

Proxmox: HP Smart Storage Admin CLI (ssaccli) installation and usage

 wiki.rtzra.ru/software/proxmox/proxmox-hp-smart-storage-ssaccli

Источник:

https://gist.github.com/mrpeardotnet/a9ce41da99936c0175600f484fa20d03?permalink_comment_id=3376050

HP Smart Storage Admin CLI (`ssaccli`) installation and usage on Proxmox PVE (6.x)

Why use HP Smart Storage Admin CLI?

You can use `ssaccli` (smart storage administrator command line interface) tool to manage any of supported HP Smart Array Controllers in your Proxmox host without need to reboot your server to access *Smart Storage Administrator* in BIOS. That means no host downtime when managing your storage.

CLI is not as convenient as GUI(s) interface provided by BIOS or desktop utilities, but still allows you to fully manage your controller, physical disks and logical drives on the fly with no Proxmox host downtime.

`ssaccli` replaces older `hpssaccli`, but shares the same syntax and adds support for newer servers and controllers.

Installation

Installation process of the `ssaccli` package on Proxmox is the same as on any other Debian based system.

NOTE: HP does not provide **Buster** repository for Debian 10/Proxmox 6.x, but we can still use **Stretch** repository even that it's targeted for Debian 9/Proxmox 5.x.

Add HP's MCP repository

To add HP's MCP repository to `apt` sources list use this command:

```
echo "deb http://downloads.linux.hpe.com/SDR/repo/mcp stretch/current non-free" > /etc/apt/sources.list.d/hp-mcp.list
```

Download and add public keys for the MCP repository

Public keys are needed by `apt` to verify repository signatures, so we need to download and add them. There are four of them and we need to download and them all:

```
wget -q -O - http://downloads.linux.hpe.com/SDR/hpPublicKey1024.pub | apt-key  
add -  
wget -q -O - http://downloads.linux.hpe.com/SDR/hpPublicKey2048.pub | apt-key  
add -  
wget -q -O - http://downloads.linux.hpe.com/SDR/hpPublicKey2048_key1.pub |  
apt-key add -  
wget -q -O - http://downloads.linux.hpe.com/SDR/hpePublicKey2048_key1.pub |  
apt-key add -
```

Installing the `ssaccli` package

First, we need to update available packages:

```
apt update
```

And then we can install the `ssaccli` package:

```
apt install ssaccli
```

Using the `ssaccli` tool

Command short and long names

All commands have a short name to reduce the length of the total input provided to the `ssaccli` tool. You can use short or long name. Here is a list of all commands and their long and short names:

- * chassisname = ch
- * controller = ctrl
- * logicaldrive = ld
- * physicaldrive = pd
- * drivewritecache = dwc
- * licensekey = lk

You can specify disks also as:

- * A range of drives (bay 1 to 3): 1l:1:1-1l:1:3
- * Drives that are unassigned: allunassigned

Command examples

Here are few examples of `ssaccli` commands that you can use to diagnose and manage your HP Smart Storage Controller.

Show available controllers

```
ssaccli ctrl all show
```

Show controllers status

```
ssaccli ctrl all show status
```

Show detailed controllers information

```
ssaccli ctrl all show detail
```

Show controllers configuration

```
ssaccli ctrl all show config
```

Rescan for new devices

Useful after swapping disks in bays, etc...

```
ssaccli rescan
```

Show all physical disks (or their status) (controller slot 0)

```
ssaccli ctrl slot=0 pd all show
```

```
ssaccli ctrl slot=0 pd all show status
```

Show all physical disks detailed information (controller slot 0)

```
ssaccli ctrl slot=0 pd all show detail
```

Show logical drives (or their status) (controller slot 0, all or specific logical drive(s))

```
ssaccli ctrl slot=0 ld all show
```

```
ssaccli ctrl slot=0 ld all show status
```

```
ssaccli ctrl slot=0 ld 1 show
```

```
ssaccli ctrl slot=0 ld 1 show status
```

Show detailed logical drives information (controller slot 0, all or specific logical drive(s))

```
ssaccli ctrl slot=0 ld all show detail
```

```
ssaccli ctrl slot=0 ld 1 show detail
```

Show array information (controller slot 0, array A)

```
ssaccli ctrl slot=0 array a show
```

Show array status (controller slot 0, all arrays)

```
ssaccli ctrl slot=0 array all show status
```

Create new RAID 0 logical drive (controller slot 0, disk in port 1I:box 1:bay 1)

```
ssaccli ctrl slot=0 create type=ld drives=1I:1:1 raid=0
```

Create new RAID 1 logical drive (controller slot 0, disks in port 1I:box 1:bay 1 and 2)

```
ssaccli ctrl slot=0 create type=ld drives=1I:1:1,1I:1:2 raid=1
```

Create new RAID 5 logical drive (controller slot 0, disks in port 1I:box 1:bay 1 to 4)

```
ssaccli ctrl slot=0 create type=ld drives=1I:1:1-1I:1:4 raid=5
```

Delete logical drive (controller slot 0, logical drive 1)

```
ssaccli ctrl slot=0 ld 1 delete
```

Add new physical disks to logical drive (controller slot 0, logical drive 1, disks in port 1I:box 1:bay 6 and 7)

```
ssaccli ctrl slot=0 ld 2 add drives=1I:1:6,1I:1:7
```

Add spare disks (controller slot 0, logical drive 1, array A, disks in port 1I:box 1:bay 6 and 7)

```
ssaccli ctrl slot=0 array a add spares=1I:1:6,1I:1:7
```

Add global spare disks (controller slot 0, logical drive 1, all arrays, disks in port 1I:box 1:bay 6 and 7)

```
ssaccli ctrl slot=0 array all add spares=1I:1:6,1I:1:7
```

Turn on/off blink logical drive LED (controller slot 0, logical drive 1)

```
ssaccli ctrl slot=0 ld 1 modify led=on  
ssaccli ctrl slot=0 ld 1 modify led=off
```

Turn on/off blink physical disk LED (controller slot 0, physical disk port 1I:box 1:bay 1)

```
ssaccli ctrl slot=0 pd 1I:1:1 modify led=on  
ssaccli ctrl slot=0 pd 1I:1:1 modify led=off
```

Modify smart array cache read and write ratio (controller slot 0, cacheratio 80% read/20% write)

```
ssaccli ctrl slot=0 modify cacheratio=80/20
```

Show physical drive write cache status (controller slot 0)

```
ssaccli ctrl slot=0 modify dwc=?
```

Enable/disable physical drive write cache (controller slot 0)

Important: Because physical drive write cache is not battery-backed, you could lose data if a power failure occurs during a write process. To minimize this possibility, use

a backup power supply.

```
ssaccli ctrl slot=0 modify dwc=enable  
ssaccli ctrl slot=0 modify dwc=disable
```

Show status of smart array write cache when no battery is present (no-battery write cache option, controller slot 0)

```
ssaccli ctrl slot=0 modify nbwc=?
```

Enable/disable smart array write cache when no battery is present (no-battery write cache option, controller slot 0)

```
ssaccli ctrl slot=0 modify nbwc=enable  
ssaccli ctrl slot=0 modify nbwc=disable
```

Enable/disable smart array cache for certain Logical Volume (controller slot 0, logical drive 1)

```
ssaccli ctrl slot=0 ld 1 modify arrayaccelerator=enable  
ssaccli ctrl slot=0 ld 1 modify arrayaccelerator=disable
```

Enable/disable SSD Smart Path (controller slot 0, array A)

```
ssaccli ctrl slot=0 array a modify ssdsmartpath=enable  
ssaccli ctrl slot=0 array a modify ssdsmartpath=disable
```

Show spare activation mode

```
ssaccli ctrl slot=0 modify spareactivationmode=?
```

Set spare activation mode

```
ssaccli ctrl slot=0 modify spareactivationmode=predictive  
ssaccli ctrl slot=0 modify spareactivationmode=failure
```

Show rebuild priority

```
ssaccli ctrl slot=0 modify rp=?
```

Modify rebuild priority

```
ssaccli ctrl slot=0 modify rp=low  
ssaccli ctrl slot=0 modify rp=medium  
ssaccli ctrl slot=0 modify rp=mediumhigh  
ssaccli ctrl slot=0 modify rp=high
```

Erase Physical Drive (controller slot 0, physical disk port 1I:box 1:bay 1)

```
ssaccli ctrl slot=0 pd 1I:1:1 modify erase
```