

Re: SATA RAID 5 Performance

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From: Greg Linwood (g_linwood@hotmai.com)

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RAID5 certainly isn't designed to perform write operations as fast as RAID1+0, but then again writes aren't written transactionally to disk on data volumes (lazy writes) which often mitigates this significantly, assuming there is a relatively large amount of memory available. RAID5 is a poor choice for Log files, but not always a bad choice for Data files. Sure, if you can throw half of your disks at mirroring, RAID1+0 is the way to go, but RAID5 often cuts the mustard for many small to mid range transaction processing systems.

Regards,
Greg Linwood
SQL Server MVP

"David G." <david_nospam@nospam.com> wrote in message
news:OK0WIS6jEHA.3724@TK2MSFTNGP11.phx.gbl...

> *Lucas Tam wrote:*

>> *Hi all,*

>>

>> *I'm in the process of researching a fast disk array for our new*

>> *database server.*

>>

>> *I've been looking at SATA RAID 5. I found a review on Tom's Hardware:*

>>

>>

> <http://www20.tomshardware.com/storage/20040831/sata-raid-controller-18.html>

>>

>> *A 12 Disk RAID 5 array is only able to handle 6MB/S?! Is that number*

>> *correct... I believe they're using IOMeter.*

>>

>> *Assuming I have 6 – 12 fast disks, what type of performance should I*

>> *expect from a RAID 5 array? Are there any RAID vendors I should look*

>> *at in particular?*

>>

>> *Thanks.*

>

> *RAID 5 has the worst write performance of all RAID options. I don't know*

> *what figures you read or how they compare to other ATA or SATA*

> *implementations, but you should know that if your databases are highly*
> *transactional, then a RAID 5 solution may not be the best choice. You*
> *may want to purchase a RAID1+0 solution. Even so, you'll likely want*
> *your OS, Log files, and tempdb on mirrored drives because of their*
> *increased write performance.*
>
> *In my experience most RAID 5 arrays have far less than 12 disks. Most I*
> *have seen use 5 per array.*
>
>
> --
> *David G.*
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