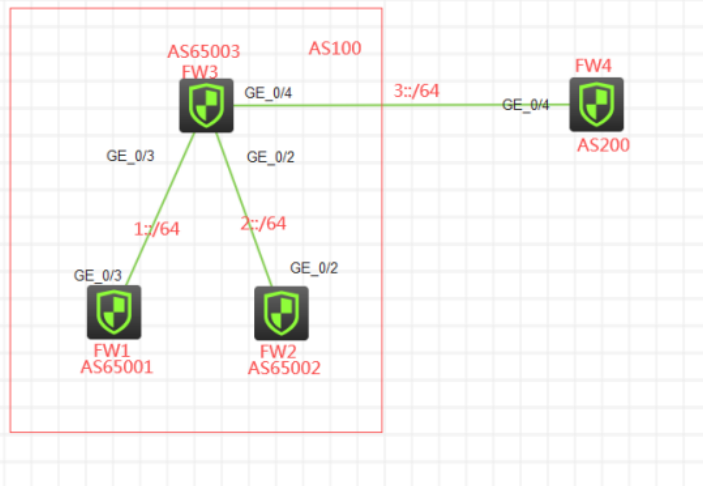


知 F1060 IPV6 BGP4+联盟典型组网配置案例

设备部署方式 H3C模拟器 韦家宁 2020-04-11 发表

组网及说明



组网说明:

本案例采用H3C HCL模拟器的F1060来模拟IPV6 BGP联盟的典型组网配置。在网络拓扑图中FW1、FW2没有直连到FW4，同时又属于不同的AS，为了实现FW1、FW2能与FW4互通，因此使用BGP联盟来达到互通的效果。

BGP联盟规划:

设备名称	AS号	联盟ID	备注
FW1	65001	100	
FW2	65002	100	
FW3	65003	100	
FW4	200		非联盟设备

IP地址规划:

设备名称	VLAN/接口	IP地址	子网掩码/地址前缀	备注
FW1	Loopback 0	1.1.1.1	32	Router-id
	Loopback 1	4::1	64	IPV6 Router-id
	Loopback 10	8::1	64	模拟业务
	GI 1/0/3	1::1	64	
FW2	Loopback 0	2.2.2.2	32	Router-id
	Loopback 1	5::1	64	IPV6 Router-id
	Loopback 10	9::1	64	模拟业务
	GI 1/0/2	2::1	64	
FW3	Loopback 0	3.3.3.3	32	Router-id
	Loopback 1	6::1	64	IPV6 Router-id
	GI 1/0/3	1::2	64	
	GI 1/0/2	2::2	64	
	GI 1/0/4	3::1	64	
FW4	Loopback 0	4.4.4.4	32	Router-id
	Loopback 1	7::1	64	IPV6 Router-id
	Loopback 100	10::1	64	模拟业务
	GI 1/0/4	3::2	64	

配置步骤

FW1:

```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname FW1
[FW1]acl ipv6 basic 2001
[FW1-acl-ipv6-basic-2001]rule 0 permit source any
[FW1-acl-ipv6-basic-2001]quit
```

```

[FW1]zone-pair security source trust destination untrust
[FW1-zone-pair-security-Trust-Untrust]packet-filter ipv6 2001
[FW1-zone-pair-security-Trust-Untrust]quit
[FW1]zone-pair security source untrust destination trust
[FW1-zone-pair-security-Untrust-Trust]packet-filter ipv6 2001
[FW1-zone-pair-security-Untrust-Trust]quit
[FW1]zone-pair security source trust destination local
[FW1-zone-pair-security-Trust-Local]packet-filter ipv6 2001
[FW1-zone-pair-security-Trust-Local]quit
[FW1]zone-pair security source local destination trust
[FW1-zone-pair-security-Local-Trust]packet-filter ipv6 2001
[FW1-zone-pair-security-Local-Trust]quit
[FW1]zone-pair security source untrust destination local
[FW1-zone-pair-security-Untrust-Local]packet-filter ipv6 2001
[FW1-zone-pair-security-Untrust-Local]quit
[FW1]zone-pair security source local destination untrust
[FW1-zone-pair-security-Local-Untrust]packet-filter ipv6 2001
[FW1-zone-pair-security-Local-Untrust]quit
[FW1]zone-pair security source trust destination trust
[FW1-zone-pair-security-Trust-Trust]packet-filter ipv6 2001
[FW1-zone-pair-security-Trust-Trust]quit
[FW1]zone-pair security source untrust destination untrust
[FW1-zone-pair-security-Untrust-Untrust]packet-filter ipv6 2001
[FW1-zone-pair-security-Untrust-Untrust]quit
[FW1]int loopback 0
[FW1-LoopBack0]ip address 1.1.1.1 32
[FW1-LoopBack0]quit
[FW1]int loopback 1
[FW1-LoopBack1]ipv6 address 4::1 64
[FW1-LoopBack1]quit
[FW1]int loopback 10
[FW1-LoopBack10]ipv6 address 8::1 64
[FW1-LoopBack10]quit
[FW1]int gi 1/0/3
[FW1-GigabitEthernet1/0/3]port link-mode route
[FW1-GigabitEthernet1/0/3]des <connect to FW3>
[FW1-GigabitEthernet1/0/3]ipv6 address 1::1 64
[FW1-GigabitEthernet1/0/3]quit
[FW1]bgp 65001
[FW1-bgp-default]router-id 1.1.1.1
[FW1-bgp-default]confederation id 100 //指定联盟ID
[FW1-bgp-default]confederation peer-as 65002 65003 //指定联盟成员
[FW1-bgp-default]peer 1::2 as-number 65003
[FW1-bgp-default]address-family ipv6 unicast
[FW1-bgp-default-ipv6]peer 1::2 enable
[FW1-bgp-default-ipv6]network 8:: 64
[FW1-bgp-default-ipv6]network 4:: 64
[FW1-bgp-default-ipv6]quit
[FW1-bgp-default]quit
[FW1]security-zone name Untrust
[FW1-security-zone-Untrust]import interface GigabitEthernet 1/0/3
[FW1-security-zone-Untrust]quit
[FW1]security-zone name Trust
[FW1-security-zone-Trust]import interface LoopBack 1
[FW1-security-zone-Trust]import interface LoopBack 10
[FW1-security-zone-Trust]quit
[FW1]

```

FW2:

```

<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname FW2
[FW2]acl ipv6 basic 2001
[FW2-acl-ipv6-basic-2001]rule 0 permit source any

```

```
[FW2-acl-ipv6-basic-2001]quit
[FW2]zone-pair security source trust destination untrust
[FW2-zone-pair-security-Trust-Untrust]packet-filter ipv6 2001
[FW2-zone-pair-security-Trust-Untrust]quit
[FW2]zone-pair security source untrust destination trust
[FW2-zone-pair-security-Untrust-Trust]packet-filter ipv6 2001
[FW2-zone-pair-security-Untrust-Trust]quit
[FW2]zone-pair security source trust destination local
[FW2-zone-pair-security-Trust-Local]packet-filter ipv6 2001
[FW2-zone-pair-security-Trust-Local]quit
[FW2]zone-pair security source local destination trust
[FW2-zone-pair-security-Local-Trust]packet-filter ipv6 2001
[FW2-zone-pair-security-Local-Trust]quit
[FW2]zone-pair security source untrust destination local
[FW2-zone-pair-security-Untrust-Local]packet-filter ipv6 2001
[FW2-zone-pair-security-Untrust-Local]quit
[FW2]zone-pair security source local destination untrust
[FW2-zone-pair-security-Local-Untrust]packet-filter ipv6 2001
[FW2-zone-pair-security-Local-Untrust]quit
[FW2]zone-pair security source trust destination trust
[FW2-zone-pair-security-Trust-Trust]packet-filter ipv6 2001
[FW2-zone-pair-security-Trust-Trust]quit
[FW2]zone-pair security source untrust destination untrust
[FW2-zone-pair-security-Untrust-Untrust]packet-filter ipv6 2001
[FW2-zone-pair-security-Untrust-Untrust]quit
[FW2]int loopback 0
[FW2-LoopBack0]ip address 2.2.2.2 32
[FW2-LoopBack0]quit
[FW2]int loopback 1
[FW2-LoopBack1]ipv6 address 5::1 64
[FW2-LoopBack1]quit
[FW2]int loopback 10
[FW2-LoopBack10]ipv6 address 9::1 64
[FW2-LoopBack10]quit
[FW2]int gi 1/0/2
[FW2-GigabitEthernet1/0/2]port link-mode route
[FW2-GigabitEthernet1/0/2]des <connect to FW3>
[FW2-GigabitEthernet1/0/2]ipv6 address 2::1 64
[FW2-GigabitEthernet1/0/2]quit
[FW2]bgp 65002
[FW2-bgp-default]router-id 2.2.2.2
[FW2-bgp-default]confederation id 100
[FW2-bgp-default]confederation peer-as 65001 65003
[FW2-bgp-default]peer 2::2 as-number 65003
[FW2-bgp-default]address-family ipv6 unicast
[FW2-bgp-default-ipv6]peer 2::2 enable
[FW2-bgp-default-ipv6]network 5:: 64
[FW2-bgp-default-ipv6]network 9:: 64
[FW2-bgp-default-ipv6]quit
[FW2-bgp-default]quit
[FW2]security-zone name Untrust
[FW2-security-zone-Untrust]import interface GigabitEthernet 1/0/2
[FW2-security-zone-Untrust]quit
[FW2]security-zone name Trust
[FW2-security-zone-Trust]import interface LoopBack 1
[FW2-security-zone-Trust]import interface LoopBack 10
[FW2-security-zone-Trust]quit
[FW2]
```

FW3:

<H3C>sys

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

[H3C]sysname FW3

[FW3]acl ipv6 basic 2001

```
[FW3-acl-ipv6-basic-2001]rule 0 permit source any
[FW3-acl-ipv6-basic-2001]quit
[FW3]zone-pair security source trust destination untrust
[FW3-zone-pair-security-Trust-Untrust]packet-filter ipv6 2001
[FW3-zone-pair-security-Trust-Untrust]quit
[FW3]zone-pair security source untrust destination trust
[FW3-zone-pair-security-Untrust-Trust]packet-filter ipv6 2001
[FW3-zone-pair-security-Untrust-Trust]quit
[FW3]zone-pair security source trust destination local
[FW3-zone-pair-security-Trust-Local]packet-filter ipv6 2001
[FW3-zone-pair-security-Trust-Local]quit
[FW3]zone-pair security source local destination trust
[FW3-zone-pair-security-Local-Trust]packet-filter ipv6 2001
[FW3-zone-pair-security-Local-Trust]quit
[FW3]zone-pair security source untrust destination local
[FW3-zone-pair-security-Untrust-Local]packet-filter ipv6 2001
[FW3-zone-pair-security-Untrust-Local]quit
[FW3]zone-pair security source local destination untrust
[FW3-zone-pair-security-Local-Untrust]packet-filter ipv6 2001
[FW3-zone-pair-security-Local-Untrust]quit
[FW3]zone-pair security source trust destination trust
[FW3-zone-pair-security-Trust-Trust]packet-filter ipv6 2001
[FW3-zone-pair-security-Trust-Trust]quit
[FW3]zone-pair security source untrust destination untrust
[FW3-zone-pair-security-Untrust-Untrust]packet-filter ipv6 2001
[FW3-zone-pair-security-Untrust-Untrust]quit
[FW3]int loopback 0
[FW3-LoopBack0]ip address 3.3.3.3 32
[FW3-LoopBack0]quit
[FW3]int loopback 1
[FW3-LoopBack1]ipv6 address 6::1 64
[FW3-LoopBack1]quit
[FW3]int gi 1/0/3
[FW3-GigabitEthernet1/0/3]port link-mode route
[FW3-GigabitEthernet1/0/3]des <connect to FW1>
[FW3-GigabitEthernet1/0/3]ipv6 address 1::2 64
[FW3-GigabitEthernet1/0/3]quit
[FW3]int gi 1/0/2
[FW3-GigabitEthernet1/0/2]port link-mode route
[FW3-GigabitEthernet1/0/2]des <connect to FW2>
[FW3-GigabitEthernet1/0/2]ipv6 address 2::2 64
[FW3-GigabitEthernet1/0/2]quit
[FW3]int gi 1/0/4
[FW3-GigabitEthernet1/0/4]port link-mode route
[FW3-GigabitEthernet1/0/4]ipv6 address 3::1 64
[FW3-GigabitEthernet1/0/4]des <connect to FW4>
[FW3-GigabitEthernet1/0/4]quit
[FW3]bgp 65003
[FW3-bgp-default]router-id 3.3.3.3
[FW3-bgp-default]confederation id 100
[FW3-bgp-default]confederation peer-as 65001 65002
[FW3-bgp-default]peer 1::1 as-number 65001
[FW3-bgp-default]peer 2::1 as-number 65002
[FW3-bgp-default]peer 3::2 as-number 200
[FW3-bgp-default]address-family ipv6 unicast
[FW3-bgp-default-ipv6]peer 1::1 enable
[FW3-bgp-default-ipv6]peer 2::1 enable
[FW3-bgp-default-ipv6]peer 3::2 enable
[FW3-bgp-default-ipv6]network 6:: 64
[FW3-bgp-default-ipv6]import-route direct
[FW3-bgp-default-ipv6]quit
[FW3-bgp-default]quit
[FW3]security-zone name Untrust
[FW3-security-zone-Untrust]import interface GigabitEthernet 1/0/4
```

```
[FW3-security-zone-Untrust]quit
[FW3]security-zone name Trust
[FW3-security-zone-Trust]import interface GigabitEthernet 1/0/3
[FW3-security-zone-Trust]import interface GigabitEthernet 1/0/2
[FW3-security-zone-Trust]import interface LoopBack 1
[FW3-security-zone-Trust]quit
```

FW4:

```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname FW4
[FW4]acl ipv6 basic 2001
[FW4-acl-ipv6-basic-2001]rule 0 permit source any
[FW4-acl-ipv6-basic-2001]quit
[FW4]zone-pair security source trust destination untrust
[FW4-zone-pair-security-Trust-Untrust]packet-filter ipv6 2001
[FW4-zone-pair-security-Trust-Untrust]quit
[FW4]zone-pair security source untrust destination trust
[FW4-zone-pair-security-Untrust-Trust]packet-filter ipv6 2001
[FW4-zone-pair-security-Untrust-Trust]quit
[FW4]zone-pair security source trust destination local
[FW4-zone-pair-security-Trust-Local]packet-filter ipv6 2001
[FW4-zone-pair-security-Trust-Local]quit
[FW4]zone-pair security source local destination trust
[FW4-zone-pair-security-Local-Trust]packet-filter ipv6 2001
[FW4-zone-pair-security-Local-Trust]quit
[FW4]zone-pair security source untrust destination local
[FW4-zone-pair-security-Untrust-Local]packet-filter ipv6 2001
[FW4-zone-pair-security-Untrust-Local]quit
[FW4]zone-pair security source local destination untrust
[FW4-zone-pair-security-Local-Untrust]packet-filter ipv6 2001
[FW4-zone-pair-security-Local-Untrust]quit
[FW4]zone-pair security source trust destination trust
[FW4-zone-pair-security-Trust-Trust]packet-filter ipv6 2001
[FW4-zone-pair-security-Trust-Trust]quit
[FW4]zone-pair security source untrust destination untrust
[FW4-zone-pair-security-Untrust-Untrust]packet-filter ipv6 2001
[FW4-zone-pair-security-Untrust-Untrust]quit
[FW4]int loopback 0
[FW4-LoopBack0]ip address 4.4.4.4 32
[FW4-LoopBack0]quit
[FW4]int loopback 1
[FW4-LoopBack1]ipv6 address 7::1 64
[FW4-LoopBack1]quit
[FW4]int loopback 100
[FW4-LoopBack100]ipv6 address 10::1 64
[FW4-LoopBack100]quit
[FW4]int gi 1/0/4
[FW4-GigabitEthernet1/0/4]port link-mode route
[FW4-GigabitEthernet1/0/4]des <connect to SW3>
[FW4-GigabitEthernet1/0/4]ipv6 address 3::2 64
[FW4-GigabitEthernet1/0/4]quit
[FW4]bgp 200
[FW4-bgp-default]router-id 4.4.4.4
[FW4-bgp-default]peer 3::1 as-number 100
[FW4-bgp-default]address-family ipv6 unicast
[FW4-bgp-default-ipv6]peer 3::1 enable
[FW4-bgp-default-ipv6]network 7:: 64
[FW4-bgp-default-ipv6]network 10:: 64
[FW4-bgp-default-ipv6]quit
[FW4-bgp-default]quit
[FW4]security-zone name Untrust
[FW4-security-zone-Untrust]import interface GigabitEthernet 1/0/4
[FW4-security-zone-Untrust]quit
```

```
[FW4]security-zone name Trust
[FW4-security-zone-Trust]import interface LoopBack 100
[FW4-security-zone-Trust]import interface LoopBack 1
[FW4-security-zone-Trust]quit
[FW4]
```

测试:

FW1、FW2的loopback 10能与FW4的loopback 100互通:

```
<FW1>ping ipv6 -a 8::1 9::1
Ping6(56 data bytes) 8::1 --> 9::1, press CTRL_C to break
56 bytes from 9::1, icmp_seq=0 hlim=63 time=1.000 ms
56 bytes from 9::1, icmp_seq=1 hlim=63 time=2.000 ms
56 bytes from 9::1, icmp_seq=2 hlim=63 time=1.000 ms
56 bytes from 9::1, icmp_seq=3 hlim=63 time=2.000 ms
56 bytes from 9::1, icmp_seq=4 hlim=63 time=3.000 ms

--- Ping6 statistics for 9::1 ---
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
<FW1>Apr 11 11:03:14:769 2020 FW1 PING/6/PING_STATISTICS: -Context=1; Ping6 statistics for 9::1: 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.

<FW1>ping ipv6 -a 8::1 10::1
Ping6(56 data bytes) 8::1 --> 10::1, press CTRL_C to break
56 bytes from 10::1, icmp_seq=0 hlim=63 time=3.000 ms
56 bytes from 10::1, icmp_seq=1 hlim=63 time=1.000 ms
56 bytes from 10::1, icmp_seq=2 hlim=63 time=2.000 ms
56 bytes from 10::1, icmp_seq=3 hlim=63 time=1.000 ms
56 bytes from 10::1, icmp_seq=4 hlim=63 time=2.000 ms

--- Ping6 statistics for 10::1 ---
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
<FW1>Apr 11 11:03:18:381 2020 FW1 PING/6/PING_STATISTICS: -Context=1; Ping6 statistics for 10::1: 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.
```

```
<FW2>ping ipv6 -a 9::1 8::1
Ping6(56 data bytes) 9::1 --> 8::1, press CTRL_C to break
56 bytes from 8::1, icmp_seq=0 hlim=63 time=2.000 ms
56 bytes from 8::1, icmp_seq=1 hlim=63 time=2.000 ms
56 bytes from 8::1, icmp_seq=2 hlim=63 time=2.000 ms
56 bytes from 8::1, icmp_seq=3 hlim=63 time=1.000 ms
56 bytes from 8::1, icmp_seq=4 hlim=63 time=1.000 ms

--- Ping6 statistics for 8::1 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 1.000/1.600/2.000/0.490 ms
<FW2>Apr 11 11:08:04:494 2020 FW2 PING/6/PING_STATISTICS: -Context=1; Ping6 statistics for 8::1: 5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss, round-trip min/avg/max/std-dev = 1.000/1.600/2.000/0.490 ms.

<FW2>ping ipv6 -a 9::1 10::1
Ping6(56 data bytes) 9::1 --> 10::1, press CTRL_C to break
56 bytes from 10::1, icmp_seq=0 hlim=63 time=1.000 ms
56 bytes from 10::1, icmp_seq=1 hlim=63 time=2.000 ms
56 bytes from 10::1, icmp_seq=2 hlim=63 time=2.000 ms
56 bytes from 10::1, icmp_seq=3 hlim=63 time=1.000 ms
56 bytes from 10::1, icmp_seq=4 hlim=63 time=2.000 ms

--- Ping6 statistics for 10::1 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 1.000/1.600/2.000/0.490 ms
<FW2>Apr 11 11:08:08:061 2020 FW2 PING/6/PING_STATISTICS: -Context=1; Ping6 statistics for 10::1: 5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss, round-trip min/avg/max/std-dev = 1.000/1.600/2.000/0.490 ms.
```

```
[FW4]ping ipv6 -a 10::1 8::1
Ping6(56 data bytes) 10::1 --> 8::1, press CTRL_C to break
56 bytes from 8::1, icmp_seq=0 hlim=63 time=3.000 ms
56 bytes from 8::1, icmp_seq=1 hlim=63 time=1.000 ms
56 bytes from 8::1, icmp_seq=2 hlim=63 time=2.000 ms
56 bytes from 8::1, icmp_seq=3 hlim=63 time=2.000 ms
56 bytes from 8::1, icmp_seq=4 hlim=63 time=2.000 ms

--- Ping6 statistics for 8::1 ---
5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss
round-trip min/avg/max/std-dev = 1.000/2.000/3.000/0.632 ms
[FW4]Apr 11 11:07:29:443 2020 FW4 PING/6/PING_STATISTICS: -Context=1; Ping6 statistics for 8::1: 5 packet(s) transmitted, 5 packet(s) received, 0.0% packet loss, round-trip min/avg/max/std-dev = 1.000/2.000/3.000/0.632 ms.

[FW4]ping ipv6 -a 10::1 9::1
Ping6(56 data bytes) 10::1 --> 9::1, press CTRL_C to break
56 bytes from 9::1, icmp_seq=0 hlim=63 time=2.000 ms
56 bytes from 9::1, icmp_seq=1 hlim=63 time=2.000 ms
56 bytes from 9::1, icmp_seq=2 hlim=63 time=1.000 ms
56 bytes from 9::1, icmp_seq=3 hlim=63 time=1.000 ms
56 bytes from 9::1, icmp_seq=4 hlim=63 time=1.000 ms

--- Ping6 statistics for 9::1 ---
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
[FW4]Apr 11 11:07:32:808 2020 FW4 PING/6/PING_STATISTICS: -Context=1; Ping6 statistics for 9::1: 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.
```

分别查看FW1、FW2、FW3、FW4的BGP邻居信息:

```
<FW1>dis bgp peer ipv6
BGP local router ID: 1.1.1.1
Local AS number: 65001
Total number of peers: 1           Peers in established state: 1
* - Dynamically created peer
Peer          AS  MsgRcvd  MsgSent  OutQ  PrefRcv  Up/Down  State
1::2         65003   12       9        0     8 00:04:31 Established
<FW1>
```

```
<FW2>dis bgp peer ipv6
BGP local router ID: 2.2.2.2
Local AS number: 65002
Total number of peers: 1           Peers in established state: 1
* - Dynamically created peer
Peer          AS  MsgRcvd  MsgSent  OutQ  PrefRcv  Up/Down  State
2::2         65003   12      11        0     8 00:05:30 Established
<FW2>
```

```
[FW3]dis bgp peer ipv6
BGP local router ID: 3.3.3.3
Local AS number: 65003
Total number of peers: 3           Peers in established state: 3
* - Dynamically created peer
Peer          AS  MsgRcvd  MsgSent  OutQ  PrefRcv  Up/Down  State
1::1         65001    9       12        0     2 00:04:59 Established
2::1         65002   11       12        0     2 00:04:59 Established
3::2         200     7        9        0     2 00:02:49 Established
[FW3]
```

```
[FW4]dis bgp peer ipv6
BGP local router ID: 4.4.4.4
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
3::1         100    11        7        0     8 00:03:18 Established
[FW4]
```

分别查看FW1、FW2、FW3、FW4的IPV6路由表：

<FW1>dis ipv6 routing-table

Destinations : 16 Routes : 16

Destination: ::1/128 Protocol : Direct
NextHop : ::1 Preference: 0
Interface : InLoop0 Cost : 0

Destination: 1::/64 Protocol : Direct
NextHop : :: Preference: 0
Interface : GE1/0/3 Cost : 0

Destination: 1::1/128 Protocol : Direct
NextHop : ::1 Preference: 0
Interface : InLoop0 Cost : 0

Destination: 2::/64 Protocol : BGP4+
NextHop : 1::2 Preference: 255
Interface : GE1/0/3 Cost : 0

Destination: 3::/64 Protocol : BGP4+
NextHop : 1::2 Preference: 255
Interface : GE1/0/3 Cost : 0

Destination: 4::/64 Protocol : Direct
NextHop : :: Preference: 0
Interface : Loop1 Cost : 0

Destination: 4::1/128 Protocol : Direct
NextHop : ::1 Preference: 0

```

Interface : InLoop0          Cost : 0

Destination: 5::/64         Protocol : BGP4+
NextHop : 2::1             Preference: 255
Interface : GE1/0/3        Cost : 0

Destination: 6::/64         Protocol : BGP4+
NextHop : 1::2             Preference: 255
Interface : GE1/0/3        Cost : 0

Destination: 7::/64         Protocol : BGP4+
NextHop : 3::2             Preference: 255
Interface : GE1/0/3        Cost : 0

Destination: 8::/64         Protocol : Direct
NextHop : ::               Preference: 0
Interface : Loop10         Cost : 0

Destination: 8::1/128       Protocol : Direct
NextHop : ::1              Preference: 0
Interface : InLoop0        Cost : 0

Destination: 9::/64         Protocol : BGP4+
NextHop : 2::1             Preference: 255
Interface : GE1/0/3        Cost : 0

Destination: 10::/64        Protocol : BGP4+
NextHop : 3::2             Preference: 255
Interface : GE1/0/3        Cost : 0

Destination: FE80::/10      Protocol : Direct
NextHop : ::               Preference: 0
Interface : InLoop0        Cost : 0

Destination: FF00::/8       Protocol : Direct
NextHop : ::               Preference: 0
Interface : NULL0          Cost : 0
<FW1>

```

<FW2>dis ipv6 routing-table

Destinations : 16 Routes : 16

```

Destination: ::1/128        Protocol : Direct
NextHop : ::1              Preference: 0
Interface : InLoop0        Cost : 0

Destination: 1::/64         Protocol : BGP4+
NextHop : 2::2             Preference: 255
Interface : GE1/0/2        Cost : 0

Destination: 2::/64         Protocol : Direct
NextHop : ::               Preference: 0
Interface : GE1/0/2        Cost : 0

Destination: 2::1/128       Protocol : Direct
NextHop : ::1              Preference: 0
Interface : InLoop0        Cost : 0

Destination: 3::/64         Protocol : BGP4+
NextHop : 2::2             Preference: 255
Interface : GE1/0/2        Cost : 0

Destination: 4::/64         Protocol : BGP4+

```



```

NextHop   : 1::1                Preference: 255
Interface : GE1/0/2             Cost      : 0

Destination: 5::/64            Protocol : Direct
NextHop   : ::                 Preference: 0
Interface : Loop1              Cost      : 0

Destination: 5::1/128          Protocol : Direct
NextHop   : ::1               Preference: 0
Interface : InLoop0           Cost      : 0

Destination: 6::/64            Protocol : BGP4+
NextHop   : 2::2              Preference: 255
Interface : GE1/0/2           Cost      : 0

Destination: 7::/64            Protocol : BGP4+
NextHop   : 3::2              Preference: 255
Interface : GE1/0/2           Cost      : 0

Destination: 8::/64            Protocol : BGP4+
NextHop   : 1::1              Preference: 255
Interface : GE1/0/2           Cost      : 0

Destination: 9::/64            Protocol : Direct
NextHop   : ::                 Preference: 0
Interface : Loop10           Cost      : 0

Destination: 9::1/128          Protocol : Direct
NextHop   : ::1               Preference: 0
Interface : InLoop0           Cost      : 0

Destination: 10::/64           Protocol : BGP4+
NextHop   : 3::2              Preference: 255
Interface : GE1/0/2           Cost      : 0

Destination: FE80::/10         Protocol : Direct
NextHop   : ::                 Preference: 0
Interface : InLoop0           Cost      : 0

Destination: FF00::/8          Protocol : Direct
NextHop   : ::                 Preference: 0
Interface : NULL0             Cost      : 0
<FW2>

```

[FW3]dis ipv6 routing-table

Destinations : 17 Routes : 17

```

Destination: ::1/128          Protocol : Direct
NextHop   : ::1               Preference: 0
Interface : InLoop0           Cost      : 0

Destination: 1::/64           Protocol : Direct
NextHop   : ::                 Preference: 0
Interface : GE1/0/3           Cost      : 0

Destination: 1::2/128          Protocol : Direct
NextHop   : ::1               Preference: 0
Interface : InLoop0           Cost      : 0

Destination: 2::/64           Protocol : Direct
NextHop   : ::                 Preference: 0
Interface : GE1/0/2           Cost      : 0

```

Destination: 2::2/128 Protocol : Direct
NextHop : ::1 Preference: 0
Interface : InLoop0 Cost : 0

Destination: 3::/64 Protocol : Direct
NextHop : :: Preference: 0
Interface : GE1/0/4 Cost : 0

Destination: 3::1/128 Protocol : Direct
NextHop : ::1 Preference: 0
Interface : InLoop0 Cost : 0

Destination: 4::/64 Protocol : BGP4+
NextHop : 1::1 Preference: 255
Interface : GE1/0/3 Cost : 0

Destination: 5::/64 Protocol : BGP4+
NextHop : 2::1 Preference: 255
Interface : GE1/0/2 Cost : 0

Destination: 6::/64 Protocol : Direct
NextHop : :: Preference: 0
Interface : Loop1 Cost : 0

Destination: 6::1/128 Protocol : Direct
NextHop : ::1 Preference: 0
Interface : InLoop0 Cost : 0

Destination: 7::/64 Protocol : BGP4+
NextHop : 3::2 Preference: 255
Interface : GE1/0/4 Cost : 0

Destination: 8::/64 Protocol : BGP4+
NextHop : 1::1 Preference: 255
Interface : GE1/0/3 Cost : 0

Destination: 9::/64 Protocol : BGP4+
NextHop : 2::1 Preference: 255
Interface : GE1/0/2 Cost : 0

Destination: 10::/64 Protocol : BGP4+
NextHop : 3::2 Preference: 255
Interface : GE1/0/4 Cost : 0

Destination: FE80::/10 Protocol : Direct
NextHop : :: Preference: 0
Interface : InLoop0 Cost : 0

Destination: FF00::/8 Protocol : Direct
NextHop : :: Preference: 0
Interface : NULL0 Cost : 0
[FW3]

[FW4]dis ipv6 routing-table

Destinations : 16 Routes : 16

Destination: ::1/128 Protocol : Direct
NextHop : ::1 Preference: 0
Interface : InLoop0 Cost : 0

Destination: 1::/64 Protocol : BGP4+
NextHop : 3::1 Preference: 255
Interface : GE1/0/4 Cost : 0

```

Destination: 2::/64          Protocol : BGP4+
NextHop   : 3::1           Preference: 255
Interface : GE1/0/4        Cost     : 0

Destination: 3::/64          Protocol : Direct
NextHop   : ::             Preference: 0
Interface : GE1/0/4        Cost     : 0

Destination: 3::2/128        Protocol : Direct
NextHop   : ::1           Preference: 0
Interface : InLoop0        Cost     : 0

Destination: 4::/64          Protocol : BGP4+
NextHop   : 3::1           Preference: 255
Interface : GE1/0/4        Cost     : 0

Destination: 5::/64          Protocol : BGP4+
NextHop   : 3::1           Preference: 255
Interface : GE1/0/4        Cost     : 0

Destination: 6::/64          Protocol : BGP4+
NextHop   : 3::1           Preference: 255
Interface : GE1/0/4        Cost     : 0

Destination: 7::/64          Protocol : Direct
NextHop   : ::             Preference: 0
Interface : Loop1          Cost     : 0

Destination: 7::1/128        Protocol : Direct
NextHop   : ::1           Preference: 0
Interface : InLoop0        Cost     : 0

Destination: 8::/64          Protocol : BGP4+
NextHop   : 3::1           Preference: 255
Interface : GE1/0/4        Cost     : 0

Destination: 9::/64          Protocol : BGP4+
NextHop   : 3::1           Preference: 255
Interface : GE1/0/4        Cost     : 0

Destination: 10::/64         Protocol : Direct
NextHop   : ::             Preference: 0
Interface : Loop100        Cost     : 0

Destination: 10::1/128       Protocol : Direct
NextHop   : ::1           Preference: 0
Interface : InLoop0        Cost     : 0

Destination: FE80::/10       Protocol : Direct
NextHop   : ::             Preference: 0
Interface : InLoop0        Cost     : 0

Destination: FF00::/8        Protocol : Direct
NextHop   : ::             Preference: 0
Interface : NULL0          Cost     : 0
[FW4]

```

至此，F1060 IPV6 BGP4+联盟典型组网配置案例已完成！

配置关键点

- 1、非联盟设备指向联盟边界设备建立EBGP邻居关系时，指向联盟ID即可，不用指向联盟边界设备的BGP进程号。
- 2、联盟内部的邻居建立均是EBGP邻居关系。

