

# VO-Dance

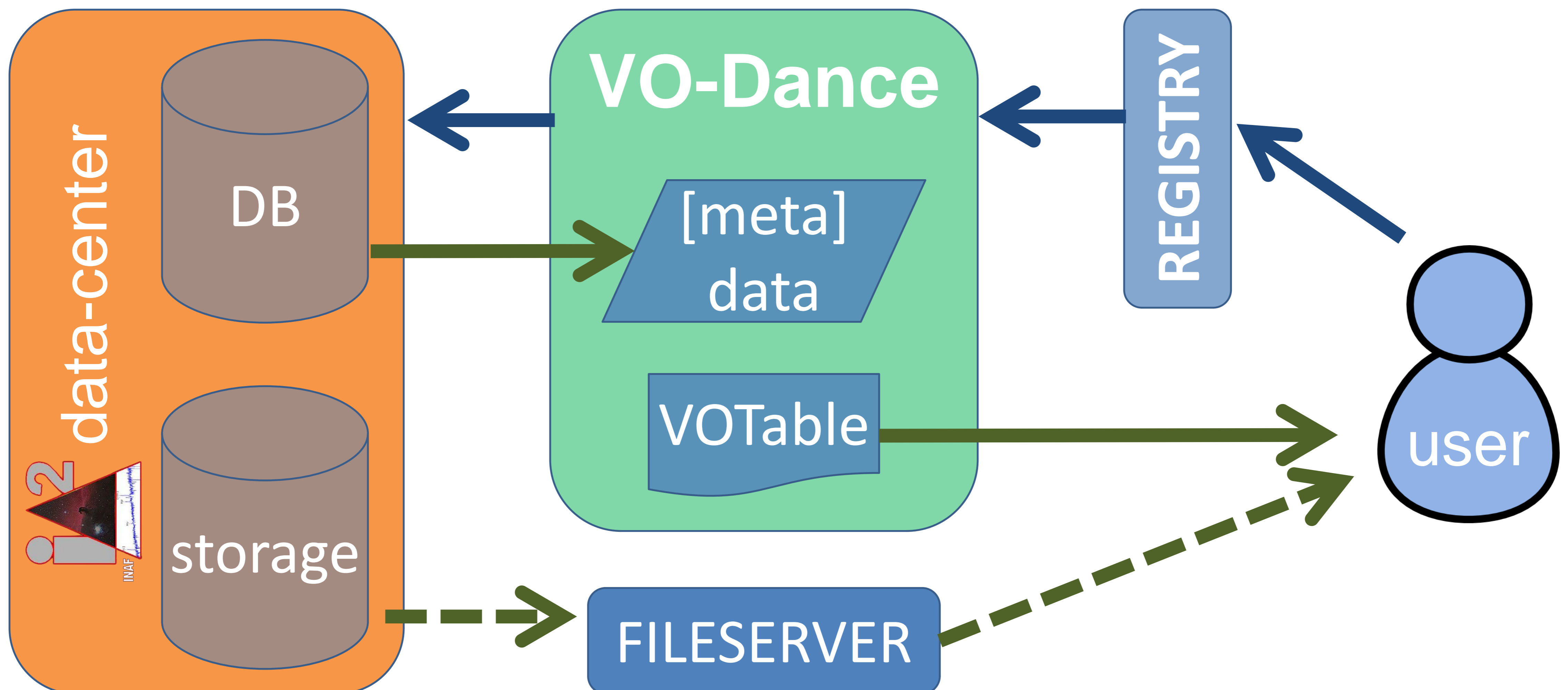
## Astrophysical data from your DB to the VO

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To let the Virtual Observatory (VO) grow its community of end users, which means also new use cases to improve its completeness and usability, new (even if already archived) astrophysical data must be taken inside the VO interoperable system of resources. This means that small to large data centers have to find an easy way to publish their data assuring compatibility with the International Virtual Observatory Alliance (IVOA) protocols and standards.

Here we present the IA2 (Italian Astronomical Archive) example to deliver resources to the VO through VO-Dance, a tool for rapid Virtual Observatory compliant services deployment.



VO-Dance plays the role of a generic transformation layer, between the data center architecture and the VO compliant request by the user, exposing resources' endpoints (on a 1:1 bases) that catch the query, then translating it to be understood by the archive, retrieving the results (in the form of metadata or data) and finally serving the answer in VO compliant form to the user. Eventually (on user's request based upon the VOTable output) data is served to the user by a FileServer application.

**VO-Dance** application is composed by:

- Java web application: the engine;
- Internal DB: translation information repository;
- Administration interface

and is (fairly) **platform and DBMS independent** (both for internal and archive DB). At present IA2 data center uses VO-Dance to serve MySQL and Oracle stored metadata.

The application can run on a server different both from the DB server's one and the storage's one. An example is the TIRGO-ARNICA SIAP resource which DB is located in Trieste and the storage in Arcetri (Firenze).

At present it serves **SIAP** and **Cone Search** resources, the **SSAP** capability is under development and **TAP** will be the next protocol to be added.

**IA2** deployed 19 VO resources using VO-Dance:

- 4 SIAP services:
  - 3 TNG imaging services (OIG, NICS and LRS instruments)
  - 1 TIRGO/ARNICA IR imaging archive
- 15 Cone Search services:
  - 11 for the ERCSC Planck data release
  - 4 from phot.redshifts for candidates QSOs and phot. galaxies

**Surf!** <http://ia2.oats.inaf.it>

**VO-Dance**

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