



# **Intel® Embedded Server RAID Technology 2 (ESRT2) StorCLI Command Set**

**Revision 1.0**

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## Revision History

Date	Revision Number	Modifications
November 2014	1.0	Initial release.

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# 1. Introduction

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## 1.1 Overview

This document states the StorCLI commands supported when using Intel® Embedded Server RAID Technology 2.

## 1.2 Definition of Terms

StorCLI	Storage Command Line Interface Tool
SWR	Software RAID
CLI	Command Line Interface
PR	Patrol Read
CC	Consistency Check
BGI	Background Initialization

## 1.3 Introduction:

The Storage Command Line Tool (StorCLI) is the command line management software designed for the Intel® RAID product line. The StorCLI is a command line interface that is designed to be easy to use, consistent, and easy to script. This document is the reference manual for using the Storage Command Line Tool with Intel® Embedded Server RAID Technology 2 (ESRT2) products, and contains a subset of supported commands for that product. Please refer to the StorCLI reference guide available at <http://www.intel.com/support> for a complete list of available commands.

Many CMDTool2 commands can be also be executed when using the Storage Command Line (StorCLI) tool.

Please refer to the full StorCLI user guide for StorCLI installation and configuration information.

## 2. StorCLI Commands Supported with ESRT2.

The below table represents the show and set commands that are supported/unsupported for ESRT2 by StorCLI.

COMMAND	Description	Support in SWR	Are these commands attributes variable?	Is there any Default values set to these attributes?
/cx Show	Show the controller Information	YES	YES	NO
/cx Show all	Show the controller Information and Associated Information	YES	YES	NO
/cx Show ctrlcount	Shows the number of controller attached	YES	YES	NO
/cx show dpmstat	View drive performance statistics	NO	NO	Not Supported
/cx set/show abortconerror	Aborts consistency check when it detects an inconsistency.	YES	NO	YES ( Default value = OFF )
/cx set/show activityforlocate	Enables/Disables drive activity, drive activity locates function for systems without SGPIO/SES capabilities.	YES	NO	YES ( Default value = OFF )
/cx set/show backplane	Configures enclosure detection on a non SES/expander backplane.	NO	NO	YES ( Default value = OFF )
/cx set/show batterywarning	Enables/Disables battery warnings.	NO	NO	YES ( Default value = OFF )
/cx set/show bgirate	Sets background initialization rate in percentage.	YES	YES	NO
/cx set/show cacheflush	Enables capture of internal writes feature. If enabled, the controller cache gets flushed out.	NO	NO	Not Supported
/cx set/show cacheflushint	Sets cache flush interval in seconds.	NO	NO	YES ( Default value = 0 seconds )
/cx set/show ccrate	Sets consistency check rate in seconds.	YES	YES	NO
/cx set/show coercion	Sets drive capacity in coercion mode.	YES	YES	NO
/cx set/show consistencycheck	Sets the consistency ccheck attributes.	YES	YES	NO
/cx set/show copyback	Enables/Disables copy back for drive types	NO	NO	YES ( Default value = OFF )
/cx set/show directpdmapping	Enables/Disables direct physical drive mapping.	YES	NO	YES ( Default value = ON )

COMMAND	Description	Support in SWR	Are these commands attributes variable?	Is there any Default values set to these attributes?
/cx set/show eccbucketleakrate	Sets leak rate of the single-bit bucket in minutes	NO	NO	YES ( Default value = 0 min )
/cx set/show eccbucketsize	Sets size of ECC single-bit-error bucket	NO	NO	YES ( Default value = 0 )
/cx set/show enableeghsp	Enables/Disables the commissioning of otherwise incompatible global hot spare drives as Emergency Hot Spare.	NO	NO	Not Supported
/cx set/show enableesmarter	Enables/Disables the commissioning of Emergency Hot Spare drives for Predictive Failure events.	NO	NO	Not Supported
/cx set/show enableeug	Enables/Disables the commissioning of Unconfigured Good drives as Emergency Hot Spare drives.	NO	NO	Not Supported
/cx set/show exposeencldevice	Enables/Disables device drivers to expose enclosure devices; for example, expanders, SEPs.	NO	NO	Not Supported
/cx set/show dimmerswitch ds	Sets dimmer switch, power-saving policy for the virtual drive.	NO	NO	Not Supported
/cx set/show foreignautoimport	Imports foreign configuration automatically, at boot.	NO	NO	YES ( Default value = OFF )
/cx set/show jbod	Enables/Disables JBOD mode; by default, drives become system drives.	NO	NO	YES ( Default value = OFF )
/cx set/show loadbalancemode	Enables/Disables automatic load balancing between SAS phys or ports in a wide port configuration.	YES	NO	YES ( Default value = OFF )
/cx set/show maintainpdfailhistory	Maintains the physical drive fail history	NO	NO	YES ( Default value = OFF )
/cx set/show migraterate	Sets data migration rate in percentage.	YES	NO	YES ( Default value = 0% )
/cx set/show patrolread pr	Patrol Read options	YES	YES	NO
/cx set/show perfmode	Performance tuning setting for the controller.	NO	NO	Not Supported
/cx set/show prcorrectunconfiguredareas	Correct media errors during PR by writing 0s to unconfigured areas of the disk.	YES	NO	YES ( Default value = ON )

COMMAND	Description	Support in SWR	Are these commands attributes variable?	Is there any Default values set to these attributes?
/cx set/show prrate	Sets patrol read rate of the virtual drives in percentage	YES	YES	NO
/cx set/show rebuildrate	Sets rebuild rate of the drive in percentage.	YES	YES	NO
/cx set/show reconrate	Sets reconstruction rate for a drive in percentage.	YES	NO	YES ( Default value = 0%)
/cx set/show restorehotspare	If a failed disk is replaced with an Unconfigured good disk, it is automaticly configured as a hotspare drive.	NO	NO	YES ( Default value = OFF )
/cx set/show smartpollinterval	Set time for polling of SMART errors in seconds.	YES	NO	YES ( Default value = 600 sec )
/cx set/show spinupdrivecount	Sets number of drives that are spun up at a time.	YES	NO	YES ( Default value = OFF )
/cx set/show spinupdelay	Sets spin-up delay in seconds in between drive groups.	YES	NO	YES ( Default value = 8 )
/cx set/show stoponerror	Stops the MegaRAID® BIOS during POST, if any errors are encountered	NO	NO	Not Supported
/cx set/show time	Sets the controller time to your input value or the system time.	NO	NO	Not Supported
/cx set/show usefdeonlyencrypt	Enables/Disables FDE drive-based encryption.	YES	NO	YES ( Default value = OFF )
/cx set/show autorebuild	Sets autorebuild options	YES	NO	YES ( Default value = ON )
/cx show eventloginfo	List the event logs	YES	NO	NO
/cx show health all	List controller Health Information	YES	NO	NO
/cx show termlog	Shows the F/W termlog information	yes	NO	Not Supported
/cx show freespace	Shows the Free space available after creating VD	Yes	NO	NO
/cx set/show OCR	Shows controller reset option	YES	NO	YES ( Default value = ON )
/cx set/show preservedcache	Shows Preserved cache Info	YES	NO	Not supported
/cx set/show bootdrive	List from which drive the OS boots	YES	NO	NO
/cx set/show NCQ	NCQ value	YES	NO	YES ( Default value = ON )
/cx set/show bios	Shows the input output configuration	YES	YES	NO



COMMAND	Description	Support in SWR	Are these commands attributes variable?	Is there any Default values set to these attributes?
/cx set/show sgpioforce	Shows serial IO information	YES	NO	YES ( Default value = OFF )
/cx set/show migraterate	Enable/disable the migrate schedule rate	YES	NO	YES ( Default value = OFF )
/cx set/show PI	PI state and import of drives	YES	NO	YES ( Default value = ON )
/cx set/show safeid	Shows the Safe ID of the specified controller.	NO	NO	Not supported
/cx set/show PCI	List bus and device number	YES	NO	YES ( Default value = OFF )
cx set/show ASO	Advance software options	NO	NO	NO
cx set/show Securitykey keyid	Lists security key id	YES	NO	YES ( Default value = OFF )
cx set/show badblocks	Lists bad block count	YES	NO	Not Supported
cx set/show maintenance	Lists Adapter Maintenance Mode	NO	NO	Not Supported

**NOTE:**

In the above table, the column where the attributes cannot be changed, those commands attributes are constant and cannot be changed and the default values are shown in the table. Few commands status may be successful but are not supported in SWR, and these commands have default values.