

Trimble NetRS - How to set up a PPP connection to a NetRS using LINUX and WvDial

32 Freddy Blume January 13, 2009 [Application Notes](#) 9499

How to set up a PPP connection to a NetRS using LINUX and WvDial

Use the LINUX command "wvdial SITE", where SITE is the dialer specified in the wvdial.conf file (e.g. [Dialer unavco]). See below.

REMOTE MODEM SETTINGS

USRobotics Courier V.Everything Settings:

B0 C1 E0 F1 L2 M1 Q2 V1 X1

BAUD=9600 PARITY=N WORDLEN=8

DIAL=TONE ON HOOK TIMER

&A1 &B0 &C1 &D0 &G0 &H0 &I0 &K1 &L0 &M4 &N6

&P1 &R1 &S0 &T5 &U0 &X0 sY1 %N6 #CID=0

S00=001 S01=000 S02=043 S03=013 S04=010 S05=008 S06=002 S07=060

S08=002 S09=006 S10=014 S11=055 S12=050 S13=000 S14=001 S15=000

S16=000 S17=000 S18=000 S19=005 S20=000 S21=010 S22=017 S23=019

S24=150 S25=005 S26=001 S27=000 S28=008 S29=020 S30=000 S31=000

S32=009 S33=000 S34=000 S35=000 S36=000 S37=000 S38=000 S39=000

S40=000 S41=000 S42=125 S43=200 S44=015 S45=000 S46=000 S47=0002

S48=000 S49=000 S50=000 S51=000 S52=000 S53=000 S54=064 S55=000

S56=000 S57=000 S58=000 S59=001 S60=000 S61=010 S62=000 S63=000

S64=000 S65=000 S66=000 S67=000 S68=000 S69=000 S70=000 S71=056
S72=125 S73=121

DIP SWITCHES:

ON: 1,3,4,7,8

#####

LOCAL MODEM SETTINGS

C1 E0 F1 M1 Q2 V1 X1

BAUD=9600 PARITY=N WORDLEN=8

DIAL=PULSE ON HOOK TIMER

&A1 &B0 &C1 &D0 &G0 &H0 &I0 &K1 &L0 &M4 &N0

&P0 &R1 &S0 &T5 &U0 &X0 &Y1 %N6 #CID=0

S00=001 S01=000 S02=043 S03=013 S04=010 S05=008 S06=002 S07=060

S08=002 S09=006 S10=014 S11=070 S12=050 S13=000 S14=001 S15=000

S16=000 S17=000 S18=000 S19=000 S20=000 S21=010 S22=017 S23=019

S24=150 S25=005 S26=001 S27=000 S28=008 S29=020 S30=000 S31=000

S32=009 S33=000 S34=000 S35=000 S36=000 S37=000 S38=000 S39=0001

S40=000 S41=000 S42=126 S43=200 S44=015 S45=000 S46=000 S47=000

S48=000 S49=000 S50=000 S51=000 S52=000 S53=000 S54=064 S55=000

S56=000 S57=000 S58=000 S59=000 S60=000 S61=000 S62=000 S63=000 7

S64=000 S65=000 S66=000 S67=000 S68=000 S69=000 S70=000

DIP SWITCHES:

ON: 1,3,4,7,8

#####

COMPUTER PPP INFO

Configure the /etc/wvdial.conf file:

; Phone = <Target Phone Number>

; Username = <Your Login Name>

; Password = <Your Password>

[Modem0]

Modem = /dev/modem

Baud = 9600

SetVolume = 1

Dial Command = ATDT

Init1 = ATZ

FlowControl = NOFLOW

; Phone = <Target Phone Number>

; Username = <Your Login Name>

; Password = <Your Password>

[Dialer unavco]

Area Code =303

Username = test

Password =test123

Phone = 5551212

Dial Prefix =

Stupid Mode = 1

Inherits = Modem0

Configure/check /etc/sysconfig/network-scripts/ifcfg-ppp0:

Please read /usr/share/doc/initscripts-*/sysconfig.txt

for the documentation of these parameters.

USERCTL=yes

PEERDNS=yes

TYPE=Modem

DEVICE=ppp0

BOOTPROTO=dialup

ONBOOT=no

NAME=unavco

CCP=off

PC=off

AC=off

BSDCOMP=off

VJ=off

VJCCOMP=off

LINESPEED=9600

MODEMPORT=/dev/modem

IDLETIMEOUT=600

DEMAND=no

PROVIDER=unavco

DEFROUTE=no

PERSIST=no

PAPNAME=unavco

WVDIALSECT=unavco

MODEMNAME=Modem0

#####

RX PORT SETTINGS

- Select I/O configuration--> Port configuration
- Edit port modem is attached to
- Service--> PPP
- Baud--> 19200 (or other)
- Parameter for PPP mode: Enter the IP addresses
- Connection--> modem

NetRS Configuration File "PPP"

++ FBCfg v1

Configuration File, Original Name = PPP

created Wed Jun 29 17:50:13 UTC 2005

file /etc/sysconfig/gpsd.config

0 OFF-serial 115200:N:N 0 ppp 1 0

1 serial 115200:N:N 0 ppp 10 0

2 OFF-serial 9600:N:N 0 cmr 10 2

3 OFF-serial 9600:N:N 0 cmr 10 1

end of file /etc/sysconfig/gpsd.config

file /etc/sysconfig/met.conf

end of file /etc/sysconfig/met.conf

file /etc/sysconfig/advertise

Enable: yes

Interval: 300

Target: 10.234.4.46 16000

Target: 69.44.87.248 16000

end of file /etc/sysconfig/advertise

```
## file /etc/sysconfig/dialout
```

```
## end of file /etc/sysconfig/dialout
```

```
## file /etc/sysconfig/mgetty+sendfax/mgetty.config
```

```
#
```

```
# mgetty configuration file
```

```
#
```

```
# this is a sample configuration file, see mgetty.info for details
```

```
#
```

```
# comment lines start with a "#", empty lines are ignored
```

```
# ----- global section -----
```

```
#
```

```
# In this section, you put the global defaults, per-port stuff is below
```

```
# set the global debug level to "4" (default from policy.h)
```

```
debug 0
```

```
# set the local fax station id
```

```
fax-id 49 115 xxxxxxxx
```

```
# access the modem(s) with 38400 bps

#speed 38400

# use these options to make the /dev/tty-device owned by "uucp.uucp"
# and mode "rw-rw-r--" (0664). *LEADING ZERO NEEDED!*

#port-owner uucp

#port-group uucp

#port-mode 0664

# use these options to make incoming faxes owned by "root.uucp"
# and mode "rw-r-----" (0640). *LEADING ZERO NEEDED!*

#fax-owner root

#fax-group uucp

#fax-mode 0640

# ----- port specific section -----

#

# Here you can put things that are valid only for one line, not the others

#

# Zoom V.FX 28.8, connected to ttyS0: don't do fax, less logging

#
```

```
#port ttyS0

# debug 3

# data-only y

# some other Rockwell modem, needs "switchbd 19200" to receive faxes

# properly (otherwise it will fail with "timeout").

#

#port ttyS1

# speed 38400

# switchbd 19200

# ZyXEL 2864, connected to ttyS2: maximum debugging, grab statistics

#

#port ttyS2

# debug 8

# init-chat "" ddd+++dddAT&FS2=255 OK ATN3S0=0S13.2=1 OK

# statistics-chat "" AT OK ATI2 OK

# statistics-file /var/log/statistics.ttyS2

# modem-type cls2

# direct connection of a VT100 terminal which doesn't like DTR drops

#

#port ttyS3
```

```
# direct y
```

```
# speed 19200
```

```
# toggle-dtr n
```

```
# SerialPort1
```

```
port console
```

```
direct y
```

```
speed 115200
```

```
toggle-dtr n
```

```
debug 0
```

```
# SerialPort2
```

```
port tts/1
```

```
direct n
```

```
speed 9600
```

```
toggle-dtr n
```

```
init-chat "" AT OK
```

```
debug 0
```

```
# SerialPort3
```

```
port tts_max0
```

```
direct y
```

```
speed 115200
```

toggle-dtr n

debug 0

SerialPort4

port tts_max1

direct y

speed 115200

toggle-dtr n

debug 0

end of file /etc/sysconfig/mgetty+sendfax/mgetty.config

file /etc/sysconfig/ppp/options.console

nocdtrcts

192.168.0.1:192.168.0.10

noctrlscts

local

end of file /etc/sysconfig/ppp/options.console

file /etc/sysconfig/ppp/options.tts.1

192.168.0.1:192.168.0.20

noctrlscts

end of file /etc/sysconfig/ppp/options.tts.1

```
## file /etc/sysconfig/ppp/options.tts_max0
```

```
192.168.0.1:192.168.0.30
```

```
noctscts
```

```
local
```

```
## end of file /etc/sysconfig/ppp/options.tts_max0
```

```
## file /etc/sysconfig/ppp/options.tts_max1
```

```
192.168.0.1:192.168.0.40
```

```
noctscts
```

```
local
```

```
## end of file /etc/sysconfig/ppp/options.tts_max1
```

```
#####  
#####
```

SAMPLE COMPUTER MESSAGE FILE (var/log/messages)

```
Jun 29 18:30:40 noreaster wvdial[8720]: WvDial: Internet dialer version 1.53
```

```
Jun 29 18:30:40 noreaster wvdial[8720]: Initializing modem.
```

```
Jun 29 18:30:40 noreaster wvdial[8720]: Sending: ATZ
```

```
Jun 29 18:30:40 noreaster wvdial[8720]: OK
```

```
Jun 29 18:30:40 noreaster wvdial[8720]: Modem initialized.
```

```
Jun 29 18:30:40 noreaster wvdial[8720]: Sending: ATDT3035273541
```

Jun 29 18:30:40 noreaster wvdial[8720]: Waiting for carrier.
Jun 29 18:30:59 noreaster wvdial[8720]: CONNECT 9600/ARQ
Jun 29 18:30:59 noreaster wvdial[8720]: Carrier detected. Chatmode finished.
Jun 29 18:30:59 noreaster pppd[8707]: Serial connection established.
Jun 29 18:30:59 noreaster /etc/hotplug/net.agent: assuming ppp0 is already up
Jun 29 18:30:59 noreaster pppd[8707]: Using interface ppp0
Jun 29 18:30:59 noreaster pppd[8707]: Connect: ppp0 <--> /dev/modem
Jun 29 18:31:03 noreaster modprobe: modprobe: Can't locate module ppp-compress-21
Jun 29 18:31:03 noreaster modprobe: modprobe: Can't locate module ppp-compress-21
Jun 29 18:31:04 noreaster pppd[8707]: Deflate (15) compression enabled
Jun 29 18:31:04 noreaster pppd[8707]: local IP address 10.234.4.32
Jun 29 18:31:04 noreaster pppd[8707]: remote IP address 192.168.0.1
Jun 29 18:31:04 noreaster su(pam_unix)[8760]: session opened for user root by (uid=0)
Jun 29 18:31:04 noreaster su(pam_unix)[8760]: session closed for user root
Jun 29 18:34:48 noreaster pppd[8707]: Terminating on signal 15.
Jun 29 18:34:48 noreaster su(pam_unix)[8812]: session opened for user root by (uid=0)
Jun 29 18:34:48 noreaster su(pam_unix)[8812]: session closed for user root
Jun 29 18:34:48 noreaster pppd[8707]: Connection terminated.

#####

RECEIVER MESSAGE FILE INFO

Jun 29 17:30:10 KAKA frontpanel[422]: Starting mgettyPort2

Jun 29 17:31:01 KAKA pppd[422]: pppd 2.4.1 started by root, uid 0
Jun 29 17:31:01 KAKA pppd[422]: Using interface ppp0
Jun 29 17:31:01 KAKA pppd[422]: Connect: ppp0 <--> /dev/tts/1
Jun 29 17:31:04 KAKA pppd[422]: Deflate (15) compression enabled
Jun 29 17:31:04 KAKA pppd[422]: local IP address 192.168.0.1
Jun 29 17:31:04 KAKA pppd[422]: remote IP address 10.234.4.32
Jun 29 17:31:10 KAKA AutoDelete: Searched 1330 files in 109 directories.
Jun 29 17:31:37 KAKA Advertise[251]: Sending Advertisements.
Jun 29 17:32:11 KAKA AutoDelete: Searched 1330 files in 109 directories.
Jun 29 17:33:11 KAKA AutoDelete: Searched 1330 files in 109 directories.
Jun 29 17:34:11 KAKA AutoDelete: Searched 1330 files in 109 directories.
Jun 29 17:34:48 KAKA pppd[422]: LCP terminated by peer (User request)
Jun 29 17:34:51 KAKA pppd[422]: Connection terminated.
Jun 29 17:34:51 KAKA pppd[422]: Connect time 3.8 minutes.
Jun 29 17:34:51 KAKA pppd[422]: Sent 75 bytes, received 87 bytes.

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Online URL:
<https://kb.unavco.org/article/trimble-netrs-how-to-set-up-a-ppp-connection-to-a-netrs-using-linux-and-wvdial-32.html>