Re: RAID options

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From: SuperGumby [SBS MVP] (*not_at_your.nellie*)
Date: 11/25/04

Date: Fri, 26 Nov 2004 08:16:38 +1100

There's a reason I didn't suggest that.

The idea of running two mirrors would be that in a significant upgrade scenario you can yank the two partners and use them as fallback should things go pear shaped. This is not normally supported with RAID10, 0+1, 1+0 (whichever). This would also be my motivation for the additional drives, I'd have OS and programs on the mirror and DATA on the RAID5, pull mirror partner, apply update/upgrade, if it goes well sync drives, if it don't, fallback.

Though I'm a great proponent of having sufficient HDD IO for SBS I believe there will be little difference between accessing the array as RAID10 and having access split between two RAID1 arrays.

Just in case I wasn't understood. I'd consider the 3*73+hotspare not only acceptable but darn fine.

There is another point to consider about using more drives. Just how the hey are you gonna back it up? People will use as much space as you give them, mostly they don't need all of it but if there's room they will fill it.
You've reminded me about a thought I was going to toss around the other MVP's, if anything significant comes of it it should filter through to the group.

"Dirk−Thomas Brown" <youhadtoask@hotmail.com> wrote in message news:uU2lTwy0EHA.3500@TK2MSFTNGP09.phx.gbl...
> You could also take the two independent RAID 1 's you created as SuperGumby
> mentioned, then go back and strip the two RAID 1's arrays for more
> performance.
>
> Dirk−Thomas
>
> "SuperGumby [SBS MVP]" <not@your.nellie> wrote in message
> news:uURfc5u0EHA.2540@TK2MSFTNGP09.phx.gbl...
> > if you have 4 HDD's you should configure them as a RAID5 array with
> > hotspare.

> >
> > ie. 3*73 in RAID5, 146GB usable, plus hotspare.
> >
> > A valid alternative would be to configure the drives as two independent
> > RAID1 arrays. The usable space is still 146GB but you have no spare.
> >
> > Though SBS is IO intensive performance of the array should not be your
> > primary concern. I would consider the RAID5 as adequate.
> >
> > If the budget allows an additional two drives you're on easy street. Run
> > two
> > as a RAID1 mirror (73GB usable, divided into ~20 for the OS and 'rest'
for
> > whatever purpose). Use three in a RAID5 array for DATA. Use the 6th HDD
as
> > a
> > hotspare for either array.
> >
> > 'rest' could possibly contain your Exchange and Sharepoint databases.
I'm
> > not suggesting this is in any way an 'optimal' idea though.
> >
> >
> > "mthornal" <noone@nodomain.net> wrote in message
> > news:OnNUodt0EHA.1392@TK2MSFTNGP14.phx.gbl...
> >> I was wondering if anyone could offer some guidance in how best to
> > configure
> >> the RAID arrays on a new server that will be built to run Windows SBS
> > 2003.
> >> The motherboard (Intel SE7501BR2) has a single Ultra 320 SCSI channel
and
> >> there is a hardware RAID controller (Intel SRCZCR) plugged into the
> >> motherboard that uses this channel. The configuration options on the
> >> RAID
> >> card are pretty comprehensive and I think will enable me to configure
the
> >> drives into any number of RAID configurations. The chassis (Intel
> >> SC5200HSRP) can be configured with up to a total of 10 SCSI disks in 2
> >> hot
> >> swap cages all driven from the single SCSI channel although currently
we
> >> have only 1 cage with 4 73GB disks.
> >>
> >> Initially I was going to simply configure the 4 73GB (10k rpm) disks we
> > have
> >> into a single RAID 5 array. Although now I'm thinking that that isn't
> > going
> >> to provide the storage capacity that we need and hence if I'm going to
> > need
> >> to buy some more disks which should I buy and how should I configure
> >> them.

> >> *Performance is the priority and if this is likely to be significantly*
> > *better*
> >> *by using a RAID 1 pair for the OS and then a RAID 5 set for the other*
> > *files*
> >> *even though there is only a single SCSI channel then I would certainly*
> >> *consider that.*
> >>
> >> *The other thing to consider is that on the boot host disk there needs*
to
> > *be*
> >> *a non NTFS service partition for motherboard maintenance therefore this*
> > *disk*
> >> *would need to be a basic disk. If a second host disk was configured as*
a
> >> *RAID 5 array then this disk could be a NTFS dynamic disk and as our*
> > *storage*
> >> *requirements grew new physical disks could be added to the array to*
> > *increase*
> >> *capacity and the dynamic disk could just be extended (at least that's*
the
> >> *theory).*
> >>
> >> *Any thoughts would be appreciated.*
> >>
> >> *Thanks,*
> >> *M.*
> >>
> >>
> >
> >
>
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