

DS5 – Intelligent resource Discovery

Workshop

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Objectives

- Assess technologies relevant to astronomical resource discovery
- Design new infrastructural components using these technologies
- Produce trial implementations of such new components

Implementation

- Manpower from VOTech (~50% EU funded):
 - CNRS = 2
 - UEDIN = 1
 - ESO = 1
 - LU = 1
 - INAF = 1
- Resource Discovery Study Report (sep '06)
- Contributions to software releases:
 - 12, 24 and 36 months

Presentations yesterday

- Ontologies and Semantic Web (SD)
- Intelligent access to foreign data (NG)
- Publishing ideas and arguments (TL)
- Sky-oriented resource discovery (PO)

Today

- Develop on yesterday's talk
- Brainstorming

<http://eurovotech.org/twiki/bin/view/VOTech/KickOffResourceDiscoveryMinutes>

Ontologies

- Start with small, task-oriented ontologies
- Focus on resource discovery rather than data modelling
- Assess existing technologies (e.g. IRIT-CDS collaboration) and ontologies (FactGuru)
- We have existing taxonomies: thesaurus, UCD... ontologies bring these together

Ontologies

- Applications: start with simple cases
 - use ontology of astronomical object types for
 - registry population / resource classification
 - registry query / refinement
- One-step computed terms
 - search for nearby stars uses distance & distance-parallax relationship stored in an ontology

Discovery

- Discoverers can be broker agents:
 - go to the registry, but also request individual services for additional (meta)data
 - e.g.: I want catalogues, how deep?, what accuracy?.....
- Need for a resource investigation language

Applications

- Broaden empty queries /refine very generic queries
- Workflow building investigators
- Possible improvements of Registry resources: add new pieces of metadata