

本手順書は、LSI MegaRAID コントローラのファームウェアアップデート手順について記載したものです。

1. アップデート対象

<対象製品>

- ・ Cloudy II NAS/Windows (3.5 インチ HDD 搭載モデル)
- ・ Cloudy II iX (3.5 インチ HDD 搭載モデル)

<対象 RAID コントローラ>

- ・ LSI MegaRAID SAS 9260-4i

<対象ファームウェア>

- ・ Firmware Package Version : 12.12.0-0139
(Firmware Version : 2.130.373-2022)

上記3点全て該当する場合は、本アップデートの実施をお願いします。

コントローラおよびファームウェアの確認方法は以降のアップデート手順に記載しています。

アップデート対象でない場合は、「RAID コントローラ設定手順」を参照のうえ、コントローラの推奨設定値を確認/変更されることをお勧めします。

2. ファームウェア アップデート手順

1. 弊社ホームページよりファームウェアのダウンロードを行ない、ダウンロードしたファイル(mr2108fw.rom)をサーバの任意の場所に保存してください。
2. Windows をご使用の場合は、デスクトップにある MSM のショートカットから MSM (MegaRAID Storage Manager) 画面を起動させ、ログイン名とパスワードを入力し、ホーム画面を表示させます。
ix をご使用の場合は、MSM がインストールされた PC から同様の手順をおこなってください。



3. 初期画面から[Physical]-[LSIMegaRAIDSAS****]を選択し、RAID コントローラとファームウェアバージョンを確認します。

- ・アップデート対象コントローラ: LSI MegaRAID SAS 9260-4i
- ・アップデート対象ファームウェア: Firmware Package Version: 12.12.0-0139
(Firmware Version: 2.130.373-2022)

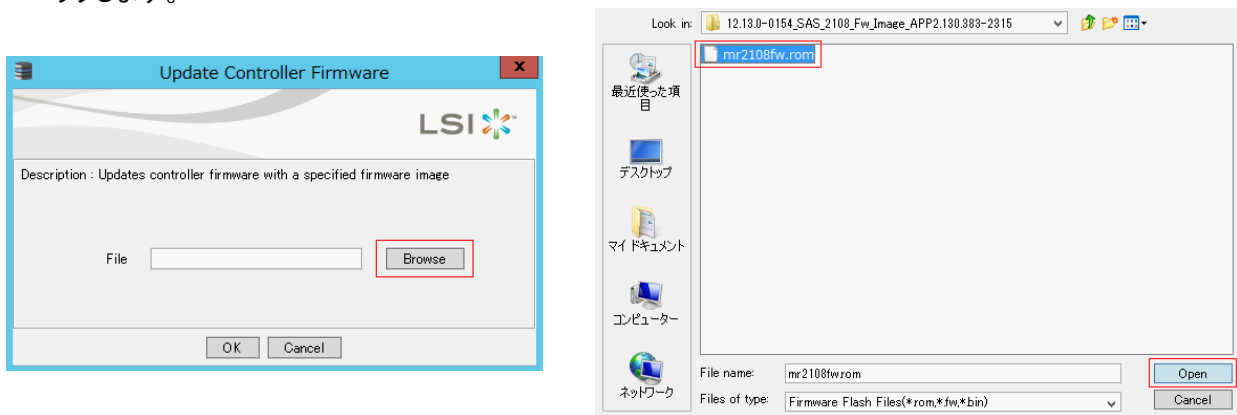
上記 2 点が該当する場合は、次の 4. 以降の手順に進みアップデートを行なってください。
該当しない場合は、アップデート作業は不要ですので、本作業は終了となります。

The screenshot shows the 'Physical' tab of the MegaRAID Storage Manager interface. The left sidebar lists the controller 'LSI MegaRAID SAS 9260-4i (Bus 5, Dev 0)' and its 11 SATA slots. The main area displays properties for the selected controller, including 'LSI MegaRAID SAS 9260-4i', 'SV14604522', and '0x1000'. The 'Firmware Properties' section on the right shows 'Firmware Package Version: 12.7.0-0007' and 'Firmware Version: 2.70.03-0862'. The 'Power State Properties' section shows 'Power savings on unconfigured drives: Enabled', 'Power savings on hot spares: Enabled', and 'Drive Standby Time: 30mins'.

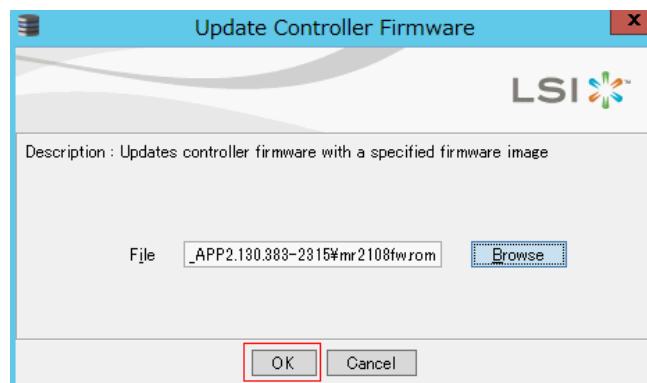
4. [Dashboard]タブをクリックし初期画面を表示させ、「Update firmware」をクリックします。

The screenshot shows the 'Dashboard' tab of the MegaRAID Storage Manager interface. The 'Controller' is identified as 'LSI MegaRAID SAS 9260-4i (Bus 5, Dev 0)'. The 'Properties' section shows 'Status: Optimal', 'Enclosures: 1', 'Backplanes: 0', 'Drives: 11', 'Drive groups: 1', and 'Virtual Drive(s): 2'. The 'Usage' section shows a 100% usage gauge and 'Total capacity: 20.007 TB', 'Configured Capacity: 20.007 TB', and 'Unconfigured Capacity: 0 Bytes'. The 'Background Operations' section shows 'Virtual drive operations in progress: 0' and 'Drive operations in progress: 0'. The 'Advanced Software Option' section shows 'Alarm: Disabled', 'MegaRAID RECOVERY: Disabled', and 'CacheCache™ - SSD Caching: Disabled'. The 'Actions' section includes 'Create virtual drive', 'Create CacheCache™ - SSD Caching', 'Load configuration', and 'Update firmware'. The 'Help' section includes links for 'How to use MSM?', 'How to create virtual drive?', 'How to enable MegaRAID Advanced Software Options?', and 'Glossary'.

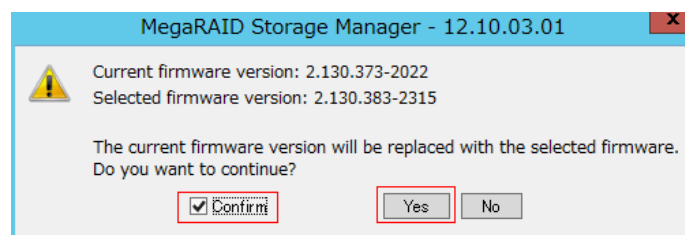
5. ファイル選択画面が表示されるので、[Browse]ボタンをクリックし、ファームウェアを選択し[Open]ボタンをクリックします。



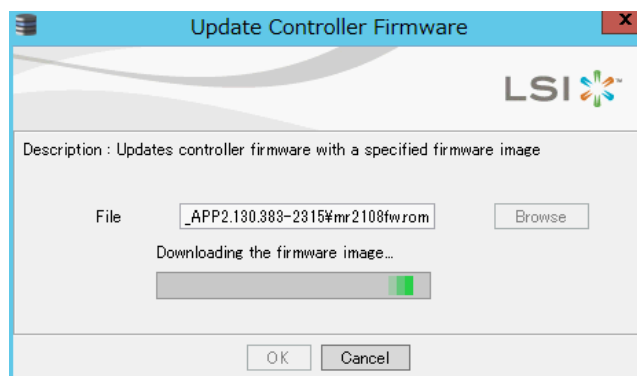
6. [OK]ボタンをクリックするとアップデートが開始されます。



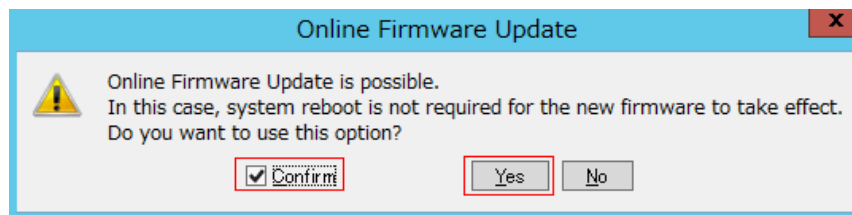
7. 確認画面が表示されるので、「Confirm」にチェックを入れ、[Yes]をクリックします。



8. アップデートが実行されます。



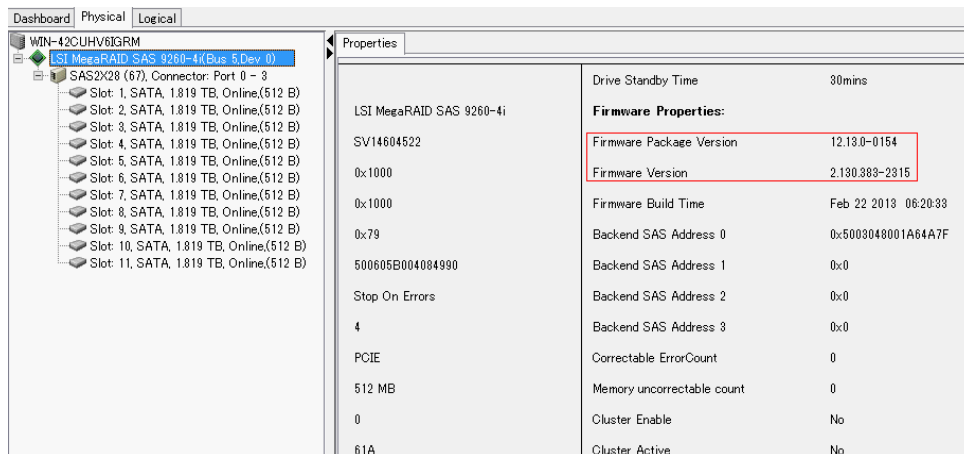
9. アップデートが完了し、再起動不要のオプションを使うかどうかの確認メッセージが表示されるので、再起動をしない場合は「Confirm」にチェックを入れ、再起動を行なう場合は、チェックを入れず[Yes]ボタンをクリックします。
 ファームウェアのバージョンによってはこのメッセージは異なる場合があります。



10. [Physical]-[LSIMegaRAIDSAS****]を選択し、ファームウェアバージョンが変更されたことを確認します。

<最新ファームウェア>

Firmware Package Version : 12.13.0-0154 (Firmware Version : 2.130.383.2315)



以上で、ファームウェアアップデートの作業は終了です。

※本アップデートが完了しましたら、別途手順書を参照いただき Patrol Read と ConsistencyCheck の設定を確認いただくことをお勧めします。

LSI MegaRAID Controllers Release Note

LSI MegaRAID SAS 9260-4i

【 Firmware Package Version : 12.13.0-0154 】

SCGCQ00307050	Defect	Not able to flash both 9265-8i and 9285-8e card with 5.3 patch 1 firmware. However, it is ok on 9266-8i.
SCGCQ00338490	Defect	Invalid target ID after new logical drive creation
SCGCQ00341791	Defect	Support for mutlipath topology is broken
SCGCQ00361303	Defect	On iMR FW update caused card to FW fault state and card cannot boot to OS.
SCGCQ00371477	Defect	During Reconstruction (R0->R5) when system reboots the reconstruction doesnt resume. System hangs.
SCGCQ00375250	Defect	OEM BMC see clock stetching on I2C bus
SCGCQ00375854	Defect	adapterOperations.alarmControl is being set to 1 even if controller doesnot have alarm on board
SCGCQ00384381	Defect	Drive temperature is shown very high on 9240
SCGCQ00391094	Defect	9260-16i's drive locate/fault LED header doesn't work
SCGCQ00392062	Defect	Firmware halts when flashing components other than app.rom for OEM controller
SCGCQ00392063	Defect	PL library and files checkin for PL version 5.38
SCGCQ00396335	Defect	9260-16i's drive locate/fault LED header is not working properly.
SCGCQ00363619	Enhancement	Request Set the Recovery mode page (WriteRetryCount and recoveryTimeLimit)

【 Firmware Package Version : 12.12.0-0139 】

Firmware defects:

- SCGCQ00262426 - If VD is secured while reconstruction is going on does not stay secured once reconstruction is done.
- SCGCQ00313883 - Battery continually stating Battery Yearly Deep Discharge Relearn Pending. Please Initiate a manual Relearn
- SCGCQ00319537 - System hang on IBM machine with a critical boot message
- SCGCQ00327006 - Event (MR_EVT_CTRL_RESETNOW_DONE) is not generated after OFU is completed
- SCGCQ00329851 - EEPROM corruption(BQ2060 errata) due to corrupted value of design Capacity written in FCC for iBBU07
- SCGCQ00332181 - INVALID SGL causes dump into montask, OCR does not recover. MonTask: line 377 in file ../../dm/mpt2/mptrec.c & MonTask: line
- SCGCQ00333679 - reverting the changes of SCGCQ00295604
- SCGCQ00333696 - EEPROM corruption(BQ2060 errata) due to corrupted value of design Capacity written in FCC for iBBU07
- SCGCQ00334032 - Code review checkin
- SCGCQ00335607 - Firmware upgrade/downgrade not possible due to missing env stamping
- SCGCQ00336716 - Megamon issue when disabling the drive security on a MR controller with spun down FDE drives.
- SCGCQ00337894 - OFU is not happening when tried to upgrade firmware.
- SCGCQ00338008 - Flash of package with OFU request
- SCGCQ00345497 - Code review: With the new approach for CtrlOFUPossibleSet/Get() shutdown path broken
- SCGCQ00346275 - Copyback on a drive hits kill adapter
- SCGCQ00347253 - Firmware fails to return proper value when flashed same firmware image with different stamping with OFU request.
- SCGCQ00353344 - Data Corruption during Raid Level Migration
- SCGCQ00335935 - Coverity Defect fixes
- SCGCQ00286152 - GetConnectorIndex() Out of bound array access
- SCGCQ00334889 - Multiple switch cases are not handles correctly in debug functions
- SCGCQ00314781 - Controller always enter HSM when it is set to HCOE
- SCGCQ00317767 - Code Review Defect: Correct the error in copy back path smart errors path
- SCGCQ00333346 - Dont interpret the cachecade BVD flags if the volume is created with old FW which does not support cachecade.
- SCGCQ00340772 - Address Action Item SCGCQ00340495 (Check coding standard for structure OfuRequestState)
- SCGCQ00332658 - Out-of-bounds access (OVERRUN_STATIC) of an array "ar" in pdCopyBackSpinupCallBack

- SCGCQ00332651 - Out-of-bounds access (OVERRUN_STATIC) of an array "nvInfo->lockKeyBlob.keyCheck" in displayNvKeyInfo
- SCGCQ00329070 - Coverity Defect
- SCGCQ00315029 - PD clear operation is not handle correctly with spun drive drives
- SCGCQ00332588 - Fix coverity defects 10216 and 10425 (overflow and potential NULL pointer access)
- SCGCQ00307050 - Not able to flash both 9265-8i and 9285-8e card with 5.3 patch 1 firmware. However, it is ok on 9266-8i.
- SCGCQ00353322 - Unable to enable ocr using application due to FW ocr setting taking precedence
- SCGCQ00328109 - Out of bound access in LDBBMListInit
- SCGCQ00337060 - Coverity Defects
- SCGCQ00341791 - Support for mutlipath topology is broken
- SCGCQ00330344 - FW halts with a a kill adaptor on performing an onffline of the drive under copyback. line 1188 in file ../../raid/1078dma.c
- SCGCQ00332099 - Out-of-bounds access (OVERRUN_STATIC) of an array "ar" in pdCmdRebuildCB

Firmware Enhancements:

- SCGCQ00302600 - Added more debug information
- SCGCQ00307949 - True FW Online update for Liberator
- SCGCQ00307950 - BGI is in endless loop continuously restarting after completion
- SCGCQ00308988 - Improve foreign config import for iMR with mixed JBOD/RAID settings
- SCGCQ00314258 - Need the ability to determine what disk a logical LBA associate with on the fly, api call/algorithm/etc. on Liberator
- SCGCQ00323446 - Add NVDATA support to make 512 Emulated drive support as configurable for customers.
- SCGCQ00345203 - megacli reports battery pack is missing on hot insertion
- SCGCQ00314965 - iBBU07 - SOH bad will be declared for low capacity battery before starting learn cycle
- SCGCQ00307956 - iBBU07: EEPROM and register values will be updated to revised values at first boot after FW flash.

BIOS:

Version change only

UEFI Driver:

- SCGCQ00262858 Defect Debug message is shown from EFI app choice prompt
- SCGCQ00308870 Defect EFI Driver 518When disconnecting the driver in EFI, I am still able to exectue the EFI utility menu.
- SCGCQ00312683 Defect UEFI Driver not timing out in 3 mins when FW is in undefined state
- SCGCQ00320619 Defect UEFI: Build Device Path and Get Next Target function of SCSI Pass Thru is not returning correct EFI status for certain cases
- SCGCQ00335617 Defect Drives are reporting timeout on Write Buffer cmd
- SCGCQ00339371 Defect UEFI Driver fails SCT Test
- SCGCQ00343869 Defect Enhance critical boot message handling
- SCGCQ00338066 EnhancementRequest UEFI - HAMR: Fire LD list query based on maxHANodes
- SCGCQ00338782 EnhancementRequest If SetOptions is called for Invader dont show EFI WebBIOS and EFI CLI option
- SCGCQ00340581 EnhancementRequest UEFI Driver should check pMRCtrlInfo ->maxHANodes with > 1 to determine HAMR

HII:

- SCGCQ00318010 (DFCT) - Allows to select Cachecade VD as Boot device
- SCGCQ00319005 (DFCT) - HII will not allow config to be cleared no drives attached
- SCGCQ00319010 (DFCT) - HII while in safe mode locks up when entering View drive
- SCGCQ00293056 (ENHREQ) - HII: LSIP200198414/LSIP200229508/LSIP200231613: Disables all requirement for human input at boot time
- SCGCQ00317934 (ENHREQ) - Add MFI State error string for the new MFI stat error codes
- SCGCQ00317991 (ENHREQ) - Remove 'Adaptive Read Ahead' option from every MegaRAID management utility (PR: SCGCQ00295908)