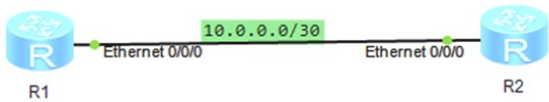


【MVS】华为路由器路由策略典型组网配置1-引入直连路由时调用Route-policy

网络相关 韦家宁 2024-07-14 发表

组网及说明

```
loopback0:1.1.1.1/32
loopback1:2.2.2.2/32
loopback2:3.3.3.3/32
```



本案例采用ENSP模拟器来部署Router-policy，在本案例中，需要对R1路由器的loopback地址进行直连路由引入的同时，增加cost20修改直连路由的属性，因此需要配置Route-policy来满足需求。全网采用OSPF实现互通。

配置步骤

- 1、按照网络拓扑图配置IP地址。
- 2、配置R1与R2的OSPF。
- 3、在R1配置Route-policy，通过引入直连路由时修改cost值为20。

配置关键点

R1:

```
<Huawei>u t m
Info: Current terminal monitor is off.
<Huawei>u t d
Info: Current terminal debugging is off.
<Huawei>system
Enter system view, return user view with Ctrl+Z.
[Huawei]sysname R1
[R1]int eth 0/0/0
[R1-Ethernet0/0/0]ip address 10.0.0.1 30
[R1-Ethernet0/0/0]quit
[R1]int loopback 0
[R1-LoopBack0]ip address 1.1.1.1 32
[R1-LoopBack0]quit
[R1]int loopback 1
[R1-LoopBack1]ip address 2.2.2.2 32
[R1-LoopBack1]quit
[R1]int loopback 2
[R1-LoopBack2]ip address 3.3.3.3 32
[R1-LoopBack2]quit
```

配置ACL

```
[R1]acl number 2000
[R1-acl-basic-2000]rule 0 permit source 1.1.1.1 0.0.0.0
[R1-acl-basic-2000]rule 1 permit source 2.2.2.2 0.0.0.0
[R1-acl-basic-2000]rule 2 permit source 3.3.3.3 0.0.0.0
[R1-acl-basic-2000]quit
```

配置路由策略，调用ACL，并指定apply cost为20修改路由的属性。

```
[R1]route-policy weijianing permit node 1
[R1-route-policy]if-match acl 2000
[R1-route-policy]apply cost 20
[R1-route-policy]quit
```

配置OSPF，在引入直连路由时调用路由策略。

```
[R1]ospf 1 router-id 10.0.0.1
[R1-ospf-1]import-route direct route-policy weijianing
[R1-ospf-1]area 0.0.0.0
```

```
[R1-ospf-1-area-0.0.0.0]network 10.0.0.0 0.0.0.3
[R1-ospf-1-area-0.0.0.0]quit
[R1-ospf-1]quit
```

R2:

```
<Huawei>u t m
Info: Current terminal monitor is off.
<Huawei>u t d
Info: Current terminal debugging is off.
<Huawei>system
Enter system view, return user view with Ctrl+Z.
[Huawei]sysname R2
[R2]int eth 0/0/0
[R2-Ethernet0/0/0]ip address 10.0.0.2 30
[R2-Ethernet0/0/0]quit
[R2]ospf 1
[R2-ospf-1]area 0.0.0.0
[R2-ospf-1-area-0.0.0.0]network 10.0.0.0 0.0.0.3
[R2-ospf-1-area-0.0.0.0]quit
[R2-ospf-1]quit
```

使用dis ospf peer brief命令查看R1与R2都已经建立了OSPF邻居关系。

```
[R1]dis ospf peer brief

      OSPF Process 1 with Router ID 10.0.0.1
      Peer Statistic Information
-----
Area Id      Interface      Neighbor id    State
0.0.0.0      Ethernet0/0/0    10.0.0.2      Full
-----
[R1]
```

```
[R2]dis ospf peer brief

      OSPF Process 1 with Router ID 10.0.0.2
      Peer Statistic Information
-----
Area Id      Interface      Neighbor id    State
0.0.0.0      Ethernet0/0/0    10.0.0.1      Full
-----
[R2]
```

在R2查看OSPF路由表，发现从R1发布的直连路由的cost值已修改到20

```
[R2]dis ip routing-table protocol ospf
Route Flags: R - relay, D - download to fib
-----
Public routing table : OSPF
      Destinations : 3      Routes : 3

OSPF routing table status : <Active>
      Destinations : 3      Routes : 3

Destination/Mask    Proto    Pre    Cost    Flags NextHop         Interface
-----
1.1.1.1/32         O_ASE    150    20      D      10.0.0.1      Ethernet0/0/0
2.2.2.2/32         O_ASE    150    20      D      10.0.0.1      Ethernet0/0/0
3.3.3.3/32         O_ASE    150    20      D      10.0.0.1      Ethernet0/0/0

OSPF routing table status : <Inactive>
      Destinations : 0      Routes : 0

[R2]
```

至此，华为路由器路由策略典型组网配置1已完成。