QoS: Enhanced Show Commands for Active Policies

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The QoS: Enhanced Show Commands for Active Policies feature introduces the **show policy-map interface brief** command. The keywords and arguments of the **show policy-map interface brief** command allow you to display only the active policies (that is, policy maps) in use on your network. An active policy is one that is attached to an interface.

History for the QoS: Enhanced Show Commands for Active Policies Feature

Release	Modification
12.0(32)SY	12.0(32)SY introduces support for this feature on the Cisco 12000 family of routers.
12.2(28)SB	This feature was introduced.

Finding Support Information for Platforms and Cisco IOS Software Images

Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at http://www.cisco.com/go/fn. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click **Cancel** at the login dialog box and follow the instructions that appear.

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Restrictions for QoS: Enhanced Show Commands for Active Policies

For ATM permanent virtual circuits (PVCs), policy maps do not remain associated with the interface if the ATM PVC is not working properly (that is, the ATM PVC is "down"). Therefore, if an ATM PVC is down, and a policy map is attached to an interface, the **show policy-map interface brief** command does not include information about the policy maps in the command output.

Information About QoS: Enhanced Show Commands for Active Policies

To use the QoS: Enhanced Show Commands for Active Policies feature, you should understand the following concepts:

Benefits of the Enhanced Show Commands

Fine-Tune Information Reported

The QoS: Enhanced Show Commands for Active Policies feature introduces the **show policy-map interface brief** command. The keywords and arguments of the **show policy-map interface brief** command allow you to tailor and fine-tune the information displayed by the command so that only the active policies (that is, those policy maps attached to an interface) are displayed.

Time-stamp and User ID Information Reported

The **show policy-map interface brief** command also provides the time stamp (that is, the date and time) when the policy map was attached to an interface, along with the user ID of the person who attached the policy map to the interface.

VRF Interface Information Reported

The **show policy-map interface brief** command displays the active policies attached to an interface. If you are using a virtual private network (VPN), the **show policy-map interface brief** command displays the active policies attached to VRF interfaces that are used in a VPN.

Time-stamp and User ID Information in the Enhanced Show Commands

The keywords and arguments included with the **show policy-map interface brief** command allow you to fine-tune the information that the command displays.

For example, if you use the optional **timestamp** keyword, the time and date that a policy map was attached to an interface will be included in the display. In addition to the time and date information, the name (that is, the user ID) of the person who attached the policy map to the interface will also be displayed.

Note If the network software is reloaded (reinstalled), the timestamp information (the time and date information) obtained will not be retained for any of the policy maps attached to interfaces on the network. Instead, the time and date information displayed will be the time and date when the software was reloaded.

How the User Information is Obtained

The user information included in the display is obtained from the information you enter when you log on to the router. For example, if you are using the SSH Secure Shell utility to log on to a router, you would typically enter your username and password.

However, it is not always possible to obtain the user information. Instances where user information cannot be obtained include the following:

- Not all routers require user information when you log on. Therefore, you may not be prompted to enter your username when you log on to a router.
- If you are connecting to a console port using the telnet utility in a DOS environment, you do not need to enter user information.
- The user information cannot be retrieved due to system constraints or other reasons.

If the user information cannot be obtained, the words “by unknown” will be displayed as shown below.

```
Service-policy output: policyname2
    VRFB   interface s6/0/1 - applied 21:47:04 on 23/12/01 by unknown
```

VPN Information in the Enhanced Show Commands

The **show policy-map interface brief** command includes an optional keyword, **vrf**, and associated argument, *vrf-id*, that can be used with VPNs.

When you use the **vrf** keyword and the *vrf-id* argument, the display includes information about the VRF interface.

```
Service-policy input: policyname1
    VRFA   interface s2/0/1
    VRFB   interface s6/0/0
```

How to Use the QoS: Enhanced Show Commands for Active Policies Feature

The QoS: Enhanced Show Commands for Active Policies feature introduces the **show policy-map interface brief** command. This section contains the procedure for using the **show policy map interface brief** command.

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Using the show policy-map interface brief Command

Use the keywords and arguments of the **show policy-map interface brief** command to display only the active policy maps, along with information about the interfaces to which the active policy maps are attached.

To use the **show policy map-interface brief** command, complete the following steps.

Prerequisites

Policies (that is, policy maps) must exist and must be attached to an interface for the results of the display to be useful. Therefore, before using the **show policy-map interface brief** command, use the Modular Quality of Service (QoS) Command-Line Interface (CLI) (MQC) to create and configure your policy maps as appropriate, and attach the policy maps to interfaces.

SUMMARY STEPS

1. **enable**
2. **show policy-map interface** [**input** | **output**] **brief** [*policymap-name*] [**vrf** [*vrf-id*]] [**timestamp**]
3. **exit**

DETAILED STEPS

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**show policy-map interface** [**input** | **output**] **brief** [*policymap-name*] [**vrf** [*vrf-id*]] [**timestamp**] **Example:** `Router# show policy-map interface input brief policy_map_1 timestamp`	Displays information about the active policy maps. • Enter any optional keywords or arguments.
Step 3	**exit** **Example:** `Router# exit`	(Optional) Exits privileged EXEC mode.

Examples

The information that is displayed by the **show policy-map interface brief** command varies according to the optional keywords and arguments that you specify.

If you do not specify any optional keywords or variables, all policy maps are displayed.

The "Examples" section of the **show policy-map interface brief** command reference page lists the significant keyword and argument combinations used with the command, and describes the corresponding information displayed. For more information, see the "Command Reference" section on page 6.

Configuration Examples for QoS: Enhanced Show Commands for Active Policies

This section contains the following examples:

Using the show policy-map interface brief Command: Example

In this example, the **show policy-map interface brief** command displays the information about a specific input policy, policyname2. Time-stamp information will also be included in the display. Time-stamp information includes the time and date the policy map was attached to the interface, along with the user ID of the person who attached the policy map to the interface.

```
Router# show policy-map interface input brief policyname2 timestamp

Service-policy input: policyname2
    interface s2/0/2 - applied 21:47:04 on 24/12/01 by JBloggs
    interface s6/0/1 - applied 19:43:04 on 25/12/01 by JBloggs
```

In this example, the **show policy-map interface active** command displays the information about the output policy maps attached to a VRF interface. Timestamp information will also be included in the display.

```
Router# show policy-map interface output brief vrf timestamp

Service-policy output: policyname2
    VRFC   interface s2/0/2 - applied 21:47:04 on 23/12/01 by JBloggs
    VRFA   interface s6/0/1 - applied 21:47:04 on 23/12/01 by JBloggs

Service-policy output: policyname3
    VRFC   interface s2/0/2 - applied 21:47:04 on 23/12/01 by JBloggs
    VRFA   interface s6/0/1 - applied 21:47:04 on 23/12/01 by JBloggs
```

Additional References

The following sections provide references related to the QoS: Enhanced Show Commands for Active Policies.

Related Documents

Related Topic	Document Title
QoS commands: complete command syntax, command modes, command history, defaults, usage guidelines, and examples	*Cisco IOS Quality of Service Solutions Command Reference*
Class maps, policy maps, hierarchical policy maps, and Modular Quality of Service (QoS) Command-Line Interface (CLI) (MQC)	*Cisco IOS Quality of Service Solutions Configuration Guide, 12.4*

Standards

Standard	Title
None	—

MIBs

MIB	MIBs Link
None	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: http://www.cisco.com/go/mibs

RFCs

RFC	Title
None	—

Technical Assistance

Description	Link
The Cisco Technical Support & Documentation website contains thousands of pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.	http://www.cisco.com/techsupport

Command Reference

This section documents one new command only.

- **show policy-map interface brief**

show policy-map interface brief

To display information about only the active policy maps attached to an interface, use the **show policy-map interface brief** command in privileged EXEC mode.

show policy-map interface [**input** | **output**] **brief** [*policy-map-name*] [**vrf** [*vrf-id*]] [**timestamp**]

Syntax Description

input	(Optional) Indicates that only the information about the active input policy maps will be displayed.
output	(Optional) Indicates that only the information about the active output policy maps will be displayed.
brief	Indicates that name of all the active policy maps (both input and output policy maps) and the interfaces to which the policy maps are attached will be displayed. The active input policy maps will be displayed first, followed by the output policy maps.
policy-map-name	(Optional) Name of an active policy map to be displayed.
vrf	(Optional) Indicates that the active policy maps for VRF will be displayed.
vrf-id	(Optional) A specific VRF identifier.
timestamp	(Optional) Indicates that the date and time when the policy map was attached will be displayed, along with the ID of the user who attached the policy map.

Command Default

If no optional keywords or arguments are specified, all policy maps (even those that are not active) are displayed.

Command Modes

Privileged EXEC

Command History

Release	Modification
12.2(28)SB	This command was introduced.

Usage Guidelines

The **show policy-map interface brief** command displays the name of the active policy maps and the interfaces to which those policy maps are attached. An active policy map is one that is attached to an interface.

The optional keywords and arguments allow you to tailor the information displayed about VPNs, time stamps, and user IDs.

If you do not specify any optional keywords or arguments, all policy maps (even those that are not active) are displayed.

VPN Information Reported

The **show policy-map interface brief** command can be used for VRF interfaces in applications that use virtual private networks (VPNs). To specify VRF interfaces, use the **vrf** keyword with the *vrf-id* argument.

Time-stamp and User ID Information Reported

If the optional **timestamp** keyword is used with **show policy-map interface brief** command, the time and date when when a policy map was attached to an interface appear in the display. In addition to the time and date information, the name (that is, the user ID) of the person who attached the policy map to the interface will also be displayed.

Note If the network software is reloaded (reinstalled), the timestamp information (the time and date information) obtained will not be retained for any of the policy maps attached to interfaces on the network. Instead, the time and date information displayed will be the time and date when the software was reloaded.

Method for Obtaining User Information

The user information included in the display is obtained from the information that you enter when you log in to the router. For example, if you are using the SSH Secure Shell utility to log in to a router, you would typically enter your username and password. However, it is not always possible to obtain the user information. Instances where user information cannot be obtained include the following:

- Not all routers require user information when you log in. Therefore, you may not be prompted to enter your username when you log in to a router.
- If you are connecting to a console port using the Telnet utility in a DOS environment, you do not need to enter user information.
- The user information cannot be retrieved because of system constraints or other factors.

If the user information cannot be obtained, the words “by unknown” will be displayed.

Hierarchical Policy Map Information

For a hierarchical policy map structure, only the information about the parent policy maps is displayed. Information about child policy maps is not displayed.

ATM PVCs

For ATM permanent virtual circuits (PVCs), policy maps do not remain associated with the interface if the ATM PVC is not working properly (that is, the ATM PVC is “down”). Therefore, if an ATM PVC is down, and a policy map is attached to an interface, the **show policy-map interface brief** command does not include information about the policy maps in the command output.

Examples

The information that is displayed by the **show policy-map interface brief** command varies according to the optional keywords and arguments that you specify.

The following sections list the significant keyword and argument combinations used with the command and describe the corresponding information displayed:

show policy-map interface brief Command Example

The **show policy-map interface brief** command displays *all* the attached policy maps (both input policy maps and output policy maps) along with the information about the interfaces to which the policy maps are attached. The input policy maps are displayed first, followed by the output policy maps.

```
Service-policy input: policyname1
    interface s2/0/1
    interface s6/0/0

Service-policy output: policyname1interface s2/0/1 interface s6/0/0
```

show policy-map interface brief timestamp Command Example

The **show policy-map interface brief timestamp** command displays *all* the attached policy maps (both input policy maps and output policy maps) along with the information about the interfaces to which the policy maps are attached. The input policy maps are displayed first, followed by the output policy maps.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

```
Service-policy input: parentpolicy1
Service-policy input: childpolicy1
    interface s2/0/1 - applied 20:43:04 on 25/12/01 by JBloggs
    interface s6/0/1 - applied 19:43:04 on 25/12/01 by JBloggs

Service-policy output: policyname2
    interface s2/0/2 - applied 21:47:04 on 24/12/01 by JBloggs
    interface s6/0/1 - applied 19:43:04 on 25/12/01 by JBloggs
```

show policy-map interface brief *policymap-name* Command Example

The **show policy-map interface brief** *policymap-name* command displays the policy map attached as *either* an input policy map *or* an output policy map, along with the information about the interface to which the policy map is attached. Only the policy map specified by the *policymap-name* argument is displayed.

For example, the display for the **show policy-map interface brief policyname1** command is as follows:

```
Service-policy input: policyname1
    interface s2/0/1
    interface s6/0/0

Service-policy output: policyname1
    interface s1/0/2
    interface s3/0/0
```

show policy-map interface brief *policymap-name* timestamp Command Example

The **show policy-map interface brief** *policymap-name* **timestamp** command displays the policy map attached as *either* an input policy map *or* an output policy map, along with the information about the interface to which it is attached. Only the policy map specified by the *policymap-name* argument is displayed.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

For example, the display for the **show policy-map interface brief policyname2 timestamp** command is as follows:

```
Service-policy input: policyname2
    interface s2/0/2 - applied 21:47:04 on 24/12/01 by JBloggs
    interface s6/0/1 - applied 19:43:04 on 25/12/01 by JBloggs

Service-policy output: policyname2
    interface s4/0/2 - applied 12:47:04 on 24/12/01 by JBloggs
    interface s7/0/1 - applied 14:43:04 on 25/12/01 by JBloggs
```

show policy-map interface output brief Command Example

The **show policy-map interface output brief** command displays the attached *output* policy maps, along with the information about the interfaces to which they are attached.

```
Service-policy output: policyname1
```

```
    interface s2/0/1
    interface s6/0/0
```

show policy-map interface output brief timestamp Command Example

The **show policy-map interface output brief timestamp** command displays the attached *output* policy maps, along with the information about the interfaces to which they are attached.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

```
Service-policy output: policyname2
    interface s2/0/2 - applied 21:47:04 on 24/12/01 by JBloggs
    interface s6/0/1 - applied 19:43:04 on 25/12/01 by JBloggs
```

show policy-map interface input brief Command Example

The **show policy-map interface input brief** command displays the attached *input* policy maps, along with the information about the interfaces to which they are attached.

```
Service-policy input: policyname2
    interface s2/0/2
    interface s6/0/1
```

show policy-map interface input brief timestamp Command Example

The **show policy-map interface input brief timestamp** command displays the attached *input* policy maps, along with the information about the interfaces to which they are attached.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

```
Service-policy input: policyname2
    interface s2/0/2 - applied 21:47:04 on 24/12/01 by JBloggs
    interface s6/0/1 - applied 19:43:04 on 25/12/01 by JBloggs
```

show policy-map interface output brief *policymap-name* Command Example

The **show policy-map interface output brief** *policymap-name* command displays the attached *output* policy map, along with the information about the interface to which it is attached. Only the policy map specified by the *policymap-name* argument is displayed.

For example, the display for the **show policy-map interface output brief policyname1**command is as follows:

```
Service-policy output: policyname1
    interface s2/0/1
    interface s6/0/0
```

show policy-map interface output brief *policymap-name* timestamp Command Example

The **show policy-map interface output brief** *policymap-name* **timestamp** command displays the attached *output* policy map, along with the information about the interface to which it is attached. Only the policy map specified by the *policymap-name* argument is displayed.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

For example, the display for the **show policy-map interface output brief policyname2 timestamp** command is as follows:

```
Service-policy output: policyname2
    interface s2/0/2 - applied 21:47:04 on 24/12/01 by JBloggs
    interface s6/0/1 - applied 19:43:04 on 25/12/01 by JBloggs
```

show policy-map interface input brief *policymap-name* Command Example

The **show policy-map interface input brief** *policymap-name* command displays the attached *input* policy map, along with the information about the interface to which it is attached. Only the policy map specified by the *policymap-name* argument is displayed.

For example, the display for the **show policy-map interface input brief policyname1** command is as follows:

```
Service-policy input: policyname1
    interface s2/0/1
    interface s6/0/0
```

show policy-map interface input brief *policymap-name* timestamp Command Example

The **show policy-map interface input brief** *policymap-name* **timestamp** command displays the attached *input* policy map, along with the information about the interface to which it is attached. Only the policy map specified by the *policymap-name* argument is displayed.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

For example, the display for the **show policy-map interface input brief policyname2 timestamp** command is as follows:

```
Service-policy input: policyname2
    interface s2/0/2 - applied 21:47:04 on 24/12/01 by JBloggs
    interface s6/0/1 - applied 19:43:04 on 25/12/01 by JBloggs
```

show policy-map interface brief vrf Command Example

The **show policy-map interface brief vrf** command displays *all* the policy maps (both input policy maps and output policy maps), along with information about the interfaces and the VRFs to which the policy maps are attached.

```
Service-policy input: policyname1
    VRFA   interface s2/0/1
    VRFB   interface s6/0/0

Service-policy output: policyname2
    VRFC   interface s2/0/2
    VRFB   interface s6/0/1
```

show policy-map interface brief vrf timestamp Command Example

The **show policy-map interface brief vrf timestamp** command displays *all* the policy maps (both input policy maps and output policy maps), along with information about the interfaces and the VRFs to which the policy maps are attached.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

```
Service-policy input: policyname1
    VRFA   interface s2/0/1 - applied 21:47:04 on 23/12/01 by JBloggs
    VRFB   interface s6/0/0 - applied 21:47:04 on 23/12/01 by JBloggs

Service-policy output: policyname2
```

```
    VRFC   interface s2/0/3 - applied 20:47:04 on 23/12/01 by JBloggs
    VRFD   interface s6/0/2 - applied 20:49:04 on 21/12/01 by JBloggs
```

In some network configurations, the policy map may be attached to the interface initially, and then at a later time, the interface can be configured to act as a VRF interface. In this kind of network configuration, the time-stamp information displays the time when the policy map was attached to the interface. The display does not include the time when the interface was configured to act as a VRF interface. Displaying only the time when the policy map is attached to the interface also applies to the scenarios described below.

In other network configurations, a VRF may be attached to multiple interfaces as described in the following scenarios:

- The policy map is also attached to both the interfaces and the VRFs. In this network configuration, all the interfaces should be shown in the display for the VRF, under the policy map name, as follows:

```
Service-policy input: policyname1
    VRF1 interface s2/0/1 - applied 21:47:37 on 23/12/01 by JBloggs
         interface atm0/0 - applied 11:37:57 on 21/11/01 by JBloggs
```

- The policy map is not attached to all interfaces to which the specific VRF is attached. In this network configuration, only the VRF interfaces that have that policy map configured are displayed.

show policy-map interface brief *policymap-name* vrf timestamp Command Example

The **show policy-map interface brief** *policymap-name* **vrf timestamp** command displays the policy maps attached as *either* an input policy map *or* an output policy map, along with information about the interface and VRF to which the policy map is attached. Only the policy map specified by the *policymap-name* argument is displayed.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

For example, the display for the **show policy-map interface brief policyname1 vrf timestamp** command is as follows:

```
Service-policy input: policyname1
    VRF1   interface s2/0/1 - applied 21:47:04 on 23/12/01 by JBloggs

Service-policy output: policyname1
    VRF2   interface s6/0/1 - applied 21:47:04 on 23/12/01 by JBloggs
```

show policy-map interface brief *policymap-name* vrf *vrf-id* timestamp Command Example

The **show policy-map interface brief** *policymap-name* **vrf** *vrf-id* **timestamp** command displays *all* the policy maps (both the input policy maps and the output policy maps), along with information about the interface and VRF to which the policy maps are attached. Only the policy map and VRF specified by the *policymap-name* argument and the *vrf-id* argument are displayed.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

For example, the display for **show policy-map interface brief policyname1 vrf VRFA timestamp** command is as follows:

```
Service-policy input: policyname1
    VRFA   interface s2/0/1 - applied 21:47:04 on 23/12/01 by JBloggs

Service-policy output: policyname1
    VRFA   interface s6/0/1 - applied 21:47:04 on 23/12/01 by JBloggs
```

show policy-map interface output brief vrf Command Example

The **show policy-map interface output brief vrf** command displays the attached *output* policy maps, along with information about the interface and VRF to which the policy maps are attached.

```
Service-policy output: policyname2
    VRFC   interface s2/0/2
    VRFA   interface s6/0/1
```

show policy-map interface output brief vrf timestamp Command Example

The **show policy-map interface output brief vrf timestamp** command displays the attached *output* policy maps, along with information about the interface and VRF to which the policy maps are attached.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

```
Service-policy output: policyname2
    VRFC   interface s2/0/2 - applied 21:47:04 on 23/12/01 by JBloggs
    VRFA   interface s6/0/1 - applied 21:47:04 on 23/12/01 by JBloggs
```

show policy-map interface input brief vrf Command Example

The **show policy-map interface input brief vrf** command displays the attached *input* policy maps, along with information about the interface and VRF to which the policy maps are attached.

```
Service-policy input: policyname1
    VRFA   interface s2/0/1
    VRFB   interface s6/0/0

Service-policy input: policyname2
    VRFC   interface s2/0/2
    VRFB   interface s6/0/1
```

show policy-map interface input brief vrf timestamp Command Example

The **show policy-map interface input brief vrf timestamp** command displays the attached *input* policy maps, along with information about the interface and VRF to which the policy maps are attached.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

```
Service-policy input: policyname1
    VRFA   interface s2/0/1 - applied 21:47:04 on 23/12/01 by JBloggs
    VRFB   interface s6/0/0 - applied 21:47:04 on 23/12/01 by JBloggs

Service-policy input: policyname2
    VRFC   interface s2/0/3 - applied 20:47:04 on 23/12/01 by JBloggs
    VRFD   interface s6/0/2 - applied 20:49:04 on 21/12/01 by JBloggs
```

show policy-map interface input brief vrf *vrf-id* Command Example

The **show policy-map interface input brief vrf** *vrf-id* command displays the attached *input* policy maps, along with information about the interface and VRF to which the policy maps are attached. Only the policy maps attached to the VRF specified by the *vrf-id* argument are displayed.

For example, the display for the **show policy-map interface input brief vrf VRFA** command is as follows:

```
Service-policy input: policyname1
    VRFA   interface s2/0/1
```

```
Service-policy input: policyname2
    VRFA   interface s6/0/1
```

show policy-map interface output brief vrf *vrf-id* Command Example

The **show policy-map interface output brief vrf** *vrf-id* command displays the attached *output* policy maps, along with information about the interface and VRF to which the policy maps are attached. Only the policy maps attached to the VRF specified by the *vrf-id* argument are displayed.

For example, the display for the **show policy-map interface output brief vrf VRFB** command is as follows:

```
Service-policy output: policyname1
    VRFB   interface s2/0/1

Service-policy output: policyname2
    VRFB   interface s6/0/1
```

show policy-map interface input brief vrf *vrf-id* timestamp Command Example

The **show policy-map interface input brief vrf** *vrf-id* **timestamp** command displays the attached *input* policy maps, along with information about the interface and VRF to which the policy maps are attached. Only the policy maps attached to the VRF specified by the *vrf-id* argument are displayed.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

For example, the display for the **show policy-map interface input brief vrf VRFA timestamp** command is as follows:

```
Service-policy input: policyname1
    VRFA   interface s2/0/1 - applied 21:47:04 on 23/12/01 by JBloggs

Service-policy input: policyname2
    VRFA   interface s6/0/1 - applied 21:47:04 on 23/12/01 by JBloggs
```

show policy-map interface output brief vrf *vrf-id* timestamp Command Example

The **show policy-map interface output brief vrf** *vrf-id* **timestamp** command displays the attached *output* policy maps, along with information about the interface and VRF to which the policy maps are attached. Only the policy maps attached to the VRF specified by the *vrf-id* argument are displayed.

The **timestamp** keyword displays the time and date when the policy map was attached to the specific interface, along with the user ID of the person who attached the policy map to the interface.

For example, the display for the **show policy-map interface output brief vrf VRFB timestamp** command is as follows:

```
Service-policy output: policyname1
    VRFB   interface s2/0/1 - applied 21:47:04 on 23/12/01 by JBloggs

Service-policy output: policyname2
    VRFB   interface s6/0/1 - applied 21:47:04 on 23/12/01 by JBloggs
```

Table 1 describes the significant fields shown in the various displays.

Table 1 show policy-map interface brief Field Descriptions

Field	Description
Service-policy output: policyname2	Output policy map name.
Service-policy input: policyname2	Input policy map name.
interface s2/0/1	Interface to which the policy map is attached.
VRFA	VRF to which the policy map is attached.
applied 21:47:04 on 23/12/01	Time and date when the policy map was attached to the interface or VRF.
by JBloggs	User ID of the person who attached the policy map to the interface or VRF.

Related Commands

Command	Description
show policy-map interface	Displays the packet statistics of all classes that are configured for all service policies either on the specified interface or subinterface or on a specific PVC on the interface.

Glossary

MQC—Modular Quality of Service Command-Line Interface. A command-line method used to create and configure class maps and policy maps, and then attach the policy maps to interfaces. The MQC is used to apply many QoS features, such as network traffic classification and marking, to a network.

policy map—A configuration file that applies one or more QoS features to a specific class or category of traffic. Policy maps are often referred to as service polices, as the Cisco IOS **service policy** command is used to attach a policy map to an interface.

VPN—Virtual Private Network. Enables IP traffic to travel securely over a public TCP/IP network by encrypting all traffic from one network to another. A VPN uses "tunneling" to encrypt all information at the IP level.

VRF—A VPN routing/forwarding instance. A VRF consists of an IP routing table, a derived forwarding table, a set of interfaces that use the forwarding table, and a set of rules and routing protocols that determine what goes into the forwarding table. In general, a VRF includes the routing information that defines a customer VPN site that is attached to a router.

Note Refer to *Internetworking Terms and Acronyms* for terms not included in this glossary.