

Function of the Reflector Port of the Core Switch



Overview

Configure Catalyst Switched Port Analyzer (SPAN):

ExampleIntroductionPrerequisitesBackground InformationSpan on Catalyst Express 500/520Span on The Catalys.

Key Takeaways

A reflector port on a core switch is used to loop back traffic from a source port onto an RSPAN VLAN for remote monitoring, effectively enabling traffic analysis without affecting normal network operations.

Overview

A reflector port is a specialized port on a switch configured to copy packets from a source port or VLAN and place them onto an RSPAN (Remote Switched Port Analyzer) VLAN for monitoring purposes. It is primarily used in network traffic analysis, allowing administrators to capture and inspect traffic from multiple switches or VLANs without physically connecting monitoring devices to each source port.

Key Functions

Traffic Loopback: The reflector port loops back untagged traffic from the source session and forwards it to the RSPAN VLAN, which is then flooded to trunk ports carrying that VLAN. **Remote Mirroring:** It enables remote mirroring, allowing traffic from one switch to be analyzed on another switch or monitoring device located elsewhere in the network. **Isolation:** The port is invisible to all other VLANs and cannot participate in normal network communication while configured as a reflector port.

Spanning Tree Disabled: Spanning Tree Protocol is automatically disabled on the reflector port to prevent loops and ensure uninterrupted mirroring. **Port Restrictions:** A reflector port cannot be a SPAN source or destination, cannot be part of an EtherChannel while active, and can only serve one RSPAN session at a time.

Operational Considerations

Device Connectivity: Any device connected to a reflector port loses connectivity until the RSPAN session is disabled.

VLA

N Tagging: Administrators can configure the reflector port to send mirrored traffic as tagged or untagged depending on monitoring requirements. **Temporary Use:** The port is dedicated to mirroring while the session is active and cannot perform other switching functions.

Importance in Core Switches

In a core switch, which aggregates traffic from distribution and access layers and handles high-volume routing and switching, reflector ports are critical for: **Network Diagnostics:** Capturing traffic from multiple layers for troubleshooting or performance analysis. **Security Monitoring:** Observing suspicious traffic patterns without disrupting normal operations. **Performance Testing:** Evaluating network load and latency by analyzing mirrored traffic.

By using a reflector port, network administrators can monitor and analyze traffic efficiently across the network backbone while maintaining the high performance and reliability expected from core switches.

Article Content

Configure Catalyst Switched Port Analyzer (SPAN): Example

IntroductionPrerequisitesBackground InformationSpan on Catalyst Express 500/520Span on The Catalyst 2900XL/3500XL SwitchesSpan on The Catalyst 2948G-L3 and 4908G-L3Span on The Catalyst 8500Frequently Asked Questions and Common ProblemsRelated InformationThe SPAN feature, which is sometimes called port mirroring or port monitoring, selects network traffic for analysis by a network analyzer. The network analyzer can be a Cisco Switch Probe device or other Remote Monitoring (RMON) probe. Previously, SPAN was a relatively basic feature on the Cisco Catalyst Series switches. However, the latest release...See more on cisco
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Cisco Systems 2950, 2955 SPAN and RSPAN Interaction with Other

Reflector Port The reflector port is the mechanism that copies packets onto an RSPAN VLAN. The reflector port forwards only the traffic from the RSPAN source session with which it is affiliated. Any

Reflector Port, Ingress SPAN, Egress SPAN, VSPAN | Cisco WS

The reflector port forwards only the traffic from the RSPAN source session with which it is affiliated. Any device that is connected to a port that is set as a reflector port loses connectivity until the RSPAN

What is a Core Switch | Functions and Difference over Normal Switch

It is a powerful backbone switch in the center of the network core layer, which centralizes multiple aggregation switches to the core and implements LAN routing.

What Is a Core Switch? Network Backbone Architecture Guide

Think of a core switch as the high-speed interstate highway of your network. It does not inspect the cargo or check driver's licenses; its sole mandate is to move massive amounts of traffic

Core Switch vs. Distribution Switch vs. Access Switch

These data switches are responsible for routing and data switching at the core layer of the network. The data routed and switched by the core switch is carried forward to the bottom layers of the network

What is a Core Switch?

Spread the loveA core switch is a crucial component of a network infrastructure that serves as the backbone of a network. It's a high-performance switch that

Core Switch

Core switches are defined as high-capacity switches located at the top of a cloud data center network, connecting aggregation switches and providing interfaces to wide area networks (WANs). They are

Differences Between the Core Switch and Normal Switch | FiberMall

Differences between the core switch and ordinary switch The difference between ports The number of standard switch ports is generally 24-48, and most network ports are Gigabit Ethernet

What is a Core Switch | Functions and Difference over Normal Switch

What is a core switch and how it works? This article builds the basics of this kind of switch for the ones who don't know anything about it. What is a Core Switch? It is a powerful

Understanding the Core Switch: Key Differences and Uses

Explore the core switch's role as the backbone of your network. Discover key differences, uses, and insights into layer 3 core switch technology.

Core Switch vs. Distribution Switch vs. Access Switch

Comprehensive guide to Core, Distribution, and Access Switches. Roles in the network and important parameters explained.

Difference between core switch and ordinary switch and

In modern computer networks, core switches and ordinary switches are two key network devices, which have significant differences in network

Core Switch: The Powerhouse of Your Network

What is a core switch and how does it differ from other switches? Defining the Core Switch and Its Role in Network Architecture The core switch is

Reflector Port Use?

I believe that the reflector port is an older method of configuration to support RSPAN. You can read more about it in this link [Catalyst Switched Port Analyzer \(SPAN\) Configuration Example - Cisco](#)

Core Switch Explained: Key Functions and Benefits

Discover what a Core Switch is, its pivotal role in network architecture, and how it boosts performance and reliability in your data infrastructure.

Configure Catalyst Switched Port Analyzer (SPAN):

This document describes the recent features of the Switched Port Analyzer (SPAN) that have been implemented.

Core Switch

Definition of Core Switch A core switch is a high-capacity, central networking device that serves as the backbone of a computer network, facilitating data transmission and communication

What Is Core Switch?

The core switch resides at the core layer, connecting multiple distribution layer switches. Its primary function is to switch traffic as quickly and efficiently as possible, minimizing latency and

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