Monitor the SFP Module

For Releases 20.2.1 and later.

You can use CLI and vty commands to read the small form-factor pluggable (SFP) module EEPROM and digital optical monitoring (DOM) memory and report the module information and DOM as per the Multisource Agreement (MSA) SFF-8472 specification.

To report the SFP module information and monitor the DOM status of the optical transceiver:

```
admin@versa-vos-cli> show debug vsm sfp-optics-modules

vsmd debug vty commands:
vsm-vcsn0> show vsm sfp-optics-modules
 [vni-x/x]  Interface Name
 [enter]    Show all SFP interfaces
        (show all vni ports with SFP modules detected)

vsm-vcsn0> show vsm optics-diagnostics
   [string]   select from choices: [brief, dom, detail]

vsm-vcsn0> show vsm optics-diagnostics brief
   [string]   Interface name [vni-x/x]
```

For example:

```
admin@versa-vos-cli> show debug vsm sfp-optics-modules

    Datapath interface      : vni-0/5
    Vendor Name             : FINISAR
        Part Number         : FTRJ1319P1BTL
        SerialNumber        : P5H1HTR
    Transceiver Identifier  : 0x03 Identifier_SFP_SFP_PLUS
                            : Ethernet 1000BASE-LX
    10G/1G/Eth Compliance   : Transceiver:A0[3,6] 0x00 0x02
    Connector               : 0x03 Connector_LC
    Length          : (SMF,km)  (SMF,m )  (50um,m)  (62.5um,m)  (Copper,m)  (OM3,m)
                    : 10        10000     0         0           0           0
    Laser Wavelength        : 1310nm
    Optical Diagnostics Monitoring   : Implemented
        RX signal power        : Power Measurement Average Power
        TX signal power        : Not valid when the transmitter is disabled
        Calibration            : Externally Calibrated
```

```
Module Temperature          : 44.82 degrees C / 112.68 degrees F
Module Voltage              : 3.3132 V
Laser Bias Current          : 14.772 mA
Laser TX Output Power       : 0.4068 mW / -3.91 dBm
RX Measurement Average Power : 0.7736 mW / -1.11 dBm
Optional Status/Control Bits : 0x00
    TX Disable State        : 0x00
    TX Fault State          : 0x00
    RX LOS State            : 0x00

Datapath interface          : vni-0/8
Vendor Name                 : FINISAR
    Part Number             : FTLX8571D3BCL
    SerialNumber            : UG407UW
Transceiver Identifier      : 0x03 Identifier_SFP_SFP_PLUS
                            : Ethernet 10G Base-SR
10G/1G/Eth Compliance       : Transceiver:A0[3,6] 0x10 0x00
Connector                   : 0x03 Connector_LC
Length                      : (SMF,km)  (SMF,m )  (50um,m)  (62.5um,m)  (Copper,m)  (OM3,m)
                            : 0        0         80        30          0           300
Laser Wavelength            : 850nm
Optical Diagnostics Monitoring : Implemented
    RX signal power         : Power Measurement Average Power
    TX signal power         : Not valid when the transmitter is disabled
    Calibration             : Internally Calibrated
Module Temperature          : 35.36 degrees C / 95.65 degrees F
Module Voltage              : 3.3833 V
Laser Bias Current          : 8.046 mA
Laser TX Output Power       : 0.5447 mW / -2.64 dBm
RX Measurement Average Power : 0.4614 mW / -3.36 dBm
Optional Status/Control Bits : 0x30
    TX Disable State        : 0x00
    TX Fault State          : 0x00
    RX LOS State            : 0x00

Datapath interface          : vni-0/9
Vendor Name                 : FINISAR
    Part Number             : FTLX8571D3BCL
    SerialNumber            : AJ20GLU
Transceiver Identifier      : 0x03 Identifier_SFP_SFP_PLUS
                            : Ethernet 10G Base-SR
10G/1G/Eth Compliance       : Transceiver:A0[3,6] 0x10 0x00
Connector                   : 0x03 Connector_LC
Length                      : (SMF,km)  (SMF,m )  (50um,m)  (62.5um,m)  (Copper,m)  (OM3,m)
                            : 0        0         80        30          0           300
Laser Wavelength            : 850nm
Optical Diagnostics Monitoring : Implemented
    RX signal power         : Power Measurement Average Power
    TX signal power         : Not valid when the transmitter is disabled
    Calibration             : Internally Calibrated
Module Temperature          : 36.34 degrees C / 97.41 degrees F
Module Voltage              : 3.3687 V
Laser Bias Current          : 6.946 mA
Laser TX Output Power       : 0.5398 mW / -2.68 dBm
```

RX Measurement Average Power   : 0.3621 mW / -4.41 dBm
      Optional Status/Control Bits   : 0x30
          TX Disable State   : 0x00
          TX Fault State   : 0x00
          RX LOS State   : 0x00

Software Release Information

Releases 20.2.1 and later support all content described in this article