

## FreeNAS - Bug #25709

### Update mps driver

08/28/2017 09:32 AM - Olivier Faber

<b>Status:</b>	Resolved		
<b>Priority:</b>	No priority		
<b>Assignee:</b>	Alexander Motin		
<b>Category:</b>	OS		
<b>Target version:</b>	11.1-BETA1		
<b>Seen in:</b>	11.0-U2	<b>Needs Merging:</b>	Yes
<b>Severity:</b>	New	<b>Needs Automation:</b>	No
<b>Reason for Closing:</b>		<b>Support Suite Ticket:</b>	n/a
<b>Reason for Blocked:</b>		<b>Hardware Configuration:</b>	X10SDV-4C-7TP4F board with a SAS826TQ backplane (also tested without backplane, no difference)
<b>Needs QA:</b>	No	<b>ChangeLog Required:</b>	No
<b>Needs Doc:</b>	Yes		

#### Description

The LSI SAS2116 in a Supermicro X10SDV-4C-7TP4F won't recognise any disks. Bug also described in this topic:

<https://forums.freenas.org/index.php?threads/supermicro-x10sdv-4c-7tp4f-with-onboard-sas-no-disks.57278/>

The dmesg shows this:

```
root@freenas:~ # dmesg | grep mps
mps0: <Avago Technologies (LSI) SAS2116> port 0xe000-0xe0ff mem 0xfb5c0000-0xfb5c3fff,0xfb580000-0
xfb5bffff irq 16 at device 0.0 on pci3
mps0: Firmware: 20.00.07.00, Driver: 21.01.00.00-fbsd
mps0: IOCCapabilities: 1285c<ScsiTaskFull,DiagTrace,SnapBuf,EEDP,TransRetry,EventReplay,HostDisc>
mps_mapping_enclosure_dev_status_change_event: enclosure with handle = 0x1 reported 0 slots
mps0: SAS Address for SATA device = a2984a22a7bdc971
mps0: SAS Address from SATA device = a2984a22a7bdc971
failure at /freenas-11-releng/freenas/_BE/os/sys/dev/mps/mps_sas_lsi.c:675/mpssas_add_device()! Co
uld not get ID for device with handle 0x0011
mpssas_fw_work: failed to add device with handle 0x11
mps0: SAS Address for SATA device = a2984a1fc7cfb190
mps0: SAS Address from SATA device = a2984a1fc7cfb190
failure at /freenas-11-releng/freenas/_BE/os/sys/dev/mps/mps_sas_lsi.c:675/mpssas_add_device()! Co
uld not get ID for device with handle 0x0012
mpssas_fw_work: failed to add device with handle 0x12
mps0: SAS Address for SATA device = a2984a23c6a7c587
mps0: SAS Address from SATA device = a2984a23c6a7c587
failure at /freenas-11-releng/freenas/_BE/os/sys/dev/mps/mps_sas_lsi.c:675/mpssas_add_device()! Co
uld not get ID for device with handle 0x0013
mpssas_fw_work: failed to add device with handle 0x13
mps0: SAS Address for SATA device = a2984a26c5cfd174
mps0: SAS Address from SATA device = a2984a26c5cfd174
failure at /freenas-11-releng/freenas/_BE/os/sys/dev/mps/mps_sas_lsi.c:675/mpssas_add_device()! Co
uld not get ID for device with handle 0x0014
mpssas_fw_work: failed to add device with handle 0x14
```

I tried with NAS4Free, and there it does work:

```
nas4free: ~# dmesg | grep mps
```

```
mps0: <Avago Technologies (LSI) SAS2116> port 0xe000-0xe0ff mem 0xfb5c0000-0xfb5c3fff,0xfb580000-0
xfb5bffff irq 16 at device 0.0 on pci3
mps0: Firmware: 20.00.07.00, Driver: 21.02.00.00-fbsd
mps0: IOCCapabilities: 1285c<ScsiTaskFull,DiagTrace,SnapBuf,EEDP,TransRetry,EventReplay,HostDisc>
mps0: SAS Address for SATA device = a2984a22a7bdc971
mps0: SAS Address from SATA device = a2984a22a7bdc971
mps0: SAS Address for SATA device = a2984a1fc7cfb190
mps0: SAS Address from SATA device = a2984a1fc7cfb190
mps0: SAS Address for SATA device = a2984a23c6a7c587
mps0: SAS Address from SATA device = a2984a23c6a7c587
mps0: SAS Address for SATA device = a2984a26c5cfd174
mps0: SAS Address from SATA device = a2984a26c5cfd174
da1 at mps0 bus 0 scbus0 target 3 lun 0
da0 at mps0 bus 0 scbus0 target 0 lun 0
da2 at mps0 bus 0 scbus0 target 5 lun 0
da3 at mps0 bus 0 scbus0 target 10 lun 0
```

I also checked in 9.10.2-U6, same story:

```
[root@freenas] ~# dmesg | grep mps
mps0: <Avago Technologies (LSI) SAS2116> port 0xe000-0xe0ff mem 0xfb5c0000-0xfb5c3fff,0xfb580000-0
xfb5bffff irq 16 at device 0.0 on pci2
mps0: Firmware: 20.00.07.00, Driver: 21.01.00.00-fbsd
mps0: IOCCapabilities: 1285c<ScsiTaskFull,DiagTrace,SnapBuf,EEDP,TransRetry,EventReplay,HostDisc>
mps_mapping_enclosure_dev_status_change_event: enclosure with handle = 0x1 reported 0 slots
mps0: SAS Address for SATA device = a2984a22a7bdc971
mps0: SAS Address from SATA device = a2984a22a7bdc971
failure at /freenas-9.10-releng/_BE/os/sys/dev/mps/mps_sas_lsi.c:675/mpssas_add_device()! Could no
t get ID for device with handle 0x0011
mpssas_fw_work: failed to add device with handle 0x11
mps0: SAS Address for SATA device = a2984a1fc7cfb190
mps0: SAS Address from SATA device = a2984a1fc7cfb190
failure at /freenas-9.10-releng/_BE/os/sys/dev/mps/mps_sas_lsi.c:675/mpssas_add_device()! Could no
t get ID for device with handle 0x0012
mpssas_fw_work: failed to add device with handle 0x12
mps0: SAS Address for SATA device = a2984a23c6a7c587
mps0: SAS Address from SATA device = a2984a23c6a7c587
failure at /freenas-9.10-releng/_BE/os/sys/dev/mps/mps_sas_lsi.c:675/mpssas_add_device()! Could no
t get ID for device with handle 0x0013
mpssas_fw_work: failed to add device with handle 0x13
mps0: SAS Address for SATA device = a2984a26c5cfd174
mps0: SAS Address from SATA device = a2984a26c5cfd174
failure at /freenas-9.10-releng/_BE/os/sys/dev/mps/mps_sas_lsi.c:675/mpssas_add_device()! Could no
t get ID for device with handle 0x0014
mpssas_fw_work: failed to add device with handle 0x14
```

#### Related issues:

Is duplicate of FreeNAS - Bug #19880: Failed to add the device with handle 0x...

Closed: Duplicate 29/2016

#### Associated revisions

##### Revision 9de00136 - 10/13/2017 12:02 PM - Dru Lavigne

Mention updated drivers.

Ticket: #24604

Ticket: #24820

Ticket: #25709

#### History

**#1 - 08/28/2017 09:37 AM - Dru Lavigne**

- Status changed from *Unscreened* to *15*

Olivier: please attach a debug (System -> Advanced -> Save Debug) to assist the dev in diagnosing the issue. We'll mark the ticket as private until the debug has been reviewed.

**#2 - 08/29/2017 11:22 PM - Olivier Faber**

- File *debug-freenas-20170829232212.tgz* added

Dru Lavigne wrote:

Olivier: please attach a debug (System -> Advanced -> Save Debug) to assist the dev in diagnosing the issue. We'll mark the ticket as private until the debug has been reviewed.

Sure, here it is.

**#3 - 08/30/2017 04:58 AM - Dru Lavigne**

- Status changed from *15* to *Unscreened*

- Assignee changed from *Release Council* to *Alexander Motin*

- Private changed from *No* to *Yes*

**#4 - 08/30/2017 05:27 AM - Alexander Motin**

- Status changed from *Unscreened* to *15*

- Target version set to *11.1*

Does the problem happen if disks are connected without the backplane directly to HBA? I'd suspect some enclosure firmware bug.

Can you try to update to nightly train to see whether it help? We are not developing the driver ourselves, and nightly version should probably include the same version as NAS4Free.

**#5 - 08/30/2017 05:44 AM - Olivier Faber**

Alexander Motin wrote:

Does the problem happen if disks are connected without the backplane directly to HBA? I'd suspect some enclosure firmware bug.

Can you try to update to nightly train to see whether it help? We are not developing the driver ourselves, and nightly version should probably include the same version as NAS4Free.

I tried connecting the disk directly to the controller without the backplane, but that didnt make a difference. I also tried a totally different type of disk: no difference.

I'll try the nightly.

**#6 - 08/30/2017 08:08 AM - Olivier Faber**

It works with the current nightly!

**#7 - 08/30/2017 08:10 AM - Alexander Motin**

- File deleted (debug-freenas-20170829232212.tgz)

**#8 - 08/30/2017 08:11 AM - Alexander Motin**

- Status changed from 15 to Ready For Release

- Private changed from Yes to No

Thank you. Then I am closing this, since it will be the part of 11.1 release.

**#9 - 09/01/2017 07:33 AM - Dru Lavigne**

- Subject changed from LSI SAS2116 on Supermicro X10SDV-4C-7TP4F wont recognise disks to Update mps driver

**#10 - 09/09/2017 10:50 AM - Dru Lavigne**

- Is duplicate of Bug #19880: Failed to add the device with handle 0x000e to persistent table because there is no free space available added

**#11 - 09/26/2017 02:42 PM - Dru Lavigne**

- Target version changed from 11.1 to 11.1-BETA1

**#12 - 10/24/2017 04:48 AM - Dru Lavigne**

- Status changed from Ready For Release to Resolved

**#13 - 11/08/2017 07:31 AM - Nick Wolff**

- Needs QA changed from Yes to No