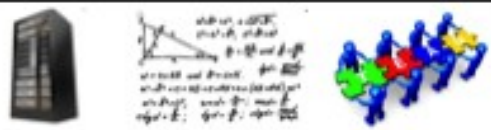
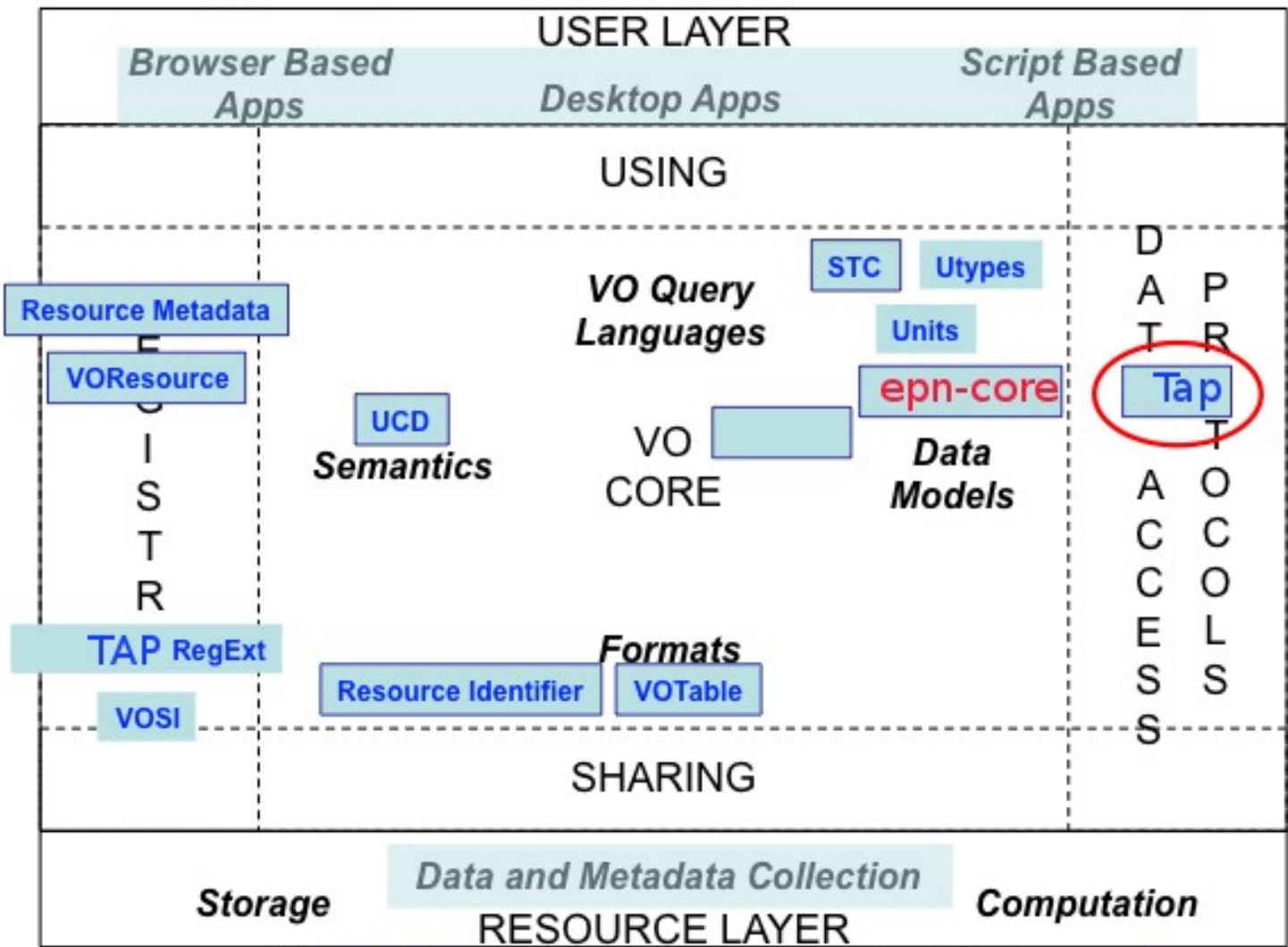


The Europlanet VO environment

<http://voparis-europlanet.obspm.fr/>

Cyril Chauvin
Ivan Zolotukhin
Renaud Savalle
Pierre Le Sidaner
Jonathan Normand
Observatoire de Paris



DAL is based on TAP using DaCHS

DM Core is called epn-core

Close to obs-core with 19 mandatory parameters:

- Resource Type
- Data Product Type
- Target Name
- Target Class
- Time min/max
- Time Sampling Step
- Exposure Time
- Spectral Range
- Spectral Sampling Step
- Spectral Resolution
- Spatial Coordinates (c1,c2,c3)
- Spatial Resolution
- Spatial Frame Type
- Incidence Angle
- Emergence Angle
- Phase Angle
- Instrument Host Name
- Instrument Name
- Measurement Type

VO client

- Queries the VO registry (uses VO-Paris registry)

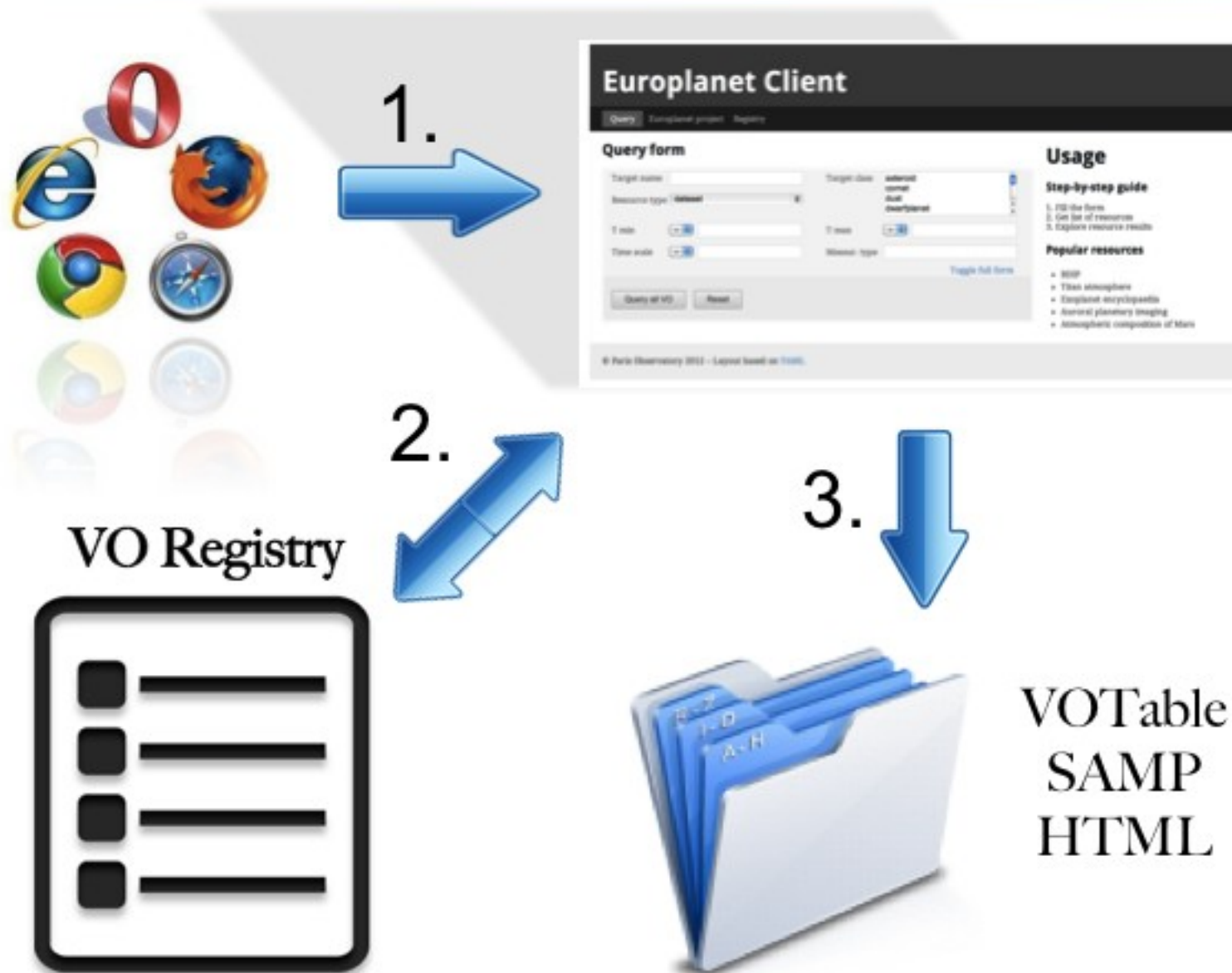
As TAP Regext is not yet implemented:

Select TAP service where id contain “epn_%”

Find schema using shortname in VOResource

- Uses all EPN set of parameters to make standardized query
- Python application (Django)
- Parallel AJAX query to multiple resources (“Query all VO” button)
- Web SAMP Profile (samp.js)

VO client



Planetary file format

- No standard such as astronomical FITS
=> use of PDS + ASCII files**
- Need converter to use VO client
not easy to read PDS => use of IDL library**
- Need to convert to OGC compatible
format GEOTIFF**

Use of UWS service/client

- ❑ **A way to use IDL/GDL from a separate program**
- ❑ **Use of interface done for UWS 1.0 and the associated infrastructure**
- ❑ **Use of generic client to access, submit job and send results to Aladin**

Service description

Use of WADL Web Application Description Language

Describe method (always the same per UWS1.0)

Describe Input/Output parameters in a simple way

Example at <http://voparis-uws.obspm.fr/wadl-v1.0/>

For transforming PDS images to FITS with WCS

Entry parameters are defined like:

```
<param style="query" name="pds" type="xs:anyURI" required="true">  
<doc>PDS file (IMG extension)</doc>  
</param>  
<param style="query" name="geo" type="xs:anyURI" required="true">  
<doc>PDS file (GEO extension)</doc>  
</param>
```

Output parameters like:

```
<option value="0" mediaType="image/fits"/>
```


UWS client by R. Haigron

Work on java 7.

Ask R. Haigron for the jar, code can be shared

Configuration Services

	Job	Status
Edit Quit	5698c59b-8830-4cb4-eded-ce2ae282c224	ERROR
euoplanet	9e944581-42fe-07a4-8136-f9c0a5378aa7	COMPLETED
euoplanet	5158fa8a-787b-3994-7106-bb0a59d10416	COMPLETED
euoplanet	e5e7d777-bb7e-d8d4-2da1-e169751de932	COMPLETED

Delete

Service:
 Id:
 Phase:
 Start time:
 End time:
 Duration time:

UWS client by R. Haigron

Configuration:

- Provide the WADL description of your services
- Provide your favourite VO SAMP-compatible application to display the data

WADL files list

Name	File
wcscheck	/home/lesidaner/outils_vo/uwste...
jonathan	/home/lesidaner/outils_vo/uwste...
asposfull	/home/lesidaner/outils_vo/aspos...
astrometry	/home/lesidaner/outils_vo/wadl/a...
astrocheck	/home/lesidaner/outils_vo/wadl/a...
aspos	/home/lesidaner/outils_vo/wadl/a...
euoplanet	/home/lesidaner/outils_vo/wadl/p...

Image viewer:

Table viewer:

Spectrum viewer:

(*) pds

(*) geo

Configuration Services

Service	Job	Status
astrometry	5698c59b-8830-4cb4-eded-ce2ae282c224	<input type="button" value="ERROR"/>
euoplanet	9e944581-42fe-07a4-8136-f9c0a5378aa7	<input type="button" value="COMPLETED"/>
euoplanet	5158fa8a-787b-3994-7106-bb0a59d10416	<input type="button" value="COMPLETED"/>
euoplanet	e5e7d777-bb7e-d8d4-2da1-e169751de932	<input type="button" value="COMPLETED"/>
euoplanet	d81675d6-47fa-5414-19c8-ce6422036784	<input type="button" value="COMPLETED"/>

Service:
 Id:
 Phase:
 Start time:
 End time:
 Duration time:

Parameters
 pds
 geo: <http://voparis-uws.obspm.fr/uws-v1.0/pdstoaladin/d81675d6-47fa-5414-19c8-ce6422036784/parameters/geo>

Results

Aladin v7.5

Fichier Edition Image Catalogue Graphique Outil Vue Interop Aide

Position Référentiel ICRS

Allsky opt Allsky IR DSS Simbad NED PPMX 2MASS

lunefull.png

Msc img

select
 dépl.
 zoom
 dist
 phot
 dessin
 marq
 filtre
 corr.
 x-y
 rvb
 assoc
 coupe
 cont
 cont
 pixel
 prop
 X
 suppr

Msc img
 Drawing
 test8_astrofits
 test7_astrofits
 test6_astrofits
 test5_astrofits
 test4_astrofits
 test3_astrofits
 test2_astrofits
 test_astrofits
 lunefull.png

taille - +
 op... - +
 zoom - +

grille cigne nord multivues unif.

[Plane @11] - Msc img

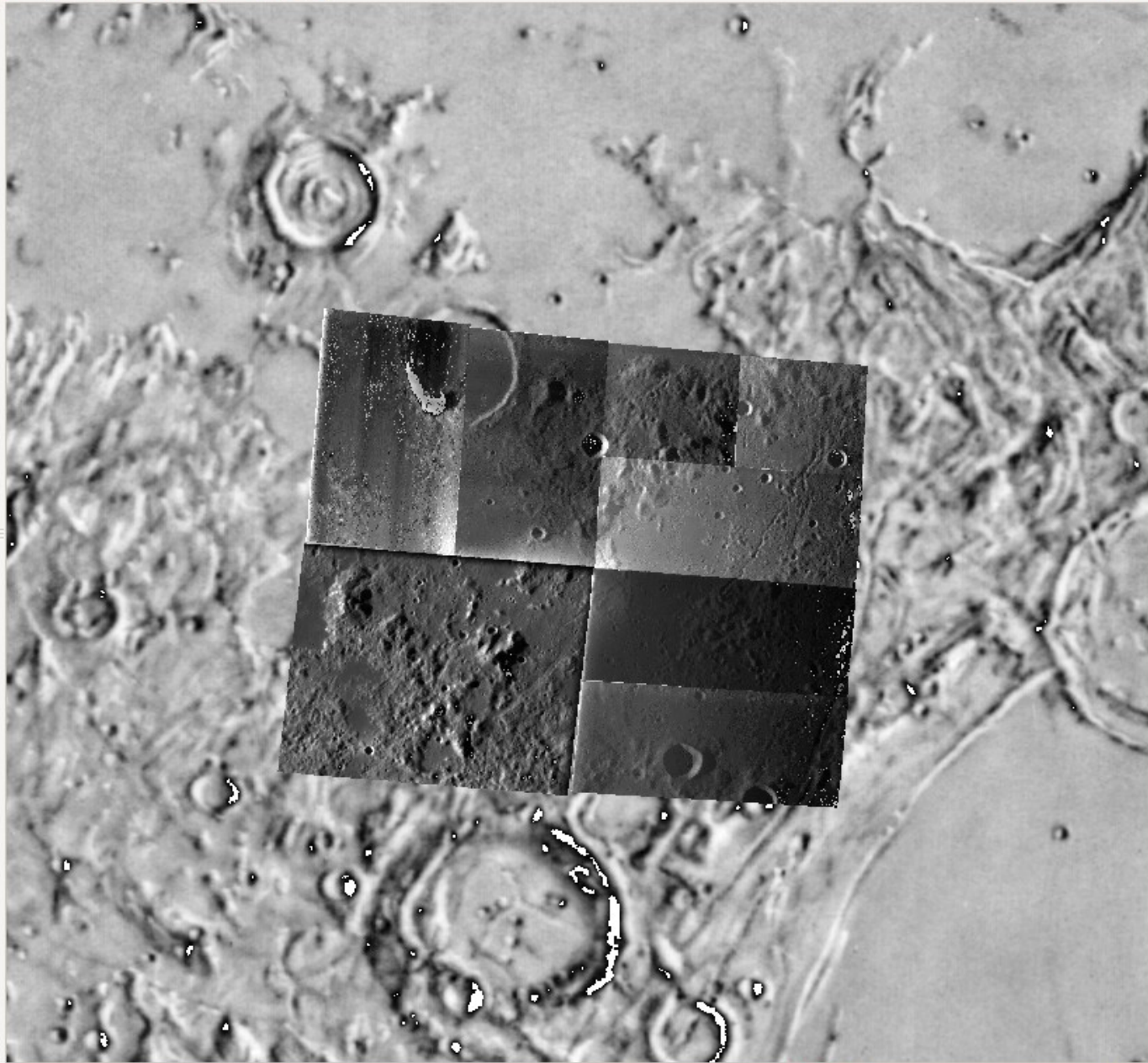
Chercher

0 sel / 0 src 53Mo



Couches

- lune8
- lune7
- lune6
- lune5
- lune4
- lune3
- lune2
- lune
- Lune_map



Contrôle de l'ordre de rendu des couches

Conclusion

- ◆ Parts of the VO environment can easily be reused for other disciplines
- ◆ Tools and services can also be reused
- ◆ Specific developments for planetology, plasma, solar physic and others project should also be of great interest for the IVOA.