Smart Storage Administrator 陆崇 2017-12-31 发表

Gen10系列服务器有两种途径可以配置热备盘,第一种可以在BIOS中进行配置,第二种可以进入SSA中进行配置。

本文讲述如何在SSA中进行管理配置热备盘。

服务器重启后按F10进入到Intelligent Provisioning中:



选择Smart Storage Administrator选项

Intelligent Provisioning	
and the second	
Smart Storage Administrator	
Scripting Toolkit Windows PE 64 Bit Mode	

进入SSA中后先选择阵列卡,然后点击Configure选项开始配置阵列:



在SSA中配置热备盘有两种方式:

- 1: 配置阵列时一同配置热备盘。
- 2: 阵列配置完成后再进行添加热备盘。

## 首先进行第1种方式(配置阵列时一同配置热备盘):

点击Create Array选项:

Configure	C Refresh	HPE Smart Array P816I-a S	R Gen10			
Selected Controller	-	Embedded Slot				
HPE Smart Array P816i a Si Gen10 Extended Stot	R Act	ions		Status Messages		
Controller Devices	0	eate Array		00 40 80 80		
Logical Devices	Creat 80.8	ates an array from a group of selected p may is created, the unused space is av	hysical drives. Once allable for creating	View all status messages		
Blassing Designs	extst	sa unives. A rogical drive carried de crea 5.	ico criscus an array	<b>Controller Configuration</b>	Summa	ry
6 physical deves		eate Arrays with RAID 0		🖀 0 Data Array(s)		
Unassigned Drives	Com	le arms from a mun of selected rive	ind drivers. Each array	6 Unassigned Drive(s)		
G unissigned drives	LORA	ains exactly one physical drive and one	PAID 0 logical drive.	Viewmore details		
pols	M	anage Power Settings		P		
Cache Manager	Mod	fies the controller's power mode and e	nables or disables	Port Settings		
	surv be n	ival mode for supported controllers. An equired after changing power modes to	optimize power	Port 11: Mored Mode Port 21: Mored Mode		
	534	ngs and performance.		Port 31: Mixed Mode		
Encryption Manager	Se	t Bootable Logical Drive/Volume		Port 41: Mored Mode		
	Sets Locs liste drive	the primary and secondary boot lopica al logical drives as well as remote logic d for selection as primary and/or secon sivolumes for the controller.	i drives/volumes. al drives/volumes are dary boot logical			
	M	anage Device Identification LEDs				
	These	The short of the Ideal College I Price	00.000			

选择要配置阵列的硬盘后点击Create Array选项:



选择RAID级别后点击Create Logical Drives选项:



在该界面中可以点击Finish选项完成阵列配置,也可以点击Manger Spare Drivers选项添加热备盘。

Logical Drive was successfu	lly created. Please choose one of the actions below.	
Array Details		
Status	OK.	
Used Space	2514.9 GiB (100.0%)	
Total Usable Space	2.4 TiB	
Acceleration Mode	Independent: Caching can be enabled or disabled for each individual logical drive	
Logical Drives		
Logical Drive 1	1.64 TIB (1.80 TB)	
Physical Drives		
900 GB SAS HDD at Port 11 : Box	1 : Bay 9	
000 GB SAS HDD at Port 11: Box	1 : Bay 10	
900 GB SAS HDD at Port 11 Box	1 : Bay 11	
Device Path		
HPE Smart Array P408I-a SP Ger	10 in Embedded Slot	

在该界面中首先选择要添加的热备盘(可以选择一块硬盘做热备盘也可以选项多块硬盘做热备盘)。

HPE Smart Array P816I-a SR Gen10 > Manage Spare Drives		
<ul> <li>In a dual domain configuration, mixing single and dual ported SAS trives can lead to a loss of redundancy.</li> <li>To avoid wasting drive capacity, select physical drives that are same size as the existing drives in the array.</li> </ul>		Hide
pare Drive Type (where one)  Dedicated Spare Drives, Drives designated as spares can only be used as spare drives,  Auto Replace Drives, When activated, selected drives will automatically become part of the array  dd/Remove Spare Drives (where the)		
Sonthy Size ▼ All terms Ø SelectALE(2) 0 200 C0		
LASHED POT4(Box2(Bey2		
iested 2 cs.1.64.T#(1.80.T#)	Save	Cancel

然后在该界面中选项热备盘的类型:

**Dedicated (专用)** - 在更换发生故障的数据驱动器时,必须使用备用驱动器上的数据进行重建。在专用模式下,一个备用驱动器可以专用于多个阵列。

Auto-Replace Drives (自动更换驱动器)-发生故障的数据驱动器的备用驱动器自动变为更换数据驱动器。当更换备用驱动器时,数据驱动器不需要重建。在自动更换模式下,备用驱动器无法在阵列之间共享。



点击SAVE后出现阵列信息(能看到阵列的状态,热备盘的信息等):



点击Finish后完成配置,查看该阵列的具体信息:

onfigure	C Refresh	Logical Devices	Show All	~	Array A with	Spare - 1 Logical D
International Constraints of Constra		Exploredered           Processing         Processing (PR), France and Angel (PR	Show A		Acceleration Mark	Spare - 1 Logical C Spare

#### 查看热备盘信息:



# 第2种方式: 创建完阵列后再添加热备盘

首先创建一个Logical Drive,然点击Manager Spare Drivers选项。



选择热备盘的类型,再选择要添加的热备盘,点击SAVE选项。

Array A - 1 Logical Drive(s) Anage Spare Drives	
<ul> <li>In a dual domain configuration, mixing single and dual ported SAS drives can lead to a loss of redundancy.</li> <li>To avoid wasting drive capacity, select physical drives that are same size as the existing drives in the array.</li> </ul>	Hide
Spare Drive Type (www.es.ms	
Dedicated Spare Drives. Drives designated as spares can only be used as spare drives. Auto Replace Drives. When activated, selected drives will automatically become part of the array.	
dd/Remove Spare Drives (what's mec?)	
Group By Enclosure 🛩	
Internal Drive Cage at Port 2I : Box 3	
Seter All (1)     Seter A	
Internal Drive Cage at Port 41 : Nox 2	
Select AB(2)	
lected 2 ze 2.46 TB (2.70 TB)	Save Cancel

显示阵列信息,点击Finish选项可以完成添加热备盘配置,也可以选择Manage Spare Drives选项进行修改。

Array Details	
Lined Space	0% 2514 8 0/0 (100 0%)
Total Lisable Space	24.7.0
Spare Drive Type	Dedicated Spare Drives. Drives designated as spares can only be used as spare drives.
Acceleration Mode	Independent, Caching can be enabled or disabled for each individual logical drive
Logical Drives	
Logical Drive 1	1.64 TID (1.80 TD)
Physical Drives	
900 G8 SAS HDD at Port 21: Box 3: 8	Ray 3
900 GB SAS HDD at Port 21: Box 3: B	8ay 2
900 GB SAS HDD at Port 21 Box 3 : E	Bay 1.
Spare Drives	
	Nay 4
900 GB SAS HDD at Port 21: Box 3 : B	
900 GB SAS HDD at Port 21: Box 3: B 900 GB SAS HDD at Port 41: Box 2: B	Bay 1
900 GB SAS HDD at Port 21 - Box 3 - B 900 GB SAS HDD at Port 41 - Box 2 - B 900 GB SAS HDD at Port 41 - Box 2 - B	Bay L Hay 2

## 移除热备盘

如果热备盘添加完成后想移除热备盘,可以点击Manager Spare Drivers选项。



#### 移除掉一块热备盘或修改热备盘模式后点击SAVE选项。



#### 查看阵列信息中能看到目前只有两块热备盘:

<ul> <li>Spare configuration saved.</li> </ul>		
a spare comparant.		
Array Details		
Status	ok	
Jsed Space	2514.9 GIB (100.0%)	
lotal Usable Space	2.4 TID	
ipare Drive Type	Auto Replace Drives. When activated, selected drives will automatically become part of the array.	
icceleration Mode	Independent. Caching can be enabled or disabled for each individual logical drive	
Logical Drives		
ogical Drive 1	1.64 TIB (1.80 TB)	
Physical Drives		
900 GB SAS HDD at Port 21 - Box 3 - Bay 3		
900 GB SAS HDD at Port 21 : Box 3 : Bay 2		
900 GB SAS HDD at Port 21 · Box 3 · Bay 1		
Spare Drives		
900 GB SAS HDD at Port 41 Bex 2 : Bay 1		
000 GE SAS HDD at Port 41: Box 2 - Bay 2		
Device Path		
HPE Smart Array P816i-a SP Gen10 in Emb	edded Slot	
HPE Smart Array P816i-a SP Gen10 in Emb	edded Stot	
		_

点击FINISH后能看到该阵列卡中只有两块热备盘,另一块会出现在未使用的设备中。



- 1:在SSA中配置热备盘时,如果条件允许可以选择一块硬盘做热备盘也可以选择多块硬盘做热备盘。
- 2: 在添加热备盘时注意设置热备盘的模式 (dedicated模式和Auto-Replace Drives模式)。