```
NLRNC1> cell -cid 660 celldata -cid 660 !Check usage for cell 66C1 including upl
ink interference
NLRNC1> cedr | grep 66C1        !Same as above but can be done to print out the
whole RNC if | grep 66C1 is ommitted
```

mom <mo> parameter

if you don't know the <mo> replace with <all>

if for example the parameter is struct (more than one controlling event associat
ed to parameter) then:

mom <parameterName> <all>

To check resource usage on RBS

lh mod2 hwm -c 46388 print rbs !where 46388 is 4638A1

lt Iub : loads the Proxies
pr Iub : prints the proxies
get Proxy or RNCFunction: gets status

al: alarm

lt plug|ret: load ret|plug data

lst plug|ret: list ret|ret

get 34: gets equipment status

Iub: Node-B side
Iublink: RNC side

To change RNCs
q; to quit
./moshell jhrnc1

on the individual mo
./moshell u0348
lt sector
pr sector
pr cable

to restart Node-B on Node-B level: acc 0 restart

to set Electrical Tilt: lset Equipment=1,SectorAntenna=3,AuxPlugInUnit=2,RetuDev
iceGroup=1,RetDeviceSet=1,RetDevice=1 electricalAntennaTilt value

get relation=****A1/B1/C1_ gsm rela
get relation=****A1/B1/C1_ utran

bl PROXY: block/lock
deb PROXY: deblock/de-lock

lst cell: Cell Channel Status
get rbslocalcell: gets CPICH and Availabilty Status

Hardware Admission Control
Stored under Iub
DBRNC1> get Iublink=Iub_U2163

070119-17:32:12 10.209.44.1 7.0 RNC_NODE_MODEL_F_5_2 stopfile=/tmp/22327
==========
==========
90 RncFunction=1,IubLink=Iub_U2163-Birdswood_B
eacon
==========
==========
IubLinkId Iub_U2163-Birdswood_Beacon
availabilityStatus 0 (NO_STATUS)
beMarginDlHw 0
beMarginUlHw 0
dlHwAdm 100
operationalState 1 (ENABLED)
rbsId 2163
reservedBy [3] =
>>> reservedBy = RncFunction=1,UtranCell=2163A1
>>> reservedBy = RncFunction=1,UtranCell=2163B1
>>> reservedBy = RncFunction=1,UtranCell=2163C1
rncModuleRef RncModule=54
tpcPattern01CountDl 8
ulHwAdm 100
userLabel Iub_U2163-Birdswood_Beacon
==========
==========
Total: 1 MOs

Difference between pr and lst
PTRNC1> pr cell=1000

070105-11:28:57 10.201.44.1
==========
===
Proxy MO
==========
===
10273 RncFunction=1,ExternalGsmNetwork=10127,ExternalGsmCell=1000A
10274 RncFunction=1,ExternalGsmNetwork=10127,ExternalGsmCell=1000B
10275 RncFunction=1,ExternalGsmNetwork=10127,ExternalGsmCell=1000C
21980 RncFunction=1,UtranCell=1000A1
22006 RncFunction=1,UtranCell=1000B1
22035 RncFunction=1,UtranCell=1000C1
==========
===
Total: 6 MOs

PTRNC1> lst cell=1000

070105-11:29:11 10.201.44.1
==========
===
Proxy Adm State Op. State MO
==========

```
===
21980  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1
21981  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1,Fach=1
21982  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1,Pch=PCH
21983  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1,Rach=RACH
21984  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1,Hsdsch=1
22006  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1
22007  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1,Fach=1
22008  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1,Pch=PCH
22009  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1,Rach=RACH
22010  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1,Hsdsch=1
22035  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1
22036  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1,Fach=1
22037  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1,Pch=PCH
22038  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1,Rach=RACH
22039  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1,Hsdsch=1
============================================================================
===

cvls: software print out
cabx: cabinet + XPs
cabs: sofware per card in cabinet

lg a: alarm log

srt: Process Board Utilization in RNC

pmx -m 2: Statistics Export
pmr -m 2: display statistics

CREATING EXTERNAL 2G NEIGHBOR
cr RncFunction=1,UtranCell=1086A1,GsmRelation=1086A1_4754A
ExternalGsmNetwork=10027,ExternalGsmCell=4754A #externalGsmCellRef

lset RncFunction=1,UtranCell=1086A1,GsmRelation=1086A1_4754A$ mobilityRelationTy
pe 0
lset RncFunction=1,UtranCell=1086A1,GsmRelation=1086A1_4754A$ qOffset1sn 7

CREATING 3G-3G NEIGHBOR SAME RNC
cr RncFunction=1,UtranCell=4653C1,UtranRelation=4653C1_1432C1
UtranCell=1432C1 #UtranCellRef
lset RncFunction=1,UtranCell=4653C1,UtranRelation=4653C1_1432C1$ qOffset1sn 0
lset RncFunction=1,UtranCell=4653C1,UtranRelation=4653C1_1432C1$ qOffset2sn 0

CREATING 3G-3G NEIGHBOR DIFFERENT RNCs
RBRNC1> cr RncFunction=1,UtranCell=1580B1,UtranRelation=1580B1_529A1

Attribute 1 of 1, utranCellRef (moRef:ManagedObject):
   Enter mo LDN: IurLink=626_655_10,ExternalUtranCell=529A1


CREATING EXTERNAL 2G CELL
TPRNC1> cr RncFunction=1,ExternalGsmNetwork=1,externalgsmcell=1A

Attribute 1 of 5, cellIdentity (long): 11

Attribute 2 of 5, ncc (long): 0

Attribute 3 of 5, bcc (long): 0
```

```
Attribute 4 of 5, bcchFrequency (long): 102

Attribute 5 of 5, lac (long): 11122


CREATING EXTERNAL 3G CELL

JHRNC1> cr rncfunction=1,IurLink=1126_655_10,ExternalUtranCell=64C1

Attribute 1 of 6, cId (long): 640

Attribute 2 of 6, lac (long): 11126

Attribute 3 of 6, rac (long): 110

Attribute 4 of 6, primaryScramblingCode (long): 505

Attribute 5 of 6, uarfcnDl (long): 10712

Attribute 6 of 6, uarfcnUl (long): 9762


>>>  [Proxy ID = 2712] MO name :ManagedElement=1,RncFunction=1,ExternalGsmNetwor
k=1,ExternalGsmCell=1A

TPRNC1> get 2712

070309-11:00:32 10.212.44.10 7.0 RNC_NODE_MODEL_F_5_2 stopfile=/tmp/18141
================================================================================
================================
2712                                RncFunction=1,ExternalGsmNetwork=1,External
GsmCell=1A
================================================================================
================================
ExternalGsmCellId                   1A
bandIndicator                       0 (DCS1800)
bcc                                 0
bcchFrequency                       102
cellIdentity                        11
individualOffset                    0
lac                                 11122
maxTxPowerUl                        100
ncc                                 0
qRxLevMin                           100
reservedBy                          [0] =
userLabel
================================================================================
================================
Total: 1 MOs


TPRNC1> del 2712

070309-11:01:05 10.212.44.10 7.0 RNC_NODE_MODEL_F_5_2 stopfile=/tmp/18141
Delete following MOs ?
================================================================================
===
 2712  RncFunction=1,ExternalGsmNetwork=1,ExternalGsmCell=1A
================================================================================
===
```

```
Warning: Undo Mode is currently inactive !!!!
Are you Sure [y/n] ? y

Deleting ...
================================================================================
===
 2712  RncFunction=1,ExternalGsmNetwork=1,ExternalGsmCell=1A
    >>> Mo deleted
================================================================================
===
Total: 1 MOs attempted, 1 MOs deleted

lga |grep -i 2007-06-09

U3045-MTN_14th_Avenue_Rooftop> get vp

070719-10:26:11 10.204.80.193 7.0n RBS_NODE_MODEL_H_6_6 stopfile=/tmp/11603
================================================================================
================================
1463                                TransportNetwork=1,AtmPort=1-2-ima1,VplTp=v
p1
================================================================================
================================
VplTpId                             vp1
atmTrafficDescriptor                AtmTrafficDescriptor=C1P4400
availabilityStatus                  0 (NO_STATUS)
externalVpi                         1
operationalState                    1 (ENABLED)
userLabel                           vp1
================================================================================
================================
1464                                TransportNetwork=1,AtmPort=1-2-ima1,VplTp=v
p1,VpcTp=1
================================================================================
================================
VpcTpId                             1
alarmReport                         2 (ALARM_LOC)
availabilityStatus                  0 (NO_STATUS)
continuityCheck                     false
counterMode                         0 (PM_MODE_OFF)
nomPmBlkSize                        1024 (NOM_PM_BLKSIZE_2_10)
operationalState                    1 (ENABLED)
userLabel                           1
================================================================================
==========

NLRNC1> tgc | grep 2532

070803-09:37:36 10.211.44.1 7.0p RNC_NODE_MODEL_F_5_2 stopfile=/tmp/11824

Logging to file: /home/support/moshell_logfiles/logs_moshell/tempfiles/20070803-
092747_11788/tgLog11788

NLRNC1> lh cc celllist
put /home/support/moshell_logfiles/logs_moshell/tempfiles/20070803-092747_11788/
lhCmd11788 /c/tmp/lhCmd11788 ... OK
.................................
Log close: /home/support/moshell_logfiles/logs_moshell/tempfiles/20070803-092747
_11788/tgLog11788
  10     6  011700  2532A1           Iub_U2532-The_Rock_Cottage    98    34  1/1
```

```
/1/1/2/1.4    1/1/1/1/7/1.2     0122SP0
  10     6  011700  2532B1           Iub_U2532-The_Rock_Cottage    99    34  1/1
/1/1/2/1.5    1/1/1/1/7/1.2     0122SP0

NLRNC1> bo

================================================================================
================================================
00  M BoardType Devs  SwAllocation          01  M BoardType Devs  SwAllocation
        02  M BoardType Devs  SwAllocation
================================================================================
================================================
00    SCB3            SCB                   00    SCB3            SCB
        00    SCB3            SCB
01    SCB3            SCB                   01    SCB3            SCB
        01    SCB3            SCB
02    SXB3            SXB                   02    ET-M4           ETM4
        02    ET-M4           ETM4
03    SXB3            SXB

04    TUB             TUB                   04    ET-M4           ETM4
        04    ET-M4           ETM4
05    TUB             TUB

06    ET-M4           ETM4                  06  9 SPB21     CDDDD SPB_TYPE_B
        06 11 SPB21     CDDDD SPB_TYPE_B
07    ET-M4           ETM4                  07  9 SPB21     CDDDD SPB_TYPE_B
        07 11 SPB21     CDDDD SPB_TYPE_B
08    GPB53           GPB_SCCP_ITU          08  2 SPB21     CDDDD SPB_TYPE_B
        08  5 SPB21     CDDDD SPB_TYPE_B
09    GPB53           GPB_SCCP_ITU          09  2 SPB21     CDDDD SPB_TYPE_B
        09  5 SPB21     CDDDD SPB_TYPE_B
10    GPB53           GPB_Central_E1_ITU    10  3 SPB21     CDDDD SPB_TYPE_B
        10  6 SPB21     CDDDD SPB_TYPE_B
11    GPB53           GPB_Central_E1_ITU

12    GPB53           GPB_OM                12  9 GPB53           GPB_Module
        12 11 GPB53           GPB_Module
13    GPB53           GPB_OM                13  2 GPB53           GPB_Module
        13  5 GPB53           GPB_Module
14  1 GPB53           GPB_Module            14  3 GPB53           GPB_Module
        14  6 GPB53           GPB_Module
15  - GPB53           GPB_Module            15  4 GPB53           GPB_Module
        15  7 GPB53           GPB_Module
16  8 GPB53           GPB_Module            16  - GPB53           GPB_Module
        16  - GPB53           GPB_Module
17    GPB53           GPB_RANAP_RNSAP       17 10 GPB53           GPB_Module
        17 12 GPB53           GPB_Module
18    GPB53           GPB_RANAP_RNSAP

19  1 SPB21     PCDDD SPB_TYPE_A            19  3 SPB21     CDDDD SPB_TYPE_B
        19  6 SPB21     CDDDD SPB_TYPE_B
20  1 SPB21     PCDDD SPB_TYPE_A            20  4 SPB21     CDDDD SPB_TYPE_B
        20  7 SPB21     CDDDD SPB_TYPE_B
21  1 SPB21     PCDDD SPB_TYPE_A            21  4 SPB21     CDDDD SPB_TYPE_B
        21  7 SPB21     CDDDD SPB_TYPE_B
22  8 SPB21     PCDDD SPB_TYPE_A            22 10 SPB21     CDDDD SPB_TYPE_B
        22 12 SPB21     CDDDD SPB_TYPE_B
23  8 SPB21     PCDDD SPB_TYPE_A            23 10 SPB21     CDDDD SPB_TYPE_B
        23 12 SPB21     CDDDD SPB_TYPE_B
```

```
24    ET-M4           ETM4                  24    ET-M4           ETM4
        24    ET-M4           ETM4
25    ET-M4           ETM4

26    ET-M4           ETM4                  26    ET-M4           ETM4
        26    ET-M4           ETM4
27    ET-M4           ETM4

================================================================================
================================================
11  M BoardType Devs  SwAllocation          12  M BoardType Devs  SwAllocation

================================================================================
================================================
00    SCB3            SCB                   00    SCB3            SCB

01    SCB3            SCB                   01    SCB3            SCB

02    ET-M4           ETM4                  02    ET-M4           ETM4

04    ET-M4           ETM4                  04    ET-M4           ETM4

06 30 SPB21     CDDDD SPB_TYPE_B            06 40 SPB21     CDDDD SPB_TYPE_B

07 30 SPB21     CDDDD SPB_TYPE_B            07 40 SPB21     CDDDD SPB_TYPE_B

08 31 SPB21     CDDDD SPB_TYPE_B            08 41 SPB21     CDDDD SPB_TYPE_B

09 31 SPB21     CDDDD SPB_TYPE_B            09 41 SPB21     CDDDD SPB_TYPE_B

10 32 SPB21     CDDDD SPB_TYPE_B            10 42 SPB21     CDDDD SPB_TYPE_B

12 30 GPB53           GPB_Module            12 40 GPB53           GPB_Module

13 31 GPB53           GPB_Module            13 41 GPB53           GPB_Module

14 32 GPB53           GPB_Module            14 42 GPB53           GPB_Module

15 33 GPB53           GPB_Module            15 43 GPB53           GPB_Module

16  - GPB53           GPB_Module            16  - GPB53           GPB_Module

17 34 GPB53           GPB_Module            17 44 GPB53           GPB_Module

19 32 SPB21     CDDDD SPB_TYPE_B            19 42 SPB21     CDDDD SPB_TYPE_B

20 33 SPB21     CDDDD SPB_TYPE_B            20 43 SPB21     CDDDD SPB_TYPE_B

21 33 SPB21     CDDDD SPB_TYPE_B            21 43 SPB21     CDDDD SPB_TYPE_B

22 34 SPB21     CDDDD SPB_TYPE_B            22 44 SPB21     CDDDD SPB_TYPE_B

23 34 SPB21     CDDDD SPB_TYPE_B            23 44 SPB21     CDDDD SPB_TYPE_B

24    ET-M4           ETM4                  24    ET-M4           ETM4

26    ET-M4           ETM4                  26    ET-M4           ETM4

NLRNC1> cab
```

```
070803-09:40:23 10.211.44.1 7.0p RNC_NODE_MODEL_F_5_2 stopfile=/tmp/11824
put /home/support/moshell_logfiles/logs_moshell/tempfiles/20070803-092747_11788/
lhCmd11788 /c/tmp/lhCmd11788 ... OK
.....................................................
================================================================================
====================
SMN  APN  BOARD      GREEN   YELLOW  RED     PRODUCT NR       REV     DATE     S
ERIAL NR   TEMP  COREMGR
================================================================================
====================
  0    1  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2B     20060510 T
U88703545
  0    2  SXB3       ON      OFF     OFF     ROJ 119 2109/3   R1C     20060516 T
U88752639
  0    3  SXB3       ON      OFF     OFF     ROJ 119 2109/3   R1C     20060516 T
U88752669
  0    4  TUB        ON      OFF     OFF     ROJ 119 2104/4   R3C     20060514 T
U88736236
  0    5  TUB        ON      OFF     OFF     ROJ 119 2104/4   R3C     20060514 T
U88736235
  0    6  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660426
  0    7  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660420
  0    8  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88716992  +39C
  0    9  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88716988  +40C
  0   10  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717215  +40C  StandbyReady*
  0   11  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717222  +40C  Active
  0   12  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717221  +39C
  0   13  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717206  +39C
  0   14  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717196  +39C
  0   15  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717220  +39C
  0   16  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717019  +40C
  0   17  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717022  +40C
  0   18  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717201  +39C
  0   19  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560063  +45C
  0   20  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560026  +46C
  0   21  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560000  +47C
  0   22  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
U88559939  +47C
  0   23  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
U88559908  +45C
  0   24  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660505
  0   25  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
```

```
U88660419
  0   26  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660507
  0   27  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660427
  0    0  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2B     20060510 T
U88703572
--------------------------------------------------------------------------------
--------------------
  1    1  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2C     20060418 T
U88550589
  1    2  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660416
  1    4  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660567
  1    6  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559987  +36C
  1    7  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559988  +39C
  1    8  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559984  +40C
  1    9  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559985  +39C
  1   10  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560059  +36C
  1   12  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717239  +26C
  1   13  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717006  +28C
  1   14  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717228  +28C
  1   15  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717177  +27C
  1   16  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717015  +27C
  1   17  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717020  +27C
  1   19  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560064  +35C
  1   20  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560067  +38C
  1   21  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559983  +38C
  1   22  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2A     20050509 T
U86127272  +38C
  1   23  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559997  +38C
  1   24  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660383
  1   26  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660403
  1    0  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2C     20060418 T
U88550384
--------------------------------------------------------------------------------
--------------------
  2    1  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2C     20060516 T
U88752549
  2    2  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660415
  2    4  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
```

```
U88660602
  2    6  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559958  +35C
  2    7  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559930  +37C
  2    8  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559914  +38C
  2    9  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559897  +37C
  2   10  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559893  +35C
  2   12  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717000  +25C
  2   13  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717235  +26C
  2   14  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88716993  +26C
  2   15  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88716990  +26C
  2   16  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717198  +25C
  2   17  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717018  +25C
  2   19  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559994  +32C
  2   20  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559890  +36C
  2   21  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560098  +36C
  2   22  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559918  +37C
  2   23  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559909  +36C
  2   24  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660595
  2   26  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060504 T
U88660601
  2    0  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2C     20060418 T
U88550509
--------------------------------------------------------------------------------
--------------------
 11    1  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2C     20060516 T
U88752520
 11    2  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060516 T
U88760494
 11    4  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060516 T
U88760453
 11    6  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060412 T
U88527202  +41C
 11    7  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060412 T
U88527267  +45C
 11    8  SPB21      ON      ON      OFF     ROJ 119 2103/41  R2B     20060419 T
U88560017  +44C
 11    9  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559957  +44C
 11   10  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560031  +43C
 11   12  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717199  +36C
 11   13  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
```

```
U88717232  +38C
 11   14  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717161  +38C
 11   15  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717026  +38C
 11   16  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717030  +37C
 11   17  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717160  +37C
 11   19  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559986  +42C
 11   20  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559877  +44C
 11   21  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559977  +45C
 11   22  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560033  +44C
 11   23  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88560032  +42C
 11   24  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060516 T
U88760330
 11   26  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060516 T
U88760334
 11    0  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2C     20060516 T
U88752564
--------------------------------------------------------------------------------
--------------------
 12    1  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2C     20060516 T
U88752562
 12    2  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060524 T
U88834878
 12    4  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060516 T
U88760427
 12    6  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
U88559873  +37C
 12    7  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
U88560057  +40C
 12    8  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
U88560108  +40C
 12    9  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
U88560028  +38C
 12   10  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559943  +35C
 12   12  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717200  +25C
 12   13  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88716995  +27C
 12   14  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717229  +27C
 12   15  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717230  +28C
 12   16  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88717001  +27C
 12   17  GPB53      ON      OFF     OFF     ROJ 119 2106/53  R2B     20060511 T
U88716997  +26C
 12   19  SPB21      ON      16HZ    OFF     ROJ 119 2103/41  R2B     20060419 T
U88559942  +35C
 12   20  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
U88559940  +37C
 12   21  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
```

```
U88559933  +39C
 12   22  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
U88559932  +41C
 12   23  SPB21      ON      OFF     OFF     ROJ 119 2103/41  R2B     20060419 T
U88559931  +39C
 12   24  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060516 T
U88760296
 12   26  ET-M4      ON      OFF     OFF     ROJ 119 2102/22  R1B     20060524 T
U88834886
 12    0  SCB3       ON      OFF     OFF     ROJ 119 2108/4   R2C     20060516 T
U88752565
------------------------------------------------------------------------------
---------------------
```

CE check:

```
CTRNC1> cell -cid 109 celldata -cid 109 for P5
NLRNC1> dyncelldata cid 25329 for P4
```

CodeTree check:

```
CTRNC1> cell -cid 4398 codetree -cid 4398
```

performance stats

```
pmx labru1016 irat -m 2 -a
pmx labru1016b,gsmrelation=080g1016b irat -m 2


RBRNC1> get externalgsmcell=4336B

071011-11:11:18 10.204.44.1 7.0p RNC_NODE_MODEL_F_5_2 stopfile=/tmp/4522
================================================================================
================================
14951                                RncFunction=1,ExternalGsmNetwork=10427,Exte
rnalGsmCell=4336B
================================================================================
================================
ExternalGsmCellId                    4336B
bandIndicator                        2 (OTHER_BANDS)
bcc                                  6
bcchFrequency                        93
cellIdentity                         43362
individualOffset                     0
lac                                  10423
maxTxPowerUl                         33
ncc                                  3
qRxLevMin                            -111
reservedBy                           [10] =
 >>> reservedBy = RncFunction=1,UtranCell=194B1,GsmRelation=194B1_4336B
 >>> reservedBy = RncFunction=1,UtranCell=3323A1,GsmRelation=3323A1_4336B
 >>> reservedBy = RncFunction=1,UtranCell=3323C1,GsmRelation=3323C1_4336B
 >>> reservedBy = RncFunction=1,UtranCell=4336A1,GsmRelation=4336A1_4336B
 >>> reservedBy = RncFunction=1,UtranCell=4336B1,GsmRelation=4336B1_4336B
 >>> reservedBy = RncFunction=1,UtranCell=4336C1,GsmRelation=4336C1_4336B
 >>> reservedBy = RncFunction=1,UtranCell=3783B1,GsmRelation=3783B1_4336B
 >>> reservedBy = RncFunction=1,UtranCell=3783A1,GsmRelation=3783A1_4336B
 >>> reservedBy = RncFunction=1,UtranCell=1423C1,GsmRelation=1423C1_4336B
 >>> reservedBy = RncFunction=1,UtranCell=1423A1,GsmRelation=1423A1_4336B
userLabel                            4336B
================================================================================
================================
Total: 1 MOs
```

```
cat /c/license/licensekeys.xml
get 1
bl (proxy nr)
bl .4604
deb .4604

get aal2routing

Read Pathfinder errors
U0049-Sanlam_Plaza_East>cab
U0049-Sanlam_Plaza_East> lhsh 000800 te log read


UEH_EX trace
NLRNC1> get cell=2532b1 iub
NLRNC1> get IubLink=Iub_U2532-The_Rock_Cottage

RBRNC1> get cell=. service
RBRNC1> get cell=. cid
RBRNC1> get servicearea sac

restart log:
> llog

PTRNC1> dyncelldata cid 6550
071101-11:12:10 10.201.44.1 7.0p RNC_NODE_MODEL_F_5_2 stopfile=/tmp/29097
$ dyncelldata cid 6550
cId: 6550
Cell froId: 234
CC SP: 012100/sp0.lnh/CommonChMainPT
rncModuleId: 5
IubLink froId: 81
Total ASE DL: 2335
aseDlAdm: 500
beMarginAseDl: 0
Total ASE UL: 8182
aseUlAdm: 500
aseUlAdmOffset: 0
beMarginAseUl: 0
CPM RL Count: 0
compModeAdm: 15
HSDPA UE Count: 10
hsdpaUsersAdm: 15
SF8 RL DL Count: 0
sf8Adm: 8
SF16 RL DL Count: 0
sf16Adm: 16
SF32 RL DL Count: 1
sf32Adm: 32
SF4 RL UL Count: 0
sf4AdmUl: 0
DL Code Allocation Level: 46.09 %
dlCodeAdm: 85 %
beMarginDlCode: 5
UL Interference: -103.0 dBm
Filtered DL Power: 28.18 %
pwrAdm: 75 %
pwrAdmOffset: 10 %
beMarginDlPwr: 10
```

Congestion State: Uncongested
$

Alarm log:
lga

Format Card
U0437-Monument_Park_T_Club> lhsh 001800 format -f /f

BSC Commands
RLDEP
RLUMP
RLNRP

MSS Commands
MGAAP:AREA=xxxx8; (E)(I)
MGOCP:CELL=xxxA1;

MSC Commands
MGCEP:CELL=xxxx; (Inner Def)
MGOCP:CELL=xxxx; (Outer Def)

----------Emergency unlock----------
Get licensing (get the proxy)
Acl <proxy>
Acc <proxy> setemergencystate

----------Routing Case---------

Routing Case Check and checking Signalling point code of the node

DBRNC1> get aal2routing numberdirec

080626-12:54:17 10.209.44.1 7.0y RNC_NODE_MODEL_G_5_28 stopfile=/tmp/21228
==
================================
MO   Attribute   Value
==
================================
Aal2RoutingCase=DBMGW1_2711   numberDirection   2711
Aal2RoutingCase=DBMGW1   numberDirection   2710
Aal2RoutingCase=T0240RXI1   numberDirection   272092
60903
Aal2RoutingCase=D5006RXI1   numberDirection   272092
62201
Aal2RoutingCase=DBRXI2   numberDirection   272092
60902
Aal2RoutingCase=D067RXI1   numberDirection   272092
60904
Aal2RoutingCase=Iur_NGRNC1   numberDirection   272032
6
Aal2RoutingCase=1   numberDirection   272031
6
Aal2RoutingCase=DBRXI1_9   numberDirection   272092
60901
Aal2RoutingCase=272092600005119   numberDirection   272092
600005119
Aal2RoutingCase=D540RXI1   numberDirection   272092
62202

```
================================================================================
================================
Total: 11 MOs


DBRNC1> get aal2sp

080626-12:55:00 10.209.44.1 7.0y RNC_NODE_MODEL_G_5_28 stopfile=/tmp/21228
================================================================================
================================
8650                                TransportNetwork=1,Aal2Sp=1
================================================================================
================================
Aal2SpId                            1
a2ea                                272092600000000
userLabel                           Aal2Sp 272092600000000
================================================================================
================================
Total: 1 MOs



-------------------Check which Parameters have been changed---------------

Moshell Commands:

lgo on any node ! Prints out parameters that have been changed

-------------------------Admission Control Locked up-----------------------

Problem on cell where admission control thinks there are 10 HSDPA users but in r
eality there are none

NLRNC1> cedr | egrep -i 4379b1

080623-14:40:35 10.211.44.1 7.0y RNC_NODE_MODEL_G_5_28 stopfile=/tmp/1262
^[[A^[[A

.put /home/support/moshell_logfiles/logs_moshell/tempfiles/20080623-143507_1238/
lhCmd1238 /d/usr/lhCmd1238 ... OK
.......................................
--------------------------------------------------------------------------------
-------------------------------------------------------------
MOD   CELL   cid  fro ro PwrDl/Adm dlCode  ulInt sf8dl sf8ul sf16dl sf16ul sf32d
l sf4ul   dlASE   ulASE HScnt   EULs  EULns CPMcnt CC_SP
--------------------------------------------------------------------------------
-------------------------------------------------------------
 40 4379B1 43799  277 10 28.6% 75%  43.2% -105.0   1/8   0/8   0/16   3/32   1/3
2   0/4  67/500  33/500 10/10    0/4  0/100   1/15 1206sp0
--------------------------------------------------------------------------------
-------------------------------------------------------------

NLRNC1> lh mod40 hrnti -c 43799 status

080623-14:40:50 10.211.44.1 7.0y RNC_NODE_MODEL_G_5_28 stopfile=/tmp/1262
================================================================================
=============
$ lhsh 121200 hrnti -c 43799 status
1212: Allocated : 0
1212: Free      : 128
```

```
$


As can be seen from first printout HScnt =10/10 from second printout HRNTI Alloc
ated=0


--------------------------Checking HS Users on Cell using HRNTI-----------------
-----------

NLRNC1> lhsh 121200 ? | grep hr         !121200 Is the board module 14

080623-14:56:05 10.211.44.1 7.0y RNC_NODE_MODEL_G_5_28 stopfile=/tmp/2951
hrnti      [-c cellId | index] set|used|free|status
hrnti help|list
sync       sync <volume>                  synchronize volume with disk

NLRNC1> lhsh 121200 hrnti help

080623-14:56:33 10.211.44.1 7.0y RNC_NODE_MODEL_G_5_28 stopfile=/tmp/2951
$ lhsh 121200 hrnti help
hrnti [-c cellId | index] set|used|free|status
hrnti help|list


Prints the usage of Hsdpa RadioNetwork Temporary Identifier.

   -c cellId - Print hrnti information for the cell with
               the given CellId.
   index     - Print hrnti information for the cell with
               the given index. The index is the same as
               the capsule index.

   help   - Print this help menu.
   list   - List  all Cells cellId, CellFroId and index.
            Index marked with * is default.
   set    - Set default Cell.
   used   - Prints all used Hrnti.
   free   - Prints all free Hrnti.
   status - Prints an overview of the Hrnti status

   Example:
   hrnti -c 5 set  - Set cell with id 5 as default.
   hrnti free      - Print free Hrnti numbers for Cell 5.
   hrnti -c 3 free - Print free Hrnti numbers for Cell 3.
------------------------------Loging Files from Command Prompt----------------

Loging files from command prompt

NLRNC1> l+

Logging to file: /home/support/moshell_logfiles/logs_moshell/sessionlog/080623-1
51331_NLRNC1.log

NLRNC1> jj

080623-15:13:41 10.211.44.1 7.0y RNC_NODE_MODEL_G_5_28 stopfile=/tmp/2951
$ jj
Unknown command 'jj'.
$
```

```
NLRNC1> l-

Log close: /home/support/moshell_logfiles/logs_moshell/sessionlog/080623-151331_
NLRNC1.log

-----------------Changing cell Parameters-----------------------------------
-----------


Lt all OR ltc all  load all MO attributes and proxies

Parameter Settings :

get utrancell=324A1 availabilityStatus|administrativeState|bchPower|cellReserved
|maxPwrMax                              |||||||||||||||||||||||||||||||||||||||||
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
||||

PARAMETER CHANGES:
set utrancell=XXXXX usedfreqthresh2drscp -95

Alarms:

Al
Ala
Altk
Tgc or tgc | grep cellid   cells on a which rnc module
to refresh list: tgcr

Performance Measurement:

Performance measurement 1 cell:
pmxf utrancell=324A1 rrc|rab|normalrabrelease|systemrabrelease  a -m 1

pmxf utrancell=1629A1 totnorrcconnectreq|pmnorabestablish|normalrabrelease|syste
mrabrelease -a -m 1

performance report for whole rnc:

pmr utrancell=324 rrc -m 1

pmx utrancell=324 rrc -a -m 2

pmx utrancell=324 rrcconnectreq|rabestablishattemptspeech|rabestablishsuccessspe
ech|normalrabreleasespeech|systemrabreleasespeech  a  m 2
```

RESTARTING A NODE:

XXXXX> acc 0 restart (Generally REFRESH)

UL INTERFEARANCE:

tgd cell=* ulinterference

NCELL RELATIONS:

get utranrelation=*****A1 relationid   shows all utran defined cells
get relation=****A1 gsmrelation   shows all GSM defined cells

GSM cells defined on an RNC

lget RncFunction=1,ExternalGsmNetwork=1
lget RncFunction=1,ExternalGsmCell=xxx

IUB Link info

get Iublink=Iub_U2163

Find state of cell and Channels:

lst cell=*****

CELLS on an RNC MODULE:

Get rncmodule=xx

lt Iub : loads the Proxies
pr Iub : prints the proxies
get Proxy or RNCFunction: gets status

al: alarm

lt plug|ret: load ret|plug data
Changing Electrical Tilt:
get ret elec
find proxy: pr ret
set xx (proxy) electricalAntennaTilt 60 (6 degrees)
confirm setting: get ret elec

lst plug|ret: list ret|ret

get 34: gets equipment status

Iub: Node-B side
Iublink: RNC side

To change RNCs
q; to quit
./moshell jhrnc1

on the individual mo
./moshell u0348

```
lt sector
pr sector
pr cable


to restart Node-B on Node-B level: acc 0 restart

to set Electrical Tilt: lset Equipment=1,SectorAntenna=3,AuxPlugInUnit=2,RetuDev
iceGroup=1,RetDeviceSet=1,RetDevice=1 electricalAntennaTilt value

get relation=****A1/B1/C1_ gsm rela
get relation=****A1/B1/C1_ utran

bl PROXY: block/lock
deb PROXY: deblock/de-lock

lst cell: Cell Channel Status
get rbslocalcell: gets CPICH and Availabilty Status

Hardware Admission Control
Stored under Iub
DBRNC1> get Iublink=Iub_U2163

070119-17:32:12 10.209.44.1 7.0 RNC_NODE_MODEL_F_5_2 stopfile=/tmp/22327
================================================================================
================================
90                                  RncFunction=1,IubLink=Iub_U2163-Birdswood_B
eacon
================================================================================
================================
IubLinkId                           Iub_U2163-Birdswood_Beacon
availabilityStatus                  0 (NO_STATUS)
beMarginDlHw                        0
beMarginUlHw                        0
dlHwAdm                             100
operationalState                    1 (ENABLED)
rbsId                               2163
reservedBy                          [3] =
 >>> reservedBy = RncFunction=1,UtranCell=2163A1
 >>> reservedBy = RncFunction=1,UtranCell=2163B1
 >>> reservedBy = RncFunction=1,UtranCell=2163C1
rncModuleRef                        RncModule=54
tpcPattern01CountDl                 8
ulHwAdm                             100
userLabel                           Iub_U2163-Birdswood_Beacon
================================================================================
================================
Total: 1 MOs


Difference between pr and lst
PTRNC1> pr cell=1000

070105-11:28:57 10.201.44.1
================================================================================
===
Proxy  MO
================================================================================
===
10273   RncFunction=1,ExternalGsmNetwork=10127,ExternalGsmCell=1000A
```

```
10274   RncFunction=1,ExternalGsmNetwork=10127,ExternalGsmCell=1000B
10275   RncFunction=1,ExternalGsmNetwork=10127,ExternalGsmCell=1000C
21980   RncFunction=1,UtranCell=1000A1
22006   RncFunction=1,UtranCell=1000B1
22035   RncFunction=1,UtranCell=1000C1
==============================================================================
===
Total: 6 MOs

PTRNC1> lst cell=1000

070105-11:29:11 10.201.44.1
==============================================================================
===
Proxy  Adm State     Op. State     MO
==============================================================================
===
21980  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1
21981  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1,Fach=1
21982  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1,Pch=PCH
21983  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1,Rach=RACH
21984  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000A1,Hsdsch=1
22006  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1
22007  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1,Fach=1
22008  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1,Pch=PCH
22009  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1,Rach=RACH
22010  1 (UNLOCKED)  0 (DISABLED)  RncFunction=1,UtranCell=1000B1,Hsdsch=1
22035  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1
22036  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1,Fach=1
22037  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1,Pch=PCH
22038  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1,Rach=RACH
22039  1 (UNLOCKED)  1 (ENABLED)   RncFunction=1,UtranCell=1000C1,Hsdsch=1
==============================================================================
===

cvls: software print out
cabx: cabinet + XPs
cabs: sofware per card in cabinet

lg a: alarm log

srt: Process Board Utilization in RNC

pmx: Statistics Export
pmr: display statistics

CREATING EXTERNAL 2G NEIGHBOR
cr RncFunction=1,UtranCell=1086A1,GsmRelation=1086A1_4754A
ExternalGsmNetwork=10027,ExternalGsmCell=4754A #externalGsmCellRef

lset RncFunction=1,UtranCell=1086A1,GsmRelation=1086A1_4754A$ mobilityRelationTy
pe 0
lset RncFunction=1,UtranCell=1086A1,GsmRelation=1086A1_4754A$ qOffset1sn 7

CREATING 3G-3G NEIGHBOR SAME RNC
cr RncFunction=1,UtranCell=4653C1,UtranRelation=4653C1_1432C1
UtranCell=1432C1 #UtranCellRef
lset RncFunction=1,UtranCell=4653C1,UtranRelation=4653C1_1432C1$ qOffset1sn 0
lset RncFunction=1,UtranCell=4653C1,UtranRelation=4653C1_1432C1$ qOffset2sn 0
```

```
CREATING 3G-3G NEIGHBOR DIFFERENT RNCs
RBRNC1> cr RncFunction=1,UtranCell=1580B1,UtranRelation=1580B1_529A1

Attribute 1 of 1, utranCellRef (moRef:ManagedObject):
   Enter mo LDN: IurLink=626_655_10,ExternalUtranCell=529A1


CREATING EXTERNAL 2G CELL
TPRNC1> cr RncFunction=1,ExternalGsmNetwork=1,externalgsmcell=1A

Attribute 1 of 5, cellIdentity (long): 11

Attribute 2 of 5, ncc (long): 0

Attribute 3 of 5, bcc (long): 0

Attribute 4 of 5, bcchFrequency (long): 102

Attribute 5 of 5, lac (long): 11122

CREATING EXTERNAL 3G CELL

JHRNC1> cr rncfunction=1,IurLink=1126_655_10,ExternalUtranCell=64C1

Attribute 1 of 6, cId (long): 640

Attribute 2 of 6, lac (long): 11126

Attribute 3 of 6, rac (long): 110

Attribute 4 of 6, primaryScramblingCode (long): 505

Attribute 5 of 6, uarfcnDl (long): 10712

Attribute 6 of 6, uarfcnUl (long): 9762


>>>  [Proxy ID = 2712] MO name :ManagedElement=1,RncFunction=1,ExternalGsmNetwor
k=1,ExternalGsmCell=1A

TPRNC1> get 2712

070309-11:00:32 10.212.44.10 7.0 RNC_NODE_MODEL_F_5_2 stopfile=/tmp/18141
================================================================================
================================
2712                                RncFunction=1,ExternalGsmNetwork=1,External
GsmCell=1A
================================================================================
================================
ExternalGsmCellId                   1A
bandIndicator                       0 (DCS1800)
bcc                                 0
bcchFrequency                       102
cellIdentity                        11
individualOffset                    0
lac                                 11122
maxTxPowerUl                        100
ncc                                 0
qRxLevMin                           100
reservedBy                          [0] =
```

```
userLabel
================================================================================
================================
Total: 1 MOs


TPRNC1> del 2712

070309-11:01:05 10.212.44.10 7.0 RNC_NODE_MODEL_F_5_2 stopfile=/tmp/18141
Delete following MOs ?
================================================================================
===
 2712  RncFunction=1,ExternalGsmNetwork=1,ExternalGsmCell=1A
================================================================================
===
Warning: Undo Mode is currently inactive !!!!
Are you Sure [y/n] ? y

Deleting ...
================================================================================
===
 2712  RncFunction=1,ExternalGsmNetwork=1,ExternalGsmCell=1A
    >>> Mo deleted
================================================================================
===
Total: 1 MOs attempted, 1 MOs deleted

lga |grep -i 2007-06-09

*check Node
moshell U3045

al
lt plug|ret
y
lst plug
get ret elec
q


bl = lock
deb = unlock

acc 0 restart
h cvmk

******************************************************
cvls/cvmk/cvms/cvset/cvrm/cvcu/cvls1
******************************************************
ConfigurationVersion (CV) handling.

Command syntax:
    * cvls [<cv-filter>]
    * cvcu
    * cvrm <cv-name>|<cv-filter>
    * cvms <cvname> [<operator>] [<comment>]
    * cvmk <cvName> [<operator>] [<comment>]
    * cvset <cvname>
    * cvls1
```

```
Description:
A set of commands similar to the "cv" commands in OSE but operate through MO int
erface instead of telnet/ssh (ie: no password).
    * cvls displays both the current cv information (equivalent of "cv cu") and
cv list (equivalent of "cv ls"). It is possible to filter the output of cvls to
only show CVs where the CV name or CV attributes match a certain string.
    * cvcu displays the current cv information only (equivalent of "cv cu").
    * cvmk creates a cv. Operator name and comments (not longer than 40 characte
rs) can be given as argument.
The advantage of using cvmk instead of OSE command "cv mk" is that the Upgrade P
ackage information is included in the cv attributes.
    * cvset: to set a cv as startable.
    * cvms:  create a cv and make it startable (combination of cvmk and cvset)
    * cvrm can remove many cv's in one go using pattern matching on the cv name
(remove from rollback list is attempted before deletion).

Examples:
List all CVs
  >> cvls
List all CVs using Upgradepackage CXP9011274_R9A
  >> cvls CXP9011274_R9A
Create a cv and make it startable (no userid or comments given):
  >> cvms Rbs1_P2.0.16
Create a cv and make it startable (userid and comments given):
  >> cvms Rnc1_P2.1.2_B eanzmagn cell power increased to 33dBm
Remove all cv's whose name match the string "Temp":
  >> cvrm Temp
Remove all cv's whose name don't match the string "Final":
  >> cvrm !Final
Remove all cv's whose name don't match the string "final" or the string "RNC":
  >> cvrm !Final|RNC

Note: If the OSE shell command "cv mk" is used to create a cv (instead of "cvmk"
 or "cvms"), the cv attributes will not contain the UpgradePackage reference whi
ch means that the cv will not be deleted when the UpgradePackage is removed. If
there are CV's lying on the node without their corresponding UpgradePackage and
the node is restarted on one of these cv's, there is a high risk that the node w
ill go cyclic.
To avoid this situation it is recommended to always use the moshell command "cvm
k" or "cvms" when creating cv's since the UpgradePackage reference will then aut
omatically be included in the cv attributes.

Note: The cvls1 command gives similar output to "cvls" but accesses the cv infor
mation through OSE shell instead of the MO interface.
It can be used when MO service is down or when running in light mode ("-l" optio
n).


U0567-Wilderness_Hoogte> cvms

******************************************************
cvls/cvmk/cvms/cvset/cvrm/cvcu/cvls1
******************************************************
ConfigurationVersion (CV) handling.

Command syntax:
    * cvls [<cv-filter>]
    * cvcu
    * cvrm <cv-name>|<cv-filter>
    * cvms <cvname> [<operator>] [<comment>]
```

```
    * cvmk <cvName> [<operator>] [<comment>]
    * cvset <cvname>
    * cvls1

Description:
A set of commands similar to the "cv" commands in OSE but operate through MO int
erface instead of telnet/ssh (ie: no password).
    * cvls displays both the current cv information (equivalent of "cv cu") and
cv list (equivalent of "cv ls"). It is possible to filter the output of cvls to
only show CVs where the CV name or CV attributes match a certain string.
    * cvcu displays the current cv information only (equivalent of "cv cu").
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rs) can be given as argument.
The advantage of using cvmk instead of OSE command "cv mk" is that the Upgrade P
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the node is restarted on one of these cv's, there is a high risk that the node w
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To avoid this situation it is recommended to always use the moshell command "cvm
k" or "cvms" when creating cv's since the UpgradePackage reference will then aut
omatically be included in the cv attributes.

Note: The cvls1 command gives similar output to "cvls" but accesses the cv infor
mation through OSE shell instead of the MO interface.
It can be used when MO service is down or when running in light mode ("-l" optio
n).


U0567-Wilderness_Hoogte> cvms OP_CXP9010809%1_R30K_071115_1330

071115-13:31:41 10.207.83.145 7.0p RBS_NODE_MODEL_H_6_6 stopfile=/tmp/4978
071115-13:31:41 10.207.83.145 7.0p RBS_NODE_MODEL_H_6_6 stopfile=/tmp/4978

U0567-Wilderness_Hoogte> confb+

U0567-Wilderness_Hoogte> acc 1 create
```

```
071115-13:31:41 10.207.83.145 7.0p RBS_NODE_MODEL_H_6_6 stopfile=/tmp/4978

================================================================================
================================
Proxy  MO                                                              Action
                    Nr of Params
================================================================================
================================
    1  ConfigurationVersion=1                                          create
                    5

Parameter 1 of 5, configurationVersionName (string): OP_CXP9010809%1_R30K_071115
_1330

Parameter 2 of 5, identity (string): OP_CXP9010809%1_R30K_071115_1330

Parameter 3 of 5, type (enumRef-ConfigurationVersionType):
   Enter one of the following integers: 0:standard, 1:upgrade, 2:minimal, 3:test
, 4:autocreate, 5:other: 5

Parameter 4 of 5, operatorName (string): zamtndatoss

Parameter 5 of 5, comment (string): none
 >>> Return value = null

================================================================================
================================
Total: 1 MOs attempted, 1 MOs actioned

U0567-Wilderness_Hoogte> acc 1 setstartable

071115-13:32:03 10.207.83.145 7.0p RBS_NODE_MODEL_H_6_6 stopfile=/tmp/4978

================================================================================
================================
Proxy  MO                                                              Action
                    Nr of Params
================================================================================
================================
    1  ConfigurationVersion=1                                          setStartab
le                  1

Parameter 1 of 1, configurationVersionName (string): OP_CXP9010809%1_R30K_071115
_1330
 >>> Return value = null

================================================================================
================================
Total: 1 MOs attempted, 1 MOs actioned

U0567-Wilderness_Hoogte> confb-

U0567-Wilderness_Hoogte> cvls

071115-13:32:31 10.207.83.145 7.0p RBS_NODE_MODEL_H_6_6 stopfile=/tmp/4978

================================================================================
======================
071115-13:32           CV Name                                  Upgrade Packag
```

```
e
================================================================================
======================
Startable:              OP_CXP9010809%1_R30K_071115_1330          CXP9010809/1_R
30K
Loaded:                 OP_CXP9010809%1_R30K_071002_1208          CXP9010809/1_R
30K
Executing:              OP_CXP9010809%1_R30K_071115_1330          CXP9010809/1_R
30K
Last created:           OP_CXP9010809%1_R30K_071115_1330          CXP9010809/1_R
30K
--------------------------------------------------------------------------------
----------------------
Current UpgradePkg:     UpgradePackage=CXP9010809%1_R30K          CXP9010809/1_R
30K
CommandLog:             Enabled
AutoCreatedCV:          Disabled
Rollback status:        Rollback is on
Rollback init timer:    30
Rollback init counter:  5
Rollback list:          s[0] =
================================================================================
==================================
CV Name                                 Creation Date    Package
      Type  Operator     Comment
================================================================================
==================================
BasicCV_CXP9010811%2_R20C               2006-12-14 15:13 CXP9010809/1_R30K
      other Cello Packet Basic CV CXP9010811/2_R20C
INITIAL_CV                              2007-03-05 12:43 no value (upgrade packag
e id) other unknown      none
OAM_CXP9010809_1_R30K_700122_205254     2007-09-03 07:03 CXP9010809/1_R30K
      other RBS EM       Generated by OaM Wizard.
SITE_CXP9010809_1_R30K_070903_093058    2007-09-03 07:31 CXP9010809/1_R30K
      other RBS EM       Generated by Site Equipment Wizard.
before_CXP9010809_1_R30K_070903_0901    2007-09-03 07:46 CXP9010809/1_R30K
      other support      none
Recovery_CXP9010809_1_R30K_070903_0903 2007-09-03 09:01 CXP9010809/1_R30K
      other decchen      none
OP_CXP9010809_1_R30K_070904_1040        2007-09-04 08:40 CXP9010809/1_R30K
      other LOPES_a      P4_LICESNE
OP_CXP9010809_1_R30K_070904_1045        2007-09-04 08:44 CXP9010809/1_R30K
      other LOPES_a      P4_LICENSE
OP_CXP9010809%1_R30K_071002_1208        2007-10-02 10:08 CXP9010809/1_R30K
      other nmsadm       new licence
OP_CXP9010809%1_R30K_071115_1330        2007-11-15 11:31 CXP9010809/1_R30K
      other zamtndatoss  none
================================================================================
==================================
>>> Total: 10 CV's

U0567-Wilderness_Hoogte> acc 0 restart

071115-13:36:47 10.207.83.145 7.0p RBS_NODE_MODEL_H_6_6 stopfile=/tmp/4978
Call Action restart on following MOs ?
================================================================================
===
    0  ManagedElement=1
================================================================================
===
```

```
Are you Sure [y/n] ? y

================================================================================
================================
Proxy  MO                                                              Action
                     Nr of Params
================================================================================
================================
    0  ManagedElement=1                                                restart
                     1

Parameter 1 of 1, restartRank (enumRef-RestartRank):
   Enter one of the following integers: 0:RESTART_WARM, 1:RESTART_REFRESH, 2:RES
TART_COLD: 1
 >>> Return value = null

================================================================================
================================
Total: 1 MOs attempted, 1 MOs actioned


moshell GERNC1
lt ^utrancell
y

lst 2343|2132

get 2343|2132 cellreserved

set 2343|2132 cellreserved 0
y


lt all
lst cell=1569
ldeb cell=1569


lst cell=304|1607|1848|2163|2191|2476|2479|2486|2654|4384|4514
lst cell=811|2024|2479


lst cell=254|557|565|1428|2080|2180|2503|2515|3060|3066|3367|3368|3369

lst cell=52|150|=430|2090|3022|1000|=78|508



---------------------------------
PTRNC1> al

PTRNC1> lt utrancell            !Load Utran Cells


PTRNC1> get utrancell=430       !view attributes for Cell
-----------------------------------
PTRNC1> lt iub                  !load iub

PTRNC1> get iublink=Iub_U0430   !view attributes for Iub
-----------------------------------
```

```
support@satlx1o> ./moshell u0430 !Change

U0430> cab                      !Prints Leds
U0430> cabx                     !Prints Leds attributes

_____________________________________________________
PTRNC1>lt relation                       !load relations

PTRNC1>pr relation=127A1_               !U0127

_____________________________________________________
moshell U0127                   !change to RBS

if not sure which RNC cell is on, connect to the node B e.g moshell u1000 and ru
n "get 1"
lt ret                          !Loads remote electrical tilts
y                               !Confirm
get ret elec                    !gets electrical tilt for RBS

_____________________________________________________________________

cvls                            !Lists all the Configuration versions

---------------------------------------------------------------------

MOshell always get the right mo and attribute you want to change

moshell u3180
lt ret                          ! loads MO's containing RET
lst ret                         ! lists all the rets from here you can see which
 proxy is mapped to which sector mo
get 1                           ! loads all attributes for proxy 1 i.e sector 3
get 1 electricalantennatilt     ! loads only the elec tilt attribute for proxy 1
set 1 electricalantennatilt 20  ! changes tilt
set ret electricalAntennaTilt 20 ! Sets all elec tilts for all anenna's at once

--Vedere Electrical Tilt:

moshell U1889

lt ret

"y"

get ret elec


------------Emergency Unlock----------------
Get licensing (get the proxy)
Acl <proxy>
Acc <proxy> setemergencystate
```