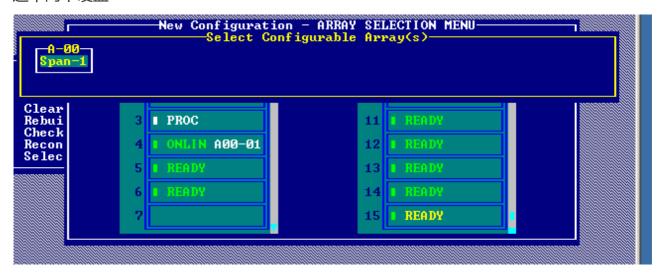
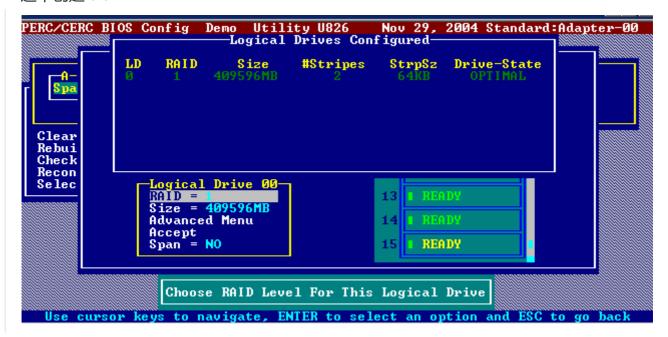
阵列实验报告

- 任务:运用两个模拟器 (Isi和raid interactive simulator4) 中分别创建raid1和raid5
- lsi模拟器(只能在win32系统中运行 eg:win server 2003中运行)
- 选中两个硬盘



• 选中创建raid 1

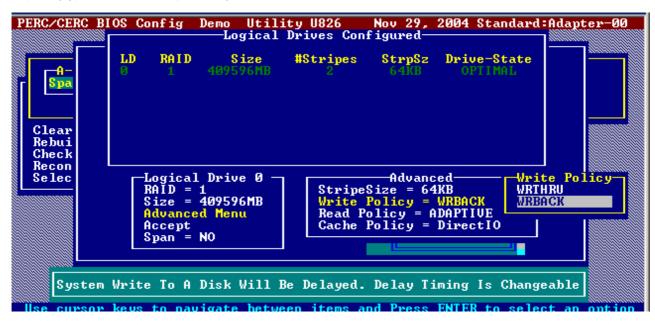


• 数据块默认选中64k

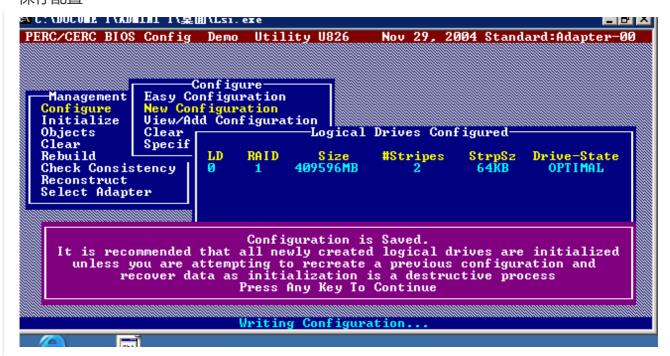
•

```
no Utility U826 Nov 29,
-Logical Drives Configured-
PERC/CERC BIOS Config
                                  Demo
                                                                               2004 Standard:Adapter-00
                          RAID
                                                                                 Drive-State
                   LD
                                                    #Stripes
                                                                    StrpSz
     Spa
  Clear
   Rebui
  Check
   Recon
  Selec
                       -Logical Drive 0 -
RAID = 1
Size = 409596MB
                                                                      Advanced<sup>.</sup>
                                                         StripeSize
                                                        Write Policy = WRBACK
Read Policy = ADAPTIVE
Cache Policy = DirectIO
                       Advanced Menu
                       Accept
                       Span = NO
                                           Change Stripe Size
```

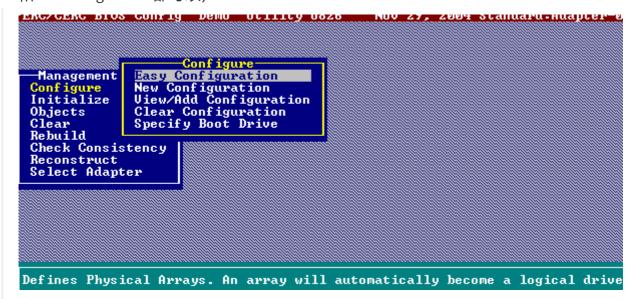
因为有阵列卡有电源所以写入策略选WRBACK



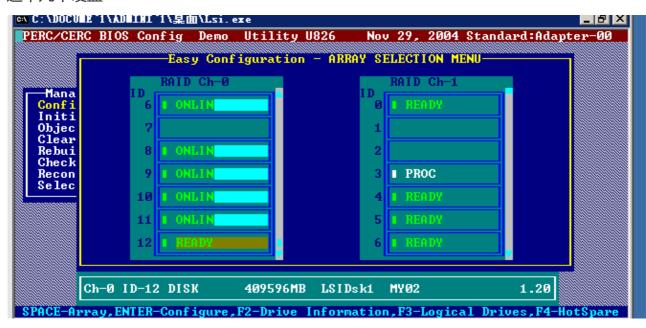
• 保存配置



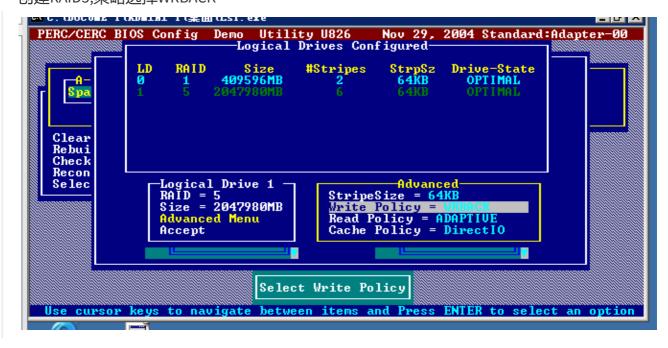
• 加入新阵列(不要选择new configuration,因为他会覆盖原来创建的阵列,easy configuration和add configuration都可以)



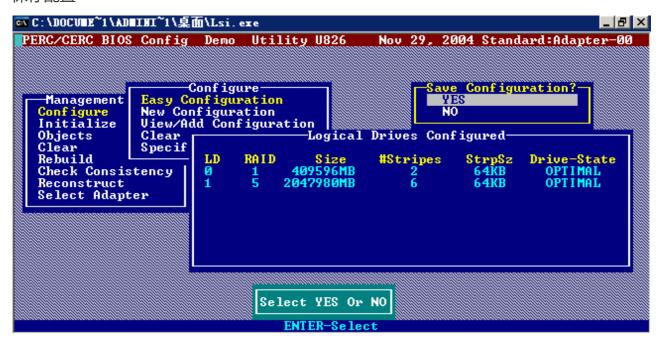
• 诜中几个硬盘



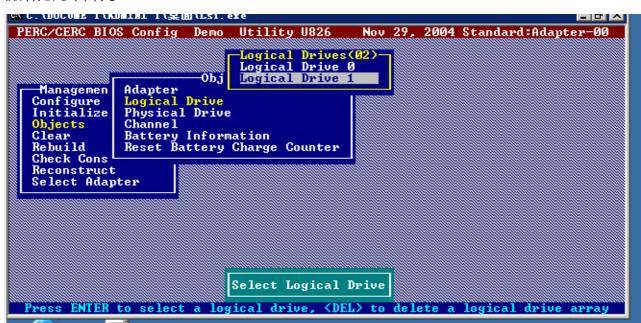
创建RAID5,策略选择WRBACK



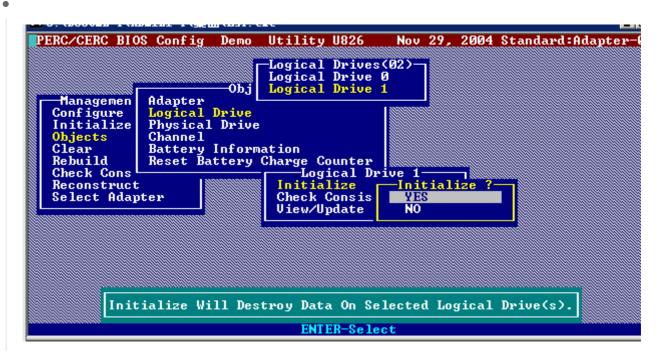
• 保存配置



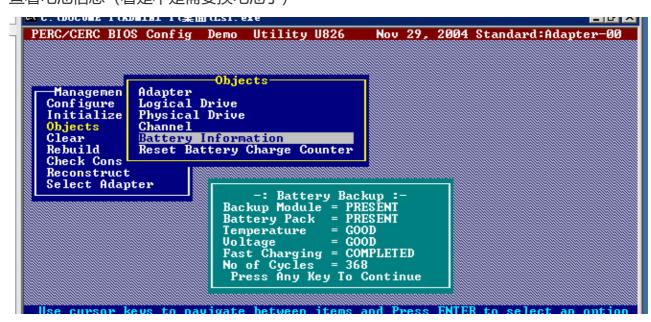
初始化两个阵列



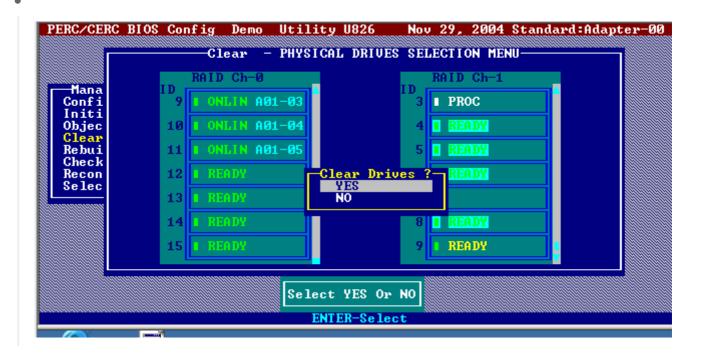
```
Utility U826
                                                              Nov 29, 2004 Standard:Adapter-00
PERC/CERC BIOS Config Demo
                                       -Logical Drives(02)
<mark>Logical Drive 0</mark>
Logical Drive 1
                                -0bj
                   Adapter
   -Managemen
  Configure
Initialize
Objects
                   Logical Drive
Physical Drive
                   Channe 1
                   Battery Information
Reset Battery Charge Counter
   Clear
   Rebuild
   Check Cons
                                             Logical
  Reconstruct
Select Adapter
                                         Initialize
                                         Check Consistency
View/Update Parameters
                                    Initialize Logical Drive
Use cursor keys to navigate between items and Press ENTER to select an option
```



查看电池信息(看是不是需要换电池了)



• 删除硬盘:



Clear - PHYSICAL DRIVES SELECTION MENU

Clear - PHYSICAL DRIVES SELECTION MENU

Clear Physical Drive Progress

Ch-1 Targ-05

14%

Ch-1 Targ-06

14%

Ch-1 Targ-08

14%

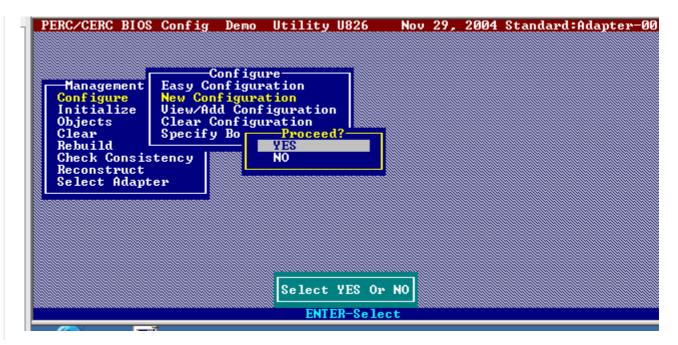
Ch-1 Targ-08

14%

Clear(write 0s) Physical Drive. Please Wait...

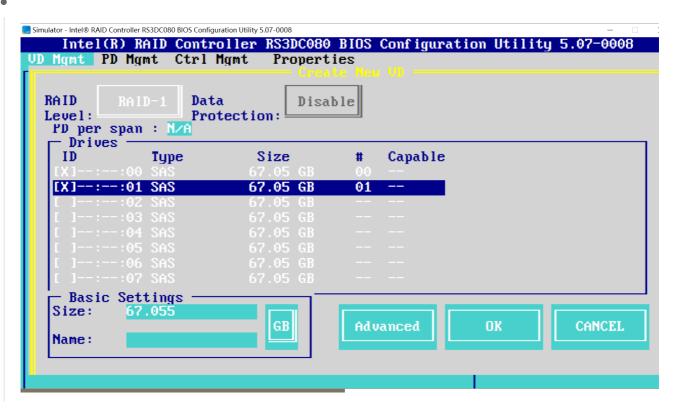
Clear Physical Drives in Progress. Press ESC to Abort...

创建新阵列

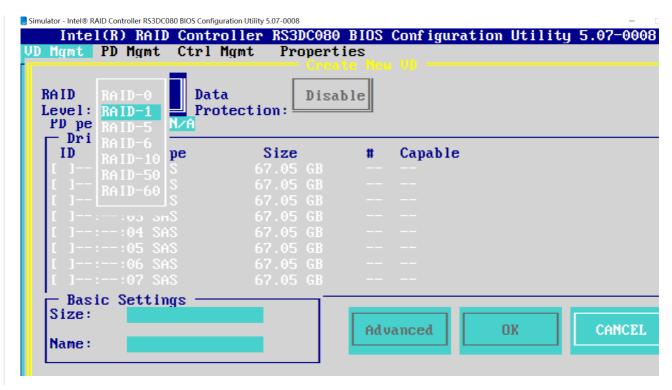


● RAIDInteractiveSimulator4模拟器(win10运行)

•



• 选中raid-1 (回车)

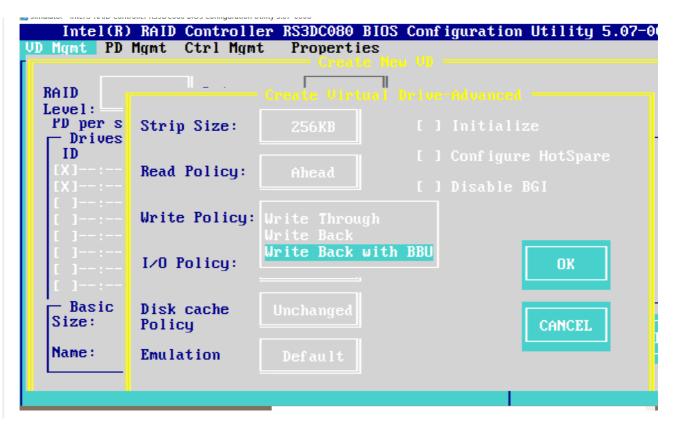


• 选中两个磁盘(空格)

RAID Data Disable Protection: ! Level: PD per span : N/A ·Drives · ID Size Capable Type # :04 Basic Settings Size: 67.055 OK GB Advanced vr_1 Name:

• 修改创建的阵列名

•



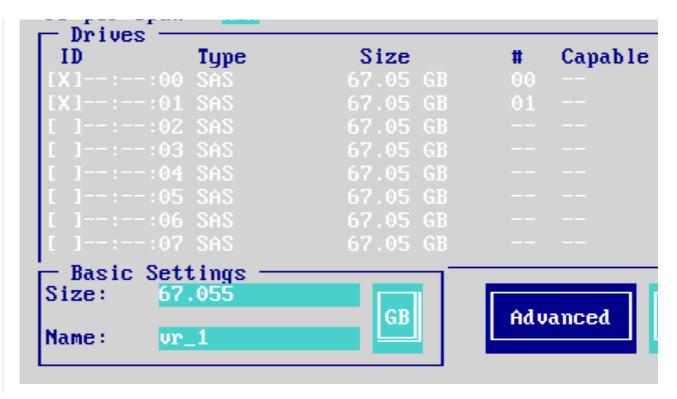
选择策略为WRITE BACH WITH BBU

Simulator - Intel® RAID Controller RS3DC080 BIOS Configuration Utility 5.07-0008

• 进入创建(回车)

> --:06: Ready: 67.05 GB --:07: Ready: 67.05 GB

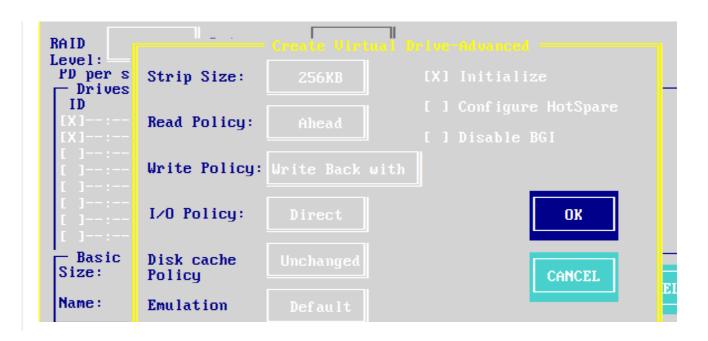
• 选择advance高级 (回车)



• 选中初始化 initialize

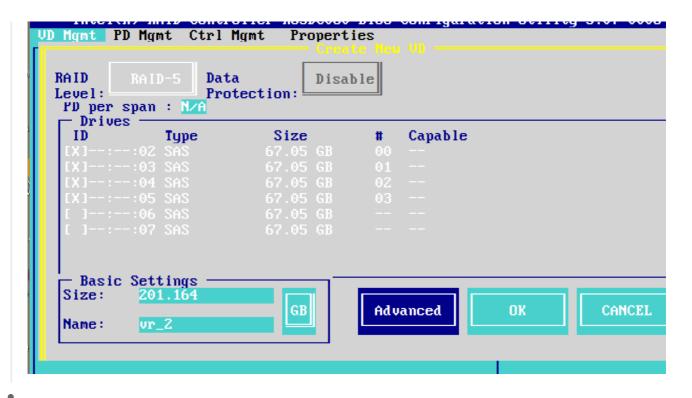
RAID Level: PD per s Drives Strip Size: [X] Initialize ID Read Pol Write Po I/O Poli Basic Disk cac OK CANCEL Size: Policu Name: Emulatio

• 两个ok退出即可完成创建一个raid 1



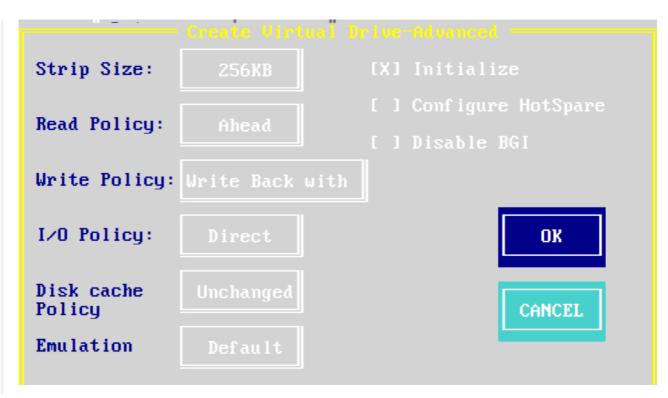
Data RAID Disable Protection: Level: PD per span : N∕A □ Drives ID Type Size # Capable .05 GB .05 GB .05 GB Basic Settings Size: 67.055 CANCEL GB Advanced OK vr_1 Name:

• 创建raid5选中4个硬盘,修改名字为vr_2



Level: Protection: Disabi PD per span : N/A · Drives -ID Size Capable Type # |---:--:02 SAS |--:--:03 SAS 67.05 GB 67.05 GB - Basic Settings -Size: 201.164 Advanced OK CAN GB vr_2 Name:

• 选择策略,初始化后, ok退出即可



可以看见下面有两个刚刚创建的阵列

```
|以有処 | 「四日内で」「「四川し」 | Curi | Ing|||し | Iroperties | Management | Virtual Drive | Management | A2 | Dev. 0x00)
[-] Intel(R) RAID Controller R(Bus 0x02, Dev 0x00)
   -[-] Drive Group: 0, RAID 1
      -[-]
             ID: 0, vr_1, 67.05 GB
       -[+]
       -[+] Available size: 0.00 B

- Hot spare drives
   [-] Drive Group: 1, RAID 5
         └─ ID: 1, vr_2, 201.16 GB
       -[+] Available size: 0.00 B
    [-] Unconfigured Drives
        - --:--:06: Ready: 67.05 GB
            :--:07: Ready: 67.05 GB
```

- ctrl +n 切换到pd mgmt选择项
- 可以查看硬盘的状态(空闲,选中)
- 可以看到01和00号硬盘属于阵列00 于阵列01

02和03和04和05号硬盘属 06和07号硬盘属于未被选择状态(空闲状态)

Intel(R) RAID Controller RS3DC080 BIOS Configurati

VD Mgmt PD Mgmt Ctrl Mgmt Properties

Drive Management

	lane				
Slot	Type	Capacity	State	DG	Vendor
::00	SAS	67.05 GB	Online	00	SEAGATE
::01	SAS	67.05 GB	Online	00	SEAGATE
::0Z	SAS	67.05 GB	Online	01	SEAGATE
::03	SAS	67.05 GB	Online	01	SEAGATE
::04	SAS	67.05 GB	Online	01	SEAGATE
::05	SAS	67.05 GB	Online	01	SEAGATE
::06	SAS	67.05 GB	UG		SEAGATE
::07	SAS	67.05 GB	UG		SEAGATE

properties选择项下可以查看很多配置信息

Simulator - Intel® RAID Controller RS3DC080 BIOS Configuration Utility 5.07-0008	- ⊔ ×
Intel(R) RAID Controller RS3DC080 BIOS Configuration Utility	y 5.07-0008
VD Mgmt PD Mgmt Ctrl Mgmt Properties	
Product Name : Intel(R) RAID Controller RS3DC080	
Controller Status : Optimal	
Serial No : SV35116036	
ROC Temperature : 43 Celsius	
Package : 24.6.0-0036 FW Version : 4.260.00-4046	
BIOS Version : 6.20.04.1_4.16.08.00_0x06090702	
Boot Block Version : 3.02.00.00-0001	
Battery status : Missing	
Security Capable : No	
Controller ID : 0 PCI Bus : 0x02	
PCI Bus : 0x02	
PCI Device : 0x00	
PCI Function : 0x00	
PCI Slot ID : 0x11	
Metadata Size : 512 MB	
Data Protection Support : Yes Data Protection Enabled : Yes	
Emergency Spare : Unconfigured Good & Global Hot Spare	
i Emergency Spare . Oncomingured dood a alobal not spare	