Interface Configuration Mode Commands

To set, view, and test the configuration of WAAS software features on a specific interface, use the **interface** global configuration command.

interface {**GigabitEthernet** *slot/port* | **InlineGroup** *slot/group* | **PortChannel** *index* | **Standby** *group-index* | **TenGigabitEthernet** *slot/port* | **bvi** *bridge-id*}

Syntax Description

GigabitEthernet *slot/port*	Selects a Gigabit Ethernet interface to configure.
InlineGroup *slot/group*	Selects an inline group interface to configure.
PortChannel *index*	Selects the port channel interface to configure.
Standby *group-index*	Selects the standby group to configure.
TenGigabitEthernet *slot/port*	Selects a 10-Gigabit Ethernet interface to configure.
bvi *bridge-id*	Selects the bridge virtual interface to configure.

Defaults

No default behavior or values.

Command Modes

global configuration

Device Modes

application-accelerator

appnav-controller

Usage Guidelines

Within interface configuration mode, you can use the interface commands (**autosense**, **bandwidth**, **cdp**, and so on) to configure the specified interface.

To return to global configuration mode, use the **exit** command at the interface configuration mode prompt.

Examples

The following example shows how to enter interface configuration mode:

```
WAE(config)# interface gigabitethernet 1/0
WAE(config-if)#
```

Related Commands

(config) interface InlineGroup

(config) interface PortChannel

(config) interface standby

(config-if) autosense

To enable autosense on an interface, use the **autosense** interface configuration command. To disable this function, use the **no** form of this command.

autosense

no autosense

Syntax Description

This command has no arguments or keywords.

Defaults

Autosense is enabled by default.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

Cisco router Ethernet interfaces do not negotiate duplex settings. If the WAAS device is connected to a router directly with a crossover cable, the WAAS device interface must be manually set to match the router interface settings. Disable **autosense** before configuring an Ethernet interface. When **autosense** is on, manual configurations are overridden. You must reboot the WAAS device to start autosensing.

Examples

The following example shows how to disable autosense on Gigabit Ethernet port 1/0:

```
WAE(config)# interface GigabitEthernet 1/0
WAE(config-if)# no autosense
```

The following example shows how to reenable autosense on Gigabit Ethernet port 1/0:

```
WAE(config)# interface GigabitEthernet 1/0
WAE(config-if)# autosense
WAE(config-if)# exit
WAE(config)# exit
WAE# reload
```

Related Commands

(config) interface GigabitEthernet

show interface

show running-config

(config-if) bandwidth

To configure the link speed on a network interface, use the **bandwidth** interface configuration command. To restore default values, use the **no** form of this command.

bandwidth {**10** | **100** | **1000**}

no bandwidth {**10** | **100** | **1000**}

Syntax Description

10	Sets the link speed to 10 megabits per second (Mbps).
100	Sets the link speed to 100 Mbps.
1000	Sets the link speed to 1000 Mbps. This option is not available on all ports and is the same as autosense.

Defaults

No default behaviors or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

To configure the link speed of a network interface on a WAAS device, use the **bandwidth** interface configuration command. The speed is specified in megabits per second (Mbps). The WAAS software automatically enables autosense if the speed is set to 1000 Mbps.

Note Changing the interface bandwidth, duplex mode, or MTU can cause network disruption for up to 10 seconds. The best practice is to make such changes when traffic interception is disabled or at an off-peak time when traffic disruption is acceptable.

You can configure the Gigabit Ethernet interface settings (autosense, link speed, and duplex settings) if the Gigabit over copper interface is up or down. If the interface is up, it applies the specific interface settings. If the interface is down, the specified settings are stored and then applied when the interface is brought up. For example, you can specify any of the following commands for a Gigabit over copper interface, which is currently down, and have these settings automatically applied when the interface is brought up.

```
WAE(config-if)# bandwidth 10
WAE(config-if)# bandwidth 100
WAE(config-if)# bandwidth 1000
WAE(config-if)# autosense
WAE(config-if)# half-duplex
WAE(config-if)# full-duplex
```

Note We strongly recommend that you do not use half duplex on the WAE, routers, switches, or other devices. Half duplex impedes the system ability to improve performance and should not be used. Check each Cisco WAE interface and the port configuration on the adjacent device (router, switch, firewall, WAE) to verify that full duplex is configured.

Examples

The following example shows how to set an interface bandwidth to 1000 Mbps:

```
WAE(config-if)# bandwidth 1000
```

The following example shows how to restore default bandwidth values on an interface:

```
WAE(config-if)# no bandwidth
```

Related Commands

(config-if) autosense

(config) interface GigabitEthernet

(config-if) bridge-group

To configure the bridge group for a network interface, use the **bridge-group** interface configuration command. To restore default values, use the **no** form of this command.

bridge-group *bridge-id*

no bridge-group *bridge-id*

Syntax Description

bridge-id	Bridge ID from 1–4. On devices with an AppNav Controller Interface Module that has 12 ports, the bridge ID ranges from 1–5. On devices with an AppNav Controller Interface Module that has 4 ports, the bridge ID must be 1.

Defaults

No default behaviors or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

Use this command to configure a network interface with a bridge group for use by an AppNav Controller Interface Module that is intercepting traffic in inline mode.

Examples

The following example shows how to configure interfaces with a bridge group for use in inline mode on an AppNav Controller Interface Module:

```
WAE(config)# interception-method inline
WAE(config)# bridge 5 protocol interception
WAE(config)# bridge 5 intercept vlan add 100-200,300-350,native
WAE(config)# interface GigabitEthernet 1/10
WAE(config-if)# bridge-group 5
WAE(config)# interface GigabitEthernet 1/11
WAE(config-if)# bridge-group 5
```

Related Commands

(config) interface GigabitEthernet

(config-if) cdp

To enable the Cisco Discovery Protocol (CDP) on a particular interface on a WAAS device, rather than on all interfaces, use the **cdp** interface configuration command.

cdp enable

Syntax Description

enable	Enables CDP on an interface.

Defaults

No default behavior or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

Using the **cdp enable** command in global configuration mode enables CDP globally on all the interfaces of the WAAS device. If you want to control CDP behavior per interface, then use the **cdp enable** command in interface configuration mode.

Note Enabling CDP at the interface level overrides the global control. However, you must enable CDP globally on the WAAS device before you enable CDP on an interface. Otherwise, the following message is displayed in the command output:

```
WAE(config-if)# cdp enable
Cannot enable CDP on this interface, CDP Global is disabled
```

Examples

The following example shows how to enable CDP on Gigabit Ethernet interface (slot 1/port 0) of the WAAS device:

```
WAE# configure
WAE(config)# cdp enable
WAE(config)# interface GigabitEthernet 1/0
WAE(config-if)# cdp enable
```

Related Commands

(config) cdp

show cdp

show interface

(config-if) channel-group

To configure the port-channel group for a network interface, use the **channel-group** interface configuration command. To restore default values, use the **no** form of this command.

channel-group *index*

no channel-group *index*

Syntax Description

index	Assigns the interface to the port channel with the specified index 1–7.

Defaults

No default behaviors or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Examples

The following example shows how to configure an interface with a channel group:

```
WAE(config)# interface GigabitEthernet 1/0
WAE(config-if)# channel-group 1
```

Related Commands

(config) interface GigabitEthernet

(config-if) description

To configure the description for a network interface, use the **description** interface configuration command. To remove the description, use the **no** form of this command.

description *description*

no description

Syntax Description

description	Interface description.

Defaults

No default behaviors or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Examples

The following example shows how to configure an interface with a description:

```
WAE(config)# interface GigabitEthernet 1/0
WAE(config-if)# description interception interface 1
```

Related Commands

(config) interface GigabitEthernet

(config-if) encapsulation dot1Q

To set the VLAN ID that is to be assigned to traffic that leaves a WAE, use the **encapsulation dot1Q** interface configuration command.

encapsulation dot1Q *VLAN*

Syntax Description

VLAN	VLAN ID from 1–4094.

Defaults

No default behavior or values.

Command Modes

interface configuration

Device Modes

application-accelerator

Usage Guidelines

The **encapsulation dot1Q** command is available only for the inlineGroup interface.

Note If the VLAN ID that you set with the **encapsulation dot1Q** interface command does not match the VLAN ID expected by the router subinterface, you may not be able to connect to the inline interface IP address.

The inline adapter or module supports only a single VLAN ID for each inline group interface. If you have configured a secondary address from a different subnet on an inline interface, you must have the same secondary address assigned on the router subinterface for the VLAN.

Examples

The following example shows how to set a VLAN ID to encapsulate traffic leaving the WAE:

```
(config)# interface inlineGroup 1/0
(config-if)# encapsulation dot1Q 100
```

Related Commands

(config) interface GigabitEthernet

(config-if) ip

(config-if) exit

To terminate interface 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

appnav-controller

central-manager

Examples

The following example shows how to terminate interface configuration mode and return to global configuration mode:

```
WAE(config-if)# exit
WAE(config)#
```

(config-if) failover timeout

To set the maximum time for the inline interface to transition traffic to another port after a failure event, use the **failover timeout** interface configuration command. To disable this function, use the **no** form of this command.

failover timeout {**1** | **3** | **5**}

no failover timeout {**1** | **3** | **5**}

Syntax Description

1	Specifies the number of seconds to a failover.
3	Specifies the number of seconds to a failover.
5	Specifies the number of seconds to a failover.

Defaults

The default is 1 second.

Command Modes

interface configuration

Device Modes

application-accelerator

central-manager

Usage Guidelines

This command applies only to interfaces on the Cisco WAE Inline Network Adapter card. To set the failover timeout for all interfaces together on the Cisco Interface Module, use the **(config) inline** command.

The **failover timeout** command is used in inlineGroup interface scope. It sets the maximum time (in seconds) for the inline interface to transition to a fail-to-wire mode of operation after a failure event occurs (such as a power outage and kernel crash). For example, if the timeout is set to 3 seconds, traffic is dropped for a maximum of 3 seconds after the WAE loses power or suffers a kernel crash. After this time, all traffic received on either port of the group interface is sent out of the other port in the group. The default timeout is 1 second.

Examples

The following example shows how to set the failover time limit for the inline group 0 of the adapter that is installed in slot 1 to 5 seconds and then remove that setting:

```
(config)# interface inlineGroup 1/0
(config-if)# failover timeout 5
(config-if)# no failover timeout 5
```

Related Commands

(config) interface GigabitEthernet

(config-if) inline

(config-if) shutdown

(config-if) full-duplex

To configure an interface for full-duplex operation on a WAAS device, use the **full-duplex** interface configuration command. To disable this function, use the **no** form of this command.

full-duplex

no full-duplex

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

Use this interface command to configure an interface for full duplex. Full duplex allows data to travel in both directions at the same time through an interface or a cable. Half duplex ensures that data travels only in one direction at any given time. Although full duplex is faster, the interfaces sometimes cannot operate effectively in this mode. If you encounter excessive collisions or network errors, configure the interface for half duplex rather than full duplex.

Note We strongly recommend that you do not use half duplex on the WAE, routers, switches, or other devices. Half duplex impedes the system ability to improve performance and should not be used. Check each Cisco WAE interface and the port configuration on the adjacent device (router, switch, firewall, WAE) to verify that full duplex is configured.

Note Changing the interface bandwidth, duplex mode, or MTU can cause network disruption for up to 10 seconds. The best practice is to make such changes when traffic interception is disabled or at an off-peak time when traffic disruption is acceptable.

Examples

The following example shows how to configure full duplex on a Gigabit Ethernet interface in slot 1/port 0:

```
WAE# configure
WAE(config)# interface GigabitEthernet 1/0
WAE(config-if)# full-duplex
```

The following example shows how to disable full duplex:

```
WAE(config-if)# no full-duplex
```

Related Commands

(config-if) half-duplex

(config) interface GigabitEthernet

show interface

show running-config

(config-if) half-duplex

To configure an interface for half-duplex operation on a WAAS device, use the **half-duplex** interface configuration command. To disable this function, use the **no** form of this command.

half-duplex

no half-duplex

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

Use this interface configuration command to configure an interface for half duplex. Full duplex allows data to travel in both directions at the same time through an interface or a cable. Half duplex ensures that data travels only in one direction at any given time. Although full duplex is faster, the interfaces sometimes cannot operate effectively in this mode. If you encounter excessive collisions or network errors, configure the interface for half duplex rather than full duplex.

Note We strongly recommend that you do not use half duplex on the WAE, routers, switches, or other devices. Half duplex impedes the system ability to improve performance and should not be used. Check each Cisco WAE interface and the port configuration on the adjacent device (router, switch, firewall, WAE) to verify that full duplex is configured.

Note Changing the interface bandwidth, duplex mode, or MTU can cause network disruption for up to 10 seconds. The best practice is to make such changes when traffic interception is disabled or at an off-peak time when traffic disruption is acceptable.

Examples

The following example shows how to configure half duplex on the Gigabit Ethernet interface in slot 1/port 0:

```
WAE# configure
WAE(config)# interface GigabitEthernet 1/0
WAE(config-if)# half-duplex
```

The following example shows how to disable half duplex:

```
WAE(config-if)# no half-duplex
```

Related Commands

(config-if) full-duplex

(config) interface GigabitEthernet

show interface

show running-config

(config-if) inline

To enable inline interception for an inlineGroup interface, use the **inline** interface configuration command. To disable inline interception, use the **no** form of this command.

inline [**vlan** {**all** | **native** | *vlan_list*}]

no inline [**vlan** {**all** | **native** | *vlan_list*}]

Syntax Description

vlan	(Optional) Modifies the VLAN list parameters.
all	Applies the command to all tagged and untagged packets.
native	Specifies untagged packets.
vlan_list	List of VLAN IDs to either allow or restrict on this interface. A comma (,) is used to separate list entries. A hyphen (-) is used to specify a range of VLAN IDs. The valid range is 0 to 4095.

Defaults

The default is enabled for all VLANs if you have a WAE inline network adapter installed.

Command Modes

interface configuration

Device Modes

application-accelerator

central-manager

Usage Guidelines

The **inline** command is used in the inlineGroup interface scope. It enables or disables inline interception. If the VLAN list is omitted, the command applies to all VLAN tagged or untagged packets.You can restrict the inline feature to any specified set of VLANs.

The VLAN list can be "all," a comma-separated list of VLAN IDs, or ranges of VLAN IDs. The special VLAN ID "native" can be included to specify untagged packets.

Note When inline inspection is active, you cannot configure WCCP until you explicitly disable the inline capability on all VLANs. Conversely, you cannot enable inline interception on any inline groups until you disable WCCP.

Examples

The following example shows how to enable inline interception for all untagged and tagged packets with any VLAN ID received on ports in inlineGroup 0 of the adapter that is installed in slot 1:

```
(config)# interface inlineGroup 1/0
(config-if)# inline
(config-if)# exit
```

The following example shows how to disable inline interception on the same ports for 802.1Q-encapsulated packets that have the VLAN ID 5 or any VLAN ID between 10 and 15, inclusive. If the two VLANs are combined in the given order, inline interception is performed for all packets received on ports in group 0 of slot 1, except those packets on VLANs 5, 10, 11, 12, 13, 14, and 15.

```
(config)# interface inlineGroup 1/0
(config-if)# no inline vlan 5,10-15
(config-if)# exit
```

The following example shows how to enable inline interception for all untagged traffic and traffic only on VLANs 0 through 100 on the ports in group 1 in slot 2:

```
(config)# interface inlineGroup 2/1
(config-if)# no inline vlan 101-4095
(config-if)# exit
```

The following example shows how to enable inline interception for traffic only on VLAN 395 on the ports in group 1 in slot 2. Because the default behavior is to enable traffic on all VLANs, you must first disable all VLANs, and then enable just the set that you want.

```
(config)# interface inlineGroup 2/1
(config-if)# no inline vlan all
(config-if)# inline vlan 395
(config-if)# exit
```

Related Commands

show interface

(config-if) ip

To configure the IP address or subnet mask, or to negotiate an IP address from DHCP on the interface of the WAAS device, use the **ip** interface configuration command. To disable this function, use the **no** form of this command.

ip address {*ip-address ip-subnet* [**secondary**] | **dhcp** [**client-id** *id*][**hostname** *name*]}

no ip address {*ip-address ip-subnet* [**secondary**] | **dhcp** [**client-id** *id*][**hostname** *name*]}

Syntax Description

address	Sets the IP address of an interface.
ip-address	IP address.
ip-subnet	IP subnet mask.
secondary	(Optional) Makes this IP address a secondary address.
dhcp	Sets the IP address negotiated over DHCP.
client-id *id*	(Optional) Specifies the client identifier.
hostname *name*	(Optional) Specifies the hostname.

Defaults

No default behavior or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

Use this command to set or change the IP address, subnet mask, or DHCP IP address negotiation of the network interfaces of the WAAS device or inline module. The change in the IP address takes place immediately.

The **ip address** interface configuration command allows configuration of secondary IP addresses for a specified interface as follows:

```
WAE(config-if)# ip address ip_address netmask secondary
```

Up to four secondary IP addresses can be specified for each interface. The same IP address cannot be assigned to more than one interface. The secondary IP address becomes active only after a primary IP address is configured. The following command configures the primary IP address:

```
WAE(config-if)# ip address ip_address netmask
```

The secondary IP addresses are disabled when the interface is shut down and are enabled when the interface is brought up.

Use the **no** form of the command to disable a specific IP address:

```
WAE(config-if)# no ip address ip_address netmask
```

Note No two interfaces can have IP addresses in the same subnet.

Use the **ip-address dhcp** command to negotiate a reusable IP address from DHCP.

Examples

The following example shows how to configure the port-channel interface with an IP address of 10.10.10.10 and a netmask of 255.0.0.0:

```
WAE# configure
WAE(config)# interface PortChannel 1
WAE(config-if)# ip address 10.10.10.10 255.0.0.0
```

The following example shows how to delete the IP address configured on the interface:

```
WAE(config-if)# no ip address
```

The following example shows how to enable an interface for DHCP:

```
WAE(config-if)# ip address dhcp
```

The following example shows how to configure a client identifier and hostname on the WAAS device to be sent to the DHCP server:

```
WAE(config-if)# ip address dhcp client-id myclient hostname myhost
```

Related Commands

(config) interface GigabitEthernet

show interface

show running-config

(config-if) ip access-group

To control connections on a specific interface of a WAAS device by applying a predefined access list, use the **ip access-group** interface configuration command. To disable an access list, use the **no** form of this command.

ip access-group {*acl-name* | *acl-num*} {**in** | **out**}

no ip access-group {*acl-name* | *acl-num*} {**in** | **out**}

Syntax Description

acl-name	Alphanumeric identifier of up to 30 characters, beginning with a letter that identifies the ACL to apply to the current interface.
acl-num	Numeric identifier that identifies the access list to apply to the current interface. For standard access lists, the valid range is 1 to 99; for extended access lists, the valid range is 100 to 199.
in	Applies the specified access list to inbound packets on the current interface.
out	Applies the specified access list to outbound packets on the current interface.

Defaults

No default behavior or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

Use the **ip access-group** interface configuration command to activate an access list on a particular interface. You can use one outbound access list and one inbound access list on each interface.

Before entering the **ip access-group** command, enter interface configuration mode for the interface to which you want to apply the access list. Define the access list to apply using the **ip access-list** command.

Examples

The following example shows how to apply the access list named *acl-out* to outbound traffic on the interface Gigabit Ethernet 1/2:

```
WAE(config)# interface GigabitEthernet 1/2
WAE(config-if)# ip access-group acl-out out
```

Related Commands

clear arp-cache

(config) ip access-list

show ip access-list

(config-if) load-interval

To configure the interval at which to poll the network interface for statistics, use the **load-interval** interface configuration command. To remove the configuration, use the **no** form of this command.

load-interval *seconds*

no load-interval *seconds*

Syntax Description

seconds	Sets the interval at which to poll the interface for statistics and calculate throughput. Ranges from 30 to 600 seconds. The default is 30 seconds.

Defaults

30 seconds.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Examples

The following example shows how to configure the load interval for an interface:

```
WAE(config)# interface GigabitEthernet 1/0
WAE(config-if)# load-interval 60
```

Related Commands

(config) interface GigabitEthernet

(config-if) mtu

To set the interface Maximum Transmission Unit (MTU) packet size, use the **mtu** interface configuration command. To reset the MTU packet size, use the **no** form of this command.

mtu *mtusize*

no mtu *mtusize*

Syntax Description

mtusize	MTU packet size in bytes (88–1500).

Defaults

No default behavior or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

The MTU is the largest size of IP datagram that can be transferred using a specific data link connection. Use the **mtu** command to set the maximum packet size in bytes.

The MTU field is not editable if the interface is assigned to a standby or port channel group.

Note Changing the interface bandwidth, duplex mode, or MTU can cause network disruption for up to 10 seconds. The best practice is to make such changes when traffic interception is disabled or at an off-peak time when traffic disruption is acceptable.

Examples

The following example shows how to set the MTU to 1500 bytes and then remove that setting:

```
WAE(config-if)# mtu 1500
WAE(config-if)# no mtu 1500
```

Related Commands

show interface

show running-config

(config-if) shutdown

To shut down a specific hardware interface on a WAAS device, use the **shutdown** interface configuration command. To restore an interface to operation, use the **no** form of this command.

shutdown

no shutdown

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

See the "(config) interface GigabitEthernet" command for alternative syntax.

Examples

The following example shows how to shut down a Gigabit Ethernet interface on the WAAS device:

```
WAE# configure
WAE(config)# interface GigabitEthernet 2/0
WAE(config-if)# shutdown
```

Related Commands

(config) interface GigabitEthernet

show interface

show running-config

(config-if) standby

To configure an interface on a WAAS device to be a backup for another interface, use the **standby** interface configuration command. To restore the default configuration of the interface, use the **no** form of this command.

standby *group-index* [**primary**] {**description** *text* | **ip** *ip-address netmask* | **shutdown** | **bridge-group** *bridge-id*}

no standby *group-index* [**primary**] {**description** *text* | **ip** *ip-address netmask* | **shutdown** | **bridge-group** *bridge-id*}

Syntax Description

group-index	Standby group.
primary	(Optional) Defines the active interface in the standby group. By default, the first attached interface is active.
description *text*	(Optional) Sets the description for the specified interface. The maximum length of the description text is 240 characters.
ip *ip-address netmask*	Sets the IP address and the netmask for the specified standby group. The group IP address and netmask of a standby group must be configured on all of the member interfaces.
shutdown	(Optional) Shuts down the specified standby group. You can shut down a standby group even if you have not configured a group IP address for the standby group. **Note** When a standby group is shut down, all of the alarms previously raised by this standby group are cleared.
bridge-group *bridge-id*	Places the standby interface into the specified bridge group.

Defaults

There are no standby interfaces by default.

Command Modes

interface configuration

Device Modes

application-accelerator

appnav-controller

central-manager

Usage Guidelines

You can associate an interface with a standby group by using the **standby** interface configuration command. To make an interface the active interface in a standby group, use the **standby** *group-index* **primary** interface configuration command. If you have already associated an interface with a standby group but have not made it the primary interface, you cannot specify the command again to add the primary designation. First, remove the interface from the standby group by using the **no standby** *group-index* command and then reassign it, specifying the **primary** option at the same time.

A physical interface can be a member of a standby group or a port channel, but not both.

Examples

The following example shows how to create a standby group:

```
WAE# configure
WAE(config)# interface standby 1
WAE(config-if)#
```

The following example shows how to assign a group IP address of 10.10.10.10 and a netmask of 255.0.0.0 to Standby Group 1. You can configure a group IP address regardless of whether the standby group is shut down or not.

```
WAE(config-if)# ip address 10.10.10.10 255.0.0.0
```

The following example shows how to add two Gigabit Ethernet interfaces to Standby Group 1 and then assign one of these member interfaces as the active interface in the group:

a. A Gigabit Ethernet interface (slot 1/port 0) is added to Standby Group 1.

```
WAE(config)# interface gigabitEthernet 1/0
WAE(config-if)# standby 1
```

b. A second Gigabit Ethernet interface (slot 2/port 0) is added to Standby Group 1 and assigned as the primary (active) interface.

```
WAE(config)# interface gigabitEthernet 2/0
WAE(config-if)# standby 1 primary
WAE(config-if)# exit
WAE(config)#
```

The following example shows how to remove the GigabitEthernet slot 1/port 0 interface from Standby Group 1 using the **no** form of the **standby** command:

```
WAE(config)# interface gigabitEthernet 1/0
WAE(config-if)# no standby 1
WAE(config-if)# exit
WAE(config)#
```

The following example shows how to shut down Standby Group 1. When a standby group is shut down, all of the alarms previously raised by this standby group are cleared:

```
WAE(config)# interface standby 1
WAE(config-if)# exit
WAE(config)# exit
```

The following example shows how to tear down Standby Group 1:

```
WAE(config)# interface standby 1
WAE(config-if)# no ip address 10.10.10.10 255.0.0.0
Please remove member interface(s) from this standby group first.
WAE(config)# interface GigabitEthernet 2/0
WAE(config-if)# no standby 1
WAE(config-if)# exit
WAE(config)# interface standby 1
WAE(config-if)# no ip address 10.10.10.10 255.0.0.0
WAE(config-if)# exit
WAE(config)# no interface standby 1
WAE(config)# exit
```

Related Commands

(config) interface GigabitEthernet

show interface

show running-config