

Core Switch Dual-Machine Redundancy Backup



Overview

This article provides an in-depth analysis of the core logic behind fiber optic ring redundancy design from four dimensions: technical principles, design challenges, practical solutions, and future trends. Technical Principles: Evolution from "Single Chain" to "Closed Loop" In the core layer, I want to have redundancy, which means that if the main core switch of my network has a problem, the backup switch will automatically enter the circuit. What method is there?

04-19-2024 02:04 PM 04-19-2024 04:47 AM You need first to use PO for all connection. How about core switch that have dual controller and dual PSU, should i have an additional unit as backup (ex: 5400 zl) @HPE Wow I have this model switch and working on such a setup. Looking at settings up VRRP for this. UniFi enables High Availability across your deployment by building redundancy into every part of the network—from Gateways to Switches to Access Points—so that. The fiber optic ring redundancy design for industrial Ethernet switches is precisely engineered to address this pain point—achieving millisecond-level fault self-healing through the synergy of physical ring architecture and intelligent protocols, thereby constructing the "self-healing heart" of. This is a huge improvement in stability and failure-domain reduction. This is the same concept u/bmoraca is hinting at. This eliminates StackWise-Virtual, MLAG. However, the main choice of the core switch is not limited to these parameters, but also depends on link aggregation and redundancy. These functions, such as redundancy, stacking, and hot backup, are very important and determine the performance, efficiency, and stability of the core switch in.

Article Content

Oct 22, 2025

An Overview of High Availability in UniFi – Ubiquiti Help Center

The Enterprise Campus Aggregation is a high-capacity 100G switch that extends redundancy to the core of your network. It features Multi-Chassis Link Aggregation (MC-LAG), which allows combining two ...

Feb 05, 2026

Solved: core switch redundancy

Does the core have 2 sups that would provide some level of redundancy once it had to power supplies with separate feeds that would just leave the chassis as only point of failure and they ...

Jan 18, 2026

Fiber Optic Ring Redundancy Design for Industrial Ethernet Switches

The foundation of redundancy design lies in dual backup of physical links. Taking the USR-ISG series industrial switches as an example, they support two independent fiber optic accesses, forming ...

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Redundant Core Switch

Clients: I have redundant “core” switches with single controllers, with 4 additional switches connected to each “core” switch. If I loose a “core” switch, then about half a floor would ...

Jul 04, 2026

Core layer | FortiSwitch 7.4.0 | Fortinet Document Library

This design provides the maximum level of redundancy and resiliency towards the nonstop forwarding goal that this layer proposes to provide for the entire wired and wireless networks and with the ...

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Link aggregation, redundancy, stacking, and hot backup of core switches

These functions, such as redundancy, stacking, and hot backup, are very important and determine the performance, efficiency, and stability of the core switch in practical applications.

Sep 25, 2025

Core switch redundancy

Another advantage of VSS or any similar stacking type technology is that each access switch can have active active 10G uplink back to the core. If you mix vendors, you would probably ...

Jun 23, 2026

Question About Core Redundancy Best Practice : r/networking

ECMP just lets the access-layer switch understand that either of the redundant uplinks is a valid path towards the rest of the routing table. So unlike STP, which would want to cutoff one uplink, you can ...

Feb 05, 2026

Solved: redundancy in core layer

In the core layer, I want to have redundancy, which means that if the main core switch of my network has a problem, the backup switch will automatically enter the circuit.

Mar 04, 2026

Redundancy for Core Switch Stack : r/networking

So when one of the "new core" switches goes down, anything connected to it will still be offline. You can design around this by having redundant connections to the different "cores" and ...

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