

V i T A L®

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Vital Images, Inc., a Canon Group company, is a leader in healthcare enterprise imaging, including advanced visualization, enterprise image viewers and business intelligence technology designed to help healthcare organizations deliver exceptional care while optimizing resources across multi-facility organizations. The company's products are scalable to meet the unique needs of hospitals and imaging centers and are accessible throughout the enterprise anytime and anywhere.

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30

YEARS

A Legacy of Leadership

Healthcare Enterprise Imaging Portfolio

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About Vital

Vital, a Canon Group company, has a legacy of leadership in healthcare imaging using smart algorithms and techniques of innovation spanning 30 years. As the premier provider of an Enterprise Imaging solution focused on interoperability, Vital transforms and seamlessly connects disparate PACS and other data into an efficient, perceptive and interoperable solution. Through modular and scalable enterprise message orchestration, enterprise visualization and enterprise analytics solutions, Vital's Vitrea® Enterprise Imaging solution makes data accessible across the entire enterprise anytime, anywhere, and in any standardized form. Today, Vital is selectively embedding intelligence and leveraging decades of smart algorithms in advanced visualization, giving clinicians the ability to make real-time precise decision-making for today's empowered healthcare consumer while delivering an exceptional patient care experience.



Y E A R S

Our past informs our future.

Over the past 30 years, Vital has led the charge in advanced visualization—making the possible a reality. Our proven past of speed and clinical precision gives health systems confidence that they have an enterprise imaging partner they can trust in their mission to put patients first.

Together with Canon Group

Vital—with the global power of Canon Group—is leading real-time healthcare. Acquired by Canon Group in 2016, Vital has all the reach and resources of a global powerhouse established in 140 countries across the world.



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Vitre View is not intended for diagnostic use when accessed from a mobile device.

Healthcare imaging has been disrupted. We bring it together.

Disruption has created a shift to consumer-driven care. Vital was ahead of that shift—evolving the imaging system to deliver meaningful data for each user. Complex clinical decision support demands another level of enterprise solution.



Enterprise Imaging

Transforming healthcare through standards-based interoperability.



Enterprise Viewer



Diagnostic Viewer



Advanced Visualization



Enterprise Imaging Archive

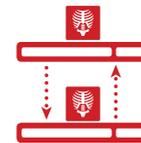


Image Sharing



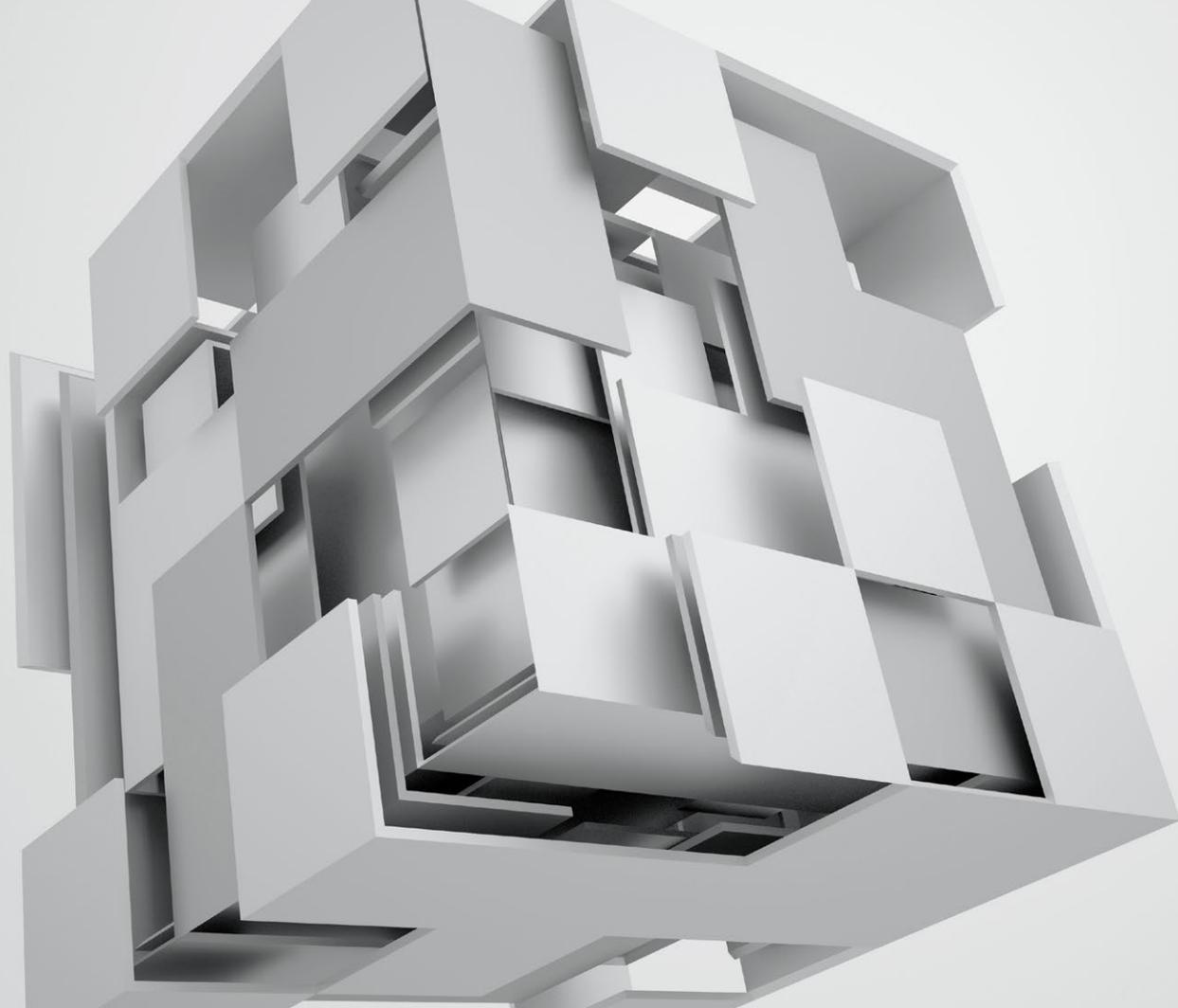
Predictive Analytics



Business Intelligence

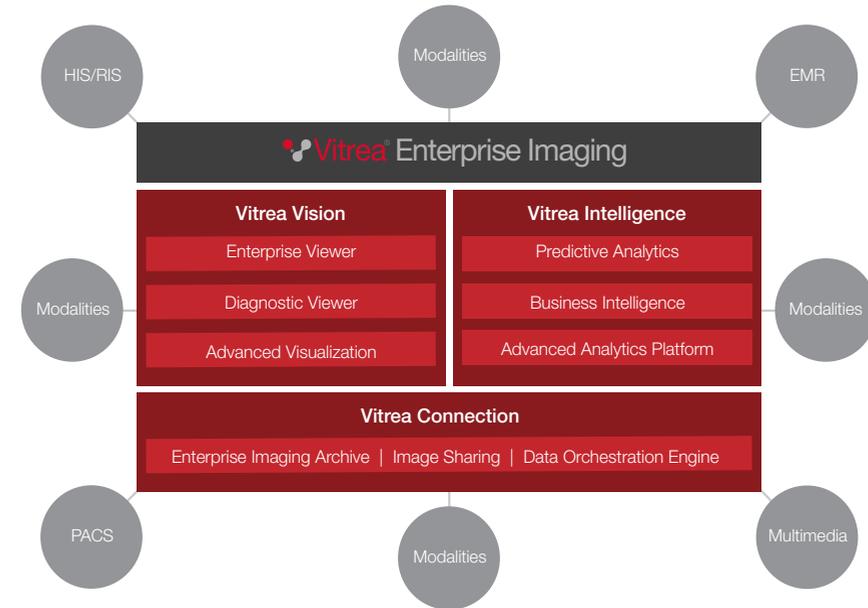


Data Orchestration Engine



A Different Approach

We see our customers as valued partners. Side by side, we work with you to clearly identify your needs. Based on those requirements, we deliver a tailored, progressive solution built upon our modular image-management, workflow, visualization and resource-planning platform. Our solutions give healthcare organizations meaningful data access while helping you achieve your vision of better patient care through interoperability.





Vitreia Vision

[Vitreia View Enterprise Viewer](#) | [EasyViz™ Diagnostic Viewer](#) | [Vitreia Advanced Visualization](#)

A meaningful legacy

Vital has a legacy of challenging what is possible in healthcare imaging. And our past informs the future. Our personalized viewing experience provides access, accuracy and collaboration at an enterprise level. We've shown not just what's possible but what's applicable in the realities of the hospital setting.

Enterprise Viewer

Vitreia View: The diagnostic-quality, zero-footprint viewer.

Patient records include a vast array of multimedia images and related documents. They are often stored in disparate systems and on external media which are scattered across your enterprise. This makes it difficult for clinicians to communicate and collaborate with the care team and their patients.

The Vitrea View enterprise viewer image-enables your EMR, allowing users to access images directly from patient records. It provides fast and secure access to imaging information – both DICOM and non-DICOM – from across the enterprise and beyond. By providing a single point of access from a browser on a desktop, laptop or mobile device, Vitrea View integrates images effectively into primary clinical workflows to help improve care coordination.

Vitreia View Enterprise Viewer Benefits

Get real-time access to consolidated imaging information.

- Enable authorized users to access diagnostic-quality images and information from across the enterprise and beyond – with a single sign-on.
- Access patient imaging data anytime, anywhere and on any device.

Realize the full benefits of enterprise viewing.

- Simple, intuitive design allows users to realize the full benefits of enterprise viewing with minimal training.
- Helps integrate images into the primary clinical workflow effectively.

Collaborate to help improve patient experience.

- Point-of-care delivery of imaging information allows clinicians to share images and review results with patients easily.
- Presents DICOM and multimedia images intuitively from a browser window on a desktop, laptop or mobile device.

Facilitates improved patient care.

- Decrease repeat imaging and patient radiation exposure through efficient, easy access to relevant prior images across the enterprise.
- Help improve care coordination by providing a single point of access to DICOM images and multimedia files.
- Embedded Intelligence may impact the pre-process workflow and provide a better healthcare experience for patients.

Diagnostic Viewer

EasyViz: A personalized, highly contextualized diagnostic viewing experience.

The number of radiological studies is on the rise. So is the number of images per study. As demands on radiologists' time continue to increase, it becomes challenging to deliver timely, relevant information to help them find the answers to clinical questions efficiently and provide the best care.

The EasyViz diagnostic viewer is designed with these challenges in mind. Its flexible, customizable user interface keeps patient data organized for easy access and a better reading experience. It helps to improve patient care by maximizing productivity and increasing diagnostic accuracy.

EasyViz Diagnostic Viewer Benefits

Gain support for your unique workflow needs.

- Allows diagnosis from local or remote environments with uncompromised image quality and performance via multiple deployment options – thick, thin and zero footprint
- Enhances communication that supports improved patient care with real-time session collaboration, interrupted workflow and multidisciplinary team meetings

Create an optimal user experience with a personalized toolset.

- Provides radiologists with a fast, reliable viewing experience and a customizable diagnostic toolset that is consistent – regardless of device or location
- Delivers highly contextualized advanced hanging protocols – driven by modality, body part and individual reading preferences

Help improve diagnostic accuracy.

- Provides single-system support for subspecialty reads with complete, clinically advanced 2D/3D toolset across all modalities, including fusion* expansion modules and mammography
- Offers fast and easy navigation, as well as image interaction and manipulation through an intuitive user interface
- Performs contextualized launch into advanced visualization applications with premier diagnosis tools

Reduce data-retrieval complexity through superior accessibility.

- Allows for seamless access to distributed imaging data, including intelligent management of relevant priors
- Reduces network traffic and cost through adaptive streaming technology while maintaining high image-reading performance and efficiency

*EasyViz Fusion is not available in the U.S.

Advanced Visualization

Vitre[®] Advanced Visualization: Gain diagnostic confidence with full-powered 2D, 3D and 4D solutions.

Elevate the reading experience with embedded advanced visualization applications which provide premier tools to aid in diagnosis with Vitrea Advanced Visualization. We offer a multi-modality advanced visualization solution that delivers comprehensive applications in a variety of IT environments. By providing access to advanced clinical tools and multi-modality applications anytime, anywhere, Vitrea Advanced Visualization enables physicians to have meaningful interactions wherever they are.

Its multi-modality applications enhance diagnostic confidence across your entire organization. And advanced imaging tools, such as in-suite 3D viewing and automated measurements, facilitate improved clinical outcomes with powerful applications and streamlined partner integrations. We tailor clinical workflows to fit your needs.

Vitre[®] Advanced Visualization Benefits

Facilitates improved clinical outcomes

Powerful clinical workflows and partner applications seamlessly integrated

Enhanced workflows

Increased efficiency through consistent user experience and protocols across all modalities

Intuitive user interface

Easy to view in the reading room – dark color scheme

Easy deployment

Thin-client solution with no software footprint on existing workstations

Better health outcomes

Embedded Intelligence may support current applications and increase efficiency and accuracy



Vitrea Advanced Visualization Deployments

Workstation

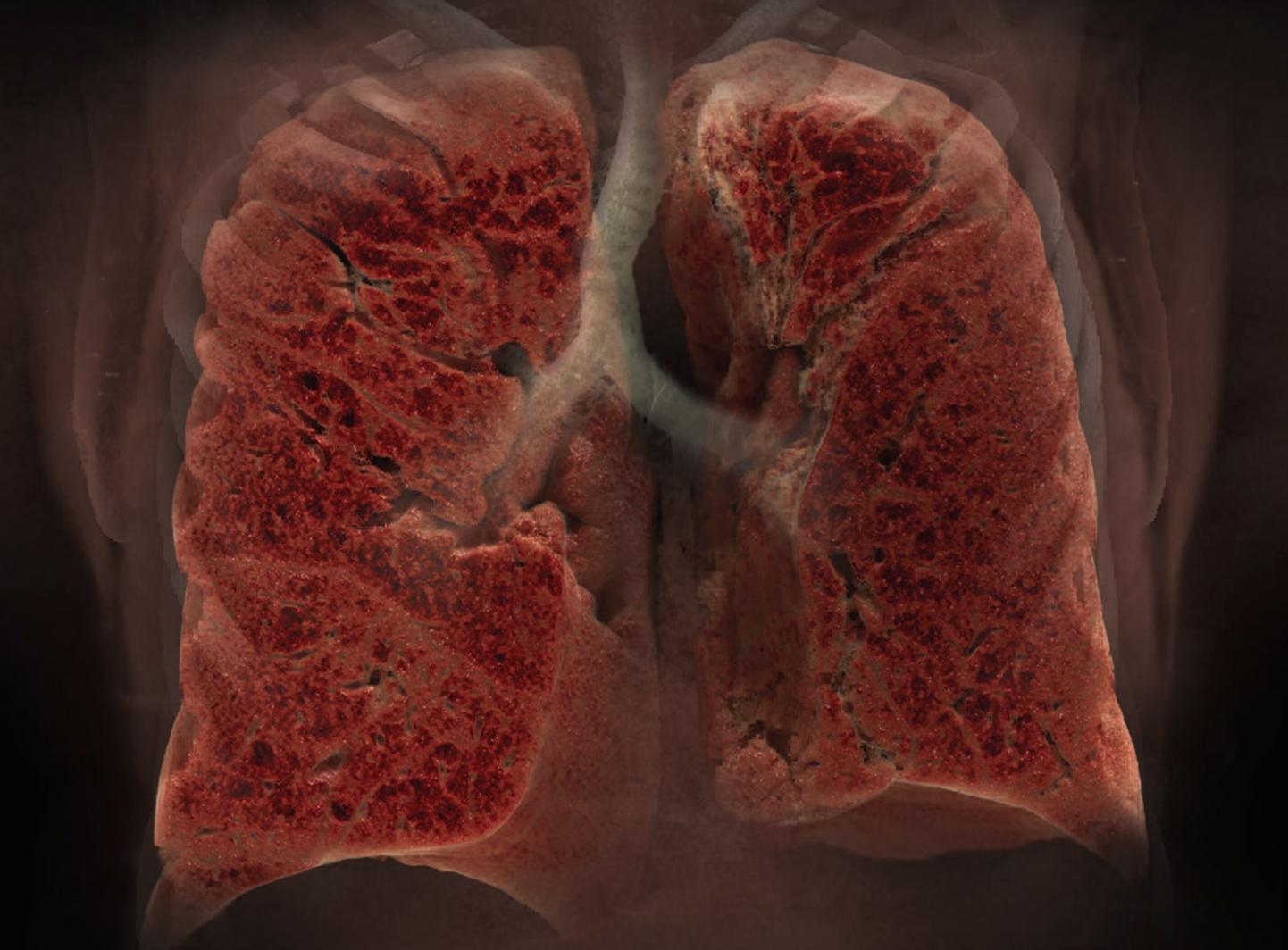
A one-user, multi-modality workstation that increases productivity through an intuitive user interface, helping to optimize the time and resources needed to produce clinical results

Extend

A three-user, multi-modality deployment that increases your department workflow with a cost-effective alternative to enterprise integration – with minimal IT impact

Enterprise

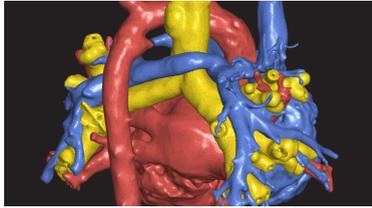
An enterprise-wide advanced visualization deployment that provides scalable thin-client access to multi-modality clinical applications anywhere in your medical enterprise



Vitreia Advanced Visualization

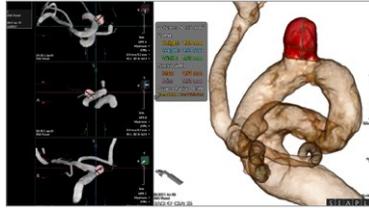
Clinical Applications

Our suite of applications offers full-powered 2D, 3D and 4D advanced visualization. It can process and analyze clinical data from multiple modalities, including CT, MR, PET, PET/CT, SPECT, US and XA. Applications for cardiology, neurology and oncology provide comprehensive toolsets that deliver critical information for planning procedures and treating patients.



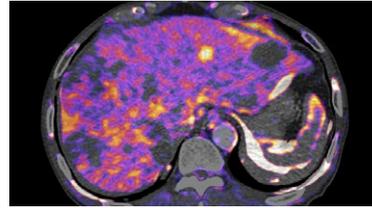
3D Print*

- Create 3D models from CT, MR or XA images, and export them from Vitrea software as stereolithography files (.STL) which are used in a wide variety of other applications.
- Print on-demand with best-in-class 3D printing
- Generate models in a wide range of colors and materials – from soft and dissectible to rigid and durable



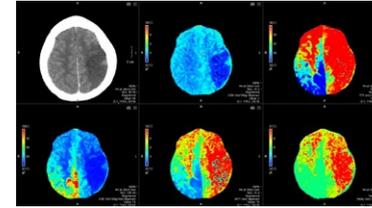
Cerebral Aneurysm Analysis†

- Analyze based upon the dimensions and morphology of the aneurysm during procedures for informed treatment decisions
- Guided step-by-step workflows.
- Visualize semi-automated segmented aneurysms



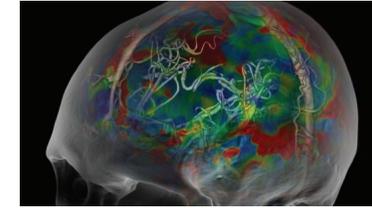
CT Body Perfusion 4D

- Single-input organ workflow for Arterial Flow (AF) map display
- Dual-input lung workflow for AF, Pulmonary Flow (PF), pulmonary Perfusion Index (PI) map display
- Dual-input liver workflow for AF, PF and hepatic PI map display
- Deformable registration and motion correction
- Patlak Plot method for AF maximum slope, Patlak Equivalent Blood Volume and Patlak Flow display



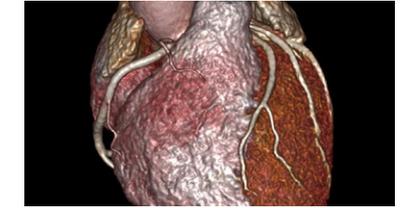
CT Brain Perfusion 2D

- Automatic calculation of quantitative brain perfusion results:
 - Regional Cerebral Blood Volume (rCBV)
 - Mean Transit Time (MTT)
 - Regional Cerebral Blood Flow (rCBF)
 - Time-to-Peak of tissue response curve (TTP) and tissue response curve delay
- Summary maps
- Streamlined workflow with automatic curve-fitting, midline correction, motion correction and region of interest templating
- Selection of Bayesian‡, singular value decomposition (SVD) and delay-insensitive singular value decomposition (SVD+) algorithms



CT Brain Perfusion 4D

- Automatic calculation of quantitative brain perfusion results:
 - Regional Cerebral Blood Volume (rCBV)
 - Mean Transit Time (MTT)
 - Regional Cerebral Blood Flow (rCBF)
 - Time-to-Peak of tissue response curve (TTP)
 - Tissue response curve delay
- Selection of SVD+ (delay insensitive) and Bayesian‡ deconvolution algorithms
- Single-view Summary Map for communicating the perfusion results
- 4D cine of the DSA view for visualizing the flow of contrast through the vessels
- Automatic curve-fitting and motion correction



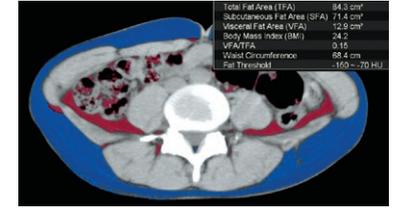
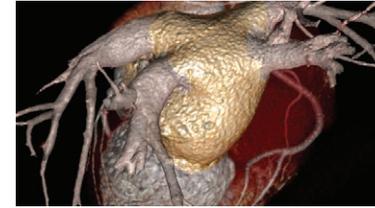
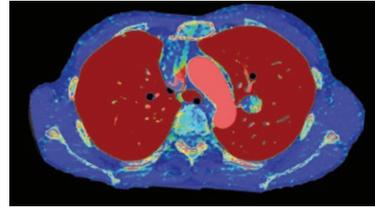
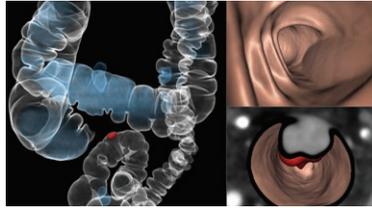
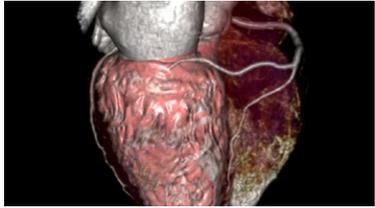
CT Cardiac Analysis

- Utilize streamlined coronary workflow with automatic extraction of the coronary arteries and optimized viewports, such as volume rendering, MIP, MPR, and curved and straightened MPR views
- Evaluate interior blood vessel characteristics with the SUREPlaque™§ tool
- Full vessel probe for coronary artery analysis, including Cath view, Lesion tool and Vessel Walk
- Classify key findings for consolidated cardiac workflow reporting

*The output anatomical model is not for diagnostic use.

†Cerebral Aneurysm Analysis for XA only supports Canon Datasets.

‡Not available for sale in the U.S. §SUREPlaque is a separately licensed application.



CT Cardiac Functional Analysis

- Review automatic segmentation of the heart, left ventricle and myocardium in multiple phases
- Calculate global metrics automatically, including cardiac index, cardiac output, ejection fraction, end diastolic volume, end systolic volume, myocardial mass, stroke index and stroke volume
- Visualize the heart with four-chamber, long-axis and short-axis views
- Calculate regional metrics automatically, including wall motion, percentage of wall thickening and regional ejection fraction, and polar maps with live 3D beating heart visualization
- Classify key findings for consolidated cardiac workflow reporting

CT Colon Analysis

- Segment colon automatically, creating 2D and 3D centerlines for simultaneous multiplanar reformatting (MPR) and 3D review
- Segment polyps with a single click for morphological characterization, and quantify size, density and distance to rectum or anal verge
- Integrated filet view and endoluminal fly-through
- Automatic fluid/stool tagging and subtraction
- Polyp assessment and reporting using C-RADS guidelines

CT Dual Energy Image View

- Provide a viewing option with the ability to combine different energy scans for creating derived images
- View monochromatic images and/or blended and enhanced images at multiple different energy levels, other than the energy levels scanned
- Flexible display and easy-to-use interface for efficient reporting
- Accessible from multiple locations, or may be integrated into your PACS system

CT Endovascular Stent Planning

- Automated aorta segmentation with centerline and contour-editing tools
- Stent-graft templates for abdominal and thoracic aortic aneurysms
- User-guided workflow with automated anatomical landmark identification and stent-specific endovascular measurements
- Clock angle tool and clock overlay functionality for key measurements supporting fenestrated grafts
- Custom Device Template Editor for creating new, adding or modifying stent-planning templates

CT EP Planning

- Automated left atrium and pulmonary vein segmentation
- Automatic centerline and lumen boundaries with 3D fly-through for pulmonary vein ostia visualization and measurements
- Export results as an .STL file
- Export the 3D model to an EP navigation and mapping system (EnSite®)

CT Fat Measurement*

- Segment subcutaneous and visceral fat regions
- Evaluate fat segmentation results
- Generate report with results based on the obesity standard associated with the selected report guidelines

*CT Fat Measurement is only available in select countries. It is not available in the U.S.



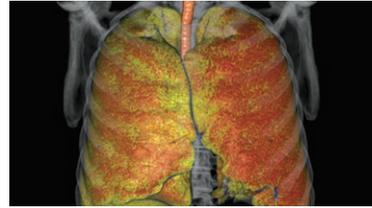
CT Liver Analysis

- Track tumors with RECIST and WHO measurements
- Conduct single-click liver and vascular segmentation
- Perform single-click tumor probe with tumor margin borders
- Support of volume fusion for multiple timed phases
- Plan virtual resection



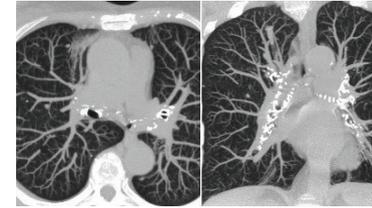
CT Lung Analysis

- Perform semi-automated lung and airway segmentation
- Restore previously segmented nodules from prior studies for comparison
- Quantify lung nodules with nodule growth and doubling times in comparison studies
- View dictation table with Lung-RADS™, Fleischner Criteria and export options to PowerScribe® 360
- Segment lung nodules, including solid nodules and ground glass opacity (GGO) nodules, with a single click



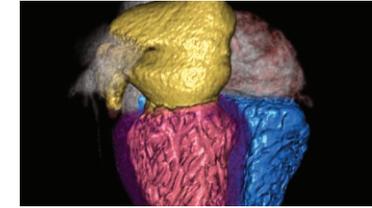
CT Lung Density Analysis

- Segment airway, left lung and right lung semi-automatically
- Visualize lung density with color-defined Hounsfield Unit (HU) ranges
- Quantify lung-density result with HU density range and lung-density index, as well as PD15% and volume measurements
- Display density graph/histogram of the classified lung voxels' relative frequencies
- Compare lower and upper lung-density index ratios



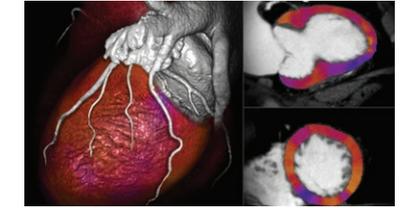
CT Lung Screening Solution

- Vitrea Advanced Visualization's flagship CT Lung Analysis application with Vitrea Image Denoising includes:
- Nuance PowerScribe 360 Reporting support
 - Visia™ CT Lung CAD integration
 - Custom report templates with Lung-RADS and ACR guidelines



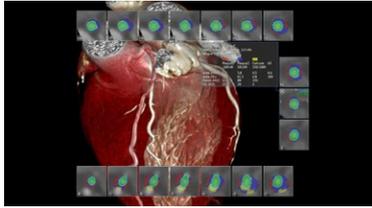
CT Multi-Chamber CFA

- Segment left atrium (LA), left ventricle (LV), myocardium and right ventricle (RV) semi-automatically, and identify long-axis and mitral valve boundaries across multiple phases
- Calculate cardiac index, Cardiac Output (CO), End Systolic Volume (ESV), LV/ RV End Diastolic Volume (EDV), LV/RV regurgitation fraction, myocardial mass, Stroke Volume (SV) and three-point LA metrics automatically
- Calculate regional metrics, including polar plots, regional ejection fraction, wall motion and wall thickening percentage
- Classify key findings for consolidated cardiac workflow reporting



CT Myocardial Perfusion

- Segment chambers and myocardium semi-automatically
- View qualitative measurements, including Hounsfield Unit (HU) attenuation, myocardial mass and myocardial volume
- View polar map plots (contrast, perfusion index and transmural perfusion ratio) highlighting potential myocardium defects
- Calculate qualitative perfusion results automatically
- Review single-volume and dual-volume analysis of early acquisition and later acquisition
- View cardiac vessels over colored attenuation data

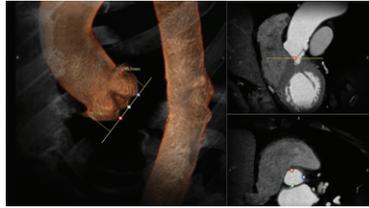


CT SUREPlaque™

SUREPlaque tools assist clinicians in evaluating interior blood vessel characteristics:

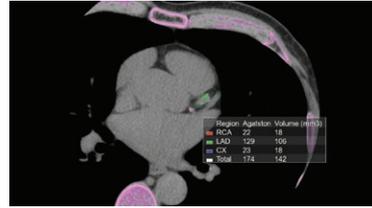
- Quantify coronary remodeling and plaque burden non-invasively
- Easily visualize coronary vessel anatomy and disease, using defined HU ranges
- Characterize vessel wall lesions as either calcified or non-calcified

View and measure lumen area and diameter, plaque (area, burden, index and volume) and wall area/ lumen area ratio automatically.



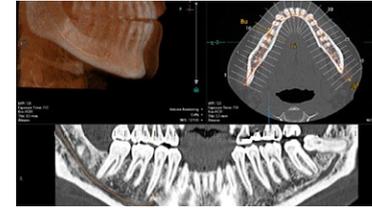
CT TAVR Planning

- Load multiple volumes and series for analysis and measurements in different cardiac cycle phases
- Segment aortic root and aortoiliac vessels automatically with multiple viewing options, including volume rendering, MIP, MPR, curved and straightened vessel MPR views
- Utilize custom reporting templates with user-guided automation for analysis and necessary measurements
- Automatic cusp point identification and aortoiliac measurements
- Enable planning for transapical, transfemoral and subclavian delivery approaches with C-arm angle display for device placement



CT VScore™

- Visualize images in 2D and 3D
- Generate reports with templates that autofill user-selected scores, including exportable graphs and snapshots
- Calculate calcium score using Agatston, mass or volume
- View graphical display of calcium percentile comparing a patient's calcified plaque burden to that of other asymptomatic men or women of the same age range and/or ethnic group
- The vessel order is more conducive to user workup for efficiency.
- The Pick Select tool is available by default.



Dental Analysis*

- Automatically creates a curved centerline along the dental arch for generating panoramic images and can be manually adjusted if necessary
- Creates crosscut images perpendicular to the panoramic image at any desired interval
- Life-size printing and image export (may require calibration of the printing device)
- Simple workflow using preset protocols for Maxilla, Mandible and Implant exams for fast and easy generation of routine dental images



Global Illumination

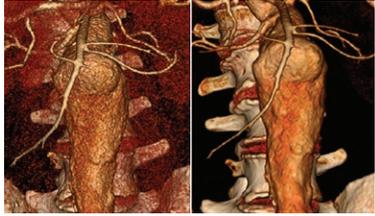
An alternate 3D rendering technique to help provide a more photorealistic view of human anatomy.

- Users are able to acquire and share these images for communication and education.
- Included in existing Vitrea® Advanced Visualization workflows.
- Enables more real-world rendering to aid communication between imaging specialists, clinicians, and patients
- Highly interactive and easy to use



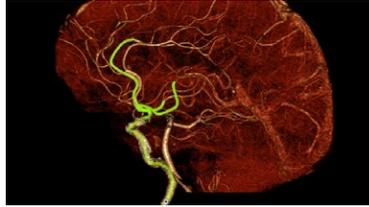
Multi Modality Viewer

- Facilitates presentation, navigation and manipulation of CR, CT, DX, MRI, PET, PET/CT, RF, RG, US and XA images
- Compare multiple series seamlessly
- Easily switch to additional integrated applications for further post-processing or series quantification
- Subtract two CT/MRI series/datasets during image processing
- Access advanced applications and workflows along with semi-automated whole-body image MRI stitching



Vitreous Image Denoising

- Reduce image noise via SPD denoising algorithm
- Apply customized filter with reduced pixel noise and improved signal-contrast-to-noise ratio (SNR)
- Toggle between original and denoised volumes in real time
- Modify predefined image filter presets and save them for future use
- Preview interactive denoising



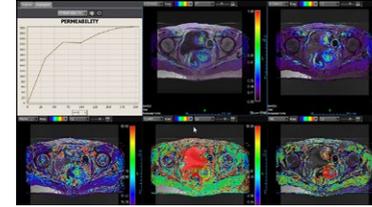
Vessel Probe

- Create a centerline through the vessel lumen
- Use multiple image-viewing formats, including 3D, curved MPR, curved reformat, oblique MPR and orthogonal MPR (multiplanar reformatted) views of selected vessels
- Apply automated stenosis-measurement tools, including average and NASCET, as well as single and dual reference
- Detect internal and external lumen boundaries automatically, including maximum and minimum lumen diameters



XA 3D-Angio

- Evaluate vessels in 3D with digital subtraction angiography (DSA) protocol and preset visualization settings
- View bone, devices and vessels with multi-volume fusion
- Generate automatic centerline and lumen boundaries with single-click segmentation
- Clinical angle display updates automatically as volume view rotates, and angles can be sent back to the X-ray system for C-arm positioning*

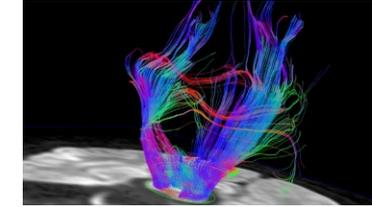


Olea MR Body Options

The MR Body options, powered by Olea Medical®, provide users with access to the latest tools and applications for Breast, Prostate and Body Imaging.

The MR Body options include the following:

- MR Body Full
- MR Breast
- MR Female Pelvis
- MR Head and Neck
- MR MSK
- MR Prostate
- MR Rectum



Olea MR Neuro Options

The Olea MR Neuro options, powered by Olea Medical, provide expert stroke post-processing options, parameters, maps and metrics incorporated into a fully automated workflow to save time. State-of-the-art applications provide users with the latest tools and applications for neuro imaging.

The Olea MR Neuro options include the following:

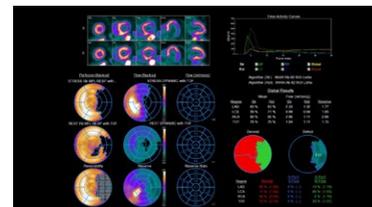
- MR Basic Stroke
- MR Neuro
- MR Neuro Full
- MR Neuro ASL

*Canon Infinix labs only.

Vitreia Advanced Visualization Integrated Applications

To provide the best tools to our customers, we integrate partner applications seamlessly into our software.*

*Check with your Vital sales representative or solutions architect for your supported applications set.



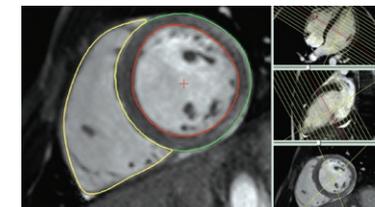
4DM by INVIA

- Delivers advanced processing algorithms, precise co-registration and reproducible quantification and image displays
- Quality-assurance measures
- Intelligent workflows for greater efficiency
- The quantification of myocardial perfusion, function and viability
- Multiple review screens
- Integrated reporting with customizable templates



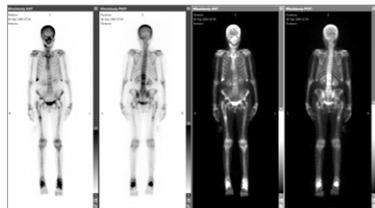
iCAD VeraLook® CT Colon CAD

- 2D and 3D fly-through visualization
- Automated identification of regions of interest (ROI)
- Bookmark CAD markings
- CAD summary panel
- Extracts features from potential polyps based on shape, morphology, texture, contrast, brightness and other attributes



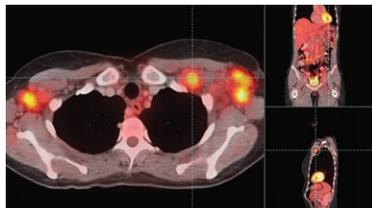
Medis® Suite Cardiovascular MR

- Medis Suite provides an efficient and flexible workflow, including CVMR Viewer, QMass, and QFlow.
- Scanline views for cross referencing
 - Perform caliper measurements
 - Take snapshots
 - Flexible reporting, including predefined texts



Mirada Nuclear Medicine

- Vendor neutral software allows data from different scanners to be read using the same display format and protocols
- Unlimited number of configurable workflows for reading planar static and dynamic NM data
- Mirada Workflow Designer enables easy creation and customization of workflows
- Smart workflow rules mean that data is available within your preferred workflow and layout throughout your institution
- Saving and restoring sessions enables easy work modifications at a later stage and allows multiple stakeholders to work corroboratively



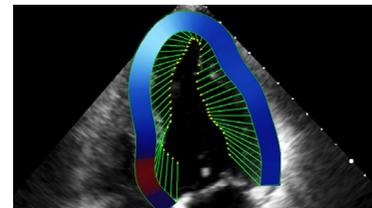
Mirada Oncology Fusion™

- Industry-leading comprehensive PET/CT reading platform
- Custom layouts, custom reports and hotkeys for any tool
- Software-based PET/MR
- Support for Response Evaluation Criteria in Solid Tumors (RECIST), PET Response Criteria in Solid Tumors (PERCIST) and World Health Organization (WHO)
- Support for multi-timepoint gated, multi-sequence MR and multi-phase CT data
- Automatic image alignment of datasets upon load
- CT Segmentation Tool



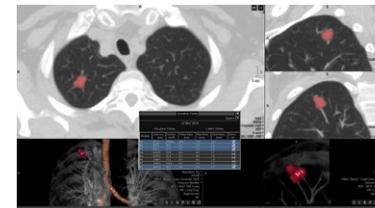
Mirada RTx

- Multi-modal deformable fusion incorporates any combination of CBCT, CT, CT Angiography, MRI, PET, PET/CT, and including 4D datasets
- Multi-atlas contouring provides single-click automated contouring using an atlas or previously contoured case
- Dose deformation and summation
- Adaptive re-planning
- Mirada software works seamlessly with any treatment planning system, scanner vendor or PACS



TOMTEC®

- The seamless integration of TOMTEC-ARENA into Vitrea Advanced Visualization means that the routine and advanced analysis of the ultrasound and cath images is reachable within one click and completely embedded in the clinical workflow
- TOMTEC Cardiology Ultrasound Basic
 - TOMTEC Cardiology Ultrasound Essentials
 - TOMTEC Cardiology Ultrasound Premium
 - TOMTEC Cardiac Cath Complete
 - TOMTEC Cardiac Echo Cath
 - TOMTEC Radiology Ultrasound



Visia™ CT Lung CAD

- Visia enables the detailed segmentation of anatomical pulmonary structures as well as the automatic detection of abnormalities (lung tumors, pulmonary embolism), their evaluation and quantification.
- Clinically validated CAD performance – proven to improve reader accuracy and efficiency
 - Automated tracking for lung nodules in longitudinal exams
 - Dictation table with Lung-RADS®, Fleischner Criteria and export options to PowerScribe® 360

Vitreia Advanced Visualization Clinical Workflows

The clinical applications within Vitrea Advanced Visualization contain many workflows to assist users as they work on specific clinical exams. These can be used to optimize the screen layout and custom visualization settings automatically.

Some of the workflows available in our clinical applications include:

CT Abdominal Analysis

Visualize the abdominal aorta.

CT Aorta Analysis

Visualize and evaluate the aorta vasculature.

CT Carotid

Visualize and evaluate the carotid and vertebral vessels.

CT Circle of Willis

Evaluate the intracranial vascular anatomy for possible occlusion or aneurysms.

CT Larynx Airway Analysis

Visualize and evaluate the larynx airway.

CT Musculoskeletal

Use clinical tools for visualizing cortical bone and joint displacement, muscles and soft tissue injuries.

CT Renal

Visualize renal anatomy using CT angiography studies.

CT Runoff

Evaluate occlusion or focal stenosis in patients with peripheral artery disease.

CT Urogram

Evaluate kidneys, ureters and bladder.

MR Abdominal Analysis

Review and analyze MR abdominal exams using general clinical tools and visualization settings.

MR Brain Tumor

Analyze and quantify tumor volumes obtained from MR brain series scans using a special 2D view.

MR Musculoskeletal

View types of orthopedic studies with presets for optimal visualization of soft tissue and bony structures.

MR Vascular

Evaluate vascular anatomy from MR angiography studies.



Automated Stroke Processing

Olea Pulse[®] is a fully automated CT/MRI post-processing application that streamlines acute stroke patient protocols.

Key Benefits

- Instant volumetric estimation of infarct, penumbra and mismatch ratio
- Automated multi-volume computation
- Dynamic thresholding perfusion maps to visually assess hypoperfused area
- Automatic and instant report delivery by email to key physicians

Key Features

- Olea Pulse is not a black box. It can access all post-processing steps and modify parameters from anywhere, at any time.
- Vendor neutral and easy integration into IT systems
- Automated and customizable stroke report

*Olea Pulse is available for sale in Canada, Asia Pacific, and the US.



Vitreia Connection

Enterprise Imaging Archive | Image Sharing | Data Orchestration Engine

Enterprise technology isn't just about imaging.
It's about content.

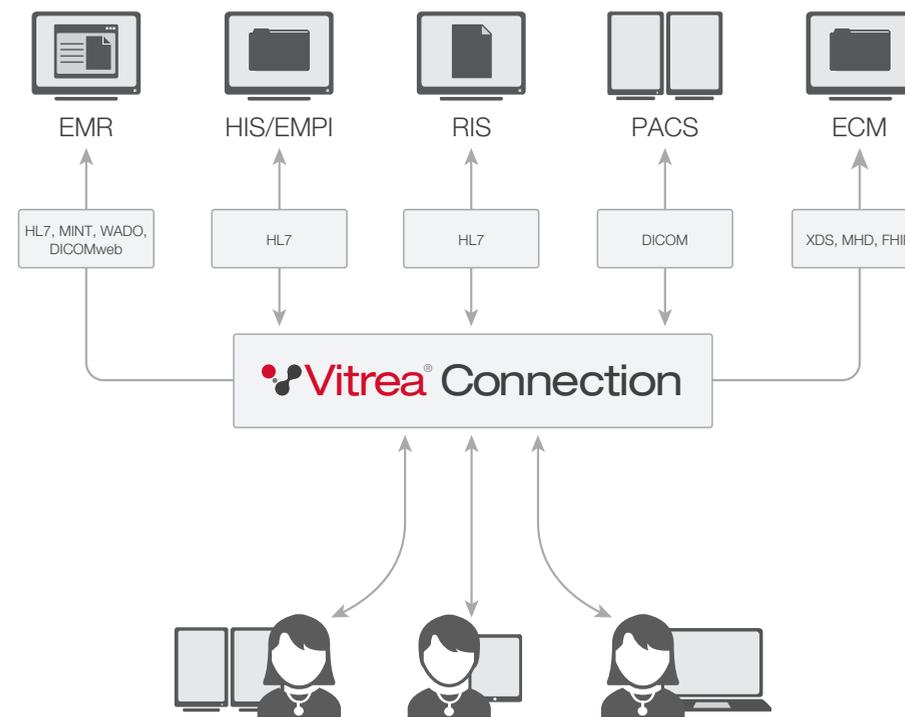
Working with Vital means you're working with imaging experts who think beyond imaging. Canon Group is bringing imaging information but also textual information – all for the purpose of one shared view for a user. Together with Canon Group, we are able to give patients access to images while at the same time delivering analytics associated with those images to the IT manager or imaging department head. It's content that brings provider and patient together.

Enterprise Imaging Archive

Vitreia Connection: Connect to and understand your data in a meaningful way.

A patient-centric archive for all of your medical images and associated data objects, Vitrea Connection leverages industry standards to maximize interoperability.

- Built upon cutting-edge technologies previously adopted and proven in industries outside of healthcare
- Supports a variety of deployment scenarios targeting multi-facility, multi-PACS environments at the departmental, enterprise, regional and national scale.





Enterprise Imaging Archive Benefits

- Supports a variety of deployment scenarios targeting multi-facility, multi-PACS environments at the departmental, enterprise, regional and national scale.
- Delivers patient-centric orchestration of multiple data types – DICOM and non-DICOM – contained in disparate systems, allowing you to leverage your existing investments while immediately improving workflow and interoperability.
- Facilitates a progressive migration and replacement strategy en route to a consolidated solution, avoiding costly data migrations.
- Offers massive, horizontal scalability to expand capacity quickly – without downtime.
- Leverages industry standards to maximize interoperability.
- Simplifies business continuance and disaster recovery.

Image Sharing

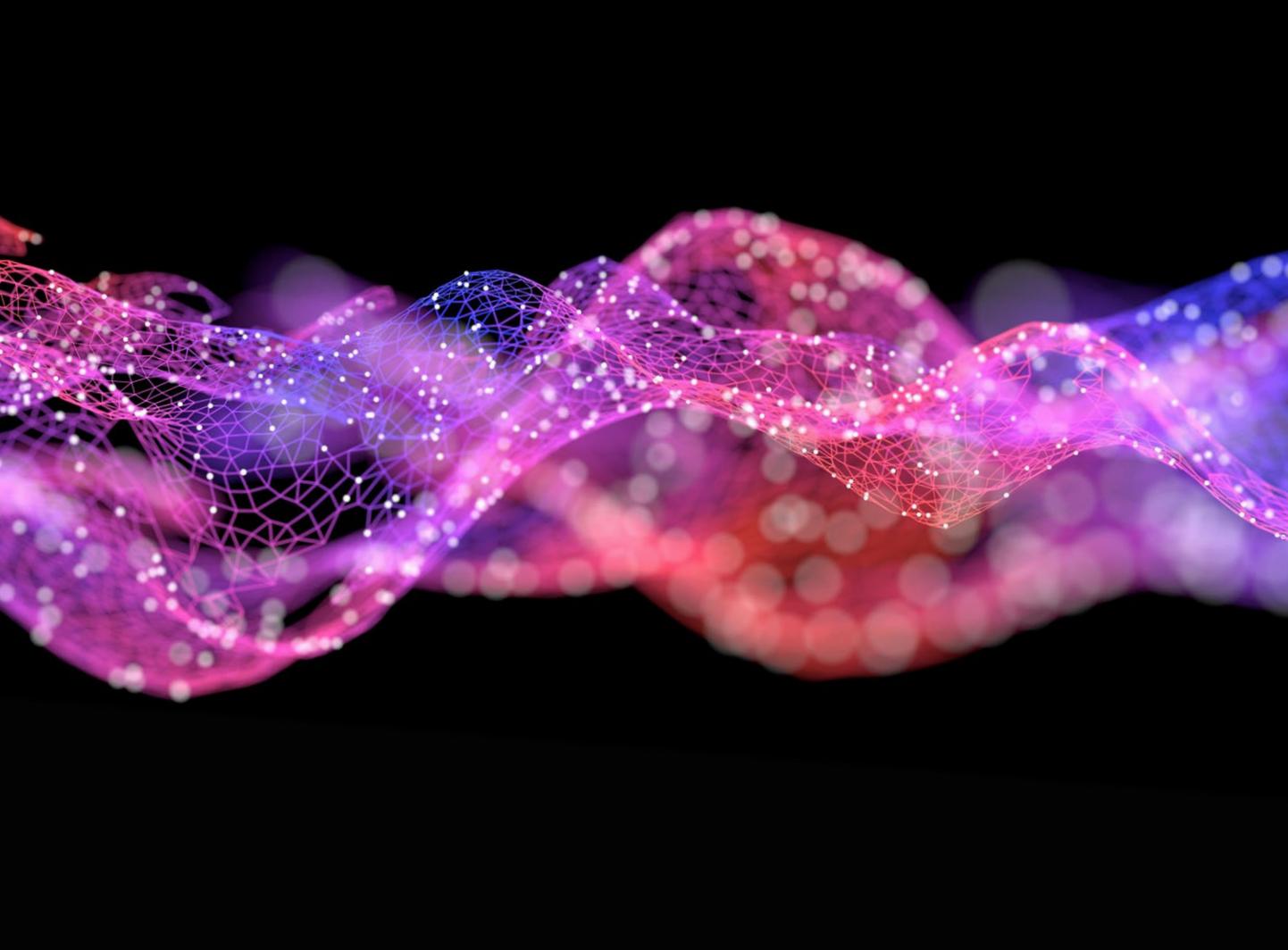
Vitre Image Sharing: Taking you the last mile.

Many vendors talk about image sharing. Generally, these vendors focus on the exchange of images between facilities or, in other words, eliminating the need to use CDs for image to exchange. None of these vendors are thinking about how to solve the gap that remains once images are moved from one facility to another. We refer to this as the “last mile” problem.

How are outside images accepted by an institution and integrated into existing systems and clinical workflows? The processes used to accept outside images are manual, slow and complicated. These processes often delay patient care. The Vitrea Image Sharing solution solves the “last mile” problem by automating the processes for outside image ingestion, allowing clinicians fast access to outside images within their current workflow. Closing the gap and completing the image sharing workflow benefits the department, the enterprise and ultimately the patient.

Image Sharing Benefits

- Automates and simplifies the process of accepting outside studies, whether the studies are on CD or DVD, or they’re obtained through another vendor
- Allows timely access to images at the point of care, independent of the process of transferring to storage
- Simplifies and decentralizes image upload process, allowing you the ability to send studies to other physicians or institutions directly, via any image exchange system/workflow
- Automates the process of moving studies between an institution’s PACS systems:
 - Enterprise-wide prefetch from all available PACS systems
 - Ad-hoc query from a PACS workstation across all available PACS systems
- Reconciles all patient demographics and study metadata appropriately
- Share or import DICOM and multimedia images between users inside and outside of your organization through an intuitive interface that can be launched through the EMR
- Optimize use of existing investments, including image exchange systems
- Enhancing the patient experience by reducing repeat images and providing data access for the patient



Data Orchestration Engine

Vitreia Connection provides patient-centric orchestration of multiple data types.

Leveraging the best technologies from all industries, the data orchestration engine within Vitrea Connection delivers greater flexibility to tailor workflows across departments. By using a graphical dataflow designer, customers can make massive modifications to the dataflow that are extensible enough to meet each department's needs and accommodate unknown future needs. With a simple drag and drop, customers can quickly and easily create a workflow that is uniquely theirs, without waiting for their custom needs to be addressed within the next version release.



Vitrea Intelligence

[Predictive Analytics](#) | [Business Intelligence](#) | [Advanced Analytics Platform](#)

We don't just deliver data. We deliver meaning.

Advances in technology mean data is abundant. But without interoperability and algorithms, data can't support clinical decision making. We go beyond collecting and storing data—with platforms that can make it meaningful to the end user, and distribute it across systems.

Predictive Analytics

Improve financial performance with predictive analytics.

Running a profitable imaging business in today's complex healthcare environment can be challenging. Adjusting to the demands of value-based reimbursement models and declining margins calls for a data-driven approach to managing your bottom line.

Existing analytics products reveal historical data to users and help them visualize information from which they can infer future trends and make corresponding business decisions. Opportunity Navigator™ predictive analytics goes further by combining your operational and financial data and then presenting a menu of financial “opportunities” that you could realize by taking specific actions to increase revenues or avoid costs.

Predictive Analytics Benefits

Operational Perspective

- Proactively identify revenue-generating and cost-saving opportunities
- Receive customized data to support achieving revenue targets
- Gain access to operational and financial data
- Analyze resources affecting business performance

Clinical Perspective

- Manage and optimize modality throughput
- Reduce variation in exam performance
- Identify opportunities to standardize clinical workflow
- Improve operations associated with specific ICD-10 diagnostic codes

IT Perspective

- Enable easy end-user interaction with data visualization
- Gain access to data, and free IT resources from report-generation tasks
- Leverage standard communications protocols such as HL7 and DICOM
- Support enterprise data warehouse integration
- Scale the solution as your organization grows

Business Intelligence

Gain access to the clinical, operational and financial data you need to become a data-driven organization.

The Practice Management business intelligence module makes running your imaging business easier by allowing you to make informed business decisions. It reveals the information you need to manage your organization and your referring physician base strategically, helping you to enhance your exam revenue stream.

Business Intelligence Benefits

Operational Perspective

- Gain a strategic view of your entire organization
- Manage in fine detail – even at the device level
- View integrated clinical, financial and operational data in real time
- Obtain access to critical data

Clinical Perspective

- Manage and optimize modality throughput
- Search clinical reports by keyword
- Visualize patient waits in real time
- Better manage sites, departments and resources
- Leverage KPIs to propagate best practices

IT Perspective

- Enable easy end-user interaction with data visualization
- Free IT resources from report-generation tasks with user data access
- Leverage standard communication protocols such as HL7 and DICOM
- Support enterprise data warehouse integration
- Scale the solution as your organization grows

Advanced Analytics Platform

Visually analyze the rich data that is generated directly by your imaging equipment.

With the addition of Codex, Vitrea Intelligence becomes an even more powerful tool. Using Codex, you can visually analyze the data that is generated directly by your imaging equipment. It unlocks the DICOM metadata, providing the most comprehensive and accurate view of imaging operations available today, enabling your organization to make more informed decisions through convenient access to comprehensive information.

Advanced Analytics Platform Benefits

Operational Perspective

- Strategically manage your entire organization's fleet of imaging modalities
- Manage MR coil and US transducer utilization
- Gain accurate visibility into all modality utilization, including mobile devices
- Share and display customizable dashboards to monitor performance

Clinical Benefits

- Discover and resolve unwanted variations in acquisition workflow
- Optimize protocols and exam cards with series and instance-level data analysis
- Easily share KPIs to propagate best practices throughout your organization
- Better manage sites, departments and resources

IT Benefits

- Enable easy end-user interaction with data through comprehensive dashboards
- Free your IT resources from report-generation tasks with self-service data access for users
- Streamline the implementation process with easy integration of DICOM data sources and single-server architecture
- Integrate your enterprise data warehouse



Support

The success of your organization depends on reliable technology and minimal downtime. Our designated Customer Success program and quick response times ensure that you receive the help you need, when you need it. We offer different levels of support to choose from through our maintenance and service contracts.

Vitreia Advanced Visualization	Standard	Preferred	Premier
Software updates and upgrades	■	■	■
Vital Customer Success Manager (CSM)	■	■	■
Access to Vital U live webinars and online library	■	■	■
Access to online technical knowledgebase	■	■	■
Rapid-response remote technical support	■	■	■
Standard support hours (Mon. – Fri., 7 a.m.-7 p.m.)	■	■	■
24/7 technical support		■	■
Hardware support assistance		■	■
Proactive system activity review with CSM		■	■
Education credits*			■
On-site assistance for critical issues†			■

Vitreia View Enterprise Viewer	Standard	Preferred
Software updates and upgrades	■	■
Vital Customer Success Manager (CSM)	■	■
Rapid-response remote technical support	■	■
Proactive system activity review with CSM	■	■
Standard support hours (Mon. – Fri., 7 a.m.-7 p.m.)	■	■
24/7 technical support		■
On-site assistance for critical issues†		■

*Education credits can be added to any tier for Vitreia Advanced Visualization at an additional cost.
 †Critical issues qualify for on-site assistance when they meet certain criteria. Contact Vital for details.



Vital U® Education Options

We offer various learning opportunities through Vital U, our professional education organization. Because we value fostering partnerships with our customers, we tailor ongoing education programs for each organization's size, needs and desired outcomes.

Vital U Classroom Education

For uninterrupted learning in a hands-on classroom environment, attend a Vital U classroom course at our headquarters in Minneapolis, Minnesota.

Customer-Site Education

For your convenience, we can bring the class to you, teaching the fundamentals of Vitrea Advanced Visualization software at your location.

Vital U Webinars

Our live webinars offer lecture-style instruction on using clinical applications. New modules are offered weekly.

Vital eLearning

Resources are available online, whenever and wherever you need them. Access our educational courses, eLearning, user guides, videos, workflows and other release-related documentation.

Shaping the Future of Healthcare Technology