Note

A system might be able to access the same storage device through multiple different communication paths, whether those are using Fibre Channel, SAS, iSCSI, or some other technology. Multipathing allows you to configure a virtual device that can use any of these communication paths to access your storage. If one path fails, then the system automatically switches to use one of the other paths instead.

If deploying a single iSCSI gateway for testing, skip the `multipath` configuration.

These example steps configure an iSCSI initiator to use multipath support and to log in to an iSCSI target. Configure your client's Challenge-Handshake Authentication Protocol (CHAP) user name and password to log in to the iSCSI targets.

1. Install the iSCSI initiator tools.

```
[root@node ~]# yum install iscsi-initiator-utils
```

2. Configure multipath I/O.

   - Install the multipath tools.

```
[root@node ~]# yum install device-mapper-multipath
```

   - Enable and create a default multipath configuration.

```
[root@node ~]# mpathconf --enable --with_multipathd y
```

   - Add the following to the `/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
    }
}
```

   - Restart the `multipathd` service.

```
[root@node ~]# systemctl reload multipathd
```

3. If required for your configuration, set CHAP authentication.