Combining the powers of ImageJ and OMERO

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ImageJ2: a better ImageJ

ImageJ2 is a new version of ImageJ for the next generation of scientific image data. Internally, it is a total redesign of ImageJ, but it is backwards compatible with ImageJ 1.x via a “legacy layer” including complete integration with the existing ImageJ user interface (UI), as well as extensible support for new UIs. ImageJ2 has an N-dimensional data model driven by the powerful ImgLib2 library, which supports image data expressed in an extensible set of numeric and non-numeric types, and accessed from an extensible set of data sources.

The Scijava collaboration

ImageJ is developed in close collaboration with related projects including Fiji, SCIFIO, ImgLib2, KNIME, CellProfiler and OME. Image-specific features are part of ImageJ, while more general code lives in the Scijava Common library. Scijava projects strive to deliver a coherent software stack reusable throughout the life sciences community and beyond, so that scientists can truly “write once, run anywhere” and share with the world.

Write once, run anywhere

The ImageJ vision is to extend Java’s mantra of "write once, run anywhere" to image processing algorithms. ImageJ2 introduces extensible plugin, module and OPS frameworks which make ImageJ commands richer, more powerful and easier to share across applications. This design isolates the image processing logic from the graphical user interface, making ImageJ modules accessible from many different platforms including CellProfiler, KNIME, Alida and OMERO.

ImageJ-OMERO interoperability

https://github.com/imagej/imagej-omero

◆ Add OMERO capabilities to your ImageJ.

◆ Execute ImageJ modules from OMERO clients.

◆ ImageJ scripts declare typed inputs & outputs.

1 http://imagej.net/
2 http://imglib2.net/
3 http://scif.io/
4 http://scijava.org/
5 https://github.com/scijava/scijava-common
6 https://github.com/imagej/imagej-ops
7 http://fiji.sc/
8 http://cellprofiler.org/
9 http://tech.knime.org/community/image-processing
10 http://www2.infomath.uni-halle.de/agprbio/alida
11 http://openmicroscopy.org/