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 int_num | Standby group_num}
```

**Syntax Description**

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GigabitEthernet</td>
<td>Selects a gigabit ethernet interface to configure.</td>
</tr>
<tr>
<td>slot/port</td>
<td></td>
</tr>
<tr>
<td>InlineGroup</td>
<td>Selects an inline group interface to configure.</td>
</tr>
<tr>
<td>slot/group</td>
<td></td>
</tr>
<tr>
<td>PortChannel</td>
<td>Selects a port channel interface to configure.</td>
</tr>
<tr>
<td>int_num</td>
<td></td>
</tr>
<tr>
<td>Standby</td>
<td>Selects a standby group to configure.</td>
</tr>
<tr>
<td>group_num</td>
<td></td>
</tr>
</tbody>
</table>

**Defaults**

No default behavior or values.

**Command Modes**

- global configuration

**Device Modes**

- application-accelerator

**Usage Guidelines**

Within interface configuration mode, you can use the interface commands (`autosense`, `bandwidth`, `cdp`, etc.) 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
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
show startup-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.

```plaintext
bandwidth {10 | 100 | 1000}
no bandwidth {10 | 100 | 1000}
```

### Syntax Description

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Sets the link speed to 10 megabits per second (Mbps).</td>
</tr>
<tr>
<td>100</td>
<td>Sets the link speed to 100 Mbps.</td>
</tr>
<tr>
<td>1000</td>
<td>Sets the link speed to 1000 Mbps. This option is not available on all ports and is the same as autosense.</td>
</tr>
</tbody>
</table>

### Defaults

No default behaviors or values.

### Command Modes

- interface configuration

### Device Modes

- application-accelerator
- 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.

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.

```plaintext
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:

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

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

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

Related Commands

- (config-if) autosense
- (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

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>enable</td>
<td>Enables CDP on an interface.</td>
</tr>
</tbody>
</table>

Defaults

No default behavior or values.

Command Modes

interface configuration

Device Modes

application-accelerator

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

Related Commands

    (config) cdp
    show cdp
    show interface
    show running-config
show startup-config
(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
```

<table>
<thead>
<tr>
<th>Syntax Description</th>
<th>VLAN ID from 1–4094.</th>
</tr>
</thead>
</table>

| 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 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
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**

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Specifies the number of seconds to a failover.</td>
</tr>
<tr>
<td>3</td>
<td>Specifies the number of seconds to a failover.</td>
</tr>
<tr>
<td>5</td>
<td>Specifies the number of seconds to a failover.</td>
</tr>
</tbody>
</table>

**Defaults**

The default is 1 second.

**Command Modes**

interface configuration

**Device Modes**

application-accelerator

central-manager

**Usage Guidelines**

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
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.

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
show startup-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.

```plaintext
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
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.

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

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

The following example shows how to disable half duplex:

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

**Related Commands**
(config-if) full-duplex
(config-if) half-duplex

(config) interface GigabitEthernet
show interface
show running-config
show startup-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 packetson 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
```
(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.

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

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

**Syntax Description**

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>address</td>
<td>Sets the IP address of an interface.</td>
</tr>
<tr>
<td>ip-address</td>
<td>IP address.</td>
</tr>
<tr>
<td>ip-subnet</td>
<td>IP subnet mask.</td>
</tr>
<tr>
<td>secondary</td>
<td>(Optional) Makes this IP address a secondary address.</td>
</tr>
<tr>
<td>dhcp</td>
<td>Sets the IP address negotiated over DHCP.</td>
</tr>
<tr>
<td>client-id id</td>
<td>(Optional) Specifies the client identifier.</td>
</tr>
<tr>
<td>hostname name</td>
<td>(Optional) Specifies the hostname.</td>
</tr>
</tbody>
</table>

**Defaults**

No default behavior or values.

**Command Modes**

interface configuration

**Device Modes**

application-accelerator

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 Cisco WAE Inline Network Adapter. 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 2
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`
- `show startup-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**

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>acl-name</strong></td>
<td>Alphanumeric identifier of up to 30 characters, beginning with a letter that identifies the ACL to apply to the current interface.</td>
</tr>
<tr>
<td><strong>acl-num</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>in</strong></td>
<td>Applies the specified access list to inbound packets on the current interface.</td>
</tr>
<tr>
<td><strong>out</strong></td>
<td>Applies the specified access list to outbound packets on the current interface.</td>
</tr>
</tbody>
</table>

**Defaults**

No default behavior or values.

**Command Modes**

interface configuration

**Device Modes**

application-accelerator
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) 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**

<table>
<thead>
<tr>
<th>mtusize</th>
<th>MTU packet size in bytes (88–1500).</th>
</tr>
</thead>
</table>

**Defaults**

No default behavior or values.

**Command Modes**

interface configuration

**Device Modes**

application-accelerator
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.

**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`
- `show startup-config`
To negate a Gigabit Ethernet interface configuration command or set its defaults, use the following no command from GigabitEthernet interface configuration mode.

`no [autosense | bandwidth {10 | 100 | 1000}] | cdp enable | channel-group {1 | 2} | description text | full-duplex | half-duplex | ip {access-group {acl-num | acl_name} {in | out} | address {ip_address netmask [secondary] | dhcp [client-id id hostname name | standby grpnumber [priority priority]}

To negate an InlineGroup interface configuration command or set its defaults, use the following no commands from the InlineGroup interface configuration mode.

`no [autosense | bandwidth {10 | 100 | 1000} | failover timeout {1 | 3 | 5} | full-duplex | half-duplex | inline [vlan {all | native | vlan_list}] | shutdown]

To negate a port-channel interface configuration command or set its defaults, use the following no commands from the port-channel interface configuration mode.

`no [description text | ip {access-group {acl-num | acl_name} {in | out} | address ip-address netmask} | shutdown]

**Syntax Description**
The command options vary. For more information on the syntax description, see the “(config) interface GigabitEthernet” command.

**Command Defaults**
No default behavior or values.

**Command Modes**
interface configuration

**Device Modes**
application-accelerator
central-manager

**Usage Guidelines**
The command options for the no interface configuration command vary depending on the current interface configuration mode. For example, if you are in Gigabit interface configuration mode, there are 11 options for the no command.

```
WAE(config-if)# interface GigabitEthernet 2/0
WAE(config-if)# no ?
autosense  Interface autosense
bandwidth  Interface bandwidth
cdp        Cisco Discovery Protocol Interface Config commands
channel-group Configure EtherChannel group
description Interface specific description
full-duplex Interface fullduplex
half-duplex Interface halfduplex
ip         Interface Internet Protocol Config commands
```
mtu            Set the interface Maximum Transmission Unit (MTU)
shutdown      Shutdown the specific interface
standby       Standby interface config commands

However, if you are in Standby interface configuration mode, there are only four options for the `no` command as shown in this example:

```
WAE(config)# interface standby 4
WAE(config-if)# no ?
   description  Standby interface description
   errors       Set the maximum number of errors allowed on this interface
   ip           Set the IP address of a standby group
   shutdown     Shutdown this interface
```

WAE(config-if)# no

**Examples**

The following example shows how to configure the Gigabit Ethernet interface in slot 2, port 0 not to autosense the interface bandwidth:

```
WAE(config)# interface GigabitEthernet 2/0
WAE(config-if)# no autosense
```

**Related Commands**

```
(config) interface GigabitEthernet
show interface
show running-config
show startup-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
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
    show startup-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_number {description text | errors max-errors | ip ip-address netmask | priority priority_level | shutdown}
```

```
no standby group_number {description text | errors max-errors | ip ip-address netmask | priority priority_level | shutdown}
```

### Syntax Description

- **group_number**: Standby group number (1–4).
- **description text**: (Optional) Sets the description for the specified interface. The maximum length of the description text is 240 characters.
- **errors max-errors**: Sets the maximum number of errors allowed on the active interface before the interface is shut down and the standby interface is brought up. This option is disabled by default. Values are from 0 to 4294967295.
- **ip ip-address netmask**: Sets the IP address and the netmask for the specified standby group (Standby Group 1, 2, 3, or 4). The group IP address and netmask of a standby group must be configured on all of the member interfaces.
- **priority priority_level**: Sets the priority of the member interface within a standby group. The priority of a member interface can be changed at run time. The member interface that has the highest priority after this change becomes the new active interface (the default action is to preempt the currently active interface if an interface with higher priority exists). Only the active interface uses the group IP address.
  
  If the priority option is specified without a priority number, the default value of 100 is used.
- **shutdown**: (Optional) Shuts down the specified standby group (Standby Group 1, 2, 3, or 4). 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.

### Defaults

There are no standby interfaces by default. The errors option is disabled by default.

### Command Modes

- interface configuration

### Device Modes

- application-accelerator
- central-manager
Examples

The following example shows how to configure two Gigabit Ethernet interfaces to be part of the same standby group, with interface 1/0 as the active interface:

```
WAE(config-if)# interface gigabitEthernet 1/0 standby 1 ip 10.16.10.10 255.255.254.0
WAE(config-if)# interface gigabitEthernet 2/0 standby 1 ip 10.16.10.10 255.255.254.0
WAE(config-if)# interface gigabitEthernet 1/0 standby 1 priority 300
WAE(config-if)# interface gigabitEthernet 2/0 standby 1 priority 200
WAE(config-if)# interface gigabitEthernet 1/0 standby 1 errors 10000
WAE(config-if)# interface gigabitEthernet 2/0 standby 1 errors 10000
```

The following example shows how to display information about the standby group configuration by entering the `show standby` EXEC command. In the following sample command output, one standby group (Standby Group 1) is configured on this WAAS device. The command output also shows which member interface is the active interface. In this case, the active interface is the Gigabit Ethernet slot 1/port 0 interface.

```
WAE# show standby
Standby Group: 1
  Description: This a backup for Gigabit Ethernet 2/0.
  IP address: 10.16.10.10, netmask: 255.0.0.0
  Member interfaces: none
  Active interface: Gigabit Ethernet 1/0
  Maximum errors allowed on the active interface: 500

Note: To display information about a specific standby group configuration, use the `show interface standby group_number` EXEC command.
```

The following example shows how to create a standby group, Standby Group 1:

```
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
WAE(config-if)# errors 500
```

The following example shows how to add two Gigabit Ethernet interfaces to Standby Group 1 and then assign a priority within the group to each of these member interfaces:

- A Gigabit Ethernet interface (slot 1/port 0) is added to Standby Group 1 and assigned a priority of 150.

  ```
  WAE(config)# interface gigabitEthernet 1/0
  WAE(config-if)# standby 1 priority 150
  ```

- A second Gigabit Ethernet interface (slot 2/port 0) is added to Standby Group 1 and assigned a priority of 100 (the default value).

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

Because GigabitEthernet 0/0 is assigned the highest priority (a priority number of 150) of all the member interfaces in the group, it is the active interface for the group (if it can be brought up).
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)#
```

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
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
- show standby
- show startup-config