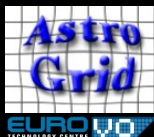


A Rich Registry Client

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VOExplorer

- Browse a collection
- Incomplete Metadata
- Select subset
- Filter
- View
- Use

Selecting a subset

- Describes a subset of items to search within.
- Static Lists (Playlists)
 - hand-picked items
- Smart Lists (Smart Playlists)
 - defined by rules over resource fields
 - Name, Subject, Type, Publisher, Authority, UCD, ...
 - Form-Driven or Textual (SRQL)
- Subsets retrieved from Registry using XQuery to standard IVOA interface.
 - Fast, handles large result sets (< 500)
 - Caches previous queries on disk

Simple Registry Query Language - SRQL

- <http://tinyurl.com/2vszol>
- Google-ish – a forgiving query language for users.
- Almost impossible to write an invalid query
- Advanced features for advanced users.
- Tends to produce false positives
 - all matches are returned – increase user confidence that everything relevant has been returned.
 - makes serendipitous discovery more likely.
 - relies on a powerful filtering mechanism as the next stage
- SRQL Parses to an AST and compiles to Xquery
 - available as a standalone library.

Registry Access

- Xfire - Streaming SOAP toolkit – used in VOExplorer (client) and Astrogrid Registry (server)
 - can interoperate with standard SOAP (e.g. Axis)
 - still benefits when only one side is streaming.
 - Only uses standard IVOA interfaces
- Streaming resource parser over Xfire client
 - builds resource objects and discards XML on the fly
- Caching – registry changes slowly.
 - cache resource objects to disk
 - individually, and also as arrays as results of queries.
 - plan to investigate caching on the server too.
- client is accessible from Astro Runtime

• service can be downloaded and installed

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Demo – is the network up?

Fine Grained

- Fine-grained querying **is** feasible
- VOExplorer regularly runs queries that return 300 to 500 records - in an acceptable amount of time
- Upside – more aspects to query on
- Downside – records do get larger. Example, UKIDSS dataset is a 3Meg resource document.
 - That came as a shock
 - Clientside needs to be written with this in mind.
- We find Registry is quite responsive
 - while still handling background load of IVORN->URL resolving queries from services.
 - is a RDBMS-based registry necessary anymore?

Coarse grained – controversial

– throw tomatoes now

- Is there enough data of interest to the working astronomer when in 'find services' mode?
 - Is curation, publisher, relevant?
 - Stuff like max search records – does this assist the user's selection?, or is it something that's interesting once the user has committed to a service?
- Graininess is in part a cause of poor registrations
 - No agreement on what is required.
 - So much of the schema is optional
- Should we do some analysis of what fields are being used most at the moment – and the spread of values within them?
 - e.g. Content – Level

Registry 1.0

- Can't come soon enough!
- Great opportunity to introduce better quality metadata
- Better resource model to query and browse against.

Registry Annotation Services

- Recommendation
- Popularity
- Tagging
- Notes / user-defined names.
- VOMon – concrete example
- Footprint services?
- Fine-grained data that fills in the blanks for coarse registries. (is this `getCapabilities()` now?)
 - Do all these fit into a similar pattern?
 - Could we recommend a common way of discovering and interacting with them.