

## WebSys 2.4 Release notes.

Enhancements in database to support NetSys 4.0.  
Generation of full 12 bit Grayscale images in JPG and JPG2000 formats.  
And naturally, the bug fixes.

This version of WebSys is tested for the following data sets

Clinical Data Sets:

Format: DICOM, DICOM with RT Objects, RTOG

**Read:** DICOM: Most manufacturers (Appendix A)  
RT Objects: Most manufacturers (Appendix A)  
RTOG: Most manufacturers (Appendix A)  
Nomenclature for reading RTOG files: AAPM.nnnn or  
RTOG.nnnn or user definable.

**Write:**

### DICOM

Anonymized DICOM Objects in Part 10 Explicit format (Optionally can be switched to Part 10 Implicit or Raw Model).

All attributes (except anonymized attributes) are regenerated as output. All sequences are regenerated with the same contents and order as output.

### RTOG

The corresponding Directory files are scanned and anonymized by replacing values. Otherwise, files are not changed.

Raw data files:

Up to 500 MB data files can be sent as raw data.

## Rapid Review Capabilities

- This version of WebSys generates appropriate rapid review Jpeg 200 (12 bit Grayscale) Images for the Rapid Review Applet v.3.
- Overlay of Structure Sets and contours (color).
- The generated image sets include
  - Image formats: Axial, Sagittal, Coronal, Localizer, Arbitrary cut, Other.
  - Image modalities: CT, MR, CR, SC, RT Image (Portal, DRR).
  - Scout views (based on volumetric image set).

**Requirement for Java Applet:** Java Advanced Imaging Codec Package (from Sun Crop.).

## NetSys 4.0

DICOM Object Reading capabilities:

CT, MR, PET  
Plan, Dose, Structure Set  
DRR, Portal.

### Visualization capabilities:

#### 2D:

Axial, Sagittal, Coronal.  
Arbitrary Cut  
Beam's Eye View.  
Structure Set (ROI): 2D, 3D wire 3D surface  
Plan: Prescription, Fractionation, Beam.  
RT Image: DRR, BEV, Portal (Overplayed Curves)

#### 3D:

Volumetric Rendering:

- Surface rendering
- Ray tracing Voxel view.

Arbitrary Cut  
Beam's Eye View

### Support for Plan Review:

**Editing of Structure Set Contours (Axial, Sagittal, Coronal).**  
**Update, Save and Version Control.**  
**DVH Recalculation.**

Appendix A: Some of the systems and the corresponding data object types, for which WebSys is tested

Manufacturer	DICOM Modalities	RT Modalities	RTOG Set
Varian (v. 7.1 , 7.0, 7.1.59)	CT (Pass through and generated)	Plan Structure set Dose RT Image (DRR, Portal)	
Elekta (Prices Plan 29.86)	CT (Pass through and generated) SC	Plan Structure set Dose RT Image (DRR, Portal)	Yes
MDS Nordion (Helax OS 7.1.35)	CT	Plan Structure set	Yes

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		Dose RT Image (DRR, Portal)	
Adac	CT (Pass through and generated)	Plan Structure set	Yes
GE (Genesis)	CT MR	-	
Marconi Medical Sys. (PQ5000, AcQSim 4.1.1, 4.2X)	CT MR(Pass through and generated)	Plan Structure set	
Seimens (Somotoma Plus 4, Symphony 4VA12B, Magnetom VisionMR)	CT, MR		
CMS	CT (Pass through and generated) SC	Plan Structure set Dose RT Image (DRR, Portal)	Yes