

Number/Revision:

PY-CIB071-00

Issue Date:

September 02, 2021

Title:

VMware ESXi 6.0/6.5/6.7 "lsi_msgpt3" driver for the SAS controller card could cause delayed response and slowdowns

Applies to:

PRIMERGY

CX2550 M1 / M2 RX2540 M1/M2 /M4 / M5

CX2560 M4 RX2560 M1 / M2

CX2570 M4 RX4770 M2 / M3/ M4/ M5 RX1330 M1 / M2 / M3 / M4 TX1320 M2 / M3 / M4 RX2510 M2 TX1330 M2 / M3 / M4 RX2520 M1 / M4 / M5 TX2550 M4/ M5

RX2530 M1 / M2 / M4 /M5 TX2560 M1 / M2

- ✓ Using one of the following VMware ESXi versions and
 - VMware ESXi 6.7 Update 1
 - VMware ESXi 6.7
 - VMware ESXi 6.5 Update 2
 - VMware ESXi 6.5 Update 1
 - VMware ESXi 6.5
 - VMware ESXi 6.0 Update 3
 - VMware ESXi 6.0 Update 2
 - VMware ESXi 6.0 Update 1
 - VMware ESXi 6.0
- ✓ Using one of the below SAS controller cards, and
 - SAS controller card PSAS CP400i: S26361-F3842-L502/-E2/-E20
 - SAS controller card PSAS CP400e: S26361-F3845-L501/-E1/-E201
- ✓ Older version of "lsi msgpt3" driver is loaded
 - For "VMware ESXi 6.7", "VMware ESXi 6.5", "VMware ESXi 6.0 on non- vSAN environment", Versions older than 17.00.00.00
 - For VMware ESXi 6.0 on vSAN environment, Versions older than 06.255.12.00-9



Effective Duration:

Permanent

Problem:

In the PRIMERGY server where VMware ESXi 6.7/6.5/6.0 is operating, the device driver "lsi_msgpt3" for the SAS controller card may cause a delayed response and slow down of the server. This can cause the following symptoms:

- Connection from vSphere Client / Host Client to the ESXi host becomes unavailable
- No response is sent from vCenter Server.
- The screen may lead to PSODs irregularly when the ESXi host is shut down.
- It takes several minutes until the prompt appears at login to the SSH.
- It takes a long time until data collection by "vm-support" scripts complete.
- It takes considerable amount of time to collect data for monitoring by "esxtop" command.
 - No response is received after executing the "esxcli storage" series commands or "df" command (where Ctrl + C keys are seen to be not effective) or Direct Console [DCUI] seems to be out-of-operation (where any keystrokes are seen as not effective).
- Local disks become invisible.

Cause:

The cause is due to a failure in the device driver "lsi_msgpt3" for the SAS controller card where too many requests are issued for obtaining the SAS controller information via the "lsi_msgpt3" driver. Responses from the lsi msgpt3 driver may be significantly delayed because of these requests.

Solution:

This problem is resolved by updating the lsi_msgpt3 driver as per the below steps for the installed ESXi version and environment. See Downloads section for links to the driver and firmware updates.

Note: To determine which ESXi Bundle to apply, choose the Offline Bundle that matches your environment. The steps below show the minimum supported Offline Bundle that contains the updated driver for this issue. If the bundle was already applied or the system was built using the Fujitsu Custom Image with the same edition number as the Fujitsu Offline Bundle, it does not need to be reapplied.



For VMware ESXi 6.7, ESXi 6.5, and ESXi 6.0 in a non-vSAN environment

- For VMware ESXi 6.7
 - 1. Apply SAS controller card firmware 16.00.00.00.
 - 2. Apply the offline bundle "Fujitsu Custom Image for VMware ESXi 6.7 U1 Offline Bundle (v461-1)" or later
- For VMware ESXi 6.5
 - 1. Apply SAS controller card firmware 16.00.00.00.
 - 2. Apply the offline bundle "Fujitsu Custom Image for VMware ESXi 6.5 U2 Offline Bundle (v421-1)" or later
- For VMware ESXi 6.0
 - 1. Apply SAS controller card firmware 16.00.00.00.
 - 2. Apply the offline bundle "Fujitsu Custom Image for VMware ESXi 6.0 Update 3e Offline Bundle (v382-1)" or later
 - 3. Apply the "lsi msgpt3" driver version 17.00.00.00

For VMware ESXi 6.0 in a vSAN environment

- For VMware ESXi 6.0
 - 1. Apply SAS controller firmware version 13.00.00.00.
 - 2. Apply the latest offline bundle of VMware ESXi 6.0 Update 3.
 - 3. Apply the VMware ESXi 6.0 patch ESXi600-201909001 or later.

Downloads:

SAS Firmware 13.00.00.00

https://support.ts.fujitsu.com/IndexDownload.asp?Softwareguid=D6E7E69E-E956-4F9C-9D4C-956BFBCF94CA

SAS Firmware 16.00.00.00

 $\underline{https://support.ts.fujitsu.com/IndexDownload.asp?SoftwareGuid=8939553F-B517-427F-91DB-660771B69451}$

lsi msgpt3 driver 17.00.00.00

https://my.vmware.com/web/vmware/details?downloadGroup=DT-ESXI60-AVAGOTECH-LSI-MSGPT3-17000000-10EM&productId=491

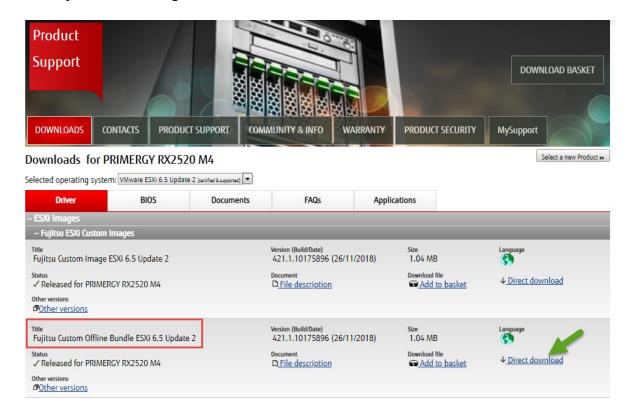
VMware ESXi 6.0 Patch ESXi600-201909001

https://docs.vmware.com/en/VMware-vSphere/6.0/rn/esxi600-201909001.html



To find the latest ESXi Offline Bundles:

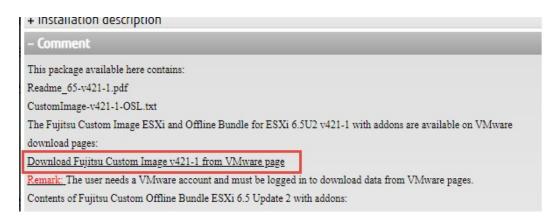
- 1. Browse to https://support.ts.fujitsu.com
- 2. Click "Browse for Product" > FUJITSU Server PRIMERGY > desired PRIMERGY product group > PRIMERGY product family.
- 3. Click the "Downloads" tab and choose the VMware OS version in the dropdown list.
- 4. Expand "ESXi Images" under the "Driver" tab.



5. Click on the Direct Download link to the right.



6. Expand the "Comment" section to find the link to the image on the VMware site.



7. Agree to the terms and conditions at the bottom of the page then press "Download file" to download the README for the bundle.

Revision History:

REVISION	DATE	CHANGE SUMMARY
00	September 2, 2021	Initial Release