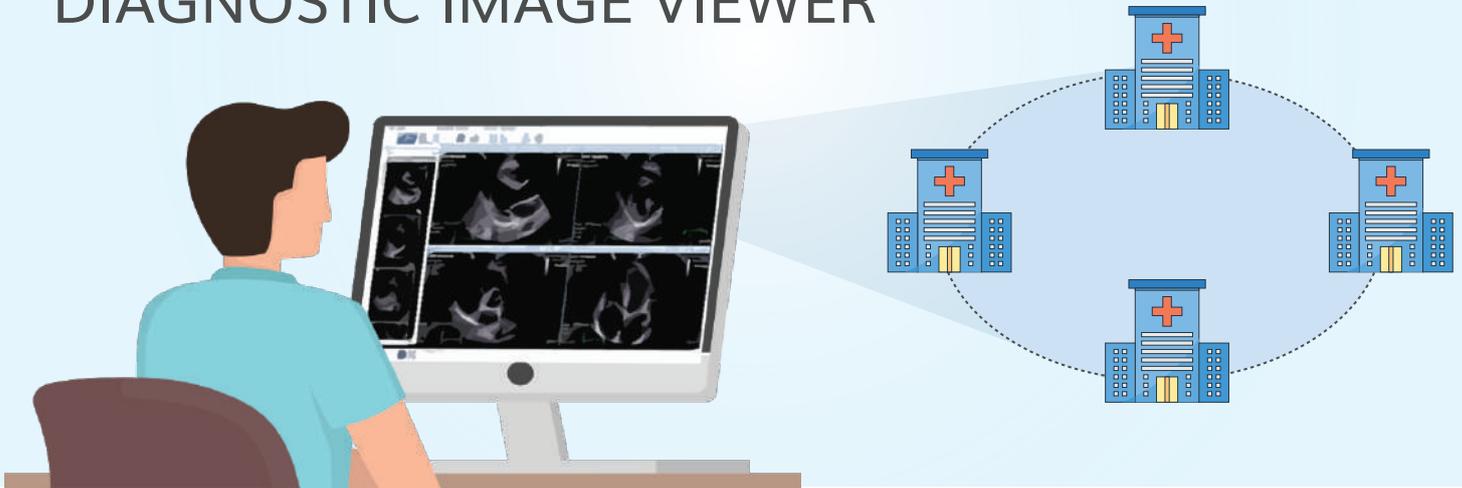




CASE STUDY

CROSS ENTERPRISE DIAGNOSTIC IMAGE VIEWER



Customer

A U.S. based Fortune 100 Company with a large presence in Healthcare

Introduction

In today's rapidly evolving healthcare environment, the need for cross-department and cross-enterprise information sharing is greater than ever before. This is particularly true for diagnostic images. Cross Enterprise Image Viewer functions as a gateway to patient care and serves as an essential touch point for clinicians: it provides them with a unified, web-based diagnostic viewer that supports their natural workflow, facilitates faster and smarter decisions, and helps them to stay focused on what is most important: patient outcomes.

The Solution in Brief

The Cross Enterprise Image Viewer is designed to optimize the productivity and lower clinical costs. This includes providing radiologists and other members of clinical teams the power to help: Improve clinical workflows by providing a central, intuitive workspace that makes it easy to organize, prioritize, and manage exams.

This Image viewer brings together multi-modality radiological Images and patient reports along with 3D post-processing, imaging tools, and enterprise-wide access on a single desktop. It also provides seamless access for Radiologists to all comparison studies - no matter where images were acquired.

SFO teams enhanced the viewer by developing multiple new features especially for this product.

Key functionalities

- Improve clinical workflows by providing a central, intuitive workspace that makes it easy to organize, prioritize, and manage exams.
- Access a wider range of images and clinical information thanks to seamless connections with other third-party systems and sources of information.
- Make faster, more informed decisions with advanced efficiency tools that help clinicians find, view, and leverage data for more informed interpretations.
- Find, review, and analyze images from multiple modalities in one convenient application, without the need for dedicated workstations, including 2D, 3D, 4D, and other advanced image formats.

SFO Major Contribution Areas

Cross Enterprise Framework

- Radiologists can view prior studies of the patient from remote hospitals and Compare these without a need for DICOM transfer of images
- The ability to view remote patient data in an IHE-PIX environment.
- The ability to cache the remote study before patient arrival
- The ability to view remote images, reports and SR

Adaptive Streaming Engine

- Delivers diagnostic quality images to any location quickly.
- An image and non-image object (NIO) data delivery system for radiology client and server applications.
- Intelligent selection of streaming pipelines depending on:
 - Type of data
 - Network speed
- Intelligent prioritization of images/data depending on the user actions and behavior.

Multi Planar Reconstruction

- Standard MPR
- Curved MPR
- Cross curved MPR
- Spine MPR
- Multi oblique MPR



Smart Hanging Protocol

- Helps to improve productivity by reducing image setup time.
- Capability to hang exams based on the information learned from user's prior interactions with the system.
- Allows users to teach the PACS system to hang exams using a one-click learning feature



Technologies used

- VC++, MFC
- COM
- C#, .NET
- Java
- DICOM

SFO's Role

- SFO has been part of the teams enhancing the Image Viewer and has added multiple new features to the product.
- The SFO Scrum team is responsible for the design, development and testing of these features.