



New TF on multi-core/ whole-node scheduling/ handling jobs with special requirements

WS discussion

- During the WLCG WS we had more than 1 hour of discussion considering the following questions:
 - Handling jobs with special requirements, including high memory jobs
 - Whole node scheduling
 - Whether usage of 16-core slots has advantages over 8-core slots and should become a standard
- ALICE, ATLAS and CMS presented their views.
- In preparation for the WS, WLCG Operations Coordination collected site input via a questionnaire. Based on the collected input, the site perspective was also presented.
- Certainly, the allocated time slot was not enough, but the discussion during WS demonstrated interest in the topic and its importance.

Handling payloads with specific requirements

- Experiments have different approaches:
 - CMS and ALICE are handling complexity of scheduling payloads with different requirements largely inside the pilot.
 - ATLAS prefers to pass specific requirements to the batch system and allow it to handle them.

More cores or whole node scheduling

- More cores or whole node scheduling as well as long job time limits provide more flexibility for the VOs and might allow maximizing the resource utilization.
- On the other hand, many sites expressed their concerns regarding potential accounting issues, CPU efficiency, compatibility with existing infrastructure and availability of the workflows allowing co-existence of payloads with different number of cores.

Conclusions

- This topic has been included in the agenda of the WLCG Ops and Facilities session of the WS in order to understand whether we can come up with recommendations and a proper strategy for more efficient job allocation on the WLCG infrastructure.
- Clearly further studies are needed.
- We propose to set up a dedicated task force including site and experiment experts.
- People who are interested in taking part, please, contact wlcg-ops-coord-chairpeople@cern.ch