

## Working with Block Volumes/iscsi info.txt

### iSCSI Commands and Information

Block volumes attached with the iSCSI attachment type use the iSCSI protocol to connect a volume to an instance. See Volume Attachment T

Once the volume is attached , you need to log on to the instance and use the `iscsiadm` command-line tool to configure the iSCSI connection

To enhance security, Oracle enforces an iSCSI security protocol called CHAP that provides authentication between the instance and volume

#### Note

You do not need to run the iSCSI commands for attachments to volumes configured for the Ultra High Performance level. The Block Volume Ma

For these volumes, you need to ensure that you have configured the required prerequisites and that the Block Volume Management plugin is

Configuring Attachments to Ultra High Performance Volumes

Enabling the Block Volume Management Plugin

Troubleshooting Ultra High Performance Volume Attachments

Accessing a Volume's iSCSI Information

When you successfully attach a volume to an instance, Block Volume provides a list of iSCSI information. You need the following informati

IP address

#### Note

When an IP address is assigned to a volume attachment, it is a valid IP address and an iSCSI connection can be made to it. Block Volume d

Port

CHAP user name and password (if enabled)

IQN

#### Note

The CHAP credentials are auto-generated by the system and cannot be changed. They are also unique to their assigned volume/instance pair

The Console provides this information on the details page of the volume's attached instance. Click the Actions menu (Actions Menu) on you

See Attaching a Block Volume to an Instance and Connecting to a Block Volume for step-by-step instructions.

### Recommended iSCSI Initiator Parameters for Linux-based Images

iSCSI attached volumes for Linux-based images are managed by the Linux iSCSI initiator service, `iscsid`. Oracle Cloud Infrastructure image

```
node.startup = automatic
```

```
node.session.timeo.replacement_timeout = 6000
```

```
node.conn[0].timeo.noop_out_interval = 0
```

```
node.conn[0].timeo.noop_out_timeout = 0
```

```
node.conn[0].iscsi.HeaderDigest = None
```

If you are using custom images, you should update the `iscsid` service configuration by modifying the `/etc/iscsi/iscsid.conf` file.

### Additional Reading

There is a wealth of information on the internet about iSCSI and CHAP. If you need more information on these topics, try the following pa

Oracle Linux 8 Managing Storage Devices – Working With Linux I-O Storage

Oracle Linux Administrator's Guide for Release 7 – About iSCSI Storage

Oracle Linux Administrator's Guide for Release 6 – About iSCSI Storage

Troubleshooting iSCSI Configuration Problems