

Sub configuration needs to be done on either the core switch or the aggregation switch

Article Overview

Subnet configuration is typically done on the core switch, which acts as the gateway for aggregation and access switches, while aggregation switches primarily handle VLANs and traffic forwarding.

Core Switch Responsibilities

The core switch serves as the central point in a network hierarchy and is responsible for routing between VLANs and subnets. When configuring a subnet:

- o Assign the management subnet on the core switch to act as the gateway for downstream aggregation and access switches .
- o Enable DHCP server functionality on the core switch if it will provide IP addresses to devices in the subnet .
- o Configure static routes for management networks to ensure proper reachability .
- o Enable management VLAN auto-negotiation so aggregation and access switches can automatically detect and use the correct management VLAN .

Aggregation Switch Responsibilities

Aggregation switches consolidate traffic from multiple access switches and forward it to the core. Their configuration typically includes:

- o VLAN assignment for different traffic types (e.g., video, data) to segregate broadcast domains .
- o Link aggregation (LAG) to increase bandwidth and provide redundancy between aggregation and core switches .
- o Spanning Tree Protocol (RSTP) configuration to prevent loops and ensure failover paths .
- o Optionally, aggregation switches can have static management IPs within the subnet defined on the core switch, but they do not usually define the subnet itself .

Practical Deployment

- o Define the subnet on the core switch (e.g., 192.168.100.0/24) and assign the gateway IP (e.g., 192.168.100.254) for aggregation and access switches .
- o Enable DHCP on the core switch if needed, specifying the IP range for downstream devices .
- o Configure aggregation switches with VLANs and LAGs to connect access switches and ensure traffic flows efficiently to the core .
- o Enable management VLAN auto-negotiation so aggregation switches can automatically join the correct management network .

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Summary

- o Core switch: Subnet configuration, routing, DHCP, management gateway.
- o Aggregation switch: VLANs, traffic forwarding, link aggregation, optional static management IPs.
- o This hierarchical approach ensures centralized control, efficient traffic flow, and simplified management across the network .

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

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

An aggregation switch refers to a type of switch used to connect multiple ToR switches to a core switch/router in a cloud data center

Switches do not exchange any port channel control information with other end devices in static link aggregation.

This guide provides information and guidance to help the network administrator deploy the Meraki Switch (MS) line in a Campus

Before configuring an aggregate group, you must configure its interfaces. Among the interfaces assigned to any particular aggregate

To configure Port Channels on a Citrix ADC, you can either enable LACP, or you can configure a Channel manually. If

As the aggregation point of access switches, the aggregation switch is required with the ability to process the access layer

What is an Aggregation Switch and How Does it Work? An aggregation switch consolidates data traffic from multiple

We're going to install two 48 port SFP+ switches at a co-location facility that will house all of our primary servers and

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In what order should I configure port aggregation on my switches? You should be certain that configuration changes are first done on

An aggregation switch is a network device that consolidates traffic from multiple access switches, wireless access

this section of the guide will demonstrate how to configure a Aggregation switch with dual purposes, providing power

Huawei Technical Support

This lesson explains how to configure Etherchannel (Link Aggregation) using PAgP and LACP on Cisco

Configure the core switch as the management subnet gateway of aggregation/access switches. Configure the management VLAN

Web: <https://in-au.co.za>

