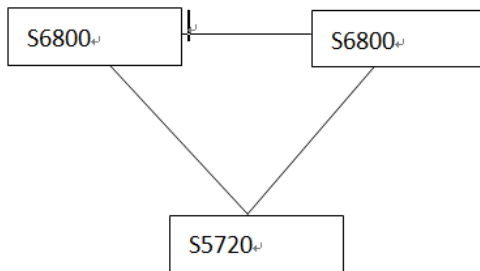


知 S6800与华为S5720对接PVST典型组网配置案例

产品特性 STP 韦家宁 2020-04-16 发表

组网及说明

本案例使用S6800与华为S5720对接PVST的典型组网配置案例，其中S6800为主根，同时也部署了IRF、与S5720部署了链路聚合，为了进一步防止物理环路，因此在S6800与华为S5720部署PVST。



S6800版本信息如下：

```
<6800>dis version
```

H3C Comware Software, Version 7.1.045, Release 2418P05

Copyright (c) 2004-2015 Hangzhou H3C Tech. Co., Ltd. All rights reserved.

H3C S6800-4C uptime is 234 weeks, 1 day, 5 hours, 28 minutes

Last reboot reason : USER reboot

Boot image: flash:/s6800-cmw710-boot-r2418p05.bin

Boot image version: 7.1.045, Release 2418P05

Compiled Jun 09 2015 12:06:42

System image: flash:/s6800-cmw710-system-r2418p05.bin

System image version: 7.1.045, Release 2418P05

Compiled Jun 09 2015 12:06:42

Slot 1:

Uptime is 26 weeks,0 days,8 hours,29 minutes

S6800-4C with 2 Processors

BOARD TYPE: S6800-4C

DRAM: 4096M bytes

FLASH: 1024M bytes

PCB 1 Version: VER.A

PCB 2 Version: VER.A

Bootrom Version: 214

CPLD 1 Version: 002

CPLD 2 Version: 003

Release Version: H3C S6800-4C-2418P05

Patch Version : None

Reboot Cause : UserReboot

[SubSlot 0] Main Board

[SubSlot 1] 24*SFP Plus(MacSec) + 2*QSFP Plus

[SubSlot 2] 24*SFP Plus(MacSec) + 2*QSFP Plus

Slot 2:

Uptime is 26 weeks,0 days,8 hours,15 minutes

S6800-4C with 2 Processors

BOARD TYPE: S6800-4C

DRAM: 4096M bytes

```
FLASH:          1024M bytes
PCB 1 Version:  VER.A
PCB 2 Version:  VER.A
Bootrom Version: 214
CPLD 1 Version: 002
CPLD 2 Version: 003
Release Version: H3C S6800-4C-2418P05
Patch Version :  None
Reboot Cause  :   UserReboot
[SubSlot 0] Main Board
[SubSlot 1] 24*SFP Plus(MacSec) + 2*QSFP Plus
[SubSlot 2] 24*SFP Plus(MacSec) + 2*QSFP Plus
<6800>
```

华为S5720版本信息如下:

```
dis version
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 92 weeks, 0 day, 8 hours, 23 minutes
```

```
ES5D2T52C002 0(Master) : uptime is 92 weeks, 0 day, 8 hours, 22 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

S6800配置如下:

```
stp instance 0 root primary
stp vlan 4 to 5 7 12 400 root primary
stp mode pvst
stp global enable
```

华为S5720配置如下 (华为的vbst相当于华三的PVST) :

```
stp enable
stp mode vbst
```

查看S6800的STP根信息:

```
<6800>dis stp root
```

VLAN ID	Root Bridge ID	ExtPathCost	IntPathCost	Root Port
1	32768.741f-4a92-a2e7	0	0	
4	0.741f-4a92-a2e7	0	0	
5	0.741f-4a92-a2e7	0	0	
7	0.741f-4a92-a2e7	0	0	
12	0.741f-4a92-a2e7	0	0	
196	32768.741f-4a92-a2e7	0	0	
400	0.741f-4a92-a2e7	0	0	
555	32768.741f-4a92-a2e7	0	0	

查看S5720的STP根信息:

```
dis stp bridge root
```

VLAN-ID	Root ID	Root Cost	Hello Time	Max Age	Forward Delay	Root Port
---------	---------	-----------	------------	---------	---------------	-----------

```

-----
1 32768.9c71-3a78-0800    0  2 20  15
4  0.741f-4a92-a2e7  1000 2 20  15 Eth-Trunk10
5  0.741f-4a92-a2e7  1000 2 20  15 Eth-Trunk10
12 0.741f-4a92-a2e7  1000 2 20  15 Eth-Trunk10
400 0.741f-4a92-a2e7  1000 2 20  15 Eth-Trunk10

```

查看S6800 STP端口的状态:

<6800>dis stp brief

VLAN ID	Port	Role	STP State	Protection
4	Bridge-Aggregation7	DESI	FORWARDING	NONE
4	Bridge-Aggregation8	DESI	FORWARDING	NONE
4	Bridge-Aggregation9	DESI	FORWARDING	NONE
4	Bridge-Aggregation10	DESI	FORWARDING	NONE
4	Bridge-Aggregation11	DESI	FORWARDING	NONE
4	Bridge-Aggregation12	DESI	FORWARDING	NONE
4	Bridge-Aggregation13	DESI	FORWARDING	NONE
4	Bridge-Aggregation14	DESI	FORWARDING	NONE
4	Bridge-Aggregation15	DESI	FORWARDING	NONE
4	Bridge-Aggregation16	DESI	FORWARDING	NONE
4	Bridge-Aggregation18	DESI	FORWARDING	NONE
5	Bridge-Aggregation7	DESI	FORWARDING	NONE
5	Bridge-Aggregation8	DESI	FORWARDING	NONE
5	Bridge-Aggregation9	DESI	FORWARDING	NONE
5	Bridge-Aggregation10	DESI	FORWARDING	NONE
5	Bridge-Aggregation11	DESI	FORWARDING	NONE
5	Bridge-Aggregation12	DESI	FORWARDING	NONE
5	Bridge-Aggregation13	DESI	FORWARDING	NONE
5	Bridge-Aggregation14	DESI	FORWARDING	NONE
5	Bridge-Aggregation15	DESI	FORWARDING	NONE
5	Bridge-Aggregation16	DESI	FORWARDING	NONE
5	Bridge-Aggregation18	DESI	FORWARDING	NONE
7	Bridge-Aggregation7	DESI	FORWARDING	NONE
7	Bridge-Aggregation8	DESI	FORWARDING	NONE
7	Bridge-Aggregation9	DESI	FORWARDING	NONE
7	Bridge-Aggregation14	DESI	FORWARDING	NONE
7	Bridge-Aggregation15	DESI	FORWARDING	NONE
7	Bridge-Aggregation18	DESI	FORWARDING	NONE
12	Bridge-Aggregation7	DESI	FORWARDING	NONE
12	Bridge-Aggregation8	DESI	FORWARDING	NONE
12	Bridge-Aggregation9	DESI	FORWARDING	NONE
12	Bridge-Aggregation10	DESI	FORWARDING	NONE
12	Bridge-Aggregation11	DESI	FORWARDING	NONE
12	Bridge-Aggregation12	DESI	FORWARDING	NONE
12	Bridge-Aggregation13	DESI	FORWARDING	NONE
12	Bridge-Aggregation14	DESI	FORWARDING	NONE
12	Bridge-Aggregation15	DESI	FORWARDING	NONE
12	Bridge-Aggregation16	DESI	FORWARDING	NONE
12	Bridge-Aggregation18	DESI	FORWARDING	NONE
12	Ten-GigabitEthernet1/1/12	DESI	FORWARDING	NONE
196	Bridge-Aggregation7	DESI	FORWARDING	NONE
196	Bridge-Aggregation8	DESI	FORWARDING	NONE
196	Bridge-Aggregation9	DESI	FORWARDING	NONE
196	Bridge-Aggregation18	DESI	FORWARDING	NONE
400	Bridge-Aggregation7	DESI	FORWARDING	NONE
400	Bridge-Aggregation8	DESI	FORWARDING	NONE
400	Bridge-Aggregation9	DESI	FORWARDING	NONE
400	Bridge-Aggregation10	DESI	FORWARDING	NONE
400	Bridge-Aggregation11	DESI	FORWARDING	NONE
400	Bridge-Aggregation12	DESI	FORWARDING	NONE
400	Bridge-Aggregation13	DESI	FORWARDING	NONE
400	Bridge-Aggregation14	DESI	FORWARDING	NONE
400	Bridge-Aggregation15	DESI	FORWARDING	NONE
400	Bridge-Aggregation16	DESI	FORWARDING	NONE

```
400 Bridge-Aggregation18      DESI FORWARDING NONE
555 Bridge-Aggregation7       DESI FORWARDING NONE
555 Bridge-Aggregation8       DESI FORWARDING NONE
555 Bridge-Aggregation9       DESI FORWARDING NONE
555 Bridge-Aggregation18      DESI FORWARDING NONE
555 Ten-GigabitEthernet1/1/17  DESI FORWARDING NONE
555 Ten-GigabitEthernet1/1/18  DESI FORWARDING NONE
555 Ten-GigabitEthernet2/1/17  DESI FORWARDING NONE
555 Ten-GigabitEthernet2/1/18  DESI FORWARDING NONE
<6800>
```

查看S5720 STP端口状态信息:

```
dis stp brief
```

VLAN-ID	Port	Role	STP State	Protection
4	Eth-Trunk10	ROOT	FORWARDING	NONE
4	Eth-Trunk11	DESI	FORWARDING	NONE
4	GigabitEthernet0/0/2	DESI	FORWARDING	NONE
4	GigabitEthernet0/0/4	DESI	FORWARDING	NONE
4	GigabitEthernet0/0/14	DESI	FORWARDING	NONE
4	GigabitEthernet0/0/16	DESI	FORWARDING	NONE
5	Eth-Trunk10	ROOT	FORWARDING	NONE
5	Eth-Trunk11	DESI	FORWARDING	NONE
12	Eth-Trunk10	ROOT	FORWARDING	NONE
12	Eth-Trunk11	DESI	FORWARDING	NONE
400	Eth-Trunk10	ROOT	FORWARDING	NONE
400	Eth-Trunk11	DESI	FORWARDING	NONE

至此，S6800与华为S5720 PVST对接的典型组网配置案例已完成!

配置关键点