The future of Orthanc
October 2013: Orthanc becomes a VNA

Picture archiving and communication system (PACS)

Vendor neutral archive (VNA)

Storage

Network

DICOM query/retrieve to remote servers is now supported!

Viewer

RIS

Transcoding
Picture archiving and communication system (PACS)

Vendor neutral archive (VNA)

Storage

Network

February?

Storage commitment

April?

Viewer

RIS

Transcoding

C-GET? DICOM TLS?
2016 to 2019: Stone of Orthanc

• Standalone, companion project to Orthanc for **viewers**
• **Lightweight, cross-platform C++ library to render medical images** (cf. VTK)
• **Can be run by Web applications** (WebAssembly)
• 2D hardware acceleration (OpenGL/WebGL)
• Built-in support of 3D coordinates (MPR, volume reslicing)
• Support of oncology: PET-CT fusion, doses, contours...

_Ultimate goal: Fast development = build a new viewer in a handful of days_
2020: Next generation of Web viewers

This is **WebAssembly using Stone**!

Full access to 3D geometry (MPR, reference lines...)

Independent of Orthanc: DICOMweb or any kind of “DICOM source”

Not decided yet: Heavyweight (Qt) or Web application?
2020: Radiotherapy viewers for end-users

Goal: Patient empowerment
(bring those highly specific images out of hospitals, clinical study)
Lua scripts

External applications

REST API

DICOM protocol

Imaging modalities

Plugin SDK

Storage plugins
(default: filesystem and SQLite)

Web applications
(extended REST API)

Orthanc process

Research, machine learning, HL7, “rich” IT scripts, NifTI/BIDS, “servlets”…?
External applications
REST API
DICOM protocol

Imaging modalities

Orthanc process

Storage plugins
(default: filesystem and SQLite)

Plugin SDK

Web applications
(extended REST API)

 Lua scripts

Python plugins
Thanks for your contributions!