

# Core aggregation switch configuration



## Article Overview

Core switches act as the high-speed backbone, while aggregation switches consolidate traffic from access switches and forward it to the core, with configuration focusing on VLANs, IP management, and link aggregation.

### Roles and Functions

**Core Switches:** Serve as the backbone of the network, connecting distribution/aggregation switches and handling high-volume traffic with low latency. They support advanced Layer 3 routing, high throughput, fault tolerance, and redundancy to ensure network stability . **Aggregation Switches:** Positioned between access and core layers, aggregation switches consolidate traffic from multiple access switches, wireless APs, or edge devices. They support Layer 2/3 functions, link aggregation (LACP or static), QoS, VLAN segmentation, and redundancy to optimize traffic flow and reduce bottlenecks .

### Configuration Best Practices

#### 1. Management VLAN and IP Addressing:

- Use the core switch as the management subnet gateway for aggregation and access switches.
  - Configure a management VLAN on the core switch and enable auto-negotiation for plug-and-play deployment .
  - Assign a mix of static and dynamic IP addresses for aggregation and access switches to simplify initial deployment and ongoing management. For example, allocate half of the subnet for static IPs and the other half for DHCP-assigned addresses .
- #### 2. Link Aggregation:

## Article Content

What is an Aggregation Switch? | Features and Practical Benefits

The aggregation switch conducts uploading and distributing in addition to other tasks including policy implementation,

SME Network Solution Typical Configuration Examples

"Gateway + Core Switch + Aggregation Switch + Access Switch + WAC + AP + AR180" Networking: Local Entire Network

Configuring Link Aggregation Group (LAG) on a Switch

Article ID:2860 Configuring Link Aggregation Group (LAG) on a Switch Objective Link Aggregation Group (LAG)

Link Aggregation Configuration

S300, S500, S2700, S3700, S5700, S6700, S7700, and S9700 Series Switches Typical Configuration Examples (V200) This

Wired Core | Validated Solution Guide

The following procedures describe the creation of a core switch configuration in CLI format. The switch configuration

Standalone AC Solution: Aggregation Switches Function as Gateways

# Configure an Eth-Trunk interface for connecting to AGG1, which is a stack of aggregation switches. The configuration of an Eth

Link Aggregation, LAG, LACP and MLAG in 2026: Design, Best

You see link aggregation: Between access and distribution switches Between servers and ToR switches (NIC

[Enterprise Switch] How to configure Link Aggregation on Edgework ...

Edgework enterprise switches' ports can be statically grouped into an aggregate link (i.e., trunk) to increase the

Core, Aggregation, or Access Switches? Choose the

Discover the crucial differences between core, aggregation, and access switches. Find out

UniFi Port Switch Aggregation: What Is Switch Aggregation?

An aggregation switch is a network switch that sits between the access layer (edge switches) and the core layer

Core Switch Vs Aggregation Switch: What Is The Difference?

There are no fixed requirements for core switches or aggregation switches. It depends on the size of the network

## Two-Tier Core

Configure Two-Tier core switches as a VSX pair for Layer 2 aggregation of the data center access switches, IP data

## Data Center Design: Basic 3 Layers, Core, Aggregation, and Access

Data Center Basic Layered Design of Core, Aggregation, and Access The data center network design is based on a

## Tutorial

Learn how to configure a Cisco Switch Link Aggregation using the command-line, by following this simple step-by-step

## Port Aggregation Configurations

Port Aggregation Port aggregation allows you to group multiple physical ports into one unit. Port aggregation is useful for

## 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

## Configuring Link Aggregation Group and Link Aggregation Control

This chapter describes Link Aggregation Group, Link Aggregation Control Protocol, and manual load balancing. This chapter also

## Configuring Aggregation and Access Switches to Be Managed by the ...

## Configuring Aggregation and Access Switches to Be Managed by the Controller Configuration Roadmap Aggregation

## Core vs Aggregation vs Access Switches | Network Design Guide

Compare core, aggregation and access switches. Learn their roles, port speeds, PoE, Layer 3 routing, redundancy,

## Configuring Aggregation and Access Switches to Be Managed by the ...

Configure the core switch as the management subnet gateway of the aggregation/access switches. For details, see

## Everything You Need to Know About Aggregation Switch

What is an Aggregation Switch and How Does it Work? An aggregation switch consolidates

## SMB Switch: Access Switch vs Aggregation Switch vs Core Switch

There are so many kinds of switches in the market, which one should we buy? For most companies, they only need to

## Cisco Data Center Infrastructure 2.5 Design Guide

Recommended Platform and Modules In a large data center, a single pair of data center

## Link Aggregation: Static vs Dynamic, LACP, and MLAG

Understand how link aggregation (LACP, MLAG, static vs dynamic) improves bandwidth

## Link\_Aggregation\_Config\_Guide

1 Link Aggregation Configuration Guide This document describes the Link Aggregation feature supported in

## Everything You Need to Know About Aggregation Switch

An aggregation switch is different from a core switch. While both switches direct traffic on a

## Configuring Aggregation and Access Switches to Be Managed by the ...

On the core switch, configure a management subnet for aggregation/access switches, enable the DHCP server

## Contact Us

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