARM file. After it seemingly installed the SYS file, it is telling me that it can't use the card and it is isn't supported by the driver (latest from netgear). Anyone any ideas please?

Many thanks.

Anonymous on May 3 2005, 10:00