

# ☰ TAP Usage in SIMBAD

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# Outline

1. Usage
2. Supported features
3. ADQL
4. Table Upload
5. TAP Implementation



# Usage

- ◆ Web interface of Simbad-TAP
- ◆ Client application
  - ◆ Topcat
  - ◆ TAPHandle (generic tap web-interface) (see <http://saada.u-strasbg.fr/taphandle>)

# Supported features

- ◆ Synchronous queries
- ◆ Asynchronous queries
- ◆ Availability
- ◆ Capabilities (*still TAPRegExt - 27<sup>th</sup> January 2011*)
- ◆ Table metadata
- ◆ Upload (*limit=2000 rows ; methods: inline, http*)
- ◆ Output formats: vatable, json, csv, tsv, text
- ◆ Languages: ADQL, ~~PQL~~

# ADQL

- ◆ Point, circle, box, polygon, ~~region~~
- ◆ Contains, intersects, distance, area, ~~centroid~~, coord1, coord2, ~~coordsys~~
- ◆ /!\ Coordinate system limited to ICRS (barycenter) !

# Table upload

- ◆ Usage in ADQL:  
TAP\_UPLOAD.<table\_name>
- ◆ Goal: join your own tables with the Simbad ones
- ◆ Notes:
  - ◆ The tables are uploaded at the query submission
  - ◆ They exist only during the query execution
  - ◆ They can be used only by the query with which they have been uploaded

# ☰ TAP implementation


- ◆ CDS TAP Library
- ◆ DB : PostgreSQL + PgSphere

SIMBAD: TAP Service (test)


http://simtest.u-strasbg.fr/simbad/sim-tap
Google

School Wiki VizieR Photometry Tool VizieR WeatherSpark Google Translate CDS CDS Portal Facebook Google Maps

SIMBAD: TAP Service (test)



## SIMBAD: TAP Service (TEST)



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» TAP Service

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**SERVICE DESCRIPTION**

TAP is an IVOA protocol which describes a way to query data tables of a service. Queries are by default written in ADQL and results are returned by default in VOTable. For more information about TAP see <http://www.ivoa.net/Documents/TAP/> and <http://www.ivoa.net/Documents/latest/ADQL.html> for ADQL.

**NOTE:** *This service is still in progress !*

**EXECUTE A QUERY**

```
-- Basic data from an object given one of its identifiers.
SELECT basic.OID,
       RA,
       DEC,
       main_id AS "Main identifier",
       coo_bibcode AS "Coord Reference",
       nbref AS "NbReferences",
       plx_value as "Parallax",
       rvz_radvel as "Radial velocity",
       galdim_majaxis,
       galdim_minaxis,
       galdim_angle AS "Galaxy ellipse angle"
FROM basic JOIN ident ON oidref = oid
WHERE id = 'm13';
```

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» *TAP Service*

ADQL help

**Query examples**

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Execution options

Upload (0)

Batch queries

Other TAP resources

# ☰ Some links

- ◆ Simbad-TAP: test service address -see me
- ◆ PgSphere
  - ◆ <http://pgsphere.projects.postgresql.org/>
- ◆ CDS TAP Library (v1.0)
  - ◆ <http://cdsportal.u-strasbg.fr/taptuto/>
- ◆ Questions about Simbad-TAP:
  - ◆ [cds-question@astro.unistra.fr](mailto:cds-question@astro.unistra.fr)