
WEB SERVICES/PUBLICATIONS/OUTREACH

P2.1 ADS Web Services for the Discovery and Linking of Bibliographic Records

Alberto Accomazzi, Guenther Eichhorn, Carolyn S. Grant, Michael J. Kurtz, Stephen S. Murray (Harvard-Smithsonian Center for Astrophysics)

The NASA Astrophysics Data System (ADS) currently provides free access to over 2.5 million records in four bibliographic databases through a sophisticated search interface. In addition to the basic metadata about a published paper, the ADS provides links to any relevant on-line resources, including full-text articles and published data tables. Similarly, an increasingly larger number of publishers and institutions are using the ADS to verify the existence and availability of references published in the scientific literature. To facilitate the exchange of metadata necessary to establish these links, the ADS is developing prototype Web Services based on emerging industry standards such as SOAP and WSDL as part of a collaboration with the major NASA Astrophysics Data Centers. Some examples illustrating the use of this technology in resource discovery, sharing and validation are presented and discussed. The ADS is funded by NASA Grant NCC5-189.

P2.2 Web Services in AIPS++

B. Waters, J. Benson, T. Cornwell

The richness and transparency of the Glish distributed-computing model has traditionally obviated the need for standard networking components, such as the network classes found in Java, Python, or Perl. However, Glish is able to wrap arbitrary commands, enabling us to link powerful Java-based toolkits to Glish's event-based, client-server processing model. We have used this technique to implement a SOAP-based Cone Search web service for the Virtual Observatory.

P2.3 Turning Besan on Observatory On-line Facilities into the VO - Galactic Model Simulation, Binary Star, Molecular Collisional and TNO Data Bases

Bernard Debray (Besan on Observatory) Marie-Lise Dubernet-Tuckey (LERMA, Paris Observatory and University of Franche-Comt) Alain Grosjean, Edouard Oblak, Jean-Marc Petit, C line Reyl , Annie Robin (Besan on Observatory)

For several years, the Besan on Observatory has been developing scientific facilities that are, or will be in the near future, accessible on-line through the World-Wide Web, namely:

- the Model of stellar population synthesis of the Galaxy which produces simulations of the stellar content in various galactic directions, suitable for observation preparations and interpretations;