Subject: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by DarkKnight on Wed, 10 Jun 2009 21:41:16 GMT
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I need to reinstall windows xp pro on my pc but I have a Raid setup. I'm researching if it's better for me to keep the Raid or split the drives. At work I've asked a few in our tech department and I get mixed answers.

I know theirs a lot here who have strong technical knowledge and would like to know your opinion.

The hard drives are 270 Gbs. Which setup would be faster? Which better to do? Please state why with your answer.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by Gen_Blacky on Wed, 10 Jun 2009 23:04:49 GMT
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I don't like raid because if one drives fails it corrupts everything. But that depends what kind of raid you want to use.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by cmatt42 on Thu, 11 Jun 2009 01:12:13 GMT
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If you've only got two drives and they were setup in RAID 0, just split them up. Put your OS on one drive, and setup the page file on the other.

If you're gaming (which I'll assume you're going to be for obvious reasons), put the games on the OS drive as well. They'll load quickly, and if a drive fails, you won't lose too much data as per Gen_Blacky's concerns.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by nikki6ixx on Thu, 11 Jun 2009 01:19:54 GMT
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I'm of the mind that using a RAID 0 setup with just two drives is too much of a gamble, given that when it comes to performance, unless you're hardcore, the benefits aren't really that high.

Sure loading programs a bit faster is nice, but if one drive goes to hell, any 'time savings' from RAID 0 will be wiped out by one or two days' hassle of trying to recover data, and get everything back into working condition.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by DarkKnight on Thu, 11 Jun 2009 01:43:12 GMT
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thats the problem. i got a virus and killed it but now my pc boots on its own. It comes up to load windows and then crashes and gets caught in a loop. I have to put a recovery cd in just to get windows back up.

I've already backed most things. just need to back up my maps then I'm good to go.

Think I'll split the drives.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by EvilWhiteDragon on Thu, 11 Jun 2009 11:02:53 GMT
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Darkknight wrote on Thu, 11 June 2009 03:43thats the problem. i got a virus and killed it but now my pc boots on its own. It comes up to load windows and then crashes and gets caught in a loop. I have to put a recovery cd in just to get windows back up.

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Think I'll split the drives.
If you regularly backup to a disk other than your RAID 0 array, you should be fine. I myself got a 2x 1TB RAID 0 array for data + backups and a 250GB disk for windows install + games + documents.
I do notice a great speed increase whenever I run something of the 2 TB array. The sustained transfer speed is around 200 MB/s on the RAID array and about 80 MB/s on my single 250 GB disk.

I'm also planning to get 2 60GB OCZ vertexes or 2 Intel X25M disks and put those in RAID 0 for maximum performance. Ofcourse, since it will contain my documents and such (important shit, not movies/music) I will backup it to my 2 TB array.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by jnz on Thu, 11 Jun 2009 12:25:28 GMT
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If you have a good, stable power supply. That is not too big or too small for your system (yes, it can be too big). Rather than these cheap makes. Also a good make of hard disk, such as western digital. You can hardly worry about it breaking down before you need to wipe everything off anyway.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?

Posted by CarrierII on Thu, 11 Jun 2009 17:13:56 GMT
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I found some cheap hard disks so I just went RAID 0 + 1 (AKA RAID 10)

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by cmatt42 on Thu, 11 Jun 2009 18:35:10 GMT
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0+1 isn't 10; there is a difference.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by DarkKnight on Thu, 11 Jun 2009 23:33:50 GMT
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ok here's my new problem.

Been googling my ass off. how do you split a raid???

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by Speedy059 on Fri, 12 Jun 2009 00:45:12 GMT
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Just stick with Raid 1 if you have two hard drives. It's pointless to do Raid 0 for your personal computer. You wont know the difference from Raid 1 and Raid 0 if it's your personal computer. Raid 0/10 is only beneficial for webservers and database servers when you have 1000's of queries going on.

People who use Raid 0 on their personal computer are doing it to satisfy their psychological mindset that they will see a big speed increase on Raid 0.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by DarkKnight on Sat, 13 Jun 2009 04:09:22 GMT
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well its to late. couldnt find the right drivers so i just split the drives. i got everything installed on it and its working great except for one minor issue, something is wrong with my renegade install cds.

I'm going to make a new thread for that.

Thanks for the help everyone

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by EvilWhiteDragon on Sat, 13 Jun 2009 15:21:19 GMT
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Speedy059 wrote on Fri, 12 June 2009 02:45Just stick with Raid 1 if you have two hard drives. It's pointless to do Raid 0 for your personal computer. You wont know the difference from Raid 1 and Raid 0 if it's your personal computer. Raid 0/10 is only beneficial for webservers and database servers when you have 1000's of queries going on.

People who use Raid 0 on their personal computer are doing it to satisfy their psychological mindset that they will see a big speed increase on Raid 0.
RAID 1 is THE MOST OVERRATED RAID LEVEL. Simply because it *looks* like a form of backup, while it actually is not. As assoon a virus removes/damages your file, it will do so on both disks. RAID 1 only protects you from 1 disk dying. Which from my experiance doesnt happen often, and if it is dying, SMART will usually give an error.

The advantage of RAID 0 is that you'll get increased sustained read/writes, and a possible average lower seektime (with multiple IO).

Idealy you would run RAID 5 or RAID 6. RAID 5 can be done with just 3 disks, and will give you a 1/3 loss of total diskspace, but 1 disk can drop out of the array without problems.
RAID 6 would give you the speed benefits of RAID 0, but with the same level of redundancy as RAID 1. Minimum amount of disks is 4. You'll lose 50% of the total diskspace, but you can also lose 2 disks without losing data.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by Speedy059 on Tue, 16 Jun 2009 08:42:43 GMT
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EvilWhiteDragon wrote on Sat, 13 June 2009 11:21
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Yes that is correct, Raid 1 will not protect against viruses or anything else that is similar to it. It only protects from hard drive failure.

I'm unsure that Raid 0 will increase your seek time since the hard drives are still going the same speed. But it can transfer files quicker....

Idealy you are wasting your time and resources going for Raid 5+ when for a personal computer. Any important information should be backed up remotely, not locally. I honestly haven't had much lucky with raid systems as it's always something else that ruins your data like what you mentioned earlier.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by EvilWhiteDragon on Tue, 16 Jun 2009 10:50:52 GMT
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With RAID 0 you can get lower access times in an ideal situation.
That means 2+ I/O running, and both needing information on a different disk. Normally you would have an average of twice your normal seek time so say 20 ms. With 2 disk having to run 2 I/O it would be around 10ms for each I/O.

However, it has to be noted that currently the difference will be lower thanks to NCQ/ TCQ. This allows the HDD to work more efficiently in regard to seeking files.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by DarkKnight on Tue, 16 Jun 2009 21:34:58 GMT
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well i ended up splitting the drives. putting all my downloaded content on the opposite drive of my windows. I'm only putting paid for software on the one with my windows xp.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?
Posted by Speedy059 on Tue, 16 Jun 2009 22:07:56 GMT
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The reason I like Raid 1 isn't just for the redundant disks, but with the higher end Raid cards it will grab files from both hard drives at the same time. As oppose to Raid 0 the data is stripped across the hard drives and can only 1 file at a time. Raid 1 can multi-task and read off of both hard drives for different files. Writting will be slower, but reading will be slightly faster.

I guess I'm just biased and don't like Raid 0 unless it's associated with Raid 1 in a Raid 10 setup. Seen to many issues with Raid 0 with web servers and database servers that I manage.

Subject: Re: R.A.I.D. Questions? Should I split it or keep it as one?

Posted by EvilWhiteDragon on Wed, 17 Jun 2009 17:25:17 GMT

Speedy059 wrote on Wed, 17 June 2009 00:07The reason I like Raid 1 isn't just for the redundant disks, but with the higher end Raid cards it will grab files from both hard drives at the same time. As oppose to Raid 0 the data is stripped across the hard drives and can only 1 file at a time. Raid 1 can multi-task and read off of both hard drives for different files. Writting will be slower, but reading will be slightly faster.

I guess I'm just biased and don't like Raid 0 unless it's associated with Raid 1 in a Raid 10 setup. Seen to many issues with Raid 0 with web servers and database servers that I manage.
Well, from my experiance RAID 0 is OK, and certainly has more than decent performance, the only drawback is that if one drive crashes all data will be lost. But then again, you should keep backups at all times.