WLCG Environmental Sustainability Workshop



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Holistic cost analysis of running a computing center

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The Tier-2 computing center at MIT has been established in 2006 and has been a prominent contributor to the CMS computing ever since. Over the years hardware has aged and we are faced with a major re-design which affects our principal design ideas that have driven our purchases over the years. In this context we have done a more holistic evaluation of the cost which for the first time includes power consumption based on our own measurements under realistic loads.

We compare cost of running an aging computing center and propose hardware retirement schedules that are more cost effective when considering power consumption and rack space.

Author: WANG, Zhangqier (Massachusetts Inst. of Technology (US))

Co-authors: PAUS, Christoph (Massachusetts Inst. of Technology (US)); GONCHAROV, Maxim (Massachusetts

Inst. of Technology (US))

Presenter: WANG, Zhangqier (Massachusetts Inst. of Technology (US))

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