

Installing smartlink PCI modem drivers on Fedora Linux

I knew firsthand that I have a smartlink 56K PCI modem, If you do not know which modem you have you need to visit LinModems support page

<http://linmodems.technion.ac.il/>

and download scanModem

```
[root@localhost Modems]# ./scanModem
```

From <http://linmodems.technion.ac.il/> , get a recent update of scanModem, if this copy was not there obtained. There are weekly updates.
Updated on: 2007_July_16

Identifying PCI bus slots with candidate modems.

```
=== Finished modem firmware and bootup diagnostics section. ===  
=== Next deducing cogent software ===
```

Analysing card in PCI bus 00:0a.0, writing to scanout.00:0a.0

IDENT=slamr

Using scanout.00:0a.0 data, and writing guidance to ModemData.txt

Writing Smartlink.txt

Writing residual guidance customized to your System.

A subfolder Modem/ has been written, containing these files with more detailed Information:

```
-----  
-----  
dmesg.txt          Bootup.txt          dmesg.txt          DriverCompiling.txt  
InfoGeneral.txt    ModemData.txt       Rational.txt        scanout.00:0a.0  
Smartlink.txt      SoftModem.txt       Testing.txt         UNSUBSCRIBE.txt  
wvdial.txt         YourSystem.txt  
-----  
-----
```

Please read 1stRead.txt first for Guidance.

```
[root@localhost Modems]#
```

It is supported by slamr for which

<http://linmodems.technion.ac.il/packages/smartlink/slmodem-2.9.11-20070505.tar.gz>

and

<http://linmodems.technion.ac.il/packages/smartlink/ungrab-winmodem-20070505.tar.gz>

are needed.

```
[root@localhost Modems]# cat Modem/ModemData.txt
```

Only plain text email is forwarded by the DISCUSS@linmodems.org List Server.

Do use the following as the email Subject Line:

SomeName, YourCountry Fedora release 7 (Moonshine)

Kernel kernel 2.6.22.1-27.fc7

This will alert cogent experts, and distinguish cases in the Archives.

YourCountry will enable Country Code guidance.

Occasionally responses are blocked by an Internet Provider mail filters.

So in a day, also check the Archived responses at <http://www.linmodems.org> .
Local Linux experts can be found through: <http://www.linux.org/groups/index.html>

----- System information -----

CPU=i686, Fedora release 7 (Moonshine)

Kernel

Linux version 2.6.22.1-27.fc7 (kojibuilder@xenbuilder2.fedora.redhat.com) (gcc
version 4.1.2 20070502 (Red Hat 4.1.2-12)) #1 SMP Tue Jul 17 17:13:26 EDT 2007
scanModem update of: 2007_July_16

The slmodemd set symbolic link is /dev/ttySL0 -> /dev/pts/3

ALSAversion 1.0.14rc2

USB modem not detected by lsusb

Modem or host audio card candidates have firmware information:

PCI slot	PCI ID	SubsystemID	Name
-----	-----	-----	-----
00:0a.0	163c:3052	163c:3052	Modem: Smart Link Ltd. SmartLink
SmartPCI562 56K Modem			

Modem interrupt assignment and sharing:

16: 519307 IO-APIC-fasteoi SL1900

--- Bootup diagnostics for card in PCI slot 00:0a.0 ----

ACPI: PCI Interrupt 0000:00:0a.0[A] -> GSI 17 (level, low) -> IRQ 16

0000:00:0a.0: ttyS3 at I/O 0xb008 (irq = 16) is a 16450

0000:00:0a.0: ttyS2 at I/O 0xb010 (irq = 16) is a 8250

Couldn't register serial port 0000:00:0a.0: -28

ACPI: PCI interrupt for device 0000:00:0a.0 disabled

ACPI: PCI Interrupt 0000:00:0a.0[A] -> GSI 17 (level, low) -> IRQ 16

The PCI slot 00:0a.0 of the modem card may be disabled early in a bootup process, but then enabled later. If modem drivers load but the modem is not responsive, read Bootup.txt about possible fixes. Send dmesg.txt along with ModemData.txt to discuss@linmodems.org if help is needed.

=== Finished modem firmware and bootup diagnostics section. ===

=== Next deducing cogent software ===

For candidate modem in PCI bus: 00:0a.0

Class 0703: 163c:3052 Modem: Smart Link Ltd. SmartLink SmartPCI562 56K Modem

Primary PCI_id 163c:3052

Support type needed or chipset: slamr

The modem is supported by the Smartlink slamr driver plus the slmodemd helper utility. Read the Smartlink.txt and Modem/YourSystem.txt for follow through guidance.

Writing Smartlink.txt

===== end Smartlink section =====

Completed candidate modem analyses.

The base of the UDEV device file system is: /dev/.udev

Versions adequately match for the compiler installed: 4.1.2
and the compiler used in kernel assembly: 4.1.2

Kernel-header resources needed for compiling are not manifestly ready!

If compiling is necessary packages must be installed, providing:
kernel-source-2.6.22.1-27.fc7

Checking pppd properties:
-r-xr-xr-x 1 root root 312332 2006-12-01 06:54 /usr/sbin/pppd

In case of an "error 17" "serial loopback" problem, see:
<http://pheap2.technion.ac.il/linmodems/archive-sixth/msg02637.html>

To enable dialout without Root permission do:
\$ su - root (not for Ubuntu)
chmod a+x /usr/sbin/pppd
or under Ubuntu related Linuxes
chmod a+x /usr/sbin/pppd

Checking settings of: /etc/ppp/options
noauth
lock
usepeerdns

In case of a message like:
Warning: Could not modify /etc/ppp/pap-secrets: Permission denied
see <http://linmodems.technion.ac.il/bigarch/archive-sixth/msg04656.html>

Read Modem/YourSystem.txt concerning other COMM channels: ppp0
Which can interfere with Browser navigation.

Don't worry about the following, it is for the experts
should trouble shooting be necessary.

=====

Checking for modem support lines:

/device/modem symbolic link:
slmodemd created symbolic link /dev/ttySL0: lrwxrwxrwx 1 root root 10 2007-07-25
09:01 /dev/ttySL0 -> /dev/pts/3
Within /etc/udev/ files:
/etc/udev/rules.d/50-udev.rules:KERNEL=="modems/mwave*", NAME="%k",
GROUP="uucp", MODE="0660"
Within /etc/modprobe.conf files:
/etc/modprobe.conf:install slamr modprobe --ignore-install ungrab-winmodem ;
modprobe --ignore-install slamr; test -e /dev/slamr0 || (/bin/mknod -m 660
/dev/slamr0 c 242 0 2>/dev/null && chgrp dialout /dev/slamr0)
/etc/modprobe.conf~:install slamr modprobe --ignore-install ungrab-winmodem ;
modprobe --ignore-install slamr; test -e /dev/slamr0 || (/bin/mknod -m 660
/dev/slamr0 c 242 0 2>/dev/null && chgrp dialout /dev/slamr0)
Within any ancient /etc/devfs files:

Within ancient kernel 2.4.n /etc/module.conf files:

----- end modem support lines -----

[root@localhost Modems]#

First I updated to the latest kernel and installed kernel-headers and kernel-devel packages respectively

```
[root@localhost ~]# yum install kernel-2.6.22.1-27.fc7 kernel-devel-2.6.22.1-27.fc7
kernel-headers-2.6.22.1-27.fc7 -y
Loading "installonlyn" plugin
Setting up Install Process
Parsing package install arguments
fedora          100% |=====| 2.1 kB    00:00
```

```
[root@localhost ~]# yum install kernel-2.6.22.1-27.fc7 kernel-devel-2.6.22.1-27.fc7
kernel-headers-2.6.22.1-27.fc7 -y
Loading "installonlyn" plugin
Setting up Install Process
Parsing package install arguments
fedora          100% |=====| 2.1 kB    00:00
primary.sqlite.bz2 100% |=====| 3.8 MB   20:43
updates        100% |=====| 1.9 kB    00:00
primary.sqlite.bz2 100% |=====| 1.0 MB   04:59
```

```
Resolving Dependencies
--> Running transaction check
filelists.sqlite.bz2 100% |=====| 2.5 MB   12:23
---> Package kernel-devel.i686 0:2.6.22.1-27.fc7 set to be updated
---> Package kernel.i686 0:2.6.22.1-27.fc7 set to be updated
---> Package kernel-headers.i386 0:2.6.22.1-27.fc7 set to be updated
--> Processing Dependency: mkinitrd >= 6.0.9-7.1 for package: kernel
--> Restarting Dependency Resolution with new changes.
--> Running transaction check
---> Package mkinitrd.i386 0:6.0.9-7.1 set to be updated
--> Processing Dependency: nash = 6.0.9-7.1 for package: mkinitrd
--> Restarting Dependency Resolution with new changes.
--> Running transaction check
---> Package nash.i386 0:6.0.9-7.1 set to be updated
```

Dependencies Resolved

Package	Arch	Version	Repository	Size
Installing:				
kernel	i686	2.6.22.1-27.fc7	updates	16 M
kernel-devel	i686	2.6.22.1-27.fc7	updates	4.7 M
Updating:				
kernel-headers	i386	2.6.22.1-27.fc7	updates	651 k
Updating for dependencies:				
mkinitrd	i386	6.0.9-7.1	updates	91 k
nash	i386	6.0.9-7.1	updates	158 k

Transaction Summary

```
Install      2 Package(s)
Update      3 Package(s)
Remove      0 Package(s)
```

Total download size: 22 M
Downloading Packages:

```
(1/5): kernel-headers-2.6 100% |=====| 651 kB 02:43
(2/5): kernel-2.6.22.1-27 100% |=====| 16 MB 68:07
(3/5): nash-6.0.9-7.1.i386 100% |=====| 158 kB 00:27
(4/5): mkinitrd-6.0.9-7.1 100% |=====| 91 kB 00:13
(5/5): kernel-devel-2.6.2 100% |=====| 4.7 MB 16:01
```

```
Running Transaction Test
Finished Transaction Test
Transaction Test Succeeded
```

```
Running Transaction
```

```
Updating : nash ##### [1/8]
Updating : mkinitrd ##### [2/8]
Installing: kernel-devel ##### [3/8]
Installing: kernel ##### [4/8]
Updating : kernel-headers ##### [5/8]
Cleanup : mkinitrd ##### [6/8]
Cleanup : nash ##### [7/8]
Cleanup : kernel-headers ##### [8/8]
```

```
Installed: kernel.i686 0:2.6.22.1-27.fc7 kernel-devel.i686 0:2.6.22.1-27.fc7
Updated: kernel-headers.i386 0:2.6.22.1-27.fc7
Dependency Updated: mkinitrd.i386 0:6.0.9-7.1 nash.i386 0:6.0.9-7.1
Complete!
```

Then I proceeded to compile slmodemd against the new kernel

```
[olivares@localhost ~]$ cd Download/slmodem-2.9.11-20070505
[olivares@localhost slmodem-2.9.11-20070505]$ make clean
make -C modem clean && make -C drivers clean && echo "done."
make[1]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/modem'
rm -f slmodemd modem_test modem_main.o modem_cmdline.o modem_test.o modem.o
modem_datafile.o modem_at.o modem_timer.o modem_pack.o modem_ec.o modem_comp.o
modem_param.o modem_debug.o homolog_data.o dp_sinus.o dp_dummy.o sysdep_common.o
rm -f *~ *.orig *.rej
make[1]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/modem'
make[1]: Entering directory `/home/olivares/Download/slmodem-2.9.11-
20070505/drivers'
rm -f kernel-ver slamr.o slusb.o slamr.ko slusb.ko *st7554.o amrmo_init.o
sysdep_amr.o *.mod.* *.cmd *~
rm -f -r .tmp_versions
make[1]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-
20070505/drivers'
done.
[olivares@localhost slmodem-2.9.11-20070505]$
[olivares@localhost slmodem-2.9.11-20070505]$ make KERNEL_VER=/lib/modules/'uname-
a'/build
make -C modem all
make[1]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/modem'
rebuild profile...
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_main.o -c modem_main.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_cmdline.o -c modem_cmdline.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem.o -c modem.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_datafile.o -c modem_datafile.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_at.o -c modem_at.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_timer.o -c modem_timer.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_pack.o -c modem_pack.c
modem_pack.c: In function 'modem_async_get_bits':
modem_pack.c:100: warning: pointer targets in passing argument 2 of 'm->get_chars'
differ in signedness
modem_pack.c: In function 'modem_async_put_bits':
```

```

modem_pack.c:148: warning: pointer targets in passing argument 2 of 'm->put_chars'
differ in signedness
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_ec.o -c modem_ec.c
modem_ec.c: In function 'tx_info':
modem_ec.c:723: warning: pointer targets in passing argument 2 of 'l->modem-
>get_chars' differ in signedness
modem_ec.c: In function 'push_rest_data':
modem_ec.c:811: warning: pointer targets in passing argument 2 of 'l->modem-
>put_chars' differ in signedness
modem_ec.c: In function 'rx_info':
modem_ec.c:860: warning: pointer targets in passing argument 2 of 'l->modem-
>put_chars' differ in signedness
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_comp.o -c modem_comp.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_param.o -c modem_param.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_debug.o -c modem_debug.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o homolog_data.o -c homolog_data.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o dp_sinus.o -c dp_sinus.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o dp_dummy.o -c dp_dummy.c
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o sysdep_common.o -c sysdep_common.c
gcc -o slmodemd modem_main.o modem_cmdline.o modem.o modem_datafile.o modem_at.o
modem_timer.o modem_pack.o modem_ec.o modem_comp.o modem_param.o modem_debug.o
homolog_data.o dp_sinus.o dp_dummy.o dsplibs.o sysdep_common.o
gcc -Wall -g -O -I. -DCONFIG_DEBUG_MODEM -o modem_test.o -c modem_test.c
gcc -o modem_test modem_test.o modem_cmdline.o modem.o modem_datafile.o modem_at.o
modem_timer.o modem_pack.o modem_ec.o modem_comp.o modem_param.o modem_debug.o
homolog_data.o dp_sinus.o dp_dummy.o dsplibs.o sysdep_common.o
make[1]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/modem'
make -C drivers KERNEL_DIR=/lib/modules/2.6.22.1-27.fc7/build
make[1]: Entering directory `/home/olivares/Download/slmodem-2.9.11-
20070505/drivers'
make modules -C /lib/modules/2.6.22.1-27.fc7/build
SUBDIRS=/home/olivares/Download/slmodem-2.9.11-20070505/drivers
make[2]: Entering directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
  CC [M] /home/olivares/Download/slmodem-2.9.11-20070505/drivers/amrmo_init.o
/home/olivares/Download/slmodem-2.9.11-20070505/drivers/amrmo_init.c: In function
'amrmo_pci_probe':
/home/olivares/Download/slmodem-2.9.11-20070505/drivers/amrmo_init.c:620: warning:
'deprecated_irq_flag' is deprecated (declared at include/linux/interrupt.h:66)
/home/olivares/Download/slmodem-2.9.11-20070505/drivers/amrmo_init.c: In function
'amrmo_init':
/home/olivares/Download/slmodem-2.9.11-20070505/drivers/amrmo_init.c:760: warning:
'pci_find_device' is deprecated (declared at include/linux/pci.h:477)
  CC [M] /home/olivares/Download/slmodem-2.9.11-20070505/drivers/sysdep_amr.o
  CC [M] /home/olivares/Download/slmodem-2.9.11-20070505/drivers/st7554.o
  LD [M] /home/olivares/Download/slmodem-2.9.11-20070505/drivers/slamr.o
  LD [M] /home/olivares/Download/slmodem-2.9.11-20070505/drivers/slusb.o
Building modules, stage 2.
MODPOST 2 modules
WARNING: could not find /home/olivares/Download/slmodem-2.9.11-
20070505/drivers/.amrlibs.o.cmd for /home/olivares/Download/slmodem-2.9.11-
20070505/drivers/amrlibs.o
WARNING: modpost: GPL-incompatible module slusb.ko uses future GPL-only symbol
'usb_deregister'
WARNING: modpost: GPL-incompatible module slusb.ko uses future GPL-only symbol
'usb_register_driver'
  CC /home/olivares/Download/slmodem-2.9.11-20070505/drivers/slamr.mod.o
  LD [M] /home/olivares/Download/slmodem-2.9.11-20070505/drivers/slamr.ko
  CC /home/olivares/Download/slmodem-2.9.11-20070505/drivers/slusb.mod.o
  LD [M] /home/olivares/Download/slmodem-2.9.11-20070505/drivers/slusb.ko

```

```
make[2]: Leaving directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
make[1]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
[olivares@localhost slmodem-2.9.11-20070505]$
[olivares@localhost slmodem-2.9.11-20070505]$ make
make -C modem all
make[1]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/modem'
make[1]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/modem'
make -C drivers KERNEL_DIR=/lib/modules/2.6.22.1-27.fc7/build
make[1]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
cc -I/lib/modules/2.6.22.1-27.fc7/build/include -o kernel-ver kernel-ver.c
make all KERNEL_VER=2.6.22.1-27.fc7
make[2]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
make modules -C /lib/modules/2.6.22.1-27.fc7/build
SUBDIRS=/home/olivares/Download/slmodem-2.9.11-20070505/drivers
make[3]: Entering directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
  Building modules, stage 2.
  MODPOST 2 modules
WARNING: could not find /home/olivares/Download/slmodem-2.9.11-20070505/drivers/.amrlibs.o.cmd for /home/olivares/Download/slmodem-2.9.11-20070505/drivers/amrlibs.o
WARNING: modpost: GPL-incompatible module slusb.ko uses future GPL-only symbol 'usb_deregister'
WARNING: modpost: GPL-incompatible module slusb.ko uses future GPL-only symbol 'usb_register_driver'
make[3]: Leaving directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
make[2]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
make[1]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
[olivares@localhost slmodem-2.9.11-20070505]$

[olivares@localhost slmodem-2.9.11-20070505]$ su
Password:
[root@localhost slmodem-2.9.11-20070505]# make install
make -C modem all
make[1]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/modem'
make[1]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/modem'
make -C drivers KERNEL_DIR=/lib/modules/2.6.22.1-27.fc7/build
make[1]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
cc -I/lib/modules/2.6.22.1-27.fc7/build/include -o kernel-ver kernel-ver.c
make all KERNEL_VER=2.6.22.1-27.fc7
make[2]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
make modules -C /lib/modules/2.6.22.1-27.fc7/build
SUBDIRS=/home/olivares/Download/slmodem-2.9.11-20070505/drivers
make[3]: Entering directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
  Building modules, stage 2.
  MODPOST 2 modules
WARNING: could not find /home/olivares/Download/slmodem-2.9.11-20070505/drivers/.amrlibs.o.cmd for /home/olivares/Download/slmodem-2.9.11-20070505/drivers/amrlibs.o
WARNING: modpost: GPL-incompatible module slusb.ko uses future GPL-only symbol 'usb_deregister'
WARNING: modpost: GPL-incompatible module slusb.ko uses future GPL-only symbol 'usb_register_driver'
```

```

make[3]: Leaving directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
make[2]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
make[1]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
make install -C drivers KERNEL_DIR=/lib/modules/2.6.22.1-27.fc7/build
make[1]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
cc -I/lib/modules/2.6.22.1-27.fc7/build/include -o kernel-ver kernel-ver.c
mkdir -p /dev
mknod -m 600 /dev/slamr0 c 242 0 ; mknod -m 600 /dev/slamr1 c 242 1 ; mknod -m
600 /dev/slamr2 c 242 2 ; mknod -m 600 /dev/slamr3 c 242 3 ; echo -n
mknod -m 600 /dev/slusb0 c 243 0 ; mknod -m 600 /dev/slusb1 c 243 1 ; mknod -m
600 /dev/slusb2 c 243 2 ; mknod -m 600 /dev/slusb3 c 243 3 ; echo -n
make install KERNEL_VER=2.6.22.1-27.fc7
make[2]: Entering directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
install -D -m 644 slamr.ko /lib/modules/2.6.22.1-27.fc7/extra/slamr.ko
install -D -m 644 slusb.ko /lib/modules/2.6.22.1-27.fc7/extra/slusb.ko
/sbin/depmod -a
make[2]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
make[1]: Leaving directory `/home/olivares/Download/slmodem-2.9.11-20070505/drivers'
install -D -m 755 modem/slmodemd /usr/sbin/slmodemd
rm -f -rf /var/lib/slmodem
install -d -D -m 755 /var/lib/slmodem
[root@localhost slmodem-2.9.11-20070505]#

[root@localhost slmodem-2.9.11-20070505]# cd ../ungrab-winmodem-20070505
[root@localhost ungrab-winmodem-20070505]# make clean
rm -f *.o *.ko *.mod.* *.cmd *~
rm -f -r .tmp_versions
[root@localhost ungrab-winmodem-20070505]# make
make modules -C /lib/modules/2.6.22.1-27.fc7/build
SUBDIRS=/home/olivares/Download/ungrab-winmodem-20070505
make[1]: Entering directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
CC [M] /home/olivares/Download/ungrab-winmodem-20070505/ungrab-winmodem.o
/home/olivares/Download/ungrab-winmodem-20070505/ungrab-winmodem.c: In function
'softmodem_release_init':
/home/olivares/Download/ungrab-winmodem-20070505/ungrab-winmodem.c:90: warning:
'pci_find_device' is deprecated (declared at include/linux/pci.h:477)
Building modules, stage 2.
MODPOST 1 modules
CC /home/olivares/Download/ungrab-winmodem-20070505/ungrab-winmodem.mod.o
LD [M] /home/olivares/Download/ungrab-winmodem-20070505/ungrab-winmodem.ko
make[1]: Leaving directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
[root@localhost ungrab-winmodem-20070505]# make install
make modules -C /lib/modules/2.6.22.1-27.fc7/build
SUBDIRS=/home/olivares/Download/ungrab-winmodem-20070505
make[1]: Entering directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
Building modules, stage 2.
MODPOST 1 modules
make[1]: Leaving directory `/usr/src/kernels/2.6.22.1-27.fc7-i686'
install -D -m 644 ungrab-winmodem.ko /lib/modules/2.6.22.1-27.fc7/extra/ungrab-
winmodem.ko
/sbin/depmod -a
[root@localhost ungrab-winmodem-20070505]#

```



```
[olivares@localhost slmodem-2.9.11-20070505]$ su -
Password:
[root@localhost ~]# modprobe ungrab-winmodem
[root@localhost ~]# modprobe slamr
[root@localhost ~]# slmodemd -c USA /dev/slamr0 &
[1] 3892
[root@localhost ~]# SmartLink Soft Modem: version 2.9.11 Jul 25 2007 08:21:07
symbolic link `/dev/ttySL0' -> `/dev/pts/1' created.
modem `slamr0' created. TTY is `/dev/pts/1'
Use `/dev/ttySL0' as modem device, Ctrl+C for termination.
```

Turn on slmodemd service on again. If you did not have this service enabled, to enable it,

```
[root@localhost ~]# cd slmodem-2.9.11-20070505/scripts/
[root@localhost scripts]# cp slmodemd /etc/rc.d/init.d/
[root@localhost scripts]# cd /etc/rc.d/init.d/
[root@localhost init.d]# chmod +x slmodemd
[root@localhost init.d]# chkconfig slmodemd --add
[root@localhost init.d]# cd ~
```

Turn on service if has not been done so.

```
[root@localhost ~]# chkconfig slmodemd on
```

To verify that all symbolic links have been made you may do the following,

```
[root@localhost ~]# cd /etc/rc.d/init.d
[root@localhost init.d]# pwd
/etc/rc.d/init.d
[root@localhost init.d]# head -8 slmodemd
#!/bin/sh
#
# slmodemd:    Starts the SmartLink Modem Daemon
#
# chkconfig: 345 90 10
# description: This is the user space part of the SmartLink Modem driver
# processname: slmodemd
# config: /etc/sysconfig/slmodem
[root@localhost init.d]# cd ..
[root@localhost rc.d]# for i in 0 1 2 3 4 5 6
> do
> ls rc$i.d/*slmodemd*
> done
rc0.d/K10slmodemd
rc1.d/K10slmodemd
rc2.d/S90slmodemd
rc3.d/S90slmodemd
rc4.d/S90slmodemd
rc5.d/S90slmodemd
rc6.d/K10slmodemd
[root@localhost rc.d]# chkconfig slmodemd --list
slmodemd      0:off  1:off  2:on   3:on   4:on   5:on   6:off
[root@localhost rc.d]#
```

I dialed to check if everything is working and it is

```
[root@localhost ~]# wvdial
--> WVDial: Internet dialer version 1.54.0
--> Cannot get information for serial port.
--> Initializing modem.
```

```
--> Sending: ATZ
ATZ
OK
--> Sending: ATQ0 V1 E1 S0=0 X3 &C1 &D2 +MS=90
ATQ0 V1 E1 S0=0 X3 &C1 &D2 +MS=90
OK
--> Modem initialized.
--> Sending: ATDT7072000
--> Waiting for carrier.
ATDT7072000
CONNECT 45333
--> Carrier detected. Starting PPP immediately.
--> Starting pppd at Wed Jul 25 08:36:48 2007
--> pid of pppd: 4172
--> Using interface ppp0
--> local IP address 66.201.8.81
--> remote IP address 66.201.8.6
--> primary DNS address 66.201.0.203
--> secondary DNS address 12.176.80.9
```

```
[root@localhost slmodem-2.9.11-20070505]# cat /etc/wvdial.conf
```

```
[Dialer Defaults]
Modem = /dev/ttySL0
Baud = 460800
Init1 = ATZ
Init2 = ATQ0 V1 E1 S0=0 X3 &C1 &D2 +MS=90
ISDN = 0
Modem Type = Analog Modem
Phone = 7072000
Username = my_username
Password = my_password
Carrier Check = no
Stupid Mode = yes
Auto DNS = yes
[root@localhost ~]#
```

```
File created on
[olivares@localhost ~]$ echo $(date +%Y%m%d%H%M%S)
20070725091127
```