LSI SMcli: Basic Commands

The SANtricity SMcli is a Perl interface to Engenio's CLI to enable monitoring and management of SAN devices.

COMMON COMMANDS
Basic SMcli syntax `SMcli –n <arrayname> –p '<arrayPasswd>' –c '<arrayCommand>;'` **Example:** SMcli –n Qarray1 –c 'show allDrives summary;' **Note:** The password is needed if the command is making a change.
To autodiscover all array devices `SMcli –A`
To show/verify the Array devices in the config file `SMcli –d –v`
To show all drives attached to an array `SMcli –n Qarray1 –c 'show allDrives;'`
To show a summary of all drives attached to an array `SMcli –n Qarray1 –c 'show allDrives summary;'`
To show a given drive `SMcli –n Qarray1 –c 'show drive[85,1];'`
To show all volumes `SMcli –n Qarray1 –c 'show allVolumes;'`
To show a summary of all volumes `SMcli –n Qarray1 –c 'show allVolumes summary;'`
To show the status of a volume rebuild `SMcli –n Qarray2 –c 'show volume [TRAY_0_VOL_2] actionProgress;'`

To reset the Global Fault:
`SMcli <IP-array-ControllerA> <IP-array-ControllerB> –c 'reset storageArray diagnosticData;'`
Note: This command resets the diagnostic data.
 	
Example for array2:
`SMcli 10.17.21.33 10.17.21.34 –c "reset storageArray diagnosticData;"`

To reset the 88 error after a controller swap 1. Log in to the other/good controller. 2. Run cmgrSetAltToServiceMode. 3. Run cmgrSetAltToOptimal. 4. Telnet into the replaced controller. 5. Run sysReboot. After a few minutes, the replaced controller should be back up, and you will be able to telnet to the replaced controller.
To set a controller to online mode if it does not come on-line after replacement (in Service Mode) `SMcli –n Qarray1  –p 'Qa@Ar39!' –c 'set controller[B] availability=online;'`
To get trace info from the shell `dglist` #shows all the traces, as in trace.1, trace.2, etc. `dgprint trace.1`   # outputs the file to your screen

COMMON COMMANDS CONTINUED

To capture a support bundle, which is what NetApp needs on a given DXi array.
Although the following commands allow you to get a support bundle for a specific array, you should typically gather the LSI collect log from the DXi GUI.

1. Log in as ROOT.
2. Enter mkdir /scratch/ARRAYLOG.
3. Enter cd /scratch/ARRAYLOG.
4. Run the following command from inside the directory you created in Step 2:

   `SMcli ip1 ip2 –c 'save storageArray supportData file=\"support.zip\";'`

   Where
   ip1 = IP address of the A controller
   ip2 = IP address of the B controller
   array1 A = 10.17.21.31 B = 10.17.21.32
   array2 A = 10.17.21.33 B = 10.17.21.33
   array3 A = 10.17.21.35 B = 10.17.21.36
   array4 A = 10.17.21.37 B = 10.17.21.38

   Note: You can get the same information by running `cat /etc/hosts`
   It will take few minutes for the command to run.

5. ls # shows a file called support.zip.
6. Ftp this file to LSI.

CAUTION: The commands below may result IN LOSS OF DATA ON A DISK DRIVE. The commands should ONLY be used if you are confident about the situation and confident that the action is required. If you are not sure, please contact Quantum support before executing ANY of the following commands.

To initialize a drive if the drive shows up as offline
   `SMcli –n <name> –p 'Qa@Ar39!' –c 'start drive[0,3] initialize;'`

To replace a drive if the drive shows up as not part of a group (UnA)
   `SMcli –n Qarray4 –S –p 'Qa@Ar39!' –c 'replace drive[85,13] replacementDrive=85,13;'`

This command can also be used if the data did not copy back to a drive that was replaced.