

AppLauncher

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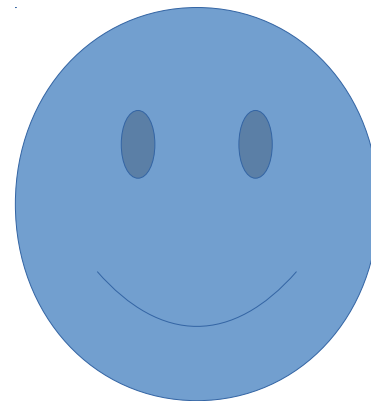
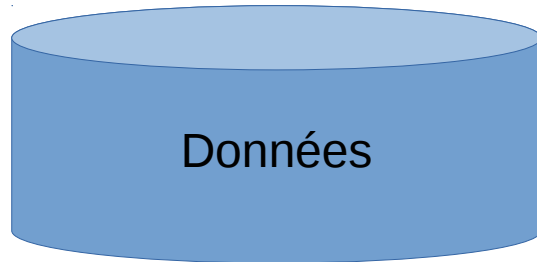
Faciliter l'interopérabilité entre services et logiciels

-

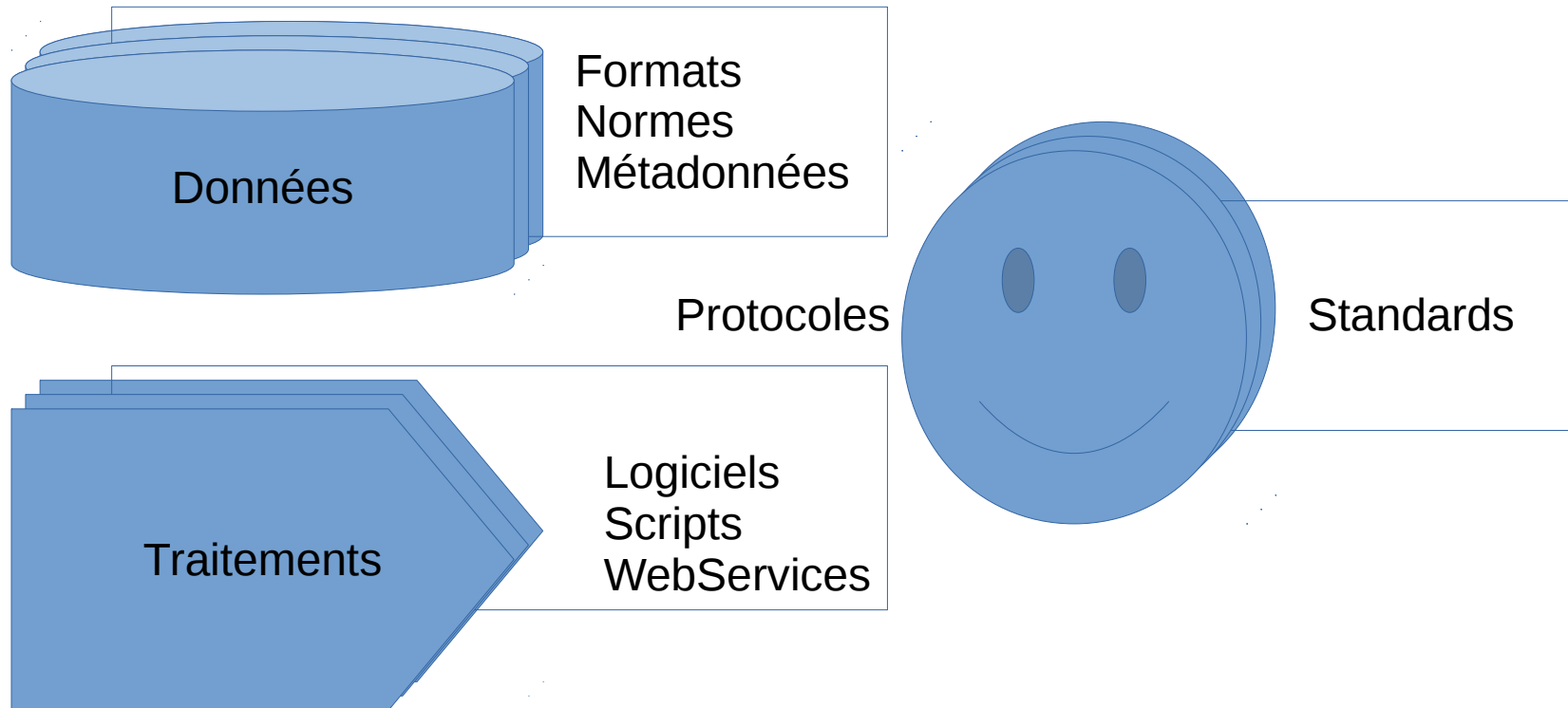
Guillaume Mella, Sylvain Lafrasse, Laurent Bourgès
JMMC / IPAG / Obs. Grenoble

SIST 2016 Montpellier

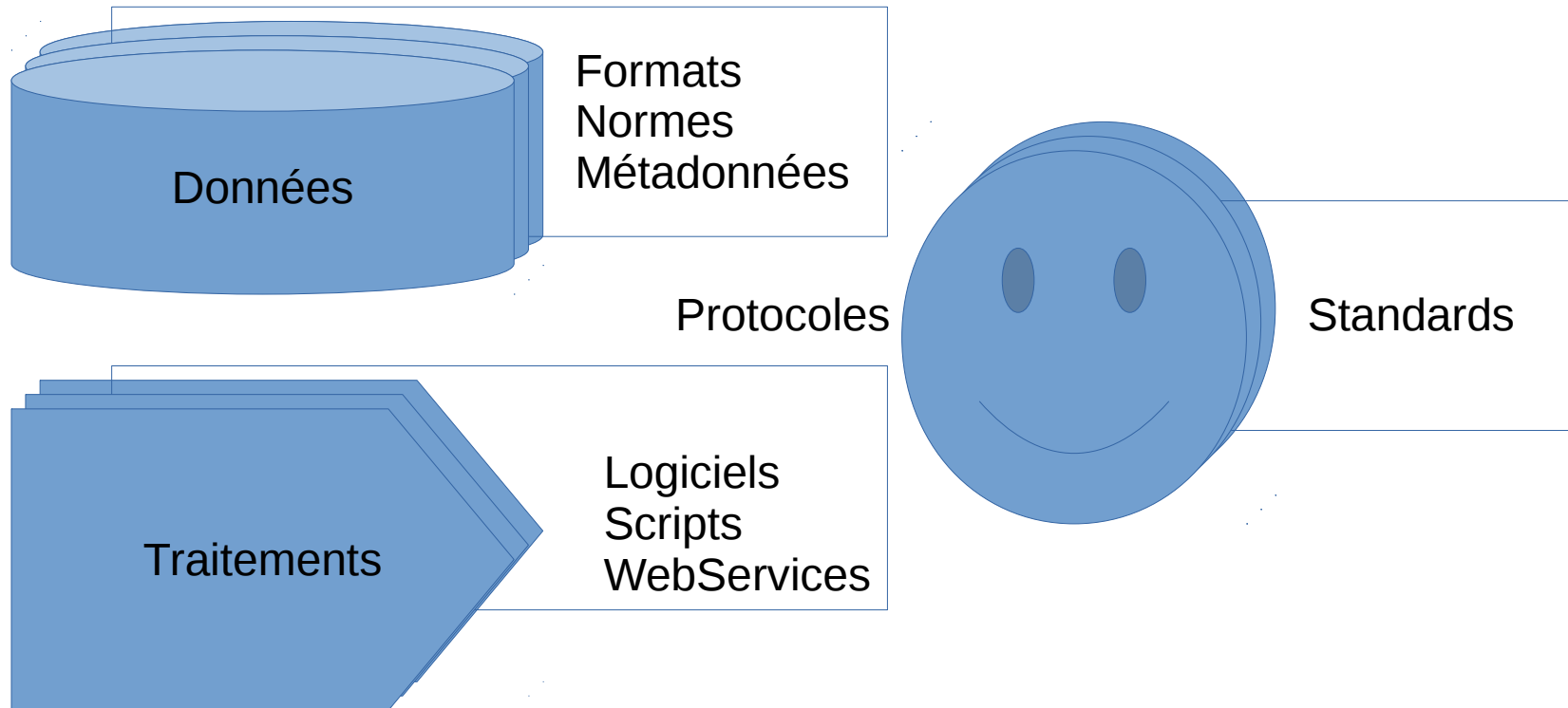
Concepts de base



Concepts de base

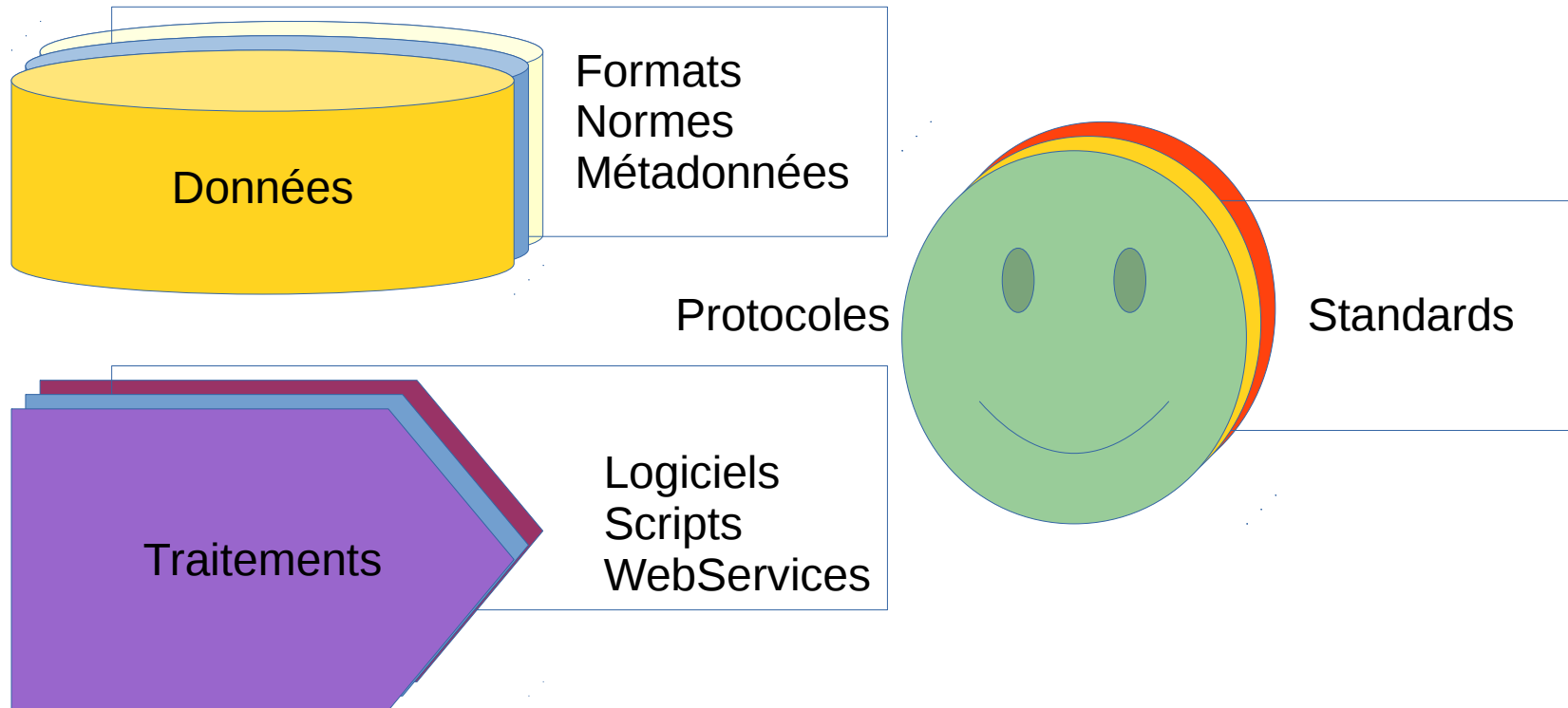


Concepts de base



~~Outil monolithique~~

Concepts de base



Outils interopérables

International Virtual Observatory Alliance



Réunions '*Interop*' : 2 x par an pour standardiser :

- Accès aux données
- Identification et référencement des ressources
- Modèles de données et sémantique
- Ouverture, partage des données et accès aux services

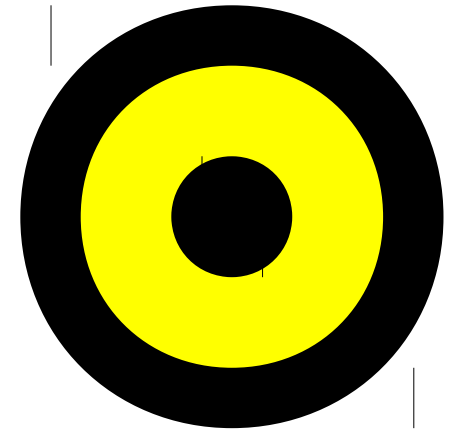
International Virtual Observatory Alliance



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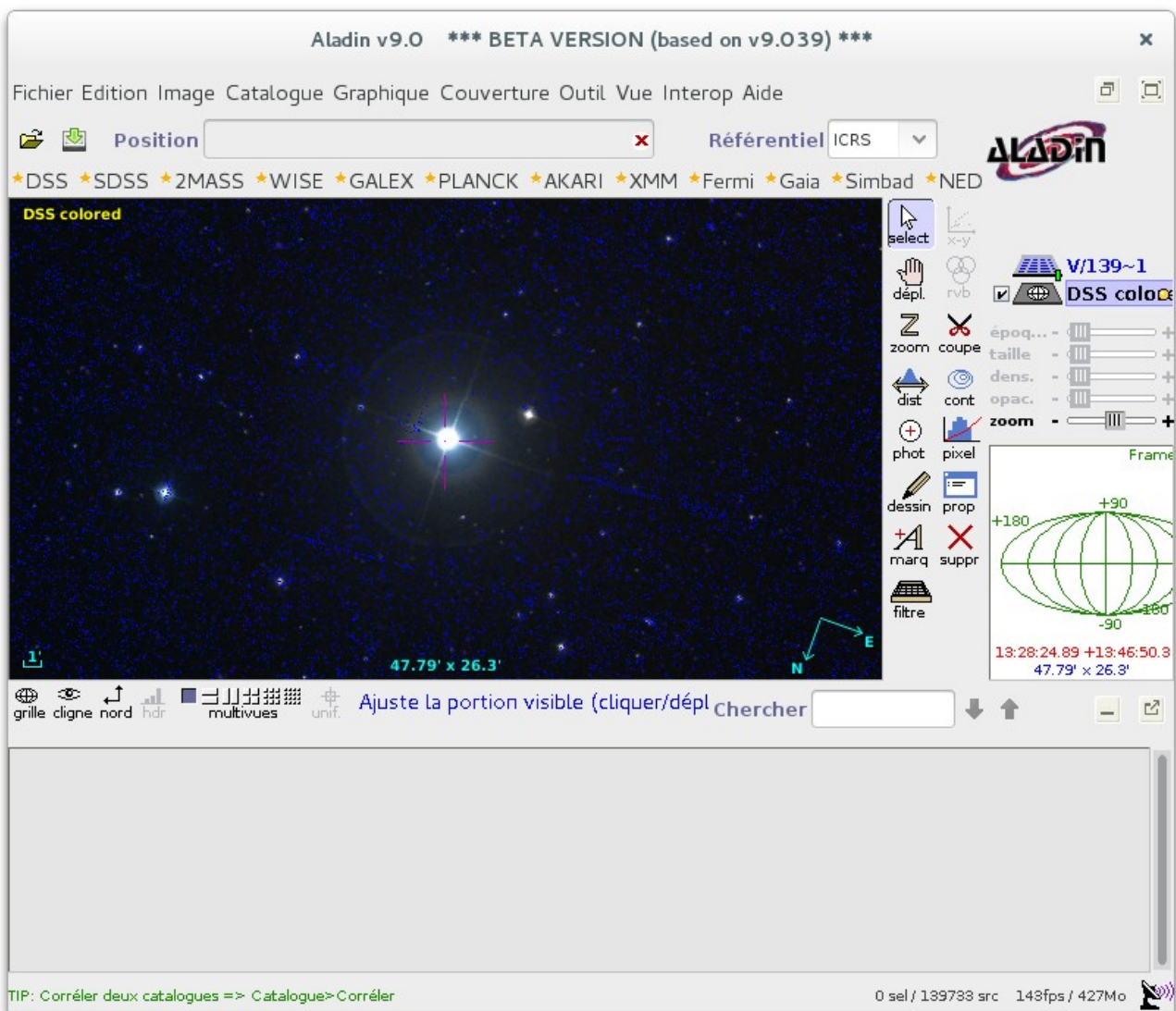
[depuis le poste utilisateur]



SAMP is a **messaging protocol** that enables astronomy software tools to **interoperate and communicate**. IVOA members have recognised that building a monolithic tool that attempts to fulfil all the requirements of all users is impractical, and it is a better use of our limited resources to enable individual tools to work together better. One element of this is defining **common file formats for the exchange of data** between different applications. Another important component is a **messaging system** that enables the applications to share data and take advantage of each other's functionality. SAMP supports **communication between applications on the desktop and in web browsers**, and is also intended to form a framework for more general messaging requirements.

Simple Application Messaging Protocol (SAMP)

- Passage de messages entre applications et pages web (synchrones et asynchrones)
- Le premier arrivé démarre un bus de communication (à base de sockets réseau)
- Chacun partage ses métadonnées et déclare les messages supportés (Mtypes standards + extensions)
 - l'utilisateur peut co-utiliser les logiciels centrés sur des jeux de données communs



Position Référentiel ICRS

DSS SDSS 2MASS WISE GALEX PLANCK AKARI XMM Fermi Gaia Simbad NED

DSS colored

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

V/139-1
DSS colored

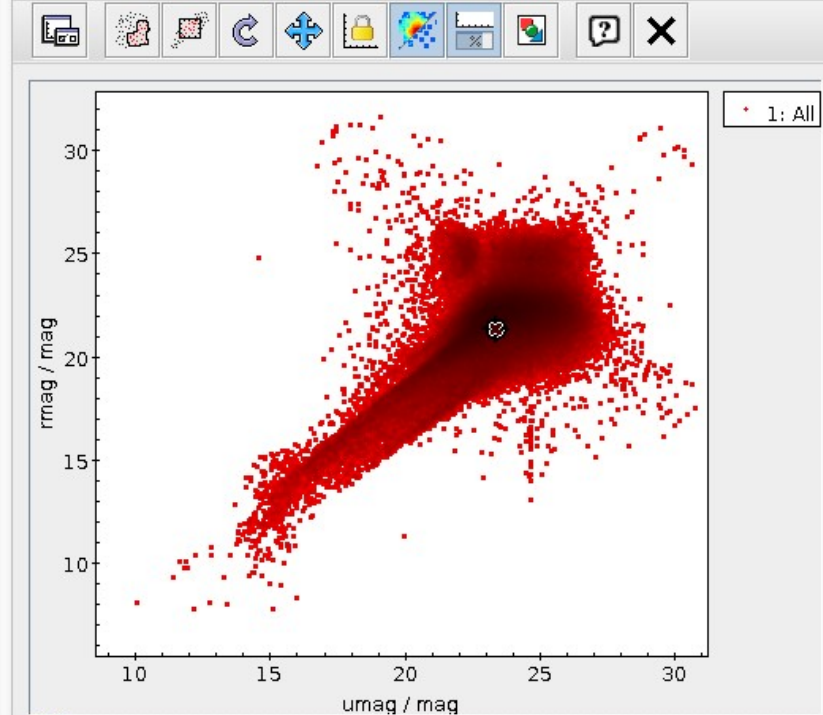
époq...
 taille
 dens.
 opac.
 zoom

Frame

+180 +90 -90 -180

13:28:24.89 +13:46:50.3
47.79' x 26.3'

grille cligne nord hdr multivues unif. 5 objets superposés - cliquer pour at Chercher



Frame

Legend

All
 1: 139-1

Position Subsets Form

Color:

Label:

In Legend:

Position: Count: 139 731 / 139 733

Select

8644	2004, 0751	3	23, 389	0, 673	22, 684	0, 184	21, 9	0, 159	21, 581
20011	2003, 4092	3	23, 389	0, 632	22, 667	0, 15	22, 056	0, 125	21, 815
20219	2003, 4091	3	23, 389	0, 857	25, 351	0, 951	22, 241	0, 226	21, 155

table.load.votable

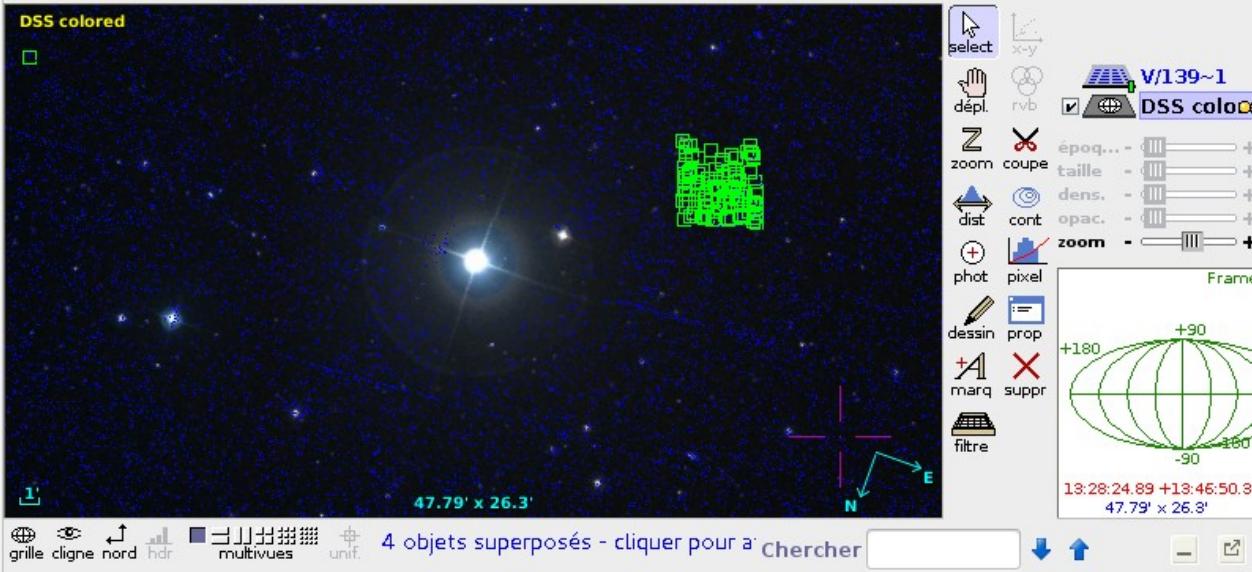
Loads a table in VOTable format.

This is the usual way to exchange table data between SAMP clients.

Arguments:

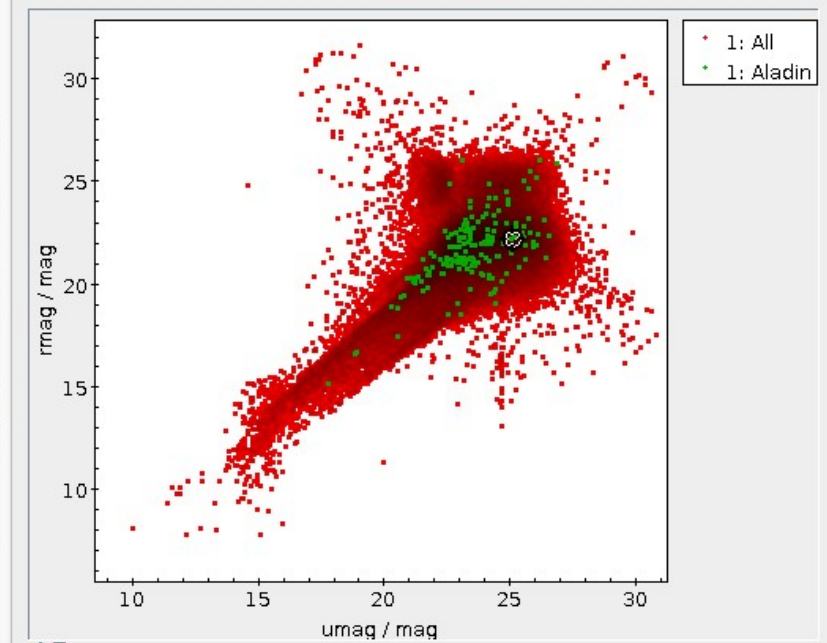
- url** (string): URL of the VOTable document to load
- table-id** (string) optional: identifier which may be used to refer to the loaded table in subsequent messages
- name** (string) optional: name which may be used to label the loaded table in the application GUI

Return Values: none



4 objets superposés - cliquer pour chercher

V	m	q	c	SDSS9	m	Im	RAJ2000	DEJ2000	ObsDate	Q	umaq	e	umaq	qmaq	e	qmaq	rmaq	e
VizieR	1	3	J132912.90+133924.3	Im	202.303764	13.656758	2003.4092	3	24.136	1.044	22.973	0.211	24.185					
VizieR	1	3	J132913.53+133855.1	Im	202.306396	13.648642	2003.4092	3	22.333	0.428	21.243	0.07	20.489					
VizieR	2	3	J132913.53+133855.2	Im	202.30641	13.64867	2003.4091	3	22.765	0.535	21.856	0.101	21.108					
VizieR	2	3	J132913.73+133951.4	*Im	202.307233	13.664281	2003.4091	3	21.193	0.146	20.354	0.031	20.067					



Position Subsets Form

All
 Aladin

Color: ■

Label:

In Legend:

Count: 139 731 / 139 733

lect				
22,421	0,146	21,209	0,08	20,668
24,012	0,444	22,341	0,173	21,598
22,539	0,205	21,589	0,116	21,594

table.select.rowList

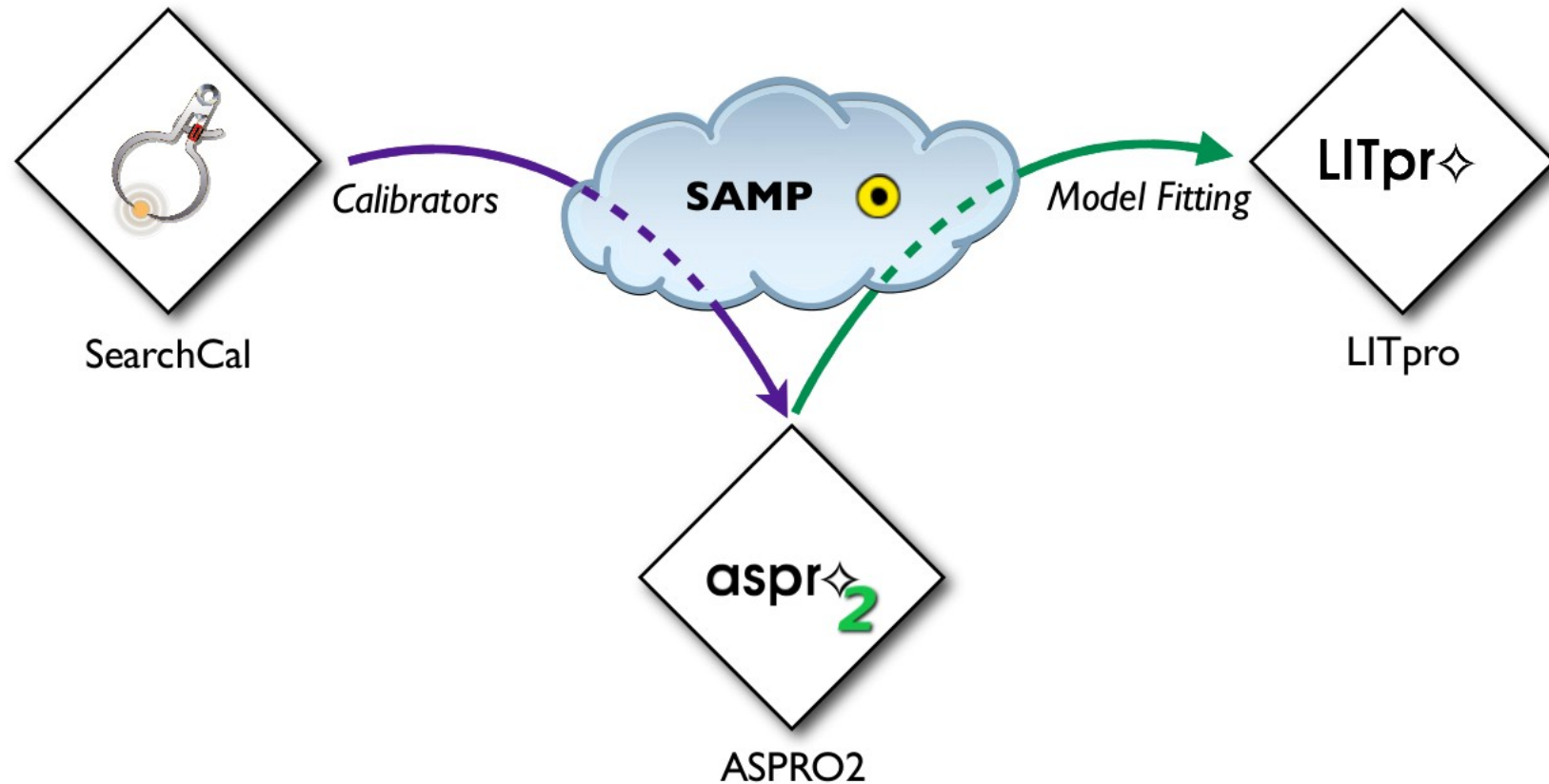
Selects a list of rows of an identified table by row index. The table to operate on is identified by one or both of the table-id or url arguments. At least one of these must be supplied; if both are given they should refer to the same thing. Exactly what selection means is left to the receiving application.

Arguments:

- table-id** (string): identifier associated with a table by a previous message (e.g. table.load.*)
- url** (string): URL of a table
- row-list** (list of SAMP int): list of row indices (zero-based) defining which table rows are to form the selection

Return Values: none

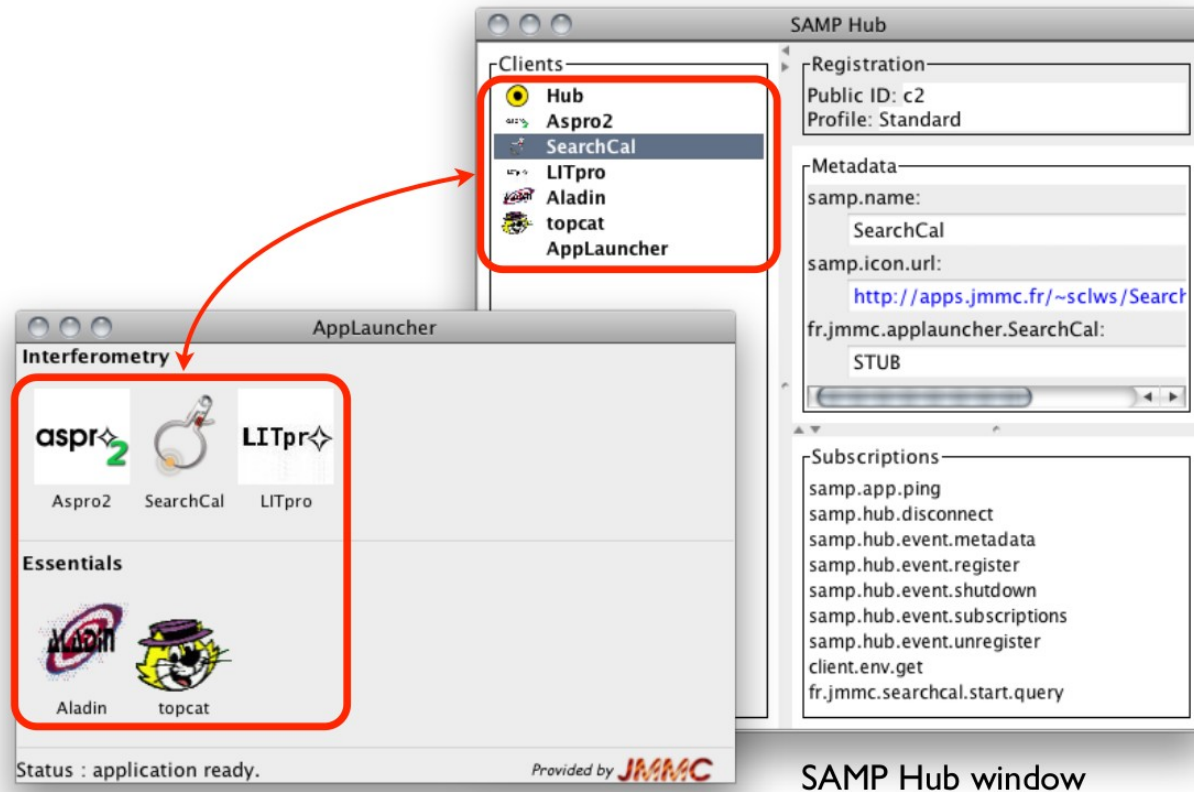
SAMP adopté au JMMC



Mais ... l'utilisateur doit :

- Lancer les applications manuellement au préalable
- Connaître la liste des applications existantes et supportant les différents types de messages
- ...c'était suffisant pour proposer encore mieux !

AppLauncher : une solution

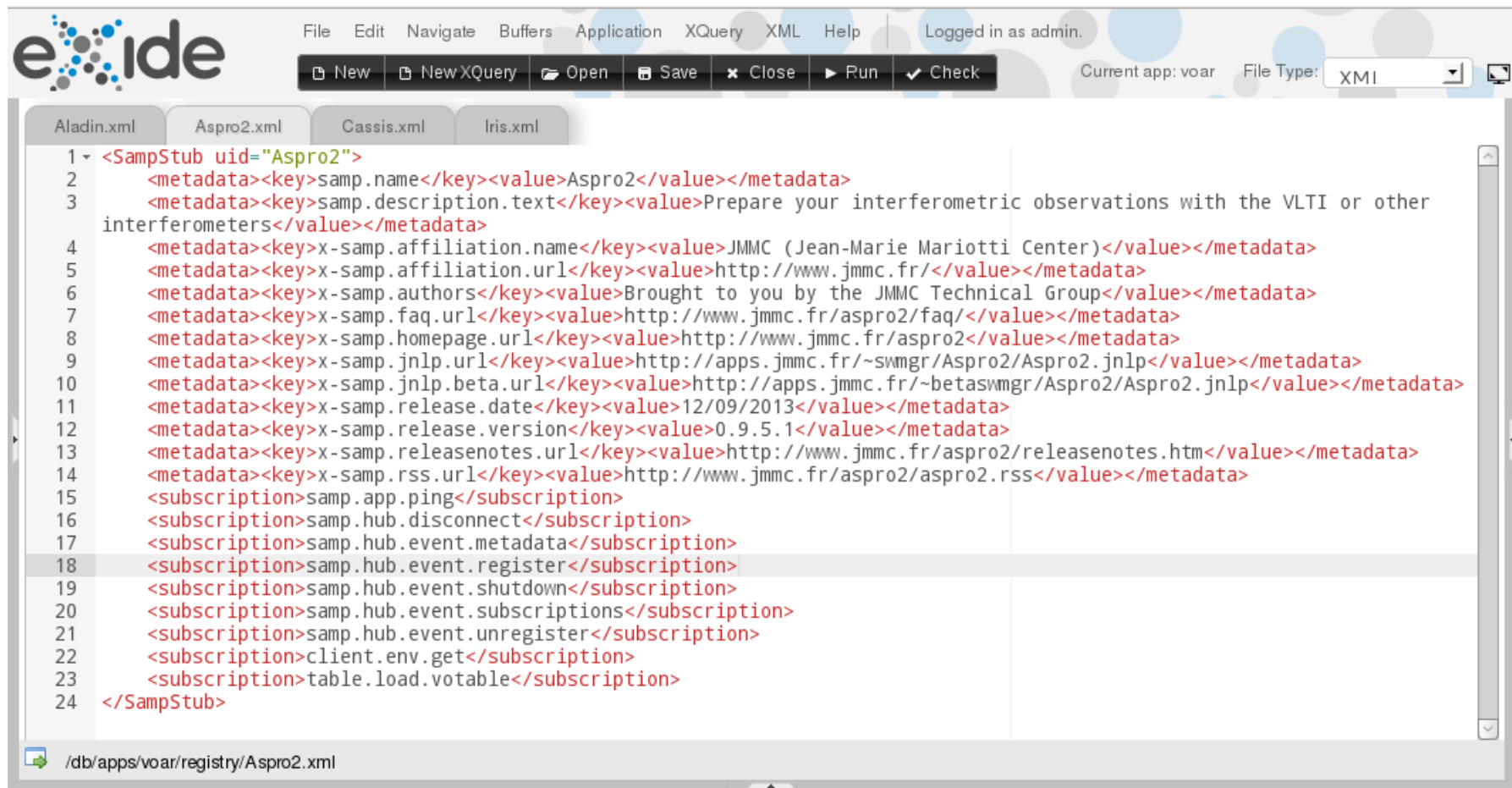


AppLauncher Dock window

SAMP Hub window

Développé et maintenu à Grenoble par
Sylvain Lafrasse, Laurent Bourgès, Guillaume Mella

AppLauncher : une solution

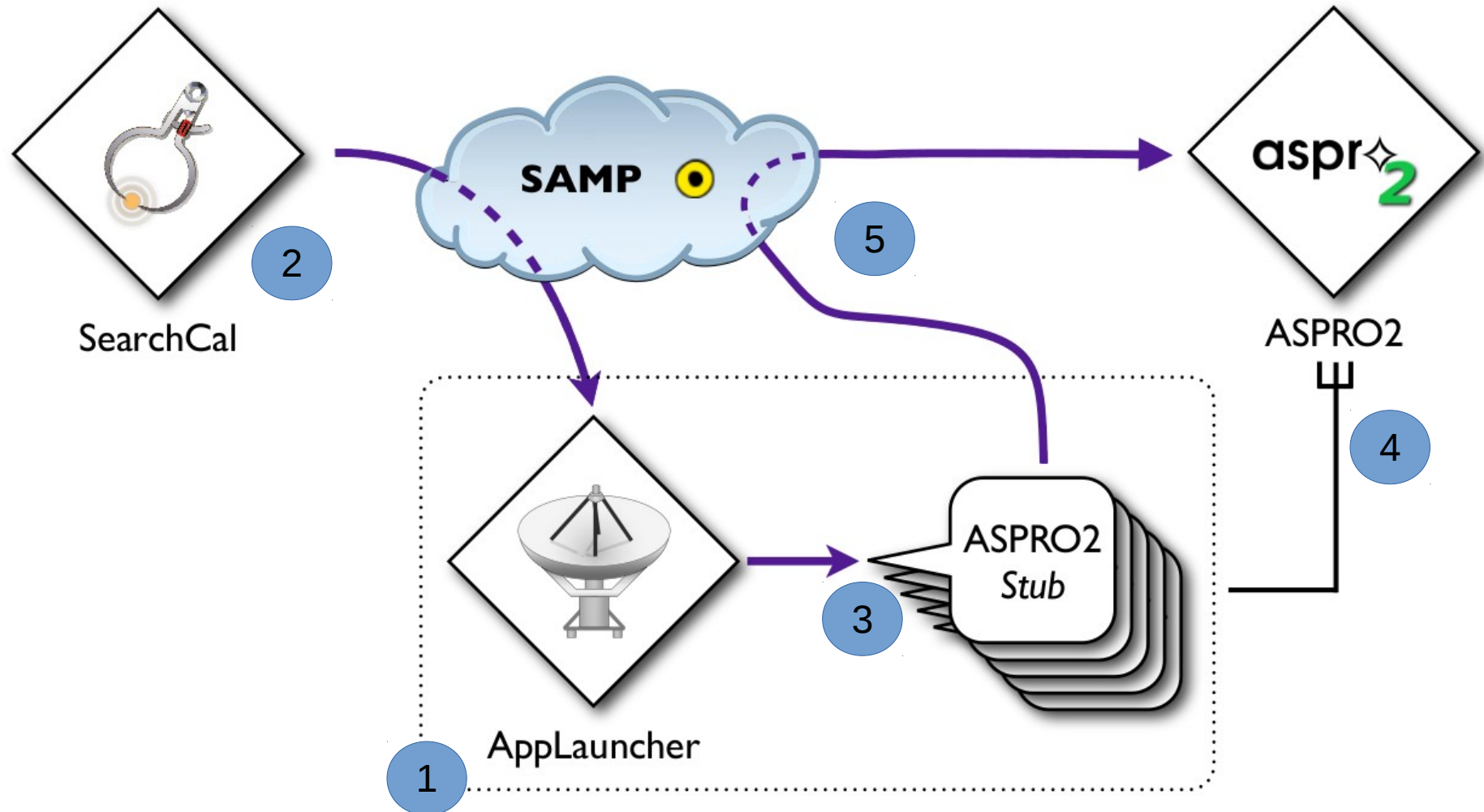


The screenshot shows the eXide web application interface. The top navigation bar includes 'File', 'Edit', 'Navigate', 'Buffers', 'Application', 'XQuery', 'XML', and 'Help'. The user is logged in as 'admin'. The main toolbar contains 'New', 'New XQuery', 'Open', 'Save', 'Close', 'Run', and 'Check'. The current application is 'voar' and the file type is 'XMI'. The editor displays the following XML content:

```
1 <SampStub uid="Aspro2">
2   <metadata><key>samp.name</key><value>Aspro2</value></metadata>
3   <metadata><key>samp.description.text</key><value>Prepare your interferometric observations with the VLTI or other
interferometers</value></metadata>
4   <metadata><key>x-samp.affiliation.name</key><value>JMMC (Jean-Marie Mariotti Center)</value></metadata>
5   <metadata><key>x-samp.affiliation.url</key><value>http://www.jmmc.fr/</value></metadata>
6   <metadata><key>x-samp.authors</key><value>Brought to you by the JMMC Technical Group</value></metadata>
7   <metadata><key>x-samp.faq.url</key><value>http://www.jmmc.fr/aspro2/faq/</value></metadata>
8   <metadata><key>x-samp.homepage.url</key><value>http://www.jmmc.fr/aspro2/</value></metadata>
9   <metadata><key>x-samp.jnlp.url</key><value>http://apps.jmmc.fr/~swmgr/Aspro2/Aspro2.jnlp</value></metadata>
10  <metadata><key>x-samp.jnlp.beta.url</key><value>http://apps.jmmc.fr/~betaswmgr/Aspro2/Aspro2.jnlp</value></metadata>
11  <metadata><key>x-samp.release.date</key><value>12/09/2013</value></metadata>
12  <metadata><key>x-samp.release.version</key><value>0.9.5.1</value></metadata>
13  <metadata><key>x-samp.releasenotes.url</key><value>http://www.jmmc.fr/aspro2/releasenotes.htm</value></metadata>
14  <metadata><key>x-samp.rss.url</key><value>http://www.jmmc.fr/aspro2/aspro2.rss</value></metadata>
15  <subscription>samp.app.ping</subscription>
16  <subscription>samp.hub.disconnect</subscription>
17  <subscription>samp.hub.event.metadata</subscription>
18  <subscription>samp.hub.event.register</subscription>
19  <subscription>samp.hub.event.shutdown</subscription>
20  <subscription>samp.hub.event.subscriptions</subscription>
21  <subscription>samp.hub.event.unregister</subscription>
22  <subscription>client.env.get</subscription>
23  <subscription>table.load.votable</subscription>
24 </SampStub>
```

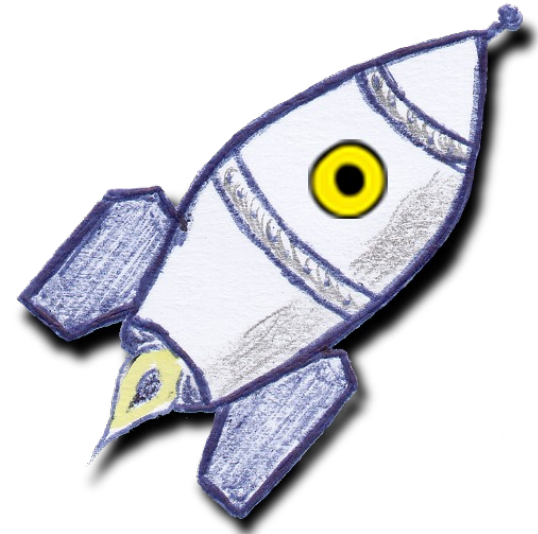
The status bar at the bottom shows the file path: /db/apps/voar/registry/Aspro2.xml

AppLauncher : une solution



Conclusion

- Logiciel en production
- Propose aux utilisateurs d'enregistrer les applications non-référencées !
- Concept à redécliner ?



Références

- <http://ivoa.net>
- http://ivoa.net/deployers/intro_to_vo_concepts.html
- <http://ivoa.net/samp>
- <http://www.jmmc.fr/applauncher>
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