



MegaRAID Engineering Release Notice

GCA Release Version 00.50.00.04 - MR_SAS_Providers (SCGCQ00559870)

(SCGCQ00559870) - GCA Release Version 00.50.00.04 - MR SAS Providers
(SCGCQ00559286) - Beta Release Version 00.50.00.03 - MR SAS Providers
(SCGCQ00559083) - Beta Release Version 00.50.05.03 - MR SAS Providers
(SCGCQ00559075) - Beta Release Version 00.50.V0.03 - MR SAS Providers
(SCGCQ00529918) - Beta Release Version 00.50.00.02 - MR SAS Providers
(SCGCQ00529916) - Beta Release Version 00.50.05.02 - MR SAS Providers
(SCGCQ00529870) - Beta Release Version 00.50.V0.02 - MR SAS Providers
(SCGCQ00518552) - Alpha Release Version 90.50.05.05 - MR SAS Providers
(SCGCQ00518535) - Alpha Release Version 90.50.00.04 - MR SAS Providers
(SCGCQ00496043) - Alpha Release Version 90.50.V0.02 - MR SAS Providers
(SCGCQ00496037) - Alpha Release Version 90.50.05.02 - MR SAS Providers
(SCGCQ00496011) - Alpha Release Version 90.50.00.02 - MR SAS Providers



MegaRAID Engineering Release Notice

GCA Release Version 00.50.00.04 - MR_SAS_Providers (SCGCQ00559870)

Defects=0, Enhancements=0 (Version Change Only)



MegaRAID Engineering Release Notice

Beta Release Version 00.50.00.03 - MR_SAS_Providers (SCGCQ00559286)

Change Summary (Defects=2)

SCGCQ00531105 (DFCT) - The incorrect port is reported for MD connection

SCGCQ00546711 (CSET) - Galaxy (FH): CIM provider is not creating R1-EC Nytro cache VD (Not creating storage pool)



MegaRAID Engineering Release Notice

Beta Release Version 00.50.00.03 - MR_SAS_Providers (SCGCQ00559286)

Total Defects Resolved (2)

(SCGCQ00531105) Defect 1/2

HEADLINE: The incorrect port is reported for MD connection

DESC OF CHANGE: Added a property ConnectorIndex in LSIESG_EnclosureChassis and LSIESG_BackPlaneChassis to populate this attribute.

TO REPRODUCE: 1.Install LSI SMI-S Provider.
2.Query for LSIESG_EnclosureChassis and LSIESG_Backplanechassis and check the property "ConnectorIndex".

ISSUE DESC: There is no way of determining as of which connector cable of enclosure/backplane is connected to which port of the controller.

(SCGCQ00546711 - Port of SCGCQ00473137) Defect 2/2

HEADLINE: Galaxy (FH): CIM provider is not creating R1-EC Nytro cache VD (Not creating storage pool)

DESC OF CHANGE: Made sure the once Raid Level assigned it is not overwritten by the default value.
Also change validation logic so R1-EC can be created 2 or more drives. Previously R1-EC creation was failed with odd number(eg 3) of drives as it was considered case.

TO REPRODUCE: 1. Install SMIS provider (Latest)
2. Copy CIMPTT tool in client system
3. Try to create R1-EC CC VD
4. See that CIM provider is not creating R1-EC Nytro cache VD (Not even creating storage pool) and CIMPTT throws error. (At this time if you try to create R0, R1-E, R1+BVS Nytro cache VD, CIM provider allows to create these VDs). Only if you try to create R1-EC Nytro cache VD, it is failing.

Note :
1. Find those SBMA trace log, CIMPTT output log for your reference
2. Moreover this R1-EC creation was successful with previous SMIS build version (80.35.00.01). It is failing in this latest build.

ISSUE DESC: Galaxy (FH): CIM provider is not creating R1-EC Nytro cache VD (Not creating storage pool)



MegaRAID Engineering Release Notice

Beta Release Version 00.50.05.03 - MR_SAS_Providers (SCGCQ00559083)

Change Summary (Defects=1)

SCGCQ00557292 (DFCT) - Display of StoreLib library version in the provider trace log



MegaRAID Engineering Release Notice

Beta Release Version 00.50.05.03 - MR_SAS_Providers (SCGCQ00559083)

Total Defects Resolved (1)

(SCGCQ00557292)		<i>Defect 1/1</i>
HEADLINE:	Display of StoreLib library version in the provider trace log	
DESC OF CHANGE:	Added a new method to retrieve the SL library version and then printing it in the verbose mode of the provider log.	
TO REPRODUCE:	<ol style="list-style-type: none">1.Install LSI SMI-S Provider.2.Enable verbose mode logging of provider tracelog.3.Tail the Sbmtracelog.txt for observing the SL Library version.	
ISSUE DESC:	When verbose mode is enabled in SMI-S Provider,StoreLib libraries version packaged in the provider is not been shown.	



MegaRAID Engineering Release Notice

Beta Release Version 00.50.V0.03 - MR_SAS_Providers (SCGCQ00559075)

Change Summary (Defects=1)

SCGCQ00558202 (DFCT) - MR6.2 -Beta: esxi 5.1 - MSM - IR3 controller is not detecting .



MegaRAID Engineering Release Notice

Beta Release Version 00.50.V0.03 - MR_SAS_Providers (SCGCQ00559075)

Total Defects Resolved (1)

(SCGCQ00558202)		Defect 1/1
HEADLINE:	MR6.2 -Beta: esxi 5.1 - MSM - IR3 controller is not detecting .	
DESC OF CHANGE:	Hence made changes in accordance with the VMware ESXi cleaning up of resources.	
TO REPRODUCE:	1.Install LSI SMI-S Provider. 2.Query provider via MSM.	
ISSUE DESC:	Provider cleans up the resources when the SL library gets unloaded.When cleaning up the resources on VMware ESXi OS,call to exitlib is unloading the provider and hence MSM is unable to discover the controller.	



Change Summary (Defects=5)

SCGCQ00501764 (DFCT) - No Volume creation on boot volume PDs.

SCGCQ00518403 (DFCT) - Fixing coverity defects for MR_SAS_Providers_6.2

SCGCQ00518490 (DFCT) - Controller SAFE mode logic is not present in SMIS Provider.

SCGCQ00518512 (DFCT) - need to add property 'supportextencldrivecount' in dtype of LSI provider.

SCGCQ00527419 (DFCT) - Creating cachecade VD and associating it with normal VD is not happening through SMIS



MegaRAID Engineering Release Notice

Beta Release Version 00.50.00.02 - MR_SAS_Providers (SCGCQ00529918)

Total Defects Resolved (5)

(SCGCQ00501764) Defect 1/5

HEADLINE: No Volume creation on boot volume PDs.
DESC OF CHANGE: Added check before creating volume.
TO REPRODUCE: No Volume creation on boot volume PDs.
ISSUE DESC: No Volume creation on boot volume PDs.

(SCGCQ00518403) Defect 2/5

HEADLINE: Fixing coverity defects for MR_SAS_Providers_6.2
DESC OF CHANGE: Fixed resource leak, uninitialized variables, improper conversion issue on provider. More details can be found on coverity defect report.
TO REPRODUCE: Fixing coverity defects for MR_SAS_Providers_6.2
ISSUE DESC: ResourceLeak, Uninitialization of variables and improper conversion problems found in MR_SAS_Providers_6.2 codebase.

(SCGCQ00518490) Defect 3/5

HEADLINE: Controller SAFE mode logic is not present in SMIS Provider.
DESC OF CHANGE: Added property 'safeModeBoot' in dtype of Controller.cc and Controller.h and modified property HealthState of MegaRaidHbaProvider.cc, when controller has booted into safemode.
TO REPRODUCE: 1) Install old SMIS build
2) Query for MegaRaidHba class
3) Current HealthState is displayed based on states of various other entities like Fan, Powersupply, BBU etc
ISSUE DESC: SAFE mode is not being implemented. MegaRaidHBA class HealthStatus has to be displayed when HBA is in safe mode. Current HealthState is displayed based on states of various other entities like Fan, Powersupply, BBU etc. This is not needed when Controller is in safe mode.

(SCGCQ00518512) Defect 4/5

HEADLINE: need to add property 'supportextencldrivecount' in dtype of LSI provider.
DESC OF CHANGE: Added property 'supportextencldrivecount' in dtype of Controller.cc and Controller.h
TO REPRODUCE: need to add property 'supportextencldrivecount' in dtype of LSI provider.
ISSUE DESC: need to add property 'supportextencldrivecount' in dtype of LSI provider.

(SCGCQ00527419) Defect 5/5

HEADLINE: Creating cachecade VD and associating it with normal VD is not happening through SMIS
DESC OF CHANGE: There was an existing code that was zeroing the pay lode before firing MR_DCMD_LD_SSCD_SET_LDS. Also size of the pay load was not properly calculated.
TO REPRODUCE: Boot to OS and create cachecade VD and normal VD using SMIS

<PTT>method lsiesg_storageconfigurationservice
Connecting to CIM-XML CIMOM...Using ssl Connected....
1: RequestStateChange
2: StartService
3: StopService
4: CreateOrModifyStoragePool
5: CreateOrModifyElementFromStoragePool
6: DeleteStoragePool
7: ReturnToStoragePool
8: CreateReplica
9: ModifySynchronization
10: AttachReplica
11: attachCachecade
12: AttachOrModifyReplica
13: CreateOrModifyReplicationPipe
14: CreateReplicationBuffer
15: CreateOrModifyElementFromElements
16: ScsiScan



MegaRAID Engineering Release Notice

Beta Release Version 00.50.00.02 - MR_SAS_Providers (SCGCQ00529918)

```
17: RequestUsageChange
18: GetElementsBasedOnUsage
19: clearConfiguration
20: RejoinMirror
21: viewMirrorBreak
Select an Instance (1..21)? 11
Connecting to CIM-XML CIMOM...Using ssl Connected....
1: LSIESG_StorageConfigurationService.CreationClassName="LSIESG_StorageConfigura
tionService",Name="500605B00404D420_StorageConfigurationService",SystemCreationC
lassName="LSIESG_MegaRAIDHBA",SystemName="500605B00404D420"
Selected instance 1
```

Enter input parameters:
Please press return key for NULL values

```
InLDs:
lsiesg_storagevolume
Connecting to CIM-XML CIMOM...Using ssl Connected....
1: LSIESG_StorageVolume.CreationClassName="LSIESG_StorageVolume",DeviceID="50060
5B00404D420_0",SystemCreationClassName="LSIESG_MegaRAIDHBA",SystemName="500605B0
0404D420"
2: LSIESG_StorageVolume.CreationClassName="LSIESG_StorageVolume",DeviceID="50060
5B00404D420_1",SystemCreationClassName="LSIESG_MegaRAIDHBA",SystemName="500605B0
0404D420"
Select an Instance (1..2)? 2
Select an Instance, enter 0 to exit (1..2)? 0
```

```
Assign:
1
Connecting to CIM-XML CIMOM...Using ssl Connected....
```

Method "attachCacheade" Returned = 0

No Output Parameters are returned

Configuration Summary:

```
Controller: LSI MegaRAID SAS 9380-8e(Bus 5,Dev 0)
Status: Optimal
Firmware Package Version: 24.2.0-0005
Firmware Version: 4.220.00-2841
Driver Name: megaraid_sas
Driver Version: 06.602.00.00
BBU: YES
Enclosure(s): 1
Drive(s): 10
Virtual Drive(s): 2
```

```
BBU---
Type CVPM03
BBU Status: Optimal
```

```
Enclosures---
PRODUCT NAME TYPE STATUS
Mogul Ses OK
```

```
OS: Rhel 6.4 32bit
Server: Dell
```

ISSUE DESC:

Boot to OS and create cachecade VD and normal VD using SMIS

```
<PTT>method lsiesg_storageconfigurationservice
Connecting to CIM-XML CIMOM...Using ssl Connected....
1: RequestStateChange
2: StartService
3: StopService
4: CreateOrModifyStoragePool
5: CreateOrModifyElementFromStoragePool
6: DeleteStoragePool
7: ReturnToStoragePool
8: CreateReplica
9: ModifySynchronization
10: AttachReplica
11: attachCacheade
12: AttachOrModifyReplica
13: CreateOrModifyReplicationPipe
14: CreateReplicationBuffer
15: CreateOrModifyElementFromElements
16: ScsiScan
17: RequestUsageChange
18: GetElementsBasedOnUsage
19: clearConfiguration
```



MegaRAID Engineering Release Notice

Beta Release Version 00.50.00.02 - MR_SAS_Providers (SCGCQ00529918)

```
20: RejoinMirror
21: viewMirrorBreak
Select an Instance (1..21)? 11
Connecting to CIM-XML CIMOM...Using ssl Connected....
1: LSIESG_StorageConfigurationService.CreationClassName="LSIESG_StorageConfigura
tionService",Name="500605B00404D420_StorageConfigurationService",SystemCreationC
lassName="LSIESG_MegaRAIDHBA",SystemName="500605B00404D420"
Selected instance 1
```

Enter input parameters:
Please press return key for NULL values

```
InLDs:
lsiesg_storagevolume
Connecting to CIM-XML CIMOM...Using ssl Connected....
1: LSIESG_StorageVolume.CreationClassName="LSIESG_StorageVolume",DeviceID="50060
5B00404D420_0",SystemCreationClassName="LSIESG_MegaRAIDHBA",SystemName="500605B0
0404D420"
2: LSIESG_StorageVolume.CreationClassName="LSIESG_StorageVolume",DeviceID="50060
5B00404D420_1",SystemCreationClassName="LSIESG_MegaRAIDHBA",SystemName="500605B0
0404D420"
Select an Instance (1..2)? 2
Select an Instance, enter 0 to exit (1..2)? 0
```

```
Assign:
1
Connecting to CIM-XML CIMOM...Using ssl Connected....
```

Method "attachCacheade" Returned = 0

No Output Parameters are returned

Configuration Summary:

```
Controller: LSI MegaRAID SAS 9380-8e(Bus 5,Dev 0)
Status: Optimal
Firmware Package Version: 24.2.0-0005
Firmware Version: 4.220.00-2841
Driver Name: megaraid_sas
Driver Version: 06.602.00.00
BBU: YES
Enclosure(s): 1
Drive(s): 10
Virtual Drive(s): 2
```

```
BBU---
Type CVPM03
BBU Status: Optimal
```

```
Enclosures---
PRODUCT NAME TYPE STATUS
Mogul Ses OK
```

```
OS: Rhel 6.4 32bit
Server: Dell
```



MegaRAID Engineering Release Notice

Beta Release Version 00.50.05.02 - MR_SAS_Providers (SCGCQ00529916)

Change Summary (Defects=1)

SCGCQ00521848 (CSET) - LSI provider 00.38.05.xx gets "connection timeout" error when ortonville or Ravenswood is plugged



MegaRAID Engineering Release Notice

Beta Release Version 00.50.05.02 - MR_SAS_Providers (SCGCQ00529916)

Total Defects Resolved (1)

(SCGCQ00521848 - Port of SCGCQ00521381)		Defect 1/1
HEADLINE:	LSI provider 00.38.05.xx gets "connection timeout" error when ortonville or Ravenswood is plugged	
DESC OF CHANGE:	Hence,now a call to function exitLib would be made whenever we unload the provider library.	
TO REPRODUCE:	<ol style="list-style-type: none">1. Plug Ironville or Ravenswood on a system.2. Install sles10.4 64bit or sles11.1 64bit.3. Install Platform Agent or OpenPegasus and register LSI provider 00.38.05.xx in namespace, then use "ei" or "niall" to get instances via LSI provider.	
ISSUE DESC:	When SMI-S provider unloads SL libraries,we do not call exitLib on the library which is being unloaded.The main function of exitLib is to free the structures and does the clean up of resources which has been allocated for the library.As we are unloading the provider directly without calling exitLib we are seeing a connection timeout.	



MegaRAID Engineering Release Notice

Beta Release Version 00.50.V0.02 - MR_SAS_Providers (SCGCQ00529870)

Defects=0, Enhancements=0 (Version Change Only)



MegaRAID Engineering Release Notice

Alpha Release Version 90.50.05.05 - MR_SAS_Providers (SCGCQ00518552)

Defects=0, Enhancements=0 (Version Change Only)



MegaRAID Engineering Release Notice

Alpha Release Version 90.50.00.04 - MR_SAS_Providers (SCGCQ00518535)

Change Summary (Defects=5 Enhancements=1)

SCGCQ00498893 (DFCT) - Address Coverity Defects.

SCGCQ00503799 (DFCT) - Resolve Coverity reported Defects.

SCGCQ00504892 (DFCT) - makefile changes for linux

SCGCQ00492203 (CSET) - Usage of structure MR_TMMC_State for superacap (batteryprovider.cc).

SCGCQ00497837 (CSET) - SMIS: Not able to create PI enabled VD's from SMI provider on IR3 controller

SCGCQ00473470 (ENHREQ) - SCSIInitiatorTargetLogicalUnitPath Association has been implmented.



MegaRAID Engineering Release Notice

Alpha Release Version 90.50.00.04 - MR_SAS_Providers (SCGCQ00518535)

Total Defects Resolved (5)

(SCGCQ00498893) Defect 1/5

HEADLINE: Address Coverity Defects.
DESC OF CHANGE: Checks added for NULL pointer dereference.
TO REPRODUCE: Execute Coverity tool on MR 6.2.
ISSUE DESC: Address Coverity Defects found in MR 6.2.

(SCGCQ00503799) Defect 2/5

HEADLINE: Resolve Coverity reported Defects.
DESC OF CHANGE: More details can be found in coverity reports.
TO REPRODUCE: Execute Coverity on MR 6.2 source code.
ISSUE DESC: Resolve Coverity Defects in MR 6.2.

(SCGCQ00504892) Defect 3/5

HEADLINE: makefile changes for linux
DESC OF CHANGE: makefile changes for linux included
TO REPRODUCE: get instance of any class..
ISSUE DESC: makefile didnt include object of class.

(SCGCQ00492203 - Port of SCGCQ00486939) Defect 4/5

HEADLINE: Usage of structure MR_TMMC_State for superacap (batteryprovider.cc).
DESC OF CHANGE: Hence made changes to the BatteryProvider class where depending upon the type of the battery we populate the properties accordingly.

For SuperCap below properties are masked as they are not eligible for supercap.
1.EstimatedChargeRemaining
2.EstimatedRunTime
3.RechargeCount
4.RetentionTime
5.TimeToFullCharge
TO REPRODUCE: 1.Install LSI SMI-S Provider.
2.Query for LSIESG_Battery class.
ISSUE DESC: For supercap battery,some of the properties should be masked and structure MR_TMMC_State should be used for populating supercap features.

(SCGCQ00497837 - Port of SCGCQ00496073) Defect 5/5

HEADLINE: SMIS: Not able to create PI enabled VD's from SMI provider on IR3 controller
DESC OF CHANGE: Modified the property "IsSpan" of class LSIESG_GeneratedStorageSetting for proper retrieval of its value.
TO REPRODUCE: 1.Install LSI SMI-S Provider.
2.Create a setting.
3.Query for LSIESG_GeneratedStorageSetting which was created in the step2.
ISSUE DESC: For IR Controller,one of the property of class LSIESG_GeneratedStorageSetting class was not being filled with a proper value and hence Exception was seen when user tries to enumerate for LSIESG_GeneratedStorageSetting after creating the setting.

Total Enhancements Implemented (1)

(SCGCQ00473470)	Enhancement 1/1
-----------------	-----------------

HEADLINE: SCSIInitiatorTargetLogicalUnitPath Association has been implmented.

NEW FUNCTIONALITY: SCSIInitiatorTargetLogicalUnitPath Association has been implmented.



MegaRAID Engineering Release Notice

Alpha Release Version 90.50.V0.02 - MR_SAS_Providers (SCGCQ00496043)

Defects=0, Enhancements=0 (Version Change Only)

Defects=0, Enhancements=0 (Version Change Only)



MegaRAID Engineering Release Notice

Alpha Release Version 90.50.00.02 - MR_SAS_Providers (SCGCQ00496011)

Change Summary (Defects=3)

SCGCQ00483487 (DFCT) - SMI-S: Estimated time left for any operation is not displaying properly when queried from cim_job

SCGCQ00494725 (DFCT) - Creation of volume fails with ReturnCode 5

SCGCQ00493811 (CSET) - LSI Provider loads PA libraries when both DSA and PA agents are present in the system



MegaRAID Engineering Release Notice

Alpha Release Version 90.50.00.02 - MR_SAS_Providers (SCGCQ00496011)

Total Defects Resolved (3)

(SCGCQ00483487) Defect 1/3

HEADLINE: SMI-S: Estimated time left for any operation is not displaying properly when queried from cim_job
DESC OF CHANGE: From firmware we are getting value in seconds . So converted this value into millisecond and passed to function getTimeIntervalFromTimeMillis().
TO REPRODUCE: 1) Create R1 VD
2) Start CheckConsistency
3) Query for CIM_Job. It shows incorrect value of "TimeLeft"
ISSUE DESC: From firmware we are getting value in seconds and passing this value to function getTimeIntervalFromTimeMillis(). This function need value in millisecond.

(SCGCQ00494725) Defect 2/3

HEADLINE: Creation of volume fails with ReturnCode 5
DESC OF CHANGE: A Boot Volume specific check was exposed for Regular VD creation Logic. Which causing failure in VD creation. The check has moved to Boot volume specific changes.
TO REPRODUCE: 1.Install LSI SMI-S Provider.
2.With the latest code changes,create a pool.
3.Create a volume.
4.Volume creation fails with ReturnCode 5.[Invalid parameter].
ISSUE DESC: 1.Install LSI SMI-S Provider.
2.With the latest code changes,create a pool.
3.Create a volume.
4.Volume creation fails with ReturnCode 5.[Invalid parameter].

(SCGCQ00493811 - Port of SCGCQ00493804) Defect 3/3

HEADLINE: LSI Provider loads PA libraries when both DSA and PA agents are present in the system
DESC OF CHANGE: Now,we would be reading the configuration file from present directory(lsi_mr.conf) and hence both the DSA and PA would fetch their config file correctly.
TO REPRODUCE: 1.Install DSA and PA agents.
2.Run provider with PA.
3.Run provider with DSA.It loads the PA libraries which is incorrect.
ISSUE DESC: In the system,when both the Denali and DSA are installed,provider takes the wrong storelib binaries while exectuting DSA.This behaviour was because,in the code we have harcoded the path of the libraries which is for only Denali.Hence,while executing DSA,it fails to fetch the correct libraries.