

Volunteer Computing Experience with ATLAS@Home

Thursday, October 13, 2016 12:00 PM (15 minutes)

ATLAS@Home is a volunteer computing project which allows the public to contribute to computing for the ATLAS experiment through their home or office computers. The project has grown continuously since its creation in mid-2014 and now counts almost 100,000 volunteers. The combined volunteers' resources make up a sizable fraction of overall resources for ATLAS simulation. This paper takes stock of the experience gained so far and describes the next steps in the evolution of the project. These improvements include running natively on Linux to ease the deployment on, for example, university clusters, using multiple cores inside one job to reduce the memory requirements and running different types of workload, such as event generation. In addition to technical details, the success of ATLAS@Home as an outreach tool is evaluated.

Tertiary Keyword (Optional)

Virtualization

Secondary Keyword (Optional)

Outreach

Primary Keyword (Mandatory)

Distributed workload management

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Session Classification: Track 3: Distributed Computing

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