###### TDM PWE -DS1/E1

***Objective:***

* Validate DS1 TDM PWE for pluggable **XCVR-TDM4GE.** The PWE is between 10.5.1 and 6.20.

Shape, rectangle

Description automatically generated

***Procedure:***

* On the SAOS 6.20 node, 3926\_0060, the TDM FRU port tdm01 is connected to TDM DS1 testset.
* Find the mac address of the SAOS 6.20 FRU port tdm01 by doing a port show. Keep this mac address handy for test of testcase.

CN3926\_0060> port tdm show

+ +

| TDM Global Configuration and Status |

+ + +

| Parameter | Value |

+ + +

| Mode | ansi |

| C-TPID | 8100 |

+ + +

+ +

| TDM Module Configuration and Status |

+ + +

| Parameter | Value |

+ + +

| MAC Address | 74:87:bb:6f:70:8a |

| Reference1 Clock | tdm01 (rx) |

| Reference2 Clock | - |

| Alarm State | None |

+ + +

* Provision the pluggable on the SAOS 10.5.1 device 5144-009.

tdm-global mode ansi ctpid 0x8100 tdm-global sfp-auto-upgrade true

no fps fp remote-fp2 no fps fp remote-fp1 no fps fp remote-fp26

xcvrs xcvr 2 properties mode DS1-E1 xcvrs xcvr 1 properties mode OC3-STM1

tdm-ports tdm-port 2 clock-mode internal tdm-ports tdm-port 2 ettp-id 2

tdm-ports tdm-port 2 type smart-sfp tdm-ports tdm-port 2 port-mode ds1-e1 tdm-ports tdm-port 2 src-address port

* Find the SAOS 10x pluggable mac address by displaying the tdm port. Keep this mac address handy.

5144-009> show tdm ports port 2

+----- TDM PORT 2 CONFIGURATION AND STATUS INFORMATION +

| Parameter | Value |

+ + +

| TDM-Port-Name | 2 |

| Type | Smart-Sfp |

| Port-Mode | Ds1-E1 |

| Parent-Id | 2 |

| Ettp-Id | 2 |

| Src-Address | Port |

| Clock-Mode | Internal |

| Loopback-Mode | None |

| Loopback-Type | None |

| Loopback-Channel | None |

| Prbs-Insert | None |

| Prbs-Insert-Channel | None |

| Prbs-Monitor | None |

| Prbs-Monitor-Channel | None |

| Line-Build-Out | 133 |

+ + +

| Operational Information | |

+ + +

| Oper-State | Up |

| Oper-Category | Sfp-Ds1 |

| Source-Mac | 18:92:A4:96:E6:8A |

| Firmware-Oper-State | Upgrade-Complete |

| Packet-Processor-Oper-State | Upgrade-Complete |

| Active-Alarms | |

| Channels-Assigned | 0 |

| | X |

| Errored-Seconds-Line | 0 |

| Severely-Errored-Seconds-Line | 0 |

| Los-Seconds-Line | 0 |

| Unavailable-Seconds-Line | 12 |

| Ais-Seconds-Line | 0 |

| Total-Time-Line | 3640 |

| Loopback-Errored-Seconds-Line | 0 |

| Loopback-Severely-Errored-Seconds-Line | 0 |

| Loopback-Los-Seconds-Line | 0 |

| Loopback-Unavailable-Seconds-Line | 0 |

| Loopback-Available-Seconds-Line | 0 |

| Loopback-Total-Time-Line | 0 |

+ + +

* Config the following on SAOS 6.20 FRU port tdm01.

vlan add vlan 2100 port 1.4  **add NNI Port 1.4 into VLAN**

virtual-circuit ethernet create vc vcEth vlan 2100

port tdm t1 set port tdm01 framing extended-super-frame port tdm enable port tdm01

virtual-circuit tdm create tdm-profile 620\_ds1\_profile pwType satop payload-size **192**  **by default 10x has payload size of 192**

attachment-circuit satop create ac ac-620-test port tdm01 rtp off  **satop encapsulation supported, rtp should be set to off**

virtual-circuit tdm-mef8 create vc vc-10x-ds1 ac ac-620-test tdm-profile 620\_ds1\_profile peer-mac **18:92:A4:96:E6:8A** in-ecn 2100 out-ecn 2101  **peer mac is the 10x TDM port mac**

virtual-switch cross-connect create xc xc-10x-ds1test tdm-vc vc-10x-ds1 eth-vc vcEth

* Config the following on SAOS 10.5.1. TDM DS1 pluggable is inserted into port 2.

classifiers classifier v2100 filter-entry vtag-stack vtags 1 vlan-id 2100

fds fd v2100 mode **tdm-vpws**

fps fp fp26-v2100 logical-port 26 fd-name v2100 classifier-list v2100

fps fp fp2-v2100 logical-port 2 fd-name v2100 classifier-list v2100

# TDM pseudowires ECID must match with remote node, mac address is the SAOS 6x tdm01 mac displayed previously

tdm-pseudowires tdm-pseudowire tdm2100 emulation-type satop encapsulation mef8 **in-ecid 2101 out-ecid 2100** tdm-vid 2100 peer-mac **74:87:bb:6f:70:8a** parent-tdm-port 2 channel-type ds1-e1 rtp off channel 0

tdm-pseudowires tdm-pseudowire tdm2100 jitter-buffer 5000

tdm-pseudowires tdm-pseudowire tdm2100 admin-state enabled

* Verify DS1 traffic on the testsets connected to the 10x port 2 and 6x FRU port tdm01

Graphical user interface, application

Description automatically generated

* With TDM traffic, ensure that synchronization is provisioned and that both 10x and 6x devices are synced to a singled timing source.

Test Case Results:

Passed: Yes No Verified by Date/Time Comments