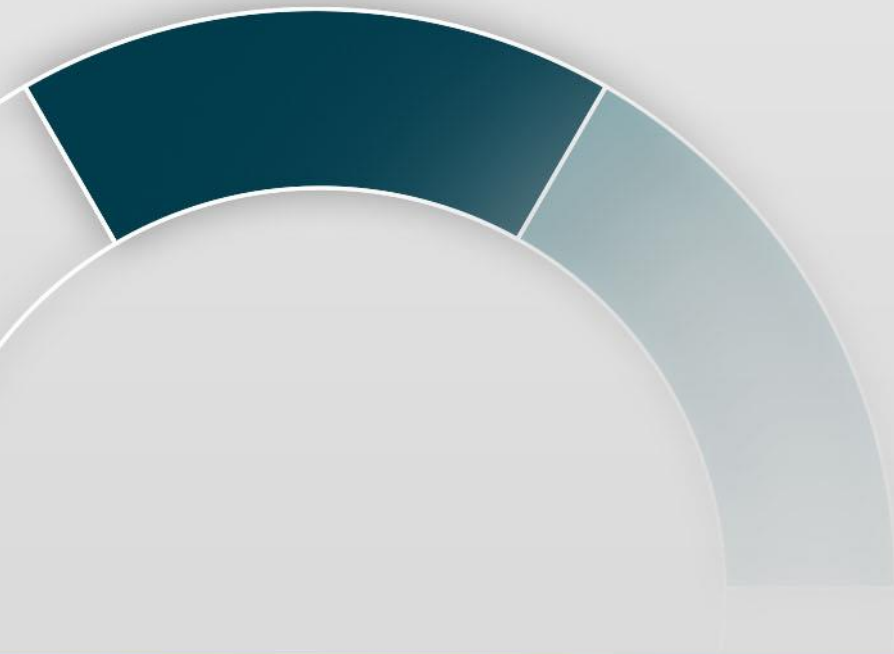




Call Trace & Network Parameter Collection Procedures

July 2015



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

1 Physical Site Information (XIF)

The **Physical information** of each cell that contain CellID, Latitude, Longitude, Antenna Orientation etc, that were not available inside network dump. The supported format will be in Text Delimited or in our XIF format.

The following header fields are mandatory for parsing xif dump files.

- Cellid
- Latitude
- Longitude
- AntDir

Parsing will fail, if one of these mandatory header fields is not found in the dump file.

Sample information as below :

Siteid	Cellid	Enodebid	SiteName	Longitude	Latitude	Mcc	Mnc	Lac	CI	Gdheight	Antdir	Antheight	Anttilt	Anttype	Antbw	Antelectilt	Cellstatus
1002B	1002B-DL1	1002B-EN1	Wisma Sel	101.7152	3.144736	502	16	43222	2657637		50	20	0	ANDREW\	64.6	3	On Air
1002B	1002B-DL1	1002B-EN1	Wisma Sel	101.7152	3.144736	502	16	43222	2657638		120	20	0	ANDREW\	63.4	5	On Air
1002B	1002B-DL1	1002B-EN1	Wisma Sel	101.7152	3.144736	502	16	43222	2657639		270	20	0	ANDREW\	64.6	3	On Air

This file need to be parsed daily to ensure the information drawn on the map and data that will be snyc to Xeus are accurate.

Sample :



Nextel Site
File_230914.xif

2 Network Configuration Dump

2.1 Huawei BSC

Supported file format is an XML file exported from CM Export feature of iManager M2000.

Follow these steps to collect the dump:

1. Start iManager M2000
2. Click Maintenance...Task Management at the menu
3. Create a new task Configuration Data Export. Select the BSC in the Extended Properties. Choose XML format and set the destination path.
4. Once the task completed, FTP the file from the destination path.

Supported MO class are as below:

```
BSC6000NE
BSC6000CellChannel
BSC60002GExtCell
BSC60003GExtCell
BSC6000Cell
BSC6000CellBaseAttr
BSC6000CellCallCtrl
BSC6000CellChMng
BSC6000CellHOCtrl
BSC6000CellPwrCtrl
BSC6000CellSoftPara
BSC6000CellSysMsg
BSC6000CellTimer
BSC60002GAdjRel
BSC60003GAdjRel
BSC6000CellHopData
BSC6000Site
BSC6000TRX
```

Following is the sample snapshot of the CM Export file:

```
<?xml version="1.0" encoding="iso-8859-1"?>
<MOTree>
  <MO className="BSC6000NE" fdn=".3221229568.3221233664.3221282818">
    <attr name="fdn">.3221229568.3221233664.3221282818</attr>
    <attr name="IP">10.4.137.21</attr>
    <attr name="MOIndex">2</attr>
    <attr name="className">BSC6000NE</attr>
    <attr name="latitude">255.0</attr>
```

```

<attr name="locationName">Arena</attr>
<attr name="longitude">194.0</attr>
<attr name="matchVersion">iManagerM2000_BSC6000_MATCH_ENG_V200R006C01B624</attr>
<attr name="name">BSCNTB31</attr>
<attr name="neID">2</attr>
<attr name="neType">BSC6000</attr>
<attr name="neVersion">BSC6000V900R008C12</attr>
<attr name="realLatitude">0DN</attr>
<attr name="realLongitude">0DE</attr>
<attr name="vendorName">Huawei</attr>
<MO className="BSC6000BCGrp" fdn=".3221229568.3221233664.3221282818.3221417986">
  <attr name="fdn">.3221229568.3221233664.3221282818.3221417986</attr>
  <attr name="BSCIndex">0</attr>
  <attr name="GrpIndex">0</attr>
  <attr name="MOIndex">2_0_0</attr>
  <attr name="className">BSC6000BCGrp</attr>
  <attr name="name">CBCGrp</attr>
  <attr name="neID">2</attr>
</MO>.....

```

2.2 Huawei RNC

Supported file format is the export file from Huawei OSS EXP CFGMML command.

By default, this file is saved in the ftp/export_cfgmml directory of the main area of the OMU and named CFGMML-RNCX-IP-YYYYMMDDHHMMSS.zip("X" indicates RNC ID).

The folder is located within the RNC. To avoid Xeda having to access the folder, it is best that these Data in the folder be copied out into a server.

Following is sample snapshot of the file :

```

//*****MML script file*****
//Export start time: 2009-02-23 13:16:19
//Export end time: 2009-02-23 13:18:15
//Export Workstation IP address: 10.232.2.100
//System RNCID: 1
//For BAM version: BSC6800V100R008C01B060
//*****
SET SYS:SYSDISC="HUAWEI WCDMA RNC", SYSOBJECTID="RNC 1", SYSCONTACT="0012 123 28560000",
SYSLOCATION="ABCDE", SYSSERVICES="WCDMA RNC";
ADD RNCBASIC:RNCID=123, MCC="123", MNC="11";
SET WMPUIP:WMPUIPADDR="10.121.139.100", MASK="255.255.255.0", BAMIPADDR="10.121.139.200";
SET SUBNET:SUBNET=80;
ADD OPC:NI=NAT, SPCBITS=BIT14, SPC=H'000C44, NSAP=H'45000060192040139F0000000000000000000000,
NAME="SYRNC";
.....

```

Following are the supported commands :

```
ADD GSMCELL
ADD GSMNCELL
ADD NRNC
ADD NRNCCELL
ADD CCP
ADD NCP
ADD NODEB
ADD NODEBALGOPARA
ADD NODEBIP
ADD NODEBLDR
ADD CNOOPERATOR
ADD RNCBASIC
SET ADMCTRL
SET AMRC
SET CERRMTIMER
SET CMCf
SET CONNMODETIMER
SET DCCC
SET DPB
SET DRD
SET FACHSCHEPRIO
SET FRMHANDPRIO
SET HCSHO
SET HOCOMM
SET HSDPCC
SET HSDSCHSCHEPRIO
SET HSSCCH
SET IDLEMODETIMER
SET INTERFREQHOCOV
SET INTERFREQHONCOV
SET INTERRATHOCOV
SET INTERRATHONCOV
SET INTRAFREQHO
SET LDCALGOPARA
SET LDM
SET LOCHPRIO
SET OLPC
SET SATLDCPERIOD
SET SRNSR
SET STATETIMER
SET SYS
SET UESTATETRANS
SET WFMRCFGDATA
ACT CELL
ACT CELLHSDPA
ADD CELLACCESSSTRICT
ADD CELLALGOSWITCH
ADD CELLCAC
ADD CELLFRC
ADD CELLHCS
ADD CELLHOCOMM
ADD CELLHSDPA
ADD CELLINTERRATHOCOV
ADD CELLLDB
ADD CELLLDM
ADD CELLLDR
```

```

ADD CELLMEAS
ADD CELLOLC
ADD CELLPUC
ADD CELLRLACTIME
ADD CELLSELRESEL
ADD CELLSETUP
ADD CELLSIBSWITCH
ADD CHPWROFFSET
ADD PSINACTTIMER
ADD SMLCCCELL
SET PSINACTTIMER
ADD INTERFREQNCCELL
ADD INTRAFREQNCCELL

```

Below are the instruction to generate this file in case it is not available in the server :

1. Running the following command to export the MML script file from the configuration data of the OMU by the default setting.
The script file is exported to "the main area directory of the OMU/ftp/export_cfgmml/CFGMML-RNCX-IP-YYYYMMDDHHMMSS.zip("X" indicates RNC ID)".
EXP CFGMML;;
2. Running the following command to export the MML script of configuration data on the OMU by the default export file path.
The script file is exported to /ftp/export_cfgmml on the active workspace of the active OMU and named "the main area directory of the OMU/ftp/export_cfgmml/cfgmml.zip".
EXP CFGMML: FN="cfgmml.txt";
3. If the OMU runs the WINDOWS system, to export the MML script of configuration data on the OMU (Export file path = D:\mbssc\bam\version_a\ftp; Export file name = cfgmml.zip), run the following command(Please affirm that "D:\mbssc\bam\version_a\ftp" is a valid path on the OMU server):
EXP CFGMML: FILEPATH="D:\mbssc\bam\version_a\ftp", FN="cfgmml.txt";
4. If the OMU runs the LINUX system, to export the MML script file from the configuration data of the OMU (Export file path = /mbssc/bam/version_a/ftp; Export file name = cfgmml.zip), run the following command (Please affirm that "/mbssc/bam/version_a/ftp" is a valid path on the OMU server):
EXP CFGMML: FILEPATH="/mbssc/bam/version_a/ftp", FN="cfgmml.txt";

2.3 Huawei NodeB

Supported file format is an XML configuration file located in the NodeB itself. There is one file per NodeB.

```

<?xml version="1.0" encoding="GB2312" standalone="yes"?>
<NODEB xmlns = "x-schema:NodeBCfgBiz.xml" ID = "0x0">

```

```

<NODEBSOM ID = "0x14000000">
  <NODEBTYPE ID = "0x24000001">15</NODEBTYPE>
  <NULPFPGA ID = "0x24000002">
    <NULPRXDELAYTIME ID = "0x34000003">
      <NULPRDT ID = "0x44000004" STATIC = "0" DESC = "Rx time
delay">184</NULPRDT>
    </NULPRXDELAYTIME>
  </NULPFPGA>
  <NULPCDMDDMDSP ID = "0x24000005">
    <DEMDSPMODE ID = "0x34000006">
      <NBWM ID = "0x44000007" STATIC = "1" DESC = "NodeB work mode(0-
TWOANTENNA 1-FOURANTENNA 3-ECONOMIZED)">0</NBWM>
    </DEMDSPMODE>
  </NULPCDMDDMDSP>
  <NDLPFPGA ID = "0x24000008">
    <NDLPUPGBUSMODE ID = "0x34000009">
      <UGWM ID = "0x4400000a" STATIC = "0" DESC = "Rx G_Bus work mode(0-
BACKUP 1-STANDALONE)">0</UGWM>
    </NDLPUPGBUSMODE>
  </NDLPFPGA>
  <NDLPENCODEDSP ID = "0x2400000b">
    <TXDELAYTIME ID = "0x3400000c">
      <TDT ID = "0x4400000d" STATIC = "0" DESC = "Tx time
delay">248</TDT>
    </TXDELAYTIME>
  </NDLPENCODEDSP>
  <BBUCM ID = "0x2400000e" STATIC = "0" DESC = "BBU cascade mode">0</BBUCM>...

```

The network dump files is inside M2000 server in the following path:

M2000 server : /export/home/sysm/ftproot/NE type (for example: DBS3900)/Data

Example : /export/home/sysm/ftproot/DBS3900/Data

The data generated for automatic backup is located in the **AUTOBAKDATA******* directory.

Sample output location will be like this:

Remote site: /export/home/sysm/ftproot/DBS3900/Data			
Filename	Filesize	Filetype	Last modified
..			
6494342		File folder	9/12/2014 6:00:00 AM
6495686		File folder	8/7/2014 6:00:00 AM
6495669		File folder	8/7/2014 6:00:00 AM
1074399202		File folder	8/7/2014 6:00:00 AM
6497405		File folder	7/14/2014 12:53:00 PM
6497424		File folder	7/9/2014 5:57:00 PM
6497423		File folder	7/9/2014 4:02:00 PM

Each eNodeB will be having the same file named : **NodeBCfg.xml** as per screenshot below :

Remote site: /export/home/sysm/ftproot/DBS3900/Data/6494342/AUTOBAKDATA20140912060006			
Filename	Filesize	Filetype	
..			
NodeBCfg.xml	87,976	XML File	

Supported file format is an XML configuration file located in the NodeB itself. There is one file per NodeB.

```
<?xml version="1.0" encoding="GB2312" standalone="yes"?>
<NODEB xmlns = "x-schema:NodeBCfgBiz.xml" ID = "0x0">
  <NODEBSOM ID = "0x14000000">
    <NODEBTYPE ID = "0x24000001">15</NODEBTYPE>
    <NULPFPGA ID = "0x24000002">
      <NULPRXDELAYTIME ID = "0x34000003">
        <NULPRDT ID = "0x44000004" STATIC = "0" DESC = "Rx time
delay">184</NULPRDT>
      </NULPRXDELAYTIME>
    </NULPFPGA>
    <NULPCDMDDMDSP ID = "0x24000005">
      <DEMDSPMODE ID = "0x34000006">
        <NBWM ID = "0x44000007" STATIC = "1" DESC = "NodeB work mode(0-
TWOANTENNA 1-FOURANTENNA 3-ECONOMIZED)">0</NBWM>
      </DEMDSPMODE>
    </NULPCDMDDMDSP>
    <NDLPFPGA ID = "0x24000008">
      <NDLPUPGBUSMODE ID = "0x34000009">
```

```

        <UGWM ID = "0x4400000a" STATIC = "0" DESC = "Rx G_Bus work mode(0-
BACKUP 1-STANDALONE)">0</UGWM>
        </NDLPUPGBUSMODE>
    </NDLPFFPGA>
    <NDLPENCODEDSP ID = "0x2400000b">
        <TXDELAYTIME ID = "0x3400000c">
            <TDT ID = "0x4400000d" STATIC = "0" DESC = "Tx time
delay">248</TDT>
        </TXDELAYTIME>
    </NDLPENCODEDSP>
    <BBUCM ID = "0x2400000e" STATIC = "0" DESC = "BBU cascade mode">0</BBUCM>...

```

2.4 Huawei eNodeB

In order to produce the network dump, data need to be backup automatically (periodically).

2.4.1 Backing Up M2000 Periodically

This describes how to periodically back up the M2000 dynamic data.

2.4.1.1 Prerequisites

- You have logged in to the M2000 client.
- You have the relevant operation privileges.
- The tape drive is connected properly. It holds a tape if you plan to back up data on the tape.
- A hard disk has sufficient free space if you plan to back up data on the hard disk.

2.4.1.2 Context

Generally, M2000 dynamic data is backed up periodically. The periodic backup of the dynamic data is performed in full backup mode.

Dynamic data backup has no restriction on backup time. The backup can be performed during the system operation.

Note : Backing up dynamic data consumes system resources. Thus, the time set for backup should be at night when the system traffic is light.

2.4.1.3 Procedure

1. On the main window, choose **Maintenance > Task Management**.

The **Task Management** dialog box is displayed.

2. Choose **Task Type > Backup > Server Backup** in the navigation tree and double-click the node. The **Attribute** dialog box of server periodic backup is displayed as below.

The image shows a screenshot of the 'Attribute' dialog box, which is used for configuring task attributes. The dialog has a title bar with 'Attribute' and a close button. It contains two tabs: 'Common Parameters' (selected) and 'Extended Parameters'. The 'Common Parameters' tab is divided into two sections: 'Basic Info' and 'Period Info.'.

Basic Info:

- Task Name:** A text field containing 'Server Backup'.
- Run Type:** A dropdown menu set to 'Period'.
- Start Time:** A date and time picker showing '27/11/2006 05:00:00'.
- Task Type:** A label showing 'Server Backup'.

Period Info.:

- Period:** A text field containing '1' and a dropdown menu set to 'Day'.
- Run Times:** A text field containing '0' with a note '(Zero means that run times is no limited)'.

At the bottom right of the dialog are three buttons: 'OK', 'Cancel', and 'Apply'.

- Click **Common Parameters**, and set **Task Name** and **Start Time**.

The screenshot shows a dialog box titled 'Attribute' with two tabs: 'Common Parameters' and 'Extended Parameters'. The 'Extended Parameters' tab is active. It contains two fields: 'Server Full Backup Date' with a dropdown menu showing 'Sunday', and 'File Path' with a text box containing '/export/home/backup/omc'. At the bottom right, there are three buttons: 'OK', 'Cancel', and 'Apply'.

- Click **Extended Parameters**, and set **Server Full Backup Date**.

2.4.2 eNodeB Network Dumps Location

The network dump files is inside M2000 server in the following path:

M2000 server : /export/home/sysm/ftproot/NE type (for example: DBS3900 LTE)/Data

Example : /export/home/sysm/ftproot/DBS3900 LTE/Data

The data generated for automatic backup is located in the **AUTOBAKDATA******* directory.

Sample output location will be like this:

Sample Output Location :

Remote site: [/export/home/sysm/ftproot/DB53900 LTE/Data](#)

Filename	Filesize	Filetype	Last modified
..			
6497394		File folder	8/7/2014 7:01:00
6497380		File folder	8/7/2014 7:01:00
6497355		File folder	8/7/2014 7:01:00
6497328		File folder	8/7/2014 7:01:00
6496265		File folder	8/7/2014 7:01:00
6496006		File folder	8/7/2014 7:01:00
6497409		File folder	8/7/2014 7:00:00
6497303		File folder	8/7/2014 7:00:00
6497281		File folder	8/6/2014 10:55:0
6497088		File folder	7/9/2014 6:07:00
6496654		File folder	7/9/2014 6:03:00
6497087		File folder	6/25/2014 6:08:0
6497356		File folder	5/16/2014 10:37:
6497349		File folder	5/16/2014 10:37:
6497348		File folder	5/16/2014 10:37:

Each eNodeB will be having the same file named : **M2000.xml** as per screenshot below :

Remote site: [/ftproot/BTS3900 LTE/Data/3221291845/AUTOBAKDATA20140910060008](#)

Filename	Filesize	Filetype	Last modified	Permissions
..				
M2000.XML	497,033	XML Docum...	9/10/2014 10:03:00 AM	-rw-rw----

Following is a sample snapshot of the file :

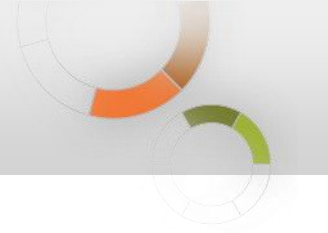
```
<?xml version="1.0" encoding="GB2312"?>
<spec:BACKUPCFG
xmlns:spec="http://www.huawei.com/specs/huawei_wl_bulkcm_xml_baseline_syn_1.0.0"
xmlns="http://www.huawei.com/specs/bsc6000_nrm_forSyn_collapse_1.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.huawei.com/specs/huawei_wl_bulkcm_xml_baseline_syn_1.0.0
CfgSynData_collapse_spec.xsd">
  <spec:fileHeader fileFormatVersion="1.1.0" NRMversion="LTEDATAV100R005C00SPC373"
NEVersion="DBS3900 LTE V100R005C00SPC373" synType="synall"/>
  <spec:synData>
    <class synlabel="00000000011209476647">
      <TBLANGNO id="0">
        <attributes>
          <LangNo>0</LangNo>
        </attributes>
      </TBLANGNO>
```

2.5 Ericsson BSC

Supported file format is the command printout from Command Handling in Ericsson OSS. Here is a list of supported command printout:

Note: Some commands may be applicable for certain version of the BSC only.

```
RLADP:SET=ALL;
DBTSP:TAB=AXEPARS;
RLGRP:CELL=ALL;
IOEXP;
RAEPP:ID=ALL;
RLCAP;
RLCDP:CELL=ALL;
RLDCP;
RLLSP;
RLOMP;
RLTYP;
RLHBP;
RLBDP:CELL=ALL;
RLCFP:CELL=ALL;
RLCHP:CELL=ALL;
RLDTP:CELL=ALL;
RLGAP:CELL=ALL;
RLSTP:CELL=ALL;
DTSTP:DIP=ALL;
RLACP:CELL=ALL;
RLCRP:CELL=ALL;
RLCXP:CELL=ALL;
RLDEP:CELL=ALL;
RLDHP:CELL=ALL;
RLDMP:CELL=ALL;
```



```
RLDRP:CELL=ALL;
RLGSP:CELL=ALL;
RLHPP:CELL=ALL;
RLIMP:CELL=ALL;
RLLCP:CELL=ALL;
RLLDP:CELL=ALL;
RLLFP:CELL=ALL;
RLLHP:CELL=ALL;
RLLLPP:CELL=ALL;
RLLPP:CELL=ALL;
RLMFP:CELL=ALL;
RLPBP:CELL=ALL;
RLPDP:CELL=ALL;
RLSBP:CELL=ALL;
RLSMP:CELL=ALL;
RLSSP:CELL=ALL;
RLSUP:CELL=ALL;
RLUMP:CELL=ALL;
RRGBP;
RLBCP:CELL=ALL;
RLCPP:CELL=ALL;
RLLOP:CELL=ALL;
RLPCP:CELL=ALL;
RLCPP:CELL=ALL,EXT;
RLDEP:CELL=ALL,EXT;
RLLHP:CELL=ALL,EXT;
RLLOP:CELL=ALL,EXT;
RLDEP:CELL=ALL,EXT,UTRAN;
RLNRP:CELL=ALL,UTRAN;
RLGNP:CELL=ALL;
RLNRP:CELL=ALL;
RLLBP;
SAOSP;
SAAEP:SAE=ALL;
SAAEP:SAE=1153;
SAAEP:SAE=298;
SAAEP:SAE=299;
SAAEP:BLOCK=RQCD,SAE=522;
SAAEP:BLOCK=RQCD,SAE=523;
RLAPP:CELL=ALL;
RLIHP:CELL=ALL;
RLLUP:CELL=ALL;
RLOLP:CELL=ALL;
RLSLP:CELL=ALL;
RLTDP:MSC=ALL
RRTPP:TRAPPOOL=ALL;
RLLPP:CELL=ALL;
RXMOP:MOTY=RXOTG;
RXTCP:MOTY=RXOTG;
RXMOP:MOTY=RXOTRX;
CACLP;
```

2.6 Ericsson RNC

KGET dump collection

Supported file format is MO Shell from the Ericsson OSS. Following are the supported command printout:

Note: For new release of Ericsson RNC the supported file format is extracted from MO Shell (kget). The command is 'lt all; kget all'

```
RncFunction
UeRc
UeRcTrCh
UeRcRab
UeRcEdchFlow
UeRcPhyChEdch
WcdmaCarrier
UtranCell
Pch
UtranRelation
GsmRelation
Fach
Hsdsc
Eul
Rach
IubLink
NbapCommon
NodeSynch
NbapDedicated
IubEdch
Handover
DchFrameSynch
Ura
RncModule
Rcs
SecurityHandling
IurLink
WcdmaCarrier
ExternalUtranCell
CchFrameSynch
UeRrcType
UePositioning
PositioningServiceClass
AgpsPositioning
RttPositioning
ExternalGsmNetwork
ExternalGsmCell
LocationArea
ServiceArea
RoutingArea
```

Paging
 UtranNetwork
 PowerControl
 PlmnIdentityGroup
 Sid
 SasPositioning
 Channelswitching
 UeMeasControl

2.7 Ericsson NodeB

Supported file format is the BulkCM Export from the Ericsson OSS. By default Ericsson OSS will automatically export the Bulk CM for whole network daily. In order to reduce the output file, user can exclude the Transport Network information which is not required.

```
<?xml version="1.0" encoding="UTF-8"?>
<bulkCmConfigDataFile xmlns:es="EricssonSpecificAttributes.4.7.xsd"
  xmlns:un="utranNrm.xsd" xmlns:xn="genericNrm.xsd"
  xmlns:gn="geranNrm.xsd" xmlns="configData.xsd">
  <fileHeader fileFormatVersion="11.1111 V4.5" vendorName="Ericsson"/>
  <configData dnPrefix="Undefined">
    <xn:SubNetwork id="Sample">
      <xn:attributes>
        <xn:userLabel>Sample</xn:userLabel>
        <xn:userDefinedNetworkType></xn:userDefinedNetworkType>
      </xn:attributes>
      <xn:VsDataContainer id="1">
        <xn:attributes>
          <xn:vsDataType>vsDataType</xn:vsDataType>
          <xn:vsDataFormatVersion>EricssonSpecificAttributes </xn:vsDataFormatVersion>
          <es:vsDataAreas/>
        </xn:attributes>
        <xn:VsDataContainer id="VsDataContainer_sample">
          <xn:attributes>
            <xn:vsDataType>vsDataType</xn:vsDataType>
            <xn:vsDataFormatVersion>EricssonSpecificAttributes </xn:vsDataFormatVersion>
            <es:vsDataPlmn>
              <es:userLabel></es:userLabel>
              <es:mcc>x</es:mcc>
              <es:mnc>x</es:mnc>
              <es:mncLength></es:mncLength>
              <es:aliasPlmnIdentities></es:aliasPlmnIdentities>
            </es:vsDataPlmn>
          </xn:attributes>
        </xn:VsDataContainer>
      </xn:VsDataContainer>
    </xn:SubNetwork>
  </configData>
</bulkCmConfigDataFile>
```

Snapshot of Ericsson BulkCM Export file

Following are the elements supported by Xeda :

NodeBFunction
 vsDataNodeBFunction\
 vsDataSector
 vsDataCarrier
 vsDataRbsLocalCell
 vsDataSectorAntenna
 vsDataAntennaBranch
 vsDataAntFeederCable

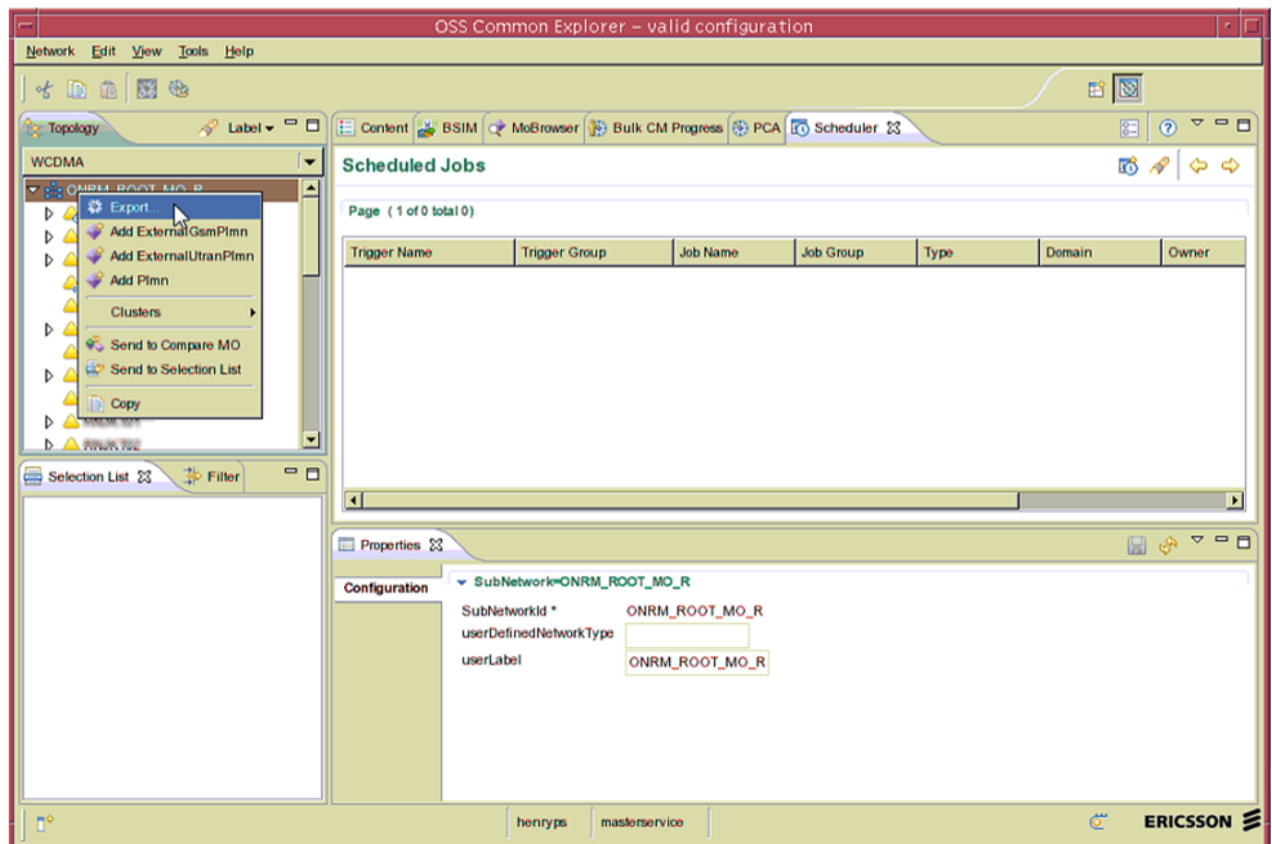
```
vsDataAuxPlugInUnit  
RNCFunction  
  attributes  
    VsDataContainer  
      UtranCell  
      IubLink
```

2.7.1 Collecting Bulk CM

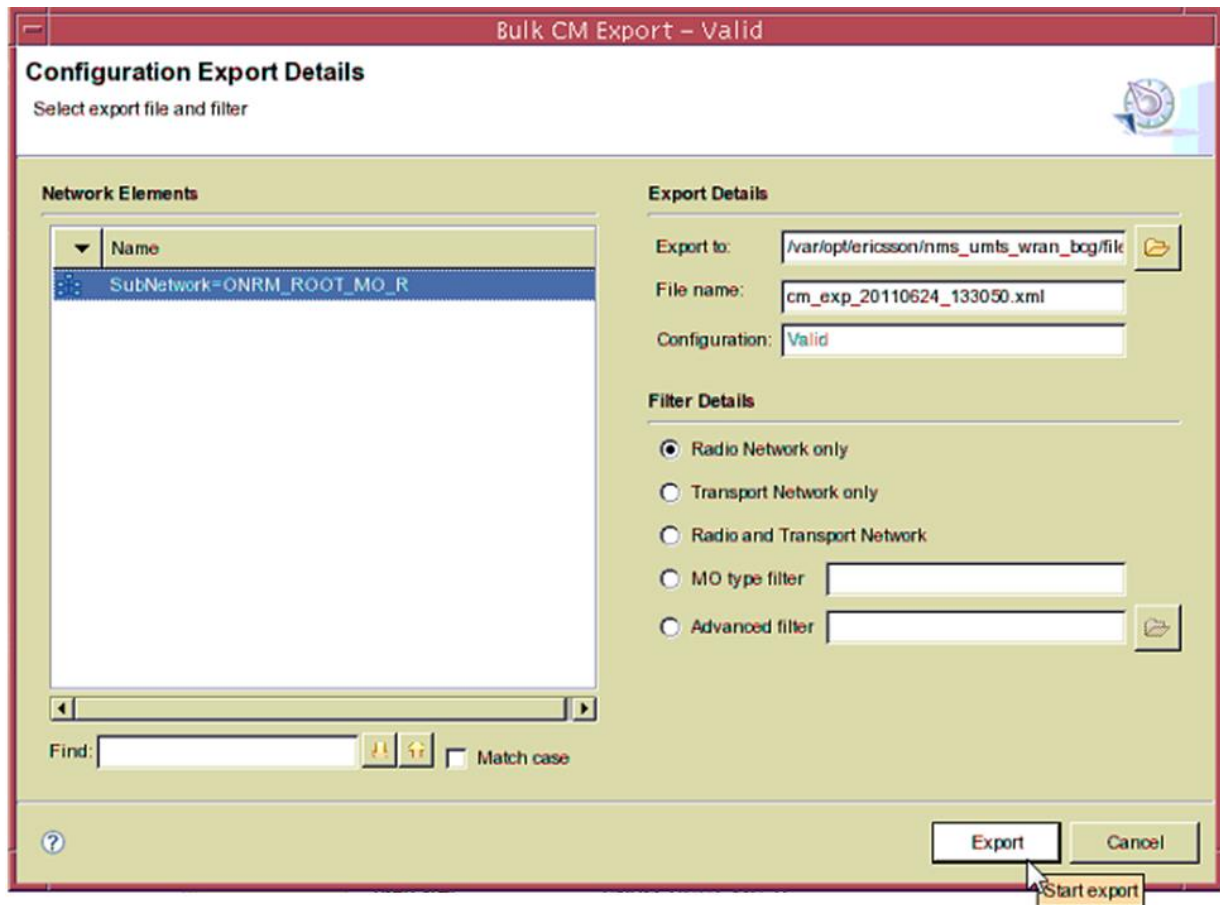
1. Start **OSS Common Explorer**.



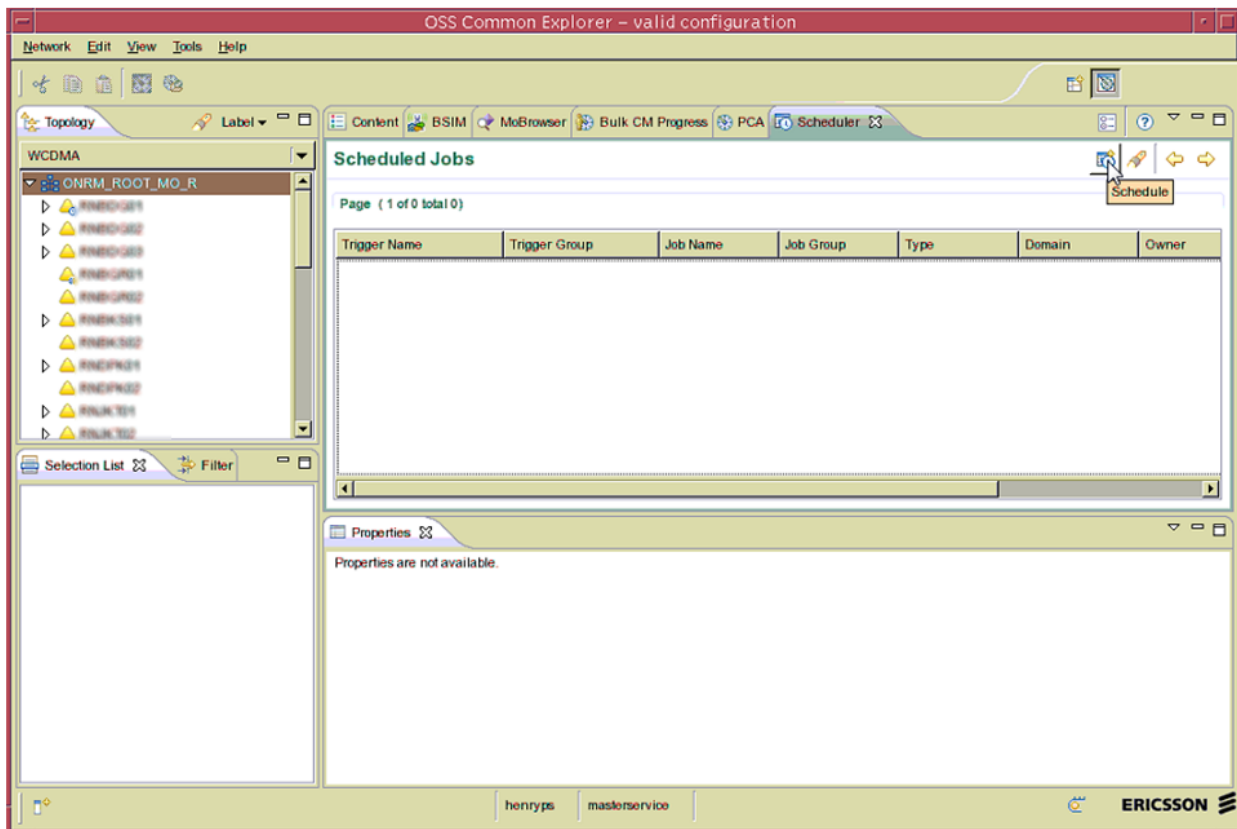
2. OSS Common Explorer will appear on the screen as shown in the figure below. At Topology Tab, select the Root node from the network tree. Then, right click and select '**Export.**' option from the context menu.



3. After clicking on '**Export.**' option, Bulk CM Export dialog box will appear as shown in the figure below. Tick to select **Radio Network only** as a filter details option and click **Export** button.



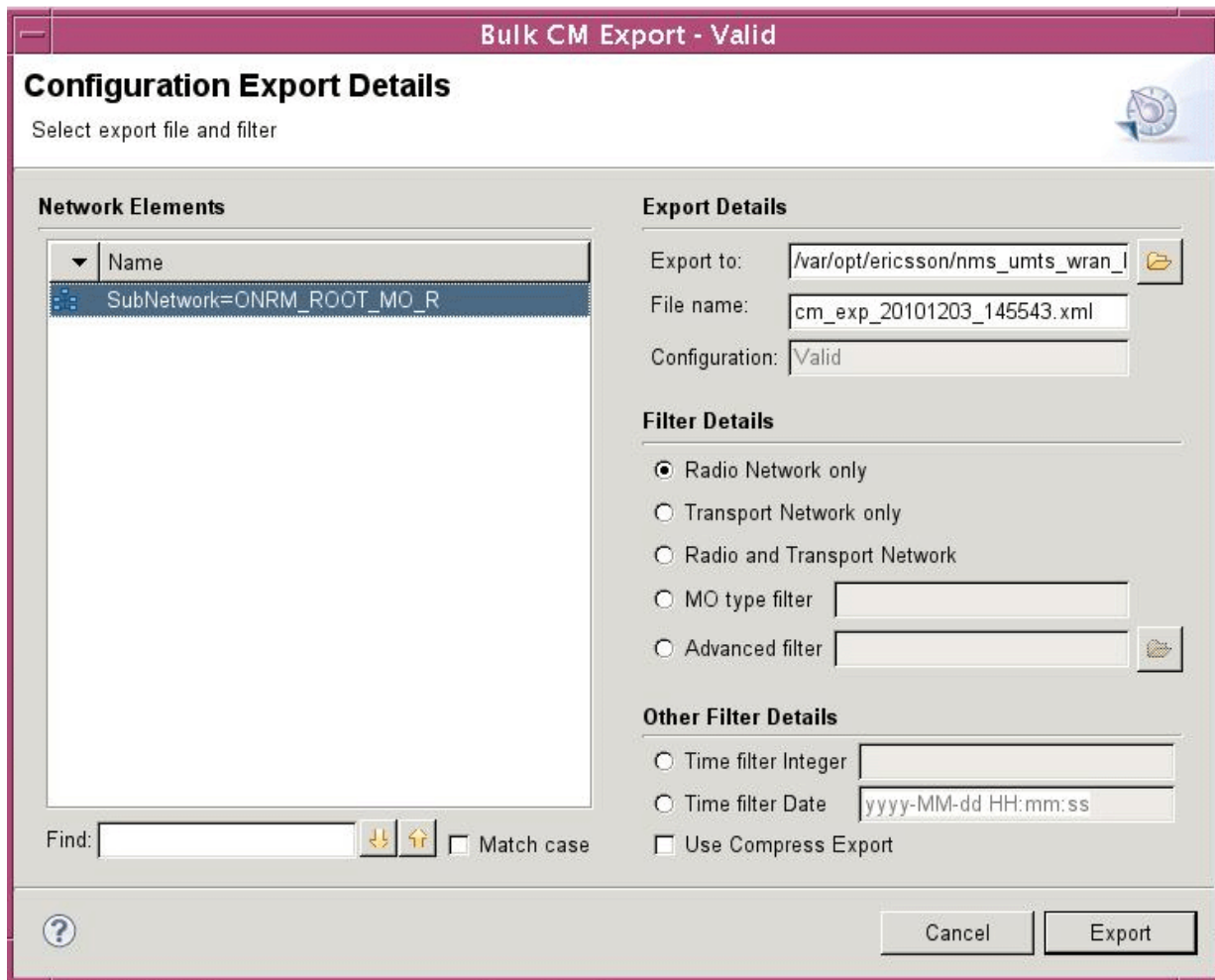
4. Click on Bulk CM Progress tab to view on the export progress.
5. FTP to the OSS and set the export to **/var/opt/ericsson/nms_umts_wran_bcg/files/export**.



2.8 Ericsson eNodeB

For the BulkCm Network Dump:

1. In the Common Explorer, select the Top Network Element, then right-click and select ExportNE. The Bulk CM Export dialog will appear.



Bulk CM Export - Valid

Configuration Export Details
Select export file and filter

Network Elements

Name
SubNetwork=ONRM_ROOT_MO_R

Find: ☐ Match case

Export Details

Export to:

File name:

Configuration:

Filter Details

☒ Radio Network only
☐ Transport Network only
☐ Radio and Transport Network
☐ MO type filter
☐ Advanced filter

Other Filter Details

☐ Time filter Integer
☐ Time filter Date
☐ Use Compress Export

2. Set the output location
3. At the Filter select Radio and Transport Network
4. Click Export

2.9 Motorola BSC

Supported file format is the exported Comma Delimited file at the OMC. There are separate files for Cell and Neighbor parameter. For the neighbor parameters file the GSM Neighbors Export and Utran Relation Export are in one single file.

View - Sample RFPlanCell.out														
File Edit View Help														
MSC Name	OMC Name	BSS Name	Site Name	MCC	MNC	LAC	CI	bsic	layer_number	dtx_req				
MSC1	OMC1	BSC1	BSC1City	510	19	50101	51006	57	0	1	4	10	0	255

View - Sample 2G Neighbors.out																						
File Edit View Help																						
MSC Name	OMC Name	BSS Name	Site Name	Source MCC	Source MNC	Source LAC	Source CI	Dest MCC	Dest MNC	Dest LAC	Dest CI	Dest BSIC										
MSC	OMC	BSB01	BSB01_01_AsiaCity	502	19	50101	51006	502	19	50101	51007	58	664	6	-4	-4	30	10	0	0	0	0

View - sample Motorola 3g nei.out																	
File Edit View Help																	
MSC Name	OMC Name	BSS Name	Site Name	Source MCC	Source MNC	Source LAC	Source CI	Dest MCC	Dest MNC	Dest LAC	Dest CI	Dest BSIC	ID				
MSC	OMC1	BSC1	BSC1_01_XYZ	500	10	50101	51006	500	10	5011	501	10061	500-010-5011-501-10061	10762	8	0	-

2.10 Nokia BSC

Supported file format is the RAML Export in XML format.

Following is the snapshot of the file:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE raml SYSTEM 'raml20.dtd'>
<raml version="2.0" xmlns="raml20.xsd">
  <cmData type="actual">
    <header>
      <log dateTime="2009-06-01T15:31:08" action="created" appInfo="ActualExporter"/>
    </header>
    <managedObject class="BSC" version="S13" distName="PLMN-PLMN/BSC-1234" id="1567005">
      <p name="dcsMacrocellThreshold">2</p>
      <p name="dcsMicrocellThreshold">3</p>
      <p name="name">SYBSC1</p>
      <p name="neSwRelease">S11.5</p>
      <p name="adjCellFreqsInMeasBAInfo">10</p>
      <p name="alarmChFail">40</p>
      <p name="alarmNoOfSei">4</p>
      <p name="alarmSchFail">80</p>
      <p name="alarmSdcch">20</p>
      <p name="alarmSeizReq">100</p>
      <p name="alarmTch">20</p>
      <p name="amhLowerLoadThreshold">20</p>
      <p name="amhMaxLoadOfTgtCell">70</p>
      <p name="amhTrhoGuardTime">30</p>
      <p name="amhUpperLoadThreshold">80</p>
      <p name="amrConfInHandovers">1</p>....
    </managedObject>
  </cmData>
</raml>
```

2.11 Nokia RNC

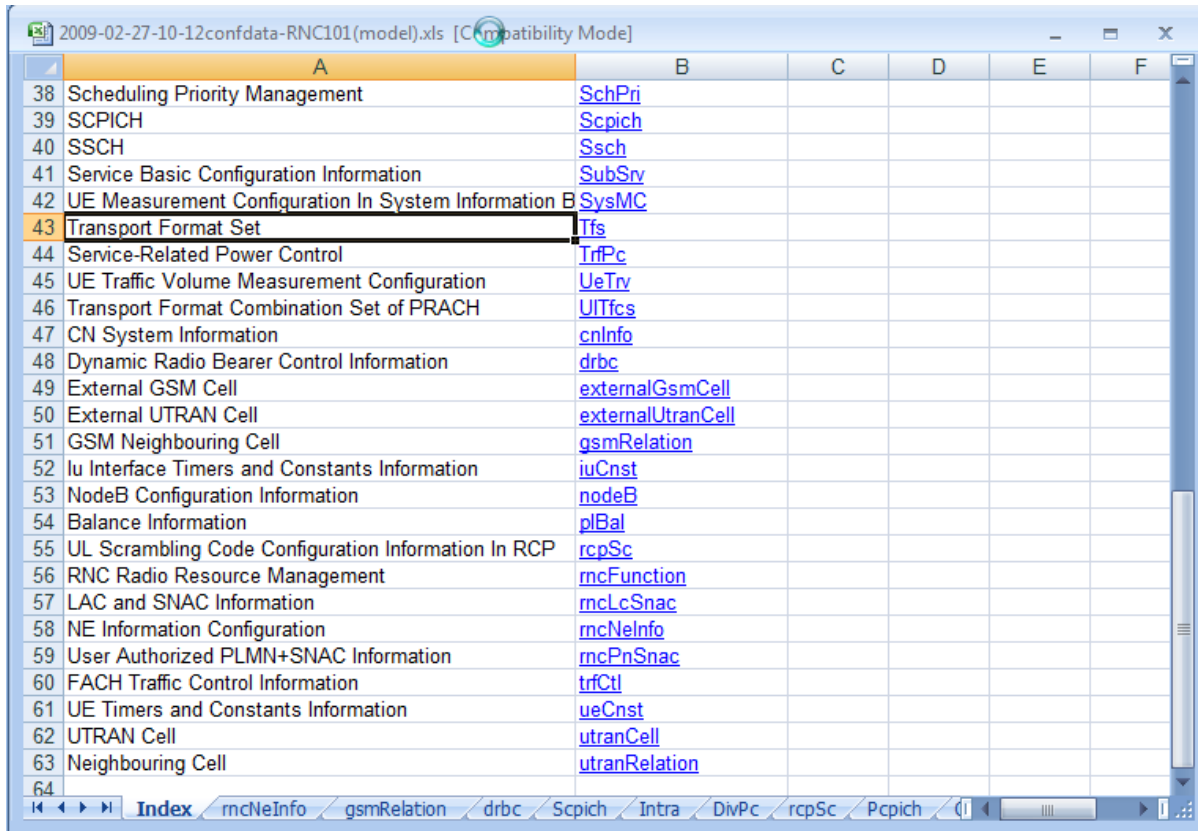
Supported file format is the RAML Export in XML format.

Following is the snapshot of the file:

```
<?xml version="1.0" encoding="UTF-8"?>  
<!DOCTYPE raml SYSTEM 'raml20.dtd'>  
<raml version="2.0" xmlns="raml20.xsd">  
  <cmData type="actual">  
    <header>  
      <log dateTime="2006-11-07T12:04:02" action="created" appInfo="ActualExporter"/>  
    </header>  
    <managedObject class="RNC" version="RN2.1" distName="PLMN-PLMN/RNC-102" id="87001">  
      <defaults name="System"/>  
      <p name="A2EA">496019204013100000000000000000000000000000</p>  
      <p name="ActivationTimeOffset">600</p>  
      <p name="BTSfrozenMaxTimer">30</p>  
      <p name="BitRateSetPSNRT">0</p>  
      <p name="CCCHforCUCallowed">1</p>  
      <p name="CMmasterSwitch">0</p>  
      <p name="CVUserInactInSignConnRel">1</p>  
      <p name="CellDCHtestTmr">0</p>  
      <p name="CellReselectionObservingTime">30</p>  
      <p name="CrHandlingPolicyDL">2</p>  
      <p name="CrHandlingPolicyUL">2</p>  
      <p name="CrQueuingTimeDL">4</p>  
      <p name="CrQueuingTimeUL">4</p>  
      <p name="DCHUtilRelThrDL">8</p>  
      <p name="DCHUtilRelThrUL">8</p>  
      <p name="DLBLERConfInterval">23</p>...
```

2.12 ZTE RNC

Supported file format is Excel datasheet from the RNC.



	A	B	C	D	E	F
38	Scheduling Priority Management	SchPri				
39	SCPICH	Scpich				
40	SSCH	Ssch				
41	Service Basic Configuration Information	SubSrv				
42	UE Measurement Configuration In System Information B	SysMC				
43	Transport Format Set	Tfs				
44	Service-Related Power Control	TrfPc				
45	UE Traffic Volume Measurement Configuration	UeTrv				
46	Transport Format Combination Set of PRACH	UITfcs				
47	CN System Information	cnInfo				
48	Dynamic Radio Bearer Control Information	drbc				
49	External GSM Cell	externalGsmCell				
50	External UTRAN Cell	externalUtranCell				
51	GSM Neighbouring Cell	gsmRelation				
52	Iu Interface Timers and Constants Information	iuCnst				
53	NodeB Configuration Information	nodeB				
54	Balance Information	plBal				
55	UL Scrambling Code Configuration Information In RCP	rcpSc				
56	RNC Radio Resource Management	rncFunction				
57	LAC and SNAC Information	rncLcSnac				
58	NE Information Configuration	rncNeInfo				
59	User Authorized PLMN+SNAC Information	rncPnSnac				
60	FACH Traffic Control Information	trfCtl				
61	UE Timers and Constants Information	ueCnst				
62	UTRAN Cell	utranCell				
63	Neighbouring Cell	utranRelation				
64						

Navigation bar: Index | mcNeInfo | gsmRelation | drbc | Scpich | Intra | DivPc | rcpSc | Pcpich

3 Traffic Measurement Recording

3.1 Huawei WCDMA (PCHR)

1. RNC Network Dump

Use “EXP CFGMML” command to export the MML scripts of the configuration data into the BAM folder

2. CHR Log

The CHRs are generated automatically and stored under the BAM in the following path:

- RNC R10 → /bam/versiona/loaddata/famlogfmt for R10
- RAN R11 → /bam/common/fam/famlogfmt
- RAN R12 & R13 → /bam/common/fam/famlogfmt/pchr

The PCHR log will have either UCHR or PCHR word in the filenames e.g.

- RNC R10 → RNC0101_02Log20110404000002_20110404010109.log.zip
- RAN R11 → BSC0121_[UCHR]02Log20111010231746(DST)_20111010232743(DST).log.zip
- RAN R12 & R13 → BSC0121_[PCHR]02Log20111010231746(DST)_20111010232743(DST).log.zip

Important: For R11 and above, please ensure that the file name has ‘UCHR’ or ‘PCHR’. File with ‘CHR’ string alone does contain the performance call log and not supported in Xeus Pro.

3.1.1 Huawei PCHR File Path

The CHRs are generated automatically and stored under the BAM in the following path:

- RAN R12 & R13 → /bam/common/fam/famlogfmt/pchr

The PCHR log will have either UCHR or PCHR word in the filenames e.g.

- RAN R12 & R13 → BSC0121_[PCHR]02Log20111010231746(DST)_20111010232743(DST).log.zip

3.1.2 Huawei PCHR Field

If one of the fields is not enabled in the CHRs, use the following command to enable it:

1. In the LMT tool, execute the command SET CHRRNCCTRL (R10) or SET UCHRCTRL (R11) in the Command Input field.
2. Click the “SELECT ALL” check box in the Type option drop down lists.

3. Run the command through a batch file only:

Huawei R10

SET CHRRNCCTRL:STATETYPE=ABNORMAL_ONLY-1&NORMAL_ONLY-1, DOMAINTYPE=CS_ONLY-1&PS_ONLY-1, FLOWTYPE=CONN_SETUP-1&RAB-1&DCCC-1&SHO-1&HHO-1&SYS_HO_OUT-1&RRC_RELEASE-1&STAT-1&NET_OPT-1, RRCAUSE=ORIGINATING_CONVERSATIONAL_CALL-1&ORIGINATING_STREAMING_CALL-1&ORIGINATING_INTERACTIVE_CALL-1&ORIGINATING_BACKGROUND_CALL-1&ORIGINATING_SUBSCRIBED_TRAFFIC_CALL-1&TERMNT_CONVERSATIONAL_CALL-1&TERMNT_STREAMING_CALL-1&TERMNT_INTERACTIVE_CALL-1&TERMNT_BACKGROUND_CALL-1&EMERGENCY_CALL-1&INTER_RAT_CELL_RESELECTION-1&INTER_RAT_CELL_CHG_ORDER-1®ISTRATION-1&DETACH-1&ORIGINATING_HIGH_PRIOR_SIG-1&ORIGINATING_LOW_PRIOR_SIG-1&CALL_RE_ESTAB-1&TERMNT_HIGH_PRIOR_SIG-1&TERMNT_LOW_PRIOR_SIG-1&TERMNT_CAUSE_UNKNOWN-1&MBMS_RECEPTION-1&MBMS_PTP_RB_REQ-1;

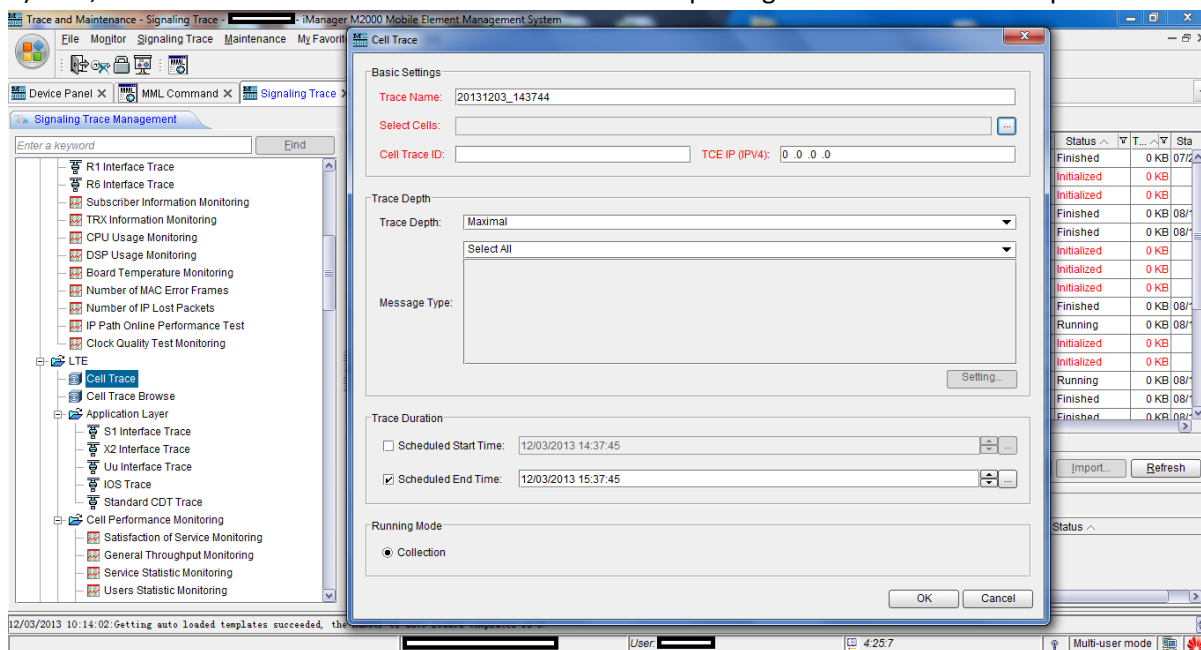
Huawei R11 & above

SET UCHRCTRL:STATETYPE=ABNORMAL_ONLY-1&NORMAL_ONLY-1, DOMAINTYPE=CS_ONLY-1&PS_ONLY-1, FLOWTYPE=CONN_SETUP-1&RAB-1&DCCC-1&SHO-1&HHO-1&SYS_HO_OUT-1&RRC_RELEASE-1&STAT-1&NET_OPT-1, RRCAUSE=ORIGINATING_CONVERSATIONAL_CALL-1&ORIGINATING_STREAMING_CALL-1&ORIGINATING_INTERACTIVE_CALL-1&ORIGINATING_BACKGROUND_CALL-1&ORIGINATING_SUBSCRIBED_TRAFFIC_CALL-1&TERMNT_CONVERSATIONAL_CALL-1&TERMNT_STREAMING_CALL-1&TERMNT_INTERACTIVE_CALL-1&TERMNT_BACKGROUND_CALL-1&EMERGENCY_CALL-1&INTER_RAT_CELL_RESELECTION-1&INTER_RAT_CELL_CHG_ORDER-1®ISTRATION-1&DETACH-1&ORIGINATING_HIGH_PRIOR_SIG-1&ORIGINATING_LOW_PRIOR_SIG-1&CALL_RE_ESTAB-1&TERMNT_HIGH_PRIOR_SIG-1&TERMNT_LOW_PRIOR_SIG-1&TERMNT_CAUSE_UNKNOWN-1&MBMS_RECEPTION-1&MBMS_PTP_RB_REQ-1;

3.2 Huawei LTE (SIG Log)

Instructions to Collect Huawei LTE SIG Log :

1) First, create a “LTE Cell Trace” task in M2000 before capturing the call trace. The output file format is SIGLOG.



2) After capturing the log, you can export the log from eNodeB by executing the MML commands as the following:

ULD NEFILE: MODE=IPV4;

History Command:

Command Input(F5):

File Type:

IP Mode:

FTP User Name:

Zip Type:

Flow Control Option:

Destination File Name:

Server IP:

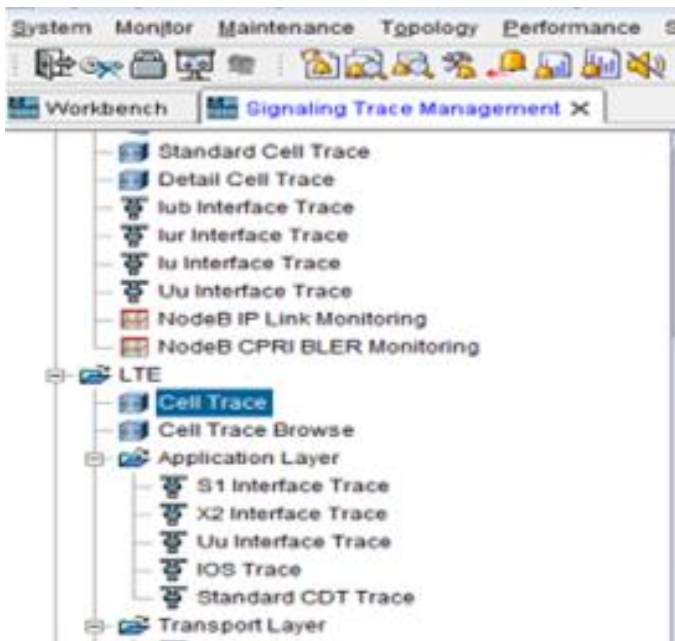
FTP Password:

Progress Flag:

3) The output file will have ".dat" or ".sig" extension.

3.3 Huawei LTE (TMF)

- Open Signaling Trace Management on M2000
- Click on Cell Trace
- Click on New



- Enter "Trace Name"

Cell Trace

Basic Settings

Trace Name: 20141127_205237

Select Cells:

Reference No.:

TCE IP (IPv4): 0.0.0.0

Trace Depth

Trace Depth: Medium Depth

Select All: Maximal Depth, Medium Depth, Minimal Depth

Trace Period

Start Time: 11/27/2014 20:52:37

End Time: 11/27/2014 21:52:37

Task

Collection Task

OK Cancel

- Select desired cell in "Select Cells"

Cell Trace

Basic Settings

Trace Name: 20141127_205237

Select Cells:

Reference No.:

TCE IP (IPv4): 0.0.0.0

Trace Depth

Trace Depth: Medium Depth

Select All: Maximal Depth, Medium Depth, Minimal Depth

Trace Period

Start Time: 11/27/2014 20:52:37

End Time: 11/27/2014 21:52:37

Task

Collection Task

OK Cancel

Select cells

NE

BTS3900 LTE

BTS3900 V100R000C005PC260

BTS3900 V100R000C005PC270

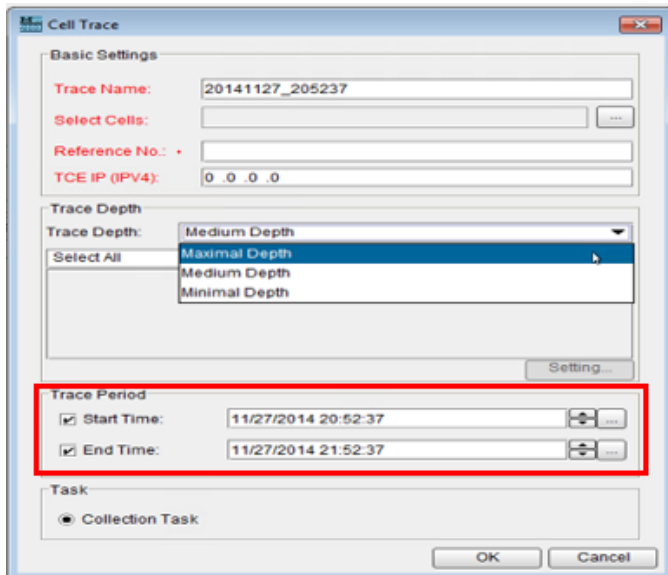
BTS3900 V100R000C005PC265

Selected by cell

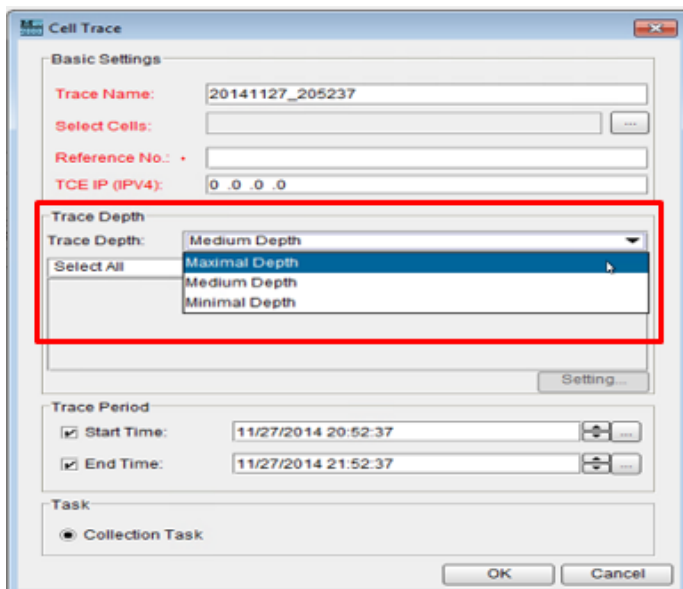
Base Station Name

Selected/Total: 0/0

- Set the desired trace duration



- Trace Depth
 - Set to High
- Message Type
 - Select ALL messages



- Right click on the completed trace and select Export
- In the export file view, set the desired path

3.4 Ericsson WCDMA (GPEH)

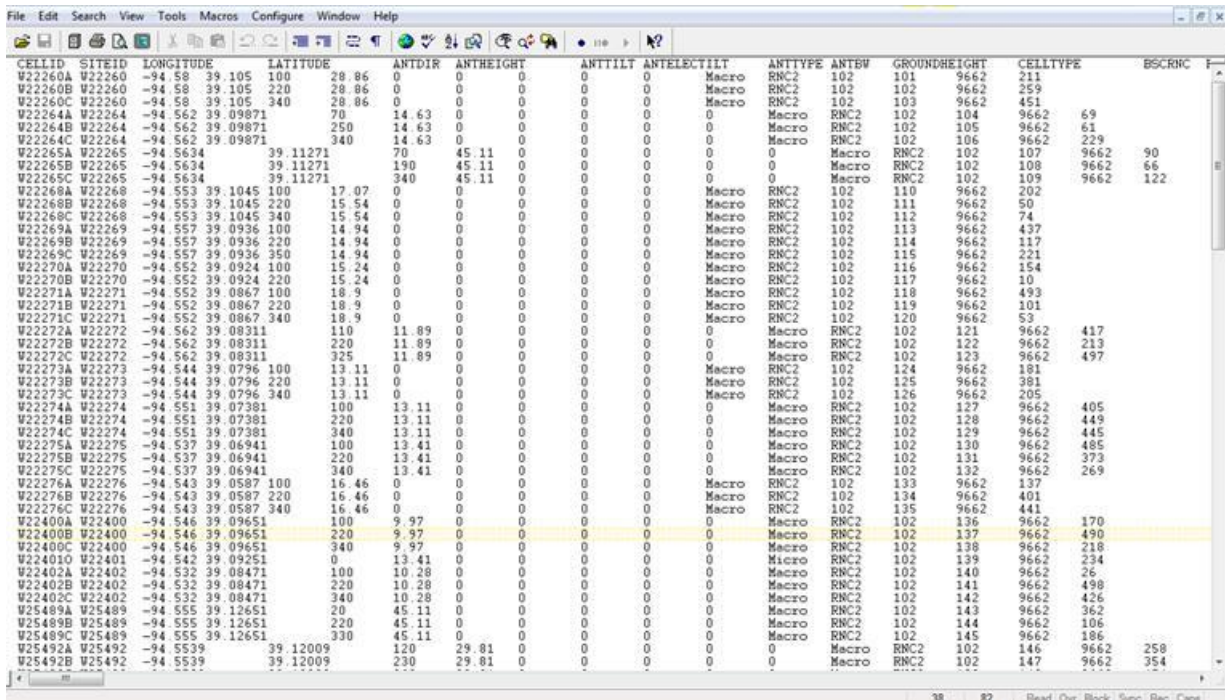
Site Data

It is advisable for the users to import the site data by XIF/TEMS Cel-file/ MCOM file format first before the importing of the Ericsson WCDMA OSS Bulk CM XML file or Ericsson RNC MOSHELL KGET log.

The table below shows some of the mandatory fields in creating a XIF format site data:

XIF Parameter	Description
CellId	The unique Cell Identity/Name of the cell e.g. G1001A. Note: Xeus Pro does not accept two records with SAME Cell Id. Any duplicate cell Id will be renamed with additional suffix e.g. G1001A_1. Mandatory field
SiteId	The Site Id of the cell e.g. D1001. Note: Site Id will be displayed as label for cell in the map
Longitude	Longitude of the cell in Float format e.g. -121.23328. Mandatory field
Latitude	Latitude of the cell in Float format e.g. 30.12312. Mandatory field
AntDir	Direction of the cell in Degree unit Mandatory field
RncId	RNC Identity Note: RncId-Cid pair allows matching of WCDMA Cell network data to the site data in Xeus Pro database
Cid	WCDMA Cell Identity Note: RncId-Cid pair allows matching of WCDMA Cell network data to the site data in Xeus Pro database

XIF parameter format



CELLID	SITEID	LONGITUDE	LATITUDE	ANTDIR	ANTHEIGHT	ANTILT	ANTELECTILT	ANTTYPE	ANTEN	GROUNDHEIGHT	CELLTYPE	BSC/RNC
V22260A	V22260	-94.58 39.105	100	28.86	0	0	0	Macro	RNC2	102	101	9662
V22260B	V22260	-94.58 39.105	220	28.86	0	0	0	Macro	RNC2	102	102	9662
V22260C	V22260	-94.58 39.105	340	28.86	0	0	0	Macro	RNC2	102	103	9662
V22264A	V22264	-94.562 39.09871	70	14.63	0	0	0	Macro	RNC2	102	104	9662
V22264B	V22264	-94.562 39.09871	250	14.63	0	0	0	Macro	RNC2	102	105	9662
V22264C	V22264	-94.562 39.09871	340	14.63	0	0	0	Macro	RNC2	102	106	9662
V22265A	V22265	-94.5634	39.11271	70	45.11	0	0	Macro	RNC2	102	107	9662
V22265B	V22265	-94.5634	39.11271	190	45.11	0	0	Macro	RNC2	102	108	9662
V22265C	V22265	-94.5634	39.11271	340	45.11	0	0	Macro	RNC2	102	109	9662
V22268A	V22268	-94.553 39.1045	100	17.07	0	0	0	Macro	RNC2	102	110	9662
V22268B	V22268	-94.553 39.1045	220	15.54	0	0	0	Macro	RNC2	102	111	9662
V22268C	V22268	-94.553 39.1045	340	15.54	0	0	0	Macro	RNC2	102	112	9662
V22269A	V22269	-94.557 39.0936	100	14.94	0	0	0	Macro	RNC2	102	113	9662
V22269B	V22269	-94.557 39.0936	220	14.94	0	0	0	Macro	RNC2	102	114	9662
V22269C	V22269	-94.557 39.0936	350	14.94	0	0	0	Macro	RNC2	102	115	9662
V22270A	V22270	-94.552 39.0924	100	15.24	0	0	0	Macro	RNC2	102	116	9662
V22270B	V22270	-94.552 39.0924	220	15.24	0	0	0	Macro	RNC2	102	117	9662
V22271A	V22271	-94.552 39.0867	100	18.9	0	0	0	Macro	RNC2	102	118	9662
V22271B	V22271	-94.552 39.0867	220	18.9	0	0	0	Macro	RNC2	102	119	9662
V22271C	V22271	-94.552 39.0867	340	18.9	0	0	0	Macro	RNC2	102	120	9662
V22272A	V22272	-94.562 39.08311	110	11.89	0	0	0	Macro	RNC2	102	121	9662
V22272B	V22272	-94.562 39.08311	220	11.89	0	0	0	Macro	RNC2	102	122	9662
V22272C	V22272	-94.562 39.08311	325	11.89	0	0	0	Macro	RNC2	102	123	9662
V22273A	V22273	-94.544 39.0796	100	13.11	0	0	0	Macro	RNC2	102	124	9662
V22273B	V22273	-94.544 39.0796	220	13.11	0	0	0	Macro	RNC2	102	125	9662
V22273C	V22273	-94.544 39.0796	340	13.11	0	0	0	Macro	RNC2	102	126	9662
V22274A	V22274	-94.551 39.07381	100	13.11	0	0	0	Macro	RNC2	102	127	9662
V22274B	V22274	-94.551 39.07381	220	13.11	0	0	0	Macro	RNC2	102	128	9662
V22274C	V22274	-94.551 39.07381	340	13.11	0	0	0	Macro	RNC2	102	129	9662
V22275A	V22275	-94.537 39.06941	100	13.41	0	0	0	Macro	RNC2	102	130	9662
V22275B	V22275	-94.537 39.06941	220	13.41	0	0	0	Macro	RNC2	102	131	9662
V22275C	V22275	-94.537 39.06941	340	13.41	0	0	0	Macro	RNC2	102	132	9662
V22276A	V22276	-94.543 39.0587	100	16.46	0	0	0	Macro	RNC2	102	133	9662
V22276B	V22276	-94.543 39.0587	220	16.46	0	0	0	Macro	RNC2	102	134	9662
V22276C	V22276	-94.543 39.0587	340	16.46	0	0	0	Macro	RNC2	102	135	9662
V22400A	V22400	-94.546 39.09651	100	9.97	0	0	0	Macro	RNC2	102	136	9662
V22400B	V22400	-94.546 39.09651	220	9.97	0	0	0	Macro	RNC2	102	137	9662
V22400C	V22400	-94.546 39.09651	340	9.97	0	0	0	Macro	RNC2	102	138	9662
V22401A	V22401	-94.542 39.09251	0	13.41	0	0	0	Macro	RNC2	102	139	9662
V22402A	V22402	-94.532 39.08471	100	10.28	0	0	0	Macro	RNC2	102	140	9662
V22402B	V22402	-94.532 39.08471	220	10.28	0	0	0	Macro	RNC2	102	141	9662
V22402C	V22402	-94.532 39.08471	340	10.28	0	0	0	Macro	RNC2	102	142	9662
V25489A	V25489	-94.555 39.12651	20	45.11	0	0	0	Macro	RNC2	102	143	9662
V25489B	V25489	-94.555 39.12651	220	45.11	0	0	0	Macro	RNC2	102	144	9662
V25489C	V25489	-94.555 39.12651	330	45.11	0	0	0	Macro	RNC2	102	145	9662
V25492A	V25492	-94.5539	39.12009	120	29.81	0	0	Macro	RNC2	102	146	9662
V25492B	V25492	-94.5539	39.12009	230	29.81	0	0	Macro	RNC2	102	147	9662

Sample of XIF format

RNC Network Dump

You can import the WCDMA site configuration and neighbor data by the following options:

1. Ericsson WCDMA OSS Bulk CM XML file
2. Ericsson RNC MOSHELL KGET log file

GPEH Recording Collection

The following are the steps to obtain the GPEH recording set. Refer to [Appendix 1\(b\): Ericsson GPEH Recording Steps](#) for a more detail information.

GPEH collection parameter settings:

1. Start OSS Common Explorer
2. Select the required RNC Node
3. Change the 'gpehDataLevel' to 'ALL_DATA'
4. Increase the value for 'gpehFileSize' parameter to 50,000 (50,000kB)

Initiate GPEH Collection

1. Select Performance > Initiate data Collection > WCDMA/LTE RAN Measurements
2. Select Administration > Add profile
3. Select GPEH as the subscription profile type
4. Enter profile name

5. Select “RNC network elements should be observed”
6. Select the required RNC for recording
7. Select the required Utran Cells for recording
8. Select the required GPEH recording events. Please refer to [Section 3.4.1](#) for GPEH Recording Scenarios for the required events on different analysis scenarios. Following table show the recommended GPEH events to be collected for a standard Xeus Pro 5 analysis.

GPEH Internal Event	• INTERNAL_ADMISSION_CONTROL_RESPONSE • INTERNAL_CALL_REESTABLISHMENT • INTERNAL_CALL_SETUP_FAIL • INTERNAL_CHANNEL_SWITCHING • INTERNAL_CMODE_ACTIVATE • INTERNAL_CMODE_DEACTIVATE • INTERNAL_CNHOO_EXECUTION_ACTIVE • INTERNAL_FAILED_HSDSCH_CELL_CHANGE • INTERNAL_FAILED_TRANSITION_TO_DCH • INTERNAL_HSDSCH_CELL_SELECTION_NO_CELL_SELECTED • INTERNAL_IFHO_EXECUTION_ACTIVE • INTERNAL_IMSI • INTERNAL_IRAT_HO_CC_EVALUATION • INTERNAL_IRAT_HO_CC_EXECUTION • INTERNAL_MEASUREMENT_HANDLING_EXECUTION • INTERNAL_OUT_HARD_HANOVER_FAILURE • INTERNAL_OUT_HARD_HANOVER_SUCCESS • INTERNAL_PACKET_DEDICATED_THROUGHPUT • INTERNAL_PACKET_DEDICATED_THROUGHPUT_STREAMING • INTERNAL_PS_RELEASE_DUE_TO_CNHOO • INTERNAL_RAB_ESTABLISHMENT • INTERNAL_RAB_RELEASE • INTERNAL_RADIO_QUALITY_MEASUREMENTS_UFH • INTERNAL_SOFT_HANOVER_EXECUTION • INTERNAL_SOHO_DS_MISSING_NEIGHBOUR • INTERNAL_SOHO_DS_UNMONITORED_NEIGHBOUR • INTERNAL_SUCCESSFUL_HSDSCH_CELL_CHANGE • INTERNAL_SUCCESSFUL_HSDSCH_CELL_SELECTION_NEW_ACTIVE_SET • INTERNAL_SUCCESSFUL_HSDSCH_CELL_SELECTION_OLD_ACTIVE_SET • INTERNAL_SUCCESSFUL_TRANSITION_TO_DCH • INTERNAL_SYSTEM_BLOCK • INTERNAL_SYSTEM_RELEASE • INTERNAL_SYSTEM_UTILIZATION • INTERNAL_UE_POSITIONING_QOS	Identify Admission Control Identify Call Re-establishment after abnormal release Identify Call Setup Failure Identify Channel Switching Identify Compressed Mode Activation Identify Compressed Mode Deactivation Identify Core Network Hard Handover Identify failed HS-DSCH cell change Identify Failed transition to DCH in HS mode Identify HS cell selection involving no new cell Identify inter-frequency handovers Identify the UE IMSI Identify IRAT handover decision Identify IRAT handovers Identify Compressed Mode type Identify failed hard handovers Identify successful hard handovers Capture RLC and application throughput for PS Interactive data Capture RLC and application throughput for PS streaming data Identify Packet Switched RAB release due to a Core Network Hard Handover Identify RAB establishments Identify RAB releases Capture UL SIR Errors and DL TX Code Power information Identify Soft Handovers Identify missing neighbors Identify unmonitored neighbors Identify HS-DSCH cell change Identify HS-DSCH cell selection with new cell selected after hard handover Identify HS-DSCH cell selection that selects a new cell in the old active set Identify successful transition to DCH in HS mode Identify blocked call Identify dropped call Capture Resource Usage Capture UE Position from Location Services
RRC Event	• RRC_CELL_CHANGE_ORDER_FROM_UTRAN • RRC_CELL_CHANGE_ORDER_FROM_UTRAN_FAILURE • RRC_CONNECTION_REJECT • RRC_CONNECTION_RELEASE • RRC_CONNECTION_REQUEST • RRC_CONNECTION_SETUP_COMPLETE • RRC_DOWNLINK_DIRECT_TRANSFER • RRC_HANOVER_FROM_UTRAN_COMMAND • RRC_HANOVER_FROM_UTRAN_FAILURE • RRC_INITIAL_DIRECT_TRANSFER	Identify IRAT Cell Change Order Identify IRAT Cell Change failure Identify RRC Connection Reject Identify RRC connection release Identify Call Attempt Identify UE category Capture NAS messages Identify Successful relocation preparation for IRAT handover Identify Failed relocation preparation for IRAT handover Capture NAS messages

	• RRC_MEASUREMENT_CONTROL • RRC_MEASUREMENT_REPORT • RRC_SIGNALLING_CONNECTION_RELEASE_INDICATION • RRC_UPLINK_DIRECT_TRANSFER	Capture GSM Neighbor Information Capture neighbor Ec/No and RSCP Identify Fast Dormancy Capture NAS messages
RANAP Event	• RANAP_COMMON_ID • RANAP_IU_RELEASE_COMMAND • RANAP_IU_RELEASE_COMPLETE • RANAP_IU_RELEASE_REQUEST • RANAP_RELOCATION_COMMAND • RANAP_RELOCATION_PREPARATION_FAILURE	Capture the IMSI for the call Identify UMTS to GSM relocation Identify Call Release for UETR/CTR Identify call release or dropped call Identify direct retry to GSM Identify IRAT relocation preparation failure
NBAP Event	• NBAP_RADIO_LINK_SETUP_REQUEST • NBAP_CELL_SETUP_REQUEST	Identify propagation delay for GeoAnalysis Identify propagation delay for GeoAnalysis

GPEH events to be collected

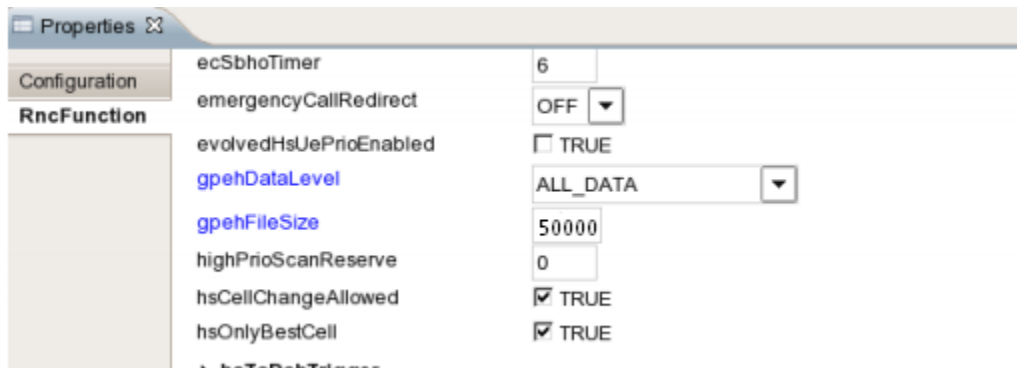
9. Select the UE Fraction for the percentage of mobile that will be recorded.
10. Input the schedule for the profile recording. It is advisable to make sure there is no others running recording on the planned schedule.
11. Once complete, the collected GPEH files will be located in
"/var/opt/ericsson/nms_ums_pms_seg/segment1/GPEH/" folder.

Configure the GPEH collection parameter at the RNC

1. Start **OSS Common Explorer**.

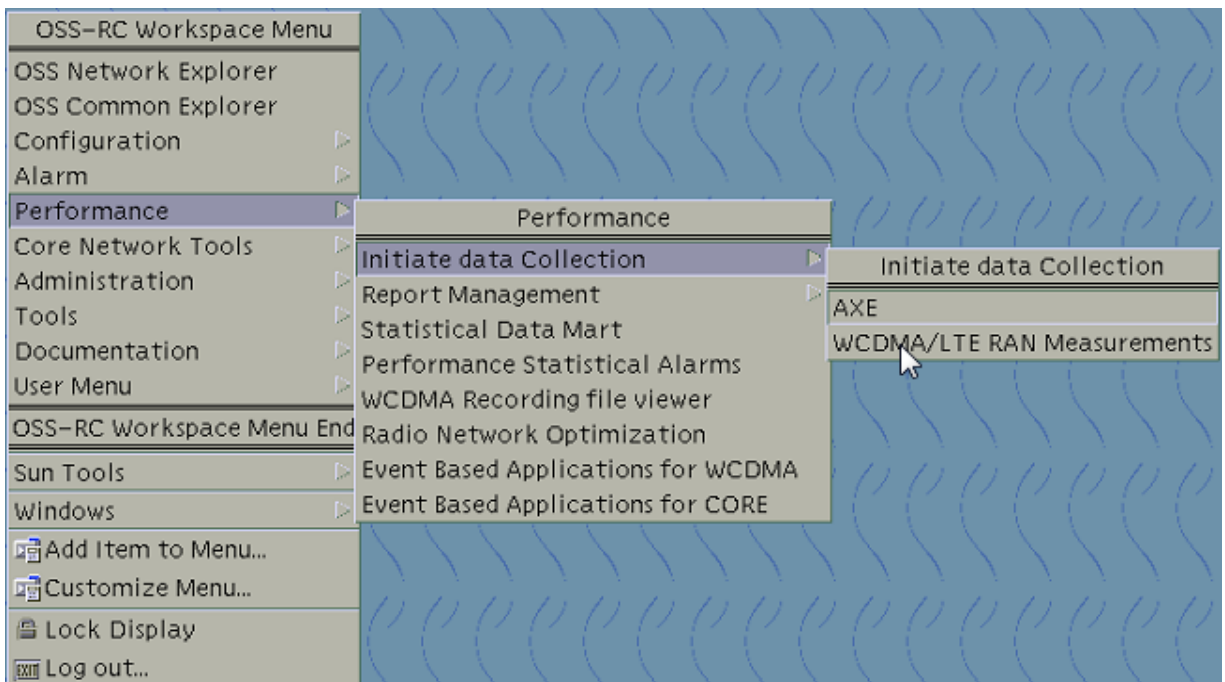


2. Select the required **RNC Node** to perform GPEH recording.
3. Change the '**GPEH Data Level**' parameter value according to the value in your recording scenario. The recommend value for all data is **1**.
4. Increase the value for '**GPEH File Size**' parameter to 50,000 (50,000 KB).

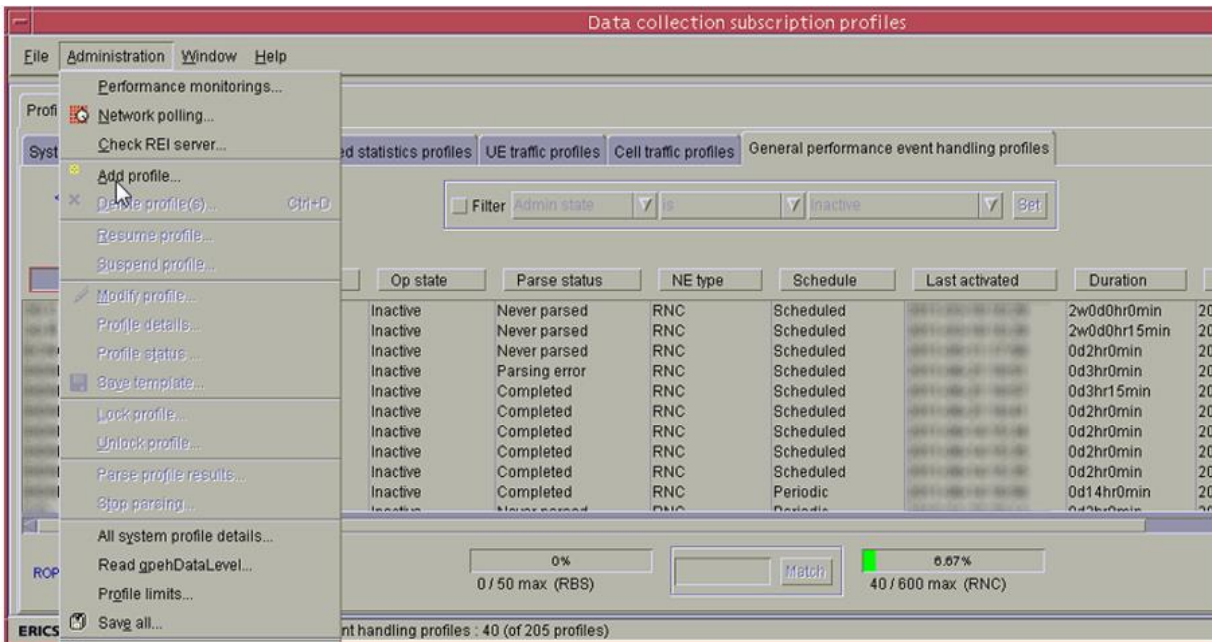


Initiate GPEH collection

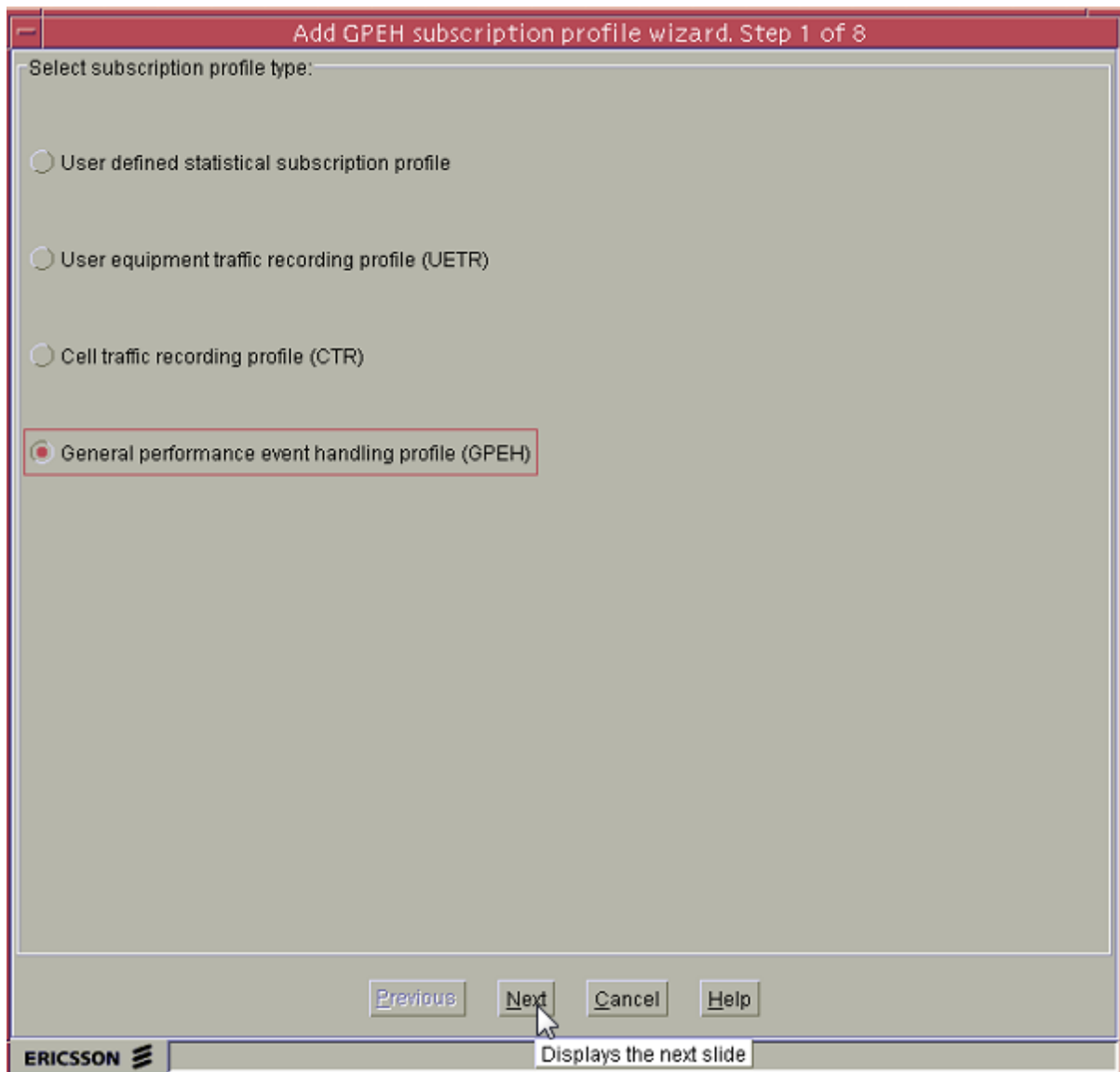
1. Select **Performance > Initiate data Collection > WCDMA/LTE RAN Measurements** to start the WCDMA/LTE RAN Measurement tool.



2. Select **Administration > Add profile...** to add a new profile.



3. Add GPEH subscription profile wizard will appear on the screen as shown in the figure below. Select the required recording type. (GPEH, CTR or UETR) Click **Next** button to proceed to the next step.



4. Type in the Profile name and click **Next** button to proceed to the next step.

Add GPEH subscription profile wizard, Step 2 of 8

Enter subscription profile name and comment:

Enter user name for the profile: *

demo

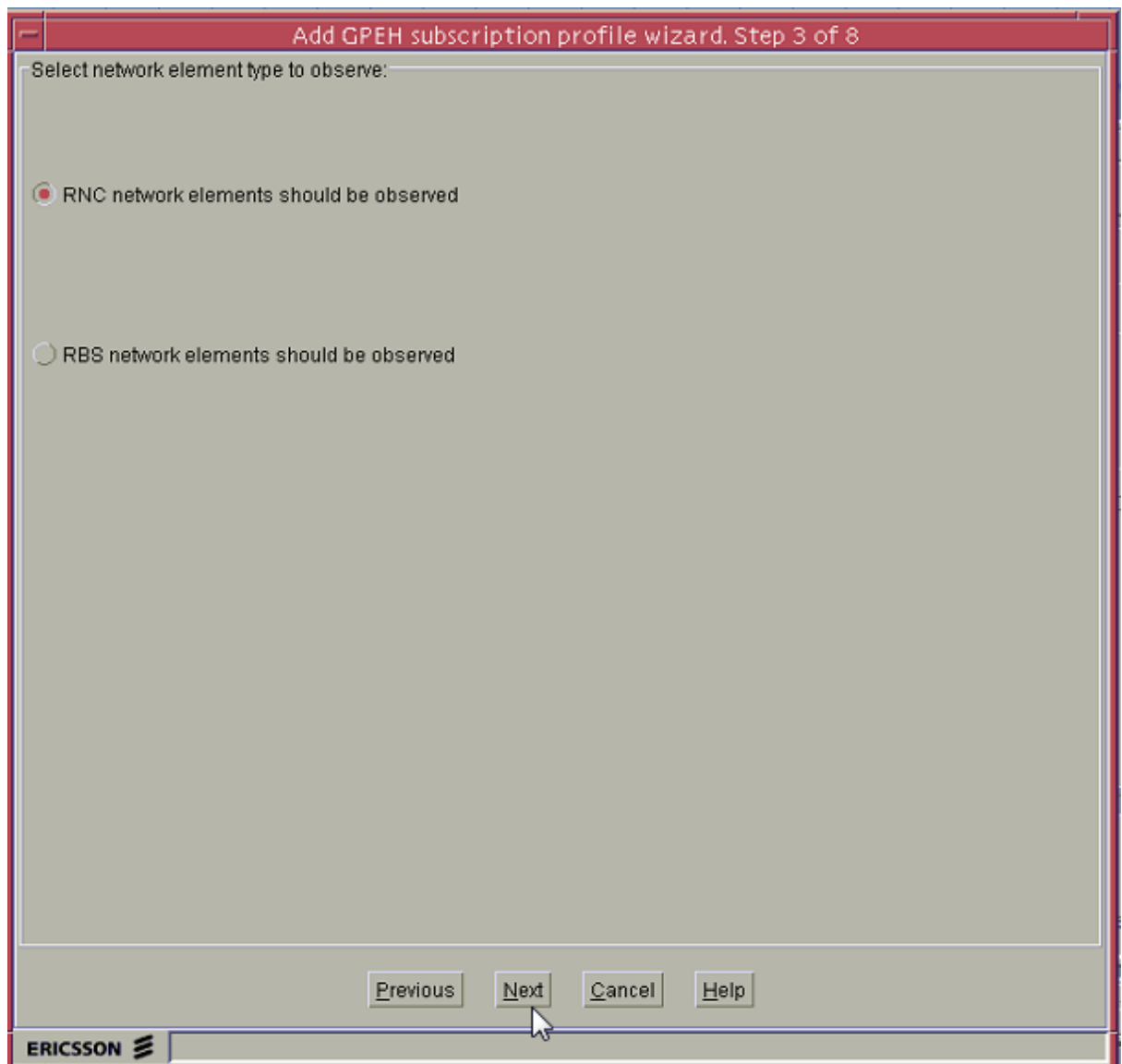
Enter comment for the profile:

Previous Next Cancel Help

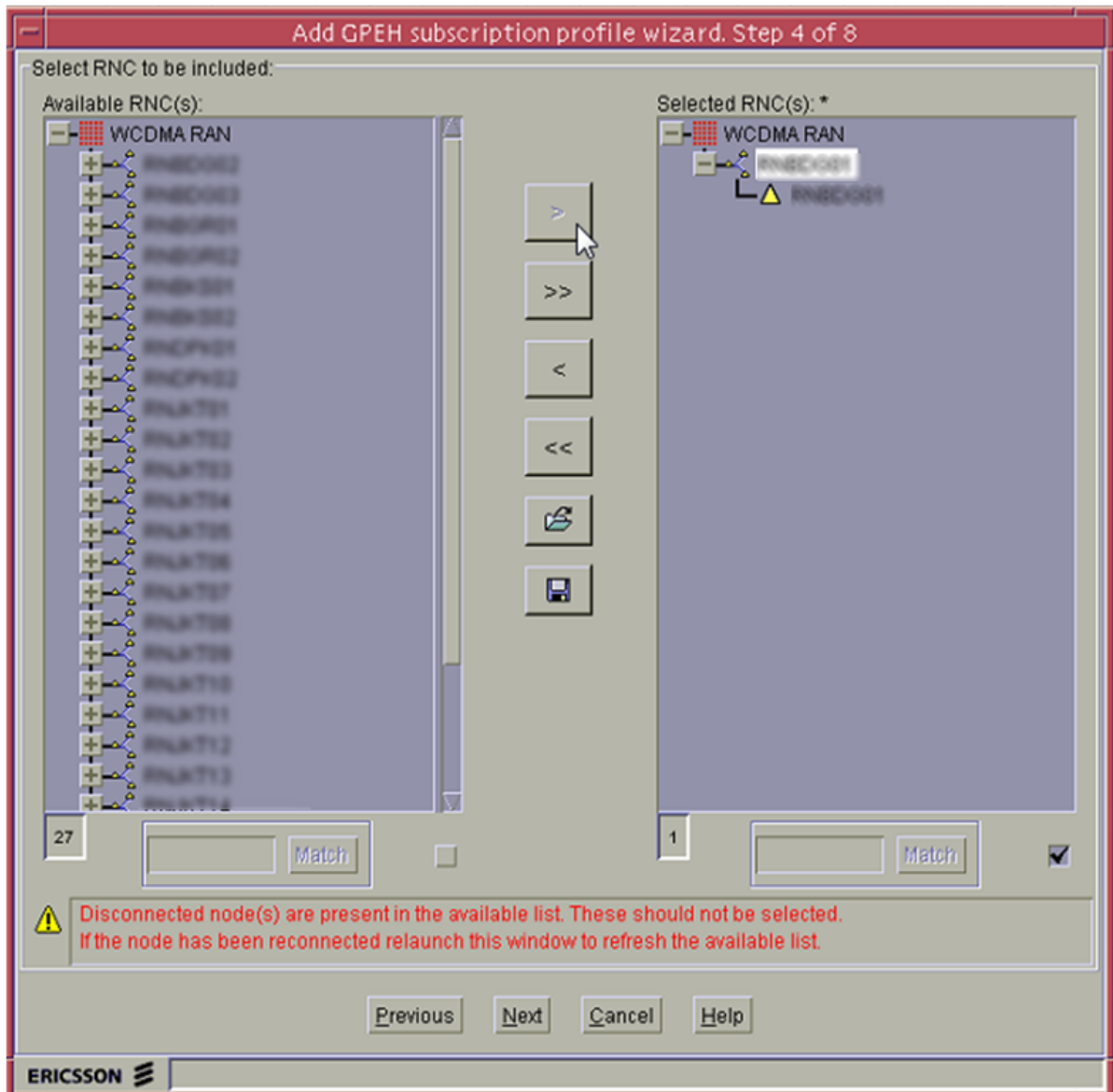
Displays the next slide

ERICSSON

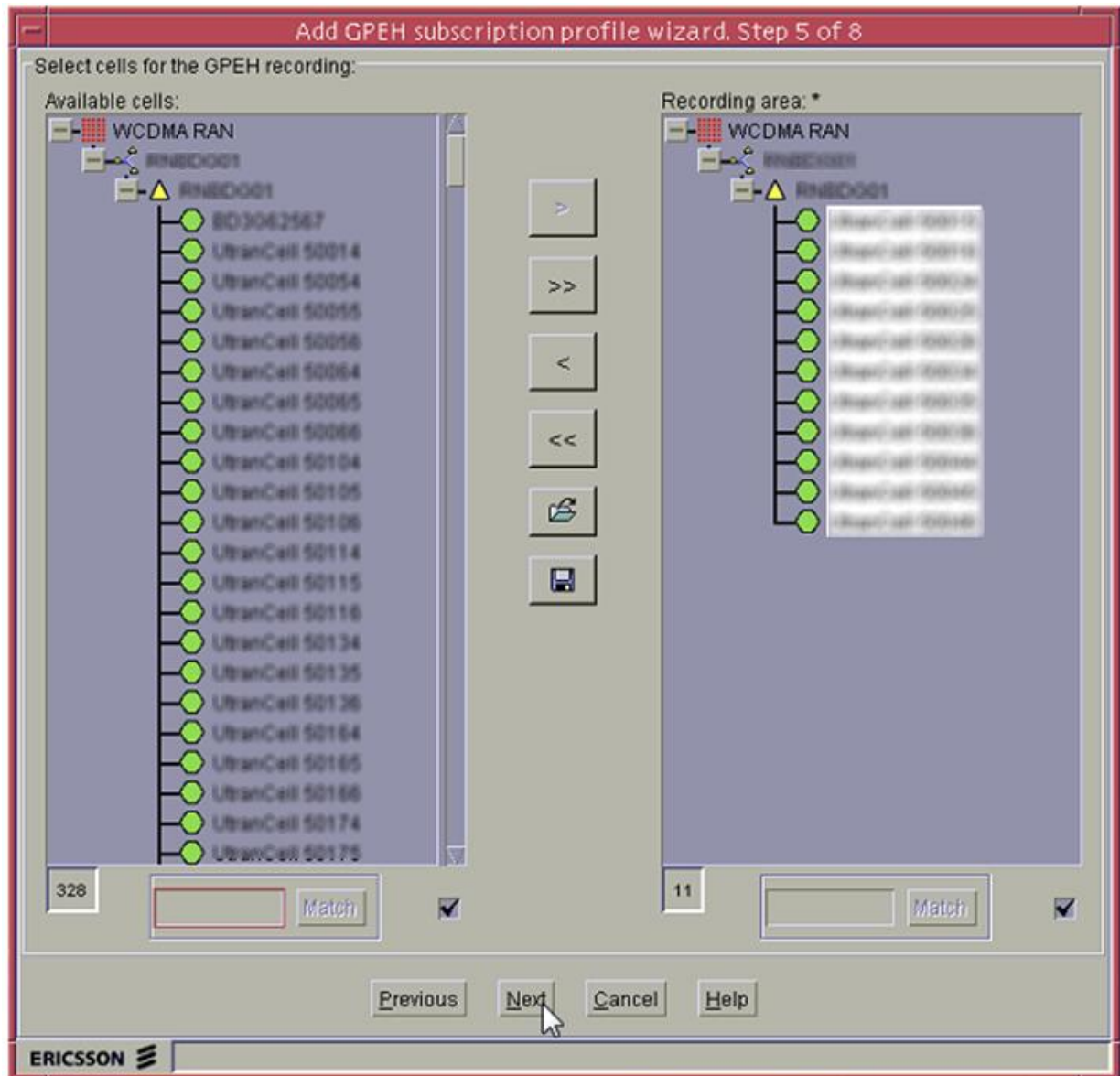
5. Select **RNC network elements should be observed** and click **Next** button to proceed to the next step.



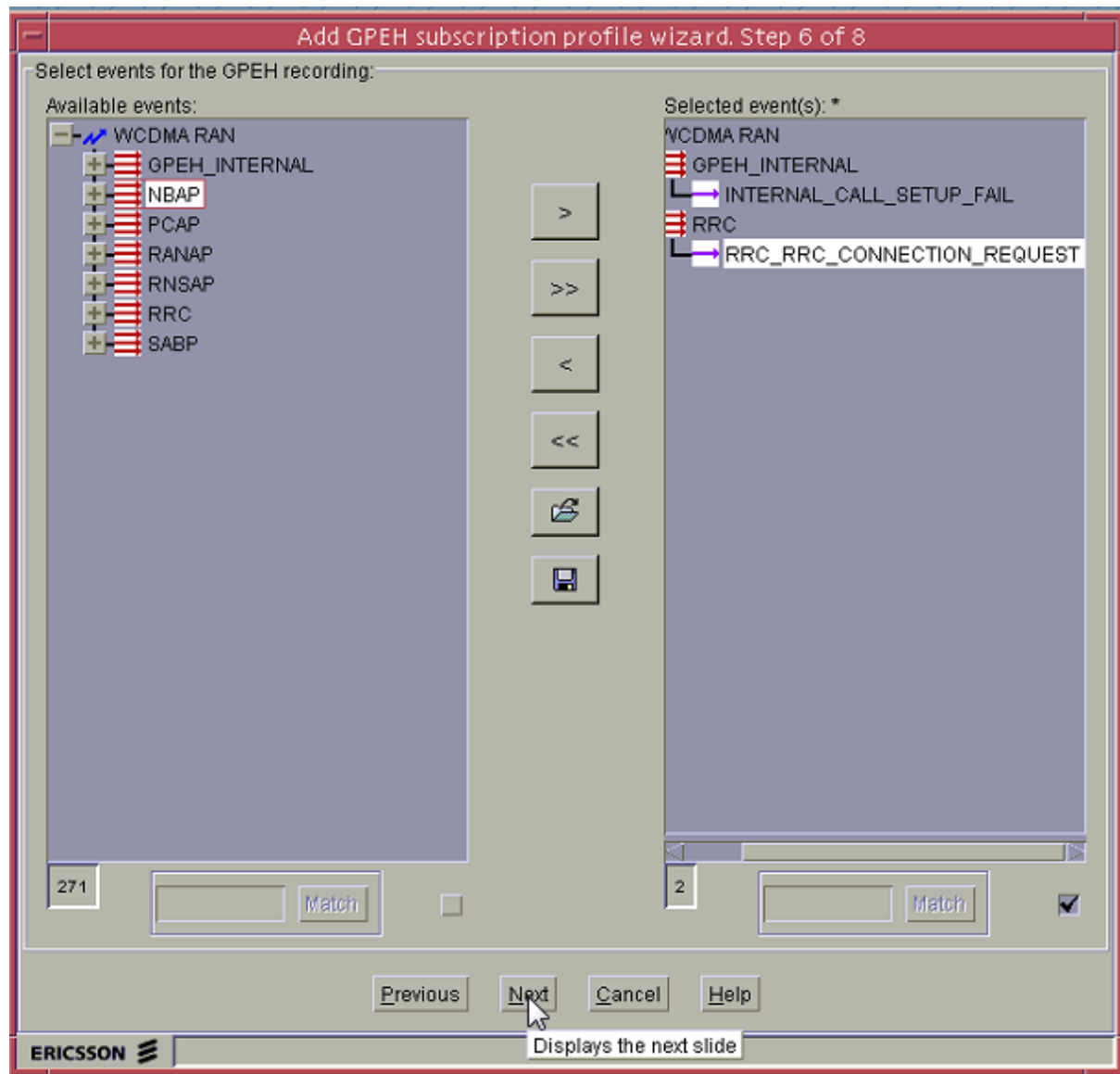
6. Select the required **RNC** you would like to collect and click **Next** button to proceed to the next step.



7. Select the required **Utran Cells** for recording and click **Next** button to proceed to the next step.



8. Select the events for the GPEH recording and click **Next** button to proceed to the next step. Please refer to section 3.4.1 for GPEH Recording Scenarios for the required events on different analysis scenarios.



9. Select the **UE Fraction** (Percentage of mobile that will be recorded) and click **Next** button to proceed to the next step.

Add GPEH subscription profile wizard, Step 7 of 8

Select UE fraction for the GPEH recording:

UE fraction: 503

1 200 400 600 800 1000

Previous Next Cancel Help

ERICSSON

Displays the next slide

10. Select the schedule for the subscription profile.

Add GPEH subscription profile wizard, Step 8 of 8

Select schedule for the subscription profile:

Select schedule type: **Periodic** ▼ Data will be collected for the specified duration only on the selected days. The profile will be activated on the specified start date and time.

Duration: Days: **1** ▼ Hours: **0** ▼ Minutes: **0** ▼ ROP count: **96**

Periodic dates and time setup

June ▼ 2011 ▼ ► ☐ Clear all

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
23				1	2	3	4
24	5	6	7	8	9	10	11
25	12	13	14	15	16	17	18
26	19	20	21	22	23	[24]	25
27	26	27	28	29	30		

☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat

Start time: 14 ▼ 00 ▼ ☐ Use current time

Projected times

Start date: **Select a date !**

Start time: 14:00

End date: -- --

End time: -- --

Day count: -- --

Total ROPs: 0 x 96 = 0

Run time: 0 hr

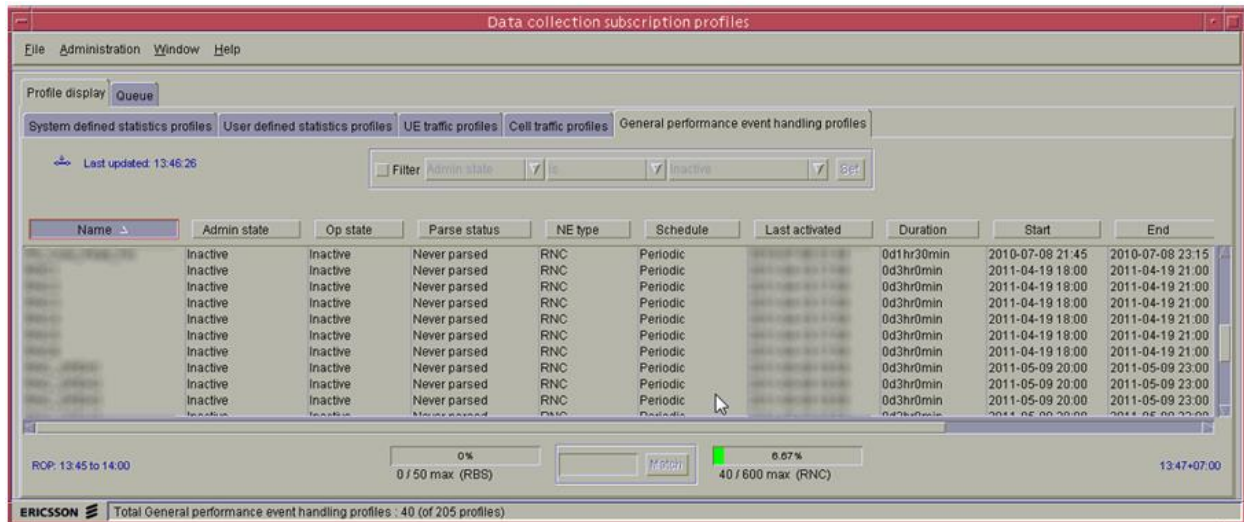
Repeat days: -- --

Summary Dates

Previous Finish Cancel Help

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11. Monitor the progress at **Profile display tab > General performance even handling profiles.**



12. Once complete, the collected GPEH files will be located in
“/var/opt/ericsson/nms_umts_pms_seg/segment1/GPEH/” folder.

3.4.1 Ericsson GPEH Recording Scenarios

Following table shows the different analysis scenarios in Xeus Pro 5 and the recommended data collection configuration.

Analysis Type	Recommended GPEH Event to be collected	Cell Set	Recording Setting
Problem Cells detail analysis such as troubleshooting of dropped call, blocked call and Throughput. User needs to analyze call messages with message details.	GPEH Internal Event - INTERNAL_ADMISSION_CONTROL_RESPONSE - INTERNAL_CALL_REESTABLISHMENT - INTERNAL_CALL_SETUP_FAIL - INTERNAL_CHANNEL_SWITCHING - INTERNAL_CMODE_ACTIVATE - INTERNAL_CMODE_DEACTIVATE - INTERNAL_CNHOO_EXECUTION_ACTIVE - INTERNAL_FAILED_HSDSCH_CELL_CHANGE - INTERNAL_FAILED_TRANSITION_TO_DCH - INTERNAL_HSDSCH_CELL_SELECTION_NO_CELL_SELECTED - INTERNAL_IFHO_EXECUTION_ACTIVE - INTERNAL_IMSI - INTERNAL_IRAT_HO_CC_EVALUATION	Problem cells only. Not more than 10% of total RNC limit	gpehDataLevel = 1 (ALL DATA) Ue_Fraction = 500

	• INTERNAL_IRAT_HO_CC_EXECUTION • INTERNAL_MEASUREMENT_HANDLING_EXECUTION • INTERNAL_PACKET_DEDICATED_THROUGHPUT • INTERNAL_RAB_ESTABLISHMENT • INTERNAL_RAB_RELEASE • INTERNAL_RADIO_QUALITY_MEASUREMENTS_UFH • INTERNAL_SOFT_HANOVER_EXECUTION • INTERNAL_SOHO_DS_MISSING_NEIGHBOUR • INTERNAL_SOHO_DS_UNMONITORED_NEIGHBOUR • INTERNAL_SUCCESSFUL_HSDSCH_CELL_CHANGE • INTERNAL_SUCCESSFUL_HSDSCH_CELL_SELECTION_NEW_ACTIVE_SET • INTERNAL_SUCCESSFUL_HSDSCH_CELL_SELECTION_OLD_ACTIVE_SET • INTERNAL_SUCCESSFUL_TRANSITION_TO_DCH • INTERNAL_SYSTEM_BLOCK • INTERNAL_SYSTEM_RELEASE • INTERNAL_SYSTEM_UTILIZATION • INTERNAL_OUT_HARD_HANOVER_FAILURE • INTERNAL_OUT_HARD_HANOVER_SUCCESS RRC Event • RRC_CELL_CHANGE_ORDER_FROM_UTRAN • RRC_CELL_CHANGE_ORDER_FROM_UTRAN_FAILURE • RRC_CONNECTION_REJECT • RRC_CONNECTION_RELEASE • RRC_CONNECTION_REQUEST • RRC_CONNECTION_SETUP_COMPLETE • RRC_DOWNLINK_DIRECT_TRANSFER • RRC_HANOVER_FROM_UTRAN_COMMAND • RRC_HANOVER_FROM_UTRAN_FAILURE • RRC_INITIAL_DIRECT_TRANSFER • RRC_MEASUREMENT_CONTROL • RRC_MEASUREMENT_REPORT • RRC_UPLINK_DIRECT_TRANSFER RANAP Event • RANAP_COMMON_ID • RANAP_IU_RELEASE_COMMAND • RANAP_IU_RELEASE_REQUEST • RANAP_RELOCATION_COMMAND • RANAP_RELOCATION_PREPARATION_FAILURE		
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	NBAP Event NBAP_RADIO_LINK_SETUP_REQUEST		
Cell Analysis, Scatter and Distribution Chart	GPEH Internal Event - INTERNAL_CALL_REESTABLISHMENT - INTERNAL_CHANNEL_SWITCHING - INTERNAL_CNHHO_EXECUTION_ACTIVE - INTERNAL_FAILED_HSDSCH_CELL_CHANGE - INTERNAL_FAILED_TRANSITION_TO_DCH - INTERNAL_HSDSCH_CELL_SELECTION_NO_CELL_SELECTED - INTERNAL_IFHO_EXECUTION_ACTIVE - INTERNAL_IRAT_HO_CC_EVALUATION - INTERNAL_IRAT_HO_CC_EXECUTION - INTERNAL_MEASUREMENT_HANDLING_EXECUTION - INTERNAL_PACKET_DEDICATED_THROUGHPUT - INTERNAL_RAB_ESTABLISHMENT - INTERNAL_RAB_RELEASE - INTERNAL_RADIO_QUALITY_MEASUREMENTS_UFH - INTERNAL_SOFT_HANOVER_EXECUTION - INTERNAL_SOHO_DS_MISSING_NEIGHBOUR - INTERNAL_SOHO_DS_UNMONITORED_NEIGHBOUR - INTERNAL_SUCCESSFUL_HSDSCH_CELL_CHANGE - INTERNAL_SUCCESSFUL_HSDSCH_CELL_SELECTION_NEW_ACTIVE_SET - INTERNAL_SUCCESSFUL_HSDSCH_CELL_SELECTION_OLD_ACTIVE_SET - INTERNAL_SUCCESSFUL_TRANSITION_TO_DCH - INTERNAL_SYSTEM_BLOCK - INTERNAL_SYSTEM_RELEASE - INTERNAL_SYSTEM_UTILIZATION - INTERNAL_OUT_HARD_HANOVER_FAILURE - INTERNAL_OUT_HARD_HANOVER_SUCCESS NBAP Event - NBAP_RADIO_LINK_SETUP_REQUEST RANAP Event - RANAP_COMMON_ID	Whole RNC	gpehDataLevel = 0 (HEADER ONLY)* Ue_Fraction = 500 *The plot will be limited to the Active Set from the internal message. Monitored Set measurement will not be available

Neighbor Optimization including missing neighbor and Pilot Pollution Analysis	GPEH Internal Event - INTERNAL_CALL_REESTABLISHMENT - INTERNAL_SOFT_HANOVER_EXECUTION - INTERNAL_SOHO_DS_MISSING_NEIGHBOUR - INTERNAL_SOHO_DS_UNMONITORED_NEIGHBOUR - INTERNAL_OUT_HARD_HANOVER_FAILURE - INTERNAL_OUT_HARD_HANOVER_SUCCESS RRC Event - RRC_CONNECTION_RELEASE - RRC_CONNECTION_REQUEST NBAP Event - NBAP_RADIO_LINK_SETUP_REQUEST RANAP Event - RANAP_COMMON_ID	Whole RNC	gpehDataLevel = 0 (HEADER ONLY) Ue_Fraction = 800
Phone Profiling	GPEH Internal Event - INTERNAL_ADMISSION_CONTROL_RESPONSE - INTERNAL_CALL_REESTABLISHMENT - INTERNAL_CALL_SETUP_FAIL - INTERNAL_CNHHO_EXECUTION_ACTIVE - INTERNAL_FAILED_HSDSCH_CELL_CHANGE - INTERNAL_FAILED_TRANSITION_TO_DCH - INTERNAL_IFHO_EXECUTION_ACTIVE - INTERNAL_IRAT_HO_CC_EXECUTION - INTERNAL_MEASUREMENT_HANDLING_EXECUTION - INTERNAL_RAB_ESTABLISHMENT - INTERNAL_RADIO_QUALITY_MEASUREMENTS_UFH - INTERNAL_SOFT_HANOVER_EXECUTION - INTERNAL_SOHO_DS_MISSING_NEIGHBOUR - INTERNAL_SOHO_DS_UNMONITORED_NEIGHBOUR - INTERNAL_SYSTEM_BLOCK - INTERNAL_SYSTEM_RELEASE RRC Event - RRC_CONNECTION_RELEASE - RRC_CONNECTION_REQUEST - RRC_DOWNLINK_DIRECT_TRANSFER - RRC_INITIAL_DIRECT_TRANSFER (Mandatory) - RRC_UPLINK_DIRECT_TRANSFER (Mandatory)	Whole RNC	gpehDataLevel = 1 (ALL DATA) Ue_Fraction = 500

	RANAP Event • RANAP_COMMON_ID • RANAP_IU_RELEASE_COMMAND • RANAP_IU_RELEASE_REQUEST NBAP Event • NBAP_RADIO_LINK_SETUP_REQUEST		
Smartphone Analysis	RRC Event • RRC_CONNECTION_RELEASE • RRC_CONNECTION_REQUEST • RRC_DOWNLINK_DIRECT_TRANSFER • RRC_INITIAL_DIRECT_TRANSFER (Mandatory) • RRC_UPLINK_DIRECT_TRANSFER (Mandatory) NBAP Event • NBAP_CELL_SETUP_REQUEST RANAP Event • RANAP_COMMON_ID • RANAP_IU_RELEASE_COMMAND • RANAP_IU_RELEASE_REQUEST GPEH Internal Event • INTERNAL_CALL_REESTABLISHMENT • INTERNAL_CALL_SETUP_FAIL • INTERNAL_CHANNEL_SWITCHING • INTERNAL_IMSI • INTERNAL_OUT_HARD_HANOVER_FAILURE • INTERNAL_OUT_HAND_HANOVER_SUCCESS • INTERNAL_PACKET_DEDICATED_THROUGHPUT_CONV_SPEECH • INTERNAL_PACKET_DEDICATED_THROUGHPUT_CONV_UNKNOWN • INTERNAL_PACKET_DEDICATED_THROUGHPUT_STREAMING • INTERNAL_RAB_ESTABLISHMENT • INTERNAL_RAB_RELEASE • INTERNAL_SYSTEM_BLOCK	Whole RNC	gpehDataLevel = 1 (ALL DATA) Ue_Fraction = 500

GPEH Plots	RRC Event • RRC_CONNECTION_RELEASE • RRC_CONNECTION_REQUEST • RRC_MEASUREMENT_REPORT NBAP Event • NBAP_RADIO_LINK_SETUP_REQUEST GPEH Internal Event • INTERNAL_SYSTEM_RELEASE	Whole RNC	gpehDataLevel = 1 (ALL DATA) Ue_Fraction = 500
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GPEH Recording Scenarios

Analysis Type	Recommended UETR/CTR Event to be collected
Call Trace (UETR) or Cell Trace (CTR)	RRC Event • All RRC events RANAP Event • All RANAP events NBAP Event • All NBAP events

Appendix: Recommended Events for UETR/CTR Analysis

3.5 Ericsson LTE (Cell Trace)

Data Collection Instructions

Here is a table of events and the protocol required to be collected. The events that are available for CTR and UETR respectively are marked by a tick:

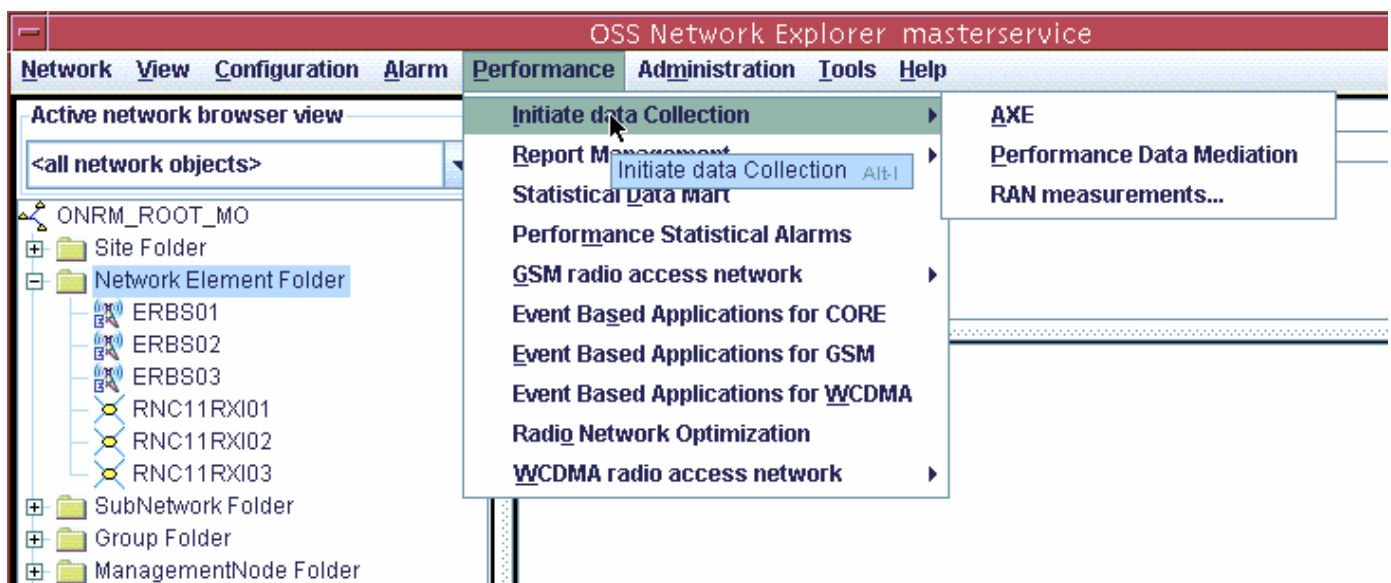
Event Name	Protocol	CTR	UETR
INTERNAL_EVENT_UE_MOBILITY_EVAL	INTERNAL	✓	✓
INTERNAL_PER_CELL_TRAFFIC_REPORT	INTERNAL	✓	
INTERNAL_PER_RADIO_CELL_MEASUREMENT	INTERNAL	✓	
INTERNAL_PER_RADIO_UE_MEASUREMENT	INTERNAL	✓	
INTERNAL_PER_RADIO_UE_MEASUREMENT_TA	INTERNAL	✓	✓
INTERNAL_PER_RADIO_UTILIZATION	INTERNAL	✓	
INTERNAL_PER_UE_RB_TRAFFIC_REP	INTERNAL	✓	
INTERNAL_PER_UE_TRAFFIC_REP	INTERNAL	✓	

INTERNAL_PER_UETR_CELL_TRAFFIC_REPORT	INTERNAL		✓
INTERNAL_PER_UETR_RADIO_CELL_MEASUREMENT	INTERNAL		✓
INTERNAL_PER_UETR_RADIO_UE_MEASUREMENT	INTERNAL		✓
INTERNAL_PER_UETR_RADIO_UTILIZATION	INTERNAL		✓
INTERNAL_PER_UETR_UE_RB_TRAFFIC_REP	INTERNAL		✓
INTERNAL_PER_UETR_UE_TRAFFIC_REP	INTERNAL		✓
INTERNAL_PROC_ERAB_RELEASE	INTERNAL	✓	✓
INTERNAL_PROC_ERAB_SETUP	INTERNAL	✓	✓
INTERNAL_PROC_HO_EXEC_S1_IN	INTERNAL	✓	✓
INTERNAL_PROC_HO_EXEC_S1_OUT	INTERNAL	✓	✓
INTERNAL_PROC_HO_EXEC_X2_IN	INTERNAL	✓	✓
INTERNAL_PROC_HO_EXEC_X2_OUT	INTERNAL	✓	✓
INTERNAL_PROC_INITIAL_CTXT_SETUP	INTERNAL	✓	✓
INTERNAL_PROC_RRC_CONN_SETUP	INTERNAL	✓	✓
INTERNAL_PROC_S1_SETUP	INTERNAL	✓	✓
INTERNAL_PROC_S1_SIG_CONN_SETUP	INTERNAL	✓	✓
INTERNAL_PROC_UE_CTXT_RELEASE	INTERNAL	✓	✓
RRC_MEASUREMENT_REPORT	RRC	✓	✓
RRC_RRC_CONNECTION_RECONFIGURATION	RRC	✓	✓
RRC_RRC_CONNECTION_RECONFIGURATION_COMPLETE	RRC	✓	✓
RRC_RRC_CONNECTION_RELEASE	RRC	✓	✓
RRC_RRC_CONNECTION_REQUEST	RRC	✓	✓
RRC_RRC_CONNECTION_SETUP	RRC	✓	✓
RRC_RRC_CONNECTION_SETUP_COMPLETE	RRC	✓	✓
S1_DOWNLINK_NAS_TRANSPORT	S1	✓	✓
S1_ERAB_RELEASE_COMMAND	S1	✓	✓
S1_ERAB_RELEASE_REQUEST	S1	✓	✓
S1_ERAB_SETUP_REQUEST	S1	✓	✓
S1_ERAB_SETUP_RESPONSE	S1	✓	✓
S1_ERAB_RELEASE_INDICATION	S1	✓	✓
S1_HANDOVER_COMMAND	S1	✓	✓
S1_HANDOVER_REQUEST	S1	✓	✓
S1_HANDOVER_REQUIRED	S1	✓	✓
S1_INITIAL_CONTEXT_SETUP_REQUEST	S1	✓	✓
S1_INITIAL_CONTEXT_SETUP_RESPONSE	S1	✓	✓
S1_INITIAL_UE_MESSAGE	S1	✓	✓
S1_UE_CONTEXT_RELEASE_COMMAND	S1	✓	✓
S1_UE_CONTEXT_RELEASE_REQUEST	S1	✓	✓

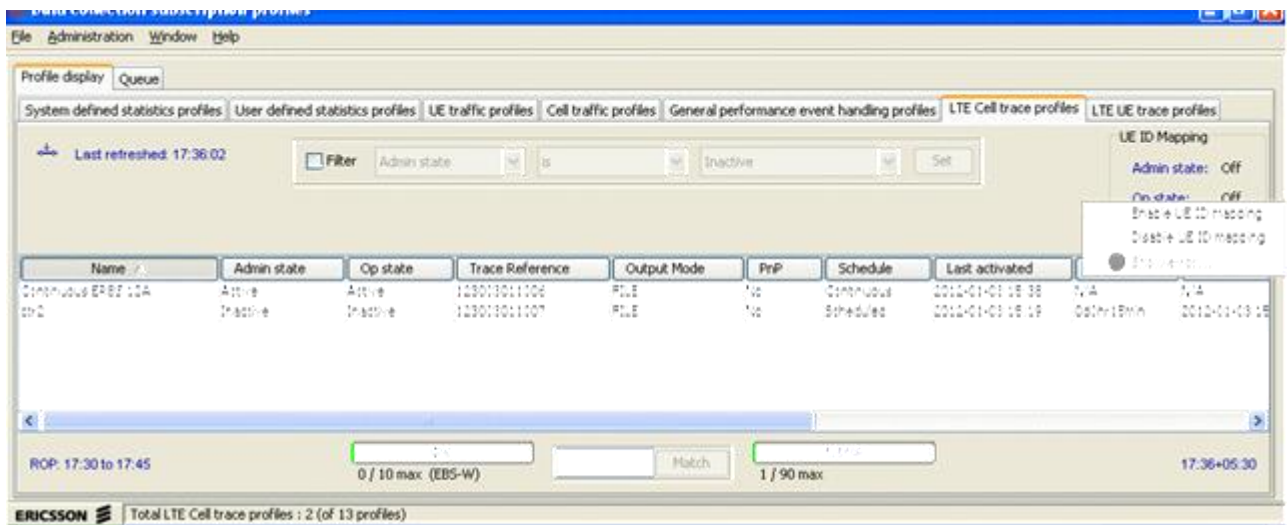
S1_ULINK_NAS_TRANSPORT	S1	✓	✓
X2_HANOVER_REQUEST	X2	✓	✓
X2_HANOVER_REQUEST_ACKNOWLEDGE	X2	✓	✓

The following is the data collection steps :

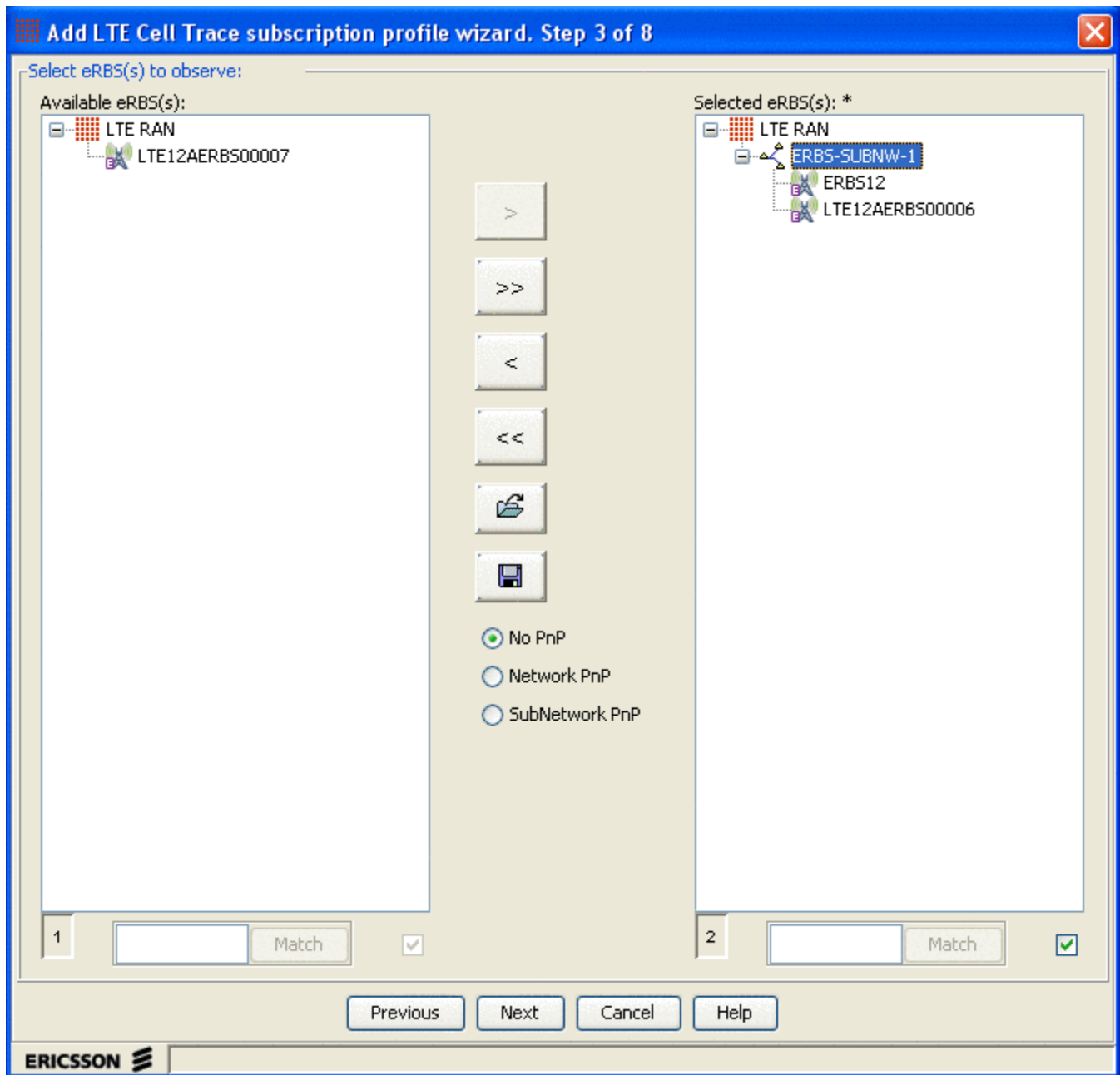
1. On the **Performance** menu of the OSS Network Explorer window, click **Initiate data Collection** then click **RAN Measurements**.



2. To create a new Subscription Profile select **Add profile** from the **Administration** menu, then the **Add subscription profile wizard** will appear. There follows a series of steps at the end of which a new Subscription Profile will be created. Move between the steps using the **Next** and **Previous** buttons.

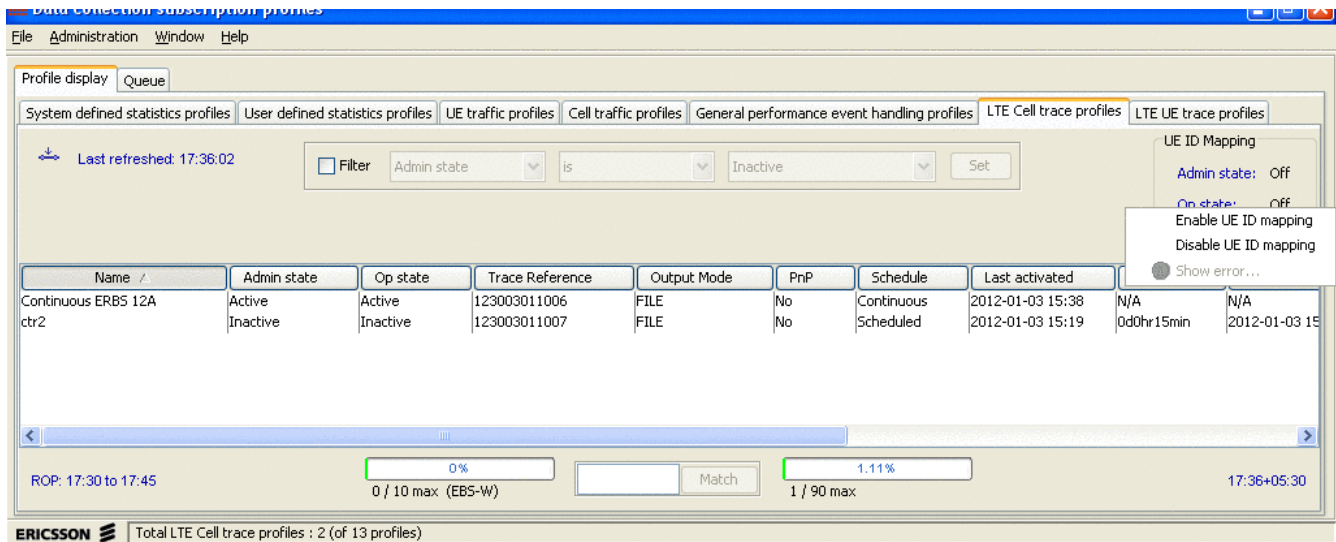


3. Choose LTE Cell Trace Profile
4. At the select eRBS, select at least 10 eRBS that are in the same cluster.



5. Click next, and select the Output Format as File
6. Click next, select all Cells
7. Click next, select All Events
8. Click next, leave the UE Fraction at 1000
9. Click Next, Select "Enable ASN.1"
10. Click Next to set up Schedule. Choose immediate and run the trace for 3 hours.
11. Follow through to start the recording.

12. At the LTE Cell Trace Profiles tab, select the newly created profile, Right click on the UE ID Mapping label and select “Enable UE ID mapping”



13. Get the output at the OSS directory
14. The output files will have name like below
 “A20120201.2145+0100-
 2200+0100_SubNetwork=ONAN_ROOT_MO_R,SubNetwork=Demo,MeContext=RBS123_celltracefile_1.bin.gz”

There would be one file per RBS for every 15 minutes.

3.5.1 Ericsson LTE MME EBM Trace

The Ericsson LTE MME EBM Trace file correlates with Ericsson LTE Call Trace. The aim is to provide IMSI information to the calls logged in the LTE Call Trace. Its format is *_ebs.* where the extension is a sequence number.

Example:

A20110207.1115-0600-20110207.1130-0600_1_ebs.235

A20110207.1130-0600-20110207.1145-0600_1_ebs.236

Here are a list of events required to be collected :

Event Name
L_TAU
L_SERVICE_REQUEST
L_ATTACH
L_DETACH

3.6 Nokia WCDMA (Megamon)

Site Data

Users need to import the site data by XIF/TEMS Cel-file/ MCOM file format first before the importing of the Nokia WCDMA RAML XML file.

The table below shows some of the mandatory fields in creating a XIF format site data:

XIF Parameter	Description
CellId	The unique Cell Identity/Name of the cell e.g. G1001A. Note: Xeus Pro does not accept two records with SAME Cell Id. Any duplicate cells Id will be renamed with additional suffix e.g. G1001A_1. Mandatory field
SiteId	The Site Id of the cell e.g. D1001. Note: Site Id will be displayed as label for cell in the map
Longitude	Longitude of the cell in Float format e.g. -121.23328. Mandatory field
Latitude	Latitude of the cell in Float format e.g. 30.12312. Mandatory field
AntDir	Direction of the cell in Degree unit Mandatory field

RncId	RNC Identity Note: RncId-Cid pair allows matching of WCDMA Cell network data to the site data in Xeus Pro database
Cid	WCDMA Cell Identity Note: RncId-Cid pair allows matching of WCDMA Cell network data to the site data in Xeus Pro database

XIF parameter format

CELLID	SITEID	LONGITUDE	LATITUDE	ANTDIR	ANTHEIGHT	ANTTILT	ANTELECTILT	ANTTYPE	ANTBW	GROUNDHEIGHT	CELLTYPE	BSCRNC
W22260A	W22260	-94.58	39.105	100	28.86	0	0	Macro	RNC2	102	101	9662
W22260B	W22260	-94.58	39.105	220	28.86	0	0	Macro	RNC2	102	102	9662
W22260C	W22260	-94.58	39.105	340	28.86	0	0	Macro	RNC2	102	103	9662
W22264A	W22264	-94.562	39.09871	70	14.63	0	0	Macro	RNC2	102	104	9662
W22264B	W22264	-94.562	39.09871	250	14.63	0	0	Macro	RNC2	102	105	9662
W22264C	W22264	-94.562	39.09871	340	14.63	0	0	Macro	RNC2	102	106	9662
W22265A	W22265	-94.5634	39.11271	70	45.11	0	0	Macro	RNC2	102	107	9662
W22265B	W22265	-94.5634	39.11271	190	45.11	0	0	Macro	RNC2	102	108	9662
W22265C	W22265	-94.5634	39.11271	340	45.11	0	0	Macro	RNC2	102	109	9662
W22268A	W22268	-94.553	39.1045	100	17.07	0	0	Macro	RNC2	102	110	9662
W22268B	W22268	-94.553	39.1045	220	15.54	0	0	Macro	RNC2	102	111	9662
W22268C	W22268	-94.553	39.1045	340	15.54	0	0	Macro	RNC2	102	112	9662
W22269A	W22269	-94.557	39.0936	100	14.94	0	0	Macro	RNC2	102	113	9662
W22269B	W22269	-94.557	39.0936	220	14.94	0	0	Macro	RNC2	102	114	9662
W22269C	W22269	-94.557	39.0936	350	14.94	0	0	Macro	RNC2	102	115	9662
W22270A	W22270	-94.552	39.0924	100	15.24	0	0	Macro	RNC2	102	116	9662
W22270B	W22270	-94.552	39.0924	220	15.24	0	0	Macro	RNC2	102	117	9662
W22271A	W22271	-94.552	39.0867	100	18.9	0	0	Macro	RNC2	102	118	9662
W22271B	W22271	-94.552	39.0867	220	18.9	0	0	Macro	RNC2	102	119	9662
W22271C	W22271	-94.552	39.0867	340	18.9	0	0	Macro	RNC2	102	120	9662
W22272A	W22272	-94.562	39.08311	110	11.89	0	0	Macro	RNC2	102	121	9662
W22272B	W22272	-94.562	39.08311	220	11.89	0	0	Macro	RNC2	102	122	9662
W22272C	W22272	-94.562	39.08311	325	11.89	0	0	Macro	RNC2	102	123	9662
W22273A	W22273	-94.544	39.0796	100	13.11	0	0	Macro	RNC2	102	124	9662
W22273B	W22273	-94.544	39.0796	220	13.11	0	0	Macro	RNC2	102	125	9662
W22273C	W22273	-94.544	39.0796	340	13.11	0	0	Macro	RNC2	102	126	9662
W22274A	W22274	-94.551	39.07381	100	13.11	0	0	Macro	RNC2	102	127	9662
W22274B	W22274	-94.551	39.07381	220	13.11	0	0	Macro	RNC2	102	128	9662
W22274C	W22274	-94.551	39.07381	340	13.11	0	0	Macro	RNC2	102	129	9662
W22275A	W22275	-94.537	39.06941	100	13.41	0	0	Macro	RNC2	102	130	9662
W22275B	W22275	-94.537	39.06941	220	13.41	0	0	Macro	RNC2	102	131	9662
W22275C	W22275	-94.537	39.06941	340	13.41	0	0	Macro	RNC2	102	132	9662
W22276A	W22276	-94.543	39.0587	100	16.46	0	0	Macro	RNC2	102	133	9662
W22276B	W22276	-94.543	39.0587	220	16.46	0	0	Macro	RNC2	102	134	9662
W22276C	W22276	-94.543	39.0587	340	16.46	0	0	Macro	RNC2	102	135	9662
W22400A	W22400	-94.546	39.09651	100	9.97	0	0	Macro	RNC2	102	136	9662
W22400B	W22400	-94.546	39.09651	220	9.97	0	0	Macro	RNC2	102	137	9662
W22400C	W22400	-94.546	39.09651	340	9.97	0	0	Macro	RNC2	102	138	9662
W22401A	W22401	-94.542	39.09251	0	13.41	0	0	Macro	RNC2	102	139	9662
W22402A	W22402	-94.532	39.08471	100	10.28	0	0	Macro	RNC2	102	140	9662
W22402B	W22402	-94.532	39.08471	220	10.28	0	0	Macro	RNC2	102	141	9662
W22402C	W22402	-94.532	39.08471	340	10.28	0	0	Macro	RNC2	102	142	9662
W25489A	W25489	-94.555	39.12651	20	45.11	0	0	Macro	RNC2	102	143	9662
W25489B	W25489	-94.555	39.12651	220	45.11	0	0	Macro	RNC2	102	144	9662
W25489C	W25489	-94.555	39.12651	330	45.11	0	0	Macro	RNC2	102	145	9662
W25492A	W25492	-94.5539	39.12009	120	29.81	0	0	Macro	RNC2	102	146	9662
W25492B	W25492	-94.5539	39.12009	230	29.81	0	0	Macro	RNC2	102	147	9662

Sample of XIF format

RNC Network Dump

You can import the WCDMA site configuration and neighbor data by importing the Nokia WCDMA RAML XML file.

Megamon .MGA Log File

Initial Megamon log files collection :

1. Start Megamon -> Setup -> Select "Connections"

Check with equipment vendors and make sure the control connections settings are set correctly.

2. Setup -> Select "Output files"
 - a. Set the output file directory
 - b. Do not check on the "output type" as the output file extension will be in *.MGA binary format.
 - c. Set the time based to 10 min
 - d. Check the PC HD space and apply conditional items removal accordingly
 - e. Do not check on any options settings
 - f. Set the format of the output filename as your preference. Advisable filename to include network element with year, month, date, hour, minute and seconds.

3. Setup -> Select "Filter condition"

Check if there is Telecom filter with condition of
 SR:(OFAM=4FD,507,508,509)AND(NOT(NUM=0001,0002,8037,8038,0D5BA,0A340,0A339,0D9DA,0D5B8,0AB2B)), if no, create a new filter with condition.

4. Action -> Select "Get Units"
 - a. Only check on the ICSU units
 - b. Set all ICSU with "Telecoms" filter & leave "Via" column settings as "N/A"
 - c. After click "Set Filters" then confirm "Status=OK" -> Click "Start mon"
 - d. Check output directory and find the log files
 - e. Click "Stop" once the Megamon log collection is done.

5. Mandatory message – > rak_modify_rnc_param_s

3.7 ZTE WCDMA (CTS)

1. Login to NetNumen with the details
2. Subscriber Trace > Create Subscriber Trace Task (repeat step for each IMSI)

NetNmen Unified Management System - CTS Client

223.3 kbps 311.9 kbps

System Topology Fault Maintenance Security Statistics Favorite Window Help

Total: 3f

Subscriber Trace

- Create Subscriber Trace Task
- Open Raw Signal File
- Open Signal Sequence File
- History Data Management
- Subscriber Trace Task Management
- Set Client Parameter
- Set Server Parameter
- IP and NE Name Management
- NE Office ID Management

Cell Trace

- Create Cell Trace Task
- Open Cell Raw Signal File
- Cell Trace Task Management

Data Window Trace Task Management

Trace Task Management

Task ID	Number Type	Number	Status	Monitor	Start Time	Stop Time	Remark	Task Creator
101	IMSI	3	MIXED STATE		2012-03-12 19:44:40		R	RE
102	MSISDN		MIXED STATE		2012-07-13 16:26:14		IN	RE
103	MSISDN		MIXED STATE		2012-04-25 10:55:40		IN	RE
104	IMSI	3	MIXED STATE		2012-04-30 15:11:58		R	RE
105	MSISDN		MIXED STATE		2012-07-17 17:58:07		IN	RE
106	IMSI	4	MIXED STATE		2012-07-18 20:04:05		C	OM
107	IMSI	7	MIXED STATE		2012-07-18 20:05:12		C	OM
108	IMSI	0	MIXED STATE		2012-07-18 20:11:28		C	OM
109	IMSI	3	MIXED STATE		2012-07-18 20:10:54		C	OM
110	IMSI	1	MIXED STATE		2012-07-18 20:07:12		C	OM
111	IMSI	7	MIXED STATE		2012-03-29 14:44:05		C	OM
112	IMSI	2	MIXED STATE		2012-03-29 15:08:23		C	OM
113	IMSI	0	MIXED STATE		2012-06-12 18:25:32		C	OM
114	IMSI	4	MIXED STATE		2012-03-30 16:18:48		C	OM
115	IMSI	3	MIXED STATE		2012-03-30 16:43:17		C	OM
116	IMSI	7	MIXED STATE		2012-05-30 18:09:06		C	OM
117	IMSI	1	MIXED STATE		2012-05-24 20:16:00		C	OM
118	IMSI	0	MIXED STATE		2012-04-02 18:19:52		C	OM
119	IMSI	5	MIXED STATE		2012-04-05 18:12:12		C	OM
120	IMSI	7	MIXED STATE		2012-05-20 11:16:08		C	OM
121	IMSI	0	MIXED STATE		2012-06-29 17:04:58		C	OM
122	IMSI	3	MIXED STATE		2012-07-04 16:42:41		C	OM
123	IMSI	1	MIXED STATE		2012-07-13 12:35:43		C	OM
124	IMSI	5	MIXED STATE		2012-05-07 19:28:39		C	OM
125	IMSI	4	MIXED STATE		2012-04-12 12:36:26		C	OM
151	MSISDN		MIXED STATE		2012-04-16 09:32:12		IN	733444
161	IMSI	4	MIXED STATE		2012-03-06 18:52:37		R	RE
162	IMSI	5	MIXED STATE		2012-03-29 12:41:45		R	RE
163	IMSI	5	MIXED STATE		2012-03-06 18:59:36		R	RE
164	IMSI	1	MIXED STATE		2012-03-06 19:08:53		R	RE
165	IMSI	3	MIXED STATE		2012-03-06 19:08:54		R	RE
166	IMSI	2	MIXED STATE		2012-06-12 17:08:12		R	RE
167	IMSI	2	MIXED STATE		2012-03-06 19:08:56		R	RE
168	MSISDN		MIXED STATE		2012-04-26 13:47:20		IN	RE
169	IMSI	3	MIXED STATE		2012-03-06 19:17:05		R	RE
170	IMSI	2	MIXED STATE		2012-03-06 19:19:43		R	RE
171	IMSI	5	MIXED STATE		2012-03-06 14:03:51			724468
172	MSISDN		MIXED STATE		2012-07-10 14:39:53		IN	868548
173	IMSI	0	MIXED STATE		2012-07-18 09:39:31			910407
174	MSISDN		MIXED STATE	Monitoring	2012-07-18 16:38:02		IN	910407