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New developments in cost modeling for the LHC computing

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The increase in the scale of LHC computing during Run 3 and Run 4 (HL-LHC) will certainly require radical changes to the computing models and the data processing of the LHC experiments. The working group established by WLCG and the HEP Software Foundation to investigate all aspects of the cost of computing and how to optimise them has continued producing results and improving our understanding of this process. In particular, experiments have developed more sophisticated ways to calculate their resource needs, we have a much more detailed process to calculate infrastructure costs. This includes studies on the impact of HPC and GPU based resources on meeting the computing demands. We have also developed and perfected tools to quantitatively study the performance of experiments workloads and we are actively collaborating with other activities related to data access, benchmarking and technology cost evolution. In this contribution we expose our recent developments and results and outline the directions of future work.

Consider for promotion

No

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