

eRAD PACS

Scalable, web-based enterprise solution for radiology imaging workflow.



With full support for distributed environments requiring global worklist access, eRAD PACS is the foundation for your radiology imaging workflow.

More than just a PACS, eRAD is a comprehensive workflow solution that addresses the challenges of today's distributed reading environments. Since 1999, radiology groups and Teleradiology service providers have relied on eRAD for its flexibility and configurability—for the innovative way it quickly moves images to the radiologist instead of the radiologist to the images. Evolving from one of the early web-based PACS for remote reading, eRAD now offers a complete suite of tools to support the business of acquiring, reading, and reporting from anywhere.

Access and manage any study with eRAD's scalable, web-based, enterprise PACS solution. Acquisition and reporting sites can distribute, share, and archive data securely, using worklists and multi-modality protocols tailored to each site. Users can navigate studies from a single worklist, customized to their role and preferences. Pre-fetching, load balancing, and embedded dictation deliver faster report turnaround times. Data integrity features help ensure accuracy and productivity.

FEATURES

► Embedded advanced reporting

No need to purchase and install a stand-alone reporting system when eRAD's embedded report editor allows you to scroll and dictate, self-edit, attach key images, and use advanced speech recognition—directly from the PACS, at any workstation with internet access.

► Data sharing across multiple sites

eRAD PACS enables secure image uploading across the web, scanned document sharing, and data coercion—which forces consistency across disparate systems while maintaining data integrity.

► Zero-Footprint Web Viewer

eRAD's mobile HTML5 browser-based web viewer delivers simple, secure access to imaging results from mobile devices, such as a tablet or smartphone. Physicians can view patient and study details, clinical reports, and images quickly when and where they need it.

► Mammography Module

Fully integrated with eRAD PACS, the Mammography Module provides a full toolset for breast imaging and eliminates the need for a dedicated mammography workstation—potentially saving hours of productivity and thousands in support costs.

► Increased speed with image pre-fetch and pre-cache

Pre-fetch from third-party archives means that relevant priors are ready and that complex legacy migrations are unnecessary. Get optimum efficiency via rules-based pre-caching of studies to the radiologist's workstation (i.e., any computer connected to the internet) in advance of viewing.

► 3D Volume Rendering

With support for Direct Volume Rendering, Maximum Intensity Projection (MIP), and Raysum Average Projection modes, 3D Volume Rendering enables creation of reconstructed images on-the-fly. The cost and disruption of routing to a lab or specialized workstation is eliminated. Gain greater clinical quality by correlating 3D volumes with 2D series to identify the same point in all orthogonal images. Easily manage larger studies with slab scrolling.

"We have been delighted with the eRAD PACS since it was installed in early 2008. Now we have implemented eRAD's Integrated Scheduling Module to streamline our workflow across multiple facilities. This is a giant step toward our goal of becoming both filmless and paperless."

Amy Wendt

*Manager of Operations and Business Development
Community Imaging
Wheaton and Bellwood, Illinois*

Optimum reliability and performance

Event-driven workflows keep users on task, custom-triggering notifications for study interpretation, transcription, report downloads, etc., until the loop is closed. Worklists can be customized, with role-specific tools. Advanced imaging tools (like MPR, MIP, image fusion, mask subtraction) aid radiologists, and embedded dictation streamlines reporting.

Leading edge security

eRAD PACS has disaster recovery solutions built into the system. Encryption and rules-based user access down to the patient record level ensure that we meet HIPAA laws for information portability and security.

Expandability

Hub servers balance the workload and enable an increase in data capacity as your organization grows. Conditional archiving can be managed based on sending organization or other criteria, for cost-effective storage. Advanced DICOM interface tools and HL7 integration make eRAD PACS a flexible implementation, with the ability to operate with nearly any HIS, RIS, EMR, or other practice management system.

► Configurable, event-driven workflow

eRAD's rules-based engine allows users to create triggers or events that will make the workflow more efficient, including study assignments, auto-notification via email or SMS, pre-fetching priors, pre-caching studies to a remote workstation, auto-printing, and auto-faxing. eRAD rules are easy to manage, build, change, and assign.

UNDER THE HOOD

eRAD PACS uses Web-enabled, Linux-driven servers in a distributed architecture, which provides continuity of service during connectivity outages. It provides LDAP support for centralized user account management, as well as a programmable interface for third-party system integration. Customizable web page templates and style sheets provide added flexibility. Data is protected by secure access and SSL encryption. Support for server virtualization maximizes resources.

These technology features automate your workflow and drive the power and flexibility of eRAD PACS:

- Highly configurable worklists/workflows, including color schemes.
- Vendor Neutral Archive (VNA) for read/write to third-party DICOM archives; use eRAD as a workflow engine accessing a legacy DICOM archive or store images using eRAD's archive.
- HIPAA compliant, role-based controls for multi-user access.
- Automated actions based on user-defined rules, such as making studies visible on designated worklists, pre-caching studies to a specific workstation, sending notifications to users, printing and faxing reports, etc.
- Embedded dictation, transcription and speech understanding for seamless PACS-driven workflow, no RIS or separate third-party system necessary.
- Native document scanning and document uploading (PDF/JPEG) into PACS.
- Key images and annotations stored together as part of the medical report and available online for secure customer access via browser-enabled devices.
- Integrated management tools for data coercion, providing the ability to manipulate DICOM information when acquired by the server for normalization or correction of data.
- Auto print, fax and email notifications triggered by changes in study status for critical results reporting management.
- Ability to create orders upon receipt of inbound studies and post to a centralized global worklist.
- International language support.
- Integration of third-party speech systems for seamless PACS-driven workflow.
- HL7 interface with multiple disparate HIS, RIS, PM and EMR systems.
- Support for the import of DICOM media.
- Role-based permissions for customized user accounts.
- Study anonymization/sanitization features for de-identification in clinical trials management and peer review.
- Web-based, programmable API interface, providing access to reports and images from EMRs (image-enabling the EMR).
- Management reporting allowing filtered worklists to be exported to MS Excel (without requiring a RIS).
- Support for medical image sharing/viewing, via the secure import/uploading of CD/DVDs, USB, etc. from any computer connected to the Internet.
- Access to forgotten password via credential-checked email.
- Database optimization for large volumes.
- Templated web pages for more granular access to study information (certain fields can be hidden, not the whole page).
- Support for user-defined keyboard macros to streamline data entry and management. Fast, centralized view of all patient information in a Patient Folder.