

HCIA 实验 6 STP

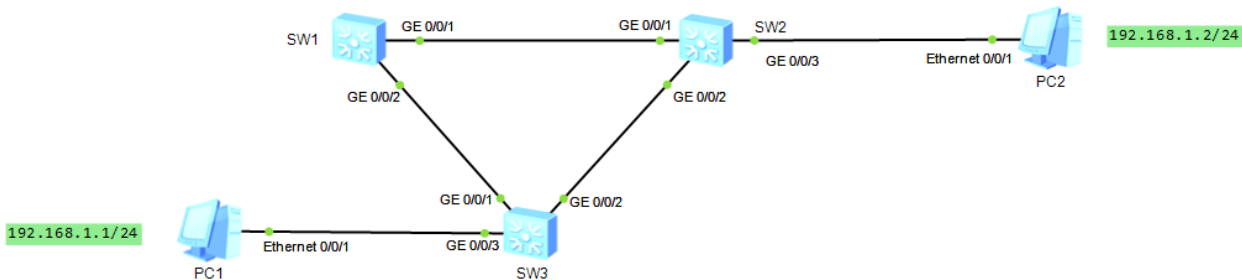
版本 V2.0

密级 ☒开放 ☐内部 ☐机密

类型 ☐讨论版 ☐测试版 ☒正式版

| 修订记录 | | | | |
|------------|------|-----|-----|------------|
| 修订日期 | 修订人 | 版本号 | 审核人 | 修订说明 |
| 2019-11-14 | Ryan | 1.0 | | |
| 2021-3-1 | 童驰阳 | 2.0 | | datacom 版本 |

1 实验拓扑



2 实验需求

本实验模拟企业内网冗余环境，完成以下配置需求：

1. 如图所示，配置设备名称和IP地址。
 2. 所有交换机的生成树模式使用stp
- SW1/2/3:
- ```
stp mode stp
```
3. 使用display stp brief，查看各端口角色与状态。
  4. 配置sw1优先级为0，选择为根桥；配置sw2优先级为4096，选择为备份根桥。

SW1:

```
stp priority 0
```

#

#

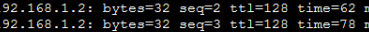
```
[SW1]dis stp brief
```

| MTSID | Port                 | Role       | STP State  | Protection |
|-------|----------------------|------------|------------|------------|
| 0     | GigabitEthernet0/0/1 | DESIGNATED | FORWARDING | NONE       |
| 0     | GigabitEthernet0/0/2 | DESIGNATED | FORWARDING | NONE       |

```
[SW2]dis stp brief
```

| MSTID | Port                 | Role | STP State  | Protection |
|-------|----------------------|------|------------|------------|
| 0     | GigabitEthernet0/0/1 | ROOT | FORWARDING | NONE       |
| 0     | GigabitEthernet0/0/2 | DESI | FORWARDING | NONE       |
| 0     | GigabitEthernet0/0/3 | DESI | FORWARDING | NONE       |

```
[SW3]dis stp brief
MSTID Port Role STP State Protection
0 GigabitEthernet0/0/1 ROOT FORWARDING NONE
0 GigabitEthernet0/0/2 ALTE DISCARDING NONE
0 GigabitEthernet0/0/3 DESI FORWARDING NONE
```



The screenshot shows a PC Simulator window with a title bar that reads "PC". Below the title bar is a menu bar with five options: "基础配置", "命令行", "组播", "UDP发包工具", and "串口". The "命令行" (Command Line) option is currently selected. The main area of the simulator is a black terminal window with white text. It displays the message "Welcome to use PC Simulator!" followed by a prompt "PC>". The user has entered the command "ping 192.168.1.2 -t". The terminal shows the results of four ping attempts, all successful. Each line shows the IP address, the number of bytes (32), the sequence number (seq=1 to seq=4), the TTL (128), and the response time in milliseconds (78, 62, 78, and 63 ms respectively).

```

Welcome to use PC Simulator!

PC>ping 192.168.1.2 -t

Ping 192.168.1.2: 32 data bytes, Press Ctrl C to break
From 192.168.1.2: bytes=32 seq=1 ttl=128 time=78 ms
From 192.168.1.2: bytes=32 seq=2 ttl=128 time=62 ms
From 192.168.1.2: bytes=32 seq=3 ttl=128 time=78 ms
From 192.168.1.2: bytes=32 seq=4 ttl=128 time=63 ms

```

[illegible]

注意：将SW3的G0/0/1恢复后，由于ensp的bug（无法重新学习mac地址），可能无法恢复通信，需要重新ping。