
Subject: Re: [PATCH] usbarm: Update to use the kthread api.

Posted by [Alan Stern](#) on Wed, 03 Jan 2007 17:52:42 GMT

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On Wed, 3 Jan 2007, Eric W. Biederman wrote:

> >> The problem with signals is that they can come from various sources, most
> >> notably from random kill commands issues from userland. This defeats
> >> the notion of a fixed thread lifetime under control of the owning module.
> >> Of course this issue doesn't exist for you above useage where you'd
> >> hopefully avoid allowing signals that could terminate the thread.

> >

> > In my case the situation is exactly the reverse: I want to allow signals
> > to terminate the thread (as well as allowing signals to interrupt I/O).

I should have been clearer here. Signals don't terminate the thread; they merely notify it to clean up and terminate itself.

> > The reason is simple enough. At system shutdown, if the thread isn't
> > terminated then it would continue to own an open file, preventing that
> > file's filesystem from being unmounted cleanly. Since people should be
> > able to unmount their disks during shutdown without having to unload
> > drivers first, the simplest solution is to allow the thread to respond to
> > the TERM signal normally sent by the shutdown scripts.

> >

> > Since the thread is owned by the kernel, random kill commands won't have
> > any bad effect. Only kill commands sent by the superuser can terminate
> > the thread.

> >

>

> Why in the world would a thread hold a file open for an indeterminate duration?

> That seems very wrong.

The thread uses the file to provide backing storage. Kind of like the loop driver, except that my driver uses a higher-level interface into the VFS than the loop driver does, for greater simplicity. You wouldn't say that what the loop driver does is wrong, would you?

> I can just about understand reading a firmware file or something like that
> and close the file afterwards. But unless you are worrying about a very small
> window I think we have a problem here.

I don't follow. Why do you think there's a problem?

Alan Stern

Containers mailing list

