

Batch efficiency at CERN

Monday, March 23, 2009 8:00 AM (20 minutes)

A frequent source of concern for resource providers is the efficient use of computing resources in their centres. This has a direct impact on requests for new resources.

There are two different but strongly correlated aspects to be considered: while users are mostly interested in a good turn-around time for their jobs, resource providers are mostly interested in a high and efficient usage of their available resources.

Both things, the box usage and the efficiency of individual user jobs, need to be closely monitored so that the sources of the inefficiencies can be identified. At CERN, the Lemon monitoring system is used for both purposes. Examples of such sources are poorly written user code, inefficient access to mass storage systems, and dedication of resources to specific user groups.

As a first step for improvements CERN has launched a project to develop a scheduler add-on that allows careful overloading of worker nodes that run idle jobs. Results on the impact of these developments on the box efficiency will be presented.

Primary authors: Mr URIA EISMAR, Christian (CERN); Mr SALGUEIRO DOMINGUES DA SILVA, Ricardo Manuel (CERN); Dr SCHWICKERATH, Ulrich (CERN)

Presenter: Mr SALGUEIRO DOMINGUES DA SILVA, Ricardo Manuel (CERN)

Session Classification: Poster session

Track Classification: Distributed Processing and Analysis