DICOM Conformance Statement Web DICOM Viewer

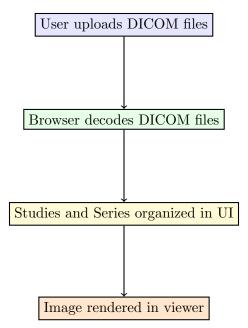
Zargantana / Web DICOM Viewer May 2, 2025

1. Introduction

This document is the DICOM Conformance Statement for the **Web DICOM Viewer**. This software component is designed for displaying DICOM images directly in a web browser. It supports uploading image files through a browser interface, visualizing them frame by frame with interactive navigation and rendering options.

2. Implementation Model

2.1 Application Data Flow



2.2 Functional Definition

The Web DICOM Viewer is a **VIEWER** application that does not establish network communication via DICOM protocol (no SCU/SCP roles). It operates solely on files provided through user upload.

3. AE Specifications

3.1 Web DICOM Viewer AE

• SOP Classes Supported:

All storage SOP classes containing image data (e.g., CT, MR, XA, US, NM, CR, OT).

• Supported Transfer Syntaxes:

- Explicit VR Little Endian (1.2.840.10008.1.2.1)
- Implicit VR Little Endian (1.2.840.10008.1.2)
- JPEG Baseline (Process 1) (1.2.840.10008.1.2.4.50)
- JPEG Lossless (1.2.840.10008.1.2.4.70)
- JPEG-LS Lossless (1.2.840.10008.1.2.4.80)
- JPEG 2000 Lossless (1.2.840.10008.1.2.4.90)
- RLE Lossless (1.2.840.10008.1.2.5)

• Image Display Capabilities:

- Only the first defined window level (Window Center / Window Width) is used for rendering.
- Support for grayscale and color images as provided in the DICOM file.

3.2 Supported Modalities

Modality Code	Description
CR	Computed Radiography
US	Ultrasound
XA	X-Ray Angiography
NM	Nuclear Medicine (e.g., gammagraphy)
OT	Other (Generic / Non-standard)
DX	Digital Radiography
CT	Computed Tomography (if uploaded)
MR	Magnetic Resonance (if uploaded)

4. Networking

Note: This application does not support DICOM network communication (no DICOM Upper Layer Protocol, DICOMweb, or DIMSE services).

5. Browser Interface and User Interaction

- Users upload DICOM files via an HTML file input element.
- The system displays a list of studies and associated series.
- Users can select a study and navigate through its images.
- Two display modes:
 - For studies with modality OT or more than 50 images: scroll navigation via mouse wheel.
 - For other studies: a series list view with selection and optional cine loop playback.

6. Limitations

- Only the first window level is supported.
- No support for DICOM C-FIND, C-MOVE, or other DICOM services.
- No integration with PACS or DICOMweb servers.
- Only file-based workflows supported.

7. Security

The viewer operates entirely on the client side, without uploading data to a remote server. Security and confidentiality of patient data depend on user handling and browser environment.

8. IHE Integration Statement

This viewer does not currently support IHE Integration Profiles such as RAD-68 or XDS-I.b.

9. Support and Contact Information

Web DICOM Viewer

Website: https://visordicom.es Email: zargantana.reader@gmail.com