Subject: Re: [PATCH 01/11] sysfs: Support for preventing unmounts.
Posted by Benjamin Thery on Thu, 19 Jun 2008 08:54:49 GMT
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Eric W. Biederman wrote:
> Dave Hansen <dave@linux.vnet.ibm.com> writes:
>
>> On Wed, 2008-06-18 at 19:07 +0200, Benjamin Thery wrote:
>>> To support mounting multiple instances of sysfs occassionally I
>>> need to walk through all of the currently present sysfs super blocks.
>> I know you may have addressed this before, but I forgot and it didn't
>> make it into the changelogs.
>>
>> Why are you doing this again? It seems like an awfully blunt
>> instrument.
>
> So the fundamentals.
> - The data in sysfs fundamentally changes behind the back of the
>   VFS and we need to keep the VFS in sync. Essentially this is the
>   distributed filesystem problem.
>
> - In particular for sysfs_rename and sysfs_move_dir we need to support finding
>   the dcache entries and calling d_move. So that the dcache does not
>   get into an inconsistent state. Timeouts and invalidates like NFS
>   uses are to be avoided if at all possible.
>
> - Coming through the vfs we are guaranteed that the filesystem will
>   not be unmounted while we have a reference on a dentry, and with
>   multiple mounts we do not get that guarantee. Therefore to get that
>   guarantee for all of the superblocks we need the blunt instrument.
>
> - Since mount/unmount are rare blocking them is no big deal.
>
> I believe any distributed filesystem that is together enough to tell
> us about renames (so we can update the dcache) instead of doing the
> NFS timeout will need the ability to block mount/unmount while it is
> executing d_move.
>
> Currently sysfs does not need to block mounts only because we perform
> an internal mount and then never unmount sysfs.

Thanks Eric for detailing this.
I think you explained it in much better way than I could do.
You're the author of the patch after all ;-)

  Benjamin

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> Eric
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>

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