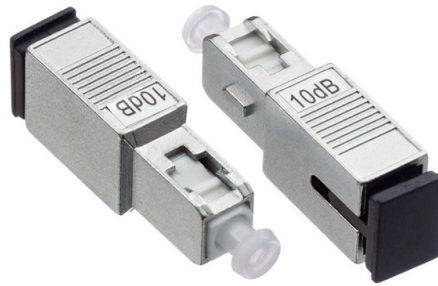


How to force a 10 Gigabit optical switch to Gigabit speed



Summary of Content

You generally cannot force a 10G SFP+ port to 1G speed without using a compatible 1G SFP transceiver.

Key Considerations

1. Port Hardware Limitations Most 10G SFP+ ports are designed to operate at 10 Gbps and do not support manual speed reduction to 1 Gbps unless the port or PIC explicitly supports dual-rate operation. Attempting to configure the port speed via CLI often fails because the underlying hardware does not allow a lower speed setting . 2. Using Compatible SFP Transceivers The standard method to achieve 1G operation on a 10G port is to replace the 10G SFP+ module with a 1G SFP module (e.g., SFP-1GE-SX or SFP-1GE-LX). The switch will then automatically configure the port to operate at 1 Gbps . This is the only reliable approach on most Juniper QFX and Cisco 10G switches. 3. Auto-Negotiation and Configuration

- On Juniper QFX5100 switches, autonegotiation is enabled by default on 10G ports and cannot be disabled. Commands like link-speed 1g only work on aggregated interfaces or when using compatible 1G optics .

- On Cisco switches, 10G fiber ports typically do not expose a "speed" command for manual configuration. The port will attempt 10G link negotiation, and there is no software-only method to force 1G . 4. Alternative Solutions

- If you cannot replace the SFP module, consider using a fiber link with 1000BASE-SX or LX modules to connect to the 1G device.

Article Content

How to force gigabit speed on a Huawei switch s 10G optical module

The following uses the Moduletek SFP-10G-LR module connected to a Huawei S6700 switch as an example to introduce how to read

You need to see first if pc get a gigabit connection to the switch. Then force the pc to run at 100mbps in the nic settings.

Configure and Verify Ethernet 10/100/1000Mb Half/Full Duplex ...

Table that shows all possible settings and results of speed and duplex between a NIC and a switch. Discussion of the

Hard Setting Speed on 10gb Ports

When I go into the interface I am not presented with the "speed" command like I would be on a normal interface.

nexus, SFP 10G incompatible with 1G speed

On a nexus 5548, when I try to force the speed to 1G on a 10g fiber port, the port goes down I know for SPF 1G,

What Can I Do If My PC Has Slow Network Speed When Connected

What Can I Do If My PC Has Slow Network Speed When Connected to an Unmanaged Switch? Note: The following

Ethernet Stuck at 100 Mbps? Fix Your Gigabit Connection

Connect the computer directly to a confirmed Gigabit switch or router port using a short, known-good Cat5e or Cat6

Upgraded to 10Gbe but still only getting Gigabit speeds

I have 1x 10GbE connection from my PC to a 10GbE switch and 2x 2.5GbE connections from that switch to a NAS with 2x 2.5GbE

How to force 1G speed for Juniper QFX5100 10G ports?

The proper syntax for forcing a QFX's port speed to gigabit is link-speed 1g, see

Configure Gigabit and 10-Gigabit Ethernet Interfaces | Junos OS ...

Learn how to configure link settings and IP options on Gigabit and 10-Gigabit Ethernet interfaces. Also, this topic includes how to

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