





[event home page](#) | view: Indico style | focus on:
 -- all days -- | -- all sessions -- | details: LOCAL: Europe/Paris [login](#)
 contribution | [manage](#)    



iRODS workshop @ CC-IN2P3

from **Monday 02 February 2009 (08:00)**
 to **Thursday 05 February 2009 (18:00)**
 Europe/Paris
 at **CC-IN2P3**
 chaired by: **Jean-Yves Nief (CC-IN2P3)** , **Reagan Moore (RENCI)**
 support: nief@cc.in2p3.fr

Description: This workshop aims to gather people from various communities who are interested in iRODS or who are already using it. This workshop will also include an iRODS tutorial on rules and micro-services, and presentations on applications of the iRODS technology. If you are interested in presenting, please contact Jean-Yves Nief ("support" button on the left hand side). Please note that the number of participants will be limited.

[Monday 02 February 2009](#) | [Tuesday 03 February 2009](#) |
[Wednesday 04 February 2009](#) | [Thursday 05 February 2009](#) |

Monday 02 February 2009

[top](#) ↑

08:45->17:45 Talks from various projects (Auditorium)

Description:

Presentations by projects on their applications of the iRODS data grid. We would like to encourage presentations on client APIs that have been integrated with iRODS, rule sets that have been implemented, micro-services that have been developed.

- | | | |
|-------|---|-----------------------------------|
| 08:45 | Introduction (15') | Jean-Yves Nief |
| 09:00 | iRODS status. (45') | Reagan Moore |
| 09:45 | Coffee break (30') | |
| 10:15 | CC-IN2P3 director speech (15') | Dominique Boutigny |
| 10:30 | ARCS Data Fabric (30') | Pauline Mak |
| 11:00 | ASPiS: integrating iRODS with Shibboleth and provenance engines (30') | Eric Liao |
| 11:30 | Using iRODS with the EnginFrame grid portal into the GRIDA3 project (30') | Marco Piras,
Francesco Locunto |
| 12:00 | SRB usage in BioEmergences (30') | Dominique De Waleffe |
- BioEmergences is an EC funded project where biologists, mathematicians, engineers and computer scientists define, implement and systematize the production of symbolic and precise reconstruction of cells evolution starting from *in vivo* captures of microscope images of embryos. The computational means for the project are provided by the different partners own computing facilities for initial runs of the algorithms. Afterwards the programs are moved to run under control of a workflow management application for systematic application to multiple datasets. The talk will briefly present the project, the workflow application. Then we will explain the differnt uses of SRB in the context of this project. Finally, we will conclude with a discussion on the potential migration to IRODS.

12:30 Lunch (1h30') (Cantine)

- 14:00 Using Data Grids for Long Term Digital Preservation (30') Adil Hasan
In this talk we describe an FP7 integrated project focussed on long-term digital preservation called SHAMAN.
We focus on the issues concerned with using data grids in long-term preservation.
- 14:30 The Storage Abstraction Service of the SPAR project (30') Thomas Ledoux
The National Library of France (BnF) is building its distributed archiving and preservation system (SPAR) in order to preserve in the long term all the digital information collected or created.
This system is based on the OAIS standard but, in order to be independant of the underlying hardware infrastructure, a Storage Abstraction Service (SAS) is used. The SAS exposes its capabilities by the way of storage units, that represent some hardware designed to satisfy a given class of service, as well as records which abstracts the possible copies.
In order to implement such Service, the choice of iRods has been made. In particular, a storage unit is seen as a particular resource associated with a set of irules to comply with the said class of service.
In the presentation, we will show how such elements are defined and how the multiple operations needed for long-term preservation at the storage level can be achieved through the use of iRods.
- 15:00 The Adonis research data preservation project for digital humanities in France (30') Thomas Kachelhoffer
The aim of this project is to give to the french researchers on Humanities Sciences, a distributed data working space. On top of this, the project will be able to provide long term data preservation, to handle digital objects concepts, to provide data treatment facilities and some basic workflow mechanism.
This activity is also connected to some European project as DARIAH. It will be currently based on two major software: iRods for the data manipulation at the file level and fedora-commons (version 3) at the digital object level. Two major french computing centers will be involved: the CINES for long term preservation and the CC-IN2P3 for data access. At this time, around twelve numerical resources centers, distributed in France, are identified to provide numerical data and high level data management for the overall Digital Humanities community.
- 15:30 iRODS as future data grid backend for TextGrid ? (30') Wolfgang Pempe
TextGrid, which is part of the D-Grid initiative (<http://www.d-grid.de>), is the first project in the humanities in Germany creating a community grid for the collaborative editing, annotation, analysis, and publication of specialist text resources. The architecture of TextGrid enhances a Globus-based grid infrastructure with a specific middleware layer and an open, WebService-based service layer of specialised functionalities for textual processing. The current TextGrid data grid infrastructure is implemented by using the applicable components of Globus Toolkit 4.
With regard to the coming next phase of the TextGrid project we consider the redesign of the existing storage infrastructure taking advantage of both Fedora, its Digital Object Model and the flexible, rule-based concept of iRODS.
- 16:00 Coffee break (30')
- 16:30 Enabling a robust VOSpace based on iRODS (30') André Schaaff
VOSpace [1] is the International Virtual Observatory Alliance [2] interface to distributed storage. It is the visible side of the storage system. To make a VOSpace [1] usable in the real life we need an efficient storage mechanism. After a few experiences we have focused on iRODS [3] which is a new data grid software system developed by the SDSC Storage Resource Broker team and collaborators. Our first aim was to create a storage area for Aladin [5] but also for the new CDS [6] Portal which is under development. In a first step we have developed an Aladin [5] plugin giving an access to the iRODS [3] implementation (through the Jargon [7] Java API) and in a second step the VOSpace [1] interface has been added over iRODS [3]. We have developed a VOSpace Explorer in Java to access and manage the files. It is possible to do the common actions on the files. If a VO Tool supports drag and drop it is also possible to interact through this way with the explorer.
iRODS [3] is easy to implement and provides a good solution to ensure the robustness of a VOSpace [1]. The installation is simple and can be done without much manpower. It is possible to start with a small configuration and to follow the evolution of the needs.
A PLASTIC [8] compliant tool like VOSpace Explorer is useful to provide a simple access to the stored files for VO Applications.

As the main conclusion of this work we think that iRODS is a very good solution for the implementation of a robust VOspace. And for many reasons (Open source, easy to use, flexible (definition of micro-services), follows the evolution of the architecture, etc.).

17:00 Collaborative data life-cycle management for petascale astronomy Arun Jagatheesan projects. (30')

Tuesday 03 February 2009

[top↑](#)

09:00->18:00 **Tutorial** (Room 202)

Description:

Depending upon the level of interest, we can either give an introduction to iRODS data grid, or provide a more advanced tutorial on iRODS micro-service creation. We will present information on the structured information resource interface and its use for accessing tar files.

10:45	Coffee break (30')
12:30	Lunch (1h30')
15:45	Coffee break (30')

Wednesday 04 February 2009

[top↑](#)

09:00->18:00 **Tutorial** (Room 202)

Description:

Tutorial on iRODS rule creation for controlling server-side workflows. We will demonstrate nested procedures, queries on metadata attributes, processing of result sets from queries, and deferred processing.

10:45	Coffee break (30')
12:30	Lunch (1h30')
15:45	Coffee break (30')

Thursday 05 February 2009

[top↑](#)

09:00->12:00 **Parallel session 1.** (Auditorium)

Description:

Parallel sessions will be held so communities of interest can build collaborations. Provisional communities include:
 Astrophysics
 Medical records
 Arts and Humanities
 Preservation environments

10:45	Coffee break (30')
-------	--------------------

09:00->12:00 **Parallel session 2** (Room 202)

Description:

Parallel sessions will be held so communities of interest can build collaborations. Provisional communities include:
 Astrophysics
 Medical records

Arts and Humanities
Preservation environments

10:45

Coffee break (30')

12:00

Lunch (2h00')

14:00->17:00 **Parallel session 3** (Auditorium)

Description:

Parallel sessions will be held so communities of interest can build collaborations. Provisional communities include:

Astrophysics

Medical records

Arts and Humanities

Preservation environments

15:30

Coffee break (30')

14:00->17:00 **Parallel session 4** (Room 202)

Description:

Parallel sessions will be held so communities of interest can build collaborations. Provisional communities include:

Astrophysics

Medical records

Arts and Humanities

Preservation environments

15:30

Coffee break (30')