VO Tools - VAMDC

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Linking the VAMDC Portal to Virtual Observatory Tools

A key element of the VAMDC infrastructure is the web portal (portal.vamdc.eu), that provides an unified way to query the VAMDC registered atomic and molecular databases. A request is built through a graphical user interface and sent to all the databases. They return data in a common XML format called XSAMS.

The portal provides tools called "Processors" that can convert a XSAMS file into another format. The Processors called « Molecular Spectroscopy XSAMS to HTML » and « Atomicxsams2HTML » display for respectively molecular and atomic spectroscopic data » an HTML page where columns and lines can be selected. The selected data can be exported into 2 formats: a CSV table where column are separated by « , » and a VOTable which is a Virtual Observatory (VO) standard used to exchange data among VO Tools.

The VOTable can be sent to any VO Tool launched on the users' desktop using the « send via SAMP » functionality of the processor. SAMP is another VO Standard (http://www.ivoa.net/documents/SAMP/) that allows several

applications to exchange data directly, without the need to save and load a file locally.

In the example below, the file is sent to an application called TOPCAT (http://www.star.bris.ac.uk/~mbt/topcat/) which is dedicated to the visualisation of tabular data. All functionalities of TOPCAT can be used on the selected VAMDC data.

Figure: Molecular data displayed by the processor and sent to TOPCAT VO Tool.

Support to access VAMDC Databases

You can implement all the protocols that VAMDC has designed: http://www.vamdc.eu/standards.

You might want to save time and to use our libraries in Java or other languages: http://www.vamdc.eu/software.

You may need some tutorials: see http://tutorial.vamdc.org.

You may need some help: send a mail to support@vamdc.eu.

You may want to exchange: http://forum.vamdc.org