

## Re: Software RAID 0 and linux 2.6.8.1

**Source:** <http://linux.derkeiler.com/Mailing-Lists/Debian/2004-10/0529.html>

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**Date:** 10/05/04

Date: Tue, 5 Oct 2004 14:05:27 -0700 (PDT)

To: Niels <[nls404@xs4all.nl](mailto:nls404@xs4all.nl)>

hi ya

On Tue, 5 Oct 2004, Niels wrote:

- > *Promise Netherlands told me today that the kernel 2.6.x.x drivers*
- > *probably come next year. On a dutch forum they told me (2 secs ago) that*
- > *the name of a non-true hardware controller is a firmware controller.*

dependin on your ideas/view...

hw raid from promise is okay... its cheap .. but.. ymmv

but, none of the onboard ( motherboard-based bios) raid stuff works

( "works" is you unply any disk at anytime and you do not need ( to do anything to recover the system and no data loss

hardware raid controllers

<http://1U-Raid5.net/HW>

3ware is okay ..but is \$300 - \$500+ depending on which one

( for that price you can have redundant disks, redundant ( motherboard, redundant cpu, redundant power supply, ( redundant nic, redundant fan ...

- > *>Seems like my confusion between you saying "software" and "hardware"*
- > *>controller is, as Paolo was saying, the Promise FastTrak isn't a "true"*
- > *>hardware controller apparently.*

all hardware raid controllers has its own microcontroller and firmware

- > *It still requires some software, ie.*
- > *>kernel module, on the software side to operate.*

all hardware controllers ( raid or not ) need a linux driver

> *This is, however,*  
> *>coNSIDerably faster than using strictly software RAID where no card is*  
> *>needed at all. From the description of your system, however, this*  
> *>wouldn't appear to be a problem.*

whether hw or sw raid is faster would depend on your test setup  
and your software you use

"test sw" is not the same as real world applications doing its normal  
workload w/ random "do this now for me cpu interrupts"

> >>*I shall explain my choises. I really want to buy a RAID 0 (striping)*  
> >>*controller, because my current haddisk is the bottleneck in my current*  
> >>*system. I have a dual XP–M 2800+ with 1Gbit NIC and 1GB memory. I have*  
> >>*read enough about RAID 0. I really want it! I know that it is not safe,*  
> >>*but I can backup my data.*

if the disk is a bottle neck...

– use one ide disk per cable

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– NEVER ever put cdrom ( ata–33 ) on the same ide cable as a  
disk drive ( ata–100, ata–133 )

– use disk with 8MB buffers instead of the old fashion 2mb

– some botherboards can sustain 40MByte/sec disk transfers...  
while the same disk with different motherboard can sustain  
a measly 20MB/sec ....

( tar cf sourceDisk | ( /mnt/targetDisk; tar xvfp – )

where both disk on the same motherboard

( remember the disks are marketed at 100Mb/sec or 133Mbyte/sec  
( or 320MB/sec for scsi...

> >>*I buy a software RAID controller because the price difference between a*  
> >>*software RAID SATA controller and a SATA controller is < i;½10,–*

you do NOT need to buy anything for sw raid ...

– its all in the /etc/raidtab file and sw raid is in the linux  
kernel

you might need to buy a \$10 or \$20 generic IDE controller so you can have  
one disk per ide cable ...

– one disk per ide cable is critical

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> >> *The adress you gave me was wrong,*

> >> *<http://www.1U-Raid5.net/HowTO/SW-Raid-HOWTO.txt> this one is correct.*

oopps... thanx for the \_ vs -

c ya

alvin