

# Table Access Protocol 1.1

- TAP-1.0 published in 2010
  - RESTful web service ~ in front of a RDBMS
  - support synchronous and asynchronous queries
  - support astronomy-specific content: spherical coordinates
  - support wide range of tabular data: self-describing, metadata-rich
  - support join with uploaded table(s)
  - allow for extra features beyond the spec
- many dependencies: many documents

# Table Access Protocol 1.1

- many implementations:
  - different programming languages
  - different libraries and frameworks created
  - different back-end systems
  - wide range of content
- many lessons learned
  - metadata
  - polymorphism
  - authentication & authorization

# PR-TAP-1.1

- many small editorial fixes, clarifications, and improved examples
- a little more editorial work to do...
- general move to get rid of extraneous content and refer to other standards
- PR published 2017-80-30
  - change to use VOTable + DALI type system

# PR-TAP-1.1

- proposal: add column value statistics to the tap\_schema
  - min/max, fill
  - median, quartiles
  - histograms
- no action: defer

# PR-TAP-1.1

- async proposal: require that services support PHASE=RUN in the job creation POST: immediate PENDING to QUEUED
  - services can allow it now
  - services must allow the normal 2-post create + execute (intent/interpretation)
- no action: defer

# PR-TAP-1.1

- tap\_schema.columns
  - use VOTable type in datatype
  - arraysize now character, matches VOTable
  - xtype column added in previous WD
- type system: <datatype,arraysize,xtype>
  - can use VOTable types in VOSI-tables output
  - simple & direct tap\_schema <-> VOTable mapping

# PR-TAP-1.1

- tap\_schema.columns
  - issue with arraysize/"size": NULL or 1 for scalar values?
  - differentiate between double and double[1]
  - TAP depends on DALI ...
  - DALI depends on VOTable ...
- Discuss?

# PR-TAP-1.1

- tap\_schema.schemas
  - add schema\_index (integer) column
  - service-suggested ordering
- added in dev version; included in PR



# PR-TAP-1.1

- PR ready for RFC?
  - plan: early November