

# NilRead Advanced Clinical Visualization

True zero-footprint diagnostic viewing in any setting

Medical imaging technology is racing forward at an unprecedented pace, but picture archiving and communications systems (PACS) often seem to lag behind. Advanced fusion modalities, breast tomosynthesis, 3D angiography and more have opened important new avenues in patient care and pushed PACS capabilities to their limits.

At the same time, innovative image communication and remote reading solutions have become a priority to support today's plethora of unique business models. Flexible, real-time access to patient images, virtual diagnostic toolsets and advanced visualization on-the-fly can immediately bring the experienced eyes of a sub-specialist to a case across a hospital campus or the globe. Technologically enabled real-time physician collaboration and telehealth are also enhancing care. But often the results are reading rooms overcrowded with specialized imaging workstations, tangles of input devices and overloaded archives, adding significant workflow complications and expense.

## The modern view-sophisticated, versatile, simple

In this modern environment where more can quickly become too much, Hyland Healthcare believes the answer is less — less operational complexity, less maintenance and less associated costs. With the sophisticated visual clinical visualization tools that are part of NilRead by Hyland, you have access to a true zero-footprint, advanced clinical and interpretive viewer operating inside any standard web browser that enables interactive image processing, viewing and distribution with no software installation or plug-ins.

From 3D volume rendering to curved planar reformatting, NilRead brings visualization features and toolsets that rival the most

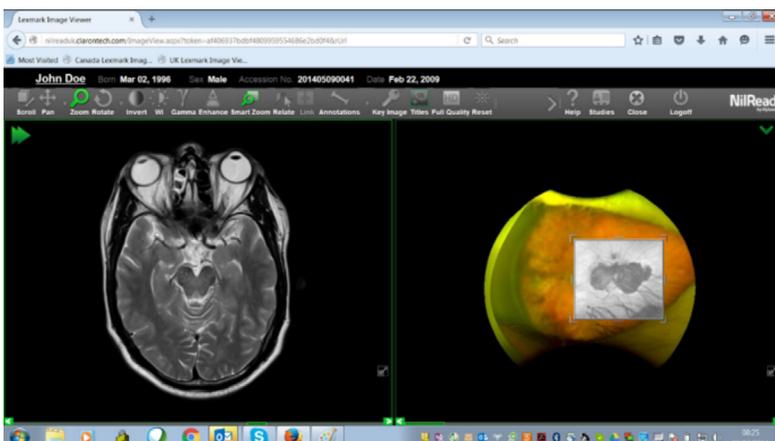
advanced PACS workstation to the radiologist's or specialist's fingertips. NilRead integrates seamlessly with virtually any vendor neutral archive (VNA) or PACS and supports rules-based exam viewing, user permissions and multi-monitor viewing. Best of all, the advanced clinical visualization toolset can be deployed as part of a standard volume-based or current user-based NilRead license.

With a CE-marked and FDA-approved advanced imaging, diagnostic quality display, NilRead enterprise viewer becomes the focal point of a robust, best-of-breed, reconstructed PACS implementation optimized for any site's needs today and poised for the future. Centralized NilRead computing streamlines IT maintenance and infrastructure costs, while consolidating upgrades —providing relief to already strained IT budgets.

Automatically adapting to a mobile environment, NilRead advanced clinical visualization also runs on any web-enabled smartphone or tablet for referential viewing. It provides true anywhere, anytime image access and enables cross-enterprise data sharing consults, trauma transfer, and telehealth.

Robust, server-side rendering ensures ultra-fast speed, negating the need for powerful local workstations and viewing devices. And, enhanced security features mean that no protected health information (PHI) is locally stored on the viewing device.

For multi-specialty image access enterprise-wide, the versatile NilRead enterprise viewer also supports a wide range of non-DICOM image formats. With full diagnostic toolsets, a hospital can image-enable an EHR system to truly deliver a consistent, inclusive, enterprise-wide image viewing environment to all clinicians.



NilRead by Hyland advanced clinical visualization displays both DICOM and non-DICOM data simultaneously with full diagnostic toolset capabilities.

## Key benefits:

- ▶ Industry-leading, advanced clinical visualization in a browser-based environment that facilitates access, sharing and interoperability
- ▶ Industry-leading diagnostic tools for radiology and ophthalmology, fully available in a zero-footprint environment
- ▶ Focal point for best-of-breed, decoupled PACS strategy that enhances hospital ownership of imaging assets and reduces reliance on PACS vendors
- ▶ Enhanced productivity through anywhere, anytime access to advanced clinical diagnostic quality images with a consistent user interface and experience
- ▶ Cost-effective system management based on zero-footprint, server-side architecture
- ▶ Sophisticated cross-enterprise image communication and powerful tools promote real-time, interactive collaboration facilitating second opinions and remote diagnoses
- ▶ Consistent user profiles and timely image communication tools with referring physicians promote streamlined, faster workflows and enhanced patient referrals
- ▶ Secure image display and management due to server-side image rendering that prevents residual PHI on the viewing device
- ▶ Simple, cost-effective path to a full enterprise-wide, patient-centric image management platform

## Key features

- ▶ Fully diagnostic image viewing on any high-resolution display and resident support for multi-monitor viewing, while maintaining pure zero-footprint client architecture
- ▶ Industry-leading image visualization with protocols that support PET-CT and PET-MR fusion, mammography, digital breast tomosynthesis, the DICOM-ECG standard, ophthalmology, enhanced MR and other advanced segmentation
- ▶ Enhanced functional tools for other 'ologies, including laser blending and laterality segmentation for ophthalmology
- ▶ Support for 3D volume rendering, multi-planar reformatting, curved planar reformatting, vessel analysis and semi-automated vessel tracing
- ▶ Advanced pixel-based image measurement including line, area, angular, ellipse, contour, region on interest, Cobb angle, and spine tools
- ▶ Historical timelines of available relevant priors from any DICOM, XDS/XDSi, video and other non-DICOM image and related data archive in any location
- ▶ Rules-based hanging protocols supporting physician viewing preferences and departmental structure
- ▶ Menu configurability to support specialty/user preferences
- ▶ Supports Radiation Oncology with the display of radiotherapy plans, editing of isodose levels, editing of ROI structures, DVI and Histogram graphing, and the entire set of radiation therapy objects in 2D, MPR or 3D
- ▶ 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
- ▶ Compatibility with all major browsers using no resident software or plug-ins
- ▶ Integrates with any DICOM network, VNA and supports query/retrieve from DICOM nodes and XDS/XDSi repositories
- ▶ Referential viewing on smartphones, tablets, and notebook computers
- ▶ Rich, native collaboration tools, including sending study links to peers/colleagues and a live, real-time, interactive collaborative tool that can be linked to Skype for Business.

- ▶ Server-side rendering optimized for available bandwidth with no PHI locally cached on viewing device
- ▶ Multi-specialty image viewing with support for non-DICOM formats, including visible light images and video
- ▶ Consistent interface and architecture provides unified NilRead experience from referral viewing to full primary interpretation
- ▶ HIPAA compliant with the highest standard of web protocol security
- ▶ Optimal authentication delegation to support existing in-house methods in use within an organization, such as single sign-on leveraging active director and LDAP
- ▶ FDA 501(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.