

SunFire V20z, SunOS 5.10, disc problem

Source: <http://unix.derkeiler.com/Newsgroups/comp.sys.sun.admin/2008-02/msg00020.html>

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Hi

I have a disk with a few bad blocks, and that should not be a big deal, but as I have several ways to solve my problem, and none of them seems very pleasingly to me, I would like your opinions...

Server:

HW: Sun Fire V20z

OS: Solaris 5.10 3/05

LSILogic disc volume (mirrored root)

Problem:

One side of mirror broke, the other side (the current) has read errors on some blocks.

Notes: SunOS 5.10 3/05 is pre-GRUB

The normal solution would be to reinstall server and redeploy application as the user data are on netapp/database-server, but I would do a lot of work to avoid deploying this application...

Another fair solution would be to reinstall the server and restore application – but we threw away our installer a bit too early, so we would need to setup an installer for this purpose only, and that would be a hazle!

I assume that we can't rebuild the mirror, because it has read-errors.

I assume fsck can't do the job, as the repairing needs to be done on the physical disc and not on the virtual disc that solaris sees.

Now is time to ask for your qualified ideas?

And then I continue with my possible solution (please feel free to interupt at any time):

I would boot from the net, perform dd to rescue the blocks, inclusive

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Master Boot Record et al. and finally dd to a blank disk (hopefully without errors). That ought to leave me with a bootable system, of course with a few missing files, as they would fail to be read from the corrupt disc, but that is only a few files, and they could easily be recovered from backup.

Does this sound like a possible solution?

If so, I need some pointers to block sizes and starting points of what to dd...

Hope that you can help me...

Thanks
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ps:
Here are some basics:

```
fdisk /dev/rdisk/c1t0d0p0
Total disk size is 8941 cylinders
Cylinder size is 16065 (512 byte) blocks
Cylinders
Partition Status Type Start End Length %
1 Active Solaris2 1 8940 8940 100
```

```
format:
0. c1t0d0 <DEFAULT cyl 8938 alt 2 hd 255 sec 63>
/pci@0,0/pci1022,7450@a/pci17c2,10@4/sd@0,0
Total disk cylinders available: 8938 + 2 (reserved cylinders)
Part Tag Flag Cylinders Size Blocks
0 root wm 515 - 1789 9.77GB (1275/0/0) 20482875
1 swap wu 1 - 514 3.94GB (514/0/0) 8257410
2 backup wm 0 - 8937 68.47GB (8938/0/0) 143588970
3 unassigned wm 0 0 (0/0/0) 0
4 unassigned wm 1790 - 3064 9.77GB (1275/0/0) 20482875
5 unassigned wm 3065 - 4977 14.65GB (1913/0/0) 30732345
6 unassigned wm 4978 - 8935 30.32GB (3958/0/0) 63585270
7 unassigned wm 8936 - 8937 15.69MB (2/0/0) 32130
8 boot wu 0 - 0 7.84MB (1/0/0) 16065
9 unassigned wm 0 0 (0/0/0) 0
```

And from our console log (something like):
Searching for device at HBA 0, ID 0, LUN 0
Drive 0 on adapter 0 is predicting a future failure
The sense qualifer is 12h

HBA ID LUN VENDOR PRODUCT REV SYNC WIDE CAPACITY.

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0 0 0 LSIL GIC 1030 IM. IM 1000 16 73547 MB.
0 7 0 LSILogic LSI1030[402] 1032920 320.0 16
LSI Logic Corp. MPT boot ROM successfully installed!