Subject: Re: [PATCHSET 3/4] sysfs: divorce sysfs from kobject and driver model
Posted by Greg KH on Tue, 09 Oct 2007 22:51:39 GMT

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On Fri, Oct 05, 2007 at 06:12:41AM -0600, Eric W. Biederman wrote:
> Greg KH <greg@kroah.com> writes:
> >
> >>   Also fun is that the dev file implementation needs to be able to
> >>   report different major:minor numbers based on which mount of
> >>   sysfs we are dealing with.
> >
> > Um, no, that's not going to happen. /dev/sda will _always_ have the
> > same major:minor number, as defined by the LSB spec. You can not break
> > that at all. So while you might not want to show all mounts
> > /sys/devices/block/sda/ the ones that you do, will all have the LSB
> > defined major:minor number assigned to it.
> >
> Hmm. If that is in the LSB it must come from
> Documentation/devices.txt

Yes, that is the requirement.

> I'm not after changing the user visible major/minor assignments.

Oh, I misunderstood what you wrote above then.

> Let me see if a concrete example will help. Suppose I have
> have a SAN with two disks: disk-1 and disk-2. I have
> two machines A and B. On machine A I get the mapping:
> sda -> disk-1, sdb ->disk-2. On machine B I wind up with
> a different probe order so I get the mapping: sda -> disk-2
> sdb ->disk-1.

Ok.

> To be very clear by sda I mean the block device with major 8 and
> minor 0, and by sdb I mean the block device with major 8 and minor
> 16.

Ok.

> So I decide I want an environment on machine B that looks just
> like the environment on machine A, so I can bring transfer over
> a running program or whatever. So I run around looking at UUID
> labels and what not and I discover that the machine B knows disk-1 as
> sdb and that machine A knows disk-1 as sda. So I want to say:
> /sys/devices/block/sdb show up in this other device namespace as
> /sys/devices/block/sda.

Ah, but if you do that then the "other" device namespace would have
/sys/devices/block/sda/dev be 8:16, right? And that is not valid as sda
for that namespace must always map to the device with a 8:0 major:minor
as per the LSB spec.

So, no, that's not going to be allowed, sorry.

thanks,

greg k-h