Subject: Re: Building my own PC

Posted by Zion on Mon, 22 Feb 2010 09:43:04 GMT

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May have already been mentioned, but...

Instead of going for one, big, slow 1TB hard drive, why not go for two quick 500gb hard drives in a RAID0/1 array? (depending on speed or reliability you want)

Not only will this increase read/write speeds (not physically), but it'll also be less weight for the motor to spin, which increases the lifetime of your drives. Plus if something goes horribly wrong (in a RAID1/5 arrays only) you can easily replace the drive and rebuild your data on it.

The motherboard you've got (which is the model under the one i've just bought for an i7 machine) has a RAID controller instead of a Southbridge, which makes it fantastic for doing lots of things at once. It even supports multiple RAID arrays for that added durability.

My configuration is two 200gb drives in a RAID0 array for speed with my OS on it and other programs that need to be accessed quickly, and two 750gb drives in a RAID1 array for data that i don't really want to loose.

Bare in mind when using RAID systems though, RAID is not recognised by the OS as individual drives. In a RAID0 array (using mine as an example), two 200gb drives will show in the OS as one 400gb drive, whereas two 750gb drives in RAID1 does not show as 1.5tb of drive space, but only 750gb. RAID1 is a mirror RAID method which will write data to one drive, and copy it to the other, so if one fails you have the other to rely on. RAID0 on the other hand will write data to both drives depending on the byte size you define in the RAID setup. The only negative to this is if you loose one drive due to drive failure, you've lost all the data on that drive and it cannot be rebuilt.

In short:

Go for RAID arrays with multiple drives for speed, instead of space with one drive which is slow.