

## 组网及说明

### 1 配置需求或说明

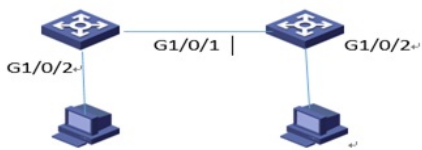
#### 1.1 适用产品系列

本案例适用于如S7006、S7503E、S7506E、S7606、S10510、S10508等S7000、S7500E、S10500系列，且软件版本是V7的交换机

#### 1.2 配置需求及实现的效果

交换机作为企业网络内部的网关设备，要实现两个不同网段的终端无状态IPv6上网，并可以互相访问。此案例中，局域网1的内网地址为2001::2/64，网关为2001::1/64，局域网2的内网地址为4001::2/64，网关为4001::1/64，内网PC使用链路本地地址上网。

### 2 组网图



## 配置步骤

### 3 配置步骤

#### 3.1 配置SW1

```
# 手工指定VLAN接口1的全球单播地址并允许其发布RA消息，关联地址池
system-view
[H3C]interface Vlan-interface1
[H3C-Vlan-interface1] ipv6 address 2001::1/64
[H3C-Vlan-interface1] undo ipv6 nd ra halt
[H3C-Vlan-interface1] ipv6 dhcp server apply pool 1 allow-hint rapid-commit
[H3C-Vlan-interface1] ipv6 nd autoconfig managed-address-flag
[H3C-Vlan-interface1] ipv6 nd autoconfig other-flag
[H3C-Vlan-interface1] quit
# 手工指定VLAN接口2的全球单播地址并允许其发布RA消息
[H3C]interface Vlan-interface2
[H3C-Vlan-interface1] ipv6 address 3001::1/64
[H3C-Vlan-interface1] undo ipv6 nd ra halt
# 配置DHCPV6地址池
[H3C]ipv6 dhcp pool 1
[H3C-dhcp6-pool-1]network 2001::/64
[H3C-dhcp6-pool-1]gateway-list 2001::1
[H3C-dhcp6-pool-1]dns-server 1::1
[H3C-dhcp6-pool-1]quit
# 将接口1和vlan虚接口2关联
[H3C]interface GigabitEthernet1/0/1
[H3C-GigabitEthernet1/0/1]port access vlan 2
[H3C-GigabitEthernet1/0/1]quit
# 配置IPv6静态路由，该路由的目的地址为4001::/64，下一跳地址为3001::2。
[H3C] ipv6 route-static 4001:: 64 3001::2
```

#### 3.2 配置SW2

```
# 手工指定VLAN接口2的全球单播地址并允许其发布RA消息，关联地址池
system-view
[H3C]interface Vlan-interface2
[H3C-Vlan-interface2] ipv6 address 3001::2/64
[H3C-Vlan-interface2] undo ipv6 nd ra halt
[H3C-Vlan-interface2] ipv6 dhcp server apply pool 1 allow-hint rapid-commit
[H3C-Vlan-interface2] ipv6 nd autoconfig managed-address-flag
[H3C-Vlan-interface2] ipv6 nd autoconfig other-flag
[H3C-Vlan-interface2] quit
# 手工指定VLAN接口3的全球单播地址并允许其发布RA消息
[H3C]interface Vlan-interface3
[H3C-Vlan-interface3] ipv6 address 4001::1/64
[H3C-Vlan-interface3] undo ipv6 nd ra halt
# 配置DHCPV6地址池
[H3C]ipv6 dhcp pool 1
[H3C-dhcp6-pool-1]network 4001::/64
[H3C-dhcp6-pool-1]gateway-list 4001::1
[H3C-dhcp6-pool-1]dns-server 1::1
[H3C-dhcp6-pool-1]quit
# 将接口1和vlan虚接口2关联
[H3C]interface GigabitEthernet1/0/1
[H3C-GigabitEthernet1/0/1]port access vlan 2
[H3C-GigabitEthernet1/0/1]quit
# 将接口2和vlan虚接口3关联
[H3C]interface GigabitEthernet1/0/2
[H3C-GigabitEthernet1/0/2]port access vlan 3
[H3C-GigabitEthernet1/0/2]quit
# 配置IPv6静态路由，该路由的目的地址为2001::/64，下一跳地址为3001::1。
[H3C] ipv6 route-static 2001:: 64 3001::1
```

#### 3.3 保存配置

```
[H3C]save force
```

#### 3.4 验证配置

配置完成后，hostA和hostC客户端可以互相访问。

```
<H3C>ping ipv6 4001::2
Ping6(56 data bytes) 2001::2 --> 4001::2, press CTRL_C to break
56 bytes from 4001::2, icmp_seq=0 hlim=62 time=2.000 ms
56 bytes from 4001::2, icmp_seq=1 hlim=62 time=2.000 ms
56 bytes from 4001::2, icmp_seq=2 hlim=62 time=1.000 ms
56 bytes from 4001::2, icmp_seq=3 hlim=62 time=2.000 ms
56 bytes from 4001::2, icmp_seq=4 hlim=62 time=2.000 ms
```

