

交换机EVPN主机路由引入ipv4单播路由表并发布实现

BGP

VPN实例

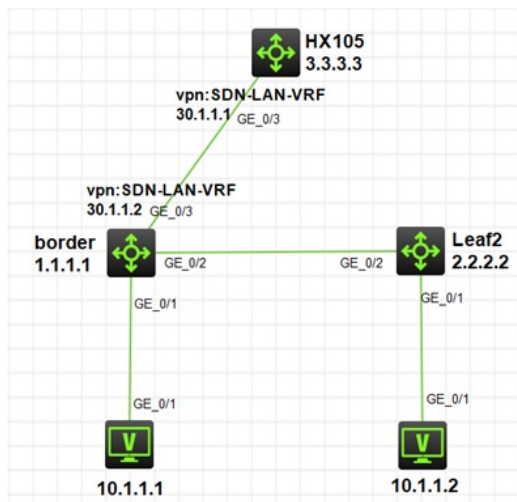
EVPN

倪民

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组网及说明

测试情况如下，border和Leaf2之间建立VXLAN隧道，border学习到Leaf2发来的主机路由：10.1.1.2/32。



问题描述

Border和HX105之间无法建立BGP EVPN邻居，现在border需要将这条主机路由发布给HX105。

过程分析

1、在border上查看路由如下

```
[Border]display ip routing-table vpn-instance SDN-LAN-VRF 10.1.1.2 32
```

Summary count : 1

Destination/Mask	Proto	Pre	Cost	NextHop	Interface
10.1.1.2/32	BGP	255	0	2.2.2.2	Vsi100

2、该路由是32位EVPN主机路由

```
[Border]display bgp l2vpn evpn route-type mac-ip 10.1.1.2
```

BGP local router ID is 1.1.1.1

Status codes: * - valid, > - best, d - dampened, h - history

s - suppressed, S - stale, i - internal, e - external

a - additional-path

Origin: i - IGP, e - EGP, ? - incomplete

Total number of routes from all PEs: 1

Route distinguisher: 1:1(SDN-LAN-VRF)

Total number of routes: 1

```
* >i Network : [2][0][48][6cf9-423a-0506][32][10.1.1.2]/136
```

NextHop : 2.2.2.2 LocPrf : 100

PrefVal : 0 OutLabel : NULL

MED : 0

Path/Ogn: i

Route distinguisher: 1:10

Total number of routes: 1

```
* >i Network : [2][0][48][6cf9-423a-0506][32][10.1.1.2]/136
```

NextHop : 2.2.2.2 LocPrf : 100

PrefVal : 0 OutLabel : NULL

MED : 0

Path/Ogn: i

3、由于border和HX105之间无法建立EVPN邻居，只能在border上将该路由引入到BGP ipv4单播路由

表中，需要在BGP VPN ipv4单播地址族下做如下配置import evpn mac-ip

```
bgp 100
```

```
router-id 1.1.1.1
```

```
peer 2.2.2.2 as-number 100
```

```
peer 2.2.2.2 connect-interface LoopBack0
```

```
#
```

```
address-family l2vpn evpn
```

```
peer 2.2.2.2 enable ----和Leaf2建立EVPN邻居
```

```
#
```

```
ip vpn-instance SDN-LAN-VRF
```

```
#
```

```
address-family ipv4 unicast
```

```
import evpn mac-ip ----在对应的VPN ipv4地址族下引入32位主机路由
```

4、引入后，border上查看BGP ipv4单播路由表，可以看到有了该32位主机路由

```
[Border]display bgp routing-table ipv4 unicast vpn-instance SDN-LAN-VRF
```

Total number of routes: 1

BGP local router ID is 1.1.1.1

Status codes: * - valid, > - best, d - dampened, h - history

s - suppressed, S - stale, i - internal, e - external

a - additional-path

Origin: i - IGP, e - EGP, ? - incomplete

Network	NextHop	MED	LocPrf	PrefVal	Path/Ogn
* >i 10.1.1.2/32	2.2.2.2	0	100	0	i

5、之后border和HX105之间建立VPN ipv4邻居关系

Border上面的配置

```
bgp 100
router-id 1.1.1.1
ip vpn-instance SDN-LAN-VRF
peer 30.1.1.1 as-number 200
```

1# import evpn mac-ip可以将主机路由引入到BGP单播路由表。
2# 需要和B端设备建立vpe单播邻居，才能将主机路由发布到对端对应的vpn路由表中。

```
import evpn mac-ip
peer 30.1.1.1 enable
```

HX105的配置类似

6、之后HX105上成功引入了该32位主机路由

```
[HX105]display ip routing-table vpn-instance SDN-LAN-VRF 10.1.1.2
```

Summary count : 1

Destination/Mask	Proto	Pre Cost	NextHop	Interface
10.1.1.2/32	BGP	255 0	30.1.1.2	Vlan30

