

某局点S10510 PBR引流不生效问题处理经验案例

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组网及说明

不涉及

问题描述

现场两台105做了堆叠，slot3槽位有FW板卡，现在所有终端的网关在105上，需要使用PBR将流量引入到FW板卡上。

```
Hexin_S10510]display device
lot      Type          State  Subslot  Soft Ver      Patch
/0       LSUM2GT24PTSSE0 Normal  0        S10500-7568  None
/1       LSUM2GT24PTSSE0 Normal  0        S10500-7568  None
/2       LSUM2GT48SE0   Normal  0        S10500-7568  None
/3       LSUM1FWDEC0    Normal  0        S10500-7568  None
/4       LSUM2TGS16SF0  Normal  0        S10500-7568  None
/5       NONE           Absent  0        NONE         None
/6       NONE           Absent  0        NONE         None
/7       NONE           Absent  0        NONE         None
/8       NONE           Absent  0        NONE         None
/9       NONE           Absent  0        NONE         None
/10      LSUM1MPU10A0   Standby 0        S10500-7568  None
/11      LSUM1MPU10A0   Standby 0        S10500-7568  None
/12      LSUM1FAB10A0   Normal  0        S10500-7568  None
/13      LSUM1FAB10A0   Normal  0        S10500-7568  None
/0       LSUM2GT24PTSSE0 Normal  0        S10500-7568  None
/1       LSUM2GT24PTSSE0 Normal  0        S10500-7568  None
/2       LSUM2GT48SE0   Normal  0        S10500-7568  None
/3       LSUM1FWDEC0    Normal  0        S10500-7568  None
/4       LSUM2TGS16SF0  Normal  0        S10500-7568  None
```

1、现场使用object-group匹配流量，发现pbr不生效，且有如下所示的提示

```
rule 0 permit ip source object-group 地市矿有线无线 destination object-group 集团公司有线无线
```

```
rule 5 permit ip source object-group 地市矿有线无线 destination object-group 服务器网段
```

```
[Hexin_S10510-Vlan-interface2]ip po
```

```
[Hexin_S10510-Vlan-interface2]ip policy-based-route 123
```

```
The operation is not supported in chassis 2 slot 1.
```

```
The operation is not supported in chassis 2 slot 0.
```

```
The operation is not supported in chassis 2 slot 2.
```

```
The operation is not supported in chassis 2 slot 4.
```

```
The operation is not supported in chassis 2 slot 3.
```

```
The operation is not supported in chassis 1 slot 1.
```

```
The operation is not supported in chassis 1 slot 0.
```

```
The operation is not supported in chassis 1 slot 2.
```

```
The operation is not supported in chassis 1 slot 4.
```

```
The operation is not supported in chassis 1 slot 3.
```

2、后续让现场不使用object-group，改用acl匹配，配置后发现设备提示资源不足，现场acl写了100条左右

```
[Hexin_S10510-Vlan-interface2]ip policy-based-route 123
Not enough resources to complete the operation in chassis 2 slot 4.
Not enough resources to complete the operation in chassis 1 slot 4.
[Hexin_S10510-Vlan-interface2]
[Hexin_S10510-Vlan-interface2]
[Hexin_S10510-Vlan-interface2]
```

通过查看display qos-acl resource信息，可以看到slot4的IP ACL只剩下310。

Interfaces: GE2/2/0/1 to GE2/2/0/48 (chassis 2 slot 2)

Type	Total	Reserved	Configured	Remaining	Usage
VFP ACL	2048	1536	0	512	75%
IFP ACL	4096	1280	1804	1012	75%
IFP Meter	2048	768	0	1280	37%
IFP Counter	2048	640	0	1408	31%
EFP ACL	1024	0	560	464	54%
EFP Meter	512	0	0	512	0%
EFP Counter	512	0	0	512	0%

Interfaces: FGE2/3/0/1 to FGE2/3/0/3 (chassis 2 slot 3)

Type	Total	Reserved	Configured	Remaining	Usage
VFP ACL	2048	1024	0	1024	50%
IFP ACL	8192	2560	1790	3842	53%
IFP Meter	4096	1536	0	2560	37%
IFP Counter	4096	1280	0	2816	31%
EFP ACL	1024	0	532	492	51%
EFP Meter	512	0	0	512	0%
EFP Counter	512	0	0	512	0%

Interfaces: XGE2/4/0/1 to XGE2/4/0/16 (chassis 2 slot 4)

Type	Total	Reserved	Configured	Remaining	Usage
VFP ACL	1024	512	0	512	50%
IFP ACL	2048	768	970	310	84%
IFP Meter	1024	512	0	512	50%
IFP Counter	1024	384	0	640	37%
EFP ACL	1024	0	532	492	51%
EFP Meter	512	0	0	512	0%
EFP Counter	512	0	0	512	0%

过程分析

1、本地测试object-group也是报错提示不支持

```
[10510]ip policy-based-route 123
```

The operation is not supported in chassis 1 slot 2.

```
[10510]dis device
```

Slot	Type	State	Subslot	Soft Ver	Patch Ver
1/0	LSQM2MPUC0	Master	0	S7500E-7568P01	None
1/1	NONE	Absent	0	NONE	None
1/2	LSQM1TGS48RSG0	Normal	0	S7500E-7568P01	None
1/3	NONE	Absent	0	NONE	None
1/4	LSQM2GT24TSSC0	Normal	0	S7500E-7568P01	None
1/5	LSQM1TGS48RSG0	Normal	0	S7500E-7568P01	None
1/6	NONE	Absent	0	NONE	None
1/7	NONE	Absent	0	NONE	None

2、单板acl资源是固定的，从诊断可以看到，1框和2框slot 4的业务单板规格最小，inbound只有2K，而且还有768是保留的，其它单板规格都是8K或者4K，这块板卡成了瓶颈，其它单板都下发成功了，没有报错。

```
==== display qos-acl resource ====
```

```
Interfaces: XGE2/4/0/1 to XGE2/4/0/16 (chassis 2 slot 4)
```

Type	Total	Reserved	Configured	Remaining	Usage
VFP ACL	1024	512	0	512	50%
IFP ACL	2048	768	560	720	64%
IFP Meter	1024	512	0	512	50%
IFP Counter	1024	384	0	640	37%
EFP ACL	1024	0	532	492	51%
EFP Meter	512	0	0	512	0%
EFP Counter	512	0	0	512	0%

解决方法

1、查阅相关资料发现，对于交换机来说，object-group只在mac portal认证支持微信认证的特性中支持，其他都是不支持的。所以后续建议配置具体rule来匹配流量。

2、单板acl资源是固定的，因此应该根据现场业务量选择可以承载的单板。当设备提示资源不足时，一般解决办法是更换高规格的单板或者精简acl。

注意：如果对应单板没有放通相应的vlan，是不占用资源的。