

Configuration of Aggregation Layer Switch Interconnection



AI Overview

Aggregation layer switches consolidate traffic from access switches, provide redundancy, and enable Layer 2 and Layer 3 services with VLANs, port channels, and QoS. Core Functions of Aggregation Switches Aggregation switches sit between the access and core layers, consolidating traffic from multiple access switches and forwarding it to the core. They typically operate at Layer 2 and Layer 3, supporting routing, traffic filtering, load balancing, multicast control, and QoS to ensure efficient and reliable network performance. They also provide redundancy to prevent single points of failure and maintain high availability. Key Configuration Components

1. VLAN and Layer 2 Configuration Define VLANs for different departments or services. Configure trunk ports to carry multiple VLANs between access and aggregation switches. Implement EAPS (Ethernet Automatic Protection Switching) or similar protocols for fault isolation and loop prevention.
2. Layer 3 Interfaces and Routing Assign SVIs (Switched Virtual Interfaces) for inter-VLAN routing. Configure default routes to the core or upstream routers. Enable routing protocols (e.g., OSPF, EIGRP) if dynamic routing is required.
3. Port Channels and Link Aggregation Combine multiple physical links into port channels using LACP or static aggregation to increase bandwidth and redundancy. Ensure consistent configuration across all aggregated links.
4. Management and Logging Configure management IP addresses and access for monitoring. Enable logging and SNMP for network visibility and troubleshooting.
5. Quality of Service (QoS) and Traffic Prioritization Classify traffic using ACLs or traffic classifiers. Apply traffic policies to prioritize critical traffic such as VoIP or VIP users. Remark VLAN or IP packet priorities using 802.1p or DSCP values.
6. Redundancy and High Availability Deploy redundant aggregation switches to avoid single points of fai...

Article Content

Layer-2 Link Aggregation Configuration

Link aggregation, also called trunking, is an optional feature available on the Ethernet switch and is used with Layer 2 Bridging. Link aggregation allows logical merge of multiple ports in a single link.

Configuring Multi-Level M-LAG Interconnection

Configure the V-STP, DFS group, peer-link, and M-LAG on SwitchC, SwitchD, SwitchE, and SwitchF. Create VLANIF interfaces on SwitchG and SwitchH and configure IP addresses for the

Cisco Data Center Infrastructure 2.5 Design Guide

The recommended platform for the enterprise data center core layer is the Cisco Catalyst 6509 with the Sup720 processor module. The high

Aggregation Switch: Increasing the Priority of Special Traffic

Deployment Procedure Configure devices at core, aggregation, and access layers to ensure connectivity of the basic network. For details, see Native AC Solution: Aggregation Switches Function as

Configuring Multi-Level M-LAG Interconnection

As shown in Figure 2-43, multi-level M-LAG interconnection ensures reliability, improves the link use efficiency, and expands the network scale in dual-homing mode, meeting customer

Configuration Guide for Cisco NCS 4000 Series

This chapter describes the procedures to configure Link Aggregation on Cisco NCS 4000 Series routers. Link Aggregation Overview Understanding Link Bundle Characteristics and

What Is an Aggregation Switch and How to Choose?

These aggregation switches typically operate at Layer 2 or Layer 3 of the OSI model, depending on the network topology and configuration

Aggregation layer | FortiSwitch 7.6.0 | Fortinet Document Library

This model allows the aggregation switches to easily accommodate thousands of devices passing through this layer while simplifying the design, maintenance, and operations. The following figure

Link Aggregation - LACP Protocol

About Switch Independent Server Side Config If you have server side NIC teaming (link aggregation) configured for switch independent mode it will enable server

Link_Aggregation_Config_Guide

1 Link Aggregation Configuration Guide This document describes the Link Aggregation feature supported in Supermicro Layer 2 / Layer 3 switch products. This document covers the Link

Cisco Catalyst 9800 Series Wireless Controller Software Configuration ...

A multichassis link aggregation group (multi-LAG) is a switch interconnection technology that: Connects multiple controller uplinks to separate uplink switches for redundancy and load

Link Aggregation and Load Balancing

Link Aggregation and Load Balancing Last updated Jun 16, 2026 Save as PDF Table of contents Link bonding Load balancing Load sharing Implementation by Cisco Meraki MS Series MX

Configuring Link Aggregation Group (LAG) on a Switch

Article ID:2860 Configuring Link Aggregation Group (LAG) on a Switch Objective Link Aggregation Group (LAG) multiply the bandwidth, increase

Link Aggregation Configuration

S300, S500, S2700, S3700, S5700, S6700, S7700, and S9700 Series Switches Typical Configuration Examples (V200) This document provides campus networks typical configuration examples and

Link Aggregation and Multi-layer switches

1. Use Packet Tracer to put up the topology above. Connect the two multi-layer switches (MLS) with a Gigabit uplink 2. Configure IP addresses where appropriate. Include the layer-2

Everything You Need to Know About Aggregation Switch

An aggregation switch operates at Layer 2 or Layer 3 of the OSI model, depending on the configuration and topology of the network. The

Link Aggregation Group

To configure LAG using PAgP, create multiple port-channel interfaces and add them to the corresponding port bundle. Configure PAgP on the uplink switch so that the PAgP bundle can

Link Aggregation Configuration

Ethernet link aggregation increases link bandwidth by bundling multiple physical links to form a logical link. Link aggregation can work in manual mode or Link Aggregation Control Protocol (LACP) mode.

Cisco Catalyst 9800 Series Wireless Controller

A multichassis link aggregation group (multi-LAG) is a switch interconnection technology that: Connects multiple controller uplinks to separate

Understanding Switch Aggregation: A Comprehensive

A: An access switch is typically located at the edge of the network and connects end-user devices, while an aggregation switch is situated in the

What Is an Aggregation Switch and How to Choose?

Discover the role of aggregation switches. Explore differences between aggregation, access, and core switches, and choose the right model for your network.

Aggregated Ethernet Interfaces Overview | Junos OS | Juniper Networks

You can configure LAGs to connect a QFX Series product or an EX4600 switch to other switches, like aggregation switches, servers, or routers. This example describes how to configure LAGs to connect

Data Center Aggregation Layer Design and Configuration with ...

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

Data Center Multi-Tier Model Design

Data Center Core Layer The data center core layer provides a fabric for high-speed packet switching between multiple aggregation modules. This

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.shangases.co.za>

Email: ekomedsolar@gmail.com

Phone: +86 13816583346

Address: No. 26 Heshun Middle Road, Economic Development Zone, Hai'an City, Jiangsu Province, China

This document is for informational purposes only. Specifications subject to change without notice.

