

WLCG Batch and CE

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GDB

Overview

- **Note: This is a discussion starter, I don't intend for conclusions today, we'll return to this topic in September**
- Why?
- Recommended batch systems
- Recommended CEs



Why?

- Maarten's Workload Management Trends:
 - <https://indico.cern.ch/event/578984/contributions/2509205/attachments/1424665/2186386/WM-landscape-v10.pdf>
 - This work indicates that we have a (slow) shift out at sites
- Unfavorable support situation for some software like PBS
- Unnecessary diversity incurs maintenance cost, mostly on experiment side
- Some guidance might make the process easier for our sites that are looking to make a change



Recommended batch systems

- HTCondor for sites with (mostly) HTC load
 - Especially at large scale in terms of number of jobs
 - Where each job is single core or a few cores up to a node
- SLURM for sites with significant HPC load
 - Especially running multi-node MPI jobs
- Local site preference of course matters
 - If site admins feel familiar with a batch system, or have local support nearby, it's probably a better choice
- Any other system in the solution set?



Recommended CEs

- HTCondor-CE
 - When connected to HTCondor batch system
- ARC-CE
 - When connected to SLURM
 - Also works with HTCondor (when would this be recommended?)
 - Lightweight/HPC sites with data staging/cache instead of local SE
- Cream-CE?
 - Batch system support?
 - If you have users with high demands on Glue1 infosys?
- Any others?





Discussion?