MOP for Huawei IN_PWR_ABN alarm clearance

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A. Introduction

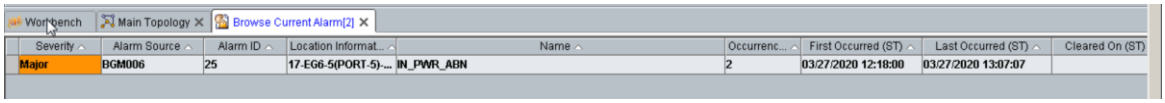
This document outlines the step-by-step process involved in MOP for IN_PWR_ABN Alarm Troubleshooting.

B. PRECHECK

- *Need to check the node reachability status of the node on which the alarm is observed and opposite end.*
- *Check the current alarms at both the ends for any hardware related alarms such as HARD_BAD, HARD_ERR, BD_STATUS, BD_OFFLINE, WRG_BD_TYPE etc. If the alarm exists then need to arrange field support with spare hardware such as IF board, ODU, IF cable and tested login accessories.*
- *If both the nodes are reachable then need to proceed to the next step else need to arrange filed support with spare hardware such as IF board, ODU, IF cable and tested login accessories.*

❖ *Please note that the method of procedure is prepared as the current scenario, available devices, and deployed software version. So, activity steps and impact can vary depending upon the scenario.*

Current Alarms before activity

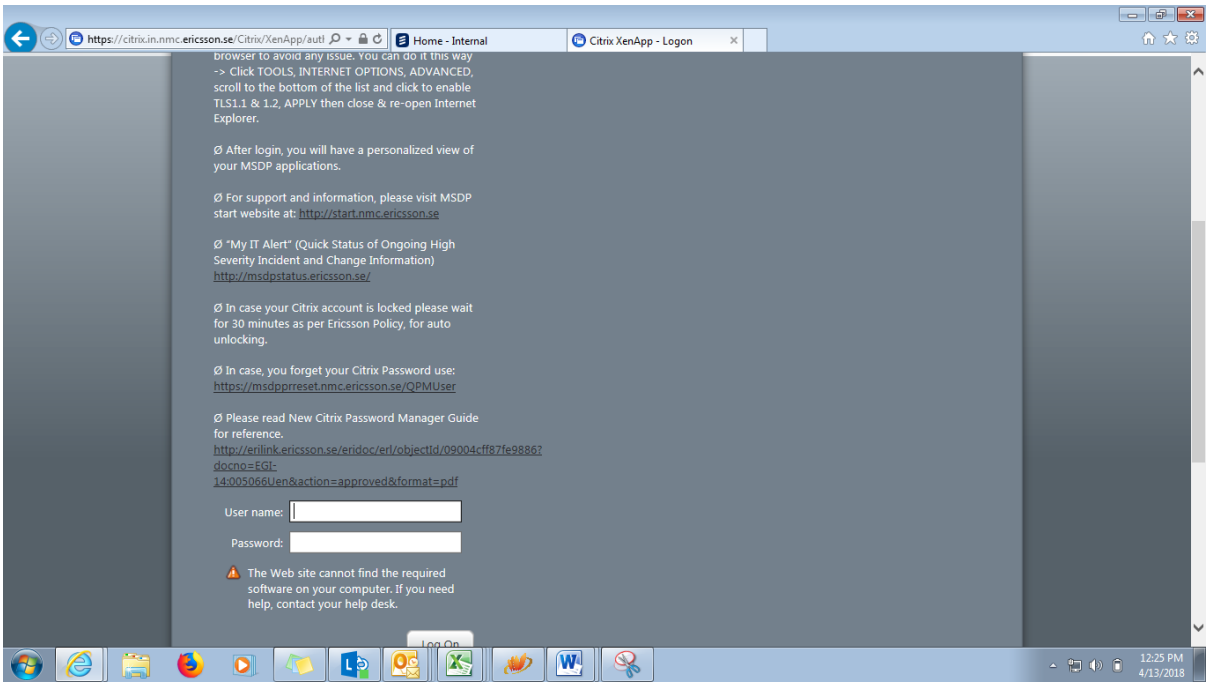


C. Procedure:

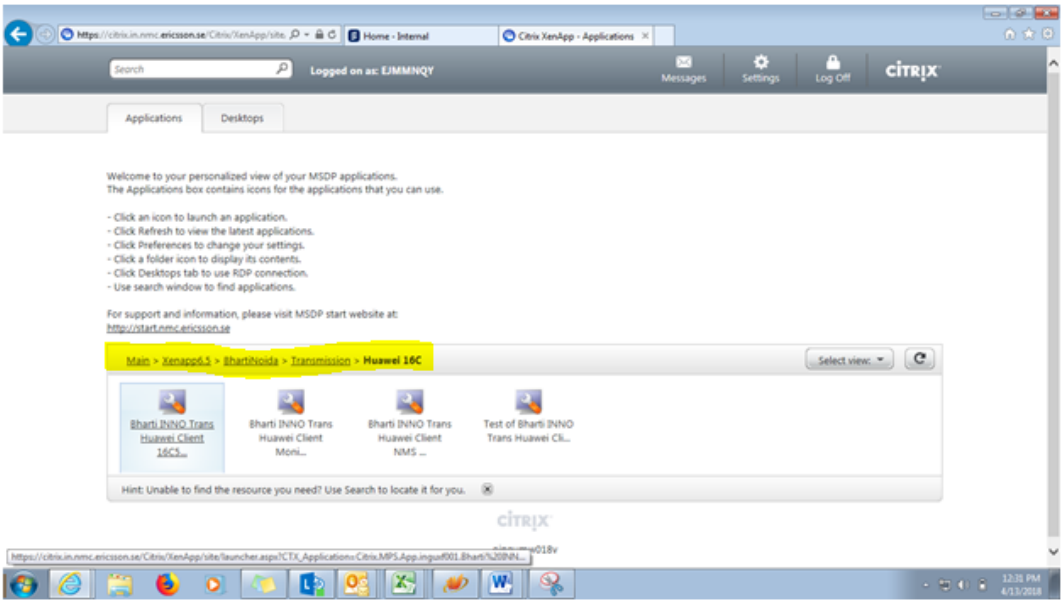
Steps for IN_PWR_ABN Alarm Clearance: -

1. Login MSDP through below mentioned link.
https://citrix.in.nmc.ericsson.se/

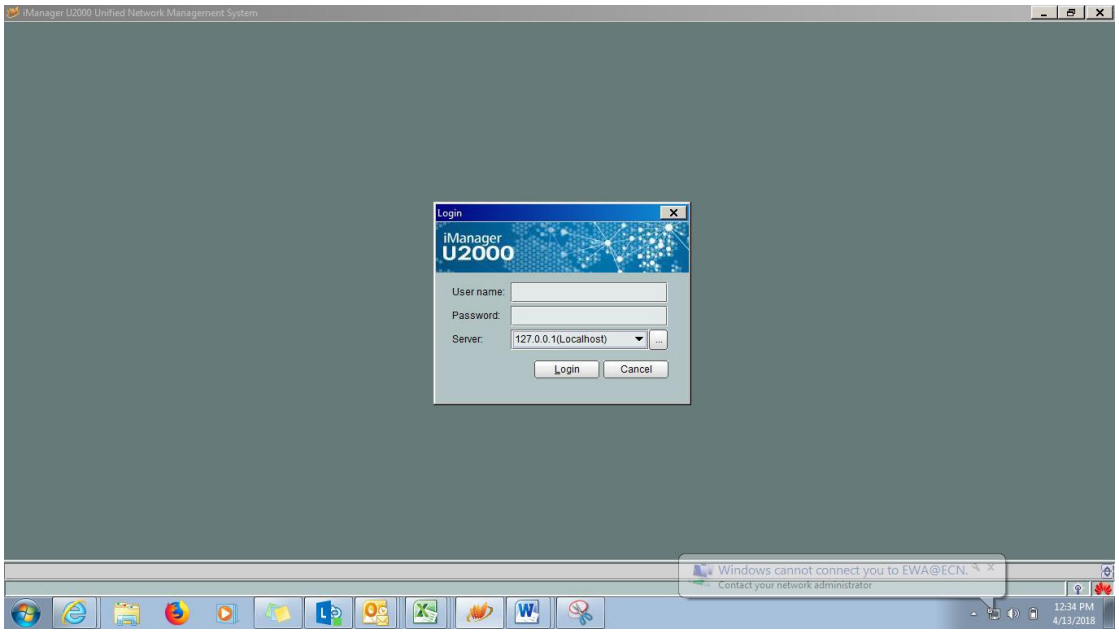
2. Provide CITRIX username and password.



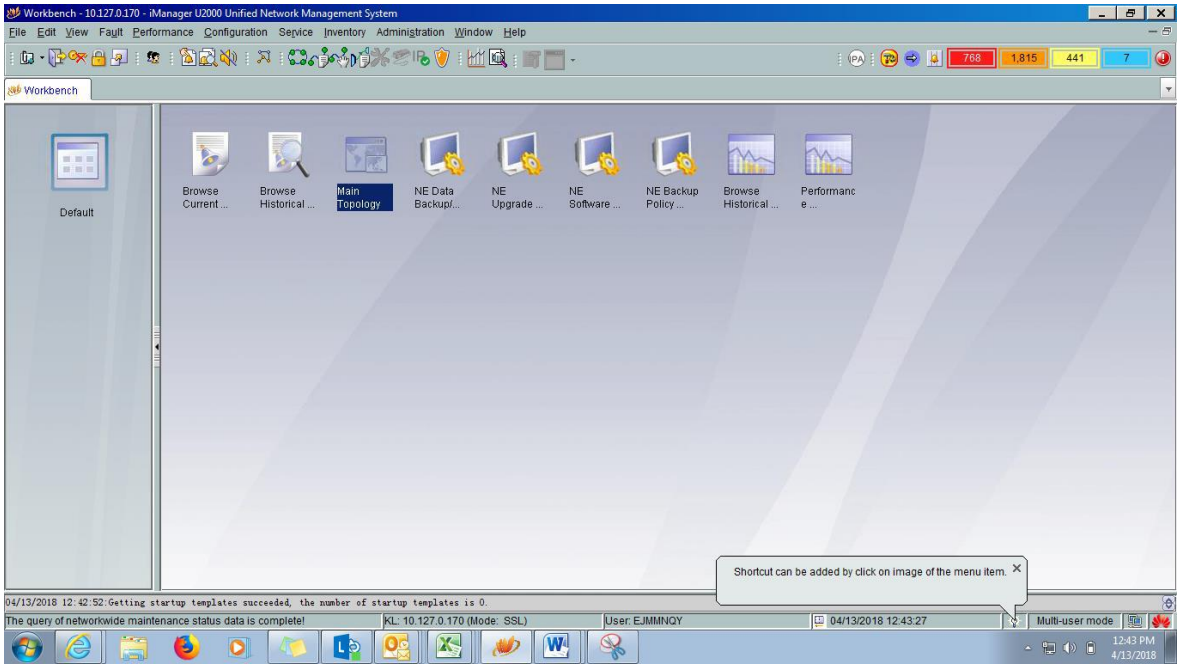
3. Click on "Xenapp6.5 >> BhartiNoida >> Transmission >> Huawei 16C/17C/18C >> Bharti INNO Trans Huawei client.



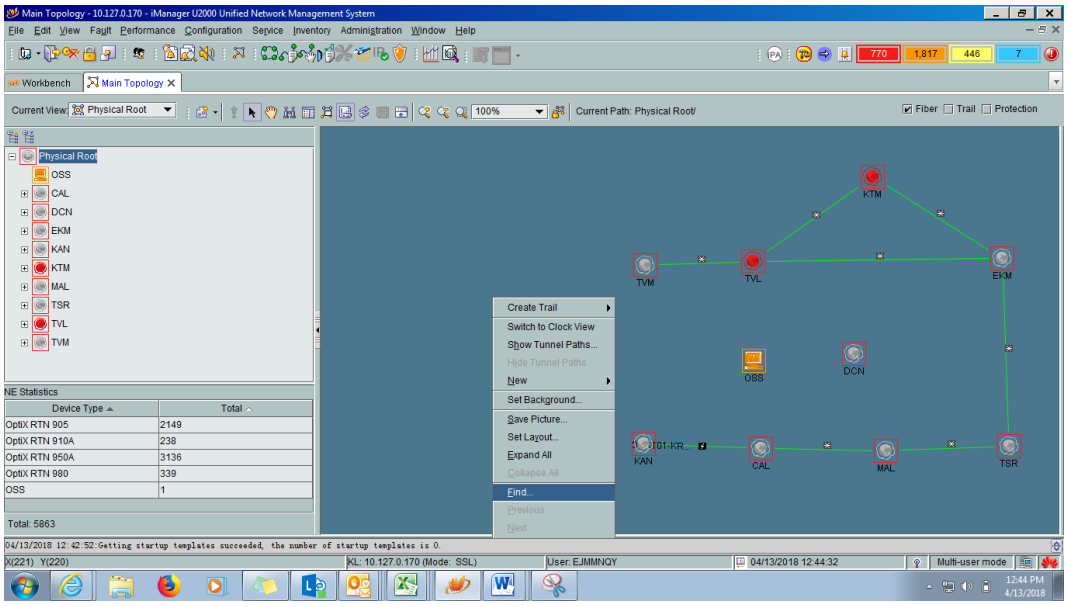
4. Now Huawei is launched enter the credentials and server IP of the circle must log in.



5. Click on "Main Topology" to open the Topology.



6. Right Click on the server and click on "FIND" to find the node.



Principle:

The IN_PWR_ABN is an alarm indicating that the input optical power is abnormal

Traffic Impact:

When the IN_PWR_ABN alarm occurs, the service at the alarmed optical interface has errors and even becomes unavailable

Possible Causes:

- *Cause 1: The transmit power of the opposite NE is over high or over low.*
- *Cause 2: The model of the selected optical module is incorrect.*
- *Cause 3: The optical module at the receive end is faulty.*
- *Cause 4: The fiber performance degrades.*

Procedure

1. *Cause 1: The transmit power of the opposite NE is over high or over low.*
    a. *Browse current performance events, and query the performance event of the transmit optical power on the opposite NE.*

If...	*Then...*
The transmit optical power does not meet the requirement	*Replace the optical module.*
The transmit optical power is over high	*Add a proper attenuator to reduce the receive optical power.*

2. *Cause 2: The model of the selected optical module is incorrect.*
    a. *Query the board manufacturing information report, and check whether the models of the SFP optical modules used at both ends are correct.*

If...	*Then...*
The models are incorrect	*Replace the optical module.*
The models are correct	*Go to Cause 3.*

3. *Cause 3: The optical module at the receive end is faulty.*
    a. *Use the optical power meter to test the receive optical power, and check whether the receive optical power meets the requirement. If yes, contact Huawei engineers to replace the optical module.*
4. *Cause 4: The fiber performance degrades.*

If...	*Then...*
The connector of the fiber jumper is dirty	*Clean fiber connectors.*
The connector or fiber is damaged	*Insert the connector properly or replace the damaged fiber jumper.*

Related Information

The following table describes the meanings of the parameters in the IN_PWR_ABN alarm reported by the EMS6.

Name	*Meaning*
Parameter 1	*Indicates the port number.*
Parameter 2, Parameter 3	*The value of Parameter 2 is always 0x00, and the value of Parameter 3 is always 0x01. The two parameters indicate the path ID.*
Parameter 4, Parameter 5	*Reserved. The values are always 0xFF.*

D. Post Activity Health Check:

Please check alarm will be clear and services also restored after confirmation from all stakeholders.

E. Fallback Procedure:

Need to shift the board to another free slot and configure the services manually.