Dividing VLANs on core switch devices

Overview

Principle: Physical ports of the switch are divided into different VLANs, and devices connected to these ports belong to the corresponding VLAN. Applicable Scenarios: Workshops with fixed device locations and simple network topologies, such as assembly lines and. If your access/distribution switches connect the user vlans to the core using trunks, then you will need to configure the vlans on both the access/distribution and on the core. All access points are on the POE. A VLAN is a broadcast domain that lives inside your switch. Instead of buying five physical switches for five departments, you buy one switch and create five VLANs. " The. VLAN (Virtual Local Area Network) technology, by logically dividing the network, isolates traffic from devices in different workshops into independent broadcast domains, becoming a key tool to address this pain point. This emerging technology is mainly used in switches. I have a 48 port switch which currently has a Finance VLAN which is made up of 14 devices, and an Admin VLAN made up of 14 devices which leaves me with 20 spare ports.

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Article Content

Mar 28, 2026

How to divide VLAN? 6 ways to divide VLAN.

We summarize 6 methods of divide VLAN to apply in different network environments. What is VLAN and how to divide VLAN? We will share our

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How to span vlans across core layer in core/distribution/access campus ...

So per site your distribution switches route all vlans except the extended vlans and of they need to route to a vlan in another site they use that unique vlan. But this is not ideal because

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Using VLAN Segmentation and Separation to Improve

However, the combination of these devices on a growing network bog down the ITS network and result in lost frames, network topology changes, and loss of

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Inter-VLAN Routing: RoAS, SVIs & What Breaks First

Learn inter-VLAN routing with step-by-step Cisco configs for router-on-a-stick and Layer 3 SVIs. Includes HSRP redundancy, DHCP relay, ACLs, and troubleshooting commands.

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What is VLAN? How to Implement, Secure, and Manage

PVLANs divide a VLAN into sub-VLANs, allowing some devices to communicate while isolating others, and enhancing security in shared environments. Network access control solutions,

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How to Configure VLAN on Cisco Switch: Step-by-Step ...

Learn how to configure VLAN on Cisco switch step-by-step. Covers VLAN creation, port assignment, trunk configuration, best practices, and troubleshooting tips for IT professionals, SMBs, and enterprises.

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Segmenting a Network Using VLANs

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Switches with VLAN capability can assign the tagged frames to specific VLANs and therefore set up logically separated networks based on a shared infrastructure.

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VLANs are divided according to protocols such as IP, IPX, DECnet, and AppleTalk, allowing broadcast domains to span multiple VLAN switches,

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Guide

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All About VLANs: A Simple Guide to Network Segmentation

VLANs are one of the primary tools used to achieve network segmentation. Here''s how they contribute: Traffic Management: VLANs control traffic patterns within a network by limiting

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VLANs enable network segmentation and traffic isolation by logically dividing a network. They improve performance, security, and scalability in modern networks.

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Best practice for vlans and dividing departments

Best practice is separating data, which you''re focusing on doing already. Ease of management is not having to log into a switch to know what physical ports have which VLANs

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Best practices for Vlans by department/location

A Core switch will not be a “bottleneck” just because you''ve followed best practice and implemented VLANs. It would only be a “bottleneck” if you''ve tried to use a home-grade switch

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VLAN How To: Segmenting a small LAN

Or you may have a more advanced switch with VLAN capability, possibly referred to as a managed, "smart" or multilayer switch. Larger networks usually have

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Inter-VLAN Routing: Ultimate Configuration Guide for Cisco

Learn the configuration of inter-VLAN routing with Cisco routers. Find out more about VLANs and how inter-VLAN communication is facilitated with routers.

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Core Switch & VLANNING

Hi folks - don''t flame me too bad butsome questions rolling around I have to ask on how you do this in the real world.I know how to create vlan etc. But my question is this I have a 4507 Core

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Segmenting a Network Using VLANs

s are assigned to a switch port. However, when a network is separated using VLANs, the devices are logically separated by Switches with VLAN capability can assign the tagged frames to specific

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How to Configure VLANs Using Network Switches and

Step-by-step instructions for configuring VLANs using network hardware. Learn how to segment your network, improve security, and manage

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Practical Guide to VLAN Division in Ethernet Switches

By reasonably planning VLAN topologies, selecting suitable division methods, and leveraging the powerful functions of industrial-grade switches like USR-ISG, enterprises can significantly improve

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How to span vlans across core layer in core/distribution/access

Today we use a collapsed backbone where a lot of vlans are spanned across the backbone because they are needed in different buildings. Could anybody give me a hint how Cisco

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Switch VLAN configuration basis and examples

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VLAN Basics VLAN is Virtual Local Area Network, it is not “VPN” (virtual private network). VLAN is a logical division of the LAN device (note, not physically divided) into a network segment, in

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Practical Guide to VLAN Division in Ethernet Switches

VLAN (Virtual Local Area Network) technology, by logically dividing the network, isolates traffic from devices in different workshops into independent broadcast domains, becoming a key tool to address

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Access, Distribution, and Core Layers Explained

Core switches connect distribution switches. In a large, complex network, core switches reduce cabling requirements and the number of switch

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