

问题描述

1、SWA设备起了3个OSPF进程，分别绑定了3个VPN，并分别配置了三个loopback地址引入OSPF发布给对端，如下：

```
ospf 1 vpn-instance 1
import-route direct
area 0.0.0.0
network 10.1.1.1 0.0.0.0
```

#

```
ospf 2 vpn-instance 2
import-route direct
area 0.0.0.0
network 20.1.1.1 0.0.0.0
```

#

```
ospf 3 vpn-instance 3
import-route direct
area 0.0.0.0
network 30.1.1.1 0.0.0.0
```

[SWA]display ip interface brief

Interface	Physical	Protocol	IP address	VPN instance	Description
Loop1	up	up(s)	192.168.1.1	1	--
Loop2	up	up(s)	192.168.2.1	2	--
Loop3	up	up(s)	192.168.3.1	3	--

2、SWB设备只启用1个OSPF进程，来学习对端的三个loopback接口的路由

```
ospf 1 router-id 4.4.4.4 vpn-instance 100
area 0.0.0.0
network 10.1.1.2 0.0.0.0
network 20.1.1.2 0.0.0.0
network 30.1.1.2 0.0.0.0
```

3、在SWB上查看发现，无法同时学习对面的三个地址段路由，时有时无

[SWB]dis ip routing-table vpn-instance 100

Destinations : 23 Routes : 23

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
192.168.2.0/24	O_ASE2	150	1	10.1.1.1	Vlan10
192.168.3.0/24	O_ASE2	150	1	10.1.1.1	Vlan10

过程分析

1、SWA上查看发现，一直上报如下router id冲突日志

```
%Nov 22 16:32:25:388 2022 H3C OSPF/6/OSPF_RTRID_CONFLICT_INTER: OSPF 2 Received newer self-originated ase-LSAs. Possible conflict of router ID 192.168.1.1.
```

```
%Nov 22 16:32:30:282 2022 H3C OSPF/6/OSPF_RTRID_CONFLICT_INTER: OSPF 3 Received newer self-originated ase-LSAs. Possible conflict of router ID 192.168.1.1.
```

```
%Nov 22 16:32:40:287 2022 H3C OSPF/6/OSPF_RTRID_CONFLICT_INTER: OSPF 1 Received newer self-originated ase-LSAs. Possible conflict of router ID 192.168.1.1.
```

2、经确认发现，SWA三个进程的router id都是默认未修改，全部都是192.168.1.1，导致冲突。

解决方法

修改SWA上三个OSPF进程的router id后恢复

```
ospf 1 router-id 1.1.1.1 vpn-instance 1
import-route direct
area 0.0.0.0
network 10.1.1.1 0.0.0.0
#
ospf 2 router-id 2.2.2.2 vpn-instance 2
import-route direct
area 0.0.0.0
network 20.1.1.1 0.0.0.0
#
ospf 3 router-id 3.3.3.3 vpn-instance 3
import-route direct
area 0.0.0.0
network 30.1.1.1 0.0.0.0
```

对端SWB上能够正常学习到3条路由如下

```
[SWB]display ip routing-table vpn-instance 100
```

```
Destinations : 24    Routes : 24
```

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
192.168.1.0/24	O_ASE2	150	1	10.1.1.1	Vlan10
192.168.2.0/24	O_ASE2	150	1	20.1.1.1	Vlan20
192.168.3.0/24	O_ASE2	150	1	30.1.1.1	Vlan30

