Subject: Simultaneous write on textfile over NFS Posted by Johannes Korn on Wed, 10 Feb 2010 09:29:10 GMT

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Hi,

I often run idl programs which utilize only one CPU core (for loops). The output is a text line appended to a file.

To exploit a multicore I run multiple instances with different parameter setups. The output goes to different files. After all jobs are completed I manually merge the files.

This ways I have to keep track which file contains what output and so on.

My question, what happens if I use the same output file for all jobs. Is it save?

This means every job would write about every 15 seconds a line like that.

OPENW, u, 'file.txt', /GET\_LUN, WIDTH=250, /APPEND printf, a, b, c
FREE LUN,u

What if two write accesses collide? Will the file be corrupted? Will there be an error? Will the second job wait until the first one has closed the file?

Filesystem is NFS.

Regards,

**Johannes** 

Subject: Re: Simultaneous write on textfile over NFS Posted by R.Bauer on Wed, 10 Feb 2010 15:04:20 GMT

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Johannes Korn schrieb:

> Hi,

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- > setups. The output goes to different files. After all jobs are completed
- > I manually merge the files.
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>
> My question, what happens if I use the same output file for all jobs. Is
> it save?
No
you need one processor which serializes your output and which takes care
on the order.
May be read a bit about mpi / openmp
cheers
Reimar
> This means every job would write about every 15 seconds a line like that.
> OPENW, u, 'file.txt', /GET_LUN, WIDTH=250, /APPEND
> printf, a, b, c
> FREE_LUN,u
> What if two write accesses collide? Will the file be corrupted? Will
> there be an error? Will the second job wait until the first one has
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> Filesystem is NFS.
> Regards,
```

> Johannes