ARISTA
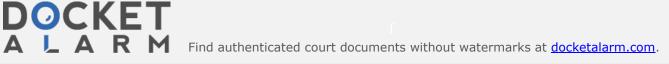
User Manual

Arista Networks

www.arista.com

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ACLs and Route Maps

The switch uses rule based lists to control packet access to ports and to select routes for redistribution to routing domains defined by dynamic routing protocols. This chapter describes the construction of Access Control Lists (ACLs), prefix lists, and route maps.

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18.1 ACL, Route Map, and Prefix List Introduction

An access control list (ACL) is an ordered set of rules that control the inbound flow of packets into Ethernet interfaces, port channel interfaces or the switch control plane. The switch supports the implementation of a wide variety of filtering criteria including IP and MAC addresses, TCP/UDP ports with include/exclude options without compromising its performance or feature set. Filtering syntax is industry standard.

A route map is an ordered set of rules that control the redistribution of IP routes into a protocol domain on the basis of such criteria as route metrics, access control lists, next hop addresses, and route tags. Route maps can also alter parameters of routes as they are redistributed.

A prefix list is an ordered set of rules that defines route redistribution access for a specified IP address space. Route maps often use prefix lists to filter routes.

Example

* These commands assign *test1* ACL to Ethernet 3 interface, then verifies the assignment.

```
switch(config)#interface ethernet 3
switch(config-if-Et3)#ip access-group test1 in
switch(config-if-Et3)#show running-config interfaces ethernet 3
interface Ethernet3
    ip access-group test1 in
switch(config-if-Et3)#
```

Removing an ACL from an Interface

The **no ip access-group** command removes an IP ACL assignment statement from *running-config* for the configuration mode interface. After an ACL is removed, the interface is not associated with an IP ACL.

The **no mac ip access-group** command removes a MAC ACL assignment statement from *running-config* for the configuration mode interface. After a MAC ACL is removed, the interface is not associated with an MAC ACL.

To remove an ACL from the control plane, enter the **no ip access-group** command in control plane configuration mode. Removing the control plane ACL command from *running-config* reinstates *default-control-plane-acl* as the control plane ACL.

Examples

* These commands remove the assigned IPv4 ACL from Ethernet 3 interface.

```
switch(config)#interface ethernet 3
switch(config-if-Et3)#no ip access-group test in
switch(config-if-Et3)#
```

* These commands place the switch in control plane configuration mode and remove the ACL assignment from *running-config*, restoring *default-control-plane-acl* as the Control Place ACL.

```
switch(config)#control-plane
switch(config-cp)#no ip access-group test_cp in
switch(config-cp)#
```