

4 APRIL 2019 / DICOM

Top 12 Free Open source DICOM Viewers and PACS Workstations for macOS

Share this article



Nowadays Many doctors and medical professionals prefer Mac OSX, Though finding medical open source/ free professional software is not easy task, which forces many users into commercial solutions, That's ok if the user is located a country with such software service provider as US, but for other countries MacOSX software market is not that friendly so as medical software service providers which push their product into certain countries.

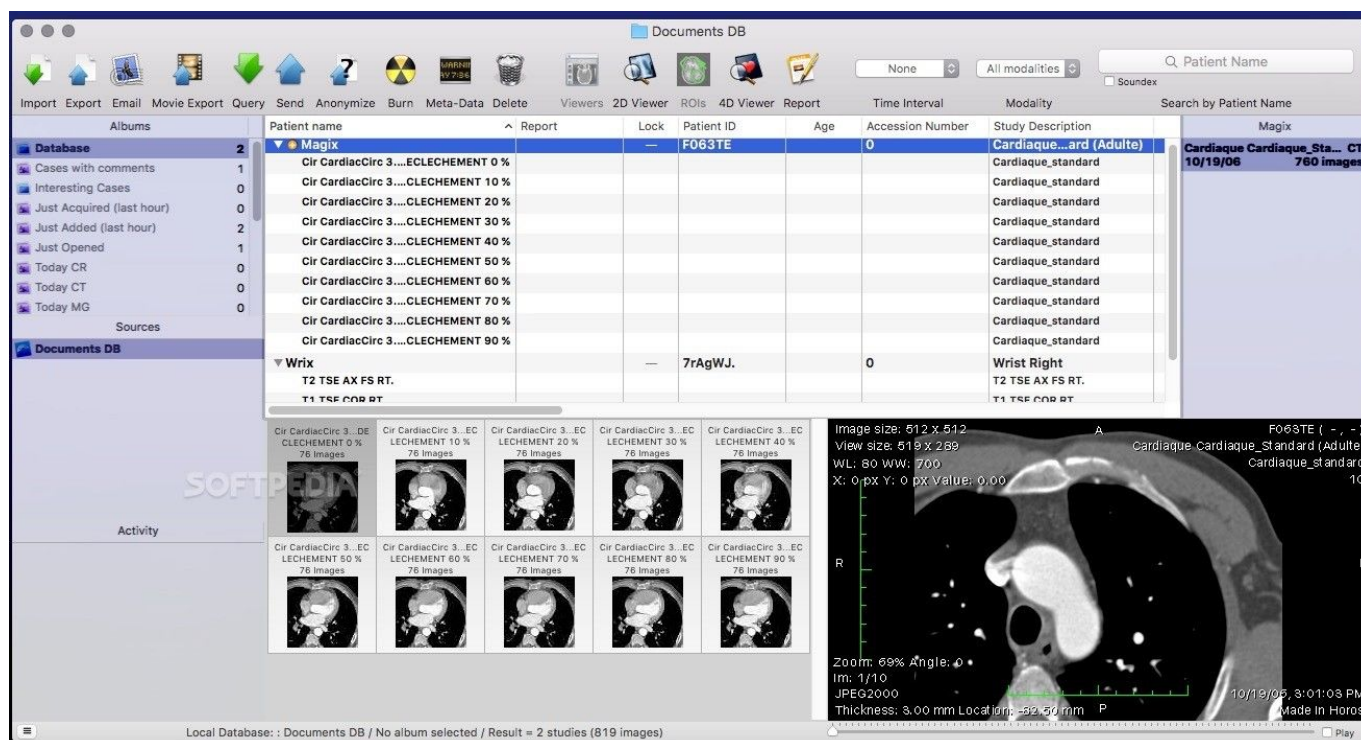
In this article we have collected the best DICOM viewers for Mac OSX, starting with the native ones that uses **Apple's native** programming languages, libraries, and frameworks, then we proceed to the cross-platform projects.

If you are looking for iOS (iPhone/ iPad) DICOM/ PACS Viewers, We have covered the most used free DICOM/ PACS Viewers for iOS in this:

- [Top 10 free iPhone and iPad DICOM viewers & Radiology apps for doctors/ radiologists](#)

Open Source Free DICOM Viewers and PACS Workstations for macOS

1- Horos: Native DICOM viewer for macOS



Horos: Native DICOM viewer for MacOSX

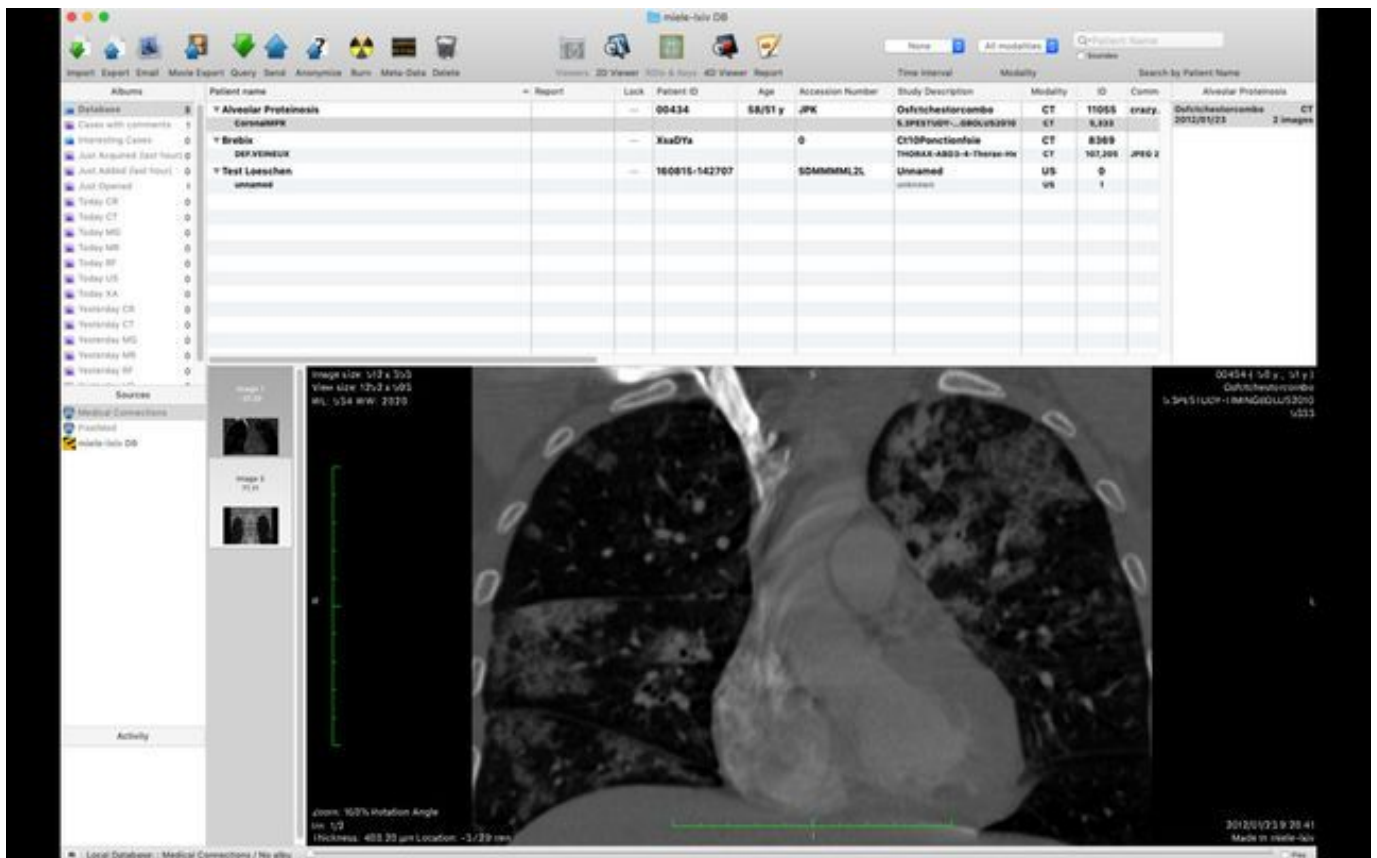
Horos is a native macOSX DICOM viewer. Horos is the only DICOM viewer in this list that comes with comprehensive tutorials, training courses and full functional enterprise-ready cloud platform. As Horos is a native macOSX app expect the best performance regarding speed, and compatibility with the older/ newer versions of macOSX versions.

Horos features

Horos comes with advanced DICOM displaying features including many manipulation and measurement tools, 3D surface rendering, image fusion for PET-CT/ SPECT-CT. It comes with OsiriX migration assistant tool which makes it easy for doctors to migrate their docs/ configurations from OsiriX to Horos with ease.

Horos project is a free open source project that released under LGPL V3.0.

2- Miele-Ixiv: Free Native Open source DICOM workstation



Miele-lxiv

Miele-LXIV is an open source/ free DICOM workstation that built on OsiriX. I comes with multi-languages support (English, German, French, Chinese, German, Italian, Japanese, Spanish).

Features

Miele-lxiv features include exporting DICOM images to multiple formats including still images (JPEG, PNG), It has simple native look and feel for macOSX that integrates DICOM display options seamlessly with the interface. It supports all DICOM formats, DICOM metadata, writing to DICOM CD/DVD and supports many PACS/ DICOM networks.

The viewer supports 2D with multiple view layouts, 3D rendering including 3D surface and volume rendering, and 3D exports to Quicktime videos or still images.

Miele-lxiv has many Hardware acceleration improvements for mac OSX which includes:

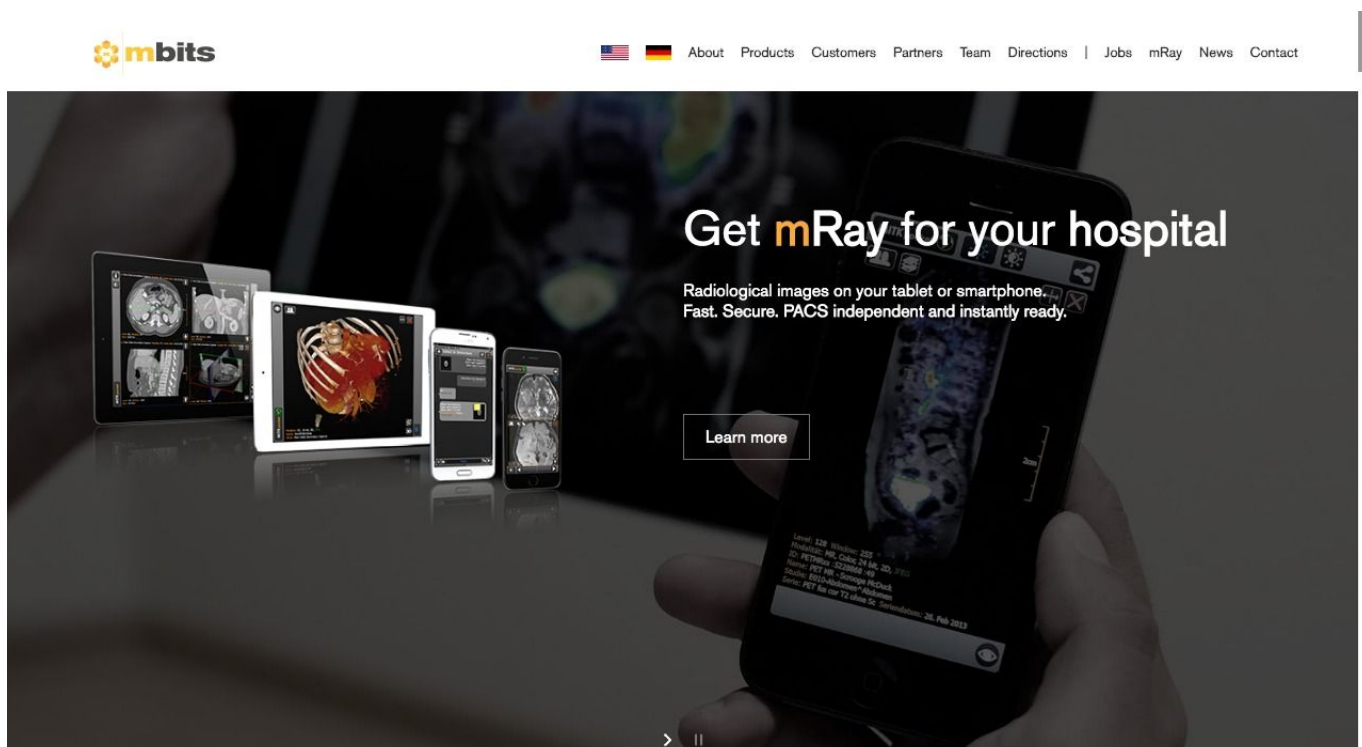
- Multi-threaded for multi-processors and multi-core processors support
- Asynchronous reading
- OpenGL for 2D Viewer and all 3D Viewers
- Graphic board accelerated, with 3D texture mapping support

It was upgraded this month to support macOS Mojave with the dark mode as it supports many macOS versions as macOS 10.9 to later versions.

Miele-lxiv was released first under OsiriX-lxiv by **Alex Bettarini** a freelance software engineer from Italy.

[Miele-LXIV](#) @ iTunes Appstore

3- mRay

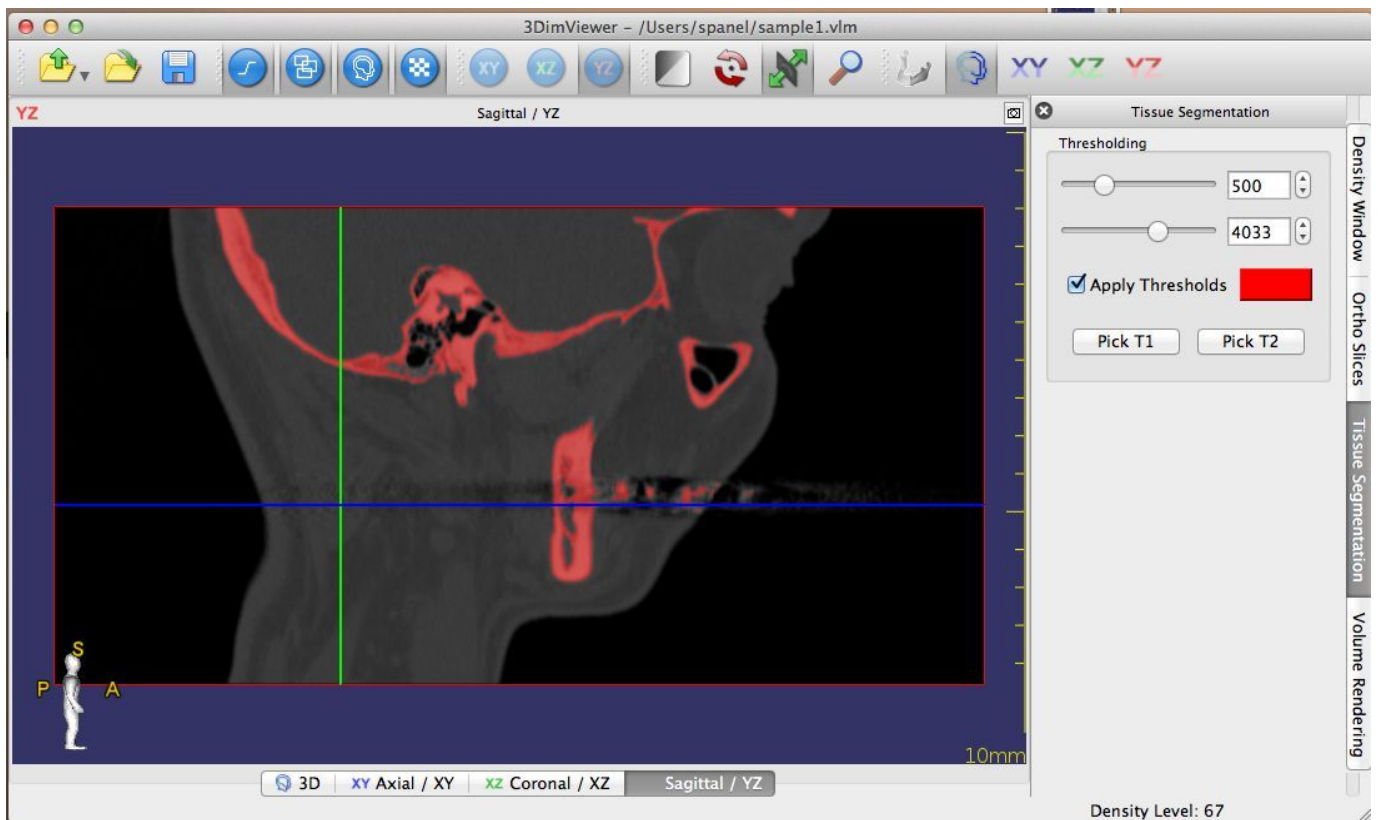


mRay is a free DICOM viewer program created by a german company that released it for Mac OSX other platforms. mRay provides PACS compatibility to many PACS platforms, which makes it easier for hospitals with different radiology stack to adapt it.

Features

mRay supports viewing most of the DICOM modalities (like: computed tomography (CT), magnetic resonance imaging (MRI), positron emission tomography (PET), fluoroscopy (XA), digital x-ray (CR), ultrasound (US)) , It comes with usable clean user-interface, packed with advanced query/ retrieve options.

mRay is not just for macOSX it is also supports iOS platforms (iPad/ iPhone), Windows platforms and Android devices which makes it portable to ease the work for radiologists and save time. Though mRay is built for the enterprise, Its not totally free, it requires mRay Server to be able to use mRay with PACS, mRay Server can be installed for free and used for an evaluation period.



3Dim Viewer

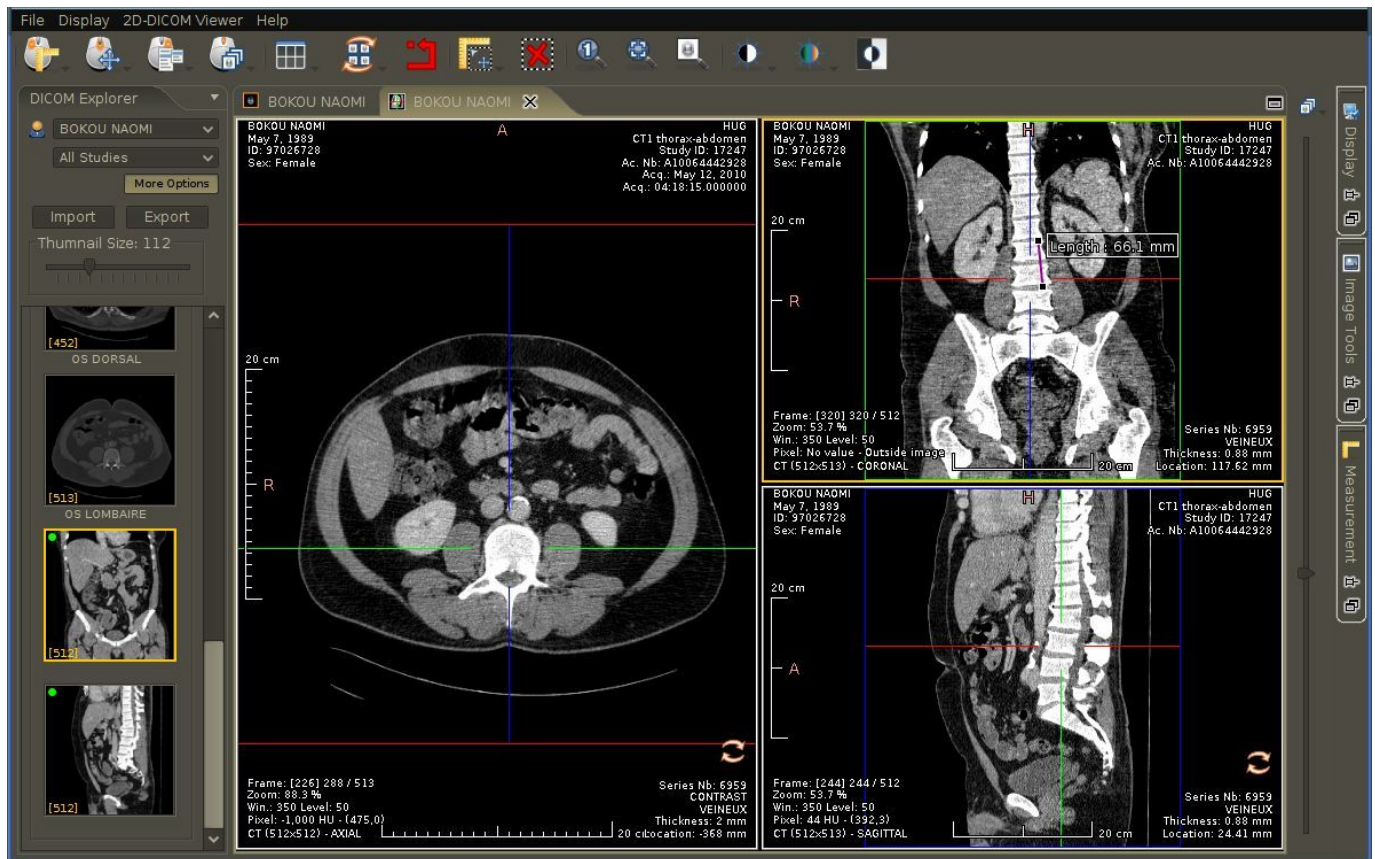
3Dim Viewer is a free lightweight DICOM viewer by a company from Czech Republic that released it for free under Apache License V2.0. It is written in C++ and uses Qt library.

Features

3Dim Viewer basic features: 3D visualization of volumetric medical images, Multiplanar and orthogonal XY, XZ and YZ views, Adjustable density window, Density and distance measuring, DICOM dataset import., Volume rendering using shaders running on NVidia and ATI graphic cards, Tissue segmentation based on thresholding, Surface modeling of any segmented tissue, and 3D surface rendering.

The most important feature for 3Dim viewer is hardware rendering as using graphic cards to render high detailed 3D images with shaders with makes it the best choice for researchers, and radiologists who wanna use advanced 3D rendering with gaming-grade gears like Nvidia and ATI cards.

5- Weasis DICOM viewer



Weasis DICOM viewer

Weasis is a multipurpose standalone desktop and web DICOM viewer project, that is released to provide PACS-ready support that works on many platforms as macOSX, Windows and Linux.

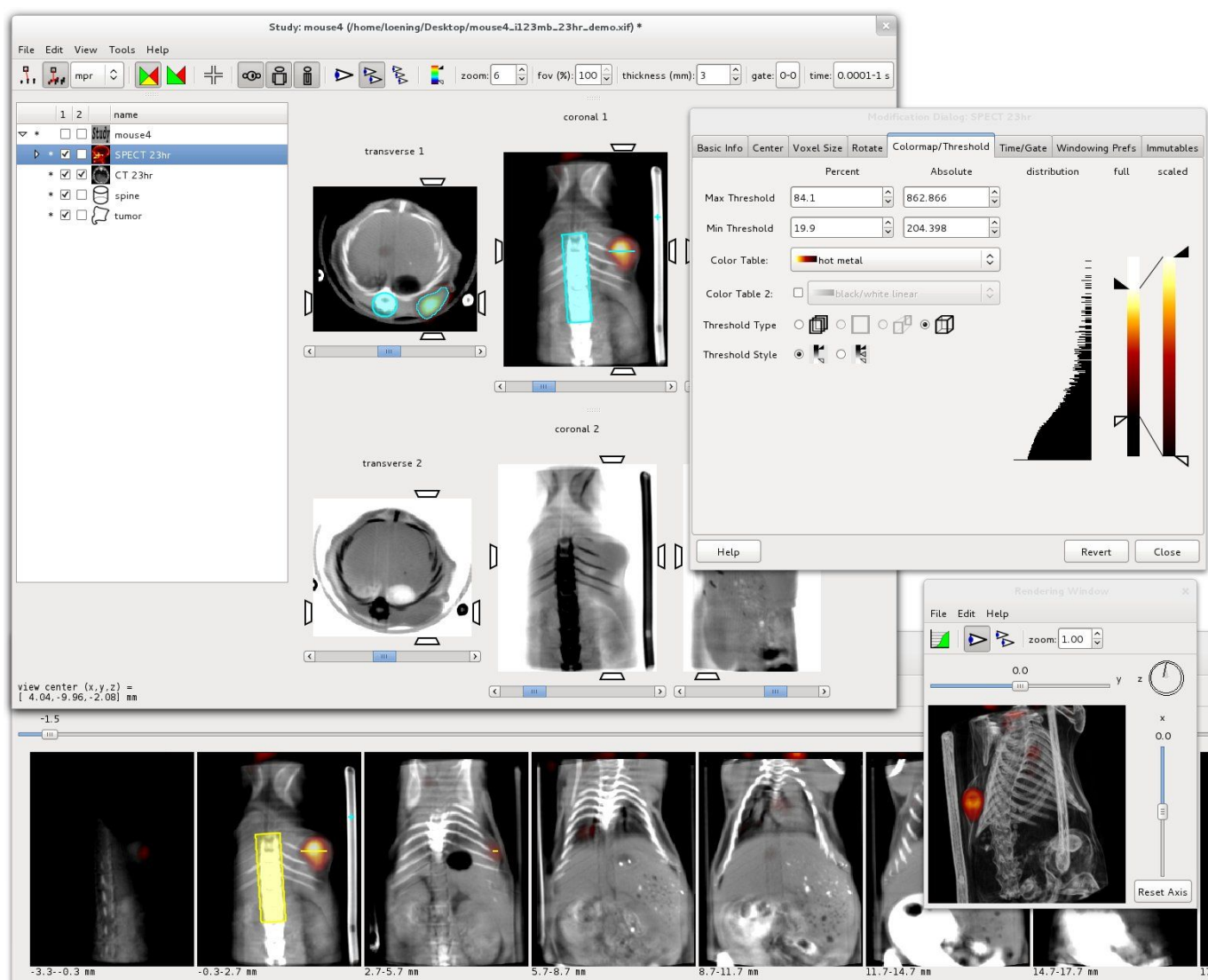
Weasis is aiming to provide a complete integrated open source solution for hospital information systems (HIS), and Radiology Information Systems (RIS).

On technical note Weasis uses OpenCV, the open source computer vision library that provides real-time processing with best performance as it was built with C/ C++.

Weasis requires Java to run on macOSX and other platforms (Windows,

Linux), for the new macOS versions it requires disabling GateKeeper to run.

6- Amide



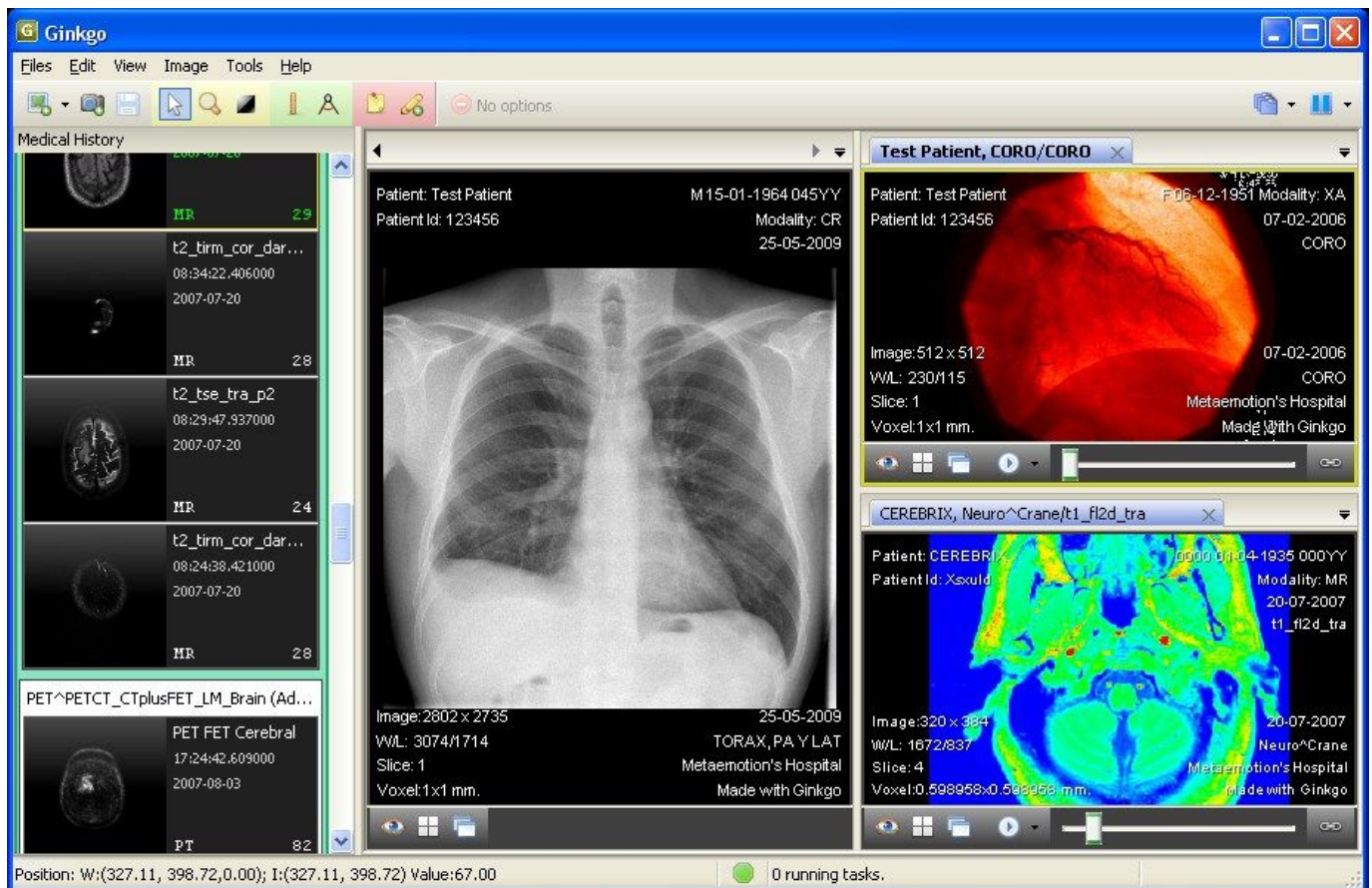
Amide: DICOM Viewer

AMIDE is an open source DICOM viewer that works for MacOSX/ Windows and Linux. I have used Amide for years on Linux, It has an amazing performance on almost all platforms including mac OSX/ Windows, all are in true Libre/ open source packed.

AMIDE DICOM viewer has advanced enterprise-grade viewing features with measurement and manipulation tools. It imports the modern DICOM files,

raw data files and legacy DICOM files without issue. AMIDE supports images file exports in multiple formats and video format as Fly-through-movie can be generated as MPEG1 video file.

7- Ginkgo CADx



Ginkgo CADx Running On Windows

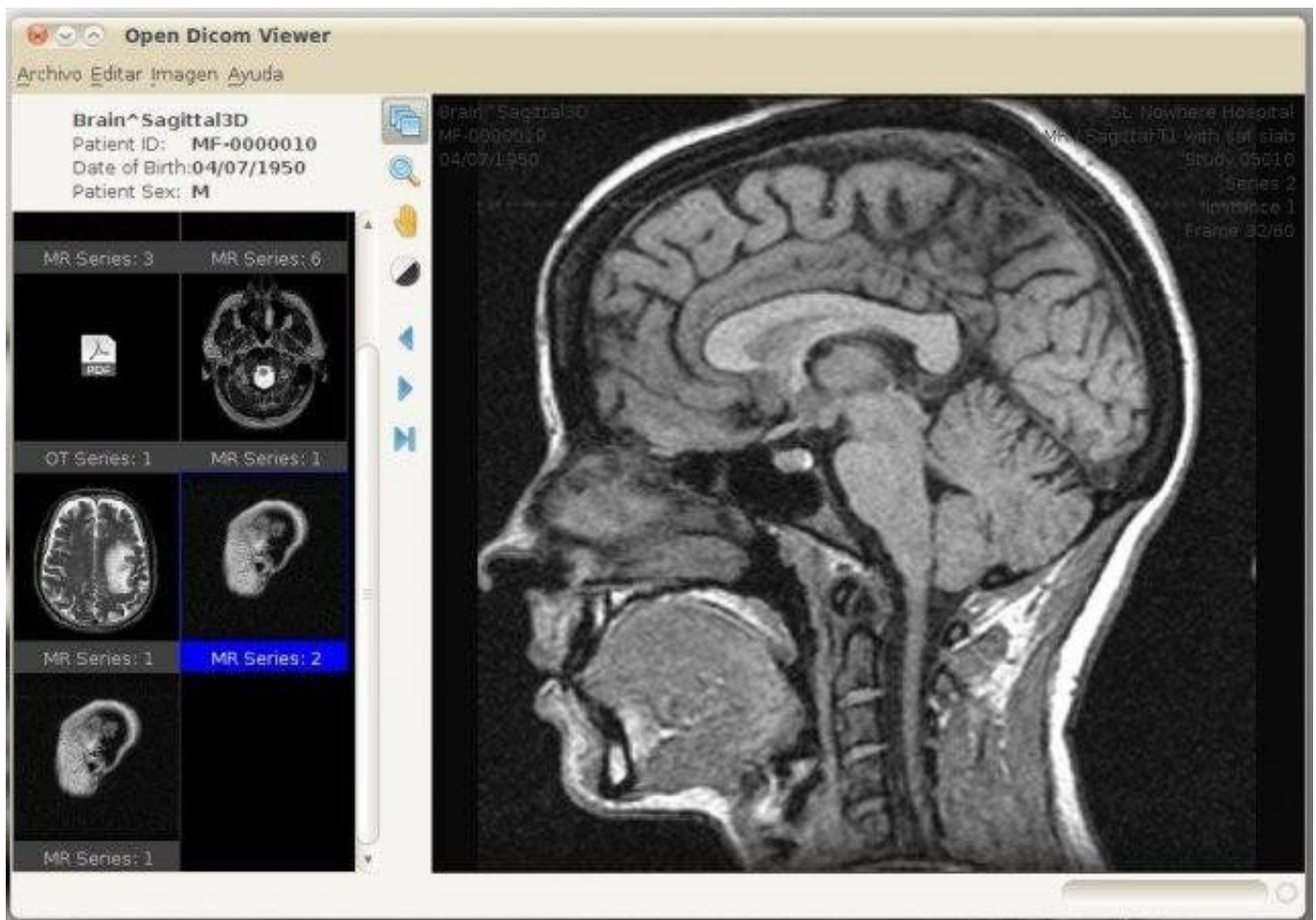
Ginkgo CADx is an advanced DICOM viewer and dicomizer (converts png, jpeg, bmp, pdf, tiff to DICOM).

Ginkgo CADs is an open source DICOM viewer that supports many desktop environments including mac OSX, Windows (PC), and Linux. It provides .dmg (disk image file) that contain the compiled application.

Ginkgo supports many DICOM modalities and file manipulation tool that

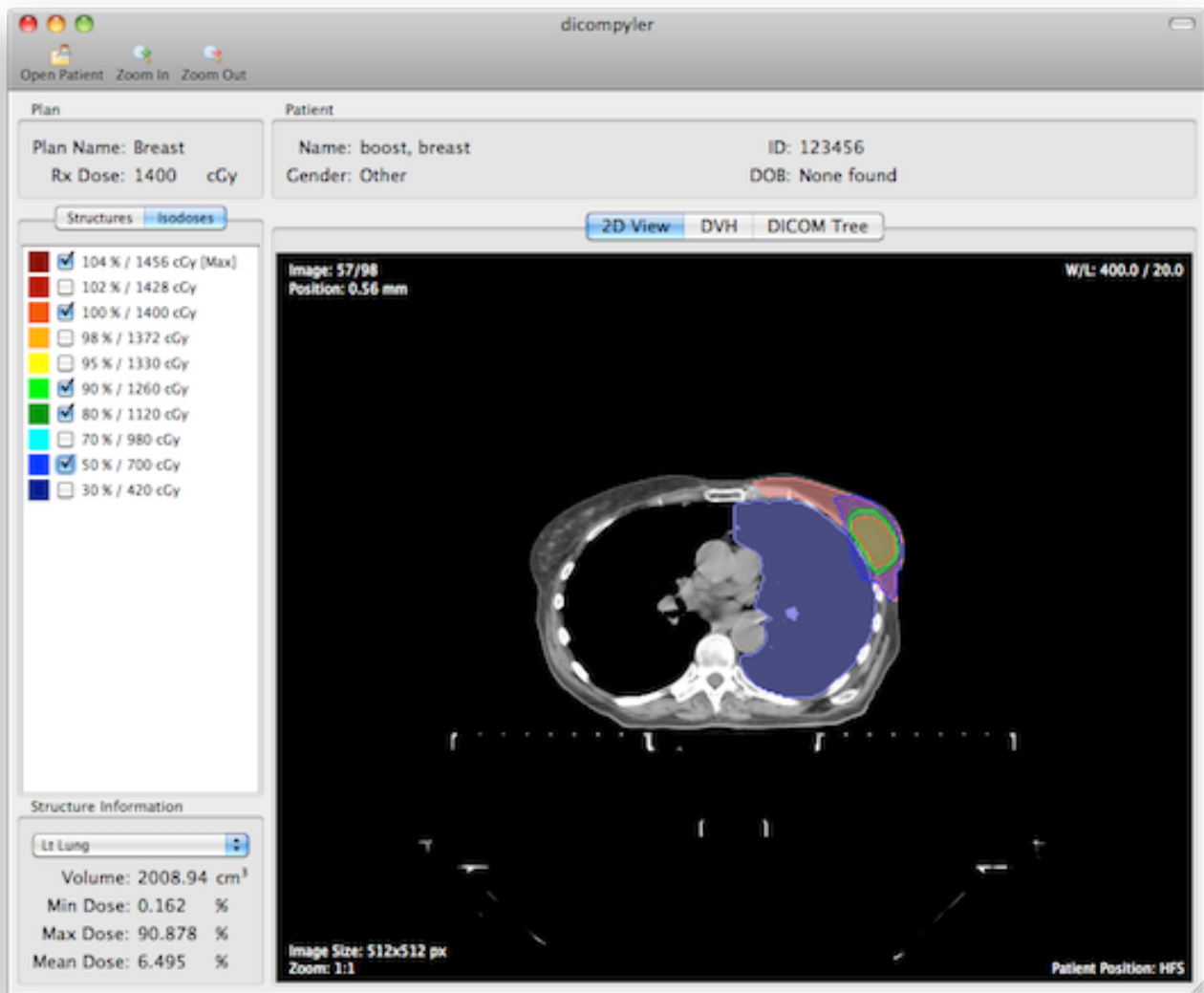
supports DICOM files conversions to still images. Note that Ginkgo has not been updated since 3 years so it may not be compatible with the new releases of macOSX.

8- Open DICOM viewer (JAVA)



Open DICOM viewer is a lightweight cross-platform application to display/view DICOM images in a web page or CD/ DVD. It's built with Java so it works on mac OSX, Windows and Linux but requires Java to work. Though it was not updated since 2015 but it works great and getting thousands of download hits every month.

9- Dicompyler



Dicompyler

Dicompyler is a lightweight extensible open source radiation therapy research platform based on the DICOM standard. It also functions as a cross-platform DICOM RT viewer.

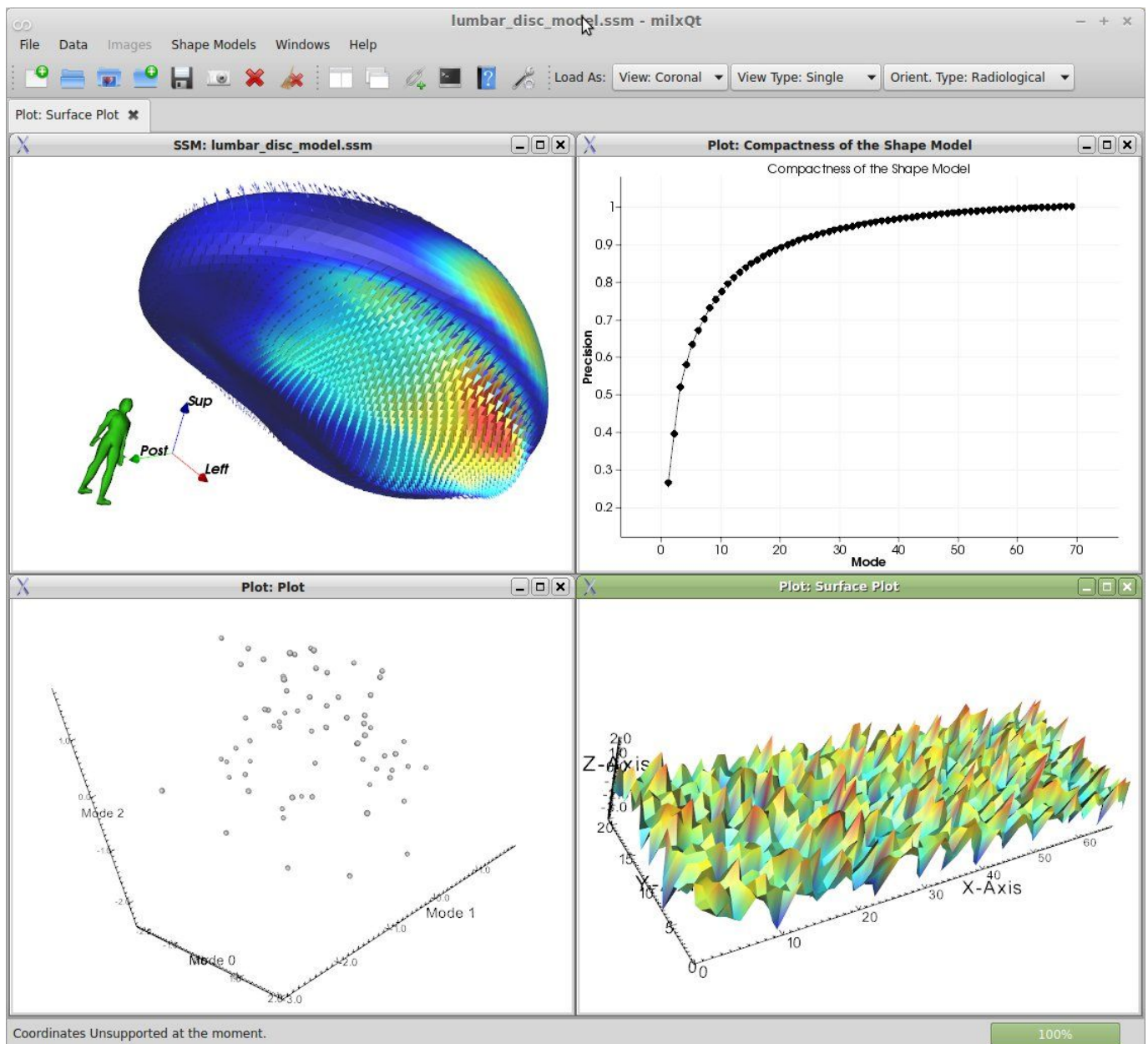
Dicompyler was written in Python which makes it run smoothly on other platforms as MacOSX, Linux (Debian, Ubuntu, Fedora, OpenSUSE), and Windows.

Dicompyler imports many DICOM modalities display them with 2D image viewer , It has a plugin system that allow developers to extend its

functionalities by building their own plugins

For the new versions of macOS as 10.5 and above it has to bypass GateKeeper to run.

10- SMILI



SMILI (Simple Medical Imaging Library Interface)

SMILI (Simple Medical Imaging Library Interface) is a DICOM library/

program that contains a large set of functionalities to process, convert DICOM files. It is built to work on all known platforms including Mac OSX, Linux and Windows.

Features:

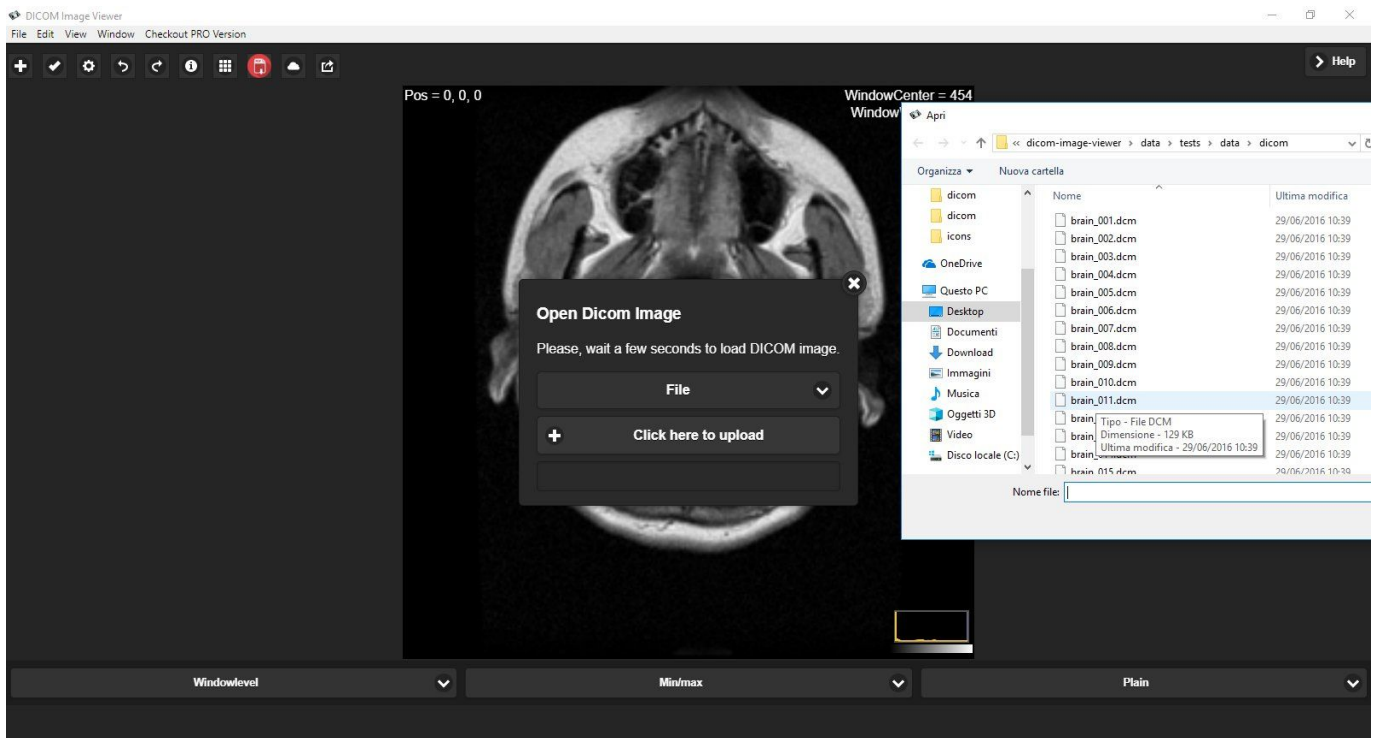
DICOM image processing, surface processing, DICOM viewer with measurement tools and advancing display options, Surface/Model Visualisation, anonymizing tool to remove the sensitive data, shape modelling and analysis, animation for surfaces, and n-D Image Visualisation.

SMILI's UI is built with Qt library, but it provides a command-line interface as well for experienced users, which can take advantage of extending its default functionalities with python scripting.

SMILI is the development-ready framework for building a features-rich DICOM viewer/ workstation.

SMILI uses several powerful open source libraries and frameworks like: Qt for the interface, Insight Toolkit (ITK), and Visualization Toolkit (VTK).

11- DICOM Image Reader

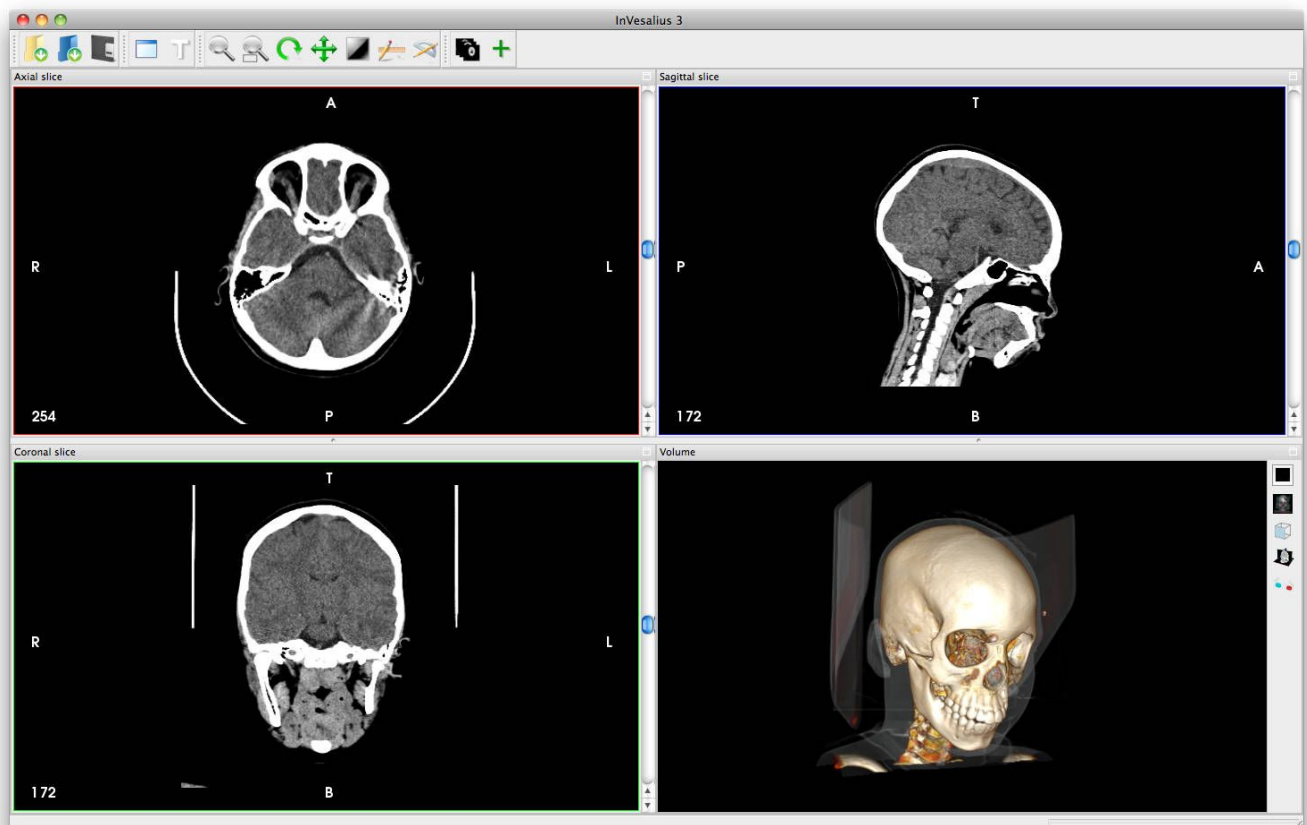


DICOM Image Reader

DICOM Image Reader is a DICOM viewer that built with Web technologies: JavaScript, HTML5, NodeJS that packed in a desktop application using Electron Framework. It can open, read DICOM files (.dcm) files with ease as they load into the viewer which comes with image manipulation tools contrast, zoom, drag, and filters.

DICOM Image Reader has a disk image (.dmg) file that contain the application for MacOSX, It also provides Windows executable and Linux ready files.

12- InVesalius



InVesalius

[InVesalius](#) Is a free open source 3D medical imaging reconstruction that generates a 3D image from a sequence of 2D DICOM images (CT or MRI). It works for Windows, Linux, & macOS. The project is in active development since 2001, to fulfill the demand for a medical imaging solution for Brazilian hospitals and clinics.

Read more about [InVesalius](#) in [here](#)

Conclusion:

The most compatible macOSX native DICOM apps I would recommend are: Horos and Miele-lxiv as both are mac Native apps and open source. Horos is providing training and comprehensive documentation for its users as it has growing community of users and doctors including developers and researchers. However, I would recommend 3Dim Viewer for its better 3D capabilities. If you are a developer and looking to build your own DICOM system that integrates with RIS or HIS Weasis and SIMLI are the best choice, I would go for Weasis as they provide multi-platform support, and it's in fairly new with active development and support.

Related articles

- [Free & open source DICOM viewers for Windows.](#)
- [Open source Free DICOM viewers \(Linux, Mac OSX and Windows\)](#)
- [FREE DICOM Viewers for doctors: Windows, Linux and Mac OSX](#)

DICOM

MacOSX

Open source

Free

List

Medical Imaging

RECOMMENDED FOR YOU

Author: [Hamza Mu](#)

A physician with programming skills, Linux user since late 1990s, Open source supporter . Doing coding with Python, NodeJS (Meteor, VueJS, Express, D3, PhantomJS), SmallTalk & R language... [Read More](#)

Want us to continue publishing amazing content like we are doing?
Please support us at [Patreon](#) .

Share this article



Newsletter

Signup for new articles

Subscribe

— Open source for Medicine, Healthcare,
Science & End-users —

DICOM

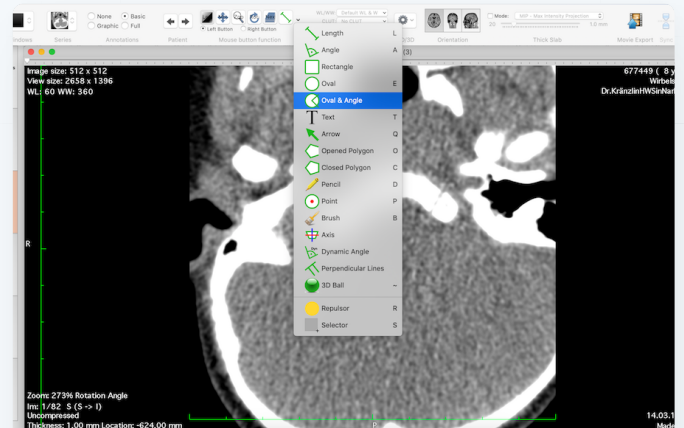


JimboDICOMViewer: Manage and
View your DICOM collections with
this free Viewer on Windows & Linux

InVesalius: Open source 3D Medical
Imaging reconstruction program

Yakami DICOM tools: free lightweight
DICOM viewer, & converter for
Windows

See all 35 posts →



DICOM

Miele-LXIV: Open source/ Free DICOM Workstation & Viewer for macOS

Miele-LXIV is a Mac OSX native
DICOM workstation and viewer, It's
completely free/ libre software as it
released under GPL3.0 license. Miele-
LXIV is developed and maintained by
group of developers who is



3 MIN READ





OPEN SOURCE

Top 16 Open source Data Portal Solutions for Open Data Publishing

Open Data is a concept that describes freedom of using the data, as anyone can use, share, redistribute, or republish it.



7 MIN READ

Open source for Medicine, Healthcare, Science & End-users © 2019

[Home](#) [Facebook](#) [Twitter](#)