

Quectel EP06-E and wAP R ac (RBwAPGR-5HacD2HnD)

[killersoft](#) 1 July 20, 2019, 11:09am

Well happy to report that a Quectel LTE EP06-E(RCM compliant) installed in a wAP ac(RBwAPGR-5HacD2HnD) tested using ROS 6.45.1 works without the need to cut or tape pins on the card.

(I am testing with ALDI mobile(mdata.net.au APN, which uses Telstra Towers here in Australia).

I used this to get to **PPP** working and **LTE MODE** TOO...

```
/port firmware
```

```
set ignore-directip-modem=yes
```

Reboot the Routerbord at this point

```
/port
```

```
set 0 name=usb1
```

```
/interface ppp-client
```

```
add apn=mdata.net.au data-channel=3 disabled=no info-channel=2 name=ppp-out1 port=usb1
```

```
-----STATS-----
```

```
[admin@MikroTik] > /system resource usb print
```

DEVICE VENDOR NAME SPEED

```
0 1-0 Linux 3.3.5 xhci-hcd-ipq40xx xHCI Host Controller 480
```

```
1 2-0 Linux 3.3.5 xhci-hcd-ipq40xx xHCI Host Controller 5000
```

```
2 2-1 Quectel EP06-E 5000
```

```
[admin@MikroTik] > /system resource usb
```

```
[admin@MikroTik] /system resource usb> print detail
```

```
0 device="1-0" vendor="Linux 3.3.5 xhci-hcd-ipq40xx" name="xHCI Host Controller"
```

```
serial-number="xhci-hcd-ipq40xx.0" vendor-id="0x1d6b" device-id="0x0002" speed="480" ports=1
```

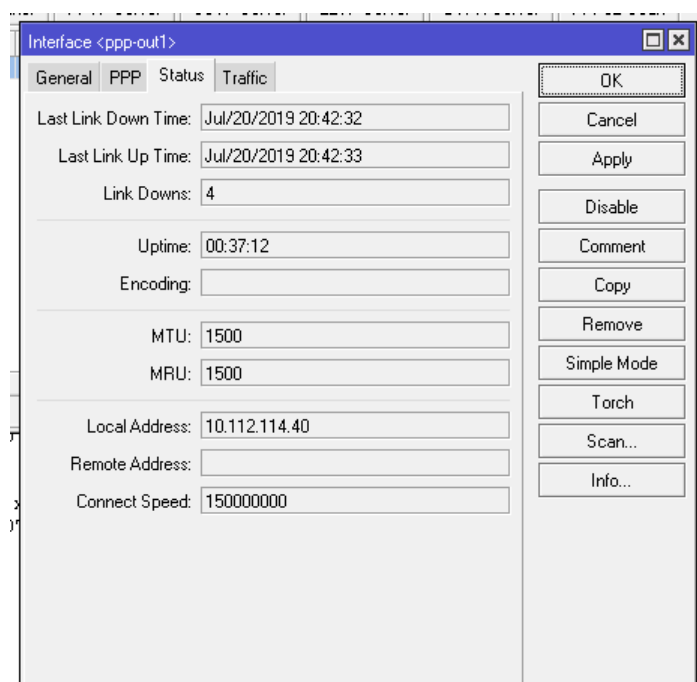
```
usb-version=" 2.00"
```

1 device="2-0" vendor="Linux 3.3.5 xhci-hcd-ipq40xx" name="xHCI Host Controller"

serial-number="xhci-hcd-ipq40xx.0" vendor-id="0x1d6b" device-id="0x0003"

speed="5000" ports=1

usb-version=" 3.00"





So now I wanted to see how LTE mode on the card went.

Using the advice on [RouterOS - RouterOS - MikroTik Documentation](#) I needed to update the card with the command :

```
AT+QCFG="usbnet",1
```

There are two ways to do this I found.

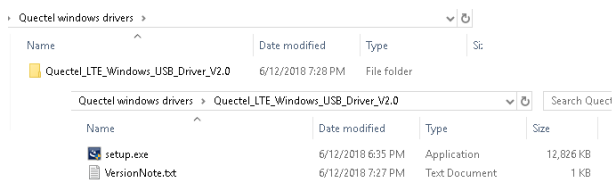
My first way was to pull the EP06-E Card and install it in a USB to WWAN converter card(available cheaply on EBAY for a couple of \$\$).



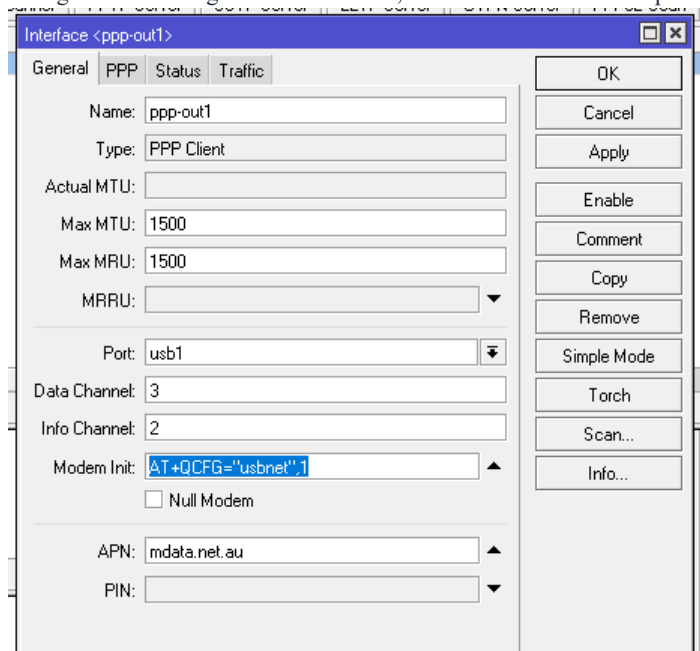
From here I see I needed to install drivers.

- > Audio inputs and outputs
- > Computer
- > Disk drives
- > Display adapters
- > Firmware
- > Human Interface Devices
- > IDE ATA/ATAPI controllers
- > Keyboards
- > Mice and other pointing dev
- > Monitors
- > Network adapters
- ✓ Other devices
 - EP06-E
 - EP06-E
 - EP06-E
 - EP06-E
 - EP06-E

A google search returned drivers that I downloaded.



This got me to having the drivers loaded, and I could see the COM port I needed to talk to (Quectel USB AT Port)



So I decided to open it with Putty. Note the Speed /Parity and Flow Control.

```
[admin@MikroTik] /interface lte> at-chat lte2 input="AT+QCFG=\"usbnet\",0"
output: OK

[admin@MikroTik] /interface lte>
```

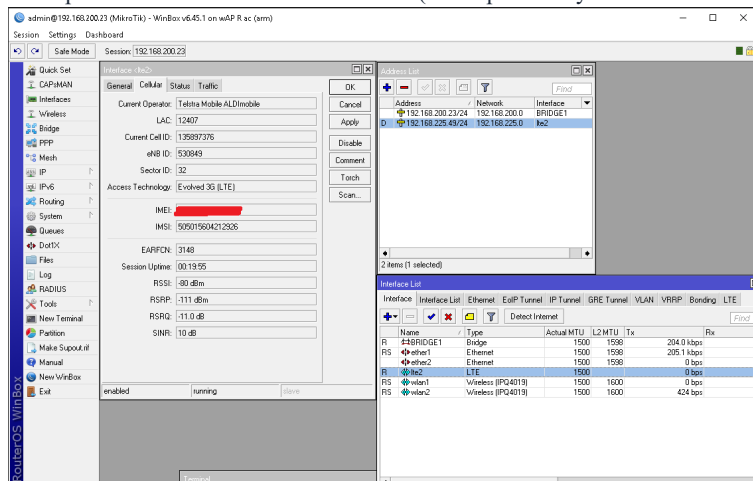
From there I added the command : AT+QCFG="usbnet",1

I also added the command AT&W to make sure it was saved(That said,experience says I dont have to do that).

I then pulled the card out of the adapter and installed it back into the wAP R.

After setting the unit booted I changed the System Port / Firmware and disabled "Ignore DirectIP Modem" I then REBOOTED.

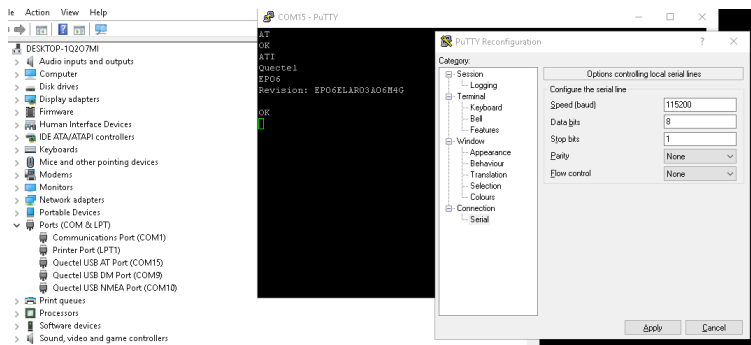
I was presented with a new LTE interface. (I had previously had a R11e-LTE in the unit(aka lte1), so it remembered that and presented lte2).



I did some tests and noted that I now got a 192.168.225.0/24 interface IP address presented to me. Given PPP mode presented me with the actual IP address given to me by the ISP/Mobile provider.

Anyhow I wanted to go back to PPP mode, so instead of removing the card and putting it back into the PC USB adapter as before and typing AT+QCFG="usbnet",0

I decided to use the at-chat command :



Note the use of the \ , which is an escape character for RouterOS's Terminal, in which I needed it to escape the " characters.

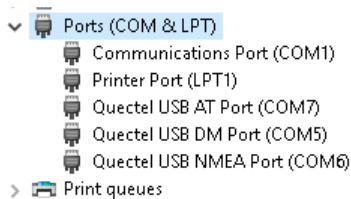
Anyhow I rebooted the Unit

Once it came back I changed the System Port / Firmware and ENABLED "Ignore DirectIP Modem" I then REBOOTED AGAIN.

The unit came back, this time missing the ppp. I suspect the unit was a bit shitty with me !

So I manually added PPP and put in the data channel / info channel data. The unit came back straight away.

So my next test was to put it back to LTE mode, but this time I was cheeky and the the "Modem Init" command to tell the EP06-E module to again change modes. This was my second way of putting the unit into LTE mode..

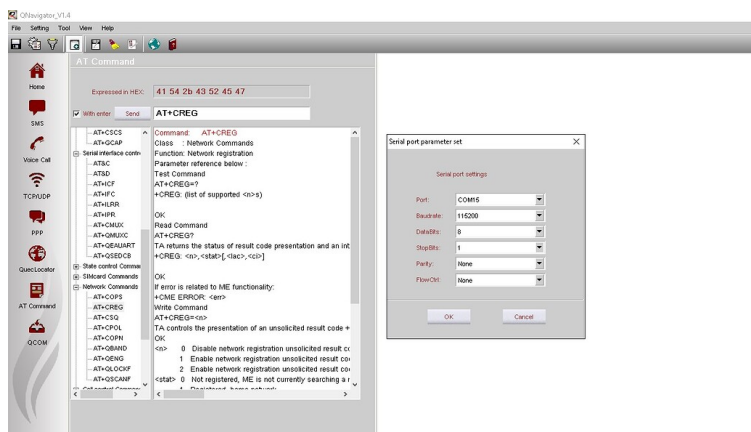


This worked a treat of course I had to reboot and change the System Port / Firmware and Enable "Ignore DirectIP Modem" I then REBOOTED AGAIN.

So this was my experience with this Card, seems to work great. I'd like to put in into my Mikrotik LtAP device with the full 3 antennas and see how it went. With just the two antenna I was pulling down >~40Mbps and I am a couple of KM's away from the local tower.

Anyhow, anyone playing with EP06-E or EC25-AU or AUT (both 06/25 RCM compliant) (have also had good experiences with that card module).

I also recommend doing a search for Quectel's QNavigator, if you have the card in a laptops micipcie slot or in a USB adaptor, its great program to have to edit/test things on the card



Cheers