(SCGCQ00359699) - Beta Release Version 1.02.05 - MR_SAS_CLI_StorCLI

Change Summary (Defects=15)

SCGCQ00324813 (DFCT) - MegaCLI: MFI_STAT_NOT_FOUND returns when retrieving the FW event log.
SCGCQ00328184 (DFCT) - StorCLI2.0: "endCtlrPropUpdate failed 4" when changing the properties of patrolread
SCGCQ00332212 (DFCT) - libsysfs custom implementation issue.
SCGCQ00335239 (DFCT) - Virtual Drive properties(stripe size and size) got changed when VD is degraded
SCGCQ00338675 (DFCT) - 'VD ADD' should use 'strip' instead of 'stripe'.
SCGCQ00344142 (DFCT) - The size is in KB for "WithArrExp" instead of GB under EXPANSION INFORMATION
SCGCQ00345525 (DFCT) - On performing an "add vd" with size provided in TB a decimal value is truncated to whole number as input.
SCGCQ00345557 (DFCT) - StorCLI: A vd can be assigned to a cachecade VD multiple times also a cachecade VD allows to be assigned to itself.
SCGCQ00345706 (DFCT) - ./storcli /c0 set perfmode=val ----->It is setting perfmode value other than 0 and 1
SCGCQ00349419 (DFCT) - storcli /c0 show all -----> driver version and driver name field is missing
SCGCQ00351987 (DFCT) - Unexpected line at output when legacy command "Adpallinfo" executed with page=x
SCGCQ00354581 (DFCT) - Storcli_EFI : System halts while executing lengthy commands
SCGCQ00355367 (DFCT) - Updated help
SCGCQ00357319 (DFCT) -
SCGCQ00359371 (DFCT) - "show" info need to add abbreviation for "PDs/DGs/VDs/BBU/Y"

Total Defects Resolved (15)

(SCGCQ00324813)	*Defect 1/15*
HEADLINE:	MegaCLI: MFI_STAT_NOT_FOUND returns when retrieving the FW event log.
DESC OF CHANGE:	earlier logic to find if more event exist is to check if the retrieved event count is equal to max_event_cout_per transaction. Now the logic is to compare if the aequence number is less that is max event sequence number.
TO REPRODUCE:	The problem will surface if the total event count is a multiple of 128, which is the max events that can be retrieved at a time.
ISSUE DESC:	MFI_STAT_NOT_FOUND returns when retrieving the FW event log. The problem will surface if the total event count is a multiple of 128, which is the max events that can be retrieved at a time.

(SCGCQ00328184)	*Defect 2/15*
HEADLINE:	StorCLI2.0: "endCtlrPropUpdate failed 4" when changing the properties of patrolread
DESC OF CHANGE:	Change has been made in adatamfi.cpp to support multiple set properties
TO REPRODUCE:	./storcli64 /c0 set pr maxconcurrentpd=252 includessds=on uncfgareas=off
ISSUE DESC:	Server: Intel System Gen2 1) Controller_1: LSI MegaRAID SAS 9265-8i Firmware: 3.190.05-1652 2) Driver : 6.601.01.00 3) Enclosure : DE1600-SAS 4) Application(s): StorCLI 5) OS: SUSE11 SP2 64 Bit 6) System Memory:4 GB 7) MWCLi- Ver 1.01.09 Aug 23, 2012 Description: ======== Getting the following error when trying to change the patrolread properties even when the requested properties values are changed successfully. Error Snippet: ========== <cmd>./storcli64 /c0 set pr maxconcurrentpd=252 includessds=on uncfgareas=off Controller = 0 Status = Failure Description = None Detailed Status : ========== ---------- Ctrl Status Ctrl_Prop Value ErrMsg ErrCd ---------- 0 Failed - - endCtlrPropUpdate failed 4 ---------- Controller Properties : ========== ---------- Ctrl_Prop Value ---------- PR MaxConcurrentPd 252 PR IncludeSSDs ON PR UnCfgAreas OFF ---------- Observations: ========= 1) If we execute the "<cmd>./storcli64 /c0 set pr maxconcurrentpd=252 includessds=off uncfgareas=on" again then no error is displayed.

(SCGCQ00332212)	*Defect 3/15*
HEADLINE:	libsysfs custom implementation issue.
DESC OF CHANGE:	erlier versions of megacli/storcli used a 3rd part library (libsysfs) to enumerate controllers, where they get the controllers in a sorted manner. In later versions of megacli/storcli libsysfs was removed for licensing reasons. LSI has written a custom code to do the same job which was done by libsysfs. This particular implementation doesn't sort the enumeration. Now a similar sorting is implemented in the LSI implementation if libsysfs.
TO REPRODUCE:	Use multiple controllers in the same machine and try enumerating them with the latest storcli and compare the same with Ph1 version of storcli/megacli.
ISSUE DESC:	erlier versions of megacli/storcli used a 3rd part library (libsysfs) to enumerate controllers, where they get the controllers in a sorted manner. In later versions of megacli/storcli libsysfs was removed for licensing reasons. LSI has written a custom code to do the same job which was done by libsysfs. This particular implementation doesn't sort the enumeration. Now a similar sorting is implemented in the LSI implementation if libsysfs.

(SCGCQ00335239)	*Defect 4/15*
HEADLINE:	Virtual Drive properties(stripe size and size) got changed when VD is degraded
DESC OF CHANGE:	Checking if PD is Missing and ignoring it while getting the blocksize of the PD in a VD.
TO REPRODUCE:	Execute storcli /c0/v0 show all on a degraded PD
ISSUE DESC:	Virtual Drive properties(stripe size and size) got changed when VD is degraded

(SCGCQ00338675)	*Defect 5/15*
HEADLINE:	'VD ADD' should use 'strip' instead of 'stripe'.
DESC OF CHANGE:	change has been made in helpcp.cpp Rsvwrdcp.cpp for stripe ti strip
TO REPRODUCE:	c:\cli> storcli.exe /c0 add vd type=r1 size=1gb drives=43:1-4 strip=64
ISSUE DESC:	'VD ADD' should use 'strip' instead of 'stripe'. Verify other HSW apps for correct terminology While creating the VD we give the strip size with token as stripe. c:\cli> storcli.exe /c0 add vd type=r1 size=1gb drives=43:1-4 stripe=64. But while displaying it, we display it as Strip. VD0 Properties : ========== Strip Size = 64 KB Span Depth = 4 Number of Drives Per Span = 2 Disk Cache Policy = Disk's Default Encryption = None Active Operations = None Exposed to OS = Yes

(SCGCQ00344142)	*Defect 6/15*
HEADLINE:	The size is in KB for "WithArrExp" instead of GB under EXPANSION INFORMATION
DESC OF CHANGE:	Due to a logical code error, user wasn't able to expand VD with array expansion. Necessary code changes done to fix the issue.
TO REPRODUCE:	Create a R1 VD one with smaller size & other with larger size. DG size size will be same as that of smaller size PD. Replace the smaller size PD with a larger size PD. Storcli returns an error message & does not expand the VD.
ISSUE DESC:	Not able to use "expandarray" option in the command "storcli /cx/vx expand size=xgb expandarray"

(SCGCQ00345525)	*Defect 7/15*

HEADLINE: On performing an "add vd" with size provided in TB a decimal value is truncated to whole number as input.

DESC OF CHANGE: Calculation of decimal value of VD size(in TeraByte) had a bug & has been fixed appropriately.

TO REPRODUCE: Step 1. Connect 3 >2TB drives to the controller.
Step 2. try to create a VD using the command "storcli /c0 add vd type=r5 size=1.9tb drives=252:0-2"
OBV: A 1TB vd is created truncating the 0.9TB size.

```
root@dhcp-135-24-227-137:~# storcli /c0 add vd type=r5 size=2.9tb drives=252:0-2
Controller = 0
Status = Success
Description = Add VD Succeeded


root@dhcp-135-24-227-137:~# storcli /c0 show freespace
Controller = 0
Status = Success
Description = None


FREE SPACE DETAILS :
==================

----------------------
ID DG AftrVD     Size
----------------------
 1  0      0 3.457 TB
----------------------

Total Slot Count = 1



root@dhcp-135-24-227-137:~# storcli /c0 add vd type=r5 size=0.457tb drives=252:0-2
Controller = 0
Status = Success
Description = Add VD Succeeded


root@dhcp-135-24-227-137:~# storcli /c0 show freespace
Controller = 0
Status = Success
Description = None


FREE SPACE DETAILS :
==================

----------------------
ID DG AftrVD     Size
----------------------
 1  0      1 3.455 TB
----------------------

Total Slot Count = 1



root@dhcp-135-24-227-137:~# storcli /c0/Vall show
Controller = 0
Status = Success
Description = None


Virtual Drives :
==============

-------------------------------------------------------------
DG/VD TYPE  State Access Consist Cache Cac sCC     Size Name
-------------------------------------------------------------
0/0   RAID5 Optl  RW     No      RaWTD -   ON    2.0 TB
0/1   RAID5 Optl  RW     No      RaWTD -   ON  1.023 GB
-------------------------------------------------------------

Cac=CacheCade|Rec=Recovery|OfLn=OffLine|Pdgd=Partially Degraded|dgrd=Degraded
Optl=Optimal|RO=Read Only|RW=Read Write|B=Blocked|Consist=Consistent|
Ra=Read Ahead Adaptive|R=Read Ahead Always|NR=No Read Ahead|WB=WriteBack|
AWB=Always WriteBack|WT=WriteThrough|C=Cached IO|D=Direct IO|sCC=Scheduled
Check Consistency



root@dhcp-135-24-227-137:~# storcli /c0 add vd type=r5 size=9.457gb drives=252:0-2
```

```
Controller = 0
Status = Success
Description = Add VD Succeeded


root@dhcp-135-24-227-137:~# storcli /c0/Vall show
Controller = 0
Status = Success
Description = None


Virtual Drives :
==============

-------------------------------------------------------------
DG/VD TYPE  State Access Consist Cache Cac sCC     Size Name
-------------------------------------------------------------
0/0   RAID5 Optl  RW     No      RaWTD -   ON    2.0 TB
0/1   RAID5 Optl  RW     No      RaWTD -   ON  1.023 GB
0/2   RAID5 Optl  RW     No      RaWTD -   ON  9.456 GB
-------------------------------------------------------------

Cac=CacheCade|Rec=Recovery|OfLn=OffLine|Pdgd=Partially Degraded|dgrd=Degraded
Optl=Optimal|RO=Read Only|RW=Read Write|B=Blocked|Consist=Consistent|
Ra=Read Ahead Adaptive|R=Read Ahead Always|NR=No Read Ahead|WB=WriteBack|
AWB=Always WriteBack|WT=WriteThrough|C=Cached IO|D=Direct IO|sCC=Scheduled
Check Consistency



root@dhcp-135-24-227-137:~# storcli /c0 show freespace
Controller = 0
Status = Success
Description = None


FREE SPACE DETAILS :
==================

----------------------
ID DG AftrVD     Size
----------------------
 1  0      2 3.446 TB
----------------------

Total Slot Count = 1



root@dhcp-135-24-227-137:~# storcli /c0 add vd type=r5 size=1.9tb drives=252:0-2
Controller = 0
Status = Success
Description = Add VD Succeeded


root@dhcp-135-24-227-137:~# storcli /c0/Vall show
Controller = 0
Status = Success
Description = None


Virtual Drives :
==============

-------------------------------------------------------------
DG/VD TYPE  State Access Consist Cache Cac sCC     Size Name
-------------------------------------------------------------
0/0   RAID5 Optl  RW     No      RaWTD -   ON    2.0 TB
0/1   RAID5 Optl  RW     No      RaWTD -   ON  1.023 GB
0/2   RAID5 Optl  RW     No      RaWTD -   ON  9.456 GB
0/3   RAID5 Optl  RW     No      RaWTD -   ON    1.0 TB
-------------------------------------------------------------

Cac=CacheCade|Rec=Recovery|OfLn=OffLine|Pdgd=Partially Degraded|dgrd=Degraded
Optl=Optimal|RO=Read Only|RW=Read Write|B=Blocked|Consist=Consistent|
Ra=Read Ahead Adaptive|R=Read Ahead Always|NR=No Read Ahead|WB=WriteBack|
AWB=Always WriteBack|WT=WriteThrough|C=Cached IO|D=Direct IO|sCC=Scheduled
Check Consistency



root@dhcp-135-24-227-137:~# storcli /c0 show freespace
```

```
Controller = 0
Status = Success
Description = None

FREE SPACE DETAILS :
==================

----------------------
ID DG AftrVD     Size
----------------------
 1  0      3 2.446 TB
----------------------

Total Slot Count = 1
```

ISSUE DESC: Create a VD using the "add vd" "storcli /c0 add vd type=r5 size=1.9tb drives=252:0-2" the command creates a 1TB size VD truncating the decimal value. On providing a suffix GB to the size created no truncation is seen. However to achieve the required decimal size in TB the size needs to be mentioned in GB.

(SCGCQ00345557) *Defect 8/15*

HEADLINE: StorCLI: A vd can be assigned to a cachecade VD multiple times also a cachecade VD allows to be assigned to itself.

DESC OF CHANGE: Added the missed checks before enabling the ssd caching on a VD.

TO REPRODUCE: Create a R5 VD. Now create a Cachecade VD using SSD drives in WT mode. Explicitly assign it to the CCVD created.

storcli /c0/v3 set ssdcaching = on
caching set on the specied VD.

Perform this operation multiple time the command is successful instead of a message "Already Assigned", whereas performing a ssdcaching=off twice on the same VD that is set to on throws an error message.

Perform the set ssdcaching operation on a CC-VD the operation is successful, which should not be permitted.

ISSUE DESC: StorCLI: A vd can be assigned to a cachecade VD multiple times also a cachecade VD allows to be assigned to itself.

(SCGCQ00345706) *Defect 9/15*

HEADLINE: ./storcli /c0 set perfmode=val ----->It is setting perfmode value other than 0 and 1

DESC OF CHANGE: Check Has been added in stctprcp.cpp to check the value other than 0 & 1

TO REPRODUCE: storcli /c0 set perfmode=0/1

ISSUE DESC: 1. execute the command ---> storcli /c0 set perfmode h

description: In perfmode help file it is giving that we can set only two values for perfmode that is 0 and 1 but it taking other values also and giving success message.

(SCGCQ00349419) *Defect 10/15*

HEADLINE: storcli /c0 show all -----> driver version and driver name field is missing

DESC OF CHANGE: Changed the condition because the check OS_SOLARIS was affecting the windows part

TO REPRODUCE: storcli /c0 show all -----> driver version and driver name field is missing

ISSUE DESC: storcli /c0 show all -----> driver version and driver name field is missing

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(SCGCQ00351987) *Defect 11/15*

HEADLINE: Unexpected line at output when legacy command "Adpallinfo" executed with page=x

DESC OF CHANGE: Necessary code changes done to disable the display of Unexpected line

TO REPRODUCE: Execute :
./storcli adpallinfo a0 page=10

ISSUE DESC:	Storcli : Unexpected line at output when command "Adpallinfo" executed with page=x . The syntax page=x gives syntax error when executed for othe legacy commands but displays the output as below for command .

(SCGCQ00354581)	*Defect 12/15*
HEADLINE:	Storcli_EFI : System halts while executing lengthy commands
DESC OF CHANGE:	Instead of allocating the input buffer in a static way changed it to dynamic allocation.
TO REPRODUCE:	1) try to execute storcli.efi /c0 add vd type=r1 size=3gb,4gb,4gb,4gb,4gb,4gb,4gb,4gb,4gb,4gb names=abcdefghijklmno,abcdefghijklmno,abcdefghijklmno,abcdefghijklmno,abcdefghijklmno,abcdefghijklmabcdefghijklmno,no,abcdefghijklmno,abcdefghijklmno,abcdefghijklmno drives=21:2,3
ISSUE DESC:	Storcli_EFI : System halts while executing lengthy commands

(SCGCQ00355367)	*Defect 13/15*
HEADLINE:	Updated help
DESC OF CHANGE:	Updated help
TO REPRODUCE:	Updated help
ISSUE DESC:	Updated help

(SCGCQ00357319)	*Defect 14/15*
DESC OF CHANGE:	As per storcli design document the "EID:Slot" column must be displayed only for "show all" option & not for show. This column might have been placed accidentally. Also, since the "show" option only displays virtual drives, "EID:Slot" column will not have any meaning in this O/P. The resolution was only to remove the "EID:Slot" column from O/P of the command "storcli /c0/fall show"
TO REPRODUCE:	Step 1. Create a set of DG's, R5,R6,R1. Step 2. Hot plug all the drives from the DG. Step 3. perform "storcli /c0/fall show"
ISSUE DESC:	The column "EID:Slot" is not populated with foreign confign present.

(SCGCQ00359371)	*Defect 15/15*
HEADLINE:	"show" info need to add abbreviation for "PDs/DGs/VDs/BBU/Y"
DESC OF CHANGE:	fixed by adding description for PDs/DGs/VDs/BBU/Y
TO REPRODUCE:	storcli show----->execute this command
ISSUE DESC:	Storcli-"show" info need to add abbreviation for "PDs/DGs/VDs/BBU/Y" 1. check the controller present info. 2.storcli show ---> execute this command