

Confidentiality Class	External Confidentiality Label	Document Type	Page
Ericsson Internal	Public	Activity Description	1 (9)
Prepared By (Subject Responsible)	Approved By (Document Responsible)		Checked
ESARSOV Sourav Sarkar			
Document Number	Revision	Date	Reference
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Degraded functionality in LAG #1

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A. Introduction

This document outlines the step-by-step process involved in MOP for Ceragon LAG Member degraded 1 Using Ceragon Server

Description

The LAG_MEMBER_DEGRADED 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

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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.*

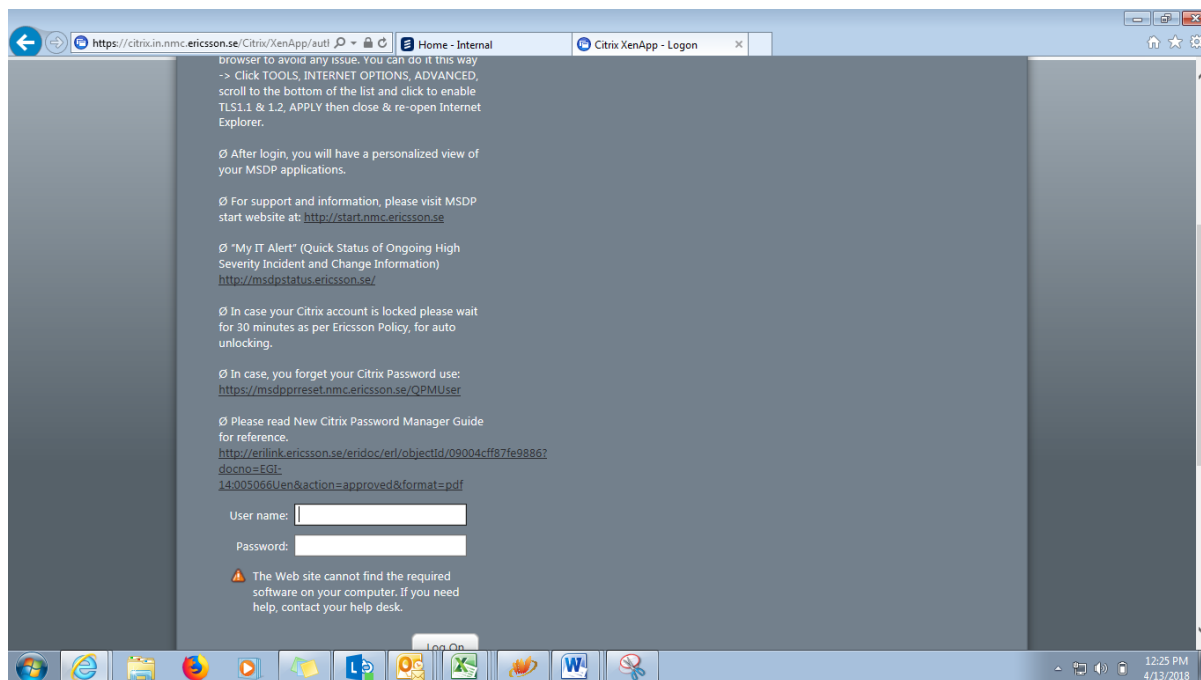
Current Alarms before activity

A. Procedure:

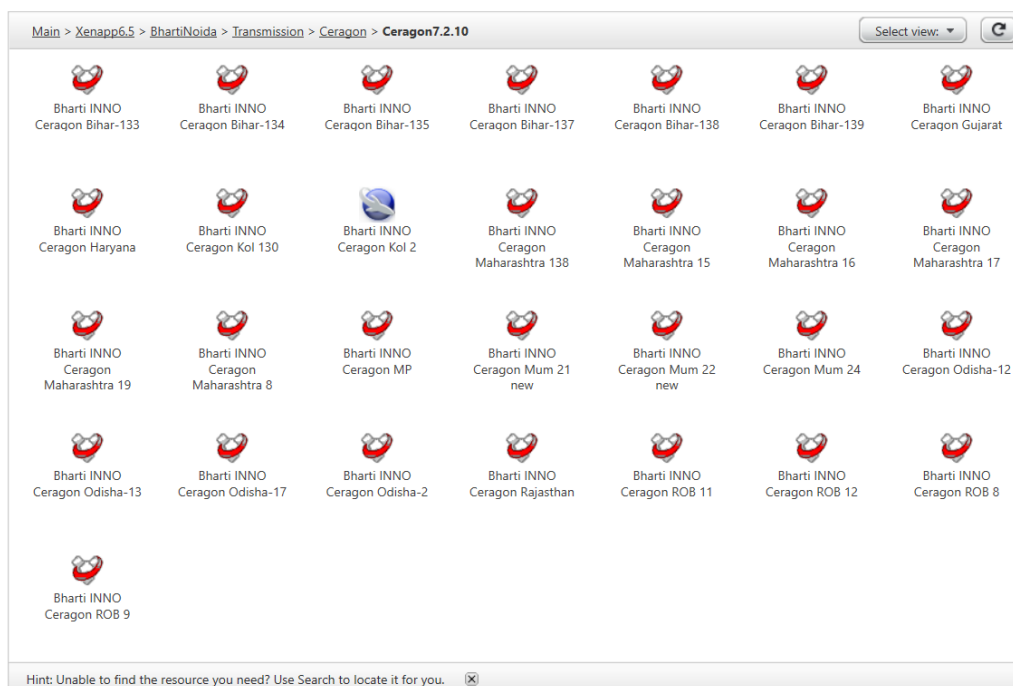
STEPS FOR LAG configuration activity:-

- 1. Login MSDP through below mentioned link.
<https://citrix.in.nmc.ericsson.se/>*
- 2. Provide CITRIX username and password.*

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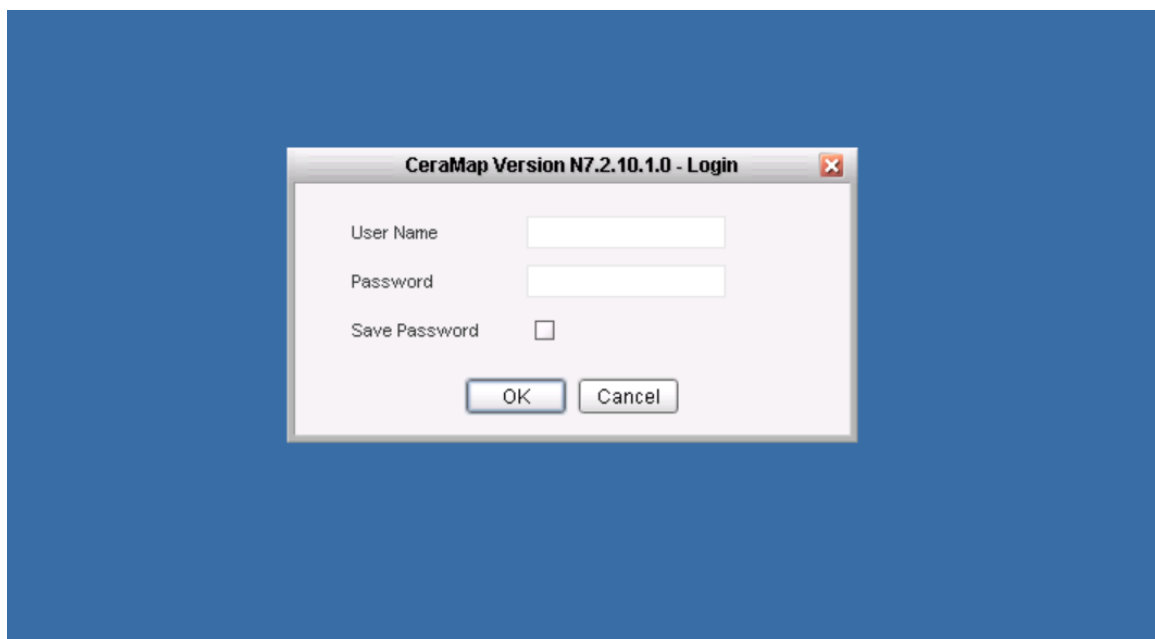
3. Click on "Xenapp6.5" > Main > Xenapp6.5 > BhartiNoida > Transmission > Ceragon > Ceragon7.2.10



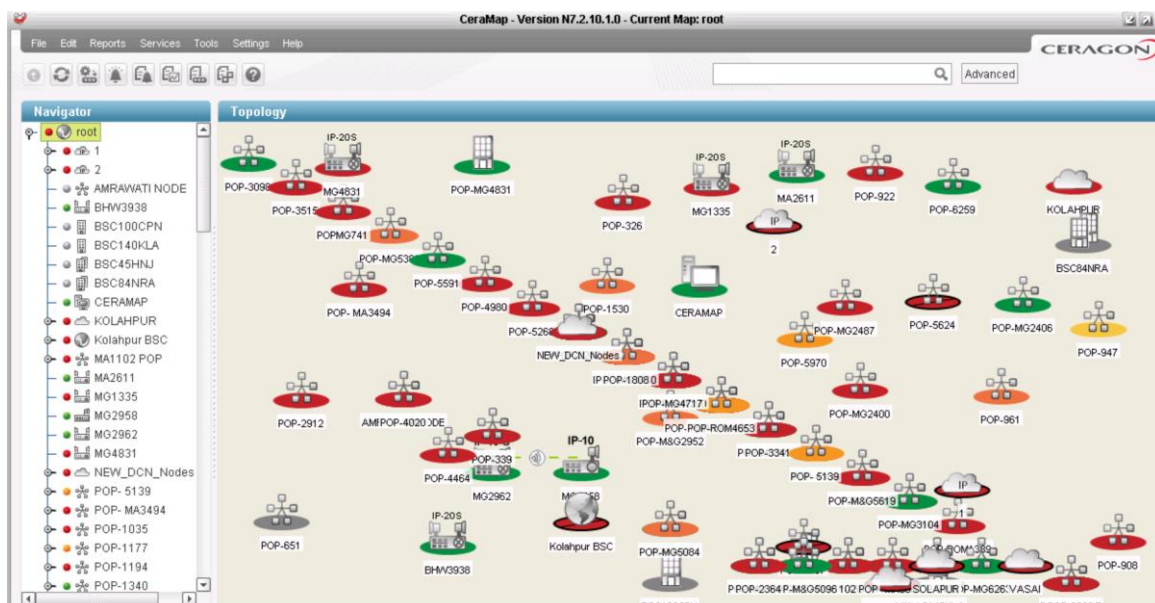
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4. Now Ceragon is launched enter the credentials and server IP of the circle must log in.

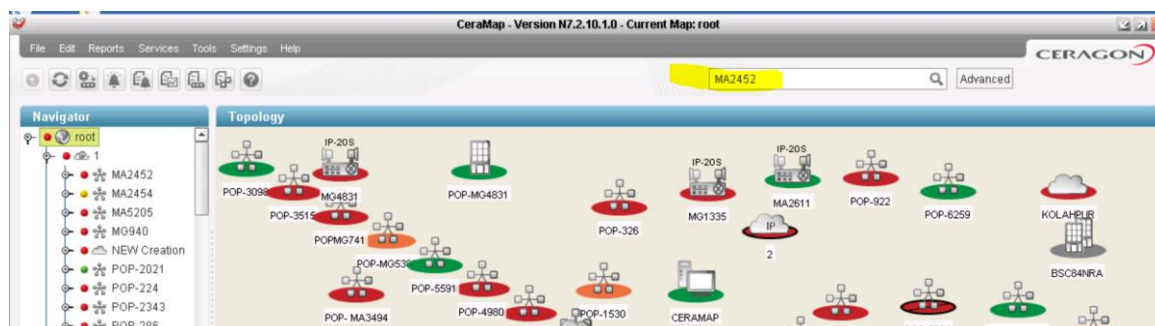


5. Click on "Main Topology" to open the Topology.



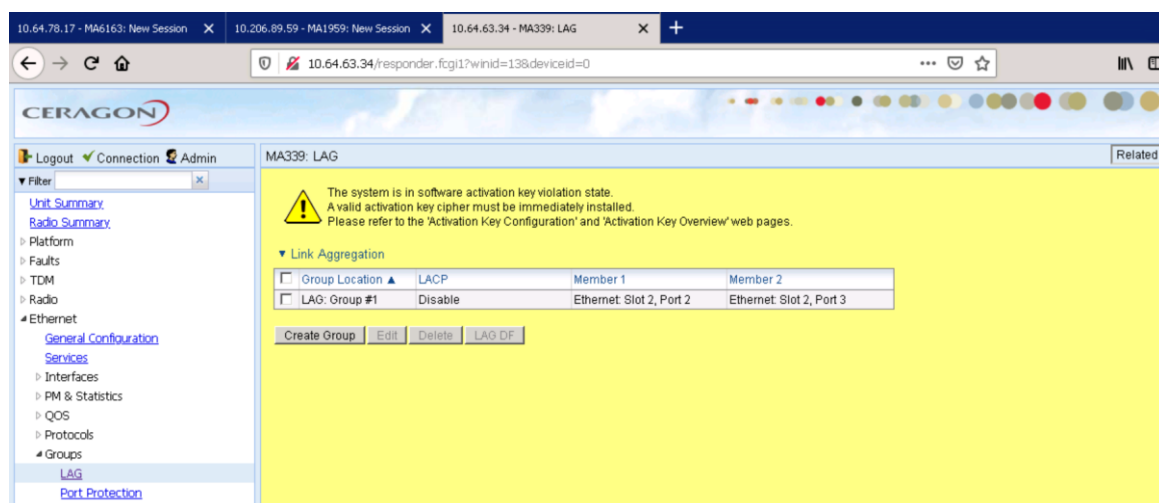
6. Type node name/IP to "FIND" to find the node.

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

1. Select Ethernet-> Groups -> LAG



2. Select Create group -> Member 1 -> select Eth port 1 -> Member 2 -> select ETH port 2 -> then finish

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LAG - Mozilla Firefox

10.64.63.34/responder.fcgi?winid=341&deviceid=0&winsystemname=sys-if-logical-mgr-if-logi...

The system is in software activation key violation state.
A valid activation key cipher must be immediately installed.
Please refer to the 'Activation Key Configuration' and 'Activation Key Overview' web pages.

Link Aggregation - Edit

Group Location: LAG: Group #1

LACP: Disable

LAG degrade: Disable

Member 1: Ethernet: Ethernet: Slot 2, Port 2

Member 2: Ethernet: Ethernet: Slot 2, Port 3

Remove Member: None

Add Member: None

Apply

Page Refresh Interval (Seconds): None Last Loaded: 12:54:02 Refresh Close

LACP configuration port setting according to Plan, and then apply OK.

3. Select **NODE** -> **Faults** -> Go Current alarm >

CERAGON

Logout Connection Admin

Filter

Unit Summary

Platform

Faults

TDM

Ethernet

Sync

Quick Configuration

Utilities

IP20N (1RU) PDJT01: Unit Summary

Unit Parameters

Description: Modular IDU, 1RU, 5 slots / Modular IDU, 2RU, 10 slots

System up time: 111 days, 21 hours, 21 minutes, 0 second

Local date and time: 30-03-2020 12:55:58

Running Version: 10.9.5.0.0.281

Unit Temperature: 62°C, 143.6°F

Voltage input (Volt): 53

Current Alarms

Time	Severity	Description	Origin	Alarm
15-02-2020 14:05:36	High	LAG is not fully functional - LAG Degraded	LAG: Group #1	
17-12-2019 17:18:03	High	Loss-of-frames alarm on TDM service	E1/T1: Slot 3, Port 2	

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

Cause 1: The port link is faulty or disabled.

Corrective Action: Need to change the port if not resolved go to step 2

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Select Node->Fault-> Go Current alarm

#	Time	Severity	Description	User Text	Origin
1	31-03-2020 19:17:36	High	Activation key violation		Slot 1
2	31-03-2020 19:16:49	High	Loss of Carrier		Ethernet Slot 1, Port 1
3	29-03-2020 04:41:28	High	Alarm Indication Signal (AIS) on TDM-LIC TDM port		E1/T1- Slot 3, Port 2

Select Node->Platform->Interface Manager->

Interface location	MAC address	Admin status	Operational Status
<input checked="" type="checkbox"/> Ethernet: Slot 1, Port 1	00:0A:25:E9:5D:24	Up	Down
<input type="checkbox"/> Ethernet: Slot 1, Port 2	00:0A:25:E9:5D:25	Down	Down
<input type="checkbox"/> Ethernet: Slot 1, Port 3	00:0A:25:E9:5D:26	Up	Up

Select Node->Ethernet->Groups->LAG to check the LAG status.

Group Location	LACP	Member 1	Member 2
<input type="checkbox"/> LAG: Group #1	Enable	Ethernet: Slot 1, Port 3	Ethernet: Slot 1, Port 4
<input type="checkbox"/> LAG: Group #2	Disable	Ethernet: Slot 1, Port 5	Ethernet: Slot 1, Port 6

Cause 2: Check the link status of all ports and check whether the ETH_LOS alarm is reported

Corrective Action: If ETH_LOS alarm found need to clear the same.

Select Node->Fault-> Go Current alarm

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#	Time	Severity	Description	User Text	Origin
1	31-03-2020 19:17:36	Activation key violation			Slot 1
2	31-03-2020 19:16:49	Loss of Carrier			Ethernet Slot 1, Port 1
3	29-03-2020 04:41:28	Alarm Indication Signal (AIS) on TDM-LIC TDM port			E1/T1: Slot 3, Port 2

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

Corrective Action: Need to check port settings and correct the same.

Select Node->Ethernet->Interfaces->Physical Interfaces

Option	Operational Status	Admin status	Media type	Auto negotiation	Actual port speed	Actual port duplex
	Down	Up	Auto-Type	On	1000	Full Duplex
	Down	Down	Auto-Type	On	1000	Full Duplex
	Up	Up	RJ45	On	1000	Full Duplex
	Up	Up	RJ45	On	1000	Full Duplex
	Down	Up	RJ45	On	1000	Full Duplex
	Up	Up	RJ45	On	1000	Full Duplex
	Up	Up	RJ45	On	1000	Full Duplex
	Up	Up	RJ45	On	1000	Full Duplex

Select Node->Platform->Interface Manager->

Interface location	Description	Operational Status	Admin status	Media type	Auto negotiation
Ethernet Slot 1, Port 1		Down	Down	Auto-Type	On
Ethernet Slot 1, Port 2		Down	Down	Auto-Type	On
Ethernet Slot 1, Port 3		Up	Up	RJ45	On
Ethernet Slot 1, Port 4		Up	Up	RJ45	On
Ethernet Slot 1, Port 5		Down	Up	RJ45	On
Ethernet Slot 1, Port 6		Up	Up	RJ45	On

Cause 4: The port is self-looped.

Corrective Action: Need to remove loop.

A. Post Activity Health Check:

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

A. 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"