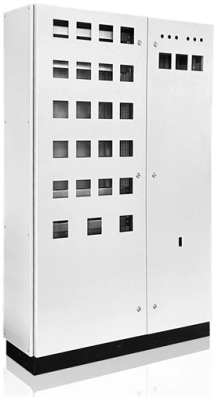
Dual-core switch configuration example



Overview

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 Cisco.

Key Takeaways

A dual-core switch setup typically involves configuring two core switches in a redundant topology using VSX, MLAG, or SmartLink, with inter-switch links and VLANs for high availability and traffic aggregation. Key ConceptsDual-core switch topologies are designed to provide redundancy and high availability in enterprise or data center networks. Common approaches include: VSX (Virtual Switching Extension): Used in Aruba CX switches to create a logical pair of core switches that share Layer 2 and Layer 3 responsibilities, allowing multi-chassis link aggregation (MC-LAG) to access switches.

MLA

G (Multi-Chassis Link Aggregation): Provides similar functionality but may not be supported on all hardware.

Smart

Link: A simpler redundancy mechanism for VLAN failover when MLAG is not available. Example Configuration Steps (Aruba VSX)Create Inter-Switch Link (ISL): Define a Link Aggregation Group (LAG) on both core switches to serve as the VSX data plane inter-switch link.

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Assign the LA

G to the VSX configuration.

Configure VLA

Ns: Create VLANs for traffic routing to upstream networks. Use the same VLAN for the routed transit path between the cores to ensure failover if one core loses external connectivity.

Enable VS

X: Use the Aruba Central UI or MultiEdit tool to enable VSX on both cores.

Assign the LA

G as the VSX ISL. Configure out-of-band management interfaces for VSX keepalives to maximize port availability for access switches. Connect Access Layer: Configure MC-LAG or standard LAGs from access switches to both cores.

Ensure VLA

Ns are propagated correctly across the VSX pair. Example Configuration Steps (SmartLink Across Dual-Core Mesh)Topology: Two core switches in a mesh topology. Access layer switches form a VSF stack connecting to both cores.

Smart

Link Setup: Assign VLANs (e.g., 10, 20, 30) to SmartLink. Optionally, create a dedicated VLAN for SmartLink control to manage failover traffic. Failover Behavior: If one core fails, SmartLink automatically redirects traffic to the other core.

No MLA

G is required, but redundancy is maintained at the VLAN level.

Cisco Dual-

Core Example

Connect devices to both core switches. Configure zoning and interop mode if using heterogeneous SAN switches (e.g., MDS 9000 with McData 6064). Ensure both cores propagate configuration changes and provide full security for attached devices.

Use Layer 3 10 GigE links for redundancy and high throughput between cores and aggregation modules.

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Best Practices

Always configure redundant links between cores and aggregation layers. Use dedicated VLANs for control traffic (VSX keepalives or SmartLink). Test failover scenarios to ensure traffic continuity.

Document LA

Gs, VLANs, and inter-switch links for troubleshooting. This configuration ensures high availability, load balancing, and seamless failover in a dual-core switch environment, whether using Aruba VSX, Cisco dual-core, or SmartLink mechanisms.

Article Content

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

Cisco Data Center Infrastructure 2.5 Design Guide

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

How to create and run an STM32H7 dual-core basic example

This article provides a step-by-step guide to learn how to run STM32H7 Dual-Core applications using STM32CubeIDE. It covers configuring the project, setting up both Cortex®-M7 and

Dual-Switch Configuration

Dual-Switch Configuration This example shows a dual-switch configuration, with the servers configured in between the two switches as the "bump". Each server is dual homed. LBG are formed in a

Aruba Central Two-Tier Data Center | Validated Solution Guide

This guide demonstrates using Aruba Central to build a Two-Tier data center solution. Topics include switch onboarding, configuring underlying services, multi-chassis link aggregation

Multicore Setup and Running Hello World on Dual-Core

These instructions will walk you through the complete process using a FreeRTOS-based simple Blinky application as an example, ensuring you understand how to set up and configure a functional dual

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STM32H7 dual-core inter-CPU communication

This example demonstrates how to implement communication between both cores to exchange data. It uses shared RAM and 2 separate ring buffers, acting like pipe (single input, single output) in both

Basic Cisco Switch Configuration Example in 10 Steps

Unlike other lower class switch vendors (which are plug-and-play), the Cisco switch needs some initial basic configuration in order to enable management, security and some other important features. In

SME Network Solution Typical Configuration Examples

"Gateway + Core Switch + Access Switch + AP + AR180" Networking: Huawei eKit Cloud Management "Gateway + Core Switch + Access Switch + WAC + AP" Networking: Local Entire Network

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!

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 PuTTY CLI

Features and Applications of Core Switches

Core Switches also provide intelligent routing, QoS assurance, security, scalability, and manageability. A well-matched Core Switch configuration is a strong support for building powerful,

Best Practices for Switch Stacking Configuration

Learn what is switch stacking and how to best leverage it to maximize your network''s performance. Find out the complete configuration guide with instructions

Aruba-HP-switches-configuration-examples-cookbook.adoc

Cheat sheets to help you in daily hands-on tasks of trouble shooting, configuration, and diagnostics with Fortinet, HP/Aruba, Cisco, Checkpoint and others'' gear. - yuriskinfo/cheat-sheets

Solved: core switch redundancy

Hi, school with around 800 users having one core switch 6509-E sup-720 (inter-vlan routing) collapsed core design connected to - 30 layer 3 HP switches with 10G and 1G backup links -

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Understand Virtual Port Channel (vPC) Enhancements

This document describes details surrounding common Virtual Port Channel (vPC) enhancements configured on Cisco Nexus switches in a vPC domain.

Step-by-Step Cisco Switch Configuration

This document discusses basic configuration commands for Cisco switches. It provides examples of configuring switch names, passwords on console and VTY lines, and getting help on switch

Design Zone

The hierarchical design uses a building block approach leveraging a high-speed routed core network layer to which are attached multiple independent distribution blocks. The distribution

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Technical inquiry: https://bagyou.es/project-enquiry.html

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

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