GPRS/EDGE Modem User Manual-Linux

Test Version：Fedora10，Ubuntu-9.10

Notes:

You can use the quick setup (method A) if your version is Fedora10, Ubuntu-9.10 or above of Linux system, and you can use the detailed instructions (method B) if dialing failed

Method A：Quick Setup

(1) Copy the gsm,gsm-conn two files to the "/etc/ppp/peers/" directory

(2) Insert the modem into the computer, and run the command as below:

#ls /dev/ttyUSB*

It means that the usb driver is ok if shows the usb ports (for example: /dev/ttyUSB0)

(3) Please modify the bold part according to your local network configuration, shown as below:

#vi gsm

/dev/ttyUSB0

……

-chap

user **admin**

password **admin**

……

#vi gsm-conn

……

""ATZ

OK 'AT+CGDCONT=1,"IP","**cmnet**"'

OK 'ATDT***99***1#**'

……

(4) Open the terminal and run command as below:

#pppd call gsm &

It means network has connected if it shows got the IP address or found the ppp0 when you run the command "#ifconfig"

Method B：Detailed Instructions

(1) Copy the chap-secrets, pap-secrets two files to the "/etc/ppp/peers/" directory(it doesn't need if the files have existed)

(2) Copy the gsm,gsm-conn two files to the "/etc/ppp/peers/" directory(please create the directory manually if it doesn't exist)

(3) Insert the modem into computer, it will show as below:

```
[root@localhost /]# usb 2-1: configuration #1 chosen from 1 choice
cp2101 2-1:1.0: cp2101 converter detected
usb 2-1: reset full speed USB device using uhci_hcd and address 27
usb 2-1: cp2101 converter now attached to ttyUSB0
usb 2-1: New USB device found, idVendor=10c4, idProduct=ea60
usb 2-1: New USB device strings: Mfr=1, Product=2, SerialNumber=3
usb 2-1: Product: CP2102 USB to UART Bridge Controller
usb 2-1: Manufacturer: Silicon Labs
usb 2-1: SerialNumber: 0001
```

It means the usb driver is ok if it shows ttyUSB0 port from the terminal

(4) Please modify the bold part according to your local network configuration, shown as below:

#vi gsm

/dev/ttyUSB0

……

-chap

user **admin**

password **admin**

……

#vi gsm-conn

……

""ATZ

OK 'AT+CGDCONT=1,"IP","**cmnet**"'

OK 'ATDT***99***1#**'

……

(5) Open the terminal and run command as below:

#pppd call gsm &

It means network has connected if it shows got the IP address or found the ppp0 when you run

the command "#ifconfig"

(6) If it shows connected and you can ping the internet IP address by terminal, but you can not

surf the Internet, please add DNS to the resolv.conf from dialing

For example: please add the DNS to resolv.conf if you get the DNS as below:


```
primary   DNS address 211.136.20.203
secondary DNS address 211.136.20.203
```

#vi /etc/resolv.conf

Name server 211.136.20.203

Appendix：Test Instruction

（1）Check the dialing file and path of pppd and chat, shown as below:

```
[root@localhost peers]# whereis pppd
pppd: /usr/sbin/pppd /usr/lib/pppd /usr/share/man/man8/pppd.8.gz
[root@localhost peers]# whereis chat
chat: /usr/sbin/chat /usr/share/man/man8/chat.8.gz
[root@localhost peers]# _
```

It means the files existed and under the "/usr/sbin/" directory

You must download and compile the file "pppd, chat" if it not exist, and then copy to the

"/usr/sbin/" directory, and you can also try to copy the file from other Linux systems

Please change the bold configuration path of chat if the files existed but not under the

"/usr/sbin/" directory when you run the command "#whereis", shown as below:

#vi gsm

……

Connect '**/usr/sbin/**chat -s -v -f /etc/ppp/peers/gsm-conn'

(2) Test port as below:

#ls /dev/ttyUSB*

Please check the modem if it not shows new port

(3) AT Test the port by AT command, shown as below:

#minicom

```
Welcome to minicom 2.3

OPTIONS: I18n
Compiled on Aug 29 2008, 07:16:49.
Port /dev/ttyUSB0

                 Press CTRL-A Z for help on special keys

AT S7=45 S0=0 L1 V1 X4 &c1 E1 Q0
OK
_
```

It means the port is ready if it shows ok

（4）Setup port as below:

#minicom -s

```
+-----[configuration]------+
¦ Filenames and paths      ¦
¦ File transfer protocols  ¦
¦ Serial port setup        ¦
¦ Modem and dialing        ¦
¦ Screen and keyboard      ¦
¦ Save setup as dfl        ¦
¦ Save setup as..          ¦
¦ Exit                     ¦
¦ Exit from Minicom        ¦
+--------------------------+
```

```
+--------------------------------------------------------+
¦ A -      Serial Device      : /dev/ttyUSB0             ¦
¦ B - Lockfile Location       : /var/lock               ¦
¦ C -      Callin Program     :                         ¦
¦ D -      Callout Program    :                         ¦
¦ E -      Bps/Par/Bits       : 460800 8N1              ¦
¦ F - Hardware Flow Control   : No                      ¦
¦ G - Software Flow Control   : No                      ¦
¦                                                        ¦
¦     Change which setting? _                           ¦
+--------------------------------------------------------+
```

Please set the baud rate to 115200 if you use GPRS modem, next press "Save setup as df1",

exit the setup.

You can try network connection after checking the AT command is OK by minicom