



**Adam Tas Corridor Energy**

# **Huawei Access Switch Loop Prevention**





## Huawei Access Switch Loop Prevention

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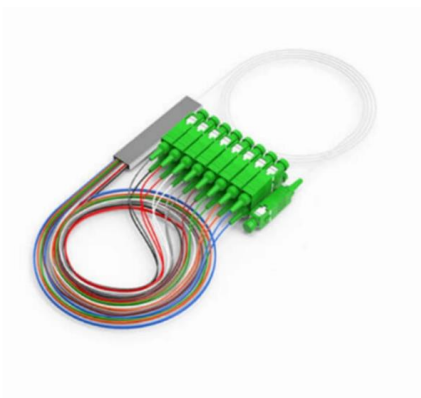


### **Huawei Enterprise Support Community**

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### **Huawei, H3C and Ruijie: How to configure loop detection?**

Under what circumstances did the loop detection technology come into being? Loops in the network will cause the device to repeatedly send broadcast, multicast, and



### **How to Detect Loops in Huawei Switches? Is Your Network Suffering**

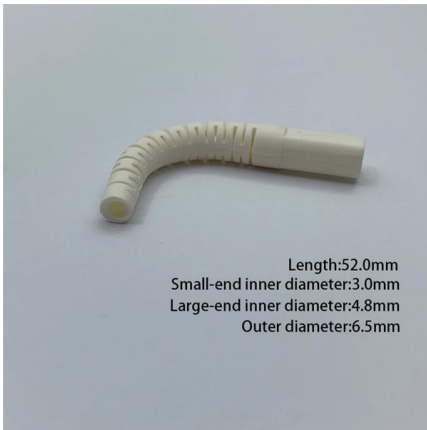
Whether you're troubleshooting erratic connectivity or optimizing traffic flow, mastering Huawei's loop-checking tools ensures your switches operate at peak efficiency.

### **Basic CLI Commands on Huawei Switch**

This text is a guide detailing Basic Command Line Interface (CLI) Commands on Huawei brand



switches. It provides step-by-step instructions for users to perform



Length:52.0mm  
Small-end inner diameter:3.0mm  
Large-end inner diameter:4.8mm  
Outer diameter:6.5mm

### How to Detect Loops in Huawei Switches? Is Your Network Suffering

Network stability hinges on one critical skill: identifying and resolving loops before they cripple your infrastructure. For IT teams managing Huawei switches, undetected loops can trigger cascading

### HUAWEI S Series Switch-Configure MSTP to Prevent Loops

This video demonstrates how to configure the MSTP to prevent loops. For more information about MSTP: <https://info.pport.huawei /info-> .



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|  |   |  |                                   |
|--|---|--|-----------------------------------|
|  | <b>37.6MPA</b><br>Tensile Strength            |  | <b>2856MPA</b><br>Elastic Modulus |
|  | <b>9.8KJ/M<sup>2</sup></b><br>Impact Strength |  | <b>1.54G/CM</b><br>Density        |

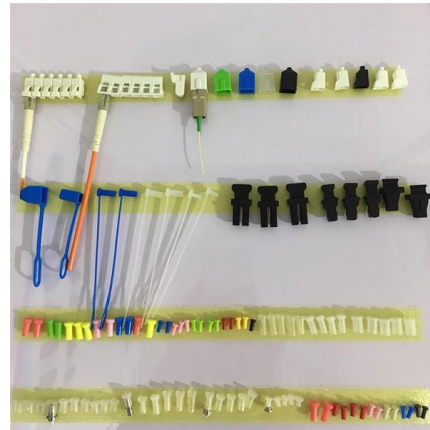
### Configuring Loop Prevention

Switch the interface working mode to Layer 2. portswitch Determine whether to perform this step based on the current interface working mode. (Optional) Add the interface to a specified MSTP process with



## Loop Prevention Design

Loop Prevention Design On an Ethernet network, redundant links are used to implement link backup and enhance network reliability. The downside of this is that it may produce loops,



## Loop Prevention

Loop Prevention On an Ethernet network, Spanning Tree Protocol (STP) is often used to prevent loops. However, VPLS users do not know the topology of the Internet Service Provider (ISP) network.

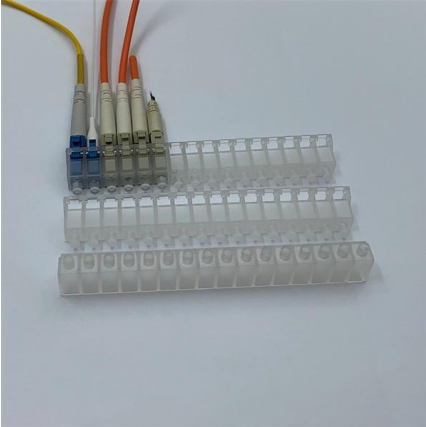
## Configuring Loop Prevention

system-view Enter the interface view of the root port or alternate port. interfaceinterface-type interface-number Switch the interface working mode to Layer 2. portswitch Determine whether to perform this



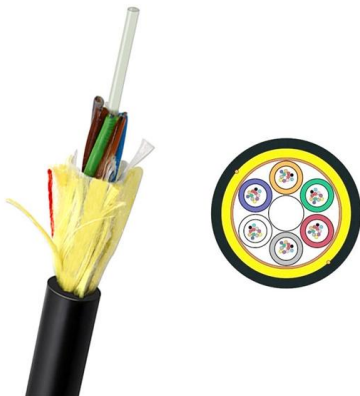
## Configuring Loop Prevention on the Underlay Network

Configuring Loop Prevention on the Underlay Network Context In this example, there are two core switches Core-a and Core-b, to which downstream aggregation switches are dual-homed.



## Configuring Loop Prevention on the Underlay Network

Context In this example, the underlay network uses a three-layer physical topology. It is recommended that STP be disabled on the links between the core layer and aggregation layer. Each aggregation



## STP attack and Root Protection feature on Huawei

Spanning Tree protocol is a loop prevention mechanism in a bridged LAN. Every STP topology has its own root bridge, which determines how STP

## Configuring Loop Prevention on a Port

If a device has an alternate port, configure loop prevention on both the root port and the alternate port. Root protection and loop prevention cannot be configured on the same port.





## Huawei Configure STP to prevent loops

When there is a loop in the network, STP blocks a certain port to eliminate the loop. As shown in the figure, there is a loop in the current network. SwitchA, SwitchB, SwitchC, and SwitchD all run STP.

## Configuration for Loop Prevention on the Underlay Network

Each aggregation switch and its connected access switches form independent MSTP regions, in which each aggregation switch acts as the root bridge. If the underlay network uses a two-layer physical

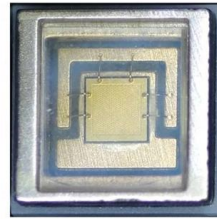


## Solved: Access layer

Looking for some advice on what would be the best approach to prevent physical loops at the access layer. Our existing design is quite simple, it consists of several switches acting as layer 2

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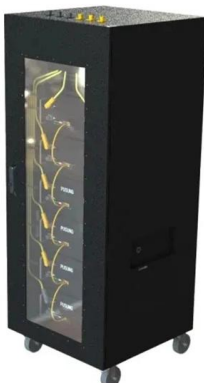
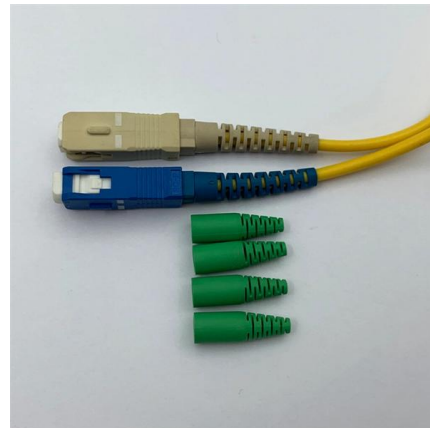


## Configuring Loop Prevention on the Underlay Network

Context In this example, the underlay network uses a three-layer physical topology. It is recommended that MSTP be disabled on the links between the core layer and aggregation layer. Each aggregation

## MAC Address Flapping Prevention

MAC Address Flapping Prevention Security Policy  
MAC address flapping occurs on a network when the network has a loop or undergoes certain attacks. The following methods can help prevent MAC



## Huawei Switch Configuration Guide

The document provides configuration instructions and commands for basic switch configuration using Huawei switches. It covers topics such as changing the



## Loop Prevention

The full-mesh PEs and split horizon ensure route reachability and prevent loops on VPLS networks. If a CE is connected to multiple PEs, or multiple CEs on the same VPLS VPN are interconnected, VPLS



## Typical Loopback Detection Configuration

To minimize the impact of loops on a Layer 2 network, a detection technology that quickly notifies users of loops is required. When a loop occurs, users are requested to check network connections and

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