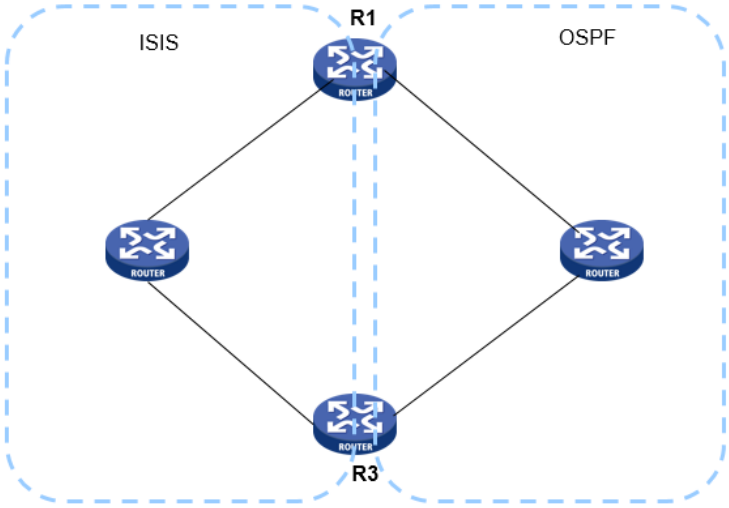
某局点OSPF和ISIS双点双向引入

OSPF IS-IS 方志伟 2020-03-25 发表

组网及说明

组网图如下



配置步骤

R1相关配置

```
#
isis 1
 network-entity 10.0000.0000.0001.00
 #
 address-family ipv4 unicast
 import-route ospf 1 route-policy oti
#
ospf 1 router-id 1.1.1.1
 import-route isis 1 type 1 route-policy ito
 preference ase 10 route-policy pre
 area 0.0.0.0
 network 10.1.14.1 0.0.0.0
#
route-policy ito deny node 10
 if-match tag 200
#
route-policy ito permit node 20
 if-match ip address prefix-list zj
 apply tag 400
#
route-policy oti deny node 10
 if-match tag 300
#
route-policy oti permit node 20
 if-match ip address prefix-list zj
 apply tag 100
#
route-policy pre permit node 10
 apply preference 150
#
 ip prefix-list zj index 10 permit 10.1.1.0 24 greater-equal 32
#
```

R3相关配置

```
#
 isis 1
```

```
 network-entity 10.0000.0000.0003.00
 #
 address-family ipv4 unicast
 import-route ospf 1 route-policy oti
#
 ospf 1 router-id 3.3.3.3
 import-route isis 1 type 1 route-policy ito
 preference ase 10 route-policy pre
 area 0.0.0.0
 network 10.1.34.3 0.0.0.0
 #
 route-policy ito deny node 10
 if-match tag 100
 #
 route-policy ito permit node 20
 if-match ip address prefix-list zj
 apply tag 300
#
 route-policy oti deny node 10
 if-match tag 400
#
 route-policy oti permit node 20
 if-match ip address prefix-list zj
 apply tag 200
#
 route-policy pre permit node 10
 apply preference 150
#
 ip prefix-list zj index 10 permit 10.1.1.0 24 greater-equal 32
#
```

配置关键点

路由的双点双向引入需要解决路由回馈（通过标签）和次优路径（优先级）2大问题
所以关键点在于路由引入的时候带上标签，以及合理规划路由的优先级
R1上：OSPF到ISIS打标签100；ISIS到OSPF打标签400；
从而oti策略里面拒绝标签300，打标签100；ito策略里面拒绝标签200，打标签400
R3上：ISIS到OSPF打标签300；OSPF到ISIS打标签200；
从而ito策略里面拒绝标签100，打标签300；oti策略里面拒绝标签400，打标签200
在R1上，OSPF中把300标签的路由优先级调整为150，其余的外部路由优先级调整为10
在R3上，OSPF中把400标签的路由优先级调整为150，其余的外部路由优先级调整为10

附件下载： hcl_tn0isp.rar