How to configure a dual-core switch



Overview

My question is if i stack them would i configure the ACL''s and Routing etc on just one switch and use the second for the fiber as a layer 2 switch or do i need to configure both for layer3?

Key Takeaways

Dual-core switches are typically configured for redundancy and high availability using inter-switch links, link aggregation, and routing protocols like OSPF or VRRP.

Core Switch Pairing and Redundancy

For a dual-core setup, the core switches are often configured as a logical pair to provide seamless failover. In Aruba networks, this is achieved using VSX (Virtual Switching Extension), which allows the two core switches to operate as a single logical entity for Layer 2 aggregation and Layer 3 routing. In Cisco environments, similar functionality can be achieved using VSS (Virtual Switching System) or stacking, enabling port-channel uplinks from access switches to both cores.

Inter-

Switch Links and Link AggregationInter-Switch Link (ISL): Create a dedicated link or aggregated link (LAG/port-channel) between the two core switches to synchronize routing and forwarding information. Link Aggregation: Use LAG or EtherChannel to combine multiple physical links into a single logical link, increasing bandwidth and providing redundancy. This is applied both between core switches and from access switches to the core.

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VLA

Ns: Assign VLANs to the inter-switch links to carry traffic for multiple Layer 2 segments and routed transit paths.

Each VR

F may require a separate VLAN.

Routing and Gateway Redundancy

Routing Protocols: Implement OSPF, EIGRP, or BGP between the core switches and upstream devices (firewalls, routers) to ensure dynamic path selection and failover. Gateway Redundancy: Use HSRP, VRRP, or GLBP to provide a virtual default gateway for hosts, ensuring continuous Layer 3 connectivity if one core switch fails. Cost Control: Adjust OSPF or routing metrics to control preferred paths and load balancing between cores.

Access-to-

Core Connectivity

Trunk Links: Configure access switches with trunk ports to carry multiple VLANs to both core switches. If cores are a logical pair (VSX/VSS), a single port-channel can span both cores. Spanning Tree Considerations: If cores are not logically paired, use RSTP or MSTP to prevent loops and designate primary/secondary root bridges on the core switches.

Redundant Uplinks: Allocate multiple uplinks from access switches to cores to ensure failover and load balancing. Two uplinks are generally sufficient for most deployments. Management and MonitoringOut-of-Band Management: Use dedicated management interfaces for monitoring and VSX keepalives to maximize data plane ports for traffic.

I

P Addressing: Assign static IPs or DHCP reservations for management interfaces to ensure predictable connectivity and enable centralized management via platforms like Aruba Central. Configuration Tools: Use CLI, MultiEdit, or centralized management tools to apply consistent configurations across both core switches, reducing errors and simplifying troubleshooting.

Best Practices Summary

Configure core switches as a logical pair (VSX or VSS) for redundancy. Use LAG/port-channel for inter-core links and access-to-core uplinks. Implement dynamic routing (OSPF/EIGRP) and gateway redundancy (HSRP/VRRP).

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Assign VLA

Ns per VRF or traffic type and ensure proper trunking. Use RSTP/MSTP if cores are not logically paired to prevent loops. Reserve management IPs and use out-of-band interfaces for monitoring.

Document all connections and maintain consistent port selection for easier troubleshooting. This configuration ensures high availability, load balancing, and simplified management for dual-core switch deployments in both data center and campus networks.

Article Content

How to configure core switch via stacking system?

My question is if i stack them would i configure the ACL''s and Routing etc on just one switch and use the second for the fiber as a layer 2 switch or do i need to configure both for layer3?

Configure Stack Settings on a Switch through the CLI

In this tutorial you will run two classic Arduino blink programs simultaneously on different cores of the Portenta board that blinks the RGB LED in two different colours.

Two-Tier Core

Configure Two-Tier core switches as a VSX pair for Layer 2 aggregation of the data center access switches, IP data center services, and routing to the main campus.

Example for Establishing a Stack of Two Switches (Configuring

Complete the stack configuration of each switch based on the stack plan, including the stack member ID, stack priority, stack domain ID, and stack port. After the configuration is

Multicore Setup and Running Hello World on Dual-Core

The document provides an overview of the RA8 Dual Core MCU''s design, which integrates Cortex-M85 and Cortex-M33 cores, and outlines the steps required to configure, build, and debug dual-core

AM2634: How to choose & setup the Dual core with Lockstep

Could anyone guide me please on how to get started with the Lockstep mode feature (2 functional cores) & Dual-core mode (4 functional cores) feature to a project separately?

ESP32 Dual Core with Arduino IDE | Random Nerd Tutorials

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In this tutorial, we''ll show you how to run code on the ESP32 second core by creating FreeRTOS tasks. You can run pieces of code simultaneously on both cores, and make your ESP32 multitasking.

PA-Aggregate-Group-Configuration-Dual-Uplink-Core-Switch

This single core switch is now getting replaced by 2 Huawei core switches, both in active-active mode. We have tested the 1 up-link scenario to firewall and is working as expected.

How to Configure a Cisco Switch in 10 Steps

Whether you''re configuring a single switch for a small office or managing a more complex network with multiple switches, you''ll learn how to use the Cisco Command Line Interface (CLI) to

How to Configure a Cisco Switch (step by step)

If you''re looking to configure a switch for the first time, this post is for you. Learn step-by-step configuration commands for Cisco IOS Switches.

1500 Questions | Azure Architect Expert (AZ-305) 2026

Azure ExpressRoute provides a private, high-speed, dedicated connection that bypasses the public internet entirely. By configuring an Azure Site-to-Site (S2S) VPN Gateway as a backup path, the

Recommendations: Dual Core Switch for redundancy.

Hi Experts, May I ask for your recommendations for this kind of setup. Best practices and other routing and switching stuff. I have the following: 1 5520 ASA connected to the internet, 2 core

8 Steps to configure your network switch

Learn how to setup a network switch with ease. Switches allow you to send and receive information efficiently and securely. Get setup today!

SME Network Solution Typical Configuration Examples

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

Edge switch redundancy to two core switches

I want to provide best redundancy for an access switch (Cisco 3650) when connecting to two core switches (Cisco 9500 series), as show in attached topology. My plan is to configure 2

Configuring Multiple Switches

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I am currently researching the best way to configure 4 switches. I am still learning the finer points of networking and have had mixed opinions on the following question. Should i Daisy

Introduction to Core Switch Configuration

HSRP and VRRP protocols are used to guarantee the load sharing and hot backup of core equipment. In case of problems in a certain switch between core switch and dual aggregation switch, three-layer

Guide to Basic Switch Configuration | Auvik

Switch configuration on your own can seem like a daunting task. Use this handy guide to get your network switch up and running with ease.

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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Technical inquiry: https://explosivefunctions.co.za/contact.html
EU project coordination: Parque das Nações, Lisbon, Portugal

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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