

Configure a dual-core router switch



AI Overview

Configure dual-core switches with redundancy using VSX/VSS, port channels, and proper STP/MSTP settings to ensure high availability and load balancing. Core Switch Setup For dual-core switches, consider configuring them as a VSX pair (HPE/Aruba) or VSS (Cisco). This allows the two physical switches to operate as a single logical device, simplifying Layer 2 aggregation and enabling multi-chassis link aggregation (MC-LAG) to access switches. Create a link aggregation (LAG) interface between the cores to serve as the inter-switch link (ISL) for VSX/VSS, ensuring redundancy and high throughput. Access Switch Connectivity Connect each access switch to both core switches. If the cores are configured as a single logical device (VSX/VSS), you can create a port channel on the access switch that includes both uplinks. This provides uplink redundancy and load balancing without relying solely on STP. If the cores are not logically combined, configure separate links and rely on STP/MSTP to block one path and prevent loops. STP/MSTP Best Practices Use Multiple Spanning Tree Protocol (MSTP) for predictable Layer 2 topology. Designate primary and secondary root bridges on core switches to control traffic flow. Enable Root Guard on access switch uplinks to prevent rogue switches from becoming root. Use BPDU Guard on client-facing ports to block unexpected BPDUs. Consider Admin Edge for ports connected to end devices to speed up port activation. Layer 3 Redundancy For routing redundancy, implement VRRP or HSRP on the core switches to provide a virtual gateway for access switches. If using dynamic routing, configure OSPF or EIGRP between cores and upstream firewalls to control preferred paths and failover behavior. Adjust routing costs to influence traffic distribution. Additional Recommendations Maintain out-of-band management interfaces for core switches to monitor VSX/VSS health. Use static LAGs for redundancy if LACP is not required for load balancing. Keep a spare switch with a recent configuration backup to quickly replace a failed core or access switch...

Article Content

How to configure redundant core switch in collapsed core?

With a routed access design, you'd configure a default gateway per access switch then route the connections to both cores. The cores will only route to other access switches and shouldn't

Cisco Router and Switch Configuration Step by Step

Welcome to our detailed step-by-step guide on how to configure Cisco routers and switches with Internet via Router on a Stick Method.

Redundant switch configuration for small network rack

Just for reference I have had three or four hard router failures and one core switch in the last 18 years. By comparison I have no idea how many

Dual-router setup w/ a dedicated VPN Router: A step-by-step tutorial

This tutorial will teach you how to set up a dual-router configuration with a dedicated VPN router behind another router (the primary router). This will work with any vpn-enabled router

How To Use A Network Switch With 2 Routers

This article will guide you through the process of using a network switch with two routers, providing a clear understanding of the setup, configuration, and testing phases.

Dual Core Design

Need clarification on dual core switch design. Should be a pretty easy question, but the dual core design is just 2 core routers instead of one. Is this what they mean by dual core design?

How to Set Up and Configure Huawei WiFi 6 Plus AX3 Dual Core Router ...

#huawei #wifi6 #wifi6router #HuaweiWiFi6Plus #AX3DualCore #WiFiRouterSetup #TechReview #HuaweiRouter #WiFi6 #RouterConfiguration #MetroPro #HighSpeedInternet...

MS Layer 3 Switching and Routing

Layer 3 routing capabilities are available on most Cisco Meraki switches. This allows the switches to route traffic between VLANs in a campus

How To Use A Network Switch With 2 Routers

Learn how to effectively use a network switch with 2 routers to expand your network and optimize connectivity. Discover the best practices for

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

Core switch to dual ISP routers

Hi, I am looking for some design help. We currently have dual routers ISP1 and ISP2 and plan to connect them to a single layer 3 core switch. I am trying to decide what way to go with the

How to Configure Redundant Switches in Your Network

Let's dive into a detailed, step-by-step guide on setting up redundant switches, covering both the hardware setup and software configurations.

Redundant switch configuration for small network rack

This is the first time I'm attempting redundant switches. This is not a large setup with high volumes of traffic. We have some NAS servers and three Proxmox servers that virtualise almost

How to configure Dual WAN on AsusWRT routers

👁👁👁 AI-free content. This post is 100% written by a human, as is everything on my blog. Enjoy! How to configure Dual WAN on AsusWRT routers

Tutorial

This tutorial will teach you how to set up a dual-router configuration with a dedicated VPN router behind another router (the primary router). This will work with any VPN-enabled router

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.

Recommendations: Dual Core Switch for redundancy.

Make sure you designate the primary root bridge and the secondary on your core switches and configure the appropriate port roles and security controls in place from rouge stp

Fortifying Your Network with Cisco Switch Power Redundancy Setup:

Ensure high network availability with a complete Cisco switch power redundancy setup guide. Learn dual PSU deployment, StackPower, PoE budgeting, and best practices.

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 Router and Switch | Ultimate Guide

Do you know the best configuration settings for your routers and switches? Read my guide and take advantage of advanced network devices

How to configure redundant core switch in collapsed core?

The cores will only route to other access switches and shouldn't encounter issues with spanning tree if configured with routed ports instead of switch ports. If you configure OSPF or EIGRP, they will route

Connecting two core switches : r/networking

Both Office and Lab network have switches in spine (access layer) where servers or desktops are connected. As Edge core is connected to switch so I am thinking about connecting Edge core direct

Redundant Core switches and Single Router Design

Hello Everyone, I am working on one design and need support for connectivity between two core switches and router. As shown in the attached

ITPro Today, Network Computing, IoT World Today combine

ITPro Today, Network Computing and IoT World Today have combined with TechTarget . The page you are looking for may no longer exist.

Introduction to Core Switch Configuration

A switch that functions as part of a router and operates at the third layer of the OSI network standard model, the network layer. The most important purpose of the layer 3 switch is to speed up the data

How to configure a dual-stack.

In special cases a LAN needs two pool of addresses with different versions, Ipv4 and Ipv6. In this little document I´m going to explain how to create

how to configure cisco core switch HSRP active active

In this video we will learn how to configure cisco core switch active active using HSRP step by step. In this LAB we practice on creating vlan, distribute vl...

Contact Us

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