Subject: RE: [PATCH 2.6.19-rc2] scsi: megaraid_{mm, mbox}: 64-bit DMAcapability fix

Posted by Seokmann.Ju on Mon, 16 Oct 2006 20:37:20 GMT

Hi,
> Er ... this patch would apply in reverse, but what's in the tree
> currently looks to be correct.
No, the patch submitted by Andrey and Vasily should fix the issue.
Without this, driver still claims 64-bit DMA capability for those MegaRAID SATA controllers.

Example)
For SATA 150-6 with OLD filter,
 if (((1) && ((0) || (1))) || (0) || (0) || (0) || (0) || (0) {
  ...;
 }
driver gets into inside of if clause and set DMA mask with 64-bit which is NOT correct.

However, with the patch,
 if (((1) && ((0) && (1))) || (0) || (0) || (0) || (0) || (0) {
  ...;
 }
driver bypasses this filter and stay with 32-bit DMA mask.

Seokmann

> -----Original Message-----
> From: James Bottomley [mailto:James.Bottomley@SteelEye.com]
> Sent: Monday, October 16, 2006 3:35 PM
> To: Vasily Averin
> Cc: Linux Kernel Mailing List; linux-scsi@vger.kernel.org;
> Ju, Seokmann; Andrew Morton; Linus Torvalds;
> devel@openvz.org; Andrey Mirkin
> Subject: Re: [PATCH 2.6.19-rc2] scsi: megaraid_{mm,mbox}:
> 64-bit DMAcapability fix
>
> On Mon, 2006-10-16 at 12:08 +0400, Vasily Averin wrote:
> > It is known that 2 LSI Logic MegaRAID SATA RAID Controllers
> (150-4 and 150-6)
> > don't support 64-bit DMA. Unfortunately currently this
> check is wrong and driver
> > sets 64-bit DMA mode for these devices.
> >
> > Signed-off-by: Andrey Mirkin <amirkin@sw.ru>
> > Ack-by: Vasily Averin <vvs@sw.ru>
> >
> > ---

> linux-2.6.19-rc2/drivers/scsi/megaraid/megaraid_mbox.c.mgst6

> 2006-10-16

> > 10:26:50.000000000 +0400

> > +++ linux-2.6.19-rc2/drivers/scsi/megaraid/megaraid_mbox.c

> 2006-10-16

> > 11:30:55.000000000 +0400

> > @@ -884,7 +884,7 @@ megaraid_init_mbox(adapter_t *adapter)

> >

> >   if (((magic64 == HBA_SIGNATURE_64_BIT) &&

> >   ((adapter->pdev->subsystem_device !=

> > - PCI_SUBSYS_ID_MEGARAID_SATA_150_6) ||

> > + PCI_SUBSYS_ID_MEGARAID_SATA_150_6) &&

> >   (adapter->pdev->subsystem_device !=

> >   PCI_SUBSYS_ID_MEGARAID_SATA_150_4))) ||

> >   (adapter->pdev->vendor == PCI_VENDOR_ID_LSI_LOGIC &&

>

> Er ... this patch would apply in reverse, but what's in the tree

> currently looks to be correct.

>

> James

>

>

>

On Mon, 2006-10-16 at 14:37 -0600, Ju, Seokmann wrote:

> Hi,

> > Er ... this patch would apply in reverse, but what's in the tree

> > currently looks to be correct.

> No, the patch submitted by Andrey and Vasily should fix the issue.

> Without this, driver still claims 64-bit DMA capability for those MegaRAID SATA controllers.

Actually ... I found the problem ... the patch is double attached in the
email so applying it spits reverse patch applied errors. I've corrected
this and put it in the tree.

James