Fibocom

Perfect Wireless Experience
完美无线体验

Linux System Trace Tool Guidance

Version: 1.0.2

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Applicability Table

No.	Product model	Description

Copyright

Notice

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Version Record

Version	Update Date	Description
V1.0.0	2015-03-23	Initial version
V1.0.1	2015-10-31	Support 4G modem
V1.0.2	2016-03-25	Optimization Document Format

Contents

1 Compile

1.1 Source Code

1. find_port.c
2. tracelog.c

1.2 Compile

1. Put the two source code files in the same directory
2. Excute ‘gcc -o tlog tracelog.c’ command to build the code
3. tlog file will be created in the directory.

```
ght@fibocom:~/tlog$ ls
find_port.c  tracelog.c
ght@fibocom:~/tlog$ gcc -o tlog tracelog.c
ght@fibocom:~/tlog$ ls
find_port.c  tlog  tracelog.c
ght@fibocom:~/tlog$
```

If used embed Linux system, you need to use your cross compile tool instead gcc.

Such as:

sbox-arm-linux-gnueabi-gcc -o tlog tracelog.c

2 Using the tool

2.1 Port Testing

After the system is started and the 4G module is powered up, execute the dmesg command to check the kernel messages;the information as shown in below picture indicate that ACM driver has been successfully loaded.Execute ls -al /dev/ttyACM* command to inquire ttyACM0,ttyACM1 and ttyACM2. More Details Please See:

[FIBOCOM_L8 Family System Driver Integration and Application Guidance_V2.1.0]

```
ght@fibocom:~/tlog$ dmesg
[164663.546925] usb 1-1.2: new high-speed USB device number 73 using ehci_hcd
[164663.639835] usb 1-1.2: New USB device found, idVendor=8087, idProduct=0716
[164663.639839] usb 1-1.2: New USB device strings: Mfr=0, Product=0, SerialNumber=0
[164665.650866] usb 1-1.2: USB disconnect, device number 73
[164668.150425] usb 1-1.2: new high-speed USB device number 74 using ehci_hcd
[164668.250825] usb 1-1.2: New USB device found, idVendor=1519, idProduct=0443
[164668.250829] usb 1-1.2: New USB device strings: Mfr=1, Product=2, SerialNumber=3
[164668.250832] usb 1-1.2: Product: L816-AM
[164668.250834] usb 1-1.2: Manufacturer: FIBOCOM
[164668.250836] usb 1-1.2: SerialNumber: 003580023000167
[164668.270468] cdc_acm 1-1.2:1.0: This device cannot do calls on its own. It is not a modem.
[164668.270516] cdc_acm 1-1.2:1.0: ttyACM0: USB ACM device
[164668.272460] cdc_acm 1-1.2:1.2: This device cannot do calls on its own. It is not a modem.
[164668.272509] cdc_acm 1-1.2:1.2: ttyACM1: USB ACM device
[164668.274335] cdc_acm 1-1.2:1.4: This device cannot do calls on its own. It is not a modem.
[164668.274390] cdc_acm 1-1.2:1.4: ttyACM2: USB ACM device
ght@fibocom:~/tlog$
```

Send Trace Strat Command For the First Time:

1. chmod 777 /dev/ttyACM*
2. echo -e "ATE0\r\n" > /dev/ttyACM2
3. cat /dev/ttyACM2 &
4. echo -e

"at+xsystrace=0,\"bb_sw=1;3g_sw=1;lte_l1_sw=1;digrfx=1;3g_dsp=1\",\"bb_sw=sdl:th,tr,st,pr,mo,lt,db,li,sy|fts:xllt(gprs,umts),mon(gprs,umts),sdl(gprs,umts),llt(gprs,umts)|egdci:0x00000001|lte_stk:0x02,0x83FFFFFF|ims:1|lte_stk:0x01,0xFFFFFFFF,0xFFFFFFFF,0xFFFFFFFF,0xFFFFFFFF|xllt:xllt_set_template(1,{basic});digrfx=0x0003;lte_l1_sw=(ALL,NORMAL,ALL,ALL)\",\"oct=4;oct_fcs=16\"\r\n" > /dev/ttyACM2

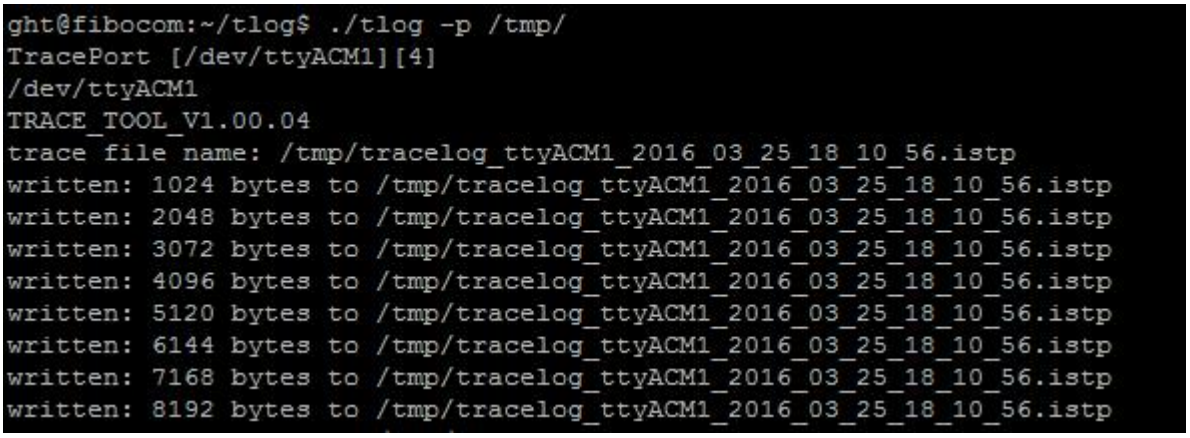
```
root@fibocom:/home/ght/tlog# chmod 777 /dev/ttyACM*
root@fibocom:/home/ght/tlog# echo -e "ATE0\r\n" > /dev/ttyACM2
root@fibocom:/home/ght/tlog# cat /dev/ttyACM2 &
[1] 20363
root@fibocom:/home/ght/tlog# echo -e "at+xsystrace=0,\"bb_sw=1;3g_sw=1;lte_l1_sw=1;digrfx=1;3g_dsp=1\",\"bb_sw=sdl:th,tr,st,pr,mo,lt,db,li,sy|fts:xllt(gprs,umts),mon(gprs,umts),sdl(gprs,umts),llt(gprs,umts)|egdci:0x00000001|lte_stk:0x02,0x83FFFFFF|ims:1|lte_stk:0x01,0xFFFFFFFF,0xFFFFFFFF,0xFFFFFFFF,0xFFFFFFFF|xllt:xllt_set_template(1,{basic});digrfx=0x0003;lte_l1_sw=(ALL,NORMAL,ALL,ALL)\",\"oct=4;oct_fcs=16\"\r\n" > /dev/ttyACM2
root@fibocom:/home/ght/tlog#
OK
```

Please note that sending the command “ATE0” is mandatory, otherwise there could be issues in the terminal output.

2.2 Capture Trace

1. chmod 777 tlog
2. cp tlog /bin/
3. tlog -p /tmp/

Parameters -p means an directory to save the trace.



Send Us the trace file in /tmp/ directroy.