

Prepared (also subject responsible if other) Pragadeesh		No.		
Approved	Checked	Date 07-05-2020	Rev Ver1.0	Reference

MOP of ETH_LOS Alarm for Huawei

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Activity Description

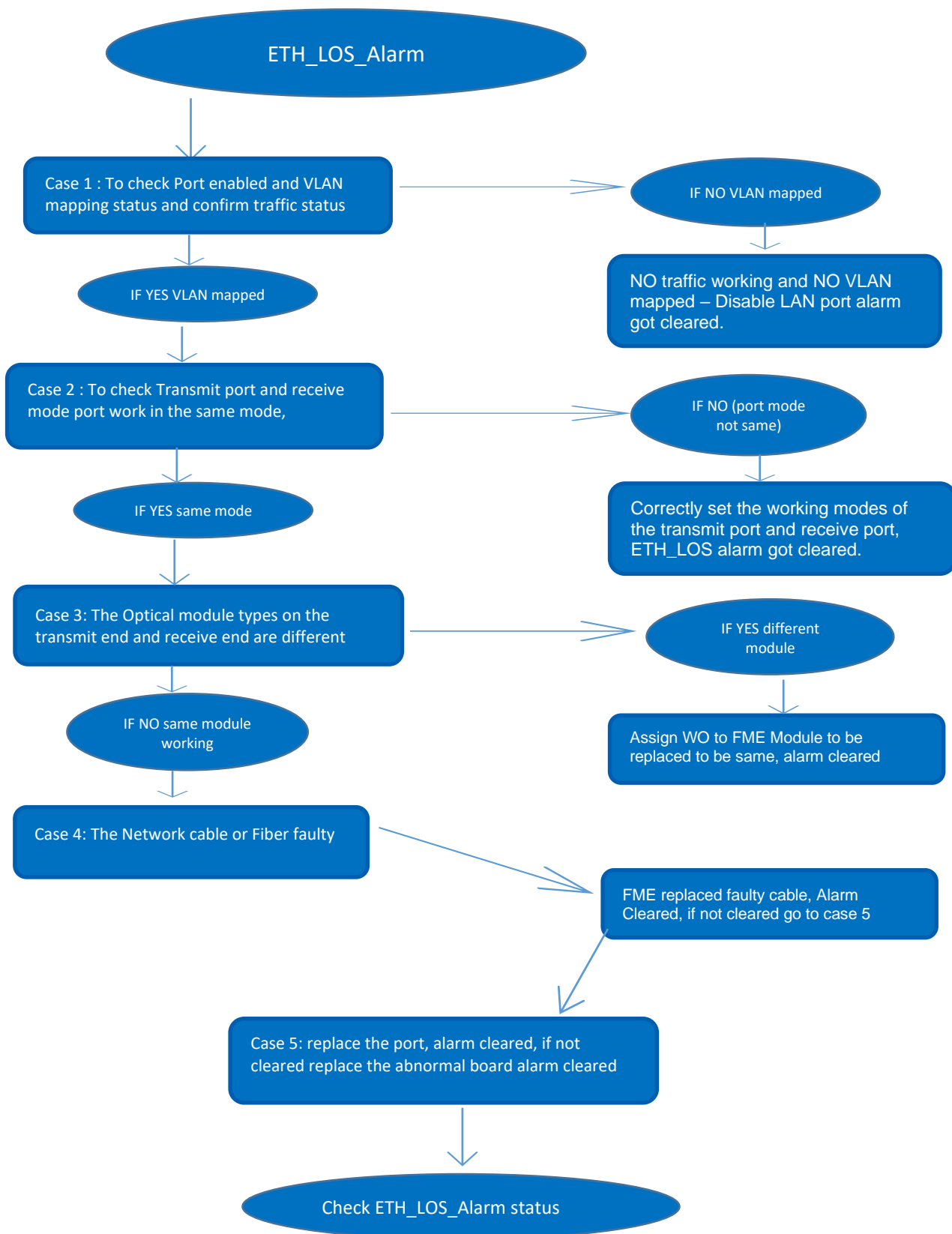
This activity is for E2E troubleshooting and alarm clearance of ETH_LOS.

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

Alarm Name	ETH_LOS Alarm
Alarm Description	The ETH_LOS alarm indicates the loss of Ethernet port connection
Possible Causes	<ol style="list-style-type: none">1. The negotiation fails because the transmit port and receive port work in different modes2. The Optical module types on the transmit end and receive end are different3. The Cable or Fiber is Faulty4. The Local and Receive end is Faulty5. The Remote transmit end is faulty

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Flow Chart



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Activity Details

The ETH_LOS alarm indicates the loss of Ethernet port connection

Below mentioned steps needs to follow clear ETH_LOS alarm.

1. To check the ETH_LOS alarm enabled port VALN mapped or not and traffic status
2. The negotiation fails because the transmit port and receive port work in different modes
3. The Cable or Fiber is Faulty
4. The Local and Receive end is Faulty
5. The Remote transmit end is faulty

Case 1: to check the ETH LOS alarm observed port, any VALN mapped status, yes if VLAN mapped and check the traffic status and also needs to check active Alarm date, If no traffic working means disable LAN port alarm got cleared, if traffic working means go to Case :2

Severity	Alarm ID	Alarm So...	Name	Occur...	Last Occurred (ST)	Location Information	First Occurred (ST)	Acknowled...	Cleared On (ST)	Additio
Critical	235	AYANA3	ETH_LOS	1	04/17/2020 14:08:58	22-EG2D-2(CEN)-MAC-1	04/17/2020 14:08:58	04/24/2020 1...		

Location Information: 22-EG2D-2(CEN)-MAC:1	Troubleshooting Alarm Description: Loss of network port connection
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Select the E-LAN services to checking VLAN mapping – if yes VLAN mapping available in 22-EG2D-Port2, go to check traffic status, if no VLAN mapping available disable LAN port.

<ul style="list-style-type: none"> N+1 Protection SDH/PDH Service Management SNCP Service Control Board 1+1 Protection Interface Management MPLS Management APS Protection Management Ethernet Service Management <ul style="list-style-type: none"> E-Line Service E-LAN Service E-AGGR Service QinQ Link 	Query New Activate/Deactivate Delete Apply Print... Save As...					
	Protection Group		Manual Loopback Detection	Periodic Loopback Detection	Loopback upon MAC Address Flapping	
	MAC Address Learning Parameters		Disabled MAC Address		Unknown Frame Processing	Maintenance Association MEP Point
	UNI	Port Attributes	Split Horizon Group		Static MAC Address	Self-Learning MAC Address
	Port		SVLAN/SVLANs		VLANs/CVLAN	
22-EG2D-2(CEN)		-		319-321,421		-
22-EG2D-1(PORT-1)		-		319-321,411,421		-
17-EG2D-1(NEW CEN)		-		319-321,421		-
9-ISV3-1(RTNIF-1)		-		319-321,421,567,632,651,684		-
7-EMET-3(BANK OF BARODALIMAN)		-		567,632,651,684		-

Select the Self –Learning MAC address check the MAC status, NO MAC received from 22-EG2D port2, further go to LAN port disable.

Protection Group		Manual Loopback Detection		Periodic Loopback Detection		Loopback upon MAC Address Flapping					
MAC Address Learning Parameters				Disabled MAC Address		Unknown Frame Processing		Maintenance Association		MEP Point	
UNI		Port Attributes		Split Horizon Group			Static MAC Address		Self-Learning MAC Address		
Available Boards: 22-EG2D											
VLAN ID				MAC Address				Egress Interface			
421				F8-E8-11-00-58-97				22-EG2D-1(PORT-1)[319-321,411,421]			
421				10-51-72-FA-50-BE				22-EG2D-1(PORT-1)[319-321,411,421]			

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Select the Ethernet interface to port disable 22-EG2D port2.

Basic Attributes						
Port ^	Name ^	Port Enabled v	Port ... ^	Enca... ^	Working Mode ^	Max Fra...
22-EG2D-2(CEN)	CEN	Enabled v	Layer 2	802.1Q	Auto-Negotiation	1522
22-EG2D-1(PORT-1)		Enabled	Layer 2	802.1Q	Auto-Negotiation	1522
17-EG2D-2(LAG)	LAG	Enabled	Layer 2	802.1Q	Auto-Negotiation	1522
17-EG2D-1(NEW CEN)	NEW CEN	Enabled	Layer 2	802.1Q	Auto-Negotiation	1522
7-EM6T-3(BANK OF BARODA IWAN)	BANK OF BARODA IWAN	Enabled	Layer 2	802.1Q	Auto-Negotiation	1522

Further port disabled (22-EG2D port2), alarm got cleared

Select Board

All

Basic Attributes

Flow Control

Layer 2 Attributes

Layer 3 Attributes

Advanced Attributes

Port ^	Name ^	Port Enabled ▾	Port ... ^	Enca... ^	Working Mode ^	Max Fra...
22-EG2D-2(CEN)	CEN	Disabled	Layer 2	802.1Q	Auto-Negotiation	1522
22-EG2D-1(PORT-1)		Enabled	Layer 2	802.1Q	Auto-Negotiation	1522
17-EG2D-2(LAG)	LAG	Enabled	Layer 2	802.1Q	Auto-Negotiation	1522
17-EG2D-1(NEW CEN)	NEW CEN	Enabled	Layer 2	802.1Q	Auto-Negotiation	1522
7-EM6T-3(BANK OF BARODA IWAN)	BANK OF BARODA IWAN	Enabled	Layer 2	802.1Q	Auto-Negotiation	1522

No. 0, Total: 10, Select

Associated Service

Service

Query


Apply

Print...

Save As...

Used Resource ^

Result



Operation succeeded.

Details>>

Save As...

Close

ETH_LOS alarm got cleared status

Severity ^	Name ^	Alarm... ^	Location ^	Occurrence Time(CT) ^	Cleared Time(CT) v	Type ^	NE Type ^
Critical	ETH_LOS	AYANA3	22-EG2D-2(CEN)-MAC:1	04/17/2020 14:08:58	05/08/2020 02:06:42	Communication	OptiX RTN 980
Minor	MW_BER_SD	AYANA3	6-ISU2-1(AYANAV)-RTNIF:1	05/07/2020 21:36:28	05/07/2020 21:36:29	Service	OptiX RTN 980

Alarm Details

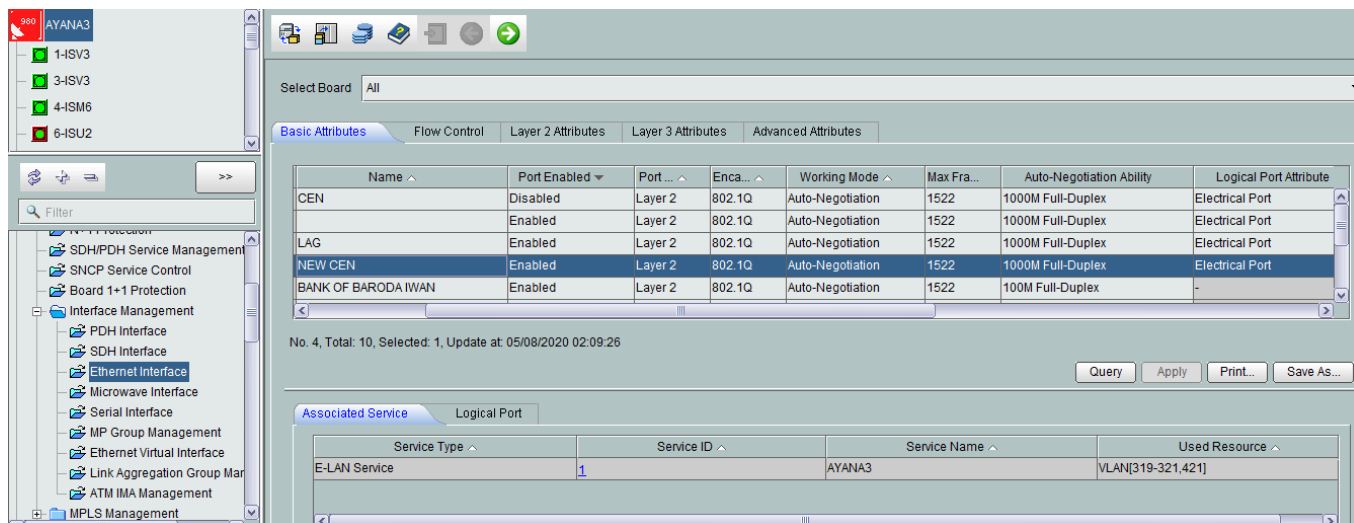
Loss of network port connection
22-EG2D-2 (CEN)-MAC:1

Alarm Causes

Occur Reason:
(1)The port is enabled, but the network cable or fiber of the network port is improperly connected.

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Case 2: To check the encapsulation mode and auto Negotiation settings, if working transmit and receive mismatch to set correctly working mode then alarm got cleared, if working modes same go to Case 3



Name	Port Enabled	Port ...	Enca...	Working Mode	Max Fra...	Auto-Negotiation Ability	Logical Port Attribute
CEN	Disabled	Layer 2	802.1Q	Auto-Negotiation	1522	1000M Full-Duplex	Electrical Port
LAG	Enabled	Layer 2	802.1Q	Auto-Negotiation	1522	1000M Full-Duplex	Electrical Port
NEW CEN	Enabled	Layer 2	802.1Q	Auto-Negotiation	1522	1000M Full-Duplex	Electrical Port
BANK OF BARODA IWAN	Enabled	Layer 2	802.1Q	Auto-Negotiation	1522	100M Full-Duplex	-

No. 4, Total: 10, Selected: 1, Update at: 05/08/2020 02:09:26

Service Type	Service ID	Service Name	Used Resource
E-LAN Service	1	AYANA3	VLAN[319-321,421]

Case 3: further assign to WO FME clear ETH_LOS alarm, FME will take required spares and visit the site to check the network cable connected properly, if not connected properly or cable faulty, further faulty cable to be replaced (ETH cable or Optical cable) and also clean the SFP, if not resolved go to case 4.

FME faulty LAN cable replaced alarm got cleared



Case 4: after LAN cable replaced if still alarm observed, further LAN port to be changed local end, if still observed alarm LAN port to be changed at remote end alarm got cleared, if still alarm not cleared further go to case 5.

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Case 5: Check whether any fault occurs on the alarmed port and to check any abnormal observed on Ethernet board, further to reset board alarm got cleared, if still alarm not cleared means board to be replaced alarm got cleared.

FME Abnormal board replaced status



Further checked Node alarm status ETH_LOS alarm got cleared

Severity ^	Name ^	Alarm... ^	Location ^	Occurrence Time(CT) ^	Cleared Time(CT) v	Type ^	NE Type ^	
Critical	ETH_LOS	AYANA3	22-EG2D-2(CEN)-MAC:1	04/17/2020 14:08:58	05/08/2020 02:06:42	Communication	OptiX RTN 980	M ^
Minor	MW_BER_SD	AYANA3	6-ISU2-1(AYANAV)-RTNIF:1	05/07/2020 21:36:28	05/07/2020 21:36:29	Service	OptiX RTN 980	M v

Alarm Details	Alarm Causes
Loss of network port connection 22-EG2D-2 (CEN)-MAC:1	Occur Reason: (1)The port is enabled, but the network cable or fiber of the network port is improperly connected;