

H3C S9500交换机RRPP功能的相交环拓扑配置

一、组网需求:

1. S9500A、S9500B、S9500C、S9500D和S9500E构成RRPP域1;
2. RRPP域1的控制VLAN为4092;
3. S9500A、S9500B、S9500C和S9500D构成主环1;
4. S9500B、S9500C和S9500E构成子环2;
5. S9500A为主环的主节点, Ethernet1/1/1为主端口, Ethernet1/1/2为副端口;
6. S9500E为子环的主节点, Ethernet1/1/1为主端口, Ethernet1/1/2为副端口;
7. S9500B为主环的传输节点和子环的边缘节点, Ethernet1/1/2为公共端口, Ethernet1/1/3为边缘端口;
8. S9500C为主环的传输节点和子环的辅助边缘节点, Ethernet1/1/1为公共端口, Ethernet1/1/3为边缘端口;
9. S9500D为主环的传输节点, Ethernet1/1/1为主端口, Ethernet1/1/2为副端口;
10. 主环和子环的定时器都取缺省值;

二、组网图:

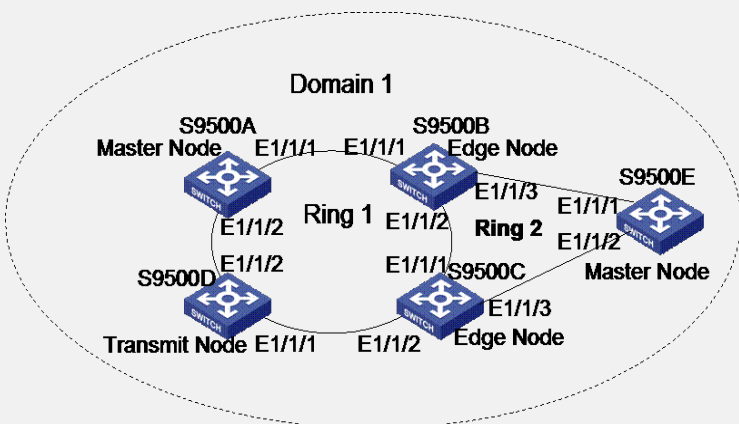


图1 相交环拓扑组网图

三、配置步骤:

软件版本: S9500-CMW310-B1325版本及以后版本

硬件版本: S9500交换机全系列硬件版本

交换机上接入以太网环的端口已经被配置为Trunk端口, 并允许数据VLAN的报文通过

S9500A上的配置

```
<S9500A> system-view
[S9500A] rrpp domain 1
[S9500A-RRPP-Domain-1] control-vlan 4092
[S9500A-RRPP-Domain-1] ring 1 node-mode master primary-port Ethernet1/1/1 secondary-port Ethernet1/1/2 level 0
[S9500A-RRPP-Domain-1] ring 1 enable
[S9500A-RRPP-Domain-1] quit
[S9500A] rrpp enable
```

S9500B上的配置

```
<S9500B> system-view
[S9500B] rrpp domain 1
[S9500B-RRPP-Domain-1] control-vlan 4092
[S9500B-RRPP-Domain-1] ring 1 node-mode transit primary-port Ethernet1/1/1 secondary-port Ethernet1/1/2 level 0
[S9500B-RRPP-Domain-1] ring 2 node-mode edge common-port Ethernet1/1/2 edge-port Ethernet1/1/3
[S9500B-RRPP-Domain-1] ring 1 enable
[S9500B-RRPP-Domain-1] ring 2 enable
[S9500B-RRPP-Domain-1] quit
[S9500B] rrpp enable
```

S9500C上的配置

```
<S9500C> system-view
[S9500C] rrpp domain 1
[S9500C-RRPP-Domain-1] control-vlan 4092
[S9500C-RRPP-Domain-1] ring 1 node-mode transit primary-port Ethernet1/1/1 secondary-port Ethernet1/1/2 level 0
[S9500C-RRPP-Domain-1] ring 2 node-mode assistant-edge common-port Ethernet 1/1/1 edge-port Ethernet 1/1/3
[S9500C-RRPP-Domain-1] ring 1 enable
[S9500C-RRPP-Domain-1] ring 2 enable
[S9500C-RRPP-Domain-1] quit
[S9500C] rrpp enable
S9500D上的配置
<S9500D> system-view
[S9500D] rrpp domain 1
[S9500D-RRPP-Domain-1] control-vlan 4092
[S9500D-RRPP-Domain-1] ring 1 node-mode transit primary-port Ethernet1/1/1 secondary-port Ethernet1/1/2 level 0
[S9500D-RRPP-Domain-1] ring 1 enable
[S9500D-RRPP-Domain-1] quit
[S9500D] rrpp enable
S9500E上的配置
<S9500E> system-view
[S9500E] rrpp domain 1
[S9500E-RRPP-Domain-1] control-vlan 4092
[S9500E-RRPP-Domain-1] ring 2 node-mode master primary-port Ethernet1/1/1 secondary-port Ethernet1/1/2 level 1
[S9500E-RRPP-Domain-1] ring 2 enable
[S9500E-RRPP-Domain-1] quit
[S9500E] rrpp enable
```

配置完毕后，用户可以使用display命令查看RRPP的配置和报文统计情况。

四、配置关键点：

1. 为RRPP域配置的控制VLAN必须是在交换机上创建过的VLAN。
2. RRPP环网中不建议配置环回端口，尤其是在RRPP端口上不允许配置环回。