

## MEDDREAM PACS SERVER PREMIUM 7.3.1.831 & LITE 1.12.1.831 PRODUCT SPECIFICATION

Function	Description	PREMIUM v7.3.1.831	LITE v1.12.1.831
<b>Certifications</b>			
<b>Certified PACS</b>	MedDream PACS Premium functionality is certified as part of MedDream product. MedDream PACS Lite includes open source PACS, which is not a part of MedDream product and is not certified. More details in section: <b>Regulatory for PACS functionality</b> .	<b>+</b>	<b>-</b>
<b>Certified Viewer</b>	MedDream DICOM Viewer functionality is certified as a part of the MedDream product. For a full list of Viewer's certifications: <a href="#">Specification document</a> .	<b>+</b>	<b>+</b>
<b>PACS features</b>			
<b>DICOM compatibility</b>	Supported DICOM 3.0 protocol.	<b>+</b>	<b>+</b>
<b>DICOM Storage service</b>	PACS server is DICOM image archive. PACS server can store images from external DICOM sources by DICOM by using the C-Store method.	<b>+</b>	<b>+</b>
<b>DICOM Retrieve service</b>	The external system (DICOM SCU) can search and retrieve images from the PACS server using DICOM C-FIND, C-MOVE, and C-GET services.	<b>+</b>	<b>+</b>
<b>DICOM Modality worklist</b>	Possibility to import, store and send DICOM modality worklist records to the configured medical devices. <b>*PACS Lite:</b> The worklist plugin should be installed.	<b>+</b>	<b>+*</b>
<b>Auto Route</b>	Automated DICOM study transfer by configurable, flexible rules. <b>*PACS Lite:</b> one-liner script should be installed.	<b>+</b>	<b>+*</b>
<b>Export</b>	Possibility to export images stored in PACS Server database to the specified directory (including configured DICOMDIR Viewer).	<b>+</b>	<b>+</b>
<b>Import</b>	Possibility to import external DICOM formatted directory and/or raw image files into PACS Server.	<b>+</b>	<b>+</b>
<b>Forward</b>	Possibility to forward images stored in PACS to a remote DICOM SCP.	<b>+</b>	<b>+</b>
<b>Integration options</b>	Possibility to integrate PACS to HIS/RIS/EHR/PHR medical workflows using defined integration interfaces defined by DICOM, HL7, and FHIR standards as well as use custom integrations.	<b>+</b>	<b>+</b>
<b>Automatic Study Aging</b>	Possibility to set date and time schedule for Automatic Study Aging from short-term to long-term archive.	<b>+</b>	<b>-</b>
<b>Automatic Purge</b>	Possibility to set aging Period for Purging old worklist records. Possibility to set an aging Period for Purging old DICOM studies.	<b>+</b>	<b>-</b>
<b>Auto Scan</b>	Possible to set Auto-Scan directory for auto importing DICOM Images.	<b>+</b>	<b>-</b>
<b>Patient Reconciliation</b>	Flexible Patient reconciliation rules. Possibility to check duplicate Patient IDs. Possibility to edit Study Patient data manually or semi-automatically.	<b>+</b>	<b>-</b>
<b>Users' activities logging</b>	All user activities are automatically logged into the System Journal Log.	<b>+</b>	<b>-</b>
<b>Live Monitor</b>	Possible to display information about live connections.	<b>+</b>	<b>-</b>
<b>PACS administration</b>			
<b>WEB based administration</b>	The web-based user interface for PACS administration, configuration, managing users, and managing data. <b>*PACS Lite:</b> managing data only.	<b>+</b>	<b>+*</b>
<b>User management</b>	Possibility to create and manage users and user groups. <b>PACS Lite:</b> create and manage users only.	<b>+</b>	<b>+*</b>
<b>User access control</b>	Possibility to define privileges for the users or user groups managing patient/study actions: View, Modify, Forward, Query, Move, Download, Export, Import, Print, Upload, Monitor, System administration, Monitor, Mark study.	<b>+</b>	<b>-</b>

<b>Study View, manage</b>	Possibility to view and manage patients/studies. The list of studies includes detailed info: Patient ID, Patient Name, Patient Sex, Date of Birth, Institution name, Study ID, Study Date, Study Time, Accessions Number, Referring Physician, Name, and Description. <b>*For PACS Premium only:</b> Privacy, Age, Received On, Reading Physician's Name, Read By, Requesting Physician's Name, Source AE, Total Number of Instances.	+	+*
<b>Patient Search</b>	Possibility to search patients by selected criteria: Patient ID, Patient Name, Date of Birth, Institution Name, and Study Date.	+	+
<b>Study Search</b>	Possibility to search study by selected criteria: Patient ID, Patient Name, Study Date, Accession Number. <b>*For PACS Premium only:</b> Study Unique ID (UID), Study ID, Referring Physician's Name, Reading Physician's Name, Source AE.	+	+*
<b>Series Search</b>	Possibility to search series by selected criteria: Series Unique ID (UID), Series Date (set dates from to), Modality, Series Description.	+	-
<b>Image Search</b>	Possibility to search images by selected criteria: Image Unique ID (UID), Photometric Interpretation (MONOCHROME1, RGB, etc.), Image date (set dates from to).	+	-
<b>System Monitoring</b>	Possibility to view system services, system, and user activities, system logs, etc.	+	-
<b>DICOM Modality Worklist</b>			
<b>Modality Worklist records</b>	Possibility to enter the following information for worklist data: Patient ID, Patient Name, Patient's Sex, Date of Birth (DD-MM-YYY), Additional Patient History, Institution Name, Accession Number, Admitting Diagnoses Description, Referring Physician's Name, Requesting Physician's Name, Requested Procedure ID, Requested Procedure Description, Requested Procedure Priority, Scheduled AE Station, Modality, Scheduled Start Date (DD-MM-YYYY), Scheduled Start Time (HH:mm:ss), Performing Physician, Scheduled Procedure ID, Scheduled Procedure Description, Scheduled Procedure Location, Procedure Code Value, Procedure Code Meaning, Procedure Code Scheme Designator, Procedure Code Scheme Version, Protocol Code Value, Protocol Code Meaning, Protocol Code Scheme Designator, Protocol Code Scheme Version. <b>*PACS Lite:</b> The worklist plugin should be installed.	+	+*
<b>Customization features</b>			
<b>Multilanguage support</b>	Supported languages: English, Lithuanian, Russian. Possibility to support more languages by request.	+	-
<b>Viewer features</b>			
This specification file contains only a description of MedDream PACS Server product functionalities. MedDream PACS product package also contains MedDream WEB DICOM Viewer functionalities. <b>For a full list of MedDream DICOM Viewer specifications please read the <a href="#">Specification document</a>.</b> Where MedDream viewing functionalities are described, such as:			
<b>General Features</b>	Pan, Zoom, Scroll, etc.	+	+
<b>Measurements</b>	Line, Angle, Polyline, etc.	+	+
<b>Viewport features</b>	Ellipse ROI propagation, Copy image to the clipboard, Quick save KO and PR, etc.	+	+
<b>Layout features</b>	Thumbnail position, Multi-image, Hanging Protocols, etc.	+	+
<b>Manipulation features</b>	Simultaneous scrolling, Sync Windowing, Crosshair, etc.	+	+
<b>Supporting functions</b>	The report, Study forward, Export, etc.	+	+
<b>Specific features</b>	Live Share support, PET-CT Fusion, Color channels, etc.	+	+
<b>ECG</b>	Measurement (mV, s), QT points (RR, QT, QTc), HR, etc.	+	+
<b>Ultrasound</b>	VTI (Velocity Time Integral), etc.	+	+
<b>MPR</b>	Orthogonal MPR, Axial MPR, Coronal MPR, Sagittal MPR, etc.	+	+

<b>Advanced MPR features</b>	MPR Oblique MIST, 3D rendering, MPR/MIP comparison, etc.	+	+
<b>Customization features</b>	The theme, Thumbnail view, Language support, etc.	+	+
<b>Other viewing functionalities</b>	All viewing functionalities are described in the MedDream DICOM Viewer <a href="#">Specification document</a> .	+	+
<b>Supported modalities</b>			
<b>CR</b>	Computed Radiography modality for diagnostic use.	+	+
<b>CT</b>	Computer Tomography modality for diagnostic use.	+	+
<b>DX</b>	Digital Radiography modality for diagnostic use.	+	+
<b>ECG</b>	Electrocardiography modality for diagnostic use.	+	+
<b>EPS</b>	Cardiac Electrophysiology modality for diagnostic use.	+	+
<b>ES</b>	Endoscopy modality for diagnostic use.	+	+
<b>IO</b>	Intra-Oral Radiography modality for diagnostic use.	+	+
<b>IVUS</b>	Intravascular Ultrasound modality for diagnostic use.	+	+
<b>MG</b>	Mammography modality for diagnostic use.	+	+
<b>MR</b>	Magnetic Resonance modality for diagnostic use	+	+
<b>NM</b>	Nuclear Medicine modality for diagnostic use.	+	+
<b>OCT</b>	Optical Coherence Tomography (non-Ophthalmic) modality for diagnostic use.	+	+
<b>OPT</b>	Ophthalmic Tomography modality for diagnostic use.	+	+
<b>OP</b>	Ophthalmic Photography modality for diagnostic use.	+	+
<b>OT</b>	Other modalities for diagnostic use.	+	+
<b>PT</b>	Positron Emission Tomography (PET) modality for diagnostic use.	+	+
<b>PX</b>	Panoramic X-Ray modality for diagnostic use.	+	+
<b>RF</b>	Radio Fluoroscopy modality for diagnostic use.	+	+
<b>RG</b>	Radiographic imaging modality for diagnostic use.	+	+
<b>SC</b>	Secondary Capture modality for diagnostic use.	+	+
<b>SR</b>	Support for SR documents.	+	+
<b>XA</b>	X-Ray Angiography modality for diagnostic use.	+	+
<b>US</b>	Ultrasound modality for diagnostic use.	+	+
<b>XC</b>	External-camera Photography modality for diagnostic use.	+	+
<b>Integration into medical information systems</b>			
<b>HIS</b>	Flexible and open integration interface into Hospital information systems.	+	+
<b>RIS</b>	Flexible and open integration interface into Radiology information systems.	+	+

<b>EHR</b>	Flexible and open integration interface into Electronic health records.	+	+
<b>EMR</b>	Flexible and open integration interface into Electronic medical records.	+	+
<b>PHR</b>	Flexible and open integration interface into Personal health records.	+	+
<b>Patient Portal</b>	Flexible and open integration interface into Patient Portals.	+	+
<b>eHealth</b>	Flexible and open integration interface into eHealth, national or regional eHealth systems.	+	+
<b>Teleradiology</b>	Flexible and open integration interface into Teleradiology and Telemedicine systems.	+	+
<b>Cloud</b>	Flexible and open integration interface into Cloud healthcare systems.	+	+
<b>Any medical application</b>	Flexible and open integration interface into any other medical applications.	+	+
<b>Licensing</b>			
<b>Limited License</b>	License limited on connected modalities (AE Titles).	+	-
<b>Unlimited License</b>	An unlimited License is available upon request.	+	+
<b>Virtualization environments support</b>			
<b>VMWare</b>	VMWare virtualization. <a href="#">Read more.</a>	+	+
<b>Docker</b>	Docker container. <a href="#">Read more.</a>	-	+
<b>Kubernetes</b>	Kubernetes deployment support. <a href="#">Read more.</a>	-	+
<b>Hyper-V</b>	Hyper-V virtualization. <a href="#">Read more.</a>	+	+
<b>Cloud deployment support</b>			
<b>Amazon AWS</b>	Amazon Cloud deployment. <a href="#">Read more about Amazon Web Services.</a>	+	+
<b>Google</b>	Google Cloud deployment. <a href="#">Read more about Google Cloud Healthcare.</a>	+	+
<b>Azure</b>	Microsoft Azure Cloud deployment. <a href="#">Read more about Microsoft Azure Cloud.</a>	+	+
<b>Alibaba</b>	Alibaba Cloud deployment. <a href="#">Read more about Alibaba Cloud.</a>	+	+
<b>DB Engines support</b>			
<b>MySQL</b>	MySQL database support. <a href="#">Read more.</a>	+	+
<b>PostgreSQL</b>	PostgreSQL database support. <a href="#">Read more.</a>	-	+
<b>MSSQL</b>	MSSQL database support. <a href="#">Read more about Microsoft SQL Server.</a>	-	+
<b>MariaDB</b>	MariaDB database support. <a href="#">Read more.</a>	+	+
<b>Operating Systems on server-side support</b>			
<b>Windows Server</b>	Windows Server 2008/2012/2012R2/2016/2019 (64-bit).	+	+
<b>Windows</b>	Windows 7/8/10/11 (64-bit).	+	+
<b>Linux</b>	Linux (64 bit, with glibc version >= 2.15): Debian, Ubuntu, CentOS, Fedora.	+	+
<b>Operating Systems on client-side support</b>			

<b>Windows</b>	Windows 7/8/10/11 (32/64 bit).	<b>+</b>	<b>+</b>
<b>Apple macOS X</b>	v10.9 or later.	<b>+</b>	<b>+</b>
<b>Web browsers support PACS web administration</b>			
<b>Microsoft Edge</b>	85 or later.	<b>+</b>	<b>+</b>
<b>Mozilla Firefox</b>	74 or later.	<b>+</b>	<b>+</b>
<b>Google Chrome</b>	74 or later.	<b>+</b>	<b>+</b>
<b>Safari</b>	10 or later.	<b>+</b>	<b>+</b>
<b>Mobile devices (tablets and smartphones) support</b>			
<b>IOS</b>	Safari browser, Chrome browser.	<b>+</b>	<b>+</b>
<b>Android</b>	Chrome browser.	<b>+</b>	<b>+</b>
<b>Regulatory for PACS functionality</b>			
<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	<b>+</b>	<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>-</b>
<b>Europe CE</b>	Certified as a CE 0197 Class IIb device according to MDR.	<b>+</b>	<b>-</b>
<b>United Kingdom MHRA</b>	Registered as radiology picture archiving and communication system workstation.	<b>+</b>	<b>-</b>
<b>Switzerland Registration</b>	Registered as IIB class radiology picture archiving and communication system workstation.	<b>+</b>	<b>-</b>
<b>Thailand FDA</b>	Received approval for distribution.	<b>+</b>	<b>-</b>
<b>Singapore Registration</b>	Registered as a Class B medical device.	<b>+</b>	<b>-</b>
<b>Malaysia Registration</b>	Registered as an IIB class medical device.	<b>+</b>	<b>-</b>
<b>Russia Registration</b>	Registered as a Class 2b medical device.	<b>+</b>	<b>-</b>