

RegTAP at ESAVO

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RegTAP

- a standardized relational view (subset) of an IVOA resource
- a way to execute ADQL queries on that relational view over HTTP POST
- recommendation

<http://www.ivoa.net/documents/RegTAP/20141030/PR-RegTAP-1.0-20141030.html>

The screenshot shows the EuroVO service interface. At the top, there is a large blue "EURO VO" logo with a pixelated "VO" part. To the right of the logo, the word "Signed" is visible. Below the logo, there is a horizontal menu bar with three search options: "Simple Search", "Advanced Search", and "ADQL Search". The "Advanced Search" option is highlighted with a pink oval. On the far left, there is a vertical sidebar containing several icons: a house (Home), a magnifying glass (Search), a gear (Settings), a person (User), and an information icon (Info). The main content area contains a text input field with the placeholder "[11]Find Contact Persons" and a dropdown arrow. Above this input field, there is a note: "Select and execute any of the following sample queries." and "(Notice that the text area is fully editable so you are able to adjust the queries or write your own from scratch)". To the right of the input field, there is a code editor window displaying a SQL query:

```
SELECT DISTINCT base_role, role_name, email  
FROM rr.res_role  
    NATURAL JOIN rr.interface  
WHERE access_url='http://dc.zah.uni-heidelberg.de/tap'
```

At the bottom of the main content area, there are two buttons: "Search" and "Clear".

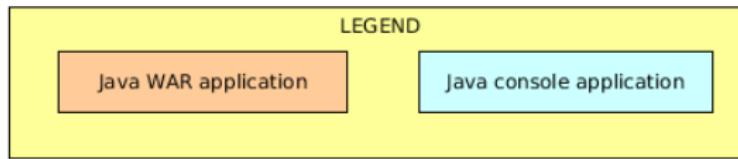
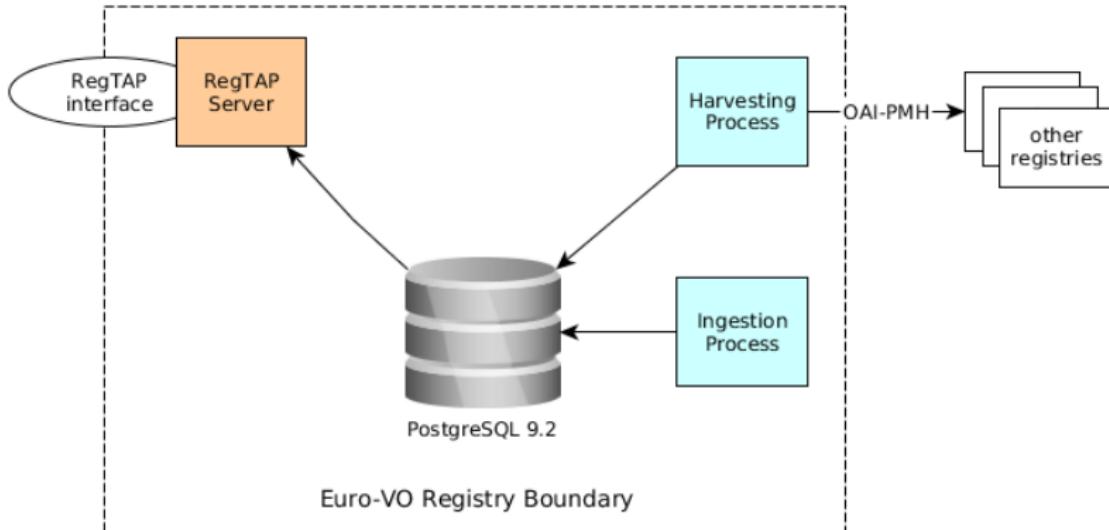
The screenshot shows the EuroVO Cone Search interface. At the top, there is a navigation bar with icons for Home, Search, Registry, Interop, and Help. Below the navigation bar is a toolbar with icons for search, help, and close. A purple box highlights the "Available Cone Services" section, which contains a dropdown menu set to "RegTAP". Another purple box highlights the "Keywords:" input field and the "Match Fields" checkboxes (Short Name, Title, Subjects, ID, Publisher, Description). A third purple box highlights the "Accept Resource Lists" checkbox and the "Submit Query" button. The main area displays a table of available cone services, with columns for Short Name, Title, and Version. The table includes entries for 3XMM Enhanced Catalogue, Astrophysics Data System, ALFALFA, Arches-Xmatch, B/avo.rad, B/bax, B/cb, B/cfht, B/chandra, B/corot, B/denis, B/eso, and B/rvcs. The "Version" column shows entries like "3XMM Er", "Astronomer", "ALFA, AL", "Xmatch", "Clusters", "Novae, E", "Obs_Log", "Obs_Log", "Stars:va", "Stars:va", and "Stars:va". At the bottom, there are buttons for Access IRI, Description, and Version.

Short Name	Title	Version
3XMMe-CONESEARCH	3XMM Enhanced Catalogue	3XMM Er
ADS	Astrophysics Data System	Astronomer
ALFALFA	Arecibo Legacy Fast ALFA Survey	ALFA, AL
Arches-Xmatch	Arches Cross-matched Catalogue	Xmatch
B/avo.rad	MERLIN+VLA Images of HDF-HFF sources (Muxlow+, 2003)	
B/bax	The BAX Database (Blanchard+, 2004)	Clusters
B/cb	Cataclysmic Binaries, LMXBs, and related objects (Ritter+, 2014)	Novae, E
B/cfht	Log of CFHT Exposures (CADC, 1979-)	Obs_Log
B/chandra	The Chandra Archive Log (CXC, 1999-2014)	Obs_Log
B/corot	CoRoT observation log Release 13 (CoRoT, 2009-2014)	Stars:va
B/denis	The DENIS database (DENIS Consortium, 2005)	
B/eso	ESO Science Archive Catalog (ESO, 1991-2015)	Obs_Log
B/rvcs	General Catalogue of Variable Stars (Samuels+, 2007-2012)	Stars:va

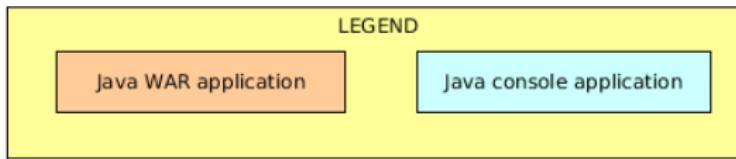
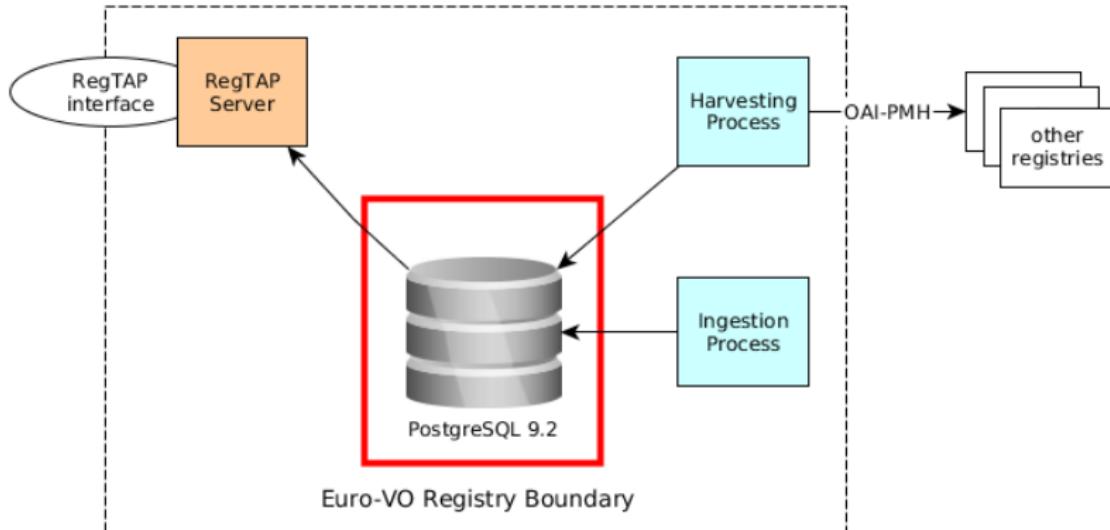
A bare-bones RegTAP interface allowing you to post queries is also found at: <http://registry.euro-vo.org/regtap/tapHome.html>



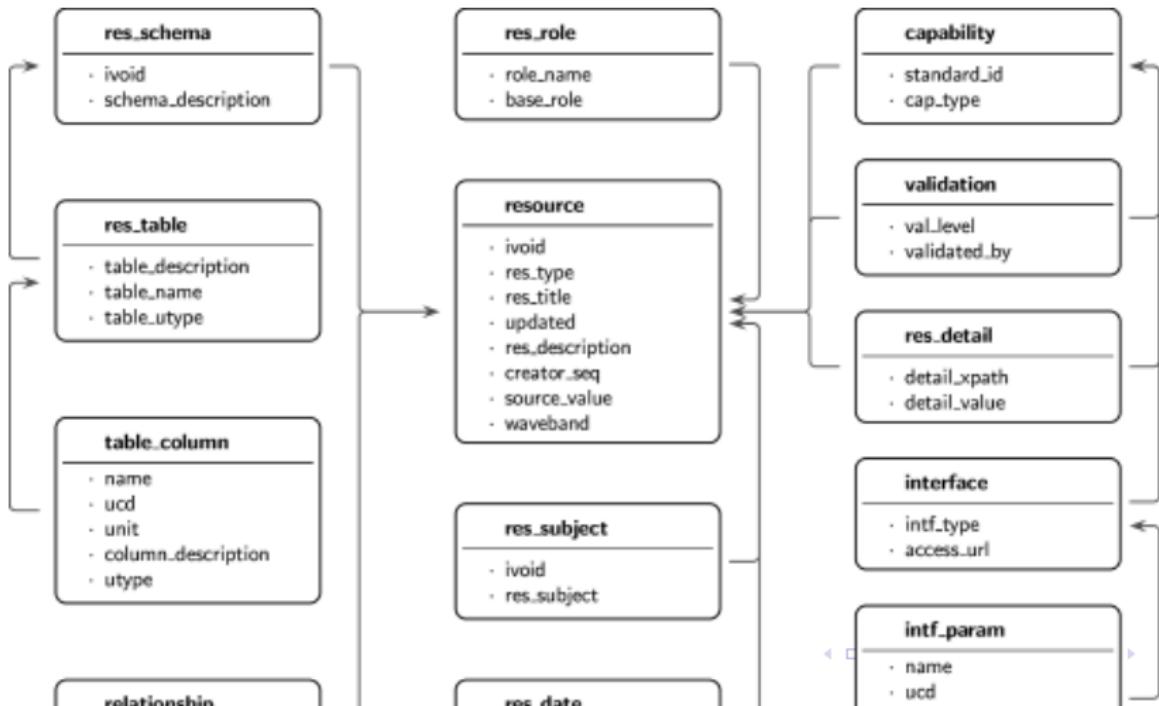
RegTAP implementation at EuroVO



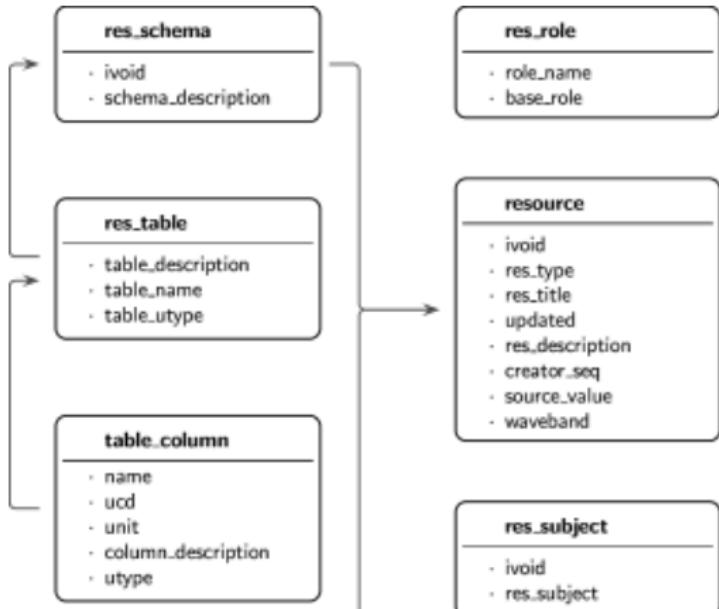
RegTAP database schema



RegTAP database schema



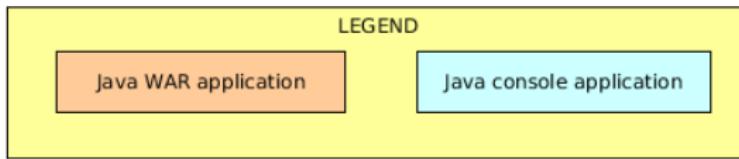
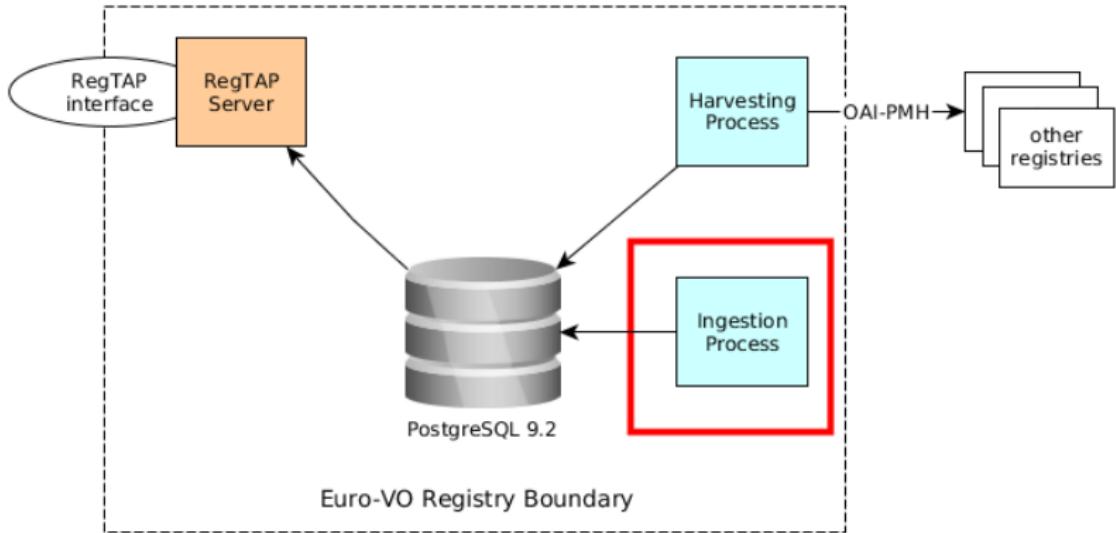
RegTAP database schema



```
01 CREATE TABLE IF NOT EXISTS resource (
02     ivoid          vo_common.ivoid      TEXT
03     res_type       TEXT
04     created        TIMESTAMP(1) WITH TIME ZONE
05     short_name    TEXT
06     res_title     TEXT
07     updated        TIMESTAMP(0) WITH TIME ZONE
08     content_level TEXT
09     res_description TEXT
10     reference_url vo_common.url      TEXT
11     creator_seq   TEXT
12     content_type  TEXT
13     source_format TEXT
14     source_value   TEXT
15     res_version   TEXT
16     region_of_regard FLOAT
17     waveband      TEXT
18     rights         TEXT
19 );
20
21 ALTER TABLE resource ADD PRIMARY KEY (ivoid);
22
23 CREATE TABLE IF NOT EXISTS res_detail (
24     ivoid          vo_common.ivoid      NOT NULL,
25     cap_index      SMALLINT           NULL,
26     detail_xpath   TEXT              NOT NULL,
27     detail_value   TEXT              NULL
28 );
29
30 ALTER TABLE rr.res_detail ADD CONSTRAINT res_detail_ibfk_1
31 FOREIGN KEY (ivoid) REFERENCES resource (ivoid)
32 ON DELETE NO ACTION ON UPDATE NO ACTION ;
```

Diagram navigation icons: back, forward, search, etc.

Ingestion



XPath

8.4 The capability Table

The capability table describes a resource's modes of interaction; it only contains the members of the base `res_detail` table (see [8.13](#)).

The table has a `cap_index` to disambiguate multiple capabilities on a single resource. See section [3](#) for de

Column names, utypes, ADQL types, and descriptions for the `rr.capability` table

`ivoid` `VARCHAR(*)` The parent resource.

`xpath:/identifier`

`cap_index` `SMALLINT(1)` An arbitrary identifier of this capability within the resource.

`cap_type` `VARCHAR(*)` The type of capability covered here.

`xpath:@xsi:type`

`cap_description` `VARCHAR(*)` A human-readable description of what this capability provides as part

`xpath:description`

`standard_id` `VARCHAR(*)` A URI for a standard this capability conforms to.

`xpath:@standardID`

XPath

8.4 The capability Table

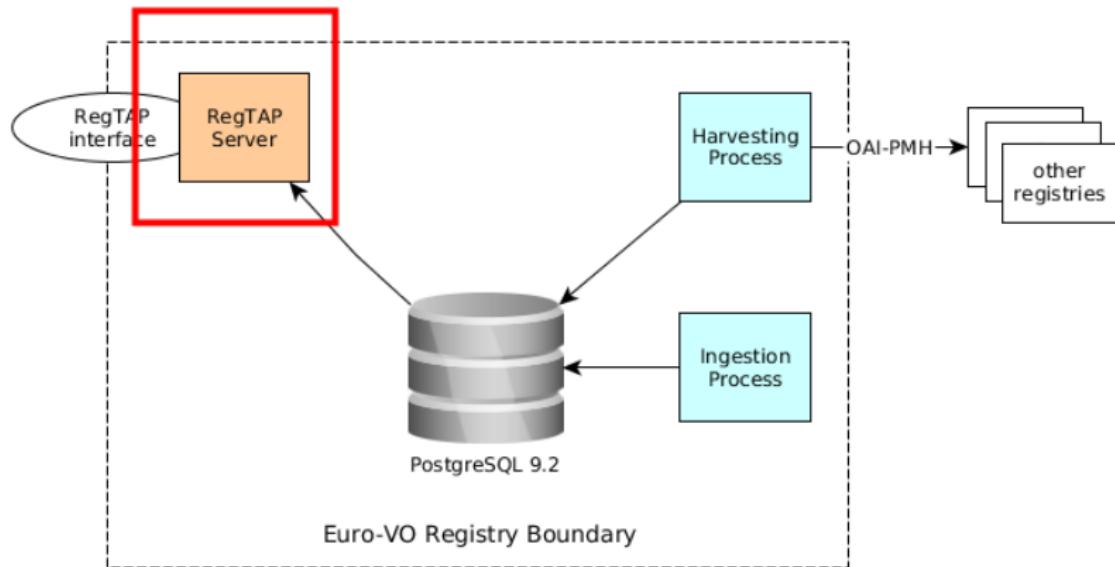
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ivoid	VARCHAR(*)	The parent resource.
xpath:/identifier		
cap_index	SMALLINT(1)	An arbitrary identifier of this capability within the resource.
cap_type	VARCHAR	1 capability ivoid cap_index
xpath:@xsi:type		2 -----
cap_description	VARCHAR	3 /*/capability
xpath:description		4 ivoid identifier lowercase
standard_id	VARCHAR	5 cap_index count(preceding-sibling::capability)
xpath:@standardID		6 cap_type @xsi:type lowercase prfx-trnslt
		7 cap_description description
		8 standard_id @standardID lowercase
		9 -----
		10 ivoid -> resource ivoid

TAP



LEGEND

Java WAR application

Java console application

<http://cdsportal.u-strasbg.fr/taptuto/>

TAP Library v2.0

This Java library is a framework aiming to build quickly and easily a TAP service.

[Getting started !](#)

[Download !\[\]\(0678d1887db22e3f6b52fe38cd7e7b5b_img.jpg\)](#)

What is TAP ?

TAP is a protocol defined by the IVOA in the [Recommendation of 27 March 2010 \(Version 1.0\)](#) which lets access table data.

The standards ADQL and UWS are used in this protocol.

[Remind me! !\[\]\(e10db9d69cb0b265e01951fb48872059_img.jpg\)](#)

Why this library?

In order to help Java developpers to quickly build a TAP service with as less code writing as possible. A service built using this framework will be conform to the IVOA definition of the protocol TAP.

Functionalities:

- Configuration file: a TAP service can be created with just a simple key-value configuration file...nothing else.

How to use it ?

- Getting started: to start will
- Migration help: to migrate
- Documentation: to have more functionnalities.

 The documentation is
will be added piece by piece

<http://registry.euro-vo.org/>

The screenshot shows the EuroVO Cone Search interface. On the left is a sidebar with various icons: a house (Home), a magnifying glass (Search), a folder (Columns), a gear (Registry), a person (Interop), and a question mark (Help). Below the sidebar is a toolbar with three buttons: a wrench (Tools), a question mark (Help), and a close (X) button.

The main window has a dark blue header bar with the EuroVO logo. Below the header is a menu bar with options: Cone Search, Window, Columns, Registry, Interop, Help. Under the menu bar are three buttons: Tools, Help, and Close.

The main content area is titled "Available Cone Services". It contains a "Registry" field set to <http://registry.euro-vo.org/regtap/tap>, a "RegTAP" dropdown menu, and a "Keywords:" input field. Below these are "Match Fields" checkboxes for Short Name, Title, Subjects, ID, Publisher, and Description, all of which are checked. There is also a checkbox for "Accept Resource Lists" which is checked.

At the bottom of the search area are "Cancel Query" and "Submit Query" buttons. A red circle highlights the "Submit Query" button.

The main table lists various cone services:

Short Name	Title	Version
3XMMe-CONESEARCH	3XMM Enhanced Catalogue	3XMM Er
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B/eso	ESO Science Archive Catalog (ESO, 1991-2015)	Obs_Log
B/vari	General Catalogue of Variable Stars (Samuels+, 2007-2012)	Stars:va

Below the table are three buttons: "Access IRI", "Description", and "Version". A red circle highlights the "Version" button.

At the bottom of the page is a footer with the text: "A bare-bones RegTAP interface allowing you to post queries is also found at: <http://registry.euro-vo.org/regtap/tapHome.html>".

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The End.