Subject: Re: [dm-devel] Re: dm: bounce_pfn limit added Posted by Alasdair G Kergon on Tue, 30 Oct 2007 23:26:17 GMT

View Forum Message <> Reply to Message

On Tue, Oct 30, 2007 at 01:11:38PM -0700, Andrew Morton wrote:

- > On Mon, 29 Oct 2007 09:31:39 +0300
- > Vasily Averin <vvs@sw.ru> wrote:
- > > Device mapper uses its own bounce_pfn that may differ from one on underlying
- > > device. In that way dm can build incorrect requests that contain sq elements
- > > greater than underlying device is able to handle.
- > > This is the cause of slab corruption in i2o layer, occurred on i386 arch when
- > > very long direct IO requests are addressed to dm-over-i2o device.

Interesting. When this patch was originally proposed a couple of years ago, we did this instead:

http://git.kernel.org/?p=linux/kernel/git/torvalds/linux-2.6.git;a=commitdiff;h=daef265f1590cf3e6de9 89d074041a280c82d58b;hp=00d6da9b4d6707b808481372537adb0fb38f99b3

-) DM doesn't need to bounce bio's on its own, but the block layer defaults
-) to that in blk_queue_make_request(). The lower level drivers should
-) bounce ios themselves, that is what they need to do if not layered below
-) dm anyways.

Alasdair

--

agk@redhat.com