Standard ACL Configuration Mode Commands

To create and modify standard access lists on a WAAS device for controlling access to interfaces or applications, use the **ip access-list standard** global configuration command. To disable a standard access list, use the **no** form of this command.

ip access-list standard {acl-name | acl-num}

no ip access-list standard {acl-name | acl-num}

Syntax Description

| standard | Enables standard ACL configuration mode. The CLI enters the standard ACL configuration mode in which all subsequent commands apply to the current standard access list. The (config-std-nacl) prompt appears: |
|----------|---|
| | WAE(config-std-nacl)# |
| acl-name | Access list to which all commands entered from ACL configuration mode apply, using an alphanumeric string of up to 30 characters, beginning with a letter. |
| acl-num | Access list to which all commands entered from access list configuration mode apply, using a numeric identifier. For standard access lists, the valid range is 1 to 99. |

Defaults

An access list drops all packets unless you configure at least one **permit** entry.

Command Modes

global configuration

Device Modes

application-accelerator

central-manager

Usage Guidelines

Within ACL configuration mode, you can use the editing commands (**list**, **delete**, and **move**) to display the current condition entries, to delete a specific entry, or to change the order in which the entries will be evaluated. To return to global configuration mode, enter the **exit** command at the ACL configuration mode prompt.

To create an entry, use the **deny** or **permit** keyword and specify the type of packets that you want the WAAS device to drop or to accept for further processing. By default, an access list denies everything because the list is terminated by an implicit **deny any** entry. Therefore, you must include at least one **permit** entry to create a valid access list.

IP ACLs that are defined on a router take precedence over the IP ACLs that are defined on the WAE. IP ACLs that are defined on a WAE take precedence over the WAAS application definition policies that are defined on the WAE.

After creating an access list, you can include the access list in an access group using the **access-group** command, which determines how the access list is applied. You can also apply the access list to a specific application using the appropriate command. A reference to an access list that does not exist is the equivalent of a **permit any** condition statement.

To create a standard access list, enter the **ip access-list standard** global configuration command. Identify the new or existing access list with a name up to 30 characters beginning with a letter, or identify a new or existing access list beginning with a number. If you use a number to identify a standard access list, it must be between 1 and 99.



You must use a standard access list for providing access to the SNMP server or to the TFTP gateway/server. However, you can use either a standard access list or an extended access list for providing access to the WCCP application.

You typically use a standard access list to allow connections from a host with a specific IP address or from hosts on a specific network. To allow connections from a specific host, use the **permit host** *source-ip* option and replace *source-ip* with the IP address of the specific host.

To allow connections from a specific network, use the **permit host** *source-ip wildcard* option. Replace *source-ip* with a network ID or the IP address of any host on the network that you want to specify. Replace *wildcard* with the dotted decimal notation for a mask that is the reverse of a subnet mask, where a 0 indicates a position that must be matched and a 1 indicates a position that does not matter. For instance, the wildcard 0.0.0.255 causes the last eight bits in the source IP address to be ignored. Therefore, the **permit 192.168.1.0 0.0.0.255** entry allows access from any host on the 192.168.1.0 network.

After you identify the standard access list, the CLI enters the standard ACL configuration mode and all subsequent commands apply to the specified access list.

```
WAE(config)# ip access-list standard teststdacl WAE(config-std-nacl)# exit
```

Examples

The following example shows how to create a standard access list on the WAAS device that permits any packets from source IP address 192.168.1.0 for further processing:

```
WAE(config)# ip access-list standard teststdacl
WAE(config-std-nacl)# permit 192.168.1.0 any
WAE(config-std-nacl)# exit
```

The following example shows how to activate the access list for an interface:

```
WAE(config)# interface gigabitethernet 1/0
WAE(config-if)# ip access-group teststdacl in
WAE(config-if)# exit
```

The following example shows how this configuration appears when you enter the **show running-configuration** command:

```
...
!
interface GigabitEthernet 1/0
```

```
ip address 10.1.1.50 255.255.0.0
ip access-group teststdacl in
exit
. . .
ip access-list standard teststdacl
permit 192.168.1.0 any
exit
```

Related Commands

```
clear arp-cache
show ip access-list
(config) ip access-list
(config-if) ip access-group
(config-std-nacl) deny
(config-std-nacl) delete
(config-std-nacl) list
(config-std-nacl) move
(config-std-nacl) permit
```

(config-std-nacl) delete

To delete a line from the standard IP ACL, use the **delete** standard ACL configuration command.

delete line-num

| Syntax Description | line-num Entry at a specific line number in the access list. |
|--------------------|---|
| Defaults | No default behavior or values. |
| Command Modes | standard ACL configuration mode |
| Device Modes | application-accelerator central-manager |
| Examples | The following example shows how to delete line 10 from the standard IP ACL teststdacl: WAE(config)# ip access-list standard teststdacl WAE(config-std-nacl)# delete 10 |
| Related Commands | (config-std-nacl) deny (config-std-nacl) delete (config-std-nacl) list (config-std-nacl) move |
| | (config-std-nacl) permit |

(config-std-nacl) deny

To add a line to a standard access-list that specifies the type of packets that you want the WAAS device to drop, use the **deny** standard ACL configuration command. To negate a standard IP ACL, use the **no** form of this command.

[insert line-num] deny {source-ip [wildcard] | host source-ip | any}

no deny { source-ip [wildcard] | **host** source-ip | **any**}

Syntax Description

| insert line-num | (Optional) Inserts the conditions following the specified line number into the access list. | |
|-----------------|---|--|
| deny | Causes packets that match the specified conditions to be dropped. | |
| source-ip | Source IP address. The number of the network or host from which the packet is being sent, specified as a 32-bit quantity in 4-part dotted-decimal format (for example, 0.0.0.0). | |
| wildcard | (Optional) Portions of the preceding IP address to match, expressed using 4-digit, dotted-decimal notation. Bits to match are identified by a digital value of 0; bits to ignore are identified by a 1. | |
| | Note For standard IP ACLs, the <i>wildcard</i> parameter of the ip access-list command is always optional. If the host keyword is specified for a standard IP ACL, then the <i>wildcard</i> parameter is not allowed. | |
| host source-ip | Matches the following IP address. | |
| any | Matches any IP address. | |

Defaults

An access list drops all packets unless you configure at least one **permit** entry.

Command Modes

standard ACL configuration mode

Device Modes

application-accelerator

central-manager

Usage Guidelines

To create an entry, use the **deny** or **permit** keyword and specify the type of packets that you want the WAAS device to drop or to accept for further processing. By default, an access list denies everything because the list is terminated by an implicit **deny any** entry. Therefore, you must include at least one **permit** entry to create a valid access list.

You typically use a standard access list to allow connections from a host with a specific IP address or from hosts on a specific network. To allow connections from a specific host, use the **permit host** *source-ip* option and replace *source-ip* with the IP address of the specific host.

To allow connections from a specific network, use the **permit host** *source-ip wildcard* option. Replace *source-ip* with a network ID or the IP address of any host on the network that you want to specify. Replace *wildcard* with the dotted decimal notation for a mask that is the reverse of a subnet mask, where

a 0 indicates a position that must be matched and a 1 indicates a position that does not matter. For instance, the wildcard 0.0.0.255 causes the last eight bits in the source IP address to be ignored. Therefore, the **permit 192.168.1.0 0.0.0.255** entry allows access from any host on the 192.168.1.0 network.

Examples

The following example shows how to create a standard access list that denies any packets from source IP address 192.168.1.0 for processing:

```
WAE(config)# ip access-list standard teststdacl
WAE(config-std-nacl)# deny 192.168.1.0 any
WAE(config-std-nacl)# exit
```

The following example shows how to activate the standard access list for an interface:

```
WAE(config)# interface gigabitethernet 1/0
WAE(config-if)# ip access-group teststdacl in
WAE(config-if)# exit
```

The following example shows how this configuration appears when you enter the **show running-configuration** command:

```
!
interface GigabitEthernet 1/0
ip address 10.1.1.50 255.255.0.0
ip access-group teststdacl in
exit
. . .
ip access-list standard example
deny 192.168.1.0 any
exit
```

Related Commands

```
(config-std-nacl) delete
(config-std-nacl) list
(config-std-nacl) move
(config-std-nacl) permit
```

(config-std-nacl) exit

To terminate standard ACL configuration mode and return to the global configuration mode, use the **exit** command.

exit

| Syntax Description | This command has no arguments or keywords. |
|--------------------|---|
| Defaults | No default behavior or values. |
| Command Modes | All modes |
| Device Modes | application-accelerator central-manager |
| Examples | The following example shows how to terminate standard ACL configuration mode and return to global configuration mode: |

WAE(config-std-nacl)# exit

WAE(config)#

(config-std-nacl) list

To display a list of specified entries within the standard IP ACL, use the list standard ACL configuration command.

list [start-line-num [end-line-num]]

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| start-line-num | (Optional) Line number from which the list begins. |
|----------------|--|
| end-line-num | (Optional) Last line number in the list. |

Defaults

No default behavior or values.

Command Modes

standard ACL configuration mode

Device Modes

application-accelerator

central-manager

Examples

The following example shows how to display a list of specified entries within the standard IP ACL:

WAE(config)# ip access-list standard teststdacl

WAE(config-std-nacl)# list 25 50

Related Commands

(config-std-nacl) delete

(config-std-nacl) move

(config-std-nacl) move

To move a line to a new position within the standard IP ACL, use the **move** standard ACL configuration command.

move old-line-num new-line-num

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| | | |

| old-line-num | Line number of the entry to move. |
|--------------|--|
| new-line-num | New position of the entry. The existing entry is moved to the following position in the access list. |

Command Modes

standard ACL configuration mode

Device Modes

application-accelerator

central-manager

Examples

The following example shows how to move a line to a new position within the standard IP ACL:

WAE(config)# ip access-list standard teststdac1
WAE(config-std-nacl)# move 25 30

Related Commands

(config-std-nacl) delete

(config-std-nacl) list

(config-std-nacl) permit

To add a line to a standard access list that specifies the type of packets that you want the WAAS device to accept for further processing, use the **permit** standard ACL configuration command. To negate a standard IP ACL, use the **no** form of this command.

[insert line-num] permit {source-ip [wildcard] | host source-ip | any}

no permit {source-ip [wildcard] | **host** source-ip | **any**}

Syntax Description

| insert line-num | (Optional) Inserts the conditions following the specified line number into the access list. | |
|-----------------|---|--|
| source-ip | Source IP address. The number of the network or host from which the packet is being sent, specified as a 32-bit quantity in 4-part dotted-decimal format (for example, 0.0.0.0). | |
| wildcard | (Optional) Portions of the preceding IP address to match, expressed usin 4-digit, dotted-decimal notation. Bits to match are identified by a digital value of 0; bits to ignore are identified by a 1. | |
| | Note For standard IP ACLs, the <i>wildcard</i> parameter of the ip access-list command is always optional. If the host keyword is specified for a standard IP ACL, then the <i>wildcard</i> parameter is not allowed. | |
| host source-ip | Matches the following IP address. | |
| any | Matches any IP address. | |

Defaults

An access list drops all packets unless you configure at least one **permit** entry.

Command Modes

standard ACL configuration mode

Device Modes

application-accelerator

central-manager

Usage Guidelines

To create an entry, use the **deny** or **permit** keyword and specify the type of packets that you want the WAAS device to drop or to accept for further processing. By default, an access list denies everything because the list is terminated by an implicit **deny any** entry. Therefore, you must include at least one **permit** entry to create a valid access list.

You typically use a standard access list to allow connections from a host with a specific IP address or from hosts on a specific network. To allow connections from a specific host, use the **permit host** *source-ip* option and replace *source-ip* with the IP address of the specific host.

To allow connections from a specific network, use the **permit host** *source-ip wildcard* option. Replace *source-ip* with a network ID or the IP address of any host on the network that you want to specify. Replace *wildcard* with the dotted decimal notation for a mask that is the reverse of a subnet mask, where a 0 indicates a position that must be matched and a 1 indicates a position that does not matter. For

instance, the wildcard 0.0.0.255 causes the last eight bits in the source IP address to be ignored. Therefore, the **permit 192.168.1.0 0.0.0.255** entry allows access from any host on the 192.168.1.0 network.

Examples

The following example shows how to create a standard access list that permits any packets from source IP address 192.168.1.0 for further processing:

```
WAE(config)# ip access-list standard teststdacl
WAE(config-std-nacl)# permit 192.168.1.0 any
WAE(config-std-nacl)# exit
```

The following example shows how to activate the standard access list for an interface:

```
WAE(config)# interface gigabitethernet 1/0
WAE(config-if)# ip access-group teststdacl in
WAE(config-if)# exit
```

The following example shows how this configuration appears when you enter the **show running-configuration** command:

```
!
interface GigabitEthernet 1/0
ip address 10.1.1.50 255.255.0.0
ip access-group teststdacl in
exit
. . .
ip access-list standard example
permit 192.168.1.0 any
exit
```

Related Commands

```
(config-std-nacl) delete
(config-std-nacl) deny
(config-std-nacl) list
(config-std-nacl) move
```