Core Switch Network Segmentation Huawei

Overview

Native AC Solution: Core Switches Function as the Gateway for Wired In this example, a CSS of core switches functions as the gateway for wired and wireless.

Key Takeaways

Huawei core switches support network segmentation through VLANs, VXLAN, and microsegmentation to enhance security, traffic management, and multi-tenant isolation. VLAN-Based SegmentationVLANs (Virtual Local Area Networks) are the foundational method for segmenting traffic on Huawei core switches. By assigning ports to specific VLANs, administrators can isolate traffic between departments, services, or user groups.

Proper VLA

N configuration prevents VLAN hopping attacks, enforces port isolation, and allows MAC-forced forwarding (MFF) to bind devices to specific ports, blocking unauthorized access. Layer 3 ACLs can further restrict inter-VLAN communication, ensuring sensitive resources remain protected.

VXLAN and Multi-

Tenant Segmentation

For larger or cloud-scale deployments, Huawei switches like the S6730-H and S6720S support VXLAN with BGP-EVPN, enabling scalable multi-tenant segmentation.

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VXLA

N encapsulates Layer 2 traffic over Layer 3 networks, allowing multiple tenants or services to share the same physical infrastructure while maintaining logical isolation. This approach is ideal for data centers, campus networks, and environments with virtualization or Wi-Fi 6 APs, supporting high-density access and backbone traffic.

Microsegmentation

Microsegmentation, also called EPG-based security isolation, provides finer-grained control than VLANs or subnets. Servers or devices are grouped into Endpoint Groups (EPGs) based on IP addresses or ranges, and traffic policies are applied per group. This allows isolation between servers even within the same subnet, overcoming limitations of traditional VLAN or ACL-based segmentation.

Microsegmentation simplifies operations and enhances security by controlling east-west traffic within the data center.

Core Switch Features for Segmentation

Huawei core switches, such as the CloudEngine 9800, 8800, 6800, and 5800 series, and S6730/S6720S models, provide advanced Layer 2/3 capabilities, high-density 10/40/100 GE ports, and integrated WLAN AC functions. Key features include: Layer 2/3 gateway functionality for wired and wireless convergence.

DHC

P services for IP address assignment across VLANs.

Stacking and Eth-

Trunk interfaces for redundancy and high bandwidth. Security features like DoS protection, DHCP/ARP snooping, IP/MAC filtering, and encrypted traffic anomaly detection. Automation and monitoring via NETCONF/YANG, CampusInsight, and telemetry for proactive network management.

Best Practices

Plan VLA

Ns and VXLANs according to departments, services, or tenants to minimize broadcast domains and optimize performance. Use microsegmentation for sensitive servers or applications requiring strict isolation.

Apply AC

Ls and port isolation to prevent unauthorized access and VLAN hopping. Leverage stacking and redundancy to ensure high availability and fault tolerance. Monitor traffic and performance using Huawei's telemetry and CampusInsight tools to detect anomalies and optimize QoS.

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By combining VLANs, VXLAN, and microsegmentation, Huawei core switches provide a flexible, secure, and scalable network segmentation strategy suitable for modern enterprise and campus networks.

Article Content

Native AC Solution: Core Switches Function as the Gateway for Wired

In this example, a CSS of core switches functions as the gateway for wired and wireless users on the entire network and is responsible for routing and forwarding of user services on the entire network.

Network Switches | Huawei Enterprise

Designed for scenarios such as data centers, enterprise campuses, and enterprise private lines, making networks more simple, smart, open, and secure, as well as

Huawei Core Switch: Network''s Beating Heart? Can Centralized

Every enterprise network has a silent dictator—the Huawei core switch. Buried in server rooms or data centers, this unassuming device governs traffic flow between departments, ...

Enterprise LAN with Huawei Switches — Network Diagram

Three-tier enterprise network using Huawei AR6700 router and S5735 switches with VLAN segmentation. Explore, fork, and customize this architecture diagram.

Huawei S6730 Switch – 10GE Aggregation & Core Switches

Positioned perfectly as an Aggregation Switch or Core Switch, the S6730-H delivers scalability, security, and cost-effectiveness for modern digital infrastructures. These models deliver a high-performance

Huawei Enterprise networking product icons | PPT

This document contains icons representing various networking and telecommunications equipment for an enterprise network, including routers, switches, servers, wireless access points, and more. Over

How to Create VLAN on Huawei Switch: Are You Overlooking

Creating a VLAN on a Huawei switch isn''t just a technical task—it''s a strategic move. From blocking hackers with port isolation to slashing costs through smart segmentation, every step

Huawei Switch VLAN Configuration: Are You Overlooking These

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VLANs (Virtual Local Area Networks) on Huawei switches like the S5700 or CloudEngine series let you isolate departments, prioritize IoT devices, and lock down sensitive data ...

Huawei CloudEngine S8700 Core Switches | Modular Chassis Switch

I specialize in advanced network configurations, troubleshooting, and providing expert-level support to ensure seamless network operations. The Huawei CloudEngine S8700 Series represents

Huawei S6700 Series Switches Product Brochure

The S6700 series switches (S6700s) are next-generation 10G box switches. The S6700 can function as an access switch in an Internet data center (IDC) or a core switch on a campus network.

Configuring the Core Switch

Configuring the Core Switch Context In this scenario, IP addresses of the interfaces connecting the core switch to the BRASs and firewalls and OSPF need to be configured on the core

Huawei CloudEngine 16800 Core 98010567 | Omnixon Global

The Huawei CloudEngine 16800 Core Data Center Switch from Huawei is enterprise-grade Network Switches hardware built for data centers. 400GE/800GE capable spine switch purpose-built for

Huawei CloudEngine S8700 Core Switches | Modular Chassis Switch

Explore Huawei CloudEngine S8700 modular chassis switches, designed for enterprise cores and data centers, these switches deliver up to 16 Tbps capacity.

Cisco vs Aruba Switches: Enterprise Comparison Guide

Compare Cisco vs Aruba switches for enterprise networks. Read our expert guide on Catalyst vs CX, DNA licensing, Central, and ISE vs ClearPass.

Native AC Solution: Core Switches Function as the Gateway for Wired

In addition, core switches are configured with the native AC function to manage APs and transmit wireless service traffic on the entire network, implementing wired and wireless convergence.

Best Data Center and Cloud Networking Reviews 2026

The data center and cloud networking vendors covered in this market provide hardware and/or software solutions to deliver connectivity primarily within enterprise data centers. This includes data center

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Example for Configuring Communication Between Different Network ...

Example for Configuring Communication Between Different Network Segments Through Static Routes Overview In addition to configuring an IP address for a VLANIF interface, you need to configure a

Huawei S6730 Switch – 10GE Aggregation & Core Switches

Campus and enterprise networks now demand both blazing-fast throughput and simplified operations. The Huawei S6730-H Switch series answers with high-density 10 GE access, robust Layer-3

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