DS3 Cycle 2 progress report

Cycle 2 topics

- **VO WS Basic Profile**

- **Workflow**
  - **JLOW**

- **VizieR SkyNode**

- **Mediation tools**

- *(Added item):* **Aladin/ACR**

VO WS Basic Profile

- **Reminder :**
  - **Recommendation about how to implement Web Services in the frame of IVOA**
    - Takes into account existing documents (http://www.ws-i.org/, …)
    - Includes IVOA existing work (Support Interfaces, …)
  - **Presentations at Pune, Kyoto and Madrid Interop**
  - **Minor changes since Kyoto**
  - **1.0 release depends on Support interfaces progress**
  - **Support interfaces implemented at CDS since October 2005**
  - **…**

VO WS Basic Profile (2)

- ## Milestones :

  - ### Document available at IVOA

    - http://www.ivoa.net/internal/IVOA/IvoaGridAndWebServices/VO-WS-Basic-Profile-0.22.pdf (30/09/05)

    - Checked with the Basic Profile tools

      WS-I checking tools (cannot be integrated in a global test process, very restrictive license)

      Own checking tools (support interfaces implementation checking, etc.), could be used in the Registry process (is a service compliant with the IVOA basic rules ?, …)

- ## OV France

  - ### Web Services meeting, 1-2 February 2006

    - http://www.france-ov.org/twiki/bin/view/ASOVFrance/WebServices2006

  - ### People interested in using Basic Profile

Workflow

- **Workflow user friendly graphic representation tools**
  - **JLOW – Java Libraries fOr Workflow**
  - **Sources and documentation available at :**
    - http://cdsweb.u-strasbg.fr/devcorner.gml
  - **Application in AÏDA (MDA project …)**

- **Use cases**
  - **Working group at CDS**
    - Report available at DS3 end
  - **Workflow working group of OV France :**
    - http://www.france-ov.org/twiki/bin/view/GROUPEStravail/Workflow
    - First meeting 10 November 2005
    - 2006 plan : define scientific workflow use cases and use existing tools as demonstrators

Workflow (2) : design and engine sides

- **JLOW has been developed during the Cycle 1**
    - Client side based on JGraph (http://www.jgraph.com/)

        Workflow representation is stored in GXL (XML => can be mapped to other formats)

    - Server side

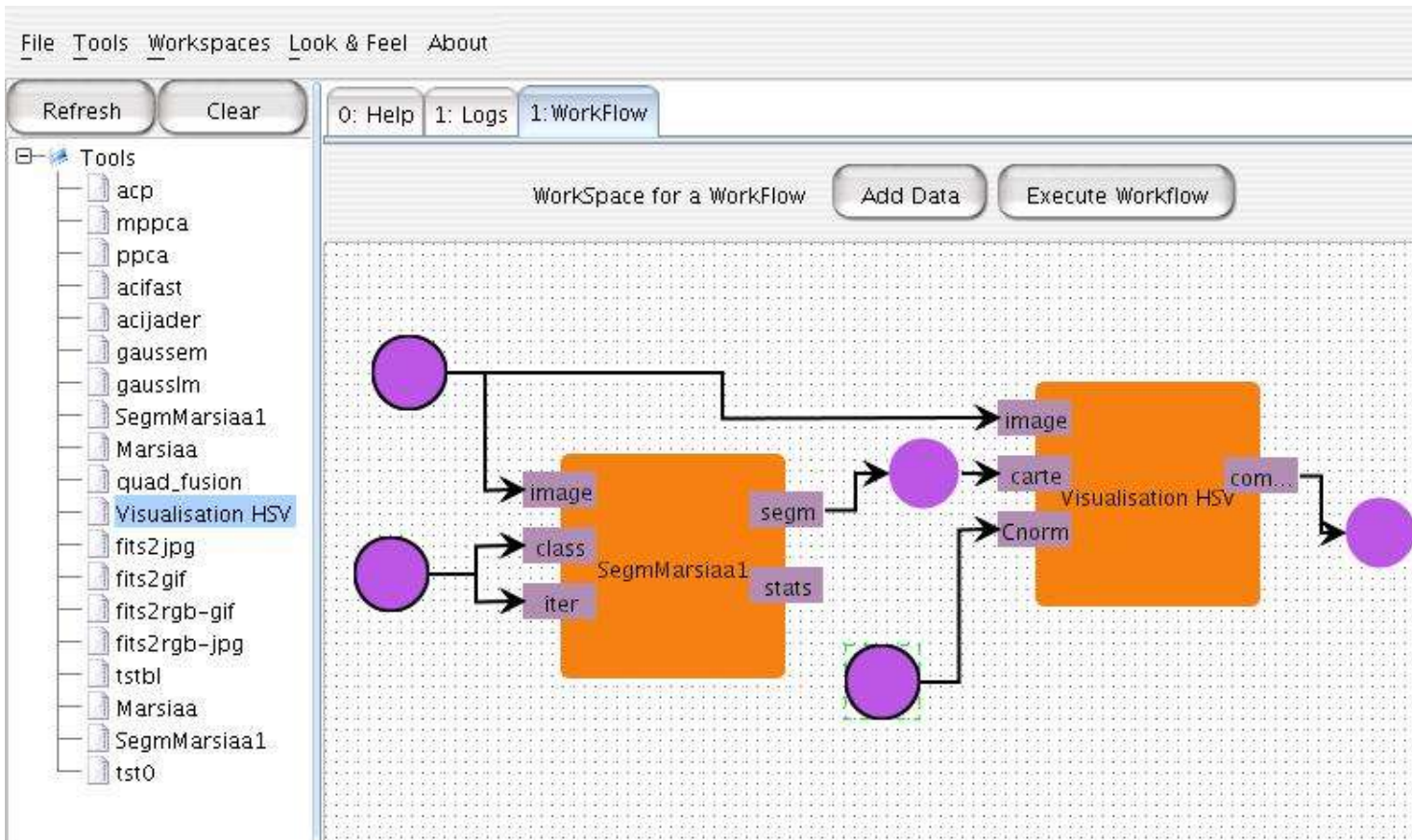   Very light Workflow engine but enough for applications like AÏDA (see further)

- **Collaboration with ESSI (Sophia Antipolis, IT laboratory) people started in December 2005**

    Interest for INAF ?

    - **ESSI is developing a middleware to access Grid5000 and EGEE**

    - **First use test in AÏDA architecture done beginning of February**

    - **ESSI is interested by light Workflow design tools like JLOW**
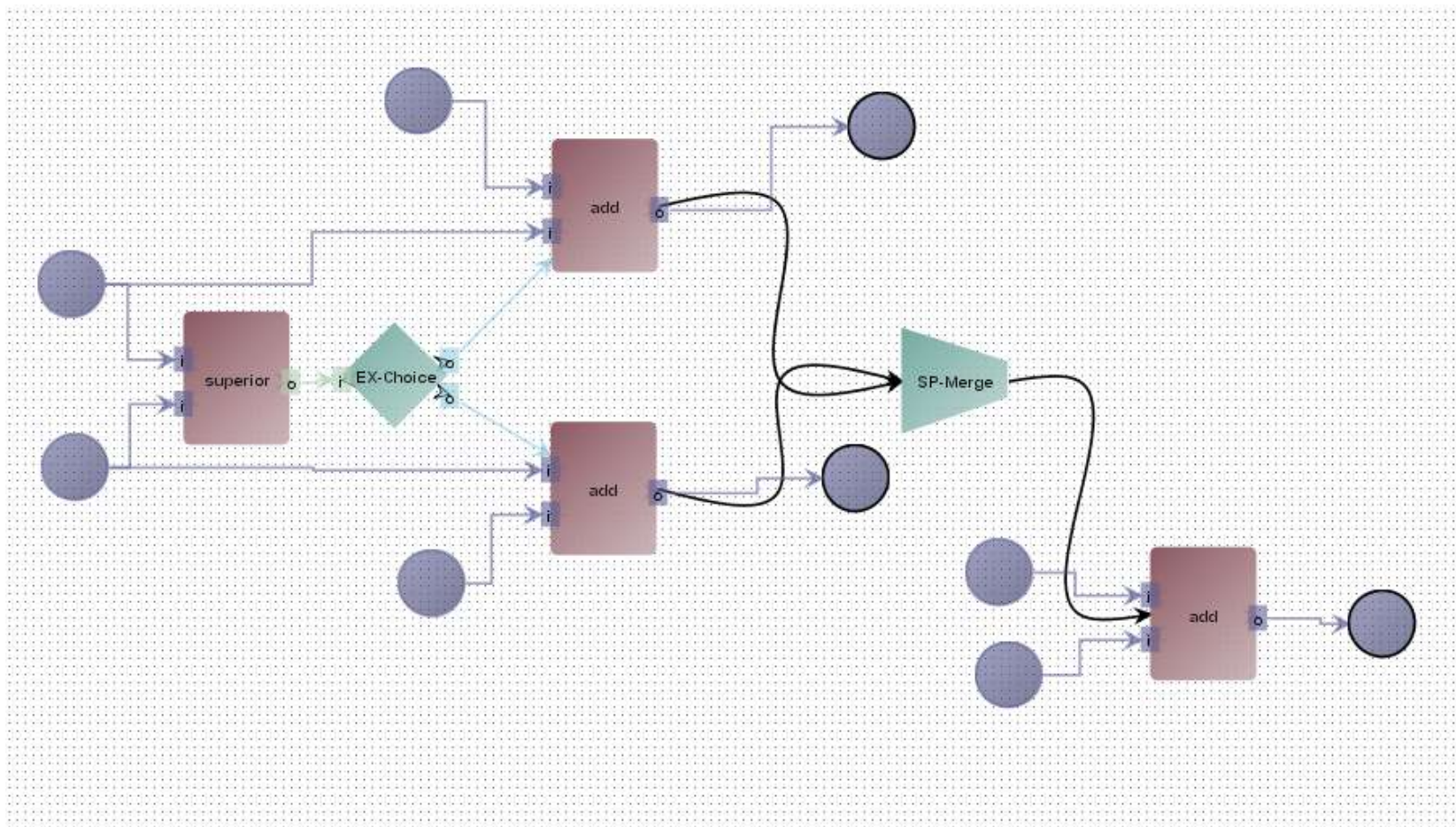
Workflow (3) : JLOW in AïDA

Example of use in AïDA (Astronomical Image processIng Architecture)

* AïDA is developed in the frame of MDA (3 years) project (French ministry funds) ending mid 2006

Workflow (4) : other example

Another examples during the demo…

Workflow (5) : AÏDA aims

■ **Workflow Use cases in the image processing domain**

■ **Used to preserve expertise from trainees, PhD students, … (software modules in an image processing workflow)**

■ **Lessons learnt are used at VOTech benefits**

VizieR - SkyNode

- **Reminder**
  - **2 ways to access VizieR**
    - Main access through cgi
    - Simple access through soap (cf. CDS Developer's corner)
  - **VizieR is not a relational database !**
    - VizieR uses relational database for metadata and binary storage (very large catalogs) with dedicated access programs for the data

- **Very large collection of catalogues, a test case for VOQL/ADQL**
  - **> 5000 catalogues**
  - **"Passage à l'échelle" for SkyNode**

VizieR - SkyNode (2)

- **Two catalogues, Tycho2 and USNO-B1, have been implemented in December with the ESA "SkyNode Kit" (many thanks to Aurélien, Inaki and Pedro)**

- **Other catalogues are now available : 2MASS, IRAS, UCAC2, All-Sky Compiled Catalogue..., DENIS3, MSX and GOODS**

- **Criteria : most accessed or not available otherwise**

- **In progress…**
    - **See DS3 Cycle 3 proposals**

Mediation tools

- **Report available at**
  - **http://wiki.eurovotech.org/bin/view/VOTech/DS3Plan02**

(Added item) **Aladin/ACR**

- **As a follow-up of the study of Aladin usage of ACR API (see http://wiki.eurovotech.org/bin/view/VOTech/UsageOfAcrApiInAladin), we have integrated those developments in an up-to-date prototype version of Aladin**

- **Allows to:**
    - **Access to MySpace**
    - **Query the registry**
    - **Launch a CEA application from Aladin**

- **Access through Java Web Start : http://aladin.u-strasbg.fr/java/Aladin-proto.jnlp**

Conclusion

- **VO WS Basic Profile and VizieR SkyNode works must be discussed at the next Interop meeting**
  - Proposals to submit to the VOQL WG

- **Workflow work is evolving at different levels : CDS, OV France, ESSI collaboration**
  - Collaboration with other VOTech teams ?