V7交换机DHCPv6中继配置方法

目录

1 配置需求或说明

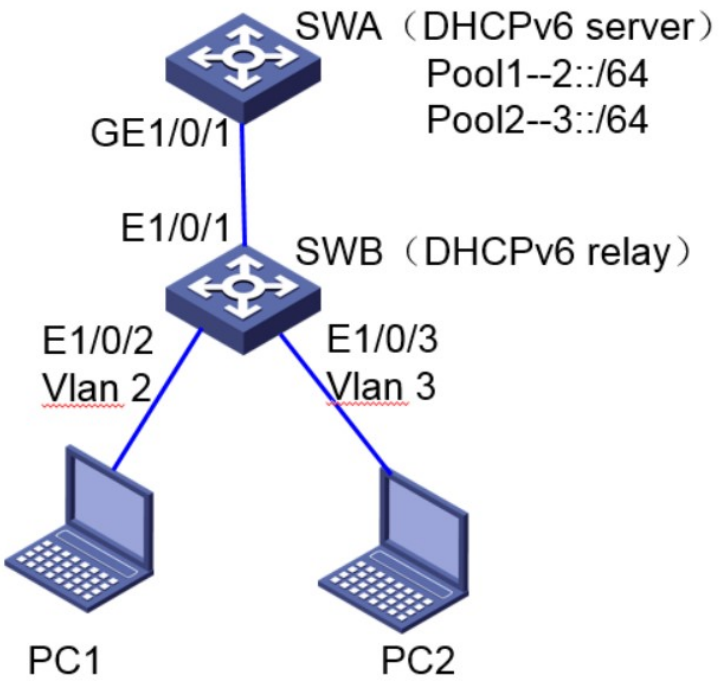
1.1适用产品系列

本案例适用于如S7000E、S7500E等的V7交换机，V5、V7交换机具体分类及型号可以参考“1.1 Comware V5、V7平台交换机分类说明”。

1.2配置需求及实现的效果

SWA作为DHCPv6服务器为终端PC1和PC2分配2::/64以及3::/64的Ipv6地址，SWB作为DHCPv6中继设备为终端和服务器转发报文。

2 组网图



3 配置步骤

3.1 配置SWA为DHCPv6服务器

#配置SWA（DHCPv6服务器）与SWB（DHCPv6中继）的IPV6互联接口所属vlan 1的虚接口地址。取消设备发布RA消息的抑制。配置被管理地址的配置标志位为1，即主机通过DHCPv6服务器获取IPv6地址。配置其他信息配置标志位为1，即主机通过DHCPv6服务器获取除IPv6地址以外的其他信息。

```
<SWA>system-view
System View: return to User View with Ctrl+Z.
[SWA]int vlan 1
[SWA-Vlan-interface1] ipv6 address 1::1/64
[SWA-Vlan-interface1]  ipv6  nd  autoconfig managed-address-flag
[SWA-Vlan-interface1] ipv6 nd autoconfig other-flag
[SWA-Vlan-interface1] undo ipv6 nd ra halt
```

#配置接口Vlan-interface1工作在DHCPv6服务器模式。

```
[SWA-Vlan-interface1] ipv6 dhcp select server
[SWA-Vlan-interface1] quit
```

#配置不参与自动分配的IPv6地址，以避免分配DNS服务器的地址。

```
[SWA]ipv6 dhcp server forbidden-address 2::1
[SWA]ipv6 dhcp server forbidden-address 3::1
```

#配置DHCPv6服务器地址池为1，为客户端分配2::/64的IPv6地址。

```
[SWA]ipv6 dhcp pool 1
[SWA-dhcp6-pool-1] network 2::/64
[SWA-dhcp6-pool-1] dns-server 2::1
[SWA-dhcp6-pool-1] gateway-list 2::1
[SWA-dhcp6-pool-1]quit
```

#配置DHCPv6服务器地址池为2，为客户端分配3::/64的IPv6地址。

```
[SWA]ipv6 dhcp pool 2
```

```
[SWA-dhcp6-pool-2] network 3::/64
[SWA-dhcp6-pool-2] dns-server 3::1
[SWA-dhcp6-pool-2] gateway-list 3::1
[SWA-dhcp6-pool-2]quit
```

#SWA上添加到DHCPv6中继的IPv6静态路由。

```
[SWA] ipv6 route-static 2:: 64 1::2
[SWA] ipv6 route-static 3:: 64 1::2
```

#保存配置

```
[SWA] save for
```

3.2 配置SWB为DHCPv6中继

#配置SWB上创建vlan 2、vlan 3，将接口Ethernet 1/0/2加入vlan 2，接口Ethernet 1/0/3加入vlan 3。

```
<SWB>sys
System View: return to User View with Ctrl+Z.
[SWB]vlan 2 to 3
[SWB]int Ethernet 1/0/2
[SWB-Ethernet1/0/2]port access vlan 2
[SWB-Ethernet1/0/2]quit
[SWB]int Ethernet 1/0/3
[SWB-Ethernet1/0/3]port access vlan 3
[SWB-Ethernet1/0/3]quit
```

#配置SWB与SWA的互联接口所属vlan1虚接口的IPv6地址。

```
[SWB]interface Vlan-interface1
[SWB-Vlan-interface1] ipv6 address 1::2/64
```

#配置vlan 2和vlan 3虚接口IPv6地址。取消设备发布RA消息的抑制。配置被管理地址的配置标志位为1，即主机通过DHCPv6服务器获取IPv6地址。配置其他信息配置标志位为1，即主机通过DHCPv6服务器获取除IPv6地址以外的其他信息。

```
[SWB]int vlan 2
[SWB-Vlan-interface2] ipv6 address 2::1/64
[SWB-Vlan-interface2]  ipv6  nd  autoconfig
managed-address-flag
[SWB-Vlan-interface2] ipv6 nd autoconfig other-
flag
[SWB-Vlan-interface2] undo ipv6 nd ra halt
[SWB-Vlan-interface2]quit
[SWB]int vlan 3
[SWB-Vlan-interface3] ipv6 address 3::1/64
[SWB-Vlan-interface3]  ipv6  nd  autoconfig
managed-address-flag
[SWB-Vlan-interface3] ipv6 nd autoconfig other-
flag
[SWB-Vlan-interface3] undo ipv6 nd ra halt
[SWB-Vlan-interface3]quit
```

#SWB上添加到DHCPv6服务器的IPv6静态路由。

```
[SWB] ipv6 route-static :: 0 1::1
```

#分别配置vlan 2、vlan 3虚接口工作在DHCPv6中继模式，指定1::1为DHCPv6服务器地址。

```
[SWB] int vlan 2
[SWB-Vlan-interface2]ipv6 dhcp select relay
[SWB-Vlan-interface2]ipv6  dhcp  relay  server-
address 1::1
[SWB-Vlan-interface2]quit
[SWB] int vlan 3
[SWB-Vlan-interface3]ipv6 dhcp select relay
[SWB-Vlan-interface3]ipv6  dhcp  relay  server-
address 1::1
[SWB-Vlan-interface3]quit
```

#保存配置

```
[SWA] save for
```

4 验证配置

#在SWA上DHCPv6分配ipv6地址情况如下，PC1获取到2::2/64的IPv6地址，PC2获取到3::2/64的IPv6地址。

```
<SWA>dis ipv6 dhcp server ip-in-use
Pool: 1
 IPv6 address                            Type      Lease expiration
 2::2                                    Auto(C)   Jan 31 00:39:50 2013
Pool: 2
 IPv6 address                            Type      Lease expiration
 3::2                                    Auto(C)   Jan 31 00:51:21 2013
```