

Planning

These are plans for purchases and infrastructure changes

- NAS
- Server refresh
- SLURM

NAS

Goals:

- I want to have a way to store my files for machines that are ephemeral
 - For example, *imara* is a node that is only on when I have analytics work to do. It would be ideal to store the results of the work done on these servers in a centralized location to enable access even when machines are powered off.
- I want to have scalability to large amounts of storage
- I want to have the throughput potential to use this as a storage array for containers if necessary
- I don't have much money to spend as I save for the wedding

Server refresh

I would like to get away from my dl380 g7 as it is somewhat loud and quite energy inefficient.

Currently, I am considering two options.

The first is to build a machine for deep learning and then use my z620 as a server.

The second is to use a [deskmini](#) as a server.

There are a couple of things that need to be considered.

z620 advantages

- Air intake from front only, allowing for stacking
- More memory expansion (64gb with single processor, 96 with two)
- Much more upgradable (additional processor, 16 cores, gpus)
- Upgrades are cheaper in general
- Intel nic
- More drives

Deskmini advantages

- Much newer processor architecture
- Integrated gpu for jellyfin transcoding
- Much lower power consumption
- NVMe storage (2x)
- No intel management engine

SLURM

https://slurm.schedmd.com/quickstart_admin.html