

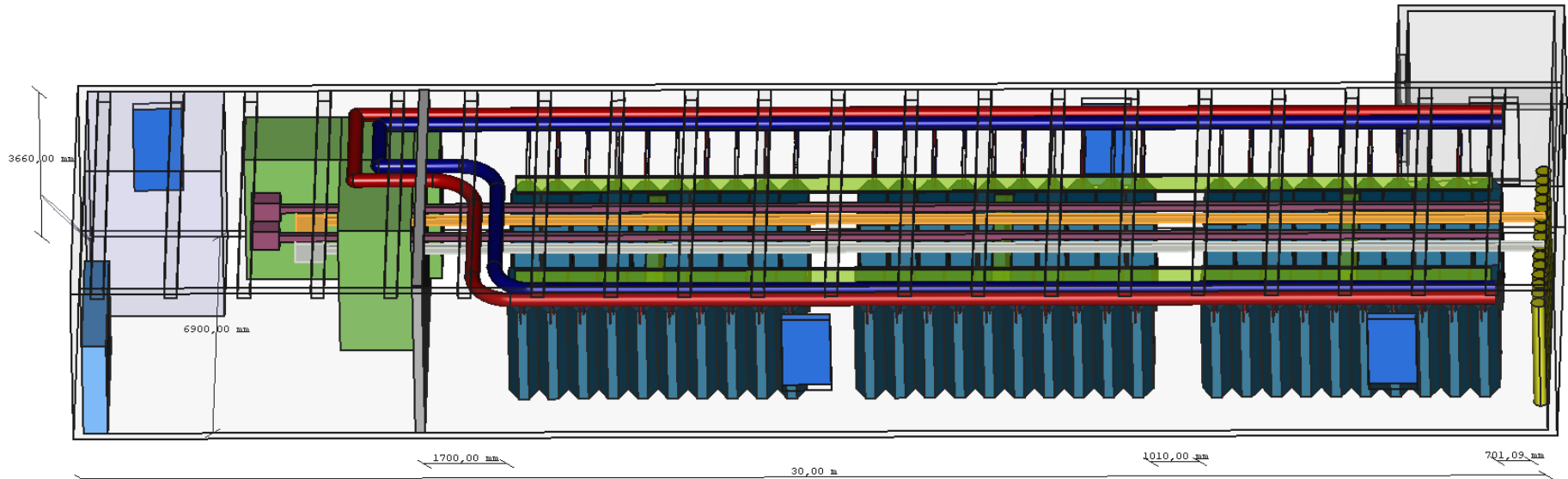
All Hands Meeting 2021

NT1

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New datacenter

- Slowly moving towards realization...



Status: compute

- A bit more nodes are coming up.
- Probably AMD Milan.

Status: disk pools

- Status:
 - 1.6PB
 - Dcache[02-03] (970TB) taken out (perhaps a bit premature).
 - However, dcache06 (350TB) has been ready for a long time.
- Coming up:
 - 1.8TB (144*14TB)
 - 2 servers: AMD 7402P 24 core, 256GB memory, 100GbE.
 - We are testing now:
 - MD-RAID5/6 has write performance issues.
 - 18x 14TB RAID6: write ~1.5GiB/s, read ~3GiB/s.
 - (Note: ZFS raidz2 can do ~3GiB writes).
 - RAID0 works fine.
 - Perf top: 50% native_queued_spin_lock_slowpath
 - Think there are a latency issue together with missing parallelization...

Status: tape pools

- Current: 2x Dell R740xd
 - 1x Silver 4112, 4-core, 2.60GHz.
 - 18x 4TB SAS3 3.5" 7,2k.
 - H740P controller: 8GB cache.
- 2x Dell R720xd taken out due to end of support.
- Testing: 2x Dell R7515
 - 1x AMD EPYC 7302P 16 core
 - 8x 1.6TB, 3 DWPD.
 - MD-RAID5 first tests: write 4.3GiB/s, read 7GiB/s
 - group_thread_cnt=4
 - So NVMe help MD-RAID writes.

Status: tape library

- IBM TS3500 library
 - 4x LTO-6 drives.
 - Has 1000 LTO-6 tapes (2.5PB).
 - Room for 1500 tapes.
 - We need to fill the beast...
- New library or upgrade planed for 2021.