

# Resolving Cisco SG-200-26 Switch Failure

Zerowait Corporation 707 Kirkwood Hwy Wilmington DE 19805

Tel: (302) 996-9408

Email: engineering@zerowait.com

#### Prepared by:

Zerowait Engineering Email: engineering@zerowait.com

### I. Situation

In early July 2025, during a planned upgrade of our SRX Firewalls, our team noticed a significant issue with our network performance. Despite upgrading to a larger internet line, our network was severely underperforming, delivering only 19.26 Mbps download and 58.84 Mbps upload speeds. This degradation was critical, as it impacted our operations and ability to serve users effectively. The issue was traced to our Cisco SG-200-26 switch, a reliable but aging component of our network infrastructure.

### II. Task

Our objective was to identify and resolve the root cause of the degraded bandwidth to restore the expected speeds. The task required diagnosing whether the issue stemmed from the firewall upgrades, the internet line, or the Cisco switch itself, while minimizing downtime and ensuring a seamless user experience. We needed to troubleshoot efficiently, test potential solutions, and implement a fix to meet our performance goals.

## III. Action

Over two weeks, our team systematically investigated the issue:

- 1. **Initial Assessment**: We confirmed the firewall upgrades were correctly implemented and ruled out issues with the internet line by testing directly from the modem, which delivered expected speeds.
- 2. **Switch Troubleshooting**: We focused on the Cisco SG-200-26 switch, performing the following:
- 3. **Reconfigure**: We reconfigured and tested switch settings to rule out misconfiguration.
- 4. **Reboot**. We rebooted the switch multiple times to clear potential glitches.
- 5. **Updates**: We updated the switch firmware to the latest version to address possible software bugs. Despite these efforts, the bandwidth remained degraded, indicating a hardware issue.
- 6. **Replacement Decision**: After exhausting software-based solutions, we concluded the switch was faulty. Fortunately, we had a spare Cisco SG-200-26 switch on-site.
- 7. **Switch Replacement**: We configured the spare switch with identical settings, swapped the cables, and deployed it into the network on July 30, 2025.

# IV. Result

The switch replacement resolved the issue immediately. Post-replacement tests, showed download speeds of 856.75 Mbps and upload speeds of 92.2 Mbps, aligning closely with our service expectations. The restored connectivity ensured smooth operations and eliminated user complaints. The troubleshooting process also deepened

our team's expertise in diagnosing network hardware issues, enhancing our ability to handle similar challenges in the future.

#### V. Recommendation

Despite the failure of the Cisco SG-200-26 switch, we would still recommend Cisco's products. These switches, though older, have proven reliable in our infrastructure for years, and this incident was an isolated hardware fault. The troubleshooting experience provided valuable insights into network diagnostics, reinforcing the importance of having spare hardware on hand. Cisco's reputation for quality and the switch's overall performance make it a solid choice for SMB networks.

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