

Article Overview

Two core switches can be interconnected using trunk links, fiber or Ethernet connections, and proper VLAN and IP configuration to enable routing and redundancy.

Physical Connection

- o Choose the appropriate media: For long-distance or high-speed connections, use fiber optic cables with compatible transceivers (e.g., 1000BaseLH) between the switches. For shorter distances, Cat5e/Cat6 Ethernet cables can be used .
- o Select the ports: Use dedicated uplink or trunk ports on each switch. Some switches provide dual-purpose ports that can auto-detect MDI/MDIX, simplifying direct connections .
- o Cabling type: For direct switch-to-switch connections, a crossover cable may be required if auto-MDI/MDIX is not supported. For fiber, ensure the transceivers and fiber type match on both ends .

Logical Configuration

- o VLAN setup: Create a transport VLAN on both switches to carry inter-switch traffic. Assign a unique VLAN ID and configure the corresponding interface with an IP address for routing purposes (e.g., 10.0.0.1 on Switch1, 10.0.0.2 on Switch2), .
- o Trunk configuration: Configure the inter-switch ports as trunk ports to allow multiple VLANs to pass through. Example for Cisco switches:
switchport mode trunk
switchport trunk allowed vlan This ensures that VLAN traffic is properly tagged and routed between switches .
- o Routing: If each switch manages its own VLANs, configure static routes or a routing protocol (e.g., OSPF) to enable communication between VLANs across the two switches .

Advanced Considerations

- o Link Aggregation: For higher bandwidth and redundancy, consider EtherChannel or LACP to bundle multiple physical links into a single logical link .
- o Spanning Tree Protocol (STP): Ensure STP is enabled to prevent loops in the network, especially if multiple interconnections exist .
- o Testing: Verify connectivity using ping between the transport VLAN IPs and check trunk status with commands like show interface trunk and show vlan on Cisco devices .

Best Practices

- o Use dedicated transport VLANs for inter-switch links to isolate routing traffic from user VLANs.
- o Ensure matching VLAN IDs and IP addressing on both switches to avoid MAC address conflicts .
- o Monitor link status and bandwidth utilization to prevent congestion and optimize performance.
- o Document the configuration and maintain consistent naming conventions for easier troubleshooting. By

Connection method of two core switches

following these steps, the two core switches will be properly interconnected, allowing VLAN traffic and routing to function efficiently while maintaining network stability and scalability .

There are different types of enterprise switches that perform various roles in these layer-based or hierarchical ethernet networks.

It is possible to connect two switches together through a variety of methods, such as

Hi Everyone, We need to connect 2 switches together and have 2 options for them:- 1. Use

If you have multiple Ethernet switches that need to be connected over long distances, fiber is obviously a preferred

Connecting switches can be achieved through two common methods: cascading and stacking. In this guide, we will

Hi, Thanks for the reply but I would like to know if it's possible to configure the CORE-2-CORE link as L2 and form

Chassis aggregation is a Cisco technology to make two switches operate as a single logical switch. It is

I want to get 2x Cisco Catalyst WS-C3750X-24T-S Switches (and stack them). ESX servers, other servers and routers

In this comprehensive guide, we will explore the intricacies of network switches and provide

The post introduces how to connect multiple switches together by three methods including cascade, stack, and cluster.

I have two routers (in my opinion for redundancy like HSRP). They are connected to 2 core switches L3 (in my opinion

Same for switches in core layer. I think a link between distribution layer should be provided in any case (to avoid traffic flowing

These switches would be known as "Edge switches" Obviously I am not in the full know of what your network is

When connecting two network switches, several methods can be employed, depending on the specific

networking

Two-tier and three-tier switch architectures When structuring the logical architecture of an enterprise network, decisive factors

For example, the core switching fabric in my office is two gigabit switches with 4 ports connecting them, providing a

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