

Network Aggregation Switch



Article Overview

A network aggregation switch consolidates traffic from multiple access switches or edge devices and forwards it to core switches, enhancing bandwidth, redundancy, and network efficiency.

What is a Network Aggregation Switch?

A network aggregation switch is a high-capacity switch positioned between the access layer and the core layer in a network architecture. It collects traffic from multiple access switches, wireless access points, or other edge devices and forwards it to core switches or routers, effectively acting as a traffic manager for large networks. Aggregation switches typically operate at Layer 2 or Layer 3 of the OSI model, depending on network requirements.

Key Functions

- **Traffic Consolidation:** Aggregates multiple network connections into a single high-bandwidth link to reduce bottlenecks.
- **Link Aggregation Support:** Uses protocols like LACP or static link aggregation to combine multiple physical links into one logical connection, improving bandwidth and providing failover capability.
- **Routing and Switching:** Forwards data packets based on MAC addresses (Layer 2) or IP addresses (Layer 3), and can manage VLANs for network segmentation.
- **Quality of Service (QoS):** Prioritizes critical traffic to ensure performance for latency-sensitive applications.

Article Content

What is Link Aggregation (LAG) in Networking?

Link aggregation is a technique used in networking to bundle multiple physical ports on a network device to operate as a single link.

How To Set Up Switch Link Aggregation

Managed switches provide many advantages for a growing network, including support for VLANs, QoS, and Trunking. I touched on

Network Basics: What is Link Aggregation & How Does it Work?

One of the really interesting ways of deploying an aggregated link is to connect a device to a redundant pair of central

Aggregation Switch

An Aggregation or "Top-of-Rack" switch is designed to connect everything in a rack at high speeds, then have an even bigger pipe

Aggregation Switch: Increasing the Priority of Special Traffic

Aggregation Switch: Increasing the Priority of Special Traffic Networking Requirements Core switches set up a CSS that functions as

Link aggregation

By the mid-1990s, most network switch manufacturers had included aggregation capability as a proprietary extension to increase

Aggregation Switches: R& S Networks and Cybersecurity

R& S®LANCOM Aggregation Switches enable high-performance and hierarchical switch infrastructures to be set up and serve as the

Contact Us

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