



WF4Ever: Astrotaverna

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on behalf of the Wf4Ever Team

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Wf4Ever - Preservation of scientific workflows in data-intensive science

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- 1. Intelligent Software Components (ISOCO, Spain)**
- 2. University of Manchester (UNIMAN, UK)**
- 3. Universidad Politécnica de Madrid (UPM, Spain)**
- 4. Poznan Supercomputing and Networking Centre (PSNC, Poland)**
- 5. University of Oxford (OXF, UK)**
- 6. Instituto de Astrofísica de Andalucía (IAA, Spain)**
- 7. Leiden University Medical Centre (LUMC, NL)**



- » Taverna is an open source domain independent [Workflow Management System](#) – a suite of tools used to design and execute [scientific workflows](#).
- » Other developments
 - › Astrogrid
 - › VAMDC (Virtual Atomic and Molecular Data Centre)
 - Plugin to run workflows to access the VAMDC software

Available services

The screenshot displays the Taverna Workbench 2.2 interface. On the left, the 'Service panel' shows a list of available services, including Biomart, Biomoby, Soaplab, and various WSDL files. Below this is a 'Workflow explorer' showing a tree view of the workflow structure for 'EBI_InterProScan', including input and output ports and services. On the right, the 'Workflow diagram' shows a complex flow of tasks: 'runInterProScan' receives input from 'Job_params' and 'Content_list'. It connects to 'checkStatus', which then leads to 'Get_XML_result' and 'Get_text_result'. 'Get_XML_result' leads to 'Unpack_XML_result', and 'Get_text_result' leads to 'Unpack_text_result'. 'Unpack_text_result' leads to 'Format_as_GFF', which finally outputs to 'InterProScan_XML_result', 'InterProScan_GFF', 'InterProScan_text_result', and 'Job_ID'. The diagram also shows 'Workflow input ports' and 'Workflow output ports' for different stages of the workflow.

Tree view of workflow structure

Workflow

Design Results my myExperiment VO services Service Catalogue

Registry: <http://registry.euro-vo.org/services/RegistrySearch>

Keywords:

14 results for ConeSearch: amiga

Short name	Title	Subjects	Identifier	Publisher
AMIGACS	AMIGA Catalogue	[The AMIGA Catalog...	ivo://svo.amiga.iaa.es/con...	The AMIGA Gro...
J/A+A/411/391	The AMIGA project. R...	[Positional_Data, Gal...	ivo://CDS.VizieR/J/A+A/41...	CDS
J/A+A/472/121	AMIGA V. Isolation pa...	[Galaxies]	ivo://CDS.VizieR/J/A+A/47...	CDS
J/A+A/462/507	AMIGA III. IRAS data (L...	[Galaxies]	ivo://CDS.VizieR/J/A+A/46...	CDS
J/A+A/436/443	AMIGA. I. Velocities of...	[Galaxies, Velocities]	ivo://CDS.VizieR/J/A+A/43...	CDS
J/A+A/449/937	AMIGA. II. Morphologi...	[Galaxies]	ivo://CDS.VizieR/J/A+A/44...	CDS
J/A+A/470/505	AMIGA IV. Neighbours...	[Galaxies]	ivo://CDS.VizieR/J/A+A/47...	CDS
J/A+A/485/475	AMIGA. VI. Radio flux...	[Galaxies]	ivo://CDS.VizieR/J/A+A/48...	CDS
J/A+A/486/73	AMIGA VII. FIR and ra...	[Galaxies]	ivo://CDS.VizieR/J/A+A/48...	CDS
J/A+A/532/A117	AMIGA VIII. Flux ratio...	[Galaxies]	ivo://CDS.VizieR/J/A+A/53...	CDS
J/A+A/534/A102	AMIGA IX. Molecular g...	[Galaxies]	ivo://CDS.VizieR/J/A+A/53...	CDS
J/A+A/540/A47	AMIGA X. Isolated gal...	[Photometry, Galaxies]	ivo://CDS.VizieR/J/A+A/54...	CDS
J/A+A/540/A96	Molecular gas in Hicks...	[Clusters_of_galaxies]	ivo://CDS.VizieR/J/A+A/54...	CDS
J/A+A/545/A15	AMIGA XI. Optical nucl...	[AGN, Galaxies, Gal...	ivo://CDS.VizieR/J/A+A/54...	CDS

This is a multiwavelength database for a refinement of the pioneering Catalog of Isolated Galaxies (CIG: Karachentseva 1973; n = 1050 galaxies) including optical, IR and radio line and continuum measures in order to characterise all phases of the ISM. For most galaxies we provide: Coordinates - Optical magnitudes - Velocities - Revised morphology - FIR Luminosities - Isolation Parameters

Subjects
The AMIGA Catalogue

Service
<ivo://ivoa.net/std/ConeSearch>

Verbose
Maximum records
1051
Maximum search radius
90.0
Test query
SR
0.5
DEC
[-5.3911](#)
RA
83.8221

GET <http://amiga.iaa.csic.es/amigasearch>
Version: 1.0

- » Format conversion (votable, ascii, fits, csv,)
- » Extract a list of values from a column in a VOTable
- » Column selection in a VOTable
- » Rows selection in a VOTable
- » Join two VOTables
- » Cat two VOTables
- » Cat a list of VOTables
- » Add a column using a expression
- » Resolve coordinates
- » Add sky coordinates
- » Coordinates transformation
- » Template filler
- » Check template filler against a dictionary

Service panel

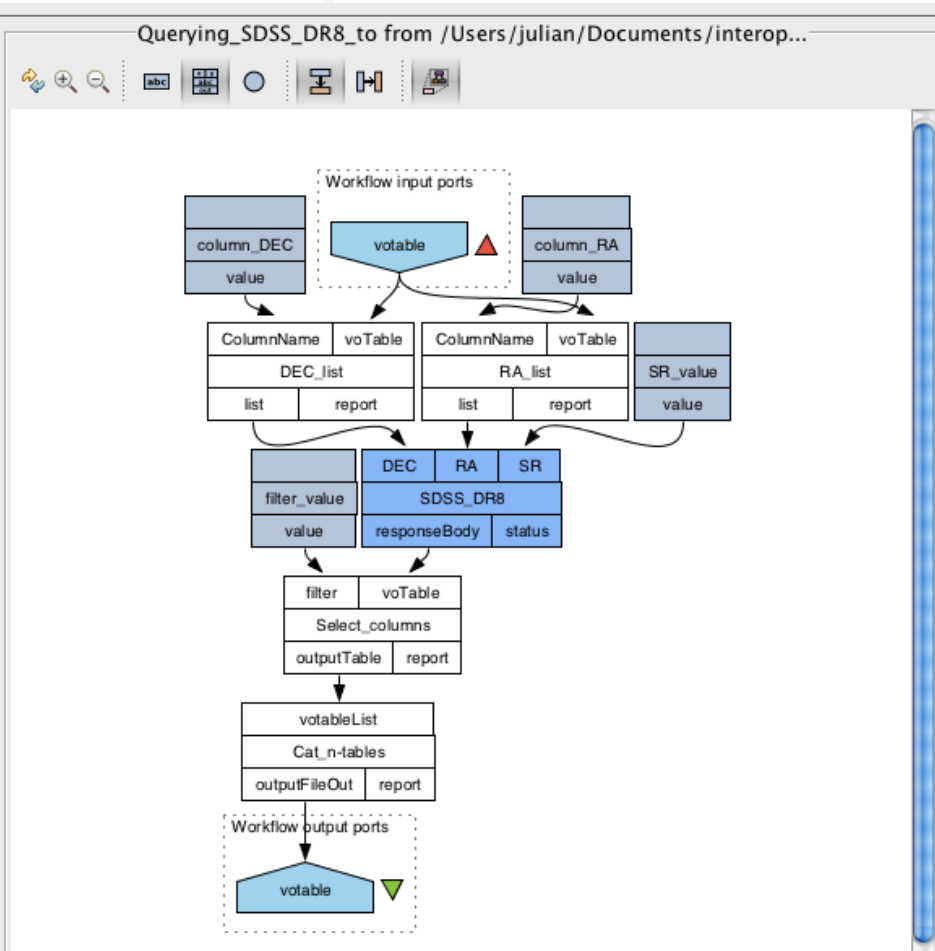
Filter: Clear

Import new services

- Service templates
- Local services
- Astro tools
 - Add Column - Add column using a expression
 - Add sky coordinates - Add sky coordinates
 - Cat n-tables - Cat a list of tables
 - Cat tables - Cat two tables
 - Check template filler - Check Template filler
 - Coordinates transformation - Coordenates transformation in a table
 - Format conversion - Table format conversion**
 - List from column - Get list from column in a votable

Workflow explorer Details Validation report

- Querying_SDSS_DR8_to
 - Workflow input ports
 - votable
 - Workflow output ports
 - votable
 - Services
 - Cat_n-tables
 - votableList
 - outputFileOut
 - report
 - column_DEC - dec
 - value



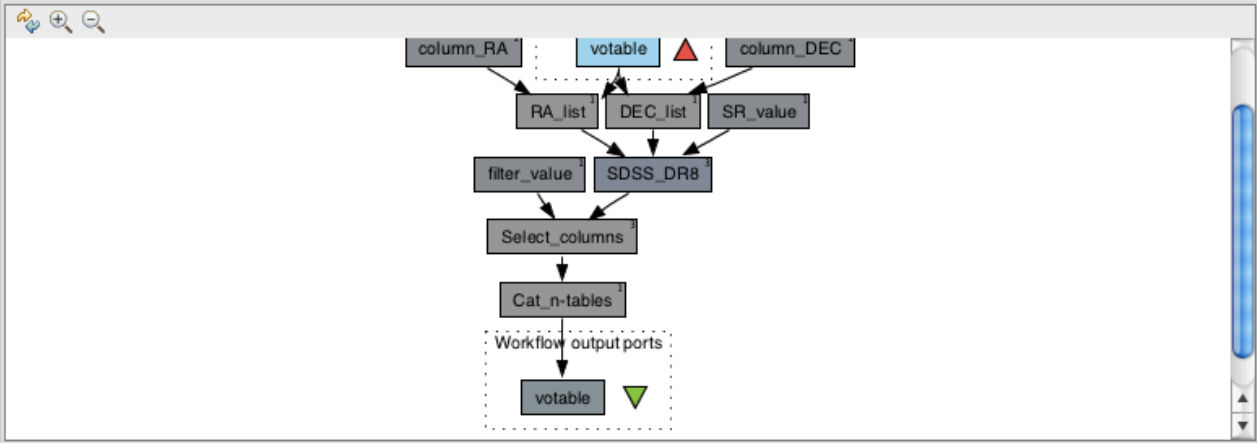
Design Results my myExperiment VO services Service Catalogue

Workflow runs Remove

Click on a run to see its values
Click on a service in the diagram to see intermediate values (if available)

Querying_SDSS_DR8_to 2012-10-18 10:15:5

Graph Progress report



Finished Pause Cancel Edit executed workflow Refresh intermediate values Show workflow results

Workflow results Save all values

Click in tree to view values

Value type VOTable Refresh Save value

VOTable Metadata SAMP

objID	specObjID	ra	dec	u
1237660355749019796		0 3,63206	-0,73693	22,0297
1237663525446156407		0 3,63214	-0,73696	22,105
1237663276318720160		0 3,63215	-0,73695	22,0856
1237663714405318767		0 3,63215	-0,73685	22,0485
1237663783125254181		0 3,63216	-0,73688	21,8365
1237667171852001075		0 3,63217	-0,73695	22,4367

- » Download and install Taverna 2.4: <http://www.taverna.org.uk/>
- » Start Taverna
- » Add a plugin site: <http://wf4ever.github.com/astrotaverna/>
- » Select Install astrotaverna
- » Restart Taverna
- » The VO services perspective should now appear together with various local tools under Available Services

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