IVOA Interoperability Meeting Concluding remarks

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IVOA Interoperability Workshop, Garching, 9-12 Nov 2009

This Interop ...

- ... has been very successful
- Focus on enabling astronomical research as IVOA 1st priority
- Focus on difficulties data centres encounter when deploying services against standards
- Constructive criticism (allowed! even welcome!!)
- Exec action

Standards

- Three standards discussed by Exec
  - SIAP 1.0
  - VOTable 1.2
  - Credential Delegation Protocol 1.0
- Others, currently in “Panama Canal”, will be approved by Exec via e-mail poll

Newsletter

- The new IVOA Newsletter (Nov 09) is out!
  http://ivoa.net/newsletter/003/

Focus on:
- applications highlights
- VO-science papers
- VO calendar

IVOA NEWSLETTER
November 2009

Subscribe to email notifications of the IVOA Newsletter

www.ivoa.net newsletter archives

The International Virtual Observatory Alliance (IVOA) was formed in June 2002 with a mission to "facilitate the international coordination and collaboration necessary for the development and deployment of the tools, systems, and organizational structures necessary to enable the international utilization of astronomical archives as an integrated and interoperating virtual observatory." The IVOA now comprises 17 VO projects from Armenia, Australia, Brazil, Canada, China, Europe, France, Germany, Hungary, India, Italy, Japan, Korea, Russia, Spain, the United Kingdom, and the United States. Membership is open to other national and international projects according to the IVOA Guidelines for Participation. You can read more about the IVOA and what we do at http://www.ivoa.net/pub/info/.

What is the VO?
The Virtual Observatory (VO) aims to provide a research environment that will open up new possibilities for scientific research based on data discovery, efficient data access, and interoperability. The vision is of global astronomy archives connected via the VO to form a multiwavelength digital sky that can be searched, visualized, and analyzed in new and innovative ways. VO projects worldwide working toward this vision are already providing science capabilities with new tools and services. This newsletter, aimed at astronomers, highlights VO tools and technologies for doing astronomy research, recent papers, and upcoming events

VO APPLICATIONS HIGHLIGHTS

VO Interoperability in DS9

SAOImage DS9 is a standalone astronomical imaging and data visualization application. DS9 supports FITS images and binary tables, multiple frame buffers, region manipulation, and many scale algorithms and colormaps. It provides for easy communication with external analysis tasks and is highly configurable and extensible via messaging capabilities XPA, and the VO

IVOA Web pages

- IVOA pages will be redesigned, with the top level routing people in five directions:
  - interested astronomers
  - those who want to deploy against standards
  - internal work
  - general-interest customers
  - education and outreach
- Change to occur soon, making wide use of links to existing material, then to be upgraded (cookbooks, etc.) – AL will lead the effort

IVOA Web pages

The International Virtual Observatory Alliance (IVOA)

Home
About
Astronomer
Deployer
Member

About IVOA

- What is the Virtual Observatory ?
- What is the IVOA ?
- Roadmap
- Member Organisations
- Contacts

For Astronomers

- Using the VO
- Links to VO portals
- Links to VO tools
- IVOA newsletter

For Deployers

- VO concepts
- The VO standards landscape
- Deployment Cookbook
- Current technical standards
- Links to related software

For Members

- IVOA twiki
- IVOA mailing lists
- Working Groups
- Executive
- Calendar
- Documents in progress

taken from A.Lawrence

TCG coordination

- Discussion at Exec
- Definition of a top-view IVOA architecture
- This shall allow to identify interdependencies, identify the topics which are of interest to more than a WG, holes in the structure, duplications, ...
- action on CA to propose solutions to deal with
  - interdependencies among standards
  - inconsistencies in documents, implementers' feedback, keeping track of validation

Standards and procedures

- “Unreadable” documents
- Proposal by Bob Hanisch:
  1. non-technical preamble in all documents,
  2. top-view IVOA architecture diagram,
  3. “peer reviewing” of standards documents,
  4. TCG to deal with interoperability concerns,
  5. documents to be reviewed by a technical writer/editor (mainly for language problems),
  6. searchable document tree
- Items 1,2,4 covered in CA’s action, 6 in AL’s
- Items 3 and 5 more controversial, trials

Prioritisation

- The Take-Up Committee and Prioritisation Committee will be merged in a “Standing Committee on Science Priorities” (CSP)
- Document submitted to Exec contains 4 items
  1. science requirements to be kept up front;
  2. proper dissemination (schools, VO-days, etc);
  3. standing committee on priorities;
  4. modification of approach on take-up.
- 3 agreed by Exec, 4th to be transformed in ToR

Prioritisation philosophy

- IVOA (CSP, TCG, Exec) to decide which items are more important / urgent and which are less
- IVOA to agree with the projects the path for their implementation

Duplications

- Especially in applications
- ... but also in the work on standards
- Possible solution within the prioritisation effort
  - stricter TCG coordination for development of standards
  - bids for construction of tools ?

    response by “consortia of projects”, work within WG(s)

    this approach may attract new developers, currently external to IVOA

HerMES final viewgraph

To summarise …

- *the project has the correct attitude (going VO from the beginning)*
- *it has some VO insiders*
- *some request for support has been made at the level of collection*
- *The VO concept is not clear*
- *VO tools and services are not well known*
- *the projects are overwhelmed by the amounts of data and work and they do not want to make this extra effort*
- *the IVOA documents are not written for astronomers (and it is wrong to assume that computer scientists are available for each such project)*

More dissemination on VO is needed at all levels

Groups and individuals deploying data should see real advantage

Some Exec action on this topic

Disagree!

A new breed

- Complex data projects require support of experts: computer scientists or, better ...
- “Astro-Informaticians”
- A new breed of astronomers with strong computer science background (or viceversa), who can help resolving complexity
- Astro-Informatics session at AAS

Education to VO

- Educating (young) professionals:
  - User Workshops (possibly on one specific subject)
  - "Hands-On" Workshops on VO tools
- Educating "new generations of astronomers":
  - The AIDA-WP5 a number of research projects that can be carried out at high school (14-18 yrs old) and undergraduate levels, using data extracted from the VO and (simplified) VO tools

Conclusion

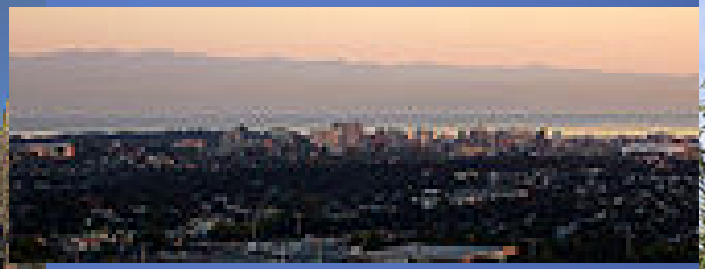
- **<u>The success of any individual VO project relies on the success of the whole IVOA</u>**

Another basketball story: my coach's favourite statement.
"The five players on court are just like the fingers in one hand: they can move independently but, to be effective, they need to move in a coordinated way"
P.Franceschini, 1966

Thanks to:

- The Program Organizing Committee
  (Séverin Gaudet, Alberto Micol, Nic Walton)
- The Local Organizing Committee
  (all involved ESO colleagues)
- You all, for attending!

Next Interop: Victoria



17th – 21st May 2010

See you there !