

## Cassandra, VTK framework for 3D visualisation

## Cassandra is a 3D scientific data viewer written in Java.

Cassandra offers a quick access to the VTK 3D graphic library. The use of Java as primary language maintains the power of the VTK graphical library and provides a natural multi-platform support.

Cassandra is the smart integration of a pipeline editor like OpenDX, combined with the power of the VTK library. The visual pipeline editor is based on DedaleGraph, a Java library used to represent graphically graph data model, also developed by Artenum. Cassandra offers the VTK modularity and power, with a graphical pipeline manager, enabling to define any kind of specific data processing by simply linking predefined filters. Cassandra also provides an access to a Python/Jython console which enables a quick prototyping of the visualisation pipelines (Python scripts) and hot manipulation of all VTK objects.

The use of external *Plug-ins* enables simple functionalities extension for data processing of Cassandra.

## Open Source



The data processing facilities can be simply extended with respect to each need, without having to learn the VTK/C++ syntax. It enables the user to focus on the specific aspects of its scientific and technical data processing.

Cassandra reads any classical VTK formats, and works under Windows, Linux, as well as Mac OS-X in alpha version.

For any further information, please visit our web site at http://www.artenum.com/cassandra or contact us by e-mail at cassandra@artenum.com.

Java enables the support of commonly used platform such as Linux, Windows and Mac OS X. Cassandra has been used in the frame of the SPIS project, at the request of the ESA, in order to view complex data results from 3D plasma simulation codes.

JyConsole offers a powerful engine, allowing a Java and Python dynamic object completion in a transparent approach.

Cassandra will be available under the QPL V1.0 license for its open source components and under the Artenum Binary Public Licence, for its binary part, which allows a free usage of Cassandra as it goes by the QPL license. For any further information or any proprietary use please contact cassandra@artenum.com.