IVOA Applications

Chair: Tom McGlynn
Vice Chair: Mark Taylor

Applications Working Group Charter

The IVOA Applications Working Group is concerned primarily with the software tools that Astronomers use to access VO data and services for doing Astronomy.

The VO is enabling new ways of doing Astronomy. Interoperability between Astronomy data, services and software empowers astronomers to combine these for scientific discovery and analysis. VO Applications may take many forms such as GUI desktop applications, software libraries, web interfaces to services, or other innovative 'portals' to the VO. Legacy Astronomy software is becoming VO enabled and new and novel VO applications are being created. The IVOA Applications Working Group provides a means for VO Applications development and implementation to be closely linked to the standards development in the IVOA, and where necessary to propose and develop standards for VO Applications to interoperate.

The role of the Applications Working Group is to:

- Provide a forum for announcement and discussion of VO Applications
- Provide feedback to IVOA on the implementation of interoperability standards in VO applications
- Identify missing or desirable technical capabilities for VO applications
- Identify missing or desirable components in terms of scientific usability
- Propose and develop standards specific to VO Astronomy-user-Applications

Organisation

The Applications Working Group is overseen by a chair and deputy chair approved by the IVOA executive. The chairs organise the interop meeting sessions, and fulfil the normal responsibilities of a WG chair for publishing proposed recommendations.

Standards proposed for development within the Applications Working Group are to be considered within the wider context of the IVOA, and care should be taken to interface appropriately with other working groups. Development of Applications Working Group standards is ideally done by small teams. These teams are required to make a mission plan and to report regularly to the group.

Interop Meetings

Applications sessions at Interop meeting will be organised for

- General discussion, announcement and demonstration of VO applications.
- Technical development of interoperability standards for VO applications.

News

Applications IG sessions at Interop Meetings:

- Oct, 2008: InterOpOct2008Applications
- May, 2008: InterOpMay2008Applications
- Sept, 2007: InterOpSep2007Applications
- May, 2007: InterOpMay2007Applications
- Sept, 2006: InterOpSept2006Applications
- May, 2006: InterOpMay2006Applications
- Oct 06, 2005: InterOpOct2005Applications
- May 17, 2005: InterOpMay2005Applications
- May 25, 2004: InterOpMay2004Applications

Links

Applications (Please add new links by editing this page)

NVO List of Tools and Software	US National Virtual Observatory
NVO DIS	Data Inventory Service (Datascope)
RVS	Remote Visualization System
VOIndia VOPlot	A tool for visualizing astronomical data
TOPCAT	Tool for OPerations on Catalogues And Tables
STILTS	Command-line tools for table/VOTable manipulation
Treeview	A viewer for hierarchical structures
NOAO VOTool	A VOTable Visualization and Editing Tool
CDS Aladin	Image and Catalogue tool
Bell Labs Mirage	Multi-dimensional visualization of data from VOTable
ESA VOSpec	A tool to handle VO compliant spectra through SSAP
VOSED	A tool for building Spectral Energy distributions
VODesktop	A resource-centered desktop client for VO: includes VOExplorer, Query and Task Runner, Astroscope, Myspace Browser
VisIVO	A Visualisation Interface to the Virtual Observatory
A list of Visualization Tools	VOTech Project DS6 survey
A Study On Existing Tools	VOTech Project
China VO VOFliter	VOTable Filter for OpenOffice Calc
VOTable2XHTML	XSLT Stylesheet for VOTable to HTML
SPLAT	Spectral Analysis Tool
SAADA	Auto-Configurable Database Generator
Octet	CVO Observation Catalog Exploration Tool

NOAO NVO Portal	NOAO Image Visualization Discovery Tool
NOAO WCSFixer	The NOAO Web-enabled IRAF Plate Solver
VO-CLI	Command-line Tools for the VO
AR Commandline	Python commandline VO tools

Applications Infrastructure

Astro Runtime	Middleware that makes it simple to call VO services from programs and science scripts
Common Execution Architecture (CEA)	A methodology and toolkit for VO enabling legacy applications by publishing them as web services

Libraries and Parsers

JAVOT (CalTech)	Java VOTable parser
SAVOT (CDS)	Java VOTable parser
STIL	Starlink Tables Infrastructure Library - Generic Java Table Handling for Astronomy
VOIndia C++	VOTable parser
VOTable Parser (Caltech/Spitzer Science Center)	Java VOTable parser based XMLBeans
IDL VOlib	Libraries for using VO services (requires IDL 6.+)
VORuby	RUBY language libraries for using VO Services

Protocols and Formats

IVOA Standards Documents

PLASTIC - PLatform for AStronomical Tool InterCommunication

Applications Standards Development

- SampProgress
- ApplicationsMessaging (historical interest)
- Messaging Work Plan (historical interest)

Mailing-list

- Applications Interest Group Discussion Forum archive. (Email: apps@ivoa.net)

Documents

AIG report to IVOA Executive committee V0.1	(.doc)	May 2004
Table 2 for AIG Report	(.xls)	May 2004
Querying heterogeneous datasets with Saada	(.ppt)	May 2006
Saada demo presented at BEIJING	(.ppt)	May 2007