

Victory, after searching the web for about 2 weeks for HOWTO's to install the vodafone gt 3g+ card with ubuntu for using in austria, I did it at the end. This should be a step by step description of what has to be done to get it work. This HowTo is for all user who have the vodafone model which does not register as usb devices. This type of card registers as pci device.

- 1.) download the nozomi driver from www.pharscape.org for driver – nozomi.tar.gz
- 2.) extract the package using tar zxvf nozomi.tar.gz
- 3.) change into the nozomi directory and call make
- 4.) create a directory name misc in /usr/lib/`uname -r`
- 5.) copy the nozomi.ko file to /usr/lib/`uname -r`/misc
- 6.) change into the directory and call insmod nozomi.ko as root. After the module has been loaded there should be found 2 devices called noz0 and noz1 in /dev directory. You can create a symbolic link named /dev/modem to /dev/noz0 to use it with kppp or gnome-ppp, but be aware that the symbolic link is gone when you remove the card or reboot the system, so you should write a script which checks that and creates the link automatically.
- 7.) add the nozomi module in the /etc/modules file
- 8.) insert the card and watch the output of dmesg, there should be something mentioned like nozomi activated... which tells you that the module is loaded and the card registered
- 9.) call the setpin.pl script which you can download [here](#), or copy the text beneath and change the pin to yours:

```
#!/usr/bin/env perl

use strict;
use warnings;

my $modem = "/dev/modem";
# Substitute 1234 with your PIN.
# You should probably put your pin somewhere else, e.g. on an USB stick,
# an encrypted file system or something else, and read it from there...
# You have been warned!
my $pin = "1234";

$SIG{ALRM} = sub {
    die("timeout: no response from modem $modem\n");
};

open(MODEM, "+<", $modem) or die("can't open modem $modem");
alarm(10);
print(MODEM "AT+CPIN=\"$pin\"\n\r");
while (<MODEM>) {
    if (m/OK/) {
        close(MODEM);
        print("PIN accepted\n");
        exit(0);
    }
    if (m/ERROR/) {
        close(MODEM);
        print("PIN rejected\n");
        exit(1);
    }
}
```

I have changed the script to take the pin as the first argument of the script so you can call it from within other scripts where you pass the pin in a kind of secure way, like input via dialog or zenity. the script should return "Pin accepted"

- 10.) Configure kppp (apt-get install kppp) like described at

<http://www.linuxforen.de/forums/showthread.php?t=157913>

When configuring kppp mention to add 2 ppp arguments - novj and noauth for no compression and no server authentication. The Login Data for Austria are: User=ppp@A1net.at Password=ppp Phonenumber=*99***1#. After having done all this I was able to connect to the internet via my vodafone card using ubuntu. Maybe I will write an installation script for this in the near future but I am not quite sure. What you should also be aware of is the current set of modem speed when the kppp statistics come up. When the card is running on speed 56700 than you have a gprs connection so mind the cost, otherwise you are on a umts connection. The led's give you this information too.

Usefull Links:

IMPORTANT:

- <http://www.arbeitsplatzvernichtung-durch-outsourcing.de/marty44/vodaumts.html>
- <http://www.pharscape.org>
- <http://www.kuix.de/umts/vodafone/>
- <http://www.linuxforen.de/forums/showthread.php?t=157913>

OTHER MODELS/MISC:

- <http://andyspace.me.uk/node/253>
- <http://www.linuxforen.de/forums/showthread.php?t=208128>
- <http://www.fredshack.com/docs/ppp.html>
- <http://www.pharscape.org/index.php?option=content&task=view&id=29>