Application Demonstrations

C. Loomis, J. Moscicki, J. Montagnat
EGEE European Review (CERN)
May 24, 2006

Overview

- **How are applications driving the evolution of the grid to make it more appealing to a broader community?**

- **Demos from two pilot applications which do this by:**
  - Making the grid easier to use
  - Pushing for and using enhanced middleware functionality

- **Both demonstrations use the production infrastructure:**
  - No special modifications of the infrastructure for the demos.
  - Demos do use some application-specific services.

GANGA

- **Presented by: Jakub Moscicki (CERN)**
- **Developed by ATLAS and LHCb, two LHC experiments.**
- **GANGA framework provides:**
  - Uniform interface to computing resources (grid and non-grid)
  - Monitoring and management of a user's workload
- **Simplifies the use of the grid and makes it more appealing to a larger number of (non-expert) users.**

Medical Data Management

- **Presented by: Johan Montagnat (I3S)**

- **Collaboration between the middleware developers, operations, and users themselves.**
- **Brings together gLite services to provide coherent system for secure, distributed, and fast treatment of medical images.**
- **Demonstrates high-level functionality which will make the grid attractive for more applications.**

First demo…

GANGA

Second demo…

Medical

Data

Management

Summary & Outlook

- **Functionality demonstrated:**
  - High-level submission and monitoring of workloads.
  - Complex workflow management.
  - Encrypted data services.
  - Low latency scheduling, fast response.

- **Starting to see convergence toward high-level grid interfaces: common application layer.**
- **Synergy between applications.**
  - GANGA used by others; SDJ useful for HEP.
- **Broadening of functionality and appeal of the grid.**