praguelcg2 report

ATLAS DE Cloud F2F Meeting

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6.-7.10.2025

Introduction

praguelcg2 is multi-VO site, supporting

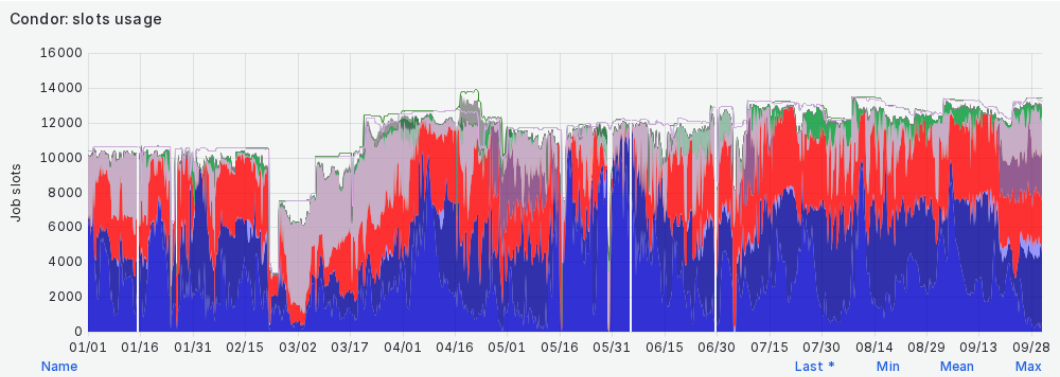
- LHC experiments
  - ATLAS
  - ALICE
- astroparticle experiments
  - Pierre Auger Observatory (PAO)
  - Cherenkov Telescope Array (CTA)
- Fermilab experiments
  - NOvA
  - DUNE

Storage

- local dCache
  - DATADISK: ∼4.2 PB
  - SCRATCHDISK: ∼110 TB
  - LOCALGROUPDISK: ∼660 TB

Batch

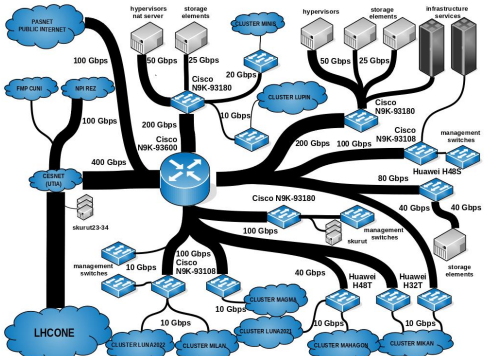
- 2 x ARC-CE + HTCondor
- ∼13k hyper-threaded cores (consisting of Intel and AMD (EPYC) processors)
- remote clusters which are part of HTCondor
  - the Faculty of Mathematics and Physics of the Charles University
- sharing by the VOs based on fair share



- external
  - 4×100 Gbps to LHCONE
  - 2×100 Gbps to Pasnet/Internet
- internal
  - storage nodes - typical 40Gbps and at least 25Gbps for older servers
  - worker nodes - 10Gbps for all new machines with many cores

IPv4/IPv6

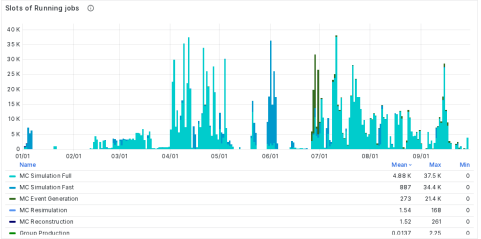
- All WNs and storage pools use IPv6
- external IPv4 connectivity limited to 20Gbps (NAT)

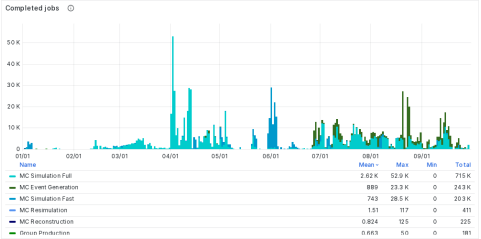


Opportunistic resources

We had/have access to several computing clusters which we can use opportunistically:

- Czech national HPC center IT4Innovations (IT4I) in Ostrava (Barbora and Karolina clusters)
  - new allocation (recently awarded to us) includes also LUMI





- local theory group clusters (Koios and Phoebe clusters)