

# NilRead Enterprise Viewer

Image enabling the EHR for a true big-picture patient record

In this age of healthcare reform, all roads lead to the electronic health record (EHR). When implemented effectively, this cross-departmental, increasingly cross-enterprise, health information repository can enhance the quality of patient care and support healthcare providers with significant productivity and financial gains.

However, integrating all-important medical images into this multi-disciplinary record remains one of technology's greatest challenges. In short, visible light and non-DICOM objects are conspicuously absent from this core clinical system.

Too often radiology and cardiology images, and related data, remain sequestered in departmental picture archiving and communications systems (PACS), accessible only to imaging specialists. Digital photos, videos and scanned documents are often lost inside a tangle of departmental systems, as other medical specialists struggle to take advantage of convenient, new visualization technologies that have outpaced hospital image storage systems.

## Anywhere, anytime image access from your EHR

NilRead is an enterprise medical image viewer designed to meet the healthcare needs of today and the future. Seamlessly integrating with your EHR, this advanced technology provides

a universal, vendor-independent platform for accessing a full range of DICOM and non-DICOM image data, wherever it resides — even in legacy PACS. The enterprise-class, scalable solution is based on a true zero-footprint, web-based architecture — there's nothing to install, and images never reside on the workstation.

NilRead can identify and ingest images from virtually any departmental archiving solution, whether dermatology JPEGs, radiology DICOM files or radiation oncology treatment plans. NilRead also integrates seamlessly with any contemporary vendor neutral archive (VNA) for healthcare organizations implementing sophisticated consolidated image storage systems.

With NilRead enterprise viewer, physicians across the enterprise and beyond can take advantage of vital imaging information from any department for the benefit of the patient care, while medical facilities move along the road to Meaningful Use.

Reaching beyond the hospital, NilRead also runs on any web-enabled mobile device, tablet or PC, providing anywhere, anytime image access and enabling data sharing across multiple locations to support trauma transfers and other telehealth processes. Robust, server-side rendering ensures fast transfer speeds and enhanced security. With no device or local image download, protected health information (PHI) never resides on the PC, phone or tablet.



NilRead's zero-footprint, web-based architecture delivers anywhere, anytime image access from any device.

## One facility license for all your viewing needs

NilRead is a robust viewer for your entire enterprise. It can handle your most basic referential viewing needs as well as the advanced clinical visualization needs of radiology departments. It all depends on how you configure the software.

NilRead provides a single, flexible licensing model that allows customers to configure the viewer by user, department, or site. The feature set can be uniquely tailored to meet the specific needs of your organization. This includes features that provide rich enterprise viewing of 2D image sets, post-processing tools such as MPR and 3D, as well as measurement tools and native collaboration features. Sites may also expand the feature set to support a primary diagnostic solution with advanced visualization tools for a full range of 'ologies including radiology and ophthalmology.

A separate license is required for a digital pathology toolset that includes a pathology rendering engine and display (available only in Europe).

## Key benefits

### For clinical use

- ▶ More informed clinical decision-making with a comprehensive, easily accessible, electronic patient record that includes medical image data
- ▶ Enhanced continuity-of-care with patient information that is readily available to multiple providers and specialists enterprise-wide and beyond
- ▶ Improved treatment speed and precision through anywhere, anytime access to imaging data
- ▶ Streamlined physician collaboration, second opinions and remote diagnoses due to cross-enterprise image communication and powerful collaboration tools
- ▶ More comprehensive patient image histories with enhanced support of non-radiology imaging departments

### For administrative and financial use

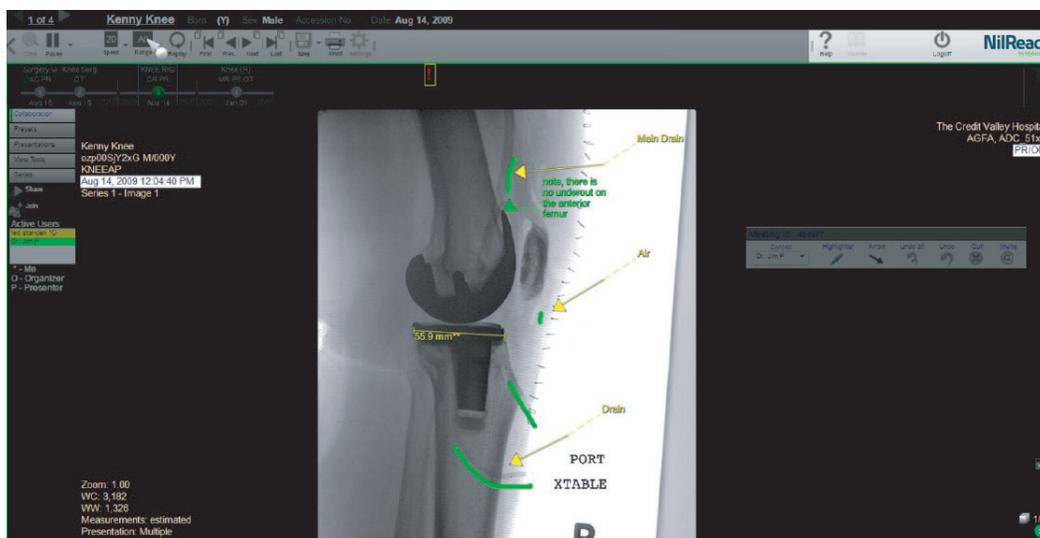
- ▶ Compliance with Meaningful Use requirements involving accessibility of medical images in the EHR, helping organizations to maximize reimbursement
- ▶ Enhanced clinician productivity due to streamlined access to complete patient information
- ▶ Viewer independence from PACS, VNA and other archive vendors for greater ownership of imaging informatics assets
- ▶ Streamlined image communication with referring physicians, leading to enhanced patient referrals

- ▶ Back up diagnostic quality DICOM viewing for coverage during a PACS failure or planned event
- ▶ Cost-effective system management based on zero-footprint central server architecture
- ▶ Flexible licensing options allow providers to leverage economies of scale
- ▶ Consistent, user-friendly interface and workflow across all devices

## Key features

- ▶ Runs seamlessly inside all major browsers, using no resident software or plug-ins
- ▶ Full diagnostic image viewing on any high-resolution display and industry-leading resident support for multi-monitor viewing
- ▶ Displays DICOM, TIFF, BigTIFF, SVS, GIF, JPEG, PDF, video; optimized for radiology, cardiology and ophthalmology/optometry applications
- ▶ Supports Radiation Oncology with the display of radiotherapy plans including 2D, MPR, 3D, editing, add, delete, color editing, opacity and line thickness of isodoses, ROI structure editing, and DVH and Histogram graphing
- ▶ Includes zero-footprint web CD uploader and data QA masking editor to support image sharing with no desktop install required
- ▶ Support for advanced video operation for visible light specialties like GI and surgical including editing and reconciliation tools to trim, capture and extract multiple segments
- ▶ Menu configurability templates to support setting preferences of specialties
- ▶ Interpretation support for 3D volume rendering, multi-planer reformatting, curved planar reformatting, vessel analysis and semi-automated vessel tracing
- ▶ Interpretation supports protocols for PET-CT and PET-MR fusion, mammography, digital breast tomosynthesis, ophthalmology, enhanced MR and other advanced segmentation
- ▶ Significant multi-specialty capability supporting the DICOM-ECG standard with an ability to view, measure and document diagnostic ECG waveforms
- ▶ Study notes feature provides the ability to generate a DICOM structured report during study review based on the RSNA Radiology Report Initiative
- ▶ Integrates with any DICOM network, VNA and supports query/retrieve from DICOM notes and XDS/XDSi repositories
- ▶ Consistent interface and architecture provides unified NilRead experience from referral viewing to full primary interpretation
- ▶ Rich, native, collaboration tools

- ▶ Server-side rendering optimized for available bandwidth with no resident PHI on viewing device following viewing session
- ▶ Fully compliant XDS/XDSi consumer
- ▶ Support for Imaging Object Change Management (IOCM) IHE profile for consistent image management
- ▶ HIPAA compliant with the highest standard of web protocol security; optional authentication delegation to support existing in-hour methods in use within an organization, such as single sign-on
- ▶ FDA 510(k) clearance for diagnostic viewing including mammography and digital breast tomosynthesis and non-diagnostic use on mobile devices; Health Canada approval for diagnostic use on workstations and mobile devices; CE Mark for sale in the EU and listed on the Australian Register of Therapeutic Goods



NilRead streamlines physician collaboration, second opinions and remote diagnoses with a powerful collaboration toolset including annotations and on-screen text.