

Recommended Core Switches for Campus Use



AI Overview

For campus core networks, Cisco Catalyst 9500/9600 and HPE Aruba 8400/8320 series are widely recommended for high performance, scalability, and reliability.

Key Considerations for Campus Core Switches

When selecting a core switch for a campus network, consider the following factors:

- Performance and Throughput:** Core switches must handle high traffic volumes with minimal latency. Look for high switching capacity and packet-forwarding rates to support backbone traffic efficiently.
- Redundancy and Reliability:** Core switches should have redundant power supplies, cooling systems, and support for high availability protocols to ensure continuous operation.
- Layer 3 Capabilities:** Core switches often perform inter-VLAN routing, policy enforcement, and DDoS protection. Ensure robust Layer 3 functionality for routing and network segmentation.
- Port Density and Speed:** Evaluate the number of high-speed uplinks (10/25/40/100 Gbps) and the ability to aggregate multiple distribution switches.
- QoS and Traffic Management:** Core switches should support advanced QoS to prioritize voice, video, and critical data traffic.
- Scalability and Future-Proofing:** Modular or stackable designs allow for expansion as the campus network grows.

Recommended Vendor Options

- Cisco Catalyst 9500 Series:** Fixed core or distribution switch, ideal for high-speed fiber backbones and redundancy.
- Catalyst 9600 Series:** Modular core switch for large campus or aggregation layers, offering high scalability and advanced Layer 3 features.
- Catalyst 9400 Series:** Can serve as modular access or distribution, suitable for large buildings needing chassis-based expansion.
- HPE Aruba 8400 Series:** High-performance modular core switch with hardware-accelerated services, cloud-native management, and AIOps for proactive monitoring.
- Aruba 8320 Series:** Stackable Layer 3 aggregation switch with Smart Ra...

Article Content

Data Center Switches

Data Center Switches CloudEngine Data Center Switches — Ethernet switches widely used in diverse applications and in different network sizes, in both data centers and high-end campus networks —

Solved: Core Switch recommendation

Also look into buffer sizes, important for campus core deployments. You'd also notice that the campus range use store & Forwarding switching architecture which is somewhat important when

Network Switches | Huawei Enterprise

Data Center Switches CloudEngine data center switches — Ethernet switches widely used in diverse applications and in different network sizes, in both data

HPE Aruba Networking Campus Core & Data Center

Meet the needs of your evolving campus core and data center networking requirements. Simplify operations with intelligent automation, distributed

Future-Proof Campus Network 2025 with 10G Switches

Learn how to build a future-proof campus network with 10G switches. Compare Huawei S6730-H, Cisco Catalyst 9300, and Ruijie S6510 for 2025

Selecting Campus Switches and Routers

Selecting Switches Other recommended features: DHCP Snooping Prevent end-users from running a rogue DHCP server Happens a lot with little wireless routers (Netgear, Linksys, etc) plugged in

Campus Network for High Availability Design Guide

Document Objectives This document presents recommended designs for the campus network, and includes descriptions of various topologies, routing protocols, configuration guidelines, and other

How to plan for a campus core switch refresh: Basic requirements

Big campus core switch refreshes typically occur every 5 to 10 years, or longer, depending on the switch. When evaluating switches, factor in future requirements.

Best Enterprise Switches 2025: Top 5 Network Switches

Our 2025 guide compares the top 5 enterprise switches from Cisco, HPE, Arista & more. Deep-dive on technical specs, AI capabilities, and use cases.

Campus LAN and Wireless LAN Solution Design Guide

Cisco Digital Network Architecture (Cisco DNA) provides a roadmap to digitization and a path to realize immediate benefits of network automation,

Selecting Campus Switches and Routers

– Focus on scalability, sufficient CPU to ensure current and immediate future needs – Router or “L3 Switch” is often appropriate, as routing needs in the Core are not onerous

Cisco Switch Selection Guide for Enterprise Campus

Cisco Campus Switch Roles: Access, Distribution, and Core Cisco's Campus LAN and Wireless LAN Solution Design Guide describes campus

Choosing Switches and Routers for the Campus

A malicious host can perform a man-in-the-middle attack by sending gratuitous ARP responses, or responding to requests with bogus information Switches can look inside ARP packets and discard

Campus LAN Core and Distribution Switches

Cisco Catalyst and Meraki Campus LAN core and distribution switches are scalable, secure network switches with exceptional intelligence.

The Roles Campus LAN Switches Play in a Modern

The second use for edge — and the term we're interested in — is in describing switches that connect end-user devices to the rest of the network. So,

Cisco Switch Selection Guide for Enterprise Campus

Select Cisco campus switches by network role first, then by model. Access switch selection depends on endpoint count, PoE demand, mGig

Campus Switches | Huawei Enterprise

Huawei campus switches offer high-performance, secure, and reliable switching for enterprises, governments, finance and manufacturing networks. Learn more.

A Complete Guide to Select a Campus LAN Switch

Campus switches are an integral part of any network. Learn what to consider when choosing a campus LAN switch.

Sizing up network edge switch offerings for a campus LAN

Both traditional and open switch vendors offer a variety of edge switch for campus LAN deployments. Learn how traditional and open switches differ and how to assess your organization's network edge

9 Best Campus Network Switch | Stop Overpaying for Port Density

Whether you are upgrading a university building, a school district office, or a large enterprise floor, this breakdown of the best campus network switch options will help you match the right hardware to your

Choosing Switches and Routers for the Campus

Switches normally flood multicast frames out every port Snooping on IGMP traffic, the switch can learn which stations are members of a multicast group, thus forwarding multicast frames only out

AshwinD24's gists · GitHub

GitHub Gist: star and fork AshwinD24's gists by creating an account on GitHub.

Enterprise Campus Network Core Switch Selection FAQ: Expert

Selecting the right core switch for an enterprise campus network requires balancing throughput, high availability, optical interoperability, power redundancy, and total ...

Data Center Multi-Tier Model Design

Recommended Platform and Modules In a large data center, a single pair of data center core switches typically interconnect multiple aggregation

Best Cisco Switch for Offices, Schools, and Enterprises

Discover the best Cisco switch for your use case: Catalyst Series for small offices, enterprises, universities/hospitals and data centers. Get

Switches - Tagged "Campus Core Switch" - network-switch

The Huawei S5720H series represents a powerful line of gigabit switches designed for enterprise campus core and distribution networks. Based on Huawei's VRP V200 operating system, it blends

Choosing Your Core Switches - Majornetwork

When designing data center or campus LAN with Cisco products (see I made the point clear here immediately) a no-brainer solution is using Nexus 7000 switches in the core. There aren't

Selecting Campus Switches and Routers

Distribution Switch Campus Core Router Campus Border Router In all cases examples of mainstream vendor models are given to guide campus network administrators

HPE Aruba Networking CX campus core switches At-A

Brochure highlights advantages of CX campus core switches, how they deliver critical high availability, exceptional scalable performance, and robust end-to-end

Future-Proof Campus Network 2025 with 10G Switches

This guide explores how to design a future-ready campus network and compares three leading families of campus switches: Huawei CloudEngine S6730-H, Cisco Catalyst 9300, and Ruijie

Contact Us

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