MANAGE AND SHARE YOUR IMAGES EASILY

"Not just hosting Big Data, but also sharing Big Data..."

"Zero-footprint web-based cockpit and viewers..."

"Secure tokens for image data tracking and audit trail maintenance..."

"Web APIs for developers of image processing and radiomics..."

"As easy to use as Instagram..."

OSIRIX FOUNDATION

Developed with the support of the OsiriX Foundation

ABOUT KHEOPS

The Kheops platform is available at https://github.com/OsiriX-Foundation and is distributed free of charge under the permissive MIT license allowing its replication and implementation in any other institution.

Documentation:
https://docs.kheops.online

Contact
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www.kheops.online

KHEOPS

Open Source platform for sharing medical images

Cloud-native technologies and architecture

VISION

To support the development of large open-access medical imaging databases for research and machine learning.

To extend on the track of development of medical imaging software (OsiriX), the Kheops platform is designed to establish an open framework for storage and exchange of medical imaging data suitable for deep learning research projects for AI and personalized medicine.

To support multi-centric clinical studies based on "open clinical data" principles and offer an open repository for multi-modality imaging and ancillary data, genomic profiles, clinical observations and quantitative analysis results.

GOAL

Development of an open-source IT framework for an open-access repository for medical imaging geared specifically toward data sharing and federation of multi-centric collaborative initiatives.
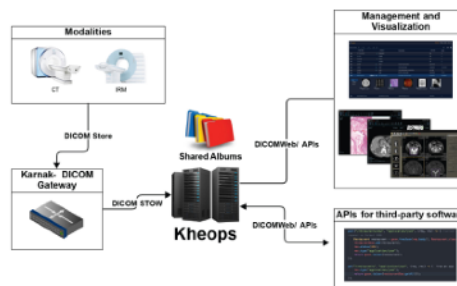
Set up internationally accessible open databanks of imaging biomarkers (phenotype) that can be easily associated with genetic and proteomic biomarkers (genotype).

SYSTEM ARCHITECTURE

The Kheops platform is 100% web-based with RESTful APIs.

All the data queries and transfers are based on the DICOMWeb standard.

Authentication based on OAuth2, OpenID Connect and Keycloak.

The solution allows visualizing the data with different viewers:

- **OHIF**: Zero footprint for desktop and mobile (http://ohif.org)

- **Weasis**: Multi-platform clinical viewer (https://nroduit.github.io)

- **OsiriX**: Advanced viewer for Mac (https://www.osirix-viewer.com)

KHEOPS IMAGING VAULT

The Kheops platform offers a secure and efficient repository for DICOM images and ancillary data. The DICOM series can be grouped into easily shareable albums.

Kheops is only intended as storage for de-identified imaging data. The de-identification of images must be done on the side of the image producers with the institution's tools or with the DICOM gateway Karnak.

An intuitive and user-friendly cockpit allows non computer-savvy users to easily manage and monitor sharing of their data among distributed network of partners.

Built using cloud-native technologies for easy installation on virtual machines and cloud providers.