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Linux Check The Health of Adaptec RAID array

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Q. How do I check the health of Adaptec RAID array under Fedora / CentOS / Red Hat Enterprise Linux / Debian / Ubuntu Linux server from a shell prompt?

[1]

A. First, visit official Adaptec [2] web site to download utilities. You can also install utility software from CD / Floppy disk. Install the rpm file.

arcconf command

To view and modify other RAID configuration use arcconf program to view health of RAID array. Simply, login as the root and type the following command at a shell prompt:

```
# /usr/StorMan/arcconf getconfig 1
```

Sample output:

```
Controllers found: 1
----------------------------------------------------------------------
Controller information
----------------------------------------------------------------------
   Controller Status                        : Optimal
   Channel description                      : SAS/SATA
   Controller Model                         : Adaptec 3405
   Controller Serial Number                 : 7C2110BD455
   Physical Slot                            : 3
   Temperature                              : 49 C/ 120 F (Normal)
   Installed memory                         : 128 MB
   Copyback                                 : Disabled
   Background consistency check             : Disabled
   Automatic Failover                       : Enabled
   Defunct disk drive count                 : 0
   Logical devices/Failed/Degraded          : 1/0/0
   ------------------------------------------------------
   Controller Version Information
   ------------------------------------------------------
   BIOS                                     : 5.2-0 (15753)
   Firmware                                 : 5.2-0 (15753)
   Driver                                   : 1.1-5 (2453)
   Boot Flash                               : 5.2-0 (15753)
   ------------------------------------------------------
   Controller Battery Information
   ------------------------------------------------------
   Status                                   : Optimal
   Over temperature                         : No
   Capacity remaining                       : 99 percent
   Time remaining (at current draw)         : 3 days, 0 hours, 52 minutes

----------------------------------------------------------------------
Logical device information
----------------------------------------------------------------------
Logical device number 0
   Logical device name                      : RAID10
   RAID level                               : 10
   Status of logical device                 : Optimal
   Size                                     : 279800 MB
   Stripe-unit size                         : 256 KB
   Read-cache mode                          : Enabled
```

```
   Write-cache mode                        : Enabled (write-back)
   Write-cache setting                     : Enabled (write-back) when protected by batter
   Partitioned                             : Yes
   Protected by Hot-Spare                  : No
   Bootable                                : Yes
   Failed stripes                          : No
   -------------------------------------------------------
   Logical device segment information
   -------------------------------------------------------
   Group 0, Segment 0                      : Present (0,0) 3LN3BY8Q00009823KDMV
   Group 0, Segment 1                      : Present (0,1) 3LN3V6AQ00009829MMLC
   Group 1, Segment 0                      : Present (0,2) 3LN1AYYD00009747RGSB
   Group 1, Segment 1                      : Present (0,3) 3LN2GAEC00009813AQW6

----------------------------------------------------------------------
Physical Device information
----------------------------------------------------------------------
      Device #0
         Device is a Hard drive
         State                             : Online
         Supported                         : Yes
         Transfer Speed                    : SAS 3.0 Gb/s
         Reported Channel,Device           : 0,0
         Reported Location                 : Enclosure 0, Slot 0
         Reported ESD                      : 2,0
         Vendor                            : SEAGATE
         Model                             : ST3146855SS
         Firmware                          : 0002
         Serial number                     : 3LN3BY8Q00009823KDMV
         World-wide name                   : 5000C50007BCFA20
         Size                              : 140014 MB
         Write Cache                       : Enabled (write-back)
         FRU                               : None
         S.M.A.R.T.                        : No
      Device #1
         Device is a Hard drive
         State                             : Online
         Supported                         : Yes
         Transfer Speed                    : SAS 3.0 Gb/s
         Reported Channel,Device           : 0,1
         Reported Location                 : Enclosure 0, Slot 1
         Reported ESD                      : 2,0
         Vendor                            : SEAGATE
         Model                             : ST3146855SS
         Firmware                          : 0002
         Serial number                     : 3LN3V6AQ00009829MMLC
         World-wide name                   : 5000C50002F017B8
         Size                              : 140014 MB
         Write Cache                       : Enabled (write-back)
         FRU                               : None
         S.M.A.R.T.                        : No
      Device #2
         Device is a Hard drive
         State                             : Online
         Supported                         : Yes
         Transfer Speed                    : SAS 3.0 Gb/s
         Reported Channel,Device           : 0,2
         Reported Location                 : Enclosure 0, Slot 2
         Reported ESD                      : 2,0
         Vendor                            : SEAGATE
         Model                             : ST3146855SS
         Firmware                          : 0002
         Serial number                     : 3LN1AYYD00009747RGSB
         World-wide name                   : 5000C50005020B14
         Size                              : 140014 MB
         Write Cache                       : Enabled (write-back)
         FRU                               : None
         S.M.A.R.T.                        : No
      Device #3
         Device is a Hard drive
```

```
         State                              : Online
         Supported                          : Yes
         Transfer Speed                     : SAS 3.0 Gb/s
         Reported Channel,Device            : 0,3
         Reported Location                  : Enclosure 0, Slot 3
         Reported ESD                       : 2,0
         Vendor                             : SEAGATE
         Model                              : ST3146855SS
         Firmware                           : 0002
         Serial number                      : 3LN2GAEC00009813AQW6
         World-wide name                    : 5000C50007BD43C0
         Size                               : 140014 MB
         Write Cache                        : Enabled (write-back)
         FRU                                : None
         S.M.A.R.T.                         : No
      Device #4
         Device is an Enclosure services device
         Reported Channel,Device            : 2,0
         Enclosure ID                       : 0
         Type                               : SES2
         Vendor                             : ADAPTEC
         Model                              : Virtual SGPIO  0
         Firmware                           : 0001
         Status of Enclosure services device
            Temperature                     : Normal

Command completed successfully.
```

Where,

- 1: Controller number