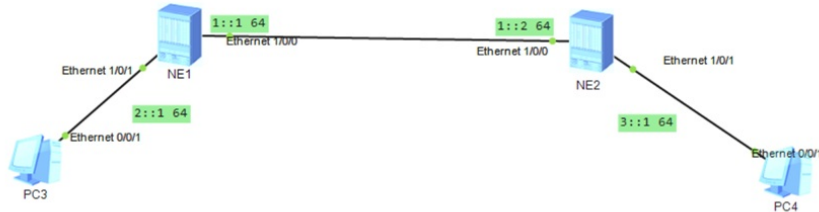


组网及说明



组网说明：本案例采用ENSP的NE2000路由器模拟OSPFV3路由协议的环境，通过配置基于IPv6的OSPFV3，实现PC之间的互通。

配置步骤

- 1、按照网络拓扑图配置IPv6地址。
- 2、分别在NE1、NE2配置OSPFV3。

配置关键点

NE1：

```
<HUAWEI>u t m
Info: Current terminal monitor is off.
<HUAWEI>u t d
Info: Current terminal debugging is off.
<HUAWEI>sys
Enter system view, return user view with return command.
[~HUAWEI]sysname NE1
[*HUAWEI]int ethe
[*HUAWEI]int Ethernet 1/0/0
[*HUAWEI-Ethernet1/0/0]ipv6 enable
[*HUAWEI-Ethernet1/0/0]ipv6 address 1::1 64
[*HUAWEI-Ethernet1/0/0]quit
[*HUAWEI]int Ethernet 1/0/1
[*HUAWEI-Ethernet1/0/1]ipv6 enable
[*HUAWEI-Ethernet1/0/1]ipv6 address 2::1 64
[*HUAWEI-Ethernet1/0/1]quit
[*HUAWEI]commit
[~NE1]
[*NE1]ospfv3 1
[*NE1-ospfv3-1]router-id 1.1.1.1
[*NE1-ospfv3-1]area 0.0.0.0
[*NE1-ospfv3-1-area-0.0.0.0]quit
[*NE1]int Ethernet 1/0/1
[*NE1-Ethernet1/0/1]ospfv3 1 area 0.0.0.0
[*NE1-Ethernet1/0/1]quit
[*NE1]int Ethernet 1/0/0
[*NE1-Ethernet1/0/0]ospfv3 1 area 0.0.0.0
[*NE1-Ethernet1/0/0]quit
[*NE1]commit
[~NE1]
```

NE2：

```
<HUAWEI>u t m
Info: Current terminal monitor is off.
<HUAWEI>u t d
Info: Current terminal debugging is off.
<HUAWEI>sys
```

Enter system view, return user view with return command.

```
[~HUAWEI]sysname NE2
[*HUAWEI]int Ethernet 1/0/1
[*HUAWEI-Ethernet1/0/1]ipv6 enable
[*HUAWEI-Ethernet1/0/1]ipv6 address 3::1 64
[*HUAWEI-Ethernet1/0/1]quit
[*HUAWEI]int Ethernet 1/0/0
[*HUAWEI-Ethernet1/0/0]ipv6 enable
[*HUAWEI-Ethernet1/0/0]ipv6 address 1::2 64
[*HUAWEI-Ethernet1/0/0]quit
[*HUAWEI]commit
[~NE2]
[*NE2]int LoopBack 0
[*NE2-LoopBack0]ip address 2.2.2.2 32
[*NE2-LoopBack0]quit
[*NE2]ospfv3 1
[*NE2-ospfv3-1]router-id 2.2.2.2
[*NE2-ospfv3-1]area 0.0.0.0
[*NE2-ospfv3-1-area-0.0.0.0]quit
[*NE2-ospfv3-1]quit
[*NE2]int ethe 1/0/1
[*NE2-Ethernet1/0/1]ospfv3 1 area 0.0.0.0
[*NE2-Ethernet1/0/1]quit
[*NE2]int ethe 1/0/0
[*NE2-Ethernet1/0/0]ospfv3 1 area 0.0.0.0
[*NE2-Ethernet1/0/0]quit
[*NE2]commit
[~NE2]
```

查看NE1与NE2均已建立了OSPFV3邻居。

```
[~NE1]dis ospfv3 peer

OSPFv3 Process (1)
OSPFv3 Area (0.0.0.0)
Neighbor ID      Pri State           Dead Time   Interface   Instance ID
2.2.2.2          1 Full/Backup      00:00:30   Eth1/0/0    0
[~NE1]
```

```
[~NE2]dis ospfv3 peer

OSPFv3 Process (1)
OSPFv3 Area (0.0.0.0)
Neighbor ID      Pri State           Dead Time   Interface   Instance ID
1.1.1.1          1 Full/DR          00:00:31   Eth1/0/0    0
[~NE2]
```

查看IPV6路由表，发现NE1与NE2均有对端发布的路由。

```

[~NE1]dis ipv6 routing-table
Routing Table : _public_
Destinations : 9      Routes : 9

Destination : ::1      PrefixLength : 128
NextHop     : ::1      Preference    : 0
Cost       : 0         Protocol      : Direct
RelayNextHop : ::      TunnelID     : 0x0
Interface  : InLoopBack0  Flags        : D

Destination : ::FFFF:127.0.0.0  PrefixLength : 104
NextHop     : ::FFFF:127.0.0.1  Preference    : 0
Cost       : 0         Protocol      : Direct
RelayNextHop : ::      TunnelID     : 0x0
Interface  : InLoopBack0  Flags        : D

Destination : ::FFFF:127.0.0.1  PrefixLength : 128
NextHop     : ::1      Preference    : 0
Cost       : 0         Protocol      : Direct
RelayNextHop : ::      TunnelID     : 0x0
Interface  : InLoopBack0  Flags        : D

Destination : 1::      PrefixLength : 64
NextHop     : 1::1     Preference    : 0
Cost       : 0         Protocol      : Direct
RelayNextHop : ::      TunnelID     : 0x0
Interface  : Ethernet1/0/0  Flags        : D

Destination : 1::1     PrefixLength : 128
NextHop     : ::1      Preference    : 0
Cost       : 0         Protocol      : Direct
RelayNextHop : ::      TunnelID     : 0x0
Interface  : Ethernet1/0/0  Flags        : D

Destination : 2::      PrefixLength : 64
NextHop     : 2::1     Preference    : 0
Cost       : 0         Protocol      : Direct
RelayNextHop : ::      TunnelID     : 0x0
Interface  : Ethernet1/0/1  Flags        : D

Destination : 2::1     PrefixLength : 128
NextHop     : ::1      Preference    : 0
Cost       : 0         Protocol      : Direct
RelayNextHop : ::      TunnelID     : 0x0
Interface  : Ethernet1/0/1  Flags        : D

Destination : 3::      PrefixLength : 64
NextHop     : FE80::3A14:D0FF:FE02:100  Preference    : 10
Cost       : 2         Protocol      : OSPFv3
RelayNextHop : ::      TunnelID     : 0x0
Interface  : Ethernet1/0/0  Flags        : D

Destination : FE80::   PrefixLength : 10
NextHop     : ::      Preference    : 0
Cost       : 0         Protocol      : Direct
RelayNextHop : ::      TunnelID     : 0x0
Interface  : NULL0       Flags        : DB

[~NE1] |

```

```

[~NE2]dis ipv6 routing-table
Routing Table : _public_
Destinations : 9          Routes : 9

Destination : ::1          PrefixLength : 128
NextHop     : ::1          Preference   : 0
Cost       : 0            Protocol    : Direct
RelayNextHop : ::         TunnelID    : 0x0
Interface  : InLoopBack0  Flags      : D

Destination : ::FFFF:127.0.0.0 PrefixLength : 104
NextHop     : ::FFFF:127.0.0.1 Preference   : 0
Cost       : 0            Protocol    : Direct
RelayNextHop : ::         TunnelID    : 0x0
Interface  : InLoopBack0  Flags      : D

Destination : ::FFFF:127.0.0.1 PrefixLength : 128
NextHop     : ::1          Preference   : 0
Cost       : 0            Protocol    : Direct
RelayNextHop : ::         TunnelID    : 0x0
Interface  : InLoopBack0  Flags      : D

Destination : 1::          PrefixLength : 64
NextHop     : 1::2         Preference   : 0
Cost       : 0            Protocol    : Direct
RelayNextHop : ::         TunnelID    : 0x0
Interface  : Ethernet1/0/0 Flags      : D

Destination : 1::2         PrefixLength : 128
NextHop     : ::1          Preference   : 0
Cost       : 0            Protocol    : Direct
RelayNextHop : ::         TunnelID    : 0x0
Interface  : Ethernet1/0/0 Flags      : D

Destination : 2::          PrefixLength : 64
NextHop     : FE80::3A14:D0FF:FE01:100 Preference : 10
Cost       : 2            Protocol    : OSPFv3
RelayNextHop : ::         TunnelID    : 0x0
Interface  : Ethernet1/0/0 Flags      : D

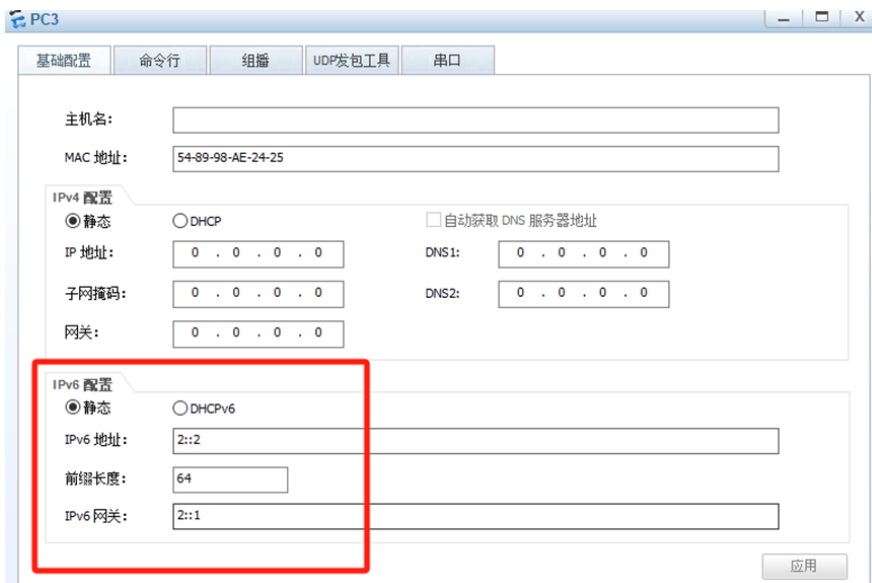
Destination : 3::          PrefixLength : 64
NextHop     : 3::1         Preference   : 0
Cost       : 0            Protocol    : Direct
RelayNextHop : ::         TunnelID    : 0x0
Interface  : Ethernet1/0/1 Flags      : D

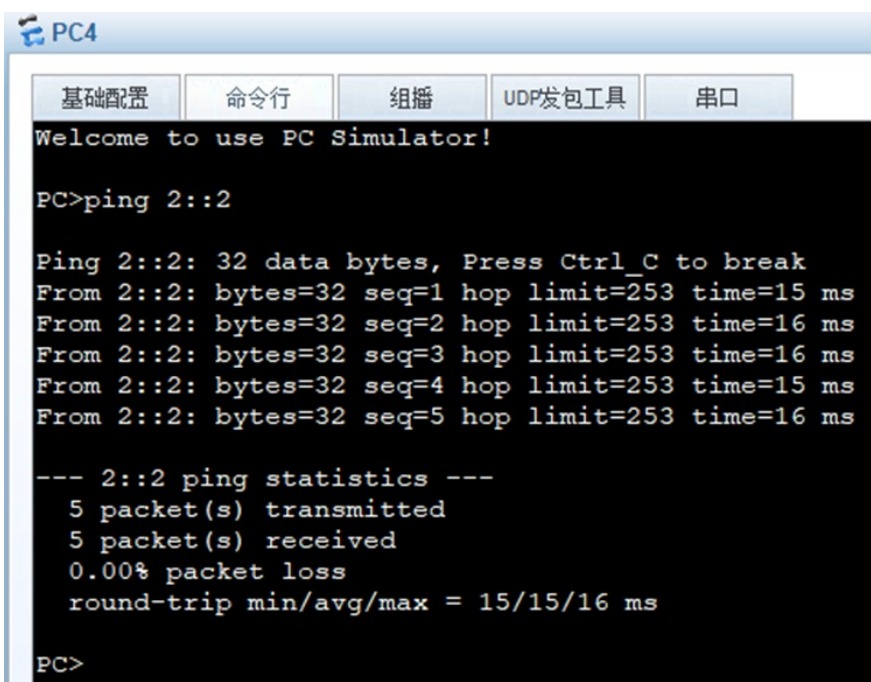
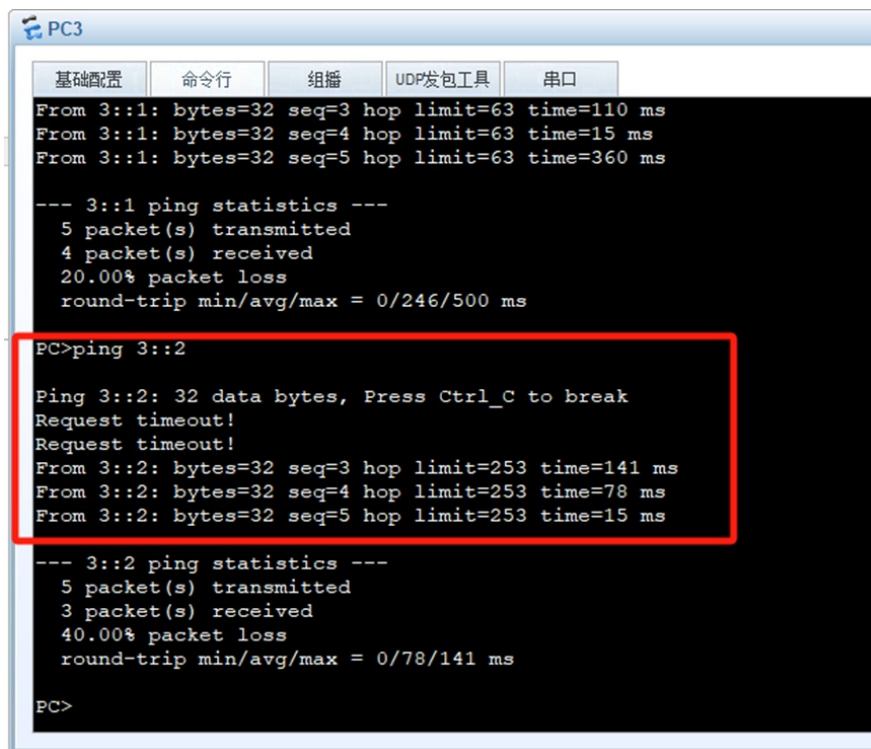
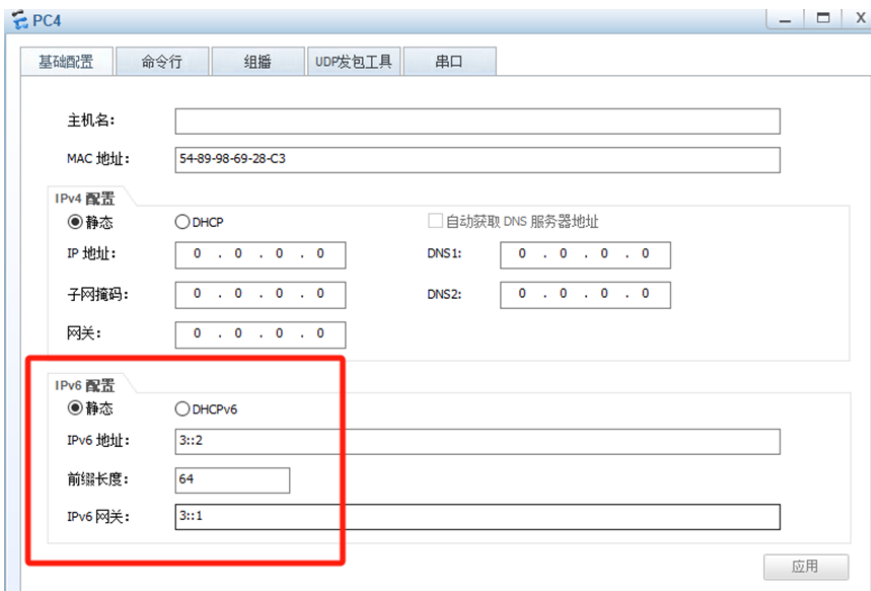
Destination : 3::1         PrefixLength : 128
NextHop     : ::1          Preference   : 0
Cost       : 0            Protocol    : Direct
RelayNextHop : ::         TunnelID    : 0x0
Interface  : Ethernet1/0/1 Flags      : D

Destination : FE80::        PrefixLength : 10
NextHop     : ::           Preference   : 0
Cost       : 0            Protocol    : Direct
RelayNextHop : ::         TunnelID    : 0x0
Interface  : NULL0        Flags      : DB
[~NE2]

```

PC分别填写IPV6地址，且能相互PING通。





至此，华为路由器OSPFV3典型组网配置案例已完成。