

知 S5820 启用流镜像outbound失败的解决办法

QoS

镜像

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组网及说明

某据点S5820 启用流镜像outbound失败， S5820版本信息如下：
H3C Comware Software, Version 7.1.045, Release 2418P06
Copyright (c) 2004-2015 Hangzhou H3C Tech. Co., Ltd. All rights reserved.
H3C S5820V2-48S uptime is 239 weeks, 6 days, 23 hours, 28 minutes
Last reboot reason : USER reboot

问题描述

某据点S5820 启用流镜像outbound失败， 以下是具体的错误反馈：
dis qos policy interface outbound

Interface: Ten-GigabitEthernet1/0/24
Direction: Outbound
Policy: shujukushenji
Classifier: shujukushenji (Failed)
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/25
Direction: Outbound
Policy: shujukushenji
Classifier: shujukushenji (Failed)
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/26
Direction: Outbound
Policy: shujukushenji
Classifier: shujukushenji (Failed)
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/27
Direction: Outbound
Policy: shujukushenji
Classifier: shujukushenji (Failed)
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/28

Direction: Outbound

Policy: shujukushenji

Classifier: shujukushenji (Failed)

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/29

Direction: Outbound

Policy: shujukushenji

Classifier: shujukushenji (Failed)

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/30

Direction: Outbound

Policy: shujukushenji

Classifier: shujukushenji (Failed)

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/24

Direction: Outbound

Policy: shujukushenji

Classifier: shujukushenji (Failed)

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/25

Direction: Outbound

Policy: shujukushenji

Classifier: shujukushenji (Failed)

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/26

Direction: Outbound

Policy: shujukushenji

Classifier: shujukushenji (Failed)

Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/27
Direction: Outbound
Policy: shujukushenji
Classifier: shujukushenji (Failed)
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/28
Direction: Outbound
Policy: shujukushenji
Classifier: shujukushenji (Failed)
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/29
Direction: Outbound
Policy: shujukushenji
Classifier: shujukushenji (Failed)
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/30
Direction: Outbound
Policy: shujukushenji
Classifier: shujukushenji (Failed)
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16
Mirror to the interface: Ten-GigabitEthernet2/0/16

过程分析

以下是QOS流镜像的配置过程:

```
traffic classifier shujukushenji operator and
if-match acl 2020
quit
traffic behavior shujukushenji
mirror-to interface Ten-GigabitEthernet1/0/16
mirror-to interface Ten-GigabitEthernet2/0/16
```

```
quit
qos policy shujukushenji
 classifier shujukushenji behavior shujukushenji
quit
acl number 2020
 description liujingxiang
 rule 0 permit source 10.190.2.0 0.0.0.255
quit
```

查询诊断信息文件看到的错误反馈如下：

```
%May 25 10:33:19:378 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: -Slot=2; Failed to
apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface T
en-GigabitEthernet2/0/30. Not enough resources to complete the operation.
%May 25 10:33:17:699 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
%May 25 10:33:17:452 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: -Slot=2; Failed to
apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface T
en-GigabitEthernet2/0/29. Not enough resources to complete the operation.
%May 25 10:33:15:893 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
%May 25 10:33:15:663 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: -Slot=2; Failed to
apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface T
en-GigabitEthernet2/0/28. Not enough resources to complete the operation.
%May 25 10:33:13:891 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
%May 25 10:33:13:735 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: -Slot=2; Failed to
apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface T
en-GigabitEthernet2/0/27. Not enough resources to complete the operation.
%May 25 10:33:11:891 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
%May 25 10:33:11:601 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: -Slot=2; Failed to
apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface T
en-GigabitEthernet2/0/26. Not enough resources to complete the operation.
%May 25 10:33:09:875 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
%May 25 10:33:09:745 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: -Slot=2; Failed to
apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface T
en-GigabitEthernet2/0/25. Not enough resources to complete the operation.
%May 25 10:33:07:655 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
%May 25 10:33:07:453 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: -Slot=2; Failed to
apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface T
en-GigabitEthernet2/0/24. Not enough resources to complete the operation.
%May 25 10:32:32:231 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: Failed to apply classif
ier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface Ten-
GigabitEthernet1/0/30. Not enough resources to complete the operation.
%May 25 10:32:30:031 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
%May 25 10:32:29:394 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: Failed to apply classif
ier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface Ten-
GigabitEthernet1/0/29. Not enough resources to complete the operation.
%May 25 10:32:27:430 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
%May 25 10:32:26:647 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: Failed to apply classif
ier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface Ten-
GigabitEthernet1/0/28. Not enough resources to complete the operation.
%May 25 10:32:25:027 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
%May 25 10:32:24:316 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: Failed to apply classif
ier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface Ten-
GigabitEthernet1/0/27. Not enough resources to complete the operation.
%May 25 10:32:23:125 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=
adminzxhx; Command is qos apply policy shujukushenji outbound
```

%May 25 10:32:22:308 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: Failed to apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface Ten-GigabitEthernet1/0/26. Not enough resources to complete the operation.

%May 25 10:32:21:124 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=adminzxhx; Command is qos apply policy shujukushenji outbound

%May 25 10:32:20:310 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: Failed to apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface Ten-GigabitEthernet1/0/25. Not enough resources to complete the operation.

%May 25 10:32:19:216 2020 s5800 SHELL/6/SHELL_CMD: -Line=vty0-IPAddr=10.190.72.58-User=adminzxhx; Command is qos apply policy shujukushenji outbound

%May 25 10:32:18:560 2020 s5800 QOS/4/QOS_POLICY_APPLYIF_CBFAIL: Failed to apply classifier-behavior shujukushenji in policy shujukushenji to the outbound direction of interface Ten-GigabitEthernet1/0/24. Not enough resources to complete the operation.

根据Not enough resources to complete the operation的错误反馈，说明已经不够资源来启用QOS流镜像的outbound方向。

解决方法

因此需要优化QOS流镜像的配置，由于Ten-GigabitEthernet1/0/16和Ten-GigabitEthernet2/0/16都是链接到同一台监控设备，所以可将Ten-GigabitEthernet1/0/16只监控inbound的流量，Ten-GigabitEthernet2/0/16只监控outbound的方向，达到流量镜像的负载均衡，节约镜像的资源，具体的配置如下：

```
acl number 2020
description liujingxiang
rule 0 permit source 10.190.2.0 0.0.0.255
quit

traffic classifier shujukushenji operator and
if-match acl 2020
quit

traffic classifier shujukushenji_outbound operator and
if-match acl 2020
quit

traffic behavior shujukushenji
mirror-to interface Ten-GigabitEthernet1/0/16
quit

traffic behavior shujukushenji_outbound
mirror-to interface Ten-GigabitEthernet2/0/16
quit

qos policy shujukushenji
classifier shujukushenji behavior shujukushenji
quit

qos policy shujukushenji_outbound
classifier shujukushenji_outbound behavior shujukushenji_outbound
quit

int range ten 1/0/24 to ten 1/0/30
qos apply policy shujukushenji inbound
qos apply policy shujukushenji_outbound outbound
quit

int range ten 2/0/24 to ten 2/0/30
qos apply policy shujukushenji inbound
qos apply policy shujukushenji_outbound outbound
quit
```

查看QOS的应用状态，inbound依旧正常，outbound也不再提示Failed:

```
dis qos policy interface outbound
Interface: Ten-GigabitEthernet1/0/24
Direction: Outbound
```

Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/25
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/26
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/27
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/28
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/29
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet1/0/30
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/24
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/25
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/26
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/27
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:
Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/28
Direction: Outbound
Policy: shujukushenji_outbound
Classifier: shujukushenji_outbound
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji_outbound
Mirroring:

Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/29

Direction: Outbound

Policy: shujukushenji_outbound

Classifier: shujukushenji_outbound

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji_outbound

Mirroring:

Mirror to the interface: Ten-GigabitEthernet2/0/16

Interface: Ten-GigabitEthernet2/0/30

Direction: Outbound

Policy: shujukushenji_outbound

Classifier: shujukushenji_outbound

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji_outbound

Mirroring:

Mirror to the interface: Ten-GigabitEthernet2/0/16

<s5800>

dis qos policy interface inbound

Interface: Ten-GigabitEthernet1/0/24

Direction: Inbound

Policy: shujukushenji

Classifier: shujukushenji

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet1/0/25

Direction: Inbound

Policy: shujukushenji

Classifier: shujukushenji

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet1/0/26

Direction: Inbound

Policy: shujukushenji

Classifier: shujukushenji

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet1/0/27

Direction: Inbound

Policy: shujukushenji
Classifier: shujukushenji
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet1/0/28
Direction: Inbound
Policy: shujukushenji
Classifier: shujukushenji
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet1/0/29
Direction: Inbound
Policy: shujukushenji
Classifier: shujukushenji
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet1/0/30
Direction: Inbound
Policy: shujukushenji
Classifier: shujukushenji
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet2/0/24
Direction: Inbound
Policy: shujukushenji
Classifier: shujukushenji
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet2/0/25
Direction: Inbound
Policy: shujukushenji
Classifier: shujukushenji
Operator: AND
Rule(s) :
If-match acl 2020
Behavior: shujukushenji
Mirroring:
Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet2/0/26

Direction: Inbound

Policy: shujukushenji

Classifier: shujukushenji

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet2/0/27

Direction: Inbound

Policy: shujukushenji

Classifier: shujukushenji

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet2/0/28

Direction: Inbound

Policy: shujukushenji

Classifier: shujukushenji

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet2/0/29

Direction: Inbound

Policy: shujukushenji

Classifier: shujukushenji

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16

Interface: Ten-GigabitEthernet2/0/30

Direction: Inbound

Policy: shujukushenji

Classifier: shujukushenji

Operator: AND

Rule(s) :

If-match acl 2020

Behavior: shujukushenji

Mirroring:

Mirror to the interface: Ten-GigabitEthernet1/0/16