FS

LACP Trouble Shooting

Models: N5860 Series; N8560 Series; NC8200 Series; NC8400 Series

Contents

1. Fault Phenomenon

Port aggregation is unsuccessful.

2. Possible Cause of Failure

① Physical link failure.

② LACP negotiation was unsuccessful.

③ There is no change in the packet flow and the matching part of the balance factor.

④ The duplex, rate, and transmission medium at both ends are inconsistent.

3. Processing Steps

3.1 Check Whether There Is a Link Failure On the Aggregation Member Port

FS#show interface status   //Check whether the port status of the aggregation member port is up.

```
FS#show interfaces status

Interface                              Status    Vlan   Duplex    Speed    Type
-------------------------------------- --------  ----   -------   -------- ------

TenGigabitEthernet 0/18                down      1      Unknown   Unknown   fiber
TenGigabitEthernet 0/19                up        1      Full      10G       fiber
TenGigabitEthernet 0/20                up        1      Full      10G       fiber
```

If the member port is down, check the physical port connection. Make sure the member is up. If conditions permit, replace other member ports, confirm whether the aggregation member port can be up, and exclude the member port from physical failure.

3.2 Check the Port Properties of Both Devices

Use the show interface XX command to view the port's media properties, focusing on the port's speed, flow control, and media type, and it needs to be configured in full-duplex mode to eliminate the problem that the port cannot be up

```
FS#show interfaces tenGigabitEthernet 0/19
Index(dec):19 (hex):13
TenGigabitEthernet 0/19 is UP    , line protocol is UP
    Hardware is TenGigabitEthernet, address is 300d.9e43.38de (bia 300d.9e43.38de)
    Interface address is: no ip address
    Interface IPv6 address is:
       No IPv6 address
    MTU 1500 bytes, BW 10000000 Kbit
    Encapsulation protocol is Ethernet-II, loopback not set
    Keepalive interval is 10 sec , set
    Carrier delay is 2 sec
    Ethernet attributes:
       Last link state change time: 2020-07-15 10:10:35
       Time duration since last link state change: 0 days,    0 hours, 12 minutes, 29 seconds

       Priority is 0
       Medium-type is Fiber
        Admin duplex mode is AUTO, oper duplex is Full
```

Admin speed is AUTO, oper speed is 10G

Flow control admin status is OFF, flow control oper status is OFF

Admin negotiation mode is OFF, oper negotiation state is OFF

Storm Control: Broadcast is OFF, Multicast is OFF, Unicast is OFF

Rxload is 1/255, Txload is 1/255

Input peak rate: 205 bits/sec, at 2020-07-15 10:11:45

Output peak rate: 304 bits/sec, at 2020-07-15 10:11:45

10 seconds input rate 0 bits/sec, 0 packets/sec

10 seconds output rate 0 bits/sec, 0 packets/sec

29 packets input, 6616 bytes, 0 no buffer, 0 dropped

Received 1 broadcasts, 0 runts, 0 giants

0 input errors, 0 CRC, 0 frame, 0 overrun, 0 abort

52 packets output, 9512 bytes, 0 underruns, 0 no buffer, 0 dropped

0 output errors, 0 collisions, 0 interface resets

3.3 Check Whether the Link Aggregation Member Ports and Link Aggregation Groups Are Normal

State: Member port negotiation status, bndl indicates that the negotiation is successful, susp indicates that the negotiation fails, and down indicates that the link status of the interface is down

FS#show lacp summary 1

System Id:32768, 300d.9e7a.74c0

Flags: S - Device is requesting Slow LACPDUs   F - Device is requesting Fast LACPDUs.

A - Device is in active mode.   P - Device is in passive mode.

Aggregate port 1:

Local information:

Port	Flags	State	LACP port Priority	Oper Key	Port Number	Port State
Te0/19	SA	bndl	32768	0x1	0x13	0x3d
Te0/20	SA	bndl	32768	0x1	0x14	0x3d

Partner information:

Port	Flags	LACP port Priority	Dev ID	Oper Key	Port Number	Port State
Te0/19	SA	32768	300d.9e43.38de	0x1	0x13	0x3d
Te0/20	SA	32768	300d.9e43.38de	0x1	0x14	0x3d

FS#show aggregatePort 1 summary

Aggregate Port	MaxPorts	SwitchPort	Mode	Load balance	Ports
Ag1	8	Enabled	ACCESS	enhanced profile	Te0/19 ,Te0/20

AggregatePort :AP Interface name

MaxPorts: AP The maximum number of interfaces that can be supported.

SwitchPort: AP Whether the interface is a Layer 2 port, Enabled indicates a Layer 2 port, and Dsiabled indicates not a Layer 2 port.

Mode: AP The attributes of the Layer 2 interface of the interface, including: ACCESS, TRUNK, TUNNEL, HYBRID, UPLINK, HOST, and PROMIS, when the AP interface is not a Layer 2 interface, the display is empty.

Load balance: AP Balance mode of the interface

Ports :AP Balance mode of the interface

3.4 Check the Aggregation Port Configuration Is Correct

```
FS#show running-config interface TenGigabitEthernet 0/19
Building configuration...
Current configuration: 62 bytes
interface TenGigabitEthernet 0/19
  port-group 1 mode active
```

There are two LACP port modes: Active and Passive

3.5 Check Whether the Configuration of the Peer Device Is Correct

If the LACP mode of both ports of the device is passive mode, the aggregation relationship cannot be established. Both ends are in active mode, or one side is in active mode and one is in passive mode.

4. Seek FS Technical Support

If the fault cannot be solved after the above steps are checked, please collect the following fault information and contact FS technical support for assistance.

```
show run
show version
show version slot
show lacp summary X
show lacp summary X
show logging
```

United Kingdom   Russia

Germany

United States

China

Singapore

Australia

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