

Do aggregation layer switches need to be configured with VLANs



Overview

The routing VLAN interfaces must be configured with VRRP. Ideally, non-redundant equipment is connected through a redundantly-connected edge or core switch. The peer link is a crucial. This chapter covers the design recommendations for a data center design deployment consisting of a Cisco Nexus® 7000 Series Switch at the aggregation layer and a Cisco Nexus 5000 Series Switch at the access layer. Super-VLAN: Unlike a common VLAN, a super-VLAN is used. The gist of this setup is that you need to have VRRP working across the switches to create the shared gateway IP so that failover doesn't need any sort of route update. Once you have that shared virtual IP to utilize as a gateway, you would setup a route on the PA-220 to direct the traffic to the. VLAN aggregation, also called super-VLAN, partitions a broadcast domain on a physical network into multiple VLANs (sub-VLANs) and aggregates them into a single logical VLAN (super-VLAN). At some point, additional switches may be added to accommodate that growth. Adding. Will I need to create seperate trunks/aggregated links on the other vlans, or by adding ports 22&24 to the other vlans, allow all traffic to go over the aggregated link, but still be segregated on its own vlan?

Best practice / any advice appreciated. Hummm, this is an interesting setup.



Article Content

Aug 05, 2025

How To Set Up Switch Link Aggregation

Adding unmanaged switches is a cheap and easy strategy, but a limited one. Unmanaged switches may be susceptible to loops (no Spanning Tree support),

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Do i need to configure VLANS on my router/firewall or

Do i need to "inform" my router/firewall of the existence of the vlans or is it possible to configure vlans on switches so it totally transparent for my router ? Acting like

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Full Gigabit L2 PoE Switch

802.1p priority in the VLAN frame header Typically, VLAN frames are interacted between Layer 2 devices. The PRI field (i.e. 802.1p priority), or CoS field, in the VLAN frame header identifies the

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What Is an Aggregation Switch and How to Choose?

An aggregation switch is a network device that consolidates traffic from multiple access switches, wireless access points, or other edge devices and

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Link Aggregation Group

If you select trunk as the switch mode, enter the VLAN IDs that you want to assign as trunk links. To allow all VLAN IDs as trunk links, set Allowed VLANs to All.

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What is a Network Switch? How it Works and Types

Many data centers adopt a spine-leaf architecture, which eliminates the aggregation layer. In this design, servers and storage connect to leaf switches

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What is a virtual LAN (VLAN) and how does it work with

The following diagram shows a Layer 3 switch with three ports configured to handle the traffic for two VLANs (VLAN 10 and VLAN 20). Ports

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Setting up VLAN across 2 switches with link aggregation

Ensure the VID (VLAN ID) match on both the switches for each VLAN you create. Make all the member ports of the VLAN's untagged, BUT be sure to add the aggregated/trunked ports in as

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Example for Configuring VLAN Aggregation

Configure VLAN aggregation on Switch B to add VLANs of different departments to a super-VLAN so that PCs in different departments can access the Internet using the super-VLAN.

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Port Aggregation Configurations

Port Aggregation Port aggregation allows you to group multiple physical ports into one unit. Port aggregation is useful for implementing load balancing and provides a redundant link backup. To

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Campus Switches RG-CS86-20XS4VS2QXS-D 20-Port 10/2.5GE (SFP+), Layer

RG-CS86-20XS4VS2QXS-D 20-Port 10/2.5GE (SFP+), Layer 3 Ruijie Core/Aggregation Switch with Cloud Management, 4-Port 25/10GE (SFP28), 2-Port 40GE Suitable for small & medium enterprise

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Meraki Switches

Meraki MS Switches combine enterprise-grade hardware with cloud management, allowing your organization to scale effortlessly. Explore the models.

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What is Link Aggregation (LAG) in Networking?

Conclusion Link Aggregation Groups in Cisco environments are a critical component in designing efficient, high-capacity, and reliable networks. Whether configured

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RouterOS

RouterOS Documentation This webpage contains the official RouterOS user manual. RouterOS is the operating system of MikroTik devices. Documentation applies for the latest stable

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Data Center Aggregation Layer Design and Configuration with ...

Introduction This chapter covers the design recommendations for a data center design deployment consisting of a Cisco Nexus® 7000 Series Switch at the aggregation layer and a Cisco Nexus 5000

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VLAN Configuration Guide

If this command is configured on a single SVI or router port that requires Layer 3 injected packets, all other SVIs or routed ports on the device also must be configured with the same first four most

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MLAG on M7100--Basic setup and best practice

In this topology, you have redundant MLAG connections up to your core and down to your edge switches. One of the aggregation switches can fail and

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Aggregation Layer

The core-layer switch has both upstream and downstream 802.1q trunks while the aggregation-layer switch has upstream 802.1q trunks and downstream access links. The multi-VRF configuration is

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How To Set Up Switch Link Aggregation

Managed switches provide many advantages for a growing network, including support for VLANs, QoS, and Trunking. I touched on simple VLAN configuration a

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Understanding VLAN Aggregation

VLAN aggregation technology, also known as super VLAN technology, uses multiple VLANs to isolate broadcast domains on a physical network so that different VLANs belong to the same subnet. It

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15 Best Managed Network Switches for Seamless

Key Takeaways The top managed switches in 2025 offer high-speed gigabit, multi-gigabit, or 10G ports for seamless data transfer. They feature

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PA-220 with multiple switch connections with same vlan

You're simply creating subinterfaces under the aggregate group that are tagged to match the VLAN you are trunking across. The "benefit" of this

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01-05 VLAN AGGREGATION CONFIGURATION

VLAN aggregation, also called super-VLAN, partitions a broadcast domain on a physical network into multiple VLANs (sub-VLANs) and aggregates them into a single logical VLAN (super-VLAN).

Contact Us

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