

Huawei Core Switch ACL



AI Overview

Huawei core switches implement ACL control by defining rules to filter network traffic based on IP addresses, protocols, ports, and other criteria, which are then applied to interfaces or service modules to manage access and enhance security.

Overview of ACLs on Huawei Switches

Access Control Lists (ACLs) on Huawei switches are sets of rules that filter packets according to conditions such as source/destination IP addresses, protocol types, and port numbers. ACLs can be applied to interfaces, traffic policies, or service modules like Telnet, FTP, or routing to control packet forwarding or discarding based on the defined rules. They help prevent unauthorized access, manage bandwidth, and protect against network attacks.

Types of ACLs

Huawei switches support several ACL types:

- Basic ACLs:** Filter traffic based on source IP addresses.
- Advanced ACLs:** Filter traffic using multiple criteria including source/destination IP, protocol type, TCP/UDP ports, fragment information, and time ranges.
- Numbered ACLs:** Identified by a numeric range (e.g., 3000–3999 for advanced ACLs).
- Named ACLs:** Identified by a user-defined name for easier management.

Configuration Steps

- Create an ACL:** Use commands like `acl acl-number` for numbered ACLs or `acl name acl-name` for named advanced ACLs.
- Define ACL rules:** Specify permit or deny actions for traffic based on IP addresses, protocols, or ports.
- Apply ACL to interfaces or service modules:** ACLs only take effect after being applied to inbound or outbound directions on interfaces or within traffic policies.

Optional time-based ACLs: ACLs can be configured to take effect only during specific time ranges for more granular control.

Practical Use Cases

- Restricting access:** Deny traffic from certain departments to sensitive servers while allowing authorized users.
- Protecting against attacks:** Block specific ports (e.g., TCP 445) to prevent malware or ransomware attacks.
- Traffic management:** Control bandwidth usage and prioritize critical services by applying ACLs in traffic policies.

Verification and Maintenance

Dis...

Article Content

Huawei Access-Lists | Huawei ACL Configurations * IPCisco

You can also find the parameters of each ACL type. In this lesson, we will show Basic Access Lists (Basic ACLs) and Advanced Access Lists (Advanced ACLs) with specific examples.

Typical ACL Configuration

If you only need to filter packets based on source IP addresses, you can configure a basic ACL. In this example, a basic ACL is applied to the FTP module to allow only the specified clients to access the

S600-E Series Switches Typical Configuration Examples

As shown in Figure 10-3, the Switch that functions as the gateway is connected to PCs, and there are reachable routes to all subnets on Switch. The administrator wants to block network

Huawei Enterprise networking product icons | PPT

This document contains icons representing various networking and telecommunications equipment for an enterprise network, including routers, switches, servers, wireless access points, and more. Over

Huawei Core Switch: Das schlagende Herz des Netzwerks? Kann ...

Jedes Unternehmensnetzwerk hat einen stillen Diktator – den Huawei Core Switch. Versteckt in Serverräumen oder Rechenzentren regelt dieses unscheinbare Gerät den Datenverkehr zwischen

Huawei Access-Lists | Huawei ACL Configurations * IPCisco

In this lesson, we will show Basic Access Lists (Basic ACLs) and Advanced Access Lists (Advanced ACLs) with specific examples. Let's firstly start with Basic Access List Configuration.

Applying an ACL to the Switch

ACLs can be applied to many features. For example, to process different types of traffic, you can use basic ACLs, basic ACL6s, advanced ACLs, advanced ACL6s, Layer 2 ACLs, or user-defined ACLs

Example for Using ACLs to Restrict Mutual Access Between Network ...

For example, if you want to filter packets based on source and destination IP addresses, configure an advanced ACL. In this example, advanced ACLs are applied to the traffic policy module

Access Control List example (Huawei)

A rule is identified by a rule ID, which can be set by a user or automatically generated based on the ACL step. All rules in an ACL are arranged in ascending order of rule IDs.

01-02 ACL CONFIGURATION

To achieve this, on Interface 1 of the switch, apply an ACL on the inbound direction so that the packets from the R& D department to the finance server are denied on the interface. On Interface 2, apply no

Access Control List example (Huawei)

Software: eNSP Platform: Huawei switches and routers An Access Control List (ACL) is a set of rules that classify packets to filter them. An ACL can contain multiple rules. A rule is identified by a rule ID,

Network ACL Configuration Examples_Network ACL_Access ...

You can add security group rules as required and use network ACL s as an additional layer of protection for your subnets. The following provides some examples on how network ACL s

How to configure Access Control List (ACL) on Huawei

☐☐ Welcome to our Huawei Networking Tutorial Series! ☐☐ Enhance your network security with Access Control Lists (ACL) on Huawei switches!☐☐ In this tutorial, you'll learn how to configure ...

Configuring an Advanced ACL

Configuring an Advanced ACL Prerequisites If you need to configure a time-based ACL, create a time range and associate the time range with the ACL rules. For details, see (Optional) Creating a Time

Configuring an Advanced ACL

Compared with a basic ACL, an advanced ACL is more accurate, flexible, and provides more functions. For example, if you want to filter packets based on source and destination IP addresses, configure

How Can I Apply an ACL to an Interface?

How Can I Apply an ACL to an Interface? An ACL cannot be directly applied to an interface. You can use either of the following methods to associate an ACL with a service module (traffic policy or

01-03 ACL CONFIGURATION

To ensure quality of video services on NetworkA, configure an ACL on the switch and reference the ACL in a traffic policy so that all the packets sent to NetworkA are processed by the switch before being

Applying an ACL to the Switch

Applying an ACL to the Switch Context An ACL is a set of rules that differentiate packets and determine whether packets are permitted and denied. The device then processes the permitted

ACL Configuration Commands

S1720, S2700, S5700, and S6720 V200R011C10 Command Reference This document describes all the configuration commands of the device, including the command function, syntax, parameters, views,

Huawei simplifies the use of traffic-filter ACLs in traffic policies ...

The version of Huawei switch after V200R020C is denied any service by default. If you want to enable remote login, such as telnet, ssh or http, you need to type a command to specify that any IP releas...

Example for Using Advanced ACLs to Implement Unidirectional

Example for Using Layer 2 ACLs in QoS to Implement Traffic Policing Example for Using User-Defined ACLs to Filter the Specified Packets Example for Using User ACLs to Control Network Access Rights

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://umele-pestovani.eu>

Email: info@umele-pestovani.eu

Phone: +49 152 287 6349

Address: Neue Mainzer Straße 66-68, 60311 Frankfurt am Main, Germany

This document is for informational purposes only. Specifications subject to change without notice.

