OME-XML - Open Microscopy Environment XML

OME-XML is a vendor-neutral file format for biological image data, with an emphasis on metadata supporting light microscopy. It can be used as a data file format in its own right, or as a way of encoding metadata within a TIFF or BigTIFF file (for which purpose there is the OME-TIFF specification).

The standard is maintained by the Open Microscopy Environment Consortium, and was last updated in June 2012.

Summary

Standard Website
http://www.openmicroscopy.org/site/support/file-formats
Specification
http://www.openmicroscopy.org/Schemas/
Mappings
over 120 file formats
Subjects
life-sciences
Disciplines
animal-pathology, animal-physiology, plant-physiology, plant-pathology, cell-biology

Extensions ☑ Add

OME-TIFF - Open Microscopy Environment TIFF ☑ Edit
A specification of how to embed OME-XML metadata within a TIFF or BigTIFF image file.

Tools ☑ Add

OMERO ☑ Edit
Repository software for organising, viewing, analysing and sharing biological microscopy images. It supports proprietary file formats but normalises to OME-TIFF/OME-XML.

Fiji ☑ Edit
Fiji is an image processing package that supports the OME data model for images

Bio-Formats ☑ Edit
Bio-Formats reads proprietary microscopy image data and metadata, and converts them to OME-TIFF, a combination of TIFF and OME-XML.

Use Cases ☑ Add

The Cell: An Image Library ☑ Edit
A resource database of images, videos, and animations of cells, capturing a wide diversity of organisms, cell types, and cellular processes. Its native metadata format for images is OME-XML.

JCB Data Viewer ☑ Edit
A repository for viewing and analysing multi-dimensional image data associated with articles published in The Journal of Cell Biology. Its native metadata format is OME-XML.