# 在UCS服务器中将JBOD驱动器配置为未配置的良 好状态

目录
<u>先决条件</u>
使用的组件
<u>背景信息</u>
<u>将磁盘状态从JBOD配置为UG</u>
UCSM
<u>UCS中心</u>
CIMC
Intersight
MegaRAID
WebBIOS
StorCLI
自动配置磁盘
UCSM
CIMC
磁盘的默认驱动器模式
Intersight
相关信息

# 简介

本文档介绍将驱动器状态从Just a Bunch Of Disks(JBOD)配置为Unconfigured Good(UG)的各种方法。

# 先决条件

# 要求

Cisco 建议您了解以下主题:

- 统一计算系统管理器(UCSM)
- 统一计算系统中心(UCSC)
- 思科集成管理控制器(CIMC)
- Cisco Intersight
- 硬盘驱动器(HDD)和独立磁盘冗余阵列(RAID)的一般知识

### 使用的组件

本文档不限于特定的软件和硬件版本。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原 始(默认)配置。如果您的网络处于活动状态,请确保您了解所有命令的潜在影响。

# 背景信息

- 本文档描述了在UCSM、UCSC、CIMC、Intersight、MegaRAID、WebBIOS和StorCLI中从 JBOD到UG的驱动器状态配置。
- 本文档还重点介绍UCSM、CIMC和Intersight中可帮助您进行自动磁盘状态配置的一些功能。
- 盒外型磁盘或回程材料授权(RMA)通常处于JBOD驱动器状态。有时,需要将JBOD驱动器更 改为UG驱动器状态才能在RAID配置中使用。将JBOD更改为UG的另一个常见原因是作为容错 RAID一部分的磁盘发生故障。在这种情况下,如果RMA磁盘处于JBOD驱动器状态,则更改 为UG有助于触发重建过程。
- 某些UCS策略允许从JBOD磁盘创建RAID,但必须明确选择此策略。
- 由于许多应用程序利用JBOD而不是RAID,因此有必要将驱动器更改为除UG外的其它状态。
   尽管本文档重点介绍从JBOD到UG的更改,但也可以采取相同的步骤来设置任何驱动状态,如UG到JBOD。

# 将磁盘状态从JBOD配置为UG

⚠ 注意:在提交任何配置更改之前,请确保您知道哪个RAID控制器管理磁盘以及哪些磁盘插槽 需要配置。

# UCSM

导航到适当的服务器并选择 Inventory > Storage > Disks. 选择需要更改的磁盘,然后选择 Set JBOD to Unconfigured Good > Yes 如图所示.

-ilialia cisco	UCS Manager		8 👽 4	● <b>●</b> ₽			● €	) <b>Q Q Q Q</b> © ©
ж	AI +	Equipment / Chassis / Chassis 1 / Servers / Server 1						
∎ &	Equipment     Chassis     Chassis 1     Fans	General Inventory Virtual Machines Installed Firmwa Motherboard CIMC CPUs GPUs Memory / Controller LUN Disks	re CIMC Sessions S Idapters HBAs NICs	EL Logs VIF Paths Health	Diagnostics Faults Storage	Events FSM Statist	cs Temperatures Power	
	<ul> <li>IO Modules</li> <li>IO Module 1</li> </ul>	+ - Ty Advanced Filter + Export + Print						٥
	<ul> <li>IO Module 2</li> <li>PSUs</li> </ul>	Name Size (MB) v Storage Controller SAS 1	Serial	Operability	Drive State	Presence	Technology	Bootable
=	Servers     Server 1	Disk.1 285148	5-074852500006020FDPH	Operable	Unconfigured Good	Equipped	HDD	False
	Adapters     Adapter 1	Disk 2 285148	V602×00 3485440	E Operable	Jbod	Equipped	HDD	False
J <sub>o</sub>	DCE Interfaces     DCE Interface 1		Set JBO	D to Unconfigured Good	× i	]		
	DCE Interface 3 DCE Interface 5 DCE Interface 7 HBAs	Details           General         FSM         Statistics	This operation 2.	ion will Set JBOD Disk State to Uno	onfigured Good for Disk			^
	NICs	Actions	Proper	L				
	iSCSI vNICs     Server 3     Server 4		ID Vendor	: 2 : Seagate Technology LLC		PID VID	: A03-D300GA2 : V01	
	O Server 7      Adapters     Rack-Mounts		Serial Product Name Product Variant	300GB 6Gb SAS 10K RPM 2.5 in	n. HDD/hot plug/drive sied r	Revision	: 0	
	FEX * Sequera	Remove Het Spare Set JBOD to Unconfigured Good	Part Details					
		Enable Encryption	Drive State	Jbod		Power State	Active	

✤ 注意:一旦提交磁盘状态更改,请查看Finite State Machine(FSM)选项卡以查看磁盘配置进度 。

#### 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#</pre>

set admin-state unconfigured-good

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

commit-buffer

### UCS中心

导航到适当的服务器并选择 Storage, 然后选择需要更改的磁盘。选择 Tools Icon > Set JBOD to Unconfigured Good 如图所示.



# CIMC

导航至 Storage 并选择适当的RAID控制器。选择 Physical Drives 并选择需要更改的磁盘,然后单击 Set State as Unconfigured Good 如图所示.

	*		tegrate AS Mod	d Management Co Iular Raid Controlle	ontroller er (SLOT-HBA) / <b>Physic</b> a	al Drive Info 🚖	_	_	_	Detrect Lide	<b>€ </b> ▼4
Chassis	Controller Info     Physical Drive Info     Virtual Drive Info     Battery Backup Unit     Storage Log								Reliesh   Ho	a rower   caunci	
Compute		Physical Drives	Phys	ical Drives							
Networking	•	PD-1	M	ake Global Hot Spare	Make Dedicated Hot Spare	Remove From Hot Spa	re Pools Prepare Fo	r Removal Undo Pr	epare For Removal	Set State as Unconfi	gured Good
Storogo		PD-7		Controller	Physical Drive Number	Status	State	Health	Boot Drive	Drive Firmware	Coerced Size
Storage	*	PD-8		SLOT-HBA	1	Online	online	Good	false	MU03	113487 MB
Cisco FlexFlash				SLOT-HBA	2	Online	online	Good	false	MU03	113487 MB
Cisco 12G SAS Modu	lar Raid		$\overline{\mathbf{v}}$	SLOT-HBA	7	JBOD	JBOD	Good	false	A703	1715655 MB
-		-		SLOT-HBA	8	JBOD	JBOD	Good	false	5701	1715655 MB
Admin	•										

## 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

\_\_\_\_\_

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#</pre>

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

导航到适当的服务器并选择 Inventory > Storage Controllers. 导航到正确的RAID控制器并选择 Physical Drives 并 选择需要更改的磁盘。选择 Ellipsis 在右上方,然后 Set State > Unconfigured Good > Set 如图所示.



# MegaRAID

启动键盘视频监视器(KVM)并重新启动服务器。按 Ctrl - R 在屏幕上显示MegaRAID时。按 Ctrl - N 直到 您加入 PD Mgmt 选项卡。导航至 F2-Operations > Make Unconfigured Good > Enter 如图所示.



# **WebBIOS**

启动KVM并重新启动服务器。按 Ctrl - H 显示WebBIOS时,选择 Drives 并选择适当的磁盘。导航至 Make Unconf Good > Go 如图所示.

oegaRAID BIOS Config Utility Pl	ujsical Configuration	egaRAID BIOS Config Utility Drive 11			
🗂 🖛 🚮 🔛 😵					
Local Oliver	Physical View	Connector	Port 0 - 3	Drive Groups:	
MEPPINS	L Backplane	Enclosure ID	252	Drive Group 0	
Advanced Software Options	- SIGCO, SAIA, BUD, 1-304 IB, UNCONTIGUEER BRR	Model Nane	ST31500341AS		
A Controller Selection	Lac: Slot: 1, SATA, HDD, 1.304 TB, Online	Vendor	λTλ		
	Slot: 3, SATA, HDD, 1-364 TB, Online	Revision	CC1H		
Controller Properties	Lac; Slot: 7, SATA, HDD, 1-364 TB, Online	SlotNumber	0		
Scan Devices	Drive Missing from Drive Group Ot Slot 0	Device Type	HDD (SATA)		
a Ristual Industry		Connected Port	3		
Vircual Drives			Next		
Drives		Make Unconf Good	i 🕒 Locate	Stop Locate	
Configuration Vizard			4	<u>9</u> 0	
Logical View		1 Home		e Back	
Events					
• Exit					

# 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 462.25 GB SATA HDD N N 512B WDC WD5003ABYX-01WERA1 U <-- In this example the Enclo 0 \_\_\_\_\_ storcli /c0 /e252 /s1 set good <-- Use the Enclosure ID and Slot ID above. Controller = 0Status = 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

# 自动配置磁盘

在UCSM和CIMC中,特定RAID控制器和固件版本支持自动配置模式。自动配置会自动将新插入的 磁盘的状态设置为所选的任何磁盘状态。在UCSM中,自动配置由连接到与服务器相关联的服务配 置文件的存储配置文件进行部署。独立C系列服务器允许在RAID控制器上直接设置自动配置。

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UCSM

导航至 Storage > Storage Profiles > Create Storage Profile 或编辑当前的。在 Auto Config Mode 框,选择 Unconfigured Good > Ok 如图所示.

cisco.	UCS Manager		Create Storage Profile	() ×	● ● ❷ Ø Ø ♥ ♥
ж	AI v	Storage / S	Name : TAC-AutoConfig		
	* Storage	Getting St	Description :		
L .	Storage Profiles     Storage Profiles		AutoConfig Mode . Onspecting a Unconfigured Good Good Toko U	ofer to the server specification	
55			sheet for the list of storage controllers that support this mode.		
重			LUNS		
			Local LUNs LUN Set Controller Definitions Security Policy		
-			Ty Advanced Filter    Export    Print	Crastianal Circ (M2)	
			No data available	Fractional Scot (Mb)	
Jo.					
Ť					
			🕀 👫 🔅 Delata 🖉 Info		
			The second secon		
				OK Cancel	
		ı	1		

# CIMC

导航至 Storage 并选择适当的RAID控制器。导航至 Set Physical Drive Status Auto Config Mode > Unconfigured Good > Save 如图所示.

	🕃 🖞	grated Management Controll	er		🐥 😣 3 admin@14
	A / / Cisco 12G SAS	S RAID Controller with 4GB FE	3WC (16 Drives)		Refresh   Host Power   Launch vKVM   Ping
Chassis 🔹	(MRAID) / Controller				
	Controller Info Physical	Drive Info Virtual Drive Info B	attery Backup Unit Stora	ige Log	
Compute	Create Virtual Drive from Unuser	d Physical Drives   Create Virtual Drive from	an Existing Virtual Drive Group	Import Foreign Config   Clear Foreign Config	Set Physical Drive Status Auto Config Mode
Networking	Clear Boot Drive   Get Storage	Firmware Log   Enable Drive Security   Disc	able Drive Security   Clear Cache	e   Clear all Configuration   Set Factory Defau	lts
_	Switch to Remote Key Manager	Set Physical Drive Status Auto Co	nfig Mode	0 ×	
Storage 🔹					
Cisco FlexMMC	<ul> <li>Health/Status</li> </ul>	All Unused Physical Drives Status will	be changed on the selection of	f Auto Config Mode.	
	1	Physical Drive Status Auto Config Mod	Unconfigured Good	▼ ve Fail Poll Interval:	300 sec
Cisco 12G SAS RAID Controll	J			Rebuild Rate:	30 %
Cisco Boot optimized M.2 Rai	RAID			Save Cancel Patrol Read Rate:	30 %
	Storage Firm	mware Log Status: Not Downloaded		Consistency Check Rate:	30 %
Admin 🕨	Eirmware Versions			Reconstruction Rate:	30 %
	• Filliwale versions			Cache Flush Interval:	4 sec
		Product Name: Cisco 12G SAS RAID	Controller with 4G	Max Drives To Spin Up At Once:	2

# 磁盘的默认驱动器模式

Cisco Intersight允许您使用存储策略在某些RAID控制器和固件版本上设置默认驱动器模式。默认驱动器模式在存储策略中定义并连接到服务器配置文件。在存储策略中选择的任何磁盘状态都会自动 设置在该服务器的新插入磁盘上。

## Intersight

导航至 Policies > Create Policy 或编辑当前的。然后导航至 Storage Policy > Policy Details > Default Drive State > Unconfigured Good > Create 如图所示.

≡	tiste Intersight	😂 Infrastructure Service 🗸		Q Search	📃 ଡ ⊄ 🚛 🗘 🚥 🐼 ବ 🗚
*	Overview	Cisco Intersight Workload Optimizer w June 16th 2023 4AM EDT. This banner Maintenance will be completed by Sur	I be performing schoolaid upgrade maintenance beginning Friday will be updated whon maintenance on your account begins. Jay June 11th 2023 JAM (DT.		×
0	Operate Servers	Policies > Storage			
	Chassis	Create			
	Fabric Interconnects HyperFlex Clusters Integrated Systems	General     Policy Details	Policy Details Add policy details		V All Planforms UCS Server (Standatione) UCS Server (P)-Attached)
۰,	Configure	^	General Configuration		
	Templates Policies Pools		Use JEGO drives for Virtual Drive creation Unused Diaks State No Dhange	× 0.	
			Online Drive State Unconfigure Good	× 0	
			Secure JB00 Disk Slots	0	
			M.2 RAID Configuration		
			MRADRAD Controller Configuration		
			MRAID/RAID Single Drive RAIDO Configuration		
		<	Cancel		Back Create

# 相关信息

- Cisco Intersight UCS服务器策略
- <u>Cisco UCS Manager存储配置指南</u>
- <u>通过EFI映射StorCLI的思科技术说明</u>
- <u>技术支持和文档 Cisco Systems</u>

### 关于此翻译

思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言,希望全球的用户都能通过各 自的语言得到支持性的内容。

请注意:即使是最好的机器翻译,其准确度也不及专业翻译人员的水平。

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