

Storage Layout

Overview

Centerpoint uses a three-tier storage strategy:

- 1. **Local NVMe** — fast system and application data storage
- 2. **Ceph OSD block devices** — two NVMe drives contributing to a distributed Ceph cluster for object/block storage across the homelab
- 3. **NFS mounts from UnRAID** — bulk media and data storage from the NAS server at `192.168.1.119`

Local NVMe Drives

System Drive — `nvme1n1` (1.8 TB)

The primary system disk, GPT-partitioned with LVM.

Partition	Size	Mount Point	Purpose
<code>nvme1n1p1</code>	1 GB	<code>/boot/efi</code>	EFI System Partition
<code>nvme1n1p2</code>	2 GB	<code>/boot</code>	Boot partition
<code>nvme1n1p3</code> (LVM PV)	1.8 TB	—	LVM physical volume
<code>ubuntu-vg/ubuntu-lv</code>	1.8 TB	<code>/</code>	Root filesystem

Current usage: 520 GB used / 1.3 TB free

This drive holds the OS, all Docker image layers (`/var/lib/docker`), container volumes, and the compose project files under `/home/jeeves/docker/`.

Ceph OSD — `nvme0n1` (931.5 GB)

Configured as a Ceph OSD block device under LVM management. Mounted at `/media/jeeves/1TB_Vol2`.

The volume appears nearly empty at the filesystem level because Ceph manages the block device directly — actual utilised capacity is tracked by the Ceph cluster, not the OS mount point.

Ceph OSD — nvme2n1 (931.5 GB)

Second Ceph OSD block device, LVM-managed. Mounted at `/media/jeeves/1TB_Vol1`. Shows ~115 GB used at the OS level; the remainder is managed by Ceph.

“ Both Ceph OSD drives contribute to a distributed storage pool shared across the homelab. Ceph provides replication and data protection at the cluster level rather than at the individual host level.

NFS Mounts — UnRAID (192.168.1.119)

UnRAID at 192.168.1.119 hosts a 38 TB storage pool (~32 TB in use) and exports three NFS shares, auto-mounted on Centerpoint at boot.

Mount Point	NFS Source	Consumer Services
<code>/mnt/Photos</code>	<code>192.168.1.119:/mnt/user/Photos</code>	Immich
<code>/mnt/data</code>	<code>192.168.1.119:/mnt/user/Data</code>	General / miscellaneous
<code>/mnt/Multimedia</code>	<code>192.168.1.119:/mnt/user/Multimedia</code>	Plex, Jellyfin, Stash, Audiobookshelf

These paths are bind-mounted into media containers — the media files themselves are never stored locally on Centerpoint.

Notes / Gotchas

- If UnRAID is offline or rebooting, NFS mounts will stall and any container with a bind mount into `/mnt/*` will hang or fail to start until the mount recovers.
- Docker named volumes (databases, config state, etc.) all reside on the system NVMe under `/var/lib/docker/volumes/` — these are **not** automatically backed up to UnRAID.
- The Ceph cluster should be monitored independently; degraded OSD status does not surface through Docker or the OS mounts in any obvious way.

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