

组网及说明

S5820与华为5720对接NTP典型组网配置，其中S5820为时钟源，华为5720为客户端

S5820版本信息如下：

H3C Comware Software, Version 7.1.045, Release 2418P06
Copyright (c) 2004-2015 Hangzhou H3C Tech. Co., Ltd. All rights reserved.
H3C S5820V2-48S uptime is 241 weeks, 2 days, 5 hours, 0 minutes
Last reboot reason : USER reboot

Boot image: flash:/s5820v2_5830v2-cmw710-boot-r2418p06.bin
Boot image version: 7.1.045, Release 2418P06
Compiled Aug 07 2015 15:40:53
System image: flash:/s5820v2_5830v2-cmw710-system-r2418p06.bin
System image version: 7.1.045, Release 2418P06
Compiled Aug 07 2015 15:40:53

华为5720版本信息如下：

Huawei Versatile Routing Platform Software
VRP (R) software, Version 5.170 (S5720 V200R010C00SPC600)
Copyright (C) 2000-2016 HUAWEI TECH CO., LTD
HUAWEI S5720-56C-EI-AC Routing Switch uptime is 98 weeks, 2 days, 13 hours, 51 minutes

ES5D2T52C002 0(Master) : uptime is 98 weeks, 2 days, 13 hours, 50 minutes
DDR Memory Size : 2048 M bytes
FLASH Memory Size : 344 M bytes
Pcb Version : VER.C
BootROM Version : 020a.0001
BootLoad Version : 020a.0001
CPLD Version : 010c
Software Version : VRP (R) Software, Version 5.170 (V200R010C00SPC600)
PWR1 information
Pcb Version : PWR VER.B
PWR2 information
Pcb Version : PWR VER.B
FAN1 information
Pcb Version : NA

配置步骤

S5820 NTP时钟源配置信息如下：

clock protocol none
ntp-service enable
ntp-service refclock-master 2

interface loopback 0
ip address 10.190.0.13 255.255.255.255
quit

华为5720 NTP配置如下：

ntp-service server disable
ntp-service ipv6 server disable
ntp-service unicast-server 10.190.0.13

S5820查看NTP显示信息：

dis ntp sessions
source reference str reach poll now offset delay disper

[25]10.190.8.252 LOCL 1 255 64 51 -28825 0.9002 18.218
[12345]LOCAL(0) LOCL 1 255 64 42 0.0000 0.0000 0.9155

Notes: 1 source(master), 2 source(peer), 3 selected, 4 candidate, 5 configured.

Total sessions: 2

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: 0.000000 s

Stability: 0.000 pps

Clock precision: 2⁻²¹

Root delay: 0.00000 ms

Root dispersion: 10.98633 ms

Reference time: e27ced67.56daf74f Sat, May 30 2020 14:34:15.339

System poll interval: 64 s

华为5720查看NTP显示信息:

dis ntp sessions

clock source: 10.190.0.13

clock stratum: 2

clock status: configured, master, sane, valid

reference clock ID: LOCAL(0)

reach: 177

current poll: 64

now: 0

offset: -0.6858 ms

delay: 3.69 ms

disper: 4.88 ms

dis ntp status

clock status: synchronized

clock stratum: 3

reference clock ID: 10.190.0.13

nominal frequency: 100.0000 Hz

actual frequency: 100.0000 Hz

clock precision: 2⁻¹⁶

clock offset: -10.4463 ms

root delay: 3.69 ms

root dispersion: 7216.57 ms

peer dispersion: 11.58 ms

reference time: 14:32:52.204 UTC May 30 2020(E27CED14.344AE85B)

synchronization state: clock set but frequency not determined

关键配置点:

配置关键点

- 1、 确保时钟源和时钟客户端路由可达。
- 2、 时钟源及时钟客户端都需要开启NTP功能。
- 3、 时钟客户端指定时钟源为NTP服务器。
- 4、 时钟源所在的设备配置为时钟源。