

Function	Description	v8.2.0
<b>Regular features</b>		
<b>Window Width/Level</b>	Image window level manipulation using the mouse.	+
<b>W/L Presets</b>	Possibility to select from a list of available Window Width/Level presets.	+
<b>Pan</b>	Moving the image allows you to position images within the viewport.	+
<b>Zoom</b>	Increase/decrease the image. Zoom to the selected area option.	+
<b>Scroll</b>	Scroll through the images of the series by using the mouse wheel, dragging vertically, or with keyboard hotkeys.	+
<b>Rotate/Flip</b>	Rotate the image right/left, and flip it horizontally/vertically with the possibility to revert the image to its original orientation.	+
<b>Magnifier</b>	Magnify (enlarge) a certain area of the image.	+
<b>Measurements</b>		
<b>Line</b>	Distance between two points.	+
<b>Angle</b>	Creating and measuring the angles between three points.	+
<b>Cobb angle</b>	Angle measurement between two lines.	+
<b>Polyline</b>	Distance from a set number of points.	+
<b>Area</b>	Area measurement from a set number of points.	+
<b>Ellipse</b>	Measure an ellipse area, min, max, mean, and standard deviation values.	+
<b>Rectangle</b>	Measure a rectangle area, min, max, mean, and standard deviation values.	+
<b>Volume</b>	Volume measurement using circles created from a set number of points.	+
<b>Height Difference</b>	Measure the vertical distance and angle between the horizontal line and the line connecting the points.	+
<b>CTR</b>	Measure the cardiothoracic ratio (CTR) to estimate a heart size.	+
<b>Flatfoot</b>	Measure the longitudinal arch of the foot to detect the longitudinal flatfoot.	+
<b>Goniometry</b>	Measure the lengths of the femur, tibia, and femoral-tibial angular deformities.	+
<b>TT-TG distance</b>	Measure the tibial tuberosity to trochlear groove distance for quantifying the knee patellar instability.	+
<b>Spine labeling</b>	Tool to mark the vertebrae of the spine. Possibility to exclude labels, and mark pathological vertebrae: T13 and/or L6. Measure Spinal balance.	+
<b>Vertebra Angle</b>	Measure an angle between the user-drawn vertebra axis and the horizontal axis of the image.	+
<b>ROI</b>	Measurement of images of the size and shape of a particular object.	+
<b>Flexpoly</b>	Mark the flexible region of the image for which the area is calculated.	+

<b>Pencil</b>	Mark the area of the image with a free drawing.	<b>+</b>
<b>Arrow</b>	Mark the area of interest on image, video, or multi-frame.	<b>+</b>
<b>Text</b>	Text fields are placed on the image for writing text notes.	<b>+</b>
<b>Continuous measurement</b>	Possibility to activate the tool in order to repeat measurements several times.	<b>+</b>
<b>Intensity</b>	Image intensity in Hounsfield units (HU).	<b>+</b>
<b>Show angles</b>	Show all angles between intersecting lines.	<b>+</b>
<b>Calibration line</b>	Change the scale of measurement.	<b>+</b>
<b>STD</b>	The average value and standard deviation of pixels in a square area of 10 by 10 mm.	<b>+</b>
<b>Delete</b>	Remove measurements of an active image.	<b>+</b>
<b>Save annotation</b>	Saving the measurements. Please contact us directly to check if your PACS can support the saving annotation function.	<b>+</b>
<b>Segmentation tools</b>		
<b>Segmentation</b>	Tools for marking the regions of interest in medical images, saving them as RTSTRUCT.	<b>+</b>
<b>Bounding Box</b>	The tool allows marking the region of interest by drawing the bounding rectangular around it. Possibility to mark 2D or 3D bounding box segments.	<b>+</b>
<b>Smart Paint</b>	Marking the region of interest by drawing the contour on the image with free drawing tools. Filling the region of interest by using smart paint tools with adjustable: radius and sensitivity. Possibility to use the tools in both 2D and 3D modes.	<b>+</b>
<b>Viewport features</b>		
<b>Scroll activator</b>	Possibility to activate/deactivate the simultaneous scrolling feature for the active viewports.	<b>+</b>
<b>Ellipse ROI propagation</b>	Possibility to propagate the measurement (Ellipse) ROI to other open viewports.	<b>+</b>
<b>Viewport to clipboard</b>	Possibility to copy viewport content to the clipboard using PNG compression format from the viewport.	<b>+</b>
<b>Image to clipboard</b>	Possibility to copy original resolution image to the clipboard (no annotations and manipulations).	<b>+</b>
<b>Save the viewport as a secondary capture</b>	Possibility to save viewport content as DICOM secondary capture in new series.	<b>+</b>
<b>Quick access controls</b>	Possibility to use controls for quickly accessing the images with additional data. Quick access controls Scrollbar, Chevron buttons, Key objects, Annotations.	<b>+</b>
<b>Quick save KO and PR</b>	Fast saving the measurements and Key Objects. Please contact us directly to check if your PACS can support the saving annotation function.	<b>+</b>
<b>Layout features</b>		
<b>Layout</b>	Select from different types of layouts to view up to 12 DICOM instances at the same time.	<b>+</b>
<b>Thumbnail position</b>	Change the position of thumbnails on the screen.	<b>+</b>
<b>Full Screen</b>	Possibility to switch to the full-screen view.	<b>+</b>
<b>Multi-image</b>	Select how many images can be loaded in the window.	<b>+</b>
<b>Multiple studies support</b>	Ability to open multiple studies and compare images of the same patient, or different patients.	<b>+</b>

<b>Split-view mode</b>	View images from multiple studies and compare them side-by-side.	<b>+</b>
<b>Related Studies (Patient History)</b>	Easy access to the entire Patient History. Possibility to filter the studies by ID, Name, Modality, Description, etc. Unique Year filter to filter the studies by the year.	<b>+</b>
<b>Multi-monitor support</b>	MedDream Chrome extension is used for automated adjusting.	<b>+</b>
<b>Key Objects (KO) storing</b>	Possibility to mark instances and save them as KO for later review.	<b>+</b>
<b>Hanging Protocols</b>	Describe how to lay out a set of images for a faster diagnosis.	<b>+</b>
<b>Manipulation features</b>		
<b>Reference lines</b>	Overlaying reference lines allow for indicating the location of an image slice on another image of an intersecting plane.	<b>+</b>
<b>Crosshair</b>	Represents the intersecting planes of the selected point in the main study.	<b>+</b>
<b>Align &amp; Lock</b>	The left or right image alignment and locking function while applying zoom or pan actions.	<b>+</b>
<b>Simultaneous scrolling</b>	Linking of series – manual simultaneous scrolling. Possibility to enable/disable for every viewport. Possibility to scroll all studies in opened viewports.	<b>+</b>
<b>Sync Windowing</b>	Optional same-series windowing synchronization.	<b>+</b>
<b>Sync actions</b>	Sync Windowing, Color Palette, Pan, and Zoom actions for the same series or for all viewports.	<b>+</b>
<b>Color palette</b>	Possibility to apply color palette for monochrome DICOM images.	<b>+</b>
<b>Histogram</b>	Showing how the data is distributed across different values for visual Windowing (W/L) changes.	<b>+</b>
<b>Cine Mode/Multi-frame creation</b>	Puts all series of images into one movie and enables scrolling through images quickly.	<b>+</b>
<b>VOI LUT</b>	Possibility to select and apply VOI LUT: non-linear transformation stored by medical modality.	<b>+</b>
<b>Reset</b>	Resetting the image's view to the original state.	<b>+</b>
<b>Supporting functions</b>		
<b>Search engine</b>	Search, filter studies, and open them for viewing.	<b>+</b>
<b>Keyboard shortcuts</b>	Possibility to customize default shortcuts, and shortcuts per user. The keyboard shortcuts allow the users to quickly change tools and interact with the data.	<b>+</b>
<b>Orientation labels</b>	Labels on the edges of the images clearly indicate how the patient is oriented.	<b>+</b>
<b>Info Labels</b>	Possibility to show/hide Info Labels in viewports.	<b>+</b>
<b>Report</b>	Write a report for a study.	<b>+</b>
<b>Image print</b>	Print the image from a Viewer.	<b>+</b>
<b>DICOM print</b>	With integrated printing component for MedDream PACS, PacsOne, Orthanc, dcm4chee v2, and dcm4chee v5 PACS.	<b>+</b>
<b>Study forward</b>	Forward studies to the other DICOM devices.	<b>+</b>
<b>Export</b>	Export multiple studies and save them in different formats: DICOM, jpg/mp4, tiff/mp4, png/mp4, and BMP/mp4.	<b>+</b>
<b>Burn</b>	Export the study to burn it to CD/DVD/Dual-Layer DVD/Custom Size.	<b>+</b>
<b>Anonymize and share</b>	Possibility to anonymize and share studies (via <a href="#">DICOM Library</a> ).	<b>+</b>

Specific features		
<b>Live Share support</b>	Diagnostic quality real-time-sharing functionality (conference mode).	<b>+</b>
<b>Multi-frame support</b>	The US and XA multi-frames are shown in cine mode. CT/MR/MG/OPT/NM studies multi-frames shown as instance series. CT/MR multi-frames are with full functionality of MPR/MIP/3D.	<b>+</b>
<b>Video support</b>	MPEG-2 and MPEG-4 video support.	<b>+</b>
<b>ECG support</b>	Electrocardiography study support.	<b>+</b>
<b>PDF support</b>	Support for PDF files.	<b>+</b>
<b>SR support</b>	Support for SR documents.	<b>+</b>
<b>Non-DICOM support</b>	BMP, JPG, TIFF, MPEG, PDF, and TXT files support.	<b>+</b>
<b>PR support</b>	Support for Presentation State annotations.	<b>+</b>
<b>Key Objects (KO) support</b>	Possibility to mark instances as Key Objects and save them. Available KO instances can be opened for review.	<b>+</b>
<b>Montage</b>	Possibility to create a Montage of different instances and save it as secondary capture in a new series.	<b>+</b>
<b>PET-CT Fusion</b>	Possibility to combine the series of PET and CT types, thus linking the sites of radioactive drug concentrations with the anatomical patient structure.	<b>+</b>
<b>Fusion</b>	Fusion can be applied on a series of PET, CT, MR, NM, or other configured modalities.	<b>+</b>
<b>Digital Subtraction</b>	Apply Digital Subtraction Angiography mask for XA images.	<b>+</b>
<b>Color channels</b>	Highlight a color component or a combination of them in the image by showing selected colors in white shades and other colors in black.	<b>+</b>
ECG features		
<b>Measurement (mV, s)</b>	Area calculation indicating beats per minute, time, and millivolt (mV, s, bpm).	<b>+</b>
<b>QT points (RR, QT, QTc)</b>	QT interval - the RR interval is calculated as well as QT and the QTc.	<b>+</b>
<b>HR</b>	Measure heart rate (HR) and compare its interval variance over the ECG.	<b>+</b>
<b>QRS axis</b>	Measure the QRS electrical heart axis.	<b>+</b>
<b>Studies comparison</b>	Comparison of two or more ECGs.	<b>+</b>
Ultrasound feature		
<b>VTI (Velocity Time Integral)</b>	Used to measure the distance from which the blood was ejected over a date interval of time.	<b>+</b>
MPR features		
<b>Orthogonal MPR</b>	2D multi-planar reconstruction with Axial, Coronal, and Sagittal projections.	<b>+</b>
<b>Axial MPR</b>	Axial multi-planar reconstruction.	<b>+</b>
<b>Coronal MPR</b>	Coronal multi-planar reconstruction.	<b>+</b>
<b>Sagittal MPR</b>	Sagittal multi-planar reconstruction.	<b>+</b>
<b>Features of 2D</b>	Window leveling, pan, zoom, measurements, scroll, crosshair, etc. Except for the image flip/rotate function.	<b>+</b>

<b>Cine</b>	Users can cine through a batch of MIP/MPR images for a quick review of anatomy within a user-defined range.	<b>+</b>
<b>Oblique MIST feature with MPR/MIP/3D rendering</b>		
<b>Oblique MIST</b>	Multiplanar reconstruction (MPR) view in oblique planes.	<b>+</b>
<b>MIP</b>	Maximum Intensity Projection mode for rendering the images.	<b>+</b>
<b>MinIP</b>	Minimum Intensity Projection mode for rendering the images.	<b>+</b>
<b>AVG</b>	Average mode for rendering the images.	<b>+</b>
<b>Regular features</b>	Window leveling, pan, zoom; scroll, crosshair.	<b>+</b>
<b>Measurements</b>	Line, Angle, Ellipse, Flexpoly, Pencil.	<b>+</b>
<b>Viewport features</b>	Copy to clipboard, Secondary capture, selectable layout, hide axis, recenter, reset.	<b>+</b>
<b>3D rendering</b>	Rendering of 3D volume with rotation, pan, zoom, and window leveling functions and applying the transfer function presets.	<b>+</b>
<b>MPR/MIP/3D comparison</b>	Several MPR/MIP/3D views can be compared at the same time.	<b>+</b>
<b>MIST MIP features</b>		
<b>MIST Axial MIP</b>	Axial multi-planar reconstruction with MIP feature.	<b>+</b>
<b>MIST Coronal MIP</b>	Coronal multi-planar reconstruction with MIP feature.	<b>+</b>
<b>MIST Sagittal MIP</b>	Sagittal multi-planar reconstruction with MIP feature.	<b>+</b>
<b>Customization features</b>		
<b>Theme</b>	Possibility to change the default color (red) to the blue color that is clearly visible on a black and white monitor.	<b>+</b>
<b>Thumbnail view</b>	One thumbnail per CT/MR/PET series is shown. Possibility to configure all thumbnails for the series to be shown.	<b>+</b>
<b>Silent Preload</b>	Optional CT/MR/PET series instances preloading on dragging thumbnail to the viewport.	<b>+</b>
<b>Rebranding</b>	OEM rebranding allows customizing: the system name, system logotype, company logotype, login logotype, and color theme. For Full rebranding please contact the sales department.	<b>+</b>
<b>Multi-language support</b>	Default languages: English, Lithuanian, Russian. Possibility to support more languages by request.	<b>+</b>
<b>Dialog windows</b>	Possibility to resize and drag dialog windows.	<b>+</b>
<b>Supported modalities</b>		
<b>CR</b>	Computed Radiography modality for diagnostic use.	<b>+</b>
<b>CT</b>	Computer Tomography modality for diagnostic use.	<b>+</b>
<b>DX</b>	Digital Radiography modality for diagnostic use.	<b>+</b>
<b>ECG</b>	Electrocardiography modality for diagnostic use.	<b>+</b>
<b>EPS</b>	Cardiac Electrophysiology modality for diagnostic use.	<b>+</b>
<b>ES</b>	Endoscopy modality for diagnostic use.	<b>+</b>

<b>IO</b>	Intra-Oral Radiography modality for diagnostic use.	<b>+</b>
<b>IVUS</b>	Intravascular Ultrasound modality for diagnostic use.	<b>+</b>
<b>MG</b>	Mammography modality for diagnostic use.	<b>+</b>
<b>MR</b>	Magnetic Resonance modality for diagnostic use	<b>+</b>
<b>NM</b>	Nuclear Medicine modality for diagnostic use.	<b>+</b>
<b>OCT</b>	Optical Coherence Tomography (non-Ophthalmic) modality for diagnostic use.	<b>+</b>
<b>OPT</b>	Ophthalmic Tomography modality for diagnostic use.	<b>+</b>
<b>OP</b>	Ophthalmic Photography modality for diagnostic use.	<b>+</b>
<b>OT</b>	Other modalities for diagnostic use.	<b>+</b>
<b>PT</b>	Positron Emission Tomography (PET) modality for diagnostic use.	<b>+</b>
<b>PX</b>	Panoramic X-Ray modality for diagnostic use.	<b>+</b>
<b>RF</b>	Radio Fluoroscopy modality for diagnostic use.	<b>+</b>
<b>RG</b>	Radiographic imaging modality for diagnostic use.	<b>+</b>
<b>SC</b>	Secondary Capture modality for diagnostic use.	<b>+</b>
<b>SR</b>	Support for SR documents.	<b>+</b>
<b>US</b>	Ultrasound modality for diagnostic use.	<b>+</b>
<b>XA</b>	X-Ray Angiography modality for diagnostic use.	<b>+</b>
<b>XC</b>	External-camera Photography modality for diagnostic use.	<b>+</b>
<b>Integration into medical information systems</b>		
<b>HIS</b>	Flexible and open integration interface into Hospital information systems.	<b>+</b>
<b>RIS</b>	Flexible and open integration interface into Radiology information systems.	<b>+</b>
<b>PACS</b>	Flexible and open integration interface into Picture archiving and communication systems.	<b>+</b>
<b>VNA</b>	Flexible and open integration interface into Vendor Neutral Archives.	<b>+</b>
<b>EHR</b>	Flexible and open integration interface into Electronic health records.	<b>+</b>
<b>EMR</b>	Flexible and open integration interface into Electronic medical records.	<b>+</b>
<b>PHR</b>	Flexible and open integration interface into Personal health records.	<b>+</b>
<b>Patient Portal</b>	Flexible and open integration interface into Patient Portals.	<b>+</b>
<b>eHealth</b>	Flexible and open integration interface into eHealth, national or regional eHealth systems.	<b>+</b>
<b>Teleradiology</b>	Flexible and open integration interface into Teleradiology or Telemedicine systems.	<b>+</b>

<b>Cloud</b>	Flexible and open integration interface into Cloud healthcare systems.	<b>+</b>
<b>Any medical application</b>	Flexible and open integration interface into any other medical applications.	<b>+</b>
<b>Integration types</b>		
<b>Integration via URL</b>	The viewer can be integrated into any application by using URL links. It could be added into iFrame or opened in a new browser tab or window.	<b>+</b>
<b>Integration via Communication API</b>	The viewer can be integrated into any application by using Communication API. This method allows controlling MedDream functionalities (open study, add study, close study, set layout, open the instance with defined transformations, set callbacks, etc.).	<b>+</b>
<b>Integration via Viewport API</b>	The viewer can be integrated into any application by adding it as a Viewport (as web a component in React/Angular application) for image visualization. User interface and user experience can be developed by the customer.	<b>+</b>
<b>Integration via URL</b>		
<b>Study UID</b>	By Study UID: URL?study={studyUID}. <a href="#">Online demo.</a>	<b>+</b>
<b>Patient ID</b>	By Patient ID: URL?patient={patientID}. <a href="#">Online demo.</a>	<b>+</b>
<b>Accession Number</b>	By Accession Number: URL?acc={AccessionNumber}. <a href="#">Online demo.</a>	<b>+</b>
<b>Patient ID + Accession Number</b>	By Patient ID + Accession Number: URL?patient={PatientID}&acc={AccessionNumber}. <a href="#">Online demo.</a>	<b>+</b>
<b>File</b>	By path to File: URL?file=PATH_TO_YOUR_FILE	<b>+</b>
<b>Token-based</b>	Token-based secure integration.	<b>+</b>
<b>PACS server support</b>		
<b>Multi PACS support</b>	Supporting Multi PACS by plugins.	<b>+</b>
<b>MedDream PACS</b>	Server to store, archive, and manage medical images. <a href="#">Read more.</a>	<b>+</b>
<b>PacsOne PACS server</b>	<a href="#">Read more.</a>	<b>+</b>
<b>dcm4chee v2 and dcm4chee v5 PACS</b>	<a href="#">Read more.</a>	<b>+</b>
<b>Orthanc PACS</b>	<a href="#">Read more.</a>	<b>+</b>
<b>DICOM Query/Retrieve</b>	The service is used to query a DICOM archive about its content, and to eventually retrieve some portions of that content to another DICOM node.	<b>+</b>
<b>FileSystem</b>	A plugin that uses simple directories instead of a full-fledged PACS.	<b>+</b>
<b>ClearCanvas</b>	<a href="#">Read more.</a>	<b>+</b>
<b>Conquest DICOM software</b>	<a href="#">Read more.</a>	<b>+</b>
<b>Google Cloud Healthcare</b>	MedDream could be integrated with <a href="#">Cloud Healthcare API</a> into Google Cloud Healthcare.	<b>+</b>
<b>PACS supporting WADO</b>	WEB DICOM (WADO) support: possibility to connect with any PACS that support WADO integration.	<b>+</b>
<b>Any PACS or other DICOM system</b>	The viewer can be integrated into any PACS system by plugins.	<b>+</b>

Virtualization environments support		
<b>VMWare</b>	VMWare virtualization. <a href="#">Read more.</a>	<b>+</b>
<b>Docker</b>	Docker container. <a href="#">Read more.</a>	<b>+</b>
<b>Kubernetes</b>	Kubernetes deployment support. <a href="#">Read more.</a>	<b>+</b>
<b>Hyper-V</b>	Hyper-V virtualization. <a href="#">Read more.</a>	<b>+</b>
Cloud deployment support		
<b>Amazon AWS</b>	Amazon Cloud deployment. <a href="#">Read more about Amazon Web Services.</a>	<b>+</b>
<b>Google</b>	Google Cloud deployment. <a href="#">Read more about Google Cloud Healthcare.</a>	<b>+</b>
<b>Azure</b>	Microsoft Azure Cloud deployment. <a href="#">Read more about Microsoft Azure Cloud.</a>	<b>+</b>
<b>Alibaba</b>	Alibaba Cloud deployment. <a href="#">Read more about Alibaba Cloud.</a>	<b>+</b>
DB Engines support		
<b>MySQL</b>	MySQL database support. <a href="#">Read more.</a>	<b>+</b>
<b>PostgreSQL</b>	PostgreSQL database support. <a href="#">Read more.</a>	<b>+</b>
<b>MSSQL</b>	MSSQL database support. <a href="#">Read more about Microsoft SQL Server.</a>	<b>+</b>
<b>MariaDB</b>	MariaDB database support. <a href="#">Read more.</a>	<b>+</b>
<b>Other</b>	The viewer can be integrated into any DB Engine by request.	<b>+</b>
Operating Systems on server-side support		
<b>Windows Server</b>	Windows Server 2012 (64-bit) and newer.	<b>+</b>
<b>Windows</b>	Windows 10 (64-bit) and newer.	<b>+</b>
<b>Linux</b>	Linux (64 bit, with glibc version >= 2.15): Debian, Ubuntu, CentOS, Fedora.	<b>+</b>
Operating Systems on client-side support		
<b>Windows</b>	Versions: 10 (32/64 bit).	<b>+</b>
<b>Apple macOS X</b>	v10.9 or later.	<b>+</b>
Web browsers support		
<b>Microsoft Edge</b>	100 or later.	<b>+</b>
<b>Mozilla Firefox</b>	100 or later.	<b>+</b>
<b>Google Chrome</b>	100 or later.	<b>+</b>
<b>Safari</b>	14 or later.	<b>+</b>
Mobile devices (tablets and smartphones) support		
<b>IOS</b>	Safari browser, Chrome browser	<b>+</b>
<b>Android</b>	Chrome browser.	<b>+</b>



Regulatory		
<b>IHE XDS-I.b</b>	Cross-enterprise Document Sharing for Imaging (XDS-I.b) profile as DOCUMENT CONSUMER (ITI-18, ITI-43, RAD-16, RAD-55, RAD-69 transactions).	<b>+</b>
<b>USA FDA</b>	K222320, 510 (k) cleared for diagnostic use including mammographic images as a class II medical device.	<b>+</b>
<b>Europe CE</b>	Certified as a CE 0197 Class IIb device according to MDR.	<b>+</b>
<b>United Kingdom MHRA</b>	Registered as radiology picture archiving and communication system workstation.	<b>+</b>
<b>Switzerland Registration</b>	Registered as IIB class radiology picture archiving and communication system workstation.	<b>+</b>
<b>Thailand FDA</b>	Received approval for distribution.	<b>+</b>
<b>Singapore Registration</b>	Registered as a Class B medical device.	<b>+</b>
<b>Russia Registration</b>	Registered as a Class 2b medical device.	<b>+</b>