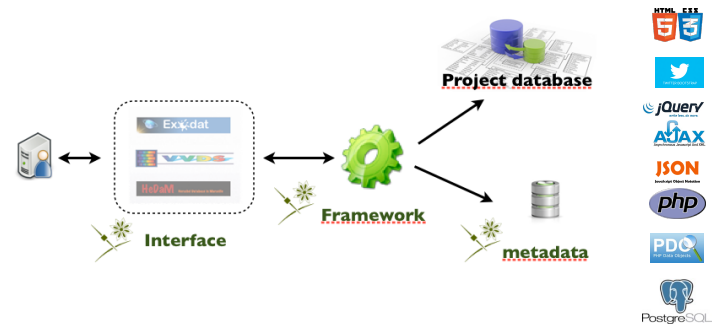# Information System implementation through ANIS @ CeSAM

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Abstract

ANIS (AstroNomical Information System) [1] is a web generic tool developed at CeSAM [2] to facilitate and standardize the implementation of astronomical data of various kinds through private and/or public dedicated Information Systems.

The architecture ANIS is composed of a database server which contains the project data, a web user interface template which provides high level services (search, extract and display imaging and spectroscopic data using a combination of criteria, an object list, a sql query module or a cone search interfaces), a framework composed of several packages, and a metadata database managed by a web administration entity.

The process for implement a new ANIS instance at CeSAM is easy and fast : the scientific project has to submit data or a data secure access, the CeSAM team installs the new instance (web interface template and the metadata database), and the project administrator can configure the instance with the web ANIS-administration entity.

Currently, the CeSAM offers through ANIS a web access to VO compliant Information Systems for different projects (HeDaM, HST-COSMOS, CFHTLS-ZPhots, ExoDAT,...).

ANIS technical solution

Functionalities provided by ANIS
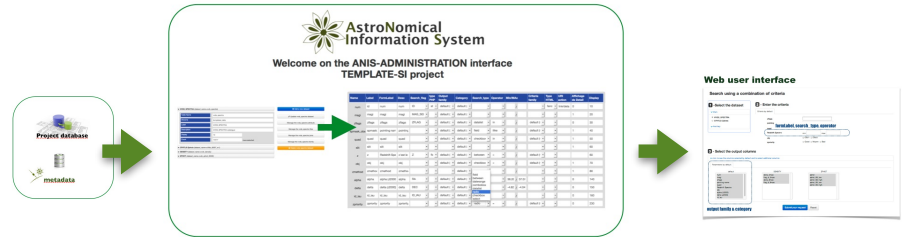
DATA SEARCH

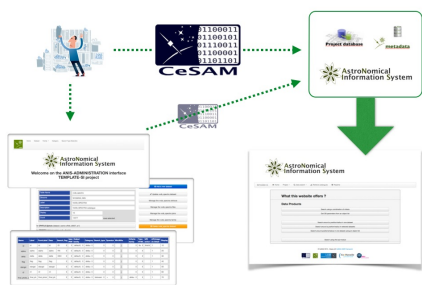

DATA DISPLAY

Role of ANIS-Metadata DB

The metadata database allows to manage the user interface.
It contains all the datasets, the metadata of their columns, all their join datasets and the associated files (readme, images, ...).

Set the ANIS-Metadata DB, is set the user interface.
The information system manager can insert new datasets and sets them.
For example :
- he defines the family of the datasets, the criteria and the output parameters,
- he selects a column in a dataset and decide if it should appear as a criterion, and selects the type of criteria (text box, combo box, check box, radio button,...),he can also decide whether this column is an output parameter.
- he defines the action on a column in the data table result,
- he adds the join datasets and sets them,
- he adds the associated files : the images that are cut in the cone-search and those displayed in the detail page, the data files and readme files that can be downloaded, ...

Each update of the metadata database automatically changes the user interface.

Easy process for implement a new ANIS instance

The process for implement a new ANIS instance at CESAM is easy and fast :

- the scientific project submits data to CESAM (which then manages the storage and security of data) or provides secure access to its data.

- CESAM installs the new instance (web interface and database metadata model).

- the project administrator configures the instance by using the web entity ANIS-Administration with CeSAM technical support.

Information Systems @ CeSAM through ANIS

Public Information Systems hosted at CeSAM
Cosmology, physics and evolution of galaxies

Project	Scientist Manager	Instrument	Wavelength domain	Description and downloads	Web site
VVDS	V. Le Brun	VLT/VIMOS		Info & Data	Public site
HST-COSMOS	L. Tasca	multiple instruments		Info & Data	Public site
Ultra-vista	L. Tasca	VISTA		Info & Data	Public site
CFHTLS-ZPHOTS	O. Ilbert	MegaCam		Info & Data	Public site
HerMES	V. Buat	Herschel/SPIRE		Info & Data	Public site
GOODS-Herschel	V. Buat	Herschel/SPIRE-PACS		Info & Data	Public site
HRS	A. Boselli	Herschel/SPIRE		Info & Data	Public site
VNGS	A. Boselli	Herschel/SPIRE		Info & Data	Public site
Fabry Perot	P. Amram, M. Marcelin	Fabry Perot interferometer		Info & Data	Public site
GHASS	B. Milliard	GALEX		Info & Data	Public site
COHA	C. Adami	OTH-2K		Info & Data	Public site
ABELLAR	C. Adami	MegaPrime / MegaCam		Info & Data	Public site

Stars and exoplanets

Project	Scientist Manager	Instrument	Wavelength domain	Description and downloads	Web site
EXODAT	M. Deleuil	COROT		Info & Data	Public site

Private Information Systems hosted at CeSAM
The CeSAM also manages information systems for projects that have not yet released public data, but may have a public presentation site.

Cosmology, physics and evolution of galaxies

Project	Scientist Manager	Instrument	Wavelength domain	Description	Web site
DGS	A. Boselli	Herschel/SPIRE-PACS		Information	Private site
VUDS	L. Tasca	VLT/VIMOS		Information	Private site
xCOSMOS	L. Tasca	VLT/VIMOS		Information	Public site
XMM-LSS/XXL	C. Adami	XMM		Information	Private site

REFERENCES & ACCESS

[1] ANIS   ADASS XXIII, poster #073
[2] CeSAM   ADASS XX, poster #013

TOPCAT : http://www.star.bristol.ac.uk/~mbt/topcat/
ANIS : http://cesam.lam.fr/anis
CeSAM data : http://cesam.lam.fr/cesamdata