VMI QoS

The VMI QoS feature supports full modular quality of service (QoS) CLI (MQC) configurations on virtual multipoint interfaces. QoS configurations include remarking, shaping, and policing.

The VMI provides services that map outgoing packets to the appropriate PPP over Ethernet (PPPoE) sessions based on the next-hop forwarding address for that packet.

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see Bug Search Tool and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Restrictions for VMI QoS

You can apply the quality of service (QoS) policy to only one outgoing interface that the PPP over Ethernet (PPPoE) session is traversing.

Information About VMI QoS

VMI QoS

Virtual multipoint interfaces (VMIs) support full modular quality of service (QoS) CLI (MQC) configurations, which includes remarking, shaping, and policing. For details, see the *QoS Modular QoS Command-Line Interface Configuration Guide* publication that is part of the *Quality of Service Solutions Configuration Guide Library*.

Configuration Examples for VMI QoS

Examples: QoS Configuration for VMI

The following example shows a configuration for quality of service (QoS) features:

```
class-map match-any chat
 match dscp af11
class-map match-any voice
 match dscp ef
class-map match-any af23
 match dscp af23
class-map match-any af31
 match dscp af31
class-map match-any af33
 match dscp af33
class-map match-any af42
 match dscp af42
policy-map multiple_sessions
 class chat
 bandwidth 50
 class voice
 bandwidth 100
 class af23
 bandwidth 150
 class af31
 bandwidth 200
 class af33
 bandwidth 250
 class af42
 bandwidth 300
 interface virtual-template 1
service-policy output multiple_sessions
```

The following example shows a configuration for shaping:

```
class-map match-any chat
match dscp af11
class-map match-any voice
match dscp ef
policy-map shape_child
class chat
bandwidth 200
class voice
```

```
priority 100
policy-map shape_parent
class class-default
shape average 400000
service-policy shape_child
```

The following example shows a configuration for assigning a policy to a virtual multipoint interface (VMI):

```
interface vmi1
service-policy output shape_parent
```

The following example shows a configuration for policing actions:

```
class-map match-any af12
match dscp af12
class-map match-any af41
match dscp af41
policy-map police
class af12
police 1000000 conform-action set-dscp-transmit af31 exceed-action set-dscp-transmit af23
violate-action set-dscp-transmit af23
class af41
police 1000000 conform-action transmit exceed-action drop violate-action drop
```

The following example shows a configuration for assigning a policy to a virtual template interface:

```
interface virtual-template 1
service-policy output police
```

Additional References

Related Documents

Related Topic	Document Title
Cisco IOS commands	Cisco IOS Master Command List, All Releases
Quality of service (QoS) commands	Cisco IOS Quality of Service Solutions Command Reference
Modular QoS CLI (MQC) configuration	*QoS Modular QoS Command-Line Interface Configuration Guide* (part of the *Quality of Service Solutions Configuration Guide Library*)

Technical Assistance

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	http://www.cisco.com/cisco/web/support/index.html

Feature Information for VMI QoS

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Table 1: Feature Information for VMI QoS

Feature Name	Releases	Feature Information
VMI QoS	15..2(1)T	The virtual multipoint interface (VMI) supports full modular quality of service (QoS) CLI (MQC) configurations, which includes remarking, shaping, and policing. No commands were introduced or modified.