

```
#!/bin/sh
#
# RJP 3.8.2025 ppp-gui for mobile broadband .. and maybe more too
# packages sudo, xterm, yad, and ppp packages are required
#
#
touch ~/.Xresources
echo '! Use a truetype font and size.
xterm*faceName: Monospace ' | grep -xFv -f $HOME/.Xresources >>
$HOME/.Xresources
echo 'xterm*faceSize: 14 ' | grep -xFv -f $HOME/.Xresources >>
$HOME/.Xresources
xrdb -merge ~/.Xresources
```

```
echo '
attach 100 {
    device-name "u3g[0-9]+";
    match "vendor" "0x12d1";
    match "product" "0x1003";
    action "/usr/sbin/ppp -ddial DNA";
};
' > /tmp/huawei-e220.conf
```

```
echo '
default:
allow users *
#set log Phase Chat Connect hdlc LCP IPCP IPV6CP CCP tun
set log Phase Chat Connect
DNA:
set device /dev/cuaU0.0
set timeout 0
set authname " "
set authkey " "
set dial "ABORT BUSY ABORT NO\\sCARRIER TIMEOUT 5 \
\\" \
AT OK-AT-OK \
AT+CFUN=1 OK-AT-OK \
AT+CMEE=2 OK-AT-OK \
AT+CSQ OK \
AT+CGDCONT=1,\\\\"IP\\\\" ,\\\\"internet\\\\" OK \
AT+CGACT? OK-AT-OK \
AT+CGATT? OK \
AT+CGCLASS? OK \
AT+COPS? OK \
\\dATD*99# TIMEOUT 40 CONNECT"
set crtscts on
disable vjcomp
disable acfcomp
disable deflate
disable deflate24
disable pred1
```

```
disable protocomp
disable mppe
disable ipv6cp
disable lqr
disable echo
nat enable yes
enable dns
resolv writable
set dns 8.8.8.8 ## google dns
set ifaddr 10.1.0.2/0 10.1.0.1/0 255.255.255.255 0.0.0.0
#add default HISADDR
# https://forums.freebsd.org/threads/pc-bsd-huawei-e1752-mobile-broadband-configure.24800/
' > /tmp/ppp.conf
```

```
echo '
# /etc/ppp/ppp.linkup

# These commands executed with uid of ppp invoker!
DNA:
shell route delete default
shell route add default -interface INTERFACE
' > /tmp/ppp.linkup
```

```
echo '
# /etc/ppp/ppp.linkdown
# These commands executed with uid of ppp invoker!
default:
shell logger "LABEL down (up UPTIME): OCTETSIN received, OCTETSOUT sent"
DNA:
shell route delete default
shell route add default billion
' > /tmp/ppp.linkdown
```

```
echo '
Install first usb_modeswitch and usbutils packages
```

```
pkg install usb_modeswitch usbutils
```

```
Check u3g driver status
```

```
kldstat
```

```
If not loaded, load u3g
```

```
kldload u3g
```

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

```

### BASIC SETTINGS for Huawei E220 DNA FINLAND ###
#####
###
#=====#
## /etc/devd/huawei-e220.conf

attach 100 {
    device-name "u3g[0-9]+";
    match "vendor" "0x12d1";
    match "product" "0x1003";
    action "/usr/sbin/ppp -ddial DNA";
};

#=====#

## /etc/ppp/ppp.conf

default:
allow users *
#set log Phase Chat Connect hdlc LCP IPCP IPV6CP CCP tun
set log Phase Chat Connect
DNA:
set device /dev/cuaU0.0
set timeout 0
set authname " " # use your provider authname here
set authkey " " # use your provider autkey here
set dial "ABORT BUSY ABORT NO\\sCARRIER TIMEOUT 5 \
\\" \
AT OK-AT-OK \
AT+CFUN=1 OK-AT-OK \
AT+CMEE=2 OK-AT-OK \
AT+CSQ OK \
AT+CGDCONT=1,\\s"IP\\s",\\s"internet\\s" OK \ # use your provider APN
in stead of internet
AT+CGACT? OK-AT-OK \
AT+CGATT? OK \
AT+CGCLASS? OK \
AT+COPS? OK \
\\dATD*99# TIMEOUT 40 CONNECT"
set crtscts on
disable vjcomp
disable acfcomp
disable deflate
disable deflate24
disable pred1
disable protocomp
disable mppe
disable ipv6cp
disable lqr
disable echo
nat enable yes

```

```
enable dns
resolv writable
set dns 8.8.8.8 ## google dns
set ifaddr 10.1.0.2/0 10.1.0.1/0 255.255.255.255 0.0.0.0
#add default HISADDR
# https://forums.freebsd.org/threads/pc-bsd-huawei-e1752-mobile-broadband-configure.24800/
```

```
#=====#
# /etc/ppp/ppp.linkup
```

```
# These commands executed with uid of ppp invoker!
DNA:
shell route delete default
shell route add default -interface INTERFACE
```

```
#=====#
```

```
# /etc/ppp/ppp.linkdown
# These commands executed with uid of ppp invoker!
default:
shell logger "LABEL down (up UPTIME): OCTETSIN received, OCTETSOUT sent"
DNA:
shell route delete default
shell route add default billion
```

```
#=====#
```

```
' > /tmp/readme-ppp.txt
```

```
yad --form --columns=5 --rows=4 --center --width=1200 --title="PPP GUI" --
text="PPP GUI" \
\
--field="README FIRST":fbtn "sh -c 'xdg-open /tmp/readme-ppp.txt ; exec sh'
& " \
--field="Make Huawei e220 conf settings":fbtn "xterm -e sh -c 'sudo cp
/tmp/huawei-e220.conf /etc/devd/huawei-e220.conf ; exec sh' & " \
--field="Make basic ppp.conf settings":fbtn "xterm -e sh -c 'sudo cp
/etc/ppp/ppp.conf /etc/ppp/ppp.conf.bak && sudo cp /tmp/ppp.conf
/etc/ppp/ppp.conf ; exec sh' & " \
--field="Look ppp.conf settings":fbtn "xterm -e sh -c 'sudo cat
/etc/ppp/ppp.conf; exec sh' & " \
--field="Restore ppp.conf earlier settings":fbtn "xterm -e sh -c 'sudo cp
/etc/ppp/ppp.conf.bak /etc/ppp/ppp.conf ; exec sh' & " \
--field="Edit ppp.conf file":fbtn "xterm -e sh -c 'sudo nano /etc/ppp/ppp.conf ;
exec sh' & " \
--field="Make basic ppp.linkup settings":fbtn "xterm -e sh -c 'sudo cp
/etc/ppp/ppp.linkup /etc/ppp/ppp.linkup.bak && sudo cp /tmp/ppp.linkup
/etc/ppp/ppp.linkup ; exec sh' & " \
```

```
--field="Edit ppp.linkup file":fbtn "xterm -e sh -c 'sudo nano
/etc/ppp/ppp.linkup ; exec sh' & " \
--field="Make basic ppp.down settings":fbtn "xterm -e sh -c 'sudo cp
/etc/ppp/ppp.linkdown /etc/ppp/ppp.linkdown.bak && sudo cp
/tmp/ppp.linkdown /etc/ppp/ppp.linkdown ; exec sh' & " \
--field="Edit ppp.linkdown file":fbtn "xterm -e sh -c 'sudo nano
/etc/ppp/ppp.linkdown ; exec sh' & " \
--field="See Mobile dmesg":fbtn "xterm -e sh -c 'sudo dmesg | grep Mobile ;
exec sh' & " \
--field="See ugen1.2 dump_device_desc":fbtn "xterm -e sh -c 'sudo usbconfig
-d ugen1.2 dump_device_desc ; exec sh' & " \
--field="Load mobile broadband driver":fbtn "xterm -e sh -c 'sudo kldload
u3g ; exec sh' & " \
--field="Connect mobile network":fbtn "xterm -e sh -c 'sudo ppp -ddial DNA ;
exec sh' & " \
--field="Disconnect mobile network":fbtn "xterm -e sh -c 'sudo killall ppp ;
exec sh' & " \
--field="Test connection":fbtn "sh -c 'xterm -hold -e ping -c 3 google.com ; exec
sh' & " \
--button=Exit:1

cd /tmp && rm huawei-e220.conf ppp.conf ppp.linkup ppp.linkdown readme-
ppp.txt
```