有关如何使用KVM从EFI外壳运行LSI StorCli的技 术说明

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简介

本文档介绍使用KVM从EFI Shell运行LSI StorCli的过程(无需闪存驱动器)。

先决条件

要求

Cisco 建议您了解以下主题:

- 在Cisco UCS服务器上使用EFI外壳
- 使用StorCli工具及其命令语法,请参阅以下命令参考指南。 https://docs.broadcom.com/docs/12352476_
- 应启用EFI外壳以引导至。

使用的组件

本文档中的信息基于以下软件和硬件版本:

- UCS C系列服务器,带基于LSI PCIe的RAID控制器。
- StorCli EFI驱动程序/工具

下载Storcli工具: <u>https://www.broadcom.com/support/download-search</u>

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。

配置

步骤1.从管理软件和工具(链接)下<u>载Storcli</u>,提取文件夹并导航EFI文件夹。获取扩展名为。 **EFI的**Storcli文件,如图所示:

Latest MegaRAID StorCLI MR 6.11	All OS	03/23/2016 💴 🛃	😗 Create
Version: 1.19.04 File Size: 40631 KB	Language: Tead Me English		
1 19 04 StorCLLtxt	FEI	license tyt	license tyt
storcli_all_os	FreeBSD		storcli.efi
	📃 Linux	•	
	Linux-OEL-Sparc	•	
	Linux-ppc	•	
	Solaris	•	
	Solaris Sparc	•	
	Ubuntu	•	
	Vmware	•	
	Vmware-MN	•	
	Vmware-NDS	•	
	Windows	•	

步骤2.按任何名称创建新文件夹,此处由名称EFI创建,并复制该文件夹中的storcli.efi。

Create Image from	Folder	
Create a New Ima	ge File From a Source Folder	
Source Folder:	C:\Users\Rahul\Desktop\EFI	Browse
New Image File:	C:\Users\Rahul\Desktop\EFI.img	Browse
	Image creation successfully completed	
		Finish

浏览以在"从文件夹创建映**像"弹出窗口中提**供源文件夹。此处选择的源文件夹是之前创建的EFI文件 夹,它包含**storcli.efi**文件。

此外,浏览IMG文件的目标路径。如图所示,单击"完成"(Finish)创建IMG文件。

🛕 10.76.78.50 - KVM Console				- 🗆 ×
File View Macros Tools Power	Virtual Media He	lp		
Intel(B) Boot Are	st CF1	E E2		
Inter(A) boot Hye	7 2014	.J.JJ [nto] Commonstion		
opprigne (C) 199	7-2014,	Incel corporation		
DVE ECT Malia ta	at failur	a abaak asbla		
TAL-LOI: Media te	St Idllur	e, check cable		
AL-NOF: EXITING	Create Image from	DL HUENL.	×	
-			~	
Intel(B) Boot Ar	Create a New Im-	ana Fila Fram a Source Folder		
Comunication (C) 19	Create a new ima	age rile riom a source rolder		
opyright (C) 19	Source Folder:	C:\Users\Rahul\Desktop\EFI	Browse	
CLIENT MAC ADDR:	New Image File:	C:\Users\Rahul\Desktop\EFI.img	Browse	F F717451795C0
XE-E51: No DHCP		Image creation successfully completed		
			Finish	
PXE-MOF: Exiting			TIIIoII	
Reboot and Select	nroner H	Root device		
nr Insert Boot Me	dia in se	elected Boot device and mres	s a keu	
		record boot active and pres	,o u nog	

步骤3.浏览文件并将其作为可移动介质装载,而不要选中**只读**框。其原因是您必须将日志文件写入 IMG文件。

i.

File	View	Macros	Tools	Power	Virtual Media	Help
					Create Ima	ige
					✓ Activate Vi	rtual Devices
					Map CD/DV	′D
					Map Remo	vable Disk
					Map Floppy	/

led		rtuai iviedi	a - iviap i	Kemovab	IE DISK			^	
	Dr	ive/Image	File:	E:			-	Browse	
				Rea	d Only				
1No						Map Dev	ice	Cancel	
of	Manu	facture	28709	972014					
ile	View	Macros	Tools	Power	Virtual Media	Help			
					Create In	nage			
					✓ Activate	Virtual Dev	ices		
					Map CD/DVD				

步骤4.在内置EFI外**壳中启动服务器**

Please select boot device: (SATA) Embedded RAID Controller Cisco CIMC-Mapped vHDD1.22 Cisco vKVM-Mapped vDVD1.22 Cisco CIMC-Mapped vDVD1.22 Cisco vKVM-Mapped vHDD1.22 Cisco vKVM-Mapped vFDD1.22 IBA GE Slot 1700 v1553 IBA GE Slot 1701 v1553 UEFI: Built-in EFI Shell Enter Setup 1 and 4 to move selection ENTER to select boot device ESC to boot using defaults		
<pre>(SATA) Embedded RAID Controller Cisco CIMC-Mapped vHDD1.22 Cisco vKVM-Mapped vDVD1.22 Cisco CIMC-Mapped vDVD1.22 Cisco vKVM-Mapped vHDD1.22 Cisco vKVM-Mapped vFDD1.22 IBA GE Slot 1700 v1553 IBA GE Slot 1701 v1553 UEFI: Built-in EFI Shell Enter Setup</pre>	Please select	boot device:
Cisco CIMC-Mapped vHDD1.22 Cisco vKVM-Mapped vDVD1.22 Cisco CIMC-Mapped vDVD1.22 Cisco vKVM-Mapped vHDD1.22 Cisco vKVM-Mapped vFDD1.22 IBA GE Slot 1700 v1553 IBA GE Slot 1701 v1553 UEFI: Built-in EFI Shell Enter Setup	(SATA) Embedded RA	ID Controller
Cisco vKVM-Mapped vDVD1.22 Cisco CIMC-Mapped vDVD1.22 Cisco vKVM-Mapped vHDD1.22 Cisco vKVM-Mapped vFDD1.22 IBA GE Slot 1700 v1553 IBA GE Slot 1701 v1553 UEFI: Built-in EFI Shell Enter Setup	Cisco CIMC-Mapped	vHDD1.22
Cisco CIMC-Mapped vDVD1.22 Cisco vKVM-Mapped vHDD1.22 Cisco vKVM-Mapped vFDD1.22 IBA GE Slot 1700 v1553 IBA GE Slot 1701 v1553 UEFI: Built-in EFI Shell Enter Setup	Cisco vKVM-Mapped	vDVD1.22
Cisco vKVM-Mapped vHDD1.22 Cisco vKVM-Mapped vFDD1.22 IBA GE Slot 1700 v1553 IBA GE Slot 1701 v1553 UEFI: Built-in EFI Shell Enter Setup ↑ and ↓ to move selection ENTER to select boot device ESC to boot using defaults	Cisco CIMC-Mapped	vDVD1.22
Cisco vKVM-Mapped vFDD1.22 IBA GE Slot 1700 v1553 IBA GE Slot 1701 v1553 UEFI: Built-in EFI Shell Enter Setup ↑ and ↓ to move selection ENTER to select boot device ESC to boot using defaults	Cisco vKVM-Mapped	vHDD1.22
IBA GE Slot 1700 v1553 IBA GE Slot 1701 v1553 UEFI: Built-in EFI Shell Enter Setup ↑ and ↓ to move selection ENTER to select boot device ESC to boot using defaults	Cisco vKVM-Mapped	vFDD1.22
IBA GE Slot 1701 v1553 UEFI: Built−in EFI Shell Enter Setup ↑ and ↓ to move selection ENTER to select boot device ESC to boot using defaults	IBA GE Slot 1700 v	1553
UEFI: Built−in EFI Shell Enter Setup ↑ and ↓ to move selection ENTER to select boot device ESC to boot using defaults	IBA GE Slot 1701 v	1553
Enter Setup ↑ and ↓ to move selection ENTER to select boot device ESC to boot using defaults	UEFI: Built-in EFI	Shell
↑ and ↓ to move selection ENTER to select boot device ESC to boot using defaults	Enter Setup	
ENTER to select boot device ESC to boot using defaults	↑ and ↓ to mov	e selection
ESC to boot using defaults	ENTER to select	boot device
	ESC to boot us	ing defaults

Map Floppy ...

步骤5.引导到外壳后,使用map -r命令刷新文件系统映射(如果在服务器引导之前连接了可移动设备,则可能不需要)。

shell> map -r

输入可用的fsx文件系统之一,如fs0或fs1,然后按Enter。提示符将更改为fsx>,其中x是所选文件 系统的编号。

Shell	L> fs0:
fs0:\	> dir
	blk3: Alias(s):
	PciRoot(0x0)/Pci(0x1D,0x0)/USB(0x0,0x0)/USB(0x6,0x0)/Scsi(0x0,0x3)
	blk4: Alias(s):
	PciRoot(0x0)/Pci(0x1D,0x0)/USB(0x0,0x0)/USB(0x6,0x0)/Scsi(0x0,0x4)
	Press ESC in O seconds to skip startup.nsh or any other key to continue.
	Shell> fs0:
	fs0:\> dir
	Directory of: fs0:\
	02/01/2016 03:37 <dir> 4,096 EFI</dir>
	0 File(s) 0 bytes
	1 Din(a)

步骤6.更改目录以更改为EFI文件夹。

fs0:\> cd EFI fs0:\EFI> ls

 (
felix of FET			
TSU: V> CU EFI			
fs0:\EFI\> ls			
Directory of: fs0:\EF	I/		
05/06/2016 11:45 <di< th=""><th>[R> 0</th><th></th><th></th></di<>	[R> 0		
05/06/2016 11:45 <d]< th=""><th>IR> 4,096</th><th></th><th></th></d]<>	IR> 4,096		
02/01/2016 03:37	2,545,408	storcli.efi	
1 File(s)	2,545,408 bytes		
2 Dir(s)			
fs0:\EFI\> _			

您现在可以运行Storcli命令。

需要记住的要点:

- PgUp和PgDn键在EFI外壳中向上滚动和向下滚动。
- page=n(n是要作为输出显示在屏幕上的行数,例如page=10)
- 使用常规append命令将输出写入文件(默认情况下,如果未定义完整路径,则文件将写入当前 已装载的fs的工作目录中)。
- 将输出直接输出到文件use>。例如 storcli.efi /c0 show term log > term log.txt
- 将输出附加到现有文件,请**使用>>**。例如,storcli.efi /c0 show term log >> term log.txt

```
fs0:\EFI\>
fs0:\EFI\>
fs0:\EFI\>
fs0:\EFI\> storcli.efi /c0/v0 show all
Controller = 0
Status = Success
Description = No VDs have been configured
fs0:\EFI\> storcli.efi /c0/eall/sall show all page=10
Controller = 0
Status = Success
Description = Show Drive Information Succeeded.
Drive /c0/e8/s1 :
_____
EID:Slt DID State DG Size Intf Med SED PI SeSz Model
                                                                    Sp
Press any key to continue
```

这些图像显示了将输出保存到与storcli位于同一文件夹的文件的示例;排除故障后,您可以提取/装 **载EFI.IMG**文件,以获取收集的日志。

```
fs0:\EFI\> ls
Directory of: fs0:\EFI\
05/06/2016 11:45 <DIR>
                                  0
05/06/2016 11:45 <DIR>
                               4,096
02/01/2016 03:37
                           2,545,408 storcli.efi
         1 File(s) 2,545,408 bytes
         2 \text{ Dir}(s)
fs0:\EFI\> storcli.efi /c0 show termlog > Termlog.txt
fs0:\EFI\> storcli.efi /c0 show termlog >> Termlog.txt
fs0:\EFI\> ls
Directory of: fs0:\EFI\
05/06/2016 11:45 <DIR>
                                     0
05/06/2016 11:45 <DIR>
                                4,096
02/01/2016 03:37
                            2,545,408 storcli.efi
                              853,710 Termlog.txt
05/10/2016 14:25
          2 File(s) 3,399,118 bytes
          2 Dir(s)
fs0:\EFI\> _
```

浏览IMG文件获取日志。

收集日志时要运行的几个重要命令:

- storcli /c0 show all > adpinfo.txt
- storcli /c0 show events file > Events.txt
- storcli /c0 /eall show phyerrorCounters > Phy.txt
- storcli /c0 show termlog > Termlog.txt
- storcli /c0/eall/sall show all > PD.txt
- storcli /c0/vall show all > VD.txt
- storcli /c0/cv show all > BBU.txt

验证

当前没有可用于此配置的验证过程。

故障排除

目前没有针对此配置的故障排除信息。