

Troubleshoot Unpartitioned SD Cards in CIMC with Flexflash Controller FX3S

Introduction

This document describes how to troubleshoot Unpartitioned SD cards error on Flexflash Controller.

Prerequisites

Requirements

There are no specific requirements for this document.

Component Used

The information in this document is based on these software and hardware versions:

- Standalone C series server
- Flexflash Controller FX3S
- Two SD cards of identical size
- CIMC version of 3.X or higher

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Problem

Error messages and fault code

Fault Code: F1260

Description: Flex Flash Virtual Drive 1 (Hypervisor) Degraded: please check the flash device or the controller

Reason: Equipment_Degraded

Fault Code: F1262

Description: Flexflash controller Flexflash-0 configuration error: Configure the Flexflash controller correctly

Reason: Equipment_Unhealthy

Note: Scenario where the issue is with 1 SD card Present.

Fault Summary | Fault History | System Event Log | Cisco IIMC Log | Logging Controls

Fault Entries Total 2

Show Quick Filter

Time	Severity	Code	Domain Name	Probable Cause	Description
2020-07-21T10:32:26	Warning	F1260	sys/rack-unit-1/board/storage-flexflash-FlexFlash-0Vd-1	equipment-degraded	Flex Flash Virtual Drive 1 (Hypervisor) Degraded: please check the flash device or the controller
2020-07-21T10:32:26	Warning	F1262	sys/rack-unit-1/board/storage-flexflash-FlexFlash-0	equipment-unhealthy	Flex Flash controller FlexFlash-0 configuration error: configure the flex controller correctly

Fault Summary | Fault History | System Event Log | Cisco IIMC Log | Logging Controls

Faults History Total 3

Show Quick Filter

Time	Severity	Probable Cause	Description
2020 Jul 21 10:32:26 BST	Notice	EQUIPMENT_DEGRADED	[F1260][warning][equipment-degraded][sys/rack-unit-1/board/storage-flexflash-FlexFlash-0Vd-1] Flex Flash Virtual Drive 1 (Hypervisor) Degraded: please ...
2020 Jul 21 10:32:26 BST	Notice	EQUIPMENT_UNHEALTHY	[F1262][warning][equipment-unhealthy][sys/rack-unit-1/board/storage-flexflash-FlexFlash-0] Flex Flash controller FlexFlash-0 configuration error: configure...
2020 Jul 21 10:32:21 BST	Debug	LOG_DEBUG	SEL INIT DONE

After you navigate to **Storage > Cisco Flexflash**, it is seen that SD card 1 as unpartitioned and Virtual drive Hypervisor degraded as expected

... / Cisco FlexFlash / Virtual Drives

Refresh | Host Power | Launch KVM | Ping | CIMC Reboot | Locator LED

General | Physical Drives | Virtual Drives | FlexFlash Logs

Virtual Drives Selected 0 / Total 1

Disable Virtual Drive | Sync Virtual Drive | Erase Virtual Drive

Virtual Drive	ID	Drive Scope	Size	Drive Status	Host Accessible	Drive Type	Operation in Progress	Last Operation Status
<input type="checkbox"/> Hypervisor	1	Raid	30432 MB	Degraded	Not-Connected	Removable	NA	none

... / Cisco FlexFlash / Physical Drives

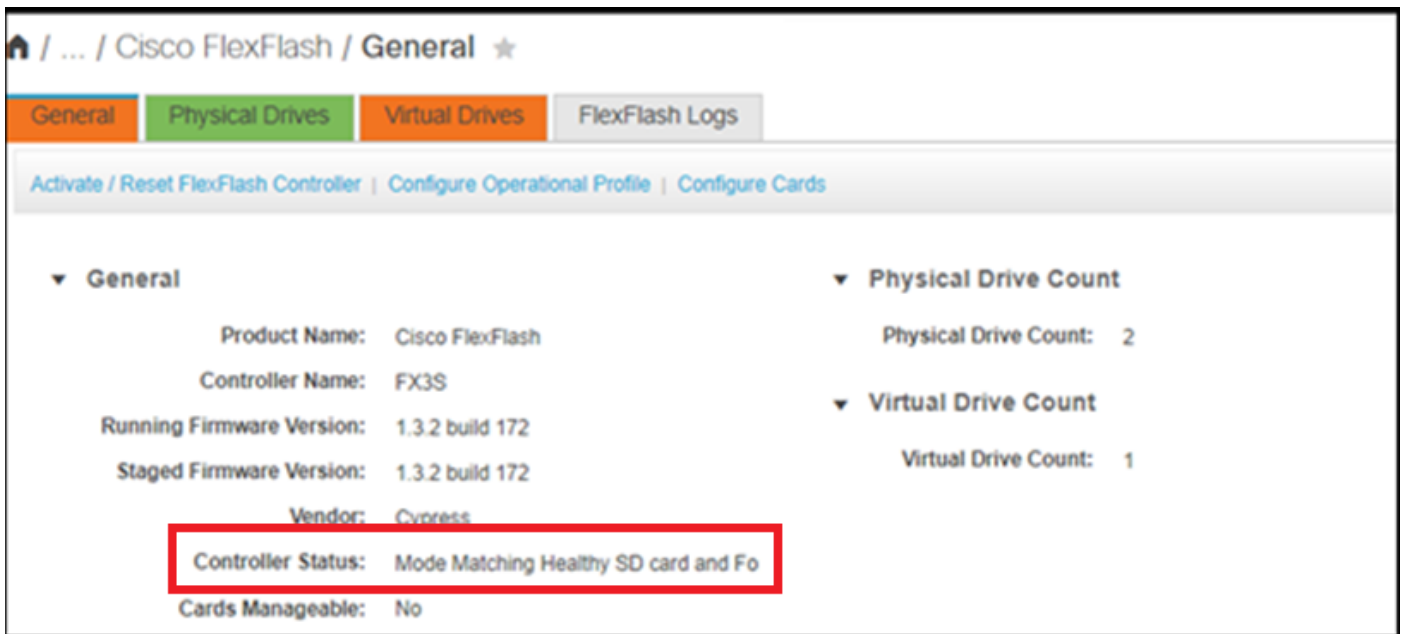
Refresh | Host Power | Launch KVM | Ping | CIMC Reboot | Locator LED

General | Physical Drives | Virtual Drives | FlexFlash Logs

Physical Drives Total 2

Physical Drives	Status	Controller	Card Type	Card Mode	Health	Sync Mode	Slot Number
SLOT-1	present	FlexFlash-0	unpartitioned card	NA	NA	NA	SLOT-1
Capacity: 30436 MB		Partition Count: 0		Signature: 00000000000000000000000000000000			
OEM ID: GH		Write Error Threshold: 0		Product Name: SMART			
Block Size: 512 bytes		Manufacturer ID: 137		Serial Number: 0x1010886f			
Card Status: NA		Read Error Count: 0		Write Enabled: true			
Product Revision: 3.0		Write Error Count: 0		Drives Enabled:			
Password Protected: false		Read Error Threshold: 0		Manufacturing Date: 7/19			
Dirty Partition Map: NA		Stale Partition Map: NA					
SLOT-2	present	FlexFlash-0	FX3S configured	mirror-secondary	healthy	manual	SLOT-2

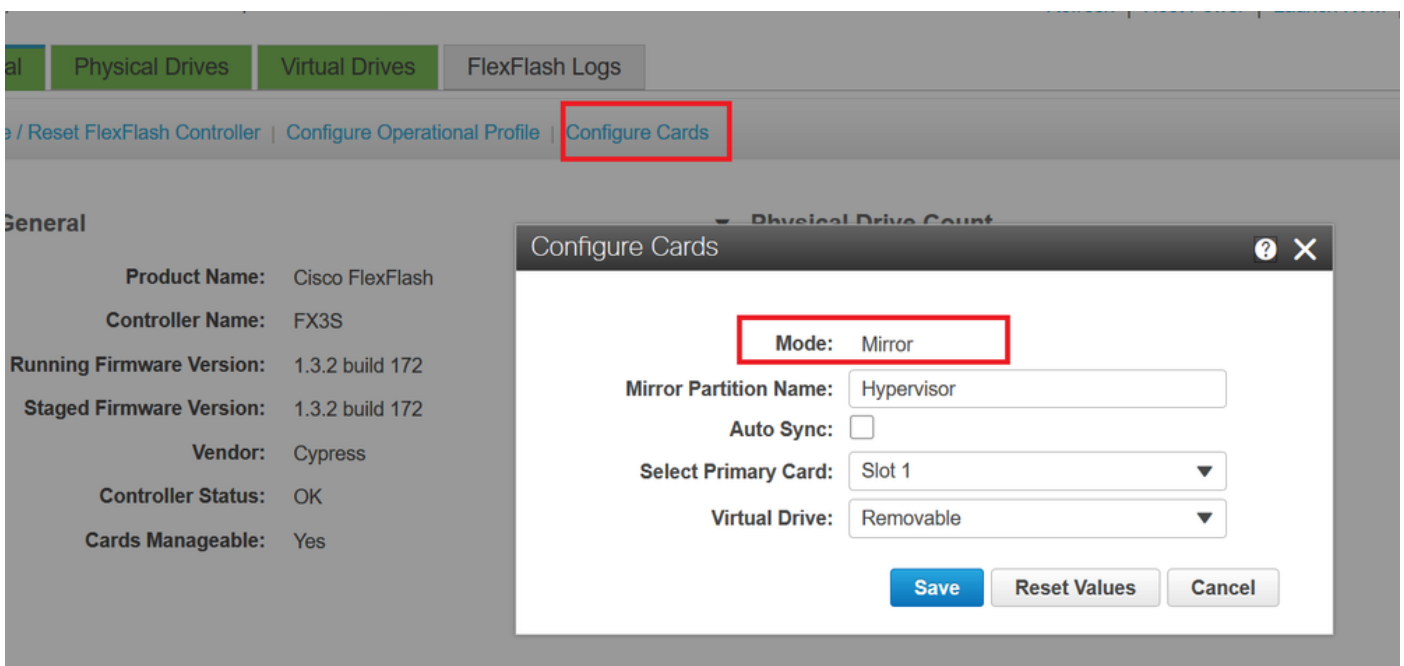
The flexflash controller status is shown in the image here.



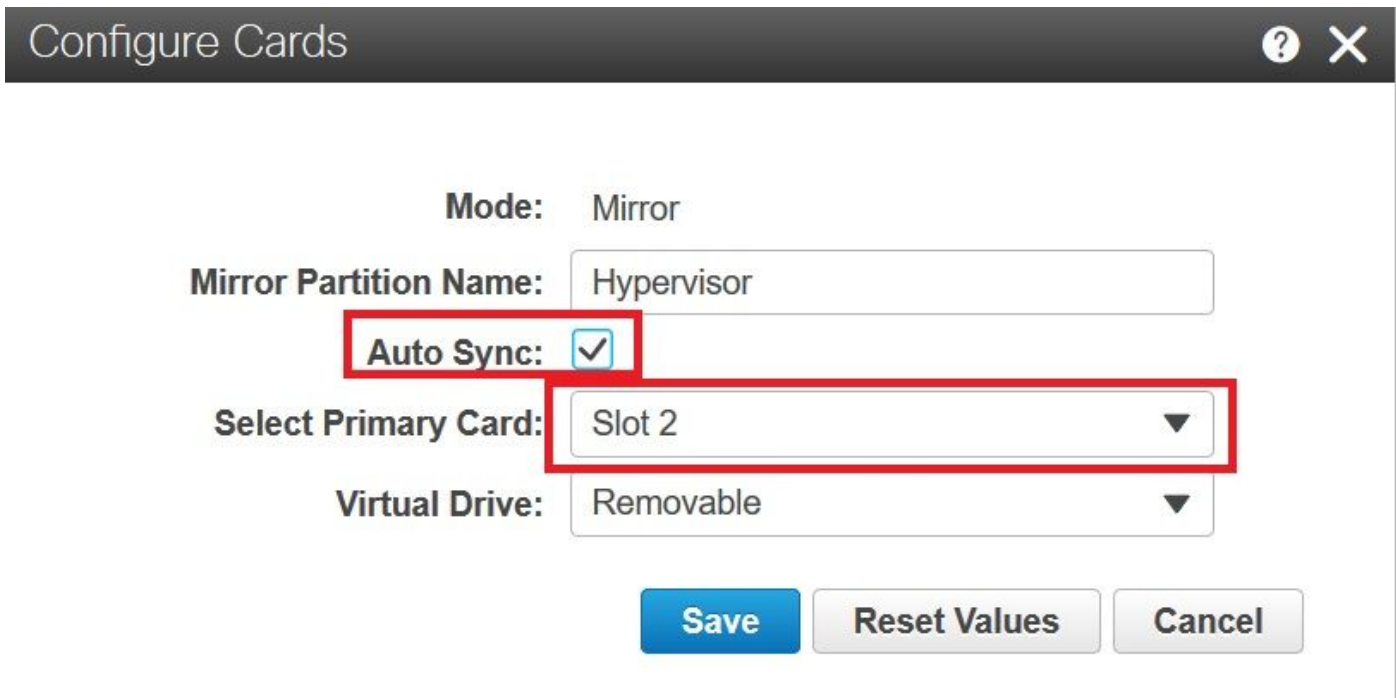
Note: Unpartitioned SD card has been degraded and can proceed with the RMA? No, replacement might not resolve the issue.

Solution

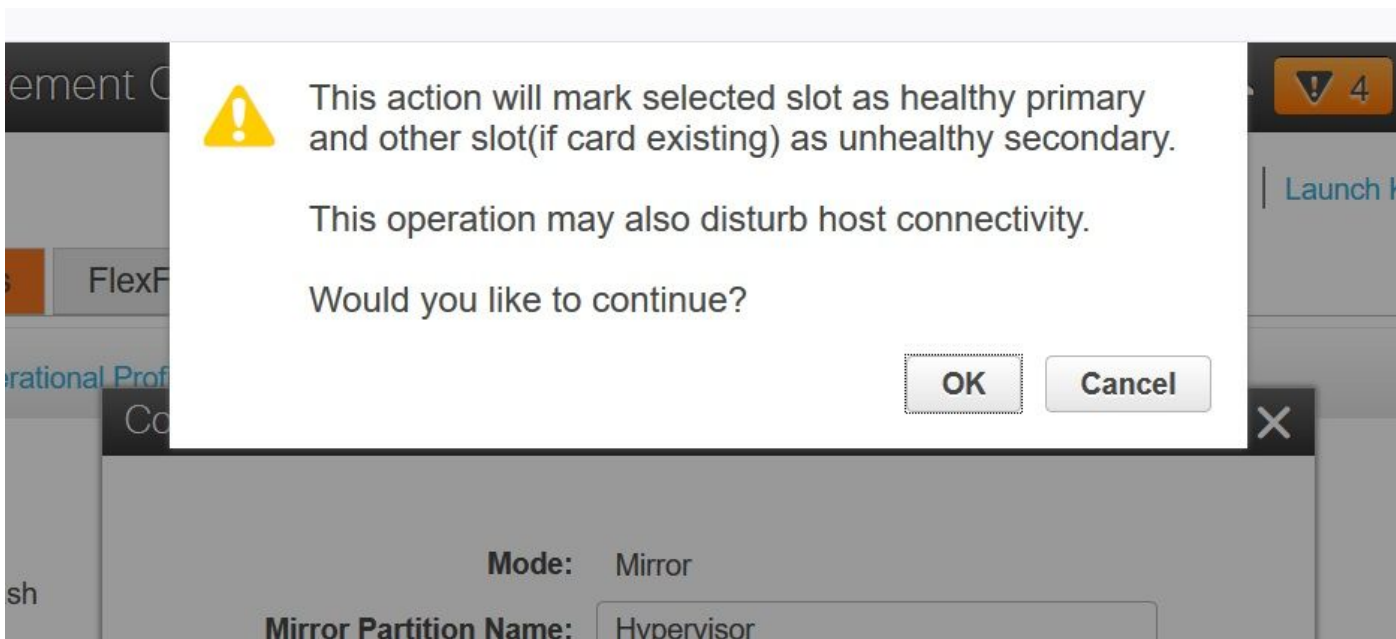
Step 1. Under **General** Tab, click **Configure cards**, as shown in this image.



Step 2. Select Primary card as **SLOT 2** (because Slot 1 is used for the unpartitioned card and it is assumed that all the data is stored in SD card 2). Check **AUTO-SYNC**, click **SAVE**, as shown in this image.



Step 3. After you click on **SAVE**, a window appears, as shown in this image, click **OK**.



Step 4. After you click **OK**, notice that in Physical drives Tab, that Slot 1 which had unpartitioned card is to be configured as **MIRROR_SECONDARY** but **UNHEALTHY**, this is an expected behavior

Physical Drives	Status	Controller	Card Type	Card Mode	Health	Sync Mode	Slot Number
▶ SLOT-1	present	FlexFlash-0	FX3S configured	mirror-secondary	unhealthy	auto	SLOT-1
▶ SLOT-2	present	FlexFlash-0	FX3S configured	mirror-primary	healthy	auto	SLOT-2

Step 5. Under the **Virtual Drives** tab and you see that Virtual Drive's **Auto-Sync** is initiated (in step 2, **auto-sync** is checked). Wait for the auto-sync to complete 100%

Virtual Drives								Selected 0 / Total 1
Virtual Drive	ID	Drive Scope	Size	Drive Status	Host Accessible	Drive Type	Operation in Progress	
<input type="checkbox"/> Hypervisor	1	Raid	60901 MB	Degraded	Not-Connected	Removable	Syncing(Auto) 14% done	

Step 6. After **Auto-Sync** is complete, as shown in this image, you see Virtual drive as **Healthy**.

Virtual Drives								Selected 0 / Total 1
Virtual Drive	ID	Drive Scope	Size	Drive Status	Host Accessible	Drive Type	Operation in Progress	
<input type="checkbox"/> Hypervisor	1	Raid	60901 MB	Healthy	Not-Connected	Removable	NA	

The card in Slot no. 1, which is seen healthy in step 4 is now **HEALTHY** after **AUTO-SYNC**.

Physical Drives								Total 2
Physical Drives	Status	Controller	Card Type	Card Mode	Health	Sync Mode	Slot Number	
SLOT-1	present	FlexFlash-0	FX3S configured	mirror-secondary	healthy	auto	SLOT-1	
SLOT-2	present	FlexFlash-0	FX3S configured	mirror-primary	healthy	auto	SLOT-2	

Step 7. The Virtual Drive is still not host-accessible if you observe here, which means you cannot see it in the boot option and cannot boot your OS from there or install the OS on it.

Home / ... / Cisco FlexFlash / Virtual Drives Refresh | Host Power

Virtual Drives							
Virtual Drive	ID	Drive Scope	Size	Drive Status	Host Accessible		
<input checked="" type="checkbox"/> Hypervisor	1	Raid	60901 MB	Healthy	Not-Connected		

Step 8. In order to make it host accessible, under **Virtual drive**, click **ENABLE VIRTUAL DRIVE**.

Virtual Drives

Enable Virtual Drive | Sync Virtual Drive | Erase Virtual Drive

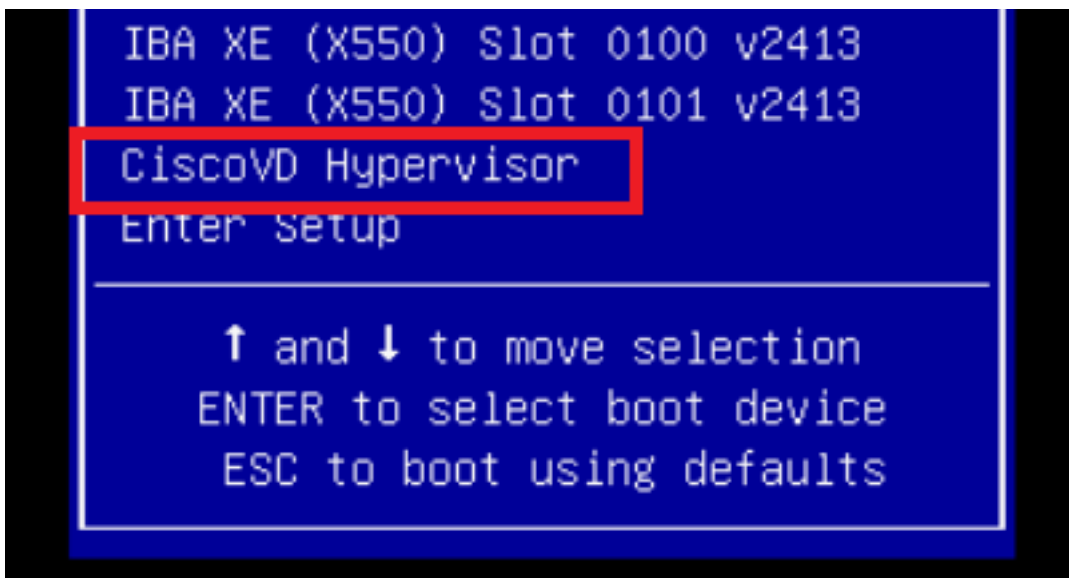
	Virtual Drive	ID	Drive Scope	Size	Drive Status	Host Accessible
<input checked="" type="checkbox"/>	Hypervisor	1	Raid	60901 MB	Healthy	Not-Connected

Step 9. Now it is observed that the Virtual drive is connected to the host and visible on the boot menu as shown in this image.

Virtual Drives

Disable Virtual Drive | Sync Virtual Drive | Erase Virtual Drive

	Virtual Drive	ID	Drive Scope	Size	Drive Status	Host Accessible
<input type="checkbox"/>	Hypervisor	1	Raid	60901 MB	Healthy	Connected



When you Forget to Check AUTO-SYNC in Step 2?

The virtual drive does not sync automatically and SD card 1 continues to show as **UNHEALTHY**. Under **VIRTUAL DRIVES** tab, check on the Virtual drive and click **SYNC VIRTUAL DRIVE**. This is called **MANUAL SYNC**. Quite self-explanatory.

After Sync is completed, the Virtual drive and SD card 1 becomes healthy as shown in **step 6**.

Home / ... / Cisco FlexFlash / Virtual Drives Refresh | Host Power | Launch KVM | Ping | CIMC Reboot | Locator LED

General | Physical Drives | **Virtual Drives** | FlexFlash Logs

Virtual Drives Selected 1 / Total 1

Enable Virtual Drive | **Sync Virtual Drive** | Erase Virtual Drive

	Virtual Drive	ID	Drive Scope	Size	Drive Status	Host Accessible	Drive Type	Operation in Progress
<input checked="" type="checkbox"/>	Hypervisor	1	Raid	60901 MB	Degraded	Not-Connected	Removable	Syncing(Manual) 0% done

Related Information

- [Cisco FlexFlash: Use and Manage Cisco Flexible Flash Internal SD Card for Cisco UCS C-Series Standalone Rack Servers](#)
- [Configure and Use Cisco FlexFlash Secure Digital Cards on Cisco UCS Servers White Paper](#)