

Semantics summary

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IVOA interoperability meeting

Victoria 2010 may 21

VO Architecture

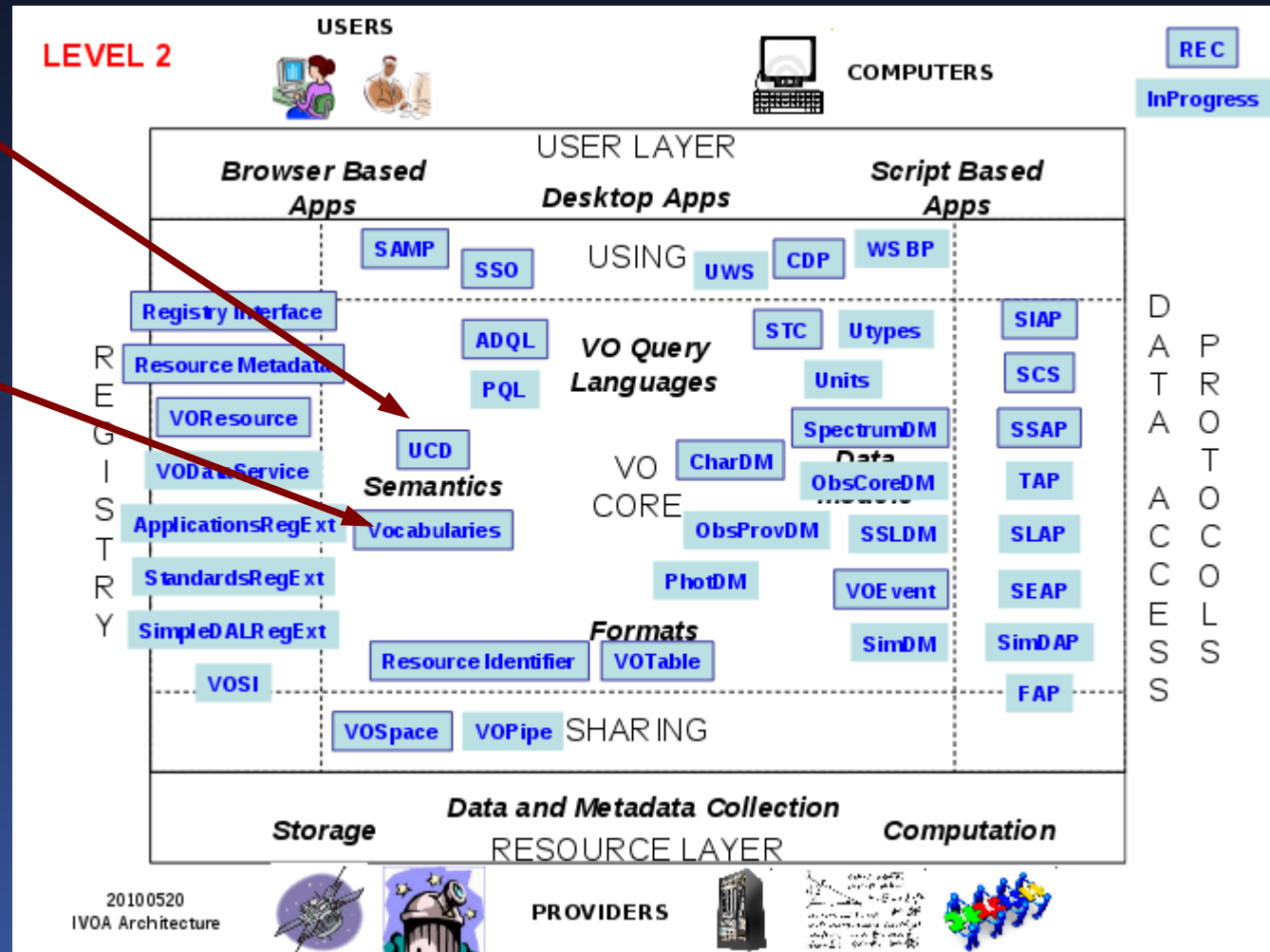


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Semantics standards

- UCD
 - method
 - words
- Vocabularies



Existing standards: Vocabularies

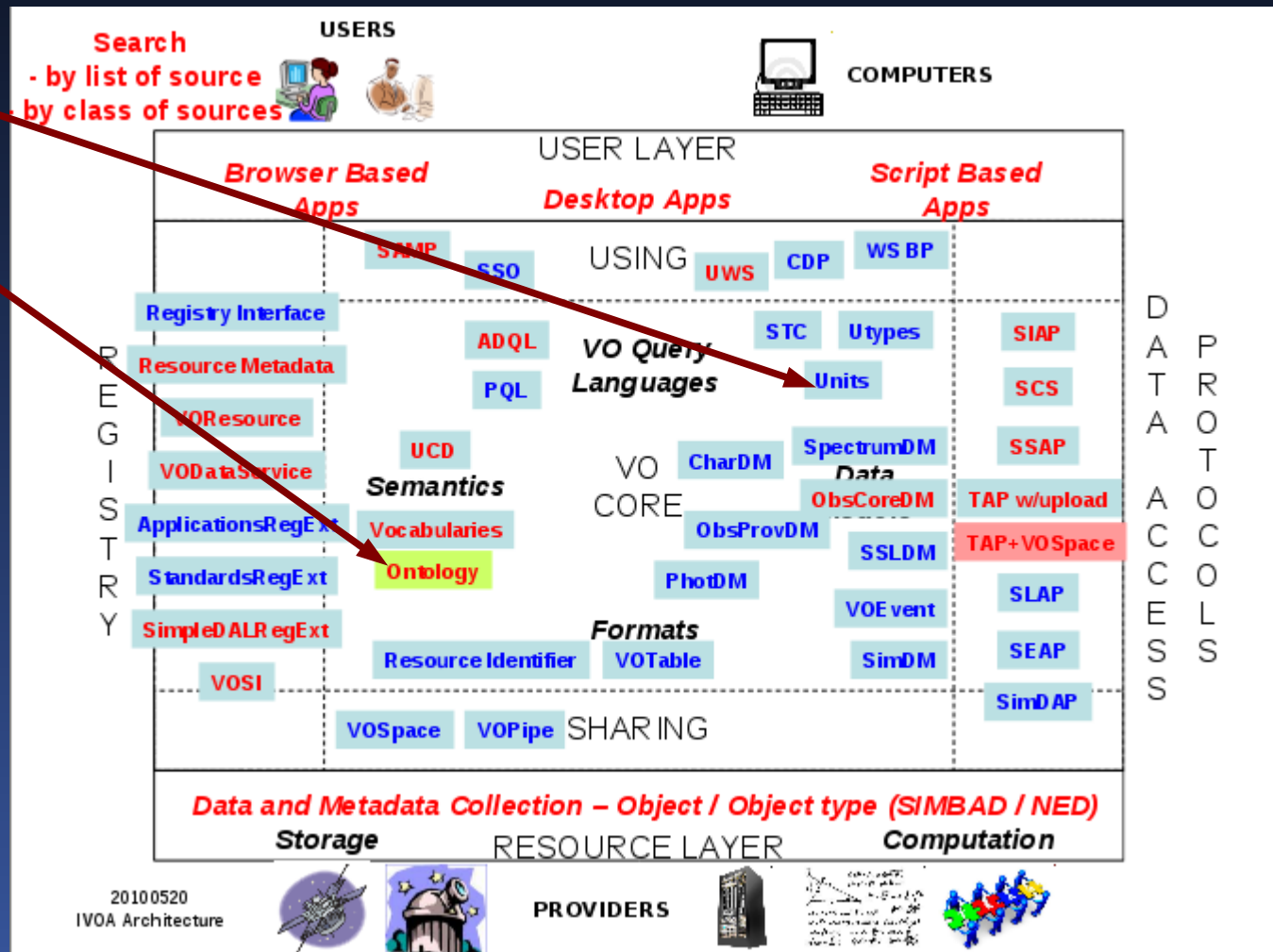
- Use in other WGs
 - use/extend existing vocabularies
 - issues in discovering, accessing, browsing vocabularies
 - define precisely the use cases !
- Need for
 - cookbooks, examples
 - list of use cases
 - vocabulary repository with versioning

Existing standards: UCDs

- Updated list of words : WD → PR → REC
- Wiki page with UCD tips

New standards

- Units
- Ontology



Units

- Core IVOA component
- Contribution from Semantics WG to DM

Ontology standard

- Identified as core IVOA component for scientific use case : queries by source class
- Ontology of astronomical object types
 - IVOA Note by INAF&CDS
- What gets standardized ?
 - Maintenance & frequent updates ? (cf Gene ontology)
 - Adopt same approach as UCDs : REC describing process and have the ontology itself as a separate document

Semantic applications

- Build simple tools or libraries
 - simple reuse in the VO
- Examples :
 - suggest from vocabulary
 - query rewriting with hierarchy

Autosuggest / Autocomplete from SKOS vocabularies

Vocabulary to use

Search string

- planet
- planetar**
- planetoid
- planetary
- protoplanet
- planetology
- planetarium
- planetesimal

A screenshot of a web interface titled "Autosuggest / Autocomplete from SKOS vocabularies". It features a dropdown menu for "Vocabulary to use" set to "IVOA Thesaurus". Below is a search input field containing "planet" and a "submit" button. A dark grey dropdown menu is open, displaying a list of suggestions: "planet", "planetar" (highlighted in blue), "planetoid", "planetary", "protoplanet", "planetology", "planetarium", and "planetesimal".

Advanced semantics

- Semantic annotations in HTML pages : RDFa
- Semantics for KDD
- ...

AstroInformatics2010

- AstroInformatics 30 years behind BioInformatics !
- June 19 = Astrosemantics

