



Site Report HPC2N

NDGF AHM Spring 2023

2023-05-24

WLCG Cluster

- Still running in old Kebnekaise cluster
 - Ubuntu 20.04.5 LTS, Slurm 21.08.7, Skylake processor
 - Has been extended to 39 nodes
 - Hoping for 40 but need to move around some HW
 - HW relatively stable
- In process of planning to buy a new *dedicated* WLCG cluster
 - Not much known yet
 - Expecting at least 1500 cores

Central IT still borrows space...

- University IT (ITS, formerly UMDAC) is refurbishing/redesigning their data centre
- ITS now temporarily housed in the old Abisko racks
 - Only approx. 60-80kW, so not noticeable wrt power/cooling
- Temporary kludges for UPS power of ITS equipment
 - Including emergency cooling, which also needs to cater for HPC2N equipment if we get cooling loss but still have power.
- Was expected to move out approx now, but their new raised floor is wobbly...

Feed from central IT UPS discontinued

- The HPC2N UPS takes the role of providing redundant power to the infrastructure datacenter.
 - It now has diesel generator feed etc.
- Had hoped for the old UPS feed to be converted to real redundancy from other source but looks like it will be from the same in-house source.
- Emergency cooling will be cold water.
- Everything delayed due to central IT datacenter rebuild delays.
- Long-term financial/political issues to be ironed out.

Tape/backup

- Hardware unchanged
 - IBM TS4500 library (2550 slot capacity)
 - 6x TS1155 tape drives
 - Dell R740xd with approx. 200T spinning disk, 4x16G FC, 2x25GigE
- New TSM server procured, not in production
 - Awaiting TSM RHEL9 support
- Hardware issues related to tapes being broken
 - Not that many, but more than you expect of tapes with "lifetime" warranty
- TSM server software still on version 8.1.14.100
 - Support TOTP MFA for admin accounts, seems to work

Tape/backup (2)

- WLCG specific tape status
 - No ALICE tape data (migrated to UIB)
 - ATLAS part full
 - Can buy more tapes, free slots in library, but waste of money if we upgrade drives.
 - Handling 2023 pledges
 - Want to buy new tape drives when IBM ships next generation, initial roadmap of this spring didn't happen. Now uncommitted to "we hope for this autumn" ...
 - NSC takes up the slack by buying more tapes to cover the Swedish pledge.

LHC OPN

- Solution was new dedicated 100G link from HPC2N to Stockholm.
- Apparently equipment in place.
- Discussions between Juniper/SUNET if chassis was broken or not.
- Progress has stalled, need to convince central IT to allocate time from their datacenter rebuild/move debacle.

