

Combining the powers of ImageJ and OMERO



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ImageJ2: a better ImageJ

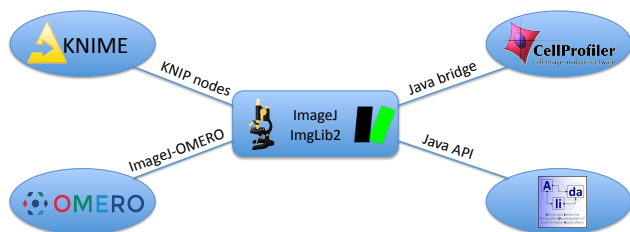
ImageJ¹ is a new version of ImageJ for the next generation of scientific image data. Internally, it is a total redesign of ImageJ, but it is backwards compatible with ImageJ 1.x via a “legacy layer” including complete integration with the existing ImageJ user interface (UI), as well as extensible support for new UIs. ImageJ2 has an N-dimensional data model driven by the powerful ImgLib2 library², 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

ImageJ¹ is developed in close collaboration with related projects including Fiji⁷, SCIFIO³, ImgLib2², KNIME⁹, CellProfiler⁸ and OME¹¹. Image-specific features are part of ImageJ, while more general code lives in the SciJava Common library⁵. SciJava⁴ 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

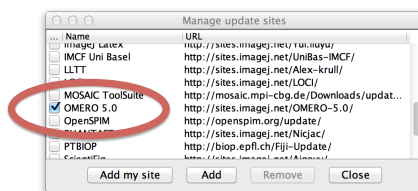
The ImageJ vision is to extend Java's mantra of “write once, run anywhere” to **image processing algorithms**. ImageJ2 introduces extensible plugin⁵, module⁵ and OPS⁶ frameworks which make ImageJ commands richer, more powerful and easier to share across applications. This design isolates the image processing logic from the graphical user interface, making ImageJ modules accessible from many different platforms including CellProfiler⁸, KNIME⁹, Alida¹⁰ and OMERO¹¹.



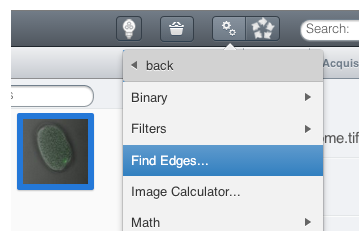
ImageJ-OMERO interoperability

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

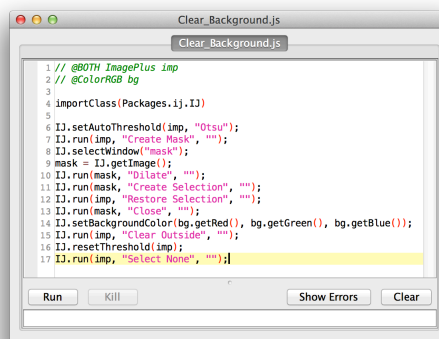
◆ Add OMERO capabilities to your ImageJ.



◆ 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.informatik.uni-halle.de/agprbio/alida>
- 11 <http://openmicroscopy.org/>

