



USTC Site Report

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CLHCP2025

2025.11.1

Overall Status

- **Built in 2019**

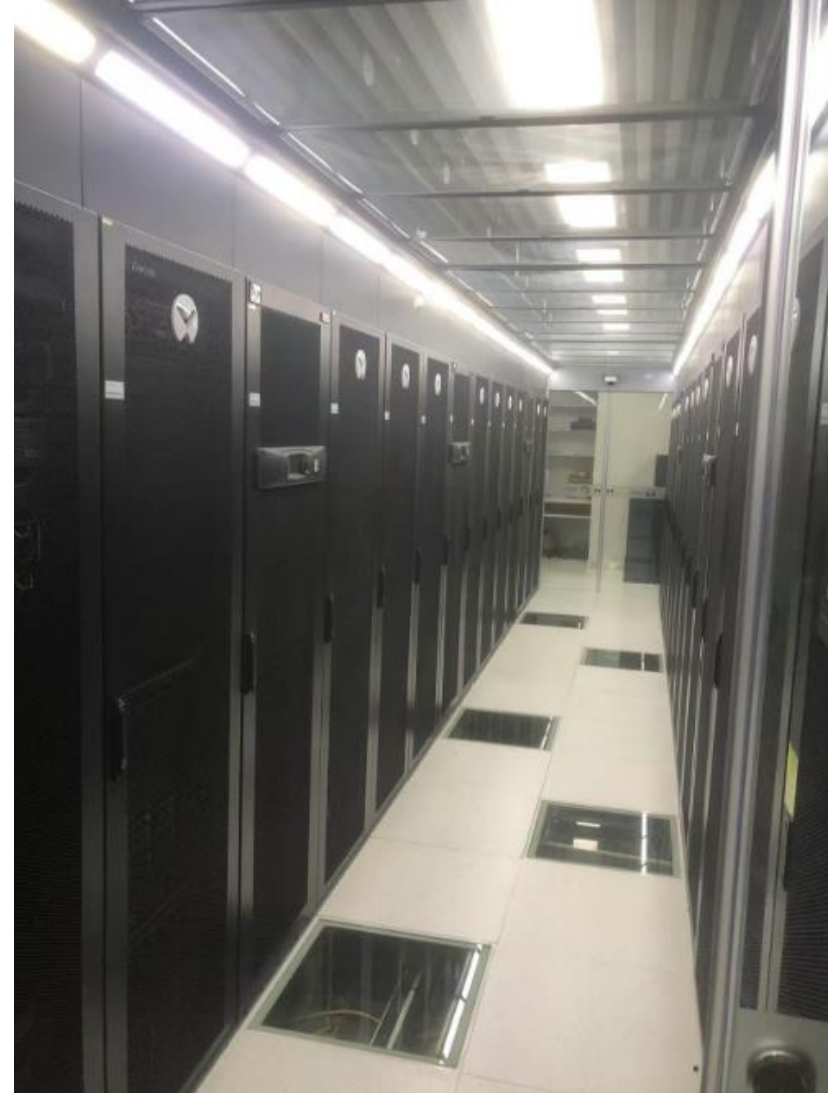
used for ATLAS, CMS and STCF
(also for BES, RHIC...)

- **A modular data center**

- **Overall: ~500 users**

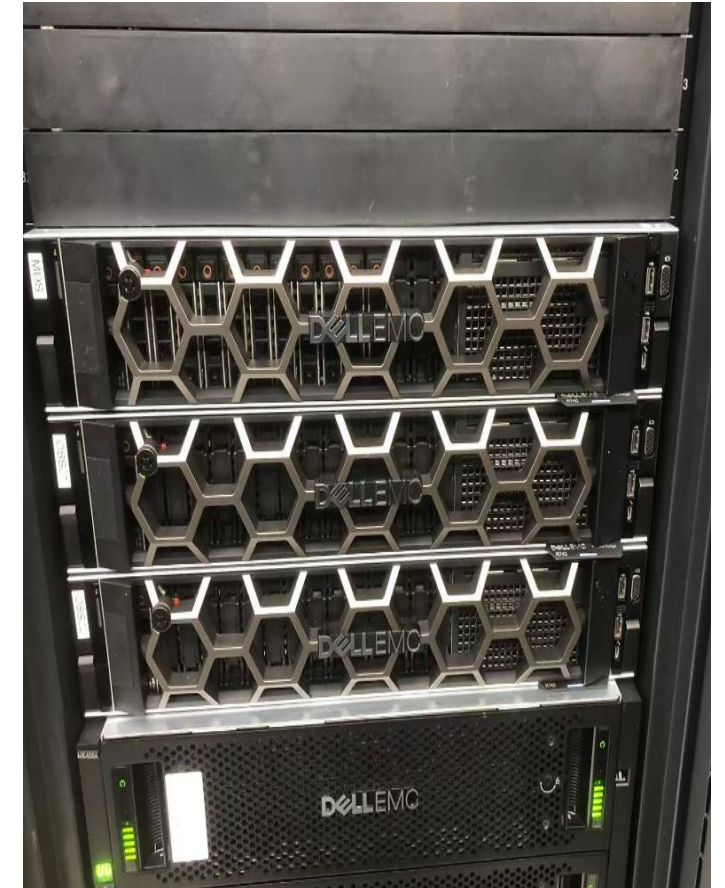
USTC users: ~ 80%

Other institute users: ~20%



Overall Resource – Cores

- **CPU (~70%) + GPU(~30%)**
 - CPU: ~3200 cores
 - GPU: ~ 20 servers, 500k cuda cores
 - Shared by LHC projects + BES +....
- **In year 2025**
 - Expanded ~1900 cores
 - Obseleted ~700 old cores
- **Plan for year 2026**
 - Add another 1200 cores

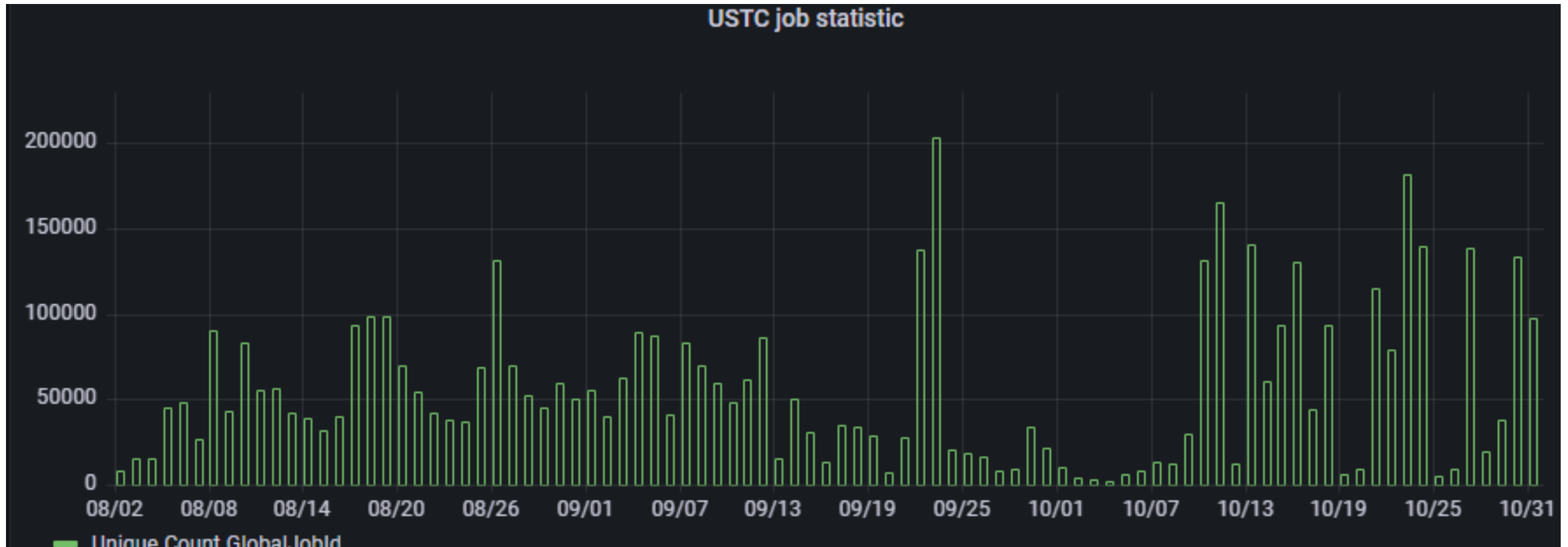


Overall Resource – Jobs

- **Job statistics**

Number of completion jobs: 13.3 M

Number of the total wall time: 8.8 M hours



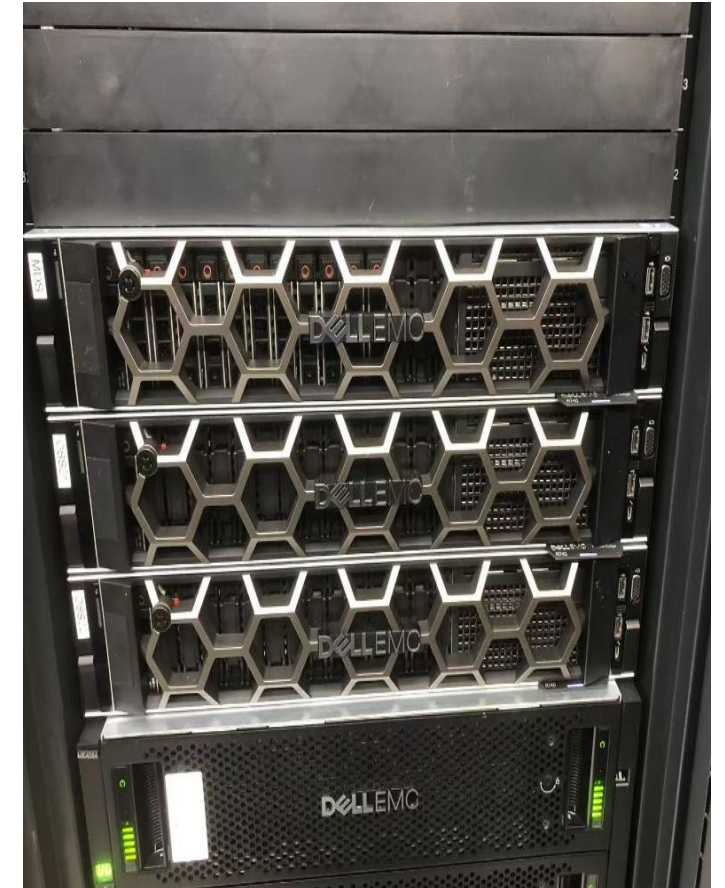
Overall Resource – Disks

- **Current status**

- 3 lustre Fs
- In total ~4PB
- Shared by different projects

- **Plans**

- To include another 2 PB disk by the end of this year
- Will also be organized with lustre



Management/Software/network

- **The whole site is running with remote management of IHEP experts**
 - OS: Updated to **Alma Linux release 9.4** in this spring, and synchronize with **CERN/IHEP** system
 - **CVMFS** is setup
 - **Lustre** for File System and **Condor** for jobs
- **Supported with CERNET for connections to Europe/Cern**
 - 4 x 1GB to the computing room
 - Planed to update the network with an additional 10 GB optical cable connection

Current situation

- Power & cooling & space: reach up to a limit
- Hardware: ~40% > 3years, ~20% >5 years
- Network: not stable, especially concerning the connection to CERN

Plans

- A power extension in year 2026
- A cooling system upgrade in late 2026 or 2027