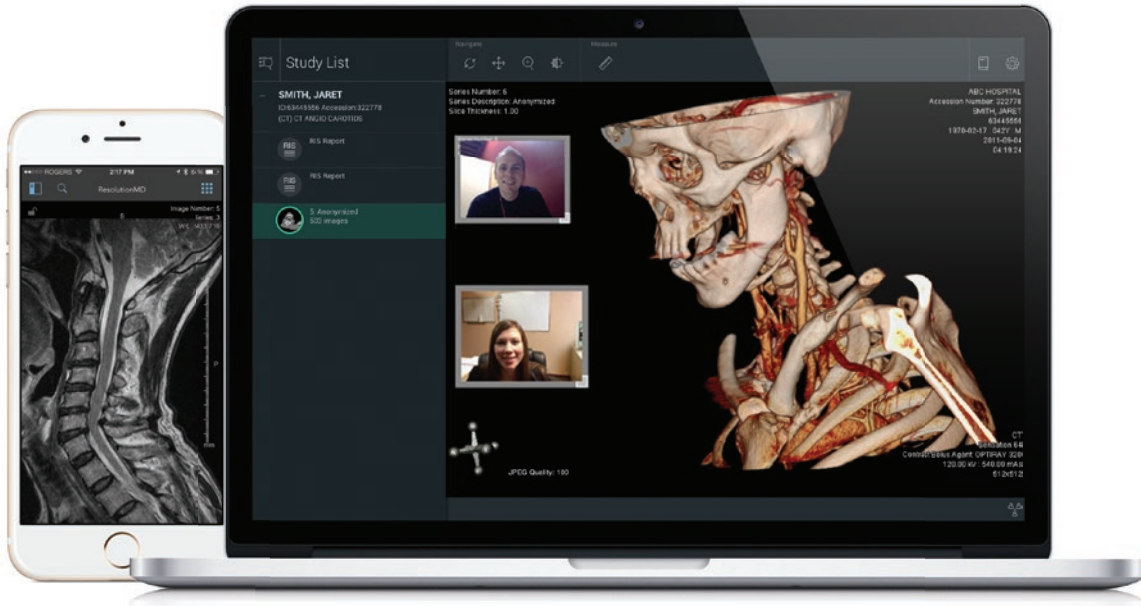


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ResolutionMD®



Product Features

ResolutionMD® software is a state-of-the-art enterprise image-viewing solution, enabling instant access to diagnostic-grade images and reports conveniently from web browsers and mobile devices. Globally accredited for diagnosis using Android, iPhone, iPad, laptop and desktop computers. ResolutionMD provides powerful capabilities critical to the modern healthcare

Over these next few pages you will be briefed on the feature set of ResolutionMD.

Supported Modalities

Imaging Modality	Web Platform	iOS Platform	Android Platform
CT	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
Enhanced CT	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
MR	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
Enhanced MR	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
SC	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
XA	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
CR/DX	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
PT	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
NM	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
US	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
OP	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
RF	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
ES	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
KO	✔ Diagnostic	✔ Diagnostic	✔ Diagnostic
MG	▪ For Review	▪ For Review	▪ For Review

OT and SR report available for viewing in ResolutionMD.

Latest Features

Web Platform* Mobile Platform*

More Browser Support

The browser neutral viewer offers quick access to information with client options that include flex for older browsers, HTML5 for newer and mobile browsers, and native mobile applications



Discoverable User Interface

Allows a physician to have instant access to tools without wasting time searching or remembering how to navigate the data



Cine Enhancements

Automatically start motion studies - such as cardiology exams where higher frame rates are required to review heart motion and blood flow, as the user loads them, giving instant access to crucial clinical information. Easily compare studies with multiple Cine streams



Measurements

Users are able to perform measurements, such as line, point and ROI on their web and mobile devices



Audio/Video

Collaboration functionality now includes embedded audio/video. Participants can see and hear each other in a collaboration session on both web and mobile devices



Secure URL Launching with Epic Integration

Data encryption is used to securely create URLs for launching studies from third party applications, including Epic's EMR system



Dictation Integration

Radiologists can dictate a report through voice recognition and have that dictation automatically converted to text and saved to the archive.



Image Exchange

Users can exchange images with outside hospitals or clinics. Studies can be sent to external facilities or can be used to request other patient exams. In collaboration session, the user can also send or request studies to or from the collaborators.



Non-DICOM Data

Support is added to view non-DICOM images and video formats (JPG, PNG, TIFF, MP4, MPG). (Requires configuration with an appropriate non-DICOM data repository)



Image Stack Navigation

Sets of 2D images in a series are now organized into stacks instead of volumes. You can navigate between stacks in a series with arrow keys (Web) or swipe gestures (iOS/Android).



Image Printing

The user can now print images from the image viewer.



Zoom

Zooming an image enlarges or shrinks the entire image for closer evaluation of small structures. The zooming is done interactively by a mouse click and drag. On mobile devices zooming is done through the 2-finger pinch gesture.



Layouts

The user can select from a collection of pre-defined grid layouts to view up to four series at a time on web and two series at a time on a mobile tablet. This is particularly useful for viewing multiple series in a study where series may be of the same anatomy but using a different contrast.



GPS

Greyscale Softcopy Presentation State (GPS) on images, enables physicians to view measurements, text and annotations that have previously been added to a study.



Reference Lines

Display of scout lines and images allows for quick reference of slice position. Selecting either a slice or scout line provides a visual indicator of position. Displays reference lines on a scout image, (or orthogonal plane in MRI) allowing the user to visually correlate the reference lines with images.



Multitasking

ResolutionMD takes full advantage of the native multi-tasking capabilities of the iOS devices so they can review images and respond to phone calls or emails without losing their image review.



Cine

Enables the physician to quickly scroll through images. Cine can be used with many different exams types including cardiology exams where higher frame rates are required to review heart motion and blood flow.



Pan

Allows the user to move the image within the image viewer to visualize other areas of anatomy or pathology. This is especially useful after the user has zoomed the image, which causes the image to be larger than the image viewer. On mobile devices panning is done through the 2-finger gesture.



Window Width/Level

By being able to change the window/level the user can view more structures with one exposure. The widths and levels are changed with right mouse click and drag. The changes are dynamic with the mouse movement. On mobile devices windowing is done through a double tap and drag.



W/L Presets

The window presets set the same window levels each time they are selected, which gives each image a consistent look regardless of the acquisition type. Users are able to apply the same window/level presets on mobile devices as on the web.



Orientation

Image Flip (Horizontal/Vertical)

Image Rotate (Clockwise/Counterclockwise)

Enables the user to flip, mirror or rotate the image +/- 90. This is very useful when the acquisition of the study is different from normal, due to patient factors or error.



Text Annotation

Using the text annotation, a physician can highlight pathologies, structures, and areas of interest for referring physicians, presentations or papers.



Freehand Annotation

Freehand markup allows users to draw directly on an image in order to bring attention to a particular anatomy or pathology.



Point Measurement

Point measurement provides the user the ability to measure the pixel values within an image.



Split-view Mode

View images from multiple studies, and compare them side-by-side.



2D Features (cont'd)

Web Platform* Mobile Platform*

Key Image Objects (KO)

View any key images that have been previously saved with an imaging study.



Linear Measurement

Gives the user basic measurement function to be able to determine the size of objects.



ROI Measurement

By being able to make measurements on images, the referring and reporting physicians can gain a better indication of the size and shape of a particular object, as well as being able to track the growth and changes of pathologies.



Angle Measurement

Allows users to create and measure various angles on datasets.



Measurement Calipers

Allows users to quickly get a view of pathology size or anatomy.



Orientation Labels

Labels on the edge of the images clearly indicate how the patient is oriented



Reset To Original View Settings

Users can reset the view to the image's original state. This is useful after the images have been zoomed, windowed, or otherwise manipulated. Users can reset the view on a mobile device by simply shaking the device.



Screenshot (Send To PACS)

DICOM Secondary Captures (SC) can be sent back to PACS, allowing users to add measurements and annotations to the images and save them for others to review.



Keyboard Shortcuts

The keyboard shortcuts allow users to quickly change tools and interact with the data.



MIP/MPR Features

Web Platform* Mobile Platform*

Cross-sectional imaging presents a wide array of image manipulation possibilities. Being able to reconstruct multiple planes from a single CT or MR dataset provides the reporting physician the ability to view anatomical structures from different aspects. Maximum Intensity Projection (MIP) views for better evaluation of vascular structures. The W/L settings are carried over to the MPR or MIP from the 2D display or the user can apply presets to the reconstructed images.



All Features of 2D Except Image Flip/Rotate



Oblique MPR

Allows the users to better review structures that are not in the acquisition orientation or orthogonal views.



Slab MPR

The data set is rendered with a user-defined slab thickness for rapid and flexible reporting of large datasets. As part of the workflow all views automatically adjust to the newly applied thickness. Users see this rendering in real time, with server-grade performance.



MIP, minIP, Average Slab Rendering

Allows the users to adjust the settings for various rendering displays to see different anatomy and pathology.



Cine

Users can cine through a batch of MIP/MPR images for quick review of anatomy within a user-defined range.



Reformatted Series Export

A MIP/MPR reconstruction can be saved to PACS as a new series within the study. A curved MPR can also be exported to PACS.



Curved MPR

Curved reformat created easily and accurately for review of vessels or other anatomy.



Volume Measurement

Allows the user to perform measurements on multiple slices and generate a resulting volume measurement. This allows users to get a truer sense of the size of structures, anatomy or pathology.



3D Features

Web Platform* Mobile Platform*

The addition of 3D Volume Rendering rounds out the advanced viewing and processing features all done in a zero-footprint environment.



2D Features Included

Pan, Window Width/Level, Linear Measurement, Zoom, W/L Presets Text Annotation, Keyboard Shortcuts, Screenshot (Send To PACS), Reset To Original View Settings.



Volume Rendering

Full functionality and flexibility to review the data in various forms, allowing the user to maximize their reading and review of 3D data. Simple presets can be applied to differentiate tissues quickly and efficiently.



Clipping Planes

Users can quickly reduce the data and volume being reviewed by using the clipping planes.



Scalpel Tool

Users can quickly reduce the data and volume being reviewed by using the scalpel to remove unwanted data from the image set.



Lens Tool

Unique to ResolutionMD is our lens tool available on the web and larger mobile devices. This allows the users to very quickly enlarge an area of interest. Using the lens tool also allows users to quickly penetrate through bone and see the anatomy and pathology on the other side. Extremely useful in review of cranial CT images.



Bone Removal

Single mouse click manipulation enables the user to quickly segment tissues from one another. An improved workflow enables faster, more efficient production of rendered images.



Rotational Batch Capture

Allows the user to capture the 3D image at various angles and orientations that can then be exported to PACS.



VR Presets

VR Preset can be applied to studies to assist in the review of the 3D volumes in various workflows. Presets display the histogram and allow the user to manipulate the data beyond basic 3D capabilities.



3D Features (cont'd)

Web Platform* Mobile Platform*

Orientation Preset Hotkeys

Allows the user to quickly orient the volume to different positions or return it to a known position after some arbitrary rotations.



Interactive Orientation Widget

Allows the user another mode to rotate the data and instant feedback to its exact orientation.



System Features

Web Platform* Mobile Platform

Collaboration

We have enabled an integrated clinical workflow for collaborative viewing sessions and sharing of control between multiple users on browsers and mobile clients. This allows the clinical users to complete the circle of care with the ultimate goal to improve patient outcomes.



Related Studies

Easy access to entire patient history, avoid time-consuming procedures like performing multiple searches and loading studies individually.



Multitenant

Manage multiple hospitals on a single server while ensuring data is entirely secure for each individual institution.



Mandated Access

User-based rules can allow a site to control what data users are allowed to access. For example, radiology users can be given full access to patient data while referring physicians are allowed to see data only for the patients they referred for imaging.



RIS Reports

Additional report repositories can be configured to query for RIS reports alongside existing patient data.



Tiered Archive Searching

An administrator can organize configured DICOM repositories into prioritized tiers. Data loading requests for a targeted study (i.e., url-launch with a specific StudyInstance UID) will be executed progressively against each tier of archives. Once the study is located, no queries are made to the remaining archives, thereby reducing the network traffic.



* Some features may only be available on certain clients

Regulatory

Web Platform* Mobile Platform

US FDA Class II Cleared



China Food and Drug Administration Certified



Health Canada Licensed



CE Marked in Europe



Australian Therapeutic Goods Administration Certified



Class II certified in Japan



Hong Kong Medical Device Control Office Certified



South Korea Ministry of Food and Drug Safety



Singapore Health Sciences Authority



Brazil National Health Surveillance Agency



Languages

English, French, Italian, German, Spanish, Portuguese, Japanese, Korean, Simplified Chinese, Traditional Chinese, Turkish**, Russian, Vietnamese**



** Documentation only

October 2015