Vespa Client

Cyril Chauvin, Pierre Le Sidaner

CONTEXT

 - Vespa Client is the reference portal for Europlanet Project

- **May discover and give access to data**
- **May search for all types of data**
- **Use TAP + EPN-CORE**
- **Planetary science ++ (helio physic, plasma physic)**

Why we are still there

- **- We may mix Cali flower and carrot data in the query result**

- **- In one year we have jump from 20 to 40 services.**

- **- Now time series, spectral cubes, dynamic spectrum, crater list, OGC services, catalogs, images ... simulations**

- **- Ongoing : movies, mineral spectrum and sample databases ...**

Query result on Mars

AMDA - Planetary and heliophysics plasma data at CDPP/AMDA 94677 results	▤	◉	⊕	🔍
APIS - Auroral Planetary Imaging and Spectroscopy 371 results	▤	◉	⊕	🔍
BDIP - Base de Données d'Images Planétaires 8896 results	▤	◉	⊕	🔍
CRISM - CRISM georeferenced cubes 20722 results	▤	◉	⊕	🔍
hisaki - Hisaki Planetary Database 142 results	▤	◉	⊕	🔍
hst_planeto - Planetary data from the Hubble Space Telescope 6034 results	▤	◉	⊕	🔍
IMPEx_EPN20 - IMPEx Simulation Data 1253 results	▤	◉	⊕	🔍
Mars_Craters - Martian Impact Craters 384344 results	▤	◉	⊕	🔍
MCD - EPN-TAP access to the MCD database 3897543 results	▤	◉	⊕	🔍
omega_cubes - L3 Omega Cubes from PSUP 7038 results	▤	◉	⊕	🔍
omega_maps - L3 Omega Maps from PSUP 10 results	▤	◉	⊕	🔍
planets - Main characteristics of solar system planets 1 result	▤	◉	⊕	🔍
PSA - ESA Planetary Science Archive 610611 results	▤	◉	⊕	🔍
PSWS Transplanet - Magnetosphere Ionosphere coupling simulation runs 607 results	▤	◉	⊕	🔍
pvol - PVOL 654 results	▤	◉	⊕	🔍
spectro_planets - Spectra of planets and satellites 2 results	▤	◉	⊕	🔍
SPICAM - SPICAM Mars Atmospheric Vertical Distribution 2302 results	▤	◉	⊕	🔍
USGS_WMS - USGS planetary maps 8 results	▤	◉	⊕	🔍

Why this presentation ?

- Because we need advises
  - We face many different communities with different habits and data formats.
  - We have to keep the portal simple and intuitive.
  - Data are more and more difficult to present everytime
  - We have played with IVOA standards at the limit to handle all situations.
  - We think large part of the problems we face will come to astronomical data soon or later

Example of limits

- We use extension of Obs-Tap so we can access data via access_url or catalog like tap

- we use datalink so we can give access to data information (PDS labels) or data services ephemeris or simulations. Please include mime type information of service return ?

- we use samp for sending GeoJson, DAS2 data.

Portal difficulties

- present more than 1000 heterogeneous data
- large list of non standard parameters in web page
- we are not good at web ergonomic
- how to be intuitive for such a large community

Conclusion

- We have definitely made a good choice to use IVOA infrastructure and protocols.

- It still not easy to extend what protocol are supposed to do.

- we have to improve the portal to better hide the complexity.

- Out of the portal try to request EPN-TAP services using rr-registry in astropy or pyvo ?