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Abhisek De				
Approved	Checked	Date	Rev	Reference
		21-01-2020	Ver1.0	

MOP of RRU Power Abnormal Alarm (198098472) for ZTE Site

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Activity Description

This activity is for E2E troubleshooting and alarm clearance of RRU Power Abnormal Alarm(198098472)

Attached is the details to be followed. As this need to be followed as guideline.

Alarm Name	RRU Power Abnormal Alarm(198098472)
Alarm Description	RRU output Power is abnormal
Possible Causes – arrange in logical order	1. The hardware of the RRU channel is faulty. 2. The RRU software version is incorrect. 3. The optical fiber link is faulty. 4. The BBU hardware is abnormal or the BBU software version is incorrect.

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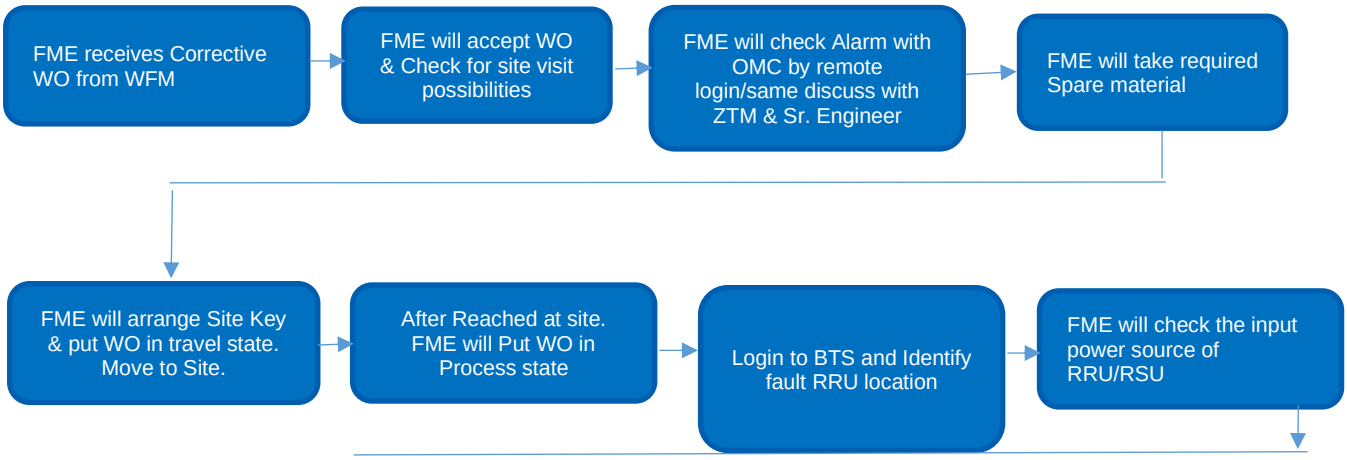
Flow Chart



1. Reset the board according to the rack number/shelf number/slot number in the alarm details.
   Wait for 15 minutes, and check whether the alarm is cleared.
   Yes -> End.
   No -> Step 2.
2. Power off reset the board according to the rack number/shelf number/slot number in the alarm details.
   Wait for 15 minutes, and check whether the alarm is cleared.
   Yes -> End.
   No -> Step 3.
3. Reset the baseband board or the optical interface board that is connected with the RRU where the alarm is located.
   a. Select Configuration Management -> Managed Element -> Device, and double-click Device. The Physical View and Topology View are displayed. Check the rack, shelf and slot of the baseband board or the optical interface board that is connected with the RRU where the alarm is located according to the rack number/shelf number/slot number in the alarm details.
   b. Reset the board according to the rack number/shelf number/slot number verified in substep a.
      Wait for 15 minutes, and check whether the alarm is cleared.
      Yes -> End.
      No -> Step 4.
4. Select Dynamic Management -> Dynamic Command -> SDR -> Managed Network Element, and reset the NE.
   Wait for 30 minutes, and check whether the alarm is cleared.
   Yes -> End.
   No -> Step 5.
5. Remove and re-install the optical fibers and optical modules on the corresponding optical interfaces according to the rack number/shelf number/slot number in the alarm details.
   Wait for 15 minutes, and check whether the alarm is cleared.
   Yes -> End.
   No -> Step 6.
6. Remove and install the optical fibers and optical modules on the corresponding optical interfaces according to the rack number/shelf number/slot number of the baseband board or the optical interface board verified in step 3.
   Wait for 15 minutes, and check whether the alarm is cleared.
   Yes -> End.
   No -> Step 7.
7. Replace the board according to the rack number/shelf number/slot number displayed in the alarm details.
   Wait for 15 minutes, and check whether the alarm is cleared.
   Yes -> End.

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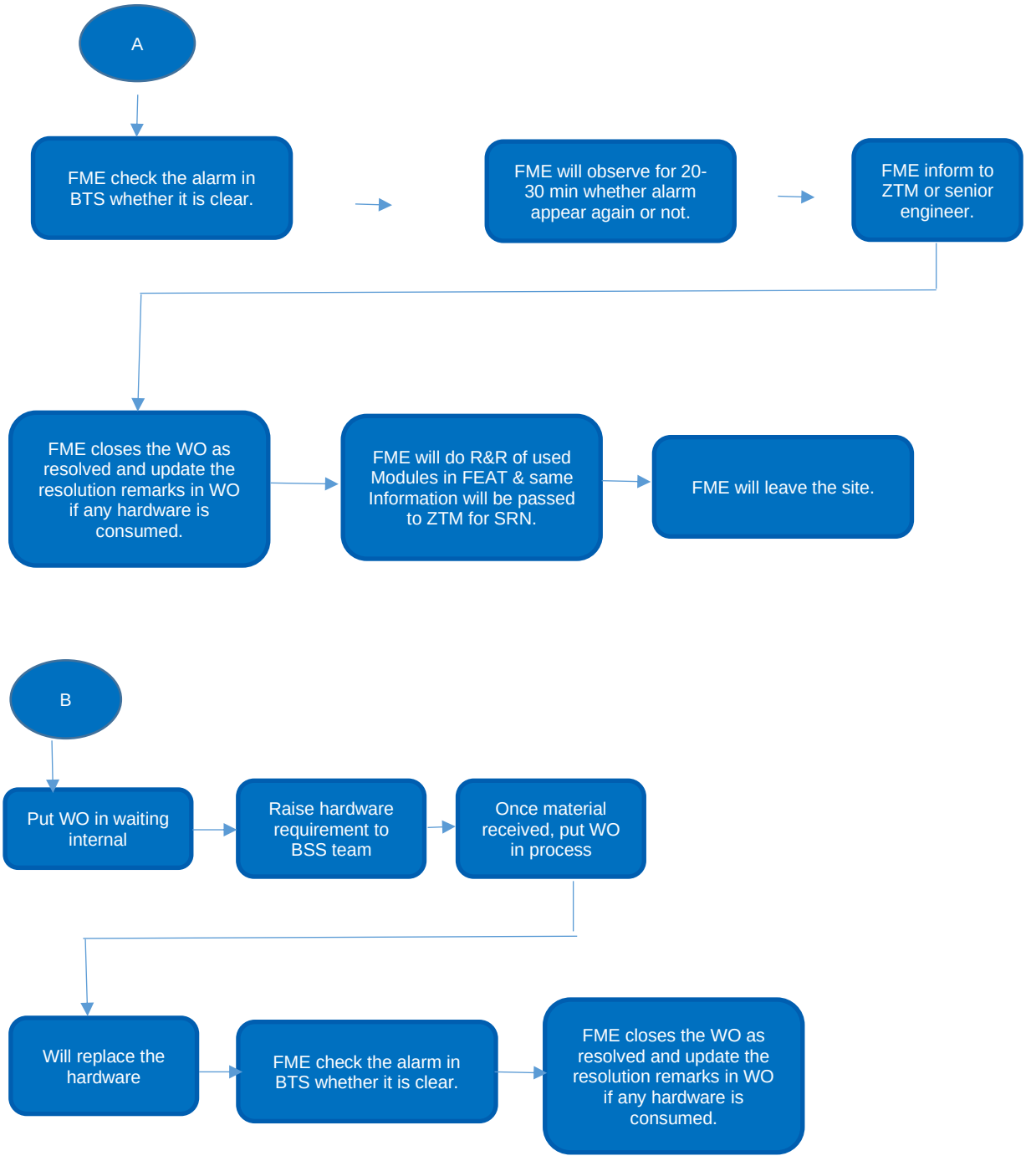

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Activity Summary

1	Corrective WO of alarm is received on WFM portal
2	FME will Accept the WO
3	Put WO in travel
4	After reaching site - put WO in process
5	Login the BTS & Check alarm status in which sector its coming
8	FME will Check input power at RRU/RSU end.
9	FME will check as per MOP
10	If cleared, then Put WO in closed state
11	If not cleared, then check either RRU/RSU faulty
12	Change the RRU/RSU.
13	If cleared, then Put WO in closed state
14	Put Work order in Waiting internal if any HW Req at site
15	Raise Req of Hardware to BSS Team
16	Once Material received again put WO in Travel mode
17	After reaching site - put WO in process
18	Replace the hardware
19	Check from BTS Login that alarm cleared or not after hardware replaced
20	Once Alarm Cleared
21	FME will close the WO as resolved

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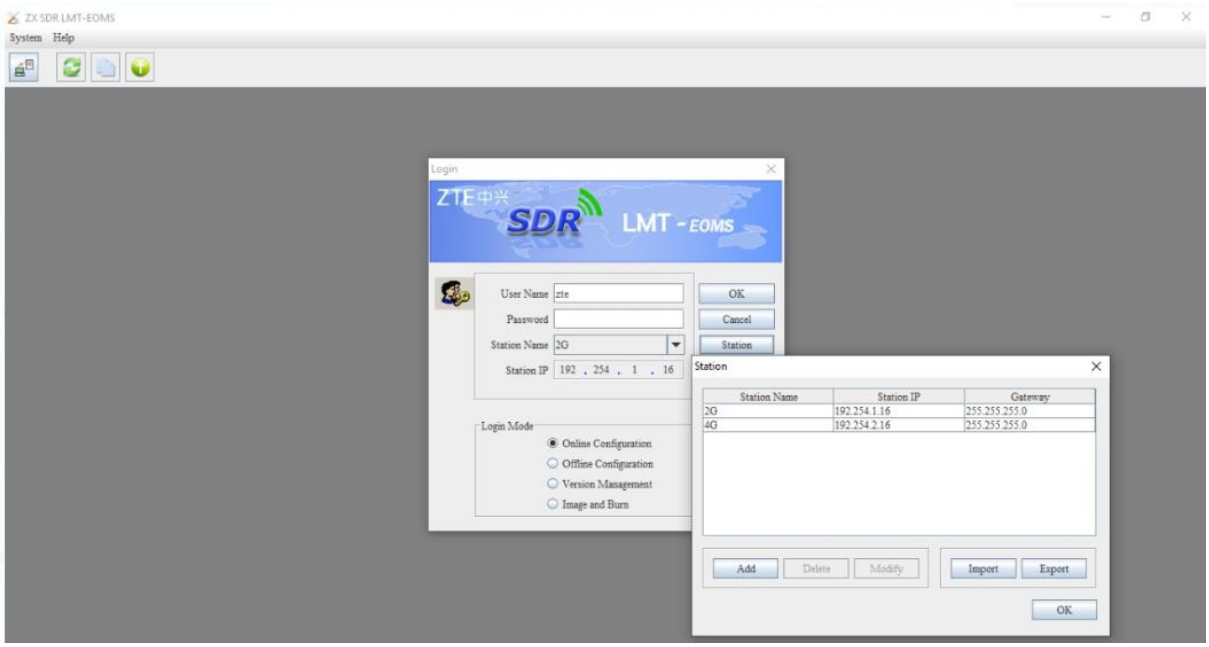
Activity Details

Pre requisites:

1) SVD WO for RRU Power Abnormal Alarm(198098472) alarm.
2) Alarm on OneFM/Netnumen/WFM.

Case : RRU Power Abnormal Alarm(198098472)alarm on 1 cell

A) Login in 2G BBU/ enodeb as per RAN MOP via ZX SDR LMT OEMS connect using LAN cable



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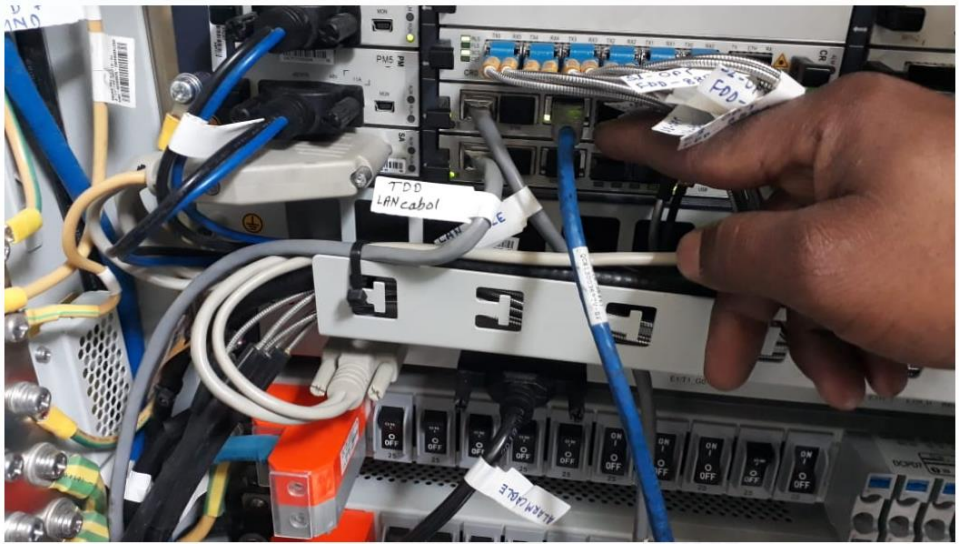

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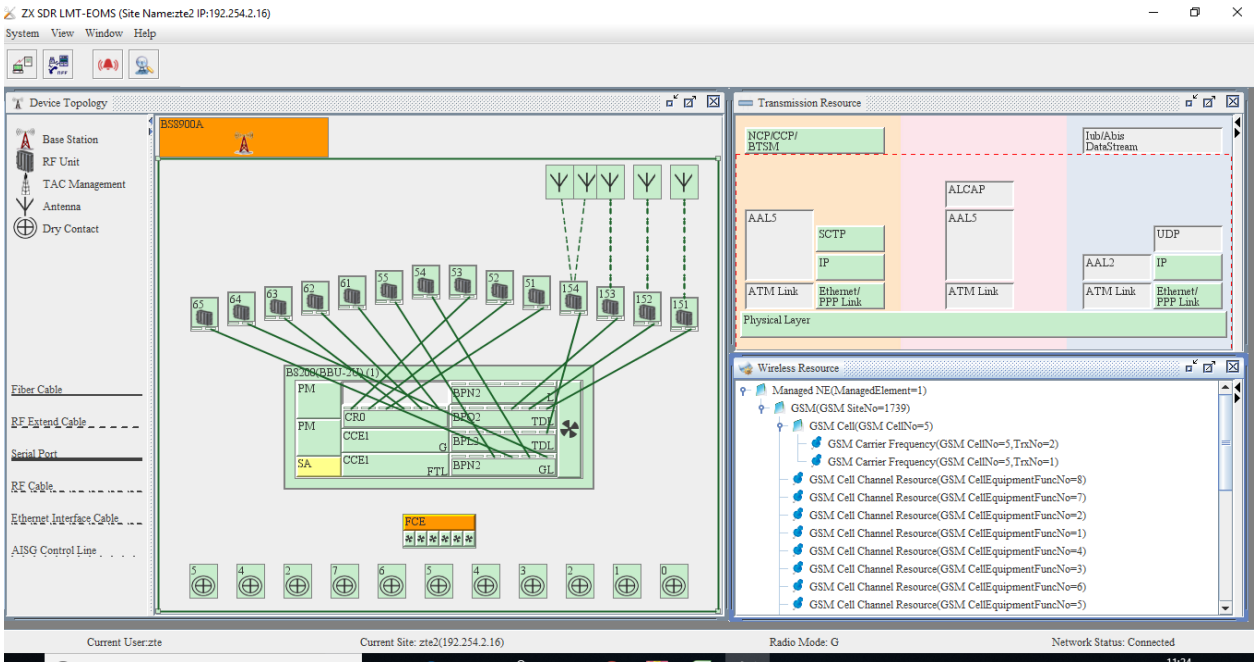
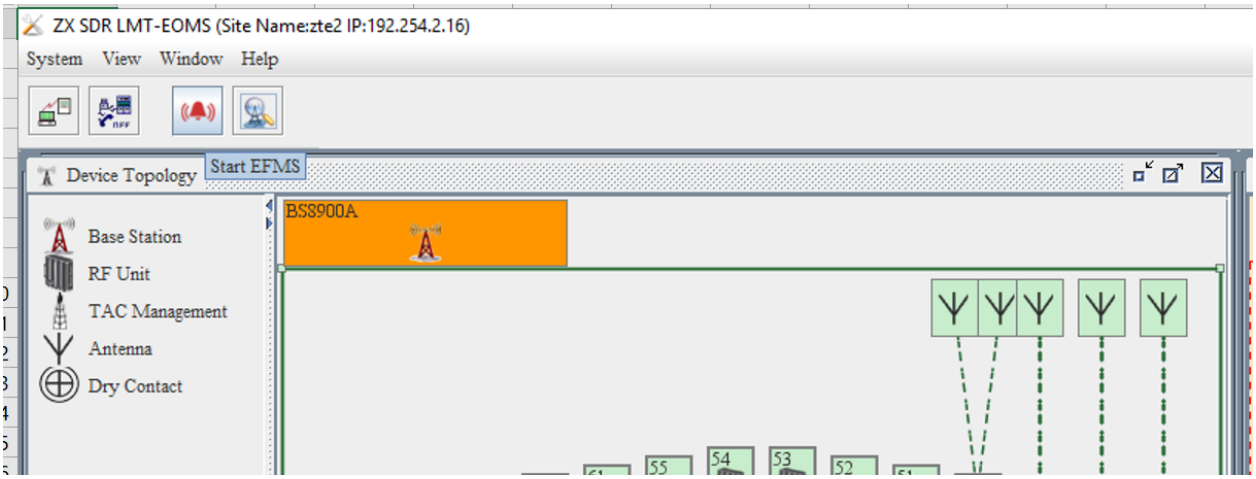
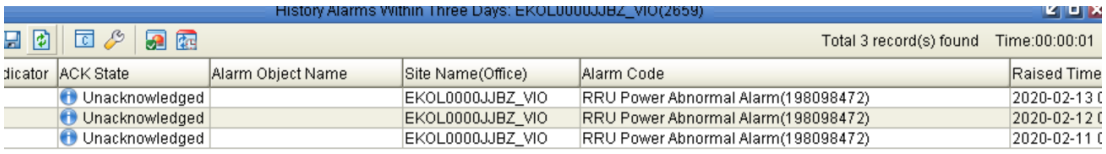


a) Start EFMS to view alarm window



EMS View:-



History Alarms Within Three Days: EKOL0000JJBZ_VIO(2659)

Total 3 record(s) found Time:00:00:01

dicator	ACK State	Alarm Object Name	Site Name(Office)	Alarm Code	Raised Time
	Unacknowledged		EKOL0000JJBZ_VIO	RRU Power Abnormal Alarm(198098472)	2020-02-13 0
	Unacknowledged		EKOL0000JJBZ_VIO	RRU Power Abnormal Alarm(198098472)	2020-02-12 0
	Unacknowledged		EKOL0000JJBZ_VIO	RRU Power Abnormal Alarm(198098472)	2020-02-11 0

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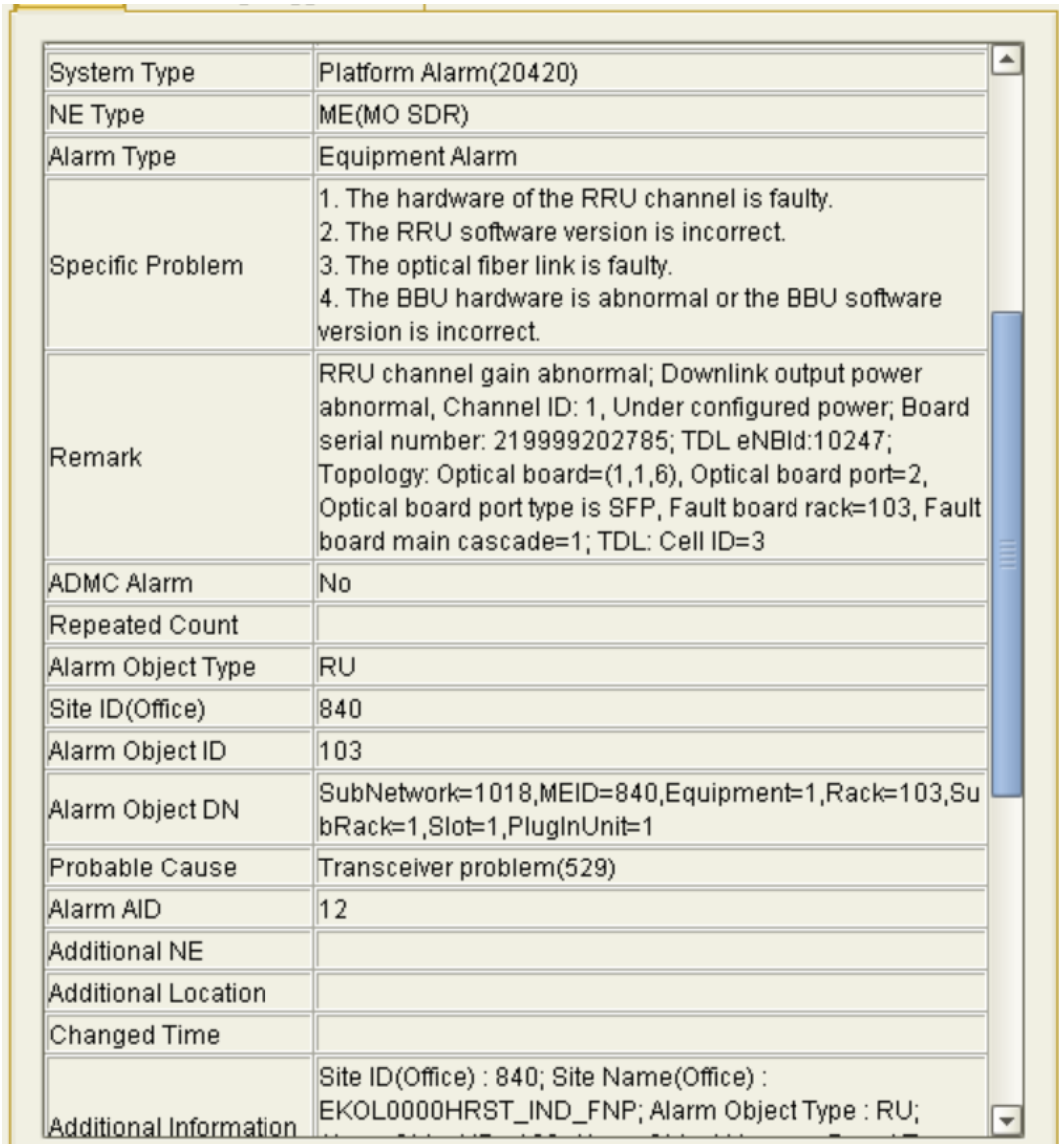
b) Double click on the alarm to check the alarm description.(EMS View):-



System Type	Platform Alarm(20420)
NE Type	ME(MO SDR)
Alarm Type	Equipment Alarm
Specific Problem	1. The hardware of the RRU channel is faulty. 2. The RRU software version is incorrect. 3. The optical fiber link is faulty. 4. The BBU hardware is abnormal or the BBU software version is incorrect.
Remark	RRU channel gain abnormal; Downlink output power abnormal, Channel ID: 1, Under configured power; Board serial number: 219999202785; TDL eNBId:10247; Topology: Optical board=(1,1,6), Optical board port=2, Optical board port type is SFP, Fault board rack=103, Fault board main cascade=1; TDL: Cell ID=3
ADMC Alarm	No
Repeated Count	
Alarm Object Type	RU
Site ID(Office)	840
Alarm Object ID	103
Alarm Object DN	SubNetwork=1018,MEID=840,Equipment=1,Rack=103,SubRack=1,Slot=1,PlugInUnit=1
Probable Cause	Transceiver problem(529)
Alarm AID	12
Additional NE	
Additional Location	
Changed Time	
Additional Information	Site ID(Office) : 840; Site Name(Office) : EKOL0000HRST_IND_FNP; Alarm Object Type : RU;

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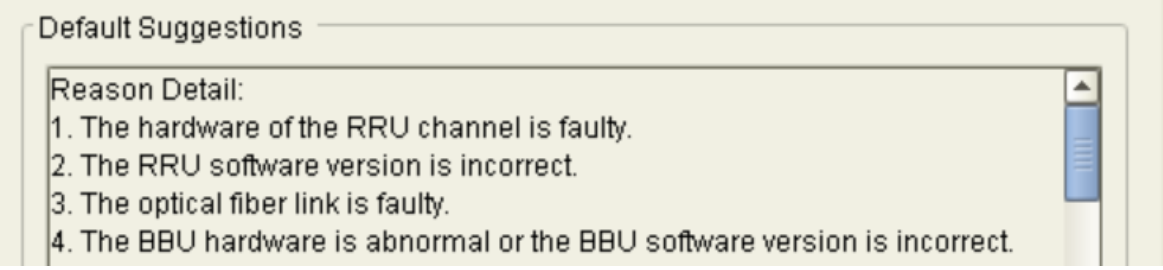
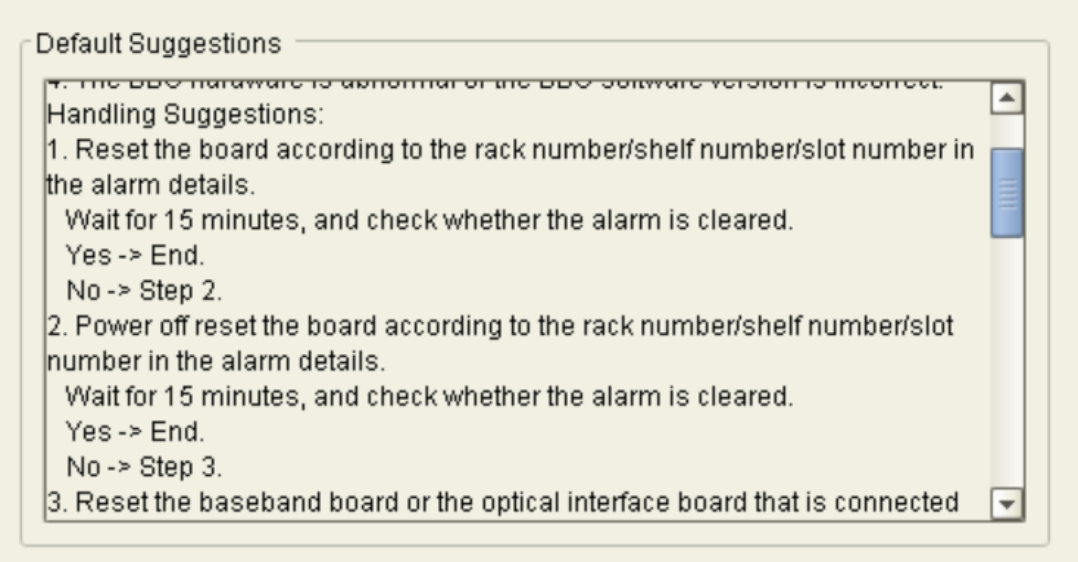
c) Click on the solution tab to check the check the probable cause





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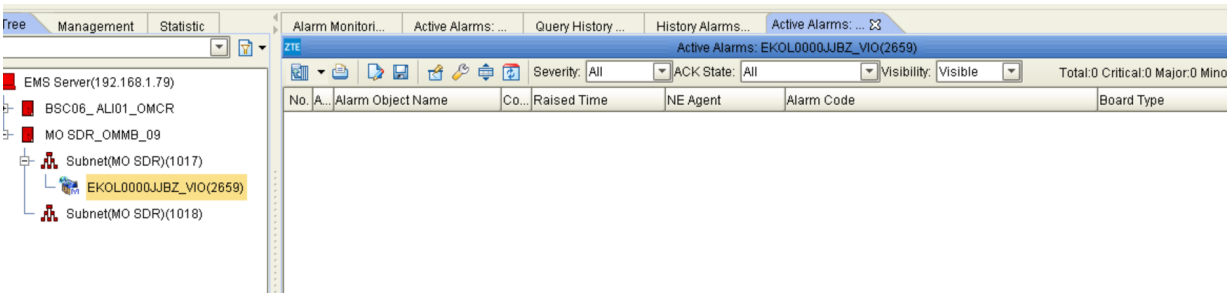
d) Replace hardware as per fault location.

e) Check in EFMS/OneFM/Netnumen whether alarm cleared or not.



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Post Analysis

Step No.	Step Name/Step Type	Command	Field	Mandatory (Y/N)	Expected Value
1	FME will check at One FM/Netnumen after 30 minutes to check alarm	As per attached MOP in traffic check status step---**Refer RAN MOP**	RAN	Y	As per MOP
2	BSS Team will check after 24 hrs if alarm has reappeared				