



# State of the TCG



*Christophe Arviset  
For the TCG*

# Technical Coordination Group



TCG

TCG	Chair	Vice-Chair
TCG	Christophe Arviset	Séverin Gaudet
IVOA Chair	Paolo Padovani	Ajit Kembhavi
Working Groups	Chair	Vice-Chair
Applications	Mark Taylor	Enrique Solano
Data Access Layer	Patrick Dowler	Mike Fitzpatrick
Data Model	Jesus Salgado	Omar Laurino
Grid&Web Services	Andreas Wicenec	Andre Schaaff
Registry	Gretchen Greene	Pierre Lesidaner
Semantics	Sebastien Derriere	Norman Gray
VOEvent	Matthew Graham	Roy Williams
Interest Groups	Chair	Vice-Chair
Data Curation & Preservation	Alberto Accomazzi	n/a
Knowledge Discovery in Databases	Giuseppe Longo	n/a
Theory	Herve Wozniak	Franck Le Petit
IVOA Committees	Chair	Vice-Chair
Standard and Processes	Francoise Genova	n/a
Science Priorities	Dave De Young	n/a

- Technical Coordination amongst WGs/IGs

- Liaison with IVOA Exec

- Specific role in Recommendation Process

- New WG/IG chairs since May

<http://www.ivoa.net/cgi-bin/twiki/bin/view/IVOA/IvoaTCG>

# IVOA Architecture



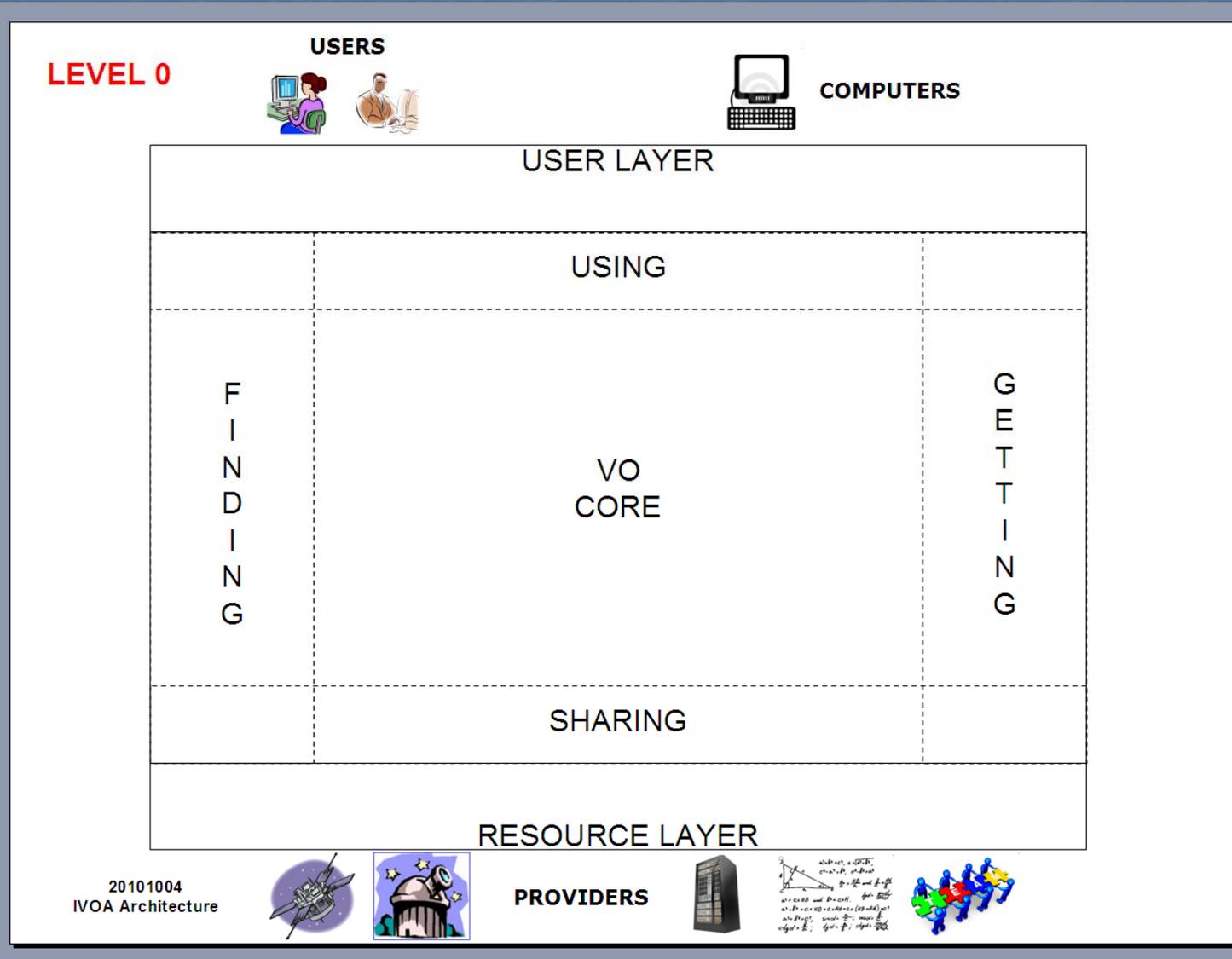
TCG

- IVOA Architecture note released on 23/Nov/2010
  - <http://www.ivoa.net/Documents/Notes/IVOAArchitecture/20101123/index.html>
- General description of IVOA Architecture
  - Level 0, 1, and 2 from general to VO specific
  - Present all IVOA standards in one slide (Level 2)
- Level 0 and 1 stable since creation
- Level 2 updated with new IVOA standards
- Individual standards diagram updated
  
- TN update planned in 2012

# IVOA Architecture Level 0



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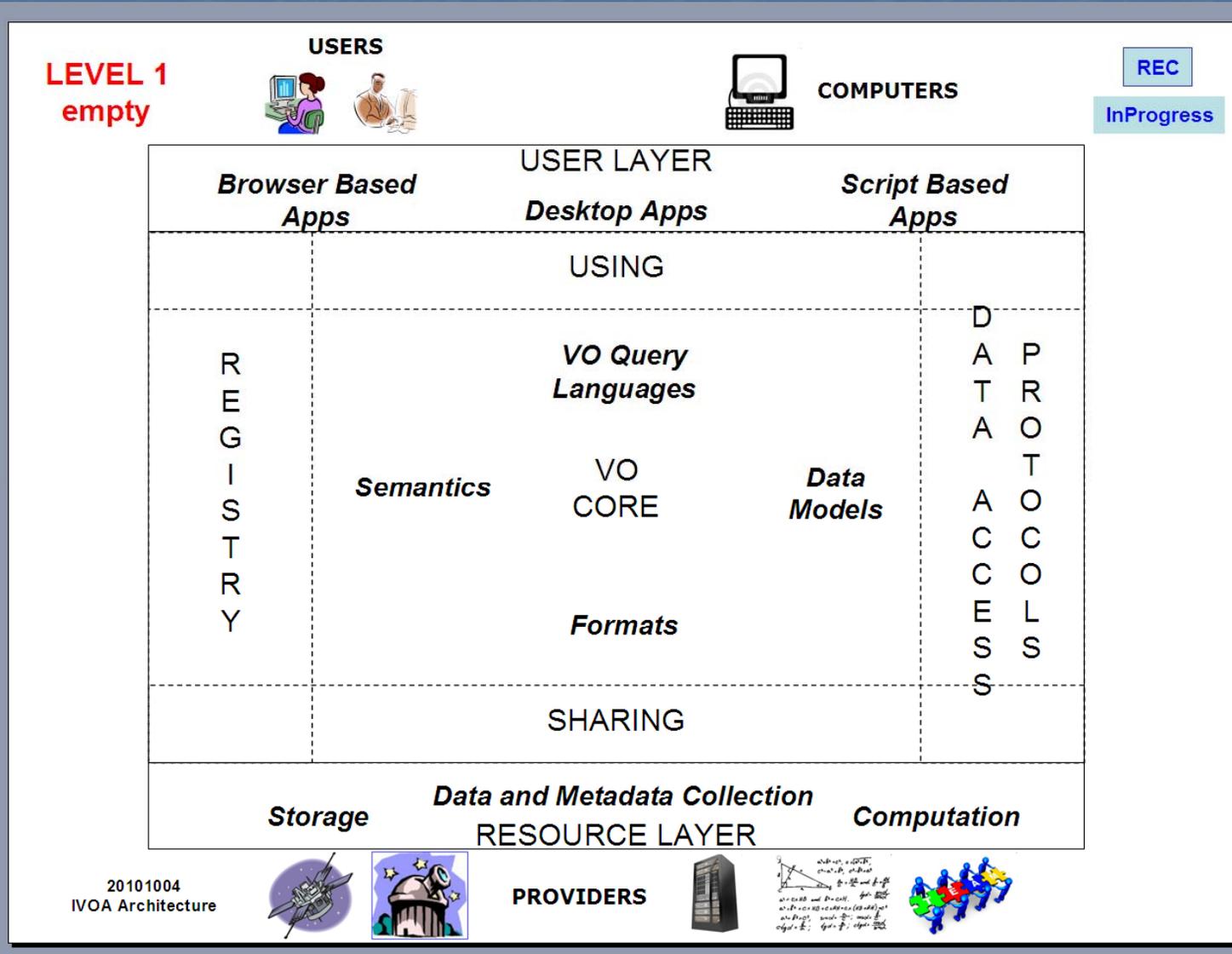


Stable since  
creation

# IVOA Architecture Level 1



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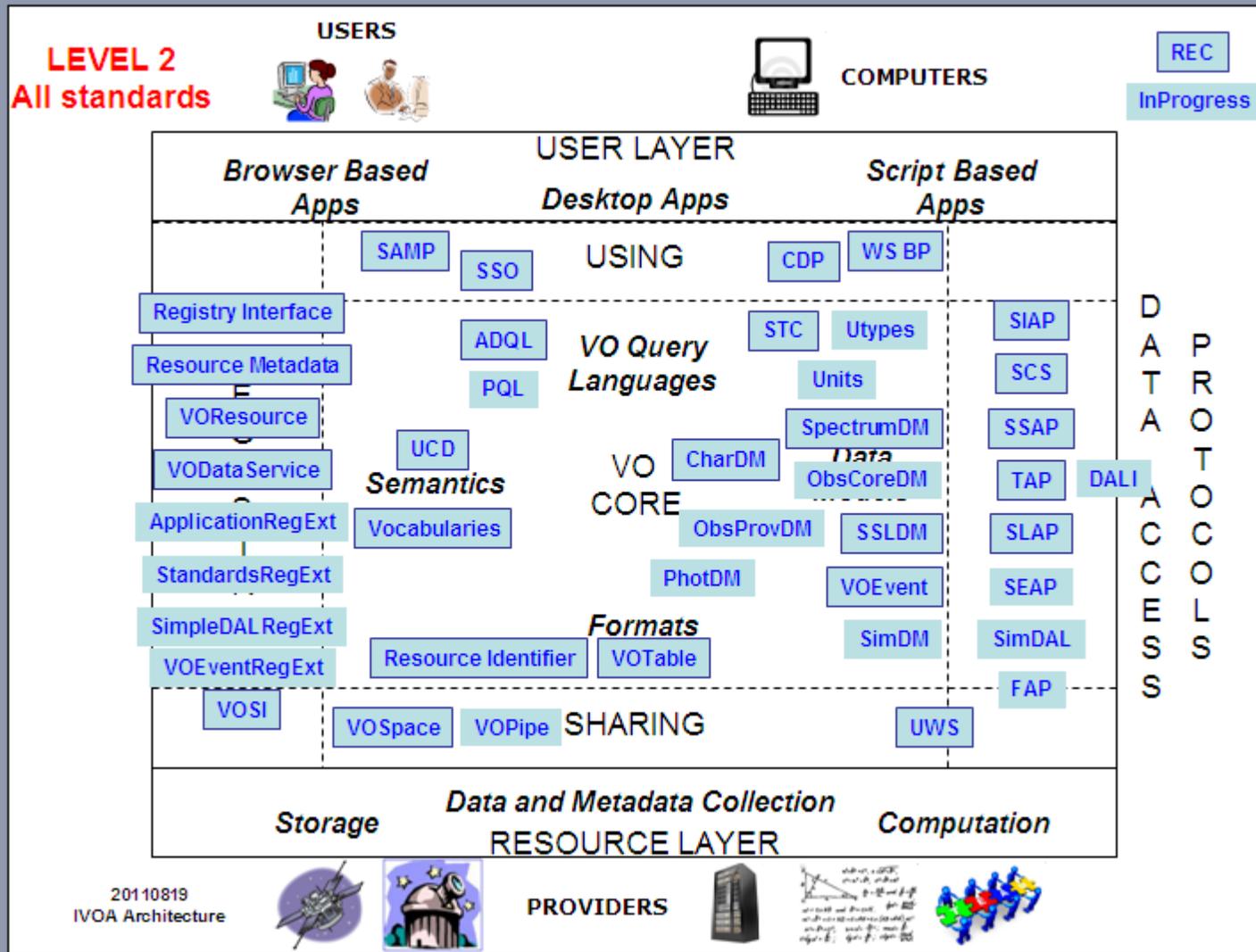


Stable since creation

# IVOA Architecture Level 3



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Updated with new standards

# Standards into REC since last Interop



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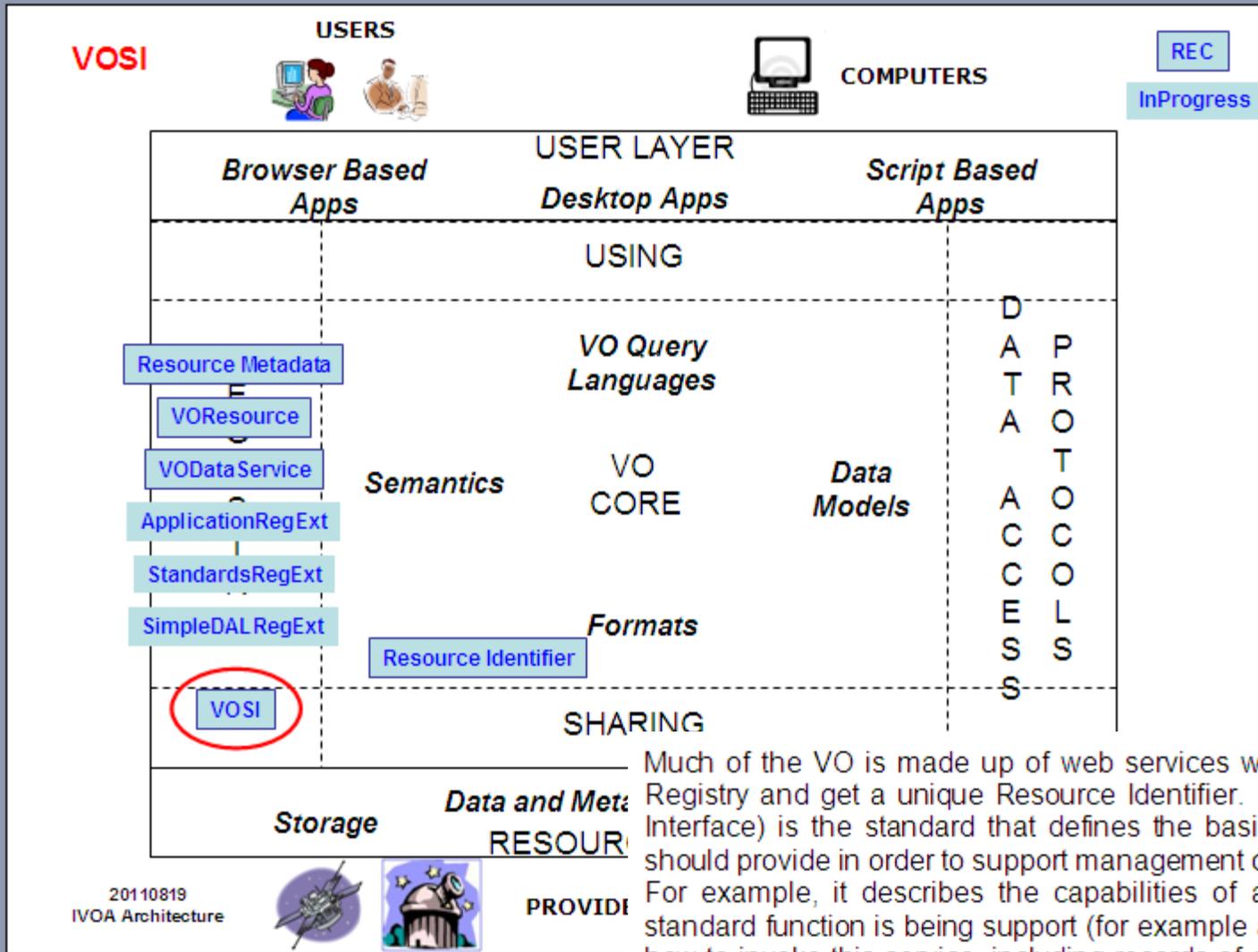
- [VOEvent] VOEvent 2.0
  - 11 July 2011
  
- [GWS] VOSI 1.0
  - 31 May 2011
  - (still need to be uploaded to the IVOA Docs page)



# VOSI 1.0 - REC in May 2011



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Much of the VO is made up of web services which are registered into the VO Registry and get a unique Resource Identifier. VOSI (standing for VO Support Interface) is the standard that defines the basic functions that all VO services should provide in order to support management of the VO. For example, it describes the capabilities of any VO Resource (which IVOA standard function is being support (for example an SSAP + SSLDM service) and how to invoke this service, including records of any details of the implementation of the function that are not fixed in the standard for that function. VOSI also defines the various possible states of this service (such as available, up since, down at, back at, etc ...).

20110819  
IVOA Architecture

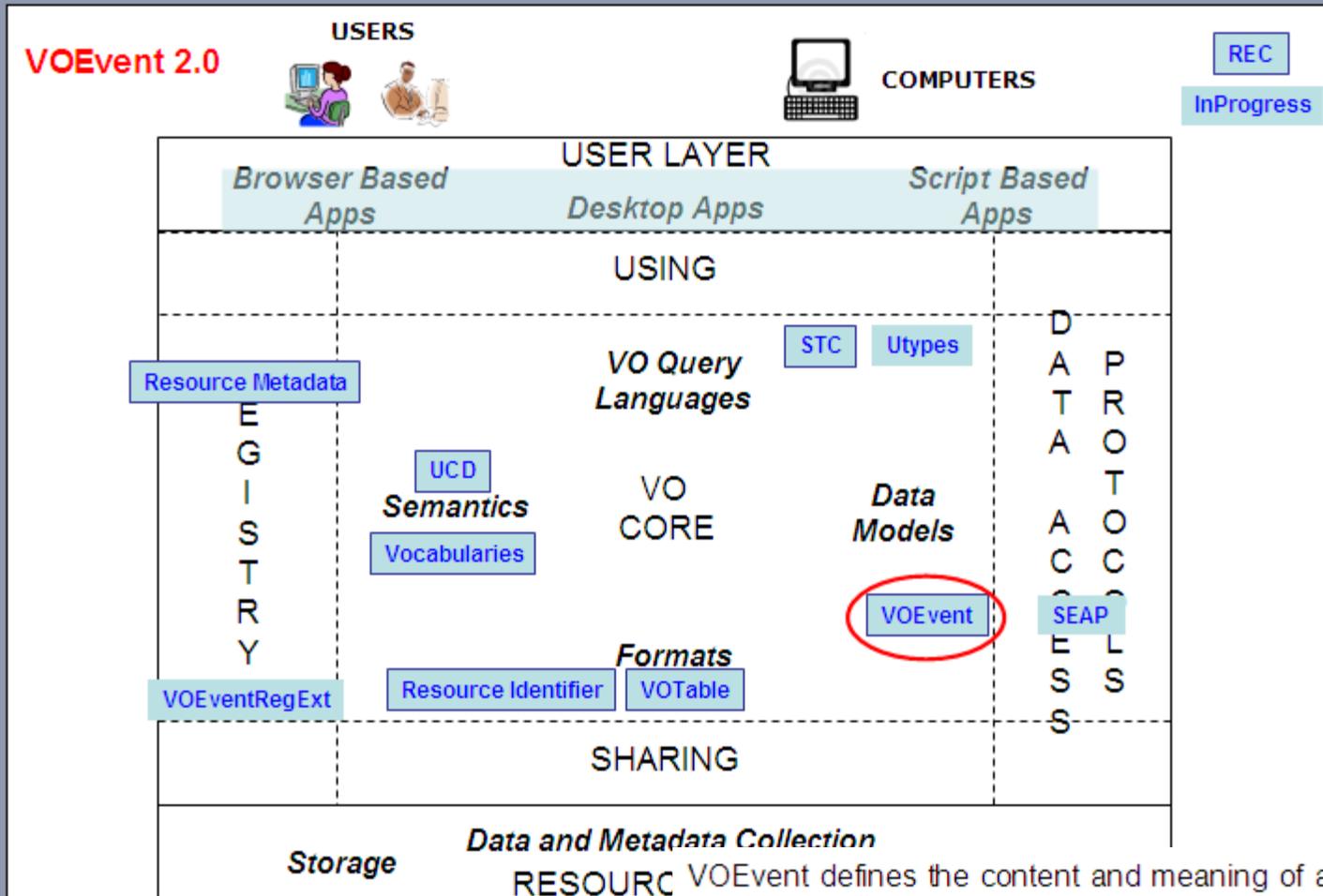


PROVIDER

# VOEvent 2.0 – REC in July 2011



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20110819  
IVOA Architecture



PROVIDER

VOEvent defines the content and meaning of a standard information packet for representing, transmitting, publishing and archiving the discovery of a transient celestial event, with the implication that timely follow-up is being requested. The objective is to motivate the observation of targets-of-opportunity, to drive robotic telescopes, to trigger archive searches, and to alert the community. VOEvent is focused on the reporting of photon events, but events mediated by disparate phenomena such as neutrinos, gravitational waves, and solar or atmospheric particle bursts may also be reported.

# TCG F2F meeting #04 – 16 Oct



TCG

- Technical discussions across WGs / IGs
  - IVOA URIs, identifiers and fragment
    - Agree to follow formal RFC 3986 for URI for all new IVOA standards
    - IVOA Note to reflect best practices
    - WG chairs to check existing IVOA standards
    - Then review steps for these cases
  - Blank values in VOTable
    - Potential changes in VOTable specs
    - To be discussed at IVOA level through Apps WG (Wed PM)
    - Review next steps afterwards

# TCG F2F meeting #04 – 16 Oct



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- How to publish data into the VO
  - Asked more and more frequently by Data Providers, new IVOA partners
  - Support initially provided by national VO projects
  - Agree to put some information on IVOA wiki pages
    - Various ways to publish
    - Available publishing toolkits for different types of data
    - Other using VO publishing libraries, tools
  - Inputs from everybody !
  - Wiki page curated by the TCG

# TCG F2F meeting #04 – 16 Oct



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- Validation and Curation of VO Resources
  - Need to define a process to improve quality of VO Resources in Registries, eg
    - IVOA common process for all Registry providers
    - Remove non working resources?
    - Set ValidationLevel flag?
    - Validation of validators?
  - Registry WG to lead the effort to define this process
  - Process to be reviewed by TCG and endorsed IVOA Exec

# The IVOA in 2011 : Technical Assessment and Roadmap



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- Being prepared by all WG / IG Chairs/vice-Chairs
- Then Endorsed by IVOA Exec
- IVOA main technical achievements since last year
- IVOA technical roadmap by WG / IG for upcoming year
- DRAFT 0.1 issued on 04/Oct/2011
- Final version soon after Pune interop

# 2011 / 2012 Roadmap

## Main highlights (not exhaustive)



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- IVOA standards for SED builder science case
  - PhotDM 1.0, SpectrumDM 1.2, Utypes 1.0
- Units 1.0, VOSpace 2.0, Registry Extensions standards
  
- Tools / help for publishing of VO resources
- Definition of process for:
  - Validation and Curation of VO resources
  - Units “vocabulary” updates
- Apply existing process for UCD “vocabulary” updates
- Technical evaluation of potential new science cases
- Update IVOA Architecture Note in 2012

# Existing IVOA REC standards - 1



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Standards	WG	Date	Comments
<b>2003</b>			
IVOA Document Standards v1.0	Standards & Process Committee	October 2003	IVOA Doc Std v1.2 in 2010
<b>2004</b>			
VOTable v1.10 VOTable Format Definition	VOTable	August 2004	VOTable v1.2 in 2009
<b>2005</b>			
UCD v1.10 An IVOA Standard for Unified Content Descriptors	Semantics	August 2005	
<b>2006</b>			
Maintenance of the list of UCD words v1.20	Semantics	May 2006	
VOEvent v1.11 Sky Event Reporting Metadata	VOEvent	November 2006	
<b>2007</b>			
Standards	WG	Date	Comments
IVOA Identifiers v1.12	Registry	March 2007	
Resource Metadata for the Virtual Observatory v1.12	Registry	March 2007	
UCD 1+ v1.23 The UCD1+ controlled vocabulary	Semantics	April 2007	UCD 1+ v1.3 expected in 2009
STC v1.33 Space-Time Coordinate Metadata for the VO	DM	October 2007	
SpectraDM v1.01 Spectral Data Model	DM	October 2007	

More details can be found on the IVOA Document pages at: <http://www.ivoa.net/Documents/>

# Existing IVOA REC standards - 2



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2008			
Standards	WG	Date	Comments
SSO v1.03 Single-Sign-On Profile: Authentication Mechanisms	GWS	January 2008	
VOSpace v1.02 VOSpace service specification	GWS	January 2008	VOSpace v1.15 in September 2009
VOResource v1.03 VOResource: an XML Encoding Schema for Resource Metadata	Registry	February 2008	
SCS v1.03 Simple Cone Search	DAL	February 2008	
SSAP v1.04 Simple Spectra Access Protocol	DAL	February 2008	
CharDM v1.13 Data Model for Astronomical DataSet Characterization	DM	March 2008	
ADQL v2.0 Astronomical Data Query Language	VOQL	October 2008	
2009			
Standards	WG	Date	Comments
SAMP 1.11 Simple Application Messaging Protocol	Apps	April 2009	
Vocabularies 1.16	Semantics	September 2009	
VOSpace 1.5	GWS	September 2009	Update from VOSpace 1.0
Registry Interface 1.01	Registry	September 2009	
SIAP 1.0 Simple Image Access Protocol	DAL	November 2009	
VOTable v1.2 VOTable Format Definition	VOTABLE	November 2009	Update from VOTable 1.10
CDP 1.0 Credential Delegation Protocol	GWS	November 2009	

More details can be found on the IVOA Document pages at: <http://www.ivoa.net/Documents/>

# Existing IVOA REC standards - 3



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2010			
Standards	WG	Date	Comments
TAP 1.0 Table Access Protocol	DAL	February 2010	
IVOA Document Standards v1.2	Standards & Process Committee	March 2010	Update from IVOA Document Standards v1.0
UWS 1.0 Universal Worker Service	GWS	October 2010	
VODataService 1.1	Registry	October 2010	
SSLDM 1.0 Simple Spectra Line DM	DM	November 2010	
SLAP 1.0 Simple Line Access Protocol	DAL	November 2010	
WS BP 1.0 Web Service Basic Profile	GWS	December 2010	
SAMP 1.2 Simple Application Messaging Protocol	Apps	December 2010	Minor updates from SAMP 1.11
2011			
Standards	WG	Date	Comments
VOSI 1.0 IVOA Support Interface	GWS	May 2011	
VOEvent 2.0	VOEvent	July 2011	

More details can be found on the IVOA Document pages at:  
<http://www.ivoa.net/Documents/>

# Standards to become REC soon



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## On-going Recommendations

Standard	RFC period	TCG Review	Exec Review
StandardsRegExt 1.0	14/April/2011-14/May/2011	21/Sep/2011-21/Oct/2011	
SSAP 1.1 and SpectrumDM 1.1	20/April/2011-17/May/2011	01/June/2011-28/June/2011	
ObsCoreDM 1.0	3/May/2011-3/June/2011	21/July/2011-15/Sept/2011	
SimDM 1.0	4/May/2011-4/June/2011		

- StandardsRegExt 1.0 and ObsCoreDM 1.0
  - Ready to go to EXEC review this week
- SSAP 1.1 / SpectrumDM 1.1
  - Some UCD and typos updated, then to EXEC
- More to start RFC soon after Pune
  - PhotDM 1.0

# IVOA Standards per year



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## IVOA Standards issued per year

