

某局点S10508 ADCampus项目多vpn实例无法泄漏缺省路由问题处理经验案例

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某局点使用我司ADCampus解决方案开局时，在设备配置evpn连接时，在防火墙上引入缺省路由，在SR8800-X上查看路由时可以查看到该vpn中防火墙引入的所有路由。同时将这些路由泄漏到另一个VPN中时，发现泄漏的路由条目数与在防火墙上引入的路由条目数不一致。仔细对比后发现，设备只泄漏了明细路由，没有泄漏缺省路由。

防火墙设备关键配置如下

```
#
ospf 1
default-route-advertise
import-route direct
import-route static
area 0.0.0.0
network x.1.1.0 0.0.0.255
network x.255.254.1 0.0.0.0
```

#

路由表信息如下

<FW-M9000>disp ip routing-table

```
Destinations : 153   Routes : 154
Destination/Mask Proto Pre Cost NextHop Interface
0.0.0.0/0 Static 60 0 223.99.12.81 XGE2/0/31
223.99.25.201 XGE2/0/32
0.0.0.0/32 Direct 0 0 127.0.0.1 InLoop0
x.1.1.0/24 Direct 0 0 8.1.1.2 XGE2/0/1
10.255.100.0/24 O_INTRA 10 2 10.255.254.2 Vlan4000
```

对端设备S10508关键配置如下

#

```
ip vpn-instance vpn-default
route-distinguisher 1:1
vpn-target 1:1 1:3 import-extcommunity
vpn-target 1:1 export-extcommunity
```

#

```
address-family ipv4
```

#

```
address-family evpn
vpn-target 1:1 1:3 import-extcommunity
vpn-target 1:1 export-extcommunity
```

#

```
ip vpn-instance vpn1
route-distinguisher 1:3
vpn-target 1:1 1:3 import-extcommunity
vpn-target 1:3 export-extcommunity
```

#

```
address-family evpn
vpn-target 1:1 1:3 import-extcommunity
vpn-target 1:3 export-extcommunity
```

#

```
bgp 100
graceful-restart
router-id 4.0.0.1
group evpn internal
peer evpn connect-interface LoopBack0
peer 4.0.0.2 group evpn
peer 4.0.0.3 group evpn
peer 4.0.0.4 group evpn
peer 4.0.0.5 group evpn
peer 4.0.0.6 group evpn
peer 4.0.0.7 group evpn
peer 4.0.0.8 group evpn
```

```

peer 4.0.0.9 group evpn
peer 4.0.0.10 group evpn
peer 4.0.0.11 group evpn
peer 4.0.0.12 group evpn
peer 4.0.0.13 group evpn
peer 4.0.0.14 group evpn
#
address-family ipv4 unicast
import-route direct
network 110.0.0.0 255.255.255.0
peer evpn enable
#
address-family l2vpn
#
address-family l2vpn evpn
reflector cluster-id 4.0.0.1
undo policy vpn-target
peer evpn enable
peer evpn reflect-client
#
ip vpn-instance vpn-default
#
address-family ipv4 unicast
undo advertise l2vpn evpn
import-route direct
import-route static
import-route ospf 2
#

```

S10508路由表信息

<S10508>disp ip routing-table vpn-instance vpn-default

Destinations : 153 Routes : 153

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
0.0.0.0/0	O_ASE2	150	1	8.1.1.2	Vlan8
0.0.0.0/32	Direct	0	0	127.0.0.1	InLoop0
8.1.1.0/24	Direct	0	0	8.1.1.1	Vlan8
8.1.1.255/32	Direct	0	0	8.1.1.1	Vlan8
10.12.16.2/32	BGP	255	0	4.0.0.2	Vsi3501
10.12.16.3/32	BGP	255	0	4.0.0.2	Vsi3501

路由泄漏的路由表信息

<S10508>disp ip routing-table vpn-instance vpn1

Destinations : 158 Routes : 158

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
0.0.0.0/32	Direct	0	0	127.0.0.1	InLoop0
8.1.1.0/24	BGP	130	0	8.1.1.1	Vlan8
8.1.1.1/32	BGP	130	0	127.0.0.1	InLoop0
10.12.16.0/21	Direct	0	0	10.12.16.1	Vsi3502
10.12.16.0/32	Direct	0	0	10.12.16.1	Vsi3502

通过确认，缺省情况下，BGP引入其他路由协议的路由时，或者BGP多实例之间引入时，不会引入该协议的缺省路由。用户可以通过配置，指定BGP引入IGP路由协议的路由时，允许将缺省路由引入到BGP路由表中。

配置BGP引入其他路由协议的路由命令如下default-route imported 修改后配置如下 # bgp 100 graceful
l-restart router-id 4.0.0.1 group evpn internal peer evpn connect-interface LoopBack0 # address-famil
y ipv4 unicast import-route direct network 110.0.0.0 255.255.255.0 peer evpn enable # address-famil
y l2vpn # address-family l2vpn evpn reflector cluster-id 4.0.0.1 undo policy vpn-target peer evpn
enable peer evpn reflect-client # ip vpn-instance vpn-default # address-family ipv4 unicast undo adver
tise l2vpn evpn import-route direct import-route static import-route ospf 2 default-route imported #
在配置路由协议引入时，存在缺省路由的情况下通常需要特殊配置，对于缺省路由需要单独配置命令
才能引入。