Contribution ID: **319** Type: **oral**

A generic Job Submission Tool (JST).

Tuesday, 24 March 2009 16:30 (20 minutes)

The Job Submitting Tool provides a solution for the submission of a large number of jobs to the grid in an unattended way. Indeed the tool is able to manage the grid submission, bookkeeping and resubmission of failed jobs .
It also allows the monitor in real time of the status of each job using the same framework.
The key elements of this tool are:
A Relational Db that contains all the tasks to execute on the grid (the solution was found to be scalable up to few thousands of concurrent running jobs). It is possible to launch on the grid tasks handled by different software. JST is also capable to handle the dependence between tasks. If task B depends on the execution of task A, then JST will launch task B only after the correct execution of task A.
a submission agent that submits jobs on behalf of the user if the database contain tasks to be executed.
A job wrapper that is executed on the WN. It takes care of interacting with the task queue server and manages the execution of the real application on the WN, in particular check is the application execution was completed without errors.
A web interface that allow the use to submit new run or new application using JST.

The tool has been extensively tested to submit bioinformatics application to the grid, but it is general enough to be used in other fields including particle physics data analysis

Presentation type (oral | poster)

oral

Summary

A generic Tool for job submission, monitoring and bookkeping over the grid.

Primary author: Dr DONVITO, Giacinto (INFN-Bari)

Co-authors: Prof. MAGGI, Giorgio Pietro (INFN-Bari and Politecnico di Bari); Dr CUSCELA, Guido (INFN-Bari)

Presenter: Dr DONVITO, Giacinto (INFN-Bari)

Session Classification: Distributed Processing and Analysis

Track Classification: Distributed Processing and Analysis