

## Procedure for Configuring MPIO on a Red Hat Enterprise Linux 6.0 fresh installation

1. Installation of Red Hat Enterprise Linux 6.0 should be performed with only a single SCM installed.
2. It is recommended that you perform the installation with only a single VD assigned to the compute module; however, installation may be performed with multiple VDs assigned.
3. Install RHEL6.0 from CDROM or other method.
4. Check platform with “**uname -a**”
5. Install rpm package:
  - a. **rpm -ivh --force scsi\_dh\_alua\_CBVTrak-2-1.x86\_64.rpm**
6. If you use a non-default kernel such as Xen or Kdump you need to recompile the RPM from the source RPM (scsi\_dh\_alua\_CBVTrak-2-1.src.rpm).
  - a) Install source RPM (rpm -ivh scsi\_dh\_alua\_CBVTrak-2-1.src.rpm).
  - b) It will create rpmbuild folder at the user's home directory. For example, if you are root user, it will be created at /root/rpmbuild/.
  - c) Move to /rpmbuild/SPEC (eq, /root/rpmbuild/SPEC).
  - d) Rebuild rpm package with rpmbuild command (rpmbuild -ba scsi\_dh\_alua.spec)
  - e) Move to rpmbuild/BUILD/x86\_64 (cd /root/rpmbuild/BUILD/x86\_64/).
  - f) Install rpm package.
7. Change /etc/multipath.conf
  - a) Save original /etc/multipath.conf as /etc/multipath.conf.orig
  - b) Edit /etc/multipath.conf
  - c) Leave defaults and blacklist as they are.
  - d) Add devices section, making sure prio is set as “tpg\_pref” (see included sample\_multipath.conf).

```
devices {
    device {
        vendor          "Intel"
        product         "Multi-Flex"
        path_grouping_policy group_by_prio
        getuid_callout  "/sbin/scsi_id --whitelisted --device=/dev/%n"
        prio            "tpg_pref"
        path_checker     tur
        path_selector    "round-robin 0"
        hardware_handler "1 alua"
        failback         immediate
        rr_weight        uniform
        rr_min_io        100
        no_path_retry    queue
        features         "1 queue_if_no_path"
        product_blacklist "VTrak V-LUN"
    }
}
```

- e) If you have LUNs in addition to the OS LUN, add them under “blacklist\_exceptions” and “multipaths” (see included sample\_multipath.conf).
  - i. You can get LUN IDs from “ls -l /dev/disk/by-id/”.
- 8. Check multipath configuration
  - a. **chkconfig multipathd on**
  - b. **chkconfig multipathd** (this show the status of multipathd)
- 9. Install the second SCM
- 10. Reboot the compute module.
- 11. Check multipath configuration.
  - a. **multipath -ll**
  - b. **multipath -v4**