



IPv6 Non-AVC QoS Support

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Information About IPv6 Non-AVC QoS Support

From Cisco IOS XE Amsterdam 17.2.1, the IPv6 Non-AVC QoS feature is supported on Fabric and FlexConnect local switching, where QoS is performed at the AP, on par with the IPv4 functionality.



Note This feature is not supported on Cisco Aironet 1700 Series Access Points, Cisco Aironet 2700 Series Access Points, and Cisco Aironet 3700 Series Access Points.

The following actions are supported for IPv6 Non-AVC QoS:

- Marking the DSCP value for IPv6 packets
- Dropping IPv6 packets based on the DSCP value
- Policing IPv6 traffic

Configuring IPv6 Non-AVC QoS

The following sections contain information about the various configurations that comprise the configuration of IPv6 Non-AVC QoS:

Marking DSCP Values for an IPv6 Packet

Procedure

	Command or Action	Purpose
Step 1	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 2	policy-map <i>policy-map-name</i> Example: Device(config)# policy-map testpolicy	Creates a policy map.
Step 3	class <i>class-map-name</i> Example: Device(config-pmap)#class testmap	Creates a policy criteria.
Step 4	set dscp <0-63> Example: Device(config-pmap-c)#set dscp 34	Sets the DSCP value in an IPv6 packet between 0 and 63.

Dropping an IPv6 Packet with DSCP Values

Procedure

	Command or Action	Purpose
Step 1	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 2	policy-map <i>policy-map-name</i> Example: Device(config)# policy-map drop_dscp	Creates a policy map.
Step 3	class <i>class-map-name</i> Example: Device(config-pmap)#class drop_dscp_class	Creates a policy criteria.
Step 4	police cir <8000 - 10000000000> Example: Device(config-pmap-c)#police cir 8000	Polices the committed information rate between 8000 and 10000000000. Target bit rate (Bits per second).

	Command or Action	Purpose
Step 5	conform-action drop Example: Device(config-pmap-c-police)#conform action drop	Configures the conform-action drop command, the action when the rate is less than the conform burst.
Step 6	exceed-action drop Example: Device(config-pmap-c-police)#exceed-action drop	Configures the exceed-action drop command, the action when the rate is within the conform and conform plus exceed burst.

Policing IPv6 Traffic

Procedure

	Command or Action	Purpose
Step 1	configure terminal Example: Device# configure terminal	Enters global configuration mode.
Step 2	policy-map <i>policy-map-name</i> Example: Device(config)# policy-map drop_dscp	Creates a policy map.
Step 3	class <i>class-map-name</i> Example: Device(config-pmap)#class drop_dscp_class	Creates a policy criteria.
Step 4	police cir <8000 - 10000000000> Example: Device(config-pmap-c)#police cir 8000	Polices the committed information rate between 8000 and 10000000000. Target bit rate (Bits per second).
Step 5	conform-action transmit Example: Device(config-pmap-c-police)#conform-action transmit	Configures the conform-action transmit command, for transmitting packets.
Step 6	exceed-action drop Example: Device(config-pmap-c-police)#exceed-action drop	Configures the exceed-action drop command, the action when the rate is within conform and conform plus exceed burst.

Verifying IPv6 Non-AVC QoS

- To verify the DSCP values for IPv6 packets, IPv6 packets that are dropped, and the policing of IPv6 traffic, use the **show policy-map** command:

The following is a sample output of the **show** command that verifies the DSCP value for an IPv6 packet:

```
Device# show policy-map
1 policymaps
Policy Map Set-dscp type:qos client:default
  Class Set-dscp1_ADV_UI_CLASS
    set dscp af41 (34)
  Class class-default
    no actions
```

- The following is a sample output of the **show** command that verifies the IPv6 packets that are dropped:

```
Device# show policy-map
1 policymaps
Policy Map Drop-dscp type:qos client:default
  Class Drop-dscp1_ADV_UI_CLASS
    drop

  Class class-default
    no actions
```

- The following is a sample output of the **show** command that verifies the policing of IPv6 traffic:

```
Device# show policy-map
1 policymaps
Policy Map Drop-traffic type:qos client:default
  Class Drop-traffic1_ADV_UI_CLASS
    police rate 2000000 bps (250000Bytes/s)
    conform-action
    exceed-action

  Class class-default
    no actions
```