How to use Huawei switch stacked optical ports

Overview

S Series Switches Stack Deployment Best Practices This document describes the best practices for stack deployment, including device selection, deployment.

Key Takeaways

Huawei switches can be stacked using optical ports by configuring dedicated service ports as stack ports, connecting them in a ring or chain topology, and assigning member IDs and priorities before activating the stack.

Overview of Optical Port Stacking

Huawei switch stacking allows multiple physical switches to operate as a single logical device, simplifying management, increasing redundancy, and scaling bandwidth. Optical ports, such as SFP+ or QSFP modules, can be used as stacking ports to carry both control and data traffic between stack members ( ).

Stack Topologies

Ring Topology: Recommended for redundancy; switches are connected in a closed loop, providing dual-link paths to prevent single points of failure ( ). Chain Topology: Simpler but less resilient; a single link failure can disrupt the stack ( ).

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Pre-

Configuration Checklist

Verify switch support: Ensure the switch model supports stacking and optical port stacking (e.g., S5700, S6700 series) ( ). Firmware consistency: All stack members should run the same VRP version. Stack cables: Use certified optical stack cables (e.g., Huawei QSFP-40G-Stack) and ensure proper bend radius and cleanliness ( ).

Member I

Ds and priorities: Assign IDs and priorities before connecting stack cables to control master election ( ).

Physical Connection Steps

Identify the service ports that support stacking. Connect the optical stack cables between the designated ports of each switch. For ring topology, connect the last switch back to the first to complete the loop ( ).

Ensure cables are not twisted, and connectors are clean to prevent signal loss ( ).

Logical Configuration

Enter system view on each switch. Configure the physical ports as stack ports: CodeCopy interface XGigabitEthernet0/0/1[Switch-Interface] stack-port enable Add physical ports to a logical stack port group: CodeCopy stack-port group 1[Switch-StackPortGroup] add interface XGigabitEthernet0/0/1 Repeat for all stack member ports. The switch will automatically select ports for stacking if multiple are configured ( ).

Save configuration and reboot switches to activate the stack ( ).

Stack Member Roles

Master: Manages the stack and configuration. Standby: Takes over if the master fails. Slave: Forwards traffic; all members participate in forwarding ( ).

Best Practices

Use bidirectional optical links for redundancy. Avoid frequent slot ID changes, as this can split the stack ( ). Validate configurations in a lab environment before production deployment ( ).

Enable auto-upgrade to synchronize firmware across members ( ).

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Troubleshooting Tips

Check stack link status and heartbeat packets if a member is not forwarding traffic. Ensure optical cables are clean and properly seated. Verify member IDs and priorities to prevent master election conflicts ( ).

By following these steps, Huawei switches can be reliably stacked using optical ports, providing a scalable, resilient, and manageable network infrastructure.

Article Content

S Series Switches Stack Deployment Best Practices

This document describes the best practices for stack deployment, including device selection, deployment, networking deployment, stack setup failures, and reliability.

Stack Configuration

This chapter describes how to set up a stack of multiple switches to improve forwarding performance and reliability. This document describes the principles and configurations of the Device Management

S SERIES SWITCHES STACK DEPLOYMENT BEST PRACTICES

When uplink ports are used for stacking and one logical stack port contains two stack member ports, the logical stack port can contain only stack member ports 1 and 2 or stack member ports 3 and 4.

How to Master Huawei Switch Stacking: Best Practices and ...

Mastering Huawei switch stacking requires meticulous planning, adherence to best practices, and proactive troubleshooting. By leveraging ring topologies, uniform firmware, and

Huawei S-Series Switch Stacking Demonstration

This test uses two identical Huawei S-Series switches for stacking (a maximum of 9 switches can be stacked). Table 1 details the switches and stacking cables used.

Huawei S Series Switches Stack Guide—Version and Model

Switches can set up a stack through stack card connection and service port connection based on stack port types. Service port connections are classified into ordinary and dedicated cable

01-02 STACK CONFIGURATION

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As shown in Figure 2-4, when the port density of a device is no longer enough for the number of users, more ports can be provided by adding a new device that sets up a stack with the existing device.

How to configure Stacking in Huawei Switches | What is Stacking

Stacking is a technology that connects multiple switches through stack cables to form a logical switch for data forwarding. As a widely-used horizontal virtualization technology, it can...

How to Configure Stacking on Huawei S5700LI Switches

In this article, we''ll walk you through the step-by-step process of configuring stacking on Huawei S5700LI switches, along with best practices to ensure a smooth implementation.

Huawei Switch Stack Configuration | S6730 S5732 S5735

In this video, we''ll walk you through the process of setting up a stack configuration using Huawei switches. Stacking switches offers various benefits including increased scalability,...

Huawei S-Series Switch Stacking Demonstration

Switch stacking combines multiple switches into a single logical device for unified data forwarding, which expands port quantity, simplifies network deployment, enhances reliability, and

Typical Stack Configuration of Fixed Switches

Fixed switches are often deployed at the aggregation layer and access layer. Unlike modular switches, fixed switches have a fixed number of ports and cannot add LPUs to expand the number of ports.

S Series Switches Stack Deployment Best Practices

S Series Switches Stack Deployment Best Practices This document describes the best practices for stack deployment, including device selection, deployment, networking deployment, stack setup

How to Master Huawei Switch Stacking: Best Practices and ...

Switch stacking is a cornerstone of modern network design, enabling simplified management, improved redundancy, and scalable bandwidth. Huawei''s stacking technology (e.g.,

Huawei S Series Switches Stack Guide—Version and Model

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Service port connections are classified into ordinary and dedicated cable connections based on cable types. Ordinary cable connection: Switches use optical cables, network cables, and

Setting Up a Stack Using Dedicated Stack Cables

This document describes how to configure a cluster switch system (Stack), including setting up, splitting, and maintaining a Stack.

Checking Whether Stack Cables Are Correctly Connected

Modular switch CSS card clustering SRUAs and SRUBs use VSTSA stack cards and dedicated cluster cables and must follow CSS connection rules. SRUCs use VS08 stack cards and dedicated high

Setting Up a Stack Using Dedicated Stack Cables

Context Configuration-free stack setup is supported when you use service ports to set up a stack through dedicated stack cables or use dedicated stack ports to set up a stack. For details, see the

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

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