

# Configure JBOD Drives to Unconfigured Good in UCS Servers

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## Introduction

This document describes various ways to configure the drive state from Just a Bunch Of Disks (JBOD) to Unconfigured Good (UG).

## Prerequisites

## Requirements

Cisco recommends that you have knowledge of these topics:

- Unified Computing System Manager (UCSM)
- Unified Computing System Central (UCSC)
- Cisco Integrated Management Controller (CIMC)
- Cisco Intersight
- General Knowledge of Hard Disk Drives (HDD) and Redundant Array of Independent Disks (RAID)

## Components Used

This document is not restricted to specific software and hardware versions.

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.

# Background Information

- This document depicts configuration of the drive state from JBOD to UG in UCSM, UCSC, CIMC, Intersight, MegaRAID, WebBIOS, and StorCLI.
- This document also highlights some features in UCSM, CIMC, and Intersight that can assist you with automatic disk state configurations.
- It is common for a Return Material Authorization (RMA) or disks out of the box to be in a JBOD drive state. Sometimes drives that are JBOD need to be changed to a UG drive state to be usable in RAID configurations. Another common reason to change JBOD to UG is when a disk that is part of a fault-tolerant RAID has failed. In this scenario, if the RMA disk is in a JBOD drive state, the change to UG can help to trigger the rebuild process.
- Some UCS policies allow RAID creation from JBOD disks, but this must be explicitly chosen.
- It can be necessary to change the drive to other states besides UG as many applications leverage JBOD over RAID. While this document highlights the change from JBOD to UG, the same steps can be taken to set any drive state, such as UG to JBOD.

## Configure the Disk State from JBOD to UG

**Caution:** Before any configuration changes are committed, ensure you know which RAID controller manages the disks and which disk slots need to be configured.

### UCSM

Navigate to the appropriate server and select **Inventory > Storage > Disks**. Select the disk that needs to be changed and choose **Set JBOD to Unconfigured Good > Yes** as shown in the image.

The screenshot displays the UCS Manager interface. On the left, the navigation tree shows 'Server 1' selected. The main panel shows the 'Storage' tab for 'Server 1', with 'Disks' selected. A table lists two disks: 'Disk 1' (Unconfigured Good) and 'Disk 2' (Jbod). A dialog box titled 'Set JBOD to Unconfigured Good' is open, showing a warning icon and the text: 'This operation will Set JBOD Disk State to Unconfigured Good for Disk 2.' The 'Yes' button is highlighted. Below the dialog, the 'Actions' menu is visible, with 'Set JBOD to Unconfigured Good' highlighted.

Name	Size (MB)	Serial	Operability	Drive State	Presence
Storage Controller SAS 1					
Disk 1	285148	S444E380003302F0M	Operable	Unconfigured Good	Equipped
Disk 2	285148	S444E380003302F0M	Operable	Jbod	Equipped

Set JBOD to Unconfigured Good

This operation will Set JBOD Disk State to Unconfigured Good for Disk 2.

Yes No

Set JBOD to Unconfigured Good

Drive State : Jbod

---

**Note:** Once disk state changes are committed, view the Finite State Machine (FSM) tab to see the disk configuration progress.

---

UCSM CLI:

```
<#root>
```

```
UCS-NYEST-A#
```

```
scope server 1
```

```
UCS-NYEST-A /server#
```

```
show raid-controller
```

```
<-- Run this command to determine the RAID Controller Type and ID.  
RAID Controller:
```

```
ID TYPE
```

```
PCI Addr
```

```
-- ----
```

```
1 SAS
```

```
07:00.0 <-- This example shows the RAID Controller TYPE is SAS and the ID is 1.
```

```
7 PCH 00:31.2
```

```
UCS-NYEST-A /server#
```

```
scope raid-controller 1 sas
```

```
UCS-NYEST-A /server/raid-controller#
```

```
scope local-disk 1
```

```
<-- In this example physical disk in slot 1 is scoped to.
```

```
UCS-NYEST-A /server/raid-controller/local-disk#
```

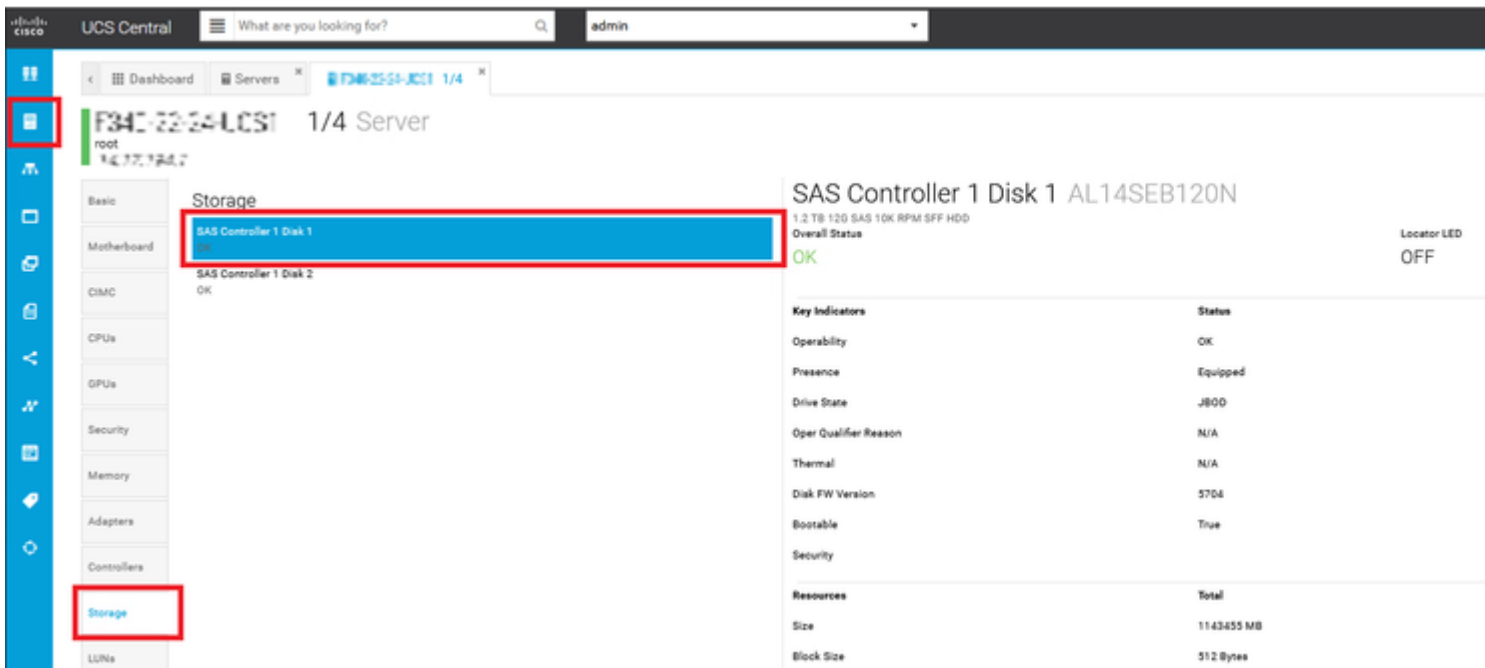
```
set admin-state unconfigured-good
```

```
UCS-NYEST-A /server/raid-controller/local-disk*#
```

```
commit-buffer
```

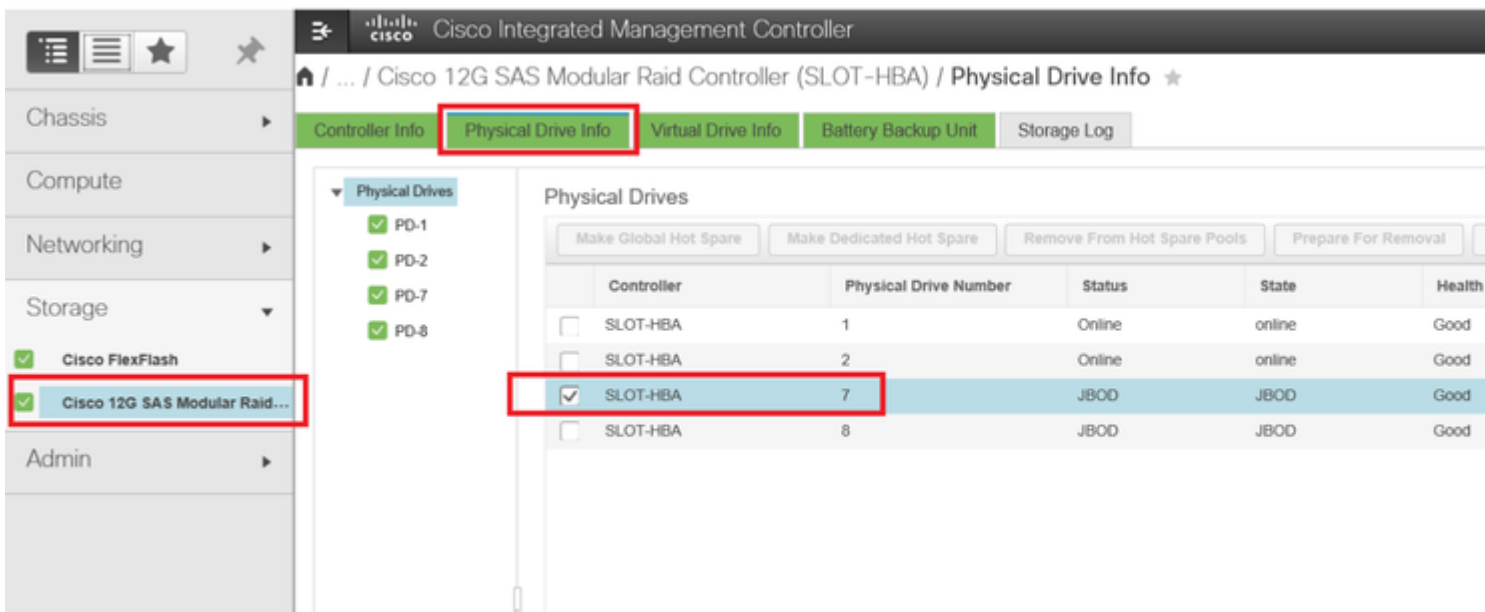
## UCS Central

Navigate to the appropriate server and select **Storage**, then choose the disk that needs to be changed. Select the **Tools Icon > Set JBOD to Unconfigured Good** as shown in the image.



## CIMC

Navigate to **Storage** and select the appropriate RAID Controller. Select **Physical Drives** and choose the disk that needs to be changed, then click **Set State as Unconfigured Good** as shown in the image.



CIMC CLI:

```
<#root>
```

```
C220-NYEST-1#
```

```
scope chassis
```

```
C220-NYEST-1 /chassis#
```

```
show storageadapter
```

<-- Run this command to determine the RAID Controller PCI Slot.

-----  
**PCI Slot**

Health Controller Status R O C Temperature Product Name Serial Number  
Firmware Package Build Product ID Battery Status Cache Memory Size Boot Drive Boot Drive is PD  
Product PID  
-----

**MRAID**

Good Optimal 62 Degrees C Cisco 12G Modular Raid Controller  
51.10.0-36 12 LSI Logic Optimal 0 MB 3 true UCSC-RAID-M5  
C220-NYEST-1 /chassis#

**scope storageadapter MRAID**

<-- Use the previous PCI Slot here.  
C220-NYEST-1 /chassis/storageadapter#

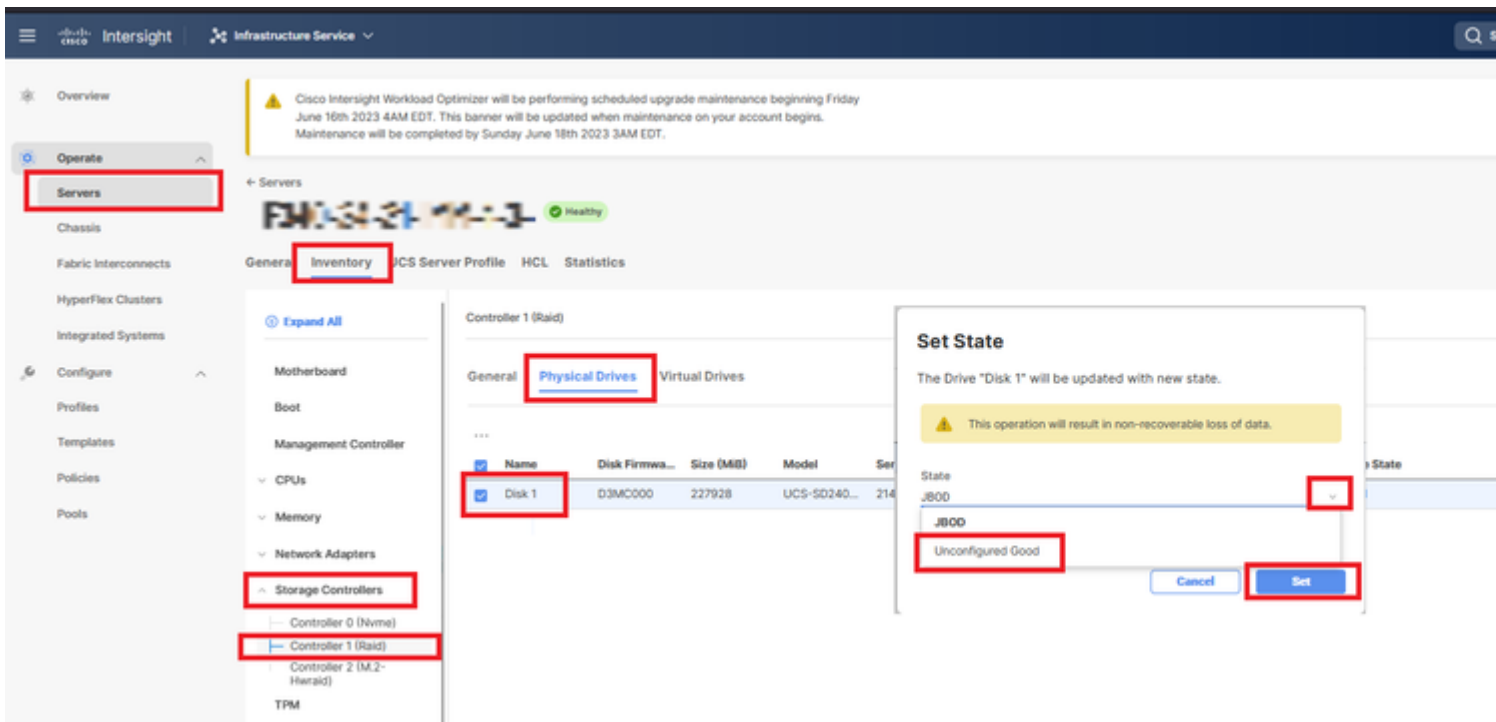
**scope physical-drive 1**

<-- In this example physical disk in slot 1 has been scoped to.  
C220-NYEST-1 /chassis/storageadapter/physical-drive#

**make-unconfigured-good**

## Intersight

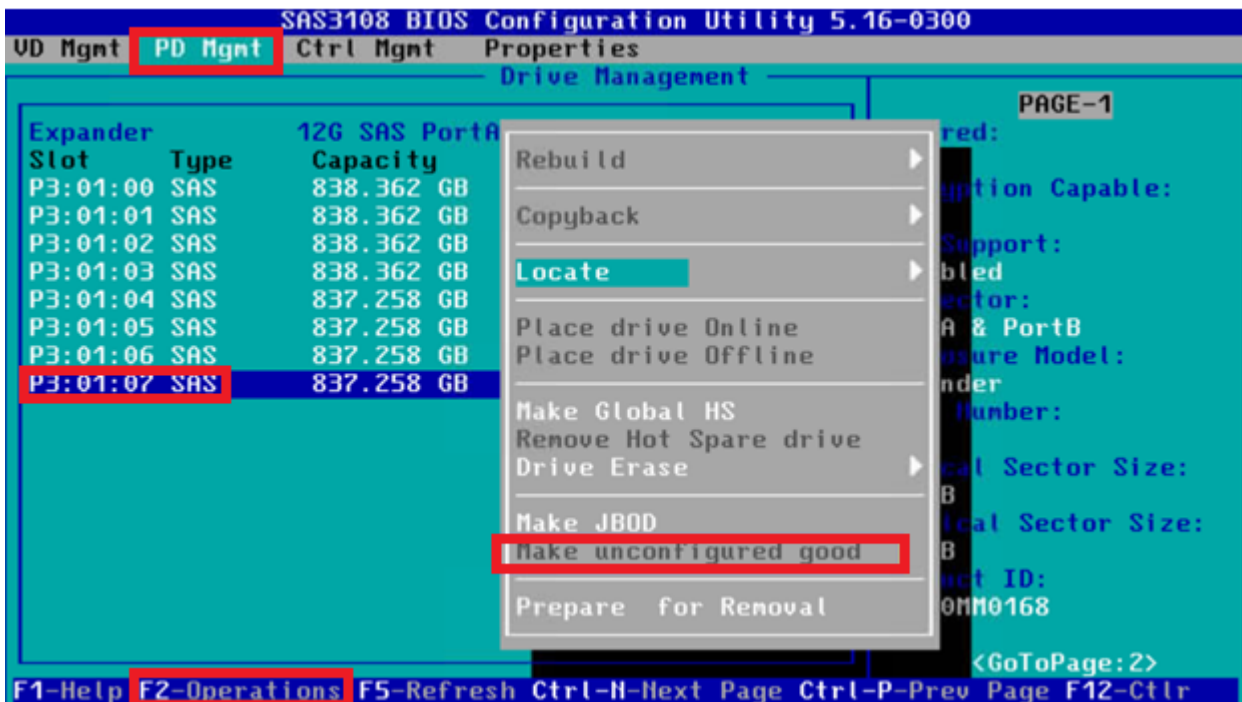
Navigate to the appropriate server and select **Inventory > Storage Controllers**. Navigate to the proper RAID Controller and select **Physical Drives** and choose the disk that needs to be changed. Select the Ellipsis on the top right and then **Set State > Unconfigured Good > Set** as shown in the image.



## MegaRAID

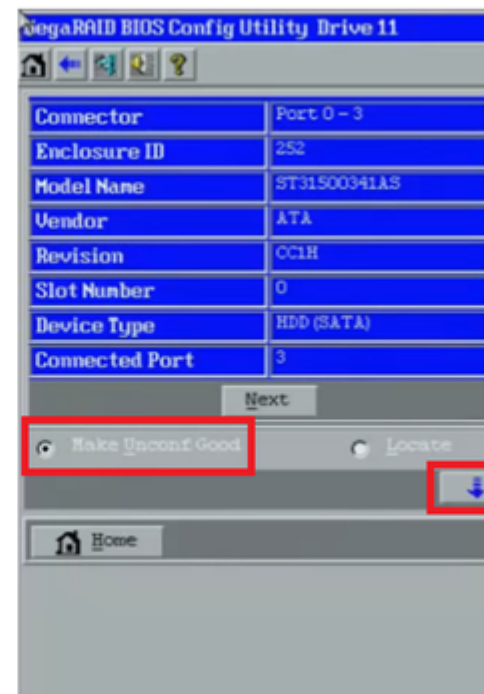
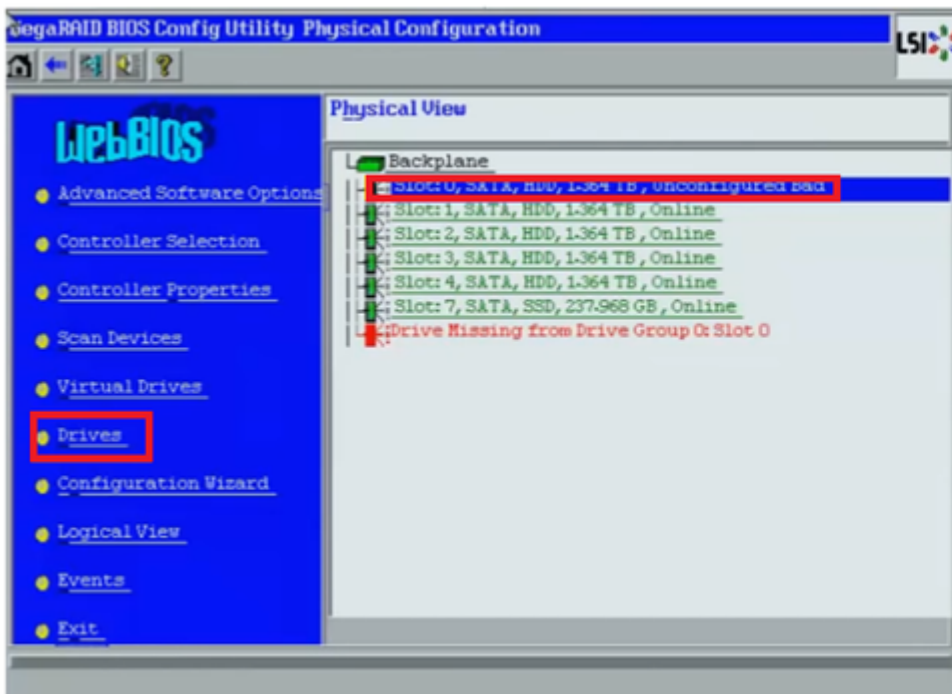
Launch the Keyboard Video Monitor (KVM) and power cycle the server. Press **Ctrl - R** when MegaRAID is

displayed on the screen. Press **Ctrl - N** until you are on the **PD Mgmt** tab. Navigate to **F2-Operations > Make Unconfigured Good > Enter** as shown in the image.



## WebBIOS

Launch the KVM and power cycle the server. Press **Ctrl - H** when WebBIOS is displayed, then select **Drives** and choose the appropriate disk. Navigate to **Make Unconf Good > Go** as shown in the image.



## StorCLI

<#root>

```
storcli /c0 /eall /sall show
```

<-- Run this command to determine the Enclosure ID and Disk slot.

```
Controller = 0
Status = Success
Description = Show Drive Information Succeeded.
```

```
Drive Information :
=====
```

-----

```
EID:slt
```

DID	State	DG	Size	Intf	Med	SED	PI	SeSz	Model	SP
-----										
252:1										
6										
UBad										
0	462.25	GB	SATA	HDD	N	N	512B	WDC	WD5003ABYX-01WERA1	U <-- In this example the Enclos
-----										

```
storcli /c0 /e252 /s1 set good
```

<-- Use the Enclosure ID and Slot ID above.  
Controller = 0  
Status = Success  
Description = Show Drive information Succeeded.

```
Drive Information :
=====
```

-----

```
EID:slt
```

DID	State	DG	Size	Intf	Med	SED	PI	SeSz	Model	SP
-----										
252:1										
6	UGood	0	462.25	GB	SATA	HDD	N N	512B	WDC	WD5003ABYX-01WERA1 U <-- The Drive
-----										

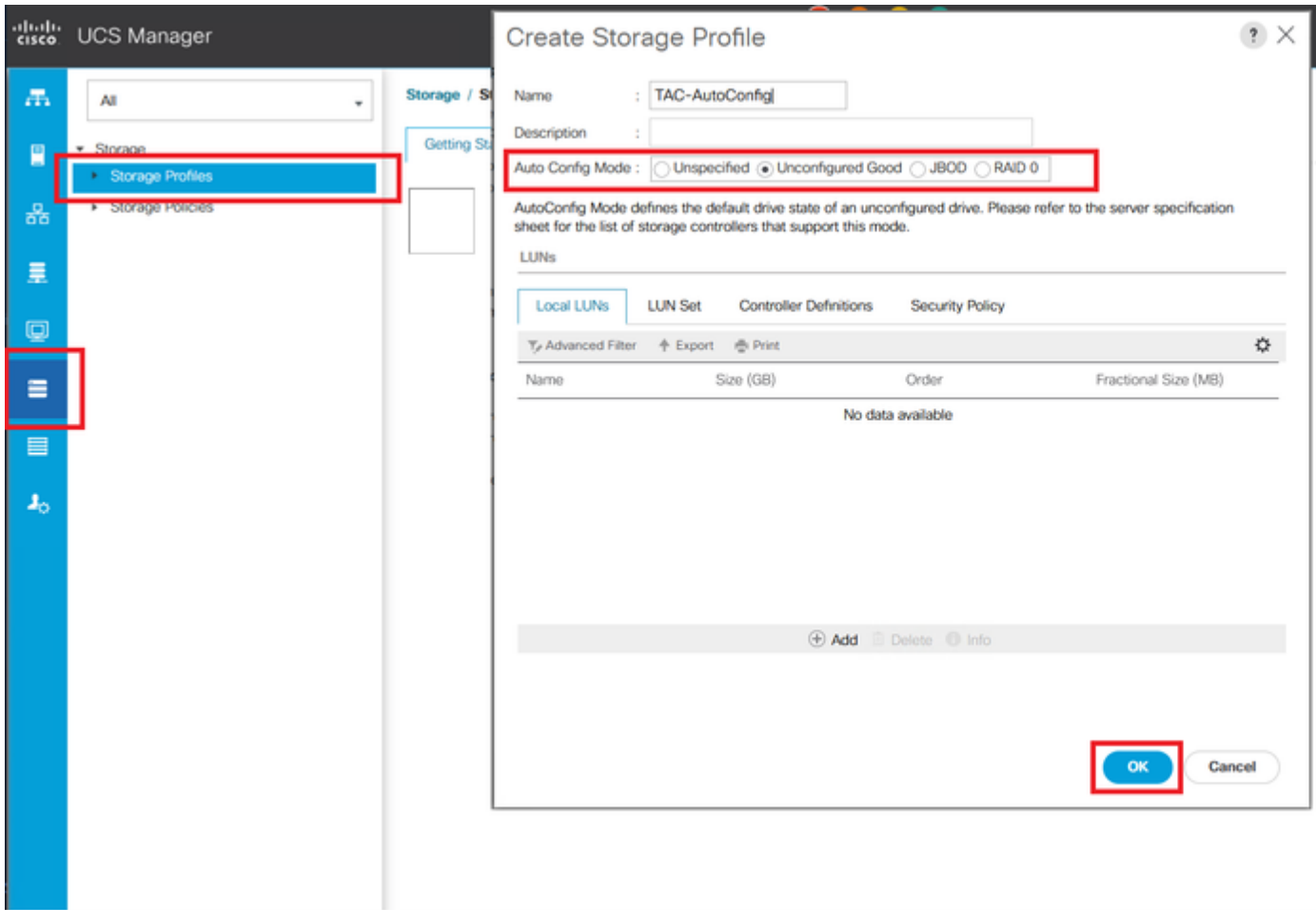
## Auto-Configuration for Disks

In UCSM and CIMC, specific RAID Controllers and firmware versions support an Auto-Configuration mode. Auto-Configuration automatically sets the state of newly inserted disks to whichever disk state is chosen. In UCSM, Auto-Configuration is deployed by a Storage Profile attached to the Service Profile associated with the server. Standalone C-Series servers allow Auto-Configuration to be directly set on the RAID Controller.

### UCSM

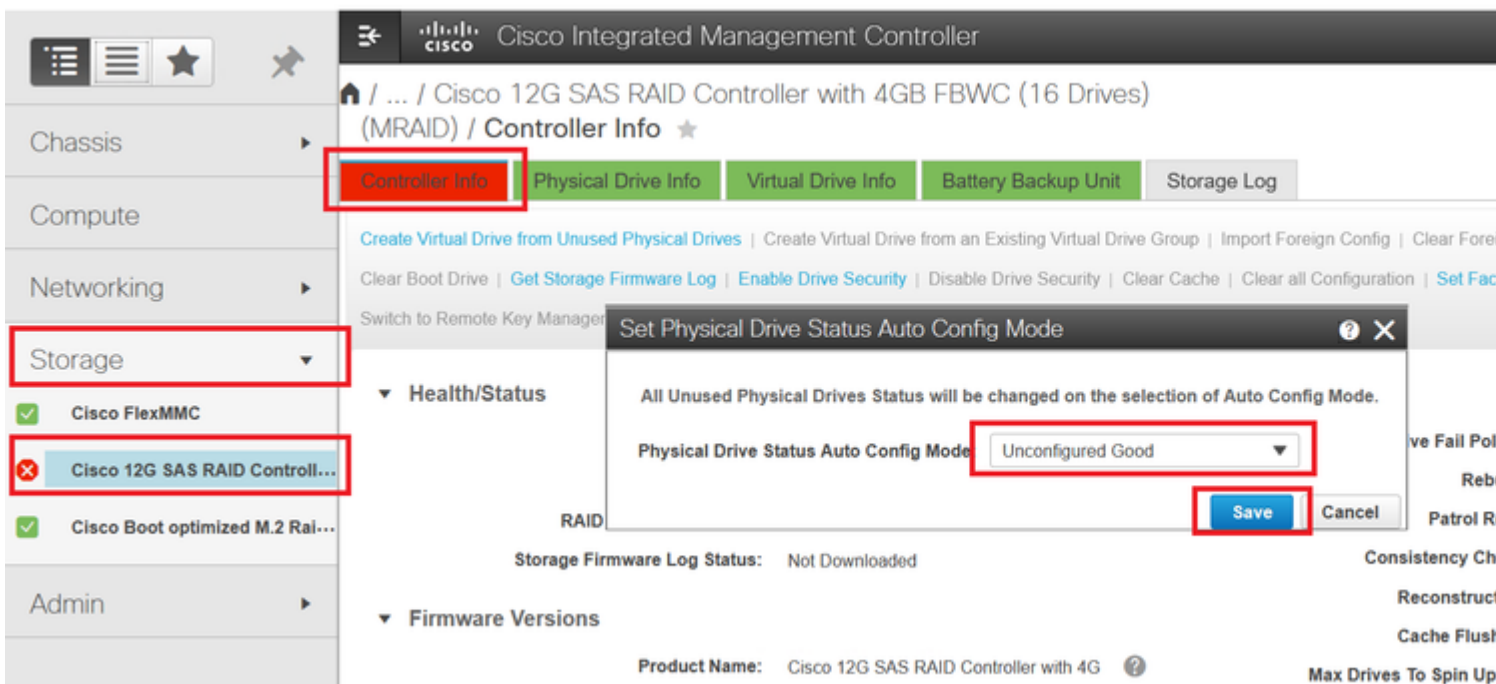
Navigate to **Storage > Storage Profiles > Create Storage Profile** or edit a current one. Within the **Auto Config Mode** box,

select **Unconfigured Good** > **Ok** as shown in the image.



## CIMC

Navigate to **Storage** and select the appropriate RAID Controller. Navigate to **Set Physical Drive Status Auto Config Mode** > **Unconfigured Good** > **Save** as shown in the image.



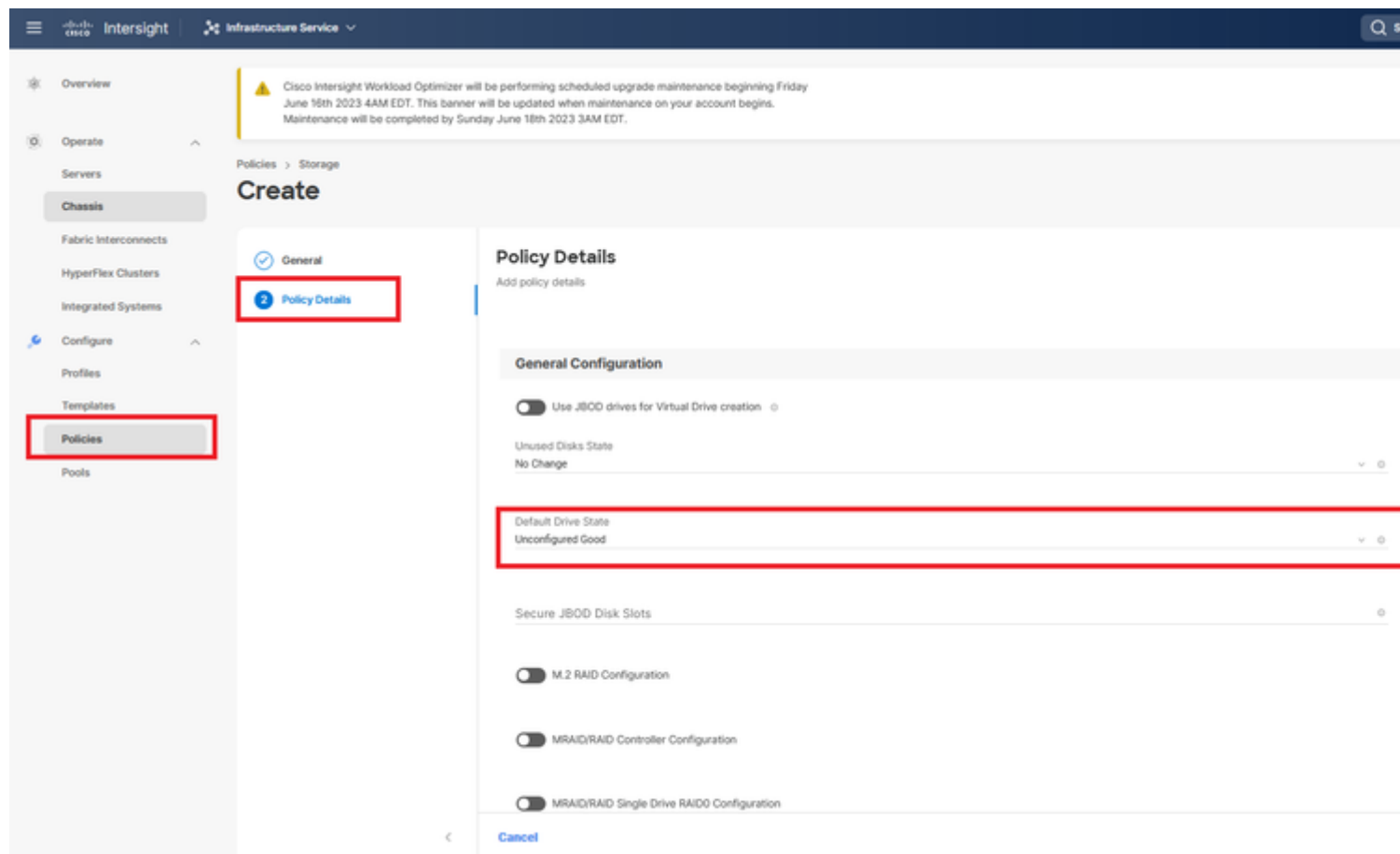


# Default Drive Mode for Disks

Cisco Intersight allows you to set the Default Drive Mode on certain RAID Controllers and firmware versions with a Storage Policy. The Default Drive Mode is defined in the Storage Policy and attached to a Server Profile. Whichever disk state is chosen in the Storage Policy is automatically set on newly inserted disks for that server.

## Intersight

Navigate to **Policies > Create Policy** or edit a current one. Then navigate to **Storage Policy > Policy Details > Default Drive State > Unconfigured Good > Create** as shown in the image.



## Related Information

- [Cisco Intersight UCS Server Policies](#)
- [Cisco UCS Manager Storage Configuration Guide](#)
- [Cisco Tech Note to Map StorCLI via EFI](#)
- [Technical Support & Documentation - Cisco Systems](#)