

## **Astro-RG meeting notes**

**Astro-RG session at OGF19: Chapel Hill, NC, USA: 29 Jan 2007:  
14.00-17.30**

**Notes by Reagan Moore: Drafted 29 Jan 2007**

Agenda posted in slides – presentations by four persons

11 persons attended (including one by teleconference)

### ***Questions raised during the session:***

1. Need to be proactive in terms of getting feedback from OGF standards groups. A prior assessment based on GGF working groups needs to be revised.
2. Have multiple IVOA implementations that are now competing with OGF standards. Examples include
  - a. VOspace versus SRM
  - b. VOEvent versus event notification
  - c. Federation versus GIN and Federated Identity
3. Seek feedback from existing grids on technology used to support IVOA services.
  - a. Expect response by next May
  - b. Want their input on how they are running astronomy applications, which services are being used. Examples include EGEE, Teragrid, DEISA, OSG, NAREGI
  - c. Such a demonstration is needed to drive the GIN project
4. Could demonstrate that a selected IVOA service runs on all of the listed grids. An example could be SIAP, or VOspace, or Montage? Will the interoperability be done by the IVOA service or rely upon a federation capability of the grids themselves? Is interoperability done at the discipline service level or through a grid service?
5. Which OGF services should be used:
  - a. Job submission description language
  - b. Data format description
  - c. Authorization description
  - d. Federated identity – SAML server
  - e. VOspace versus OGSA-Byte-IO, SAGA, Grid File System, Grid storage management
  - f. OGSA DAIS lacks pluggable query language extensions, catalog model
  - g. VOEvent feedback to Grid Information retrieval, Information Dissemination
6. VOspace presentation: Reagan Moore
  - a. Centralized catalogue for VOspace – not planned in the VO – as VOspace/VOStore split has gone
  - b. VOspace's can have registered into it links to another VOspace – some equivalence to SRM
  - c. VOspace – for a robust SOAP service based implementation – better to have clients determine data endpoints. [Issue here]
7. Guy - IVOA Single-sign-on profile has been developed. Interoperates with established grids.

Uses PKI. Differentiates between certificate provision (MyProxy) and attribute server (SAML assertions). Use transport level security with certificates. Support delegation of identity through delegation service. Will be similar to Globus toolkit

- a. Layers – SOAP + digital signature : http-get + TLS : MyProxy : Attributes : Delegation
  - b. Need feedback to the SAGA group – group chair to establish contact as an application use case**
  - c. Building version of HTTPS that uses proxy certificates. Does one exist in Grid community? May do with Jetty technology and RFC3820 proxy certificates. Driven by desire to use http get for access. Gridcite uses HTTPS and certificates (Andy McNab)
  - d. Two implementations of community-based CA: simple-CA versus ?
  - e. Attribute server supports signed assertions, still being designed as push authorization. Also need ability to pull assertion as in EGEE. May implement VOMS for hierarchical assertions on membership. EGEE may have experiment based VOs.
  - f. Choosing interface rather than an implementation
8. Masatoshi Ohishi – NaReGi collaboration. Accessing data across 11 sites. Built workflow system based on BPEL4WS. Defined a workflow description language similar to Job Submission Description Language. Define variables, loops, conditions, external services. Built server to monitor workflow status. Use workflow in Subaru Grid pipeline
- a. Major request is for interoperable software. Unless standards are created, will be at risk. IVOA community is ahead of grid community. Want same mechanism to talk to each grid infrastructure.
9. UWS manager differs from OGF in:
- a. Job description language – CEA computation environment application. Provides explicit parameters for each application. Assume the parameters are simple variables or file names.
  - b. Needed to do resource lifetime management and support for multiple users.
  - c. Prototype has been built.
  - d. Globus Introduce service may be relevant from Shannon (OSU). Supports development of services.
10. Claudio Vuerli – EuroVO wp5 Data Center Alliance to create a knowledge Grid. Focus on data centers.
- a. Conducted survey of astronomers
  - b. Identified astronomical applications
  - c. Ported Planck workflow onto grid
  - d. Data sharing between data centers and grid
11. Nic Walton – AstroGrid demo

For OGF20 – will interact with the 7 working groups and either provide feedback or will compare implementations.

Reagan Moore