IP ACL Application Configuration Commands

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Chapter 1 IP ACL Application Configuration Commands

1.1 IP ACL Application Configuration Commands

IP ACL Application Configuration Commands include:

- ip access-group

- ipv6 access-group

1.1.1 ip access-group

To control and access an interface, run ip access-group. To cancel the designated access group, run no ipv6 access-group.

Use it on the interface

[**no**] **ip access-group** *name*

To apply the established IP access list to an interface or in the global mode or cancel a IP access list which is already applied to an interface or in the global mode, run the following command.

Use it in the global mode

[**no**] **ip access-group** *name* **[vlan {***word* **| add** *word* **| remove** *word***}]**

Parameters

Parameters	Description

name	Name of the IP access control list
Vlan	THE ACCESS LIST IS APPLIED IN INGRESS.
Word	VLAN RANGE TABLE
add	ADD VLAN RANGE TABLE
remove	DELETE VLAN RANGE TABLE

Command Mode

Global configuration mode or interface configuration mode

Usage Guidelines

Most rules in the ACL take effect through hardware; those that hardware does not support give no errors but they have no actual effects; a few rules such as time-range take effect through software.
Note:

The IPv4 standard ACL supports the following rules: any: means

any source IP address. source-addr source-mask : means matching

up the source address.

reverse-mask source-addr source-mask: means to use the reverse source address for match-up.

The IPv4 extended ACL supports the following rules:

any: means any IP address. ip-protocol: means the

IP protocol ID.

ip –IP protocol reverse-mask: means the reverse configuration of varied

protocols eq/gt/lt/src-portrange/ dst-portrange: means TCP/UDP port ID

match-up.

gre: GRE protocol ID match-up icmp:

ICMP protocol ID match-up icmp: IGMP

protocol ID match-up ospf: OSPF routing

protocol ID match-up

Though tcp/udp port ID can enable the source port ID match-up and the destination port ID simultaneously, only the destination port ID match-up takes effect. Here is an exception when the match-up is configured to eq. In such case, the source port ID match-up and the destination port ID match-up takes effect simultaneously.

Example

The following example shows how to apply the ACL filter at the ingress direction of interface g0/1.

Switch_config#inter g0/1

Switch_config_g0/1# ip access-group filter

1.1.2 ipv6 access-group

To designate an access group, run the ipv6 access-group. To cancel the designated access group, run no ipv6 access-group.

Use it on the interface

[**no**] **ipv6 access-group** *name*
Use it in the global mode

To apply or delete a created IPv6 ACL on a port or in global mode, run this command.

[**no**] **ipv6 access-group** *name* **[vlan {**_word_ **| add** *word* **| remove** *word*}]

Parameters

Parameters	Description
name	Name of the ip access control list
vlan	The access list is applied in ingress.
word	vlan range table
add	Add vlan range table
remove	Delete vlan range table

Command Mode

Global configuration mode or interface configuration mode

Usage Guidelines

Most rules in the ACL take effect through hardware; those that hardware does not support give no errors but they have no actual effects; a few rules such as time-range take effect through software.

Note:

The IPv6 ACL supports the following rules: any:

means any IP address.

Ipv6-addr/ host *Ipv6-addr* :   means IPv6 address match-up. ip-protocol:

means the IPv6 protocol ID.

eq/gt/lt/src-portrange/ dst-portrange: means TCP/UDP port ID match-up.

dscp/flow-label: means field match-up.

Though tcp/udp port ID can enable the source port ID match-up and the destination port ID simultaneously, only the destination port ID match-up takes effect. Here is an exception when the match-up is configured to eq. In such case, the source port ID match-up and the destination port ID match-up takes effect simultaneously.

Example

The following example shows how to apply the ACL filter at the ingress direction of interface g0/1.

Switch_config#inter g0/1

Switch_config_g0/1# ipv6 access-group filter