H3C S5820与思科2960对接二层链路聚合典型组网配置案例

二层链路聚合　　**韦家宁**　2020-05-24 发表

组网及说明

本案例采用H3C S5820与思科2960对接二层链路聚合典型组网

H3C S5820版本信息如下：

H3C Comware Software, Version 7.1.045, Release 2418P06

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H3C S5820V2-48S uptime is 240 weeks, 3 days, 2 hours, 10 minutes

Last reboot reason : USER reboot

思科2960版本信息如下：

do sh ve

Cisco IOS Software, C2960S Software (C2960S-UNIVERSALK9-M), Version 12.2(55)SE2, RELEASE SOFTWARE (fc1)

Technical Support: http://www.cisco.com/techsupport

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Compiled Tue 11-Jan-11 02:23 by prod_rel_team

Image text-base: 0x00003000, data-base: 0x01B00000

ROM: Bootstrap program is Alpha board boot loader

BOOTLDR: C2960S Boot Loader (C2960S-HBOOT-M) Version 12.2(53r)SE, RELEASE SOFTWARE (fc3)

SCW-T-1 uptime is 1 year, 30 weeks, 4 days, 18 hours, 16 minutes

System returned to ROM by power-on

System restarted at 18:29:43 UTC Mon Oct 22 2018

System image file is "flash:/c2960s-universalk9-mz.122-55.SE2/c2960s-universalk9-mz.122-55.SE2.bin"

This product contains cryptographic features and is subject to United
States and local country laws governing import, export, transfer and
use. Delivery of Cisco cryptographic products does not imply
third-party authority to import, export, distribute or use encryption.
Importers, exporters, distributors and users are responsible for
compliance with U.S. and local country laws. By using this product you
agree to comply with applicable laws and regulations. If you are unable
to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wwl/export/crypto/tool/stqrg.html

If you require further assistance please contact us by sending email to
export@cisco.com.

cisco WS-C2960S-48TS-S (PowerPC) processor (revision D0) with 131072K bytes of memory.

Processor board ID FOC1517Y1E2

Last reset from power-on

3 Virtual Ethernet interfaces

1 FastEthernet interface

50 Gigabit Ethernet interfaces

The password-recovery mechanism is enabled.

512K bytes of flash-simulated non-volatile configuration memory.

Base ethernet MAC Address　　　: 88:F0:77:74:C3:80

Motherboard assembly number　　: 73-12424-06

Power supply part number　　　: 341-0327-03

Motherboard serial number　　　: FOC15151KUK

Power supply serial number　　: LIT144432FT

Model revision number   : D0
Motherboard revision number   : A0
Model number   : WS-C2960S-48TS-S
Daughterboard assembly number : 73-11933-04
Daughterboard serial number   : FOC1516245W
System serial number   : FOC1517Y1E2
Top Assembly Part Number   : 800-32452-03
Top Assembly Revision Number   : A0
Version ID   : V03
CLEI Code Number   : COMGK00ARC
Daughterboard revision number : A0
Hardware Board Revision Number : 0x01

Switch Ports Model   SW Version   SW Image
------ ----- -----   ----------   ----------
*   1 50   WS-C2960S-48TS-S 12.2(55)SE2   C2960S-UNIVERSALK9-M

Configuration register is 0xF

S5820的XGE1/0/41、XGE2/0/41分别与思科2960的G0/49、G0/50互联

S5820二层链路聚合配置如下：
interface Bridge-Aggregation41
 port link-type trunk
 undo port trunk permit vlan 1
 port trunk permit vlan 2 to 4094
quit

interface Ten-GigabitEthernet1/0/41
 port link-mode bridge
 port link-type trunk
 undo port trunk permit vlan 1
 port trunk permit vlan 2 to 4094
 stp root-protection
 port link-aggregation group 41
quit

interface Ten-GigabitEthernet2/0/41
 port link-mode bridge
 port link-type trunk
 undo port trunk permit vlan 1
 port trunk permit vlan 2 to 4094
 stp root-protection
 port link-aggregation group 41
quit

思科2960二层链路聚合配置如下：

interface Port-channel1
 switchport trunk allowed vlan 2,3,12,400
 switchport mode trunk
exit

interface GigabitEthernet0/49
 switchport trunk allowed vlan 2,3,12,400
 switchport mode trunk
 channel-group 1 mode on
exit

interface GigabitEthernet0/50
 switchport trunk allowed vlan 2,3,12,400
 switchport mode trunk
 channel-group 1 mode on
exit

查看S5820的链路聚合状态：
dis link-aggregation verbose Bridge-Aggregation 41
Loadsharing Type: Shar -- Loadsharing, NonS -- Non-Loadsharing
Port Status: S -- Selected, U -- Unselected, I -- Individual
Flags: A -- LACP_Activity, B -- LACP_Timeout, C -- Aggregation,
        D -- Synchronization, E -- Collecting, F -- Distributing,
        G -- Defaulted, H -- Expired

Aggregate Interface: Bridge-Aggregation41
Aggregation Mode: Static
Loadsharing Type: Shar
  Port   Status Priority Oper-Key

  XGE1/0/41   S   32768   10
  XGE2/0/41   S   32768   10

查看思科2960链路聚合的状态：

show interfaces port-channel 1 status

Port   Name   Status   Vlan   Duplex Speed Type
Po1   connected trunk   a-full a-1000

show interfaces port-channel 1 status

Port   Name   Status   Vlan   Duplex Speed Type
Po1   connected trunk   a-full a-1000
SCW-T-1#show interfaces port-channel 1 e
SCW-T-1#show interfaces port-channel 1 etherchannel
Age of the Port-channel   = 579d:18h:20m:02s
Logical slot/port   = 5/1   Number of ports = 2
GC   = 0x00000000   HotStandBy port = null
Port state   = Port-channel Ag-Inuse
Protocol   =   -
Port security   = Disabled

Ports in the Port-channel:

Index Load Port   EC state   No of bits
------+------+------+-----------------+-----------
 0   00   Gi0/49 On   0
 0   00   Gi0/50 On   0

Time since last port bundled: 60d:11h:41m:49s   Gi0/49
Time since last port Un-bundled: 60d:12h:13m:13s   Gi0/49

至此，S5820与思科2960对接二层链路聚合典型组网配置案例已完成！