Observation Data Model

Views for IVOA Rec:
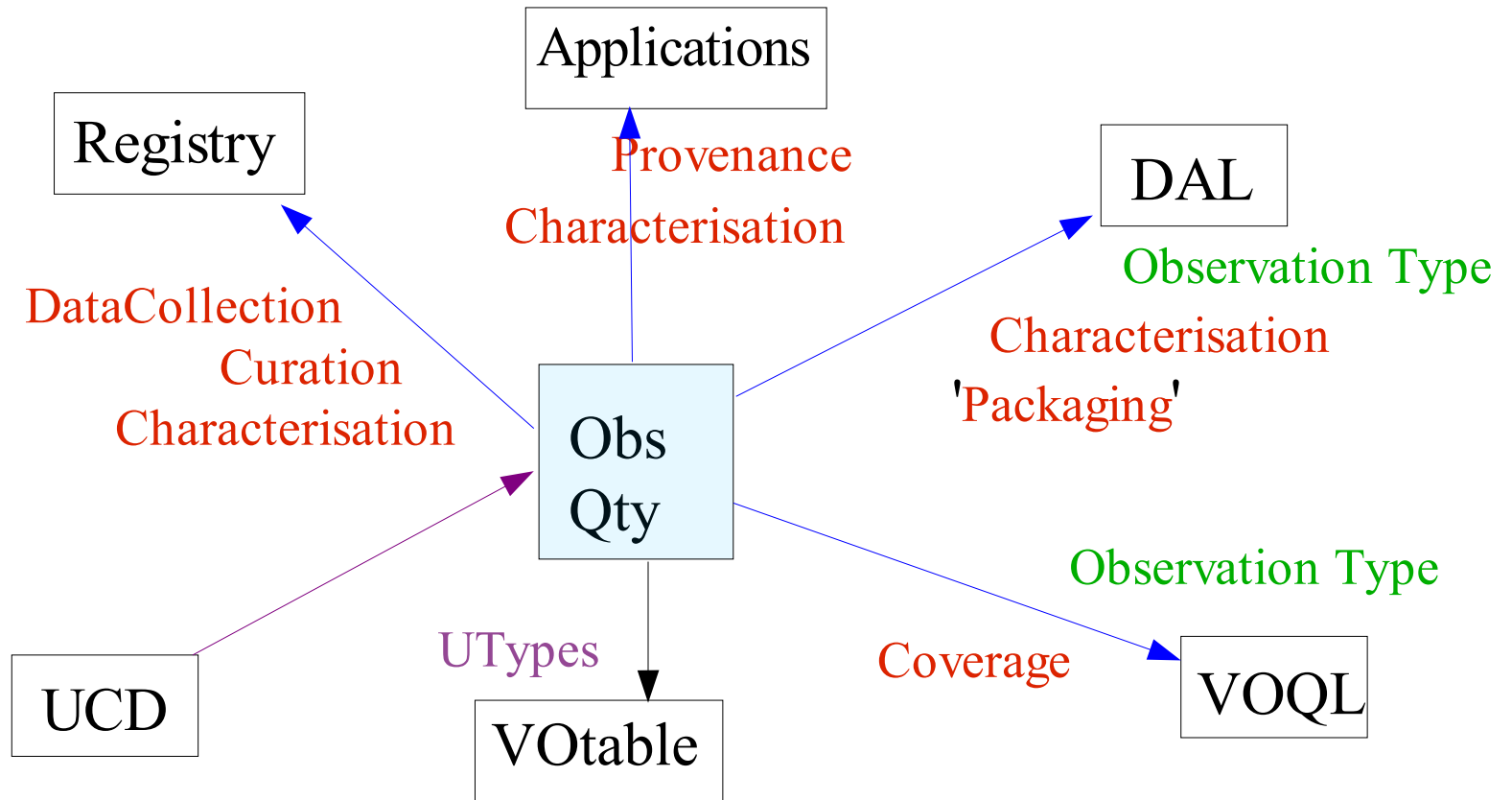
UML diagrams

WG interactions

UML diagrams

- Last version of diagrams for ObservationWorking draft
  - http://alinda.u-strasbg.fr/IDHA/dmobs

Links with other WG group efforts (1)

Applications

Registry

DAL

Provenance

Characterisation

Observation Type

DataCollection

Curation

Characterisation

Characterisation

'Packaging'

Obs
Qty

Observation Type

UTypes

Coverage

UCD

VOtable

VOQL

Links with other WG group efforts (1)

? How does the Observation data model interact with:

Registry

- Characterisation summary
- Identification of data collection and small sets of published data

Data Access layer

- SIAP: only a subset of attributes available as Utypes or « DM_hyperlink »

Registry   DM Observation

-
  - Coverage.Spectral()
    Spectral.Maxwavelenght

  - Spectral.Minwavelenght

  - Spectral.BandPass

- Coverage.Spatial()

- Coverage.RegionOfRegard

- Resolution

- Coverage.Depth

Characterisation

Coverage.Support

Coverage.Support(spectral)

Coverage.Support(spatial)

Resolution

Sensitivity

DAL

- Required parameters
  - Pos
  - Size
  - format
- Optional parameters
  - Time
  - Bandpass
  - Collection
  - Id

VOQL   Observation

- Characterisation

- Skypoint   Coverage.Location(spatial)

- SkyROI   Coverage.Support(spatial)

- SpectrumROI   Coverage.Suppor(spectral)

-

- Image Pointer   LinktoData

- SpectrumPointer

How many DM do we need?

- There are many things to be modeled

- Different regimes need different metadata

- Various levels of details: coarse to fine

- Domain, regime, scientific goal
  (theory/simulation vs observation)

→ Derive models instead of duplicate

How to write names in the DM ?

- **Within the model description:**
  - Naming convention to define classes, methods, attributes.

- **Outside the model**
  - U-types (DM-hyperlinks) should not allow to reintroduce namespaces and scatter DM efforts.
  - They should not be used in place of a controlled vocabulary.???
    - Too many steps in translation
    - No warranty for a one to one match.

IVOA Rec submission

- What else do we need in DM OBS metadata?
  - At the access format layer:
    - List the deliverables: (ex: HST associations)
    - Pointers to data files
    - Format of deliverable files: fits,jpeg, etc...
  - Versioning
  - History
  - Quality
  - Packaging ??