

# Evolutions of TAP-Lib, ...

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# □ A. News about the libraries

## A. News about the libraries

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## B. Implement ADQL-2.1

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## D. FAQ from TAP-Lib users

# □ A.1. New Releases

## UWS Library *v4.4*

- *see details*
- **Implement:**  
UWS-1.1
- *up-to-date*

## ADQL Library *v1.5*

- *see details*
- **Implement:**  
ADQL-2.0
- *PR-2.1 under implementation*

## TAP Library *v2.3*

- *see details*
- **Implement:**  
TAP-1.0
- *PR-1.1 to implement*

## □ A.2. Auto-fix ADQL query

### New function in ADQL-Lib 1.5:

- `ADQLParser.tryQuickFix(String)`
- see *Javadoc* and *GitHub Issue #104*
- **Example:** a simple ADQL query with 3 recurrent mistakes:

```
SELECT id, _raj2000, _dej2000, distance  
FROM public.myTable
```

=> *Can you find them? (4 errors)*

## □ A.2. Auto-fix ADQL query

### New function in ADQL-Lib 1.5:

- `ADQLParser.tryQuickFix(String)`
- see *Javadoc* and *GitHub Issue #104*
- **Example:** a simple ADQL query with 3 recurrent mistakes:

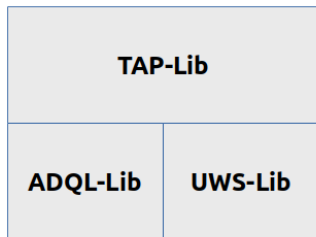
```
SELECT id, _raj2000, _dej2000, distance
FROM public.myTable
```

After execution of the function `tryQuickFix(...)`:

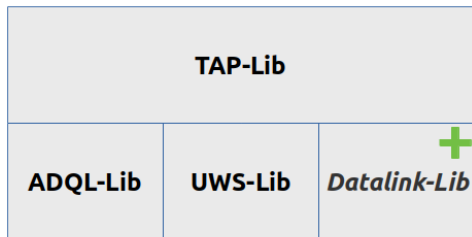
```
SELECT id, "_raj2000", "_dej2000", "distance"
FROM "public".myTable
```

- *This function also fixed Unicode confusable characters often causing issues while copy-pasting a query from a PDF.*

## □ A.3. New name - 1/2

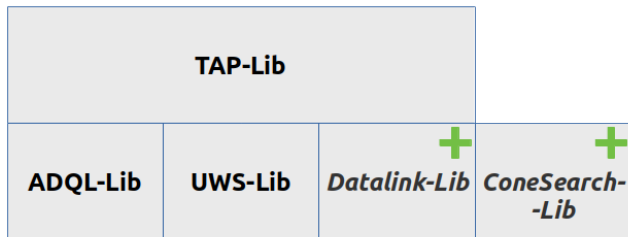


## □ A.3. New name - 1/2

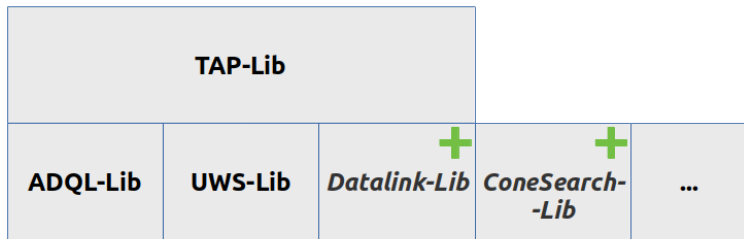




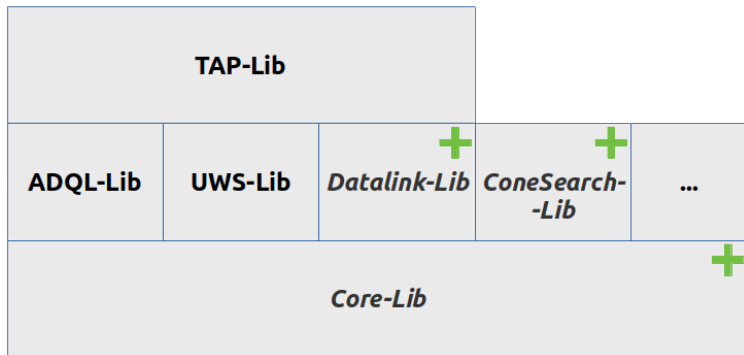
## □ A.3. New name - 1/2



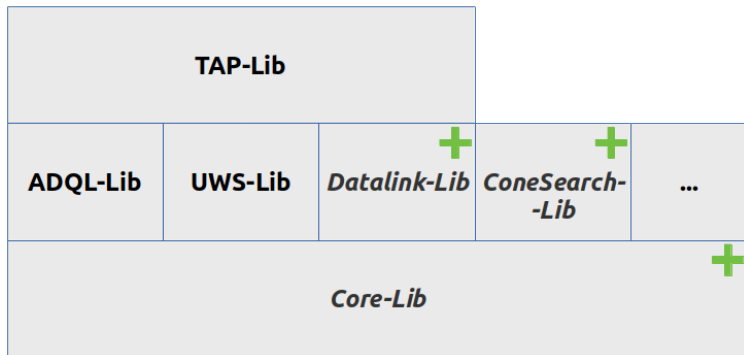
## □ A.3. New name - 1/2



## □ A.3. New name - 1/2



## □ A.3. New name - 1/2



**VOLLT : VO Libraries Like Tap-lib**

## □ A.3. New name - 2/2

- **GitHub repository renamed:** `taplib` into `vollt`
  - the former name is still usable in the URL and in git clones
  - it is however recommended to change your remote settings:

```
git remote set-url origin \  
https://github.com/gmantele/vollt.git
```

## □ A.4. Future major dev - 1/2

- **Libraries:**
  - configuration file for UWS-Lib
  - hot-reload of configuration and meta-data in TAP- and UWS-Libs
  - registry resource generation
  - Docker image (*almost ready*)
  - ...
- **Documentation:**
  - changing format
    - *technical-API-description* -> *practical "how to"*
  - changing host
    - *GitHub pages?*

## □ A.4. Future major dev - 2/2

- **Git repository:**
  - **Compilation:** Ant Gradle
    - (short term)
  - **Continuous Integration:** Travis-CI
    - (short term)
  - **Publication:** Maven, JCenter?
    - (probably short term)
  - **Re-structuration:**
    - see *presentation done during the IVOA-Interop in Shanghai*
    - (long term)



## □ A.5. Mailing list

- *Diffusion* mailing list just for announcements
- **To subscribe:**
  - send an email to [sympa@astro.unistra.fr](mailto:sympa@astro.unistra.fr)
  - Subject: subscribe vollt-announce (*eventually followed by your Firstname and Surname*)
  - Empty body
- In some weeks, possible broadcast of a poll about the technical evolutions of the libraries
- *Have a question?* [Send me an email personally](#) or use [GitHub Issues](#)



# □ B. Implement ADQL-2.1

A. News about the libraries

**B. Implement ADQL-2.1**

C. Improve ADQL-2.1

D. FAQ from TAP-Lib users

## □ B. Implement ADQL-2.1 - 1/2

=> *Next ADQL-Lib v2.0*

- API changed a bit for the creation of a parser:
  - ADQLParser is now an interface
  - ADQLParserFactory to create parser instances

- 
- 
- **With ADQL-Lib 1.x:**

```
ADQLParser parser = new ADQLParser();
```

- **But now, with ADQL-Lib  $\geq$  2.x:**

```
ADQLParserFactory parserFactory = new ADQLParserFactory();  
// with the default version:  
// (i.e. last stable version = 2.0):  
ADQLParser parser = parserFactory.createParser();  
  
// OR with a specific version:  
parser = parserFactory.createParser(ADQLVersion.V2_1);
```

## □ B. Implement ADQL-2.1 -2/2

- => possibility to choose the version of ADQL in TAP configuration (by default, set to the last stable version)
- Already supported: LOWER

# □ C. Improve ADQL-2.1

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# □ C. Improve ADQL-2.1 - 1/2

- **Issues:**
  - **Missing BNF** for the optional features in ADQL-2.1
    - at least the form and the parameters of the functions **must be defined** (e.g. LOWER(...))
  - **SQL/ADQL reserved keywords not updated**
    - new functions like LOWER are still listed as SQL reserved keywords
  - addition of UPPER(...)?

# □ C. Improve ADQL-2.1 - 2/2

- **Suggestion:**
  - **non-offical agreement on UDFs** (IVOA Note drafted by Jon J. and Markus D.)
    - *example: ivo\_healpix\_index, ivo\_apply\_pm, ivo\_match\_regex, ...*
    - propose an implementation in ADQL-Lib for these functions
    - ***gather interested people to discuss about that?***



# □ D. FAQ from TAP-Lib users

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# □ D. FAQ from TAP-Lib users

- **Done in ADQL-2.1:**
  - support of UNION
  - booleans
- **To think about in a next ADQL language version:**
  - support of arrays
  - sub-queries (returning 1 row) in SELECT and WHERE
  - ORDER BY on a column name (not an alias)
  - GROUP BY on an expression (e.g. math)
  - variable number of arguments in UDF (or ADQL functions)
  - ...

# □ Useful links



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<https://github.com/gmantele/vollt>



<http://cdsportal.u-strasbg.fr/taptuto/> (*replace taptuto by adqltuto or wwstuto in function of what you want*)

# □ Thank you for your attention



*Credit: David Troquier (aka troqman)*