DICOM viewers nowadays
What do we want?
Inspiration
Our tools
Features
Conclusion

MediVisu

Tsotne Shonia, MediVisu

HEB - ESI

2015 - July













Table of contents

- DICOM viewers nowadays
- 2 What do we want?
- Inspiration
 - Osirix
 - Other viewers
 - Orthanc
- 4 Our tools
- Features
- **6** Conclusion





DICOM viewers nowadays

It's very easy to find a DICOM viewer But they all have one or more major issues :

- Not free software;
- Expensive;
- Not user-friendly or unadapted GUI;
- Platform restriction;
- Lack of approval for medical diagnosis;
- Negligence towards the user.
- Only reads some DICOM files





What do we want?

- Approval for medical diagnosis (CE Marked / FDA Approved)
- Comfortable and intuitive
- Focus is put towards the user experience
- Free software, all features included
- Cross-platform
- Customizable and have presets for each specialty
- Able to read each dicom file (even proprietary fields)
- AGPL (Affero General Public License)





Osirix



- Developped by a doctor, Antoine Rosset
- Appreciated by the professionals
- Restricted to Mac OS X





Other viewers

3D Slicer



Ginkgo CADx



VR-Render



MedInria







Orthanc



- Belgian project
- Created by Sébastien Jodogne
- 2014 Free Software Award winner
- DICOM server for medical imaging
- GPL license
- OrthancViewer (Quentin Smetz)





Our tools

- C++
- Qt (LGPL)
- VTK (BSD)
- ITK (Apache 2.0)
- GDCM (BSD)

There are natural bridge classe(s) for Qt/VTK and GDCM/VTK/ITK





Features Non exhaustive list, can be altered during the development

- Image manipulations on each plane (axial, coronal, sagittal)
- 3D Volume Rendering (Raycasting, MIP, MPR)
- 3D Volume manipulation (Zoom, Rotation, ...)
- PET-CT Merge
- Hounsfield windowing
- Colormapping
- 2D+t / 3D+t files handling





Conclusion

MediVisu will be a universal DICOM image viewer and analyzer, certified, comfortable and cross-platform. It will be a free software under AGPL.





Contact us





MediVisu

Contact us at medivisu-dev@pettiaux.be



