

Time Meeting 4-22-2025
SDCC/SCDF

Upgrade of sPHENIX CPU Resources

- Dedicated sPHENIX HTCondor Pool now a standalone pool with a dedicated Condor Central Manager
- Total resource in the sPHENIX pool - ~132K cores
 - One of the largest HTCondor pools known to exist.
 - ~60K “legacy” cores, 71K newly purchased cores
- Two step increase in resources in sPHENIX pool
 - First batch of made available to sPHENIX on 3/24
 - 163 nodes/20.8K cores
 - Second batch made available to sPHENIX on 4/16
 - 392 nodes/50.2K cores
- Stress testing of new nodes uncovered a minor issue with the spine and leaf network.
 - Problem does NOT affect the compute nodes.
 - Vendor has provided a patch which appears to fix the problem
 - Path forward is being discussed.

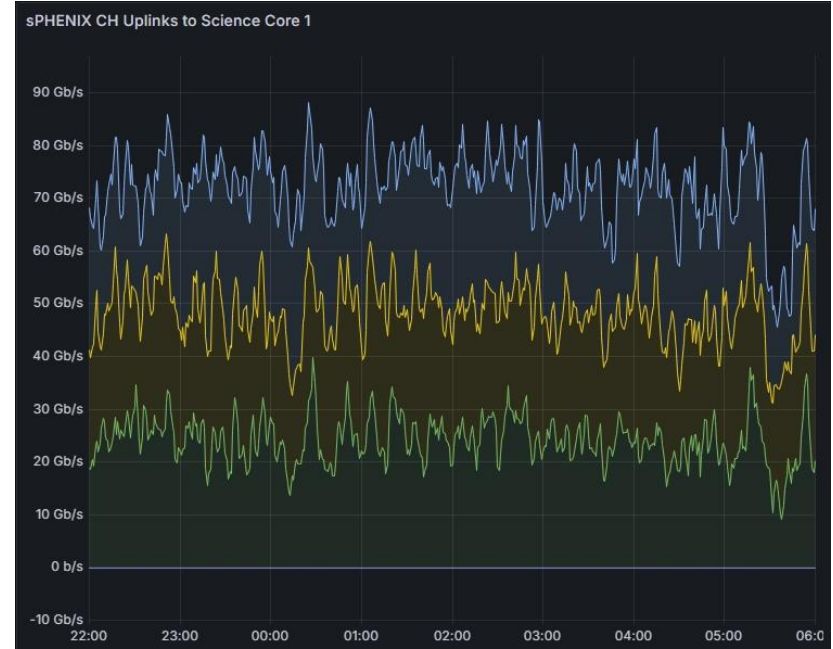
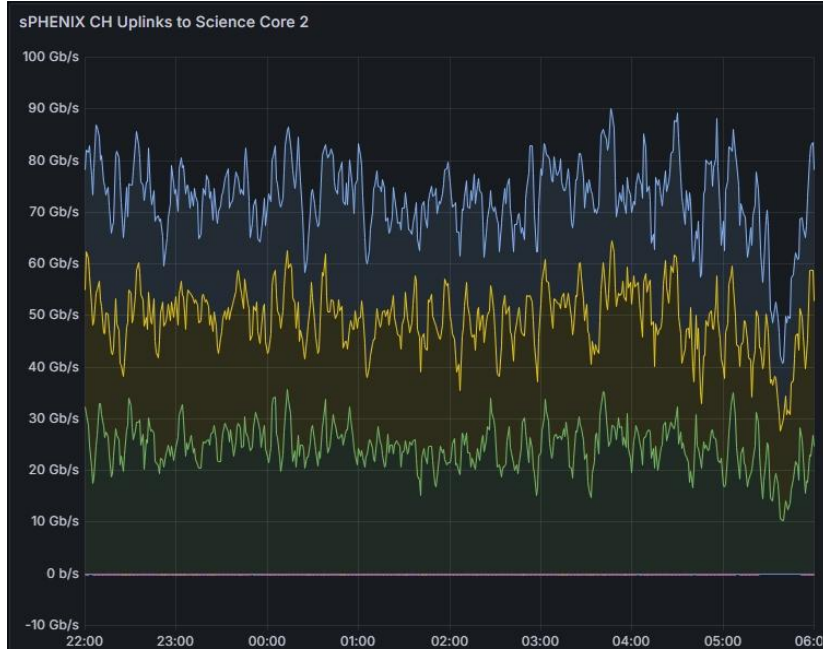
Upgrade of sPHENIX Disk Resources

- 10PB of additional Lustre storage was still being configured as of last Friday.
- Insertion of the new storage will be followed by a low impact rebalancing of data in the system

Upgrade HPSS Tape Service

- HPSS capacity/performance upgrades
 - sPHENIX HPSS
 - 9 movers+9 disk arrays, up from 4 movers+3 disk arrays
 - 100 LTO-9 tape drives in place
 - 10K LTO-9 tapes initialized
 - Upgrade of STAR movers delayed
 - Vendor shipped wrong disks, waiting on delivery of replacements.
 - 17PB empty tapes available for STAR, additional 24 PB of tape expected next week.
- Mock Data Challenge
 - Demonstrates sustained bandwidth from the counting house to tape ~20.9GB/sec, meeting sPHENIX's requirements
 - 76 tape drives running @ 296MiB/sec (310.3MB/sec) used to sustain migration of data to tape.

Mock Data Challenge



20.9GB/sec sustained bandwidth from counting house to tape 4/15 22:00 to 4/16 06:00

sPHENIX Writes into HPSS 4/7 to 4/22

