

基于队列的QoS子接口调用注意事项

QoS

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组网及说明

设备型号：SR6602

软件版本：version 5.20, Release 2603P04

需求：在子接口配置基于队列的QoS的限速。

配置步骤

基于类的队列CBQ的配置步骤如下：

(1)定义类

acl number 3150

description NM

rule 0 permit ip vpn-instance bo-general source 5.5.5.5 0

acl number 3140

description VC

rule 0 permit ip vpn-instance bo-general source 4.4.4.4 0

acl number 3130

description IS

rule 0 permit tcp vpn-instance bo-general source 3.3.3.3 0 source-port eq 8073

acl number 3120

description NS

rule 5 permit tcp vpn-instance bo-general source 2.2.2.2 0 source-port eq ftp

traffic classifier NM operator or

if-match acl 3150

traffic classifier VC operator or

if-match acl 3140

traffic classifier IS operator or

if-match acl 3130

traffic classifier NS operator or

if-match acl 3120

(2)定义流行为

traffic behavior VC_2M

queue af bandwidth 1500

traffic behavior IS_2M

queue af bandwidth 125

traffic behavior NS_2M

queue af bandwidth 125

traffic behavior NM_2M

queue af bandwidth 50

(3)定义策略

qos policy TQ_BJDC_2M

classifier NM behavior NM_2M

classifier VC behavior VC_2M

classifier IS behavior IS_2M

classifier NS behavior NS_2M

(4)在接口视图或PVC视图下应用QoS策略

interface GigabitEthernet2/2/1.898

description HLZCA1-CP02_G2/0/2

vlan-type dot1q vid 898

qos max-bandwidth 2250

bandwidth 2048

ip address 10.1.1.2 255.255.255.0

qos lr outbound cir 2048 cbs 128000 ebs 0

qos apply policy TQ_BJDC_2M outbound

#

配置关键点

1.若是子接口，则接口需要使能LR功能以保证CBQ队列功能生效，同时需要配置qos max-bandwidth命令以提供CBQ计算的基准带宽。

2.qos max-bandwidth基准带宽仅80%用于流行为里面的限速，即基准带宽乘以0.8需大于等于流行为里限速的叠加（本案例即2250x0.8 大于等于（1500+125+125+50））不满足则会报错，比如配置204

8.

3.在未配置子接口基准带宽条件下，计算CBQ时实际使用的基准带宽取值为0Kbps，如：

traffic behavior 1

queue af bandwidth pct 5

#

interface GigabitEthernet0/0/0.100

vlan-type dot1q vid 100

qos lr outbound cir 100 cbs 6225 ebs 0

qos apply policy 1 outbound

#

[SR6602X-1]dis qos poli int g 0/0/0.100

Interface: GigabitEthernet0/0/0.100

Direction: Outbound

Policy: 1

Classifier: default-class

Matched : 0(Packets) 0(Bytes)

5-minute statistics:

Forwarded: 0/0 (pps/bps)

Dropped : 0/0 (pps/bps)

Rule(s) : If-match any

Behavior: be

Default Queue:

Flow Based Weighted Fair Queuing

Max number of hashed queues: 256

Matched : 0/0 (Packets/Bytes)

Enqueued : 0/0 (Packets/Bytes)

Discarded: 0/0 (Packets/Bytes)

Discard Method: Tail

Classifier: 1

Matched : 0(Packets) 0(Bytes)

5-minute statistics:

Forwarded: 0/0 (pps/bps)

Dropped : 0/0 (pps/bps)

Operator: AND

Rule(s) : If-match acl 3000

Behavior: 1

Assured Forwarding:

Bandwidth 0 (bps)

Matched : 0/0 (Packets/Bytes)

Enqueued : 0/0 (Packets/Bytes)

Discarded: 0/0 (Packets/Bytes)

Discard Method: Tail

[SR6602X-1]int g 0/0/0.100

[SR6602X-1-GigabitEthernet0/0/0.100]qos max-bandwidth 5000

[SR6602X-1-GigabitEthernet0/0/0.100]dis this

#

interface GigabitEthernet0/0/0.100

vlan-type dot1q vid 100

qos max-bandwidth 5000

qos lr outbound cir 100 cbs 6225 ebs 0

qos apply policy 1 outbound

#

return

[SR6602X-1-GigabitEthernet0/0/0.100]qui

[SR6602X-1]dis qos poli int g 0/0/0.100

Interface: GigabitEthernet0/0/0.100

Direction: Outbound

Policy: 1

Classifier: default-class

Matched : 0(Packets) 0(Bytes)

5-minute statistics:

Forwarded: 0/0 (pps/bps)

Dropped : 0/0 (pps/bps)

Rule(s) : If-match any

Behavior: be

Default Queue:

Flow Based Weighted Fair Queuing

Max number of hashed queues: 256

Matched : 0/0 (Packets/Bytes)

Enqueued : 0/0 (Packets/Bytes)

Discarded: 0/0 (Packets/Bytes)

Discard Method: Tail

Classifier: 1

Matched : 0(Packets) 0(Bytes)

5-minute statistics:

Forwarded: 0/0 (pps/bps)

Dropped : 0/0 (pps/bps)

Operator: AND

Rule(s) : If-match acl 3000

Behavior: 1

Assured Forwarding:

Bandwidth 200 (kbps)

Matched : 0/0 (Packets/Bytes)

Enqueued : 0/0 (Packets/Bytes)

Discarded: 0/0 (Packets/Bytes)

Discard Method: Tail

4.流行为中配置实际带宽或者pct百分比注意事项是一样的。