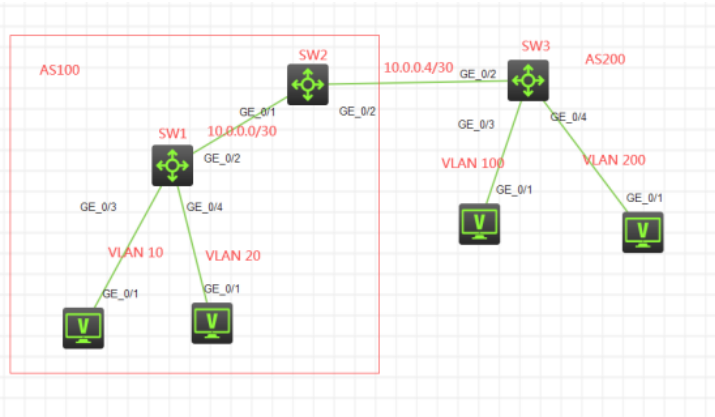


# 知 S5820 BGP一级RR路由反射器典型组网配置案例

BGP H3C模拟器 韦家宁 2020-04-06 发表

## 组网及说明



### 组网说明:

本案例使用H3C HCL模拟器的S5820交换机来模拟BGP一级RR路由反射器的典型组网配置。SW1、SW2属于AS100，SW3属于AS200。由于SW1与SW3没有互联，又想实现PC的互通，因此需要采用RR路由反射器技术，SW2为SW1的RR路由反射器，SW1为SW2的RR路由反射器的客户端。为了使得SW1与SW2之间能够建立IBGP邻居关系及达到路由反射的效果，因此SW1与SW2之间同时运行OSPF路由协议，为IBGP邻居的建立及路由反射提供承载。最后SW2与SW3之间建立EBGP邻居关系。

IP地址规划如下:

设备名称	接口/VLAN	IP地址	子网掩码位数	备注
SW1	Gi 1/0/2	10.0.0.1	30	
	VLAN 10	192.168.10.1	24	
	VLAN 20	192.168.20.1	24	
	Loopback 0	1.1.1.1	32	Router-id
SW2	Gi 1/0/1	10.0.0.2	30	
	Gi 1/0/2	10.0.0.5	30	
	Loopback 0	3.3.3.3	32	Router-id
SW3	Gi 1/0/2	10.0.0.6	30	
	VLAN 100	172.16.10.1	24	
	VLAN 200	172.16.20.1	24	
	Loopback 0	2.2.2.2	32	Router-id

## 配置步骤

SW1:

```
sys
```

```
System View: return to User View with Ctrl+Z.
```

```
[H3C]sysname SW1
```

```
[SW1]int loopback 0
```

```
[SW1-LoopBack0]ip address 1.1.1.1 32
```

```
[SW1-LoopBack0]quit
```

```
[SW1]router id 1.1.1.1
```

```
[SW1]vlan 10
```

```
[SW1-vlan10]quit
```

```
[SW1]vlan 20
```

```
[SW1-vlan20]quit
```

```
[SW1]int vlan 10
```

```
[SW1-Vlan-interface10]ip address 192.168.10.1 24
```

```
[SW1-Vlan-interface10]quit
```

```
[SW1]int vlan 20
```

```
[SW1-Vlan-interface20]ip address 192.168.20.1 24
```

```
[SW1-Vlan-interface20]quit
```

```
[SW1]int gi 1/0/3
```

```
[SW1-GigabitEthernet1/0/3]port link-type access
```

```
[SW1-GigabitEthernet1/0/3]port access vlan 10
```

```
[SW1-GigabitEthernet1/0/3]quit
[SW1]int gi 1/0/4
[SW1-GigabitEthernet1/0/4]port link-type access
[SW1-GigabitEthernet1/0/4]port access vlan 20
[SW1-GigabitEthernet1/0/4]quit
[SW1]int gi 1/0/2
[SW1-GigabitEthernet1/0/2]port link-mode route
[SW1-GigabitEthernet1/0/2]des
[SW1-GigabitEthernet1/0/2]ip address 10.0.0.1 30
[SW1-GigabitEthernet1/0/2]quit
[SW1]ospf 1 router-id 1.1.1.1
[SW1-ospf-1]area 0.0.0.0
[SW1-ospf-1-area-0.0.0.0]network 10.0.0.1 0.0.0.0
[SW1-ospf-1-area-0.0.0.0]network 1.1.1.1 0.0.0.0
[SW1-ospf-1-area-0.0.0.0]quit
[SW1-ospf-1]quit
[SW1]bgp 100
[SW1-bgp-default]router-id 1.1.1.1
[SW1-bgp-default]peer 3.3.3.3 as-number 100
[SW1-bgp-default]peer 3.3.3.3 connect-interface LoopBack 0
[SW1-bgp-default]address-family ipv4 unicast
[SW1-bgp-default-ipv4]peer 3.3.3.3 enable
[SW1-bgp-default-ipv4]network 192.168.10.0 255.255.255.0
[SW1-bgp-default-ipv4]network 192.168.20.0 255.255.255.0
[SW1-bgp-default-ipv4]quit
[SW1-bgp-default]quit
```

SW2:

sys

System View: return to User View with Ctrl+Z.

```
[H3C]sysname SW2
[SW2]int loopback 0
[SW2-LoopBack0]ip address 3.3.3.3 32
[SW2-LoopBack0]quit
[SW2]router id 3.3.3.3
[SW2]int gi 1/0/1
[SW2-GigabitEthernet1/0/1]port link-mode route
[SW2-GigabitEthernet1/0/1]des
[SW2-GigabitEthernet1/0/1]ip address 10.0.0.2 30
[SW2-GigabitEthernet1/0/1]quit
[SW2]int gi 1/0/2
[SW2-GigabitEthernet1/0/2]port link-mode route
[SW2-GigabitEthernet1/0/2]ip address 10.0.0.5 30
[SW2-GigabitEthernet1/0/2]des
[SW2-GigabitEthernet1/0/2]quit
[SW2]ospf 1 router-id 3.3.3.3
[SW2-ospf-1]area 0.0.0.0
[SW2-ospf-1-area-0.0.0.0]network 10.0.0.2 0.0.0.0
[SW2-ospf-1-area-0.0.0.0]network 3.3.3.3 0.0.0.0
[SW2-ospf-1-area-0.0.0.0]quit
[SW2-ospf-1]quit
[SW2]bgp 100
[SW2-bgp-default]router-id 3.3.3.3
[SW2-bgp-default]peer 1.1.1.1 as-number 100
[SW2-bgp-default]peer 1.1.1.1 connect-interface LoopBack 0
[SW2-bgp-default]peer 10.0.0.6 as-number 200
[SW2-bgp-default]address-family ipv4 unicast
[SW2-bgp-default-ipv4]import-route direct
[SW2-bgp-default-ipv4]peer 1.1.1.1 enable
[SW2-bgp-default-ipv4]peer 1.1.1.1 reflect-client //将1.1.1.1指定为RR路由反射器的客户端
[SW2-bgp-default-ipv4]peer 10.0.0.6 enable
[SW2-bgp-default-ipv4]quit
[SW2-bgp-default]quit
```

```

SW3:
sys
System View: return to User View with Ctrl+Z.
[H3C]sysname SW3
[SW3]int loopback 0
[SW3-LoopBack0]ip address 2.2.2.2 32
[SW3-LoopBack0]quit
[SW3]router id 2.2.2.2
[SW3]vlan 100
[SW3-vlan100]quit
[SW3]vlan 200
[SW3-vlan200]quit
[SW3]int vlan 100
[SW3-Vlan-interface100]ip address 172.16.10.1 24
[SW3-Vlan-interface100]quit
[SW3]int vlan 200
[SW3-Vlan-interface200]ip address 172.16.20.1 24
[SW3-Vlan-interface200]quit
[SW3]int gi 1/0/3
[SW3-GigabitEthernet1/0/3]port link-type access
[SW3-GigabitEthernet1/0/3]port access vlan 100
[SW3-GigabitEthernet1/0/3]quit
[SW3]int gi 1/0/4
[SW3-GigabitEthernet1/0/4]port link-type access
[SW3-GigabitEthernet1/0/4]port access vlan 200
[SW3-GigabitEthernet1/0/4]quit
[SW3]int gi 1/0/2
[SW3-GigabitEthernet1/0/2]port link-mode route
[SW3-GigabitEthernet1/0/2]des
[SW3-GigabitEthernet1/0/2]ip address 10.0.0.6 30
[SW3-GigabitEthernet1/0/2]quit
[SW3]bgp 200
[SW3-bgp-default]router-id 2.2.2.2
[SW3-bgp-default]peer 10.0.0.5 as-number 100
[SW3-bgp-default]address-family ipv4 unicast
[SW3-bgp-default-ipv4]peer 10.0.0.5 enable
[SW3-bgp-default-ipv4]import-route direct
[SW3-bgp-default-ipv4]network 172.16.10.0 255.255.255.0
[SW3-bgp-default-ipv4]network 172.16.20.0 255.255.255.0
[SW3-bgp-default-ipv4]quit
[SW3-bgp-default]quit

```

PC都填写IP地址:



配置PC\_4

接口	状态	IPv4地址	IPv6地址
G0/0/1	UP	192.168.20.2/24	

刷新

接口管理  
 禁用  启用

IPv4配置:  
 DHCP  
 静态

IPv4地址:

掩码地址:

IPv4网关:

启用

配置PC\_5

接口	状态	IPv4地址	IPv6地址
G0/0/1	UP	172.16.10.2/24	

刷新

接口管理  
 禁用  启用

IPv4配置:  
 DHCP  
 静态

IPv4地址:

掩码地址:

IPv4网关:

启用

配置PC\_6

接口	状态	IPv4地址	IPv6地址
G0/0/1	UP	172.16.20.2/24	

刷新

接口管理  
 禁用  启用

IPv4配置:  
 DHCP  
 静态

IPv4地址:

掩码地址:

IPv4网关:

启用

PC之间可以相互PING通:

```
hcl_agz_t5
SS820V2-54QS-GE_1  SS820V2-54QS-GE_7  SS820V2-54QS-GE_2  PC_3  PC_4  PC_5  PC_6
<H3C>\Apr 6 11:55:26:169 2020 H3C SHELL/5/SHELL_LOGIN: Console logged in from con0.
<H3C>ping 192.168.20.2
Ping 192.168.20.2 (192.168.20.2): 56 data bytes, press CTRL_C to break
56 bytes from 192.168.20.2: icmp_seq=0 ttl=254 time=3.000 ms
56 bytes from 192.168.20.2: icmp_seq=1 ttl=254 time=2.000 ms
56 bytes from 192.168.20.2: icmp_seq=2 ttl=254 time=1.000 ms
56 bytes from 192.168.20.2: icmp_seq=3 ttl=254 time=1.000 ms
56 bytes from 192.168.20.2: icmp_seq=4 ttl=254 time=2.000 ms
--- Ping statistics for 192.168.20.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 1.000/1.800/3.000/0.748 ms
<H3C>\Apr 6 11:55:34:910 2020 H3C PING/6/PING_STATISTICS: Ping statistics for 192.168.20.2: 5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss, round-trip min/avg/max/std-dev = 1.000/1.800/3.000/0.748 ms.
<H3C>ping 172.16.10.2
Ping 172.16.10.2 (172.16.10.2): 56 data bytes, press CTRL_C to break
56 bytes from 172.16.10.2: icmp_seq=0 ttl=252 time=3.000 ms
56 bytes from 172.16.10.2: icmp_seq=1 ttl=252 time=3.000 ms
56 bytes from 172.16.10.2: icmp_seq=2 ttl=252 time=3.000 ms
56 bytes from 172.16.10.2: icmp_seq=3 ttl=252 time=2.000 ms
56 bytes from 172.16.10.2: icmp_seq=4 ttl=252 time=3.000 ms
--- Ping statistics for 172.16.10.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 2.000/3.000/4.000/0.632 ms
<H3C>\Apr 6 11:55:45:442 2020 H3C PING/6/PING_STATISTICS: Ping statistics for 172.16.10.2: 5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss, round-trip min/avg/max/std-dev = 2.000/3.000/4.000/0.632 ms.
<H3C>ping 172.16.20.2
Ping 172.16.20.2 (172.16.20.2): 56 data bytes, press CTRL_C to break
56 bytes from 172.16.20.2: icmp_seq=0 ttl=252 time=6.000 ms
56 bytes from 172.16.20.2: icmp_seq=1 ttl=252 time=3.000 ms
56 bytes from 172.16.20.2: icmp_seq=2 ttl=252 time=3.000 ms
56 bytes from 172.16.20.2: icmp_seq=3 ttl=252 time=3.000 ms
56 bytes from 172.16.20.2: icmp_seq=4 ttl=252 time=3.000 ms
--- Ping statistics for 172.16.20.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
```

```
hcl_agz_t5
SS820V2-54QS-GE_1  SS820V2-54QS-GE_7  SS820V2-54QS-GE_2  PC_3  PC_4  PC_5  PC_6
Press ENTER to get started.
<H3C>\Apr 6 11:57:42:600 2020 H3C SHELL/5/SHELL_LOGIN: Console logged in from con0.
<H3C>ping 192.168.10.2
Ping 192.168.10.2 (192.168.10.2): 56 data bytes, press CTRL_C to break
56 bytes from 192.168.10.2: icmp_seq=0 ttl=254 time=2.000 ms
56 bytes from 192.168.10.2: icmp_seq=1 ttl=254 time=1.000 ms
56 bytes from 192.168.10.2: icmp_seq=2 ttl=254 time=2.000 ms
56 bytes from 192.168.10.2: icmp_seq=3 ttl=254 time=1.000 ms
56 bytes from 192.168.10.2: icmp_seq=4 ttl=254 time=1.000 ms
--- Ping statistics for 192.168.10.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 1.000/1.400/2.000/0.490 ms
<H3C>\Apr 6 11:57:49:014 2020 H3C PING/6/PING_STATISTICS: Ping statistics for 192.168.10.2: 5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss, round-trip min/avg/max/std-dev = 1.000/1.400/2.000/0.490 ms.
<H3C>ping 172.16.10.2
Ping 172.16.10.2 (172.16.10.2): 56 data bytes, press CTRL_C to break
56 bytes from 172.16.10.2: icmp_seq=0 ttl=252 time=3.000 ms
56 bytes from 172.16.10.2: icmp_seq=1 ttl=252 time=4.000 ms
56 bytes from 172.16.10.2: icmp_seq=2 ttl=252 time=2.000 ms
56 bytes from 172.16.10.2: icmp_seq=3 ttl=252 time=4.000 ms
56 bytes from 172.16.10.2: icmp_seq=4 ttl=252 time=5.000 ms
--- Ping statistics for 172.16.10.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 2.000/3.600/5.000/1.020 ms
<H3C>\Apr 6 11:57:55:362 2020 H3C PING/6/PING_STATISTICS: Ping statistics for 172.16.10.2: 5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss, round-trip min/avg/max/std-dev = 2.000/3.600/5.000/1.020 ms.
<H3C>ping 172.16.20.2
Ping 172.16.20.2 (172.16.20.2): 56 data bytes, press CTRL_C to break
56 bytes from 172.16.20.2: icmp_seq=0 ttl=252 time=4.000 ms
56 bytes from 172.16.20.2: icmp_seq=1 ttl=252 time=3.000 ms
56 bytes from 172.16.20.2: icmp_seq=2 ttl=252 time=3.000 ms
56 bytes from 172.16.20.2: icmp_seq=3 ttl=252 time=2.000 ms
56 bytes from 172.16.20.2: icmp_seq=4 ttl=252 time=2.000 ms
--- Ping statistics for 172.16.20.2 ---
```

```

hcl_agz_15
S5820V2-54Q3-GE_1 S5820V2-54Q3-GE_7 S5820V2-54Q3-GE_2 PC_3 PC_4 PC_5 PC_6

Press ENTER to get started.
<H3C>Apr 6 11:21:24:232 2020 H3C SHELL/S/SHELL_LOGIN: Console logged in from con0.

<H3C>ping 172.16.20.2
Ping 172.16.20.2 (172.16.20.2): 56 data bytes, press CTRL_C to break
56 bytes from 172.16.20.2: icmp_seq=0 ttl=254 time=2.000 ms
56 bytes from 172.16.20.2: icmp_seq=1 ttl=254 time=0.000 ms
56 bytes from 172.16.20.2: icmp_seq=2 ttl=254 time=1.000 ms
56 bytes from 172.16.20.2: icmp_seq=3 ttl=254 time=2.000 ms
56 bytes from 172.16.20.2: icmp_seq=4 ttl=254 time=1.000 ms

--- Ping statistics for 172.16.20.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 0.000/1.200/2.000/0.748 ms
<H3C>Apr 6 11:21:29:143 2020 H3C PING/6/PING_STATISTICS: Ping statistics for 172.16.20.2: 5 p
ip min/avg/max/std-dev = 0.000/1.200/2.000/0.748 ms.

<H3C>ping 192.168.10.2
Ping 192.168.10.2 (192.168.10.2): 56 data bytes, press CTRL_C to break
56 bytes from 192.168.10.2: icmp_seq=0 ttl=252 time=5.000 ms
56 bytes from 192.168.10.2: icmp_seq=1 ttl=252 time=2.000 ms
56 bytes from 192.168.10.2: icmp_seq=2 ttl=252 time=3.000 ms
56 bytes from 192.168.10.2: icmp_seq=3 ttl=252 time=2.000 ms
56 bytes from 192.168.10.2: icmp_seq=4 ttl=252 time=3.000 ms

--- Ping statistics for 192.168.10.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 2.000/3.000/5.000/1.095 ms
<H3C>Apr 6 11:21:36:795 2020 H3C PING/6/PING_STATISTICS: Ping statistics for 192.168.10.2: 5
ip min/avg/max/std-dev = 2.000/3.000/5.000/1.095 ms.

<H3C>ping 192.168.20.2
Ping 192.168.20.2 (192.168.20.2): 56 data bytes, press CTRL_C to break
56 bytes from 192.168.20.2: icmp_seq=0 ttl=252 time=4.000 ms
56 bytes from 192.168.20.2: icmp_seq=1 ttl=252 time=2.000 ms
56 bytes from 192.168.20.2: icmp_seq=2 ttl=252 time=3.000 ms
56 bytes from 192.168.20.2: icmp_seq=3 ttl=252 time=2.000 ms
56 bytes from 192.168.20.2: icmp_seq=4 ttl=252 time=2.000 ms

--- Ping statistics for 192.168.20.2 ---

```

```

hcl_agz_15
S5820V2-54Q3-GE_1 S5820V2-54Q3-GE_7 S5820V2-54Q3-GE_2 PC_3 PC_4 PC_5 PC_6

Press ENTER to get started.
<H3C>Apr 6 11:58:50:064 2020 H3C SHELL/S/SHELL_LOGIN: Console logged in from con0.

<H3C>ping 172.16.10.2
Ping 172.16.10.2 (172.16.10.2): 56 data bytes, press CTRL_C to break
56 bytes from 172.16.10.2: icmp_seq=0 ttl=254 time=2.000 ms
56 bytes from 172.16.10.2: icmp_seq=1 ttl=254 time=2.000 ms
56 bytes from 172.16.10.2: icmp_seq=2 ttl=254 time=1.000 ms
56 bytes from 172.16.10.2: icmp_seq=3 ttl=254 time=1.000 ms
56 bytes from 172.16.10.2: icmp_seq=4 ttl=254 time=1.000 ms

--- Ping statistics for 172.16.10.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 1.000/1.400/2.000/0.490 ms
<H3C>Apr 6 11:58:56:206 2020 H3C PING/6/PING_STATISTICS: Ping statistics for 172.16.10.2: 5 packet
ip min/avg/max/std-dev = 1.000/1.400/2.000/0.490 ms.

<H3C>ping 192.168.10.2
Ping 192.168.10.2 (192.168.10.2): 56 data bytes, press CTRL_C to break
56 bytes from 192.168.10.2: icmp_seq=0 ttl=252 time=4.000 ms
56 bytes from 192.168.10.2: icmp_seq=1 ttl=252 time=5.000 ms
56 bytes from 192.168.10.2: icmp_seq=2 ttl=252 time=3.000 ms
56 bytes from 192.168.10.2: icmp_seq=3 ttl=252 time=2.000 ms
56 bytes from 192.168.10.2: icmp_seq=4 ttl=252 time=2.000 ms

--- Ping statistics for 192.168.10.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 2.000/3.200/5.000/1.166 ms
<H3C>Apr 6 11:59:03:485 2020 H3C PING/6/PING_STATISTICS: Ping statistics for 192.168.10.2: 5 packet
ip min/avg/max/std-dev = 2.000/3.200/5.000/1.166 ms.

<H3C>ping 192.168.20.2
Ping 192.168.20.2 (192.168.20.2): 56 data bytes, press CTRL_C to break
56 bytes from 192.168.20.2: icmp_seq=0 ttl=252 time=5.000 ms
56 bytes from 192.168.20.2: icmp_seq=1 ttl=252 time=3.000 ms
56 bytes from 192.168.20.2: icmp_seq=2 ttl=252 time=3.000 ms
56 bytes from 192.168.20.2: icmp_seq=3 ttl=252 time=2.000 ms
56 bytes from 192.168.20.2: icmp_seq=4 ttl=252 time=2.000 ms

--- Ping statistics for 192.168.20.2 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss

```

查看SW1的BGP邻居信息:

```

<SW1>dis bgp peer ipv4

BGP local router ID: 1.1.1.1
Local AS number: 100
Total number of peers: 1          Peers in established state: 1

* - Dynamically created peer
Peer          AS  MsgRcvd  MsgSent  OutQ  PrefRcv  Up/Down  State
3.3.3.3      100    25      17      0     4 00:09:19 Established
<SW1>

```

查看SW2的BGP邻居信息:

```

[SW2]dis bgp peer ipv4

BGP local router ID: 3.3.3.3
Local AS number: 100
Total number of peers: 2          Peers in established state: 2

* - Dynamically created peer
Peer          AS  MsgRcvd  MsgSent  OutQ  PrefRcv  Up/Down  State
1.1.1.1      100    18      27      0     2 00:10:53 Established
10.0.0.6     200    14      20      0     4 00:07:41 Established
[SW2]

```

查看SW3的BGP邻居信息:

```
[SW3]dis bgp peer ipv4
BGP local router ID: 2.2.2.2
Local AS number: 200
Total number of peers: 1          Peers in established state: 1
* - Dynamically created peer
Peer          AS      MsgRcvd  MsgSent  OutQ  PrefRcv  Up/Down  State
10.0.0.5     100    21       15       0     5        00:07:30  Established
[SW3]
```

查看SW1的路由表:

```
<SW1>dis ip routing-table
Destinations : 26          Routes : 26

Destination/Mask  Proto  Pre Cost      NextHop          Interface
0.0.0.0/32        Direct 0 0           127.0.0.1        InLoop0
1.1.1.1/32        Direct 0 0           127.0.0.1        InLoop0
2.2.2.2/32        BGP    255 0           10.0.0.6         GE1/0/2
3.3.3.3/32        O_INTRA 10 1           10.0.0.2         GE1/0/2
10.0.0.0/30       Direct 0 0           10.0.0.1         GE1/0/2
10.0.0.0/32       Direct 0 0           10.0.0.1         GE1/0/2
10.0.0.1/32       Direct 0 0           127.0.0.1        InLoop0
10.0.0.3/32       Direct 0 0           10.0.0.1         GE1/0/2
10.0.0.4/30       O_INTRA 10 2           10.0.0.2         GE1/0/2
127.0.0.0/8       Direct 0 0           127.0.0.1        InLoop0
127.0.0.0/32      Direct 0 0           127.0.0.1        InLoop0
127.0.0.1/32      Direct 0 0           127.0.0.1        InLoop0
127.255.255.255/32 Direct 0 0           127.0.0.1        InLoop0
172.16.10.0/24    BGP    255 0           10.0.0.6         GE1/0/2
172.16.20.0/24    BGP    255 0           10.0.0.6         GE1/0/2
192.168.10.0/24   Direct 0 0           192.168.10.1     Vlan10
192.168.10.0/32   Direct 0 0           192.168.10.1     Vlan10
192.168.10.1/32   Direct 0 0           127.0.0.1        InLoop0
192.168.10.1/32   Direct 0 0           192.168.10.1     Vlan10
192.168.20.0/24   Direct 0 0           192.168.20.1     Vlan20
192.168.20.0/32   Direct 0 0           192.168.20.1     Vlan20
192.168.20.1/32   Direct 0 0           127.0.0.1        InLoop0
192.168.20.255/32 Direct 0 0           192.168.20.1     Vlan20
224.0.0.0/4       Direct 0 0           0.0.0.0          NULL0
224.0.0.0/24      Direct 0 0           0.0.0.0          NULL0
255.255.255.255/32 Direct 0 0           127.0.0.1        InLoop0
<SW1>
```

查看SW2的路由表:

```
[SW2]dis ip routing-table
Destinations : 23          Routes : 23

Destination/Mask  Proto  Pre Cost      NextHop          Interface
0.0.0.0/32        Direct 0 0           127.0.0.1        InLoop0
1.1.1.1/32        O_INTRA 10 1           10.0.0.1         GE1/0/1
2.2.2.2/32        BGP    255 0           10.0.0.6         GE1/0/2
3.3.3.3/32        Direct 0 0           127.0.0.1        InLoop0
10.0.0.0/30       Direct 0 0           10.0.0.2         GE1/0/1
10.0.0.0/32       Direct 0 0           10.0.0.2         GE1/0/1
10.0.0.2/32       Direct 0 0           127.0.0.1        InLoop0
10.0.0.3/32       Direct 0 0           10.0.0.2         GE1/0/1
10.0.0.4/30       Direct 0 0           10.0.0.5         GE1/0/2
10.0.0.4/32       Direct 0 0           10.0.0.5         GE1/0/2
10.0.0.5/32       Direct 0 0           127.0.0.1        InLoop0
10.0.0.7/32       Direct 0 0           10.0.0.5         GE1/0/2
127.0.0.0/8       Direct 0 0           127.0.0.1        InLoop0
127.0.0.0/32      Direct 0 0           127.0.0.1        InLoop0
127.0.0.1/32      Direct 0 0           127.0.0.1        InLoop0
127.255.255.255/32 Direct 0 0           127.0.0.1        InLoop0
172.16.10.0/24    BGP    255 0           10.0.0.6         GE1/0/2
172.16.20.0/24    BGP    255 0           10.0.0.6         GE1/0/2
192.168.10.0/24   BGP    255 0           1.1.1.1          GE1/0/1
192.168.20.0/24   BGP    255 0           1.1.1.1          GE1/0/1
224.0.0.0/4       Direct 0 0           0.0.0.0          NULL0
224.0.0.0/24      Direct 0 0           0.0.0.0          NULL0
255.255.255.255/32 Direct 0 0           127.0.0.1        InLoop0
[SW2]
```

查看SW3的路由表:

```

[SW3]dis ip routing-table

Destinations : 25          Routes : 25

Destination/Mask    Proto  Pre  Cost           NextHop           Interface
0.0.0.0/32          Direct 0    0              127.0.0.1         InLoop0
2.2.2.2/32          Direct 0    0              127.0.0.1         InLoop0
3.3.3.3/32          BGP    255  0              10.0.0.5          GE1/0/2
10.0.0.0/30         BGP    255  0              10.0.0.5          GE1/0/2
10.0.0.4/30         Direct 0    0              10.0.0.6          GE1/0/2
10.0.0.4/32         Direct 0    0              10.0.0.6          GE1/0/2
10.0.0.6/32         Direct 0    0              127.0.0.1         InLoop0
10.0.0.7/32         Direct 0    0              10.0.0.6          GE1/0/2
127.0.0.0/8         Direct 0    0              127.0.0.1         InLoop0
127.0.0.0/32        Direct 0    0              127.0.0.1         InLoop0
127.0.0.1/32        Direct 0    0              127.0.0.1         InLoop0
127.255.255.255/32 Direct 0    0              127.0.0.1         InLoop0
172.16.10.0/24      Direct 0    0              172.16.10.1       Vlan100
172.16.10.0/32      Direct 0    0              172.16.10.1       Vlan100
172.16.10.1/32      Direct 0    0              127.0.0.1         InLoop0
172.16.10.255/32    Direct 0    0              172.16.10.1       Vlan100
172.16.20.0/24      Direct 0    0              172.16.20.1       Vlan200
172.16.20.0/32      Direct 0    0              172.16.20.1       Vlan200
172.16.20.1/32      Direct 0    0              127.0.0.1         InLoop0
172.16.20.255/32    Direct 0    0              172.16.20.1       Vlan200
192.168.10.0/24     BGP    255  0              10.0.0.5          GE1/0/2
192.168.20.0/24     BGP    255  0              10.0.0.5          GE1/0/2
224.0.0.0/4         Direct 0    0              0.0.0.0           NULL0
224.0.0.0/24        Direct 0    0              0.0.0.0           NULL0
255.255.255.255/32 Direct 0    0              127.0.0.1         InLoop0
[SW3]

```

至此，S5820 BGP一级RR路由反射器典型组网配置案例已完成！

配置关键点