MOP for Huawei LAG Member Down Alarm clearance

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A. Introduction

This document outlines the step-by-step process involved in MOP for Huawei LAG Member down Using Huawei U2000 Client.

Description

The LAG_MEMBER_DOWN is an alarm indicating that a member port of a link aggregation group (LAG) is unavailable. This alarm occurs when a member port of a LAG can neither be activated nor function as a protection port.

Impact on the System

The port in the LAG cannot share the service load, and the port does not transmit or receive any services.

Possible Causes

Cause 1: The port link is faulty or disabled.

Cause 2: The port receives no LACP packets.

Cause 3: The port works in half-duplex mode or not in Auto-Negotiation mode.

Cause 4: The port is self-looped.

B. PRECHECK

1. *Check for the mandatory fields in Standard CR Template for if any of the mandatory fields is not duly filled, CR should not be taken for execution.*

2. *Check the data received from authorized Transmission engineer for correctness & all essential data.*

3. *If Circle Head/ CR form does not approve the CR is not duly filled, CR should not be taken for execution.*

4. *Every Outage involve activity should be performed in Night Shift Only.*

5. *Need backup of Node where the activity is performed before any activity.*

6. *If any Critical/SA alarms, Don't perform activity on the node and ask circle to clear the Alarm.*

7. *Field support should be available with spare and remote access.*
8. *Node should be managed in NMS*
9. *Need to check latest node backup availability in server.*

❖ *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.*

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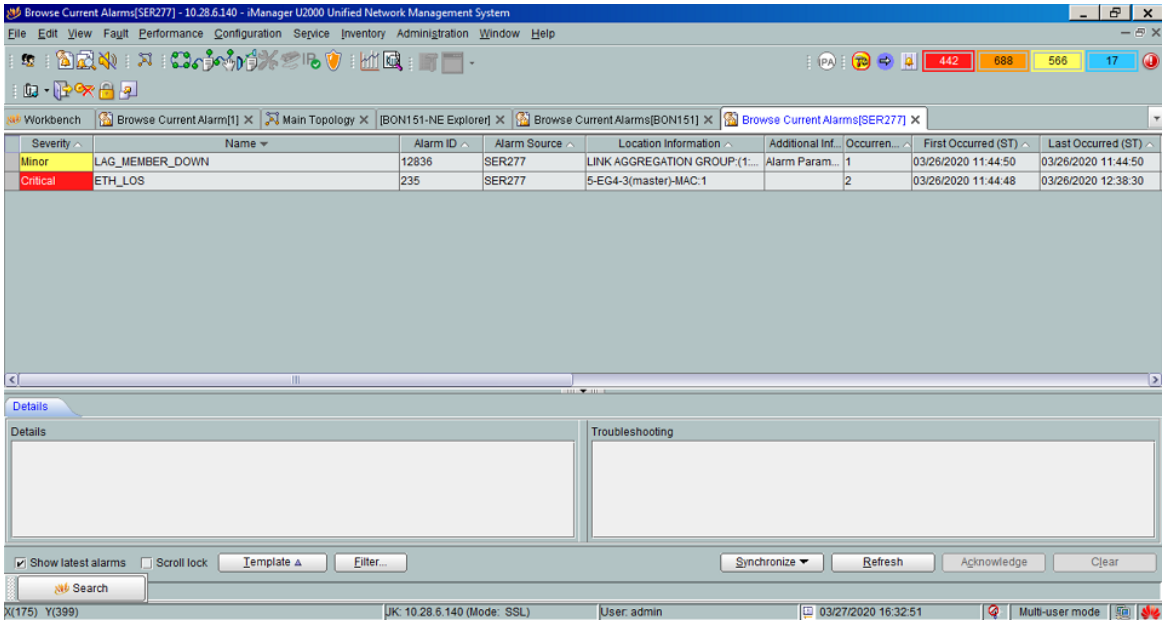
Current Alarms before activity

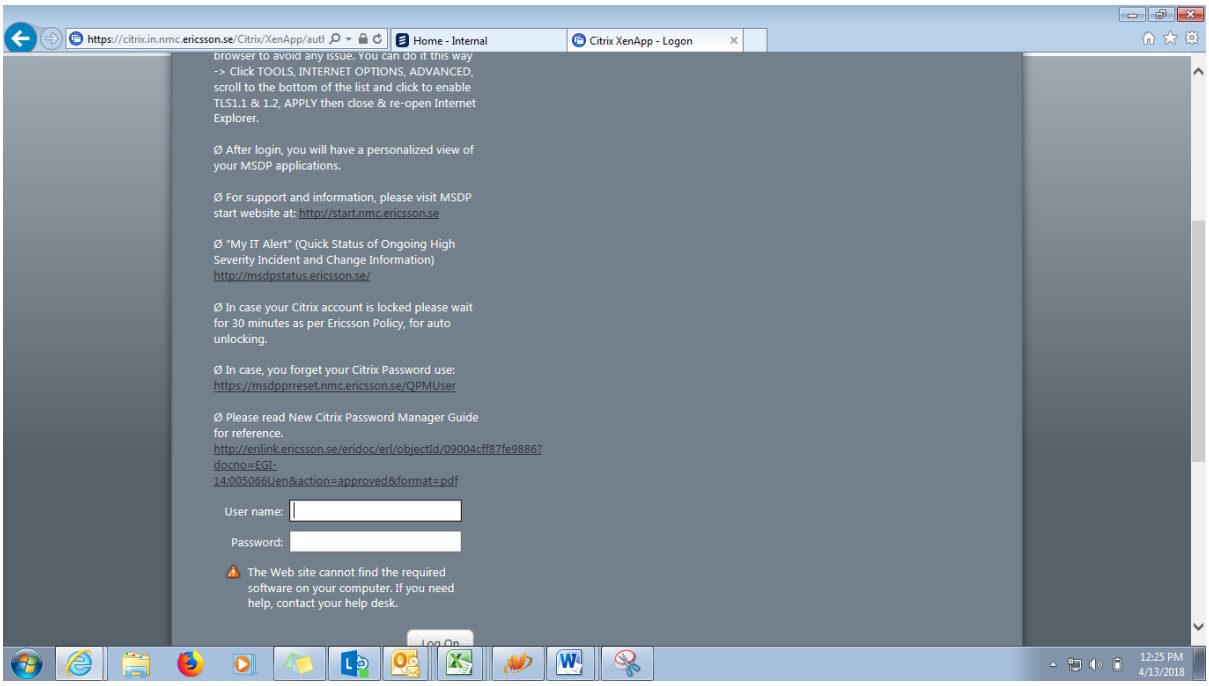


C. Procedure:

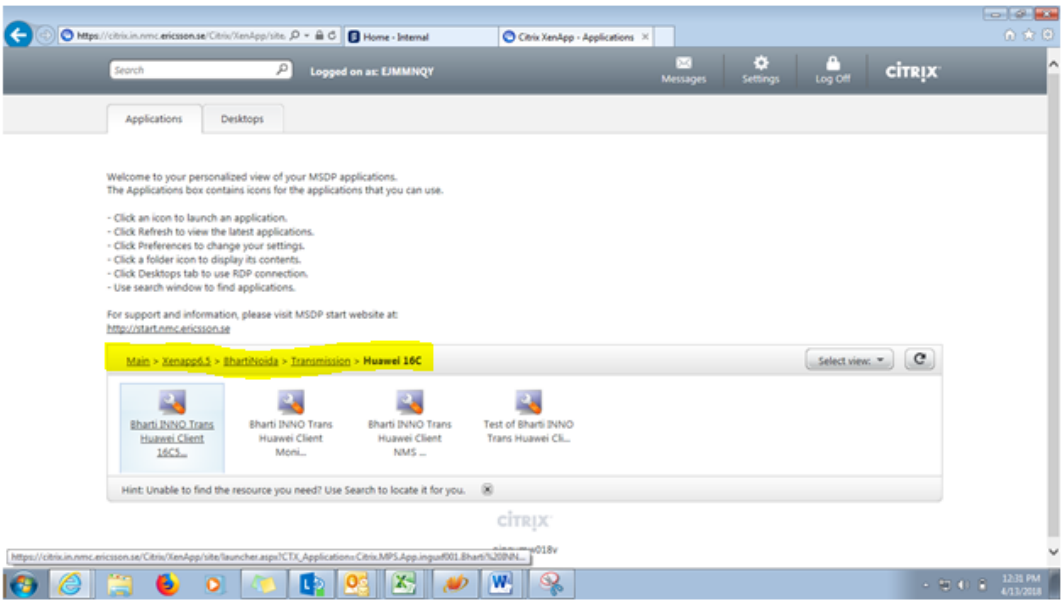
STEPS FOR LAG configuration activity:-

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

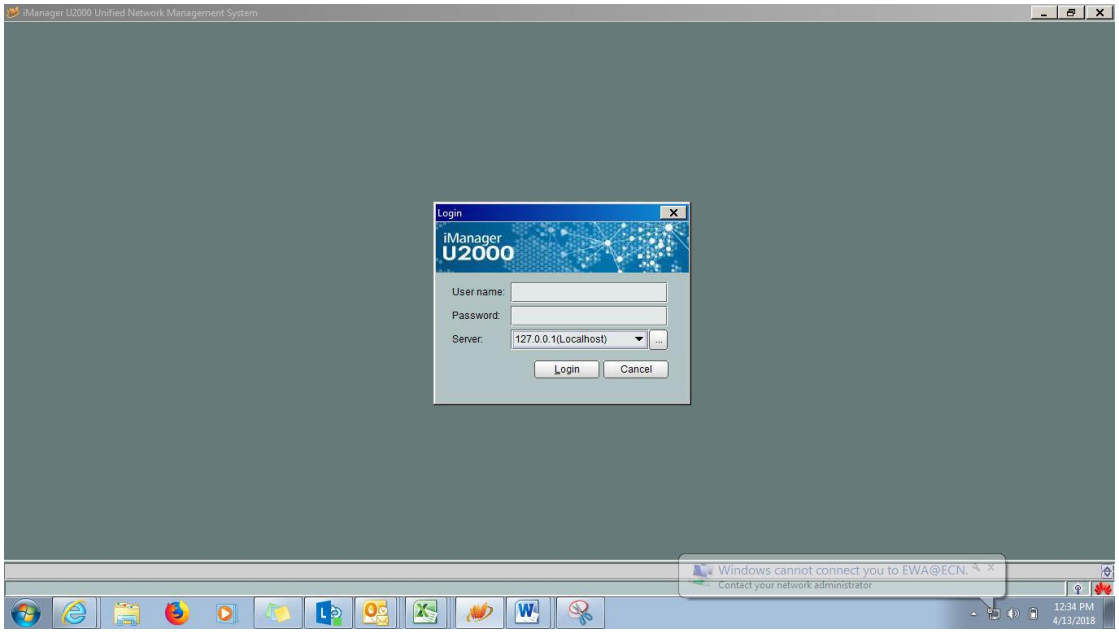
2. Provide CITRIX username and password.



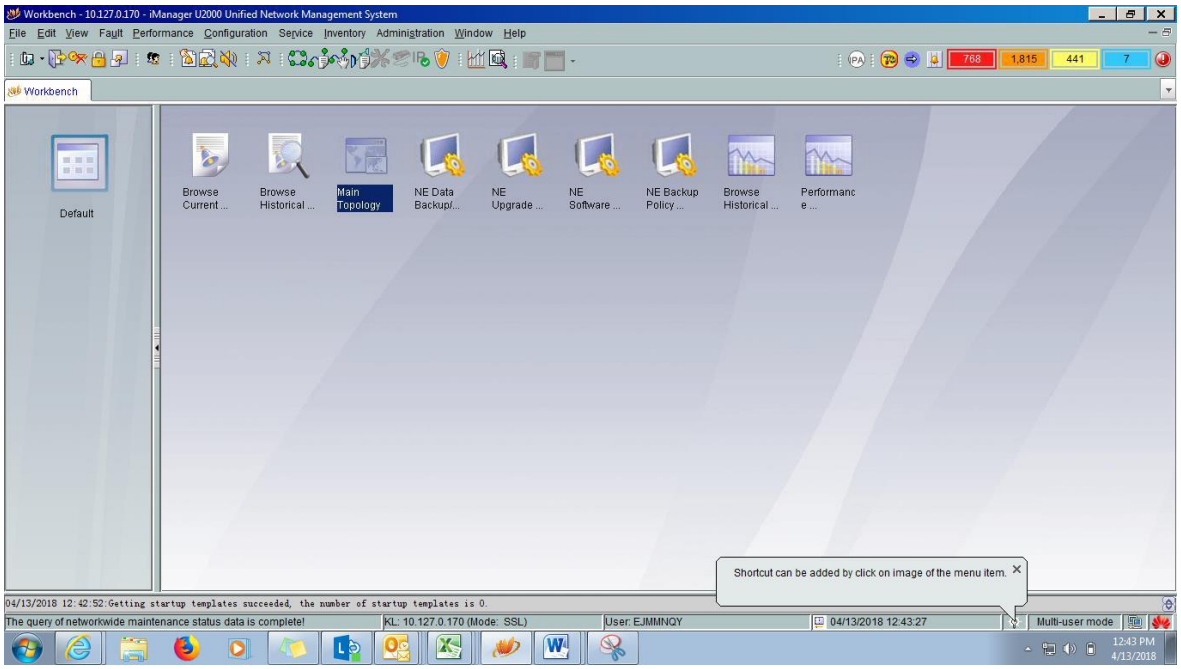
3. Click on "Xenapp6.5 >> BhartiNoida >> Transmission >> Huawei 16C/17C/18C >> Bharti INNO Trans Huawei client.



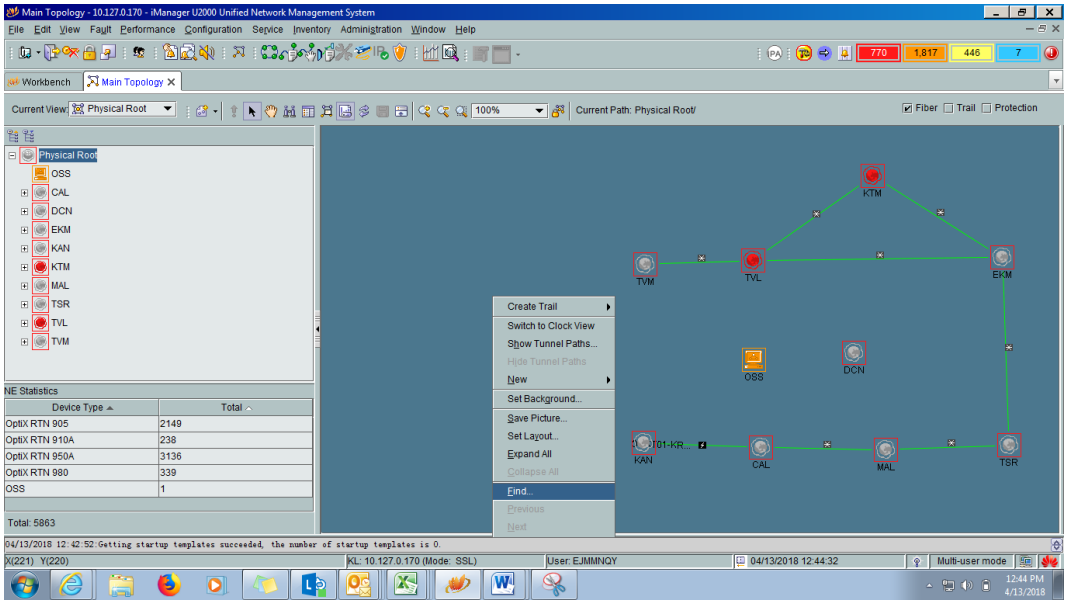
4. Now Huawei is launched enter the credentials and server IP of the circle must log in.



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



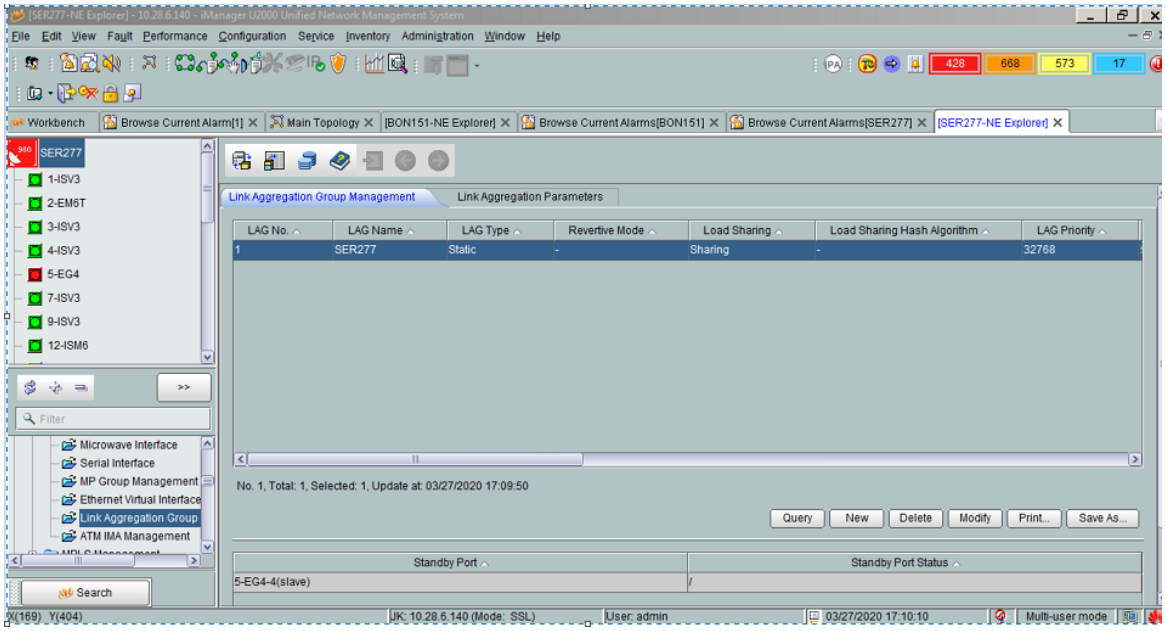
6. Right Click on the server and click on "FIND" to find the node.



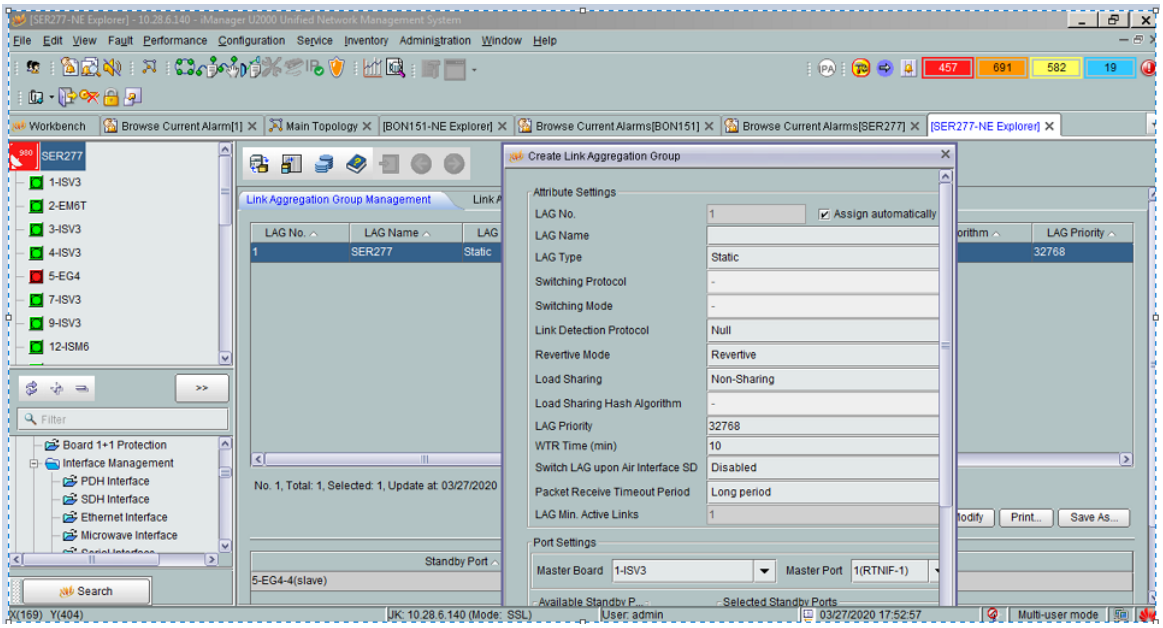
7.Login near and far end both nodes and take snapshot of TX Power, RSL and frequency and Current Modulation.

10. Login the RTN of far end near end both via U2000 NMS client

*1、Select **Configuration -> Interface Management -> Link Aggregation Management -> New** in main topology*

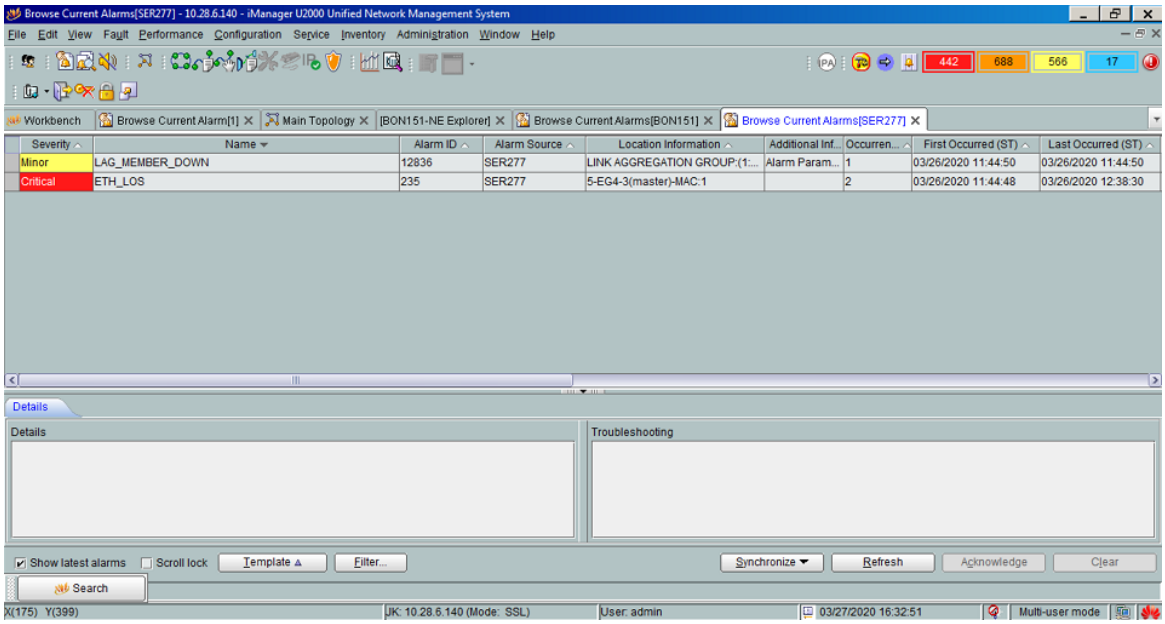


*2、Select **Configuration -> Interface Management -> Link Aggregation Management** -> New in main topology -> LAGTYPE->Static in main topology*



Then configure other Features Load Sharing- Sharing, configure port setting according to Plan, and then apply OK.

*3、Select **NODE -> CLICK Right** -> Go Current alarm >*



Determine the alarmed port and the cause of the alarm according to the alarm parameters.

If...	*Then...*
The value of Parameter 4 is 0x01	*Perform the operations described in 2.*
The value of Parameter 4 is 0x02	*Perform the operations described in 3.*
The value of Parameter 4 is 0x03	*Perform the operations described in 4.*
The value of Parameter 4 is 0x04	*Perform the operations described in 5.*

Cause 1: The port link is faulty or disabled.

a. On the NMS, check whether the port in the LAG is enabled. For details, see Querying the Protocol Information of the LAG.

If...	*Then...*
The port is not enabled	*Enable the port in the LAG.*
The port is enabled	*Go to the next step.*

b. Check the link status of all ports and check whether the ETH_LOS alarm is reported.

If...	*Then...*
The alarm is reported	*Clear the ETH_LOS alarm immediately and rectify the fault of the port link.*
The alarm is not reported	*Go to Cause 2.*

Cause 2: The port receives no LACP packets.

a. Check whether the local port and the remote port transmit the LACP packets. For details, see Querying the Protocol Information of the LAG. If the LACP packets are not transmitted, configure the ports at two ends to ensure that the packets can be normally transmitted.

Cause 3: The port works in half-duplex mode or not in Auto-Negotiation mode.

a. On the NMS, check whether the port in the LAG works in half-duplex mode. For details, see Querying the Protocol Information of the LAG. If the port works in half-duplex mode, change the working mode of the port into full duplex.

b. On the NMS, change the working mode of the port into full-duplex and Auto-Negotiation.

Cause 4: The port is self-looped.

a. Check whether the port is self-looped. For details, see Querying the Attributes of an Ethernet Port. If the port is self-looped, release the self loop. For details, see Setting a Loopback for the Packet-plane Ethernet Interface Board.

Related Information

Figure 1 Parameter Examples

Name	Meaning
Parameter 1, Parameter 2	Indicates the slot ID of the alarmed board.
Parameter 3	Indicates the ID of the alarmed subboard. The value is always 0xff.
Parameter 4, Parameter 5	Indicates the ID of the alarmed port.
Parameter 6	Indicates the cause that makes the port unavailable. • 0x01: The port link is faulty or disabled. • 0x02: The port fails to receive the LACP packets. • 0x03: The port works in half-duplex mode. • 0x04: The port is self-looped.

- *Parameters 1 and 2 indicates the Slot ID of the alarmed board.*
- *Parameter 3 (0x03) indicates the alarmed sub board the value always 0*ff.*
- *Parameter 4 & 5 indicates the ID of alarmed port.*
- *Parameters 6 indicates cause that makes the port unavailable.*

0x01: The port link is faulty or disabled.

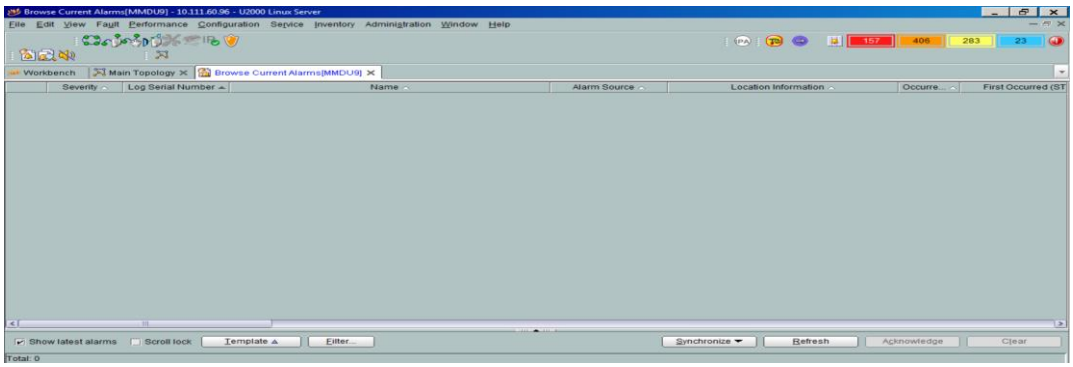
0x02: The port fails to receive the LACP packets.

0x03: The port works in half-duplex mode.

0x04: The port is self-looped.

D. Post Activity Health Check:

Please check alarm will be clear and services also restored and confirm services status from all stakeholder



E. Fall Back Procedure: -

If the changes are not applied successfully then need to arrange field support at connecting end and need to revert the applied changes to original configuration.

IF the running services are impacted then the latest NE backup can also be uploaded if the node reachability is not lost which was taken as the part of "Pre-Check".