

Article Overview

H3C aggregation layer switches can be configured for static or dynamic link aggregation using Bridge-Aggregation interfaces, supporting VLAN trunking and IRF integration.

Overview of Link Aggregation

Link aggregation combines multiple physical Ethernet links into a single logical interface, called an aggregate interface, to increase bandwidth and improve redundancy. H3C supports both static aggregation and dynamic aggregation using LACP. Dynamic aggregation allows member ports to negotiate automatically and ensures that traffic is distributed efficiently across active links, while static aggregation requires manual configuration of member ports .

Basic Configuration Steps

1. Create a Bridge-Aggregation Interface

Static Aggregation Example:

```
interface bridge-aggregation 1[DeviceA-Bridge-Aggregation1] quit
```

Dynamic Aggregation (LACP) Example:

```
interface bridge-aggregation 1[DeviceA-Bridge-Aggregation1] link-aggregation mode  
dynamic[DeviceA-Bridge-Aggregation1] quit
```

This creates a Layer 2 aggregate interface named Bridge-Aggregation1 .

2. Assign Member Ports to the Aggregation Group

```
interface range ten-gigabitethernet 1/0/1 to ten-gigabitethernet 1/0/3[DeviceA-if-range] port link-aggregation  
group 1[DeviceA-if-range] quit
```

All member ports should have the same link type, speed, and duplex mode. Ports in a static aggregation group are either Selected or Standby, with the lowest-numbered Selected port acting as the master .

3. Configure VLAN Trunking on the Aggregate Interface

```
interface bridge-aggregation 1[DeviceA-Bridge-Aggregation1] port link-type  
trunk[DeviceA-Bridge-Aggregation1] trunk permit vlan 10 20[DeviceA-Bridge-Aggregation1] quit
```

This allows VLAN 10 and VLAN 20 traffic to pass through the aggregated link .

Optional: IRF Fabric Integration

For multi-chassis aggregation using IRF, configure the IRF domain and enable LACP MAD for dynamic load sharing:

```
irf domain 1 interface bridge-aggregation 1[DeviceA-Bridge-Aggregation1] loadsharing-type  
shar[DeviceA-Bridge-Aggregation1] quit
```

This ensures that traffic is balanced across all member ports in the IRF fabric and maintains redundancy if a link fails .

Verification Commands

o Display aggregation status:

```
display link-aggregation summary
```

o Check member port states:

```
display link-aggregation verbose
```

These commands show whether ports are in Selected or Standby states and confirm VLAN trunking configuration .

Best Practices

o Remove any existing port configurations such as VLAN mapping, QinQ, or port isolation before adding ports to an aggregation group .

o Prefer dynamic aggregation (LACP) when both ends support it for better fault tolerance and automatic negotiation .

o Ensure all member ports have consistent speed, duplex, and link type to avoid aggregation failures . This configuration provides a robust aggregation layer setup for H3C switches, supporting high bandwidth, redundancy, and VLAN trunking across multiple devices.

Link Aggregation Control Protocol (LACP) : It is a protocol that enables simultaneous operation of multiple uplinks to provide higher

Introduction This document provides configuration examples for using simple multichassis link aggregation (S-MLAG). S-MLAG

H3C Aggregation Layer Switch Configuration Example

Introduction This document provides Ethernet link aggregation configuration examples. **Prerequisites** This document applies to

For high availability, you can connect each host or server to two ToR switches in the access-layer IRF fabric, and aggregate the

• Configure a Layer 2 dynamic aggregation group on both the AP and the switch. • Configure the aggregation group to distribute

Restrictions and guidelines When you configure Layer 2 link aggregation, follow these restrictions and guidelines: • When you assign

• Configure a Layer 2 static aggregation group on the AC and the switch to increase the bandwidth and improve link reliability. •

In this Lab I demonstrated how to configure Link Aggregation on HPE/H3C switches. Same way we have already

For more information about bulk configuring interfaces, see HP 5920 & 5900 Switch Series Layer 2--LAN Switching Configuration

03-Layer 2--LAN Switching Configuration Guide 00-Preface 01-Ethernet interface configuration 02-Loopback, null, and inloopback

View and Download H3C S7500 Series operation manual online. S7500 Series switch pdf manual download.

For more information about M-LAG interfaces and peer-link interfaces, see M-LAG configuration in Layer 2--LAN Switching

Example: Configuring multi-layer M-LAG+STP+dual-active VLAN gateways Network configuration As shown in Figure 1, the user

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

H3C Three-Layer Aggregation 1. Configuration steps The switch needs to enter the interface and change the interface

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