

MEC

prerequisite : set up gtp kernel module

Flow

1. install libosmocore
2. install gtp kernel

Install libosmocore

```
git clone git://git.osmocom.org/libosmocore
cd libosmocore/
autoreconf -i
./configure
make
sudo make install
sudo ldconfig -i
cd ..
```

If you encounter the problem following

```
configure.ac:17: error: possibly undefined macro: XXX
If this token and others are legitimate, please use m4_pattern_allow.
See the Autoconf documentation.
autoreconf: /usr/bin/autoconf failed with exit status: 1
```

[Solve]

```
sudo apt-get install libtool
```

If CONFIG_GTP is not enabled, you cannot use kernel GTP-U! Check if package libc-ares-dev is installed and if not please add it.

prequesite :

```
sudo apt install libtalloc-dev libpcsc-lite-dev
sudo apt install libmnl-dev
sudo apt install libc-ares-dev
```

- Then build libgtpnl like this :

```
git clone git://git.osmocom.org/libgtpnl.git
cd libgtpnl
autoreconf -fi
./configure
make
sudo make install
sudo ldconfig
```

- Build OsmoGGSN like this :

```
git clone git://git.osmocom.org/osmo-ggsn.git
cd osmo-ggsn
autoreconf -fi
./configure --enable-gtp-linux
make
sudo make install
sudo ldconfig
```

- Following message is shown at end of the command: ./configure --enable-gtp-linux

```
OsmoGGSN Configuration:
GTP Linux kernel support:          yes
```

Using OpenGGSN with kernel which has GTP-U support¶

- In order to find out whether gtp.ko module is available we can enter following command:

```
find /lib/modules/`uname -r` -name gtp.ko
```

Output below shows that gtp.ko module is present:

```
/lib/modules/4.8.0-30-generic/kernel/drivers/net/gtp.ko
```

We are loading module gtp from kernel issuing command:

```
sudo modprobe gtp
```

when you enter:

```
lsmod | grep gtp
```

then more information about gtp and related udp tunnel can be obtained:

```
gtp                28672  0
udp_tunnel         16384  1 gtp
```

Setup MEC

Platform : OpenairInterface

	project	git log version
eNB	OpenairInterface	67df8e0e7b4620
EPC	openair-cn	724542d0b59797

You should change the following files/settings

1. if_set.sh:

- Modify interface of CN/eNB respectively

```
1 if_set.sh
2 # enx00116b684eee: black to CN
3 # enx00051ba2b2f6: white to eNB
4 if_core=enp23s0f0
5 if_enb=enp23s0f1
6 MAC_core=00:90:0b:6d:44:08
7 MAC_enb=00:90:0b:6d:44:09
```

2. Interface of S-GW on Core network : 172.17.100.254/16
3. S1-interface of eNB : 172.17.1.1/16

Execute MEC

- You should install tmux

```
$ sudo apt install tmux
$ sudo sh start_MEC.sh /* execute MEC */
```