MME测试环境整体架构图

Casa-mme

S11-if

openHSS

Eth0:172.0.11.184

s1mme-if



Sim\_pgw

Eth0:172.0.11.182

Sim\_sgw

Eth0:172.0.11.181

Sim\_enodeb

Eth0:172.0.11.189

S1mme-if 是指MME与eNB的接口，即henb-interface，这里配置为gige 0/0

S11-if 是指MME与S-GW的接口，即s11-interface，这里配置为gige 0/0

S6a-if 是指MME与HSS的接口，即s6a-interface，这里配置为gige 0/0

接口可以全部用loopback口也可以用gige口或者xgige口。

注：此处全部用管理口（Eth0）跑，方便连接不在同一物理机上运行的虚拟机网元。若以上全部网元运行在同一台工作站中，可以采取全部使用业务口（Eth1）。

**一、openHSS环境配置**

1、将FHoSS文件夹拷贝到虚拟机/opt下

2、安装必备软件

apt-get update

apt-get install ant

apt-get install apt-get install mysql-server libmysqlclient15-dev

\*安装mysql时配置密码casa，与后续访问数据库密码对应即可

1. 配置java环境

cd /usr

mkdir java

cd java

将jdk-7u79-linux-x64.tar.gz 拷贝到/usr/java目录

chmod 777 jdk-7u79-linux-x64.tar.gz

解压：tar -xzvf jdk-7u79-linux-x64.tar.gz

配置：JAVA\_HOME , vi /etc/profile,末尾加入以下内容：

JAVA\_HOME=/usr/java/jdk1.7.0\_79

CLASSPATH=.:$JAVA\_HOME/lib.tools.jar:$JAVA\_HOME/jre/lib

PATH=$JAVA\_HOME/bin:$JAVA\_HOME/jre/bin:$PATH

export JAVA\_HOME CLASSPATH PATH

修改完后输入命令source /etc/profile使配置文件生效

Java -version检查配置是否生效



4、配置mysql

mysql -uroot -pcasa -h localhost < FHoSS/scripts/hss\_db.sql

mysql -uroot -pcasa -h localhost < FHoSS/scripts/userdata.sql

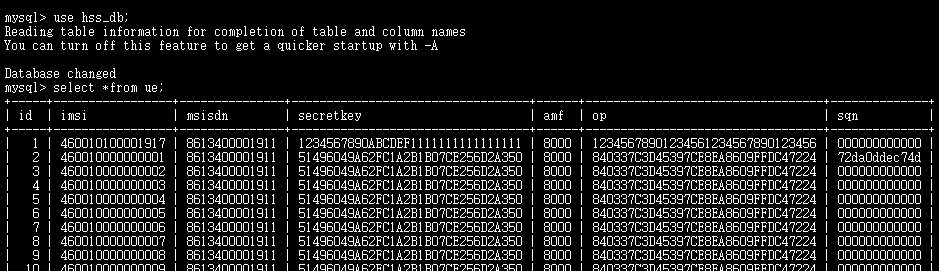
mysql -uroot -pcasa -h localhost < FHoSS/scripts/ue.sql

检查数据是否导入

mysql -uroot -pcasa

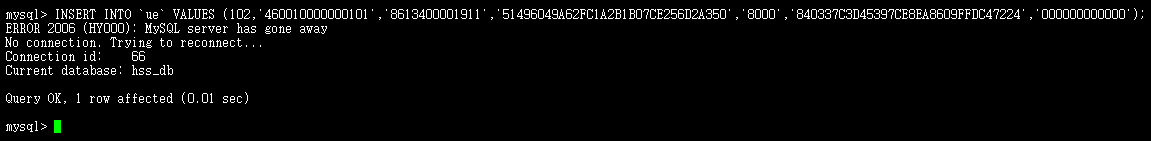
use hss\_db;

select \*from ue;



增加UE方法：以id=102,imsi=460010000000101,msisdn=8613400001911，secretkey=51496049A62FC1A2B1B07CE256D2A350,amf=8000,op=840337C3D45397CE8EA8609FFDC47224,sqn=000000000000为例三种方法

（1）直接insert命令插入



（2）写入ue.sql脚本vi /opt/FHoSS/scripts/ue.sql，添加如下

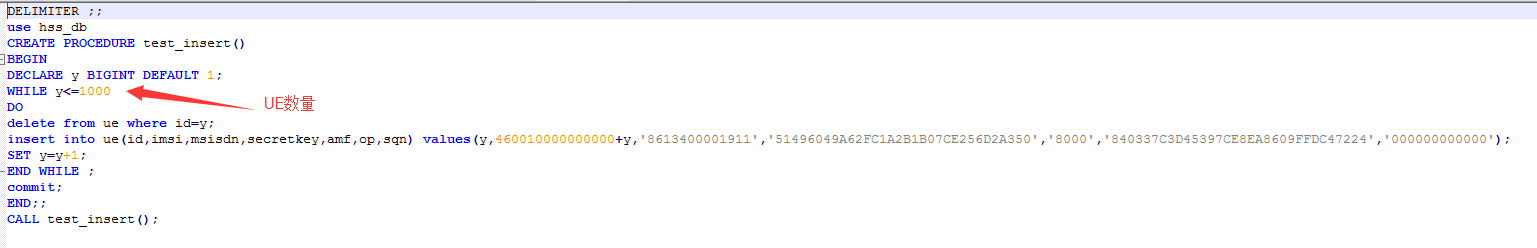


再执行mysql -uroot -pcasa -h localhost < FHoSS/scripts/ue.sql

\* 每条记录的id值唯一

修改ue信息命令：update ue set imsi=’xxxxxxxx’ where id=xx;

1. 批量增加：修改test.sql脚本vi /opt/FHoSS/scripts/test.sql



再执行mysql -uroot -pcasa -h localhost < FHoSS/scripts/test.sql。

注：下次执行此脚本之前先在mysql下输入命令drop procedure test\_insert;

IMG_256

5、编译

cd /opt/FHoSS

ant compile deploy cleanall

ant compile deploy

6、配置openHSS

vi /opt/FHoSS/deploy/DiameterPeerHSS.xml

<?xml version="1.0" encoding="UTF-8"?>

<!-- HSS Server config -->

<DiameterPeer

FQDN="HSSServer.casa.com"

Realm="epc.mnc001.mcc460.3gppnetwork.org"

Vendor\_Id="10415"

Product\_Name="JavaDiameterPeer"

AcceptUnknownPeers="1"

DropUnknownOnDisconnect="1"

Tc="30"

Workers="4"

QueueLength="32"

>

<Acceptor port="3868" bind="172.0.11.184" />

<Auth id="16777216" vendor="10415"/><!-- 3GPP Cx -->

<Auth id="16777216" vendor="4491"/><!-- CableLabs Cx -->

<Auth id="16777216" vendor="13019"/><!-- ETSI/TISPAN Cx -->

<Auth id="16777216" vendor="0"/><!-- ETSI/TISPAN Cx -->

<Auth id="16777217" vendor="10415"/><!-- 3GPP Sh -->

<Auth id="16777221" vendor="10415"/>

<Auth id="16777251" vendor="10415"/>

<Auth id="16777251" vendor="4491"/>

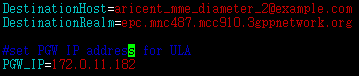
<Auth id="16777251" vendor="13019"/>

<Auth id="16777251" vendor="0"/>

</DiameterPeer>

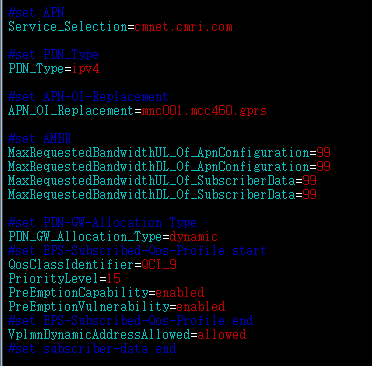
注：黄色部分配置为自己所需内容即可

vi /opt/FHoSS/deploy/hss.properties



注：DestinationHost和DestinationRealm配置为MME对端的参数；PGW\_IP配置PGW地址，为空时则使用MME配置中的default-pgw ip地址 。该文件其他参数不需要配置

在hss.properties中可配置Update Location Answer(ULA)消息中APN-Config部分参数，如下截图选项。根据需要自行配置。



7、启动运行

cd deploy

./startup.sh



注：HSS主动发的Request 尚未完善

**二、sim\_enb配置**

[plmn]

byte0 = 0x64

byte1 = 0xf0

byte2 = 0x10

[gtpu\_ping]

pdn\_server\_ipv6 =2001:250:1800:1::102

pdn\_server =172.1.1.131

ping\_size = 100

ping\_interval = 1

ping\_num\_per\_interval = 1

ping\_total\_cnt = 10

[enodeB\_0]

supported\_tac\_num = 5

tac0 = 0x1111

tac1 = 0x5678

tac2 = 0x1234

tac3 = 0x2222

tac4 = 0xabcd

enb\_name=enodeb0

default\_paging\_drx=128

csg\_id\_list\_count=1

csg\_id\_list\_0=0x01234567

#if set cell\_access\_mode\_flag to 0, henb will not set IE CELL Access Mode.

#if set it to 1,henb will add CELL Access Mode and set this IE to 0

cell\_access\_mode\_flag=0

#the enb0.ue0 csg\_id

ue\_csg\_id\_0=0x01234567

#the enb0.ue1 csg\_id

ue\_csg\_id\_1=0x01234567

#add the enodeb config you want to specify, or sim\_enodeb will auto fill it according to its index number, and the imsi is caculated by the enodeb index number, not by its enb\_id

#[enodeB\_8000]

# enb\_id = 0x10203040

[global\_enodeB]

supported\_tac\_num=1

tac\_incr=FALSE

tac0=0x1111

enb\_id\_start=0

imsi\_id\_start=0

cell\_access\_mode\_flag=0

ue\_csg\_id\_0=0x01234567

enb\_range\_cnt=0

enable\_auto\_logical\_enb=0

#when enb index between enb\_range\_start and enb\_range\_end. the enb will use this config

[enb\_range\_0]

enb\_range\_start=0

enb\_range\_end=5

enb\_name=enodeb\_range

enb\_id\_start=0

imsi\_id\_start=0

init\_global\_enb\_id=0xfff22

# logical\_enb\_id\_start, the high 20 bit of home enb id;

# henbs per logical enb = total enb / logical\_enb\_cnt. e.g. '-n' specify the total eNB number is 128,

# logical\_enb\_cnt is 32, henbs per logical enb is 128/32 = 4.

[auto\_logical\_enb]

logical\_enb\_id\_start=0x12345

logical\_enb\_cnt = 32

#different tft use different qci , if set to the same qci, that means it use the same bearer, bearer number must equal to qci number here(we only see qci in sim tools)

#do not use qci = 9, it is reserved by default bearer

#24008:The term local refers to the MS and the term remote refers to an external network entity

[bearer\_3]

qci = 3

num\_of\_filters = 2

#filter item 0

f0\_precedence = 1

f0\_ip\_protocol =icmp

#filter item 1

f1\_precedence = 10

f1\_remote\_ip =192.168.0.133

[bearer\_6]

qci = 6

num\_of\_filters = 1

#filter item 0

f0\_precedence = 10

f0\_remote\_ip =192.168.0.227

[bearer\_7]

qci = 7

num\_of\_filters = 1

#filter item 0

f0\_precedence = 3

f0\_ip\_protocol =tcp

[x2-interface]

ipaddr =172.1.1.130

local\_port=4091

remote\_port=4091

#export TARGET\_LTEGW=1

[cpe]

Active =false

Start\_Ip =172.1.1.102

Ip\_mask =24

[s1ap]

#enb\_id\_type: 1 S1AP\_T\_ENB\_ID\_MACRO\_ENB\_ID ; 2 S1AP\_T\_ENB\_ID\_HOME\_ENB\_ID

enb\_id\_type=1

init\_global\_enb\_id=0xfff11

[s1ap\_setup\_request]

csg\_id\_list\_count=1

csg\_id\_list\_0=0x01234567

without\_enb\_name=false

[s1ap\_initial\_ctxt\_setup\_failure]

active=false

percent=30

[sctp]

auto\_reconnect=false

[HANDOVER]

S1\_handover\_failure=0

S1\_handover\_cancel=0

no\_sourceUE\_Identity=0

[ipv6]

support\_ipv6=0

local\_ipv6\_addr0=2001:250:1800:1::100

local\_ipv6\_addr1=2001:250:1800:1::110

local\_ipv6\_addr2=2001:250:1800:1::120

remote\_ipv6\_addr=2001:250:1800:1::100

enb\_aricent\_ipv6\_addr=2001::101:1:1:0

mme\_aricent\_ipv6\_addr=2001::100:1:1:100

support\_gtpu\_ipv6=0

local\_gtpu\_ipv6\_addr=2001:250:1800:1::100

support\_ue\_ipv6=0

[rate]

enb\_rate=20

ue\_rate=10

[tos]

qci9=0x02

[x2\_proxy]

active=0

[mme\_configuration\_update\_failure]

#time unit: second

time\_to\_wait=60

[global\_enodeB-r2]

tac\_incr=FALSE

supported\_tac\_num=1

tac0=0x1122

enb\_id\_start=2000

[s1ap-r2]

#enb\_id\_type: 1 S1AP\_T\_ENB\_ID\_MACRO\_ENB\_ID ; 2 S1AP\_T\_ENB\_ID\_HOME\_ENB\_ID

enb\_id\_type=2

[s1ap\_setup\_request-r2]

csg\_id\_list\_count=3

csg\_id\_list\_0=0x00000007

csg\_id\_list\_1=0x00000008

csg\_id\_list\_2=0x00000009

without\_enb\_name=false

[initial\_ue-r2]

csg\_id\_0=0x01234567

cell\_access\_mode\_0=0

[real\_ue]

enable\_real\_ue=1

op=0x840337C3D45397CE8EA8609FFDC47224

key=0x51496049A62FC1A2B1B07CE256D2A350

amf=0x8000

#0 normal detach, 1 switch off

switch\_off=0

imei\_start=0x123456789012345

imeisv\_start=0x1122334455667788

**三、sgw配置**

[aaamgr.diameter.gx]

diameter.index=0

diameter.ipv4=172.1.100.18

diameter.identity=eth1

diameter.realm=casachina.com

diameter.transport.type=tcp

diameter.peer.info=172.1.1.15:3868:simple.test.nadia:3868

[aaamgr.diameter.gy]

diameter.index=1

diameter.ipv4=172.1.100.18

diameter.identity=eth0

diameter.realm=casachinagy.com

diameter.transport.type=tcp

diameter.peer.info=172.1.1.16:3869:simple.testgy.nadia:10000

[aaamgr.gtpp0]

gtpp.if\_name=if\_0

gtpp.if\_index=0

gtpp.net\_if\_name=eth1

gtpp.ipaddr=172.1.1.82

gtpp.port=3386

gtpp.echo\_interval=20

gtpp.duplicate\_hold\_time=60

gtpp.deadtime=60

gtpp.timeout=60

gtpp.max\_retries=2

gtpp.cdr\_tx\_queue\_depth=1024

gtpp.cdr\_file\_path=/public/cdrfile/

gtpp.supt\_cgf\_num=1

gtpp.wait-time=30

[aaamgr.diameter.gx]

diameter.index=0

diameter.ipv4=172.1.100.18

diameter.identity=eth1

diameter.realm=casachina.com

diameter.transport.type=tcp

diameter.peer.info=172.1.1.15:3868:simple.test.nadia:3868

[aaamgr.diameter.gy]

diameter.index=1

diameter.ipv4=172.1.100.18

diameter.identity=eth0

diameter.realm=casachinagy.com

diameter.transport.type=tcp

diameter.peer.info=172.1.1.16:3869:simple.testgy.nadia:10000

[aaamgr.gtpp0]

gtpp.if\_name=if\_0

gtpp.if\_index=0

gtpp.net\_if\_name=eth1

gtpp.ipaddr=172.1.1.82

gtpp.port=3386

gtpp.echo\_interval=20

gtpp.duplicate\_hold\_time=60

gtpp.deadtime=60

gtpp.timeout=60

gtpp.max\_retries=2

gtpp.cdr\_tx\_queue\_depth=1024

gtpp.cdr\_file\_path=/public/cdrfile/

gtpp.supt\_cgf\_num=1

gtpp.wait-time=30

gtpp.max-cdrs=1

gtpp.max-pdu-size=1024

gtpp.data\_req\_seq\_num\_start=0

gtpp.max\_consecution\_failures=5

gtpp.redirection\_allowed=1

gtpp.transport\_layer=1

[aaamgr.gtpp0.cgf0]

cgf.ipv4\_addr=172.1.1.83

cgf.port=3386

cgf.priority=1000

cgf.node\_alive=0

cgf.max\_unack\_msg=256

[aaamgr.gtpp0.cgf1]

cgf.ipv4\_addr=172.1.1.82

cgf.port=3386

cgf.priority=999

cgf.node\_alive=0

cgf.max\_unack\_msg=256

[sgw]

mtu=200

sgw.s1.ipv4=172.0.11.181

sgw.s1.ipv6=2001::172:1:1:82

sgw.s1.interface=eth0

sgw.s11.ipv4=172.0.11.181

sgw.s11.ipv6=2001::172:1:1:82

sgw.s11.interface=eth0

sgw.s5s8.ipv4=172.0.11.181

sgw.s5s8.ipv6=2001::172:2:1:82

sgw.s5s8.interface=eth0

sgw.accounting-policy.offline-charging-transport.type =none

sgw.accounting-policy.offline-charging-transport.interface =if\_0

sgw.offline-charging-trigger.trigger-condition.interim-timeout.action = interim

sgw.offline-charging-trigger.trigger-condition.location-change.action = stop-start

sgw.offline-charging-trigger.trigger-condition.rai-change.action = interim

sgw.offline-charging-trigger.trigger-condition.tai-change.action = interim

sgw.offline-charging-trigger.charging-characteristics.id = 1

sgw.offline-charging-trigger.charging-characteristics.condition-changes = 5

sgw.offline-charging-trigger.charging-characteristics.interval = 1000

sgw.offline-charging-trigger.charging-characteristics.serving-nodes = 2

sgw.offline-charging-trigger.charging-characteristics.tariff.time1 = 01:11

sgw.offline-charging-trigger.charging-characteristics.tariff.time2 = 02:12

sgw.offline-charging-trigger.charging-characteristics.tariff.time3 = 03:13

sgw.offline-charging-trigger.charging-characteristics.tariff.time4 = 04:14

sgw.offline-charging-trigger.charging-characteristics.volume.downlink = 100

sgw.offline-charging-trigger.charging-characteristics.volume.uplink = 200

sgw.offline-charging-trigger.charging-characteristics.volume.total = 300

qci\_9\_tos=0x38

**四、pgw配置**

[aaamgr.gtpp]

gtpp.if\_name=if\_0

gtpp.if\_index=0

gtpp.ipaddr=172.0.5.85

gtpp.port=3385

gtpp.echo\_interval=2000

gtpp.duplicate\_hold\_time=60000

gtpp.deadtime=60000

gtpp.timeout=60000

gtpp.max\_retries=2

gtpp.cdr\_tx\_queue\_depth=1024

gtpp.cdr\_file\_path=/public/cdrfile/

gtpp.supt\_cgf\_num=1

gtpp.wait-time=5

gtpp.max-cdrs=1

gtpp.max-pdu-size=1024

[aaamgr.gtpp.cgf0]

cgf.ipv4\_addr=172.0.5.87

cgf.port=3386

[aaamgr.gtpp.cgf1]

cgf.ipv4\_addr=172.0.1.4

cgf.port=3386

[aaamgr.diameter.gx]

diameter.index=0

diameter.ipv4=172.1.100.18

diameter.identity=casagx

diameter.interface=eth1

diameter.realm=casachina.com

diameter.transport.type=tcp

diameter.peer.info=172.1.1.82:3868:simple.test.nadia:3868

diameter.second\_peer.info=172.1.5.72:3869:gx2.test.nadia:3869

[aaamgr.diameter.gy]

diameter.index=1

diameter.ipv4=172.1.100.19

diameter.identity=casagy

diameter.interface=eth1

diameter.realm=casachinagy.com

diameter.transport.type=tcp

diameter.peer.info=172.1.1.81:3868:simple.testgy.nadia:10000

[pgw]

pgw.cnf.apn=cmnet.cmri.com.mnc001.mcc460.gprs

//the sgi/s5s8/gx/gy/gz interface are used the same interface now,change them if required

pgw.sgi.interface=eth0

pgw.sgi.ipv4=172.0.11.182

pgw.s5s8.interface=eth0

pgw.s5s8c.ipv4=172.0.11.182

pgw.s5s8u.ipv4=172.0.11.182

pgw.s5s8c.port=2123

pgw.s5s8u.port=2152

pgw.gz.interface=eth0

pgw.gz.ipv4=172.0.5.87

slot=0

pgw.ip.pool.num=2

pgw.ip.pool1.name=pool1

pgw.ip.pool1.start.ipv4=10.8.8.1

pgw.ip.pool1.subnetmask=16

pgw.ip.pool1.priority=3

pgw.ip.pool1.public=1

pgw.ip.pool1.private=0

pgw.ip.pool1.static=0

pgw.ip.pool2.name=pool2

pgw.ip.pool2.start.ipv4=20.10.10.1

pgw.ip.pool2.subnetmask=16

pgw.ip.pool2.priority=1

pgw.ip.pool2.public=1

pgw.ip.pool2.private=0

pgw.ip.pool2.static=0

[dcc-policy0]

gy\_index = 1

cc\_session\_failover = 0

init\_req\_ccfh = 0

init\_req\_ccfh\_act\_tx\_exp = 0

upd\_req\_ccfh = 0

upd\_req\_ccfh\_act\_tx\_exp = 0

term\_req\_ccfh = 0

term\_req\_ccfh\_act\_tx\_exp = 0

[apn]

pcc\_rulebase\_index=1

credit\_control\_index=0

[apn\_1]

apn =.mnc001.mcc460.gprs

ip\_pool =pool2

pcc\_rulebase\_index=1

credit\_control\_index=0

[apn\_2]

apn =cmnet.crim.com

ip\_pool =pool2

pcc\_rulebase\_index=1

credit\_control\_index=0

[apn\_3]

apn =cmnet.cmri.com.mnc001.mcc470.gprs

ip\_pool =pool2

pcc\_rulebase\_index=1

credit\_control\_index=0

[bearer\_5]

qci = 9

num\_of\_filters = 2

filter\_op =replace

#filter item 0

f0\_identifier = 0

f0\_precedence = 1

f0\_ip\_protocol =icmp

#filter item 1

f1\_identifier = 1

f1\_precedence = 10

f1\_remote\_ip =192.168.0.133

f1\_remote\_port\_start =2000

f1\_remote\_port\_end =3000

[bearer\_6]

qci = 6

num\_of\_filters = 2

filter\_op =del

#filter item 0

f0\_identifier = 0

f1\_identifier = 1

[bearer\_7]

qci = 7

num\_of\_filters = 1

#filter item 0

f0\_precedence = 2

f0\_ip\_protocol =icmp

[bearer\_8]

qci = 8

num\_of\_filters = 1

#filter item 0

f0\_precedence = 2

f0\_ip\_protocol =icmp

[bearer\_9]

qci = 9

num\_of\_filters = 1

#filter item 0

f0\_precedence = 2

f0\_ip\_protocol =icmp

[bearer\_10]

qci = 5

num\_of\_filters = 1

#filter item 0

f0\_precedence = 2

f0\_ip\_protocol =icmp

[bearer\_11]

qci = 1

num\_of\_filters = 1

#filter item 0

f0\_precedence = 2

f0\_ip\_protocol =icmp

[bearer\_12]

qci = 2

num\_of\_filters = 1

#filter item 0

f0\_precedence = 2

f0\_ip\_protocol =icmp

[bearer\_13]

qci = 3

num\_of\_filters = 1

#filter item 0

f0\_precedence = 2

f0\_ip\_protocol =icmp

[bearer\_14]

qci = 4

num\_of\_filters = 1

#filter item 0

f0\_precedence = 2

f0\_ip\_protocol =tcp

[bearer\_15]

qci = 0

num\_of\_filters = 1

#filter item 0

f0\_precedence = 2

f0\_ip\_protocol =tcp

gbrd =100000

gbru =100000

mbrd = 100000

mbru = 100000

bru = 100000

[pcc-ruledef1]

multi\_line\_match.all\_lines=1

ip.dest-address.eq=1.1.1.1

ip.dest\_prefix\_len.eq=32

ip.src-address.eq=2.2.2.2

ip.source\_prefix\_len.eq=32

tcp.src-port.eq=20

tcp.dst-port.eq=30

[pcc-ruledef2]

ip.server-ip-address.eq=3.3.3.3

ip.server\_prefix\_len.eq=32

ip.subscriber-ip-address.eq=4.4.4.4

ip.subscriber\_prefix\_len.eq=32

tcp.src-port.eq=40

tcp.dst-port.eq=50

[pcc-ruledef3]

ip.server-ip-address.eq=5.5.5.5

ip.server\_prefix\_len.eq=32

ip.subscriber-ip-address.eq=6.6.6.6

ip.subscriber\_prefix\_len.eq=32

tcp.either-port.eq=60

[pcc-ruledef4]

ip.server-ip-address.eq=5.5.5.5

ip.server\_prefix\_len.eq=32

ip.subscriber-ip-address.eq=8.8.8.8

ip.subscriber\_prefix\_len.eq=32

udp.src-port.eq=70

udp.dst-port.eq=80

[pcc-ruledef5]

ip.server-ip-address.eq=9.9.9.9

ip.server\_prefix\_len.eq=32

udp.either-port.eq=90

//pgw.pcc.ruledef1.type.eq=1

//pgw.pcc.ruledef1.code.eq=20

[pcc-ca1]

name=ca1

id=1

content\_id=1

service\_id=1

//PGW\_PCC\_GCDR == 1

billing\_action=1

online=1

offline=0

retransmissions\_counted=1

[pcc-rulebase1-rule1]

name=rulebase1

id=1

priority=1

ruledef\_name=ruledef1

ruledef\_id=1

charging\_action\_name=ca1

charging\_action\_id=1

dynamic\_only=0

[pcc-rulebase1]

name=rulebase1

id=1

billing\_record=1

**五、MME配置**

S1mme-if 是指MME与eNB的接口，即henb-interface，这里配置为gige 0/0

S11-if 是指MME与S-GW的接口，即s11-interface，这里配置为gige 0/0

S6a-if 是指MME与HSS的接口，即s6a-interface，这里配置为gige 0/0

CASA-NEKO(config)#interface gige 0/0

CASA-NEKO(config-if-gige 1)# ip address 172.0.11.53 255.255.0.0

CASA-NEKO(config-if-gige 1)#show this

interface gige 0/1

ip address 172.0.11.53 255.255.0.0

auto negotiate

no shutdown

ifname dp\_0\_0

svc port

配置diameter:

CASA-NEKO(config)#diameter-endpoint mme\_s6a

CASA-NEKO(config-diameter-ep-mme\_s6a)#origin host MME.Spirent.com realm epc.mnc001.mcc460.3gppnetwork.org gige 0/0

这里配置MME的diameter的host name 跟realm，以及与HSS相连的接口。

CASA-NEKO(config-diameter-ep-mme\_s6a)#peer host HSSServer.casa.com realm epc.mnc001.mcc460.3gppnetwork.org ipv4 172.0.11.184 port 3868 tcp

这里配置的是HSS上面的host name跟realm，需要与上面HSS的配置保持一致，ipv4为HSS的eth0口的ip，openHSS只能用tcp协议栈。

CASA-NEKO(config-diameter-ep-mme\_s6a)# route-entry realm epc.mnc001.mcc460.3gppnetwork.org app s6a peer host HSSServer.casa.com weight 50

CASA-NEKO(config-diameter-ep-mme\_s6a)# watch-dog timer 100

CASA-NEKO(config-diameter-ep-mme\_s6a)# peer-reconnect timer 5

CASA-NEKO(config-diameter-ep-mme\_s6a)# exit

CASA-NEKO(config)#diameter-endpoint mme\_s6a

CASA-NEKO(config-diameter-ep-mme\_s6a)#show this

origin host MME.Spirent.com realm epc.mnc001.mcc460.3gppnetwork.org gige 0/0

peer host HSSServer.casa.com realm epc.mnc001.mcc460.3gppnetwork.org ipv4 172.0.11.184 port 3868 tcp

route-entry realm epc.mnc001.mcc460.3gppnetwork.org app s6a peer host HSSServer.casa.com weight 50

watch-dog timer 100

peer-reconnect timer 5

exit

配置mme的服务：

CASA-NEKO(config)#lte-service mme

CASA-MOBILE(config-mme)#call-profile 1

CASA-MOBILE(config-mme-call-prof)#integrity-algorithm preference EIA1

CASA-MOBILE(config-mme-call-prof)#ciphering-algorithm preference EEA0

CASA-NEKO(config-mme)# mme-service mme1

CASA-MOBILE(config-mme-svc mme1)#associate call-profile 1

CASA-NEKO(config-mme-svc mme1)# mme-plmn-id mcc 460 mnc 01 group-id 1 mme-code 1

配置mme的一些基本参数信息

CASA-NEKO(config-mme-svc mme1)# s1mme-interface gige 0 sctp-port 36412

配置S1MME-if的接口，这里使用的是gige 0口

CASA-NEKO(config-mme-svc mme1)# s11-interface gige 0

配置S11-if的接口，这里使用的是gige 0

CASA-NEKO(config-mme-svc mme1)# s6a-interface diameter-endpoint mme\_s6a destination-realm epc.mnc001.mcc460.3gppnetwork.org

配置s6a-if，这里与上面diameter配置相关联

CASA-NEKO(config-mme-svc mme1)# default-pgw 172.0.11.182

配置默认pgw的ip

CASA-NEKO(config-mme-svc mme1)# default-sgw 172.0.11.181

配置默认sgw的ip

CASA-NEKO(config-mme-svc mme1)#show this

mme-service mme1

mme-plmn-id mcc 460 mnc 01 group-id 1 mme-code 1

s1mme-interface gige 0 sctp-port 36412

s11-interface gige 0

s6a-interface diameter-endpoint mme\_s6a destination-realm epc.mnc001.mcc460.3gppnetwork.org

associate call-profile 1

default-pgw 172.0.11.182

default-sgw 172.0.11.181

exit

**六、UE上线**

Sgw:

root@sgw:~/mme\_sgw# ./sim\_sgw

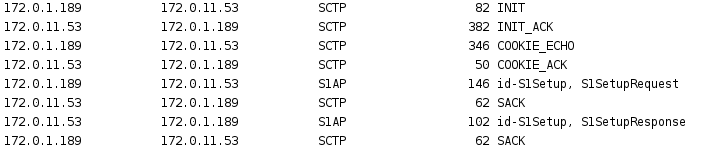
PGW:

root@pgw:~/mme\_pgw# ./sim\_pgw

Enb：

root@enb:~/mme\_enb# ./sim\_enodeb -H 172.0.1.189 -r 172.0.11.53 -i eth0 -n 1 -u 1

diag> r e （基站上线）



diag> r u （ue上线）

