

Hitachi Compute Blade 2000 LSI MegaRAID SAS 2208 RAID controller firmware update User's Guide

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Preface

This document describes how to use the **RAID firmware update tool** CD.

This preface includes the following information:

- [Intended audience](#)
- [Product version](#)
- [Release notes](#)
- [Document organization](#)
- [Document conventions](#)
- [Convention for storage capacity values](#)
- [Getting help](#)
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Notice: The use of the **RAID firmware update tool** CD and all other Hitachi Data Systems products is governed by the terms of your agreement(s) with Hitachi Data Systems.

Intended audience

This document is intended for the personnel who are involved in planning, managing, and performing the tasks to prepare your site for Compute Blade installation and to install the same.

This document assumes the following:

- The reader has a background in hardware installation of computer systems.
- The reader is familiar with the location where the Compute Blade will be installed, including knowledge of physical characteristics, power systems and specifications, and environmental specifications.

Product version

This document revision applies to the **RAID firmware update tool** CD version 01-00-015.

Release notes

Read the release notes before installing and using this product. They may contain requirements or restrictions that are not fully described in this document or updates or corrections to this document.

Document organization

The following table provides an overview of the contents and organization of this document. Click the chapter title in the left column to go to that chapter. The first page of each chapter provides links to the sections in that chapter.

Chapter	Description
Chapter 1, Firmware version check	This chapter explains how to check a RAID controller firmware version.
Chapter 2, Firmware update	This chapter explains how to update RAID controller firmware.

Document conventions

This document uses the following typographic conventions:

Convention	Description
Regular text bold	In text: keyboard key, parameter name, property name, hardware labels, hardware button, hardware switch. In a procedure: user interface item
<i>Italic</i>	Variable, emphasis, reference to document title, called-out term
Screen text	Command name and option, drive name, file name, folder name, directory name, code, file content, system and application output, user input
< > (angled brackets)	Variable (used when italic is not enough to identify variable).
[] (square bracket)	Optional values
{ } braces	Required or expected value
vertical bar	Choice between two or more options or arguments
_(underline)	Default value, for example, [<u>a</u>] b]

This document uses the following icons to draw attention to information:

Icon	Meaning	Description
	WARNING	This indicates the presence of a potential risk that might cause death or severe injury.
	CAUTION	This indicates the presence of a potential risk that might cause relatively mild or moderate injury.
NOTICE	NOTICE	This indicates the presence of a potential risk that might cause severe damage to the equipment and/or damage to surrounding properties.
	Note	This indicates notes not directly related to injury or severe damage to equipment.
	Tip	This indicates advice on how to make the best use of the equipment.

Convention for storage capacity values

Physical storage capacity values (for example, disk drive capacity) are calculated based on the following values:

Physical capacity unit	Value
1 kilobyte (KB)	1,000 (10^3) bytes
1 megabyte (MB)	1,000 KB or $1,000^2$ bytes
1 gigabyte (GB)	1,000 MB or $1,000^3$ bytes
1 terabyte (TB)	1,000 GB or $1,000^4$ bytes
1 petabyte (PB)	1,000 TB or $1,000^5$ bytes
1 exabyte (EB)	1,000 PB or $1,000^6$ bytes

Logical storage capacity values (for example, logical device capacity) are calculated based on the following values:

Logical capacity unit	Value
1 block	512 bytes
1 KB	1,024 (2^{10}) bytes
1 MB	1,024 KB or $1,024^2$ bytes
1 GB	1,024 MB or $1,024^3$ bytes
1 TB	1,024 GB or $1,024^4$ bytes
1 PB	1,024 TB or $1,024^5$ bytes
1 EB	1,024 PB or $1,024^6$ bytes

Getting help

The Hitachi Data Systems customer support staff is available 24 hours a day, seven days a week. If you need technical support, log on to the Hitachi Data Systems Portal for contact information: <https://portal.hds.com>

Comments

Please send us your comments on this document: doc.comments@hds.com. Include the document title and number including the revision level (for example, -07), and refer to specific sections and paragraphs whenever possible. All comments become the property of Hitachi Data Systems Corporation.

Thank you!

Firmware version check

This chapter describes the firmware version check for CB 2000 Standard Server Blade with the LSI MegaRAID SAS 2208 RAID controller.

- [Firmware version check](#)

Firmware version check

Check the firmware version of LSI MegaRAID SAS 2208 RAID controller that is installed in CB 2000 standard server blade in accordance with the following procedure.



Check the firmware version after closing all programs, because the system unit is restarted during the operation.

Firmware version check through OS



When you check the firmware version through OS, MegaCli must be installed in the system unit. If MegaCli is not installed or you cannot find the folder in which to store MegaCli, see [Firmware version check through MegaRAID Web BIOS](#) to check the firmware version.

1. Log on as a user, which have administrative privileges, OS.
Windows: **Administrator** privileges
Linux or VMware: **root** privileges
2. Start a **command prompt**, and move to a folder that MegaCli is stored.



Windows:
MegaCli is stored in a folder that MSM (MegaRAID Storage Manager) is stored. As default, MSM is installed in the following directory.

Windows 64-bit:
C:\Program Files (x86)\MegaRAID Storage Manager

Windows 32-bit:
C:\Program Files\MegaRAID Storage Manager

Linux:
MegaCli is stored in "/opt/MegaRAID/MegaCli" folder. (When MegaCli is installed.)

VMware:
There is no fixed place to store MegaCli.

3. Execute the following command.

Windows 32-bit:

```
#.\MegaCli -adpAllInfo -aALL -nolog > .\RAIDInfo.txt
```

Windows 64-bit:

```
#.\MegaCli64 -adpAllInfo -aALL -nolog > .\RAIDInfo.txt
```

Linux or VMware:

```
#!/MegaCli -adpAllInfo -aALL -nolog > ./RAIDInfo.txt
```



Type the command correctly for Linux, because Linux is case sensitive.

4. **RAIDInfo.txt** is created in the same folder stored MegaCli after executing the command.

5. Search the **RAIDInfo.txt** file for strings while referring to the following procedure.

(1) Search for **Product Name** as string. (RAID controller name)

(2) Search for **FW Version** as string. (Firmware version)

Product Name	: xxxxxxxxxxxxxx	RAID controller name
FW Version	: x.xxx.xxx-xxxx	Firmware version

6. Check the hit string from searching.

Product Name	FW Version	Firmware
LSI MegaRAID SAS 9266-8i	3.152.185-3520	No update available
	Version other than 3.152.185-3520	Update available

7. If the firmware version is **Update available**, need to update to the latest version.

If the firmware version is **No update available** or **Product Name** is other than **LSI MegaRAID SAS 9266-8i** as above table, firmware does not need update. Quit this procedure.

Firmware version check through MegaRAID Web BIOS

1. Turn on the system unit.
Restart the system unit when the OS is already booted.
2. When the following window is displayed while starting up, press **Ctrl** key and **H** key.

```

LSI MegaRAID SAS-MFI BIOS
Version x.xx.xx(Build xxxx xx, xxxx)
Copyright(c) xxxx LSI Corporation
HA -0 (Bus xx Dev xx) LSI MegaRAID SAS 9266-8i
FW package: xx.xx.x-xxxx

x Virtual Drive(s) found on the host adapter.

x Virtual Drive(s) handled by BIOS
Press <Ctrl><H> for Web BIOS
    
```

3. The following window is displayed.

Adapter No.	Bus No.	Device No.	Type	Firmware Pkg.Version
0.(o)	x	0	LSI MegaRAID SAS 9266-8i	x.xxx.xxx-xxxx
<input type="button" value="Start"/>				

4. Check the RAID controller firmware version.

Type	Firmware Pkg.Version	Firmware
LSI MegaRAID SAS 9266-8i	23.2.1-0065	No update available
	Version other than 23.2.1-0065	Update available

5. If the firmware version is **Update available**, need to update to the latest version.
If the firmware version is **No update available** or **Type** is other than **LSI MegaRAID SAS 9266-8i** as above table, firmware does not need update.
Quit this procedure.

Firmware update

This chapter describes the firmware update for CB 2000 Standard Server Blade with the LSI MegaRAID SAS 2208 RAID controller.

- [Firmware update](#)

Firmware update

Update the firmware of LSI MegaRAID SAS 2208 RAID controller in CB 2000 standard server blade in accordance with the following procedure.



Update the firmware after closing all programs, because the system unit is restarted during the operation.

The firmware automatically update.

It takes about 20 minutes for firmware update.

1. Let the system recognize the **RAID firmware update tool** CD as follows.

- (1) Use the **remote CD/DVD** function of the remote control application to recognize the CD drive.



Using the **remote CD/DVD** function, do not load the CD as a CD image, then attempt to recognize the image. This method is not supported.



For the use of the **remote CD/DVD** function, see the *Remote Console Application User's Guide* that comes with the unit.

If the **remote CD/DVD** function is already active, once disable it, and then re-enable it.

- (2) Insert the CD into the CD/DVD drive.

2. Please refer to "Hitachi Compute Blade 2000 User's Guide" and Start System BIOS menu.
And Set System to boot up from CD/DVD drive.

3. Turn on the system unit.

4. The following window is displayed after CD boot.
Wait 30 seconds.

```
LSI MegaRAID SAS 2208 ROMB (MegaRAID)
Firmware Update/Parameter Set Tool                               Ver.01-00 (20xx/xx/xx)

-xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx model
-xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx model

Firmware Update to Ver. 3.152.185-3520 (Package Ver. 23.2.1-0065)
```



If press **Enter** key, the menu is displayed, and press **R** key. The system unit is restarted, therefore, set this procedure again.

5. The following window is displayed, and update will be started.

```
Adapter X: XXXXXXXXXXXXXXXXXXXXXXXX
Vendor ID: 0xXXXX, Device ID: 0xXXXX

Download Completed.
Flashing image to adapter...
```



The following message of mouse is displayed while updating. This message is not problem.

DOS/32A warning (9004): mouse initialization failed

It takes 2 minutes to update.

6. The system unit automatically restart after the firmware update.

7. The following window is displayed after CD boot.

Wait 30 seconds.

```
LSI MegaRAID SAS 2208 ROMB (MegaRAID)
Firmware Update/Parameter Set Tool                               Ver.01-00 (20xx/xx/xx)

-xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx model
-xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx model

Firmware Update to Ver. 3.152.185-3520 (Package Ver. 23.2.1-0065)
```



If press **Enter** key, the menu is displayed, and press **R** key. The system unit is restarted, therefore, set this procedure again.

8. Version is checked, and the following message is displayed.

```
          000000          KK          KK
         000          000  KK          KK
        00          00  KK          KK
       00          00  KK          KK
      00          00  KK          KK
     00          00  KK          KK
    00          00  KK          KK
   00          00  KK          KK
  00          00  KK          KK
 000          000  KK          KK
000000          KK          KK

C:>
```

9. Remove the CD from the CD/DVD drive.

10. If System already set to boot up from CD/DVD drive, Please refer to "*Hitachi Compute Blade 2000 User's Guide*" and start System BIOS menu. And return the setting.

The firmware update is completed.



Acronyms and Abbreviations

CD	Compact Disc
DVD	Digital Versatile Disc
OEM	Original Equipment Manufacturer
OS	Operating System
RAID	Redundant Arrays of Inexpensive Disks
VD	Virtual Drives

Hitachi Data Systems

Corporate Headquarters

2845 Lafayette Street
Santa Clara, California 95050-2639
U.S.A.

www.hds.com

Regional Contact Information

Americas

+1 408 970 1000

info@hds.com

Europe, Middle East, and Africa

+44 (0) 1753 618000

info.emea@hds.com

Asia Pacific

+852 3189 7900

hds.marketing.apac@hds.com

