

# 分析Fretta平台相关(PD)问题

## 目录

### [简介](#)

### [要收集的日志](#)

### [要收集的基本日志](#)

### [《心跳小姐》](#)

### [EOBC/EPC相关日志](#)

### [交换矩阵相关](#)

### [切片管理器](#)

### [MPA管理器](#)

### [LED](#)

### [PD安装](#)

### [详细信息](#)

### [使用卡管理器日志进行分析](#)

### [使用show tech ctrace执行脱机分析](#)

### [在Ads服务器上对ctrace脱机解码](#)

### [确定主SC和主SUP](#)

### [从主SC检索后期代码](#)

### [主RP视点的事件历史记录：](#)

### [分类场景示例](#)

### [如何提取、编辑和构建Satori产品组合？](#)

### [构建内核的命令](#)

### [如何对不同klm进行更改并编译？](#)

### [Fretta固定卡硬件和FPGA规格](#)

## 简介

本文档介绍如何分析和查找Fretta(NCS5500)系列路由器平台相关问题的根本原因的指南。

## 要收集的日志

对于任何与平台相关的分类，请收集下列基本日志。根据可疑的组件或功能区域，除基本日志外，还收集其他日志，如下面各小节所示。

### 要收集的基本日志

- show logging
- show tech ctrace
- show tech card-mgr
- show tech shelf-mgr
- show tech os
- show tech obfl

## 《心跳小姐》

- show tech heart-beat miss

## EOBC/EPC相关日志

请参阅培训EOBC/EPC特定问题。

- show tech control-ethernet

## 交换矩阵相关

- show tech fabric from xrvn

## 切片管理器

- show tech-support sdr\_mgr
- show tech-support install
- show tech-support fabric
- show tech-support fpd
- show tech-support cm
- show controller fabric health
- show platform slices

## MPA管理器

- show tech-support mpa-mgr

## LED

- show tech-support envmon
- show tech-support alarm\_mgr
- show alarms
- show led
- show environment

有关LED和状态的详细信息，请参阅这些链接。

## PD安装

请参阅培训PD安装问题

## 详细信息

### 使用卡管理器日志进行分析

- 请花些时间浏览卡管理器详细维基，网址为

- 要调试任何平台问题，您需要使用show tech ctrace、show tech card-mgr和show tech shelf\_mgr 日志来了解发生了什么情况。
- show reboot-history card location <> from shelf\_mgr logs提供卡的重新启动历史记录。
- show controllers card-mgr event-history brief location <>和show controllers card-mgr event-history detail location <>show tech card-mgr日志提供有关card-mgr fsm状态机详细信息的详细信息。
- 当卡无法启动时，您需要查看该卡的事件历史记录，并根据卡卡卡滞止/故障的状态/事件，您需要从BIOS、PD安装或卡管理器的视点进行检查。每个事件都有一个关联的邮政编码，它提供FSM移动的线索。

**注意：**如果线卡无法启动并进入FAILED/FAILED状态，则在强制重新加载卡后，您需要连接到线卡控制台。这有助于您了解线路卡无法启动的原因。show tech无法从故障线卡收集日志。

请参阅上述卡管理器详细维基，了解特定状态、事件和邮政编码详细信息的含义。另请参阅位于calvados/dc\_common\_pkg/drivers/card\_mgr/card\_mgr\_fsm.smil的卡管理器smil文件。此文件对FSM状态、事件和状态转换有很好的描述。

以下是LC冷重置时工作案例事件历史记录简要输出的示例：

```
sysadmin-vm:0_RP0# show controller card-mgr event-history brief location 0/1
Mon Dec 16 14:47:58.974 UTC+00:00
```

```
Card Event History for: 0/1
```

```
Card Event History as seen by Master (0/RP0)
Current State: CARD_READY
```

```
DATE TIME (UTC) STATE EVENT
```

```
-----
12/16 14:46:51.116 WAIT_CARD_INFO ev_card_info_synced
12/16 14:46:06.990 WAIT_SYSADMIN_VM_READY ev_sysadmin_vm_booted
12/16 14:45:57.375 HOST_OS_RUNNING ev_sysadmin_vm_started
12/16 14:45:39.554 BOOTLDR_STARTED ev_host_os_started
12/16 14:44:22.746 CARD_POWERED_ON ev_bootldr_started
12/16 14:44:19.142 IOFPGA_BOOTED ev_dml_power_up_ok
12/16 14:44:12.825 IOFPGA_RESET_CHECK ev_inserted
12/16 14:44:12.325 CARD_IN_RESET ev_removed
12/16 14:44:10.224 PROCESS_PENDING_RESET if_pending_cold_reset_req
12/16 14:44:10.224 SYSADMIN_VM_GOING_DOWN ev_host_halting_os
12/16 14:43:50.258 SYSADMIN_VM_GOING_DOWN ev_cold_reset_req
12/16 14:43:34.275 CARD_READY ev_sysadmin_vm_shutdown
12/16 11:11:55.291 OIR_INSERT_NOTIF if_card_local_init_done
12/16 11:11:55.290 IDLE ev_card_info_synced
```

事件历史记录详细输出示例：

```
sysadmin-vm:0_RP0# show controller card-mgr event-history detail location 0/1
Mon Dec 16 14:49:20.850 UTC+00:00
```

```
Card Event History for: 0/1
```

```
Card Event History as seen by Master (0/RP0)
Event buffer info:
Total number of events recorded: 14
Number of events available for display: 14
```

Current State: CARD\_READY

EVENT #: 13 (record index = 13)  
TIMESTAMP: 2019/12/16 14:46:51.116090 UTC  
STATE: WAIT\_CARD\_INFO  
EVENT: ev\_card\_info\_synced  
EVENT DESC: Card info of the remote node has been received

EVENT #: 12 (record index = 12)  
TIMESTAMP: 2019/12/16 14:46:06.990465 UTC  
STATE: WAIT\_SYSADMIN\_VM\_READY  
EVENT: ev\_sysadmin\_vm\_booted  
EVENT DESC: SysAdmin VM has booted

EVENT #: 11 (record index = 11)  
TIMESTAMP: 2019/12/16 14:45:57.375813 UTC  
STATE: HOST\_OS\_RUNNING  
EVENT: ev\_sysadmin\_vm\_started  
EVENT DESC: SysAdmin VM has been started from host

EVENT #: 10 (record index = 10)  
TIMESTAMP: 2019/12/16 14:45:39.554589 UTC  
STATE: BOOTLDR\_STARTED  
EVENT: ev\_host\_os\_started  
EVENT DESC: Host OS has started booting

EVENT #: 9 (record index = 9)  
TIMESTAMP: 2019/12/16 14:44:22.746147 UTC  
STATE: CARD\_POWERED\_ON  
EVENT: ev\_bootldr\_started  
EVENT DESC: Bootloader on the card has started booting

EVENT #: 8 (record index = 8)  
TIMESTAMP: 2019/12/16 14:44:19.142021 UTC  
STATE: IOFPGA\_BOOTED  
EVENT: ev\_dml\_power\_up\_ok  
EVENT DESC: I/O FPGA indicating power domain 1 was successfully powered up

EVENT #: 7 (record index = 7)  
TIMESTAMP: 2019/12/16 14:44:12.825682 UTC  
STATE: IOFPGA\_RESET\_CHECK  
EVENT: ev\_inserted  
EVENT DESC: Card inserted into the chassis or I/O FPGA booted

EVENT #: 6 (record index = 6)  
TIMESTAMP: 2019/12/16 14:44:12.325703 UTC  
STATE: CARD\_IN\_RESET  
EVENT: ev\_removed  
EVENT DESC: Card removed from chassis or I/O FPGA was power cycled

EVENT #: 5 (record index = 5)  
TIMESTAMP: 2019/12/16 14:44:10.224354 UTC  
STATE: PROCESS\_PENDING\_RESET  
EVENT: if\_pending\_cold\_reset\_req

EVENT #: 4 (record index = 4)  
TIMESTAMP: 2019/12/16 14:44:10.224343 UTC  
STATE: SYSADMIN\_VM\_GOING\_DOWN  
EVENT: ev\_host\_halting\_os  
EVENT DESC: Host is performing halting of OS

EVENT #: 3 (record index = 3)  
TIMESTAMP: 2019/12/16 14:43:50.258016 UTC

```
STATE: SYSADMIN_VM_GOING_DOWN
EVENT: ev_cold_reset_req
EVENT DESC: Client request to cold reset the card (I/O FPGA is also power-cycled)

EVENT #: 2 (record index = 2)
TIMESTAMP: 2019/12/16 14:43:34.275167 UTC
STATE: CARD_READY
EVENT: ev_sysadmin_vm_shutdown
EVENT DESC: SysAdmin VM shutdown operation has started

EVENT #: 1 (record index = 1)
TIMESTAMP: 2019/12/16 11:11:55.291184 UTC
STATE: OIR_INSERT_NOTIF
EVENT: if_card_local_init_done

EVENT #: 0 (record index = 0)
TIMESTAMP: 2019/12/16 11:11:55.290959 UTC
STATE: IDLE
EVENT: ev_card_info_synced
EVENT DESC: Card info of the remote node has been received
```

在主SC和主SUP上观察到的后代码示例：

从以下输出中确定问题卡的物理插槽编号以及主SC和SUP:

位置0/1物理插槽编号为2 ( ID列 ) ，主SC为0/SC0 ，主SUP为0/RP0。

```
sysadmin-vm:0_RP0# show controller card-mgr inventory summary
Mon Dec 16 14:50:50.810 UTC+00:00
Card Manager Inventory Summary :
BP HW
Location Card Type ID Serial Number Ver Card State
-----
0/1 NC55-32T16Q4H-AT 2 JAE233813G2 0.302 CARD_READY
0/2 NC55-12X100GE-PROT 3 SAL1918EF3S 0.203 CARD_READY
0/FC1 NC55-5504-FC 22 JAE210600VD 0.3 CARD_READY
0/FC3 NC55-5504-FC 24 JAE210600XV 0.3 CARD_READY
0/FC5 NC55-5504-FC 26 JAE210600VX 0.3 CARD_READY
0/RP0 NC55-RP (Master) 27 SAL2044VUZT 1.0 CARD_READY
0/RP1 NC55-RP (Slave) 28 SAL1916DT8B 0.2040 CARD_READY
0/SC0 NC55-SC (Master) 29 SAL2046W07E 1.6 CARD_READY
```

使用此命令可获取线路卡0/1的邮政编码列表：

```
sysadmin-vm:0_RP0# show controller card-mgr trace cmgr_isr location 0/SC0 | inc "slot 2" | inc
changed
Mon Dec 16 14:56:27.355 UTC+00:00
2019-12-16:11.14.44.916211712:[ISR]: POST Code for slot 2 changed to 0xa0
2019-12-16:11.14.44.916268544:[ISR]: POST Code for slot 22 changed to 0x54
2019-12-16:11.14.44.916295168:[ISR]: POST Code for slot 24 changed to 0x54
2019-12-16:11.14.44.916321280:[ISR]: POST Code for slot 26 changed to 0x54
2019-12-16:11.14.44.916347392:[ISR]: POST Code for slot 27 changed to 0xa0
2019-12-16:11.14.44.916373504:[ISR]: POST Code for slot 28 changed to 0xa0
2019-12-16:11.15.03.646569472:[ISR]: POST Code for slot 26 changed to 0xa0
2019-12-16:11.15.04.748022272:[ISR]: POST Code for slot 22 changed to 0xa0
2019-12-16:11.15.14.266484736:[ISR]: POST Code for slot 24 changed to 0xa0
2019-12-16:11.18.11.489846272:[ISR]: POST Code for slot 2 changed to 0x1e
2019-12-16:11.18.12.491101184:[ISR]: POST Code for slot 2 changed to 0xa0
2019-12-16:11.22.30.391535104:[ISR]: POST Code for slot 2 changed to 0x1e
2019-12-16:11.22.31.492875776:[ISR]: POST Code for slot 2 changed to 0xa0
2019-12-16:11.26.49.407702016:[ISR]: POST Code for slot 2 changed to 0x1e
```

2019-12-16:11.26.50.509097472:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:11.31.08.408430592:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:11.31.09.409682432:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:11.35.26.315185152:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:11.35.27.416556032:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:11.39.45.310315520:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:11.39.46.311528448:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:11.44.04.337517056:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:11.44.05.338741248:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:11.48.23.232193024:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:11.48.24.333538304:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:11.52.41.234022400:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:11.52.43.336457728:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:11.57.00.153080320:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:11.57.01.254410752:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.01.19.178457600:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.01.20.179703296:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.05.38.203790336:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.05.39.205028864:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.09.57.103055360:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.09.58.204383232:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.14.15.027237888:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.14.16.128579072:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.18.34.047417856:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.18.35.148794880:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.22.53.047706624:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.22.54.048883200:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.27.12.054199808:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.27.13.055494656:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.31.30.979380224:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.31.32.080705024:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.35.48.888316416:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.35.49.989663744:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.40.07.891782144:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.40.08.993085440:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.44.26.908366848:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.44.27.909621760:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.48.45.918578176:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.48.46.919841792:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.53.03.837281280:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.53.04.838517248:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:12.57.22.831639552:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:12.57.23.832911360:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.01.41.833031680:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.01.42.834268672:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.06.00.740024320:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.06.01.841394688:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.10.19.768019968:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.10.20.769302528:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.14.37.655355392:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.14.38.756755456:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.18.56.655229952:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.18.57.756587520:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.23.15.658801664:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.23.16.660048384:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.27.34.655034880:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.27.35.656287232:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.31.53.652897792:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.31.54.654104576:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.36.11.558914560:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.36.12.560167424:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.40.30.568370688:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.40.31.569627136:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.44.49.468186112:[ISR]: POST Code for slot 2 changed to 0x1e

2019-12-16:13.44.50.571635712:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.49.08.482063360:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.49.09.583393280:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.53.26.395422208:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.53.27.496771584:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:13.57.45.399475712:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:13.57.46.500909568:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.02.04.405213184:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.02.05.406433280:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.06.23.417884672:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.06.24.419138048:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.10.42.329566720:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.10.43.430938112:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.15.00.253901824:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.15.01.355243520:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.19.19.247721472:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.19.20.349063680:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.23.38.254869504:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.23.39.256110592:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.27.57.261724160:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.27.58.262965760:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.32.15.158858240:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.32.17.261378560:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.36.34.186439168:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.36.35.187675648:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.40.53.126042624:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.40.54.227419648:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.43.33.504493568:[ISR]: POST Code for slot 2 changed to 0xa1  
2019-12-16:14.44.09.450505728:[ISR]: POST Code for slot 2 changed to 0x73  
2019-12-16:14.44.18.369435136:[ISR]: POST Code for slot 2 changed to 0x1b  
2019-12-16:14.44.21.973499392:[ISR]: POST Code for slot 2 changed to 0xe0  
2019-12-16:14.44.45.599875072:[ISR]: POST Code for slot 2 changed to 0xe1  
2019-12-16:14.45.26.660646400:[ISR]: POST Code for slot 2 changed to 0xe3  
2019-12-16:14.45.28.064965632:[ISR]: POST Code for slot 2 changed to 0xe2  
2019-12-16:14.45.30.167515648:[ISR]: POST Code for slot 2 changed to 0xe4  
2019-12-16:14.45.33.070848000:[ISR]: POST Code for slot 2 changed to 0xe6  
2019-12-16:14.45.38.777229312:[ISR]: POST Code for slot 2 changed to 0x50  
2019-12-16:14.45.56.597211648:[ISR]: POST Code for slot 2 changed to 0x54  
2019-12-16:14.46.06.211475968:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.46.14.720887296:[ISR]: POST Code for slot 2 changed to 0x17  
2019-12-16:14.46.15.822237696:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.48.29.977753088:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.48.31.079104512:[ISR]: POST Code for slot 2 changed to 0xa0  
2019-12-16:14.52.48.986328576:[ISR]: POST Code for slot 2 changed to 0x1e  
2019-12-16:14.52.49.987563520:[ISR]: POST Code for slot 2 changed to 0xa0

## 使用show tech ctrace执行脱机分析

### 在Ads服务器上对ctrace脱机解码

1. 将show tech ctrace存档文件复制到广告服务器上的目录。
2. 使用 `tar zxvf showtech-ctrace-admin-2019-Nov-06.174210.UTC.tgz` 解析存档内容
3. `cd showtech-ctrace-admin-2019-Nov-06.174210.UTC`
4. 使用此命令可解码目录cmgr：下card\_mgr进程的跟踪。  
`/users/gonaidu/bin/showtech_ct_dec -d cmgr -p card-mgr`
5. `cd cmgr`

**注意：**ctrace解码的日志位于本地时区 — 如果在Bangalore ADS服务器上执行了解码，则ctrace基于IST时区。在比较路由器日志和脱机解码的跟踪日志时，请记住这一点。

## 确定主SC和主SUP

在cmgr目录下使用“grep "Master Role" \*”:

```
card_mgr.0_RP0:299:2019-02-
22:07.35.38.709224844:2580:calvados/dc_common_pkg/drivers/card_mgr/src/card_mgr_main.c:1539:main
:cmgr_main:MAIN_HW_ARB_RESULT:[MAIN]: HW Arbitration Result = Master Role
card_mgr.0_SC0:96:2019-04-
06:19.04.34.500975616:1976:calvados/dc_common_pkg/drivers/card_mgr/src/card_mgr_main.c:1539:main
:cmgr_main:MAIN_HW_ARB_RESULT:[MAIN]: HW Arbitration Result = Master Role
```

## 从主SC检索后期代码

使用此命令获取LC 0/1的邮政编码 : grep "slot 2" card\_mgr.0\_SC0 |grep已更改

```
2019-04-
06:19.04.34.759844864:1976:calvados/dc_common_pkg/drivers/card_mgr/src/card_mgr_interrupt.c:256:
iofpga_check_card_post_code_change:cmgr_isr:ISR_CARD_POST_CODE_CHANGED:[ISR]: POST Code for slot
2 changed to 0xa0
```

主RP视点的事件历史记录 :

grep RAPI\_NOTIFY\_CARD\_POST\_CODE\_CB card\_mgr.0\_RP0 | grep "0V1"

```
2019-04-
06:19.04.40.665774834:2589:calvados/dc_common_pkg/drivers/card_mgr/src/card_mgr_rack_service.c:1
919:cmgr_rack_notify_card_post_code_change_cb:cmgr_rack_capi:RAPI_NOTIFY_CARD_POST_CODE_CB:[RAC
K CAPI]: 0/1 - CAPI cmgr_rack_notify_card_post_code_change_cb, client card_mgr
(PID=1976,hdl=0x7f7c880ff728,slot=29)
```

## 分类场景示例

- 卡管理器进程CPU占用 :
- LC重新加载时切片未启动 — Potenza 10C

## 如何提取、编辑和构建Satori产品组合？

可以有多个线路共存。工程师需要知道他/她应从何处提出视图。若要了解适当的satori配置列表/devline，请从sysadmin linux提示符运行此命令

```
cat /etc/build-info.txt
```

你得到这样的输出

```
### Thirdparty Information
```



```
SDK arm /auto/exr-yocto/SDK/WRL7/Fretta/REL0109/arm/kvm-host-arm-sdk.tgz
SDK x86_64 /auto/exr-yocto/SDK/WRL7/Fretta/REL0109/x86_64/kvm-host-x86_64-sdk.tgz
Refpoint = thirdparty/opensource/release@tp-main/289
Hostname      : calcium-99.cisco.com
Workspace     : /nobackup/hetsoi/satori-wrl7.release.20191209/target-n9000-gdb
Source Base   : ssh://wwwin-git-sjc-2/git/thinstack/satori.git
Devline      : cisco-xr-wr7
Devline Ver   : f53915539d9ca49d3dedec0882ee4eb12a408956
Devline Type  : GIT Repository
```

**Here Devline `cisco-xr-wr7` should be used.**

**Before pulling the view, setup your environment**

步骤2.确保此条目存在于您的git配置文件中；~/`.gitconfig`

**[应用]**

**空白= nowarn**

**ignorewhitespace =更改**

步骤3.在执行任何活动之前，使用此命令设置环境

**source /auto/exr-yocto/tools/scripts/set\_yocto\_env**

步骤4.使用此命令拉出视图。

**acme pull -sb ios\_ena -dev cisco-xr-wr7 -plat none**

步骤5.在外壳中运行以下命令

**取消设置CDPATH**

**构建内核的命令**

步骤1.导航到satori目录并运行此命令。

```
scripts/xr/build-release.sh -f
```

步骤2.内核成功构建后，它将思科特定补丁应用到各种.c和.h文件，代码在此路径上可用，用于代码引导。

```
satori/target-n9000-gdb/bitbake_build/tmp/work/n9000_gdb-wrs-linux/
```

**注意：**您不应在此处进行任何永久性更改以在二进制中反映，因为这是临时位置，在下一个版本中将被覆盖。此位置的代码应用于代码浏览和.patch文件生成。此处将讨论.patch文件

从代码位置的视点来看，klm的代码位于双路径

- 对于代码浏览和补丁生成：

```
satori/target-n9000-gdb/bitbake_build/tmp/work/n9000_gdb-wrs-linux/
```

- 在二进制/sdk生成中使用的实际.c和.h文件

```
satori/meta-cisco-nxos/recipes-kernel/
```

在上面的路径上，您将获得两个目录

A.cisco-klm —>这涵盖模块化和固定频率塔系统中使用的所有klm。

b.cisco-klm-zermatt —>这涵盖所有klm，这些klm仅用于固定频率的系统，如klm\_iofpga。

## 如何对不同klm进行更改并编译？

对klm\_iofpga进行更改非常简单。只需转到此路径，开始在.c或.h文件中进行您感兴趣的更改。

```
satori/target-n9000-gdb/bitbake_build/tmp/work/n9000_gdb-wrs-linux/cisco-klm-zermatt/0.1-r0/klm_iofpga
```

对所有其他klm进行更改有点棘手。如上所述，您需要转到tmp位置，进行更改，生成.patch文件(如何生成.patch文件，如下所述)。将.patch文件复制到特定位置，在.bb文件中为此新.patch文件创建一个条目，然后开始生成。

请找到进行更改的步骤。

步骤1.转到要进行更改的klm特定目录。你在这找到所有的klm。

```
satori/target-n9000-gdb/bitbake_build/tmp/work/n9000_gdb-wrs-linux/cisco-klm/0.1-r0
```

步骤2.使用面组工具进行更改，以便可以生成.patch文件。注意，此处acme diff不起作用，因此需要使用面组工具来生成修补程序文件。

步骤3.设置面组工具别名

```
cd satori/target-n9000-gdb/bitbake_build/tmp/work/n9000_gdb-wrs-linux/cisco-klm/0.1-r0
```

```
alias quilt=/nobackup/rpanday/kernel-wr7/satori/target-n9000-gdb/bitbake_build/tmp/sysroots/x86_64-linux/usr/bin/quilt
```

`quilt new patch_file.patch` —>指示quilt以分配名为patch\_file.patch的**新.patch文件**。

**面组顶部** —>此命令告诉我们，`patch_file.patch`位于面组堆栈的顶部，可以编辑。

**面组编辑**`klm_obfl/obfl_dc3.c` —>指示面组捕获在`klm_obfl/obfl_dc3.c`中完成的**更改**。运行此命令后，`obfl_dc3.c`将打开并准备进行编辑。编辑完成后，写入并退出。

**面组刷新** —>此命令从编辑的文件`klm_obfl/obfl_dc3.c`获取**差异**，并将其放入`patch_file.patch`中。要验证相同，请打开vi中的文件。

步骤4.一旦生成修补程序文件`patch_file.patch`，就会将其复制到此路径。

```
cp patches/patch_file.patch /nobackup/rpanday/kernel-wr7/satori/meta-cisco-nxos/recipes-kernel/cisco-klm/files
```

步骤5.在.bb文件中为**此新.patch文件**创建一个条目。**.bb文件**位于此位置。

```
/nobackup/rpanday/kernel-wr7/satori/meta-cisco-nxos/recipes-kernel/cisco-klm/cisco-klm_0.1.bb
```

## Fretta固定卡硬件和FPGA规格

PID	工程名称	卡类型	硬件规格	IOFPGA规格
NCS-5502-SE	采尔马特	2RU固定	·EDCS-1515475	·EDCS- 1026647 ·EDCS- 1516467 ·EDCS- 1193041
NCS-5501-SE	都灵 — MX	1RU固定	·EDCS-1497433	·EDCS- 1527505 ·EDCS- 1527506
NCS-5502-SE-PROTO	采尔马特 — proto			EDCS- 1516467
NCS-5502	采尔马特 — 克勒	2RU固定	·EDCS-1515475	CPU IOFPGA FS:EDCS- 1026647 MIFPGA - EDCS - 1193041 IOFPGA - EDCS- 1541805 MIFPGA - EDCS- 1541804
NCS-5501	太湖	1RU固定	EDCS-1530044	
NCS-5501-A2-SE	临冬城			
NCS-5501-A1-SE	奥尔卡斯尔			
NCS-5501-A1	NCS-55A1-36H-S 奥尔卡斯尔			
NCS-55A1-36H-SE-S	奥尔卡斯特尔 — 塞	1RU固定	·EDCS-1563746	·EDCS-1568105 ·EDCS-11402862 ·EDCS-11556985
NCS-55A1-36H-S	奥尔卡斯特尔 — CR	1RU固定	·EDCS-1563746	·EDCS-1568105 ·EDCS-11402862
N540-X-24Z8Q2C-M	托廷共形盒			

N540-24Z8Q2C-M	托廷 — 克罗			
N540X-ACC-SYS	TORTIN-16G-CR			
N540-ACC-SYS	TORTIN-16G			
NCS-5501-HD	N540-24Z8Q2C-M 托廷 — 克罗			
NCS-5501-A3	NCS-55A1-24H 皮克			
NCS-55A1-24H	皮克	1RU固定	·EDCS- 11415948	·EDCS- 1568105 EDCS- 1026647 ·EDCS- 1568940
NCS-55A2-MOD-SE-S	佩托带TCAM	2RU固定	·EDCS- 11601538	·EDCS- 11632621 ·EDCS- 11632622
NC55A2-MOD-SE-H-S	佩托, 带 TCAM和CC	2RU固定	·EDCS- 11601538	·EDCS- 11632621 ·EDCS- 11632622
NCS-55A2-MOD-S	佩托非SE温度 (TCAM)	2RU固定	·EDCS- 11601538	·EDCS- 11632621 ·EDCS- 11632622
NCS-55A2-MOD-HD-S	不带TCAM的佩 托	2RU固定	·EDCS- 11601538	·EDCS- 11632621 ·EDCS- 11632622
NCS-55A2-MOD-HX-S	不带TCAM的 PEYTO, 带 ITEMP CC	2RU固定	·EDCS- 11601538	·EDCS- 11632621 ·EDCS- 11632622
NCS-55A1-48Q6H	BIFROST-T	1RU固定	·EDCS- 12914104	·EDCS- 13259042 ·EDCS- 15599029 ·EDCS- 15676955
NCS-55A1-24Q6H-S	都灵 — cr	1RU固定	·EDCS- 12909672	·EDCS- 13259042 ·EDCS- 15599029 ·EDCS- 15676955
NCS-55A1-24Q6H-SS	都灵 — cr			