

6th March

ERICSSON Node B Commissioning and Integration

Node B Commissioning and Integration

- 1 Preparation
 - 1.1 Laptop with the below software installed
 - 1.2 Cable and accessories
 - 1.3 Node B Scripts and License
 - 1.4 Test Phone
- 2 Node B Commissioning Process Summary
- 3 Node B Commissioning
 - 3.1 Format DUW
 - 3.2 Transfer the Basic software package to NodeB
 - 3.3 Restart Node B with basic software
 - 3.4 Run Cabinet Equipment Wizard
 - 3.5 Run OAM Wizard
 - 3.6 Run Site Equipment Configuration
 - 3.7 Run lub Transport script
 - 3.8 Activating Integration Unlock
 - 3.9 Run HS/EUL script
 - 3.10 Changing the RUW power to 60 Watts
 - 3.11 Installation of the License Key File
 - 3.12 Creation of Configuration Version.

1. Preparation [<https://www.blogger.com/null>]

This section mentions the software and test tools required to do the RBS integration.

1.1. Laptop with the below software installed [<https://www.blogger.com/null>]

1. Tera Term Version 4.61
2. Filezilla 3.2.2.1(FTP Client) or any other FTP client
3. FileZilla Server Version 0.9.31(FTP Server)
4. RBS Element Manager P7
5. Java1.6.0_14jre-6u14-windows-i586-s
6. RBS 6000 Basic Software P7.1.6

1.2. Cable and accessories [<https://www.blogger.com/null>]

1. Serial to RJ45 cable
2. USB to Serial Adaptor
3. LAN cable

1.3. Node B Scripts and License [<https://www.blogger.com/null>]

Total of 7 integration scripts are used during the RBS integration.

- 1_Cabinet.xml
- 2_OAM.xml
- 3_Site_Equipment.xml
- 4_Iub_Scripts.mo
- 5_HS_EUL_Parameters.mo

The license file/integration unlock is mandatory. Without the license/ file or integration unlock the

5_HS_EUL_Parameters.mo cannot be run successfully.

1.4. Test Phone [<https://www.blogger.com/null>]

Any phone which is capable of the displaying the cell information (eg: TEMS, Phones with Netmon)

2. Node B Commissioning Process Summary **[<https://www.blogger.com/null>]**

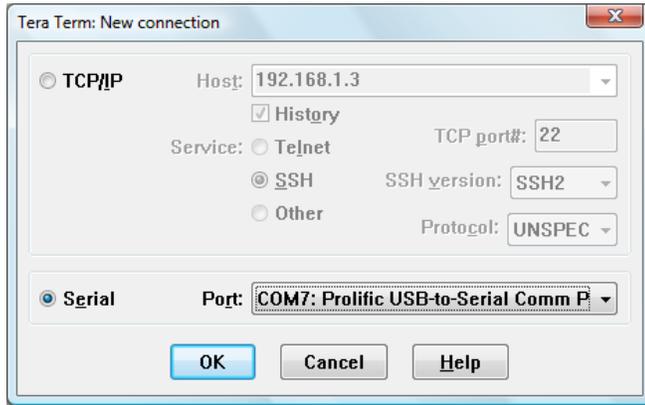
- 2.1. Format DUW**
- 2.2. Install Basic package P7.1.6**
- 2.3. Restart the Node B in the basic software**
- 2.4. Run Cabinet Equipment Wizard**
- 2.5. Run OAM Wizard**
- 2.6. Run Site Equipment wizard**
- 2.7. Run Iub_Scripts.mo Script**
- 2.8. Activate integration unlock**
- 2.9. Run HS_EUL_Parameters.mo Script**
- 2.10. Changing the RUW power to 60 Watts**
- 2.11. Installing the license key file**
- 2.12. Creating a Configuration Version.**

3. Node B Commissioning

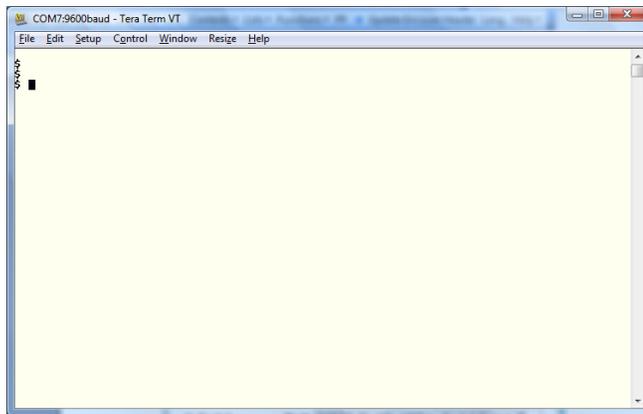
This section explains in detail the steps mentioned in the previous section.

3.1. Format DUW [<https://www.blogger.com/null>]

Connect the serial cable to the LMT A port of DUW and run Tera Term software.
Make sure that you see the command prompt \$

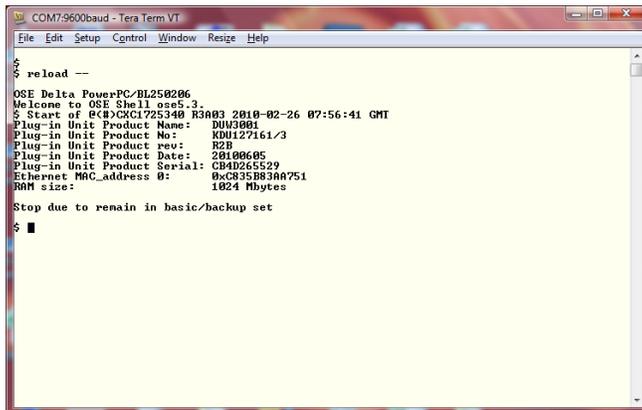


[http://3.bp.blogspot.com/-L-qwuntzH2I/VPoNJvdfnLI/AAAAAAAAABJc/v16_ZstuUqQ/s1600/image001.png]



[<http://4.bp.blogspot.com/-za8cPzdT9Zc/VPoNRBPcwXI/AAAAAAAAABKs/iEX9SDfqI8k/s1600/image003.png>]

Put the Node B in BackUp mode, by issuing the following command.
reload—



[<http://4.bp.blogspot.com/-sgxh-pgvp7E/VPoNSORGS5I/AAAAAAAAABJ8/QrzuJWxpx6U/s1600/image005.png>]

We can check the directories within the NodeB by issuing
vols

```

COM7:9600baud - Tera Term VT
File Edit Setup Control Window Resize Help
$
$ reload --
OSE Delta PowerPC/BL250206
Welcome to OSE Shell ose5.3.
$ Start of 0x4DC3C1725340 R3A03 2010-02-26 07:56:41 GMT
Plug-in Unit Product Name: DUU3001
Plug-in Unit Product No: KDU127161/3
Plug-in Unit Product rev: R2B
Plug-in Unit Product Date: 20100605
Plug-in Unit Product Serial: CB4D265529
Ethernet MAC_address 0: 0x0335B83AA751
RAM size: 1024 Mbytes

Stop due to remain in basic/backupt set

$ vols
volume      total    used      free    frw device unit
/           0K      0K 100%    0K 100% FR-
/null      0K      0K 100%    0K 100% FRU
/gzip      1K      1K 100%    0K 0% -RU none
/erpdout   1K      1K 100%    0K 0% -RU none
/ffs      7796K  3776K  48%    4020K  52% FRU ffsdd 0<0-1948>
/d         683M   43M   6%    640M  94% FRU idedd 0<4-1399999>
$

```

[<http://4.bp.blogspot.com/-AtUIZ2tHYWw/VPoNSu73cXI/AAAAAAAABKM/E8IOFI1qHL8/s1600/image007.png>]

Since the /c2 is not automatically mounted, we will have to manually mount the drive by issuing the following command.

```

mount_c2
vols

```

```

COM7:9600baud - Tera Term VT
File Edit Setup Control Window Resize Help
$
$ reload --
OSE Delta PowerPC/BL250206
Welcome to OSE Shell ose5.3.
$ Start of 0x4DC3C1725340 R3A03 2010-02-26 07:56:41 GMT
Plug-in Unit Product Name: DUU3001
Plug-in Unit Product No: KDU127161/3
Plug-in Unit Product rev: R2B
Plug-in Unit Product Date: 20100605
Plug-in Unit Product Serial: CB4D265529
Ethernet MAC_address 0: 0x0335B83AA751
RAM size: 1024 Mbytes

Stop due to remain in basic/backupt set

$ vols
volume      total    used      free    frw device unit
/           0K      0K 100%    0K 100% FR-
/null      0K      0K 100%    0K 100% FRU
/gzip      1K      1K 100%    0K 0% -RU none
/erpdout   1K      1K 100%    0K 0% -RU none
/ffs      7796K  3776K  48%    4020K  52% FRU ffsdd 0<0-1948>
/d         683M   43M   6%    640M  94% FRU idedd 0<4-1399999>
$ mount_c2
$ vols
volume      total    used      free    frw device unit
/           0K      0K 100%    0K 100% FR-
/null      0K      0K 100%    0K 100% FRU
/gzip      1K      1K 100%    0K 0% -RU none
/erpdout   1K      1K 100%    0K 0% -RU none
/ffs      7796K  3776K  48%    4020K  52% FRU ffsdd 0<0-1948>
/d         683M   43M   6%    640M  94% FRU idedd 0<4-1399999>
/c2       1147M  129M  11%   1017M  89% FRU idedd 0<1400000-3749999>

```

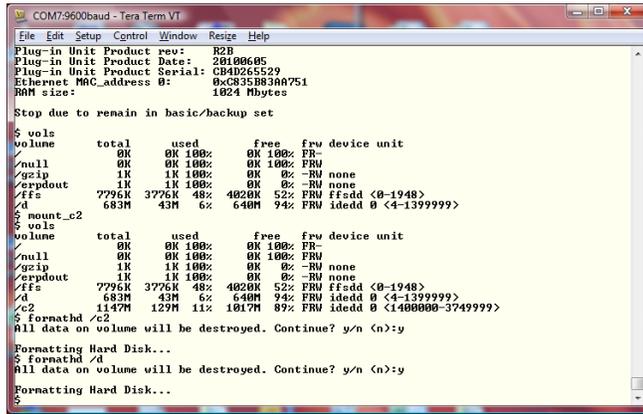
[<http://2.bp.blogspot.com/--WkSEJYDH4/VPoNTZ-dbrl/AAAAAAAABKc/4hlfJ5kvu6c/s1600/image009.png>]

Now we will proceed with the formatting of the hard drives /c2 and /d. The commands to do the format is given below.

```

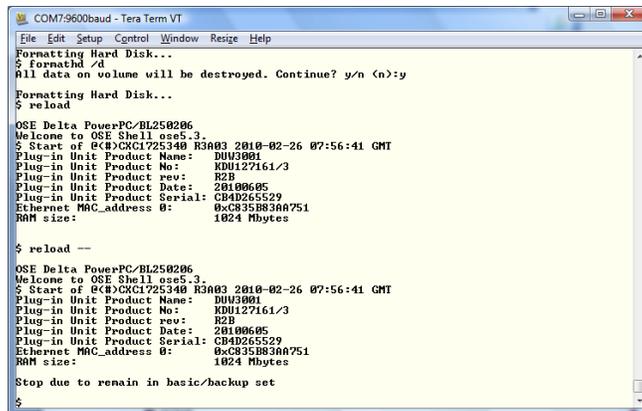
formathd /c2
formathd /d

```



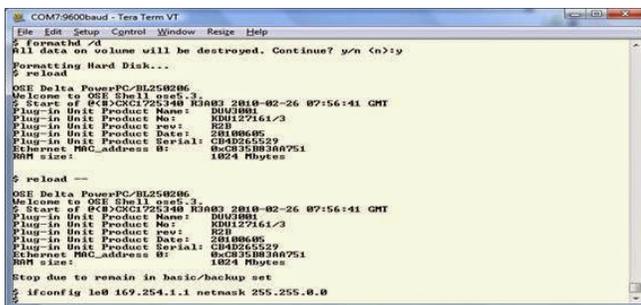
[[http://2.bp.blogspot.com/-f-
gECcUT2E/VPoNurDAPZI/AAAAAAAABKw/uHFo9-xfZR0/s1600/image011.png](http://2.bp.blogspot.com/-f-
gECcUT2E/VPoNurDAPZI/AAAAAAAABKw/uHFo9-xfZR0/s1600/image011.png)]

Once the format is done, reload the RBS. After this is done, we again move to the back up mode to start the configuration. This is done by issuing a reload – command



[http://2.bp.blogspot.com/-5RbaqJqmLeo/VPoNVNZO9RI/AAAAAAAABK4/7-4eRu_7BCg/s1600/image013.png]

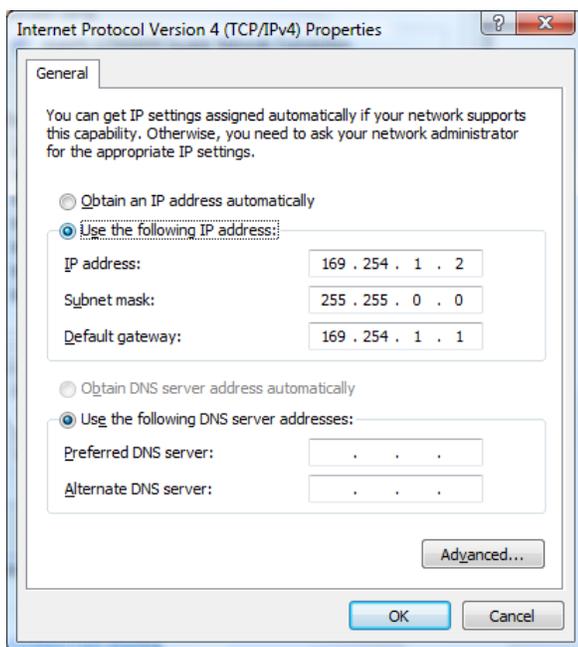
The next step is to proceed with setting the IP address in the nodeB. The command issued is `ifconfig le0 169.254.1.1 netmask 255.255.0.0`



[[http://3.bp.blogspot.com/-D3ko-
axDny4/VPoNWYYRAI/AAAAAAAABLM/xz4VB-k8Hn4/s1600/image016.jpg](http://3.bp.blogspot.com/-D3ko-
axDny4/VPoNWYYRAI/AAAAAAAABLM/xz4VB-k8Hn4/s1600/image016.jpg)]

Set the IP address in your laptop to 169.254.1.2.

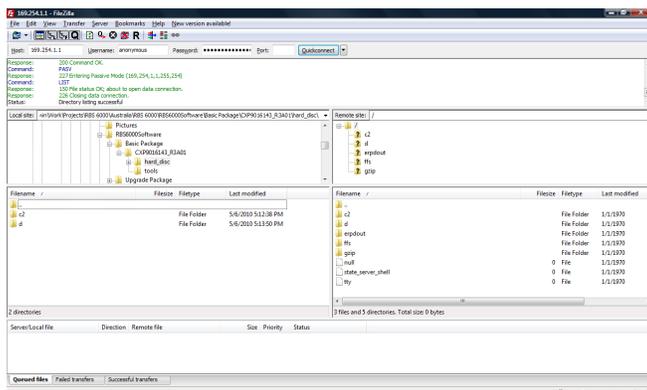
Make sure that you set the Default gateway IP address in the laptop without which the integration scripts will fail.



[http://2.bp.blogspot.com/-uk6oXCym_rU/VPoNWqaHU8I/AAAAAAAABLQ/GwThGsF7-R0/s1600/image017.png]

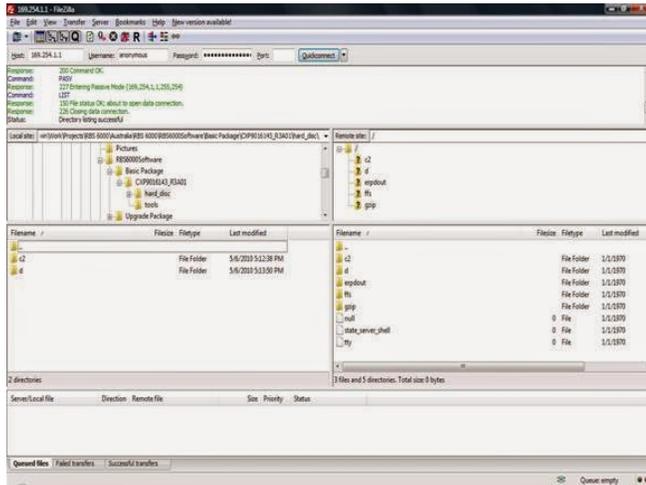
3.2. Transfer the Basic software package to NodeB.

Open an FTP client such as Filezilla and connect to the RBS IP address 169.254.1.1 through LMT B port of DUW

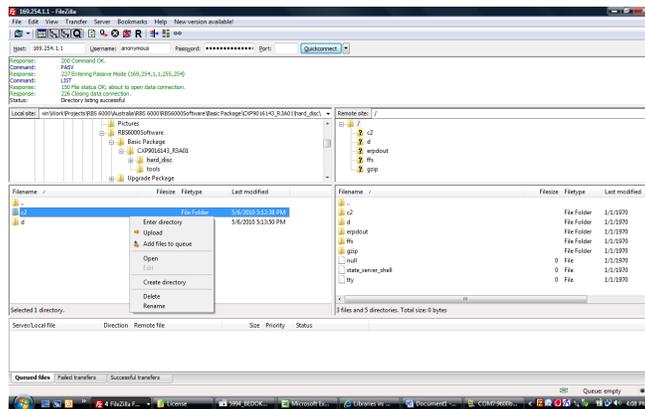


[<http://3.bp.blogspot.com/-uUblI-Gbjos/VPoNYcYzBLI/AAAAAAAABL0/Ikw1vcAf5yA/s1600/image019.png>]

Make sure you select the root directory '/' at the RBS side. Transfer /c2 and /d directories to the RBS as shown below.

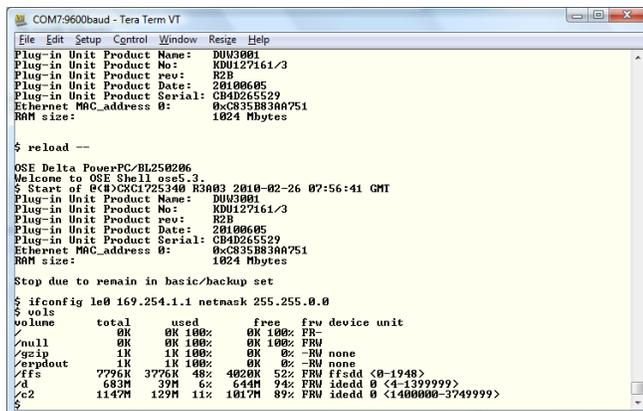


[\[http://3.bp.blogspot.com/-vY02cFbZqaA/VPoNYGTzK8I/AAAAAAAAABLw/USLTZox-oB0/s1600/image020.jpg\]](http://3.bp.blogspot.com/-vY02cFbZqaA/VPoNYGTzK8I/AAAAAAAAABLw/USLTZox-oB0/s1600/image020.jpg)



[\[http://3.bp.blogspot.com/-8nQvm0D3rfU/VPoNZeeKvcl/AAAAAAAAABME/McRqnLORnpM/s1600/image021.png\]](http://3.bp.blogspot.com/-8nQvm0D3rfU/VPoNZeeKvcl/AAAAAAAAABME/McRqnLORnpM/s1600/image021.png)

Once the transfer is completed make sure the size of /c2 is 129M and /d is 39M. This can be done by issuing the `vol`s command



[\[http://2.bp.blogspot.com/-GJajzMTdJks/VPoNcozMdrl/AAAAAAAAABMk/C6dcJBBRg0/s1600/image025.png\]](http://2.bp.blogspot.com/-GJajzMTdJks/VPoNcozMdrl/AAAAAAAAABMk/C6dcJBBRg0/s1600/image025.png)

3.3. Restart Node B with basic software

Now we have to restart the RBS with the basic software. The command to be issued is **reload**. Wait till the RBS restart is completed

```

COM7:9600baud - Tera Term VT
File Edit Setup Control Window Resize Help
Plug-in Unit Product Name: DUU3001
Plug-in Unit Product No: K0U127161/3
Plug-in Unit Product rev: R2B
Plug-in Unit Product Date: 20100605
Plug-in Unit Product Serial: CB40265529
Ethernet MAC_address 0: 0xC835B83AA751
RAM size: 1024 Mbytes

Stop due to remain in basic/backup set
$ ifconfig le0 169.254.1.1 netmask 255.255.0.0
$ vols
volume      total      used      free      frw device unit
/           0K          0K 100%    0K 100%  FRU
/NULL      0K          0K 100%    0K 100%  FRU
/gzip      1K          1K 100%    0K 0%   -RW none
/cpudat    1K          1K 100%    0K 0%   -RW none
/ffs       7796K      3776K  48%    4020K  52%  FRU ffsadd <0-1948>
/d         683M      39M   6%    644M  94%  FRU idedd 0 <4-1399999>
/c2       1147M     129M  11%    1017M  89%  FRU idedd 0 <1400000-3749999>
$ reload

OSE Delta PowerPC/BL250206
Welcome to OSE Shell ose5.3.
$ Start of 0(C)CKG1725340_R3A03 2010-02-26 07:56:41 GMT
Plug-in Unit Product Name: DUU3001
Plug-in Unit Product No: K0U127161/3
Plug-in Unit Product rev: R2B
Plug-in Unit Product Date: 20100605
Plug-in Unit Product Serial: CB40265529
Ethernet MAC_address 0: 0xC835B83AA751
RAM size: 1024 Mbytes

BoardMgr: Starting Configuration Version: BasicCU_CXP9016143_R3A01

```

[<http://2.bp.blogspot.com/-zGGFDDBpRR8/VPoNepcjNMI/AAAAAAAAABNQ/QQmfdO5haaw/s1600/image030.jpg>]

```

COM7:9600baud - Tera Term VT
File Edit Setup Control Window Resize Help

OSE Delta PowerPC/BL250242
username: Start of 0(C)CKG1725156_R71CG17 2010-04-23 12:36:22 GMT
Plug-in Unit Product Name: DUU3001
Plug-in Unit Product No: K0U127161/3
Plug-in Unit Product rev: R2B
Plug-in Unit Product Date: 20100605
Plug-in Unit Product Serial: CB40265529
Ethernet MAC_address 0: 0xC835B83AA751
RAM size: 1024 Mbytes

Patch: CBF2 loaded successfully

BoardMgr: Starting Configuration Version: BasicCU_CXP9016143_R3A01
CM State: NormalActive (own), Undefined (peer), peer supa=0xffffffff
Component rtrdb (007.01.0006/OSE-powerpc EMBEDDED)

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Constructing Database rtrdb
Loading '/gzip//d/configuration/cw/BasicCU_CXP9016143_R3A01/db.dat'

Ready

All programs loaded and started
All configured PIUs started on node

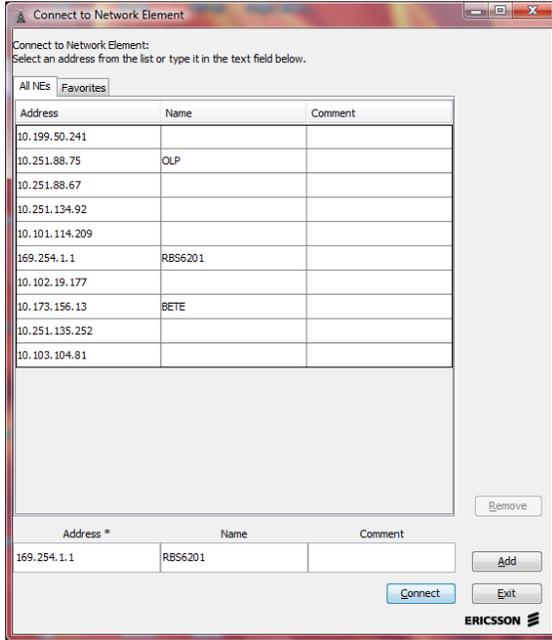
Login Server Ready

username: rbs
password:
Welcome to OSE Shell ose5.3.
$

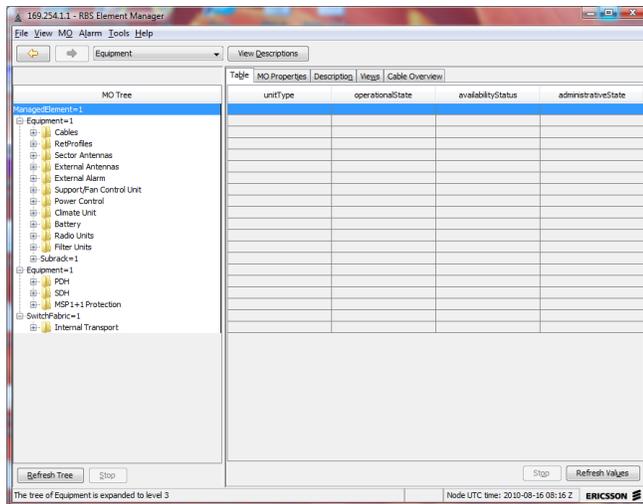
```

[<http://4.bp.blogspot.com/-frVxGN69Wik/VPoNfriUaUI/AAAAAAAAABNc/gq0klP6Bwxw/s1600/image032.jpg>]

We login to the RBS using the element manager software. The local maintenance IP address of the RBS 6201 is always 169.254.1.1.



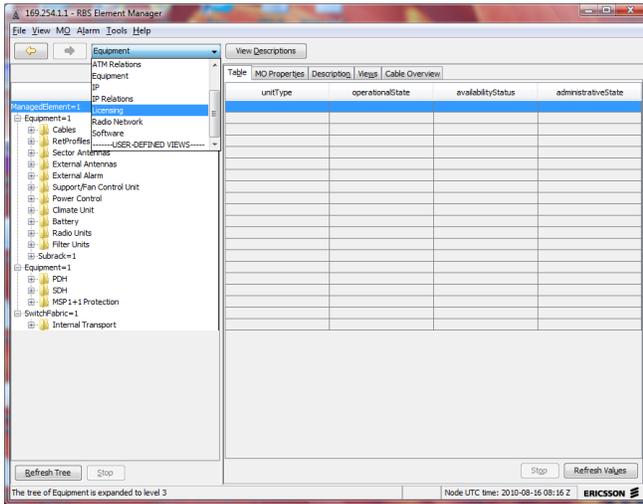
[<http://3.bp.blogspot.com/-CBj6098fH4E/VPoNgbqKzbl/AAAAAAAABNo/bSyT08pXG1Q/s1600/image033.png>]



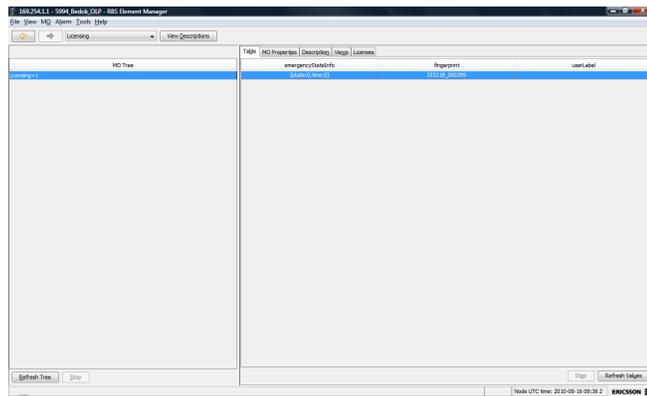
[<http://1.bp.blogspot.com/-hzPtQUb4d6w/VPoNhX6iogl/AAAAAAAABN8/H9SUVfnsSJA/s1600/image035.png>]

Checking the Finger print

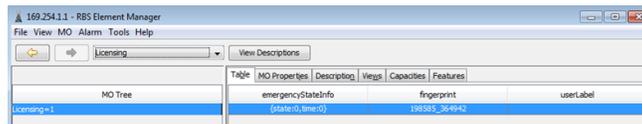
This section shows a series of screenshots on how to check the finger print of the RBS. The finger print is used to generate the license key file for the RBS.



[http://1.bp.blogspot.com/-MR5Bn9ApRME/VPoNi6F_-LI/AAAAAAAAABOM/j4e-FnZPU8g/s1600/image037.png]



[<http://4.bp.blogspot.com/-QQphukt6Pq0/VPoNjoUKBml/AAAAAAAAABOY/WhvoSbPZKPE/s1600/image039.png>]

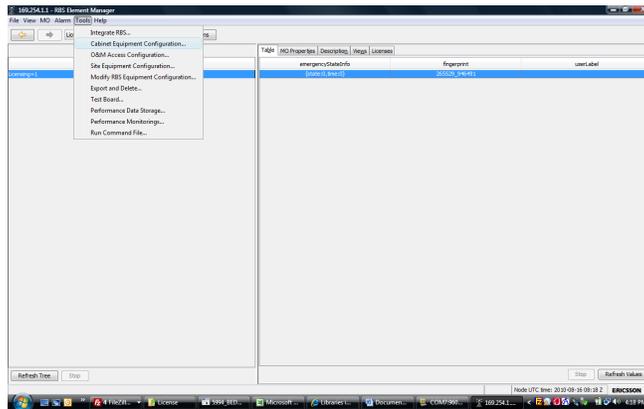


[http://4.bp.blogspot.com/-7BmhwBVUxy8/VPoNkRN7YHI/AAAAAAAAABOg/m4YHD2ED2_o/s1600/image041.png]

3.4. Run Cabinet Equipment Wizard

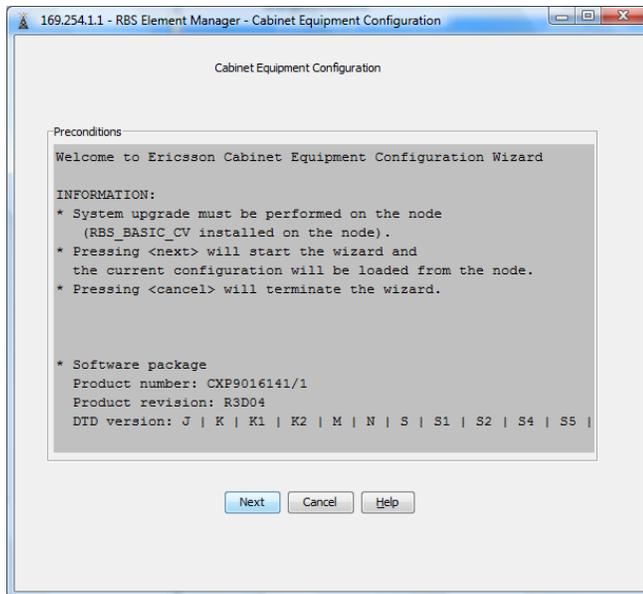
The RBS is configured with the cabinet type when we run the Cabinet equipment wizard. Also some basic sector and IP definitions are done in the Cabinet equipment configuration. The script to be run is [1_Cabinet.xml](#).

From the tools menu, select Cabinet Equipment configuration. We can choose the wizard or the scripts option. Since cabinet equipment configuration is quite simple, we will be running the wizard manually. Please follow the screenshots below.

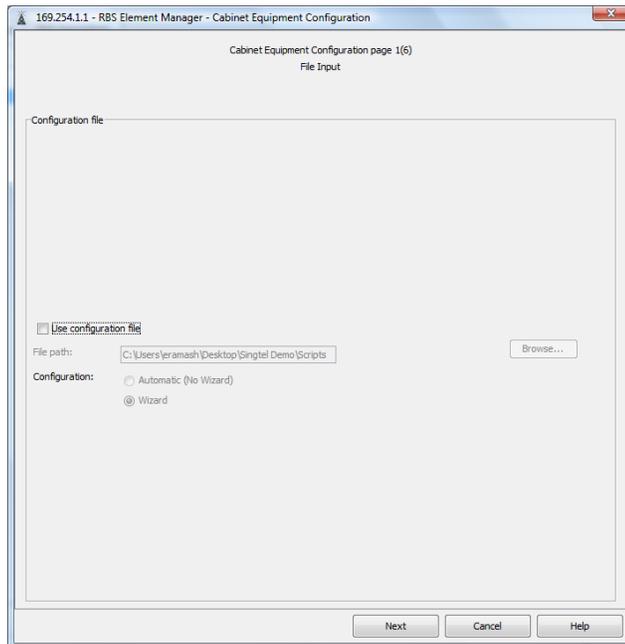


[http://1.bp.blogspot.com/-7dY4yWSr47E/VPoNIZ584FI/AAAAAAAAABO8/KzAvnk_Z0-o/s1600/image043.png]

Click Next

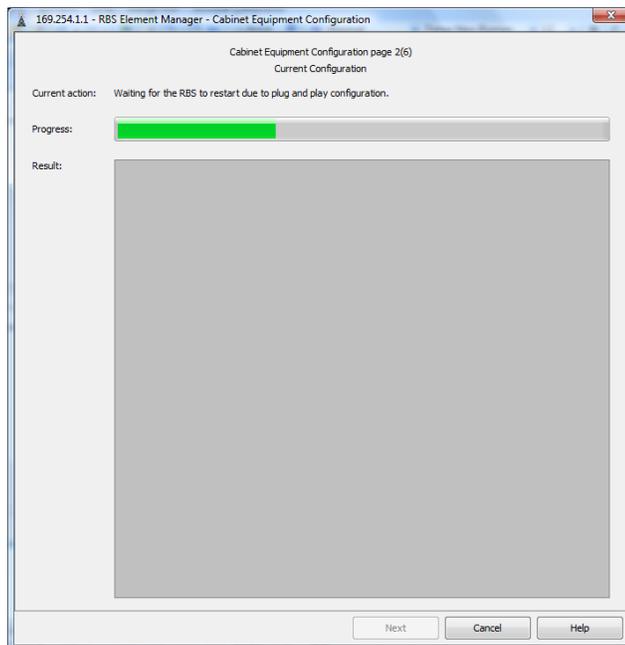


[<http://1.bp.blogspot.com/-J44kcG324Ss/VPoNI9tTHoI/AAAAAAAAABPA/4nq2IYnOCLI/s1600/image045.png>]



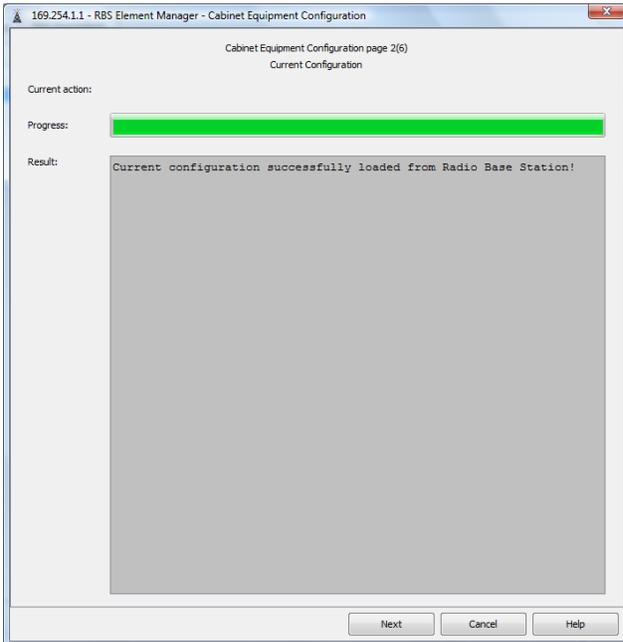
[<http://3.bp.blogspot.com/-LbhWfHrWB5Y/VPoNm3OA7NI/AAAAAAAAABPY/hD1ugsZpPvg/s1600/image047.png>]

Since we are running the wizard manually click Next. The RBS will proceed with a restart and it is a normal behaviour. Wait for the restart to complete.



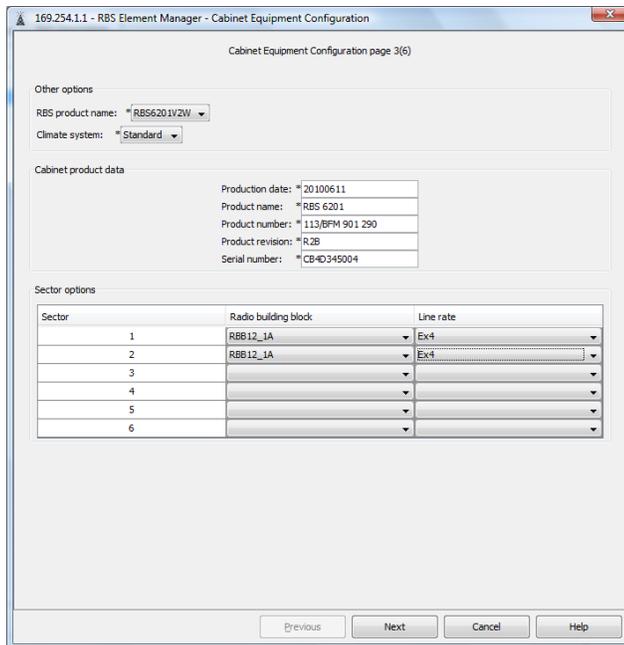
[http://3.bp.blogspot.com/-v4MYkvjS_jA/VPoNnVjWozI/AAAAAAAAABQE/QxNMBdzhS3I/s1600/image049.png]

Once the restart is completed, you will see a screen as mentioned below. Click Next



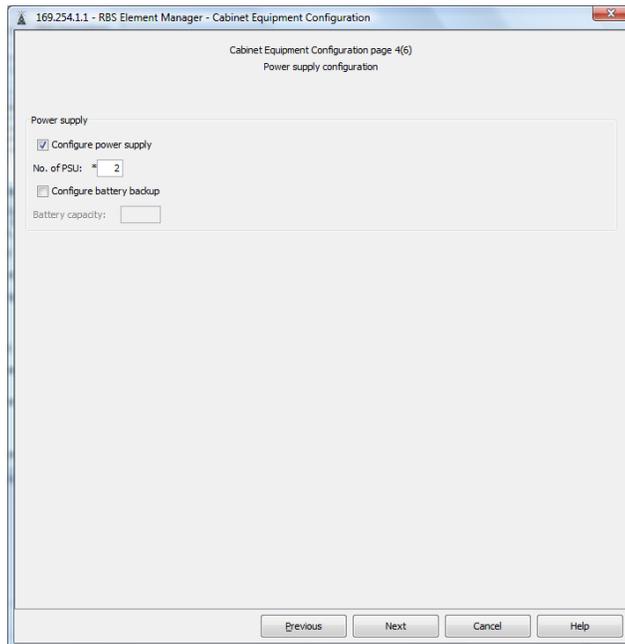
[<http://2.bp.blogspot.com/-7qLXkLAihDs/VPoNn-mMHYI/AAAAAAAAABPw/AEr5aQ2I0oQ/s1600/image051.png>]

In the next screen you will select the RBS cabinet type, key in the cabinet information and select the Radio Building blocks for the sectors. We will be using the radio building block RBB12_1A. In this example we will be configuring two sectors. Click next once done.



[http://2.bp.blogspot.com/-GX9C5G_aam8/VPoNozu_ABI/AAAAAAAAABP4/aXU1ZZwBk1Y/s1600/image053.png]

In the next page you will see the power supply and the battery configuration. Key in the number of PSU's and the battery backup in Ampere Hour if applicable. Click next once done.



169.254.1.1 - RBS Element Manager - Cabinet Equipment Configuration

Cabinet Equipment Configuration page 4(5)
Power supply configuration

Power supply

Configure power supply

No. of PSU:

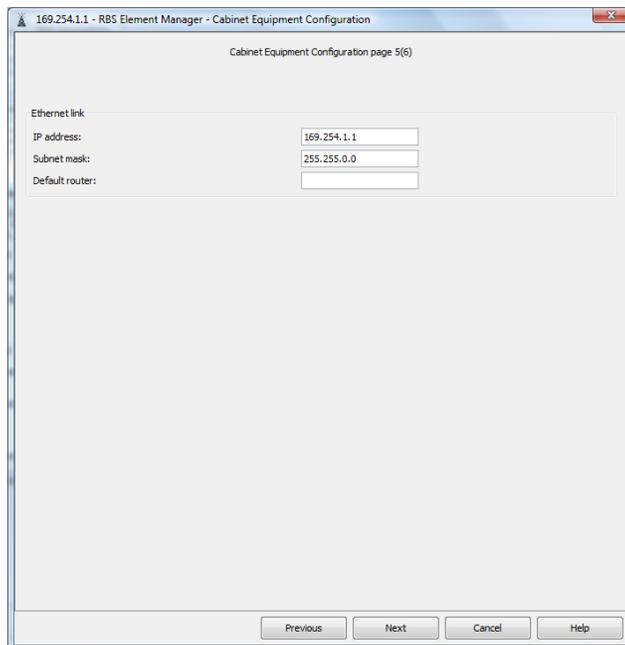
Configure battery backup

Battery capacity:

Previous Next Cancel Help

[<http://4.bp.blogspot.com/-bxpswD84pZg/VPoNqGOhoOI/AAAAAAAAABQY/jIFPk0RieFA/s1600/image055.png>]

The next page shows the Local maintenance IP address and the subnet mask. The default IP address for the RBS is 169.254.1.1 and netmask is 255.255.0.0. Click next once done.



169.254.1.1 - RBS Element Manager - Cabinet Equipment Configuration

Cabinet Equipment Configuration page 5(5)

Ethernet link

IP address:

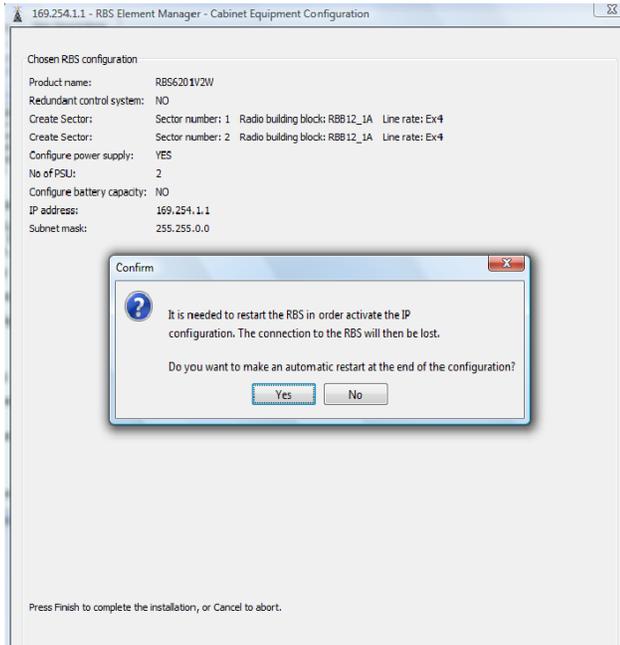
Subnet mask:

Default router:

Previous Next Cancel Help

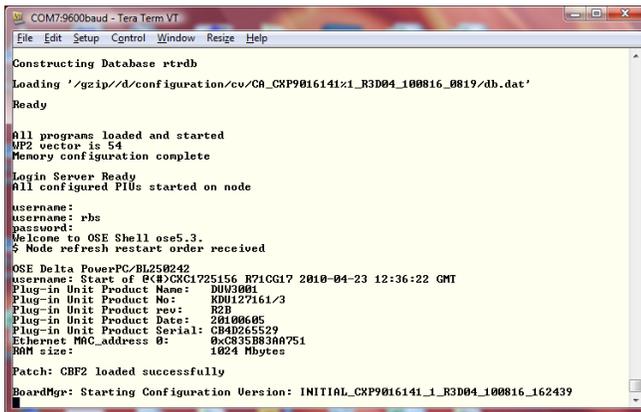
[<http://1.bp.blogspot.com/-G-v6o0imwp4/VPoNqTRLFxI/AAAAAAAAABQU/5E0bueehlec/s1600/image057.png>]

Please confirm the parameters and select the option to restart the RBS after cabinet equipment configuration.

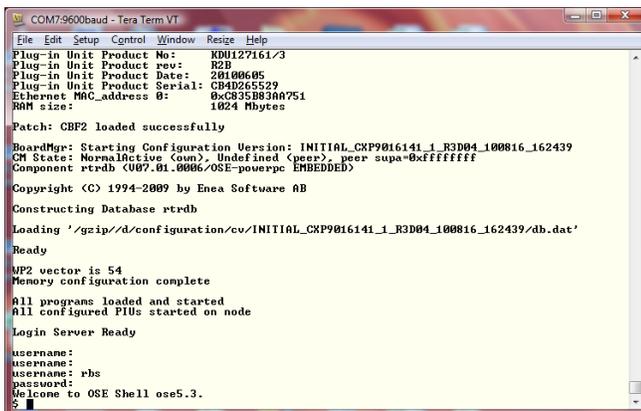


[<http://2.bp.blogspot.com/-yGIR5bE43uQ/VPoNspgczKI/AAAAAAAAABQ4/ayPI7S9UrL4/s1600/image059.png>]

Observe in the Teraterm that the RBS is starting up in the Initial CV



[<http://2.bp.blogspot.com/-UAIvpRbGURw/VPoNtAFBxpI/AAAAAAAAABRM/EiLcci4Us2Y/s1600/image061.png>]



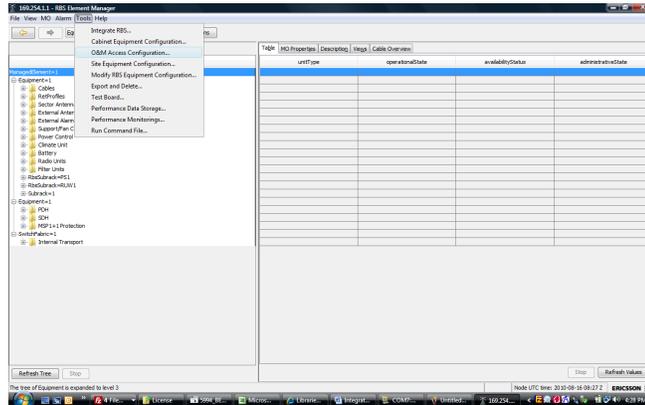
[<http://1.bp.blogspot.com/>]

[V5lvrX1nFUw/VPoTMkK5b0I/AAAAAAAAABSE/kYPy7Z-iY1Q/s1600/image063.png](http://1.bp.blogspot.com/-V5lvrX1nFUw/VPoTMkK5b0I/AAAAAAAAABSE/kYPy7Z-iY1Q/s1600/image063.png)

3.5. Run OAM Wizard

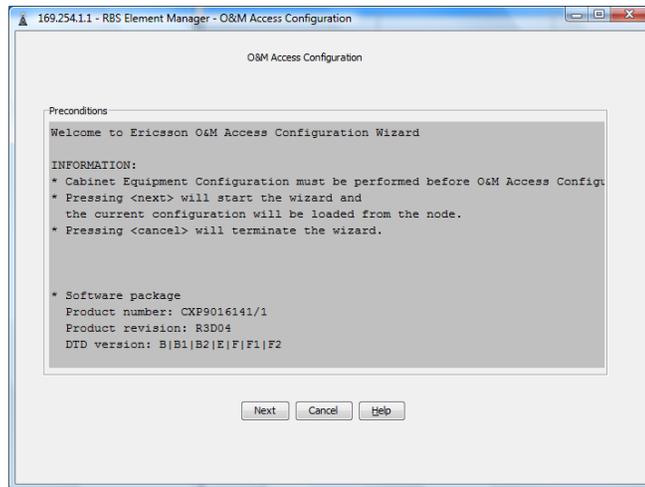
Now that the Cabinet equipment configuration is completed, we will run the 2_OAM_Script.xml through the OAM Access Configuration Wizard. This will configure OAM IP address, the OAM VLAN, the OAM Gateway , OAM Subnet mask, the Iub IP address(User Plane/ Control Plane IP), the Iub VLAN, the Iub Gateway and the Iub subnet mask. In addition to this we will also define the server IP addresses specific to Singtel.

To run the OAM wizard, from the tools menu select OAM access configuration.



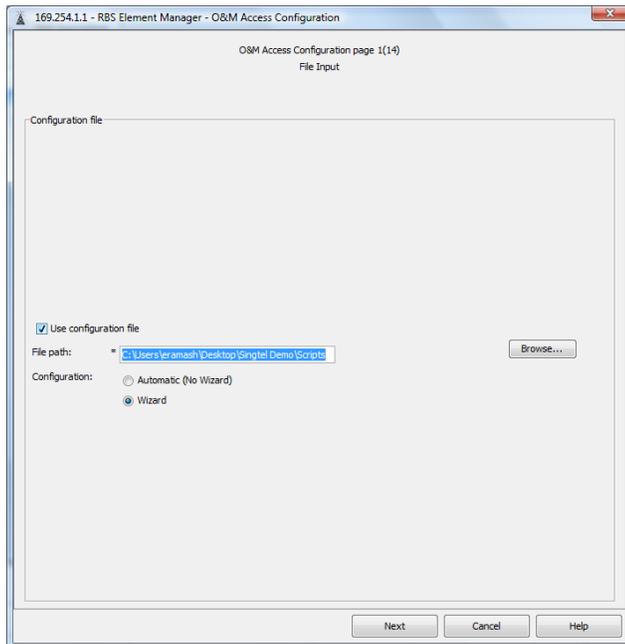
[\[http://1.bp.blogspot.com/-cQBLtxqnsy0/VPoTNwMAiAI/AAAAAAAAABSU/IALZyh8a4lw/s1600/image065.png\]](http://1.bp.blogspot.com/-cQBLtxqnsy0/VPoTNwMAiAI/AAAAAAAAABSU/IALZyh8a4lw/s1600/image065.png)

You will see the screen below.

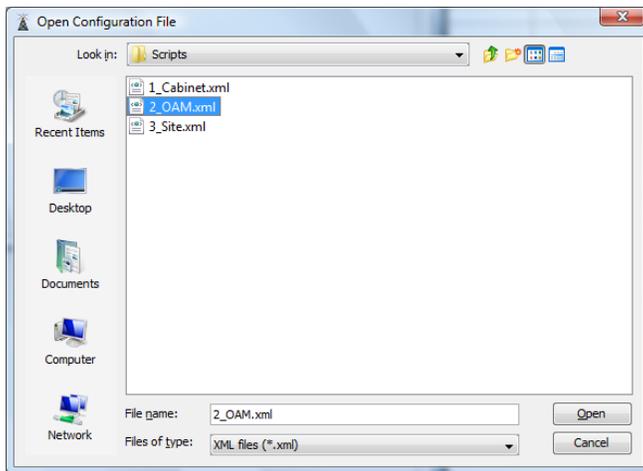


[\[http://3.bp.blogspot.com/-PBpu2zhUFO0/VPoTOi6Rdml/AAAAAAAAABSU/K_tlOmABJp0/s1600/image067.png\]](http://3.bp.blogspot.com/-PBpu2zhUFO0/VPoTOi6Rdml/AAAAAAAAABSU/K_tlOmABJp0/s1600/image067.png)

Since we will be using the **2_OAM_Script.xml** select Use Configuration file and browse the file from the folder where the OAM file is stored.

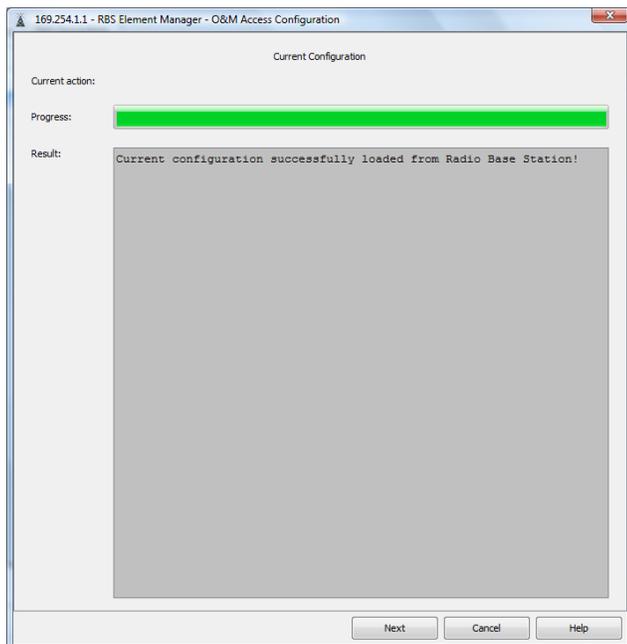


[<http://2.bp.blogspot.com/-d31nMhp3hsA/VPoTPdmPBil/AAAAAAAAABSo/4t1HhAAeZ8I/s1600/image069.png>]



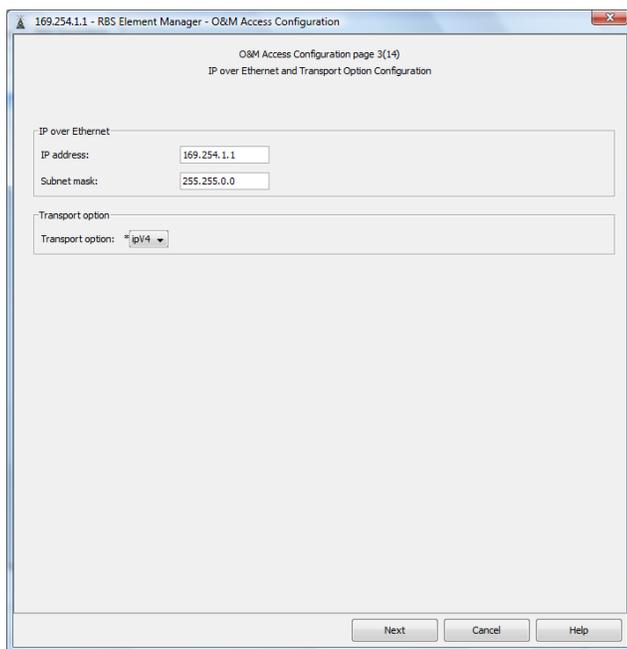
[<http://3.bp.blogspot.com/-QkHJ6-yoEmQ/VPoTQA0f3WI/AAAAAAAAABS8/V6RgsUo4T90/s1600/image071.png>]

Once the current configuration is loaded, click next.



[<http://4.bp.blogspot.com/-qLmyUM0Bh5Q/VPoTQsGNnNI/AAAAAAAAABTE/gEQIhBj834g/s1600/image073.png>]

The following screens show the parameters that have been defined through our scripts.
This screen shows the Local Maintenance IP address and the subnet mask.



[http://2.bp.blogspot.com/_P_0jrzMusQ/VPoTRgFhBhI/AAAAAAAAABTk/AnbwUWDeZV8/s1600/image075.png]

The next screen shows the OAM IP, OAM VLAN, OAM Gateway and OAM subnet mask configuration. Also we select the Transmission type (TNB). TNB is used for Optical Gigabit Ethernet through SFP and is required for IPRAN sites.

169.254.1.1 - RBS Element Manager - O&M Access Configuration

O&M Access Configuration page 4(10)
IP Host Link Configuration

GigaBIEthernet
GigaBIEthernet port: * TNB

IP Host Link
IP address: * 10.251.88.68

IP Interface
Subnet mask: * 255.255.255.224
Default router 0: * 10.251.88.65
VID: 150

Next Cancel Help

[<http://3.bp.blogspot.com/->

[TSq0cl9oEzU/VPoTSYSEC5I/AAAAAAAAABTc/bVV3rc_Heco/s1600/image077.png](http://3.bp.blogspot.com/-TSq0cl9oEzU/VPoTSYSEC5I/AAAAAAAAABTc/bVV3rc_Heco/s1600/image077.png)]

This screen shows the Iub IP address, Iub VLAN, Iub Gateway, Iub Subnet mask and the IP Sync Ref IP addresses.

169.254.1.1 - RBS Element Manager - O&M Access Configuration

O&M Access Configuration page 5(10)
IP Sync Configuration

IP Access Host ET
IP address: * 10.251.88.39

IP Interface
Subnet Mask: * 255.255.255.240
Default router 0: * 10.251.88.33
VID: 950

IP Sync Ref

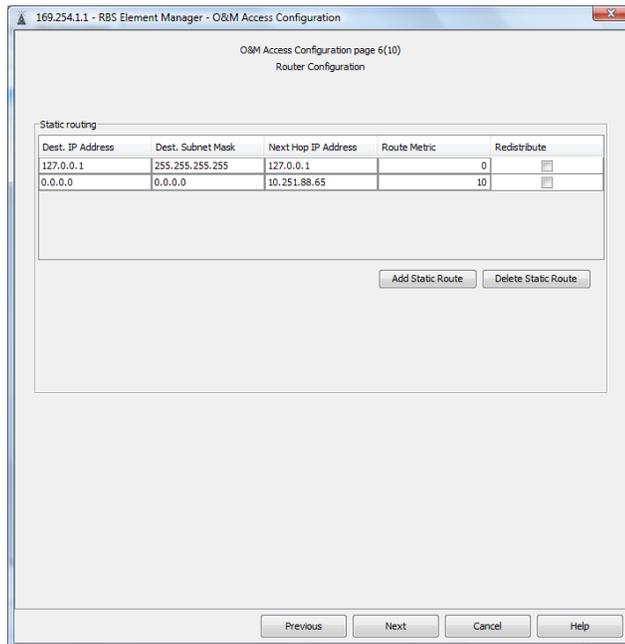
ID	NTP server IP address
1	10.251.88.3
2	10.251.88.4

Previous Next Cancel Help

[<http://3.bp.blogspot.com/->

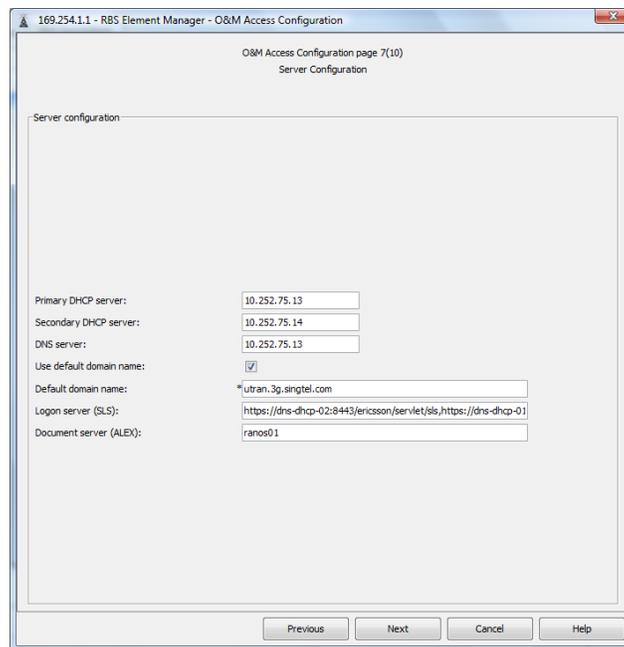
[JR40yvecNO8/VPoTTVvb0YI/AAAAAAAAABTo/2qTcCiKNC18/s1600/image079.png](http://3.bp.blogspot.com/-JR40yvecNO8/VPoTTVvb0YI/AAAAAAAAABTo/2qTcCiKNC18/s1600/image079.png)]

The next screen shows the next HOP IP address which is required for OAM access. The next hop IP address will be the OAM Gateway IP address.



[http://2.bp.blogspot.com/-dhr2T_vAsWs/VPoTUOH5t9I/AAAAAAAAABT4/5EB6nlDhapY/s1600/image081.png]

The next screen shows the Server configuration inside the Singtel network and they are standard values. Click next once done.



[<http://2.bp.blogspot.com/-906IBWnr8XY/VPoTUaaHBII/AAAAAAAAABUQ/slxO28breXA/s1600/image083.png>]

The next screen shows the NTP servers for the time setting in the RBS.

169.254.1.1 - RBS Element Manager - O&M Access Configuration

O&M Access Configuration page 8(10)
Time Setting

NTP primary server

Server address: 10.252.75.13
Service active:

NTP secondary server

Server address: 10.252.75.14
Service active:

Time

2010-08-16 16:29:39+08:00 Set Time

Time:

Day: 16
Month: Aug
Year: 2010

Daylight saving time:

Local time zone: CTT

Previous Next Cancel Help

[http://3.bp.blogspot.com/-nzyb38H8t5s/VPoTWf-usNI/AAAAAAAAABUo/_YKTVFibOw/s1600/image085.png]

The next screen shows the Network Synchronization available. We have configured two IP Sync Ref's in the RBS. Therefore we will see 2 entries here.

169.254.1.1 - RBS Element Manager - O&M Access Configuration

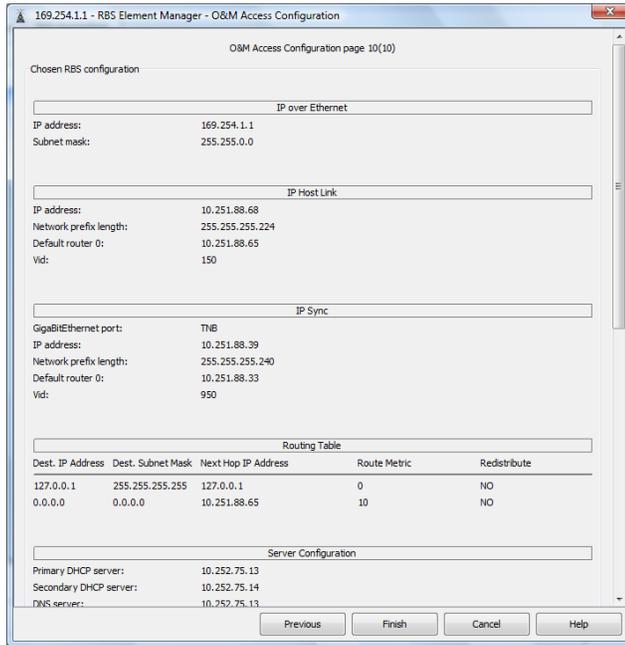
O&M Access Configuration page 9(10)
Network Synchronization

Priority	Slot	Board	Port
1	1	DUW	7
2	1	DUW	8
3			
4			
5			
6			
7			
8			

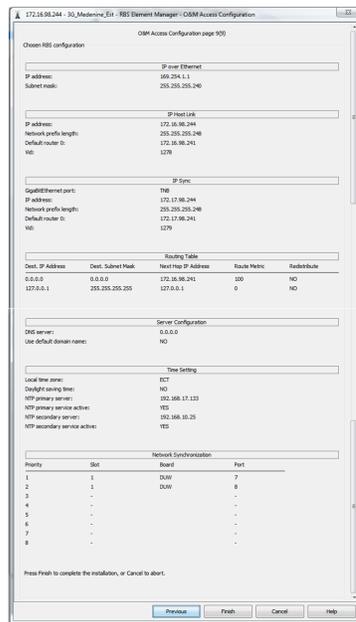
Previous Next Cancel Help

[http://1.bp.blogspot.com/-Gz1f_cuKtp0/VPoTWtyRral/AAAAAAAAABUw/-r3VGvRegTA/s1600/image087.png]

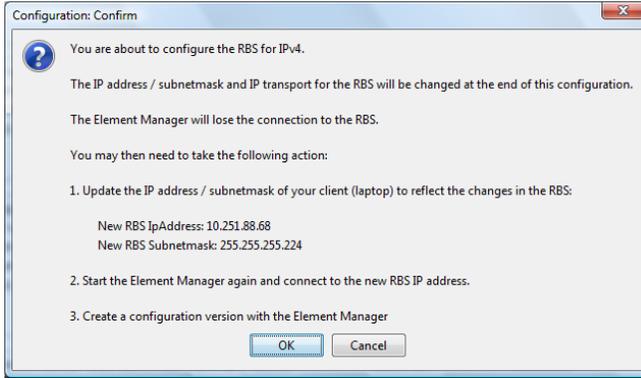
Confirm the parameters that have been entered in the OAM script. Click Finish



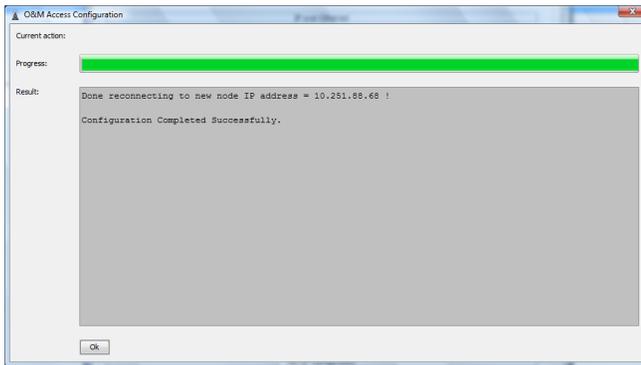
[<http://2.bp.blogspot.com/-wxbM1JVl9kE/VPoTXVrWZLI/AAAAAAAAABVM/nna0eNTic3Q/s1600/image089.png>]



[<http://2.bp.blogspot.com/-pCrTYuuYpQA/VPoTZsM0Y6I/AAAAAAAAABVY/dUYOcmdAZk/s1600/image091.png>]



[<http://1.bp.blogspot.com/-UKP77wpvbml/VPoTaT9bsYI/AAAAAAAAABVg/J--YMtJEpX0/s1600/image093.png>]



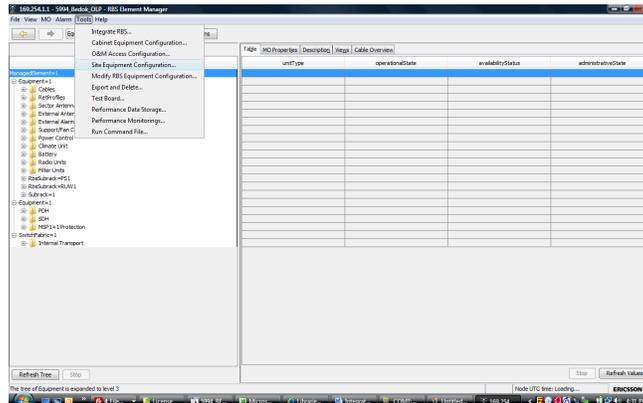
[<http://1.bp.blogspot.com/-UCbGdLbrID8/VPoTbIlvxrl/AAAAAAAAABWA/kXHwskSHXYo/s1600/image095.png>]

3.6. Run Site Equipment Configuration

The next step is to run the Site Equipment configuration. We will be running 3_Site_Equipment_script.xml.

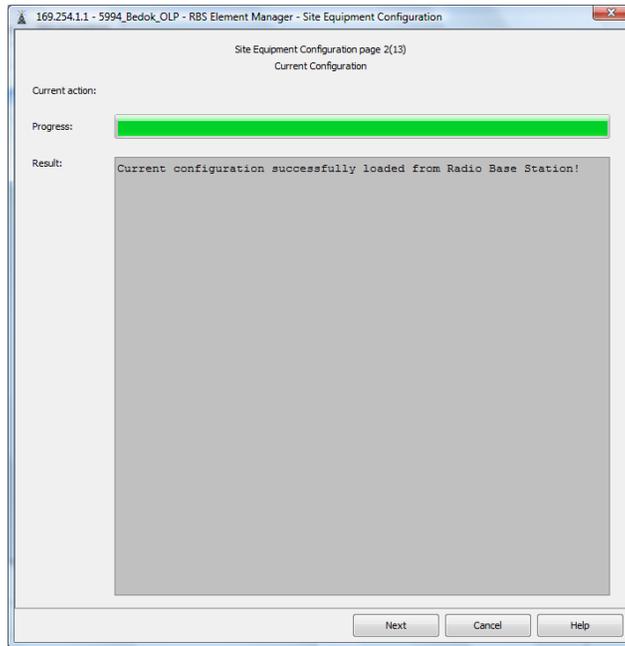
The site equipment configuration defines the site name, number of carriers/sector, defines the external equipment such as ASC, and the feeder cable settings.

To invoke the Site equipment configuration, go to Tools → Site Equipment configuration.



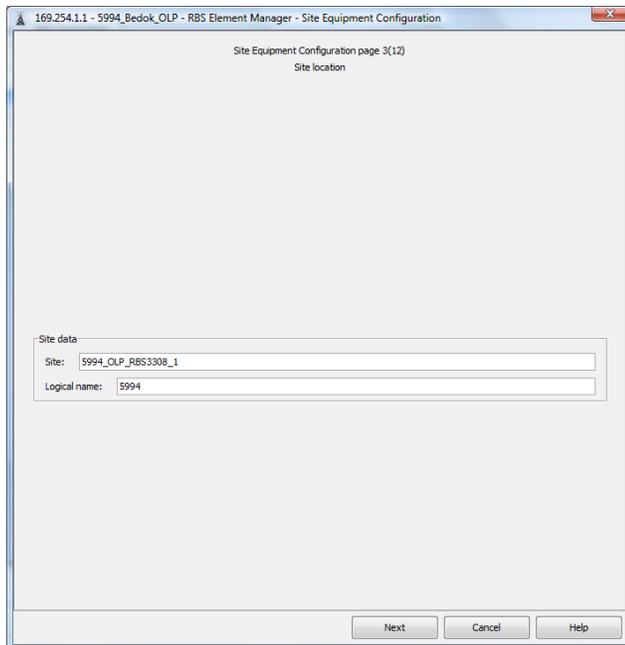
[<http://1.bp.blogspot.com/-2Fv33VM2Ekw/VPoTcPvE7jI/AAAAAAAAABWE/4nynSs1qyel/s1600/image097.png>]

Select the Site equipment file **3_Site_Equipment.xml** and
Click next



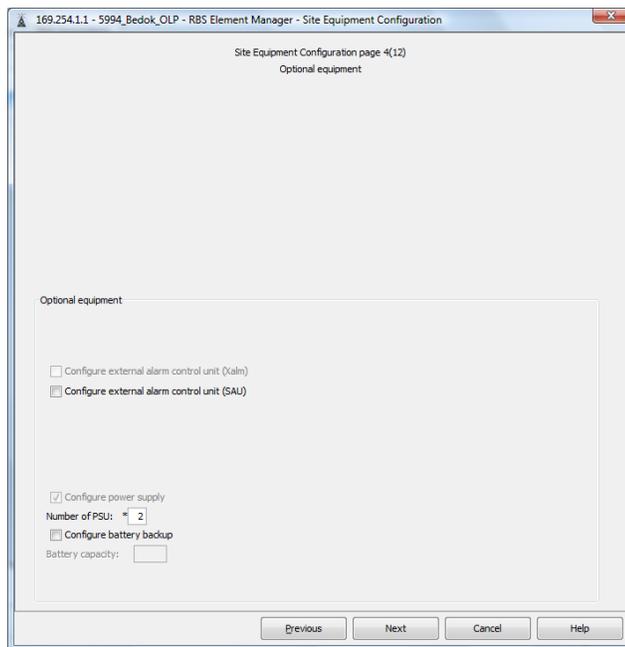
[http://4.bp.blogspot.com/-8untc0ElmHY/VPoTc3V1CeI/AAAAAAAABWQ/WvTXHf_beFM/s1600/image099.png]

This screen shows the Site name and the logical name.



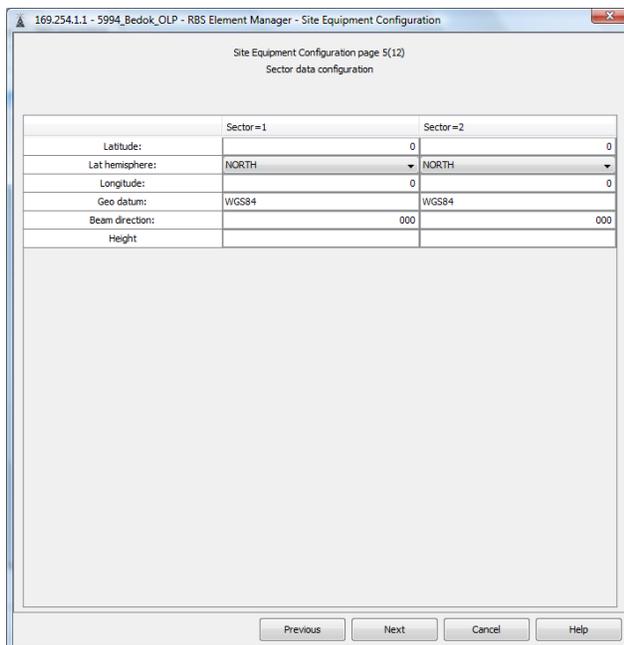
[http://2.bp.blogspot.com/-UjEb3b3osxE/VPoTdR_7Yml/AAAAAAAABWY/d9N9PYDboZw/s1600/image101.png]

The next screen shows the SAU and the PSU configuration. SAU is currently used only for the 6102 sites.



[<http://2.bp.blogspot.com/-IyWhjnvYNKY/VPoTeGdLOGI/AAAAAAAAABWw/mGt86KSpHJY/s1600/image103.png>]

The next screen shows the Sector Data info including the latitude and longitude.



[http://2.bp.blogspot.com/-MNGrGO-Wu44/VPoTe7Bn-_I/AAAAAAAAABW0/7CLXZumyLns/s1600/image105.png]

The next screen shows the Carrier configuration on per sector basis.

169.254.1.1 - 5994_Bedok_OLP - RBS Element Manager - Site Equipment Configuration

Site Equipment Configuration page 6(12)
RBS Local cell configuration

Sector 1

	Cell=1	Cell=2	Cell=3	Cell=4
Create cell:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local cell ID:	59941	59944	-	-
Number of TX branches:	1	1	-	-
Cell range (m):	35000	35000	-	-

Sector 2

	Cell=1	Cell=2	Cell=3	Cell=4
Create cell:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local cell ID:	59942	59945	-	-
Number of TX branches:	1	1	-	-
Cell range (m):	35000	35000	-	-

Previous Next Cancel Help

[[http://3.bp.blogspot.com/-](http://3.bp.blogspot.com/-ZQ1BPIY3HsM/VPoTfkcgeel/AAAAAAAAABXE/yWsh4WspZFo/s1600/image107.png)

[ZQ1BPIY3HsM/VPoTfkcgeel/AAAAAAAAABXE/yWsh4WspZFo/s1600/image107.png](http://3.bp.blogspot.com/-ZQ1BPIY3HsM/VPoTfkcgeel/AAAAAAAAABXE/yWsh4WspZFo/s1600/image107.png)]

The next screen shows the ASC configuration.

169.254.1.1 - 5994_Bedok_OLP - RBS Element Manager - Site Equipment Configuration

Site Equipment Configuration page 7(12)
Sector antenna configuration

Sector antenna configuration

	Sector=1	Sector=2
Antenna type:	1	1
TMA type:	NONE	NONE
Band:	1	1
RET type:	NONE	NONE
Mechanical tilt (deg):	0	0
Electrical tilt (deg):	-	-

TMA configuration

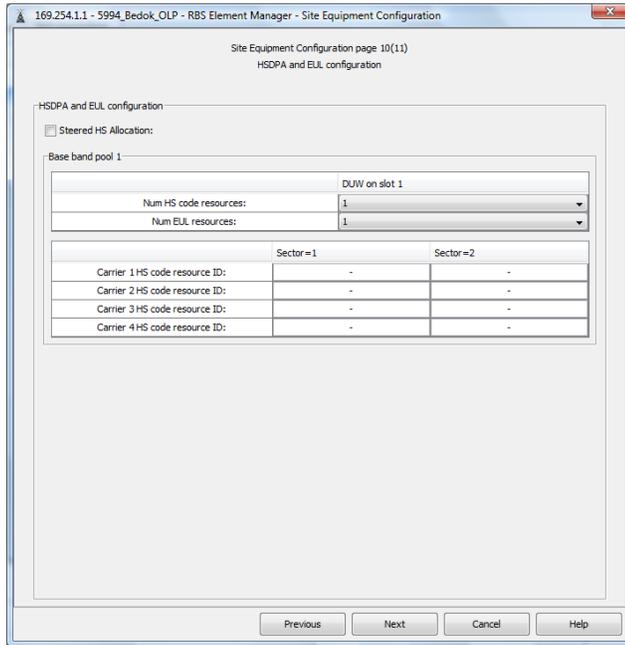
	Sector=1	Sector=2
Internal power:	<input type="checkbox"/>	<input type="checkbox"/>
DL traffic delay A (0.1 ns):	-	-
DL traffic delay B (0.1 ns):	-	-
DL attenuation (0.1 dB):	-	-
UL gain (0.1 dB):	-	-
UL traffic delay A (0.1 ns):	-	-
UL traffic delay B (0.1 ns):	-	-
TMA degraded supported:	<input type="checkbox"/>	<input type="checkbox"/>
Current low lim A (mA):	-	-
Current low lim B (mA):	-	-
Current high lim A (mA):	-	-
Current high lim B (mA):	-	-
DL attenuation (0.1 dB):	-	-
DL traffic delay (0.1 ns):	-	-
UL traffic delay (0.1 ns):	-	-

Previous Next Cancel Help

[[http://2.bp.blogspot.com/-](http://2.bp.blogspot.com/-eeDnNImpyRo/VPoTgz_QBKI/AAAAAAAAABXg/2GAHf3dh3eU/s1600/image109.png)

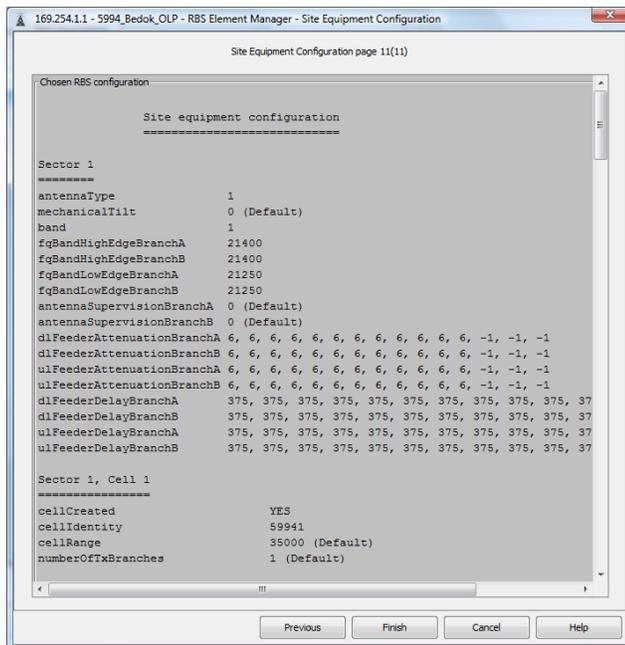
[eeDnNImpyRo/VPoTgz_QBKI/AAAAAAAAABXg/2GAHf3dh3eU/s1600/image109.png](http://2.bp.blogspot.com/-eeDnNImpyRo/VPoTgz_QBKI/AAAAAAAAABXg/2GAHf3dh3eU/s1600/image109.png)]

The next screen defined the band at which the RU's will operate.



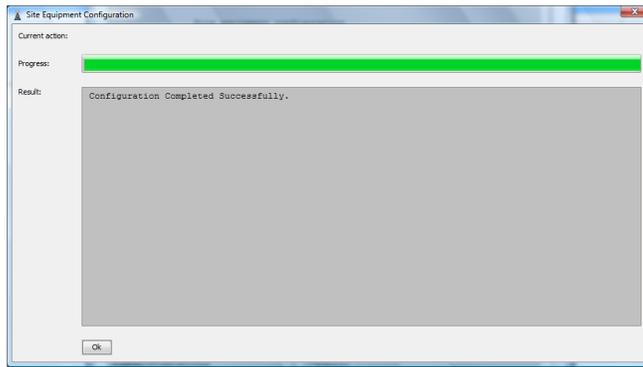
[http://4.bp.blogspot.com/-zv_EM2VotZ0/VPoTjmfG6EI/AAAAAAAAABYQ/XvV_vwK-Njc/s1600/image115.png]

Confirm the parameters in the next screen by clicking Finish.



[<http://1.bp.blogspot.com/-pkXhbJiRygv/VPoTIhpYzel/AAAAAAAAABYk/9OQsjnQpQbA/s1600/image117.png>]

Once the Site Equipment configuration is done, you will see the following screen.

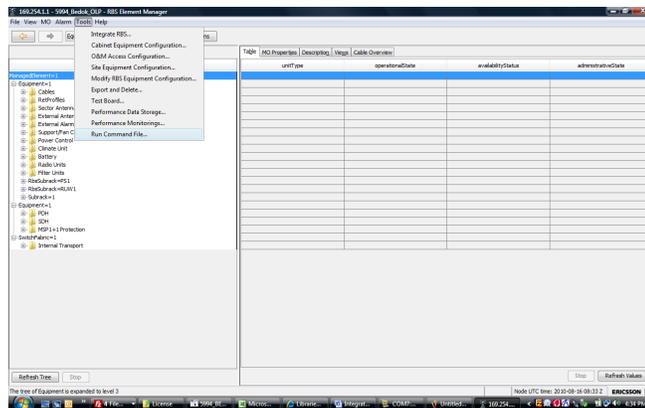


[<http://2.bp.blogspot.com/-SKf0X9->

[g96A/VPoTm0ysRgI/AAAAAAAAABY8/kz3IA02Pqf0/s1600/image119.png](http://2.bp.blogspot.com/-SKf0X9-g96A/VPoTm0ysRgI/AAAAAAAAABY8/kz3IA02Pqf0/s1600/image119.png)]

3.7. Run Iub Transport script

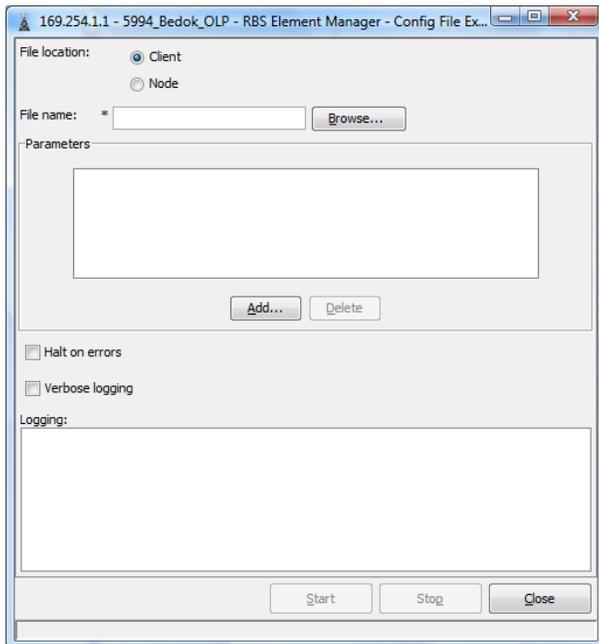
Now we will proceed to run the 6_Iub_script.mo. This will define the Iub link towards the RNC
From the tools menu select Run Command file



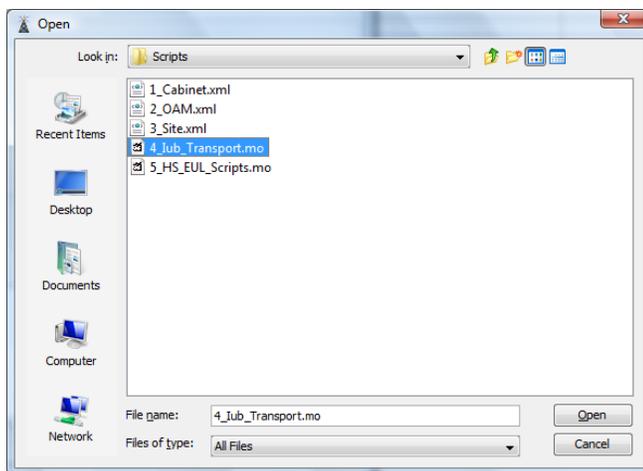
[<http://1.bp.blogspot.com/->

[vY4i1EwifkY/VPoToXvxV_I/AAAAAAAAABZI/pjx2cYC_adQ/s1600/image121.png](http://1.bp.blogspot.com/-vY4i1EwifkY/VPoToXvxV_I/AAAAAAAAABZI/pjx2cYC_adQ/s1600/image121.png)]

From the screen below select the Iub script by clicking Browse.

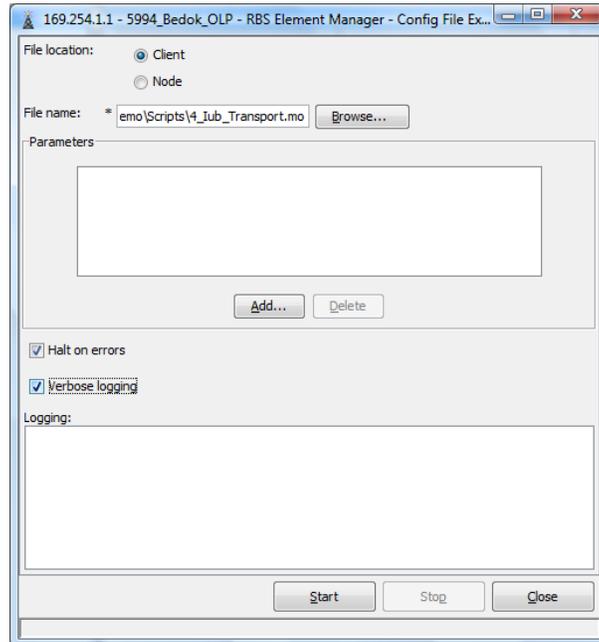


[http://2.bp.blogspot.com/-mf0ygt-J_cl/VPoTpq3_pII/AAAAAAAAABZY/hZoxG93V-7A/s1600/image123.png]



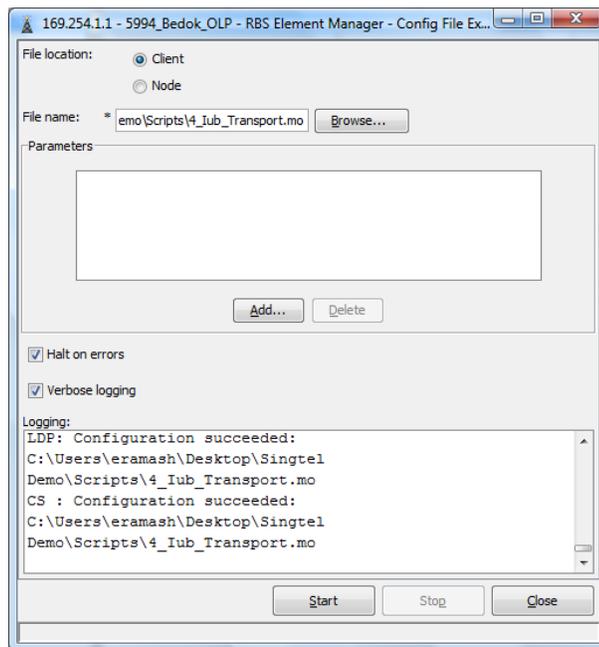
[http://1.bp.blogspot.com/-cIuoXhgrh_k/VPoTqm6TweI/AAAAAAAAABZo/TioGh7tOiGk/s1600/image125.png]

Make sure you select “Halt on Errors” and Verbose logging” before clicking the Start button.



[http://4.bp.blogspot.com/-9WvCwpQt4o/VPoTr_57LUI/AAAAAABZ4/W6rH6CC6mt4/s1600/image127.png]

Once completed you will see the following messages.



[<http://4.bp.blogspot.com/-V7RLsxPAqjw/VPoTsK9achI/AAAAAABZ8/vwKAfrxh1f0/s1600/image129.png>]

3.8. Activating Integration Unlock

We assume that during RBS integration, we do not have the License Key file. In the event of not having the LKF, we can activate a feature called “Integration Unlock”. This feature is conceptually similar to the “Emergency Unlock” feature. All the RBS software and hardware licenses will be available for a maximum

period of 7 days. The advantage of the feature is that we need to touch the Emergency Unlock feature this reserving it for emergency purposed and at the same time have the same functionality.

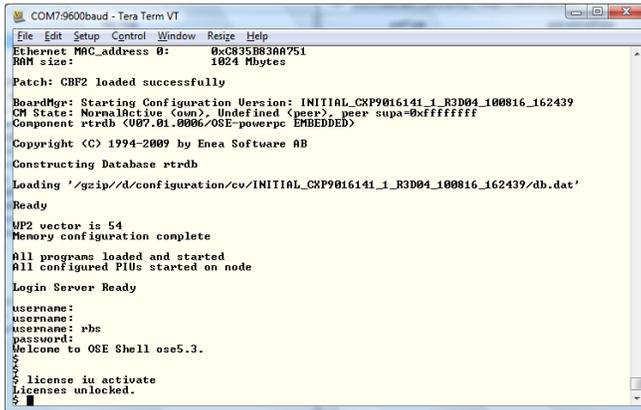
The command to activate integration unlock (to be done at Teraterm) is

```
$ license iu activate
```

The command to check the status of Integration unlock (to be done at Teraterm) is

```
$ license iu status
```

Please see the screenshots below for details.



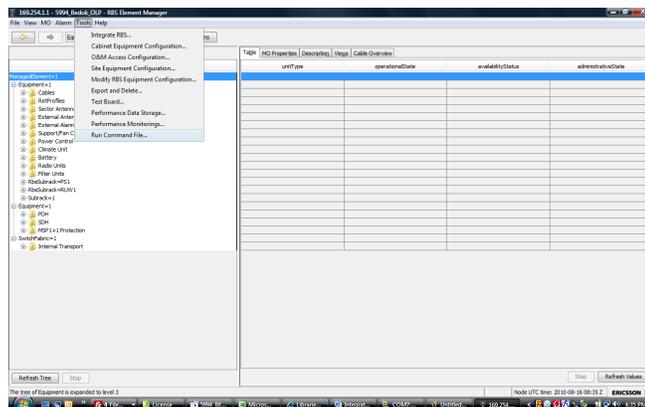
```
COM7-9600baud - Tera Term VT
File Edit Setup Control Window Resize Help
Ethernet MAC_address 0: 0xC835B83AA751
RAM size: 1024 Mbytes
Patch: CBF2 loaded successfully
BoardMgr: Starting Configuration Version: INITIAL_CXP9016141_1_R3D04_100816_162439
CM State: NormalActive (own), Undefined (peer), peer supa=0xffffffff
Component rtrdb <007.01.0006/0SE-powerpc EMBEDDED>
Copyright (C) 1994-2009 by Enea Software AB
Constructing Database rtrdb
Loading '/gisp/d/configuration/cv/INITIAL_CXP9016141_1_R3D04_100816_162439/db.dat'
Ready
WP2 vector is 54
Memory configuration complete
All programs loaded and started
All configured PIUs started on node
Login Server Ready
username:
username: rbc
password:
Welcome to OSE Shell ose5.3.
$
$
$ license iu activate
Licenses unlocked.
```

[<http://3.bp.blogspot.com/-x2212-5Ni10/VPoTt0rDKqI/AAAAAAAAABag/dQexBb7qpxc/s1600/image131.png>]

5Ni10/VPoTt0rDKqI/AAAAAAAAABag/dQexBb7qpxc/s1600/image131.png]

3.9. Run HS/EUL script

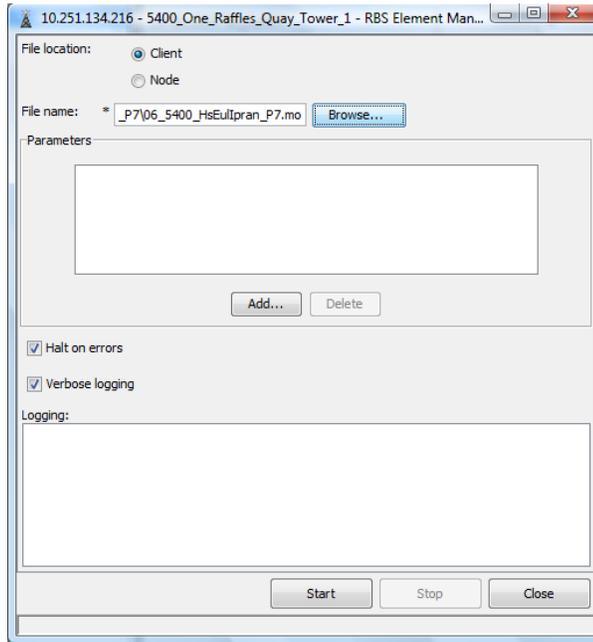
This script is required for the HS/EUL features to work properly. It is an .mo script and to run it go to Tools → Run Command file



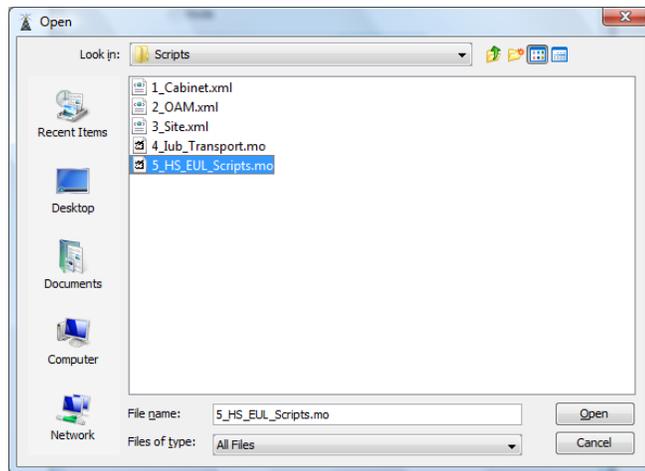
[<http://1.bp.blogspot.com/-nN74Gag4ZJo/VPoTwP5buel/AAAAAAAAABaw/WARw12G9jcw/s1600/image133.png>]

nN74Gag4ZJo/VPoTwP5buel/AAAAAAAAABaw/WARw12G9jcw/s1600/image133.png]

Browse for the HS/EUL script.

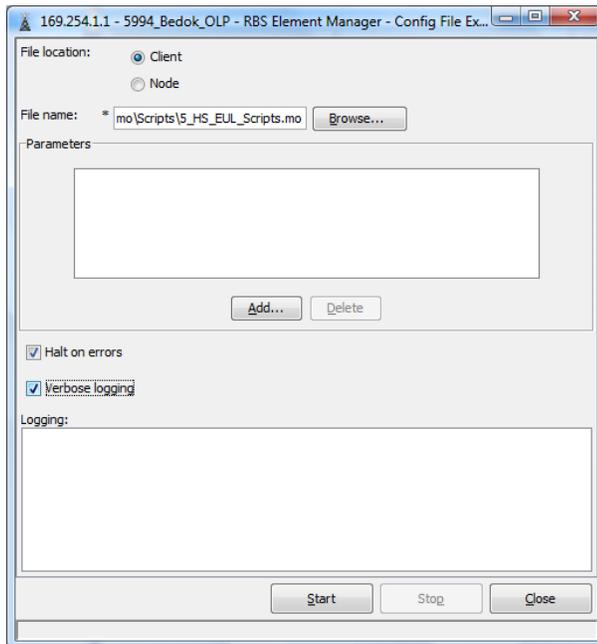


[<http://2.bp.blogspot.com/-TP2Rf0JkmlI/VPoTw8sPuTI/AAAAAAAAABbI/jDCUtbGMwXM/s1600/image135.png>]

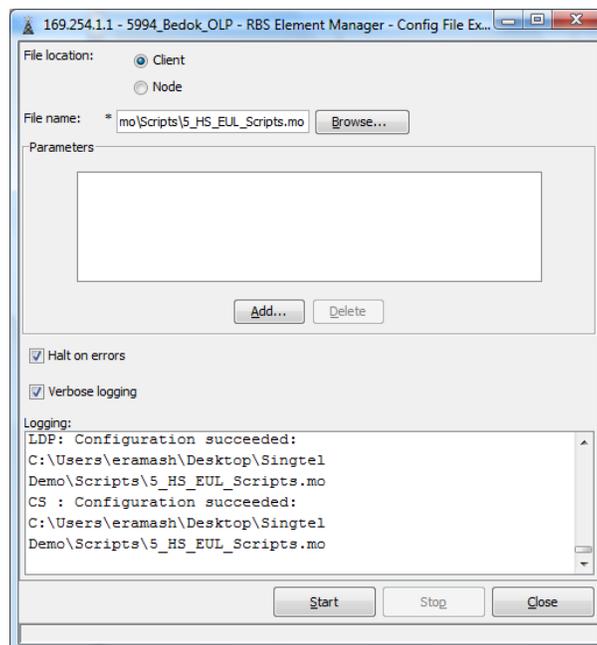


[<http://4.bp.blogspot.com/-De98AQ7QIvw/VPoTxdwMtLI/AAAAAAAAABbA/tO06j55c3ws/s1600/image137.png>]

Click on "Halt on Errors" and "Verbose Logging" and click Start. You should



[http://2.bp.blogspot.com/-UxKFANVEaVY/VPoTyKzk_ml/AAAAAAAAABbQ/JrWDXnqT2K8/s1600/image139.png]



[http://4.bp.blogspot.com/-9hLdUmqMDks/VPoTy3e8A_I/AAAAAAAAABbc/CHeS1zM7cFc/s1600/image141.png]

3.10. Changing the RUW power to 60 Watts

Most of Singtel RBS sites require that the each carrier supports 30 Watts. Since we have configured 2 carriers per RUW, we will have to set the total power of RUW to 60 Watts. Thus each carrier will have a power of 30 Watts.

We will have to set the power for all the RUW's in the RBS.

From the MOM view in the Element Managed, browse to the following path

ManagedElement -> Equipment->RbsSubrack->RbsSlot-> AuxPlugInUnit>RruDeviceGroup->TpaDeviceSet->TpaDevice

In the MO properties window set

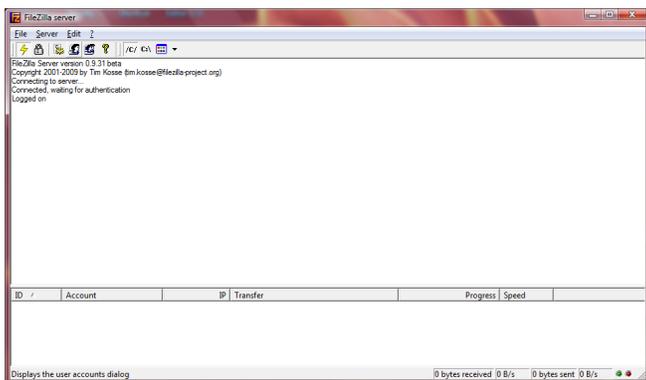
maxTotalOutputPower [https://www.blogger.com/null] = **60**

Click on Apply to confirm the settings.

3.11. Installation of the License Key File

After obtaining the License Key File, we will be proceed with LKF installation.

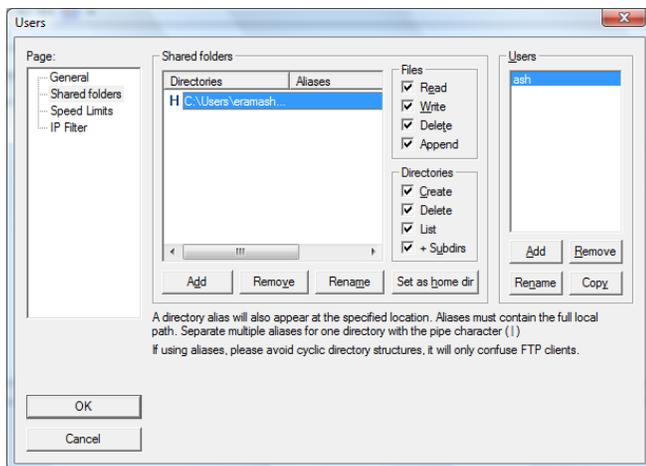
Open the FTP server software in your laptop(such as Filezilla Server)



[http://3.bp.blogspot.com/-JKD--

TOWtIQ/VPoT0ILsv1/AAAAAAAABb0/loG6LT1FGEs/s1600/image143.png]

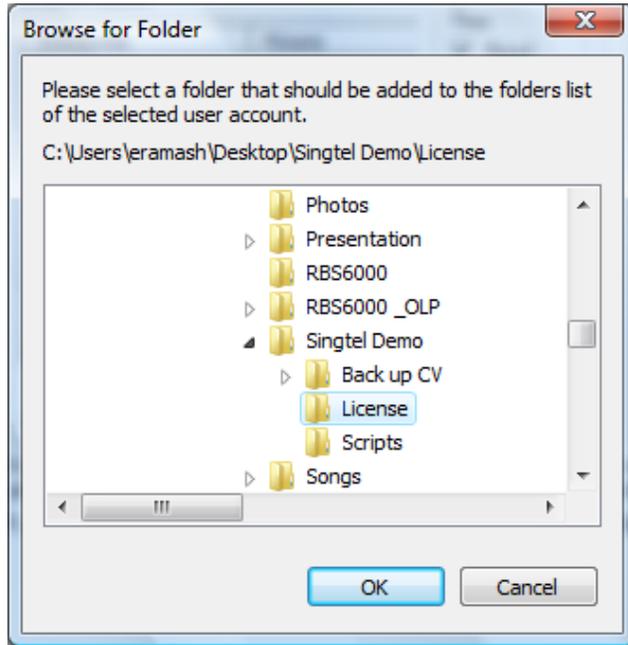
Click on the Users icon



[http://1.bp.blogspot.com/-

Wj81aOrZZaw/VPoT0sxpnaI/AAAAAAAABb8/m_451VMla_c/s1600/image145.png]

Select the folder where the license key file is installed.



[http://4.bp.blogspot.com/-YR-

ixckCd8/VPoT2xYB72I/AAAAAAAAABcY/0tXQrNOVXPA/s1600/image147.png]

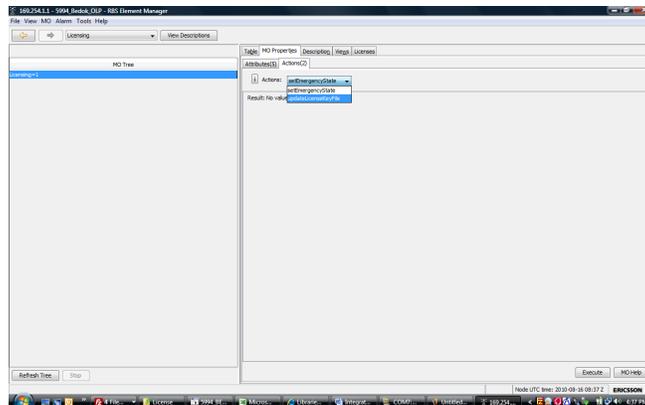
Once the selection of the folder is done, click OK



[http://3.bp.blogspot.com/-

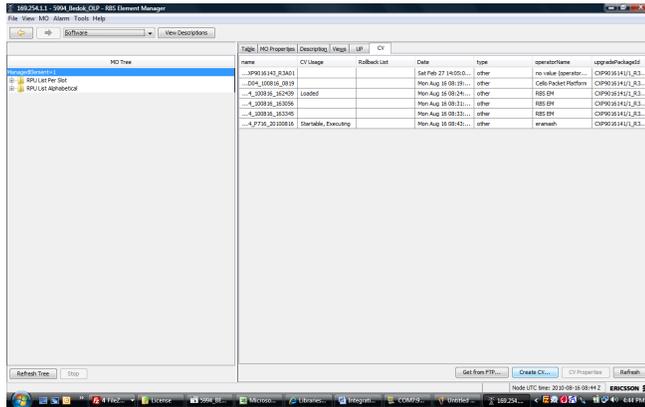
F8wfwJCysHE/VPoT3BApFzI/AAAAAAAAABcg/W1vTzak7QcA/s1600/image149.jpg]

In the Element Manager go to Licensing View. Go to MO properties and select "Update LicenseKey File".

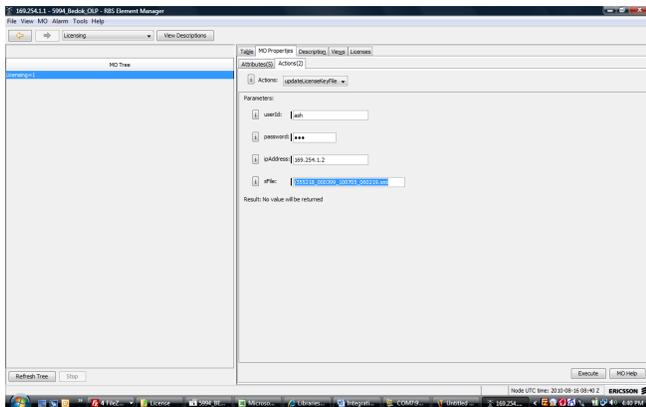


[http://4.bp.blogspot.com/-6sW64rR8IOQ/VPoT309xavi/AAAAAAAAABc0/YVO68CgZ_3o/s1600/image150.png]

Now in the following page, key in the following details of the FTP Server(our Laptop). Username, Password, IP address and the License File Name. It is shown in the screen shot below.



[http://4.bp.blogspot.com/VukVcBgGdAs/VPoT9BrS39I/AAAAAAAAABd0/b9ONaZfm4JA/s1600/image158.png]

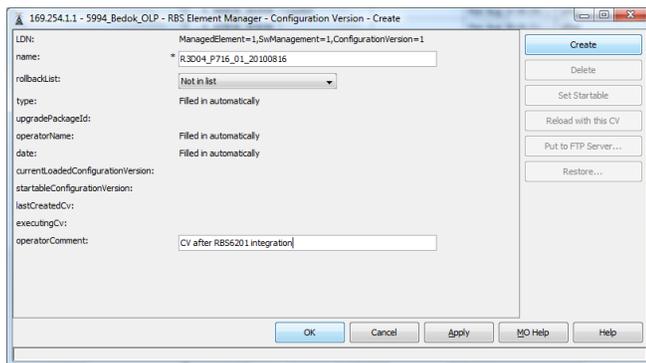


[http://4.bp.blogspot.com/-X2kRhhPWlyE/VPoT4wHW-eI/AAAAAAAAABc4/UL-u__XTPWI/s1600/image152.png]

Once all the details are keyed in click on “Execute”.

3.12. Creation of Configuration Version.

Before proceeding with the creation of CV make sure that there are no alarms in the RBS.

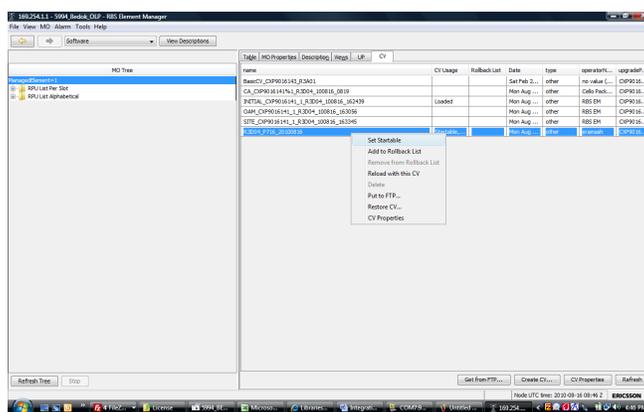


[<http://4.bp.blogspot.com/>-

[KdR2PP3xxqk/VPoT9w76whI/AAAAAAAAABd4/571dJ0W63PI/s1600/image160.png](http://4.bp.blogspot.com/KdR2PP3xxqk/VPoT9w76whI/AAAAAAAAABd4/571dJ0W63PI/s1600/image160.png)]

Once the CV name and the operator comments are keyed in click Create.

Make sure that the created CV is visible in the CV list. If it is not click refresh. Set the CV to startable and restart the RBS with the CV.



[<http://2.bp.blogspot.com/>-7pSnQaIxtjU/VPoT__vu0qI/AAAAAAAAABeU/H9Fp1IXSPDI/s1600/image162.png]

Publié il y a 6th March par [Fares Sel](#)

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