在Intersight管理模式(IMM)下配置從本地儲存啟動

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簡介

本文檔介紹要從本地儲存引導的配置 MRAID/HDD and M.2 Controller 於 Intersight Managed Mode (IMM)伺服器。

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必要條件

需求

思科建議瞭解以下主題:

- Intersight
- •本地引導
- •本地儲存裝置(HDD/SSD和M.2驅動器)
- 知識 Redundant Array of Independent Disks (RAID) 組態

採用元件

本文中的資訊係根據以下軟體和硬體版本:

- Cisco UCS 6454 Fabric Interconnect,韌體4.2(1e)
- UCSB-B200-M5刀鋒伺服器, 韌體4.2(1a)
- Intersight software as a service (SaaS)
- •儲存控制器MRAID、MSTOR-RAID

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。

設定

本地儲存MRAID - HDD

步驟1.識別安裝在伺服器和插槽ID中的控制器。

導航至 Servers > [server name] > Inventory > Storage Controllers.記下ID。

=	cisco Intersight	OPERATE > Servers > UCS-AS-MOC	P2502-8-1-1	🗘 🖪 330 🔺 349 [₽ ₽ 1 34			
<u>01o</u>		General Inventory HCL Statistics					Actions 🗸	
•	OPERATE ^	Expand All	Controller 1 (SAS)					
	Servers Chassis	Motherboard Boot	General Physical Drives Virtual Drives					
		Management Controller CPUs	Configuration		Hardware			
	Networking	Memory Network Adapters	Firmware Version	24.12.1-0451(6.30.03.3)NA	Controller ID			1
		PCIe Devices	Boot Loader Version	6.30.03.3_4.17.06.00_000.6130204	RAID Support		RAIDO, RA	ID1, RAID5, RAID6, RAID10
	Integrated Systems	Storage Controllers						
×		Controller 1 (SAS)						LSV2031020Z
æ								UCSB-MRAID12G-HE
	Targets				Vendor			Cisco Systems Inc
	Software Repository							

步驟2.創建 Boot Order Policy:

導航至 Policies > Create Policy > UCS Server > Boot Order

≡	cisco Intersight	CONFIGURE > Policies			🗘 🖪 330 🔺 349 🕞 🥵	34 Q, @ Jan	vier GarcÃa 🔔			
<u>ella</u>							reate Policy			
Ø		* All Policies @ +								
		Add Filter		Export 133 items found 16 ∨ per page K < 1 of 9 >>>						
	Chassis	Platform Type Usage								
	Fabric Interconnects	UCS Server 116 UCS Chassis 9								
		UCS Domain 32 HyperFlex Cluster 1	• Not Osed 54							
	Hyperviex Clusters		Platform Type			Last Update				
22			UCS Server	Adapter Configuration	2 টি	Aug 16, 2022 11:46 AM				
	Orchestration		UCS Server	SAN Connectivity		Aug 10, 2022 3:53 PM				
	Profiles		UCS Server	LAN Connectivity		Jul 22, 2022 12:35 PM				
	Templates		UCS Server	BIOS	12 @	Jul 21, 2022 11:05 AM				
Г	Policies		UCS Server, UCS Chassis	IMC Access	4 🔞	Jul 21, 2022 11:05 AM				
			UCS Server	Virtual Media	16 👸	Jul 21, 2022 11:05 AM				
(P)			UCS Server, UCS Chassis	Power	6 1 •	Jul 21, 2022 11:05 AM				
	Targets		UCS Server	LAN Connectivity	4 (8	Jul 21, 2022 11:05 AM				
			UCS Server	Boot Order	7 🗟	Jul 21, 2022 11:05 AM				
	Software Repository		UCS Server	LAN Connectivity		Jul 21, 2022 10:59 AM				
			UCS Server, UCS Chassis	IMC Access	3 (ਹੈ	Jul 20, 2022 1:22 PM				
			UCS Server	Virtual KVM	<u>ର</u> ି ୧	Jul 20. 2022 10:45 AM				

選擇 UCS server 和 Boot order

		Select Policy Type	
	Filters	୍ଦ୍ Search	
	PLATFORM TYPE	Adapter Configuration	iSCSI Static Target
_ <u>\</u>		O BIOS	LAN Connectivity
	UCS Server UCS Domain	🔶 💿 Boot Order	C LDAP
		O Certificate Management	🔿 Local User
	O UCS Chassis	O Device Connector	Network Connectivity
	HyperFlex Cluster	C Ethernet Adapter	○ NTP
	C Kubernetes Cluster	C Ethernet Network	O Persistent Memory
		C Ethernet Network Control	O Power
		Ethernet Network Group	SAN Connectivity

設定 Policy Organization, Name, 和 Description.

新增 local Disk boot option,選擇 Legacy 或 Unified Extensible Firmware Interface (UEFI).

= "dis	co Intersight		order > Create				🗘 🖬 330 🔺 349		₽ \$ 34 Q	
		🚈 Progress				Step 2				
OPERAT		1 General			- E	Policy Details Add policy details				
Servers	s	Policy Details			್ರೇನ್					
Fabric I				Configured Boot Mode 💿		All Platform			Server (FI-Attached)	
Network	king			🔿 Legacy 🧿 Unified E	xtensible Firmware Interface (L	JEFI)				
HyperFi				Enable Secure Boot						
Integrat	ted Systems									
X CONFIG	GURE ^			Add Boot Device						
Orchest	tration			ISCSI Boot			•	Enabled	<u>ت</u> ^ ت	
Profiles				Local Disk				Enabled	n ^ v	
Templa				NVMe						
Policies				PCH Storage						
Pools				PXE Boot						
D ADMIN				SAN Boot						
Targets				SD Card						
UCS Dir				UEFI Shell						
Softwar	re Repository			USB						

配置 Device Details:

- Device Name 是策略上的引用名稱。
- Slot 是步驟1中保**存的ID。**
- Bootloader 欄位(可選)。

	Slot	
0	FMEZZ1-SAS	0
	Bootloader Description	
		Slot FMEZZ1-SAS Bootloader Description

Add Virtual Media 選項安裝.iso映像。

		Step 2 Policy Det a Add policy detai	ails ^{Is}				
			All Platforms	UCS Server (Standal	one) UCS	Server (FI-A	ttached
Configured Boot Mode 💿							
🔵 Legacy 🧿 Unified E	xtensible Firmware Interface (UB	EFI)					
Enable Secure Boot							
Add Boot Device ~							
iSCSI Boot				-	Fachlad 1	n	
Local CDD)				Enabled		
Local Disk				•	Enabled	Ì ^	
NVMe					Enabled 1		
PCH Storage							
PXE Boot							
SAN Boot							
SD Card							
UEFI Shell							
USB							
Virtual Media							

設定 Device Name 和Type。

		Step 2 Policy Det a Add policy detai	ails Is			
			All Platforms UCS	Server (Standalone)	UCS Serve	er (FI-Attached)
Configured Boot Mode 0						
🔵 Legacy 🧿 Unified B	Extensible Firmware Interface (UI	EFI)				
Enable Secure Boot	©]					
— Virtual Media (DVD)	,			C Ena	abled 🗍	^ v
Device Name * DVD		0				
			Sub-Type KVM MAPPED DVD			<u>v 0</u>

步驟3.創建 Storage Policy

請將 Storge Policy 並啟用 MRAID/RAID Controller Configuration.

Select Policy Type

Filters	റു Search	
PLATFORM TYPE	Boot Order	
O All	Certificate Management	🔵 Local User
UCS Server	O Device Connector	Network Connectivity
O UCS Domain	Ethernet Adapter	
UCS Chassis	Ethernet Network	Persistent Memory
HyperFlex Cluster	Ethernet Network Control	O Power
C Kubernetes Cluster	Ethernet Network Group	SAN Connectivity
	C Ethernet QoS	◯ SD Card
	O FC Zone	Serial Over LAN
	Fibre Channel Adapter	⊖ smtp
	Fibre Channel Network	
	Fibre Channel QoS	⊖ ssн
	O IMC Access	Storage
	O IPMI Over LAN	Syslog
	iSCSI Adapter	Virtual KVM
	iscsi Boot	Virtual Media

設定 Drive Group 和 Virtual Drive.

					-
MRAID/	RAID Controller Configuratio	n			Enable
Global	Hot Spares				
Add	Drive Group				
			0 items found	10 ∽ per page] 0 of 0 > 河 💱
	Drive Group Name	RAID Level	Number of Spans	Dedicated Hot Spares	Drive Array Spans
					K < 0 of 0 > >

附註:要避免新增虛擬驅動器,請使用單個驅動器RAID0建立。

步驟4.部署伺服器配置檔案。

=	dialia Intersight	CON	FIGURE > Profiles	■ 330 🔺 349 🛛 🖓 📢 34	Q 🔕 🕘 Jawier G	iarcĂa 🕰			
<u>01</u> 0					Create UCS Server	r Profile			
ø									
	Servers	*	All UCS Server Profiles 🐵 🕂						
			Add Filter				16 ✓ perpage K < 1 of 3		
	Chassis				Target Platform 3				
	Fabric Interconnects			Not Assigned	UCS Server (Standalone)			Aug 16, 2022 11:46 AM	
	Networking			A Not Deployed	UCS Server (Standalone)			Aug 15, 2022 6:29 PM	
	HyperFlex Clusters				UCS Server (FI-Attached)			Aug 12, 2022 6:06 PM	
	Integrated Systems				UCS Server (FI-Attached)			Aug 12, 2022 4:22 PM	
×	CONFIGURE ^								
	Orchestration			Not Assigned	UCS Server (FI-Attached)			Aug 10, 2022 4:26 PM	
	Deplies			Not Assigned	UCS Server (FI-Attached)			Aug 9, 2022 12:37 PM	
				Not Assigned	UCS Server (Standalone)			Aug 2, 2022 11:51 PM	
	Templates			Not Assigned	UCS Server (FI-Attached)			Jul 21, 2022 11:13 AM	
				Not Assigned	UCS Server (FI-Attached)			Jul 21, 2022 11:05 AM	
				Not Assigned	UCS Server (FI-Attached)			Jul 21, 2022 11:01 AM	
Ð				E Not Assigned	UCS Server (Standalone)			Jul 21, 2022 10:57 AM	
			UCSX-Server1-HWRAID	Not Assigned	UCS Server (FI-Attached)			Jul 20, 2022 11:13 AM	

步驟4.1 套用建立的原則。

CONFIGURE > Create UCS Server Profile		Q 🖪 330 🔺 349 🛛	9 ⊄134 Q, ©	ා Javier GarcĂa <u>ද</u>
🤄 Progress			Select Boot Order	
() General	ξÕ e	Compute Configuration	Policies 13	
	~~~??	want to associate with this profile.		
2 Server Assignment			M2-HWRAID-Boot	
Compute Configuration			.27-boot-order-policy	
Management Configuration			BootfromSAN	
5 Storage Configuration			UCSC-boot-order-policy	
			Boot-testing	
6 Network Contiguration			M2-HWRAID-Booting	
7 Summary			fil test	
			@ LocalBoot	
			M2-HWRAID	
			MM-Boot-policy	
			iscsi-boot-daniel	
			ISCSI-BootPolicy-SV	
			test-B00T-Jaz	Ø

**附註**:如果需要,可以新增其他策略。本文僅說明從本地儲存啟動所需的策略。如果需要,可 以新增其他策略。

步驟5.通過KVM安裝作業系統。



## 本地儲存M.2控制器

步驟1. 識別伺服器和插槽ID中安裝的控制器。

導航至 Servers > [server name] > Inventory > Storage Controllers.記下ID。

≡	cisco Intersight	OPERATE > Servers > UCS-TS-MXC	P25-Was-M6-64108-1-1		🚨 🖪 369 🔺 348	<b>Ş</b> \$ 34		
<u>elo</u>		General Inventory UCS Server Profile						Actions 🗸
Ø	OPERATE ^		Controller 2 (M.2-Hwraid)					
	Servers Chassis	Motherboard Boot	General Physical Drives Virtual Drives					
		Management Controller	Configuration		Hardware			
		Memory						
	HyperFlex Clusters	Network Adapters		1.1.17.1002				MSTOR-RAID
		Storage Controllers						RAID1
	Integrated Systems	Controller 1 (Raid)						
×		Controller 2 (M.2-Hwraid)						FCH24427GFL
	Orthestation	TPM			Model			UCS-M2-HWRAID
	orchesolation							Cisco Systems Inc
	Templates							

步驟2.創建 Boot Order Policy:

導航至 Policies > Create Policy > UCS Server > Boot Order

(配置策略、組織、名稱和說明)。

新增本地磁碟啟動選項,選擇 Legacy 或 Unified Extensible Firmware Interface (UEFI).

Device Name 是策略上的引用名稱。

slot 是步驟1中保存的ID。

Botloader 欄位(可選)。

新增 Virtual Media 選項安裝.iso映像。

步驟3.創建 Storge Policy

請將 Storge Policy 並啟用 M.2 RAID Controller Configuration.

	Step 2 Policy Details Add policy details
	All Platforms   UCS Server (Standalone)   UCS Server (Fl-Attache
General Configuration	
● Use JBOD drives for Virtual Drive creation Unused Disks State <u>No Change</u> ~ ●	
M.2 RAID Configuration	Enable
Slot of the M.2 RAID controller for virtual drive creation MSTOR-RAID-1,MSTOR-RAID-2 v 0	
MRAID/RAID Controller Configuration	Enable
MRAID/RAID Single Drive RAID0 Configuration	Enable

#### 步驟4.部署服務器配置檔案

**附註**:本文僅說明從本地儲存啟動所需的策略。如果需要,可以新增其他策略。

**步驟4.1** 套用建立的原則。

步驟5.通過KVM安裝作業系統。

# 驗證

使用本節內容,確認您的組態是否正常運作。

啟動vKVM對映的vDVD。



通過作業系統安裝驗證RAID是否顯示。

Select a Disk to Install or (any existing VMFS-3 will be automatically = Contains a VMES partition	Upgrade upgraded to VMFS-5)	
E Claimed by VMuare vSAM	Conception 1	
Lecal: AIA CISCO VO (CIO:AIACISC Renote: (none)	0_40) 223.51/G10	
(Esc) Cancel (F1) Details (F5) Refres	h (Enter.) Cont inue	