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MOP of VSWR Alarm for Huawei Site

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Activity Description

This activity is for E2E troubleshooting and alarm clearance of VSWR of the antenna feeder abnormal.

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

Alarm Name	RF Unit VSWR Threshold Crossed
Alarm Description	The voltage standing wave ratio (VSWR) measures the signal power that the load actually receives from the transmission line. The VSWR at the antenna port is calculated based on the sampled forward power and reverse power.
Possible Causes	1. The connectors of the antenna and feeder cables are substandard, are not connected tightly, are penetrated by water, or have foreign objects such as metal fragments. 2. The antenna and feeder cables are squeezed or bent, or the feeder cable is damaged. 3. The RRU hardware / RRU Port is faulty. 4. Antenna port faulty 5. Difference between logical and physical cable connectivity.

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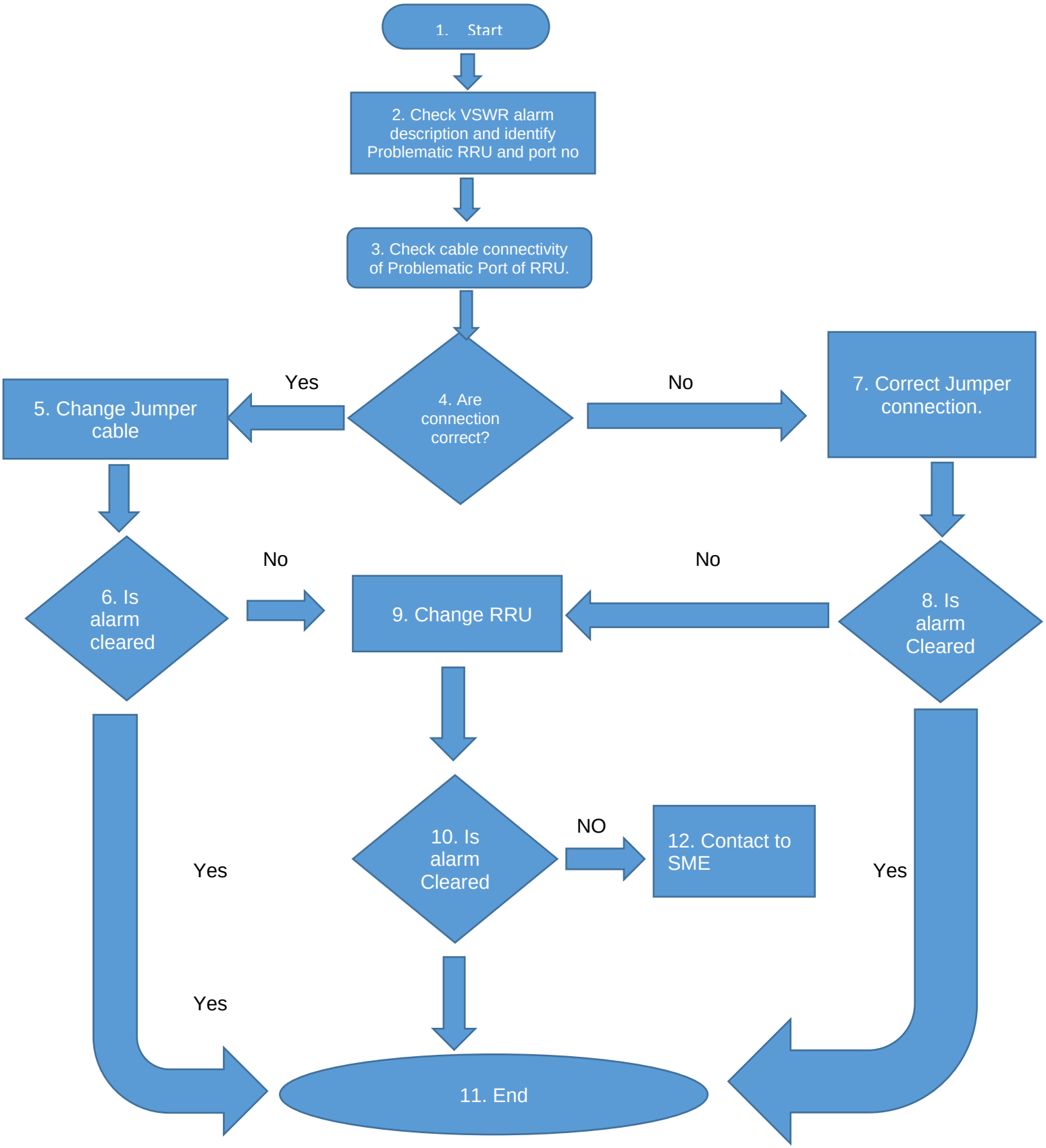
Flow Chart



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Activity Details

Preparation of site visit for VSWR Alarm:-

1. Check alarm information in detail to identify problematic RRU and RRU port No.
2. Arrange same type of RRU model and Jumper.

Steps Need to follow to clear alarm: -

1. Run command DSP VSWR to identify current VSWR value for problematic port.
2. PTW need to raise in FEAT Tool.
3. Check number of jumpers between RRU and Antenna. it should be according to plan.
4. If number of physical connected jumpers are equal to configured jumper, go on step 5 else contact to SME.
5. Check all cable connectivity between RRU & Antenna, Positive should be connected with positive and Negative should be connected with Negative.
6. Check all cable connector between RRU and Antenna are tightly connected or not, if Not , open it , clear dust and water if it is there and re-connect it ,cross check, connector should be tightly connected and observer VSWR value for 1 hour.
7. Check physical cable status, it should not be band or damaged. If it is there, need to change cable immediately. Observe VSWR value for 1 Hour post correction.
8. If no issue found in step 5 ,6 & 7, need to change each cable One by One between RRU and antenna until VSWR value becomes Normal. Need to observe VSWR Value
9. If VSWR alarm still not cleared, need to replace Hardware between RRU & Antenna one by one until VSWR value becomes Normal.

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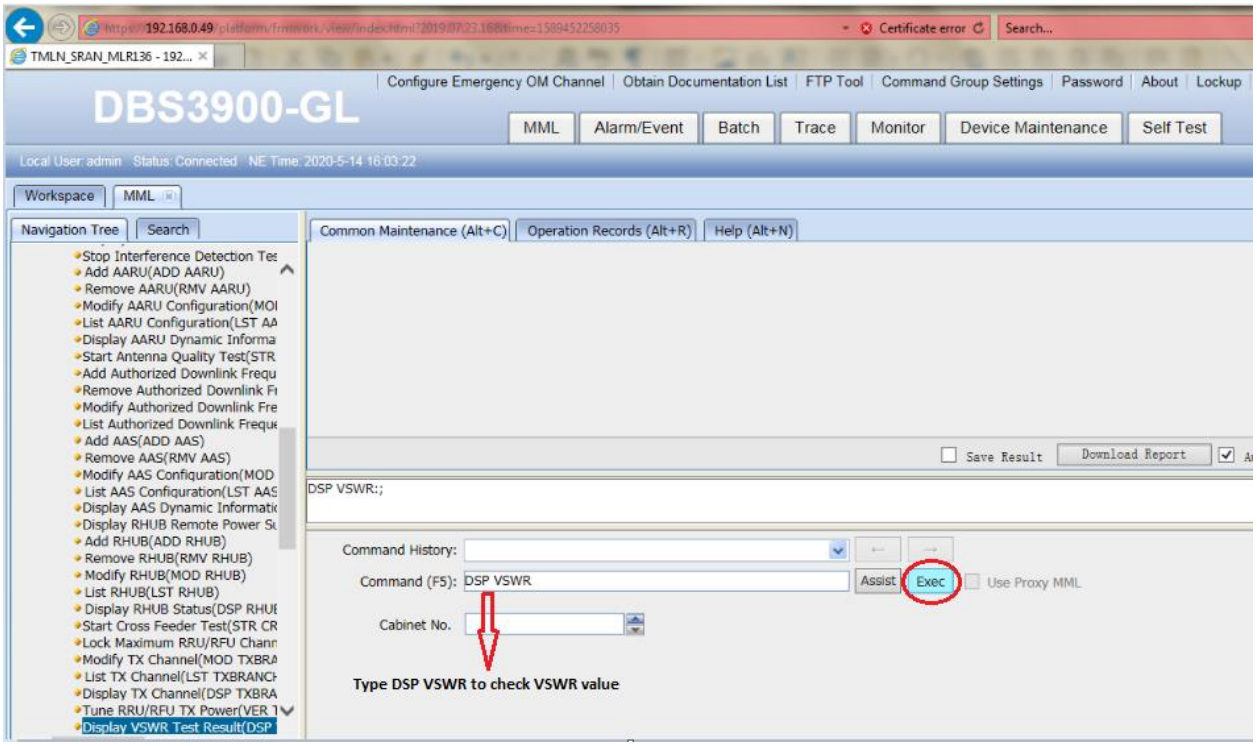
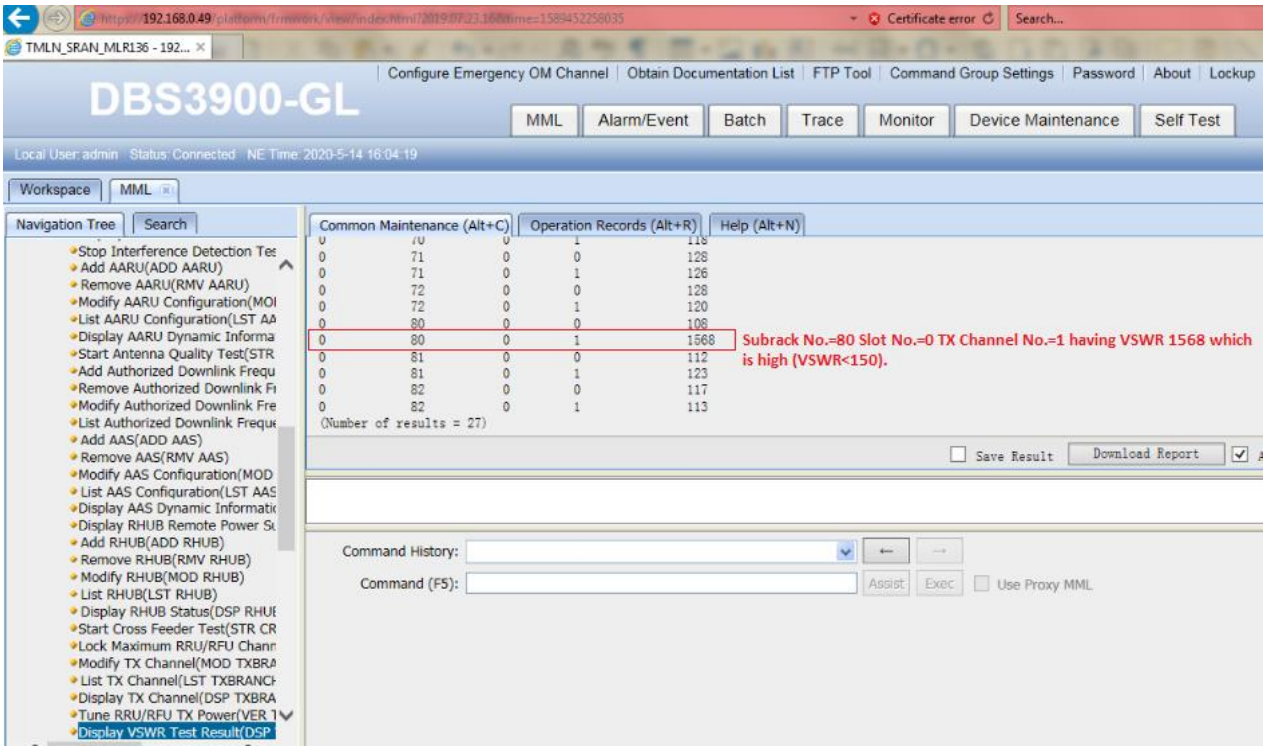
1. Run command DSP VSWR to identify current VSWR value for problematic port.





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2. In FEAT Raising PTW


3. Check number of jumpers between RRU and Antenna and found it is correct as per plan.

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4. No of cable are connected as per Plan so we are going to next step.

5. we checked all connector are tight or not and found that connectors are loose as well as band.

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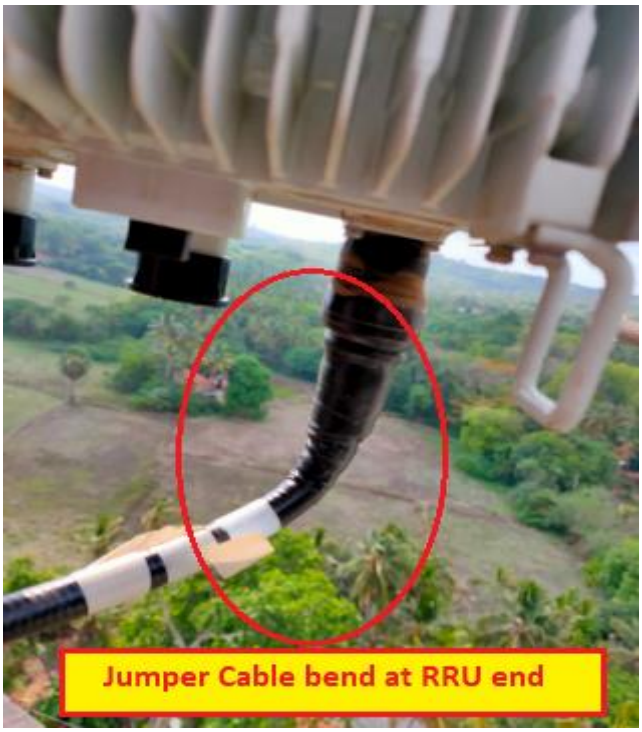

6. As cable is band and damaged, so we change cable and check VSWR value.

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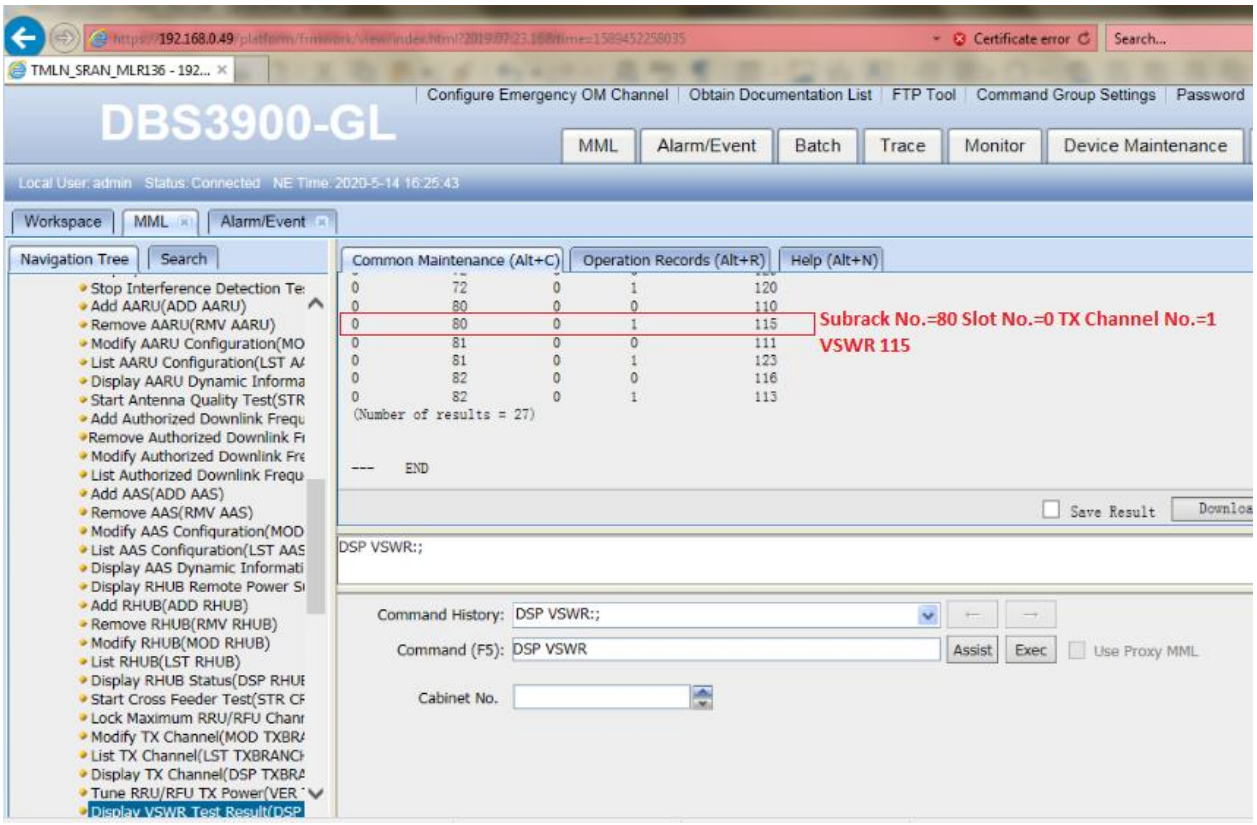
7. RUN DSP VSWR after changes and note down VSWR Value.



8. Now VSWR value is under threshold and alarm has cleared so our activity is completed.