

Policy Map Class Configuration Mode Commands

To configure a service policy in an optimization policy map, use the **class** policy map configuration command. To unconfigure settings, use the **no** form of this command.

```
class classmap-name [insert-before [existing_class]]
```

```
no class classmap-name [insert-before [existing_class]]
```

Syntax Description	<i>classmap-name</i>	Class map name (up to 40 alpha-numeric characters and hyphen, beginning with a letter).
insert-before	<i>existing_class</i>	Inserts a new class, or moves an existing class, before the specified class. If you do not specify an existing class name, the class is moved to the last position in the policy map.

Defaults No default behavior or values.

Command Modes Policy map configuration

Device Modes application-accelerator

Usage Guidelines Use the **class** command to add or modify a service policy (policy rule) for traffic identified by a class map. This command invokes the Policy Map Class configuration mode, which is indicated by a different prompt (config-pmap-c). To return to global configuration mode, enter the **exit** command.

You can delete a policy rule by using the **no** form of this command.

The WAAS software comes with many class maps and policy rules that help your WAAS system classify and optimize some of the most common traffic on your network. Before you create a new class map or policy rule, we recommend that you review the default class map and policy rules and modify them as appropriate. It is usually easier to modify an existing class map or policy rule than to create a new one. For a list of the default applications, class maps, and policy rules, see the *Cisco Wide Area Application Services Configuration Guide*.



Note

We strongly recommend that you use the WAAS Central Manager GUI to centrally configure policy maps for your WAAS devices. For more information, see the *Cisco Wide Area Application Services Configuration Guide*.

Examples

The following example shows how to configure a policy rule in an optimization policy map:

```
wae(config)# policy-map waas WAAS-GLOBAL  
wae(config-pmap)# class httpx  
wae(config-pmap-c)# optimize full accelerate http application Web
```

Related Commands

- [\(config-pmap-c\) optimize](#)
- [\(config-pmap-c\) optimize](#)
- [\(config-pmap-c\) optimize](#)
- [\(config-pmap-c\) pass-through](#)
- [\(config-pmap-c\) set ip dscp](#)
- [\(config-pmap-c\) set ip dscp](#)

(config-pmap-c) optimize

To configure optimization actions in a WAAS optimization policy, use the **optimize** policy class map configuration command. To unconfigure optimization actions, use the **no** form of this command.

```
optimize {tfo-only | {[DRE {bidirectional | adaptive | unidirectional}] [LZ] | full} [accelerate
{cifs | http | ica | mapi | MS-port-mapper | ssl | video}] [application app-name]
```

```
no optimize {tfo-only | {[DRE {bidirectional | adaptive | unidirectional}] [LZ] | full}
[accelerate {cifs | http | ica | mapi | MS-port-mapper | ssl | video}] [application app-name]
```

Syntax	Description
tfo-only	Optimize with transport flow optimizations (TFO) and not data redundancy elimination (DRE) or Lempel-Ziv (LZ) compression.
DRE	Optimize with DRE of the specified type.
bidirectional	Optimize with bidirectional caching DRE.
adaptive	Optimize with adaptive caching DRE.
unidirectional	Optimize with unidirectional caching DRE.
LZ	Apply LZ compression.
full	Apply full Layer 4 optimization; this keyword is equivalent to DRE bidirectional LZ .
accelerate { cifs http ica mapi MS-port-mapper ssl video }	Accelerate the traffic using the specified application accelerator, as follows: <ul style="list-style-type: none"> • cifs—CIFS or SMB accelerator • http—HTTP accelerator • ica—ICA accelerator • mapi—MAPI accelerator • MS-port-mapper—EPM accelerator • ssl—SSL accelerator • video—Video accelerator
application <i>app-name</i>	Assign the specified application identifier to connections matching the class for statistics collection.

Defaults No default behavior or values.

Command Modes Policy map class configuration

Device Modes application-accelerator

Usage Guidelines

This command configures the optimization actions in a WAAS optimization policy.

You may specify only a single **optimize** or **pass-through** action for a particular class. If one of these actions is already present and you specify a new action, the new action replaces the existing action. If neither of these actions is specified, the default is **pass-through**.

The following DRE caching modes are supported:

- **Bidirectional**—The peer WAEs maintain identical caches for inbound and outbound traffic. This caching mode is best suited where a significant portion of the traffic seen in one direction between the peers is also seen in the reverse direction.
- **Unidirectional**—The peer WAEs maintain different caches for inbound and outbound traffic. This caching mode is best suited where a significant portion of the traffic seen in one direction between the peers is not seen in the reverse direction.
- **Adaptive**—The peer WAEs negotiate either bidirectional or unidirectional caching based on the characteristics of the traffic seen between the peers.

Examples

The following example shows how to configure the optimization action in a policy:

```
wae(config)# policy-map waas WAAS-GLOBAL
wae(config-pmap)# class httpx
wae(config-pmap-c)# optimize full accelerate http application Web
```

Related Commands

[\(config-pmap-c\) pass-through](#)

[\(config-pmap-c\) set ip dscp](#)

(config-pmap-c) pass-through

To configure the pass-through action in an optimization policy rule, use the **pass-through** policy class map configuration command. To unconfigure the pass-through action, use the **no** form of this command.

pass-through [**application** *app-name*]

no pass-through [**application** *app-name*]

Syntax Description	application <i>app-name</i>	(Optional) Assign the specified application identifier to connections matching the class for statistics collection. Available only for WAAS optimization class maps.
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Defaults	No default behavior or values.
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Command Modes	Policy map class configuration
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Device Modes	application-accelerator
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Usage Guidelines	<p>In an optimization policy, this command prevents the traffic in the class from being optimized and instead the traffic is passed through unoptimized. You can optionally specify an application name with which to associate the traffic in the class for statistics collection purposes.</p>
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You may specify only a single **optimize** or **pass-through** action for a particular class. If one of these actions is already present and you specify a new action, the new action replaces the existing action. If neither of these actions is specified, the default is **pass-through**.

In an AppNav policy rule, this command prevents the traffic in the class from being distributed to WAAS nodes and instead the traffic is passed through unoptimized.

This command is useful in a nested policy to override a distribute action specified in the parent policy.

If you specify the pass-through action in a policy, any distribute or monitor-load actions are removed.

Examples	The following example shows how to configure the pass-through action in an optimization policy:
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```
wae(config)# policy-map waas WAAS-GLOBAL
wae(config-pmap)# class httpx
wae(config-pmap-c)# pass-through
```

Related Commands	<p>(config-pmap-c) optimize</p> <p>(config-pmap-c) optimize</p>
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(config-pmap-c) optimize
(config-pmap-c) set ip dscp
(config-pmap-c) set ip dscp

(config-pmap-c) set ip dscp

To configure the DSCP marking in a WAAS optimization policy, use the **set ip dscp** policy class map configuration command. To unconfigure DSCP marking, use the **no** form of this command.

set ip dscp *dscp-marking*

no set ip dscp *dscp-marking*

Syntax Description	<i>dscp-marking</i>	Assign the specified DSCP marking value (Table 3-2) to the connections in the class.
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Defaults	The default DSCP marking value is copy.
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Command Modes	Policy map class configuration
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Device Modes	application-accelerator
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Usage Guidelines	<p>This command overrides the global default DSCP marking value, which is set to copy by default.</p> <p>If you do not specify the set ip dscp command, the class uses the global default DSCP marking, which is set by the service-policy type waas set ip dscp command.</p> <p>You can specify the set ip dscp command only when the optimize action has been configured for a class.</p>
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Examples	The following example shows how to configure the DSCP marking value for connections in the class:
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```
wae(config)# policy-map waas WAAS-GLOBAL
wae(config-pmap)# class httpx
wae(config-pmap-c)# optimize full accelerate http application Web
wae(config-pmap-c)# set ip dscp 10
```

Related Commands	<p>(config-pmap-c) optimize</p> <p>(config-pmap-c) pass-through</p> <p>(config) service-policy</p>
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■ (config-pmap-c) set ip dscp