



# Next-gen PACS for Faster Radiology

**Streamline imaging, reporting & clinical collaboration with a secure, high-performance PACS built for hospitals and diagnostic centers.**



# Introduction

This is a Picture Archiving and Communication System generally known as “PACS” and the system streamline the workflow of a radiology/imaging department of any healthcare enterprise

A complete solution for a radiology department in any hospital organization which is functioning independently or dependently with HIS/EMR (Hospital Information System/Electronic Medical Records) in a hospital.

All medical image activities can be electronically managed and recorded without film & paper.

## Built for



Hospitals



Diagnostic Centers



Radiology Departments

## Key Features

- ✓ Multi-Modality Connectivity – Connectivity to any Modality (MRI, CT, CR, DR, US)
- ✓ Secured Authentication to View Studies and Reports of patient
- ✓ Advanced Search Engine, using all DICOM Tags to retrieve studies
- ✓ Realtime Backup enhance the reliability
- ✓ Flexible Report Creation with Predefined Templates
- ✓ Special Case Study – Create & Share special case studies & observations
- ✓ Advanced Image Processing Tools & Image Comparison Feature
- ✓ Provision to Define & Visualize Hanging Protocol
- ✓ DICOM/HL7 Complaint & Modality Work-List (MWL) Support
- ✓ Print Feature:- enable DICOM & Normal Printing
- ✓ CD/DVD/USB writing with Image viewer
- ✓ Feature to generate PPT-Presentation from studies
- ✓ Desktop & Web Based Viewer to support “own premises & remote access”

No. Features	Description
1 <b>Multi-Modality Connectivity</b>	Connect to any Modality (MRI, CT, CR, DR, US).
2 <b>Multi Monitor Support</b>	Can be connected and extend more than two monitor.
3 <b>Radiology Workstation</b>	Radiologists can view/analyze studies & create reports online.
4 <b>Doctors Console</b>	Doctors are able to view radiology reports & images online.
5 <b>Reporting Console</b>	Stenos are able to create reports in a very simple way.
6 <b>Special Case Study</b>	A feature to create & share special case studies & observations.
7 <b>Integrated Report Templates</b>	Helps radiologists/stenos to generate reports easily.
8 <b>Image Processing Tools</b>	Standard tools, Measurements, Annotation, Cini-View etc..
9 <b>Hanging Protocol</b>	Support Radiologists to visualize the images in different ways.
10 <b>Image Comparison</b>	A supportive feature to compare different studies/series/images.
11 <b>Image Conversion</b>	DICOM conversion support for Standard Image.
12 <b>DICOM MWL Support</b>	Support to Prepare and download Worklist to modality.
13 <b>Fast &amp; Lossless Connection</b>	Lossless compression & fast DICOM communication.
14 <b>Audit Trail</b>	Secured with Audit Trail, which keep track of each functions.
15 <b>Web Based Viewer</b>	To enable internet based user to access images, reports remotely
16 <b>Desktop Based Viewer</b>	To enable intranet based users to access images, reports instantly
17 <b>Import/Export Studies</b>	Import/Export Radiology Studies, images & reports
18 <b>Printing Images &amp; Reports</b>	Images & Reports printing features (Film & Paper)

No. Features	Description
19 Retrieve Historical data	Pull out historical data of studies with respect to different patient
20 CD/DVD/USB Writing	CD/DVD/USB writing with embedded viewer
21 Integrated Security	Role & Privilege based access to the system
22 Role Based Access	Access Role Based "Radiologist, Physician, Admin, Sonographer".
23 Real-time Backup & Restore	Data backup and "Search" options to retrieve old studies/scans
24 Raid Support & "N" TB Storage	"N" Terabyte real-time storage for scanned images & reports
25 Calendar View	To view scheduled scans in Radiology department.
26 Events Board	Events Board to notify the progress of the scheduled scans
27 Admin Console	A Console for better administration
28 HL7 Complaint	Support for easy integration with third party HIS/EMR systems
29 HIPPA Complaint WF	Only Reporting Radiologist & Physician have access to studies.
30 RIS Integration Support	The System support RIS Integration via HL7 & MWL Server

## Doctors Console - Login

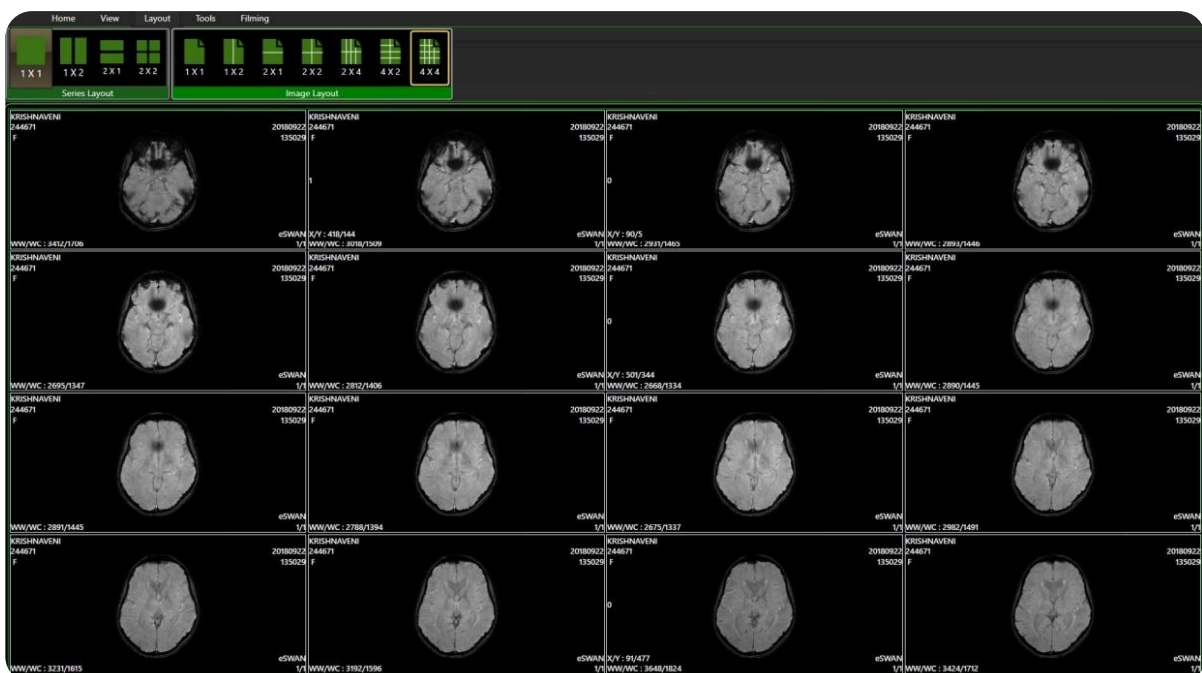
- ✓ Role & Privilege based Secure access to the System.
- ✓ Admin, Radiologist, Physician, Steno/Technician : Roles & Privileges defined





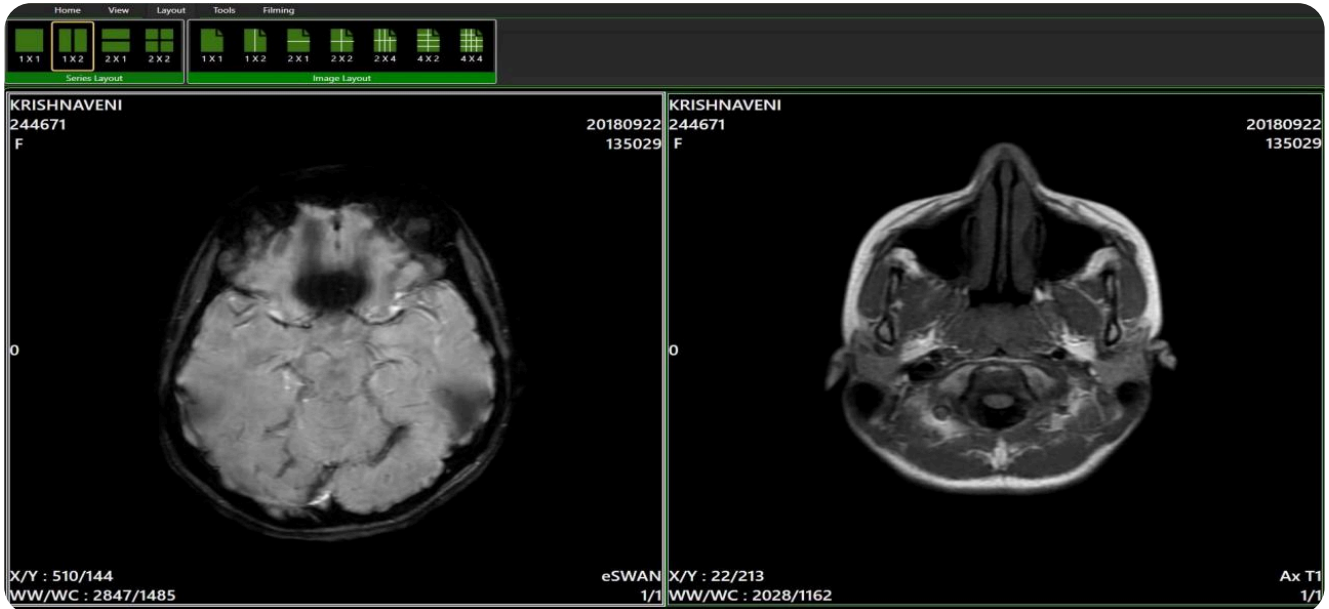
- 

Series Layout & Images Layout settings enables different display options to a radiologist to view the series of images.



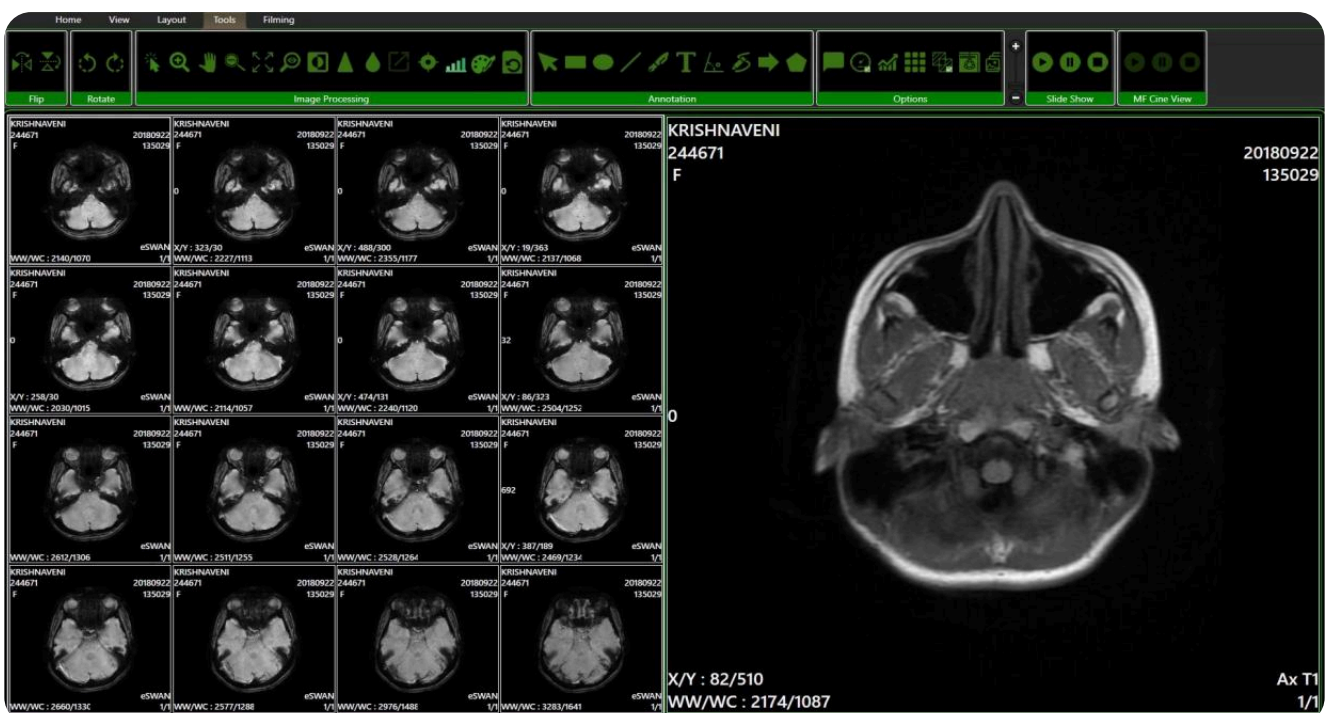
# Series Layout Settings

The Image viewer also facilitate to view different series of images with respect to a patient by using layout settings.



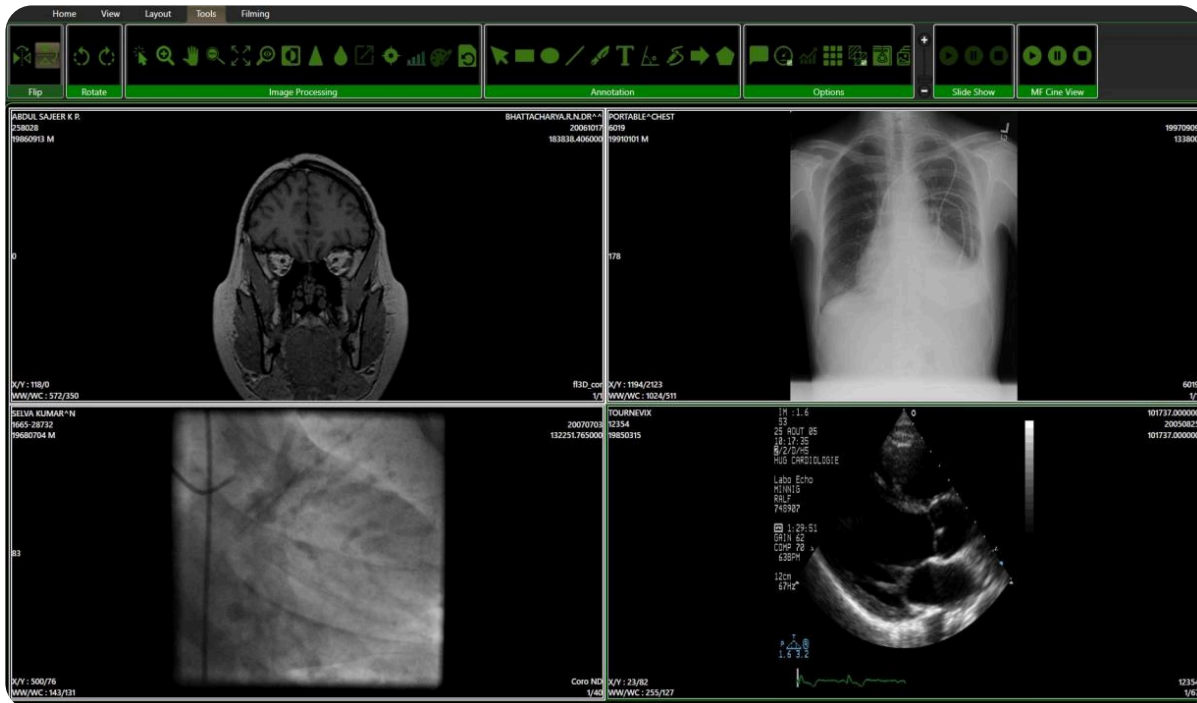
# Different Layout Settings

The Image viewer has the capability to display the images with respect to a patient with different layout settings.



# Loading Multiple Studies

The Image viewer also capable to display different series of images with respect to different Modality (CT/MRI/US/CR etc.. ).



## Image Processing Tools

The image processing tool are available to apply and analyze scanned images.

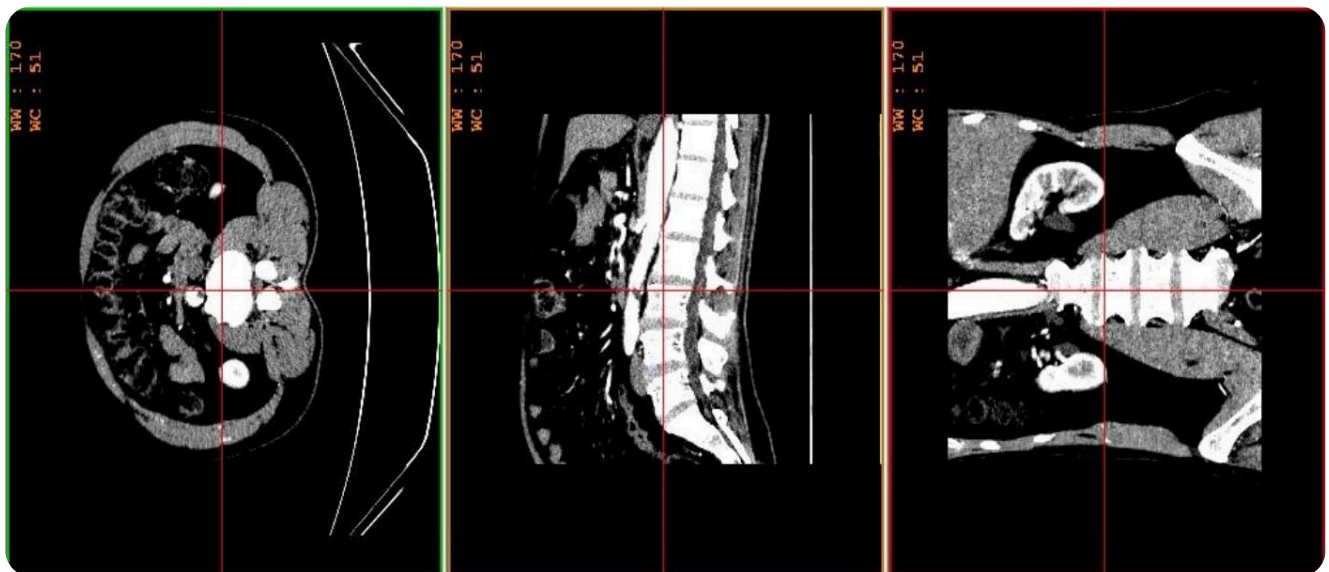
☒ Selection ☒ Rectangle ☒ Ellipse ☒ Line ☒ Freehand ☒ Text



☒ Windowing ☒ Sharpen ☒ Zoom In/Out ☒ Blur ☒ Pseudo Coloring  
☒ Magnify ☒ Pan ☒ Edge Detection ☒ Flip ☒ Invert ☒ Rotate  
☒ Angle ☒ Spline Arrow ☒ Polygon ☒ Slide Show ☒ Cine View

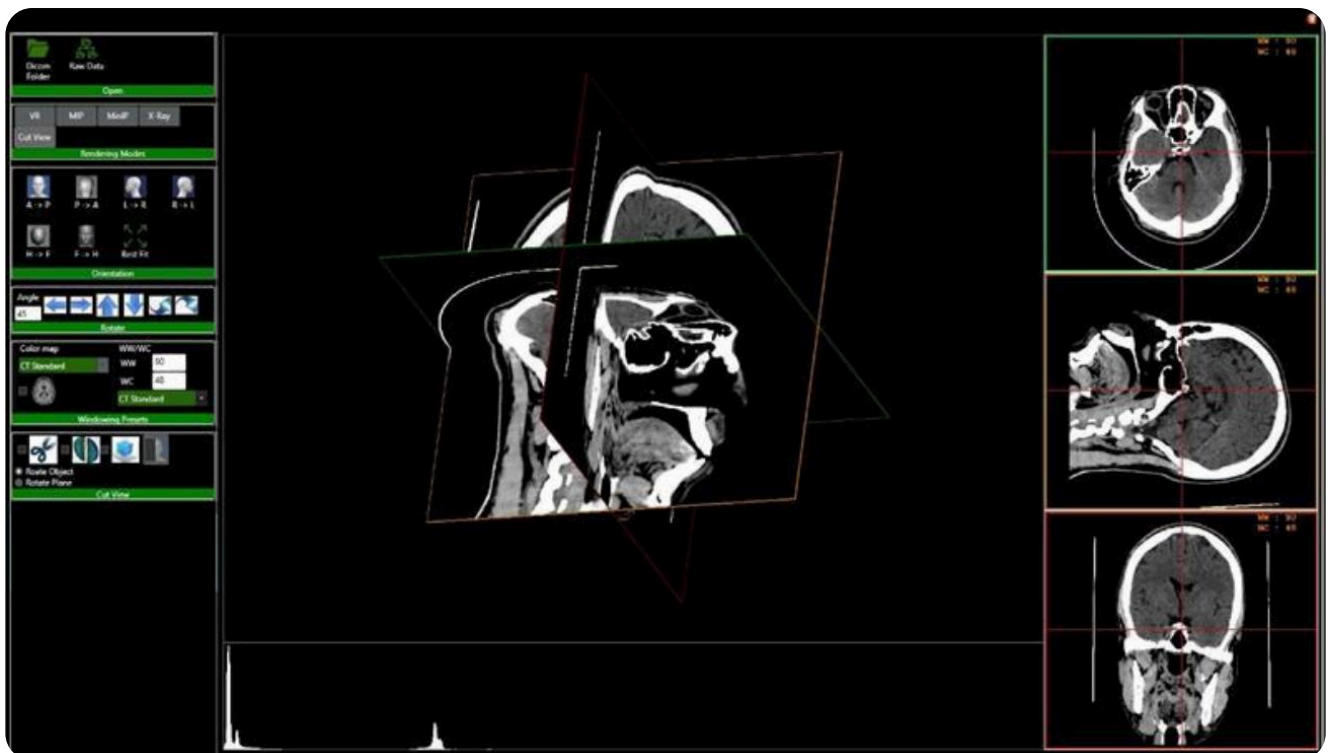
## MPR View

The Multiplanar Reformation facilitate the Axial, Coronal, Sagittal view of planes.



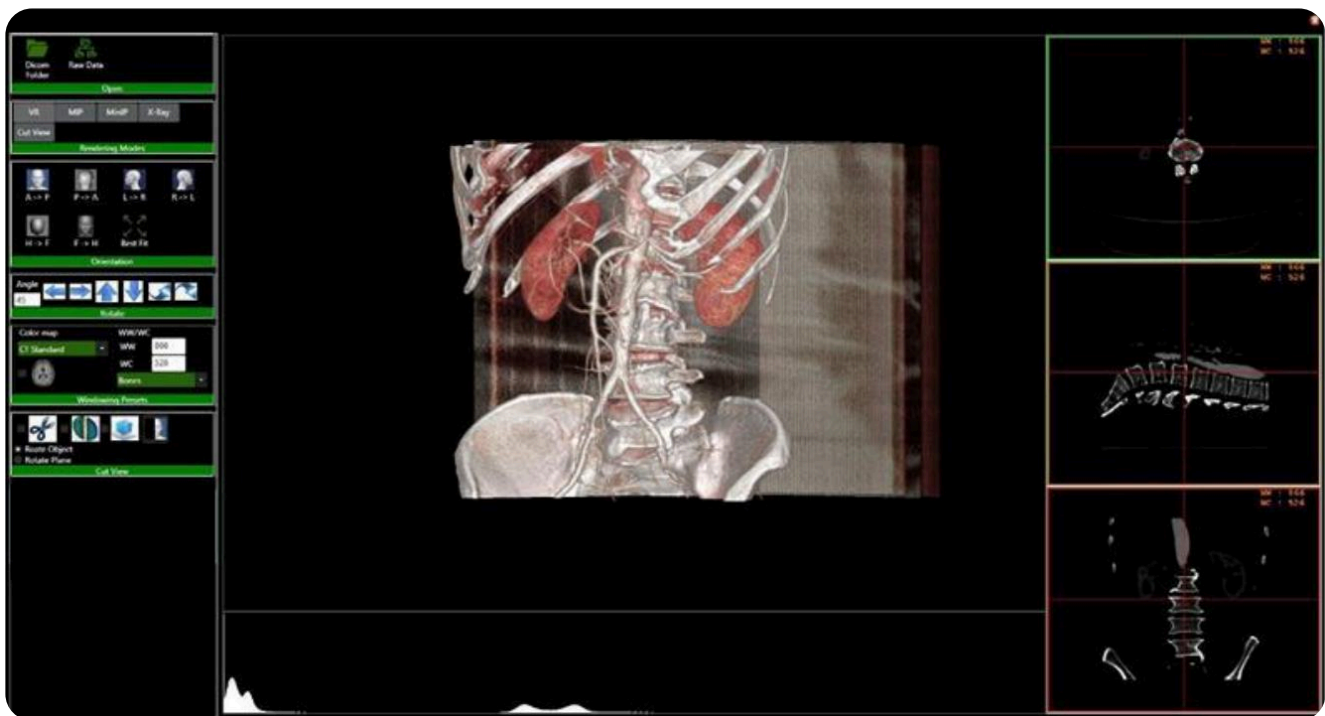
## MPR Cut View

The Multiplanar Reformation Cut View facilitate the Oblique Views



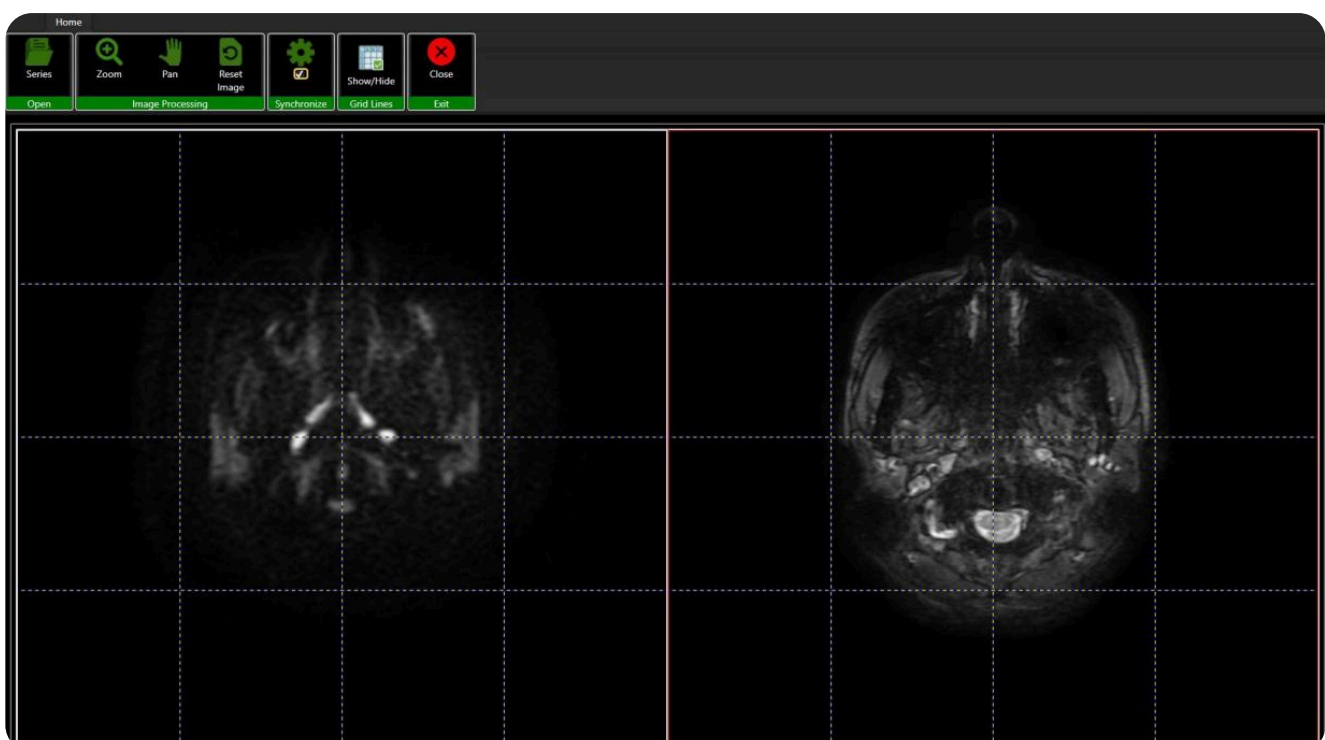
## 3D VR View

The 3D Volume Rendering facilitate the 3D View of the CT/MRI planes



## Image - Comparison

The image comparison window enables to compare two images or two series of images.



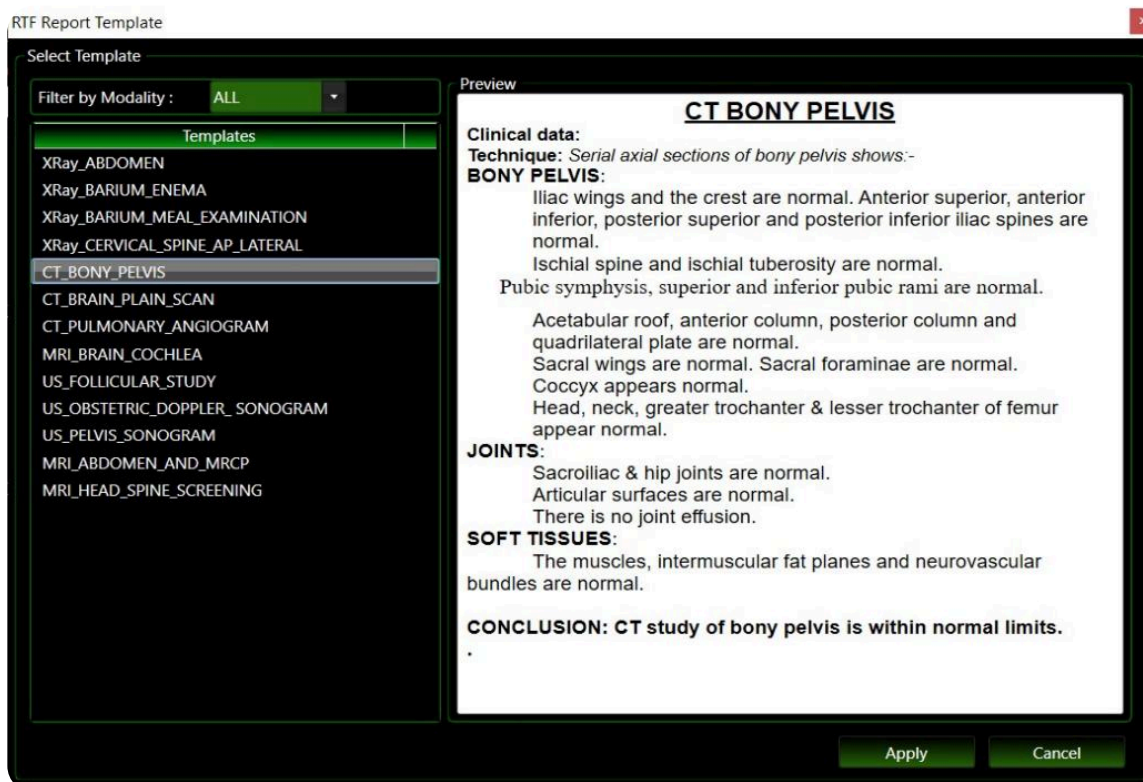
# Special Case Study

A feature to create & share special “case studies”. Radiologist will be able to save special studies with key notes and he can share those studies to other radiologist/surgeons.



# Easy & Fast Reporting

Application is able to define & create report templates for easy report creation. Predefined report templates can be uploaded and edited.



# Word Assist Reporting

Report creation window will be having basic word processing tools and able to generate reports very fast by using the predefined templates.

The interface is divided into two main sections: Patient Details and Study Report.

**Patient Details:**

- Name: SELVA KUMAR
- Sex: M
- DOB: 7/4/1968
- Date: 7/3/2007 12:00:00 AM
- Ref By:

**Report Status:**

- Reported By: Dr.Richard
- Semivaliated By:
- Validated By:
- Amended By:

**Study Report:**

**CT BONY PELVIS**

**Clinical data:**  
**Technique:** Serial axial sections of bony pelvis shows:-

**BONY PELVIS:**  
Iliac wings and the crest are normal. Anterior superior, anterior inferior, posterior superior and posterior inferior iliac spines are normal.  
Ischial spine and ischial tuberosity are normal.  
Pubic symphysis, superior and inferior pubic rami are normal.  
Acetabular roof, anterior column, posterior column and quadrilateral plate are normal.  
Sacral wings are normal. Sacral foraminae are normal.  
Coccyx appears normal.  
Head, neck, greater trochanter & lesser trochanter of femur appear normal.

**JOINTS:**  
Sacroiliac & hip joints are normal.  
Articular surfaces are normal.  
There is no joint effusion.

**SOFT TISSUES:**  
The muscles, intermuscular fat planes and neurovascular bundles are normal.

**CONCLUSION:** CT study of bony pelvis is within normal limits.

## Web Station

This is the Web Version of the application and this enable the radiologist to access the studies from remote location.



# Advantages

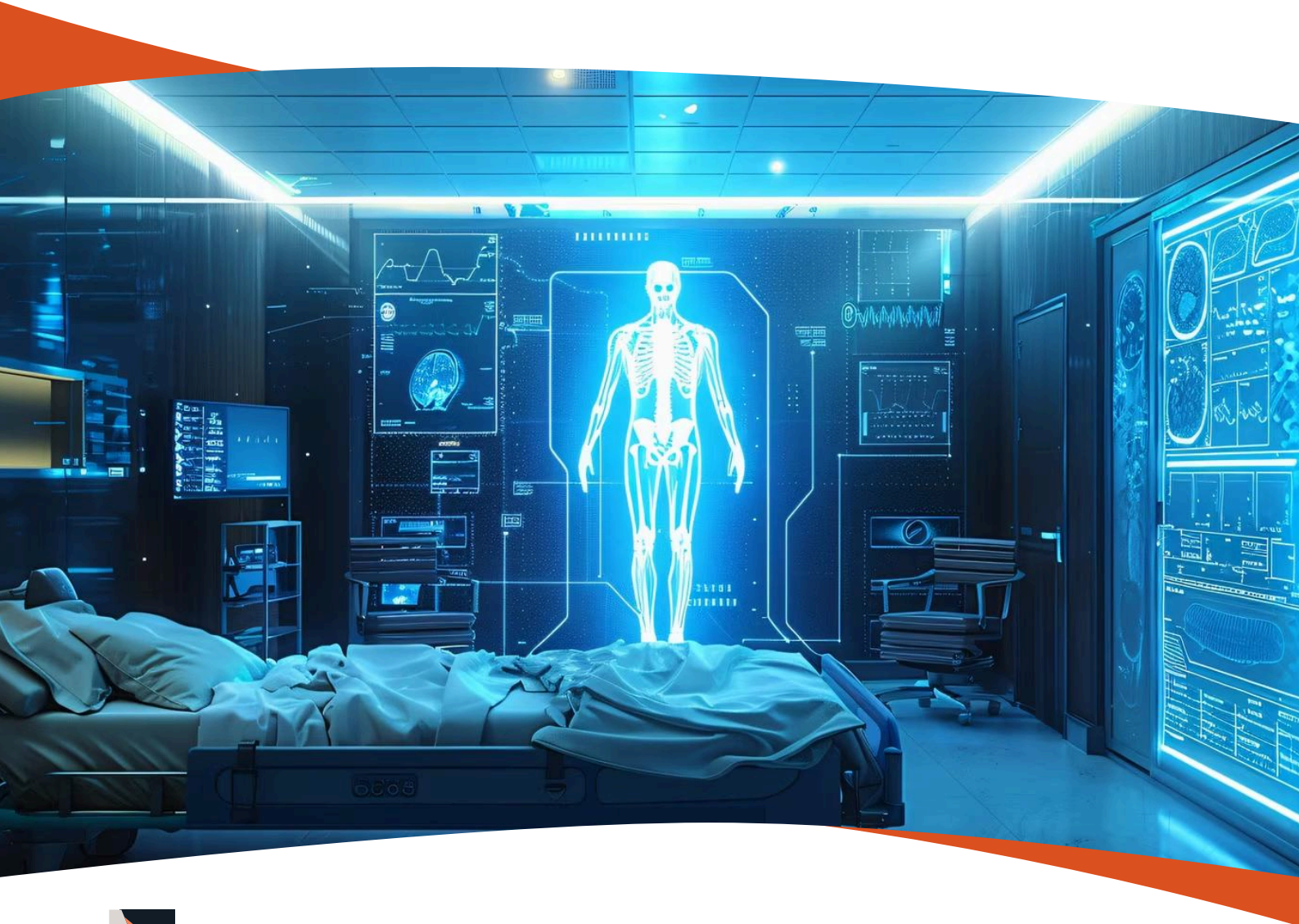
This is a new generation PACS system used to equip the radiology with better performance in less time.

- ✓ Replace Films with Digital Images and Reduce Cost of Operation.
- ✓ Archived Old Scans & Reports Enable Better Diagnosis & Treatment.
- ✓ Radiologist are able to access studies & reports from remote.
- ✓ Centralized communication and storage for various digital modalities
- ✓ "Special Studies" can be create, save & share for future references.
- ✓ Predefined templates enable speedy reporting.



# About Rayblaze Global Pvt Ltd

Rayblaze is a technology solutions company delivering scalable, secure, and performance-driven software platforms for enterprises. We work closely with healthcare organizations to modernize clinical systems, improve operational efficiency, and enable smarter digital workflows. Our focus is on building robust, integration-ready solutions that solve real operational problems—without adding complexity.



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