

CDS WP6 report

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REST Best practice

- Collaboration with Norman Gray
- Minor changes at Garching
 - VOSpace 2.0 prototyping as a use case
 - Probably in the PR pipeline around Victoria Interop
 - NASA Earth Science Data Systems Standards Process Guide wants to integrate this work after the recommendation process (M. Graham) → important to finalize a first version

VOSpace (& iRODS), ongoing work

■ Current status

- VOSpace 2.0 prototyping based on Restlet framework
 - Implementation as simple as possible to take into account last minute changes (2.0 not a yet a recommendation) and future evolutions
 - Security to manage before the production release
- iRODS 2.3 released the 12 March 2010 with new features like the extension of the iRODS metadata with user own metadata
 - Evaluation about how to put VOSpace metadata in iRODS metadata DB (extension) and to have just one DB for both VOSpace and iRODS
- iRODS experience
 - In use since 18 month for a few experiments and for the CDS Portal
 - Easy to start but useful to have contacts in the iRODS community to go further

VOSpace (& iRODS), collaboration & references

- Collaboration is going on with Jean-Yves Nief (IN2P3) to follow the iRODS evolutions (last exchange this week about metadata management)

- References
 - 3 presentations done in 2009
 - In December 2009 at Queen Mary University of London, Interoperability of Digital Repositories meeting (Adil Hasan)
 - In June 2009 at a CNES workshop about data preservation
 - In February 2009 at a joint IN2P3 – DICE iRODS workshop (Reagan Moore and Jean-Yves Nief)
 - iRODS main page illustration
 - <https://www.irods.org/>

VOSpace & Clouds

■ Quick study about Clouds usage

■ Motivation

- It is difficult to evaluate the size of a VOSpace for different reasons (number of users, user experiments, ...)
- Clouds storage is flexible
 - allocation of space is easy
 - less hardware, software and manpower

VOSpace & Clouds (2)

■ But...

- The cost is based on the storage size you use (GBs per month) and on the traffic
 - Example with Amazon S3 : a user of the VOSpace needs 1 TB to store images (during 6 month) with data download/upload during the period
 - ▶ Storage : \$0.150 per GB per month → 920\$ for 6 month
 - ▶ Transfer
 - Upload → \$0.100 / GB (e.g. 102\$ for the first (1TB images) storing)
 - Download → \$0.150 / GB
 - ▶ ...
- The study report (with other aspects than the cost) could be put on the AIDA Wiki

Security

■ Collaboration with Guy Rixon

- Authentication, Authorization (SecurityFacade from AstroGrid) tested at CDS
- Work is going on with Guy
- Coming implementation in the frame of VOSpace 2.0

Other

- VOTable parsing, SAVOT

- Last version

- VOTable 1.2 and evolutions suggestions from users
 - New mode to manage large datasets (following a very recent user need)

- ...