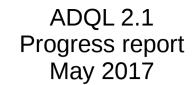


ADQL 2.1 Progress report May 2017





## Function name prefixes

Adding a short prefix to the names of our custom functions will make the names unique.

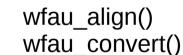
align() convert()



wfau\_align()
wfau convert()

Enables users to distinguish between different functions provided by different TAP services

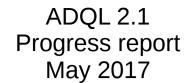
WFAU TAP service



GAVO TAP service



gavo\_align()
gavo\_convert()





## Function name prefixes

Special 'ivo' prefix reserved for functions that are part of an IVOA standard

For example - the following functions are defined in RegTAP

ivo\_nocasematch()
ivo\_hasword()
ivo\_hashlist\_has()
ivo\_string\_agg()



# Deprecating coord sys

Deprecating the coordinate system string param for the geometric functions.

Section on coordinate systems simplified to specify ICRS only.

Remove text referring to cartesian coordinate system.

no longer relevant.

String param removed (deprecated) from all of the geom functions.

circle('ICRS', point, radius)

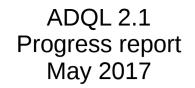


circle(point, radius)

box('ICRS', point, point)



box(point, point)





Removing the coordsys param causes problems for a few use cases.

These can be met with a small set of coordinate system specific functions.

circle('GALACTIC', float, float, float, float)



galactic\_circle(float, float, float, float)

box('EQUITORIAL', int, int, int, int)



equitorial\_box(int, int, int, int)



At the October 2016 interop we decided to delay version 2.1 until the BNF could be validated.

Since then, we have discovered:

- The BNF in the appendix is not BNF
- Strict machine readable BNF is not human friendly
- Defining things like 'not in the list of reserved words' is not possible in BNF





#### There is a solution

## **Parsing Expression Grammar (PEG)**

- Machine readable PEG is human friendly
- Defining things like 'not in the list of reserved words' is easy
- At least one group in the VO are already using it





### Proposed plan of action

- Complete version 2.1 with the current grammar
- Work together on the PEG grammar in Lyonetia GitHub project
  - Both the grammar itself and on validation tests for it
- PEG grammar will form the basis for next version of ADQL
  - Version 2.2 or 3.x depends on the level of changes