

Core Network Switch Routing Configuration



Article Overview

Core switch routing configuration involves setting up VLANs, SVIs, inter-switch links, and routing protocols to ensure efficient Layer 3 traffic flow and high availability.

VLAN and SVI Configuration

On a Layer 3 core switch, VLANs are created to segment network traffic, and Switched Virtual Interfaces (SVIs) are assigned IP addresses to enable routing between VLANs. For example, if you have a public /21 subnet from your ISP, you can break it into smaller /24 subnets and assign each to a VLAN with an SVI interface. Each SVI acts as the default gateway for devices in that VLAN .

Routing Protocols

To avoid manually adding static routes for every subnet, enable a dynamic routing protocol such as OSPF or EIGRP between the core switch and upstream routers. This allows automatic route propagation and reduces administrative overhead . If dynamic routing is not possible, static routes can be configured per subnet, e.g., ip route 1.1.3.0 255.255.255.0 1.1.1.2 where 1.1.1.2 is the uplink to the router .

Inter-Switch Links and Redundancy

For high availability, core switches are often deployed in VSX or MC-LAG pairs, which allow multi-chassis link aggregation to access switches. This ensures that if one cor...

Article Content

Introduction to Core Switch Configuration

The most important purpose of the layer 3 switch is to speed up the data exchange within the large LAN, and the routing function is

Understanding the Different Layers of Routing and Switching

Routing and switching layers are integral components of an enterprise network that managers can identify and separate to optimize

CORE ROUTING AND SWITCHING

The Layer 3 routing core in the San Jose metropolitan area network is constructed using Cisco Catalyst 6500 Series switches with

Core Network Switch Routing Configuration

Unlike access switches, which connect directly to end-user devices, the core switch focuses on aggregating and routing traffic

Core Switch vs. Distribution Switch vs. Access Switch

A core switch is the primary switch installed at the backbone of a layered or hierarchical network. These data switches are

8 Steps to configure your network switch

Just like riding a bicycle, nobody's born knowing how to setup a network switch. And this process is a little more advanced than, say,

What Is a Core Switch?

A core switch is the backbone of a large-scale network, designed to handle massive volumes of traffic with ultra-low latency and

Core Switch vs. Distribution Switch vs. Access Switch

These data switches are responsible for routing and data switching at the core layer of the network. The data routed and switched by

what we should use in the core layer (routing or switching)

Core routing may segment and bring together enterprise/global solutions (environments, wan's...etc) with a complex configuration.

Distribution & Core layer switch configuration

Hi, I have 6500,4500 & 3500 switches. I want to configure 6500 as core, 4500 as distribution & 3500 as access layer

Routing and Switching

Routing and Switching – Past, Present and Future ... Core Routing & Switching –
Business Value Snapshot • Latency minimized

Contact Us

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