參數

* 1 block(node)=64 pages
* 1 pages=8 sectors
* 1 block=64 pages=64\*8 sectors
* 1 blkno=1 sector number(logical sector number)

Logical block number不一定照順序

Devno=device number

Ssdinfo=ssd information

Inbusno=inner bus number

Slotno=slot number

由指標所指的Logical node number（ptr->logical\_node\_num）=logical block number

physical\_node\_num=physical block number

Offset\_in\_node=physical\_node\_offset=physical block offset=當下寫入該block的第幾個page

Element=把它想成channel即可

Assert:檢查是否為true，是的話，什麼都不做，若為false，發出錯誤訊息

Cnt=number inner buses

Bcount=block count(要被傳輸的sector總數)

Blkno=sector number

* 1個sector number=512 byte

Ssd\_send \_event\_up\_path():獲得bus，使用bus\_delay來傳送event

Stat.waitingforbus:等待bus的時間

Stat.numbuswaits:等待的bus數量

Neverdisconnect: True…connect，false，disconnect

Channel\_activity: channel當下屬於運作狀態

Ssd\_media\_access\_request:當request來會先呼叫這個含式，他會判斷是哪種request(doing GC request or read/write request)

Apn(absolute page number):被上層layer 寫入的block number

Invoke\_element\_cleaning: read the black page to another channel

Addtoextraq(add to extra queue):重新分配even structure 讓它指向queue前端

Addtointq(add to intq):將event放到intq Queue中(先到先進)

Getfromextraq:取出disksim->extraq指向的event，如果是空的，就使用allocateextra()來建立一個

LBA=logical block address

LPN=logical page number

nelement=number of element

LRUSIZE=LB page count

Realloc:重新分配memory size

Bzero(s,n):將pointer s前n個char 清成0

Strdup(s):將pointer s的內容複製到其他pointer(長度要與s相同)

Rem=remaining

Cyl=cylinder

Serv=serving

Acc=access

Scount: sector count

Outstanding request=request not complete yet.

Number of disk=disk information->disk length

* ssd\_clean\_element\_complete：將busy的channel reset，然後重新activate
* ioqueue\_get\_reqoutstanding(elem->queue) == 0．．．沒人在工作
* ssd\_access\_complete\_element：做element完成後的後續工作（next even…）
* simtime=disksim內部時間，會一直變動
* ssd\_clean\_gang\_complete：將busy的gang進行cleaning，然後re-activate gang to server the next set of requests
* ssd\_get\_mapping：將HDD架構mapping到SSD
* ssd\_add：若無ssd資訊，就新增ssd資訊，若某個ssd是空的，則將當下的ssd新增進去，然後return ssd number，若ssd都是滿的，就清空最後一個ssd，將當下的ssd新增過去
* ssd\_print\_block\_lifetime\_distribution：求出remain lifetime, erase block count…資訊，然後印出
* XXX\_printstate：印出各種資訊
* Init\_buffer\_cache：初始化、根據不同locality(block striping ,page striping)，做出不同的初始設定