

## 知 某局点F1000可以建立OSPF邻居但是不加路由表

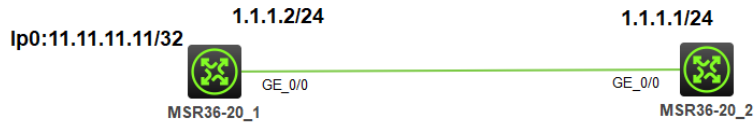
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### 组网及说明

组网如下:

MSR1与MSR2建立OSPF邻居

并且MSR1将直连路由11.11.11.11/32引入到OSPF路由中



关键配置如下:

MSR1

```
interface LoopBack0
```

```
ip address 11.11.11.11 255.255.255.255
```

```
interface GigabitEthernet0/0
```

```
port link-mode route
```

```
combo enable copper
```

```
ip address 1.1.1.2 255.255.255.0
```

```
ospf network-type p2p
```

```
ospf 1
```

```
import-route direct
```

```
area 0.0.0.0
```

```
network 1.1.1.0 0.0.0.255
```

MSR2

```
interface GigabitEthernet0/0
```

```
port link-mode route
```

```
combo enable copper
```

```
ip address 1.1.1.1 255.255.255.0
```

```
ospf 1
```

```
area 0.0.0.0
```

```
network 1.1.1.0 0.0.0.255
```

## 问题描述

在MSR2中的OSPF的LSDB中可以看到11.11.11.11/32的LSA, 但是MSR2的OSPF路由表中看不到11.11.11/32的路由

```
[MSR2]display ospf lsdb
```

```
OSPF Process 1 with Router ID 1.1.1.1
```

```
Link State Database
```

```
Area: 0.0.0.0
```

Type	LinkState ID	AdvRouter	Age	Len	Sequence	Metric
Router	11.11.11.11	11.11.11.11	4	48	80000009	0
Router	1.1.1.1	1.1.1.1	756	36	80000008	0
Network	1.1.1.1	1.1.1.1	756	32	80000001	0

```
AS External Database
```

Type	LinkState ID	AdvRouter	Age	Len	Sequence	Metric
<b>External</b>	<b>11.11.11.11</b>	<b>11.11.11.11</b>	<b>4</b>	<b>36</b>	<b>80000001</b>	<b>1</b>
External	1.1.1.0	11.11.11.11	4	36	80000001	1

```
[MSR2]display ospf routing
```

```
OSPF Process 1 with Router ID 1.1.1.1
```

```
Routing Table
```

```
Routing for network
```

Destination	Cost	Type	NextHop	AdvRouter	Area
1.1.1.0/24	1	Transit	0.0.0.0	1.1.1.1	0.0.0.0

```
Total nets: 1
```

```
Intra area: 1 Inter area: 0 ASE: 0 NSSA: 0
```

## 过程分析

问题分析:

检查配置, 发现MSR1与MSR2接口类型不一致, 所以导致MSR2中的11.11.11.11/32的LSA无法被计算加入路由表, MSR1的接口类型是P2P, MSR2的接口类型默认是广播

MSR1

```
interface GigabitEthernet0/0
port link-mode route
combo enable copper
ip address 1.1.1.2 255.255.255.0
ospf network-type p2p
```

MSR2

```
interface GigabitEthernet0/0
port link-mode route
combo enable copper
ip address 1.1.1.1 255.255.255.0
```

## 解决方法

解决方法:

将MSR1与MSR2的接口类型都改为一致即可, 本例改为广播

但是现场组网中建议改为P2P, 因为广播类型的接口要参与DR与BDR选举, 所以OSPF中断到建立至少需要40秒的时间。

```
[MSR2]display ospf routing
```

```
OSPF Process 1 with Router ID 1.1.1.1
```

```
Routing Table
```

```
Routing for network
```

Destination	Cost	Type	NextHop	AdvRouter	Area
1.1.1.0/24	1	Transit	0.0.0.0	1.1.1.1	0.0.0.0

```
Routing for ASEs
```

Destination	Cost	Type	Tag	NextHop	AdvRouter
11.11.11.11/32	1	Type2	1	1.1.1.2	11.11.11.11

