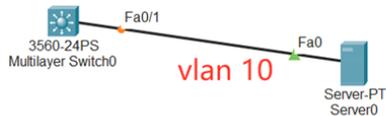


组网及说明



vlan 10:192.168.1.1/24

本案例采用思科模拟器来模拟NTP典型组网配置案例，在该网络中，S3560交换机作为NTP客户端，服务器作为NTP服务器，S3560交换机通过NTP协议来同步交换机的系统时间。

配置步骤

1. 配置交换机VLAN，确保交换机与服务器互通。
2. 开启服务器的NTP功能。
3. 交换机配置NTP功能，并指向到NTP服务器。
4. 查看交换机NTP的状态为同步。

配置关键点

MSW:

```
Switch>
```

```
Switch>ena
```

```
Switch#conf t
```

Enter configuration commands, one per line. End with CNTL/Z.

```
Switch(config)#hos MSW
```

```
MSW(config)#vlan 10
```

```
MSW(config)#int f 0/1
```

```
MSW(config-if)#sw mo acc
```

```
MSW(config-if)#sw acc vlan 10
```

```
MSW(config-if)#exit
```

```
MSW(config)#int vlan 10
```

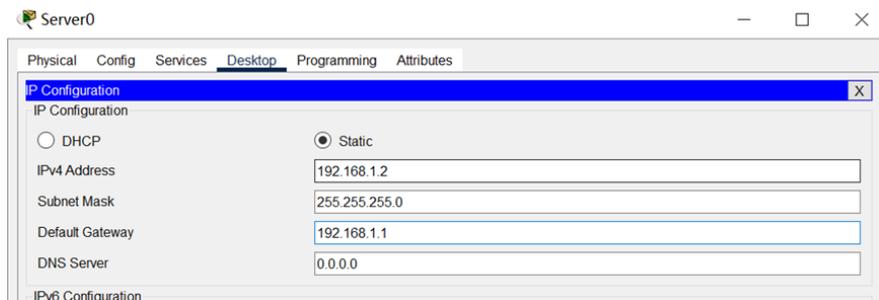
```
MSW(config-if)#ip address 192.168.1.1 255.255.255.0
```

```
MSW(config-if)#no shutdown
```

```
MSW(config-if)#exit
```

```
MSW(config)#ip routing
```

服务器填写IP地址，且能PING通交换机。



```

Physical  Config  Services  Desktop  Programming  Attributes
Command Prompt

Cisco Packet Tracer SERVER Command Line 1.0
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 4ms, Average = 1ms
    
```

NTP配置:

(1) 交换机配置NTP功能

MSW(config)#ntp server 192.168.1.2

(2) 服务器开启NTP功能

Services configuration window showing NTP service settings. The 'Authentication' section has 'Enable' selected. A calendar for January 2024 is displayed below the settings.

周一	周二	周三	周四	周五	周六	周日
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

(3) 查看交换机NTP的状态已同步

```

MSW(config)#do show ntp status
Clock is synchronized, stratum 16, reference is 192.168.1.2
nominal freq is 250.0000 Hz, actual freq is 249.9990 Hz, precision is 2**24
reference time is 23318EEF.000000AE (4:28:31.174 UTC Sat Dec 5 2054)
clock offset is 0.00 msec, root delay is 0.00 msec
root dispersion is 11.08 msec, peer dispersion is 0.12 msec.
loopfilter state is 'CTRL' (Normal Controlled Loop), drift is - 0.000001193 s/s system
interval is 4, last update was 2 sec ago.
MSW(config)#
    
```

```

MSW#show clock
14:20:9.261 UTC Wed Jan 17 2024
MSW#
    
```

至此，思科交换机NTP典型组网配置案例已完成。

