

ISCSI INITIATOR FOR LINUX

Prerequisite:

- Package `iscsi-initiator-utils`
- Package `device-mapper-multipath`

Installing:

Install the iSCSI initiator and multipath tools:

```
# yum install iscsi-initiator-utils
# yum install device-mapper-multipath
```

Configuring:

1. Create the default `/etc/multipath.conf` file and enable the `multipathd` service:

```
# mpathconf --enable --with_multipathd y
```

2. Add the following to `/etc/multipath.conf` file:

```
devices {
    device {
        vendor                "LIO-ORG"
        hardware_handler      "1 alua"
        path_grouping_policy  "failover"
        path_selector          "queue-length 0"
        failback              60
        path_checker          tur
        prio                  alua
        prio_args              exclusive_pref_bit
        fast_io_fail_tmo      25
        no_path_retry         queue
    }
}
```

3. Restart the `multipathd` service:

```
# systemctl reload multipathd
```

iSCSI Discovery and Setup:

1. If CHAP was setup on the iSCSI gateway, provide a CHAP username and password by updating the `/etc/iscsi/iscsid.conf` file accordingly.
2. Discover the target portals:

```
# iscsiadm -m discovery -t -st 192.168.56.101
192.168.56.101:3260,1 iqn.2003-01.org.linux-iscsi.rhel1
192.168.56.102:3260,2 iqn.2003-01.org.linux-iscsi.rhel1
```

3. Login to target:

```
# iscsiadm -m node -T iqn.2003-01.org.linux-iscsi.rhel1 -l
```

Multipath IO Setup:

The multipath daemon (`multipathd`), will set up devices automatically based on the `multipath.conf` settings. Running the `multipath` command show devices setup in a failover configuration with a priority group for each path.

```
# multipath -ll
mpathbt (360014059ca317516a69465c883a29603) dm-1 LIO-ORG ,IBLOCK
size=1.0G features='0' hwhandler='1 alua' wp=rw
|+- policy='queue-length 0' prio=50 status=active
|  `-- 28:0:0:1 sde  8:64  active ready running
`+- policy='queue-length 0' prio=10 status=enabled
   `-- 29:0:0:1 sdc  8:32  active ready running
```

You should now be able to use the RBD image like you would a normal multipath'd iSCSI disk.
