Plenary conclusions

**Data Model WG
Status report**

Monday Nov 12

IVOA Interop Garching Nov 2009, Data Models , Mireille Louys

Observation Core Components DM

- Agreed to use components of the Observation Model + TAP/QL

- Re-use Char DM v2.0 (only partly)

- Re-use Spectrum DM (only partly)

- Define a list of items to be exposed in a TAP/ SCHEMA OBS/TAP :

  - Utypes and shortname

  - Units

  - Type

  - Description

- WD currently written ; to iterate and deliver by end of December

- Implementation to start concurrently

Data models serialisation : Utypes

Please comment the draft circulated

Utype: A data model name convention Version 0.4

- Canonical and alternative notation
- Unique Field Identifier for data base queries not covered
  - 2 possible strategies:
  - Add a section in the Utype document for ADQL queries and extend the syntax
  - Write a specific document for UFI deriving from Utypes but providing a more flexible syntax
- Utype-derived URI to point to data model documentation   N. Gray
- Register all Utypes definition at IVOA level
- Implementation required for Utypes

Datamodels building blocs : Units

- IVOA WD to update

- Definition of BNF grammars to parse units strings (Sébastien Derrière, Jeff Lusted, F. Ochsenbein)
  - G1 to check the largest set of admitted units
  - G2 parsing a more restrictive set considered as IVOA recommended Unit strings
- Tests on existing data collections to perform
  (Heasarc, Vizier, ESAC archive, XMM , MERLIN, others…)
  Theory data collections?

Observation Data Model

- Provenance
  - Sketch out of ESO various instruments
  - Description for the Radio data case
  - DM group to produce a simple summary of the instrument provenance

- Footprint / Field of view
  - Both based on the UML version of Observation
  - More homogeneous →Stabilise the XML schema and Utype-list

- Complex observations
  - Polarisation data
  - Mosaics, associations, derived products
    - List use-cases and prototype in UML/ XML

Modeling Photometry

Photometry
- Good progress for a basic data model (ESAC, SVO)

SED
- Prototype model with FITS (CFA)

Need convergence
Need documentation for the various model fields

Science uses-cases to describe and implement with this photometry model.

SIMDB DM

- Hand-over from the Theory Interest group

- What is needed for the DM WG to endorse the model:

  - WD describing the model structure

  - UML representation

  - XML Schema

  - 2 reference implementations + their submodel description

    - SimDB with DB access

    - Micro-simulation at VO-PARIS

- More has been produced :

- Utypes list with uri reference to corresponding documentation → to be re-used for other modeling efforts (ObsDM)