

# PRESENTATION DE VOPDC Central

**21/11/2011**

**Pierre Le Sidaner, Jonathan Normand, Renaud Savalle, Albert Shih et Ivan  
Zolotukhin**

Equite

Data centre

DCP

Service UWS

Registry.

FP7

Conclusion

## **P. Le Sidaner Responsable projet**

**Jonathan Normand : développement responsable portail et services, aide à la mise en place de service**

**Renaud Savalle : Suivi de de l'état des services et contenu de registries, maintien de l'application Exoplanet**

**Albert Shih : responsable de l'Architecture physique, stockage et services, liaison avec le calcul, mise en place et maintien d'outils collaboratifs et organisationnels**

**Ivan Zolotukhin : Post Doc, Utilisations scientifique de l'OV, Développement d'une nouvelle version d'exoplanet. Développement et mise en place de Tutoriel VO pour la science.**

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12/03/2008

**Architecture Multi site : services et données répliqués.  
Construit autour de machines virtuelles sous FreeBSD et  
Debian**

**9 serveur virtuel à Paris**

**Serveur de base de données avec en plus Galmer et Skybot**

**16 serveurs virtuels à Meudon**

**Stockage mixte classique et virtualisé via Active Circle  
Inclus la gestion des bandes**

**Inclus le monitoring (Nagios) , l'agenda partagés d'équipe, le  
twiki, les serveurs de projets pour VAMDC et Europlanet.**

**Gestion des contenus à travers SVN  
Sauvegarde quotidienne.**

**Lien directe avec le cluster de l'Observatoire pour le  
lancement de job, ce qui sépare calcul / services / stockage 3**

## Name resolver

## VO-Paris Data Centre

### About

The VO-Paris Data Centre project aims at providing VO access to its databases resources, at participating to international standards developments, at implementing VO compliant simulation codes, data visualization and analysis softwares.

[Learn more...](#)

### Data Discovery Portal

The VO-Paris Data Centre Portal provides an easy way to access to all VO data available at Paris Observatory.

### Getting Started

Use the query form on the right.



Query **basic**

Target name or position \*  
 [?]

Size (default value: 1° x 1°)  
 [?]

Band  
 [?]

Time (default value: now)  
 [?]

### Projects

#### WebSampConnector

A client toolkit that enables Web page based astronomy service to interoperate and communicate with VO softwares (no more save and load or cut and paste into the VO world!).

[WebSampConnector page...](#)

#### VO-Paris PHP SDK

An implementation of IVOA VOEvent 1.1 and VOTable 1.x scheme in PHP. A partial implementation of RSS 2.0 schema is also provided.

[SDK page...](#)

#### Euro3D Client

An open-source Virtual Observatory tool which allows to deal with datasets in the Euro3D FITS format.

[Euro3D Client page...](#)

[Visit our projects page...](#)

## Data Discovery

### Cone Search Services (scs)

✓ **Extrasolar Planets Encyclopaedia**

<http://voparis-srv.obspm.fr/srv/scs-exoplanet.php>

VO-compliant and interactive encyclopaedia of extrasolar planets.

[votable](#) [html](#)

✓ **Five Supernova Surveys Galaxies**

<http://voparis-srv.obspm.fr/srv/scs-fss.php>

VO-compliant publication of the properties of the 3838 galaxies that... [Read more](#)

[votable](#) [html](#)

### Image Services (sia)

✓ **DFBS - Digitized First Byurakan Survey**

<http://voparis-srv.obspm.fr/srv/sia-dfbs.php>

The First Byurakan Survey (FBS) is the largest and the first... [Read more](#)

[votable](#) [html](#)

✓ **VOPSAT - ESO-R**

[http://voparis-srv.obspm.fr/srv/sia-vopsat\\_esor.php](http://voparis-srv.obspm.fr/srv/sia-vopsat_esor.php)

VO-compliant publication of Schmidt survey ESO-R of the southern sky... [Read more](#)

[votable](#) [html](#)

✓ **VOPSAT - POSS1-E**

[http://voparis-srv.obspm.fr/srv/sia-vopsat\\_posse.php](http://voparis-srv.obspm.fr/srv/sia-vopsat_posse.php)

VO-compliant publication of Schmidt survey POSS1-E of the southern... [Read more](#)

[votable](#) [html](#)

✓ **VOPSAT - SRC-J**

[http://voparis-srv.obspm.fr/srv/sia-vopsat\\_srcj.php](http://voparis-srv.obspm.fr/srv/sia-vopsat_srcj.php)

VO-compliant publication of Schmidt survey SRC-J of the southern sky... [Read more](#)

[votable](#) [html](#)

### Spectrum Services (ssa)

✓ **FUSE - Far Ultra Violet Spectroscopic Explorer**

<http://voparis-srv.obspm.fr/srv/ssa-fuse.php>

The FUSE Archive contains observations performed by FUSE satellite.... [Read more](#)

[votable](#) [html](#)

✓ **GIRAFFE**

<http://voparis-srv.obspm.fr/srv/ssa-giraffe.php>

The GIRAFFE Archive contains all release observations performed with... [Read more](#)

[votable](#) [html](#)

✓ **HESS - High Energy Stereoscopic System**

[http://voparis-srv.obspm.fr/srv/ssa-hess\\_spectrum.php](http://voparis-srv.obspm.fr/srv/ssa-hess_spectrum.php)

H.E.S.S. is a system of Imaging Atmospheric Cherenkov Telescopes that... [Read more](#)

[votable](#) [html](#)

✓ **HIG - HI Extragalactic Database**

<http://voparis-srv.obspm.fr/srv/ssa-h1g.php>

HI Extragalactic database is a collection of calibrated 21cm hydrogen... [Read more](#)

[votable](#) [html](#)

#### Request Summary

- Target: ngc4945
- Size: 1,1
- Time: 2455876.1210995372

#### Query [advanced](#)

Target name or position \*

[\[?\]](#)

#### Resource status

- ✓ Results found
- ✓ No results found
- ⚠ Resource error

#### VO Applications

Launch Java webstart applications

- [Aladin](#)
- [Topcat](#)
- [Splat](#)
- [VOSpec](#)

# Result of a SIA query

## VOPSAT - ESO-R (1)

### Input parameters

- POS: 196.3636625,-49.4679
- SIZE: 1,1
- FORMAT: all
- INTERSECT: OVERLAPS

### Constant fields

- Instrument: Photographic Focus / MAMA
- Telescope: ESO Schmidt
- BandPass: R (IIIa-F/RG630)
- BandPassLo: 6300e-10
- BandPassHi: 6900e-10
- Format: image/fits
- CoordSystem: ICRS
- Equinox: 2000
- Projection: TAN
- BandPassUnit: m

### WebSampConnector

Before connecting, please launch a SAMP hub and one or more VO applications.

[Connect](#)

Image Title	Date	RA	DEC	NAXES	NAXIS	SCALE	Exposure Time	CRPIX	File	File size	CRVAL	CD
--	mjd	deg	deg	--	pix x pix	deg/pix	s	pix	--	bytes	--	--
esor/219	1982-03-20T17:44:00	196°22'11.54"	-49°28'13.31"	2	5386 5374	0.00018759878 0.00018759878	3600	4819 -430.5		57891608	195.7561642 -50.05680497	-0.00018759878 0 0 0.00018759878


# VOPSAT - ESO-R (1)

## Input parameters

- POS: 196.3636625,-49.4679
- SIZE: 1,1
- FORMAT: all
- INTERSECT: OVERLAPS

## Constant fields

- Instrument: Photographic Focus / MAMA
- Telescope: ESO Schmidt
- BandPass: R (IIIa-F/RG630)
- BandPassLo: 6300e-10
- BandPassHi: 6900e-10

**WebSampConnector** 

Before connecting, please launch a SAMP hub and one or more VO applications.

[Disconnect](#)

**Image Title**

esor/219

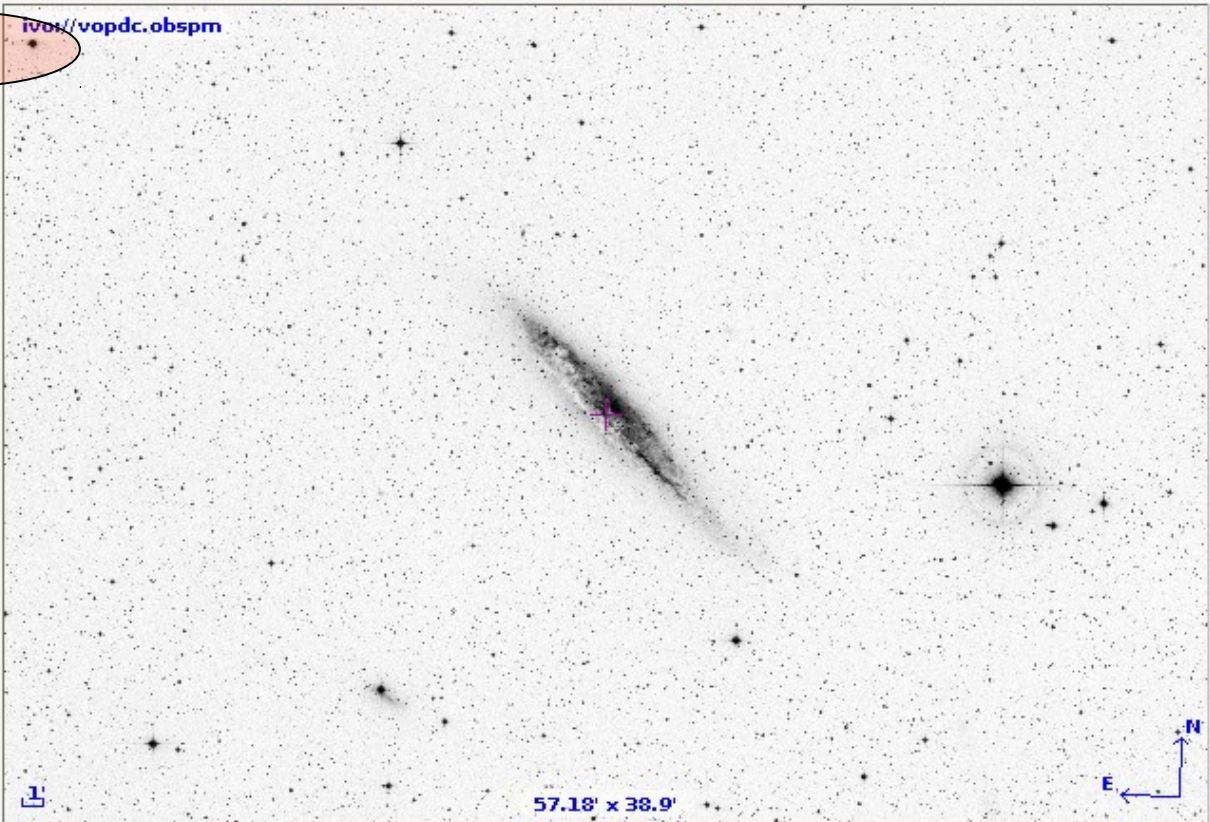
Aladin v7.0

File Edit Image Catalog Overlay Tool View Interop Help

Location Provide an object, coordinates, an URL or a filename Clear Frame ICRS

Allsky opt Allsky IR DSS Simbad NED PPMX 2MASS

ivo://vopdc.obsprn



57.18' x 38.9'

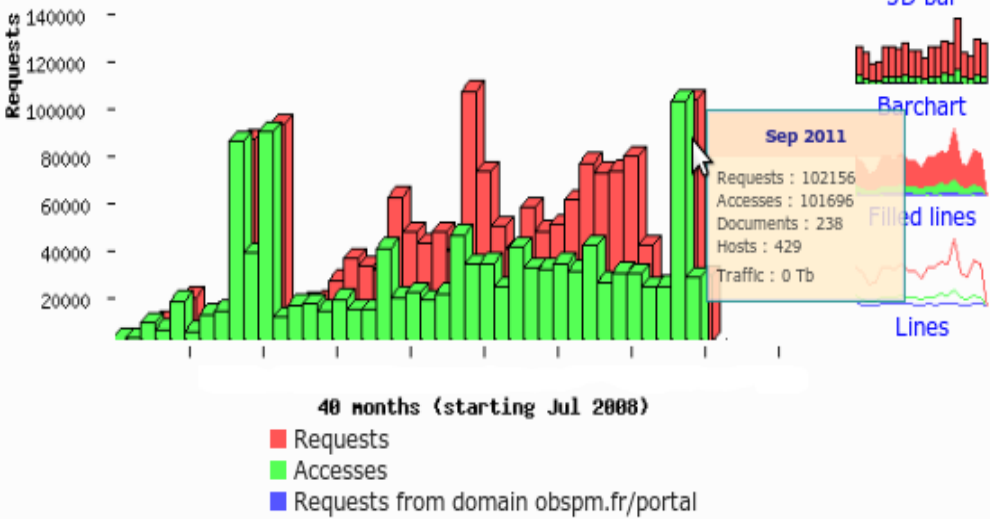
1.01° x 1.008°

Search

grid north multiview match

0 sel / 0 src 113Mb

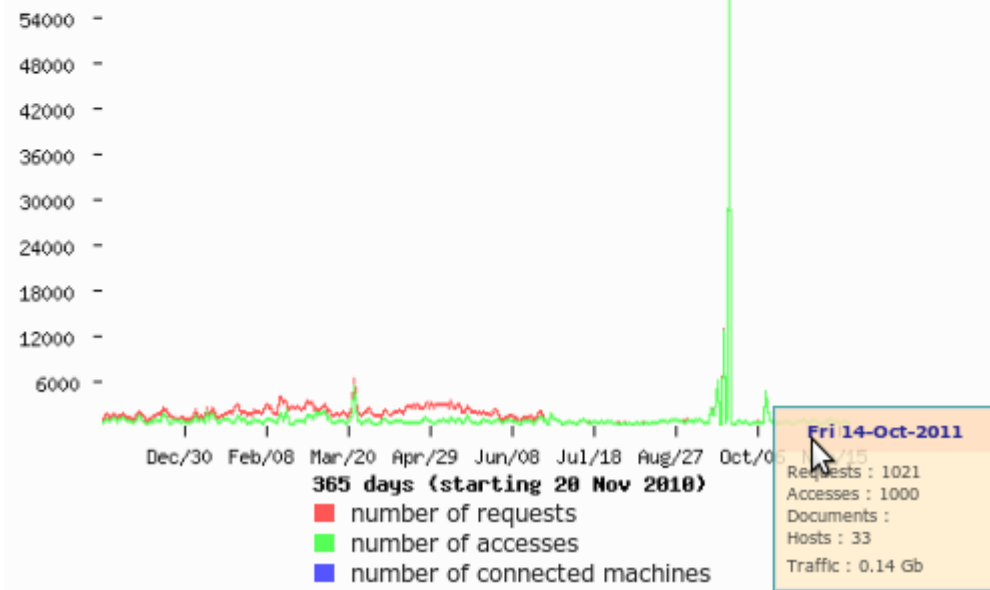
878 0 0  
9878



Summary : Sat 20 Nov 2010 / Sat 19 Nov 2011

	Sat 20 Nov 2010 / Sat 19 Nov 2011
Requests	657569
Accesses	419245
Different accesses	12496
Documents	215179
Scripts	274920
Total traffic	1066.7 Gb
Traffic accesses	12.2 Gb
Hosts	4427
New hosts	3867

- DCP
- Service UWS
- Registry.
- FP7
- Conclusion
- 12/03/2008







Countries	Requests	Percentage	Accesses	Percentage
United States	440780	67.0 %	208872	49.8 %
European Union	97356	14.8 %	96604	23.0 %
Spain	54556	8.3 %	54485	13.0 %
Japan	17046	2.6 %	16824	4.0 %
France	10968	1.7 %	8796	2.1 %
Germany	4522	0.7 %	4322	1.0 %
Russian Federation	3400	0.5 %	1597	0.4 %
Ukraine	2310	0.4 %	1979	0.5 %
Italy	2191	0.3 %	2122	0.5 %
Great Britain	2015	0.3 %	1924	0.5 %
Netherlands	1810	0.3 %	1672	0.4 %
Serbia	1802	0.3 %	1802	0.4 %
Asia-Pacific	1727	0.3 %	1619	0.4 %
South Korea	1519	0.2 %	1518	0.4 %
Australia	1439	0.2 %	1413	0.3 %
Poland	1431	0.2 %	1430	0.3 %
Chile	1196	0.2 %	1181	0.3 %
Mexico	1121	0.2 %	1112	0.3 %
India	940	0.1 %	884	0.2 %
Brazil	917	0.1 %	901	0.2 %
Austria	708	0.1 %	686	0.2 %
Argentina	646	0.1 %	637	0.2 %
Roumania	619	0.1 %	594	0.1 %
Canada	607	0.1 %	574	0.1 %
Lithuania	581	0.1 %	574	0.1 %
China	491	0.1 %	440	0.1 %
Portugal	451	0.1 %	422	0.1 %
Taiwan	411	0.1 %	405	0.1 %
Former Czechoslovakia	351	0.1 %	351	0.1 %
Colombia	298	0.0 %	298	0.1 %
Belgium	284	0.0 %	284	0.1 %
Greece	284	0.0 %	273	0.1 %
Czech Republic	257	0.0 %	242	0.1 %
Bulgaria	228	0.0 %	228	0.1 %
Puerto Rico	210	0.0 %	210	0.1 %
? Unknown (zz)	192	0.0 %	192	0.0 %
Switzerland	167	0.0 %	167	0.0 %
Sweden	136	0.0 %	135	0.0 %

services.

Equite

Data centre

DCP

Service UWS

Registry.

FP7

Conclusion

12/03/2008

# Preservation de données



**Travail initié au sein du CCT PMI du CNES**  
**Normalisation à travers OAIS**  
**Participation au DCP de l'IVOA**  
**Présentation au CNES et à PV2011 de l'Archive VOPDC**

Equite

Data centre

DCP

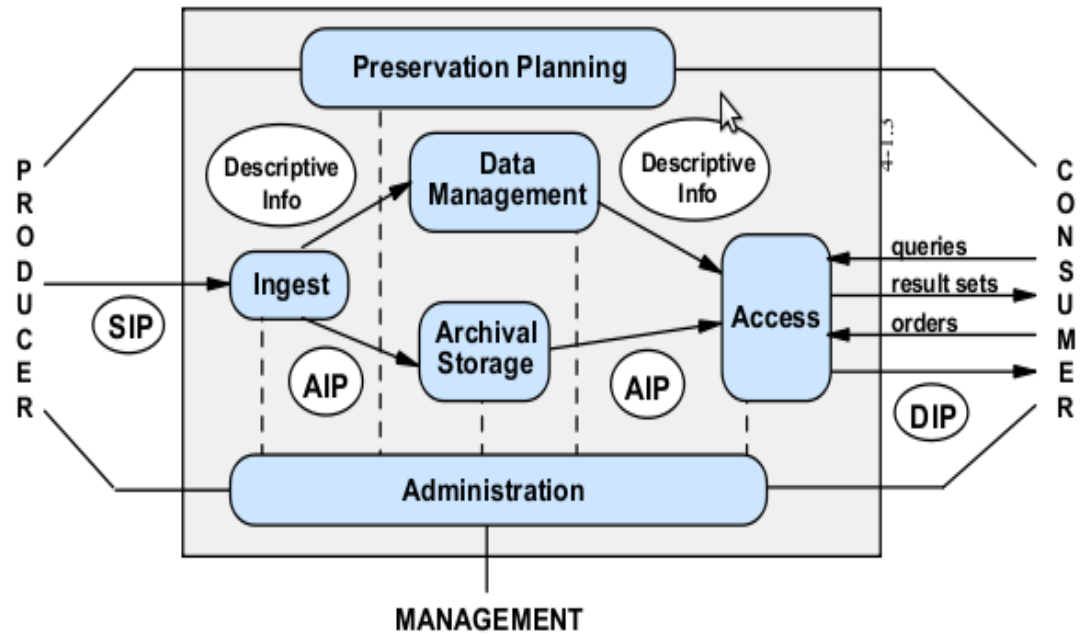
Service UWS

Registry.

FP7

Conclusion

12/03/2008



Equite

**Arrivée de nouvelles données et de nouveaux services**

**Spectre de l'IMCCE**

**Images Tarot**

**Catalogues spectrales Ivan**

**Aurores Planétaire du Lesia**

Data centre

DCP

**Arrivé de nouveau protocoles à mettre en place**

**TAP**

**Bientôt photometry et light curves**

Service UWS

**Nouveau PDAP**

**IDIS-TAP**

Registry.

**Besoin d'assistance utilisateurs**

FP7

Conclusion

## IVOA Services Validator: Results

Version 1.06

Questions, comments: [vo.paris@obspm.fr](mailto:vo.paris@obspm.fr)

Select file to load:	data/results-cron-Astrogrid-SIA.json <a href="#">Create new file</a>
Additional keyword: searched for in service id	Examples: obspm, stsci, esavo, gavo, VizieR...
Display:	<input type="checkbox"/> Display detailed results <input checked="" type="checkbox"/> Display statistics
Select Registry WSDL (for details):	NVO
Select Registry endpoint (for details):	ESA
Debug level:	0
<input type="button" value="Load and Display"/>	

### Results from file data/results-cron-Astrogrid-SIA.json

250 total service(s) found in file  
250 service(s) considered

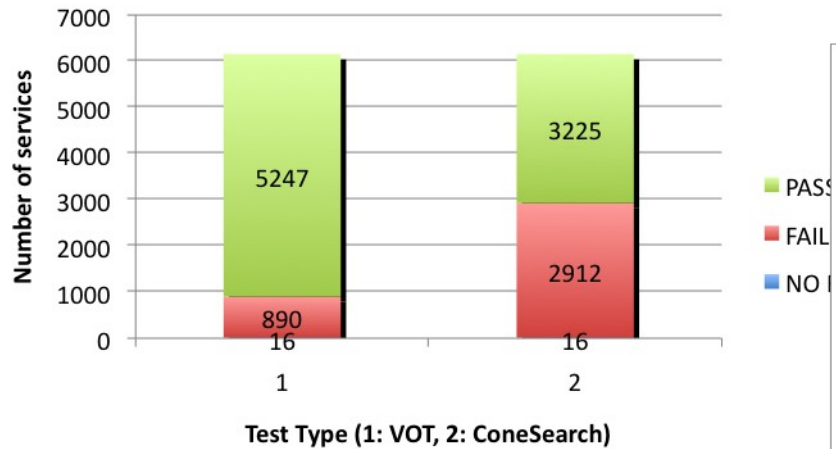
### Statistics from file data/results-cron-Astrogrid-SIA.json

Services tested: 182

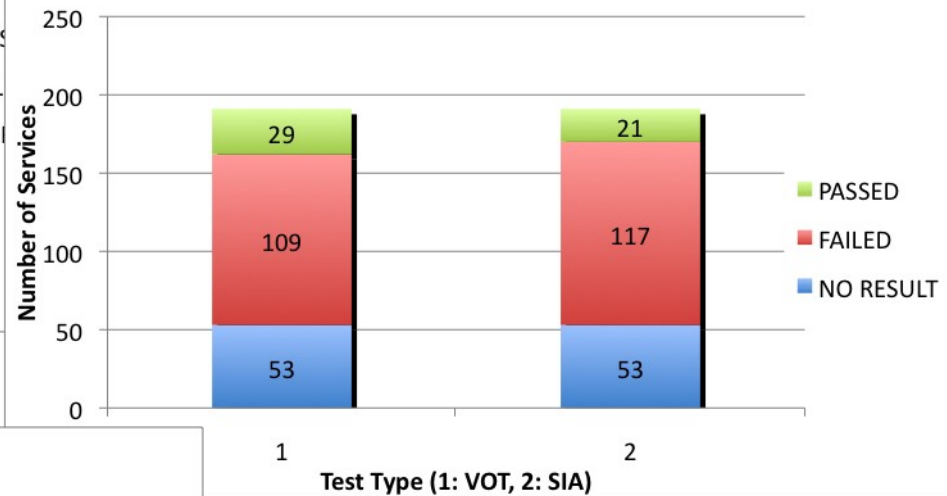
VOT - no results:	54 = 29.7 %	Spec - no results:	54 = 29.7 %
VOT - failed:	106 = 58.2 %	Spec - failed:	110 = 60.4 %
VOT - passed:	22 = 12.1 %	Spec - passed:	18 = 9.9 %

# Service status globally

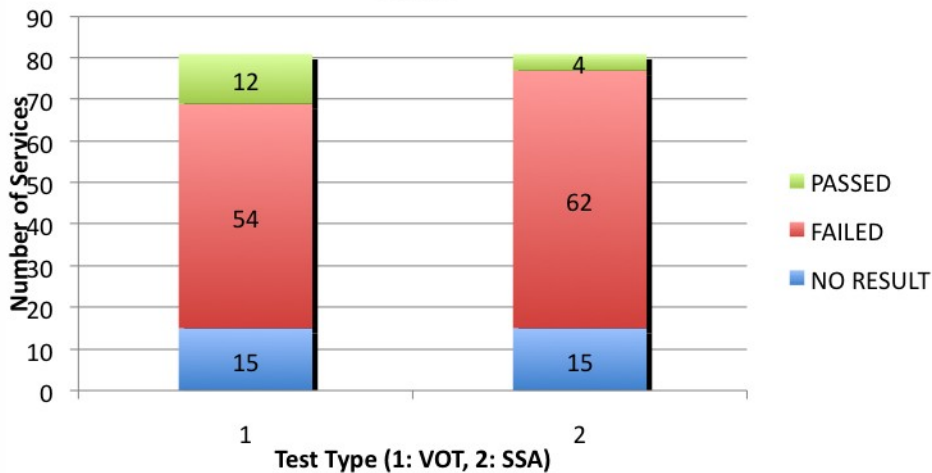
## ConeSearch



## SIA



## SSA



# Details on a web page

Go to <http://voparis-validation.obspm.fr/>  
Click on registry-load under Programs  
Select file to load (ex: results-cron-Astrogrid-SIA is the nightly results for Astrogrid, SIA)  
Check the box Display detailed results  
Click on Load and Display  
The detailed results are displayed with the colored widgets showing the validation issues validation issues

**The results shows valid services in green, invalid in red and also not responding in grey. The real added value is that there is a time in days since no change of this status is observed. This should be taken into account**

## VAMDC

### Responsabilité du WP5 infrastructure

Monitoring des services

Réplication de service et de registries

Maintien du noeud de la grille NGI

Structure de l'assistance utilisateur

Maintien du twiki

## EUROPLANET

Maintien du site IDIS

Mise en place du portail PDAP et TAP

Chaine de lecture PDS et lien IVOA

Participation au DM et DAL de Europlanet en lien  
avec le Lesia et le CDPP

UWS 1.1


UWS 1.1 create  
a job

Duration pb

Useless

Authentication and  
Owner

# Details on a web page



## IVOA Services Validator: Results

Version 1.06  
Questions, comments: [vo\\_paris@obspm.fr](mailto:vo_paris@obspm.fr)

Select file to load:	data/results-cron-Astrogrid-SIA.json <a href="#">Create new file</a>
Additional keyword: searched for in service id	Examples: obspm, stsci, esaivo, gavo, VizieR...
Display:	<input type="checkbox"/> Display detailed results <input checked="" type="checkbox"/> Display statistics
Select Registry WSDL (for details):	NVO
Select Registry endpoint (for details):	ESA
Debug level:	0
<a href="#">Load and Display</a>	

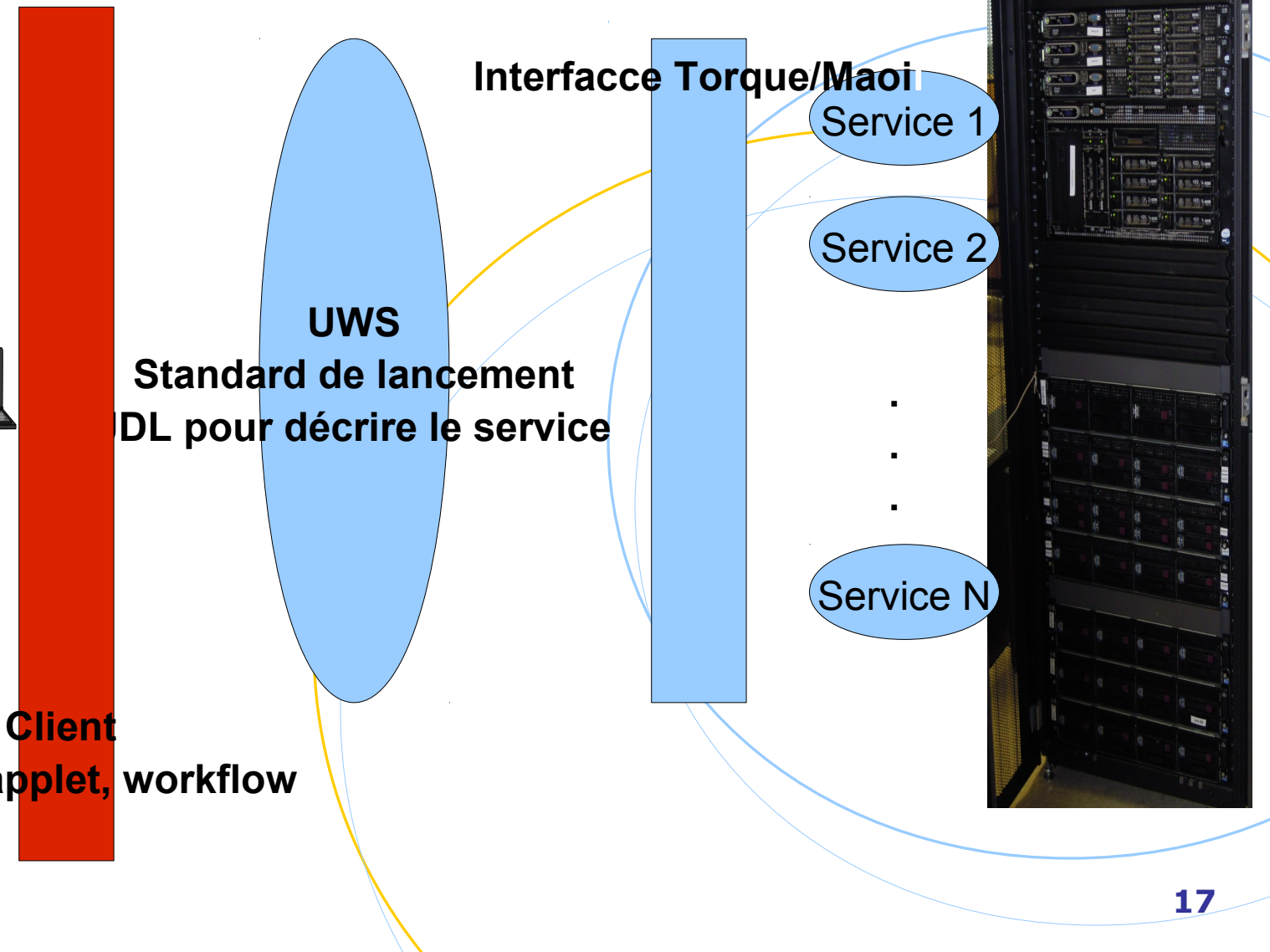
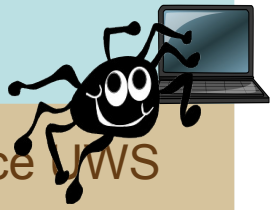
### Results from file data/results-cron-Astrogrid-SIA.json

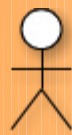
250 total service(s) found in file

IVOA Identifier	Title	Short Name	Contact Email	Service URL	Service Type	Spec	Validation results	Date	Unchanged for
<a href="#">ivo://esavo/xmm/siap</a>	The XMM-Newton Science Archive InterOperability System	XMM-Newton SIAP	esavo.helpdesk@sciops.esa.int	<a href="http://xsa.esac.esa.int:8080/aio/isp/siap.jsp? Validate Validate(batch)">http://xsa.esac.esa.int:8080/aio/isp/siap.jsp? Validate Validate(batch)</a>	vs.ParamHTTP	Simple Image Access	Simple VOTable Image Access 0 fatalities 14 warnings 0 errors	2011-10-11	13 days
<a href="#">ivo://esavo/iso/siap</a>	The ISO Data Archive InterOperability System	ISO SIAP	esavo.helpdesk@sciops.esa.int	<a href="http://archives.esac.esa.int/ida/aio/isp/siap.jsp?imageType=image Validate Validate(batch)">http://archives.esac.esa.int/ida/aio/isp/siap.jsp?imageType=image Validate Validate(batch)</a>	vs.ParamHTTP	Simple Image Access	Simple VOTable Image Access 0 fatalities 9 warnings 0 errors	2011-10-11	25 days
<a href="#">ivo://esavo/isda/siap</a>	The Integral Science Data Archive InterOperability System	Integral SIAP	esavo.helpdesk@sciops.esa.int	<a href="http://isda.esac.esa.int:8080/aio/isp/metadata.jsp?resource_class=ods Validate Validate(batch)">http://isda.esac.esa.int:8080/aio/isp/metadata.jsp?resource_class=ods Validate Validate(batch)</a>	vs.ParamHTTP	Simple Image Access	Simple VOTable Image Access 0 fatalities 0 warnings 0 errors	2011-10-11	46 days
<a href="#">ivo://xcatdb/2xmml/epicsia</a>	Epic Image SIAP of the SSC Interface for the 2XMMi Catalogue	XCATDBI-SIA	laurent.michel@astro.u-strasbg.fr	<a href="http://xcatdb.u-strasbg.fr/2xmml/sia?collection=[EPIC EpicObsImage ] Validate Validate(batch)">http://xcatdb.u-strasbg.fr/2xmml/sia?collection=[EPIC EpicObsImage ] Validate Validate(batch)</a>	vs.ParamHTTP	Simple Image Access	Simple VOTable Image Access 1 fatalities 0 warnings 0 errors	2011-10-11	5 days
<a href="#">ivo://xcatdb/2xmml/epicsia</a>	Epic Image SIAP of the SSC Interface for the 2XMMi Catalogue	XCATDBI-SIA	laurent.michel@astro.u-strasbg.fr	<a href="http://xcatdb.u-strasbg.fr/2xmml/">http://xcatdb.u-strasbg.fr/2xmml/</a>	vr.WebBrowser	Simple Image Access	Validation N/A	2011-10-11	0 days
<a href="#">ivo://nasa_heasarc/skyview/1420mhz</a>	Bonn 1420 MHz Survey	1420MHz	Skyview@skyview.gsfc.nasa.gov	<a href="http://skyview.gsfc.nasa.gov/cgi-bin/vo/sia.pl?survey=1420mhz&amp; Validate Validate(batch)">http://skyview.gsfc.nasa.gov/cgi-bin/vo/sia.pl?survey=1420mhz&amp; Validate Validate(batch)</a>	vs.ParamHTTP	Simple Image Access	Simple VOTable Image Access 0 fatalities 13 warnings 1 errors	2011-10-11	34 days
<a href="#">ivo://nasa_heasarc/skyview/1420mhz</a>	Bonn 1420 MHz Survey	1420MHz	Skyview@skyview.gsfc.nasa.gov	<a href="http://skyview.gsfc.nasa.gov/cgi-bin/query.pl">http://skyview.gsfc.nasa.gov/cgi-bin/query.pl</a>	vr.WebBrowser	undefined	Validation N/A	2011-10-11	0 days
<a href="#">ivo://nasa_heasarc/skyview/2mass</a>	Two Micron All Sky Survey (H-Band)	2MASS	Skyview@skyview.gsfc.nasa.gov	<a href="http://skyview.gsfc.nasa.gov/cgi-bin/vo/sia.pl?survey=2mass&amp; Validate Validate(batch)">http://skyview.gsfc.nasa.gov/cgi-bin/vo/sia.pl?survey=2mass&amp; Validate Validate(batch)</a>	vs.ParamHTTP	Simple Image Access	Simple VOTable Image Access 0 fatalities 13 warnings 1 errors	2011-10-11	4 days
<a href="#">ivo://nasa_heasarc/skyview/2mass</a>	Two Micron All Sky Survey (H-Band)	2MASS	Skyview@skyview.gsfc.nasa.gov	<a href="http://skyview.gsfc.nasa.gov/cgi-bin/query.pl">http://skyview.gsfc.nasa.gov/cgi-bin/query.pl</a>	vr.WebBrowser	undefined	Validation N/A	2011-10-11	0 days
<a href="#">ivo://nasa_heasarc/skyview/408mhz</a>	Hi All-Sky Continuum Survey	408MHz	Skyview@skyview.gsfc.nasa.gov	<a href="http://skyview.gsfc.nasa.gov/cgi-bin/vo/sia.pl?survey=408mhz&amp; Validate Validate(batch)">http://skyview.gsfc.nasa.gov/cgi-bin/vo/sia.pl?survey=408mhz&amp; Validate Validate(batch)</a>	vs.ParamHTTP	Simple Image Access	Simple VOTable Image Access 0 fatalities 13 warnings 1 errors	2011-10-11	34 days



Equite  
 Data centre  
 DCP  
 Service UWS  
 Registry.  
 FP7  
 Conclusion

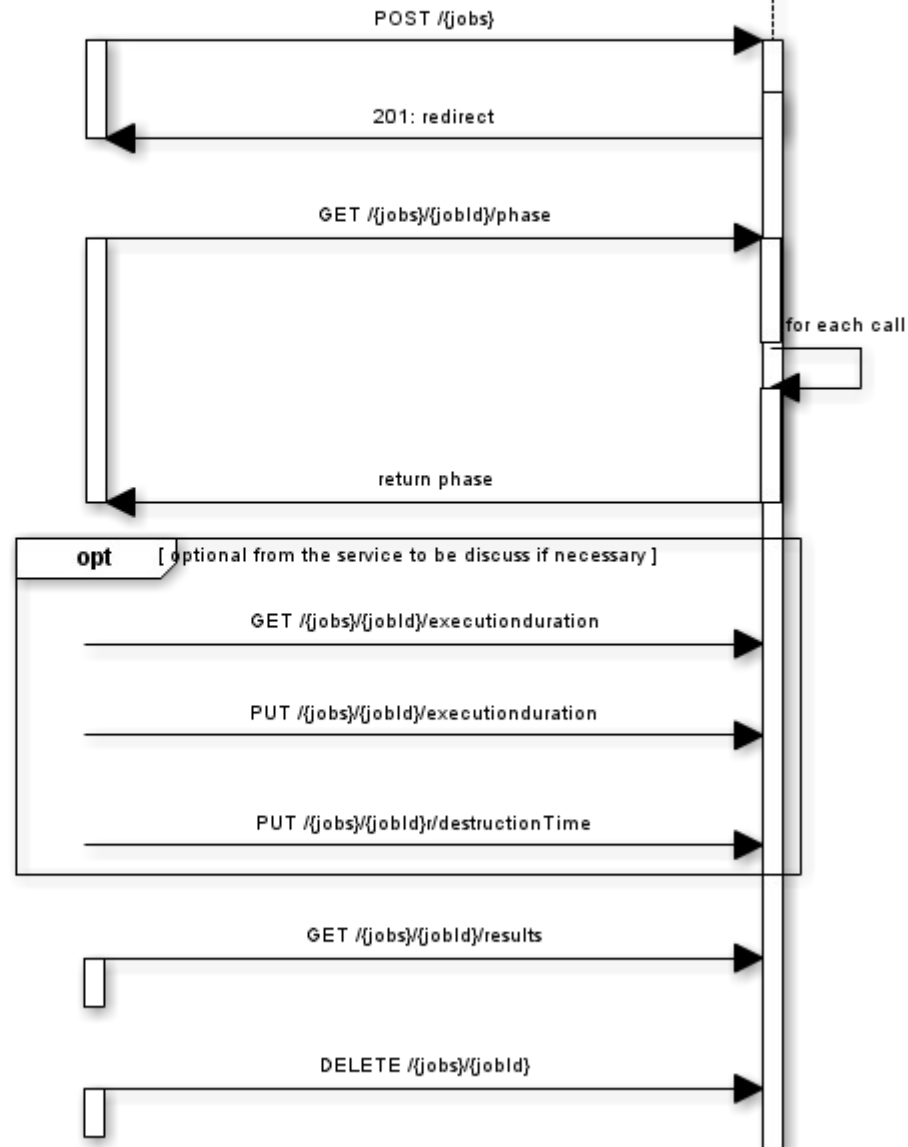




Actor

# UWS 1.1

UWS Server



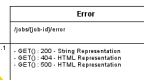
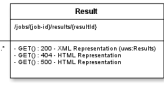
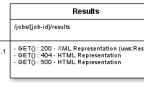
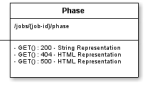
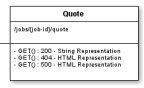
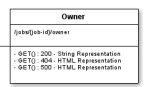
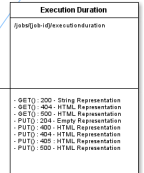
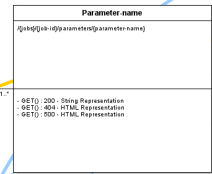
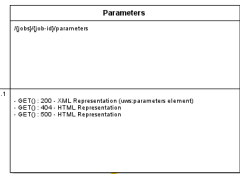
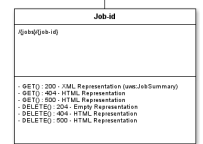
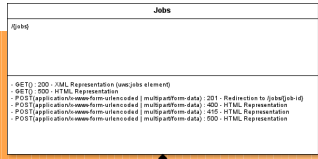
## UWS 1.1

UWS 1.1 create a job

Duration pb

Useless

Authentication and Owner



Equite  
Data centre  
DCP  
Service UWS  
Registry.  
FP7  
Conclusion  
12/03/2008

# UWS 1.1

**Travail sur un fichier de description de services standardisé WADL dont le but est de permettre de faire des clients génériques et par la suite des Workflows**

**Travail à la réécriture de UWS intervention aux interops sur ce sujet.**

**Possibilité de lancer les services depuis le portail  
Collaboration avec le CDS, le CNES et le Gepi pour faire des services et clients associés.**

## UWS 1.1

UWS 1.1 create  
a job

Duration pb

Useless

Authentication and  
Owner

# L'Equipe

Equite

## **VAMDC**

**Responsabilité du WP5 infrastructure**

Data centre

**Monitoring des services**

DCP

**Réplication de service et de registries**

Service UWS

**Maintien du noeud de la grille NGI**

**Structure de l'assistance utilisateur**

**Maintien du twiki**

Registry.

## **EUROPLANET**

**Maintien du site IDIS**

FP7

**Mise en place du portail PDAP et TAP**

**Chaine de lecture PDS et lien IVOA**

Conclusion

**Participation au DM et DAL de Europlanet en lien avec  
le Lesia et le CDPP**

# Conclusion

Equite

**Participation croissante dans les projets de labo  
Lesia – Syrte – Gepi - Imcce**

Data centre

**Participation importante aux projets Europeens**

DCP

**Participation croissante à l'IVOA**

Service UWS

**Plus de 20% des publications dans l'IVOA**

Registry.

**Vraie besoin de main d'oeuvre pour :**

**Les registries.**

FP7

**Le "public outreach" : formation des étudiants,  
applications sur supports mobiles.**

Conclusion

**Mise aux normes de l'archives OAIS « Compliant » 22**