

# WLCG HEP-SCORE Deployment Task Force

Meeting on 15 March 2023 (teleconference)

## Notes

Indico event page: <https://indico.cern.ch/event/1209422/>

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

The minutes from the previous meeting are approved.

### Status of the measurement campaign (Gonzalo Menendez Borge)

See slides for plots and tables.

Gathering lots of data from multiple sites. Sites are invited to continue to contribute.

Highlighted **need for >10** measurements per server.

Investigated some of the failed results: they are on very old CPU systems (Ivy Bridge). Agreed not

The script prepared to run the suite is usable both on x86 and ARM servers

### Analysis of HEPscore23's Workloads (Ladislav Ondris)

See slides.

Plot of HEPscore23 (HS23) workloads vs HS06: the fit figure of merit (FOM) for LHCb sim and ATLAS gen are now more inline with trends seen for other workloads.

Need for data on newer servers to obtain the same coverage we had in the analysis of September 22.

Plot HS23/HS06 vs year of CPU release shows the evolving performance of the HEP workloads on new CPU models. Domenico to present some results at the Openlab workshop this week. No objection.

Randy asks for updated tables/plots by early next week for HEPiX talk.

Andrea asks to make the study of correlation of each individual HEP workload vs HS23.

### Status of the accounting tools (Julia Andreeva)

See slides.

Readiness status:

- Some tasks are progressing well, other tasks will need more time.
- Progressing well: new units (HEPscore23 hours) for consumption in the EGI portal, historical distribution in WAU, VO requirements and pledges in CRIC.
- Need more time: reporting HS06 or HS23 in APEL repository.
  - Server side changes
    - without aggregation by the benchmark name, being validated. Expected to be deployed in production at the **end of April**.
    - with aggregation by the benchmark name expected to be deployed in production by the end of May.
  - Client side depends on the kind of records sent, normalized or not.
  - Normalized records following new specification are being tested by INFN-T1

- For sites that don't send normalized records, but summaries or individual job records, the changes have not been fully tested. New APEL client **won't be ready before the 1st of April.**
- *“The fact that the APEL client won't be ready before the 1st of April is not a showstopper for the switch to a new benchmark. This just implies that probably for some fraction of sites which would start benchmark their resources with HEPscore, we won't be able to track it unless new APEL client is released and deployed, which should happen during April-May”*
- Monitoring of the transition requires changes in APEL, EGI portal and WAU, foreseen to be all ready by **end of May.**

Oxana: what is the correct spelling for HEPscore? Clarified that no hyphenation is requested.

Michel: Not needed to monitor HS23 and HS06 on the same site. Need to make the transition as smooth as possible.

Matthias: dedicated CE does not necessarily mean homogeneous resources behind. INstead of splitting CEs, rely on the same scale HS23 and HS06

## Any other business

HS32 document.

Domenico presented the first draft of the documentation for site admins about how to use HEPscore23, instructions on how to run and how to compute the number for the accounting portal. Currently a google doc, open for comments. D. has circulated the link to the mailing list Julia agrees on having such a document as future reference for the sites. Also instructions about how to upload the data to the Accounting DB should be included.

Agreed that when the document is finalized, it will be moved to another support: twiki, gitlab intro to HEPscore, etc.

Next meeting 29 March 2023

## Annex: Attendance

### Present:

Julia Andreeva (CERN)  
Giuseppe Andronico (INFN)  
Tommaso Boccali (INFN)  
Domenico Giordano (CERN - chair)  
Michel Jouvin (IJCLab)  
Walter Lampl (U Arizona)  
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)  
Tony Wong (BNL)  
Yan Xiaofei (IHEP)