

Re: 20TB Storage System (fsck????)

Source: <http://unix.derkeiler.com/Mailing-Lists/FreeBSD/performance/2003-09/0023.html>

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To: Max Clark <max.clark@media.net>

Max Clark wrote:

> *Ohh, that's an interesting snag. I was under the impression that 5.x w/ PAE*
> *could address more than 4GB of Ram.*

>

>

It does. However as long as a pointer is 32 bits, your address space for a process is maxed out at 4G which translates to about 2.5G user after kernel and other things have taken their toll.

> *If fsck requires 700K for each 1GB of Disk, we are talking about 7GB of Ram*
> *for 10TB of disk. Is this correct? Will PAE not function correctly to give*
> *me 8GB of Ram? To check 10TB of disk?*

>

PAE functions correctly but does not provide for 7G address space.

> *Is there anyway to bypass this requirement and split fsck into smaller*
> *chunks? Being able to fsck my disk is kinda important.*

>

>

Yes, you do that by splitting up the filesystem to smaller filesystems.
Kind of obvious?

> *I have zero experience with either itanium or opteron. What is the current*
> *status of support for these processors in FreeBSD? What would the preferred*
> *CPU be? Will there be PCI cards that I would not be able to use in either of*
> *these systems?*

>

>

I'm personally biased towards the Opteron, but that's more based on that it makes more sense than their technical merits so far (because neither has too much).

Both CPU's should work fine with 5.2 according to the TODO list.

freebsd-performance: Re: 20TB Storage System (fsck????)

Meanwhile I suggest
you play with the number of inodes on the 10TB filesystem and see how
that affects
the memory usage.

Pete

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<http://lists.freebsd.org/mailman/listinfo/freebsd-performance>

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