

ADQL-next discussions

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All topics

Optional vs
Mandatory
features

Geometry
expressions

MOC

INTERSECT

Interval

Array

Boolean

Binary

Unit syntax

Make some features mandatory #94

- LOWER
- UPPER
- ILIKE
- OFFSET
- . . .

Geometry expressions



- Use DALI shape for
 - Output *(how a geometry is serialized in a VOTable)*
 - Input *(how to express a geometry in an ObsCore table, in an uploaded table or in the query itself)*
- What about STC/s expressions?
 - Forbidden?
 - Deprecated/Supported for backward compatibility?

*MOC



- How to support MOC in ADQL?
 - Add `MOC(order, [geom|literal])` constructor?
 - Add `moc_agg(point|(ra,dec)|Healpix_index)` aggregation function?
 - Add `/moc` entry point?
 - What format for upload? FITS?
 - Allowed in columns?
 - Is it a geometry compatible with `CONTAINS`?
 - `xtype="moc"` already existing in WD-DALI-1.2
- Should we support only S_{patial} MOC?
 - For now?
 - In the future?

INTERSECT



- Compute the polygon representing the intersection of two geometries

Numeric value interval



- What should be its name? INTERVAL or RANGE?
 - DALI defines an interval datatype
 - Some DBMS like Postgres, defines a values interval as RANGE
- How should interval be managed in ADQL?
 - Input?
 - Output?
 - Constraint?

Array/Vector

- How to support arrays/vectors?
 - Operator [] or functions?
 - Additional functions? (e.g. *length/size*, *subarray*, ...)
- Some DBMS do not support this feature.
 - Should it be optional?

Boolean values

- Should boolean values be accepted?
- Should we support boolean functions instead of returning an integer? (e.g. `INTERSECTS`)
- How to map with VOTable/DALI?
 - `datatype="boolean" or xtype="boolean"`

Binary data

- Should it be supported?
- How?
 - Operators? Functions?
 - Operators precedence?
- Should hexadecimal values be numeric or binary?

Unit syntax



- Function `IN_UNIT` to convert values with unit into another unit
 - Not a very convenient syntax
 - *Example:* `SELECT IN_UNIT(42, 'mas/yr')`
- How to easily set unit on a constant value?
 - *Example:* `SELECT 42{mas/yr}`

Anything else?

