

# 排除UCS刀片發現問題

## 目錄

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[背景資訊](#)

[問題](#)

[疑難排解](#)

[相關資訊](#)

## 簡介

本文檔介紹對刀片式伺服器因伺服器電源狀態 — MC錯誤而無法發現的問題進行故障排除的步驟。

## 必要條件

### 需求

思科建議您瞭解以下主題的工作知識：

- 思科整合運算系統(UCS)
- 思科光纖互連(FI)

### 採用元件

本文中的資訊係根據以下軟體和硬體版本：

- UCS B420-M3
- UCS B440-M3

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路運作中，請確保您瞭解任何指令可能造成的影響。

## 背景資訊

- 刀片韌體升級，伺服器在正常運行時間策略重新啟動後關閉。
- 資料中心中的某個電源事件。

以上可能是問題的觸發因素。

## 問題

此錯誤消息在重新啟動時或在發現過程中出現。

"無法更改刀片電源狀態"

UCSM報告無法通電的刀片的此警報

作為韌體升級的一部分重新啟動的刀片，或者任何其他維護都無法發現/啟動FSM中的以下消息：

"無法更改伺服器電源狀態 — MC錯誤(-20):管理控制器在處理請求時無法或失敗 (sam:dme:ComputePhysicalTurnup:Execute)"

SEL日誌顯示錯誤條目，如下所示：

CIMC |平台警報POWER\_ON\_FAIL #0xde |已取消斷言預測性故障 |不確定

CIMC |平台警報POWER\_ON\_FAIL #0xde |預測性故障被斷言 |已斷言

## 疑難排解

從UCSM CLI shell連線到刀片的cimc，並使用**power** 命令驗證刀片電源狀態

- ssh FI-IP-ADDR
- 連線cimc X
- 電源

### Failure Scenario # 1

```
OP:[ status ]
Power-State: [ on ]
VDD-Power-Good: [ inactive ]
Power-On-Fail: [ active ]
Power-Ctrl-Lock: [ unlocked ]
Power-System-Status: [ Good ]
Front-Panel Power Button: [ Enabled ]
Front-Panel Reset Button: [ Enabled ]
OP-CCODE:[ Success ]
```

### Failure Scenario #2

```
OP:[ status ]
Power-State: [ off ]
VDD-Power-Good: [ inactive ]
Power-On-Fail: [ inactive ]
Power-Ctrl-Lock: [ permanent lock ] <<<-----
Power-System-Status: [ Bad ] <<<-----
Front-Panel Power Button: [ Disabled ]
Front-Panel Reset Button: [ Disabled ]
OP-CCODE:[ Success ]
```

### 工作場景#的輸出

```
[ help ]# power
OP:[ status ]
Power-State: [ on ]
VDD-Power-Good: [ active ]
Power-On-Fail: [ inactive ]
Power-Ctrl-Lock: [ unlocked ]
Power-System-Status: [ Good ]
Front-Panel Power Button: [ Enabled ]
```

Front-Panel Reset Button: [ Enabled ]

OP-CODE:[ Success ]

[ power ]#

### 驗證感測器值#

POWER\_ON\_FAIL |磁碟 —> |離散 | 0x0200 | na | na | na | na | na | na |  
>>>不工作

### 感測器值#

POWER\_ON\_FAIL |磁碟 —> |離散 | 0x0100 | na | na | na | na | na | na |  
>>>工作

執行sensors命令並檢查電源和電壓感測器的值。比較相同型號的刀片式伺服器處於開機狀態的輸出。  
。

如果某些感測器的「Reading ( 讀取 )」或「Status ( 狀態 )」列為「NA ( 不可用 )」，這可能並非始終是硬體故障。

### 日誌代碼段#

```
obfl##
5:2019 Jan 9 06:42:34 GMT:3.1(20b):kernel--:<5[se_pilot2_wakeup_interrupt]:2563:USB HS: VDD Power = ON
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[1]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[2]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[3]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[4]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[5]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[6]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[7]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[8]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[9]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[a]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[b]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[c]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[d]
5:2019 Jan 9 06:42:34 GMT:3.1(20b):IPMI:1686: Pilot3SrvPower.c:481: -> Power State On: LPC RESET is IN RESET; powerOnLPC0ff[e]
```

### Sel.log#

CIMC |平台警報POWER\_ON\_FAIL #0xde |預測性故障被斷言 |已斷言

power-on-fail.hist(位於tmp/techsupport\_pidXXXX/CIMCX\_TechSupport-nvram.tar.gz中)

power-on-fail.hist.log									
<FAILURE>Tue Jan 8 20:19:48 2019 >>>>>>>>>> failed state									
Sensor Name	Reading	Unit	Status	LNR	LC	LNC	UNC	UC	UNR
P3V_BAT_SCALED	2.973	Volts	OK	na	2.011	2.403	na	4.005	na
P5V_STBY	na	Volts	na	4.242	4.483	na	na	5.519	5.760
P3V3_STBY	na	Volts	na	2.797	2.955	na	na	3.634	3.808
P1V1_SSB_STBY	na	Volts	na	0.931	0.989	na	na	1.212	1.271
P1V8_STBY	na	Volts	na	1.523	1.610	na	na	1.988	2.076
P1V0_STBY	na	Volts	na	0.844	0.892	na	na	1.106	1.154
P1V5_STBY	na	Volts	na	1.271	1.348	na	na	1.659	1.727
P0V75_STBY	na	Volts	na	0.631	0.669	na	na	0.834	0.863
P12V	na	Volts	na	10.797	11.269	na	na	12.685	13.157
P5V	na	Volts	na	4.493	4.680	na	na	5.288	5.499
P3V3	na	Volts	na	2.964	3.089	na	na	3.494	3.619
P1V5_SSB	na	Volts	na	1.349	1.404	na	na	1.583	1.646
P1V1_SSB	na	Volts	na	0.983	1.030	na	na	1.162	1.209
P1V8_SAS	na	Volts	na	1.615	1.685	na	na	1.907	1.977
P1V5_SAS	na	Volts	na	1.349	1.404	na	na	1.583	1.646
P1V0_SAS	na	Volts	na	0.796	0.842	na	na	1.162	1.217
P1V0A_SAS	na	Volts	na	0.796	0.842	na	na	1.162	1.217
P3V3_SAS	na	Volts	na	2.964	3.089	na	na	3.494	3.619
P12V_SAS	na	Volts	na	10.797	11.269	na	na	12.685	13.157
P0V75_SAS	na	Volts	na	0.679	0.702	na	na	0.796	0.827
P1V05_VTT_P1	na	Volts	na	0.913	0.952	na	na	1.076	1.123
P1V05_VTT_P2	na	Volts	na	0.897	0.936	na	na	1.061	1.108

如果上述操作不起作用，請收集UCSM和機箱技術支援日誌捆綁包。

它有助於進一步調查此問題。

出現上述症狀時，請嘗試這些步驟以恢復問題。

第1步：驗證刀片FSM狀態是否為「Failed」（失敗），說明為「state-MC Error(-20)」。

導航到Equipment > Chassis X > Server Y > FSM



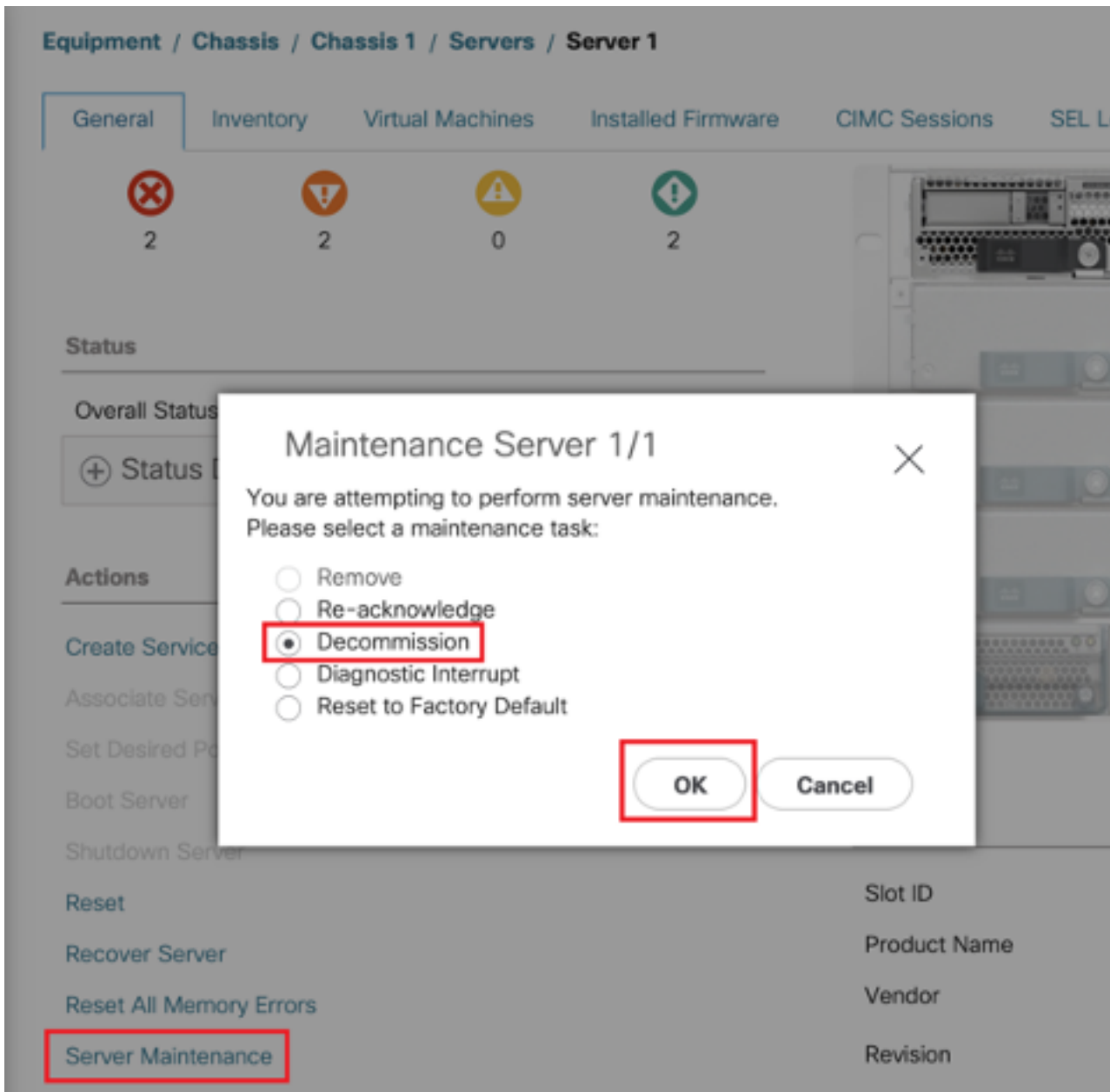
The screenshot shows the UCSM interface for a server's FSM status. The breadcrumb path is "Equipment / Chassis / Chassis 1 / Servers / Server 1". The "FSM" tab is selected and highlighted with a red box. Below the breadcrumb, the "FSM Status" is displayed as "Fail", also highlighted with a red box. The "Description" section shows the following details:

- Description: Fail
- Current FSM Name: Discover
- Completed at: [empty]
- Progress Status: 13%
- Remote Invocation Result: End Point Protocol Error
- Remote Invocation Error Code: 1002
- Remote Invocation Description: Unable to change server power state-MC Error(-20): Management controller cannot or failed in processing request

第2步：記下受影響的刀片序列號並停用刀片。

<<< IMP:在停用前從「General (常規)」頁籤中記下「Problem blade serial number (問題刀片序列號)」。第4步的稍後階段需要此步驟>>>

導航至Equipment > Chassis X > Server Y > General > Server Maintenance > Decommission > Ok。



步驟3. FI-A/B#重置插槽x/y

例如#Chassis2-Server1受到影響。

FI-A#重設插槽2/1

運行上述命令後等待30-40秒

```
[FI-A# reset slot 1/1  
FI-A# █
```

Example of Chassis 1 Server 1

第4步：重新使用已停用的刀片。

導航到Equipment > Dedeauthenticated > Servers > Look for the server we deauthenticated(Find correct blade with Serial number Notes in Step-2 before deauthenticated)>選中Recommission Tick box with correct Blade(Validate with Serial number)>Save Changes。

The screenshot shows the 'Equipment' interface with the 'Decommissioned' tab selected. The table below shows a list of servers. The first row is highlighted, and its 'Recommission' checkbox is checked. Red callouts provide instructions for each step: Step-1 (find the blade by serial number), Step-2 (check the recommission box), and Step-3 (click 'Save Changes').

Name	Recommission	ID	Vendor	PID	Model	Serial
Blade Server UCSB-B420-M3	<input checked="" type="checkbox"/>	N/A	Cisco Systems Inc	UCSB-B420-M3	Cisco UCS B420 M3	[REDACTED]

第5步：解析插槽（如果觀察到）。

導航至Equipment > Chassis X > Server Y。


如果重新授權的刀片出現「Resolve Slot Issue（解決插槽問題）」彈出視窗，請驗證其序列號，然後按一下here接受插槽中的伺服器。

## Resolve Slot Issue

Present Server	Provisioned Server
Slot ID : 1	Slot ID :
Presence : <b>Mismatch</b>	Presence :
Vendor : <b>Cisco Systems Inc</b>	Vendor :
PID : <b>UCSB-B420-M3</b>	PID :
Serial : <span style="background-color: black; color: black;">XXXXXXXXXX</span> <span style="border: 1px solid red; padding: 2px;">Verify SN</span>	Serial :
Server :	Server :

**Situation**  
This slot contains a server that is provisioned for a different slot.  
Click [here](#) to accept the server in this slot.

## Re-acknowledge Slot

 Are you sure you want to re-acknowledge this slot?  
This operation will trigger a discovery of the server in this slot.

應該立即啟動刀片發現。

等待伺服器發現完成。監控「伺服器FSM」頁籤中的進度。

步驟6.如果步驟1至5不幫助，並且FSM再次失敗，則停用刀片並嘗試物理重新拔插它。

如果仍然是硬體問題，如果伺服器無法發現與Cisco TAC的聯絡。

**NOTE:** If you have B200 M4 blade and notice failure scenario #2 , please refer following bug and Contact TAC

[CSCuv90289](#)

B200 M4 fails to power on due to POWER\_SYS\_FLT

## 相關資訊

[發現機箱的過程](#)

[UCSM伺服器管理指南](#)