

Dicom Conformance Statement

CV-DCS-2022.01-EN | Revision 1, 03/2022

Introduction

This document is intended for medical personnel, health system integrators, software designers or implementers. The assumption is, the reader has the understand of DICOM standard (Digital Imaging and Communications in Medicine).

Customy Vision is software for visualizing and processing medical images from a medical scanner, such as a CT scanner or an MRI scanner, to an output file. The software allows the user to import, visualize, and segment medical images, check and correct the segmentations, and create digital 3D models. Digital 3D models serve as the basis for advanced visualization of the patient's anatomy, fabrication of anatomical models, or design of patient-specific implants and surgical guides. The output files can be used to produce anatomic physical 3D models (using traditional or additive manufacturing methods), used in physician-patient communication and for preoperative planning of surgical treatment for orthopedic and craniomaxillofacial applications.

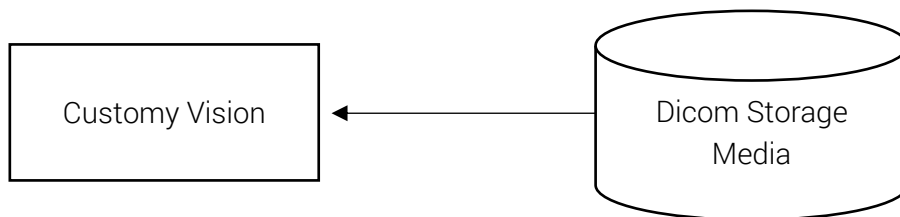
Possible formats of imported 2d images stack files to the Customy Vision project include: DICOM 3.0 format, META images, raw images, PNG, JPG, TIFF, BMP. The images are processed by the user to acquire output file which can be used for applications of reconstructing, designing, modelling and creating physical replicas of anatomical models.

Implementation

Customy Vision implementation support DICOM file format as presented in the "Digital Imaging and Communications in Medicine (DICOM) 3.0 and ACR/NEMA images. Customy Vision does not support any network services like query/retrieve, storage or other media services.

The original data is stored by the user on his DICOM storage media. In the Customy Vision project file the copy of data is stored which can be exported as a META file. Software can apply security measure in form of DICOM data anonymization, where chosen tags containing critical patient and study data can be cleared. Other than that no security features are applied.

Data Flow Diagram



Attributes of media

In order to correctly import images, the following attributes are required

IOD	Attribute Name	Tag identification
Serie	Modality	0008,0060
Series	Series number	0020,0011
Image	Image Type	0008,0008
Image	Image Orientation	0020,0013
Image	Image Position	0020,0032
Image	Pixel Spacing	0028,0030
Image	Lossy image compression	0028,2110

Pixel	Photometric interpolation	0028,0004
Pixel	Rows	0028,0010
Pixel	Columns	0028,0011
Pixel	Bits Allocated	0028,0100
Pixel	Bits Stored	0028,0101
Pixel	High bit	0028,0102
LUT	Rescale Intercept	0028,1052
LUT	Rescale Slope	0028,1053
LUT	Rescale Type	0028,1054

Media which do not meet those requirements can be still loaded to the Customy Vision project, but Smart Labs Sp. z o. o. do not guarantee correct image import and confirm there can be possible image changes and/or distortions.

Other media attributes, such as Patient Name, Patient ID, etc, are being displayed, within the DICOM preview window while importing DICOM data, under condition they are not empty. Any media attributes which are empty is not going to be displayed within the DICOM preview window.

Manufacturer Contact Details

Smart Labs Sp. z o.o.
ul. Metalowców 13
41-500 Chorzów, Poland
email: contact@customy.eu
www.customy.eu