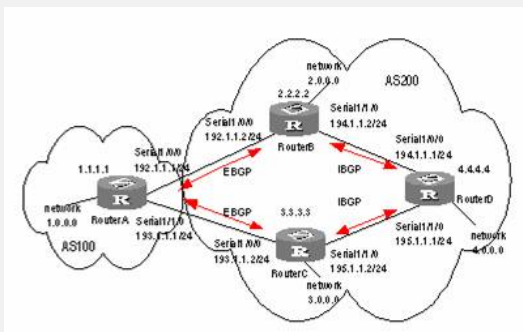


AR28/AR46系列路由器MBGP组播扩展的典型配置

【需求】

本例说明如何通过MBGP属性来管理路由选择。  
 所有路由器都配置MBGP。AS200中的IGP使用OSPF。路由器A在AS100中，并作为AS200中的路由器B和路由器C的MBGP邻居。路由器B和路由器C对路由器D运行IBGP，路由器D也在AS200中。

【组网图】



【配置脚本】

RouterA配置脚本

```
<RouterA> system-view
[RouterA] interface serial 1/0/0
[RouterA-Serial1/0/0] ip address 192.1.1.1 255.255.255.0
[RouterA-Serial1/0/0] quit
[RouterA] interface serial 1/1/0
[RouterA-Serial1/1/0] ip address 193.1.1.1 255.255.255.0
[RouterA-Serial1/1/0] quit
# 启动MBGP。
[RouterA] bgp 100
[RouterA-bgp] ipv4-family multicast
# 指定MBGP要发送的网络。
[RouterA-bgp-af-mul] network 1.0.0.0
[RouterA-bgp-af-mul] network 2.0.0.0
[RouterA-bgp-af-mul] quit
# 配置对等体。
[RouterA-bgp] bgp 100
[RouterA-bgp] group a1 external
[RouterA-bgp] peer 192.1.1.2 group a1 as-number 200
[RouterA-bgp] group a2 external
[RouterA-bgp] peer 193.1.1.2 group a2 as-number 200
[RouterA-bgp] ipv4-family multicast
[RouterA-bgp-af-mul] peer a1 enable
[RouterA-bgp-af-mul] peer 192.1.1.2 group a1
[RouterA-bgp-af-mul] peer a2 enable
[RouterA-bgp-af-mul] peer 193.1.1.2 group a2
[RouterA-bgp-af-mul] quit
# 配置路由器A的MED属性。
# 路由器A上增加访问控制列表，允许网络1.0.0.0
[RouterA] acl number 2001
[RouterA-acl-basic-2001] rule permit ip source 1.0.0.0 0.255.255.255
# 定义两个路由策略，一个名为set_med_50，另一个名为set_med_100，第一个路由策略为网络1.0.0.0配置的MED属性为50，第二个的MED属性为100。
[RouterA] route-policy set_med_50 permit node 10
[RouterA-route-policy] if-match acl 2001
[RouterA-route-policy] apply cost 50
[RouterA-route-policy] quit
[RouterA] route-policy set_med_100 permit node 10
[RouterA-route-policy] if-match acl 2001
[RouterA-route-policy] apply cost 100
# 应用路由策略set_med_50到路由器C ( 193.1.1.2 ) 出口路由更新上，应用路由策略set_med_100到路由器B ( 192.1.1.2 ) 的出口路由更新上。
[RouterA] bgp 100
[RouterA-bgp] ipv4-family multicast
[RouterA-bgp-af-mul] peer a2 route-policy set_med_50 export
[RouterA-bgp-af-mul] peer a1 route-policy set_med_100 export
```

RouterB配置脚本

```
<RouterB> system-view
[RouterB] interface serial 1/0/0
[RouterB-Serial1/0/0] ip address 192.1.1.2 255.255.255.0
[RouterB-Serial1/0/0] quit
[RouterB] interface serial 1/1/0
[RouterB-Serial1/1/0] ip address 194.1.1.2 255.255.255.0
[RouterB-Serial1/1/0] quit
[RouterB] ospf
[RouterB-ospf-1] area 0
[RouterB-ospf-1-area-0.0.0.0] network 194.1.1.0 0.0.0.255
[RouterB-ospf-1-area-0.0.0.0] network 192.1.1.0 0.0.0.255
[RouterB-ospf-1-area-0.0.0.0] quit
[RouterB-ospf-1] quit
[RouterB] bgp 200
[RouterB-bgp] undo synchronization
[RouterB-bgp] group b1 external
[RouterB-bgp] peer 192.1.1.1 group b1 as-number 100
[RouterB-bgp] group b2 internal
[RouterB-bgp] peer 194.1.1.1 group b1 as-number 200
[RouterB-bgp] peer 195.1.1.2 group b1 as-number 200
[RouterB-bgp] ipv4-family multicast
[RouterB-bgp-af-mul] peer b1 enable
[RouterB-bgp-af-mul] peer 192.1.1.1 group b1
[RouterB-bgp-af-mul] peer b2 enable
[RouterB-bgp-af-mul] peer 194.1.1.1 group b2
[RouterB-bgp-af-mul] peer 195.1.1.2 group b2
```

#### RouterC配置脚本

```
<RouterC> system-view
[RouterC] interface serial 1/0/0
[RouterC-Serial1/0/0] ip address 193.1.1.2 255.255.255.0
[RouterC-Serial1/0/0] quit
[RouterC] interface serial 1/1/0
[RouterC-Serial1/1/0] ip address 195.1.1.2 255.255.255.0
[RouterC-Serial1/1/0] quit
[RouterC] ospf
[RouterC-ospf-1] area 0
[RouterC-ospf-1-area-0.0.0.0] network 193.1.1.0 0.0.0.255
[RouterC-ospf-1-area-0.0.0.0] network 195.1.1.0 0.0.0.255
[RouterC-ospf-1-area-0.0.0.0] quit
[RouterC-ospf-1] quit
[RouterC] bgp 200
[RouterC-bgp] undo synchronization
[RouterC-bgp] group c1 external
[RouterC-bgp] peer 193.1.1.1 group c1 as-number 100
[RouterC-bgp] group c2 internal
[RouterC-bgp] peer 194.1.1.2 group c2 as-number 200
[RouterC-bgp] peer 195.1.1.1 group c2 as-number 200
[RouterC-bgp] ipv4-family multicast
[RouterC-bgp-af-mul] peer c1 enable
[RouterC-bgp-af-mul] peer 193.1.1.1 group c1
[RouterC-bgp-af-mul] peer c1 next-hop-local
[RouterC-bgp-af-mul] peer c2 enable
[RouterC-bgp-af-mul] peer 194.1.1.2 group c2
[RouterC-bgp-af-mul] peer 195.1.1.1 group c2
[RouterC-bgp-af-mul] peer c2 next-hop-local
# 配置路由器C的本地优先级属性。
# 在路由器C上加上访问列表2001，允许网络1.0.0.0。
[RouterC] acl number 2001
[RouterC-acl-basic-2001] rule permit source 1.0.0.0 0.255.255.255
[RouterC-acl-basic-2001] quit
# 定义名为localpref的路由策略，该策略中配置了匹配ACL 2001（访问控制列表2001）的路由的本地优先级为200，不匹配的为100。
[RouterC] route-policy localpref permit node 10
[RouterC-route-policy] if-match acl 2001
[RouterC-route-policy] apply local-preference 200
[RouterC-route-policy] quit
[RouterC] route-policy localpref permit node 20
[RouterC-route-policy] apply local-preference 100
# 应用此路由策略到来自BGP邻居193.1.1.2（路由器A）上的入口流量上。
[RouterC] bgp 200
[RouterC-bgp] ipv4-family multicast
[RouterC-bgp-af-mul] peer c1. route-policy localpref import
```

#### RouterD配置脚本

```
<RouterD> system-view
[RouterD] interface serial 1/0/0
[RouterD-Serial1/0/0] ip address 194.1.1.1 255.255.255.0
[RouterD-Serial1/0/0] quit
[RouterD] interface serial 1/1/0
[RouterD-Serial1/1/0] ip address 195.1.1.1 255.255.255.0
[RouterD-Serial1/1/0] quit
[RouterD] ospf
[RouterD-ospf-1] area 0
[RouterD-ospf-1-area-0.0.0.0] network 194.1.1.0 0.0.0.255
[RouterD-ospf-1-area-0.0.0.0] network 195.1.1.0 0.0.0.255
[RouterD-ospf-1-area-0.0.0.0] network 4.0.0.0 0.0.0.255
[RouterD-ospf-1-area-0.0.0.0] quit
[RouterD-ospf-1] quit
[RouterD] bgp 200
[RouterD-bgp] undo synchronization
[RouterD-bgp] group d1 internal
[RouterD-bgp] peer 194.1.1.2 group d1
[RouterD-bgp] peer 194.1.1.2 group d1
[RouterD-bgp] ipv4-family multicast
[RouterD-bgp-af-mul] peer d1 enable
[RouterD-bgp-af-mul] peer 195.1.1.2 group d1
[RouterD-bgp-af-mul] peer 194.1.1.2 group d1
```

**【提示】**

为使配置生效，所有的MBGP邻居需要使用reset bgp all命令重置。