**Description**

The HP Array Configuration Utility Command Line Interface (HP ACU-CLI) is a command-line-based disk configuration tool that can be used to configure and manage Smart Array Controllers and RAID Array Controllers in Integrity Linux environments.

HP ACU-CLI is available as a part of the HP Integrity Essentials Foundation Pack for Linux from the following HP website: [http://www.hp.com/go/integritylinux](http://www.hp.com/go/integritylinux)

**Supported Configurations**

HP ACU-CLI provides support for a number of configurations. Please consult the following HP website for the latest information about supported configurations: [http://www.hp.com/products1/serverconnectivity/support_matrices.html#linux](http://www.hp.com/products1/serverconnectivity/support_matrices.html#linux)

**Installation and Usage Instructions**

**Installing HP ACU-CLI:**

HP ACU-CLI is distributed using Red Hat Package Manager (RPM) packages.

1. If there is an older version of ACU CLI installed on the system, you must use `rpm -e hpacucli` to remove it first.

2. To install the HP ACU-CLI application, enter: `rpm -i <file name>`

3. For additional details regarding RPM, enter: `man rpm`.

The software resides in `/opt/compaq/hpacucli` and the executable name is `hpacucli` which is located in `/usr/sbin`.

**Using HP ACU-CLI:**

1. You must run `hpacucli` as root.

2. To start the HP ACU-CLI application, enter: `hpacucli`
   (Be sure that `/usr/sbin` is already added in your path.)

3. For more options, enter: `hpacucli help`

**Exiting the HP ACU-CLI:**

To exit the HP ACU-CLI, enter: `exit`
(You must be at the CLI command console.)
System Requirements and Dependencies

HP ACU-CLI requires HP Management Base (hpmgmbase) to be installed on the system. HP Management Base is a package of tools, scripts, and binaries that ensure proper system manageability functionality by providing access to the management processor through the Open IPMI driver.

HP management base packages are distribution-specific. They can normally be found on the HP Integrity Essentials Foundation Pack for Linux media. To obtain this software, go to http://www.hp.com and search for your particular server under the download drivers & software heading.

HP recommends using the most updated versions of HP supported device drivers for the Smart Array controllers and Fibre Channel host bus adapters.

Known Issues and Limitations

The following issues have not been resolved in this release of the HP Array Configuration Utility Command Line Interface.

1. Migration of logical volume using an unsupported stripe size does not work.

Attempt to migrate the stripe size of a logical volume to unsupported sizes results in no error message.

Workaround: Should only migrate existing striping to supported sizes.

2. SSP presented information is lost after SSP state toggles.

SSP-related information such as unmask or mask is lost after SSP state is changed from off to on state.

Workaround: None at this time; this issue will be fixed in future release.

Problems Resolved

The following issues have been resolved in this release of the HP Array Configuration Utility Command Line Interface.

1. Rebuild issue when Smart Array 6402 controller is installed in an rx4640 connected to internal volumes.

THIS ISSUE HAS BEEN FIXED IN THE 7.65 RELEASE.

ACU-CLI should perform a rescan of the SCSI bus as a result of running "rescan" or "pd show all" commands. This in turn should initiate a rebuild of an array after replacement of a failed drive. The rebuild does not take place as a result of running these commands with the released version.

Workaround: Customer can initiate a rescan by exiting and then rerunning ACU CLI, or by rebooting the system.
2. **CCISSL interface/driver reports inaccurate information on logical volumes.**

   **THIS ISSUE HAS BEEN FIXED IN THE 7.65 RELEASE.**

   Under some circumstances, the CCISS driver can show devices that haven’t actually been created. When this happens, a number of different devices are reported to the OS, but there is actually only one logical volume.

   **Workaround:** Customers should reboot the system after creating a new logical volume.

3. **Using ACU-CLI from two clients at the same time will result in warning messages upon exiting from one of the clients.**

   **THIS ISSUE HAS BEEN FIXED IN THE 7.65 RELEASE.**

   **Workaround:** Use only one instance of ACU-CLI at a time.

4. **Unexpected LED behavior under some circumstances.**

   **THIS ISSUE HAS BEEN FIXED IN THE 7.65 RELEASE.**

   All LEDs will go “off” if customer performs the following steps:

   ```
   ACUCLI> modify led=on
   ACUCLI> pd xxx modify led=off
   ```

   **Workaround:** There is no workaround. This will be fixed in a future release.

5. **Logical volume status abnormal after powering down OS on some cell-based systems.**

   **THIS ISSUE HAS BEEN FIXED IN THE 7.65 RELEASE.**

   After a cell-based system is powered off using the Linux command “poweroff” or “halt”, the status of logical volumes that have been previously created may show as FAILED. Also you may be unable to delete the logical volume in question.

   **Workaround:** Need to use the management processor to power off the HW partition, then power on again.

6. **Logical volume created on rx2620 doesn’t appear on rx7620.**

   **THIS ISSUE HAS BEEN FIXED IN THE 7.65 RELEASE.**

   In some circumstances, logical volumes created on one system do not appear on another system, even after a system reset.

   **Workaround:** Need to totally power off the HW partition and then power on again in order to see the logical volume.

7. **Cannot query the logical volume size using the “create” command.**

   **THIS ISSUE HAS BEEN FIXED IN THE 7.65 RELEASE.**

   The logical volume size cannot be successfully queried using the “create” command.

   **Workaround:** None at this time; this issue will be fixed in a future release.
8. **OS fails to recognize configuration changes.**

THIS ISSUE HAS BEEN FIXED IN THE 7.65 RELEASE. When existing volumes are modified or deleted, or when new volumes are created using HP ACU-CLI, the operating system will not always be aware of the changes unless the system is rebooted.

**Workaround:** Customers should reboot the system after making changes to existing volumes.

**Important Usage Notes**

1. CCISS and CPQARRAY drivers support up to 16 logical drives per controller. After creating or deleting logical drives with HP ACU CLI, under some special circumstances, the device name mapping might change after you first reboot the system. Also, after rebooting, Linux might see logical drives that were previously not visible. This name mapping problem is common to all SCSI devices on Linux.

2. Do not insert or remove a controller driver module when `hpacucli` is running.

3. Please stop the HP Storage Agents when deleting logical drives since HP Storage Agents keeps all logical drives open.

4. If all physical drives on a controller fail or are removed, software keys will not be saved to the controller.

5. ACU CLI may appear unresponsive during heavy array controller I/O conditions, such as during a partition format or a logical drive rebuild.

6. ACU CLI will not disallow the deletion of logical drives on fibre controllers that have mounted partitions.

**Support**

Support for HP ACU-CLI or Smart Array controllers can be obtained on the internet at the following location:

[http://support.hp.com](http://support.hp.com)

**Feedback**

For feedback or suggestions on ACU CLI, please send comments to:

`acu@hp.com`

Please note that support cannot be provided through this address.