

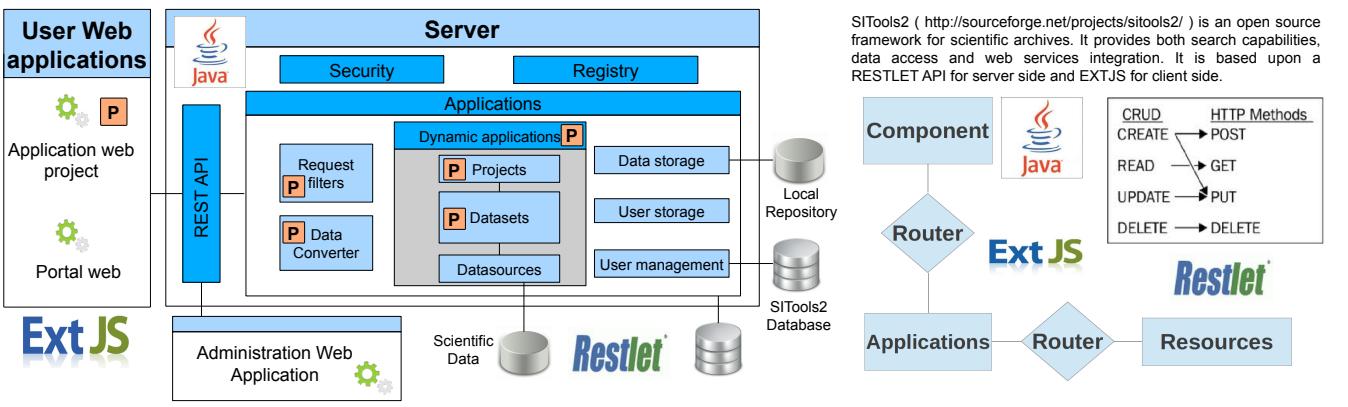
Data Access Layer for Scientific Archive : SITools2, Web 2.0 REST platform architecture

Example with HESIOD cosmological data at IDOC (Integrated Data and Operation Center)
Marc Nicolas*, Boualam Hasnoun*, Karin Dassas*, Hervé Ballans*, Jean-Christophe Malapert**

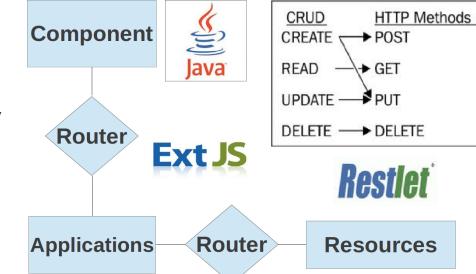
* IAS (Institut d'Astrophysique Spatiale) ** CNES (Centre National d'Etudes Spatiales)

 <http://idoc-herschel.ias.u-psud.fr/>

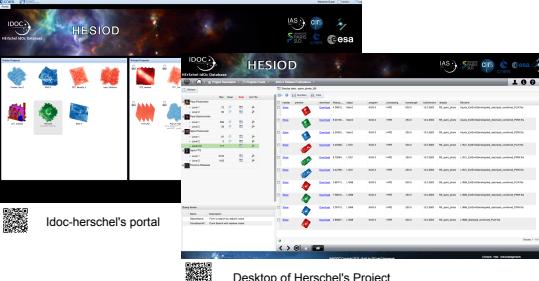
SITools2 architecture



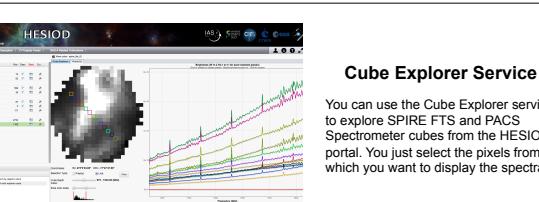
SITools2 (<http://sourceforge.net/projects/sitools2/>) is an open source framework for scientific archives. It provides both search capabilities, data access and web services integration. It is based upon a RESTLET API for server side and EXTJS for client side.



Some examples of development at IDOC



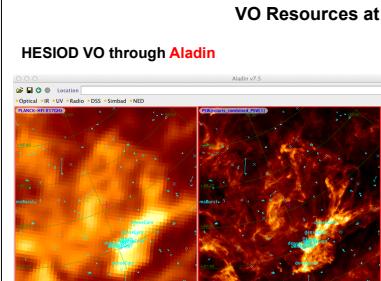
Idoc-herschel's portal



Desktop of Herschel's Project

VO Resources at IDOC

HESIOD VO through Aladin



VO tools allow to easily retrieve public data and, for instance, to compare Herschel maps to other instruments maps and to overlay sources catalogs. The following picture gives a comparison in Aladin between Planck and Herschel maps, with SIMBAD sources present in the Polaris field.

Protocol used : * RESTLET
HTTP method : * GET

Some IDOC VO services through Web browser



Service response in XML format.

Cube Explorer Service

You can use the Cube Explorer service to explore SPIRE FTS and PACS Spectrometer cubes from the HESIOD portal. You just select the pixels from which you want to display the spectra.



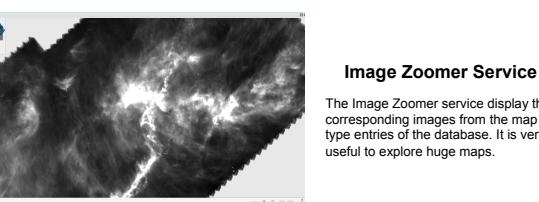
View Header Service

The View Header service is a fast way to look at the metadata from the various extensions of the fits files from the database.



Image Zoomer Service

The Image Zoomer service display the corresponding images from the map type entries of the database. It is very useful to explore huge maps.



Sky Map Visualisation MIZAR

Example of Corot N2 catalog visualisation on IDOC Corot-n2 instance with Mizar.



Other IDOC
SITools2
instances



medoc-sdo

medoc-dem

sz-clusterdb

IRIS

corotn2