

Auto-QoS

This document provides detailed understanding about Auto-QoS and its configuration.

- Feature history for Auto-QoS, on page 1
- Auto-QoS overview, on page 2
- Auto-QoS compact overview, on page 3
- Limitations for Auto-QoS, on page 3
- How Auto-QoS generates QoS templates, on page 4
- Auto-QoS policy and class maps, on page 4
- Behavior when Auto-QoS is enabled, on page 5
- Behavior when Auto-QoS compact is enabled, on page 5
- How to configure Auto-QoS, on page 7
- Upgrade Auto-QoS, on page 8
- Enable Auto-QoS compact, on page 10
- Monitor Auto-QoS, on page 12
- Troubleshoot Auto-QoS, on page 12
- Configuration examples, on page 13

Feature history for Auto-QoS

This table provides release and platform support information for the features explained in this module.

These features are available in all the releases subsequent to the one they were introduced in, unless noted otherwise.

Release	Feature name and description	Supported platform
Cisco IOS XE 26.2.1	Auto-QoS: Auto-QoS feature support has been introduced.	Cisco C9610 Series Smart Switches
Cisco IOS XE 26.2.1ea	Auto-QoS: Auto-QoS feature support has been introduced.	Cisco C9550 Series Smart Switches

Release	Feature name and description	Supported platform
Cisco IOS XE 17.18.1	Auto-QoS: Auto-QoS feature simplifies the deployment of QoS features. This feature determines the network design and enables QoS configurations so that the switch can prioritize different traffic flows.	Cisco C9350 Series Smart Switches

Auto-QoS overview

Auto-QoS is a feature designed to simplify the deployment of Quality of Service (QoS) on network devices. It automates the configuration of QoS policies by detecting the type of traffic (such as voice or video) and applying appropriate QoS settings without requiring manual, detailed configuration. This helps ensure that critical traffic receives the necessary priority and bandwidth for optimal performance.

Key points

- Automatic detection and configuration: Auto-QoS identifies network design and traffic types, then enables QoS configurations so the switch can prioritize different traffic flows.
- MQC model:
  - Uses the Modular QoS CLI (MQC) model.
  - Instead of individual global configurations, Auto-QoS applied to any interface generates several global class maps and policy maps.
- Traffic classification:
  - Auto-QoS classifies traffic and assigns each matched packet to a qos-group.
  - The output policy map places specific qos-groups into designated output queues, including the priority queue for real-time traffic.
- Egress queuing: Egress queuing policy maps traffic-class to output queues.
- Ingress policy: traffic-class must be set explicitly; otherwise, default mappings use only traffic-class 0 or 7.
- Trust behavior: DSCP is trusted by default for routed packets; CoS is trusted by default for bridged packets.
- Bi-directional QoS:
  - Inbound: Switch port should trust the DSCP value in the packet (default behavior).
  - Outbound: Switch port must ensure voice packets receive "front of line" priority, preventing excessive delay that could lead to packet loss at the end host.

Why is QoS important?

QoS ensures timely delivery and prioritization of critical traffic (like voice and video) by managing bandwidth and scheduling at both inbound and outbound interfaces.

Auto-QoS compact overview

Auto-QoS is a Cisco feature that automatically generates and applies recommended Quality of Service (QoS) configurations for your network devices. This simplifies QoS deployment by reducing the need for manual, detailed QoS design and configuration.

When you enter an Auto-QoS command, the switch displays all the generated commands as if they were entered manually via the CLI. This provides transparency into the QoS policies being applied.

Key benefits

- Simplifies configuration review: Reduces clutter in the running configuration.
- Efficient memory usage: Saves resources by not listing all auto-generated CLI lines.
- Easy deployment: Maintains the simplicity of Auto-QoS while enhancing manageability.

Limitations for Auto-QoS

These are restrictions for auto-QoS:

- Auto-qos is supported on Layer 2 or Layer 3 ports.
- Auto-QoS is not supported on subinterfaces and tunnel interfaces and member ports.
- Auto-QoS does not generate configuration when it is pushed from the startup-configuration using the auto qos voip cisco-phone command to the running-configuration. This is expected behavior and this is to prevent overwriting of user-created customized QoS policies by the default configuration, if any, every time the command auto qos voip cisco-phone is pushed from the startup-config.

  Use any of these workarounds for this limitation:

  - Configure the auto qos voip cisco-phone command manually on the switch interfaces.
  - For new switches, if you push auto-QoS commands through startup-config, the command should include each of these as part of the standard template:
    - Interface-level:
      - trust device cisco-phone
      - auto qos voip cisco-phone
      - service-policy input AutoQos-4.0-CiscoPhone-Input-Policy
      - service-policy type queueing output AutoQos-4.0-Output-Policy
    - Global-level:
      - Class-map

- Policy-map
- ACL (ACE)

- If the **auto qos voip cisco-phone** command is already configured on an interface but policies are not being generated, disable the command from all the interfaces and reconfigure the command on each interface manually.

How Auto-QoS generates QoS templates

- Class map generation: An Auto-QoS command automatically creates a series of class maps that match on Access Control Lists (ACLs), DSCP values, and/or CoS values. This differentiates network traffic into various application classes (such as voice, video, and data).
- Input policy generation: Auto-QoS also generates an input policy that references these class maps. In some cases, this input policy includes policing (rate-limiting) for specific classes to enforce bandwidth limits.
- Egress queue class maps: Auto-QoS generates eight egress-queue class maps. The egress (output) policy then assigns each of these class maps to a specific output queue, ensuring appropriate queueing and scheduling behavior for each traffic type.

Template and resource efficiency

- Template generation: The first time an Auto-QoS command is used on a device, it creates global templates—such as the eight-queue egress service-policy—that define the basic QoS structure.
- Template reuse: After these templates are created, subsequent Auto-QoS commands applied to other interfaces do not re-create them. All Auto-QoS-enabled interfaces share the same global queueing model and templates, ensuring consistency and efficient use of device resources.

Key points

- Auto-QoS simplifies traffic classification and queue assignment by generating standard templates and policies.
- Templates are generated once and reused, optimizing configuration and memory usage across the device.
- Eight-queue model is central to Cisco’s Auto-QoS approach, covering a broad range of application classes with standardized output queueing.

Auto-QoS policy and class maps

When you enter the appropriate Auto-QoS command, these actions occur automatically:

- Creation of specific class maps: Auto-QoS generates class maps that define how different types of traffic (such as voice, video, and data) are identified, often based on DSCP or CoS values.

- Creation of specific policy maps (input and output): Corresponding policy maps are created for both inbound (input) and outbound (output) traffic, referencing the generated class maps and defining actions such as marking, policing, or queuing.
- Attachment of policy maps to the interface: The generated policy maps are automatically applied (attached) to the specified interface where you enabled Auto-QoS.
- Configuration of the interface trust level: The trust state for the interface is set, determining whether the switch will accept and honor incoming QoS markings (such as DSCP or CoS) from connected devices.
- DSCP is trusted by default for routed packets, and CoS is trusted by default for bridged packets.

Behavior when Auto-QoS is enabled

- Addition of commands: When Auto-QoS is enabled, both the auto qos interface commands and the globally generated QoS configuration are automatically added to the device's running configuration.
- Command application: The switch applies the Auto-QoS-generated commands as if they were manually entered via the CLI.
- Interaction with existing configuration:
  - If there are existing user configurations, Auto-QoS-generated commands may fail to apply or may override user settings—sometimes without warning.
  - If all generated commands are applied successfully, any user configuration not overridden remains in the running configuration.
  - Any user configuration that was overridden can be restored by reloading the switch without saving the current (modified) configuration.
- Rollback behavior: If Auto-QoS-generated commands cannot be applied, the switch restores the previous running configuration.

Key points

- Enabling Auto-QoS modifies the running configuration and may override user-entered settings.
- Overridden user configuration is not permanently lost unless you save the running configuration after enabling Auto-QoS.
- Safe rollback: If Auto-QoS configuration fails, your previous running config is restored automatically.

Behavior when Auto-QoS compact is enabled

- Running configuration:

Note When you enable Auto-QoS on the main interface, the **show running-config interface <name>** command does not display meter and queuing policy information.

- Only the auto-qos commands entered by the user are visible in the running configuration.
- The detailed, auto-generated global and interface QoS configurations are hidden from the running-config output.
- The auto qos global compact command hides derived configurations from the running configuration, preventing Auto-QoS-generated commands from appearing in the output. In this instance, the no auto qos global compact command failed to disable the feature, which kept interface service-policy commands hidden and created the appearance that auto qos trust dscp was not functioning as expected.
- You cannot directly disable the auto qos global compact command while Auto-QoS configurations, such as auto qos trust dscp, remain active on an interface. Attempting to do so triggers the following error message:

```
Device(config)#no auto qos global compact
%Disable all the autoqos configuration from the interfaces to disable autoqos compact
```

- To disable auto qos global compact, first remove all Auto-QoS configurations from the interfaces, then disable the global command.

- Configuration save/reload:
  - When you save the configuration, only the auto-qos commands are stored (not the hidden, generated configuration).
  - Upon reload, the switch detects the saved auto-qos commands and re-executes them, regenerating the full Auto-QoS configuration (using the latest SRND-compliant config-set).

Important considerations

No manual edits: Do not make changes to the hidden, auto-generated commands while Auto-QoS Compact is enabled. Any user modifications will be lost (overridden) when the switch reloads and the configuration is regenerated.

Auto-QoS global compact mode

- Viewing derived config: Use the show derived-config command to view the hidden Auto-QoS global compact configuration.
- Memory and regeneration: Auto-QoS global compact-derived commands are not stored in memory. They are regenerated on every reload based on the current auto-qos commands present in the saved configuration.
- Modification warning: When compaction is enabled, do not modify auto-generated commands directly; any such changes will be lost at reload.
- Disabling compact: If you need to disable Auto-QoS global compact, first disable Auto-QoS at the interface level before disabling compact mode at the global level.

Table showing comparison of standard and compact Auto-QoS

Feature/action	Standard Auto-QoS	Compact Auto-QoS
User CLI commands in config	Visible	Visible
Auto-generated config	Visible	Hidden
Save config	All commands	Only auto-qos CLI commands
Reload behavior	Normal reload	Auto-QoS config regenerated
Manual edits to auto-gen config	Allowed	Not recommended (overwritten)

How to configure Auto-QoS

For optimum QoS performance, configure auto-QoS on all the devices in your network.

Procedure

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.
Step 2	**interface** *interface-id* **Example:** `Device(config)# interface FiftyGigE1/0/1`	Specifies the port connected to a VoIP phone, video device, or uplink. Enters interface configuration mode.
Step 3	Depending on your auto-QoS configuration, use one of the following commands: • **auto qos voip** {**cisco-phone** | **cisco-softphone** | **trust**} • **auto qos video** {**cts** | **ip-camera** | **media-player**} • **auto qos classify** [**police**] • **auto qos trust** {**cos** | **dscp**} **Example:** `Device(config-if)# auto qos trust dscp`	Enables Auto-QoS for the interface and device type. See details and notes below: • **auto qos voip cisco-phone**: For Cisco IP Phones. Trusts QoS labels when the phone is detected via CDP. **Note** Do not use for IP phones that support video, as video DSCP markings may be overwritten and misclassified. • **auto qos voip cisco-softphone**: For PCs with Cisco IP SoftPhone. Generates QoS config and policing for untrusted endpoints.

	Command or Action	Purpose
		• **auto qos voip trust**: For uplinks to trusted switches or routers. Trusts VoIP QoS classification on ingress packets. These commands enable auto-QoS for the specified video device (system, camera, or media player): • **auto qos video cts**: For Cisco TelePresence systems. Trusts QoS labels when detected. • **auto qos video ip-camera**: For Cisco video surveillance cameras. Trusts QoS labels when detected. • **auto qos video media-player**: For Cisco digital media players. Trusts QoS labels when detected. This command enables auto-QoS for classification: • **auto qos classify police**: For untrusted interfaces. Classifies and marks traffic, applies policing. These commands enable auto-QoS for trusted interfaces: • **auto qos trust cos**/**auto qos trust dscp**: Trusts CoS or DSCP values, typically for uplink or trunk ports.
Step 4	**end** **Example:** `Device(config-if)# end`	Returns to privileged EXEC mode.
Step 5	**show auto qos interface** *interface-id* **Example:** `Device# show auto qos interface FiftyGigE1/0/1`	(Optional) Displays the auto-QoS command on the interface on which auto-QoS was enabled. Use the **show running-config** command to display the auto-QoS configuration and user modifications.

Upgrade Auto-QoS

Before you begin

Prior to upgrading, you need to remove all auto-QoS configurations currently on the switch. This sample procedure describes that process.

After following this sample procedure, you must then reboot the switch with the new or upgraded software image and reconfigure auto-QoS.

Procedure

	Command or Action	Purpose

Step 1	**show auto qos**
	Example:
	`Device# show auto qos`
	`TwentyFiveGigE1/0/1`
	`auto qos trust dscp`
	`TwentyFiveGigE1/0/2`
	`auto qos trust cos`
		In privileged EXEC mode, record all current auto QoS configurations by entering this command.

Step 2	**no auto qos** **Example:** `Device(config-if)# no auto qos`	**In interface configuration mode**, run the appropriate **no auto qos** command on each interface that has an auto QoS configuration.

Step 3	**show running-config | i autoQos**
	Example:
	`Device# show running-config | i autoQos`
	`Device (config-if)#do sh ru | in auto qos`
	`auto qos trust dscp`
	`auto qos trust cos`
	`auto qos trust`
		Return to privileged EXEC mode, and record any remaining auto QoS maps class maps, policy maps, access lists, table maps, or other configurations by entering this command.

Step 4	**no policy-map** *policy-map_name*
	Example:
	`Device(config)# no policy-map pmap_101`
	`Device(config)# no class-map cmap_101`
	`Device(config)# no ip access-list extended AutoQos-101`
	`Device(config)# no table-map 101`
	`Device(config)# no table-map policed-dscp`
		In global configuration mode, remove the QoS class maps, policy maps, access-lists, table maps, and any other auto QoS configurations by entering these commands:
		• **no policy-map** *policy-map-name*
		• **no class-map** *class-map-name*
		• **no ip access-list extended** *Auto-QoS-x*
		• **no table-map** *table-map-name*
		• **no table-map policed-dscp**

Step 5	**show running-config | i autoQos** **Example:**	Return to privileged EXEC mode, run this command again to ensure that no auto-QoS

	Command or Action	Purpose
	Device# **sh ru | in AutoQos** Device# (config-if)#**do sh ru | in AutoQos** auto qos trust cos auto qos video cts auto qos trust dscp auto qos video media-player auto qos trust cos auto qos video ip-camera	configuration or remaining parts of the auto-QoS configuration exists
Step 6	**show auto qos** **Example:** Device# **show auto qos**	Run this command to ensure that no auto-QoS configuration or remaining parts of the configuration exists.
Step 7	**write memory** **Example:** Device# **write memory**	Write the changes to the auto QoS configuration to NV memory by entering the **write memory** command.

What to do next

Reboot the switch with the new or upgraded software image.

After rebooting with the new or upgraded software image, re-configure auto-QoS for the appropriate switch interfaces as determined by running the **show auto qos** command described in step 1.

Note On a Cisco switch or switch stack, only one table-map can be applied for the exceed action and one for the violate action (markdown) per device.

If a table-map is already in use under the exceed action, attempting to apply an Auto-QoS policy that also requires a table-map for the exceed action will fail.

Enable Auto-QoS compact

To enable auto-QoS compact, enter these commands:

Procedure

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** Device# **configure terminal**	Enters global configuration mode.

	Command or Action	Purpose
Step 2	**auto qos global compact** **Example:** `Device(config)# auto qos global compact`	Enables auto-Qos compact and generates (hidden) the global configurations for auto-QoS. You can then enter the auto-QoS command you want to configure in the interface configuration mode and the interface commands that the system generates are also hidden. To display the auto-QoS configuration that has been applied, use these the privileged EXEC commands: • **show derived-config** • **show policy-map** • **show access-list** • **show class-map** • **show table-map** • **show auto qos** • **show auto qos intefaces** • **show auto qos interface <interface name> FiftyGigE1/0/1** • **auto qos trust** • **show policy-map interface** • **show ip access-lists** • **show policy-map type queue** • **show policy-map type queueing interface** • **show table-map** These commands will have keyword "**AutoQos-**".

What to do next

To disable auto-QoS compact, remove auto-Qos instances from all interfaces by entering the **no** form of the corresponding auto-QoS commands and then enter the **no auto qos global compact** global configuration command.

Monitor Auto-QoS

Table 1: Commands for monitoring Auto-QoS

Command	Description
show auto qos [**interface** [*interface-id*]]	Displays the initial auto-QoS configuration. You can compare the **show auto qos** and the **show running-config** command output to identify the user-defined QoS settings.
show running-config	Displays information about the QoS configuration that might be affected by auto-QoS. You can compare the s**show auto qos** and the **show running-config** command output to identify the user-defined QoS settings.
show derived-config	Displays the hidden **mls qos** command which get configured along with the running configs because of auto-qos template.

Troubleshoot Auto-QoS

To troubleshoot Auto-QoS processes and issues:

- Use the **debug auto qos** privileged EXEC command.
- Enables detailed debugging output for Auto-QoS operations.
- Refer to the device's command reference for more details on usage and output interpretation.

To disable Auto-QoS on a specific port:

- Use the no form of the **interface** *interface-id* and **no auto qos voip** Auto-QoS interface commands.
- This removes only the Auto-QoS-generated interface configuration commands from the specified port.
- Global config behavior: If this is the last port with Auto-QoS enabled, entering the **no auto qos** command disables Auto-QoS on the device.

Note The global Auto-QoS-generated configuration commands remain in place. This avoids interrupting traffic on other ports that might still rely on those global settings.

Configuration examples

Example: auto qos trust cos

This is an example of the **auto qos trust cos** command and the applied policies and class maps.

These policy maps are created and applied when running this command:

- AutoQos-4.0-Trust-Cos-Input-Policy
- AutoQos-4.0-Output-Policy

These class maps are created and applied when running this command: **do sh policy-map ty q int fif 1/0/1 | in Class-map**

- AutoQos-4.0-Output-Priority-Queue (match-any)
- AutoQos-4.0-Output-Signaling-Queue (match-any)
- AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
- AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
- AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
- AutoQos-4.0-Output-Scavenger-Queue (match-any)
- AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
- class-default (match-any)

The **show policy-map interface** will only display the ingress policy information.

```
Device(config)# interface FiftyGigE1/0/1
        Device(config-if)# auto qos trust cos
        Device(config-if)# end

        Device# show policy-map interface FiftyGigE1/0/1

        FiftyGigE1/0/1

        Service-policy input: AutoQos-4.0-Trust-Cos-Input-Policy

        Class-map: class-default (match-any)
        0 packets
        Match: any
        QoS Set
        traffic-class cos table AutoQos-4.0-Trust-Cos-Table
```

To view the egress queue information (output policy), use the **show policy-map type queueing interface** command.

```
Device(config)# interface FiftyGigE1/0/1
        Device(config-if)# auto qos trust cos
        Device(config-if)# end

        Device# show policy-map type queueing interface FiftyGigE1/0/1
```

```
FiftyGigE1/0/1

Service-policy queueing output: AutoQos-4.0-Output-Policy

queue stats for all priority classes:
Queueing
priority level 1
queue limit 96000 bytes
(total drops) 0
(bytes output) 381284209

Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
3562992 packets
Match: traffic-class 7
Priority: Strict,

Priority Level: 1
shape (average) cir 12000000000, bc 120000000, be 120000000
target shape rate 12000000000

Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
0 packets
Match: traffic-class 6
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
0 packets
Match: traffic-class 5
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
```

```
Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
0 packets
Match: traffic-class 4
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
0 packets
Match: traffic-class 3
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 4

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
0 packets
Match: traffic-class 2
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 1

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
```

```
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
0 packets
Match: traffic-class 1
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: class-default (match-any)
3547910 packets
Match: any
Queueing
queue limit 75000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 23

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
```

Example: auto qos trust dscp

This is an example of the **auto qos trust dscp** command and the applied policies and class maps.

These policy maps are created and applied when running this command:

- AutoQos-4.0-Trust-Dscp-Input-Policy
- AutoQos-4.0-Output-Policy

These class maps are created and applied when running this command: **do sh policy-map ty q int FiftyGigE1/0/1 | in Class-map**

- class-default (match-any)

- AutoQos-4.0-Output-Priority-Queue (match-any)
- AutoQos-4.0-Output-Signaling-Queue (match-any)
- AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
- AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
- AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
- AutoQos-4.0-Output-Scavenger-Queue (match-any)
- AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
- class-default (match-any)
- show policy-map interface FiftyGigE1/0/1 | in Class-map
- AutoQos-4.0-Trust-Dscp-Priority-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Priority-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Signaling-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Signaling-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Transaction-Data-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Transaction-Data-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Bulk-Data-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Bulk-Data-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Scavenger-Class (match-any)
- AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class2 (match-any)

The **show policy-map interface** command displays the ingress policy information

```
Device(config)# interface FiftyGigE1/0/1
Device(config-if)# auto qos trust dscp
Device(config-if)# end

Device# show policy-map interface FiftyGigE1/0/1

Service-policy input: AutoQos-4.0-Trust-Dscp-Input-Policy

Class-map: AutoQos-4.0-Trust-Dscp-Priority-Class1 (match-any)
0 packets
Match: dscp ef (46)
QoS Set
traffic-class 7

Class-map: AutoQos-4.0-Trust-Dscp-Priority-Class2 (match-any)
0 packets
Match: dscp cs4 (32) cs5 (40)
```

```
QoS Set
traffic-class 7
discard-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Signaling-Class1 (match-any)
0 packets
Match: dscp cs7 (56)
QoS Set
traffic-class 6

Class-map: AutoQos-4.0-Trust-Dscp-Signaling-Class2 (match-any)
0 packets
Match: dscp cs2 (16) cs3 (24) cs6 (48)
QoS Set
traffic-class 6
discard-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class1 (match-any)
0 packets
Match: dscp af41 (34)
QoS Set
traffic-class 5

Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class2 (match-any)
0 packets
Match: dscp af42 (36) af43 (38)
QoS Set
traffic-class 5
discard-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Transaction-Data-Class1 (match-any)
0 packets
Match: dscp af21 (18)
QoS Set
traffic-class 4

Class-map: AutoQos-4.0-Trust-Dscp-Transaction-Data-Class2 (match-any)
0 packets
Match: dscp af22 (20) af23 (22)
QoS Set
traffic-class 4
discard-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Bulk-Data-Class1 (match-any)
0 packets
Match: dscp af11 (10)
QoS Set
traffic-class 3

Class-map: AutoQos-4.0-Trust-Dscp-Bulk-Data-Class2 (match-any)
0 packets
Match: dscp af12 (12) af13 (14)
QoS Set
traffic-class 3
discard-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Scavenger-Class (match-any)
0 packets
Match: dscp cs1 (8)
QoS Set
traffic-class 2

Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class1 (match-any)
0 packets
```

```
Match: dscp af31 (26)
QoS Set
traffic-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class2 (match-any)
0 packets
Match: dscp af32 (28) af33 (30)
QoS Set
traffic-class 1
discard-class 1

Class-map: class-default (match-any)
0 packets
Match: any
```

To view egress queue information (output policy), use the **show policy-map type queueing interface** command:

```
Device(config)# interface FiftyGigE1/0/1
Device(config-if)# auto qos trust dscp
Device(config-if)# end

Device# show policy-map type queueing interface FiftyGigE1/0/1
Service-policy queueing output: AutoQos-4.0-Output-Policy
```



Note The queue limit for outbound traffic varies between XL and non-XL platforms. For non-XL platforms, the queue limit is typically configured based on time or bytes.

```
queue stats for all priority classes:
Queueing
priority level 1
queue limit 32256 bytes
(total drops) 0
(bytes output) 4284

Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
49 packets
Match: traffic-class 7
Priority: Strict,

Priority Level: 1
shape (average) cir 30000000000, bc 300000000, be 300000000
target shape rate 30000000000

Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
0 packets
Match: traffic-class 6
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
```

```
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
0 packets
Match: traffic-class 5
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
0 packets
Match: traffic-class 4
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
0 packets
Match: traffic-class 3
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 4

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
```

```
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
0 packets
Match: traffic-class 2
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 1

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
0 packets
Match: traffic-class 1
Queueing
queue limit 30000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: class-default (match-any)
50 packets
Match: any
Queueing
queue limit 75000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 23

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
```

```
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
```

Example: auto qos video cts

This is an example of the **auto qos video cts** command and the applied policies and class maps.

These policy maps are created and applied when running this command:

- AutoQos-4.0-Trust-Cos-Input-Policy
- AutoQos-4.0-Output-Policy

These class maps are created and applied when running this command: **sh policy-map ty q int FiftyGigE1/0/1 | in Class-map**

```
Device#sh policy-map ty q int FiftyGigE1/0/1 | in Class-map:
        Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
        Class-map: class-default (match-any)


        Device(config)# interface FiftyGigE1/0/1
        Device(config-if)# auto qos video cts
        Device(config-if)# end

        Device(config-if)# do sh policy-map interface FiftyGigE1/0/30
        FiftyGigE1/0/30

        Service-policy input: AutoQos-4.0-Trust-Cos-Input-Policy

        Class-map: class-default (match-any)
        0 packets
        Match: any
        QoS Set
        traffic-class cos table AutoQos-4.0-Trust-Cos-Table
        police:
        cir 5000000000 bps, bc 1024000 bytes
        conformed 0 bytes; actions:
        transmit
        exceeded 0 bytes; actions:
        drop
        conformed 0000 bps, exceeded 0000 bps
```

Queueing output

```
sh policy-map ty q inter fif 1/0/30
        FiftyGigE1/0/30

        Service-policy queueing output: AutoQos-4.0-Output-Policy
```

```
queue stats for all priority classes:
Queueing
priority level 1
queue limit 32256 bytes
(total drops) 0
(bytes output) 7267

Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
51 packets
Match: traffic-class 7
Priority: Strict,

Priority Level: 1
shape (average) cir 3000000000, bc 30000000, be 30000000
target shape rate 3000000000

Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
0 packets
Match: traffic-class 6
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
shape (average) cir 1000000000, bc 4000000, be 4000000
target shape rate 1000000000
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
0 packets
Match: traffic-class 5
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
```

```
0 packets
Match: traffic-class 4
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
0 packets
Match: traffic-class 3
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 4

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
0 packets
Match: traffic-class 2
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 1

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1
```

```
Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
0 packets
Match: traffic-class 1
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: class-default (match-any)
51 packets
Match: any
Queueing
queue limit 5000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 23

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1
```

Example: auto-qos video ip-camera

This is an example of the **auto qos video ip-camera** command and the applied policies and class maps.

These policy maps are created and applied when running this command:

- AutoQos-4.0-Trust-Dscp-Input-Policy
- AutoQos-4.0-Output-Policy

These class maps are created and applied when running this command:

```
Device(config-if)#auto qos video ip-camera
Device(config-if)#do sh policy-map int fif 1/0/1 | in auto
```

- AutoQos-4.0-Trust-Dscp-Input-Policy
- AutoQos-4.0-Trust-Dscp-Priority-Class1 (match-any)

- AutoQos-4.0-Trust-Dscp-Priority-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Signaling-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Signaling-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Transaction-Data-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Transaction-Data-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Bulk-Data-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Bulk-Data-Class2 (match-any)
- AutoQos-4.0-Trust-Dscp-Scavenger-Class (match-any)
- AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class1 (match-any)
- AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class2 (match-any)
- Class-map: class-default (match-any)

```
Device(config)# interface FiftyGigE1/0/1
Device(config-if)# auto qos video ip-camera
Device(config-if)# end

Device(config-if)#do sh policy-map int FiftyGigE1/0/1
  FiftyGigE1/0/1

    Service-policy input: AutoQos-4.0-Trust-Dscp-Input-Policy

    Class-map: AutoQos-4.0-Trust-Dscp-Priority-Class1 (match-any)
      0 packets
        Match:  dscp ef (46)
        QoS Set
        traffic-class 7

    Class-map: AutoQos-4.0-Trust-Dscp-Priority-Class2 (match-any)
      0 packets
        Match:  dscp cs4 (32) cs5 (40)
        QoS Set
        traffic-class 7
        discard-class 1

    Class-map: AutoQos-4.0-Trust-Dscp-Signaling-Class1 (match-any)
      0 packets
        Match:  dscp cs7 (56)
        QoS Set
        traffic-class 6

    Class-map: AutoQos-4.0-Trust-Dscp-Signaling-Class2 (match-any)
      0 packets
        Match:  dscp cs2 (16) cs3 (24) cs6 (48)
        QoS Set
        traffic-class 6
        discard-class 1

    Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class1 (match-any)
```

```
  0 packets
    Match:  dscp af41 (34)
    QoS Set
    traffic-class 5

Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class2 (match-any)
  0 packets
    Match:  dscp af42 (36) af43 (38)
    QoS Set
    traffic-class 5
    discard-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Transaction-Data-Class1 (match-any)
  0 packets
    Match:  dscp af21 (18)
    QoS Set
    traffic-class 4

Class-map: AutoQos-4.0-Trust-Dscp-Transaction-Data-Class2 (match-any)
  0 packets
    Match:  dscp af22 (20) af23 (22)
    QoS Set
    traffic-class 4
    discard-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Bulk-Data-Class1 (match-any)
  0 packets
    Match:  dscp af11 (10)
    QoS Set
    traffic-class 3

Class-map: AutoQos-4.0-Trust-Dscp-Bulk-Data-Class2 (match-any)
  0 packets
   Match:  dscp af12 (12) af13 (14)
   QoS Set
   traffic-class 3
   discard-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Scavenger-Class (match-any)
  0 packets
    Match:  dscp cs1 (8)
    QoS Set
    traffic-class 2

Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class1 (match-any)
  0 packets
    Match:  dscp af31 (26)
    QoS Set
    traffic-class 1

Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class2 (match-any)
  0 packets
  Match:  dscp af32 (28) af33 (30)
  QoS Set
  traffic-class 1
  discard-class 1

Class-map: class-default (match-any)
  0 packets
    Match: any
    Device(config-if)#
```

This is a sample output of the **sh policy-map type queueing interface** command.

```
    Device(config-if)#do sh policy-map type queueing interface FiftyGigE1/0/1
    FiftyGigE1/0/1

    Service-policy queueing output: AutoQos-4.0-Output-Policy

    queue stats for all priority classes:
    Queueing
    priority level 1
    queue limit 32256 bytes
    (total drops) 0
    (bytes output) 5308

Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
  36 packets
    Match: traffic-class 7
    Priority: Strict,

    Priority Level: 1
    shape (average) cir 3000000000, bc 30000000, be 30000000
    target shape rate 3000000000

Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
  0 packets
    Match: traffic-class 6
    Queueing
    queue limit 300000 bytes
    (total drops) 0
    (bytes output) 0
    shape (average) cir 1000000000, bc 4000000, be 4000000
    target shape rate 1000000000
    bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
      Mean queue depth: 0
        Minimum Maximum  Mark
          thresh  thresh  prob
          0              85     100  1/1
          1              65     100  1/1
          2               0       0  1/1
          3               0       0  1/1
          4               0       0  1/1
          5               0       0  1/1
          6               0       0  1/1
          7               0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
  0 packets
    Match: traffic-class 5
    Queueing
    queue limit 300000 bytes
    (total drops) 0
    (bytes output) 0
    bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
      Mean queue depth: 0
        Minimum Maximum  Mark
          thresh  thresh  prob
          0              85     100  1/1
          1              65     100  1/1
          2               0       0  1/1
          3               0       0  1/1
          4               0       0  1/1
```

```
          5               0       0  1/1
          6               0       0  1/1
          7               0       0  1/1

Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
  0 packets
    Match: traffic-class 4
    Queueing
    queue limit 300000 bytes
    (total drops) 0
    (bytes output) 0
    bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
      Mean queue depth: 0
        Minimum Maximum  Mark
          thresh  thresh  prob
          0              85     100  1/1
          1              65     100  1/1
          2               0       0  1/1
          3               0       0  1/1
          4               0       0  1/1
          5               0       0  1/1
          6               0       0  1/1
          7               0       0  1/1

Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
  0 packets
    Match: traffic-class 3
    Queueing
    queue limit 300000 bytes
    (total drops) 0
    (bytes output) 0
    bandwidth remaining ratio 4

    Exp-weight-constant: 1 (1/2)
      Mean queue depth: 0
        Minimum Maximum  Mark
          thresh  thresh  prob
          0              85     100  1/1
          1              65     100  1/1
          2               0       0  1/1
          3               0       0  1/1
          4               0       0  1/1
          5               0       0  1/1
          6               0       0  1/1
          7               0       0  1/1

Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
  0 packets
    Match: traffic-class 2
    Queueing
    queue limit 300000 bytes
    (total drops) 0
    (bytes output) 0
    bandwidth remaining ratio 1

    Exp-weight-constant: 1 (1/2)
        Mean queue depth: 0
        Minimum Maximum  Mark
          thresh  thresh  prob
          0              85     100  1/1
          1              65     100  1/1
          2               0       0  1/1
```

```
          3               0       0  1/1
          4               0       0  1/1
          5               0       0  1/1
          6               0       0  1/1
          7               0       0  1/1

  Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
    0 packets
      Match: traffic-class 1
      Queueing
      queue limit 300000 bytes
      (total drops) 0
      (bytes output) 0
      bandwidth remaining ratio 9

      Exp-weight-constant: 1 (1/2)
          Mean queue depth: 0
          Minimum Maximum  Mark
            thresh  thresh  prob
            0               85     100  1/1
            1               65     100  1/1
            2                0       0  1/1
            3                0       0  1/1
            4                0       0  1/1
            5                0       0  1/1
            6                0       0  1/1
            7                0       0  1/1

  Class-map: class-default (match-any)
    36 packets
      Match: any
      Queueing
      queue limit 5000000 bytes
      (total drops) 0
      (bytes output) 0
      bandwidth remaining ratio 23

      Exp-weight-constant: 1 (1/2)
          Mean queue depth: 0
          Minimum Maximum  Mark
            thresh  thresh  prob
            0               85     100  1/1
            1               65     100  1/1
            2                0       0  1/1
            3                0       0  1/1
            4                0       0  1/1
            5                0       0  1/1
            6                0       0  1/1
            7                0       0  1/1
```

Example: auto qos video media-player

This is an example of the **auto qos video media-player** command and the applied policies and class maps.

These policy maps are created and applied when running this command:

- AutoQos-4.0-Trust-Dscp-Input-Policy
- AutoQos-4.0-Output-Policy

These class maps are created and applied when running this command: **do sh policy-map ty q interface FiftyGigE1/0/1 | in Class-map**

```
Device(config-if)#do sh policy-map ty q interface FiftyGigE1/0/1 | in Class-map:
        Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
        Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
        Class-map: class-default (match-any)


        Device(config)# interface FiftyGigE1/0/1
        Device(config-if)# auto qos video media-player
        Device(config-if)# end

        Device(config-if)#do sh policy-map interface FiftyGigE1/0/1
        FiftyGigE1/0/1

        Service-policy input: AutoQos-4.0-Trust-Dscp-Input-Policy

        Class-map: AutoQos-4.0-Trust-Dscp-Priority-Class1 (match-any)
        0 packets
        Match:  dscp ef (46)
        QoS Set
        traffic-class 7

        Class-map: AutoQos-4.0-Trust-Dscp-Priority-Class2 (match-any)
        0 packets
        Match:  dscp cs4 (32) cs5 (40)
        QoS Set
        traffic-class 7
        discard-class 1

        Class-map: AutoQos-4.0-Trust-Dscp-Signaling-Class1 (match-any)
        0 packets
        Match:  dscp cs7 (56)
        QoS Set
        traffic-class 6

        Class-map: AutoQos-4.0-Trust-Dscp-Signaling-Class2 (match-any)
        0 packets
        Match:  dscp cs2 (16) cs3 (24) cs6 (48)
        QoS Set
        traffic-class 6
        discard-class 1

        Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class1 (match-any)
        0 packets
        Match:  dscp af41 (34)
        QoS Set
        traffic-class 5

        Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Conf-Class2 (match-any)
        0 packets
        Match:  dscp af42 (36) af43 (38)
        QoS Set
        traffic-class 5
        discard-class 1

        Class-map: AutoQos-4.0-Trust-Dscp-Transaction-Data-Class1 (match-any)
        0 packets
        Match:  dscp af21 (18)
        QoS Set
        traffic-class 4
```

```
        Class-map: AutoQos-4.0-Trust-Dscp-Transaction-Data-Class2 (match-any)
        0 packets
        Match:  dscp af22 (20) af23 (22)
        QoS Set
        traffic-class 4
        discard-class 1

        Class-map: AutoQos-4.0-Trust-Dscp-Bulk-Data-Class1 (match-any)
        0 packets
        Match:  dscp af11 (10)
        QoS Set
        traffic-class 3

        Class-map: AutoQos-4.0-Trust-Dscp-Bulk-Data-Class2 (match-any)
        0 packets
        Match:  dscp af12 (12) af13 (14)
        QoS Set
        traffic-class 3
        discard-class 1

        Class-map: AutoQos-4.0-Trust-Dscp-Scavenger-Class (match-any)
        0 packets
        Match:  dscp cs1 (8)
        QoS Set
        traffic-class 2

        Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class1 (match-any)
        0 packets
        Match:  dscp af31 (26)
        QoS Set
        traffic-class 1

        Class-map: AutoQos-4.0-Trust-Dscp-Multimedia-Stream-Class2 (match-any)
        0 packets
        Match:  dscp af32 (28) af33 (30)
        QoS Set
        traffic-class 1
        discard-class 1

        Class-map: class-default (match-any)
        0 packets
        Match: any
```

Queueing output

```
Device(config-if)#do sh policy-map ty q int FiftyGigE1/0/30
 FiftyGigE1/0/30

  Service-policy queueing output: AutoQos-4.0-Output-Policy

    queue stats for all priority classes:
      Queueing
      priority level 1
      queue limit 32256 bytes
      (total drops) 0
      (bytes output) 5737

    Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
      25 packets
      Match: traffic-class 7
      Priority: Strict,

      Priority Level: 1
      shape (average) cir 3000000000, bc 30000000, be 30000000
      target shape rate 3000000000
```

```
Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
  0 packets
  Match: traffic-class 6
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  shape (average) cir 1000000000, bc 4000000, be 4000000
  target shape rate 1000000000
  bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0              85     100  1/1
    1              65     100  1/1
    2               0       0  1/1
    3               0       0  1/1
    4               0       0  1/1
    5               0       0  1/1
    6               0       0  1/1
    7               0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
  0 packets
  Match: traffic-class 5
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0              85     100  1/1
    1              65     100  1/1
    2               0       0  1/1
    3               0       0  1/1
    4               0       0  1/1
    5               0       0  1/1
    6               0       0  1/1
    7               0       0  1/1

Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
  0 packets
  Match: traffic-class 4
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0              85     100  1/1
    1              65     100  1/1
    2               0       0  1/1
    3               0       0  1/1
```

```
    4               0       0  1/1
    5               0       0  1/1
    6               0       0  1/1
    7               0       0  1/1

Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
  0 packets
  Match: traffic-class 3
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 4

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0               85     100  1/1
    1               65     100  1/1
    2                0       0  1/1
    3                0       0  1/1
    4                0       0  1/1
    5                0       0  1/1
    6                0       0  1/1
    7                0       0  1/1

Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
  0 packets
  Match: traffic-class 2
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 1

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0               85     100  1/1
    1               65     100  1/1
    2                0       0  1/1
    3                0       0  1/1
    4                0       0  1/1
    5                0       0  1/1
    6                0       0  1/1
    7                0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
  0 packets
  Match: traffic-class 1
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0               85     100  1/1
    1               65     100  1/1
```

```
    2               0       0  1/1
    3               0       0  1/1
    4               0       0  1/1
    5               0       0  1/1
    6               0       0  1/1
    7               0       0  1/1

  Class-map: class-default (match-any)
    19 packets
    Match: any
    Queueing
    queue limit 5000000 bytes
    (total drops) 0
    (bytes output) 0
    bandwidth remaining ratio 23

      Exp-weight-constant: 1 (1/2)
      Mean queue depth: 0
          Minimum Maximum  Mark
                  thresh  thresh  prob
    0               85     100  1/1
    1               65     100  1/1
    2                0       0  1/1
    3                0       0  1/1
    4                0       0  1/1
    5                0       0  1/1
    6                0       0  1/1
    7                0       0  1/1
```

Example: auto qos voip trust

This is an example of the **auto qos voip trust** command and the applied policies and class maps.

These policy maps are created and applied when running this command:`do sh ru interface FiftyGigE1/0/1`

```
Device(config-if)#do sh ru interface FiftyGigE1/0/30
nterface FiftyGigE1/0/30
 auto qos trust
 service-policy input AutoQos-4.0-Trust-Cos-Input-Policy
 service-policy type queueing output AutoQos-4.0-Output-Policy

Device(config-if)#do sh policy-map interface FiftyGigE1/0/1
FiftyGigE1/0/1
Service-policy input: AutoQos-4.0-Trust-Cos-Input-Policy
Class-map: class-default (match-any)
0 packets
Match: any
QoS Set
traffic-class cos table AutoQos-4.0-Trust-Cos-Table
police:
cir 5000000000 bps, bc 1024000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
drop
conformed 0000 bps, exceeded 0000 bps
```

These class maps are created and applied when running this command: `do sh policy-map ty q interface FiftyGigE1/0/1 | in Auto`

```
Device(config-if)#do sh policy-map ty q interface FiftyGigE1/0/1 | in Class-map:
Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
```

```
Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
Class-map: class-default (match-any)
```

This is a sample output of the **show policy-map interface** command for a Layer 2 interface. Depending on the type of interface (Layer 3 or Layer 2), QoS policies from trust DSCP or CoS will be installed.

```
Device(config-if)#do sh policy-map interface FiftyGigE1/0/1
FiftyGigE1/0/1
Service-policy input: AutoQos-4.0-Trust-Cos-Input-Policy
Class-map: class-default (match-any)
0 packets
Match: any
QoS Set
traffic-class cos table AutoQos-4.0-Trust-Cos-Table
police:
cir 5000000000 bps, bc 1024000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
drop
conformed 0000 bps, exceeded 0000 bps
```

This is a sample output of the **show policy-map type queueing interface** command.

```
Device(config)# interface FiftyGigE 6/0/1
Device(config-if)# auto qos voip trust
Device(config-if)# end
Device(config-if)#do sh policy-map type queueing interface FiftyGigE1/0/1
FiftyGigE1/0/1

Service-policy queueing output: AutoQos-4.0-Output-Policy

queue stats for all priority classes:
Queueing
priority level 1
queue limit 32256 bytes
(total drops) 0
(bytes output) 0

Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
0 packets
Match: traffic-class 7
Priority: Strict,

Priority Level: 1
shape (average) cir 30000000000, bc 300000000, be 300000000
target shape rate 30000000000

Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
0 packets
Match: traffic-class 6
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
```

```
Minimum Maximum  Mark
thresh  thresh  prob
0               85     100  1/1
1               65     100  1/1
2                0       0  1/1
3                0       0  1/1
4                0       0  1/1
5                0       0  1/1
6                0       0  1/1
7                0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
0 packets
Match: traffic-class 5
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0               85     100  1/1
1               65     100  1/1
2                0       0  1/1
3                0       0  1/1
4                0       0  1/1
5                0       0  1/1
6                0       0  1/1
7                0       0  1/1

Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
0 packets
Match: traffic-class 4
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0               85     100  1/1
1               65     100  1/1
2                0       0  1/1
3                0       0  1/1
4                0       0  1/1
5                0       0  1/1
6                0       0  1/1
7                0       0  1/1

Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
0 packets
Match: traffic-class 3
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 4
```

```
Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
0 packets
Match: traffic-class 2
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 1

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
0 packets
Match: traffic-class 1
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: class-default (match-any)
0 packets
Match: any
Queueing
queue limit 5000000 bytes
(total drops) 0
(bytes output) 0
```

```
bandwidth remaining ratio 23

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1
```

Example: auto qos voip cisco-phone

This is an example of the **auto qos voip cisco-phone** command and the applied policies and class maps.

These policy maps are created and applied when running this command:

- AutoQos-4.0-CiscoPhone-Input-Policy
- AutoQos-4.0-Output-Policy

These class maps are created and applied when running this command: **do sh policy-map interface FiftyGigE1/0/1 | in Class-map**

```
Device(config-if)#do sh policy-map interface FiftyGigE1/0/1 | in Class-map:
        Class-map: AutoQos-4.0-Voip-Data-CiscoPhone-Class (match-any)
        Class-map: AutoQos-4.0-Voip-Signal-CiscoPhone-Class (match-any)
        Class-map: AutoQos-4.0-Default-Class (match-any)
        Class-map: class-default (match-any)
```

These class maps are created and applied when running this command: `do sh policy-map ty q interface FiftyGigE1/0/1 | in Auto`

- AutoQos-4.0-Output-Policy
- AutoQos-4.0-Output-Priority-Queue (match-any)
- AutoQos-4.0-Output-Signaling-Queue (match-any)
- AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
- AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
- AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
- AutoQos-4.0-Output-Scavenger-Queue (match-any)
- AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)

```
Device(config)# interface FiftyGigE1/0/1
Device(config-if)# auto qos voip cisco-phone
Device(config-if)# end

Device(config-if)#do sh policy-map interface FiftyGigE1/0/1
FiftyGigE1/0/1
Service-policy input: AutoQos-4.0-CiscoPhone-Input-Policy
Class-map: AutoQos-4.0-Voip-Data-CiscoPhone-Class (match-any)
```

```
        0 packets
        Match: cos 5
        QoS Set
        traffic-class 7
        police:
        cir 5 %
        cir 500000000 bps, bc 15625000 bytes
        conformed 0 bytes; actions:
        transmit
        exceeded 0 bytes; actions:
        set-discard-class-transmit 1
        conformed 0000 bps, exceeded 0000 bps
        Class-map: AutoQos-4.0-Voip-Signal-CiscoPhone-Class (match-any)
        0 packets
        Match: cos 3
        QoS Set
        traffic-class 6
        police:
        cir 1 %
        cir 100000000 bps, bc 3125000 bytes
        conformed 0 bytes; actions:
        transmit
        exceeded 0 bytes; actions:
        set-discard-class-transmit 1
        conformed 0000 bps, exceeded 0000 bps
        Class-map: AutoQos-4.0-Default-Class (match-any)
        0 packets
        Match: access-group name AutoQos-4.0-Acl-Default
        QoS Set
        dscp default
        Class-map: class-default (match-any)
        0 packets
        Match: any

Device(config-if)#do sh policy-map ty q interface FiftyGigE1/0/1
FiftyGigE1/0/1
Service-policy queueing output: AutoQos-4.0-Output-Policy
queue stats for all priority classes:
Queueing
priority level 1
queue limit 32256 bytes
(total drops) 0
(bytes output) 0
Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
0 packets
Match: traffic-class 7
Priority: Strict,

Priority Level: 1
shape (average) cir 3000000000, bc 30000000, be 30000000
target shape rate 3000000000
Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
0 packets
Match: traffic-class 6
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
shape (average) cir 1000000000, bc 4000000, be 4000000
target shape rate 1000000000
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
```

```
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
0 packets
Match: traffic-class 5
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
0 packets
Match: traffic-class 4
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
0 packets
Match: traffic-class 3
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 4

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
```

```
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
0 packets
Match: traffic-class 2
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 1

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
0 packets
Match: traffic-class 1
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: class-default (match-any)
0 packets
Match: any
Queueing
queue limit 5000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 23

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
```

```
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
```

Example: auto qos voip cisco-softphone

This is an example of the **auto qos voip cisco-softphone** command and the applied policies and class maps.

These policy maps are created and applied when running this command: **do sh ru interface FiftyGigE1/0/1**

```
Device(config-if)#do sh ru interface FiftyGigE1/0/1
Building configuration...
Current configuration : 215 bytes
!
interface FiftyGigE1/0/1
auto qos voip cisco-softphone
service-policy input AutoQos-4.0-CiscoSoftPhone-Input-Policy
service-policy type queueing output AutoQos-4.0-Output-Policy
```

These class maps are created and applied when running this command:`do sh policy-map int fif 1/0/1`

- AutoQos-4.0-Voip-Data-Dscp-Class (match-any)
- AutoQos-4.0-Voip-Data-Cos-Class (match-any)
- AutoQos-4.0-Voip-Signal-Dscp-Class (match-any)
- AutoQos-4.0-Voip-Signal-Cos-Class (match-any)
- AutoQos-4.0-Signaling-Class (match-any)
- AutoQos-4.0-Multimedia-Conf-Class (match-any)
- AutoQos-4.0-Transaction-Class (match-any)
- AutoQos-4.0-Bulk-Data-Class (match-any)
- AutoQos-4.0-Scavanger-Class (match-any)
- AutoQos-4.0-Default-Class (match-any)
- Class-map: class-default (match-any)

These class maps are created and applied when running this command:`do sh policy-map ty q int fif 1/0/1`

- AutoQos-4.0-Output-Policy
- AutoQos-4.0-Output-Priority-Queue (match-any)
- AutoQos-4.0-Output-Signaling-Queue (match-any)
- AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
- AutoQos-4.0-Output-Transaction-Data-Queue (match-any)

- AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
- AutoQos-4.0-Output-Scavenger-Queue (match-any)
- AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
- Class-map: class-default (match-any)

```
Device(config)# interface FiftyGigE1/0/1
Device(config-if)# auto qos voip cisco-softphone
Device(config-if)# end

Device(config-if)#do sh policy-map int FiftyGigE1/0/1
Device(config-if)#auto qos voip cisco-softphone
Device(config-if)#do sh policy-map interface FiftyGigE1/0/1
FiftyGigE1/0/1

Service-policy input: AutoQos-4.0-CiscoSoftPhone-Input-Policy

Class-map: AutoQos-4.0-Voip-Data-Dscp-Class (match-any)
0 packets
Match:  dscp ef (46)
QoS Set
traffic-class 7
police:
cir 4 %
cir 4000000000 bps, bc 125000000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
conformed 0000 bps, exceeded 0000 bps

Class-map: AutoQos-4.0-Voip-Data-Cos-Class (match-any)
0 packets
Match: cos  5
QoS Set
traffic-class 7
police:
cir 4 %
cir 4000000000 bps, bc 125000000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
conformed 0000 bps, exceeded 0000 bps

Class-map: AutoQos-4.0-Voip-Signal-Dscp-Class (match-any)
0 packets
Match:  dscp cs3 (24)
QoS Set
traffic-class 6
police:
cir 1 %
cir 1000000000 bps, bc 31250000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
conformed 0000 bps, exceeded 0000 bps

Class-map: AutoQos-4.0-Voip-Signal-Cos-Class (match-any)
0 packets
```

```
Match: cos  3
QoS Set
traffic-class 6
police:
cir 1 %
cir 1000000000 bps, bc 31250000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
conformed 0000 bps, exceeded 0000 bps

Class-map: AutoQos-4.0-Signaling-Class (match-any)
0 packets
Match: access-group name AutoQos-4.0-Acl-Signaling
QoS Set
traffic-class 5
dscp cs3
police:
cir 1 %
cir 1000000000 bps, bc 31250000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
conformed 0000 bps, exceeded 0000 bps

Class-map: AutoQos-4.0-Multimedia-Conf-Class (match-any)
0 packets
Match: access-group name AutoQos-4.0-Acl-Multimedia-Conf
QoS Set
traffic-class 4
dscp af41
police:
cir 5 %
cir 5000000000 bps, bc 156250000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
set-dscp-transmit dscp table AutoQos-Police-Markdown-DSCP-Table
conformed 0000 bps, exceeded 0000 bps

Class-map: AutoQos-4.0-Transaction-Class (match-any)
0 packets
Match: access-group name AutoQos-4.0-Acl-Transaction-Data
QoS Set
traffic-class 3
dscp af21
police:
cir 10 %
cir 10000000000 bps, bc 312500000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
set-dscp-transmit dscp table AutoQos-Police-Markdown-DSCP-Table
conformed 0000 bps, exceeded 0000 bps

Class-map: AutoQos-4.0-Bulk-Data-Class (match-any)
0 packets
Match: access-group name AutoQos-4.0-Acl-Bulk-Data
QoS Set
traffic-class 2
```

```
dscp af11
police:
cir 10 %
cir 10000000000 bps, bc 312500000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
set-dscp-transmit dscp table AutoQos-Police-Markdown-DSCP-Table
conformed 0000 bps, exceeded 0000 bps

Class-map: AutoQos-4.0-Scavanger-Class (match-any)
0 packets
Match: access-group name AutoQos-4.0-Acl-Scavanger
QoS Set
traffic-class 1
dscp cs1
police:
cir 10 %
cir 10000000000 bps, bc 312500000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
conformed 0000 bps, exceeded 0000 bps

Class-map: AutoQos-4.0-Default-Class (match-any)
0 packets
Match: access-group name AutoQos-4.0-Acl-Default
QoS Set
dscp default
police:
cir 10 %
cir 10000000000 bps, bc 312500000 bytes
conformed 0 bytes; actions:
transmit
exceeded 0 bytes; actions:
set-discard-class-transmit 1
conformed 0000 bps, exceeded 0000 bps

Class-map: class-default (match-any)
0 packets
Match: any
```

This is a sample output of the **sh policy-map type queueing interface** command.

```
Device(config-if)#do sh policy-map type queueing interface FiftyGigE1/0/1
        FiftyGigE1/0/1

        Service-policy queueing output: AutoQos-4.0-Output-Policy

        queue stats for all priority classes:
        Queueing
        priority level 1
        queue limit 32256 bytes
        (total drops) 0
        (bytes output) 0

        Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
        0 packets
        Match: traffic-class 7
        Priority: Strict,

        Priority Level: 1
```

```
shape (average) cir 30000000000, bc 300000000, be 300000000
target shape rate 30000000000

Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
0 packets
Match: traffic-class 6
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
0 packets
Match: traffic-class 5
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
0 packets
Match: traffic-class 4
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
```

```
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
0 packets
Match: traffic-class 3
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 4

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
0 packets
Match: traffic-class 2
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 1

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
0 packets
Match: traffic-class 1
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
```

```
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1

Class-map: class-default (match-any)
0 packets
Match: any
Queueing
queue limit 5000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 23

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum  Mark
thresh  thresh  prob
0              85     100  1/1
1              65     100  1/1
2               0       0  1/1
3               0       0  1/1
4               0       0  1/1
5               0       0  1/1
6               0       0  1/1
7               0       0  1/1
```

Example: auto qos classify police

This is an example of the **auto qos classify police** command and the applied policies and class maps.

These policy maps are created and applied when running this command: **do sh ru int FiftyGigE1/0/30**

```
Device(config-if)#do sh ru int FiftyGigE1/0/30
Building configuration...

Current configuration : 186 bytes
!
interface FiftyGigE1/0/30
 auto qos classify police
 service-policy input AutoQos-4.0-Classify-Police-Input-Policy
 service-policy type queueing output AutoQos-4.0-Output-Policy
```

```
Device(config-if)#do sh policy-map int FiftyGigE1/0/30  | in Class
  Service-policy input: AutoQos-4.0-Classify-Police-Input-Policy
    Class-map: AutoQos-4.0-Signaling-Class (match-any)
    Class-map: AutoQos-4.0-Multimedia-Conf-Class (match-any)
    Class-map: AutoQos-4.0-Transaction-Class (match-any)
    Class-map: AutoQos-4.0-Bulk-Data-Class (match-any)
    Class-map: AutoQos-4.0-Scavanger-Class (match-any)
    Class-map: AutoQos-4.0-Default-Class (match-any)
    Class-map: class-default (match-any)
```

These class maps are created and applied when running this command:`do sh policy-map ty q int fif 1/0/30`

```
do sh policy-map ty queue int FiftyGigE1/0/30  | in Class
    Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
    Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
    Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
```

```
    Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
    Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
    Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
    Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
    Class-map: class-default (match-any)


do sh policy-map   int FiftyGigE1/0/30
 FiftyGigE1/0/30

  Service-policy input: AutoQos-4.0-Classify-Police-Input-Policy

    Class-map: AutoQos-4.0-Signaling-Class (match-any)
      0 packets
      Match: access-group name AutoQos-4.0-Acl-Signaling
      QoS Set
        dscp cs3
        traffic-class 6
      police:
          cir 10 %
          cir 1000000000 bps, bc 31250000 bytes
        conformed 0 bytes; actions:
          transmit
        exceeded 0 bytes; actions:
          set-discard-class-transmit 1
        conformed 0000 bps, exceeded 0000 bps

    Class-map: AutoQos-4.0-Multimedia-Conf-Class (match-any)
      0 packets
      Match: access-group name AutoQos-4.0-Acl-Multimedia-Conf
      QoS Set
        dscp af41
        traffic-class 5
      police:
          cir 10 %
          cir 1000000000 bps, bc 31250000 bytes
        conformed 0 bytes; actions:
          transmit
        exceeded 0 bytes; actions:
          set-dscp-transmit dscp table AutoQos-Police-Markdown-DSCP-Table
          set-discard-class-transmit 1
        conformed 0000 bps, exceeded 0000 bps

    Class-map: AutoQos-4.0-Transaction-Class (match-any)
      0 packets
      Match: access-group name AutoQos-4.0-Acl-Transaction-Data
      QoS Set
        dscp af21
        traffic-class 4
      police:
          cir 10 %
          cir 1000000000 bps, bc 31250000 bytes
        conformed 0 bytes; actions:
          transmit
        exceeded 0 bytes; actions:
          set-dscp-transmit dscp table AutoQos-Police-Markdown-DSCP-Table
          set-discard-class-transmit 1
        conformed 0000 bps, exceeded 0000 bps

    Class-map: AutoQos-4.0-Bulk-Data-Class (match-any)
      0 packets
      Match: access-group name AutoQos-4.0-Acl-Bulk-Data
      QoS Set
        dscp af11
        traffic-class 3
```

```
    police:
        cir 10 %
        cir 1000000000 bps, bc 31250000 bytes
      conformed 0 bytes; actions:
        transmit
      exceeded 0 bytes; actions:
        set-dscp-transmit dscp table AutoQos-Police-Markdown-DSCP-Table
        set-discard-class-transmit 1
      conformed 0000 bps, exceeded 0000 bps

  Class-map: AutoQos-4.0-Scavanger-Class (match-any)
    0 packets
    Match: access-group name AutoQos-4.0-Acl-Scavanger
    QoS Set
      dscp cs1
      traffic-class 2
    police:
        cir 10 %
        cir 1000000000 bps, bc 31250000 bytes
      conformed 0 bytes; actions:
        transmit
      exceeded 0 bytes; actions:
        set-discard-class-transmit 1
      conformed 0000 bps, exceeded 0000 bps

  Class-map: AutoQos-4.0-Default-Class (match-any)
    110 packets
    Match: access-group name AutoQos-4.0-Acl-Default
    QoS Set
      dscp default
    police:
        cir 10 %
        cir 1000000000 bps, bc 31250000 bytes
      conformed 13838 bytes; actions:
        transmit
      exceeded 0 bytes; actions:
        set-discard-class-transmit 1
      conformed 0000 bps, exceeded 0000 bps

  Class-map: class-default (match-any)
    4227 packets
    Match: any
```

This is a sample output of the **sh policy-map type queueing interface** command.

```
do sh policy-map ty q  int FiftyGigE1/0/30
 FiftyGigE1/0/30

  Service-policy queueing output: AutoQos-4.0-Output-Policy

    queue stats for all priority classes:
      Queueing
      priority level 1
      queue limit 32256 bytes
      (total drops) 0
      (bytes output) 11732

    Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
      70 packets
      Match: traffic-class 7
      Priority: Strict,

      Priority Level: 1
      shape (average) cir 3000000000, bc 30000000, be 30000000
      target shape rate 3000000000
```

```
Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
  0 packets
  Match: traffic-class 6
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  shape (average) cir 1000000000, bc 4000000, be 4000000
  target shape rate 1000000000
  bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0              85     100  1/1
    1              65     100  1/1
    2               0       0  1/1
    3               0       0  1/1
    4               0       0  1/1
    5               0       0  1/1
    6               0       0  1/1
    7               0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
  0 packets
  Match: traffic-class 5
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0              85     100  1/1
    1              65     100  1/1
    2               0       0  1/1
    3               0       0  1/1
    4               0       0  1/1
    5               0       0  1/1
    6               0       0  1/1
    7               0       0  1/1

Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
  0 packets
  Match: traffic-class 4
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0              85     100  1/1
    1              65     100  1/1
    2               0       0  1/1
    3               0       0  1/1
```

```
    4               0       0  1/1
    5               0       0  1/1
    6               0       0  1/1
    7               0       0  1/1

Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
  0 packets
  Match: traffic-class 3
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 4

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0               85     100  1/1
    1               65     100  1/1
    2                0       0  1/1
    3                0       0  1/1
    4                0       0  1/1
    5                0       0  1/1
    6                0       0  1/1
    7                0       0  1/1

Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
  0 packets
  Match: traffic-class 2
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 1

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0               85     100  1/1
    1               65     100  1/1
    2                0       0  1/1
    3                0       0  1/1
    4                0       0  1/1
    5                0       0  1/1
    6                0       0  1/1
    7                0       0  1/1

Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
  0 packets
  Match: traffic-class 1
  Queueing
  queue limit 300000 bytes
  (total drops) 0
  (bytes output) 0
  bandwidth remaining ratio 9

    Exp-weight-constant: 1 (1/2)
    Mean queue depth: 0
        Minimum Maximum  Mark
                thresh  thresh  prob
    0               85     100  1/1
    1               65     100  1/1
```

```
        2               0       0  1/1
        3               0       0  1/1
        4               0       0  1/1
        5               0       0  1/1
        6               0       0  1/1
        7               0       0  1/1

    Class-map: class-default (match-any)
      68 packets
      Match: any
      Queueing
      queue limit 5000000 bytes
      (total drops) 0
      (bytes output) 0
      bandwidth remaining ratio 23

        Exp-weight-constant: 1 (1/2)
        Mean queue depth: 0
            Minimum Maximum  Mark
                   thresh  thresh  prob
        0              85     100  1/1
        1              65     100  1/1
        2               0       0  1/1
        3               0       0  1/1
        4               0       0  1/1
        5               0       0  1/1
        6               0       0  1/1
        7               0       0  1/1
```

Example: auto qos global compact

This is an example of the **auto qos global compact** command.

```
Device# configure terminal
Device(config)# auto qos global compact
Device(config)# interface FiftyGigE1/0/30
Device(config-if)# auto qos voip trust

Device# show auto qos

FiftyGigE1/0/30
auto qos voip trust

Device# show running-config interface FiftyGigE1/0/30
interface FiftyGigE1/0/30
auto qos trust
service-policy input AutoQos-4.0-Trust-Cos-Input-Policy
service-policy type queueing output AutoQos-4.0-Output-Policy
```

This is a sample output of the `do sh policy-map interface FiftyGigE1/0/30` command

```
Device(config-if)#do sh policy-map interface FiftyGigE1/0/30
        FiftyGigE1/0/30
        Service-policy input: AutoQos-4.0-Trust-Cos-Input-Policy
        Class-map: class-default (match-any)
        0 packets
        Match: any
        QoS Set
        traffic-class cos table AutoQos-4.0-Trust-Cos-Table
        police:
        cir 5000000000 bps, bc 1024000 bytes
```

```
        conformed 0 bytes; actions:
        transmit
        exceeded 0 bytes; actions:
        drop
        conformed 0000 bps, exceeded 0000 bps
```

This is a sample output of the `do sh policy-map ty q interface FiftyGigE1/0/30` command

```
Device(config-if)#do sh policy-map ty q interface FiftyGigE1/0/30
        FiftyGigE1/0/30
        Service-policy queueing output: AutoQos-4.0-Output-Policy
        queue stats for all priority classes:
        Queueing
        priority level 1
        queue limit 32256 bytes
        (total drops) 0
        (bytes output) 0
        Class-map: AutoQos-4.0-Output-Priority-Queue (match-any)
        0 packets
        Match: traffic-class 7
        Priority: Strict,

        Priority Level: 1
        shape (average) cir 3000000000, bc 30000000, be 30000000
        target shape rate 3000000000
        Class-map: AutoQos-4.0-Output-Signaling-Queue (match-any)
        0 packets
        Match: traffic-class 6
        Queueing
        queue limit 300000 bytes
        (total drops) 0
        (bytes output) 0
        shape (average) cir 1000000000, bc 4000000, be 4000000
        target shape rate 1000000000
        bandwidth remaining ratio 9

        Exp-weight-constant: 1 (1/2)
        Mean queue depth: 0
        Minimum Maximum Mark
        thresh thresh prob
        0 85 100 1/1
        1 65 100 1/1
        2 0 0 1/1
        3 0 0 1/1
        4 0 0 1/1
        5 0 0 1/1
        6 0 0 1/1
        7 0 0 1/1

        Class-map: AutoQos-4.0-Output-Multimedia-Conf-Queue (match-any)
        0 packets
        Match: traffic-class 5
        Queueing
        queue limit 300000 bytes
        (total drops) 0
        (bytes output) 0
        bandwidth remaining ratio 9

        Exp-weight-constant: 1 (1/2)
        Mean queue depth: 0
        Minimum Maximum Mark
        thresh thresh prob
        0 85 100 1/1
        1 65 100 1/1
        2 0 0 1/1
```

```
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Transaction-Data-Queue (match-any)
0 packets
Match: traffic-class 4
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Bulk-Data-Queue (match-any)
0 packets
Match: traffic-class 3
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 4

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Scavenger-Queue (match-any)
0 packets
Match: traffic-class 2
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 1

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
```

```
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: AutoQos-4.0-Output-Multimedia-Stream-Queue (match-any)
0 packets
Match: traffic-class 1
Queueing
queue limit 300000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 9

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1

Class-map: class-default (match-any)
0 packets
Match: any
Queueing
queue limit 5000000 bytes
(total drops) 0
(bytes output) 0
bandwidth remaining ratio 23

Exp-weight-constant: 1 (1/2)
Mean queue depth: 0
Minimum Maximum Mark
thresh thresh prob
0 85 100 1/1
1 65 100 1/1
2 0 0 1/1
3 0 0 1/1
4 0 0 1/1
5 0 0 1/1
6 0 0 1/1
7 0 0 1/1
```