



Site caches for Grid and Cloud storage with the Disk Pool Manager (DPM)

Code	IT7590
Programme	FCT
Department	IT
Responsible	27871 - Mr. Alberto Pace

Title

Site caches for Grid and Cloud storage with the Disk Pool Manager (DPM)

Description

The Disk Pool Manager (DPM) implements features that allow the deployment of volatile disk pools that can be used as scalable file caches for massive, worldwide data access in the context of Grid/Cloud computing. The candidate will start working at deploying one or more such testbeds and at exercising them, at the beginning by writing proper test modules, and then possibly using the real software jobs that are run in the Grid.

The work also consists in understanding the interactions between the various components of the modern workflows in the Grid, in the context of site caches, cloud computing and regional storage federations, and possibly contributing to the refinement of the related architectures and algorithms used by the Disk Pool Manager system.

Skills

Information Technologies: Developing distributed computing systems (e.g. clusters, batch systems). Programming Languages: C++

Object-oriented software design,

Linux administration and performance optimisation

Disciplines

Information Technologies

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