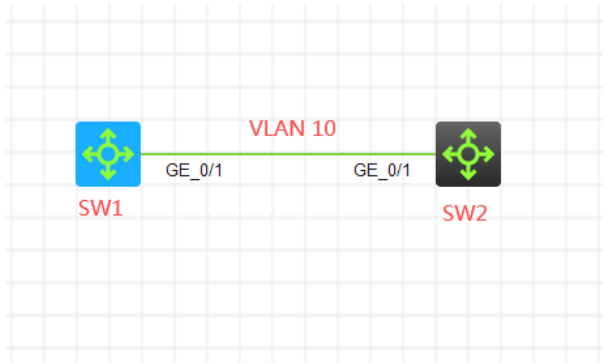


知 NTP典型组网配置案例7（组播模式）

NTP 静态路由 VLAN H3C模拟器 韦家宁 2020-02-16 发表

组网及说明



本案例采用H3C HCL模拟器来模拟NTP典型组网（组播模式），其中SW1作为NTP服务器，SW2作为NTP客户端

配置步骤

- 1、按照网络拓扑图正确配置VLAN
- 2、SW1配置为NTP组播服务端
- 3、SW2配置为NTP组播客户端

配置关键点

SW2:

```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname SW2
[SW2]vlan 10
[SW2-vlan10]quit
[SW2]int vlan 10
[SW2-Vlan-interface10]ip address 10.0.0.1 24
[SW2-Vlan-interface10]quit
[SW2]ip route-static 0.0.0.0 0.0.0.0 10.0.0.2
[SW2]int gi 1/0/1
[SW2-GigabitEthernet1/0/1]port link-type access
[SW2-GigabitEthernet1/0/1]port access vlan 10
[SW2-GigabitEthernet1/0/1]quit
```

SW2 NTP关键配置点:

```
[SW2]clock protocol ntp
[SW2]ntp-service enable
[SW2]int vlan 10

[SW2-Vlan-interface10]ntp-service multicast-client
[SW2-Vlan-interface10]quit
```

SW1:

```
<H3C>sys
[H3C]sysname SW1
[SW1]vlan 10
[SW1-vlan10]quit
[SW1]int vlan 10
[SW1-Vlan-interface10]ip address 10.0.0.2 24
[SW1-Vlan-interface10]quit
[SW1]ip route-static 0.0.0.0 0.0.0.0 10.0.0.1
[SW1]int gi 1/0/1
```

```
[SW1-GigabitEthernet1/0/1]port link-type access
[SW1-GigabitEthernet1/0/1]port access vlan 10
[SW1-GigabitEthernet1/0/1]quit
```

SW1 NTP关键配置点:

```
[SW1]clock protocol ntp
[SW1]ntp-service enable
[SW1]ntp-service unicast-peer 10.0.0.1 source Vlan-interface 10
[SW1]ntp-service refclock-master 2
[SW1]int vlan 10
[SW1-Vlan-interface10]ntp-service multicast-server
[SW1-Vlan-interface10]quit
```

分别查看SW2和SW1的NTP显示信息:

```
[SW2]dis ntp status
Clock status: synchronized
Clock stratum: 3
System peer: 10.0.0.2
Local mode: sym_passive
Reference clock ID: 10.0.0.2
Leap indicator: 00
Clock jitter: 0.000977 s
Stability: 0.000 pps
Clock precision: 2^-10
Root delay: 0.00000 ms
Root dispersion: 0.10681 ms
Reference time: e1f40306.808719a1 Sun, Feb 16 2020 18:05:58.502
[SW2]
```

```
[SW2]dis ntp sessions
.....
source      reference      strata reach poll  now offset  delay disper
.....
[2]10.0.0.2  127.127.1.0   2    1  64    2 292.43 1.2359 0.9765
[12]10.0.0.2 127.127.1.0   2    1  64    82 0.0000 0.0000 16000
Notes: 1 source(master), 2 source(peer), 3 selected, 4 candidate, 5 configured.
Total sessions: 2
[SW2]
```

```
[SW1]dis ntp status
Clock status: synchronized
Clock stratum: 2
System peer: LOCAL(0)
Local mode: client
Reference clock ID: 127.127.1.0
Leap indicator: 00
Clock jitter: 0.000977 s
Stability: 0.000 pps
Clock precision: 2^-10
Root delay: 0.00000 ms
Root dispersion: 12.77161 ms
Reference time: e1f4030f.d2843c16 Sun, Feb 16 2020 18:06:07.822
[SW1]
```

```
[SW1]dis ntp sessions
.....
source      reference      strata reach poll  now offset  delay disper
.....
[5]10.0.0.1  INIT          16    0  64    45 0.0000 0.0000 0.0000
[12345]LOCAL(0) LOCAL        1    7  64    42 0.0000 0.0000 1.3275
Notes: 1 source(master), 2 source(peer), 3 selected, 4 candidate, 5 configured.
Total sessions: 3
[SW1]
```