

Check the optical-to-electrical module on the switch

Article Overview

You can verify the health and status of an optical module on a switch using CLI commands to check link status, module type, and diagnostic metrics like Tx/Rx power, voltage, and temperature.

Steps to Check Optical Module Status on Cisco Switches

- o Access the Switch CLI SSH or console into the switch using your credentials. For Cisco Small Business switches, Telnet or SSH can be used .
- o Check Interface Status Run `show interface status` to confirm the port is connected and active. This shows the link state, speed, and media type .
- o View Installed Modules Use `show inventory` to list all installed hardware, including SFPs, with Product ID (PID), Version ID (VID), and serial number .
- o Check Transceiver Details Execute `show interface transceiver detail` or `show interfaces transceiver detail` to view Digital Diagnostic Monitoring (DDM) metrics such as:
 - o Transmit (Tx) and receive (Rx) optical power
 - o Module temperature
 - o Voltage and bias current
 - o Vendor and part information
- o Troubleshoot Unsupported Modules If the port is err-disabled due to an unsupported transceiver, follow Cisco guidance or vendor documentation to resolve compatibility issues .

Steps for Huawei Switches

- o Display Optical Module Information Use `display transceiver [interface interface-type interface-number | slot slot-id]` to view module details .
- o Run Diagnostics Execute `display transceiver diagnosis interface` to see diagnostic information, including optical power, temperature, voltage, and current .
- o Verify Certification Ensure the optical module is Huawei-certified to avoid installation issues, data bus errors, or interface damage .

Best Practices

- o Regular Monitoring: Periodically check DDM metrics to detect early signs of degradation.
- o Compatibility: Use certified modules to prevent hardware or data bus issues.
- o Documentation: Record module PID, VID, and serial numbers for inventory and troubleshooting purposes.
- o Troubleshooting: If optical power is too low or high, check fiber connections, module type, and distance specifications . By following these steps, you can effectively monitor and troubleshoot the optical-to-electrical modules on your switch, ensuring reliable connectivity and preventing unexpected link failures.

Check the optical-to-electrical module on the switch

The selected optical modules must be supported by the optical interfaces. Check whether the optical module used on the switch is

By reading internal parameters of optical transceivers on switches, users can monitor link status, real-time

Procedure Check whether the optical module models at the two ends match. Run the display interface interface-type

In this Cisco Tech Talk, learn how to view the optical module status on a Cisco switch using the Command Line

Perform a self-loop test on the optical module to check whether the optical module or optical fiber is faulty. Use a

View the Optical Module Status of your Switch Step 1. Log in to the web-based utility of your switch then choose

Objective The Cisco Small Business Series Switches allow you to plug in a Small Form-factor Pluggable (SFP) transceiver in their

When optical modules are installed on switches, it is necessary to read internal module parameters to monitor

When optical transceivers operate on switches, reading internal module parameters helps monitor link status, real

Article ID:5508 View the Optical Module Status on a Switch Objective The Cisco Small Business Series Switches

Learn Cisco commands like show inventory and show interface transceiver detail to monitor

Once the transceiver and fiber optic cable are plugged in properly in the switch optical module, you should be able to view the current

This article provides instructions on how to view the Optical Module Status on your switch through the Command Line

Working Principle of Optical Modules Optical Modules (also known as Optical Transceivers) are critical

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components in fiber optic

If possible, remove and reinstall the optical modules to check whether the fault is rectified. If the fault persists, run the reboot

The OSM TP22 Optical Switch Module and the ESM TP40 Electrical Switch Module are new members of the

Web: <https://www.morwarreconst.co.za>

