

线卡关掉由于通信故障故障排除指南

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简介

本文描述如何排除故障关掉由于Cisco Catalyst 6500系列交换机的通信故障的线卡。

[先决条件](#)

[要求](#)

本文档没有任何特定的要求。

[使用的组件](#)

本文档中的信息根据Cisco Catalyst 6500系列交换机和对一个特定软件版本没有被限制。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

背景信息

安全的复制协议(SCP)是用于从交换处理器(SP)的通信的协议对非分布式的转发卡德(非DFC)线卡通过Ethernet Out of Band Channel (EOBC)在Catalyst 6500。SCP或keep-alive轮询失败也许代表在Supervisor和线卡之间的通信问题。

每当模块关掉，请执行这些检查：

- 查看登录顺序确定模块是否供给动力了在于下‘SCP dnld’失败。

- 排除故障的Supervisor和有问题的线卡之间的通信。

检查日志

检查登录顺序发现‘SCP dnld’或keep-alive轮询失败是否是原因模块关掉：

```
%C6KPWR-SP-4-DISABLED: power to module in slot 2 set off (Module Failed SCP dnld)
%C6KPWR-SP-4-DISABLED: power to module in slot 2 set off (Module not responding to
Keep Alive polling)
```

排除故障通信

此步骤描述如何排除故障Supervisor和线卡之间的通信。

1. 检查从SP旁拉的全局SCP计数器所有增加错误。

```
6500#remote command switch show scp counters
6500-sp#
received packets           = 586786
transmitted packets       = 584442
retransmitted packets     = 13           (increasing re-transmissions indicate
congested EOBC)
loop back packets         = 0
transmit failures         = 0           (increasing transmit failures indicate
congested/stuck EOBC)
recv pkts not for me     = 0
recv pkts to dead process = 0
recv pkts not enqueueable = 0         (increasing counters indicate lack of
EOBC buffers)
response has wrong opcode = 0
response has wrong seqnum = 0
response is not an ack    = 0
response is too big       = 0
```

2. 检查每模块SCP接收/传输计数器，并且检查增加SCP重试次数。

```
6500#remote command switch show scp status
6500-sp#
Rx 586786 , Tx 584442 , Sap 15
Id      Channel name      current/peak/retry/total  time(queue/process)
-----
0  SCP async: LCP#8      0/ 11/ 1/ 13             4/ 4
1  SCP async: LCP#4      0/ 13/ 0/ 550            92/ 108
2  SCP async: LCP#2      0/ 34/ 0/ 1540           628/ 456
3  SCP async: LCP#5      0/ 17/ 1/ 716            2228/1252
4  SCP async: LCP#1      0/ 29/ 0/ 137            200/ 452
5  SCP async: LCP#9      0/ 13/ 0/ 895            176/ 428
```

3. 检查从Supervisor的SCP ping到有问题的模块。

```
6500#remote command switch test scp ping 3
6500-sp#
pinging addr 5(0x5)
assigned sap 0x11
```

```
addr 5(0x5) is alive      (Communication between the supervisor and line
card is fine)
```

```
6500#remote command switch test scp ping 2
6500-sp#
pinging addr 11(0xB)
assigned sap 0x11
```

```
no response from addr 11(0xB) (Communication between the supervisor
and linecard is broken)
```

4. 配置在线卡的在线诊断。

```
6500#remote command switch test scp ping 3
6500-sp#
pinging addr 5(0x5)
assigned sap 0x11
```

```
addr 5(0x5) is alive      (Communication between the supervisor and line
card is fine)
```

```
6500#remote command switch test scp ping 2
6500-sp#
pinging addr 11(0xB)
assigned sap 0x11
```

```
no response from addr 11(0xB) (Communication between the supervisor
and linecard is broken)
```

5. 重新安装线卡，并且查看测试结果为了发现任何测验是否失败。

```
6500#remote command switch test scp ping 3
6500-sp#
pinging addr 5(0x5)
assigned sap 0x11
```

```
addr 5(0x5) is alive      (Communication between the supervisor and line
card is fine)
```

```
6500#remote command switch test scp ping 2
6500-sp#
pinging addr 11(0xB)
assigned sap 0x11
```

```
no response from addr 11(0xB) (Communication between the supervisor
and linecard is broken)
```

6. 可选：请使用调试指令为了检查SCP下载事件。当线卡来联机，这些调试可能运行检查SCP下载事件。这是正确地工作模块的示例。

```
6500#remote login switch
6500-sp#debug scp download module 2
6500-sp#show debug
```

```
<snip>
```

```
SCP download debugging for slot 2 is on
```

```
start_timer_online_action: Start OIR online timer for slot: 2,
```

```
time: 1380 sec
```

```
scp_dnld_module 2 : 0 : 0: during state enabled, got event 5(registered)
```

```
@@@ scp_dnld_module 2 : 0 : 0: enabled -> wait_til_boot_ready
```

```
Stop timer
```

```
Start BOOT_RDY timer for 2 with 30000 msec
```

```
scp_dnld_module 2 : 0 : 0: during state wait_til_boot_ready, got event
```

```
6(boot_ready)
```

```
@@@ scp_dnld_module 2 : 0 : 0: wait_til_boot_ready -> wait_til_downloaded
```

```
Stop timer
```

```
Start DNLD timer for 2 with 120 sec
(scp_start_download) 2/0
(scp_start_download) 2/0: Started D/L Process, pid 512
get_card_image: slot/proc 2/0: UBIN patch image on flash opened
(microcode:/LCP_CPGBIT)
No download needed for card at slot 2

    scp_dnld_module 2 : 0 : 0: during state wait_til_downloaded, got event
4(dnld_completed)
@@@ scp_dnld_module 2 : 0 : 0: wait_til_downloaded -> wait_til_ready
Stop timer
Start EXEC_CODE timer for 2 with 90 sec
Received Run-ready from slot 2
scp_download_process_tearardown() mypid 512, slot/proc 2/0, image_fd -1
    scp_dnld_module 2 : 0 : 0: during state wait_til_ready, got event
8(ready)
@@@ scp_dnld_module 2 : 0 : 0: wait_til_ready -> wait_til_running
Stop timer
Start RUN_RDY timer for 5 with 90 sec
    scp_dnld_module 2 : 0 : 0: during state wait_til_running, got
event 9(running)
@@@ scp_dnld_module 2 : 0 : 0: wait_til_running -> wait_til_online
Stop timer
<snip>
```