



Contribution ID: 110

Type: **not specified**

GC3Pie: A Python framework for high-throughput computing

Wednesday, 21 September 2011 14:00 (20 minutes)

GC3Pie is a suite of Python classes (and command-line tools built upon them) to aid in submitting and controlling batch jobs to clusters and grid resources seamlessly. GC3Pie aims at providing the building blocks by which Python scripts that combine several applications in a dynamic workflow can be quickly developed.

GC3Libs, the main component of the GC3Pie framework, provides services for submitting computational jobs to Grids and batch systems and controlling their execution, persisting job information, and retrieving the final output. GC3Libs takes an application-oriented approach to batch computing. A generic Application class provides the basic operations for controlling remote computations, but different Application subclasses can expose adapted interfaces, focusing on the most relevant aspects of the application being represented.

GC3Libs can run applications in parallel, or sequentially, or any combination of the two, and do arbitrary processing of data in the middle. It provides a programming model to dynamically create workflow-like execution logic.

Duration (90min sessions)

20min

Required Facilities

beamer, power cable, wireless internet access

Primary author: MAFFIOLETTI, Sergio (UZH/GC3)

Presenter: MAFFIOLETTI, Sergio (UZH/GC3)

Session Classification: Individual Presentations