

Switch Core Routing Configuration Scheme

Article Overview

A core switch routing configuration scheme involves setting up high-speed, redundant interconnections, VLANs, and routing protocols to efficiently manage traffic between access layers, data centers, and upstream networks.

Core Switch Role and Design Principles

Core switches serve as the central backbone of a network, providing high-speed data transfer, scalability, redundancy, and centralized management . Key design considerations include:

- High Performance: Optimized switching fabric and routing engine for minimal latency.
- Redundancy: Dual power supplies, redundant links, and failover mechanisms.
- Scalability: Ability to handle large numbers of devices and future growth.
- Security: Advanced ACLs, segmentation, and traffic monitoring.
- Centralized Management: Simplified configuration and monitoring of network traffic.

Common core switch types include modular, stackable, chassis-based, and fixed-port switches, chosen based on network size, bandwidth requirements, and budget .

Interface and VLAN Configuration

- Interconnection VLANs: Create VLANs for connecting core switches to access swit...

Article Content

Sep 20, 2025

Two-Tier Core

Configure Two-Tier core switches as a VSX pair for Layer 2 aggregation of the data center access switches, IP data

Jul 30, 2025

Network Design with Examples-Core and Distribution

The typical hierarchical design model is broken up in to three layers: Access, Distribution and Core. Access Layer-

Sep 09, 2025

How to Configure VLAN and Inter-VLAN Routing on Cisco Switches

Learn how to configure VLAN and inter-VLAN routing on Cisco switches using CLI. Step-by-step VLAN setup, trunking, router-on-a

Sep 21, 2025

LAN Switching Configuration Guide

Configuring Routing Between VLANs with IEEE 802.1Q Encapsulation The IEEE 802.1Q protocol is used to interconnect multiple

Sep 27, 2025

How to Configure a Cisco Switch (step by step)

In this post, I'm going to show you how to configure a Cisco switch step-by-step. SSH access with local AAA

Sep 14, 2025

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

If we use routing, we need a /30 link between each link from the distribution to the core layer, so if we have 4 switch blocks, we

Jan 21, 2026

SME Network Solution Typical Configuration Examples

"Gateway + Core Switch + Aggregation Switch + Access Switch + WAC + AP + AR180" Networking: Local Entire Network

Mar 09, 2026

What Is a Core Switch in Networking?

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

Aug 17, 2025

How to Configure a Cisco Switch in 10 Steps

Learn how to Configure a Cisco Switch. Follow along this Step-by-Step guide that will get you using Commands via

Jul 05, 2026

Core Switch Reference Configuration | Validated Solution Guide

The Core Switch Reference Configuration section provides a reference CLI configuration of the core switches as

May 01, 2026

Catalyst 2948G-L3 Sample Configurations

This document provides three sample configurations for the Catalyst 2948G-L3. The

Apr 15, 2026

Solved: Core Switch

Dears This is my first time to configure core switch on packet tracer and still confusing in core switch how to

Jun 04, 2026

Designing and Configuring the Core Layer with EAPS

The core switches provide high performance backbone routing between the edge, aggregation, data center, and external Internet

Dec 10, 2025

6.20S2004Day43

How do all of these network types and requirements fit together? A packet switch consists of a routing engine (table look-up), a

Dec 26, 2025

Google Translate

Google's service, offered free of charge, instantly translates words, phrases, and web pages between English and over 100 other

Oct 10, 2025

Switching and Routing Core Configurations and Redundancy

Learn to build scalable, highly available switching and routing infrastructures. In this course, Switching and Routing Core

May 28, 2026

Routing and Switching

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

Jul 01, 2026

Inter-VLAN routing on Core vs Distribution switches

We're currently upgrading our flat L2 switch topology to a three-tier design using SG-class switches in a building

Oct 08, 2025

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

Feb 06, 2026

CORE ROUTING AND SWITCHING

INTRODUCTION Welcome to the Core Routing and Switching Executive Module part of the Cisco on Cisco Learning Zone E

Feb 25, 2026

SME Network Solution Typical Configuration Examples

Support Documentation Enterprise Network Solution Horizontal Solutions
CloudCampus SME Configuration & Commissioning

Dec 24, 2025

Core Switch Explained: Key Functions and Benefits

Discover what a Core Switch is, its pivotal role in network architecture, and how it boosts performance and reliability in

Oct 31, 2025

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

Oct 30, 2025

Dynamic Routing Approach between Core-Switch and WAN-Routers

Hello, without seeing the actual configs, since you are using HSRP on the core switches, you could configure an IP

Jan 10, 2026

FortiSwitchOS Switching Reference Architecture Guide

This network topology offers next-generation firewalls with advanced security, core routing, switching, and wireless. This single-pane

Dec 05, 2025

route or switch on the core Layer

I am working on a new network design for my company with four buildings, I have used building distribution method

Sep 11, 2025

Router / Core Switch Configuration

The smartest thing for you to do is to enable a routing protocol like EIGRP and run it between the 3845 and the 3560.

Nov 17, 2025

IP Routing Configuration Guide, Cisco IOS XE 17.18.x (Catalyst 9500 ...

See IP routing documentation for your version of Cisco IOS software for information on configuring fast convergence. See the

Aug 07, 2025

Configuring the Core Switch

In this scenario, IP addresses of the interfaces connecting the core switch to the BRASs and firewalls and OSPF need

Apr 23, 2026

Hierarchy Design Part 1

The campus hierarchy uses three logical layers; Core, distribution, and access. Each layer has a special purpose to fulfil, so it's

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.iiss.co.za>

Email: sales@iiss.co.za

Phone: +27 63 174 2895

Address: Unit 8, Innovation Park, 15 Rivonia Road, Sandton, Johannesburg,
2196, South Africa

This document is for informational purposes only. Specifications subject to
change without notice.

