Add Virtual Drive in the Modular RAID Controller

Contents

Introduction Procedure to Add Virtual Drive Related Information

Introduction

This document describes the procedure to use the Modular RAID Controller (Cisco 12G SASA Modular RAID) to configure disk drive groups and virtual drives, RAID configuration and to perform other configuration tasks in a pre-boot environment.

Procedure to Add Virtual Drive

Perform these steps to configure drive groups and virtual drives with the use of the Modular RAID Controller.

- 1. Log into the Cisco UCS Manager.
- 2. Open a console to the host.
- 3. Reboot the host

File View	Macros	Tools P	ower Virtual Media Hel	P		
	I D	LUN	VENDOR	PRODUCT	REVISION	CAPACITY
			LSI	Cisco 12G SAS Modular Raid	4.250.01-3633	OMB
	8	Θ	SEAGATE	ST600MM0006	0001	572325MB
	10	Θ	SEAGATE	ST600MM0006	0001	572325MB
	12	Θ	SEAGATE	ST600MM0006	0001	572325MB
	13	Θ	SEAGATE	ST600MM0006	0001	572325MB
	14	Θ	ATA	INTEL SSDSC2BB48	0370	457862MB
		Θ	LSI	Virtual Drive	RAID1	571250MB
	θ	BOD	(s) found (on the host adapter		
	ΘJ	BOD	(s) handled	d by BIOS		
	1 (Jirtu	al Drive(s	s) found on the host adapte:	r.	
	1 (Jirtu	al Drive(s	s) handled by BIOS		
	Pre	222	(Ctrl> <r> 1</r>	to Run MegaRAID Configurati	on Utility	

On boot up hit **Ctrl+R** to enter the Cisco 12G SAS Modular Raid Controller BIOS Configuration Utility.

Cisco 12G SAS Modular Raid Controller BIOS Conf	iguration Utility 5.06-0004
VD Mgmt PD Mgmt Ctrl Mgmt Properties	
Virtual Drive Manageme	ent —
[-] Cisco 12G SAS Modular Rai (Bus 0x05, Dev 0x00))
-[-] Drive Group: 0, RAID 1	Controller:
-[-] Virtual Drives	Drive Groups: 1
└── ID: 0, RAID1_23, 557.86 GB	Virtual Drives: 1
-[+] Drives	Drives: 5
-[+] Available size: 0.00 KB	
Hot spare drives	
[-] Unconfigured Drives	
├──::01: Readu: 446.10 GB	
::04: Beadu: 557.86 GB	
::05: Beadu: 557.86 GB	
E1-Help E2-Openations E5-Refnech Cipl-N-Newt Page	Ctol-P-Prov Page F12-Ctlo
ri-nerp r2-operations r5-nerresh ctri-n-next rage	ctri-i-rev raye riz-ctir
	10.255.0.47 admin 0.4 fps 0.002 KB/s

Keep the cursor on the controller name Cisco 12G SASA Modular RAID and press F2.

Select Create Virtual Drive.

Cisco 12G SAS Modular Raid Controller BIOS Conf	iguration Utility 5.06-0004			
VD Mgmt PD Mgmt Ctrl Mgmt Properties				
Uirtual Drive Managemen	nt			
[-] Cisco 12G SAS Modular Rai (Bus 0x05, Dev 0x00) [-] Drive Group: 0, RAID 1 [-] Uirtual Drives [] ID: 0, RAID1_23, 557.86 GB [] [+] Drives [] [-] Unconfigured Drives [] [-] Unconfigured Drives [] [-] Unconfigured Drives [] [] [-] Unconfigured Drives [] [] [] [] [] [] [] [] [] [] [] [] [] [Create Virtual DriveClear ConfigurationForeign ConfigManage Preserved CacheDrive SecurityDisable Data Protection			
	Advanced Software Options			
F1-Help F2-Operations F5-Refresh Ctrl-N-Next Page	Ctrl-P-Prev Page F12-Ctlr			
	10.255.0.47 admin 1.2 fps 0.592 KB/s 🔒			
Letter and the second sec				

This shows VD Mgmt that helps to configure the RAID.

ile View Macros Tools Power Virtual Media Help
Cisco 12G SAS Modular Raid Controller BIOS Configuration Utility 5.06-0004
Virtual Drive Management
Create New VD
RAID Level: RAID-0 PD per Span : NZA
Drives Two Size
Secure VD: No []::01 512e 446.10 GB
[]::04 557.86 GB
Data Protection: Disable
- Basic Settings
Size: Advanced OK CANCEL
Name :
F1-Help F12-Ctlr
10.255.0.47 admin 0.4 fps 0.001 KB/s 🔒

Note: Cisco 12G SASA Modular RAID supports only RAID 0 and RAID 1.

Select the **RAID** as per the requirement.

File View Macros Tools Power Virtual Media Help	
Cisco 12G SAS Modular Raid Controller BIOS Conf	figuration Utility 5.06-0004
Ungmt FU fight Ctri fight Properties	ent
E Create New VD	
RAID Level: RAID-0 PD per Span : N	ZA .
ID Type	e Size #
Secure VD: N []::01 512c	e 446.10 GB
L J::04 [1::05	557.86 GB
Data Protection: Disable	551.00 05
Size:	DK CANCEL
navanceu	
Name:	
F1-Help F12-Ctlr	
	10.255.0.47 admin 2.2 fps 1.25 KB/s 🔒

After you select the RAID, select the Hard Drives that will be the part of this RAID.

For example, Drive 4 and Drive 5 was chosen as shown.

File View Macros Tools Power Virtual Media Help	
Cisco 12G SAS Modular Raid Controller BIOS Conf	figuration Utility 5.06-0004
VD Mgmt PD Mgmt Ctrl Mgmt Properties	
Virtual Drive Manageme	ent
Create new VD -	
RAID Level: RAID-1 PD per Span : N	ZA
ID Type	e Size #
Secure VD: No []::01 5120	e 446.10 GB
[X]::04	557.86 GB 00
Data Protection: Disable	557.00 68 01
- Basic Settings	
Size: 557.861 GB Advanced	OK CANCEL
Name: SQL	
F1-Help F12-Ctlr	
	10.255.0.47 admin 1.2 fps 0.623 KB/s 🔒

Now, press **OK**.

This warning message will appear on the screen, press **OK**.

File View Macr	s Tools Power Virtu	ual Media Help							
Cisco 12G	SAS Modular Rai	id Controller BI	IS Configurati	on Util:	ity 5.	06-0004			
VD Mgmt PD	VD Mgmt PD Mgmt Ctrl Mgmt Properties								
	Virtual Drive Management								
RAID Leve	RAID Level: RAID-1 PD per Span : NZA								
l í						1			
	74.1-	1-1 41-4 -11							
Secure V	drives be init	ided that all new ialized unless u	NIY Created Io	fical ting to					
	recreate a pre	vious configura	tion and recov	er data	as				
Data Pro	initialization	n is a destructiv	ve process.						
	Are you sure y	jou want to skip	initialzation	?					
	_								
Basic	Basic Size: OK Cancel								
Size:									
Name:									
F1-Heln F12-Ctlr									
norp rrd									



In this screen shot, you see that a New Virtual Drive with 2 Physical drives is sucessfully added.

Related Information

- http://www.cisco.com/c/dam/en/us/td/docs/unified_computing/ucs/3rdparty/lsi/erswug/guide/48712-00B_EmbMRAID_SWUG.pdf
- <u>Technical Support & Documentation Cisco Systems</u>