Enabling a robust VOSpace for VO tools and services with iRODS

work done since Trieste

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CDS
Roadmap

- First step: learn iRODS
  - development of an Aladin plugin giving an access to the iRODS implementation  **Done**

- Second step: implemention of the VOSpace interface over iRODS  **Done**

- Third step: create client tools
  - A VOSpace Explorer  **Done**
  - A VOSpace file chooser as Aladin plugin  **Done**
  - ...

- Last step: release for real life
  - *First set of 12TB available next week, in production for end of November*
Technical aspects

- IRODS (integrated Rule-based Data System)
  - IRODS 1.0 for the prototypes, iRODS 1.1 for the next release
  - Jargon API
  - developed by SDSC, iRODS is open source

- VOSpace
  - Web Service : Axis2 & Tomcat
  - Release 1.1 RC1 used for the prototypes, RC3 will be used for the production release

- VOSpace-iRODS : 2 quad core servers with 12 TB for the production release
VOSpace-iRODS architecture

Baltimore, IVOA meeting 26-31 October 2008
GWS Session, 27 October
Enabling a robust VOSpace for VO tools and services...
Some screen shots about the developments
VOSpace Explorer, new version

- Development of a VOSpace Explorer in Java.
- If a VO tool supports drag and drop it is possible to interact through this way with the explorer.
- PLASTIC has been added.
VOSSpace Explorer, new version (2)

- Access to other VOSSpace, (ex. : Dave's VOSSpace)
VOSpace Explorer, new version (3)

- PLASTIC use between Aladin and the VO Space Explorer
File chooser for Aladin (not in the public release)
FileChooser as a servlet

- Used in CDS UWS framework
Properties, capabilities, security

TLS: with password ok, with certificate soon
Conclusion of this work

- **iRODS** is easy to implement and is a good solution to ensure the robustness of a VOSpace.

  - It is not easy to evaluate the real needs in term of disk space, etc. → 12TB as a first step, evolution after a few month period of activity

- Development of complementary tools: mainly a PLASTIC compliant VOSpace Explorer.

- This work is done in the frame of VOTECH project ending in December, tools are available and maintenance will continue for the tools used at CDS (VOSpace-iRODS framework, VOSpace Explorer)


- Presentation of the work in February 2009 at an iRODS workshop