

Why add an aggregation switch

Article Overview

An aggregation switch consolidates traffic from multiple access switches or devices into a high-bandwidth link, improving network performance, redundancy, and scalability.

Centralized Traffic Management

Aggregation switches sit between access switches and core switches, acting as a bridge that consolidates traffic from multiple devices, such as PCs, servers, wireless access points, and storage systems, before forwarding it to the core network . This centralization reduces network congestion and ensures efficient data flow across the network.

Bandwidth Optimization

By supporting link aggregation protocols like LACP or Static Link Aggregation, aggregation switches can combine multiple physical links into a single logical connection. This increases overall bandwidth, allowing multiple high-speed connections to operate simultaneously and preventing bottlenecks . For example, in a data center, multiple 10Gbps links can be aggregated to form a 40Gbps logical link.

Redundancy and Reliability

Aggregation switches provide failover capabilities. If one physical link fails, traffic can automatically reroute through other aggregated links, minimizing downtime and improving network reliability . This is particularly important in high-traffic environm...

Article Content

May 14, 2026

What Is an Aggregation Switch and How to Choose?

While they share some routing and forwarding capabilities with core switches, aggregation switches are typically focused more on consolidating traffic and implementing network

Jan 16, 2026

Everything You Need to Know About Aggregation Switch

A: The primary purpose of an aggregation switch is to connect multiple access switches to a core layer switch, allowing for efficient data flow and network management.

Dec 15, 2025

Understanding Switch Aggregation: A Comprehensive

In the context of network architecture, switch aggregation is an essential element, particularly in building high-capacity, resilient networks. It

Jan 17, 2026

Port Aggregation: Boosting Throughput and Redundancy in Enterprise ...

Port aggregation is a networking technique that combines multiple physical ports on a switch into a single logical link. By splitting traffic across these aggregated ports, it increases

Jun 01, 2026

Core, Aggregation, or Access Switches? Choose the

Discover the crucial differences between core, aggregation, and access switches. Find out which type can best transform your network's

Jun 27, 2026

Link Aggregation: Static vs Dynamic, LACP, and MLAG

Understand how link aggregation (LACP, MLAG, static vs dynamic) improves bandwidth and redundancy. Learn configuration steps on Cisco and

Mar 10, 2026

Why the aggregation switches in small home networks?

A lot of people seem to be taking my question as "why would anyone want an aggregation switch at home?" But I was specifically curious about people who post pictures with an aggregation switch with

Dec 26, 2025

Is there a functional difference between a UniFi Switch Aggregation

It's aggregation in the sense that their other switches have 10G SFP+ uplinks, so if you wanted to connect a bunch together (aggregate them) you would need a switch that has that many SFP ports.

Jul 18, 2026

Core, Aggregation, or Access Switches? Choose the

Selecting between core, aggregation, and access switches is not only technical — it's strategic. Once you know what your network needs,

Sep 23, 2025

What is an Aggregation Switch? | Features and Practical Benefits

In terms of performance and switching speed, aggregation switches typically outperform access switches. They can route network traffic, implement network security regulations, and add a

Sep 12, 2025

Aggregation Switches

Aggregation switches play an important role in the network. What is an Aggregation Switch in a Network? Why do we need to use Aggregation Switch? After reading this article, you can

Jun 28, 2026

In-depth analysis: What is an aggregation switch?

In many network constructions, we have all heard of switches. So do you really understand switches? Why are aggregation switches often

Aug 10, 2025

What Is an Aggregation Switch?

An aggregation switch is a powerful networking device that consolidates connections from multiple access switches, providing a central point for forwarding traffic and often implementing

May 17, 2026

Which Aggregation Switch to Choose?

In modern network architecture, aggregation switches are critical components. They not only enhance network performance but also ensure efficient data transmission. This article provides

Jan 25, 2026

In-depth analysis: What is an aggregation switch?

As we just mentioned, the aggregation switch is like the project manager or director within the company. They need to process the information that aggregates the base layer (access layer

May 30, 2026

What Is an Aggregate Switch?

Discover the role of an aggregation switch and its function in a network. Explore differences between aggregation, access, and core switches.

Jul 21, 2026

Why You Need a Fiber Aggregation Switch and How it Can ...

A: A network device referred to as the fiber aggregation switch consolidates links from several access switches to a few uplinks of higher capacity. It enhances traffic management, lowers

Nov 16, 2025

What Are Link Aggregation, LAG, and LACP?

What Is LAG and How Does It Work? Link Aggregation Group (LAG) is the practical implementation of link aggregation, where multiple physical ports are combined into a single logical

May 03, 2026

The Importance of Using an Aggregation Switch in LAN Designs

An aggregation switch is a high-capacity switch that sits at the core or backbone of a network, aggregating traffic from multiple access switches. Access switches typically connect to endpoints

Mar 17, 2026

The Features and Differences Between Core Switches and Aggregation Switches

As the aggregation point of access switches, the aggregation switch is required with the ability to process the access layer information and submits it to the upstream chain of the core layer. And it

May 25, 2026

What Is an Aggregation Switch and How It Works

An aggregation switch sits in the middle tier of a network, collecting traffic from multiple smaller access switches and funneling it upward to the core. In a traditional three-tier network

Feb 07, 2026

What is an Aggregate Switch?

An aggregate switch is a high-capacity network switch that consolidates connections from multiple access switches, acting as a central point for managing network traffic and providing

Jun 26, 2026

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 out to the rest of the network.

Dec 12, 2025

What is Switch Aggregation, Its Role and Selection Advice

This article wraps up "what is switch aggregation" and suggestions for choosing an aggregation switch. By considering these factors, network administrators can make informed

Jun 26, 2026

Enhance Your Network with a Link Aggregation Switch: Benefits ...

Discover the benefits, configuration, and best practices of using a link aggregation switch to enhance your network. Combine multiple Ethernet links into a single logical link seamlessly.

Nov 11, 2025

Aggregation Switch

An aggregation switch refers to a type of switch used to connect multiple ToR switches to a core switch/router in a cloud data center network. It enables high-bandwidth aggregation ports to be

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