



Astronomy ESFRI & Research Infrastructure Cluster  
ASTERICS - 653477



# The UCD helper dialog inside the TASMAN webapp

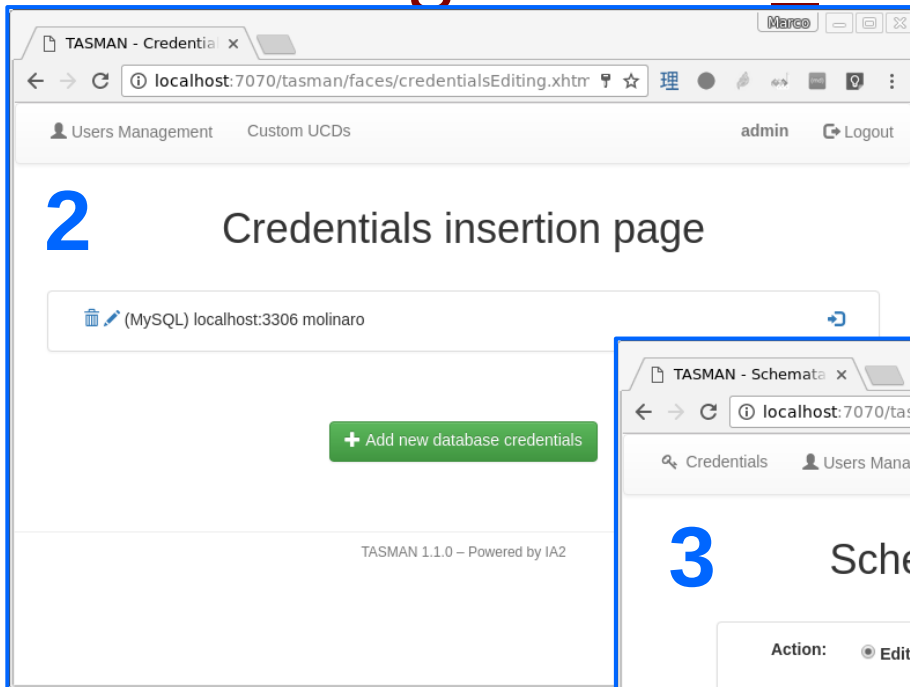
Marco Molinaro  
INAF – OATs



# OUTLINE

- **TASMAN (TAP\_SCHEMA Manager)**
  - UCD dialog
  - VOUnits check
    - How it works
- **Points for discussion**
  - Derived from TASMAN development/usage
  - Namespaces in UCDs
    - Custom UCDs
  - List maintenance
  - Service availability

# Accessing the TAP\_SCHEMA



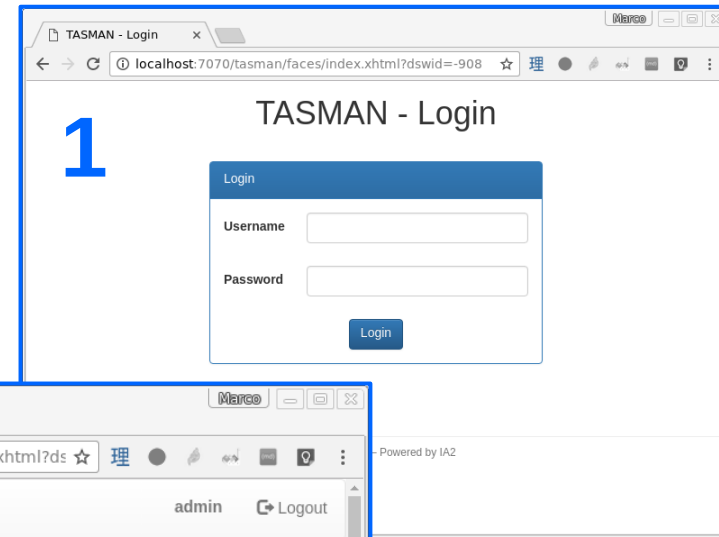
2 Credentials insertion page

Users Management Custom UCDS admin Logout

(MySQL) localhost:3306 molinaro

+ Add new database credentials

TASMAN 1.1.0 - Powered by IA2



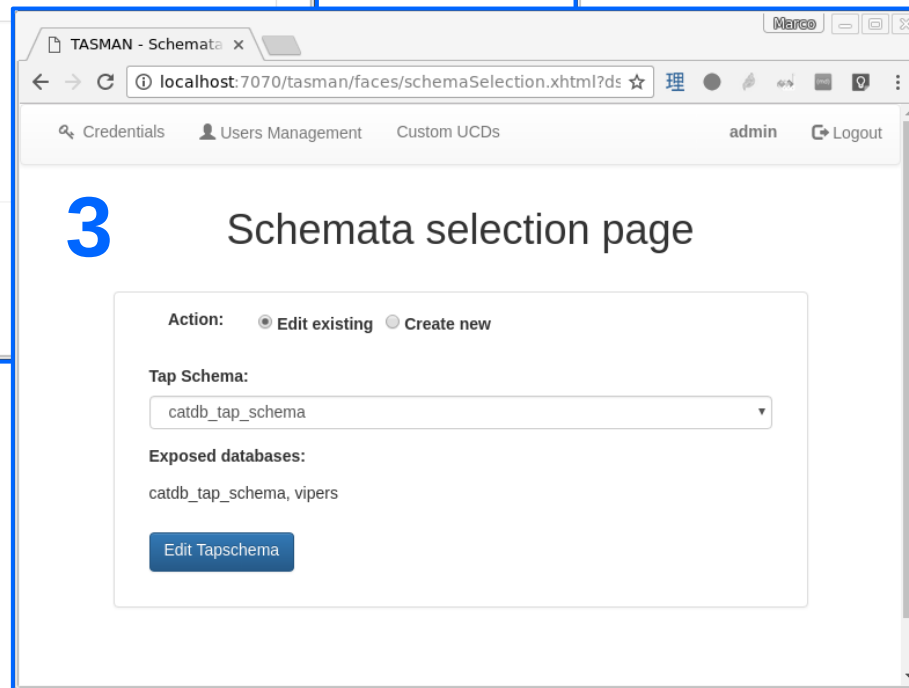
1 TASMAn - Login

Username

Password

Login

Powered by IA2



3 Schemata selection page

Credentials Users Management Custom UCDS admin Logout

Action:  Edit existing  Create new

Tap Schema:  
catdb\_tap\_schema

Exposed databases:  
catdb\_tap\_schema, vipers

Edit Tapschema

# TAP SCHEMA (column) operations

Editing catdb\_tap\_schema

Schema utype:  Schema description:

Table utype:  Table description:

Columns:

- alpha
- CDELTA1
- CDELTA2
- CRPIX1
- CRPIX2
- CRVAL1
- CRVAL2
- CTYPE1
- CTYPE2
- CUNIT1

alpha

Datatype: adql:DOUBLE Size: 0

STD  Principal

UType:

UCD:

Unit:

Description:

Unit: km.s\*\*-1

- all units recognised ✓
- all units recommended ✓
- all constraints satisfied ✓

**“unity” lib**

VOUnits

# UCD dialog: suggest

UCD Search Dialog

Search by description
  Manual insertion

Description:

main galactic latitude

Selected UCD: pos.galactic.lat;meta.main

Other suggested UCD:

Word	Definition	Flag
<input type="checkbox"/> pos.galactic.lat	Latitude in galactic coordinates	Q
<input checked="" type="checkbox"/> pos.earth.lat	Latitude on Earth	Q
<input type="checkbox"/> pos.galactic.lon	Longitude in galactic coordinates	Q
<input checked="" type="checkbox"/> meta.main	Main value of something	S

[Rebuild UCDS](#)

Close [Save changes](#)

Selectable UCDS:

pos.earth.lat  
pos.earth.lat;meta.main

Other suggested UCD:

Word	Definition	Flag
<input type="checkbox"/> pos.galactic.lat	Latitude in galactic coordinates	Q
<input checked="" type="checkbox"/> pos.earth.lat	Latitude on Earth	Q
<input type="checkbox"/> pos.galactic.lon	Longitude in galactic coordinates	Q
<input checked="" type="checkbox"/> meta.main	Main value of something	S

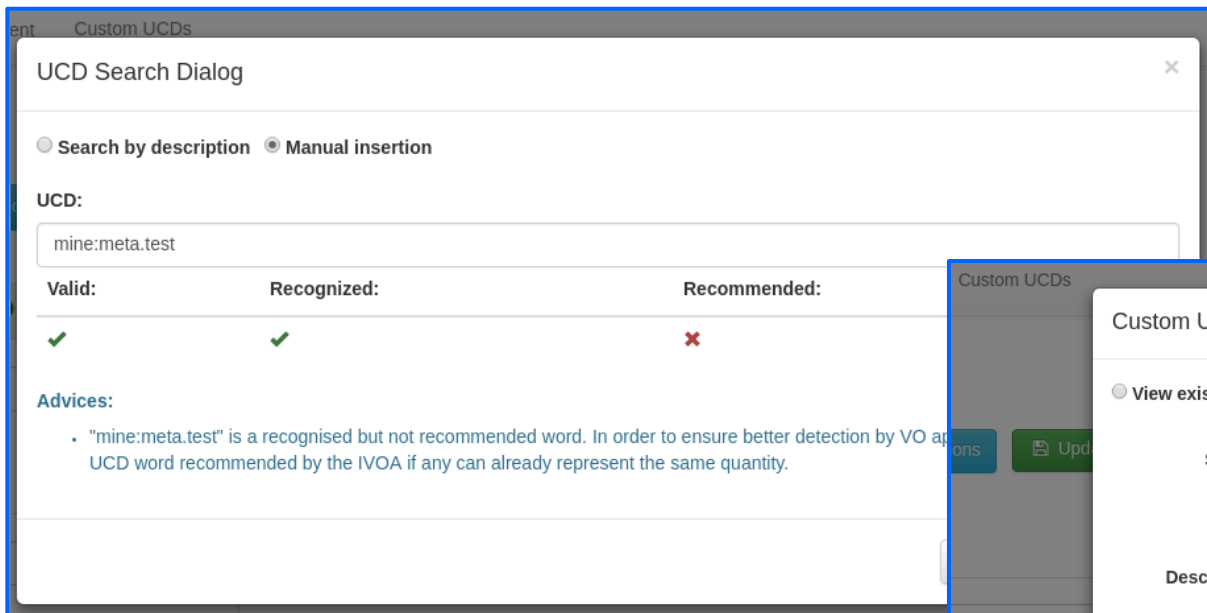
[Rebuild UCDS](#)

Description:

main galactic latitude

**IA2 ReST**  
**over**  
**CDS SOAP**  
**services**

# UCD dialog: manual/custom



UCD Search Dialog

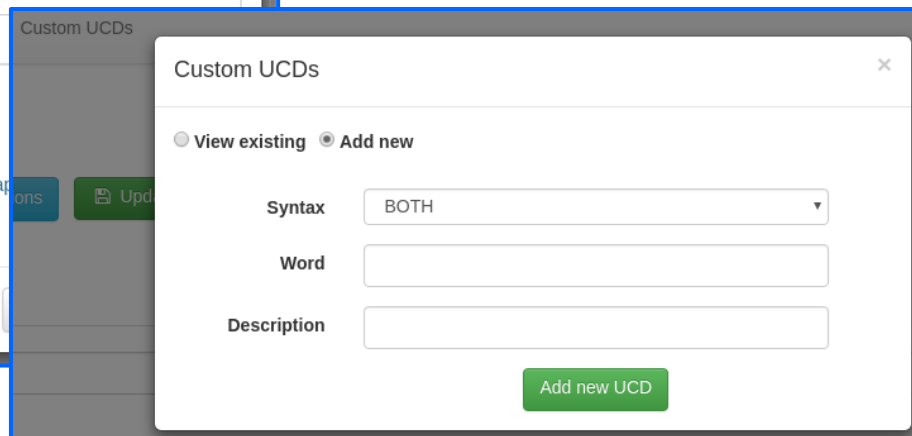
Search by description  Manual insertion

UCD:  
mine:meta.test

Valid:	Recognized:	Recommended:
✓	✓	✗

Advices:

- "mine:meta.test" is a recognised but not recommended word. In order to ensure better detection by VO applications, a UCD word recommended by the IVOA if any can already represent the same quantity.



Custom UCDs

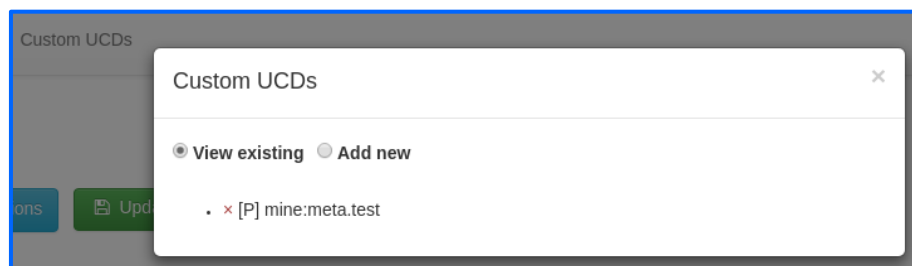
View existing  Add new

Syntax: BOTH

Word:

Description:

Add new UCD



Custom UCDs

View existing  Add new

- ✗ [P] mine:meta.test

UCD validation  
"ucidy" lib

# Custom UCDs & namespaces

- Default (implied) ivoa: namespace
- Custom (discouraged) namespace (e.g. my:)
- Combining: what if/how to
  - pos.eq.ra;my:meta.test
  - my:meta.new;ivoa:em.opt.V
- Should the specification be more explicit than
  - “The use of namespaces, indicated by the presence of a colon in the word, is possible, but should be avoided as far as possible.”

?

# UCD List Maintenance

- Work In Progress...
- Could be useful to have
  - 2 lists
    - 1 RECOMMENDED
    - 1 Draft/Proposed
  - Easily consumable
    - E | phot.flux | Photon flux
    - ...
    - [ {“flag” : “E”, “word” : “phot.flux”, “description” : “Photon flux”}, { ... }, ... ]
  - Always available
    - May require CVS on the draft list?



# UCD Services Availability

- Currently using a ReST wrapper service on top of
  - <http://cdsws.u-strasbg.fr/axis/services/UCD>
    - Hi there, this is an AXIS service!
- described at
  - <http://cds.u-strasbg.fr/resources/doku.php?id=ucd>
    - Assign
    - Suggest
    - Explain
    - Validate
- Service update/upgrade?
- Mirroring?

# CREDITS

- Sonia Zorba: main tool developer
- VOUnits validation: Norman Gray's unity
  - <https://bitbucket.org/nxg/unity>
- UCD validation: Grégory Mantelet's ucidy
  - <https://github.com/gmantele/ucidy>
- UCDs interactively assigned using
  - CDS UCD SOAP services
    - More or less following what happens on page
      - <http://cds.u-strasbg.fr/UCD/cgi-bin/descr2ucd>