

WIDE–Web Image and Data Environment

Alexandre Granier, Volker Baecker

Montpellier RIO Imaging

France

alexandre.granier@mri.cnrs.fr

<http://www.mri.cnrs.fr/index.php?m=81>

Abstract

WIDE is an open source project that aims at providing a centralized image database solution for the use at microscopy and imaging facilities. A client software and a service component are installed on the computers of the facility. Users can initiate the upload of images and documents. The service executes the upload. It continues to work after the user logged out. It can be configured to work fast or slower using less resources in order not to interfere with an ongoing image acquisition.

Once uploaded, the images are stored on a file server and indexed in the database system. The original file format is kept in order not to lose any metadata.

Users can access the images via a web-interface. The data is presented in a virtual filesystem view with thumbnails. Other, for example project based views will be added later. WIDE currently allows to manage data in the virtual filesystem, to download it, to share it with other users of WIDE and to create download links that can be accessed by anyone.

A plugin system will allow to run image analysis jobs, for example deconvolution or ImageJ macros on dedicated processing machines from the web interface. Further planned features are a history function, a tagging system and the import and export of metadata.

WIDE is based on Java EE and runs on the glassfish server. It can be accessed from other software using EJB (Enterprise Java Beans) clients or web services.

Keywords

Image database, web-application, open source software, image analysis, batch processing, ImageJ, data centralization, image management, data sharing

