

WLCG HEP-SCORE Deployment Task Force

Meeting on 1 March 2023 (teleconference)

Notes

Indico event page: <https://indico.cern.ch/event/1209412/>

Welcome, note-taking, notes from the previous meeting, matters arising

The minutes from the previous meeting are approved.

WLs and HEPscore status and next steps (Domenico Giordano)

- All workloads for HS23 are ready for x86/ARM
- LHCb (emails by Andrea) - good news with some new features and improvements to the benefit of LHCb software
- HS32 configuration v1.5 ready for testing
 - Workload containers available both from CERN gitlab registry or as unpacked image from CVMFS repository unpacked.cern.ch
 - Goal is to release v2.0 on April 1
- Next steps
 - 1 month (March) for testing on as many servers as possible
 - TF participating sites and others interested by testing it
 - Include ARM machines if possible

Andrea asks if we should inform the CRSG (about to meet in April) about the new benchmark.

General consensus: CRSG will be impacted later in the migration process but has not a major role for the HEPscore adoption. The TF should focus on passing the information to the MB and let the MB inform the other relevant WLCG bodies.

HEPscore23 WL analysis (Ladislav Ondris)

See slides

- review of the new LHCb workload (stable and reproducible)
- measurements of the new HS32 (with all workloads) is good and stable
- Showed plots of the "old" workload (pre-ARM?) vs the current workloads
- the impact of the change is relatively small

Walter comments about the 4x improvement of the reco code. The the ATLAS code is not 4x times faster (slide 6). Domenico explains that the reason is not an improvement of the code but a different definition of the score, based on wall time (new) instead of cpu time (old). Given that the workload runs on 4 threads, the fit 3.99 is an indirect confirmation of that

Michel asked for clarification on the large scatter of the LHCb workload: Ladislav clarifies that this is expected being the old workload the one that had issues fixed by the new workload (see A. Valsssi reports in previous TF minutes)

Procedure to run HEPscore23 at sites (Gonzalo Menendez Borge)

Presented the various ways to run the new HS32 (see slides)

Domenico made a call for sites to run HS32 on their servers

Any other business

- Communication about next conferences: Randy will attend and present the HEPscore status at HEPiX (27-31 March) and CHEP (8-13 May)
- Proposed exceptional meeting on Mar 29. Agreed
- Clarification on memory configuration on Juno software from Giuseppe (see minutes of the previous meeting). The Juno software is under active development but there are no solutions for the high utilization of memory (>2 GB/core), that is also characterizing the production activity.
 - It's then suggested at the meeting that the Juno workload won't be updated to the version that reduces the memory utilization, because that would make it not representative of the production workloads.

Next meeting 15 March 2023

Annex: Attendance

Present:

Giuseppe Andronico (INFN)
Domenico Giordano (CERN - chair)
Michel Jouvin (IJCLab)
Walter Lampl (U Arizona)
Helge Meinhard (CERN)
Andrew Melo (Vanderbilt U)
Gonzalo Menendez Borge (CERN)
Ladislav Ondris (CERN)
Stefano Piano (INFN Trieste)
Matthias Schnepf (KIT)
Oxana Smirnova (U Lund)
Randall Sobie (U Victoria)
Andrea Valassi (CERN)
Yan Xiaofei (IHEP)