Network Storage

iSCSI

> Internet Small Computer Systems Interface or iSCSI (/aɪˈskʌzi/ i eye-SKUZ-ee) is an Internet Protocol-based storage networking standard for linking data storage facilities. iSCSI provides block-level access to storage devices by carrying SCSI commands over a TCP/IP network. iSCSI facilitates data transfers over intranets and to manage storage over long distances. It can be used to transmit data over local area networks (LANs), wide area networks (WANs), or the Internet and can enable location-independent data storage and retrieval.
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> The protocol allows clients (called initiators) to send SCSI commands (CDBs) to storage devices (targets) on remote servers. It is a storage area network (SAN) protocol, allowing organizations to consolidate storage into storage arrays while providing clients (such as database and web servers) with the illusion of locally attached SCSI disks. It mainly competes with Fibre Channel, but unlike traditional Fibre Channel which usually requires dedicated cabling, iSCSI can be run over long distances using existing network infrastructure. iSCSI was pioneered by IBM and Cisco in 1998 and submitted as a draft standard in March 2000.
>
> source

Terminology/Concepts

Setup Host/Target

Install Linux target framework (tgt)

```
apt install tgt
systemctl start tgt
```

Create a new target. Be sure to replace the `TARGET_NAME` with an appropriate name. See iSCSI Addressing

```
TARGET_NAME=iqn.2023-09.home.mini-tgt-1
cat <<EOF > /etc/tgt/conf.d/$TARGET_NAME.conf
<target $TARGET_NAME>
        direct-store /dev/disk/by-id/ata-some-disk-1
        direct-store /dev/disk/by-id/ata-some-disk-2
        initiator-address 172.16.4.2
</target>
EOF
```

Setup Initiator

tbd

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