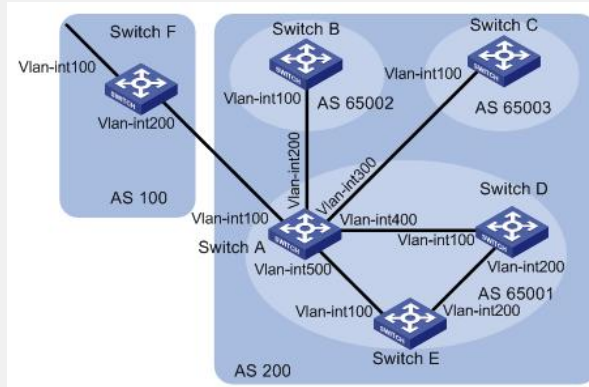


H3C S3500-EA IPv4 BGP联盟的典型配置

一、组网需求:

AS 200中有多台BGP交换机, 为了减少IBGP的连接数, 现将他们划分为3个子自治系统: AS 65001、AS 65002和AS 65003。其中AS 65001内的三台交换机建立IBGP全连接

二、组网图:



设备	接口	IP地址	设备	接口	IP地址
Switch A	Vlan-int100	200.1.1.1/24	Switch D	Vlan-int100	10.1.3.2/24
	Vlan-int200	10.1.1.1/24		Vlan-int200	10.1.5.1/24
	Vlan-int300	10.1.2.1/24	Switch E	Vlan-int100	10.1.4.2/24
	Vlan-int400	10.1.3.1/24		Vlan-int200	10.1.5.2/24
	Vlan-int500	10.1.4.1/24	Switch F	Vlan-int100	9.1.1.1/24
Switch B	Vlan-int100	10.1.1.2/24		Vlan-int200	200.1.1.2/24
Switch C	Vlan-int100	10.1.2.2/24			

三、配置步骤:

- (1) 配置各交换机接口的IP地址(略)
- (2) 配置BGP联盟

# 配置Switch A.

```
<SwitchA> system-view
[SwitchA] bgp 65001
[SwitchA-bgp] router-id 1.1.1.1
[SwitchA-bgp] confederation id 200
[SwitchA-bgp] confederation peer-as 65002 65003
[SwitchA-bgp] peer 10.1.1.2 as-number 65002
[SwitchA-bgp] peer 10.1.1.2 next-hop-local
[SwitchA-bgp] peer 10.1.2.2 as-number 65003
[SwitchA-bgp] peer 10.1.2.2 next-hop-local
[SwitchA-bgp] quit
```

# 配置Switch B.

```
<SwitchB> system-view
[SwitchB] bgp 65002
[SwitchB-bgp] router-id 2.2.2.2
[SwitchB-bgp] confederation id 200
[SwitchB-bgp] confederation peer-as 65001 65003
[SwitchB-bgp] peer 10.1.1.1 as-number 65001
[SwitchB-bgp] quit
```

# 配置Switch C.

```
<SwitchC> system-view
[SwitchC] bgp 65003
[SwitchC-bgp] router-id 3.3.3.3
```

```

[SwitchC-bgp] confederation id 200
[SwitchC-bgp] confederation peer-as 65001 65002
[SwitchC-bgp] peer 10.1.2.1 as-number 65001
[SwitchC-bgp] quit
(3) 配置AS 65001内的IBGP连接
# 配置Switch A。
[SwitchA] bgp 65001
[SwitchA-bgp] peer 10.1.3.2 as-number 65001
[SwitchA-bgp] peer 10.1.3.2 next-hop-local
[SwitchA-bgp] peer 10.1.4.2 as-number 65001
[SwitchA-bgp] peer 10.1.4.2 next-hop-local
[SwitchA-bgp] quit
# 配置Switch D。
<SwitchD> system-view
[SwitchD] bgp 65001
[SwitchD-bgp] router-id 4.4.4.4
[SwitchD-bgp] confederation id 200
[SwitchD-bgp] peer 10.1.3.1 as-number 65001
[SwitchD-bgp] peer 10.1.5.2 as-number 65001
[SwitchD-bgp] quit
# 配置Switch E。
<SwitchE> system-view
[SwitchE] bgp 65001
[SwitchE-bgp] router-id 5.5.5.5
[SwitchE-bgp] confederation id 200
[SwitchE-bgp] peer 10.1.4.1 as-number 65001
[SwitchE-bgp] peer 10.1.5.1 as-number 65001
[SwitchE-bgp] quit
(4) 配置AS100和AS200之间的EBGP连接。
# 配置Switch A。
[SwitchA] bgp 65001
[SwitchA-bgp] peer 200.1.1.2 as-number 100
[SwitchA-bgp] quit
# 配置Switch F。
<SwitchF> system-view
[SwitchF] bgp 100
[SwitchF-bgp] router-id 6.6.6.6
[SwitchF-bgp] peer 200.1.1.1 as-number 200
[SwitchF-bgp] network 9.1.1.0 255.255.255.0
[SwitchF-bgp] quit
(5) 验证配置结果。
# 查看Switch B的BGP路由表。
[SwitchB] display bgp routing-table
Total Number of Routes: 1
BGP Local router ID is 2.2.2.2
Status codes: * - valid, > - best, d - damped,
              h - history, i - internal, s - suppressed, S - Stale
              Origin : i - IGP, e - EGP, ? - incomplete
              Network      NextHop    MED      LocPrf  PrefVal Path/Ogn
*>i 9.1.1.0/24    10.1.1.1    0        100     0       (65001) 100i
[SwitchB] display bgp routing-table 9.1.1.0
BGP local router ID : 2.2.2.2
Local AS number : 65002
Paths: 1 available, 1 best
BGP routing table entry information of 9.1.1.0/24:
From      : 10.1.1.1 (1.1.1.1)
Relay NextHop : 0.0.0.0
Original nexthop: 10.1.1.1
AS-path   : (65001) 100
Origin    : igp
Attribute value : MED 0, localpref 100, pref-val 0, pre 255
State      : valid, external-confed, best,
Not advertised to any peers yet
# 查看Switch D的BGP路由表。

```

[SwitchD] display bgp routing-table

Total Number of Routes: 1

BGP Local router ID is 4.4.4.4

Status codes: \* - valid, > - best, d - damped,

h - history, i - internal, s - suppressed, S - Stale

Origin : i - IGP, e - EGP, ? - incomplete

Network	NextHop	MED	LocPrf	PrefVal	Path/Ogn
*>i 9.1.1.0/24	10.1.3.1	0	100	0	100i

[SwitchD] display bgp routing-table 9.1.1.0

BGP local router ID : 4.4.4.4

Local AS number : 65001

Paths: 1 available, 1 best

BGP routing table entry information of 9.1.1.0/24:

From : 10.1.3.1 (1.1.1.1)

Relay Nexthop : 0.0.0.0

Original nexthop: 10.1.3.1

AS-path : 100

Origin : igp

Attribute value : MED 0, localpref 100, pref-val 0, pre 255

State : valid, internal, best, Not advertised to any peers yet

四、配置关键点:

无。