

ReleaseOrder ID: DCSG01260334
Headline: Avenger StorCLI MR 8.2 - StorCLI release order version 008.0002.0000.0016
Release Version: 008.0002.0000.0016
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: GCA
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0016-DCSG01260334-2022-07-07-15-53-53
Release Date: 2022-07-07 10:20:50.000000
Date Generated: Aug 05, 2022

Defects Fixed (1):

ID: DCSG01273310
Headline: Storcli VIB ERROR_VIB_CHECK: MissingESXiRelease esx-version constraint with <it is missing
Description Of Change: Added the less than constraint during VIB creation.
Issue Description: While building VIB, The constraints file did not have the less than constraint because of which the VIB validation was failing during signing.
Steps To Reproduce: Sign the VIB which is created using the ESXi6.7 toolchain.

Release History

- [DCSG01249420 - Avenger StorCLI MR 8.2 Beta- StorCLI release order version 008.0002.0000.0015](#)
- [DCSG01244652 - Avenger StorCLI MR 8.2 Beta - StorCLI release order version 008.0002.0000.0014](#)
- [DCSG01236510 - Avenger StorCLI MR 8.2 Alpha - StorCLI release order version 008.0002.0000.0013](#)
- [DCSG01230401 - Avenger StorCLI MR 8.2 Alpha - StorCLI release order version 008.0002.0000.0012](#)
- [DCSG01219437 - Avenger StorCLI MR 8.2 PreAlpha - StorCLI release order version 008.0002.0000.0011](#)
- [DCSG01209298 - Avenger StorCLI MR 8.2 PreAlpha - StorCLI release order version 008.0002.0000.0010](#)
- [DCSG01205954 - Avenger StorCLI MR 8.2 PreAlpha - StorCLI release order version 008.0002.0000.0009](#)
- [DCSG01197628 - MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0008](#)
- [DCSG01186682 - MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0007](#)
- [DCSG01177404 - MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0006](#)
- [DCSG01173734 - MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0005](#)
- [DCSG01167708 - MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0004](#)
- [DCSG01164501 - MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0003](#)
- [DCSG01159312 - MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0002](#)
- [DCSG01150865 - MR8.2 PreAlpha Avenger StorCLI release v008.0002.0000.0001](#)

ReleaseOrder ID: DCSG01249420 [Open In CQWeb](#)
Headline: Avenger StorCLI MR 8.2 Beta- StorCLI release order version 008.0002.0000.0015
Release Version: 008.0002.0000.0015
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: Beta
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0015-DCSG01249420-2022-06-22-16-04-35
Release Date: 2022-06-22 10:32:56.000000
Date Generated: Aug 05, 2022

Defects Fixed (1):

ID: DCSG01231072
Headline: StorCLI failing message with "each R0" command
Description Of Change: Handling the return code of add each Virtual drive function so that it displays all the failure cases properly.
And exiting with the error code instead for proceeding further.
Issue Description: StorCLI failing message with "each R0" command
Steps To Reproduce: Please refer Repro steps

ReleaseOrder ID: DCSG01244652 [Open In CQWeb](#)
Headline: Avenger StorCLI MR 8.2 Beta - StorCLI release order version 008.0002.0000.0014
Release Version: 008.0002.0000.0014
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: Beta
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0014-DCSG01244652-2022-06-15-15-34-20
Release Date: 2022-06-15 10:45:00.000000
Date Generated: Aug 05, 2022

Defects Fixed (3):

ID: DCSG01236678
Headline: fail import on secure virtual disk is failing even when keyid is same.
Description Of Change: CLI will also check now to make sure the locked drives are present as part of drive refs sent by FW
Issue Description: When user pulls only one drive among multiple drives which have same keyid, CLI is failing the call conveying that multiple drives with different keyids are present because CLI is checking for count of drives returned for locked drive and locked drives list sent by scan command.
Steps To Reproduce: Try to unlock drives by having multiple drives with same keyid but only one drive locked among those.

ID: DCSG01242337
Headline: vib version mismatch
Description Of Change: vib version mismatch
Issue Description: vib version mismatch
Steps To Reproduce: vib version mismatch

ID: DCSG01237238 (Port Of Defect DCSG01237191)
Headline: Storcli shows improper description for "export" spdm command failure.
Description Of Change: Added the code to handle the failure message for export SPDM command failure.
Issue Description: Storcli shows improper description for "export" spdm command failure.
Steps To Reproduce: Storcli shows improper description for "export" spdm command failure.

ReleaseOrder ID: DCSG01236510 [Open In CQWeb](#)
Headline: Avenger StorCLI MR 8.2 Alpha - StorCLI release order version 008.0002.0000.0013
Release Version: 008.0002.0000.0013
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: Beta
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0013-DCSG01236510-2022-06-08-16-00-58
Release Date: 2022-06-08 10:26:10.000000
Date Generated: Aug 05, 2022

ReleaseOrder ID: DCSG01230401 [Open In CQWeb](#)
Headline: Avenger StorCLI MR 8.2 Alpha - StorCLI release order version 008.0002.0000.0012
Release Version: 008.0002.0000.0012
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: Alpha
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0012-DCSG01230401-2022-06-01-15-33-08
Release Date: 2022-06-01 09:57:09.000000
Date Generated: Aug 05, 2022

Defects Fixed (10):

ID: DCSG01155391
Headline: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time
Description Of Change: Changed the PR properties to CC properties reference during the set of CC properties.
Issue Description: During CC set, We are incorrectly checking for PR properties structure which is NULL and its leading to NULL pointer access.
Steps To Reproduce: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time
StorCLI2.exe /c0 set cc=on starttime=2022/04/01 11 execfrequency hours=10

ID: DCSG01208519
Headline: Set autolearnmode command output includes unnecessary space in JSON output
Description Of Change: Set autolearnmode command output includes unnecessary space in JSON output
Issue Description: Set autolearnmode command output includes unnecessary space in JSON output
Steps To Reproduce: Set autolearnmode command output includes unnecessary space in JSON output

ID: DCSG01216209
Headline: VD creation on giving wrong strip size gives inappropriate error
Description Of Change: VD creation on giving wrong strip size gives inappropriate error
Issue Description: VD creation on giving wrong strip size gives inappropriate error
Steps To Reproduce: VD creation on giving wrong strip size gives inappropriate error

ID: DCSG01219361
Headline: Source and destination target ID printed in events in not correct
Description Of Change: Correct display of source and destination drives is displayed.
Issue Description: Destination and source drive ids were swapped because of which incorrect data was seen.
Steps To Reproduce: Issue /c0 show events.

ID: DCSG01220178
Headline: VD Expand with add PD says SUCCESS while trying to add already configured PD
Description Of Change: VD Expand with add PD says SUCCESS while trying to add already configured PD
Issue Description: VD Expand with add PD says SUCCESS while trying to add already configured PD
Steps To Reproduce: VD Expand with add PD says SUCCESS while trying to add already configured PD

ID: DCSG01220272
Headline: Storcli needs update w.r.t DG, events and Add VD help.
Description Of Change: Storcli needs update w.r.t DG, events and Add VD help.
Issue Description: Storcli needs update w.r.t DG, events and Add VD help.
Steps To Reproduce: Storcli needs update w.r.t DG, events and Add VD help.

ID: DCSG01220362
Headline: With fall import securitykey observing storcli is crashing.
Description Of Change: Added LKM drive to be unlocked as part of drive list which needs to be unlocked.
Issue Description: LKM drive was not being added to apply the security key because of which we are seeing crash.
Steps To Reproduce:
1. Create secure locked drive. Unable to see keyid when a secure drive is locked.
Non Importable Drives :
=====

EID:Sl	PID	State	Status	DG	Size	Intf	Med	SED_Type	SeSz	Model	Sp	LU/NS	Count	Multipath	Multiport	Locked	KeyId	
308:0	275	UConf	Good	F	1.745	TiB	NVMe	SSD	Opal	4 KiB	SAMSUNG	MZWLJ1T9HBJR-00007		U	1	-	-	Yes
9660-16i_805e18fb95b118_62861abf																		

Physical Drives = 16
PD LIST :
=====

EID:Sl	PID	State	Status	DG	Size	Intf	Med	SED_Type	SeSz	Model	Sp	LU/NS	Count	Multipath	Multiport		
308:0	275	UConf	Good	F	1.745	TiB	NVMe	SSD	Opal	4 KiB	SAMSUNG	MZWLJ1T9HBJR-00007		U	1	-	-

2. When trying to import locked secure foreign VD storcli is crashing like below.

C:\Users\Administrator\Desktop\com\8.2>storcli2.exe /c0/fall import securitykey=Lsi@12345

C:\Users\Administrator\Desktop\com\8.2>

ID: DCSG01222638

Headline: Addition of new IOCLogInfo codes

Description Of Change: Below IOCLogInfo codes have been added to FW and the same needs to be handled in StorCLI.

Issue Description: Below IOCLogInfo codes have been added to FW and the same needs to be handled in StorCLI.

Steps To Reproduce: Below IOCLogInfo codes have been added to FW and the same needs to be handled in StorCLI.

ID: DCSG01225041

Headline: Simple erase with aue=1 (Uninterrupted) should fail

Description Of Change: CLI will fail the call if FW does not support AUE but user provides AUE to 1.

Issue Description: When user provides AUE to 1 but FW does not support the same, CLI should fail the call.

Steps To Reproduce: Only below command should be supported

ID: DCSG01227089

Headline: Storcli shows incorrect error message while setting property on an OFFLINE VD.

Description Of Change: Storcli shows incorrect error message while setting property on an OFFLINE VD.

Issue Description: Storcli shows incorrect error message while setting property on an OFFLINE VD.

Steps To Reproduce: Please refer Repro steps

ReleaseOrder ID: *DCSG01219437* [Open In CQWeb](#)

Headline: *Avenger StorCLI MR 8.2 PreAlpha - StorCLI release order version 008.0002.0000.0011*

Release Version: *008.0002.0000.0011*

UCM Project: *StorCLI_Avenger_8x*

Sub UCM Project: *StorCLI_Avenger_8_2*

UCM Stream:

Release Type: *Alpha*

State: *Released*

Release Baseline: *Release-StorCLI_Avenger_8_2-008.0002.0000.0011-DCSG01219437-2022-05-18-20-14-56*

Release Date: *2022-05-18 14:04:58.000000*

Date Generated: *Aug 05, 2022*

Defects Fixed (10):

ID: DCSG01155391

Headline: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

Description Of Change: Changed the PR properties to CC properties reference during the set of CC properties.

Issue Description: During CC set, We are incorrectly checking for PR properties structure which is NULL and its leading to NULL pointer access.

Steps To Reproduce: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

ID: DCSG01185585

Headline: CLI needs handling for invalid parameter for PD replace missing dcmd

Description Of Change: MR8_DCMD_PD_MISSING_REPLACE is now being handled and the PD persistent id will be displayed if populated by FW as part of MR8_DCMD_STAT_CMD_UNSUPPORTED_FOR_LD.

Issue Description: Invalid parameter was not being handled for MR8_DCMD_PD_MISSING_REPLACE DCMD.

Steps To Reproduce: CLI needs to handle invalid mbox parameter for PD replace missing dcmd. This error should display which mbox attribute was wrong.

ID: DCSG01207806

Headline: Storcli does not list ErrType and ErrMsg for show events command failure.

Description Of Change: Storcli does not list ErrType and ErrMsg for show events command failure.

Issue Description: Storcli does not list ErrType and ErrMsg for show events command failure.

Steps To Reproduce: Storcli does not list ErrType and ErrMsg for show events command failure.

ID: DCSG01208519

Headline: Set autolearnmode command output includes unnecessary space in JSON output

Description Of Change: Set autolearnmode command output includes unnecessary space in JSON output

Issue Description: Set autolearnmode command output includes unnecessary space in JSON output

Steps To Reproduce: Set autolearnmode command output includes unnecessary space in JSON output

ID: DCSG01215102

Headline: Controller status reason says boot with preserved cache is allowed even when its set to off

Description Of Change: CLI will now check the preserved cache field to report the controller status accordingly.

Issue Description: CLI is checking for the populated bitmap for preserved cache field instead of the actual value.

Steps To Reproduce: 1. Generate preserved cache and check the controller status.

ID: DCSG01215165

Headline: Ondemand snapdump generation fails due to insufficient memory

Description Of Change: When ENOMEM is returned as a COM Status, CLI will display following error message "The system cannot allocate more virtual memory because its capacity is full."

Issue Description: CLI should display correct error message when SL8 returns ENOMEM from drivers.

Steps To Reproduce: 1. Issue ondemand snapumpd by running IOs.

ID: DCSG01215904
Headline: Storcli2 'reset phyerrorcounters' command fails with 'Unknown error.'
Description Of Change: CLI will not send any data transfer and set the direction flag correctly.
Issue Description: Reset drive error counters does not involve any data transfer. However, CLI was sending data which was resulting in error.
Steps To Reproduce: 1. Issue reset phyerrorcounters on drive.

ID: DCSG01216153
Headline: Storcli does not show the failure for a VD which is not present.
Description Of Change: Continuing after the failure of first VD expansion
Issue Description: Storcli does not show the failure for a VD which is not present.
Steps To Reproduce: Storcli does not show the failure for a VD which is not present.

ID: DCSG01218322
Headline: Unable to see keyid when a secure drive is locked.
Description Of Change: Added checks to make sure keyid of the LKM locked drive is displayed.
Issue Description: CLI should not display the KeyId of the EKM locked drive. However code was following a different approach and was blocking the keyid for LKM drive.
Steps To Reproduce: 1. Issue /c0/fall show and check the keyid of the locked drive.

ID: DCSG01219269
Headline: Persistent id of the SES should be read from Virtual device page of topology
Description Of Change: CLI will now check for virtual device nodes for the persistent id of the expander.
Issue Description: Handling of virtual device node was not present because of which CLI was not able to get the expander ses persistent id. This change was part of MR8.2 FW and is not present in MR8.1/MR8.0 FW.
Steps To Reproduce: Persistent id of the SES should be read from Virtual device page of topology

Currently, CLI reads the persistent of the SES device from the sas sata device data structure. Starting MR8.2, This information is part of virtual device data structure and CLI should read the persistent id to be parsed for phyerrorcounters info from the same.

ReleaseOrder ID: DCSG01209298 [Open In CQWeb](#)
Headline: Avenger StorCLI MR 8.2 PreAlpha - StorCLI release order version 008.0002.0000.0010
Release Version: 008.0002.0000.0010
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: Alpha
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0010-DCSG01209298-2022-05-09-20-03-36
Release Date: 2022-05-09 14:30:01.000000
Date Generated: Aug 05, 2022

Defects Fixed (7):

ID: DCSG01176557
Headline: Storcli shows "0x40000002" error code and Error message as " Unknown error" for drive "show poh" operation.
Description Of Change: Data will not be transferred when we send down self diagnostic request.
Issue Description: The direction and the data transfer should not be done for self diagnostic request.
Steps To Reproduce: Start POH on a drive.

ID: DCSG01177355
Headline: RAID50 VD creation should fail on already created RAID5 DG.
Description Of Change: Checking the span depth of the requested VD, for R50 if the span depth is 1, then failing the command.
Issue Description: RAID50 VD creation should fail on already created RAID5 DG.
Steps To Reproduce: RAID50 VD creation should fail on already created RAID5 DG.

ID: DCSG01192190
Headline: Storcli command hangs while querying latest warning events.
Description Of Change: CLI will now return the correct error code to caller and caller decides to display the error message / success. Also direction flag for send diagnostic command has been changed from read to write.
Issue Description: When SL8 returns PEL status not found, CLI is returning success to the caller because of which we are continuing to send the event requests to SL8.
Steps To Reproduce: 1. Create a VD and try to get the warning events.

ID: DCSG01196180
Headline: Unusabledriveinfo is not displayed after drive recovery failure due to drive removal on reconnecting the drives with IO's running on rest of the drives configured.
Description Of Change: Error will not be returned back but instead we will continue with the next device.
Issue Description: We were returning back the return code when we get the error from FW when we have missing drive id.
Steps To Reproduce: 1. Run the IO's and check the unusable drive info.

ID: DCSG01199032
Headline: Not able to create keyid with 256 characters using the file method even though file has 256 character keyid.
Description Of Change: Not able to create keyid with 256 characters using the file method even though file has 256 character keyid.
Issue Description: Not able to create keyid with 256 characters using the file method even though file has 256 character keyid.
Steps To Reproduce: Not able to create keyid with 256 characters using the file method even though file has 256 character keyid.

ID: DCSG01199087
Headline: EventData is displaying erroneous data on changing adjustable task rate on the controller.
Description Of Change: CLI will now display current and previous rates individually.
Issue Description: CLI is displaying the total structure as a new rate but whereas we have previous and new rates defined in the structure
Steps To Reproduce: 1. Change any of the controller rates and check the events for the same.

ID: DCSG01206496
Headline: Storcli shows status as "-" for expand command.
Description Of Change: Storcli shows status as "-" for expand command.
Issue Description: Storcli shows status as "-" for expand command.
Steps To Reproduce: Storcli shows status as "-" for expand command.

ReleaseOrder ID: DCSG01205954 [Open In CQWeb](#)
Headline: Avenger StorCLI MR 8.2 PreAlpha - StorCLI release order version 008.0002.0000.0009
Release Version: 008.0002.0000.0009
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:

Release Type: Pre-Alpha
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0009-DCSG01205954-2022-05-04-20-42-05
Release Date: 2022-05-04 15:02:27.000000
Date Generated: Aug 05, 2022

Defects Fixed (6):

ID: DCSG01177355
Headline: RAID50 VD creation should fail on already created RAID5 DG.
Description Of Change: Checking the span depth of the requested VD, for R50 if the span depth is 1, then failing the command.
Issue Description: RAID50 VD creation should fail on already created RAID5 DG.
Steps To Reproduce: RAID50 VD creation should fail on already created RAID5 DG.

ID: DCSG01192190
Headline: Storcli command hangs while querying latest warning events.
Description Of Change: CLI will now return the correct error code to caller and caller decides to display the error message / success. Also direction flag for send diagnostic command has been changed from read to write.
Issue Description: When SL8 returns PEL status not found, CLI is returning success to the caller because of which we are continuing to send the event requests to SL8.
Steps To Reproduce: 1. Create a VD and try to get the warning events.

ID: DCSG01199087
Headline: EventData is displaying erroneous data on changing adjustable task rate on the controller.
Description Of Change: CLI will now display current and previous rates individually.
Issue Description: CLI is displaying the total structure as a new rate but whereas we have previous and new rates defined in the structure
Steps To Reproduce: 1. Change any of the controller rates and check the events for the same.

ID: DCSG01200625
Headline: Description for wrcache change is showing as none . Expected is "LD is currently operating in WT mode"
Description Of Change: Updated the code to verify with the current cachepolicy and displaying the message "VD is currently operating in WT mode." when the current is not changed.
Issue Description: Description for wrcache change is showing as none . Expected is "LD is currently operating in WT mode"
Steps To Reproduce: Description for wrcache change is showing as none . Expected is "LD is currently operating in WT mode"

ID: DCSG01203103
Headline: StorCLI2 expander firmware download does not use given buffer id in the download command
Description Of Change: While filling the cdb, bufferid input taken from user is not added.
Fix: Updated the cli code to fill the user given bufferid in the cdb which fixed this issue
Issue Description: StorCLI2 expander firmware download does not use given buffer id in the download command
Steps To Reproduce: StorCLI2 expander firmware download does not use given buffer id in the download command

ID: DCSG01205333
Headline: Failure message 'Option purge the cache before deleting logical PD' is not clear while trying 'delete discardcache' on WT VD
Description Of Change: Corrected the error message from logical PD to VD.
Issue Description: Error message which was being displayed was incorrect.
Steps To Reproduce: System Details:
HBA: 9670W-16i B0
FW: 8.2.0.100-00000-00031
OS: Windows 2019
Driver: 8.02.03.00
Storcli2: 008.0002.0000.0008
SAS PDs: 12

Note: The behavior is not consistent for WT VD & the failure error message is also not clear what is the problem here. Also VD is called as logical PD where all other places it's been called as LD/VD.

C:\Users\Administrator\Desktop>storcli2.exe /c0 show
CLI Version = 008.0002.0000.0008 Apr 27, 2022
Operating system = Windows Server 2019
Controller = 0
Status = Success
Description = None

Product Name = MegaRAID 9670W-16i
Board Name = 9670W-16i
Board Assembly = Board Assembly Number
Board Tracer Number = Board Tracer Number
Board Revision = BoardRev
Chip Name = LSISAS4124
Chip Revision = ALL
Package Version = 8.2.0.100-00000-00031
Firmware Version = 8.2.0.100-00000-00031
NVDATA Version = 02.19.00.46
Driver Name = mpi3drv.sys
Driver Version = 8.02.03.00
SAS Address = 0x500062b200000000
Serial Number = Board Tracer Number
Controller Time(LocalTime yyyy/mm/dd hh:mm:sec) = 2022/05/04 12:41:18
System Time(LocalTime yyyy/mm/dd hh:mm:sec) = 2022/05/04 12:41:18
Board Mfg Date(yyyy/mm/dd) = 2018/01/01
Controller Personality = Raid Personality
Max PCIe Link Rate = 0x08 (16GT/s)
Max PCIe Port Width = 16
PCI Address = 00:3b:00:0
PCIe Link Width = X16 Lane(s)
SAS/SATA = SAS/SATA-6G, SAS-12G, SAS-24G
PCIe = PCIE-2.5GT, PCIE-5GT, PCIE-8GT, PCIE-16GT
PCI Vendor ID = 0x1000
PCI Device ID = 0x00A5
PCI Subsystem Vendor ID = 0x1000
PCI Subsystem ID = 0x4600
Security Protocol = SPDM-1.01.00,1.00.00
PCI Slot Number = N/A
Physical Drives = 12

PD LIST :
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EID:Slit	PID	State	Status	DG	Size	Intf	Med	SED_Type	SeSz	Model	Sp	LU/NS	Count	Multipath	Multiport
274:0	257	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:1	258	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:2	259	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:3	260	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:8	265	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:9	266	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:10	267	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:11	268	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:12	269	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:13	270	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:14	271	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	
274:15	272	UConf	Good	-	5.457 TiB	SAS	HDD	-	4 KiB	ST6000NM030A	U	1	-	-	

LU/NS LIST :
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PID	LUN/NSID	Status	Size
257	0/-	Good	5.457 TiB
258	0/-	Good	5.457 TiB

259 0/- Good 5.457 TiB
260 0/- Good 5.457 TiB
265 0/- Good 5.457 TiB
266 0/- Good 5.457 TiB
267 0/- Good 5.457 TiB
268 0/- Good 5.457 TiB
269 0/- Good 5.457 TiB
270 0/- Good 5.457 TiB
271 0/- Good 5.457 TiB
272 0/- Good 5.457 TiB

EID-Enclosure Persistent ID|Slt-Slot Number|PID-Persistent ID|DG-DriveGroup
UConf-Unconfigured|UConfUnsp-Unconfigured Unsupported|Conf-Configured|Unusbl-Unusable
GHS-Global Hot Spare|DHS-Dedicated Hot Spare|UConfShld-Unconfigured Shielded|
ConfShld-Configured Shielded|Shld-JBOD Shielded|GHSShld-GHS Shielded|DHSShld-DHS Shielded
UConfSntz-Unconfigured Sanitize|ConfSntz-Configured Sanitize|JBODSntz-JBOD Sanitize|GHSSntz-GHS Sanitize
DHSSntz-DHS Sanitize|UConfDgrd-Unconfigured Degraded|ConfDgrd-Configured Degraded|JBODDgrd-JBOD Degraded
GHSDgrd-GHS Degraded|DHSDgrd-DHS Degraded|Various-Multiple LU/NS Status|Med-Media|SED-Self Encryptive Drive
SeSz-Logical Sector Size|Intf-Interface|Sp-Power state|U-Up/On|D-Down/PowerSave|T-Transitioning|F-Foreign
NS-Namespace|LU-Logical Unit|LUN-Logical Unit Number|NSID-Namespace ID

Enclosures = 1

Enclosure List :
=====

EID	State	DeviceType	Slots	PD	Multipath	PS	Fans	TSs	Alms	SIM	ProdID
274	OK	Logical Enclosure	16	12	No		0	0	0	0	VirtualSES

EID-Enclosure Persistent ID |SID-Slot ID |PID-Physical drive Persistent ID |PD-Physical drive count
PS-Power Supply count |TSs-Temperature sensor count |Alms-Alarm count |SIM-SIM Count |ProdID-Product ID

Energy Pack Info :
=====

Type	SubType	Voltage(mV)	Temperature(C)	Status
Supercap	FBU345	9571	26	Optimal

C:\Users\Administrator\Desktop>

ReleaseOrder ID: *DCSG01197628* [Open In CQWeb](#)
Headline: *MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0008*
Release Version: *008.0002.0000.0008*
UCM Project: *StorCLI_Avenger_8x*
Sub UCM Project: *StorCLI_Avenger_8_2*
UCM Stream:
Release Type: *Pre-Alpha*
State: *Released*
Release Baseline: *Release-StorCLI_Avenger_8_2-008.0002.0000.0008-DCSG01197628-2022-04-27-19-33-15*
Release Date: *2022-04-27 14:00:07.000000*
Date Generated: *Aug 05, 2022*

Defects Fixed (9):

ID: DCSG01151023
Headline: 8.2 PA1:Copyright © 2005-2020 year is not updated to 2022 in Storcli ThirdPartyLicenseFile.
Description Of Change: Updated the copyright year to 2022 in the license file
Issue Description: Updated the copyright year to 2022 in the license file
Steps To Reproduce: 8.2 PA1:Copyright © 2005-2020 year is not updated to 2022 in Storcli ThirdPartyLicenseFile.

ID: DCSG01155391
Headline: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time
Description Of Change: Changed the PR properties to CC properties reference during the set of CC properties.
Issue Description: During CC set, We are incorrectly checking for PR properties structure which is NULL and its leading to NULL pointer access.
Steps To Reproduce: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

StorCLI2.exe /c0 set cc=on starttime=2022/04/01 11 execfrequency hours=10

ID: DCSG01184516
Headline: Observing PSOC Version is reported as 0.00 when PSOC is not available.
Description Of Change: CLI will now refer to the IO Unit page 10 and read the flags(MPI3_IJUNIT10_FLAGS_PBLP_EXPECTED) to know if PSOC is present before displaying the data.
Issue Description: When PSOC is not present on the controller, PSOC details should not be shown.
Steps To Reproduce: Issue /c0 show all command.

ID: DCSG01185585
Headline: CLI needs handling for invalid parameter for PD replace missing dcmd
Description Of Change: MR8_DCMD_PD_MISSING_REPLACE is now being handled and the PD persistent id will be displayed if populated by FW as part of MR8_DCMD_STAT_CMD_UNSUPPORTED_FOR_LD.
Issue Description: Invalid parameter was not being handled for MR8_DCMD_PD_MISSING_REPLACE DCMD.
Steps To Reproduce: CLI needs to handle invalid mbox parameter for PD replace missing dcmd.
This error should display which mbox attribute was wrong.

For MR8_DCMD_STAT_CMD_UNSUPPORTED_FOR_LD, CLI should display the pdPersistentId which is wrong if sent by the FW

ID: DCSG01186710
Headline: When trying to expandVdAndArray observing wrong error message.
Description Of Change: When trying to expandVdAndArray observing wrong error message.
Issue Description: When trying to expandVdAndArray observing wrong error message.
Steps To Reproduce: When trying to expandVdAndArray observing wrong error message.

ID: DCSG01187361
Headline: Storcli crashes during "storcli /c0 show security keyid" when key id is created with 256 characters
Description Of Change: displaying the keyid using a string instead of an char array
Issue Description: Storcli crashes during "storcli /c0 show security keyid" when key id is created with 256 characters
Steps To Reproduce: Storcli crashes during "storcli /c0 show security keyid" when key id is created with 256 characters

ID: DCSG01192007
Headline: KeyID is seen at Apps for unlocked and native EKMS SED drives
Description Of Change: Not displaying the KeyID for EKM secured drive.
Updated the checks to identify EKM secured drive.
Issue Description: KeyID is seen at Apps for unlocked and native EKMS SED drives
Steps To Reproduce: KeyID is seen at Apps for unlocked and native EKMS SED drives

ID: DCSG01194125

Headline: Setting the securitykey and passphrase fails while using the file method to set the security parameters

Description Of Change: Updated the help with the format of the options.

Issue Description: Help does not have any mention on the format of the option to be followed when file option is used to provide key input params.

Steps To Reproduce: Setting the securitykey and passphrase fails while using the file method to set the security parameters

Tried the below scenatio

1) Created security key and passphrase using the below storcli command.

storcli2.exe /c0 set security securitykey=Lsi@1234 passphrase=Lsi@1234

2) Rebooted the system and provided wrong passphrase at fist time.
3) Then skipped the passphrase and booted to OS.
4) Tried to provide passphrase through the storcli command using the file method as below. Observed that command failed with the below message.

C:\npe1>storcli2.exe /c0 set security file=passphrase.txt
CLI Version = 008.0002.0000.0007 Apr 13, 2022
Operating system = Windows Server 2019
Controller = 0
Status = Failure
Description = None

Detailed Status :
=====

Operation	Result	ErrType	ErrCd	ErrMsg
Set Security Failure	DCMD	0xA		Invalid parameter

passphrase.txt file is attached with.

5) Tried to provide the passphrase through the direct storcli command as below and it is succeeded.

C:\npe1>storcli2.exe /c0 set security passphrase=Lsi@1234
CLI Version = 008.0002.0000.0007 Apr 13, 2022
Operating system = Windows Server 2019
Controller = 0
Status = Success
Description = None

Security Operation :
=====

Operation	Result
Set Passphrase	Success

6) Similarly after deleting the security key tried to set the security key and passphrase through the file method as below. Observed the below failure. Attached the key.txt file.

C:\npe1>storcli2.exe /c0 set security file=key.txt
CLI Version = 008.0002.0000.0007 Apr 13, 2022
Operating system = Windows Server 2019
Controller = 0
Status = Failure
Description = None

Detailed Status :
=====

Operation	Result	ErrType	ErrCd	ErrMsg
Set Security Failure	CLI	0xFF		Security key strength is weak.

Note : Storcli help does not give much information about how to use the file method to set the security key and passphrase

C:\npe1>storcli2 /cx set security passphrase ?

StorCli2 SAS Customization Utility Ver 008.0002.0000.0007 Apr 13, 2022

(c)Copyright 2022, Broadcom Inc. , All Rights Reserved.

NAME: Set Boot Time Passphrase on the controller
SYNTAX: storcli2 /cx set security { passphrase=<key> }|file=filename
storcli2 /sasx set security { passphrase=<key> }|file=filename

DESCRIPTION: This command sets the Boot Time Passphrase on the Controller.
OPTIONS:
passphrase=xxxx : String that is case-sensitive and must be between 8 and 32 characters; and contains at least one number, one lowercase and one uppercase letter, and one special character (e.g., <>@+), with no spaces.
Only printable characters except space are considered as valid characters.
File : File which contains the passphrase to be set

CONVENTION:
/cx - specifies the controller where X is the controller index
/sasx - specifies the controller where X is the SasAddress of the controller

ID: DCSG01195435

Headline: Updating the valid range message for smart poll interval according to the new API changes

Description Of Change: Updating the valid range message for smart poll interval according to the new API changes

Issue Description: Updating the valid range message for smart poll interval according to the new API changes

Steps To Reproduce: Updating the valid range message for smart poll interval according to the new API changes

ReleaseOrder ID: DCSG01186682 [Open In CQWeb](#)

Headline: MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0007

Release Version: 008.0002.0000.0007

UCM Project: StorCLI_Avenger_8x

Sub UCM Project: StorCLI_Avenger_8_2

UCM Stream:

Release Type: Pre-Alpha

State: Released

Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0007-DCSG01186682-2022-04-13-15-33-41

Release Date: 2022-04-13 10:00:06.000000

Date Generated: Aug 05, 2022

Defects Fixed (8):

ID: DCSG01152732

Headline: Storcli does not list "ErrMsg" for events command.

Description Of Change: Storcli does not list "ErrMsg" for events command.

Issue Description: Storcli does not list "ErrMsg" for events command.

Steps To Reproduce: Storcli does not list "ErrMsg" for events command.

ID: DCSG01155391

Headline: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

Description Of Change: Changed the PR properties to CC properties reference during the set of CC properties.

Issue Description: During CC set, We are incorrectly checking for PR properties structure which is NULL and its leading to NULL pointer access.

Steps To Reproduce: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

StorCLI2.exe /c0 set cc=on starttime=2022/04/01 11 execfrequency hours=10

ID: DCSG01167713
Headline: PEL Error observed while trying to get events on a VD which is not present currently in the configuration.
Description Of Change: MPI3_PEL_STATUS_NOT_FOUND will not be considered as an error by CLI as this only indicates that event is not found.
Issue Description: MPI3_PEL_STATUS_NOT_FOUND was considered as an error by CLI.
Steps To Reproduce: Get events on a VD which is not present.

ID: DCSG01171669
Headline: After correcting the error by importing the config along with pinned cache and ack the blocking event cli says reboot required.
Description Of Change: After acknowledging the blocking event, storcli will get the controller list, loop through the list to get the current controller. Then check the adapter state, if the controller is in fault state we will display the reboot required message to the user.
Issue Description: After correcting the error by importing the config along with pinned cache and ack the blocking event cli says reboot required.
Steps To Reproduce: After correcting the error by importing the config along with pinned cache and ack the blocking event cli says reboot required.

ID: DCSG01181844
Headline: StorCLI: Crash when performing firmware update
Description Of Change: While issuing fw download, we are allocation and deleting the data buffers every time in the loop. After the loop ends cli is deleting the data buffer again, which will cause a crash. Removed the delete statements which were outside the loop.
Issue Description: StorCLI: Crash when performing firmware update
Steps To Reproduce: StorCLI: Crash when performing firmware update

ID: DCSG01182759
Headline: Stray references to R00 in detailed help
Description Of Change: Removed static references of R00 from CLI help.
Issue Description: Static references for R00 were present in the CLI help.
Steps To Reproduce: R00 is defeatured for 8.2 .

The raid mode is not show in the supported raid list but references still exist in the detailed help.

[root@ID66-2024 ~]# storcli2 detailed h | grep -i 00
StorCli2 SAS Customization Utility Ver 008.0002.0000.0005 Mar 28, 2022
DESCRIPTION: Sets the Rebuild Rate in percentage. Valid range is from 1 to 100.
DESCRIPTION: Sets Patrol Read Rate in percentage. Valid range is from 1 to 100.
DESCRIPTION: Sets Consistency Check Rate in percentage. Valid range is from 1 to 100.
DESCRIPTION: Sets background initialization rate in percentage. Valid range is from 1 to 100.
DESCRIPTION: Sets Online Capacity Expansion Rate in percentage. Valid range is from 1 to 100.
Maximum is 30 minutes i.e., 1800 seconds.

storcli2 /cx add vd r[0]1[5]6[00]10[50]60] [Size=<VD1_Sz>,<VD2_Sz>,...[remaining[all]]
storcli2 /sasx add vd r[0]1[5]6[00]10[50]60] [Size=<VD1_Sz>,<VD2_Sz>,...[remaining[all]]
r - Sets the RAID type of the configuration. (RAID [0]1[5]6[00]10[50]60)).

[root@ID66-2024 ~]# storcli2 /c0 show all | grep -i RAID
Product Name = MegaRAID 9670W-16i
Controller Personality = Raid Personality
Max RAID Configurable PDs = 120
Max Complex RAID VDs = 64
Max NS/LU per RAID PDs = 1
SmartPoll - RAID PDs = Yes
Supported RAID Levels = RAID0, RAID1, RAID5, RAID6, RAID10, RAID50, RAID60

ID: DCSG01184516
Headline: Observing PSOC Version is reported as 0.00 when PSOC is not available.
Description Of Change: CLI will now refer to the IO Unit page 10 and read the flags(MPI3_IJUNIT10_FLAGS_PBLP_EXPECTED) to know if PSOC is present before displaying the data.
Issue Description: When PSOC is not present on the controller, PSOC details should not be shown.
Steps To Reproduce: Issue /c0 show all command.

ID: DCSG01184776
Headline: Storcli sets data length to nonzer for write buffer command mode 0xf
Description Of Change: Data buffer elements are set to NULL for Mode F download.
Issue Description: Data buffer was being sent for ModeF download which is incorrect as data buffer is not needed for mode f.
Steps To Reproduce: ./storcli2 /c0/exx/sxx download file=FwImage mode=E activatenow

Failure:
CLI Version = 008.0001.0000.0012 Feb 10, 2022
Operating system = Linux4.18.0-193.6.3.el8_2.x86_64
Controller = 0
Status = Failure
Description = Firmware Download Failed.

Detailed Status :
=====

EID:Sit	PID	Status	ErrType	ErrCd	ErrMsg
52:13	40	Failure	Firmware	0x40000002	Unknown error.

FW download and activate bothe complete but storcli reports error, reason is storcli sent 0xf command with data length = 0x8000 hence controller FW completed command with underrun error. Such error not seen during pd fw download using sg_utils

ReleaseOrder ID: **DCSG01177404** [Open In CQWeb](#)
Headline: **MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0006**
Release Version: **008.0002.0000.0006**
UCM Project: **StorCLI_Avenger_8x**
Sub UCM Project: **StorCLI_Avenger_8_2**
UCM Stream:
Release Type: **Pre-Alpha**
State: **Released**
Release Baseline: **Release-StorCLI_Avenger_8_2-008.0002.0000.0006-DCSG01177404-2022-04-01-19-08-40**
Release Date: **2022-04-01 13:19:39.000000**
Date Generated: **Aug 05, 2022**

Defects Fixed (4):

ID: DCSG01152732
Headline: Storcli does not list "ErrMsg" for events command.
Description Of Change: Storcli does not list "ErrMsg" for events command.
Issue Description: Storcli does not list "ErrMsg" for events command.
Steps To Reproduce: Storcli does not list "ErrMsg" for events command.

ID: DCSG01155391
Headline: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time
Description Of Change: Changed the PR properties to CC properties reference during the set of CC properties.
Issue Description: During CC set, We are incorrectly checking for PR properties structure which is NULL and its leading to NULL pointer access.
Steps To Reproduce: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

ID: DCSG01159535
Headline: Expand virtual Drive command description for "NoArrExp" is missing and verbose help has Disk Group instead of Drive group.
Description Of Change: Legends section has been updated and drive group is being referenced correctly in the help page.
Issue Description: Legends section does not have all the column details and drive group is being represented as disk group.
Steps To Reproduce: Legends section does not have all the column details and drive group is being represented as disk group.

ID: DCSG01173926
Headline: Storcli shows incorrect "Valid range" for Concurrent PD.
Description Of Change: Corrected the Storcli "Valid range" for Concurrent PD.
Issue Description: Storcli shows incorrect "Valid range" for Concurrent PD.
Steps To Reproduce: Storcli shows incorrect "Valid range" for Concurrent PD.

ReleaseOrder ID: DCSG01173734 [Open In CQWeb](#)
Headline: MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0005
Release Version: 008.0002.0000.0005
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: Pre-Alpha
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0005-DCSG01173734-2022-03-28-17-49-26
Release Date: 2022-03-28 12:10:45.000000
Date Generated: Aug 05, 2022

Defects Fixed (2):

ID: DCSG01163326
Headline: Storcli R0 VD creation fails in the presence of "prepformv1" drive and issue w.r.t Errtype
Description Of Change: If the drive is in isReadyForRemoval state, marking it as not configurable. And removing it from the list of requested drives
Issue Description: Storcli R0 VD creation fails in the presence of "prepformv1" drive and issue w.r.t Errtype
Steps To Reproduce: Storcli R0 VD creation fails in the presence of "prepformv1" drive and issue w.r.t Errtype

ID: DCSG01167422
Headline: observing wrong errorcode with ondemand snapdump debugfile
Description Of Change: When unable to read the file, failing the command with '-1' and Printing the error code with Hex dump
Issue Description: observing wrong errorcode with ondemand snapdump debugfile
Steps To Reproduce: observing wrong errorcode with ondemand snapdump debugfile

Enhancements Implemented (8):

ID: DCSG01103026
Headline: Enhancing the performance of VD and PD commands to minimize the PD related calls
Description Of Change: Below mentioned performance related enhancements were made:
1. VD commands, which do not use PD information, will not issue any PD DCMDs.
2. MR8_DCMD_PD_INFO_GET DCMD will be used to validate the existence of the drive with minimal required buffers.
3. MR8_DCMD_PD_AU_INFO_GET DCMD has two parts:
a. Only AU Info(Buffer 1,2,7) will be read only when caller needs size and AU specific info.
b. Only AU Inquiry buffers(Buffers 3,4,5,6) will be read only when caller needs inquiry specific information.
4. Caller decided what it needs and corresponding calls will be made.

ID: DCSG01131714
Headline: Enhancing the enclosure download command to read chunk size as input
Description Of Change: Allowing the chunksize from user and using the same while downloading the drive/enclosure image to the respective device.
If user has not provided this chunksize option, then application will default it to 32K size as we used to do before.

Below were the updated command.
storcli2 /cx/ex download file=<filepath> mode=5[7]E[F [chunksize=val] [activatenow] [bufferid=<val>]
storcli2 /cx/ex/sx download file=<filepath> mode=5[7]E [chunksize=val] [activatenow]]F

ID: DCSG01141612
Headline: 20TB SMR HDD Support for AWS Columbia Project
Description Of Change: New property named "Recording Technology" will be displayed under /cx/ex/sx show all command if the drive scsi dev type is 0x14 and the value of the property will be "SMR".

ID: DCSG01141625
Headline: Validation for MR8 in RTOS compile of RHEL 8.6 and RHEL 9.0
Description Of Change: No code changes are needed. Validated CLI in RTOS.

ID: DCSG01166223
Headline: CLI - MR8 v5.37 API new additions
Description Of Change: 1. To expand DG, CLI should send array reference for first array in the array list. For arrays participating in spanned LD(s), the first array reference needs to be provided but all the array-sizes will be changed to the new size.
2. Support for enableDataLossWarning - both set and show.
3. Addition of new arg. type MR8_EVT_ARG_TYPE_ENCL_ENCL
4. Add new ext.stats MR8_DCMD_STAT_EXT_OPERATION_TEMPORARILY_DISABLED, MR8_DCMD_STAT_EXT_LD_UNSUPPORTED_PARAMETERS and new operation type MR8_OPERATION_CONFIG_CLEAR.

ID: DCSG01172598
Headline: Consistency changes - OCE,R00,Sanitize, and SMR drive representation
Description Of Change: OCE:
1. No changes in the terminology/command syntaxes.
2. /cx/vx show ocedriveinfo will now display even the missing drives with all fields set to "-" except "state" which will set to "Msgng".

Sanitize:
1. Overwritecount and invert options when not provided, we will take defaults as 1 and 0 respectively.

SMR:
1. New property named "Recording Technology" will be displayed as part of detailed drive properties when scsi dev type is 0X14 and value will be "SMR".

ID: DCSG01172627
Headline: Allow STORCLI2 to run on all cards
Description Of Change: Removed the check in the controller enumeration for storcli2 where we prevent listing of OEM controllers .
Based on binary stamping , the customization is done in the cli and not based on controller OEM.
Also made sure the help gets displayed through storcli2 for OEM card should be same as that of channel card.

ID: DCSG01173206

Headline: Maintain consistence error values for CLI internal failures

Description Of Change: Updated cli by categorizing the cli errors.
Any new errors we add, will be added at the end of its respective category.
With this the CLI errors will be maintained unique even after adding newer errors.

ReleaseOrder ID: DCSG01167708 [Open In CQWeb](#)
Headline: MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0004
Release Version: 008.0002.0000.0004
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: Pre-Alpha-1
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0004-DCSG01167708-2022-03-21-18-36-18
Release Date: 2022-03-21 12:52:11.000000
Date Generated: Aug 05, 2022

Defects Fixed (3):

ID: DCSG01152732

Headline: Storcli does not list "ErrMsg" for events command.

Description Of Change: Storcli does not list "ErrMsg" for events command.

Issue Description: Storcli does not list "ErrMsg" for events command.

Steps To Reproduce: Storcli does not list "ErrMsg" for events command.

ID: DCSG01155391

Headline: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

Description Of Change: Changed the PR properties to CC properties reference during the set of CC properties.

Issue Description: During CC set, We are incorrectly checking for PR properties structure which is NULL and its leading to NULL pointer access.

Steps To Reproduce: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

StorCLI2.exe /c0 set cc=on starttime=2022/04/01 11 execfrequency hours=10

ID: DCSG01161249

Headline: Incorrect error message displayed with VD id > 120

Description Of Change: Added the missing stats and Extended Stats with appropriate message

Issue Description: Incorrect error message displayed with VD id > 120

Steps To Reproduce: Incorrect error message displayed with VD id > 120

ReleaseOrder ID: DCSG01164501 [Open In CQWeb](#)
Headline: MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0003
Release Version: 008.0002.0000.0003
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: Pre-Alpha-1
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0003-DCSG01164501-2022-03-16-17-20-02
Release Date: 2022-03-16 11:42:09.000000
Date Generated: Aug 05, 2022

Defects Fixed (6):

ID: DCSG01152732

Headline: Storcli does not list "ErrMsg" for events command.

Description Of Change: Storcli does not list "ErrMsg" for events command.

Issue Description: Storcli does not list "ErrMsg" for events command.

Steps To Reproduce: Storcli does not list "ErrMsg" for events command.

ID: DCSG01155391

Headline: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

Description Of Change: Changed the PR properties to CC properties reference during the set of CC properties.

Issue Description: During CC set, We are incorrectly checking for PR properties structure which is NULL and its leading to NULL pointer access.

Steps To Reproduce: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

StorCLI2.exe /c0 set cc=on starttime=2022/04/01 11 execfrequency hours=10

ID: DCSG01159371

Headline: Storcli has storcli.log file along with storcli binary inside "windows" folder.

Description Of Change: Storcli has storcli.log file along with storcli binary inside "windows" folder.

Issue Description: Storcli has storcli.log file along with storcli binary inside "windows" folder.

Steps To Reproduce: Storcli has storcli.log file along with storcli binary inside "windows" folder.

ID: DCSG01159396

Headline: Spacing required between copyright banner and help page

Description Of Change: Spacing required between copyright banner and help page

Issue Description: Spacing required between copyright banner and help page

Steps To Reproduce: Spacing required between copyright banner and help page

ID: DCSG01160698

Headline: Storcli doesn't set OCE rate in help

Description Of Change: Updated the help with the appropriate params for OCERATE.

Issue Description: Storcli doesn't set OCE rate in help

Steps To Reproduce: Storcli doesn't set OCE rate in help

ID: DCSG01162527

Headline: Need correction for expansion help option

Description Of Change: removed expansion help tag from OCE commands

Issue Description: Need correction for expansion help option

Steps To Reproduce: Need correction for expansion help option

ReleaseOrder ID: DCSG01159312 [Open In CQWeb](#)
Headline: MR8.2 PreAlpha Avenger StorCLI release 008.0002.0000.0002
Release Version: 008.0002.0000.0002
UCM Project: StorCLI_Avenger_8x
Sub UCM Project: StorCLI_Avenger_8_2
UCM Stream:
Release Type: Pre-Alpha-1
State: Released
Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0002-DCSG01159312-2022-03-09-15-04-22
Release Date: 2022-03-09 08:44:38.000000
Date Generated: Aug 05, 2022

Defects Fixed (7):

ID: DCSG01140779
Headline: AV1 8.2: OCE Invalid error status to Force
Description Of Change: mbox is now being set correctly based on user inputs.
Issue Description: Force mbox was not being set even though when user was giving force option.
Steps To Reproduce: Created r5 volume. Start recon.
Made member pd offline
Try make it online

We are getting MR8_DCMD_STAT_CMD_NEED_FORCE from FW because of which we are displaying the corresponding error stat and error message.

[root@ocebst vignesh]# ./storcli2 /c0/e360/s0 set online
pdstate:2
CLI Version = 008.0001.0000.0009 Jan 7, 2022
Operating system = Linux4.18.0-240.el8.x86_64
Controller = 0
Status = Failure
Description = Set PD Online Failed.

Detailed Status :
=====

EID:Slt	PID	Status	ErrType	ErrCd	ErrMsg
360:0	317	Failure	DCMD	0x11	The requested operation cannot be completed without 'force' option

[RAIDMGMT0] ERR: PD: pdDcmdStateSet: lmid 4c14 Pd 0x13d curstate 10 newstate 18
[RAIDMGMT0] WRN: STAT: raidMgmtDcmdFailUnsupported RaidExtStat: 0 Lldid: 0xffff Pdlid: 0x13d Operation: 0
[MR0] WRN: [CMD] cbRelease: [cbReq 81c56e00] CmdBlockReqId 37

[root@ocebst vignesh]# ./storcli2 /c0/e360/s0 set online force
pdstate:2
CLI Version = 008.0001.0000.0009 Jan 7, 2022
Operating system = Linux4.18.0-240.el8.x86_64
Controller = 0
Status = Failure
Description = Set PD Online Failed.

Detailed Status :
=====

EID:Slt	PID	Status	ErrType	ErrCd	ErrMsg
360:0	317	Failure	DCMD	0x11	The requested operation cannot be completed without 'force' option

ID: DCSG01151747
Headline: AV1_Cli2 : Failed Library 0x2A Invalid data buffer flag error is seen for /c0 show controller time in storcli2.efi for MR8.2
Description Of Change: Direction flag while reading the IOC timestamp is now set to write.
Issue Description: Direction flag while reading the controller timestamp was set to read incorrectly.
Steps To Reproduce: 1. Flash latest MR 8.2 firmware ROP on the controller
2. Copy latest MR8.2 cli2.efi in a pendrive and boot to efi shell.
3. From shell > try storcli2.efi /c0 show time
4. Controller Time(Local Time yyyy/mm/dd hh:mm:sec) Failed Library 0x2A Invalid data buffer flag.

PFA the firmware logs, teraterm logs and screenshot for the same.

ID: DCSG01152674
Headline: Storcli shows different output for "v" and "version" command.
Description Of Change: Storcli shows different output for "v" and "version" command.
Issue Description: Storcli shows different output for "v" and "version" command.
Steps To Reproduce: Storcli shows different output for "v" and "version" command.

ID: DCSG01152732
Headline: Storcli does not list "ErrMsg" for events command.
Description Of Change: Storcli does not list "ErrMsg" for events command.
Issue Description: Storcli does not list "ErrMsg" for events command.
Steps To Reproduce: Storcli does not list "ErrMsg" for events command.

ID: DCSG01154712
Headline: AV_8.2:VD expansion failed with error code 0x1000000A
Description Of Change: Array refs is not being added / populated when OCE by percentage expansion is being done.
Issue Description: While performing OCE by percentage expansion, We should not provide any array refs. This is being invalidated by SL8 library as part of MR8 buffer checks in place.
Steps To Reproduce: AV_8.2:VD expansion failed with error code 0x1000000A

C:\Users\Administrator\Desktop>cli>storcli2.exe /c0 /v3 expand percent=100
CLI Version = 008.0002.0000.0001 Feb 27, 2022
Operating system = Windows Server 2019
Controller = 0
Status = Failure
Description = expansion operation failed

Detailed Status :
=====

VD Status	ErrType	ErrCd	ErrMsg
3	Failed Library	0x1000000A	Invalid input parameter

ID: DCSG01154837
Headline: Storcli /c0 show all command crashes
Description Of Change: Memory allocated for the string, to display the details regarding "Support Online Capacity Expansion" was lesser than the string inserted.
Increased the string size to accommodate the entire string.
Issue Description: Storcli /c0 show all command crashes
Steps To Reproduce: Storcli /c0 show all

ID: DCSG01155391

Headline: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

Description Of Change: Changed the PR properties to CC properties reference during the set of CC properties.

Issue Description: During CC set, We are incorrectly checking for PR properties structure which is NULL and its leading to NULL pointer access.

Steps To Reproduce: StorCLI2 MR 8.2 - CLI crashes when setting CC execution frequency / start time

StorCLI2.exe /c0 set cc=on starttime=2022/04/01 11 execfrequency hours=10

ReleaseOrder ID: DCSG01150865 [Open In CQWeb](#)

Headline: MR8.2 PreAlpha Avenger StorCLI release v008.0002.0000.0001

Release Version: 008.0002.0000.0001

UCM Project: StorCLI_Avenger_8x

Sub UCM Project: StorCLI_Avenger_8_2

UCM Stream:

Release Type: Pre-Alpha-1

State: Released

Release Baseline: Release-StorCLI_Avenger_8_2-008.0002.0000.0001-DCSG01150865-2022-02-27-14-22-05

Release Date: 2022-02-27 08:42:46.000000

Date Generated: Aug 05, 2022

Enhancements Implemented (6):

ID: DCSG01115392

Headline: Handling of foreign drive unlock behavior in StorCLI2 when multiple key ids available

Description Of Change: No change in command syntax.

Behavior difference:
When we have multiple different keyids, User needs to provide both key and keyid to unlock the drives.

Keep the "keyid" parameter optional.
When we have multiple different keyids, StorCLI2 will not support unlocking of the drives without providing "keyid" parameter from the user.
When we have multiple same keyids,
StorCLI2 will query for MR8_DCMD_PD_LOCK_KEY_KEYID_GET DCMD and read the keyid and get the list of all drives which are locked using the same keyid.
Issue MR8_DCMD_PD_LOCK_KEY_APPLY with the above list of drives with key provided by user and keyid which is retrieved from MR8_DCMD_PD_LOCK_KEY_KEYID_GET DCMD.
Display the list of unlocked drives.

ID: DCSG01116828

Headline: Support Online capacity expansion

Description Of Change: No changes in existing command syntaxes. CLI will not issue LD Allowed ops before issuing the OCE operation.

New command addition:
storcli2 /cx/vx show ocedriveinfo - This command will list the PDs on which OCE is going on.

ID: DCSG01122751

Headline: Avenger StorCLI - 8.2 - R00 Support

Description Of Change: R00 will be handled same as R10. PdPerArray option is not applicable for R00. CLI would issue LD Span List DCMD to get the applicable number of spans based on user provided drive count and create R00 accordingly.

ID: DCSG01122754

Headline: Support for new Sanitize options overwritecount and invert

Description Of Change: New syntax:
storcli2 /cx/ex/sx start erase type=sanitize mode=1|2|3|4 aue=<0|1> [patternA=<val>] [patternB=<val>] [overwritecount=<*>] [invert=<*>] [force]

1. Overwrite count and Invert options are supported only for sanitize mode MR8_ERASE_SANITIZE_OVERWRITE i.e., 1
2. Both these options are mandatory to be provided when user selects MR8_ERASE_SANITIZE_OVERWRITE.
3. For MR8_ERASE_SANITIZE_OVERWRITE and MR8_ERASE_SANITIZE_BLOCK_ERASE, the operation reported for MR8_DCMD_PD_AU_PROGRESS_GET and ongoingOperation will be MR8_OPERATION_PD_SANITIZE.
Hence CLI will also check for MR8_OPERATION_PD_SANITIZE before displaying the erase which is in progress when user initiates sanitize type.
4. Before setting the overwrite count and invert, CLI will check if they are supported by issuing MR8_PD_SECURE_ERASE_INFO_GET.

ID: DCSG01141594

Headline: mpi3mr Linux driver - remove ioctl interface and use <bsg> interface.

Description Of Change: 1. No code changes are needed for this implementation. SL8 library which supports BSG interface needs to be packaged.
2. Tested the StorCLI2 in BSG Interface.

```
[root@dhcp-10-123-20-56 /]# ./storcli2 /c0 show
BSG Linux driver loaded :ghMegaDev = 4
CLI Version = 008.0001.0000.0099-Perf Feb 17, 2022
Operating system = Linux5.17.0-stock+
Controller = 0
Status = Success
Description = None

Product Name = MegaRAID 9660-16i
Board Name = 9660-16i
Board Assembly = Board Assembly Number
Board Tracer Number = Board Tracer Number
Board Revision = 7665526472616f42
Chip Name = LSISAS4124
Chip Revision = ALL
Package Version = 8.1.0.150-00000-00009
Firmware Version = 8.1.0.150-00000-00009
NVDATA Version = 01.79.00.40
Driver Name = mpi3mr
Driver Version = 8.1.0.8.0
SAS Address = 0x500062b200000000
Serial Number = Board Tracer Number
Controller Time(LocalTime yyyy/mm/dd hh:mm:sec) = 2022/02/21 20:32:09
System Time(LocalTime yyyy/mm/dd hh:mm:sec) = 2022/02/21 20:32:09
Board Mfg Date(yyyy/mm/dd) = 2018/01/01
Controller Personality = Raid Personality
Max PCIe Link Rate = 0x08 (16GT/s)
Max PCIe Port Width = 8
PCI Address = 00:07:00:0
PCIe Link Width = X8 Lane(s)
SAS/SATA = SAS/SATA-6G, SAS-12G, SAS-24G
PCIe = PCIe-2.5GT, PCIe-5GT, PCIe-8GT, PCIe-16GT
PCI Vendor ID = 0x1000
PCI Device ID = 0x00A5
PCI Subsystem Vendor ID = 0x1000
PCI Subsystem ID = 0x4620
Security Protocol = SPDM-1.00.00
PCI Slot Number = N/A
Drive Groups = 1

TOPOLOGY :
=====

-----
DG Span Row EID:Slot PID Type  State Status BT      Size PDC  Secured FSpace
-----
0 - - - - RAID0 - -  N 1.745 TiB dsbl N    N
0 0 - - - RAID0 - -  N 1.745 TiB dsbl N    N
0 0  0 282:4  258 DRIVE Conf  Online N 1.745 TiB dsbl N    -
-----

DG-Disk Group Index|Span-Span Index|Row-Row Index|EID-Enclosure Persistent ID
PID-Persistent ID|Slit-Slot Number|Type-Drive Type|Onln-Online|Rbld-Rebuild|Dgrd-Degraded
Pdgd-Partially degraded|Oflln-Offline|BT-Background Task Active
PDC-Drive Write Cache Policy|Frqn-Foreign|Optl-Optimal|FSpace-Free Space Present
dflt-Default|Msgng-Missing

Virtual Drives = 1

VD LIST :
=====
-----
```

DG/VD TYPE State Access CurrentCache DefaultCache Size Name

0/1 RAID0 Optl RW NR,WT NR,WB 1.745 TiB

Rec=Recovery|OfLn=OffLine|Pdgd=Partially Degraded|Dgrd=Degraded
Optl=Optimal|RO=Read Only|RW=Read Write|CurrentCache-Curent Cache Status
R=Read Ahead Always|NR=No Read Ahead|WB=WriteBack|
AWB=Always WriteBack|WT=WriteThrough|Access-Access Policy

Physical Drives = 1

PD LIST :
=====

EID:Slit	PID	State	Status	DG	Size	Intf	Med	SED_Type	SeSz	Model	Sp	LU/NS	Count	Multipath	Multiport
282:4	258	Conf	Online	0	1.745 TiB	NVMe	SSD	Opal	512B		U	1	-	-	

LU/NS LIST :
=====

PID	LUN/NSID	Status	Size
258	-/1	Online	1.745 TiB

EID-Enclosure Persistent ID|Slit-Slot Number|PID-Persistent ID|DG-DriveGroup
UConf-Unconfigured|UConfUnsp-Unconfigured Unsupported|Conf-Configured|Unusbl-Unusable
GHS-Global Hot Spare|DHS-Dedicated Hot Spare|UConfShld-Unconfigured Shielded|
ConfShld-Configured Shielded|Shld-JBOD Shielded|GHSShld-GHS Shielded|DHSShld-DHS Shielded
UConfSntz-Unconfigured Sanitize|ConfSntz-Configured Sanitize|JBODSntz-JBOD Sanitize|GHSSntz-GHS Sanitize
DHSSntz-DHS Sanitize|UConfDgrd-Unconfigured Degraded|ConfDgrd-Configured Degraded|JBODDgrd-JBOD Degraded
GHSDgrd-GHS Degraded|DHSDgrd-DHS Degraded|Various-Multiple LU/NS Status|Med-Media|SED-Self Encryptive Drive
SeSz-Logical Sector Size|Intf-Interface|Sp-Power state|U-Up/On|D-Down/PowerSave|T-Transitioning|F-Foreign
NS-Namespace|LU-Logical Unit|LUN-Logical Unit Number|NSID-Namespace ID

Enclosures = 1

Enclosure List :
=====

EID	State	DeviceType	Slots	PD	Multipath	PS	Fans	TSs	Alms	SIM	ProdID
282	OK	Logical Enclosure	24	1	No	0	0	0	0	0	VirtualSES

EID-Enclosure Persistent ID |SID-Slot ID |PID-Physical drive Persistent ID |PD-Physical drive count
PS-Power Supply count |TSs-Temperature sensor count |Alms-Alarm count |SIM-SIM Count |ProdID-Product ID

ID: DCSG01141619

Headline: Avenger MR8 API: OUT Buffer Validation and IN buffer Status update

Description Of Change: OUT Buffers with write request will now be populated with correct header information.