

# Flexible Flash の Hypervisor 領域の同期手順

# Flexible Flash について

- C-Series Server には Flexible Flash (SD カード) が同梱されて出荷されるものがあります。
- Flexible Flash には以下のイメージが含まれます。
  - Host Update Utility
  - System Configuration Utility
  - Hypervisor OS の OS カーネル部分
  - ドライバーソフトウェア

# Flexible Flash について

- CIMC 1.5 以降では、筐体内に 2枚の Flexible Flash が搭載されることをサポートしています。
- これらのカードの Hypervisor 部分を RAID1 で冗長化することが出来、可用性を高めることが出来ます。
- 本資料では、Flexible Flash の冗長化の方法について記述します。

# 0. 最初の状態

- Flexible Flash が 2枚搭載されたただけの初期の画面。RAID が Degraded であることが示されています。

The screenshot displays the Cisco FlexFlash (FlexFlash-0) management interface. On the left, the 'Overall Server Status' shows a 'Moderate Fault' and a list of hardware components, with 'Cisco FlexFlash' highlighted in a red box and pointed to by a red arrow. The main interface has tabs for 'Controller Info', 'Physical Drive Info', 'Virtual Drive Info', 'Battery Backup Unit', and 'Storage Log'. The 'Controller Info' tab is active, showing a list of actions: 'Reset FlexFlash Controller', 'Reset Configuration', 'Retain Configuration', and 'Configure Operational Profile'. Below this, the 'Health/Status' section shows 'Health: Degraded RAID' (highlighted in a red box with a red arrow) and 'Status: ok'. The 'General' section provides details: Product Name: Cisco FlexFlash, Firmware Version: 1.2 build 253, Vendor: Cypress, Controller Status: ok, Internal State: Connected, Running Firmware: 1.2 build 253-2, Startup Firmware Version: 1.2 build 253, and Cards Manageable: Yes. On the right, 'Physical Drive Count' is 2 and 'Virtual Drive Count' is 4.

Overall Server Status

Moderate Fault

Server Admin Storage

Cisco UCSC RAID SAS 2008M-8 (SLOT-MEZZ)

Cisco FlexFlash

Cisco FlexFlash (FlexFlash-0)

Controller Info Physical Drive Info Virtual Drive Info Battery Backup Unit Storage Log

Actions

- Reset FlexFlash Controller
- Reset Configuration
- Retain Configuration
- Configure Operational Profile

Health/Status

Health: Degraded RAID

Status: ok

General

Product Name: Cisco FlexFlash

Firmware Version: 1.2 build 253

Vendor: Cypress

Controller Status: ok

Internal State: Connected

Running Firmware: 1.2 build 253-2

Startup Firmware Version: 1.2 build 253

Cards Manageable: Yes

Physical Drive Count

Physical Drive Count: 2

Virtual Drive Count

Virtual Drive Count: 4

# 0. 最初の状態

- また、2本目の Flexible Flash が “Unhealthy” と表示されます。

Overall Server Status  
Moderate Fault

Server Admin Storage

Cisco UCSC RAID SAS 2008M-8 (SLOT-MEZZ)  
Cisco FlexFlash

### Cisco FlexFlash (FlexFlash-0)

Controller Info Physical Drive Info Virtual Drive Info Battery Backup Unit Storage Log

#### Physical Drives

Physical Drive	Controller	Slot Number	Status	Health	Raid Role	Card Type
SLOT-1	FlexFlash-0	SLOT-1	present	healthy	primary	SD253 card
SLOT-2	FlexFlash-0	SLOT-2	present	unhealthy	secondary activ	SD253 card

Role: **primary**  
Capacity: **15806 MB**  
Write Enabled: **true**  
Read Error Count: **0**  
Read Error Threshold: **0**  
Write Error Count: **0**  
Write Error Threshold: **0**  
Product Name: **DST**  
Product Revision: **1.0**  
Serial Number: **0x2f4c**  
Manufacturer ID: **72**  
OEM ID: **r**  
Manufacturing Date: **12/12**  
Block Size: **512 bytes**  
Password Protected: **false**  
Partition Count: **4**  
Drives Enabled: **SCU**  
Raid Signature: **484c2f000001117248412f0000011172**

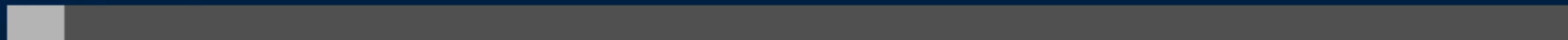
# 1. SCU を起動

- SCU3.1(3b) 以降で Flexible Flash の同期を実施出来ます



Cisco UCS Server Configuration Utility  
Version 3.1(3)

*Initializing the kernel...*



## 2. 同期ボタンをクリック

- SCU が起動したら、同期ボタンをクリックします

Cisco UCS Server Configuration Utility  
UCS C220 M3S

Server Inventory

Server Information  
Inventory

Inventory

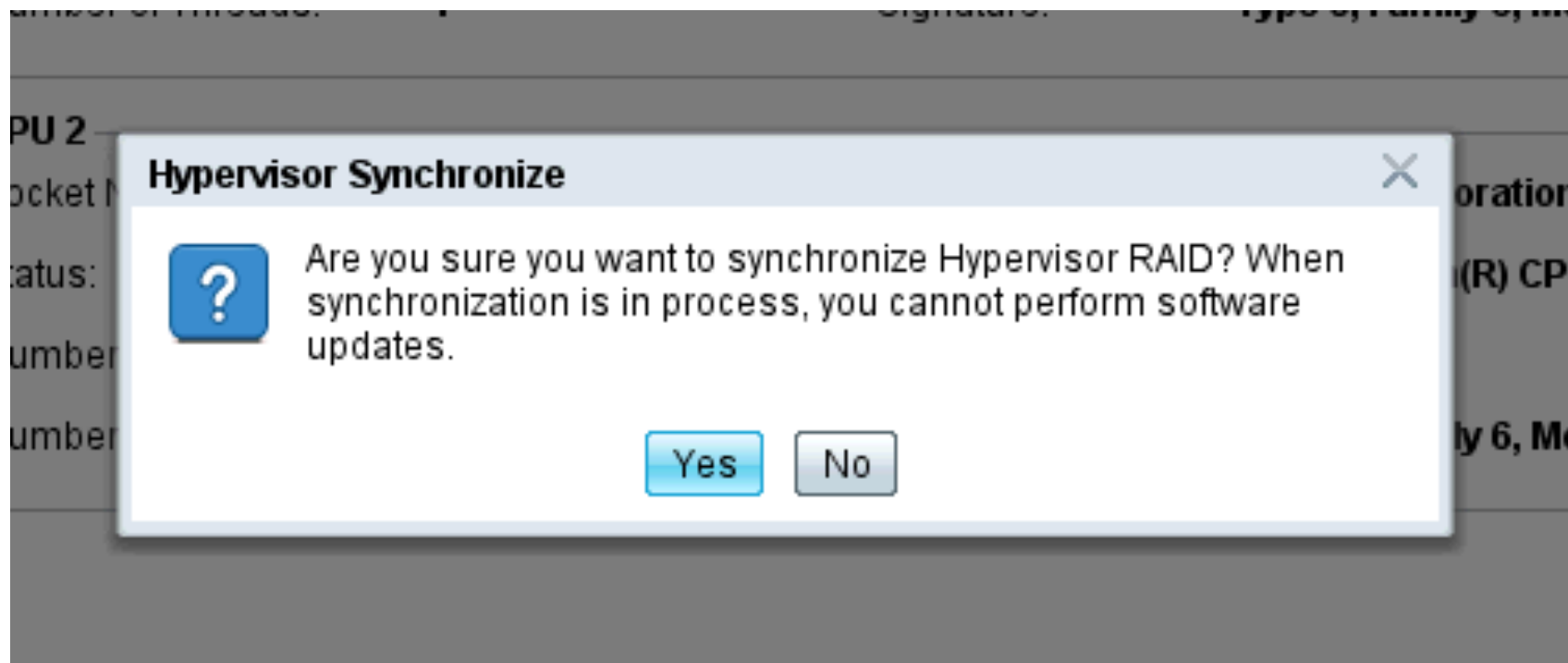
CPU Memory Power Supplies Fans IOs **Storage** BIOS CIMC

Storage

Name	Type	Description
▼ Controller 0	Mass storage device	Cisco USB Composite Devi
Disk 0	DVD reader	
Disk 1	SCSI Disk	
Disk 2	SCSI Disk	

### 3. 確認

- Hypervisor 部分を同期する旨が出力されるので、Yes をクリックします





# 4. 同期中

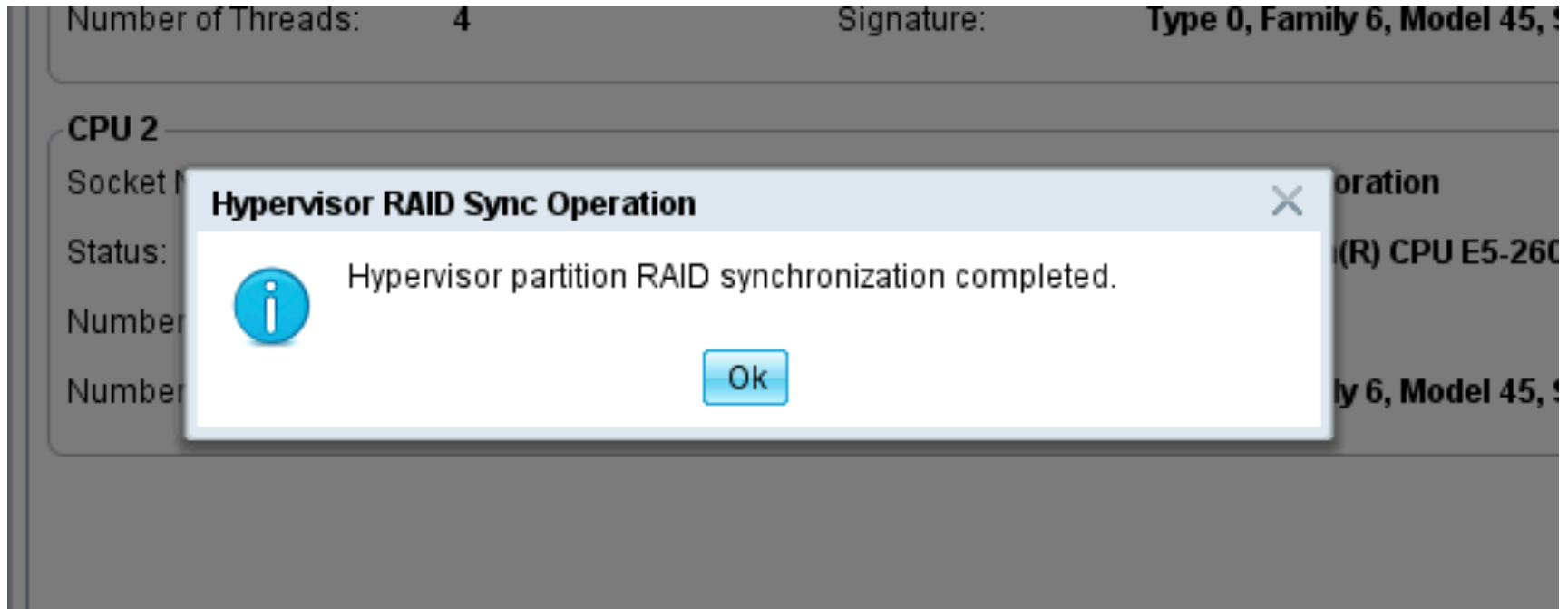
- 同期中は、CIMC で “Rebuilding” の表示になります。

The screenshot displays the Cisco FlexFlash (FlexFlash-0) management interface. The top navigation bar includes tabs for Controller Info, Physical Drive Info, Virtual Drive Info, Battery Backup Unit, and Storage Log. The main content area is divided into several sections:

- Actions:** A list of actions including Reset FlexFlash Controller, Reset Configuration, Retain Configuration, and Configure Operational Profile.
- Physical Drive Count:** A box showing Physical Drive Count: 2.
- Virtual Drive Count:** A box showing Virtual Drive Count: 4.
- Health/Status:** A box showing Health: Degraded RAID and Status: ok.
- General:** A box containing the following information:
  - Product Name: Cisco FlexFlash
  - Firmware Version: 1.2 build 253
  - Vendor: Cypress
  - Controller Status: ok
  - Internal State: **Rebuilding** (highlighted with a red box and an arrow)
  - Running Firmware: 1.2 build 253-1
  - Startup Firmware Version: 1.2 build 253
  - Cards Manageable: Yes

# 5. 同期終了

- 同期が終了すると、SCU 上で終了した旨のポップアップウィンドウが開きます。



# 5. 同期終了

- CIMC 上では状態が “Healthy RAID” として表示されます。

The screenshot displays the Storage Controller Info page in the CIMC interface. The page is divided into several sections:

- Actions:** Includes links for Reset FlexFlash Controller, Reset Configuration, Retain Configuration, and Configure Operational Profile.
- Health/Status:** Shows Health:  Healthy RAID (highlighted with a red box and arrow) and Status: ok.
- General:** Lists details such as Product Name (Cisco FlexFlash), Firmware Version (1.2 build 253), Vendor (Cypress), Controller Status (ok), Internal State (Connected), Running Firmware (1.2 build 253-2), Startup Firmware Version (1.2 build 253), and Cards Manageable (Yes).
- Physical Drive Count:** Shows Physical Drive Count: 2.
- Virtual Drive Count:** Shows Virtual Drive Count: 4.

The left sidebar shows the navigation menu with 'Storage' selected, and a list of storage controllers including 'Cisco UCSC RAID SAS 2008M-8 (SLOT-MEZZ)' and 'Cisco FlexFlash'.

# 5. 同期終了

- 同期されたディスクの状態は“Healthy”と表示され、Cisco FlexFlash の表示がグリーンになります。

The screenshot displays the Cisco FlexFlash (FlexFlash-0) configuration page. On the left, the 'Overall Server Status' shows a 'Moderate Fault'. The 'Storage' tab is active, and 'Cisco FlexFlash' is highlighted in the left sidebar. The main area shows the 'Physical Drives' table with the following data:

Physical Drive	Controller	Slot Number	Status	Health	Raid Role	Card Type
SLOT-1	FlexFlash-0	SLOT-1	present	healthy	primary	SD253 ca
SLOT-2	FlexFlash-0	SLOT-2	present	healthy	secondary activ	SD253 ca

Red boxes and arrows highlight the 'Cisco FlexFlash' label in the sidebar and the 'healthy' status in the 'Health' column for both physical drives.

# Reference

- **Cisco UCS Server Configuration Utility User Guide, Release 3.1(3)**

[http://www.cisco.com/en/US/docs/unified\\_computing/ucs/sw/ucsscu/user/guide/313/b\\_UCS\\_SCU\\_313.html](http://www.cisco.com/en/US/docs/unified_computing/ucs/sw/ucsscu/user/guide/313/b_UCS_SCU_313.html)

- **Cisco UCS C-Series Rack Servers Install and Upgrade Guides**

[http://www.cisco.com/en/US/products/ps10493/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps10493/prod_installation_guides_list.html)

- **Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide, Release 1.5**

[http://www.cisco.com/en/US/docs/unified\\_computing/ucs/c/sw/gui/config/guide/1.5/b\\_Cisco\\_UCS\\_C-series\\_GUI\\_Configuration\\_Guide.151.html](http://www.cisco.com/en/US/docs/unified_computing/ucs/c/sw/gui/config/guide/1.5/b_Cisco_UCS_C-series_GUI_Configuration_Guide.151.html)