HEPiX Spring 2025 Workshop



Contribution ID: 14 Type: not specified

Continuous calibration and monitoring of WLCG site corepower with HEPScore23

Wednesday 2 April 2025 16:25 (20 minutes)

The performance score per CPU core —corepower —reported annually by WLCG sites is a critical metric for ensuring reliable accounting, transparency, trust, and efficient resource utilization across experiment sites. It is therefore essential to compare the published CPU corepower with the actual runtime corepower observed in production environments. Traditionally, sites have reported annual performance values based on weighted averages of various CPU models, yet until now there was no direct method to validate these figures or to easily retrieve the underlying CPU model weights from each site.

With the official adoption of HEPScore23 as a benchmark in April 2023 by the WLCG, the Benchmarking Working Group introduced new tools, including the HEP Benchmark Suite with Plugins, to address this gap. The new infrastructure is able to continuously monitors and validates the reported performance values by running benchmarks across the grid. This approach ensures the accuracy of annual performance figures, promotes transparency, and enables the timely detection and correction of incorrect values with minimal effort from the sites.

Desired slot length

20 minutes

Speaker release

Yes

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Session Classification: Computing and Batch Services

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