

H3C S3500-EA IPv6基础配置

一、组网需求:

Switch A和Switch B通过以太网端口直接相连,以太网端口属于VLAN2。分别在Switch A和Switch B上给VLAN接口2配置不同类型的IPv6地址,验证它们之间的互通性。其中EUI-64前缀为2001::/64,手工指定Switch A的全球单播网络地址为3001::1/64,Switch B的全球单播网络地址为3001::2/64。

二、组网图:



三、配置步骤:

(1) 设备A上的配置

```
# 使能交换机的IPv6转发功能。
<SwitchA> system-view
[SwitchA] ipv6
# 配置VLAN接口2的自动链路本地地址。
[SwitchA] interface vlan-interface 2
[SwitchA-Vlan-interface2] ipv6 address auto link-local
# 配置VLAN接口2的EUI-64地址。
[SwitchA-Vlan-interface2] ipv6 address 2001::/64 eui-64
# 手工指定VLAN接口2的全球单播地址。
[SwitchA-Vlan-interface2] ipv6 address 3001::1/64
# 允许VLAN接口2发布RA消息。
[SwitchA-Vlan-interface2] undo ipv6 nd ra halt
```

(2) 设备B上的配置

```
# 使能交换机的IPv6转发功能。
<SwitchB> system-view
[SwitchB] ipv6
# 配置VLAN接口2的自动链路本地地址。
[SwitchB] interface vlan-interface 2
[SwitchB-Vlan-interface2] ipv6 address auto link-local
# 配置VLAN接口2的EUI-64地址。
[SwitchB-Vlan-interface2] ipv6 address 2001::/64 eui-64
# 配置VLAN接口2的全球单播地址。
[SwitchB-Vlan-interface2] ipv6 address 3001::2/64
```

(3) 验证配置

```
# 显示Switch A的接口信息。
[SwitchA-Vlan-interface2] display ipv6 interface vlan-interface 2
Vlan-interface2 current state :UP
Line protocol current state :UP
IPv6 is enabled, link-local address is FE80::20F:E2FF:FE49:8048
Global unicast address(es):
  2001::20F:E2FF:FE49:8048, subnet is 2001::/64
  3001::1, subnet is 3001::/64
Joined group address(es):
  FF02::1:FF00:1
  FF02::1:FF49:8048
  FF02::2
  FF02::1
MTU is 1500 bytes
ND DAD is enabled, number of DAD attempts: 1
ND reachable time is 30000 milliseconds
ND retransmit interval is 1000 milliseconds
Hosts use stateless autoconfig for addresses
```

显示Switch B的接口信息。

```
[SwitchB-Vlan-interface2] display ipv6 interface vlan-interface 2
```

Vlan-interface2 current state :UP

Line protocol current state :UP

IPv6 is enabled, link-local address is FE80::20F:E2FF:FE00:1

Global unicast address(es):

2001::20F:E2FF:FE00:1, subnet is 2001::/64

3001::2, subnet is 3001::/64

Joined group address(es):

FF02::1:FF00:2

FF02::1:FF00:1

FF02::2

FF02::1

MTU is 1500 bytes

ND DAD is enabled, number of DAD attempts: 1

ND reachable time is 30000 milliseconds

ND retransmit interval is 1000 milliseconds

Hosts use stateless autoconfig for addresses

从Switch A上分别Ping Switch B的链路本地地址、EUI格式的地址、全球单播地址。

如果配置正确，则三种类型的IPv6地址都可以Ping通。

四、配置关键点：

缺省S3500-EA系列交换机的工作在IPv4协议栈模式，此工作模式并不支持IPv6协议栈

，如果需要运行IPv6协议栈，必须修改交换机的工作模式为dual-IPv4-IPv6并重启设备

才能支持IPv6协议栈，其修改命令为switch-mode dual-ipv4-ipv6。