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Subject: [PATCH 2.6.19-rc2] scsi: megaraid\_{mm, mbox}: 64-bit DMA capability fix  
Posted by [vaverin](#) on Mon, 16 Oct 2006 08:08:43 GMT

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From: Andrey Mirkin ([amirkin@sw.ru](mailto:amirkin@sw.ru))

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](mailto:amirkin@sw.ru)>

Ack-by: Vasily Averin <[vvs@sw.ru](mailto: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 &&
```

```
--- 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 &&
```

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Subject: RE: [PATCH 2.6.19-rc2] scsi: megaraid\_{mm, mbox}: 64-bit DMA capability fix

Posted by [Seokmann.Ju](#) on Mon, 16 Oct 2006 12:32:14 GMT

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Hi,

Monday, October 16, 2006 4:09 AM, 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.

ACK - this patch will fix the problem.

Thank you for the finding, Vasily.

Seokmann

> -----Original Message-----

> From: Vasily Averin [mailto:[vvs@sw.ru](mailto:vvs@sw.ru)]  
> Sent: Monday, October 16, 2006 4:09 AM  
> To: Linux Kernel Mailing List; [linux-scsi@vger.kernel.org](mailto:linux-scsi@vger.kernel.org);  
> Ju, Seokmann; James Bottomley; Andrew Morton; Linus Torvalds;  
> [devel@openvz.org](mailto:devel@openvz.org)  
> Cc: Andrey Mirkin  
> Subject: [PATCH 2.6.19-rc2] scsi: megaraid\_{mm,mbox}: 64-bit  
> DMA capability fix  
>  
> From: Andrey Mirkin ([amirkin@sw.ru](mailto:amirkin@sw.ru))  
>  
> 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](mailto:amirkin@sw.ru)>  
> Ack-by: Vasily Averin <[vvs@sw.ru](mailto: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 &&
>
>
```

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Subject: Re: [PATCH 2.6.19-rc2] scsi: megaraid\_{mm, mbox}: 64-bit DMA capability fix

Posted by [James Bottomley](#) on Mon, 16 Oct 2006 19:34:44 GMT

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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

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