

Belle Monte-Carlo production on the Amazon EC2 cloud

Tuesday, March 24, 2009 10:00 AM (30 minutes)

The SuperBelle project to increase the Luminosity of the KEKB collider by a factor 50 will search for Physics beyond the Standard Model through precision measurements and the investigation of rare processes in Flavour Physics. The data rate expected from the experiment is comparable to a current era LHC experiment with commensurate Computing needs. Incorporating commercial cloud computing, such as that provided the Amazon Elastic Computing Cloud (EC2), into the SuperBelle computing model may provide a lower Total Cost of Ownership for the SuperBelle computing solution.

To investigate this possibility, we have deployed the complete Belle Monte-Carlo simulation chain on EC2 to benchmark the cost and performance of the service. This presentation will describe how this was achieved as well as the bottlenecks and costs of large-scale Monte-Carlo production on EC2.

2

Martin Seviar is Associate Professor at the School of Physics at the University of Melbourne. He is a member of the Belle and ATLAS experiments and has been involved with Grid computing since 2001. He is also a core contributor to the Open Source Wordprocessor, AbiWord.

Primary authors: Prof. SEVIOR, Martin (University of Melbourne); Prof. KATAYAMA, Nobuhiko (HIGH ENERGY ACCELERATOR RESEARCH ORGANIZATION); Mr FIFIELD, Tom (University of Melbourne)

Presenter: Prof. SEVIOR, Martin (University of Melbourne)

Session Classification: Plenary

Track Classification: Plenary