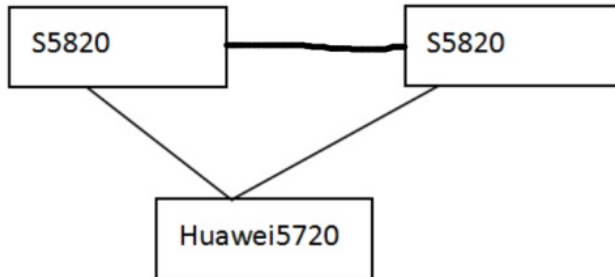


知 S5820与华为5720对接PVST典型组网配置案例

STP 韦家宁 2020-04-17 发表

组网及说明

本案例使用S5820与华为S5720对接PVST的典型组网配置案例，其中S5820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S5820与华为S5720部署PVST。



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 235 weeks, 0 days, 21 hours, 30 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

Slot 1:

Uptime is 24 weeks,3 days,7 hours,29 minutes
S5820V2-48S with 2 Processors
BOARD TYPE: S5820V2-48S
DRAM: 2048M bytes
FLASH: 512M bytes
PCB 1 Version: VER.B
Bootrom Version: 142
CPLD 1 Version: 002
CPLD 2 Version: 002
Release Version: H3C S5820V2-48S-2418P06
Patch Version : None
Reboot Cause : UserReboot
[SubSlot 0] 48SFP Plus

Slot 2:

Uptime is 24 weeks,3 days,7 hours,11 minutes
S5820V2-48S with 2 Processors
BOARD TYPE: S5820V2-48S
DRAM: 2048M bytes
FLASH: 512M bytes
PCB 1 Version: VER.B
Bootrom Version: 142
CPLD 1 Version: 002
CPLD 2 Version: 002
Release Version: H3C S5820V2-48S-2418P06
Patch Version : None
Reboot Cause : UserReboot

[SubSlot 0] 48SFP Plus

华为5720版本信息如下:

Huawei Versatile Routing Platform Software

VRP (R) software, Version 5.160 (S5720 V200R007C00SPC500)

Copyright (C) 2000-2014 HUAWEI TECH CO., LTD

HUAWEI S5720-56C-EI-AC Routing Switch uptime is 141 weeks, 2 days, 6 hours, 34 minutes

ES5D2T52C002 0(Master) : uptime is 141 weeks, 2 days, 6 hours, 33 minutes

2048M bytes DDR Memory

344M bytes FLASH

Pcb Version : VER.C

Basic BootROM Version : 0207.0001 Compiled at Oct 20 2014, 19:19:38

BootLoad Version : 0207.0001 Compiled at Feb 27 2015, 15:34:21

CPLD Version : 268

Software Version : VRP (R) Software, Version 5.160 (V200R007C00SPC500)

PWR1 information

Pcb Version : PWR VER.B

PWR2 information

Pcb Version : PWR VER.B

FAN1 information

Pcb Version : NA

配置步骤

S5820 MAC如下:

Global LLDP local-information:

Chassis ID : 741f-4a25-ae4b

System name : s5800

System description : H3C Comware Platform Software, Software Version 7.1.045,

Release 2418P06

H3C S5820V2-48S

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

rights reserved.

System capabilities supported : Bridge, Router, Customer Bridge, Service Bridge

System capabilities enabled : Bridge, Router, Customer Bridge

华为5720 MAC如下:

System bridge MAC address: a8ca-7b7c-0cf0

S5820 PVST配置:

stp instance 0 root primary

stp vlan 2 to 3 12 37 400 root primary

stp mode pvst

stp global enable

华为5720 VBST配置 (华为VBST相当于华三的PVST) :

Stp enable

stp mode vbst

查看S5820 STP根桥信息:

dis stp root

VLAN ID	Root Bridge ID	ExtPathCost	IntPathCost	Root Port
1	32768.741f-4a25-ae4b	0	0	
2	0.741f-4a25-ae4b	0	0	
3	0.741f-4a25-ae4b	0	0	
12	0.741f-4a25-ae4b	0	0	
37	0.741f-4a25-ae4b	0	0	
193	32768.741f-4a25-ae4b	0	0	
200	32768.741f-4a25-ae4b	0	0	
400	0.741f-4a25-ae4b	0	0	
555	32768.741f-4a25-ae4b	0	0	

查看华为5720根桥信息:

dis stp bridge root

VLAN-ID	Root ID	Root Cost	Hello Time	Max Age	Forward Delay	Root Port
1	4096.542b-de33-cce0	1001	2	20	15	Eth-Trunk1
2	0.741f-4a25-ae4b	1000	2	20	15	Eth-Trunk1
3	0.741f-4a25-ae4b	1000	2	20	15	Eth-Trunk1
12	0.741f-4a25-ae4b	1000	2	20	15	Eth-Trunk1
400	0.741f-4a25-ae4b	1000	2	20	15	Eth-Trunk1

查看S5820 STP端口的状态:

dis stp brief

VLAN ID	Port	Role	STP State	Protection
2	Bridge-Aggregation24	DESI	FORWARDING	NONE
2	Bridge-Aggregation25	DESI	FORWARDING	NONE
2	Bridge-Aggregation26	DESI	FORWARDING	NONE
2	Bridge-Aggregation27	DESI	FORWARDING	NONE
2	Bridge-Aggregation28	DESI	FORWARDING	NONE
2	Bridge-Aggregation29	DESI	FORWARDING	NONE
2	Bridge-Aggregation30	DESI	FORWARDING	NONE
2	Bridge-Aggregation31	DESI	FORWARDING	NONE
2	Bridge-Aggregation32	DESI	FORWARDING	NONE
2	Bridge-Aggregation41	DESI	FORWARDING	NONE
2	Bridge-Aggregation42	DESI	FORWARDING	NONE
2	Bridge-Aggregation43	DESI	FORWARDING	NONE
2	Bridge-Aggregation44	DESI	FORWARDING	NONE
2	Bridge-Aggregation45	DESI	FORWARDING	NONE
2	Bridge-Aggregation46	DESI	FORWARDING	NONE
3	Bridge-Aggregation24	DESI	FORWARDING	NONE
3	Bridge-Aggregation25	DESI	FORWARDING	NONE
3	Bridge-Aggregation26	DESI	FORWARDING	NONE
3	Bridge-Aggregation27	DESI	FORWARDING	NONE
3	Bridge-Aggregation28	DESI	FORWARDING	NONE
3	Bridge-Aggregation29	DESI	FORWARDING	NONE
3	Bridge-Aggregation30	DESI	FORWARDING	NONE
3	Bridge-Aggregation31	DESI	FORWARDING	NONE
3	Bridge-Aggregation32	DESI	FORWARDING	NONE
3	Bridge-Aggregation41	DESI	FORWARDING	NONE
3	Bridge-Aggregation42	DESI	FORWARDING	NONE
3	Bridge-Aggregation43	DESI	FORWARDING	NONE
3	Bridge-Aggregation44	DESI	FORWARDING	NONE
3	Bridge-Aggregation45	DESI	FORWARDING	NONE
3	Bridge-Aggregation46	DESI	FORWARDING	NONE
12	Bridge-Aggregation24	DESI	FORWARDING	NONE
12	Bridge-Aggregation25	DESI	FORWARDING	NONE
12	Bridge-Aggregation26	DESI	FORWARDING	NONE
12	Bridge-Aggregation27	DESI	FORWARDING	NONE
12	Bridge-Aggregation28	DESI	FORWARDING	NONE
12	Bridge-Aggregation29	DESI	FORWARDING	NONE
12	Bridge-Aggregation30	DESI	FORWARDING	NONE
12	Bridge-Aggregation31	DESI	FORWARDING	NONE
12	Bridge-Aggregation32	DESI	FORWARDING	NONE
12	Bridge-Aggregation41	DESI	FORWARDING	NONE
12	Bridge-Aggregation42	DESI	FORWARDING	NONE
12	Bridge-Aggregation43	DESI	FORWARDING	NONE
12	Bridge-Aggregation44	DESI	FORWARDING	NONE
12	Bridge-Aggregation45	DESI	FORWARDING	NONE
12	Bridge-Aggregation46	DESI	FORWARDING	NONE
37	Bridge-Aggregation24	DESI	FORWARDING	NONE
37	Bridge-Aggregation25	DESI	FORWARDING	NONE
37	Bridge-Aggregation26	DESI	FORWARDING	NONE
37	Bridge-Aggregation27	DESI	FORWARDING	NONE


```
555 Bridge-Aggregation32 DESI FORWARDING NONE
555 Bridge-Aggregation41 DESI FORWARDING NONE
555 Bridge-Aggregation42 DESI FORWARDING NONE
555 Bridge-Aggregation43 DESI FORWARDING NONE
555 Bridge-Aggregation44 DESI FORWARDING NONE
555 Bridge-Aggregation45 DESI FORWARDING NONE
555 Bridge-Aggregation46 DESI FORWARDING NONE
555 Ten-GigabitEthernet1/0/17 DESI FORWARDING NONE
555 Ten-GigabitEthernet1/0/18 DESI FORWARDING NONE
555 Ten-GigabitEthernet2/0/17 DESI FORWARDING NONE
555 Ten-GigabitEthernet2/0/18 DESI FORWARDING NONE
```

查看华为5720STP端口的状态:

```
dis stp brief
```

VLAN-ID	Port	Role	STP State	Protection
2	Eth-Trunk1	ROOT	FORWARDING	NONE
2	GigabitEthernet0/0/2	DESI	FORWARDING	NONE
3	Eth-Trunk1	ROOT	FORWARDING	NONE
12	Eth-Trunk1	ROOT	FORWARDING	NONE
400	Eth-Trunk1	ROOT	FORWARDING	NONE

至此，S5820与华为5720对接PVST典型组网配置案例已完成!

配置关键点