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# Outline

What is the VO?

The challenge

The IVOA

Demo

Putting it together

This Interop



## What is the VO?

A historical view: The goal of the Virtual Observatory (VO) is to provide a

**comprehensive** set of  
**data** and **services**  
relevant to **astronomy**  
accessible from **clients** of **your choice**  
**regardless of where you are** and  
**preserving** products of digital astronomy.



## What it's (actually) not:

A bundle of software used to work with data in astronomy.

But of course you will find and use VO-client implementations in lots of software like TOPCAT, Aladin, Splat-VO or PyVO.

## "FAIR"

There's tens of thousands of data collections somewhere online, and more should be.

To unlock the treasures hidden there, the data has to be

- ▶ **F**indable
- ▶ **A**ccesible
- ▶ **I**nteroperable
- ▶ **R**eusable

## Standards...

The IVOA constantly develops new standards and evolves existing ones. Some of them are well established and well known like Cone Search, SIA, TAP/ADQL, or SAMP whereas other standards like DataLink or obscure are not so popular (yet). Standards have to be developed though.

## Working Groups and Interest Groups

There are a lot of working groups within the IVOA and for newcomers it might be a bit overwhelming to get the overview. Some titles are selfexplaining, for others an introduction may be necessary. If you are new to the IVOA, these are most likely groups and sessions you will get in contact in the next days:

The Working Groups are: Applications, Data Access Layer, Data Model, Grid and Web Services, Resource Registry, and Semantics.

The Interest Groups are: Data Curation and Presevation, Education, Knowledge Discovery, Operations, Radio Astronomy, Solar System, Theory, and Time Domain.



## Other groups and Committees

- ▶ IVOA Executive
- ▶ IVOA Technical Coordination Group
- ▶ IVOA Standing Committee on Science Priorities
- ▶ Standing Committee on Standards and Processes



## The Interoperability meetings

The Interops are rather a working meeting than a conference. Thus, though many presentations may seem to focus on achievements, they often are addressed to a specific standard (either established or in development) and how to improve them. Discussions are much appreciated, as are reports on caveats or real bugs in the standards: this is how the VO improves!

This being said: we encourage you to get involved into the discussions!

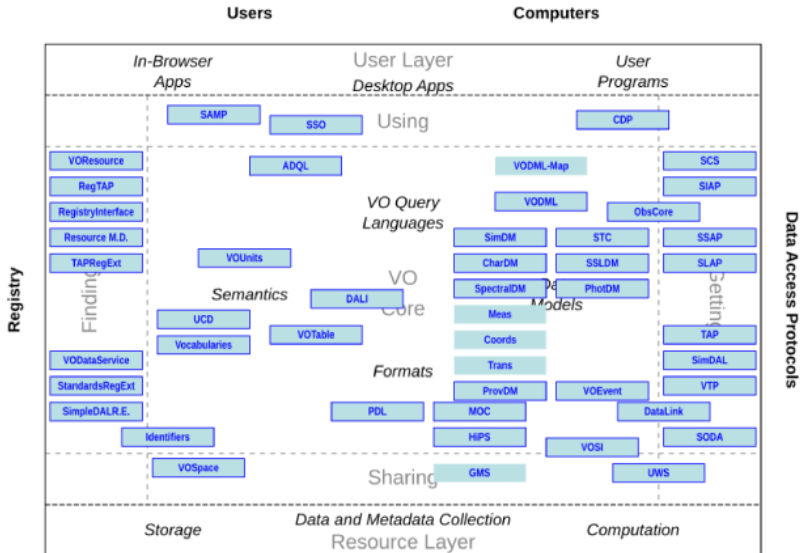


## Demo time

Let' see how all this works together.



## All at one glance:



## November 2021 - online

We thank you for your attention and hopefully we could give you a helpful preparation to the IVOA Interop meeting.  
See you in way too few hours!

