

PHILIPS

IntelliSpace Portal 8.0

Datasheet



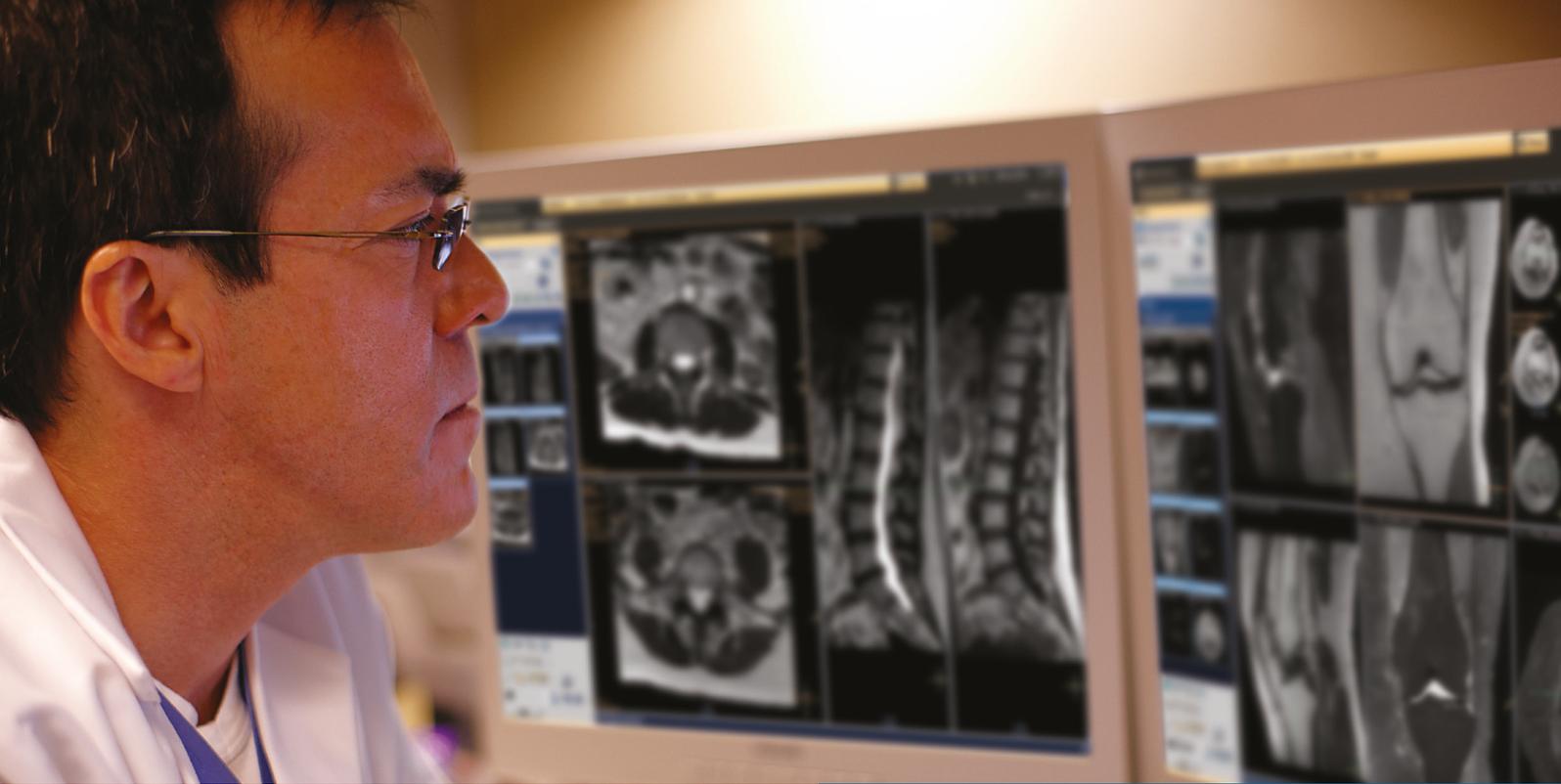
All your advanced analysis needs
One comprehensive solution

Contents

1. A single solution for the most complex patients	3	5. MI clinical applications	17
Introduction	3	● NM Review	17
Key advantages	3	● Cedars-Sinai Cardiac Suite 2015 ⁽³⁾	17
		● Corridor4DM ⁽⁴⁾ 2015	17
		● Emory Cardiac Toolbox (ECTb) v4.1 ⁽⁵⁾	17
2. Multi-modality applications	6	Emory Cardiac Toolbox (ECTb) HeartFusion ⁽⁵⁾	18
Multi Modality Viewer: a single platform for all your viewing needs	6	Emory Cardiac Toolbox (ECTb) SyncTool ⁽⁵⁾	18
● Multi Modality Tumor Tracking (MMTT)	6	NM Astonish Reconstruction	18
● Multi Modality Tumor Tracking (MMTT) qEASL ⁽¹⁾	7	NM JETPack Application Suite	18
Application Highlight: Multi Modality Advanced Vessel Analysis (AVA)	8	● NM NeuroQ 3.7 ⁽⁶⁾	19
Application highlight: ● XA Vascular Processing - DSA (in MMV)	9	NM NeuroQ ⁽⁶⁾ Amyloid	19
Application highlight: ● MR Smart Display Protocols (in MMV)	9	NM Processing Applications Suite	19
3. CT clinical applications	10	6. US clinical applications	20
● CT Lung Nodule Assessment (LNA)	10	US Q-App Elastography Analysis (EA) ⁽⁷⁾	20
● CT Lung Nodule CAD ⁽²⁾	10	US Q-App Elastography Quantification (EQ) ⁽⁸⁾	20
CT Acute MultiFunctional Review	10	US Q-App General Imaging 3D Quantification (GI 3DQ)	20
CT Advanced Vessel Analysis (AVA) Stent Planning	10	US Q-App Intima Media Thickness (IMT)	20
CT Body Perfusion	10	US Q-App Microvascular Imaging (MVI)	20
CT Bone Mineral Analysis (BMA)	11	US Q-App Region of Interest (ROI)	21
CT Brain Perfusion	11	US Q-App Vascular Plaque Quantification (VPQ)	21
CT COPD	11	US Viewing (in MMV)	21
CT Calcium Scoring	11		
CT Cardiac Plaque Assessment	11	7. Enhance workflow	22
CT Cardiac Viewer	12	PACS and beyond	22
CT Comprehensive Cardiac Analysis (CCA)	12	Get results fast	22
CT Comprehensive Cardiac Analysis (CCA) – CT-MI Fusion	12	Get information where it needs to go	23
CT Dental Planning	12	Make the most of your advanced analysis with real-time, context-based training	23
CT Dynamic Myocardial Perfusion (DMP)	12	Share best practice from around the world	23
CT EP Planning	12	A proven performer	23
CT Liver Analysis	13		
CT Myocardial Defect Assessment	13	8. Real-time collaboration	24
CT Pulmonary Artery Analysis ⁽²⁾ (PAA)	13	Live views, lively discussions	24
CT TAVI Planning	13	One step closer to treatment	24
CT Virtual Colonoscopy	13		
		9. IT Enterprise	25
4. MR clinical applications	14	Reduce the likelihood of error	25
● MR Cardiac Quantitative Mapping	14	Keep information flowing	25
MR Cardiac Viewing	14	Keep track of it all	25
MR Cartilage Assessment	14	Make the most of your hardware through virtualization	26
MR Diffusion	14		
MR Echo Accumulation	14	10. Enterprise scalability	27
MR FiberTrak	14	Growing with you	27
MR IViewBOLD	15	Do more with one worklist	27
MR MobiView	15	Say goodbye to downtime	27
MR Permeability	15	Rely on consistent performance	27
MR QFlow	15		
MR SpectroView	15	11. Continuous evolution and service solutions	28
MR Subtraction	16	Protect your investment from day one	28
MR T1 Perfusion	16	Maintain your clinical and operational standards	28
MR T2* (Neuro) Perfusion	16	Share the goal of superb healthcare solutions	28
MR Temporal Enhancement	16	Key components of continuous evolution with our service offering	29
MR Cardiac Whole Heart	16	Learning for life	29
		12. System specifications and requirements	30
		IntelliSpace Portal 8.0 configuration	30
		Server configuration concurrent user support	32
		IntelliSpace Portal 8.0 – Clinical applications portfolio	32
		Networking and DICOM	32
		DICOM Web	32
		Healthcare IT integration	32

- New application
- Enhanced application

⁽¹⁾ For research use only
⁽²⁾ CAD functionality not available for sale in the US
⁽³⁾ Not available for sale in all countries. Please check for availability in specific countries.
⁽⁴⁾ Corridor4DM is a registered trademark of Invia, LLC.
⁽⁵⁾ Emory Cardiac Toolbox, ECTb, HeartFusion, and SyncTool are registered trademarks of Emory University.
⁽⁶⁾ NeuroQ is a trademark of Syntermed.
⁽⁷⁾ Not available for sale in the US
⁽⁸⁾ Only available for sale in the US



1. A single solution for the most complex patients

Philips IntelliSpace Portal 8.0 is an advanced visualization platform that offers a single integrated solution to help you work quickly with increased diagnostic confidence – especially during complex cases and follow-up.

Multiple clinical domains, one standard for diagnosis

Grow your clinical depth and coverage with our constantly growing portfolio of expanded and enhanced applications designed by clinicians for clinicians. Designed around challenges specific to clinical domains, these applications offer exceptional flexibility to access, analyze, and quantify CT, MR, MI, US, iXR, and DXR images and information in one unified view.

Multiple modalities, one integrated platform

Increase your confidence in reading time after time with consistent multi-modality viewing environment across the enterprise*. IntelliSpace Portal 8.0 handles CT, MR, MI, US, iXR, and DXR data from multiple vendors, so you can complete cases in one session from one chair.

Multiple advanced tools, one consistent workflow

Accelerate time from image acquisition to diagnosis and imagine what you could accomplish with one more hour a day. IntelliSpace Portal 8.0 applications are equipped with time-saving features such as zero-click segmentation, collaboration

Key advantages

- Spend more time on providing input to patient treatment through workflow efficiencies, time-saving tools, and collaborative viewing options.
- Obtain a comprehensive overview of each patient and quickly quantify and diagnose using multi-modality clinical applications accessed from any point in your network.
- Be prepared for challenges on the horizon thanks to constant access to software and hardware upgrades, application enhancements, training, and education.

tools, image pre-processing, fetching of priors, and guided workflows to help you use time efficiently. Enterprises can communicate data across the clinical spectrum thanks to easy integration with other hospital systems such as PACS and RIS.

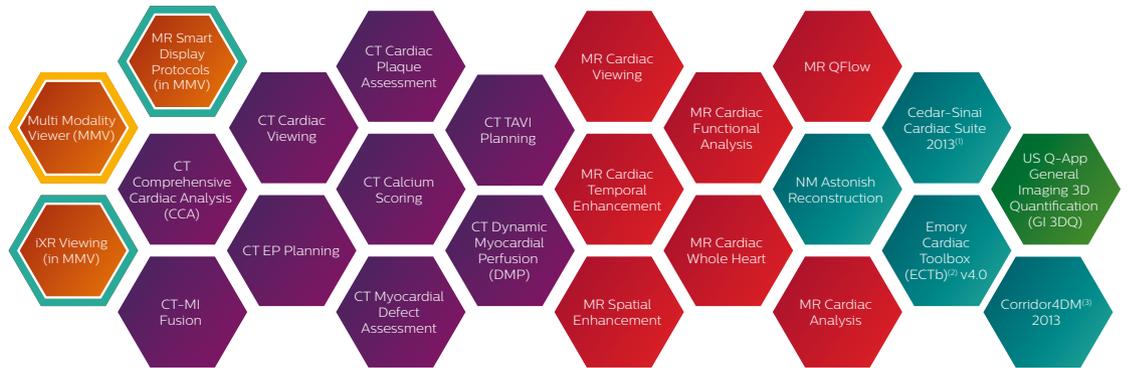
Multiple patient datasets, one unifying vision

Advanced analysis is changing rapidly. Stay at the forefront of clinical and hospital IT innovation with Philips RightFit Service Agreements. Take advantage of new features and functions today while staying connected to a steady stream of clinical and IT innovations. These include new applications, modalities, and workflow efficiencies as well as software and optional hardware upgrades along with clinical education and training services.

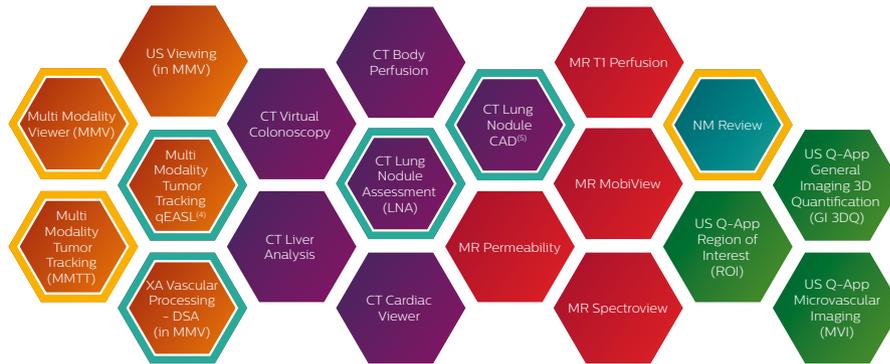
* Please contact your local Philips representative for details on multi-vendor coverage.

Access the application you need when you need it, where you need it. With these advanced multi-modality applications on IntelliSpace Portal 8.0, you can quickly and easily share rich clinical insight and input for treatment planning with the care teams managing the disease.

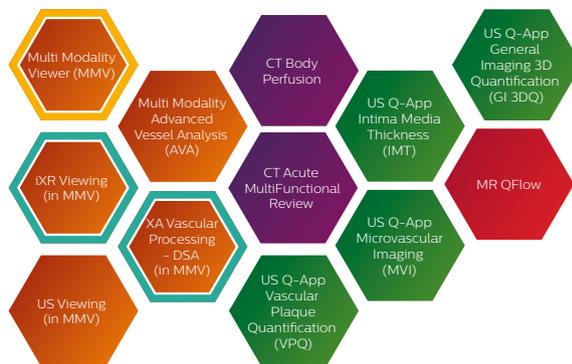
Cardiology



Oncology



Vascular



⁽¹⁾ Not available for sale in all countries. Please check for availability in specific countries.

⁽²⁾ Emory Cardiac Toolbox, ECTb, HeartFusion, and SyncTool are registered trademarks of Emory University.

⁽³⁾ Corridor4DM is a registered trademark of Invia, LLC.

⁽⁴⁾ For research use only

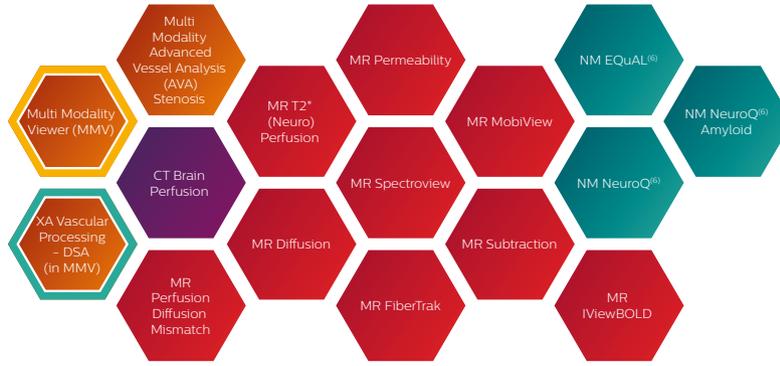
⁽⁵⁾ CAD functionality not available for sale in the US

⁽⁶⁾ NeuroQ and EQuAL are trademarks of Syntermed.

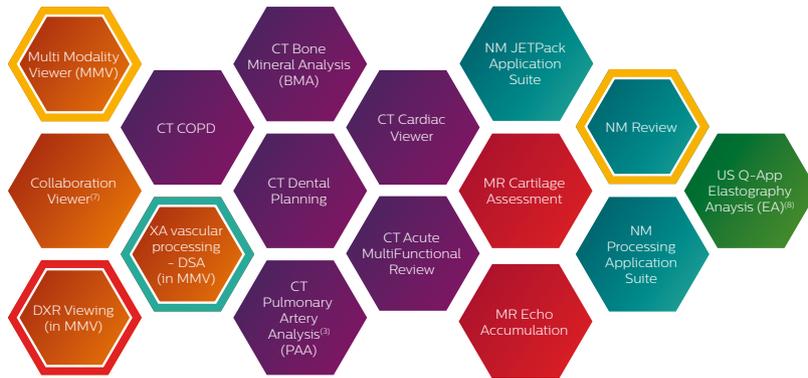
⁽⁷⁾ Web Collaboration enables viewing and sharing with tablets and smartphone devices – not intended for diagnosis

⁽⁸⁾ Not available for sale in the US

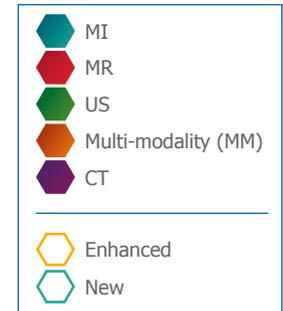
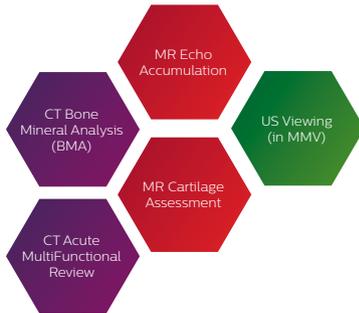
Neurology



More



Orthopedic



Multi Modality Viewer: a single platform for all your viewing needs

Philips IntelliSpace Portal 8.0 displays multi-modality datasets on any client using a LAN, WAN, or broadband Internet connection via the hospital VPN.

Powerful data processing functions are handled on the server, so there's no need to download data to the device. This improves workflow and stability.

Analyze these datasets using our Multi Modality Viewer:

- CT
- MR
- MI
- US
- iXR
- DXR

MM

2. Multi-modality applications

Multi Modality Tumor Tracking Streamline workflow for follow-up and analysis of oncology patients

Use CT, MR, PET/CT, and SPECT/CT data to monitor disease state and assess treatment response. You can also segment lesions and quantify anatomic and metabolic state over time. Enhanced semi-automatic volumetric segmentation has been optimized per modality. Since advanced treatment response criteria support is part of the preset and reflected in a workflow, you can easily review information in different layouts. A quantitative overview of volumetric and functional features is organized for quick navigation.

Benefits

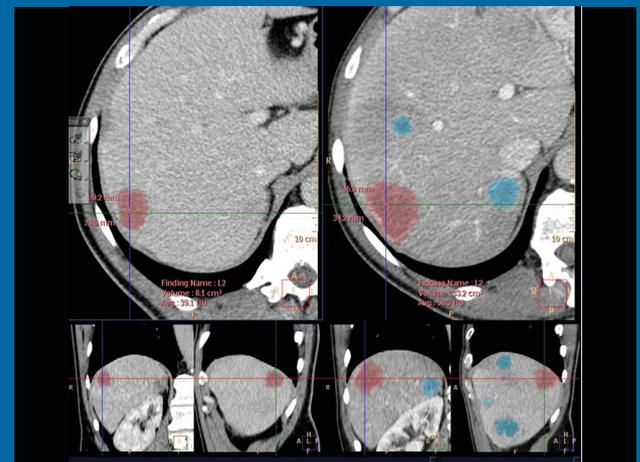
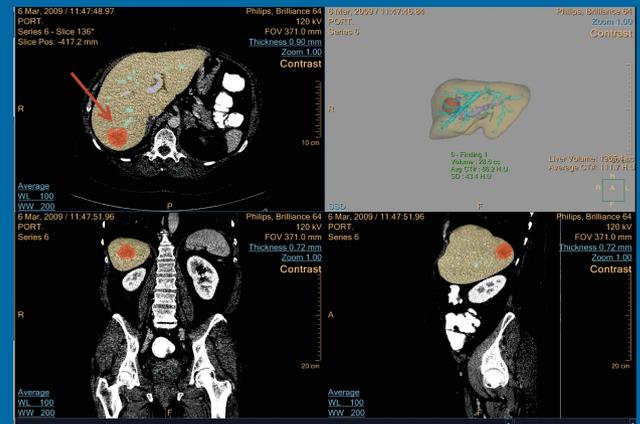
- Easily label target and non-target lesions to track lesion progression.
- Get a comprehensive result table to easily evaluate the main parameters (short and long axes, volume and mean HU) for both target and non-target lesion.
- See a complete overview of all generated advanced data like perfusion maps, fMRI data, white matter tracts, and spectroscopy results in 2D and 3D.
- Compare a quantitative overview of all segmentations
- Use smart linking to enable the correct location of each image series in comparison to other series.
- Easily share findings between Multi Modality Tumor Tracking, CT Liver Analysis, and CT Viewer to enhance surgery planning.

Automatic calculation of:

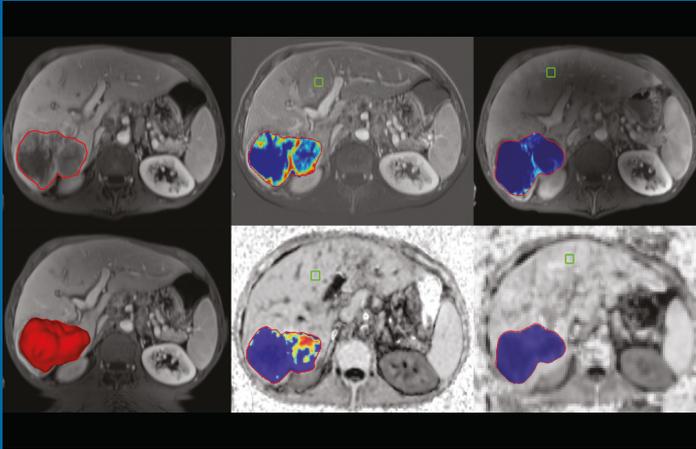
- iRRC
- WHO
- RECIST 1.0
- RECIST 1.1
- CHOI
- PERCIST
- mRECIST

Criteria are presented in easily exportable tabular and graphical layouts.

Oncology

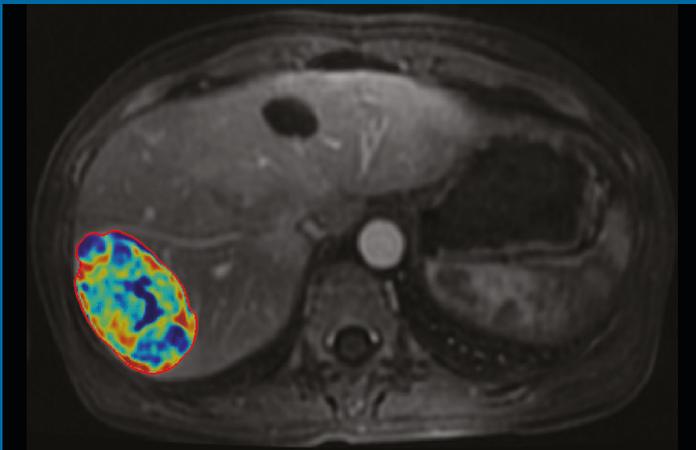


Quantitative EASL (qEASL) ⁽¹⁾



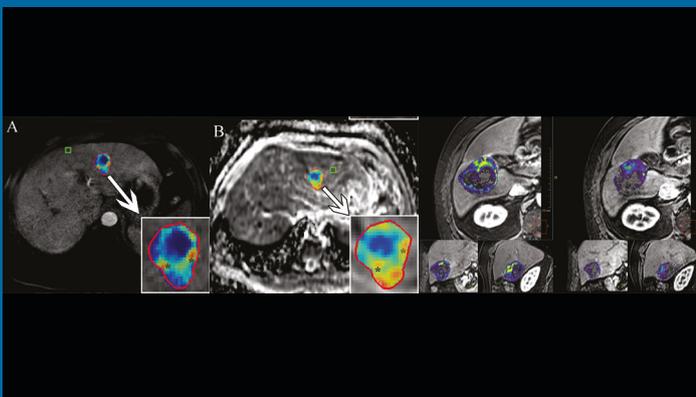
Semi-automatic 3D tumor quantification

This quantitative 3D (Volumetric) tumor response assessment tool is based on EASL (European Association for the Study of the Liver) criteria. Designated only for research, qEASL is a 3D semi-automated method that incorporates functional information from contrast-enhanced scans. Data are presented as a clear distribution color map of the necrotic and viable areas of the tumor.



“The MMTT application has really helped us simplify and streamline our workflow. It has all the necessary tools for comprehensive oncologic evaluation of the dataset. It’s **a real time-saver** for the radiologist.”

*J. Louis Rankin
Franciscan St. Francis Health,
Indianapolis, USA*



⁽¹⁾ For research use only

Multi Modality Advanced Vessel Analysis (AVA)

Reduce comprehensive vascular analysis planning to five minutes

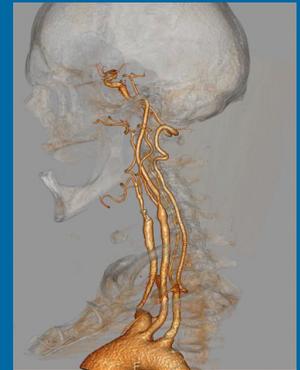
Take advantage of multiple presets and user-defined options to reduce comprehensive vascular analysis planning to five minutes. The robust bone removal algorithm on Multi Modality Advanced Vessel Analysis (AVA) provides 3D visualization of the vessels. Additional automatic tools, such as bone removal and centerlines, vessel labeling, and inner and outer lumen contours* as well as Automatic Series Creation (ASC) reduce the time to produce final results and contribute to the consistency of your results.

Easily navigate through multiple findings and when you're finished, export rich, customizable reports to your RIS or PACS without hassle.

Benefits

- Examine and quantify vascular lesions from CTA MRA studies.
- Accommodate different modes of inspection and label different vascular lesions.
- Reduce the time to produce final results using Automatic Series Creation (ASC), which automatically creates cMPR, cross-sectional, MPR, and volume images even before you open your study.
- Get excellent visualization of vascular structures with simplified zero-click bone removal and visualize the carotid siphon with skull removal.
- Enhance workflows for specific findings creation, like stenosis, aneurysm, and diameter measurements with customizable views.

* Together with Enhanced Zero-click Performance option



Speed up workflows by 77%



Multi Modality Advanced Vessel Analysis (AVA) reduces the manual time-to-results by 77% for neuro (head/neck) and body CT angiography (CTA) exams.* **

- Manual procedures
- MM Advanced Vessel Analysis (AVA) with ASC

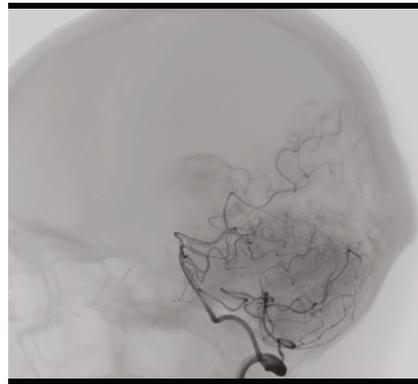
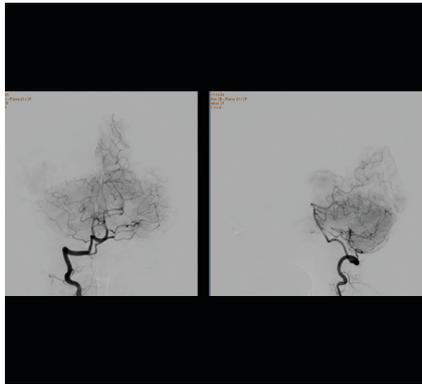
* Compared to the Philips EBW v4.x workstation

** Kadavigere, R., Maiya, M., Rao, V., Read, K. Standardized Results of CT Angiography Obtained with Automated Postprocessing Using a Dedicated Server: A Workflow Optimization Study. A collaboration of Philips Healthcare and Kasturba Medical College at Manipal University, India. Radiological Society of North America 2011 Scientific Assembly and Annual Meeting, November 26 - December 2, 2011, Chicago IL.

XA Vascular Processing - DSA (in MMV)

Expand your workflow to read and post-process images virtually anywhere

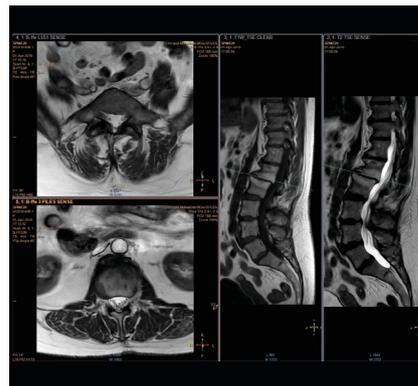
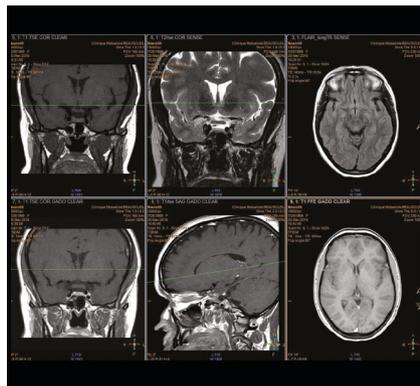
Obtain images of arteries in various parts of the body and use highly effective post-processing tools like subtractions, pixel shifting, and landmarking outside the interventional room.



MR Smart Display Protocols (in MMV)

Increase diagnostic confidence and easily organize your initial viewing layout

Spend more time analyzing and less time opening and arranging your studies. Easily set up, design, and save hangings and layouts. MR Smart Display Protocols delivers the best fitting display protocols for each individual patient based on your preference.



New



Assess lung nodules over time

CT Lung Nodule Assessment (LNA) provides quantitative information about the size, shape, and change over time of physician-indicated lung nodules.

- Oncology
- Surgery
- Pulmonary

Take advantage of one-click volume segmentation along with advanced reporting which helps rapidly distribute paper and electronic results while supporting LungRADS* categorization. New intuitive workflow and decision support tools* streamline follow-up readings. Can also be used on low dose CT chest scans.**

* Not available for sale in the US

** Please contact your local Philips representative for details on multi-vendor coverage.

New

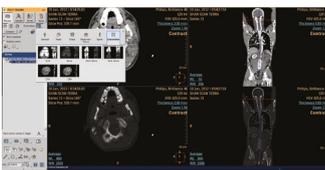


Rely on a true second reader

CT Lung Nodule CAD⁽¹⁾ acts as a true second reader that can detect lung nodules that might have been overlooked. This application features new automatic capabilities such as registration of priors and current time points, automatic calculation of nodule changes, and correlation between 2D and 3D measurements.

- Pulmonary

⁽¹⁾ CAD functionality not available for sale in the US



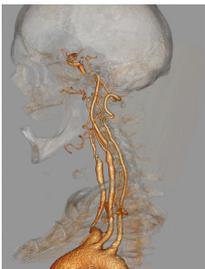
One application for fast systematic review

CT Acute MultiFunctional Review (AMFR) allows the clinician reading trauma cases to remain within one comprehensive post-processing application to accomplish the diagnosis of trauma patients that were scanned with CT.

- Surgery
- Trauma
- MSK

The application offers:

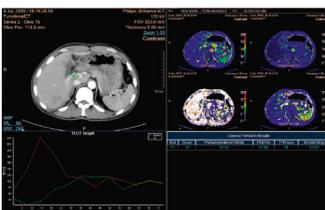
- viewing stage for trauma assessment
- rapid vascular assessment
- automatic spine assessment
- interactive pre-surgical MSK
- Multifunctional Findings Navigator to easily create, manage, and convey findings



Quickly plan endovascular stent placement

CT Advanced Vessel Analysis (AVA) Stent Planning includes multiple preset and user-defined options to gain detailed information for use in stent planning, reducing overall planning time to five minutes compared to 30-45 minutes without the application. The application includes an option that allows you to print results on a customized report.

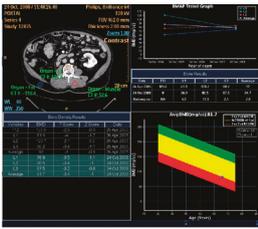
- Vascular
- Surgery



Quantifiable perfusion

CT Body Perfusion aids in the evaluation of acute or chronic stroke patients, as well as providing whole-organ or single-location liver perfusion. The package provides motion correction, and enables large coverage/low-dose imaging for superb neuro results.

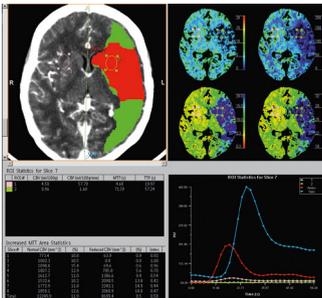
- Neurology
- Oncology



Track degenerative and metabolic bone disease

• MSK

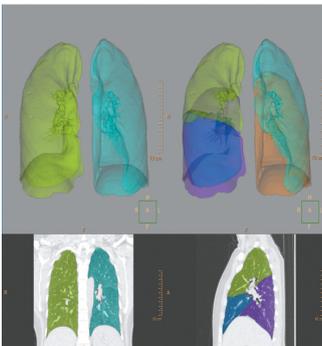
CT Bone Mineral Analysis (BMA) provides quantitative CT information to track and manage degenerative and metabolic bone diseases such as osteoporosis. CT BMA provides excellent results without the need of a reference phantom. Phantomless calculations are determined by using the patient's own fat and muscle tissue as reference points. The application automatically calculates T-scores and Z-scores and includes tracking support from study to study as well as full color screens and reports.



Identify salvageable areas in acute stroke

• Neurology
• Surgery

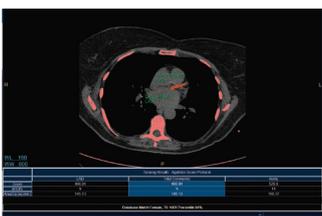
CT Brain Perfusion, exclusive to Philips, calculates and displays reduced flow summary maps to help you identify areas of salvageable tissue in acute stroke patients and assist in treatment planning. In addition, the application includes methods to visualize regions with higher collateral supply. The program automatically corrects misregistration or motion artifacts, and displays summary maps that help you distinguish between still-viable and non-viable infarcted tissue. Permeability maps are standard, and optional time-sensitive algorithms are also available.



Track lung disease

• Pulmonary

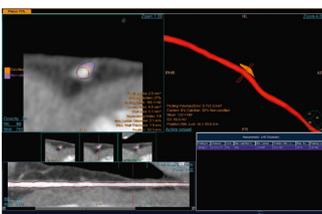
CT COPD helps quantifiably track the destructive process of diffuse lung disease (emphysema, asbestosis, black lung) and localize specific areas of the lung that have been affected. Automatically segment both the left and right lungs to determine total lung volume (cc), diseased lung volume (cc) and percentage of affected lung. Segment the airway tree, attain centerlines, and measure airway parameters such as lumen diameter and wall thickness.



One-click 3D calcium segmentation

• Cardiology

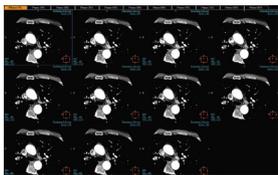
CT Calcium Scoring rapidly quantifies coronary artery calcifications (CAC) and includes mass, Agatston score, and volume scores. It allows you to distribute automated, customizable reports electronically or on paper.



Evaluate plaque risk

• Cardiology
• Vascular

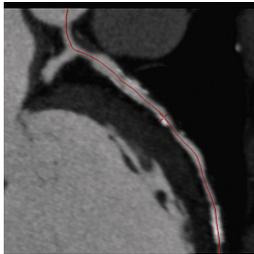
CT Cardiac Plaque Assessment includes robust capabilities allowing quantification and characterization of coronary plaque from multidetector computed tomography (MDCT) data. With this application, you can assess plaque sites.



Quick cardiac visualization

CT Cardiac Viewer provides a comprehensive set of tools that allows quick visualization of one or multiple cardiac phases, synchronization of multiple cardiac phases with interactive slab-MIP tools for review purposes, cine mode for cardiac axes views, and a simple “Area-Length” calculation of end systolic volume (ESV), end diastolic volume (EDV), cardiac output (CO), and ejection fraction (EF) for basic ventricular functional assessment.

• Cardiology



Fast cardiac analysis

CT Comprehensive Cardiac Analysis (CCA) and advanced LV/RV functional analysis provides endoluminal and epiluminal segmentation of the heart chambers to calculate ejection-fraction, stroke volume, cardiac output, and left and right ventricular mass. Visualize the entire coronary tree, vessel lumen via morphological analysis, and analyze free lumen diameter. Perform functional analysis of ventricles and analyze chamber and valve morphology in 3D and using dynamic cine mode. New added calculations include regurgitation volume and fraction index, RV/LV Early and Late (active and passive) filling volumes, and Early/late LV filling ratio.

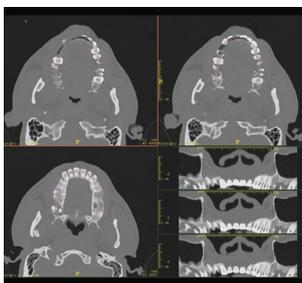
• Cardiology



Fusing cardiac CT-MI

CT Comprehensive Cardiac Analysis (CCA) incorporates support for myocardial perfusion imaging (MPI). CCA with the CT-MI Fusion option allows loading both gated and un-gated rest, and gated and un-gated stress MI datasets simultaneously with the CT. The MI images are displayed in the short axis and the two long axis planes. The axes definition is derived from the CT study.

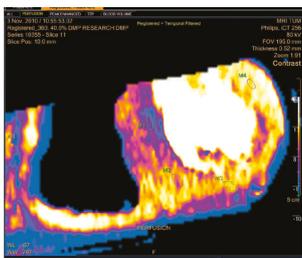
• Cardiology



Planning for oral surgery

In maxillofacial trauma cases, the course of treatment can often only be decided after a surgical consult. CT Dental Planning is designed to reduce diagnosis response time, shorten procedure length through enhanced surgical planning, and facilitate collaboration between radiologists and surgeons. Images can be rotated and adjusted to find the appropriate location, angle, and depth for surgery. For example, oral and maxillofacial surgeons can locate tooth fragments embedded in the palate of the mouth. Planning with 3D images also helps in estimating the thickness of bone when drilling and inserting metallic dental implants.

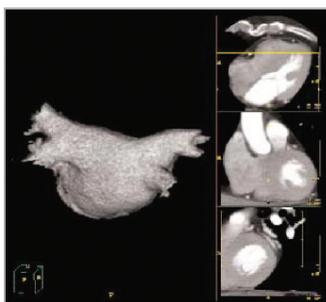
• Surgery



Dynamic color maps provide an assessment of myocardial risk

CT Dynamic Myocardial Perfusion (DMP) is intended for visualization, diagnostic assessment, and quantification of cardiac images focusing on the left ventricular myocardium: specifically providing quantitative myocardial blood flow measurements for CT images, including the ability to identify areas of decreased perfusion within the myocardium that may represent ischemia. The application supports axial, ECG-gated CT images, consisting of multiple time shots of the same myocardial region over time. CT DMP displays the results as a composite image (single image calculated from a set of time course images at a single location).

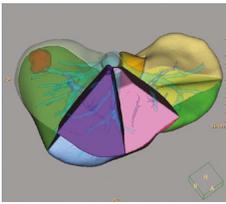
• Cardiology



Fast planning for EP procedures

CT EP Planning provides fast, overall assessment of pulmonary vein, left atrial, and appendage anatomy, enabling the electrophysiologist to quickly identify anatomy that may complicate the EP procedure.

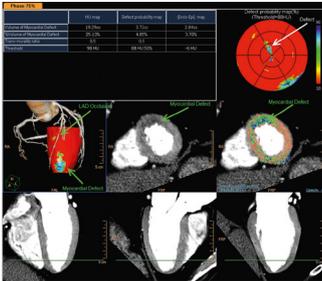
• Cardiology
• Surgery



Advanced liver segmentation

CT Liver Analysis automatically identifies the liver from a portal venous phase of a tri-phase liver scan, complete with automatic portal and hepatic vein segmentation. As a basis for comprehensive analysis and quantification, the liver is segmented semi-automatically using six types of segmentation, including 8-lobe and 9-lobe. The application enables absolute and relative volume measurements as well as virtual hepatectomy for RF ablation and surgery planning.

- Oncology
- Surgery

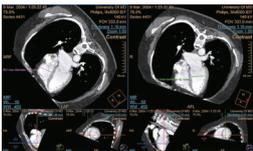


Assessing myocardial defects

CT Myocardial Defect Assessment provides visual and quantitative assessment of segmented, low-attenuation defect areas within the myocardium from a single, gated cardiac CTA scan (retrospectively-gated spiral or Step and Shoot Cardiac). The ability to derive this information from a single cardiac CTA scan reduces the need for multiple scans. The application itself is based on the robust, automatic, model-based, whole heart segmentation from the CT Comprehensive Cardiac Analysis application. CT Myocardial Defect Assessment provides visual assessment of low-attenuation deficits within the left-ventricular myocardium via:

- Cardiology

- color maps shown in short-axis views
- segmentation maps shown on short-axis and polar plots, displayed along with long-axis reference images
- volumetric visualization of coronary arteries along with segmentation maps displayed as an overlay on top of a 3D myocardial surface



Guided pulmonary embolism discovery

CT Pulmonary Artery Analysis⁽¹⁾ offers automatic segmentation of pulmonary arteries on MDCT data to estimate the patency of pulmonary arteries. A full suite of tools helps you visualize the lungs, review results, and report any PE findings. Extract relevant cardiac measurements such as RV/LV ventricular ratio and chambers volumes.

- Pulmonary

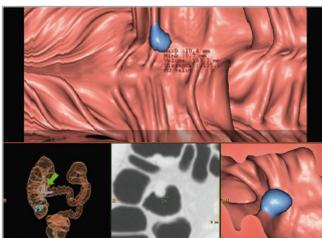
⁽¹⁾ CAD functionality not available for sale in the US



CT imaging in TAVI to advance patient care

CT TAVI Planning is a non-invasive post-processing application that provides semi-automatic measurements of the aorta and aortic valve that are useful for pre-TAVI planning. It also provides model-based segmentation of the aortic valve, ascending aorta and left ventricle, semi-automated detection of the coronary ostia, semiautomated planes detection and dimensions measurements of the aortic annulus, left ventricular outflow tract, sinotubular junction, sinus of valsalva, ascending aorta and distance to coronary ostia for TAVI-device sizing. This application also provides a reasonable starting angle of the C-arm for device deployment, which allows for less time used for the TAVI procedure itself performed in the catheterization laboratory or hybrid operating room. Recently added automatic measurements include Left and Right coronary sinus height, Non-coronary sinus height, and aortic angulation.

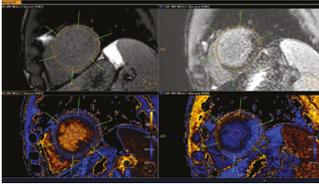
- Cardiology



Reduce reading times in virtual colonoscopy

Exclusive to Philips, **CT Virtual Colonoscopy** with Perspective Filet View allows you to perform a “virtual dissection” of the colon by unfolding or unrolling along the centerline and displaying a portion of the colon for inspection, providing a 100% view of the surface of the colon with no image manipulation.

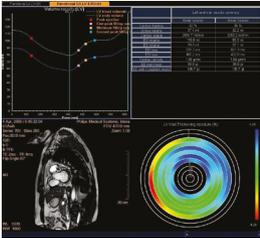
- Oncology
- Surgery



Assess myocardial tissue characteristics

MR Cardiac Quantitative Mapping helps you assess and review myocardial tissue characteristics in multiple, user-defined, field-strength specific look-up tables. Review global and diffuse myocardial pathologies by means of T1 maps, T2 maps, and T2* maps.

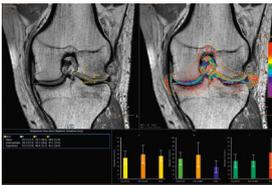
- Cardiology



Detailed quantification of cardiac function

MR Cardiac Viewing facilitates easy visual scoring in various examination contexts. The package enables comprehensive functional volumetric analysis for the ventricles, such as without papillary muscle corrections and segmentations for generation of global functional parameters such as wall motion, thickness, and thickening. Identification of spatial enhancement based on intensity signal changes is included while bookmark functionality “frames” any view on the data that is relevant for saving or communicating to other physicians.

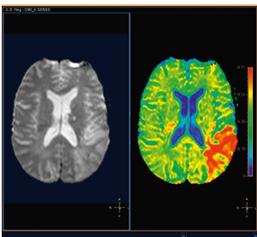
- Cardiology



Aiding in therapy planning by visualizing

MR Cartilage Assessment enables the visualization of cartilage structures integrated with color-coded T2 maps. Positioning of cartilage-shaped, layered ROIs is used to assess variation of T2 values across the cartilage depth to determine the degradation of the cartilage.

- Orthopedics



Detailed review of diffusion indicated lesions

MR Diffusion tool enables analysis of diffusion characteristics such as ADC, eADC, and FA in stroke cases and other diseases. Registration of the underlying data allows for reduced blurring in case data affected by motion. The tool includes capabilities such as user-selected color coding of output maps and user-selected choice of specific b-values for the end calculation.

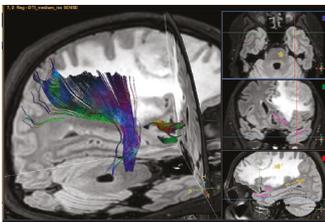
- Neurology
- Oncology



Optimizing image contrasts for multi-echo MR data

MR Echo Accumulation enables the calculation of new images based on the selected sum of echo times. This helps optimize cartilage contrast within high-resolution knee images. The processing provides interactive update of the results.

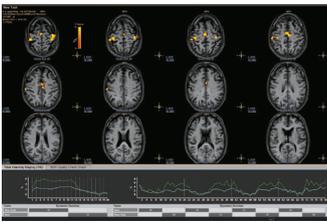
- Orthopedics



Visualize white matter connectivity in the brain

MR FiberTrak provides visualization of white matter tracts using task guidance for generating common or user-defined tracts. Detailed examples are used to guide the user for the various tracts. Visualization includes overlays, such as functional maps. Bookmarks allow saving of any (intermediate) view of the package on a dataset.

- Neurology



Brain activation analysis

The **MR IViewBOLD package** facilitates off-line functional BOLD MRI analysis for both block, event-related, and seed-based resting state analysis, so you can visualize task-related areas of activation. Automated pre-processing such dynamics registration and registration to anatomical reference enables efficient workflow. You can have detailed reviews of the data, such as review of the average responses to events and display registration results across dynamics. Export of functional results to other DICOM nodes such as surgical planning devices is included in the base configuration.

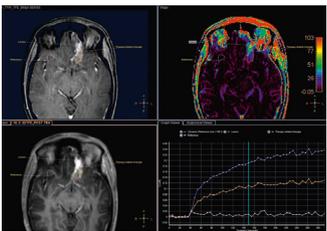
- Neurology



Automatic review of total body MR data

MR MobiView combines multiple images into a single full-field view to review multi-scanner acquisitions. This is easily accomplished with a single mouse-click in the IntelliSpace Portal Multi Modality Viewer or faster with a pre-defined zero-click protocol for day-to-day use. Key clinical cases are MRA run-offs, whole body metastases screening from eye-to-thighs, and total spine views to show the complete CNS. The resulting image series can be viewed, filmed, and exported using a DICOM compliant tool.

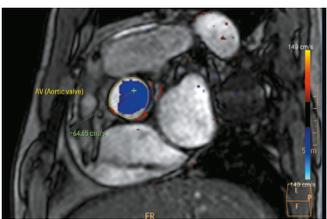
- Oncology



Lesion characterization by reviewing vascular leakage

MR Permeability helps perform measurements, such as measuring the leakage of gadolinium chelates into the extra-vascular extracellular space (EES). The most important use relates to oncology of the prostate and brain. This tool calculates parametric maps such as Ktrans and Kep which is related to tracer kinetics behavior.

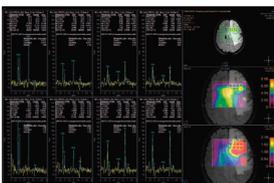
- Oncology



Visualizing and quantifying blood flow dynamics

MR QFlow enables review of q-flow data. The tooling creates 2D color flow overlay maps on anatomical which can be used, for example, calculate stroke volumes. The package includes automatic vessel contour detection for large vessels to quickly analyze vessel flow. Background correction allows for offset correction required for q-flow data of certain MR vendors.

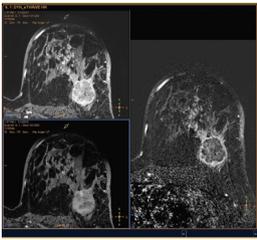
- Cardiology
- Vascular



Understanding the metabolic changes with MR

Proton spectroscopy data can be analyzed with the **MR SpectroView** application, which enables anatomy-based automatic generation of the right processing presets based on enhanced DICOM data. The package provides task guidance for easy adaptations of the final processing settings.

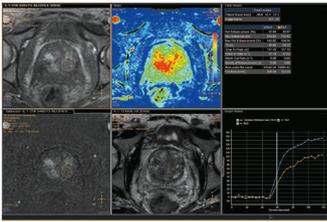
- Oncology



Improve image contrasts for MR data in dynamic studies

MR Subtraction enables subtraction calculations of dynamic studies and also provides for computation of magnetization transfer contrast ratio (MTC) images from an appropriate set of input images. Weighting factors can be defined to influence the subtraction or MTC outcome.

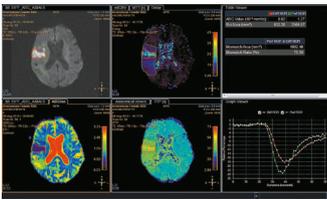
• Oncology



Assessing lesions by reviewing blood supply characteristics

MR T1 Perfusion Analysis produces measurements of relative enhancement, maximum enhancement, time to peak (TTP), and wash-in rate. Registration of the source images in the dynamic series can remove motion sensitivity, and temporal and spatial smoothing of the input data can be performed to improve SNR. The package includes user-selected color-coding of the functional data. The maps can be viewed and stored as overlays on anatomical reference images. The opacity of the overlay is user-defined. ROI analysis is also included.

• Oncology



Reviewing brain tissue viability

MR T2* (Neuro) Perfusion is designed to assess brain perfusion helping with stroke assessment and other disease tracking. The application provides mean transit time (MTT), relative Cerebral blood Volume (relCBV), time to peak (TTP), time of arrival (TO), and relative Cerebral Blood Flow (relCBF). Visualization and quantitative analysis of the diffusion-perfusion mismatch in case of acute stroke is also included. Registration is included. Temporal and spatial smoothing of the input data can be performed to improve SNR. The package includes user-selected color coding of the functional data, and maps can be viewed and stored as overlays on anatomical reference images. The opacity of the overlay is user-defined. ROI analysis can be performed, and an arterial input functions (AIF) can be defined if required.

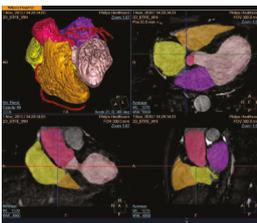
• Neurology



Assessing temporal enhancements of the myocardium

MR Cardiac Temporal Enhancement facilitates myocardial analysis of dynamically resolved cardiac data (multi-slice, dynamics) and enables comparison of rest and stress studies. Results are presented using either the AHA standardized or adapted bull's eye views. The package includes a correction algorithm and manual tools to correct frame-to-frame heart displacements caused by breathing.

• Cardiology

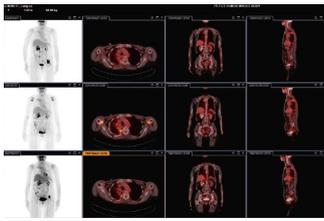


Detailed 3D visualization of the segmented heart

MR Cardiac Whole Heart performs automated segmentation of the heart into individual segments such as left-ventricle, right-ventricle, atria, and coronaries. Results can be presented in a high-quality 3D rendering.

• Cardiology

Enhanced



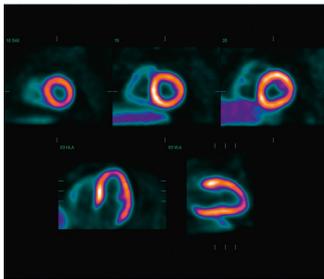
Enterprise-wide MI review

NM Review provides a powerful yet simple-to-use MI and multi-modality image review and analysis environment for clinical evaluation of MI planar, SPECT, SPECT/CT, PET/CT, and PET/MR examinations. It offers:

- the ability to add studies to the review list and batch viewing
- Automatic Registration.
- Quick Layouts Selection, allows user to define different layouts for different presets. For each preset the user will have 4 different layouts.
- MPR, MIP and fused 3D volume display
- Slab Viewer to view oblique slices
- 2D and 3D SUV measurements: SUV Body Weight, SUV Lean Body Mass, SUV Body, Surface Area, and SUV Body Mass Index
- automated 3D segmentation of lesions based on SUV value or percentage of SUV max, and the ability to export 3D contours in DICOM-RT Structure Set format to radiation therapy planning systems
- adaptive Threshold 3D segmentation
- a layout editor for personalized display

- Cardiology
- Oncology
- Neurology

Enhanced



Advanced cardiac quantification

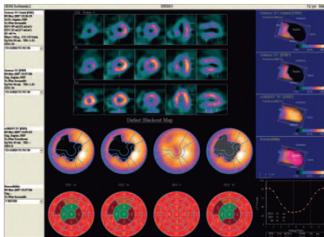
Developed at Cedars-Sinai Medical Center in Los Angeles, California, **Cedars Sinai Cardiac Suite 2015**⁽¹⁾ provides comprehensive cardiac quantification tools for gated, perfusion, and blood pool SPECT and quantitative PET. Widely accepted by clinicians worldwide, the Cedars-Sinai Cardiac Suite 2015 application provides efficient workflow for study interpretation with exclusive integration of perfusion and function. New enhancements:

- RV quantification: Automated RV contouring, quantification and analysis
- Perfusion polar map defect editor: users can manually edit polar map
- New DataView feature: user customizable viewing layouts
- Enhanced Phase Analysis algorithm, Smart Launch, color pallet editor

- Cardiology

⁽¹⁾ Not available for sale in all countries. Please check for availability in specific countries.

Enhanced



SPECT and PET cardiovascular quantification, review, and reporting

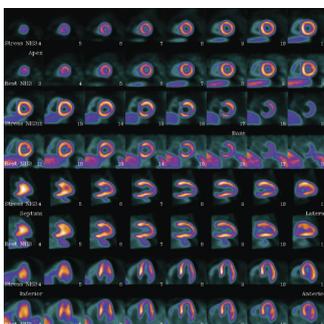
Corridor4DM⁽²⁾ 2015 is designed for advanced cardiovascular quantification and image display and includes intelligent workflow and quality assurance measures for increased confidence. Quantify myocardial perfusion, function, and viability using multiple review screens, with integrated reporting through customizable templates. Corridor4DM[®] v2015 also includes:

- Enhanced LV surface estimation and quantification
- Enhanced display tools
- Additional normal databases to support GEMS Evolution SPECT reconstruction

- Cardiology

⁽²⁾ Corridor4DM is a registered trademark of Invia, LLC.

Enhanced



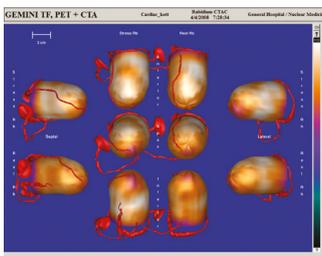
Cardiac analysis

The **Emory Cardiac Toolbox (ECTb)**⁽³⁾ v4.1 provides advanced tools for cardiac SPECT and PET analysis including comparison of perfusion to viability data, display of 3D images with coronary overlays and gated 3D cine, normal limits for agent match/mismatch as well as optional phase analysis for wall motion and evaluation of thickening.

- New SmartReport option – Automated structured reporting dedicated to Nuclear Cardiology
- Transaxial reorientation
- General performance enhancements
- Enhanced Systolic Dyssynchrony analysis
- Diastolic Dyssynchrony analysis

- Cardiology

⁽³⁾ Emory Cardiac Toolbox, ECTb, HeartFusion, and SyncTool are registered trademarks of Emory University.

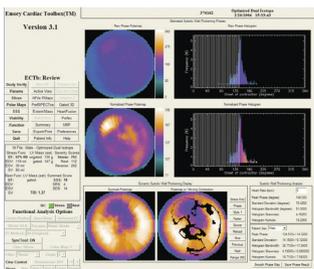


Evaluate fused coronary anatomy

Emory Cardiac Toolbox (ECTb) HeartFusion⁽¹⁾ tool offers fusion of a patient's coronary tree from cardiac CT angiography with MI perfusion images to correlate stenosis with perfusion defects and identify muscle mass at risk.

⁽¹⁾ Emory Cardiac Toolbox, ECTb, HeartFusion, and SyncTool are registered trademarks of Emory University.

• Cardiology

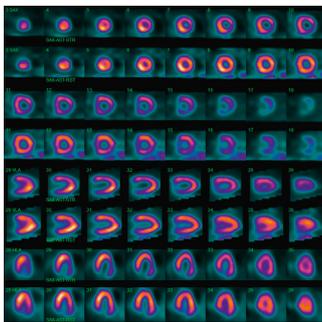


Assess cardiac mechanic dyssynchrony

ECTb SyncTool⁽¹⁾ provides an objective evaluation of left ventricular (LV) dyssynchrony using phase analysis. It also provides the cardiologist with additional prognostic information that can be obtained from 3D perfusion images, such as the presence and location of scar tissue. The SyncTool review screen includes phase polar maps, phase histograms, and a summary of systolic wall thickening analysis including peak phase and standard deviation of the phase distribution.

⁽¹⁾ Emory Cardiac Toolbox, ECTb, HeartFusion, and SyncTool are registered trademarks of Emory University.

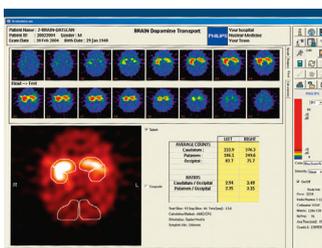
• Cardiology



Enhance SPECT resolution and reduce scan times

NM Astonish Reconstruction is an advanced reconstruction algorithm that uses a Philips-patented matched dual filtering technique to minimize noise and improve reconstructed image resolution and uniformity. Additionally, a CT attenuation map can be used in conjunction with NM Astonish Reconstruction to provide attenuation correction. By improving signal-to-noise ratio, it can provide equivalent image quality with shortened SPECT scan times to achieve increased throughput, enhanced patient comfort, and reduced motion-induced artifacts. NM Astonish Reconstruction is compatible with the following Philips cameras only: CardioMD (acquisition software v2.x), Forte, BrightView, BrightView X, BrightView XCT, SkyLight, and Precedence.

• Cardiology
• Bone SPECT

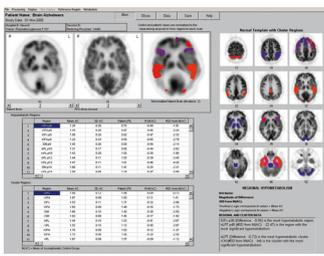


Generate new clinical insights

NM JETPack Application Suite for general MI includes a complementary set of organ-specific applications to meet the current and evolving needs of MI users, including endocrine, gastric, hepatobiliary, lung, neuro, renal, and whole-body and bone applications. It allows calculation of regional cerebral blood flow, brain perfusion index, dopamine transport, liver perfusion, micturition, and gastro-esophageal reflux. In addition, an optional IDL⁽²⁾ developers' kit is available for development of applications.

⁽²⁾ IDL is a registered trademark of Exelis Visual Information Solutions. Developer training required.

• General
Molecular
Imaging



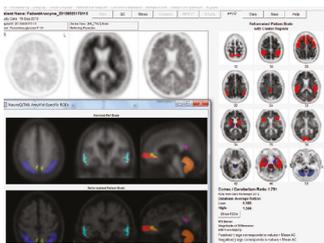
Aiding in the differential diagnosis of dementia

NM NeuroQ⁽¹⁾ 3.7 provides automated analysis and quantification of FDG uptake in multiple brain regions to allow monitoring of disease progression. It automatically identifies and compares regional brain activity in an individual scan to activity values derived from a group of asymptomatic control subjects. NM NeuroQ with the EQuAL option provides a non-invasive way to determine, in advance of TLE surgery, the likelihood that a patient will become seizure-free after surgery.

- New NeuroQ brain SPECT analysis option (HMPAO normal database)

⁽¹⁾ NeuroQ is a trademark of Syntermed.

- Neurology (PET)



Assessing Amyloid plaque

The **NM NeuroQ⁽¹⁾ Amyloid** application provides a powerful tool to assess amyloid uptake levels in various brain regions. The software automatically calculates the ratio of uptake in cortex to uptake in cerebellum and displays the regions used in the determination of the uptake in cortex and cerebellum.

⁽¹⁾ NeuroQ is a trademark of Syntermed.

- Neurology

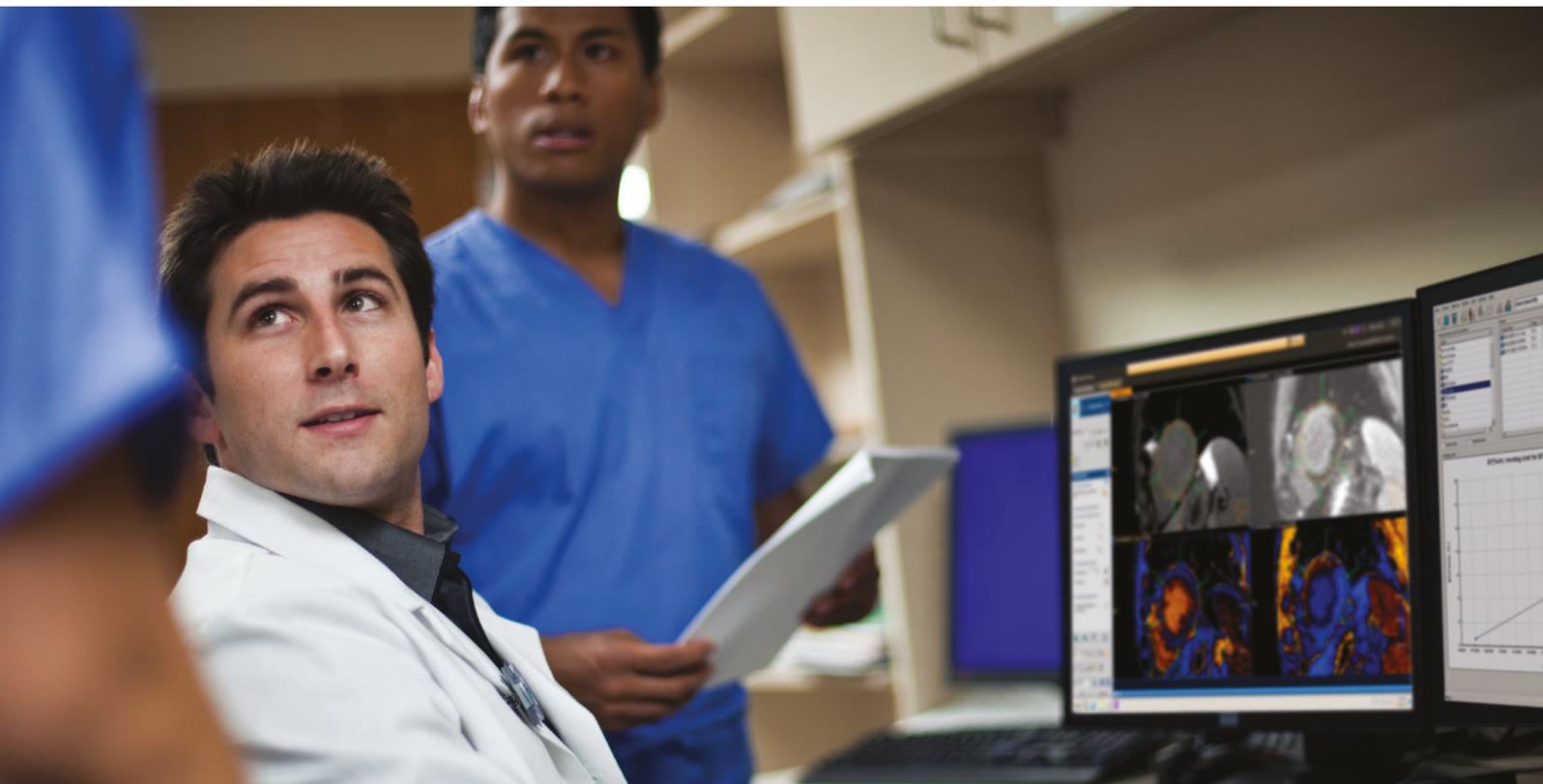


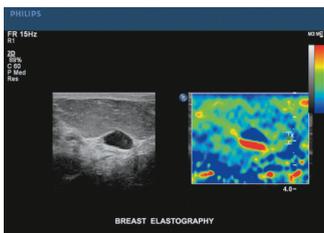
Streamline Molecular Imaging workflow

NM Processing Applications Suite offers comprehensive analysis and processing protocols for planar and SPECT studies including renal, lung, whole-body and bone, cardiac (first pass, shunt, and MUGA), gastric, esophageal, hepatobiliary, and endocrine applications.

NM Processing Application Suite features Philips AutoSPECT Pro software for fast and automated SPECT reconstruction and re-orientation. It also includes a set of tools to perform daily and periodic quality assurance for SPECT cameras. It now includes new display layouts.

- General Molecular Imaging



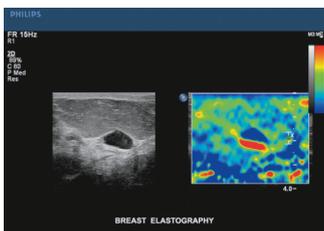


Explore new tissue stiffness measurements

US Q-App Elastography Quantification (EQ)⁽¹⁾ allows you to strain elastography quantification of tissue deformation based on an elastogram. Calculate and display the strain rate and total strain, size compare between two ROIs, and strain ratio; results may be appended to patient reports.

⁽¹⁾ Only available for sale in the US

- Radiology
- Oncology
- Internal medicine

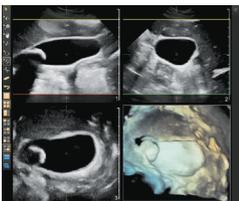


Explore new tissue stiffness measurements

US Q-App Elastography Analysis (EA)⁽²⁾ allows you to strain elastography analysis of tissue deformation based on an elastogram. The applications can be used to size compare between two ROIs; results may be appended to patient reports.

⁽²⁾ Not available for sale in the US

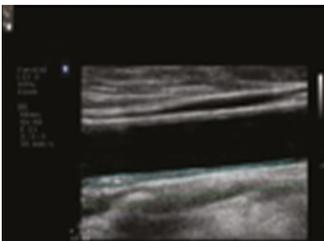
- Radiology
- Oncology
- Internal medicine



Perform advanced visualization and quantification of ultrasound volume

US Q-App General Imaging 3D Quantification (GI 3DQ) is designed to provide advanced viewing, manipulation, and quantification of 3D data sets. Perform advanced functions such as MPR interrogation, iSlice tomographic imaging, and volume rendering as well as volumetric measurements using multiple methods including semi-automated tools. Results generated from this tool can be appended to the patient's exam for complete documentation.

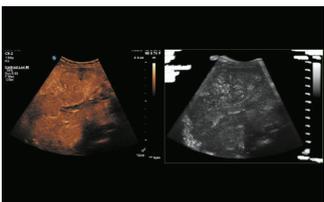
- Radiology
- Oncology
- Internal medicine



Help determine cardiovascular disease risk

US Q-App Intima Media Thickness (IMT) provides easy and consistent measurement of intima media thickness in carotids and other superficial vessels. Report IMT values and append them to patient reports.

- Vascular
- Radiology



Enhanced vessel conspicuity

US Q-App Microvascular Imaging (MVI) supports you in mapping contrast agent progression with contrast enhanced ultrasound (CEUS) for tumor assessment and monitoring.

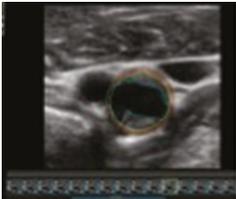
- Vascular
- Radiology
- Oncology



Perform advanced analysis of 2D, color, and Contrast Enhanced Ultrasound data

The Q-App Region of Interest (ROI) provides specialized tools for spatial and temporal analysis of regions of interest in 2D, color and ⁰contrast enhanced ultrasound exams (CEUS). This Q-App also provides basic 2D measurement tools (distance, area) as well. For CEUS applications, multiple motion compensated regions can be defined for contrast bubble analysis to generate wash-in/wash-out curves for lesion blood flow assessment.

- Radiology
- Oncology
- Internal medicine



A novel measurement of atherosclerotic plaque volume

US Q-App Vascular Plaque Quantification (VPQ) helps you perform comprehensive volume analysis for carotid plaque; a significant indicator in cardiovascular disease. Automatically measure plaque composition throughout a captured volume, percent area vessel reduction and other characteristics using 3D technology. Results may be posted to patient exams.

- Vascular
- Radiology



View ultrasound with multi-modality exams on the same workstation

US Viewing and analytics are now available from a multi-modality workstation environment. Review high-resolution single and multi-frame images in collaboration with other modalities. With US Viewing (in Multi Modality Viewing), clinicians can easily perform measurements, annotations, zoom anatomy and adjust window/levels controls. Edited images can be appended to the patient's exam for complete documentation. Multi Modality Viewing on IntelliSpace Portal 8.0 supports additional Q-App tools for advanced quantification of ultrasound data.

- Radiology
- Oncology
- Internal medicine



7. Enhance workflow

Increase diagnostic confidence? While streamlining your workflow and reducing complexity? IntelliSpace Portal 8.0 rises to the challenge. Not only does it offer advanced analysis tools, this platform is built to work within your unique hospital environment.

PACS and beyond

Review and complete entire cases in one session without leaving your chair. IntelliSpace Portal 8.0 makes it possible with proven open interfaces for connecting with Philips PACS and PACS systems* from other vendors.

* Requires integration work with your PACS vendor

Get results fast

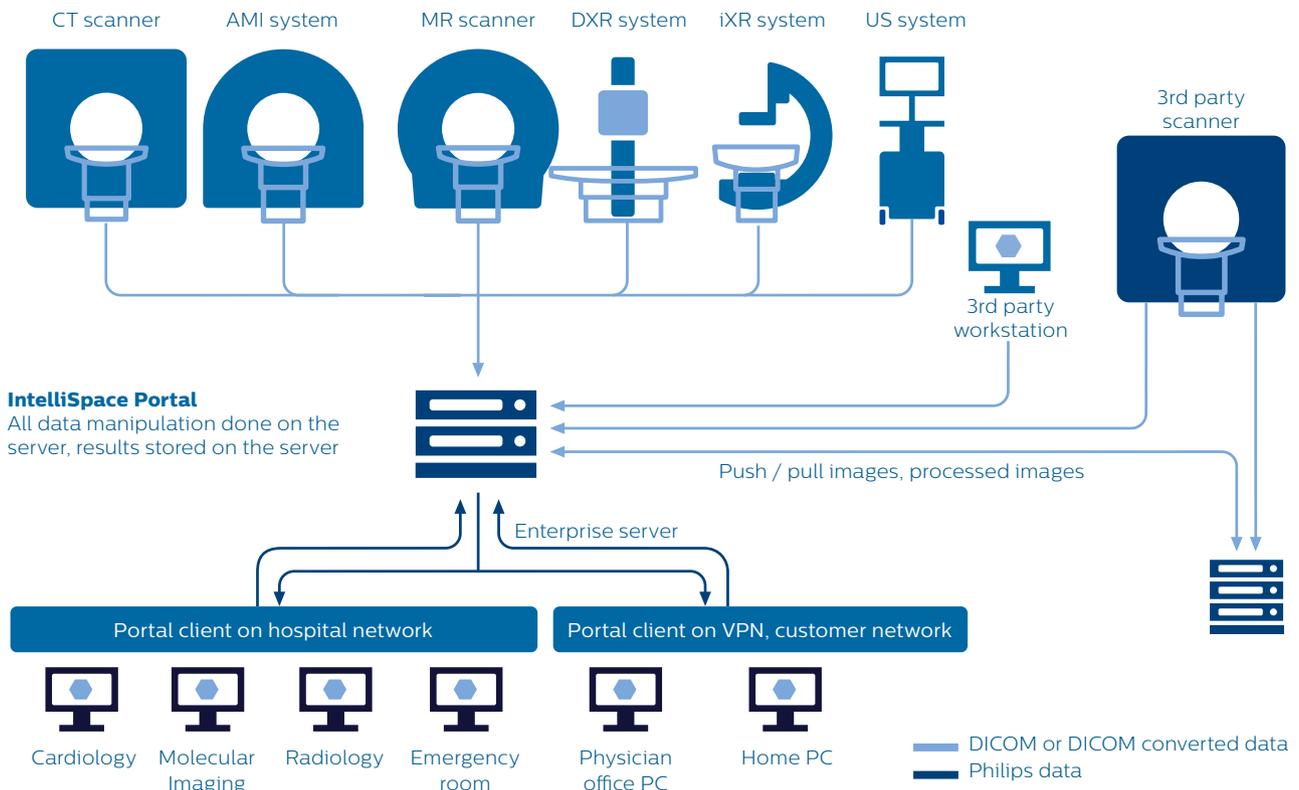
Accelerate time from image acquisition to diagnosis with time-saving features such as zero-click segmentation, image preprocessing, fetching of priors, and guided workflows – to name just a few.

Get images even faster with IntelliSpace Portal 8.0 thanks to WADO-RS. It transfers images quickly by pulling data from PACS to the IntelliSpace Portal 8.0 in pre-fetch mode.

Get information where it needs to go

Communicate with referring physicians easily and in the way you choose. In just minutes, create a customized report for a comprehensive multi-modality workup that includes multiple patient findings, graphs, and tables.

Take advantage of a variety of tools to capture, organize, store, and share information. Export clinical results directly into your enterprise's PACS or RIS using HL7 and DICOM. Save key images, notes, and tables directly to your reports, and combine multiple patient findings into a single patient-level report. Support consistency and efficiency in your reporting with integrated PowerScribe360 functionality.



Is your hospital environment “workstation-less”? Based on modality workstations? IntelliSpace Portal 8.0 accommodates both.



● **Make the most of your advanced analysis with real-time, context-based training**

Turn to KnowledgeScape Clinical Education for on-the-spot support. Our training materials include step-by-step instructions on how to use each application and are updated continually. They reflect different learning styles and include clinical videos and whitepapers along with many other formats. Every IntelliSpace Portal 8.0 user can access these resources through the main screen or within any application.

Share best practice from around the world

When you rely on IntelliSpace Portal 8.0, you're supported by a global community. We understand how valuable it is to bring users like you together to pool clinical expertise and learn from one another. The NetForum community is a global Internet meeting place where Philips users from around the world can collaborate online any time and any place they choose.

Enjoy access to product training, technical resources, case studies, scientific presentations, web seminars, whitepapers, and abstracts. Share protocols and ExamCards with other professionals and be inspired by innovation. NetForum users can also offer and receive upgrade advice.

A proven performer

The IntelliSpace Portal is continually ranked #1 in KLAS for the "Top 20 Best in KLAS" Awards: Software & Professional Services" for Advanced Visualization. In a recent KLAS report called "Advanced Visualization 2013: How Advanced Is It?" The Philips IntelliSpace Portal received the highest score when it comes to overall performance. It may be operated on independent servers or utilizing your own internal infrastructure.

* KLAS is an independent, leading research firm with the mission to improve healthcare technology delivery by honestly, accurately, and impartially measuring vendor performance for their provider partners.

8. Real-time collaboration

Live views, lively discussions

Share knowledge between specialties and increase diagnostic confidence – directly from IntelliSpace Portal 8.0 thanks to the Web Collaboration* option. Simply initiate a real-time collaboration session via instant-invitation or schedule one using standard PC tools. During the session, you and your colleagues will see the same image results and reviews in the Web-based image viewer. You can even interact with and annotate and manage this image using various tools.

Web Collaboration* is a zero-footprint, interactive viewing environment that requires no proprietary software and is compatible with most standard Web browsers. Collaboration opportunities include critical care reporting, remote consultation, and peer conferencing.

*Web Collaboration enables viewing and sharing with tablets and smartphone devices – not intended for diagnosis.

● **One step closer to treatment**

Bring advanced diagnostic imaging closer to the interventional suite by integrating your Philips Allura Interventional Suite with IntelliSpace Portal 8.0. This unique interventional X-ray integration streamlines the interventionalist's workflow by automatically retrieving patient data

on IntelliSpace Portal 8.0. As a result, interventionalists can review advanced diagnostic imaging and previous analyses directly in the interventional suite before beginning treatment. What's more, new XA vascular processing - DSA (in MMV) capabilities allow interventionalists to manipulate images as needed.



9. IT Enterprise

Advanced analysis is changing rapidly. It can be anything but simple for an enterprise to leverage the full potential of these developments. In just one solution, IntelliSpace Portal 8.0 connects your entire radiology department. Since it's server-based, it's easy to use and manage. Everyone works with the same software version, and all applications and licenses are handled in one solution.

Reduce the likelihood of error

IntelliSpace Portal 8.0 maintains rich information about patient demographics and synchronizes it with the latest information from HIS and EMR systems. It also supports patient reconciliation.

Keep information flowing

Even before clinicians start working, the system starts pre-fetching priors based on the list of patients scheduled for today or tomorrow. When reading exams using IntelliSpace Portal 8.0, clinicians can launch the patient context from the EMR.

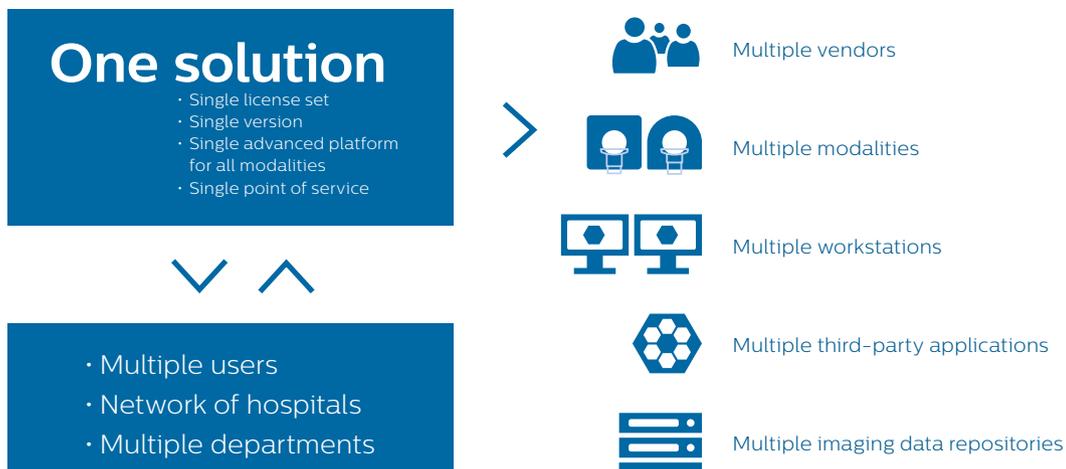
When they complete their analyses, clinicians can export patient reports – including tables and graphs – thanks to integration with your RIS and EMR systems.

Keep track of it all

Help your solution run at peak performance with a set of Web-based tools to monitor and administer your installation. Configure alerts to take a proactive approach against system performance degradation.

Make the most of your hardware through virtualization

To further enhance system performance, you can also deploy IntelliSpace Portal 8.0 within your IT infrastructure when you choose the solution's software-only model. This can increase the flexibility of your hardware and help you use it to the fullest. With VMware certification, IntelliSpace Portal 8.0 runs service-side virtualization in your or Philips-owned equipment. IntelliSpace Portal 8.0 is Citrix®-ready, which allows the solution to run on server-side virtualization. It's deployed throughout your enterprise via a virtualized client application.





Workstations? Or IntelliSpace Portal 8.0?

Simplify management with an integrated solution

Separate workstations

- Technological developments and expansion of service require new workstations.
- Dedicated modality-based workstations are used for a single purpose at fixed locations.
- Workstations can become obsolete and must be managed and upgraded separately.

One solution

- A server-based solution is easy to use, manage, and upgrade.
- All users work with the same software version.
- Add modalities, clinical applications, and users over time.

* Web Collaboration enables viewing and sharing with tablets and smartphone devices – not intended for diagnosis.

10. Enterprise scalability

Imagine working as one across your network. That's IntelliSpace Portal Enterprise. It connects multiple sites to boost productivity and helps reduce resource planning complexity today while preparing you for growth tomorrow.

Growing with you

Join separate geographical sites with IntelliSpace Portal Enterprise to create common access and workflows. What's more, this solution quickly accommodates a large increase in concurrent users. And it easily adapts when more users and sites come online without interrupting busy workflows.

Do more with one worklist

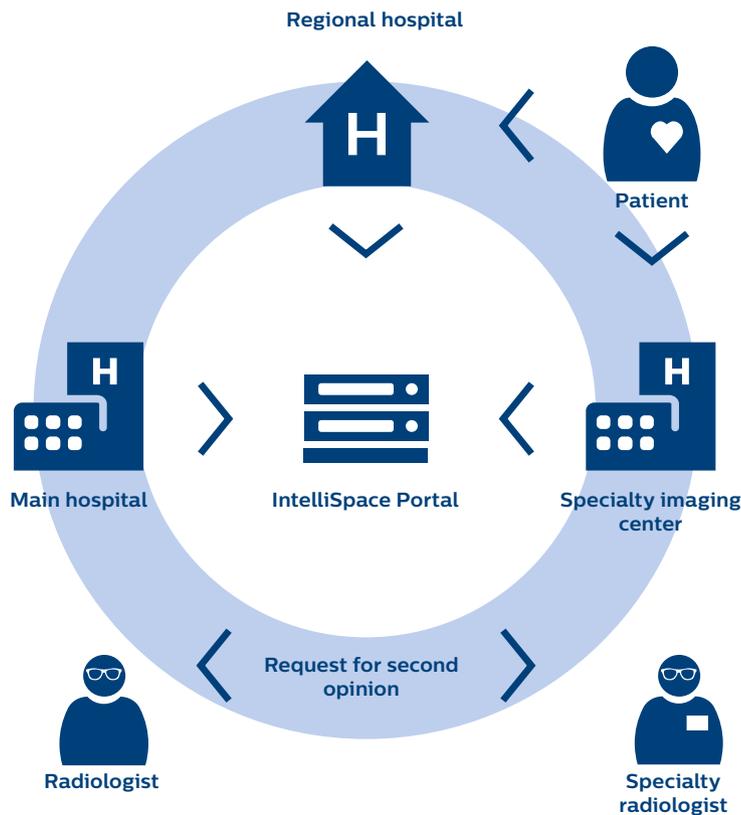
When clinicians see all of a patient's prior studies, they can work efficiently and help prevent duplicate testing. The IntelliSpace Portal Enterprise server creates a unified global worklist containing all studies stored in your IntelliSpace Portal servers.

Say goodbye to downtime

Patient care can't wait. That's why IntelliSpace Portal 8.0 features a failover system to help maintain high availability. Should one IntelliSpace Portal server from the single site "farm" go down, another server automatically takes over. IntelliSpace Portal 8.0 continues working with the remaining portal server's resources.

Rely on consistent performance

Even at heavy loads, expect the IntelliSpace Portal 8.0 to deliver exceptional performance for exceptional patient care. It balances the load by automatically routing users to the best portal server on-site based on data type and server load.





With IntelliSpace Portal Enterprise



executives can:

- standardize care pathways – even as the logistics of care delivery grow in complexity
- expand quality of care at low cost
- scale the platform to match an increasing number of locations and users



clinicians can:

- access advanced visualization and analysis solutions as well as patient data throughout the enterprise
- learn one software and retain user preferences and system configuration across sites
- help create centers of excellence and drive collaboration across sites



IT administrators can:

- manage one centralized solution
- work with one support desk and service contract

11. Continuous evolution and service solutions

Advanced analysis is changing rapidly, giving you new clinical imaging technologies and approaches to choose from every year. Turn this change into an advantage with IntelliSpace Portal 8.0. Designed around the principle of continuous evolution, this platform helps you manage evolving challenges and shape high-efficiency and technology-driven healthcare for the years to come.

Protect your investment from day one

With RightFit Service Agreements, your advanced visualization capabilities adjust to the growing needs of your enterprise at the lowest possible cost. Continuous software updates and hardware upgrades, for example, lower lifecycle costs and pave the way for enhanced upgradeability in the future.

Maintain your clinical and operational standards

Tomorrow's already planned for with RightFit Service Agreements. They connect you to a steady stream of innovations, such as applications and modalities, which expand and deepen your clinical coverage. Clinical education and training services show caregivers how to apply these advances to patient care. Professional support teams are available for rapid telephone and remote support.

Expect peak system performance from IntelliSpace Portal 8.0. RightFit Service Agreements include automatic software updates. And with scheduled hardware upgrades, you can be confident your software and hardware work together hassle-free and allow clinicians to deliver the right care at the right time.

With just one system to update, IntelliSpace Portal 8.0 brings simplicity to a complex environment. The platform is updated continually through the server. You can scale the solution as your organization grows while reducing the need to acquire multiple workstations by modality and specialty over the years. It can also reach throughout your enterprise as an application server interfacing with PACS.

Share the goal of superb healthcare solutions

When you choose Philips, you're investing in a long-term relationship. We're committed to helping you realize the full clinical and operational potential of IntelliSpace Portal 8.0 in your organization. But our product portfolio is just one element of successful growth and change.

Our solutions are informed by a strong track record, deep clinical insights, global delivery capabilities, and broad spectrum of services. Turn to us for everything from clinical guidance, technical phone support, and remote problem resolution directly from experts at our Customer Care Help Desk to on-site support and implementation services, business improvement consulting, and more.

Obsolescence protection	Pace of technology is very high, but investments will not become obsolete after two to three years
Financial considerations	Lower total cost of ownership for dealing with rotation of staff (training), pace of technology (software and hardware upgrades), and support Predictable costs operationalized through budgets instead of capital expenditure
Clinical and workflow advancement	Continuous evolution of clinical depth in applications, workflow performance (speed and power), and IT integration

Please check with your local market representative about other Service Maintenance Agreements if RightFit is not yet available in your market. For additional details, please refer to the terms and conditions applicable to your market.

Make the most of your investment in your IntelliSpace Portal 8.0 with our all-inclusive RightFit Service Agreements. Based on customer insight, they're structured around your service challenges and business priorities.

Key components of continuous evolution with our service offering

Continuous evolution	<p>Software upgrades – every 12-18 months, customers receive a new version of IntelliSpace Portal software (platform, all purchased applications, added base software)</p> <p>Software upgrade installation – Philips will provide for either on-site or remote installation of the software upgrade. The Software Update installation covers project management and software installation services. All Philips hardware (PACS and modalities) will be connected IntelliSpace Portal 8.0 will be fully prepared for connectivity to third-party PACS and modalities</p> <p>Software updates – all software updates are included (mandatory, regulatory, failure)*</p> <p>Software updates installation – Philips will provide for either on-site or remote installation of the software update. The Software Update installation covers project management and software installation services. All Philips hardware (PACS and modalities) will be connected* The IntelliSpace Portal will be fully prepared for connectivity to third-party PACS and modalities</p> <p>Hardware support – customers receive remote and on-site hardware support</p>
Continuous education	<p>Continuous education – customers receive necessary clinical education as part of the service offering, and online IntelliSpace KnowledgeScape education*</p>
Continuous support	<p>Remote Service – customer helpdesk service providing telephone and remote resolution of clinical and technical issues</p>

* Depends on your contract type

Learning for life

Every year, more advanced visualization applications are brought to market. Healthcare organizations are evolving, too – more clinical procedures, new techniques, larger departments, a larger number of departments, and increased employee turnover. Continuing education supports your staff in overcoming reluctance to change and realizing the underlying value of advanced visualization.

The Philips Learning Center offers more than 300 self-directed learning activities, accredited for healthcare professionals, and available online virtually anywhere, anytime. With content focused on clinical applications, management, concepts, and principles using different modalities, there are educational materials available for the entire department. More than 120,000 healthcare professionals use the Philips Learning Center for their continuing education requirements.

12. System specifications and requirements

IntelliSpace Portal 8.0 configurations

Feature	Specification	Feature	Specification
Server hardware specifications ⁽⁴⁾	<p>Dell Dell™ PowerEdge T610/T620 Tower Chassis or R620 Rack Mounted</p> <p>HP DL360 Gen9 8-SFF CTO Rack server* ML350 Gen9 8-SFF CTO Tower server* *32GB Memory and 3x 1.2TB SAS 10K RAID5 Hard Drive; further specifications available on the Dell and HP websites</p>	Client hardware requirements ⁽²⁾	<ul style="list-style-type: none"> • Screen resolution: 1280 x 1024 or above (recommended) or 1024 x 768 (minimum) • Minimum screen resolution for MI applications: 1280 x 1024 <ul style="list-style-type: none"> – Up to 3 megapixel monitors are supported – No support for monochrome or grayscale-only monitors – 96 DPI – 24 bpp (or higher) color depth monitors – Dual monitor capability requires adequate support of client display card and driver. • The client machine should also support a graphic card with the following requirements: <ol style="list-style-type: none"> 1. Native DirectX 9.c support 2. Native GDI+ Support 3. Native Windows Aero interface support 4. 128MB RAM (for the graphic card) • Processor (CPU) <ul style="list-style-type: none"> – Minimum: Intel Core 2 Duo 1.8 GHz /Intel Quad core 1.6 GHz/AMD Athlon 64 1.8 GHz; – Minimum for MI Apps and/or when other applications are running in parallel (e.g. PACS clients): Intel Core 2 Quad 2.4 GHz / AMD Phenom II X3 Triple core 2.8 GHz – Recommended: Intel Core 2 Quad 2.4 GHz / AMD Phenom II X3 Triple core 2.8 GHz – or equivalents/higher • Memory (RAM) <ul style="list-style-type: none"> – Minimum: 2GB RAM – Minimum: 4GB RAM for clients also running PACS – Minimum for MI Applications and/or when other applications are running in parallel: 4 GB RAM – Recommended: 4 GB RAM or above • Network adapter speed: 100 Mbit/s or above • Free disk space on C: drive: 3 GB or higher: <ul style="list-style-type: none"> – Additional 5 GB of free disk space required to burn DVDs • 3-button mouse
Server software specifications	<ul style="list-style-type: none"> • Windows Server 2008 R2 64 bit • Philips IntelliSpace Portal server software, including: <ul style="list-style-type: none"> – Proprietary Portal Server Application – Clinical application usability and IT Dashboard – IntelliSpace Portal management application for managing user database and additional settings • McAfee® antivirus software • Networking <ul style="list-style-type: none"> – TCP/IP protocol only – Gigabit network card(s) – Static IP address • Security <ul style="list-style-type: none"> – No unused Windows services running – No shared drives – Windows access control defined by client (hospital site IT) – Encrypted users/groups database file – User management application available only to defined Portal administrators – Encrypted transfer over the network of username and password information – Event logging – Windows firewall • Administrative access through server console or remote desktop • To utilize VMware, refer to server specification in the VMware whitepaper. You can request this document from your local sales representative. 		
Server power requirements	Dual power supplies for 120–240V AC		
Network requirements	<ul style="list-style-type: none"> • Dedicated 1 Gigabit/S connections between IntelliSpace Portal servers (in case of a multi-server deployment) • LAN Network bandwidth 100 Mbit/S and above (1 Gigabit/S or above recommended) • VPN access (optional) • Domain based network environment (recommended) 		

Server configuration concurrent user support

Tailor your IntelliSpace Portal solution to your specific needs with resource-based licensing. Specify how many concurrent users – between one and 50 – may access your system from any PC at the same time to maximize the value of IntelliSpace Portal 8.0. Each added user will be able to benefit from the full complement of your solution.

Feature	Specification
Client software requirements	<ul style="list-style-type: none"> • Supported Operating Systems: <ul style="list-style-type: none"> – Windows XP⁽³⁾ (32 and 64 bit) with SP2 or above – Windows Vista⁽³⁾ (32 and 64 bit) – Windows[®] 7 (32 and 64 bit) – Windows[®] 7 and Windows Vista[®] require an administrative account for initial installation – Windows[®] 8⁽³⁾ (32 and 64 bit) The new versions of 3rd party cardiac applications support Windows 8, also NeuroQ 3.6 with proper settings. – .NET[®] framework 4 or higher • Ability to add the IntelliSpace Portal to the firewall exception list • Additional software recommended (for optional functionality): <ul style="list-style-type: none"> – Adobe Acrobat Reader (for Reports and Help) – Adobe Flash Player (for online training applications) – Windows Media Player 9.0 or above (for saving movies) – IMAPIv2 (for burning CD/DVD) – IE 8.0 or Firefox 7 or Chrome 9
Recommended remote or home connection specifications	<ul style="list-style-type: none"> • Network bandwidth and latency: 5 Mbit/s or above download speed, 512Kbit/s or above upload speed, with latency <20ms • Network bandwidth and latency for MI applications: 10 Mbit/s or above download speed, 1Mbit/s upload speed with latency < 10ms • Network bandwidth/latency for MI 3rd Party Applications (AutoQuant, Corridor4DM⁽¹⁾ v2013, ECTb, NeuroQ): 100 Mbps download/10 Mbps upload with <10ms latency

⁽¹⁾ Note: The concurrency thresholds are based on average usage estimations. The actual number of concurrent users that may use the system at any given time is limited by the available system resources and may vary. Server hardware may differ depending on selected number of users. Consult your local Philips sales representative for more information.

⁽²⁾ Web Collaboration enables viewing and sharing – not intended for diagnosis

⁽³⁾ Q-App applications do not support Windows XP (64 Bit), Windows vista (32 & 64 bit), Windows 8

⁽⁴⁾ The hardware specification in a quote may refer to DELL or HP specifications. The hardware that will eventually be delivered to customer under a quote may be either DELL or HP with equivalent specification that either meets or exceeds the mentioned specs under your agreement.

IntelliSpace Portal 8.0⁽¹⁾ – Clinical applications portfolio

Feature	Option
Standard features and functionality	<ul style="list-style-type: none"> • Multi Modality Viewing (CT, MI, MR, US) • Volume rendering • CRT Endo • VIP, surface MIP, MIP, minMIP, and average displays • Full slab review capabilities • Multiplanar reformations in curved, paddlewheel, and MasterCut • Full 2D capabilities, including compare, pan, zoom, scroll, region of interest (ROI), and annotation • High-priority login for emergencies, regardless of network traffic • Lossy or lossless compression • Overall system enhancement; Collaboration Viewer
Multi-modality applications	<ul style="list-style-type: none"> ● Multi Modality Tumor Tracking (MMTT) • Multi Modality Advanced Vessel Analysis (AVA) Stenosis • Multi modality applications support (iXR Viewing, XA Vascular Processing – DSA (in MMV), iXR integration, DXR Viewing, MR Smart Display Protocols) ● Multi Modality Tumor Tracking (MMTT) qEASL⁽²⁾ • US Viewing (in MMV)
CT clinical applications	<ul style="list-style-type: none"> • CT Acute MultiFunctional Review • CT Advanced Vessel Analysis (AVA) Stent Planning • CT Body Perfusion • CT Bone Mineral Analysis (BMA) • CT Brain Perfusion • CT COPD • CT Calcium Scoring • CT Cardiac Plaque Assessment • CT Cardiac Viewer • CT Comprehensive Cardiac Analysis (CCA) • CT Comprehensive Cardiac Analysis (CCA) – CT-MI Fusion • CT Dental Planning • CT Dynamic Myocardial Perfusion (DMP) • CT EP Planning • CT Liver Analysis ● CT Lung Nodule Assessment (LNA) ● CT Lung Nodule CAD⁽³⁾ • CT Myocardial Defect Assessment • CT Pulmonary Artery Analysis⁽³⁾ • CT TAVI Planning • CT TrueView • CT Virtual Colonoscopy
MI clinical applications	<ul style="list-style-type: none"> ● Corridor4DM 2015⁽⁴⁾ ● Cedars Sinai Cardiac Suite 2015⁽⁵⁾ ● Emory Cardiac Toolbox 4.1⁽⁶⁾ • ECTb HeartFusion⁽⁶⁾ • ECTb SyncTool⁽⁶⁾ • NM Astonish Reconstruction • NM JETPack Application Suite ● NM NeuroQ 3.7⁽⁷⁾ • NM NeuroQ⁽⁷⁾ Amyloid • NM EQUAL⁽⁷⁾ • NM Processing Applications Suite ● NM Review
MR clinical applications	<ul style="list-style-type: none"> ● MR Cardiac Quantitative Mapping • MR Cardiac Viewing • MR Cartilage Assessment • MR Diffusion • MR Echo Accumulation • MR FiberTrak • MR IViewBOLD • MR MobiView • MR Permeability • MR QFlow • MR SpectroView • MR Subtraction • MR T1 Perfusion • MR T2⁽²⁾ (Neuro) Perfusion • MR Temporal Enhancement • MR Cardiac Whole Heart
US clinical applications	<ul style="list-style-type: none"> • US Q-App Elastography Analysis (EA)⁽⁸⁾ • US Q-App Elastography Quantification (EQ)⁽⁹⁾ • US Q-App General Imaging 3D Quantification (GI 3DQ) • US Q-App Intima Media Thickness (IMT) • US Q-App Microvascular Imaging (MVI) • US Q-App Region of Interest (ROI) • US Q-App Vascular Plaque Quantification (VPQ) • US Viewing (in MMV)

⁽¹⁾ The minimum requirements specifications are the estimated minimal specifications required to run the IntelliSpace Portal client. If your computer has less than the “minimum requirements,” you will not be able to properly install or use the IntelliSpace Portal client. Actual requirements will vary based on the IntelliSpace Portal application you run and other software applications you run on the system in parallel with the IntelliSpace Portal client (such as PACS/RIS, client, Dictation software). For optimal performance of the IntelliSpace Portal client and typically on clients where additional applications are expected to run in parallel to the IntelliSpace Portal client itself (such as PACS/RIS client, Dictation software), clients are required to be equipped with stronger HW specifications beyond the minimum specifications (RAM and

Processor) to allow optimal performance of the IntelliSpace Portal client in parallel to other software applications running on the client system.

⁽²⁾ For research use only

⁽³⁾ CAD functionality not available for sale in the US

⁽⁴⁾ Corridor4DM is a registered trademark of Invia, LLC.

⁽⁵⁾ Not available for sale in all countries. Please check for availability in specific countries.

⁽⁶⁾ Emory Cardiac Toolbox, ECTb, HeartFusion, and SyncTool are registered trademarks of Emory University.

⁽⁷⁾ NeuroQ is a trademark of Syntermed.

⁽⁸⁾ Not available for sale in the US

⁽⁹⁾ Only available for sale in the US

Networking and DICOM

- IntelliSpace Portal 8.0 complies with IHE standards.
 - DICOM 3.0 functionality includes:
- Storage service class as a user
- Storage service class as a provider
- Query/retrieve service class as a user
- Print service class as a user
- Storage commitment service class as a user
- Archiving and networking of images in DICOM 3.0 protocol/format for:
 - Computed Tomography (CT)
 - Magnetic Resonance (MR)
 - Molecular Imaging (MI)
 - Computed Radiology (CR)
 - Radiography and Fluoroscopy (RF)
 - Ultrasound (US)
 - Interventional X-ray (iXR)
 - Digital X-ray (DXR)

DICOM Web

IntelliSpace Portal 8.0 uses

- HTTP
- HTTPS (using Client Certificates) to facilitate the retrieval of DICOM studies, series, and images that employ the DICOM WADO-RS standard.

Healthcare IT integration

The IntelliSpace Portal 8.0 supports integration with EMR and RIS systems for incoming HL7 ADT and Order (ORM) messages. It can also export clinical findings and measurements to the EMR, RIS, and reports in:

- HL7 CDA format
- HL7 ORU format
- HL7 CDA/ORU with an embedded PDF report

IntelliSpace Portal 8.0 can also integrate with the PowerScribe360 dictation system using PowerScribe API.

Windows, Windows XP, Windows Vista, and .Net are registered trademarks of Microsoft Corporation in the United States and/or other countries. Dell is a trademark of Dell Computer Corporation. McAfee is a registered trademark of McAfee, Inc. Intel is a trademark of Intel Corporation in the United States and/or other countries. AMD is a trademark of Advanced Micro Devices, Inc. Adobe Acrobat and Adobe Flash are trademarks of Adobe Systems Incorporated in the United States and/or other countries.



