



HTML 5 ZERO-FOOTPRINT DICOM VIEWER
v7.6.0 27/01/2021

QUICK START GUIDE

Windows x64 MedDream PACS Premium

Document version 1.00

This guide describes the basics of installing and configuring a web-based DICOM Viewer for PACS server. More information is provided in the full Install Manual, download its latest version: [Install Manual](#).



ABOUT SOFTWARE

This guide describes MedDream DICOM Viewer deployment on Windows x64. MedDream PACS Premium software package contains all the software required to run MedDream Viewer on your server.


The Viewer can be integrated into HIS/RIS/EHR/EMR, Telemedicine, Patient Portals, National Systems, CAD and AI algorithms. MedDream Universal Enterprise Viewer can be installed on premises, in any virtual environment or on cloud.

MedDream is designed to aid medical professionals in day-to-day decision-making process. MedDream is a cost effective certified solution perfect for software vendors, integrators, OEM's and national system providers.

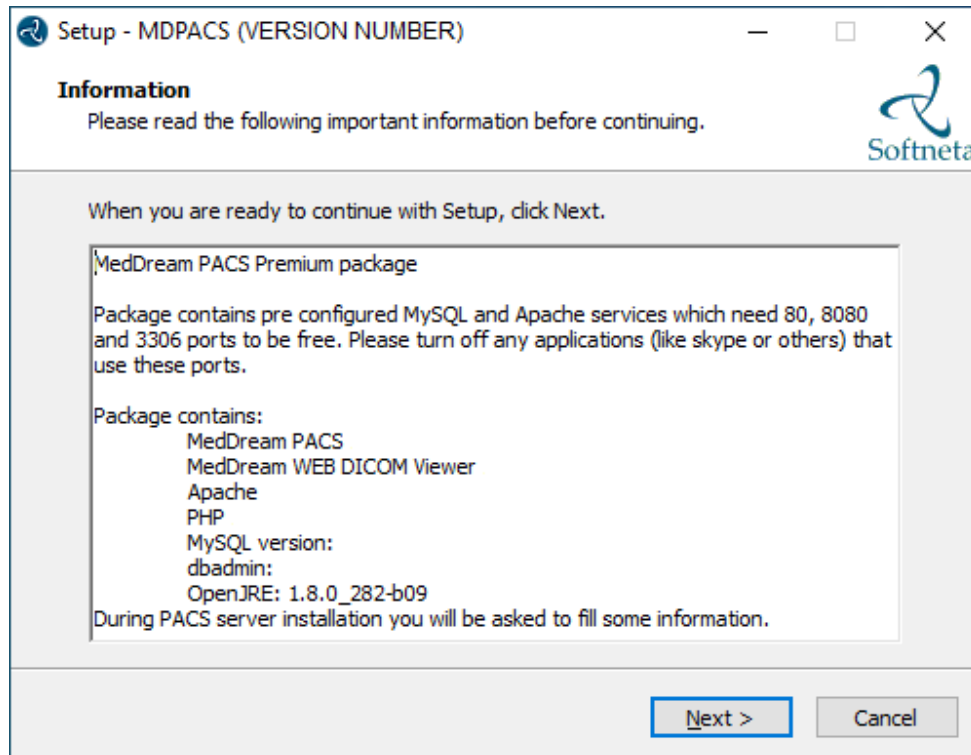
PREREQUISITES

-  The Operating system is **Windows 10 (x64)** or one of the **Windows Server (x64)** versions: 2012, 2012 R2, 2016, 2019.
-  Make sure the server has at least **2 GHz CPU with 2 cores, 3 GB of RAM, 20 GB** of available **hard disk** space. Network bandwidth is not less than **4 Mbit/s**.

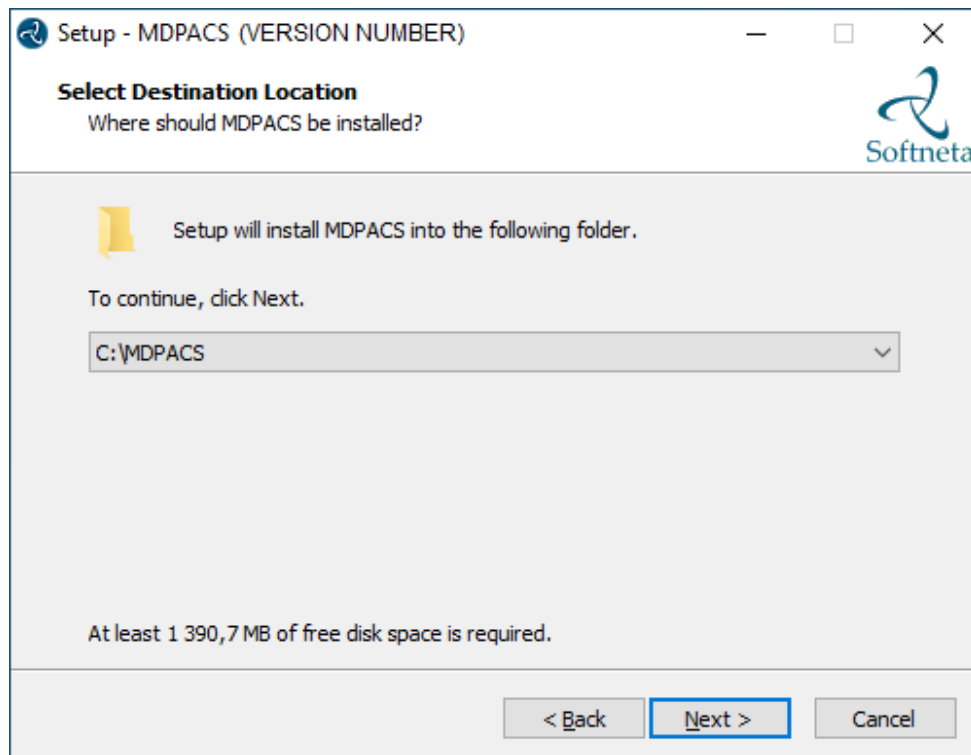
INSTALLATION FOR THE FIRST TIME

-  **Install all in one package (MedDream DICOM Viewer, MedDream PACS, MySQL database and additional programs):**
 - **Download** the latest Windows version of the package from the Softneta website: <https://softneta.com/files/meddreampacs/premium/210203/MedDream-PACS-Premium-7.2.1.760.exe>

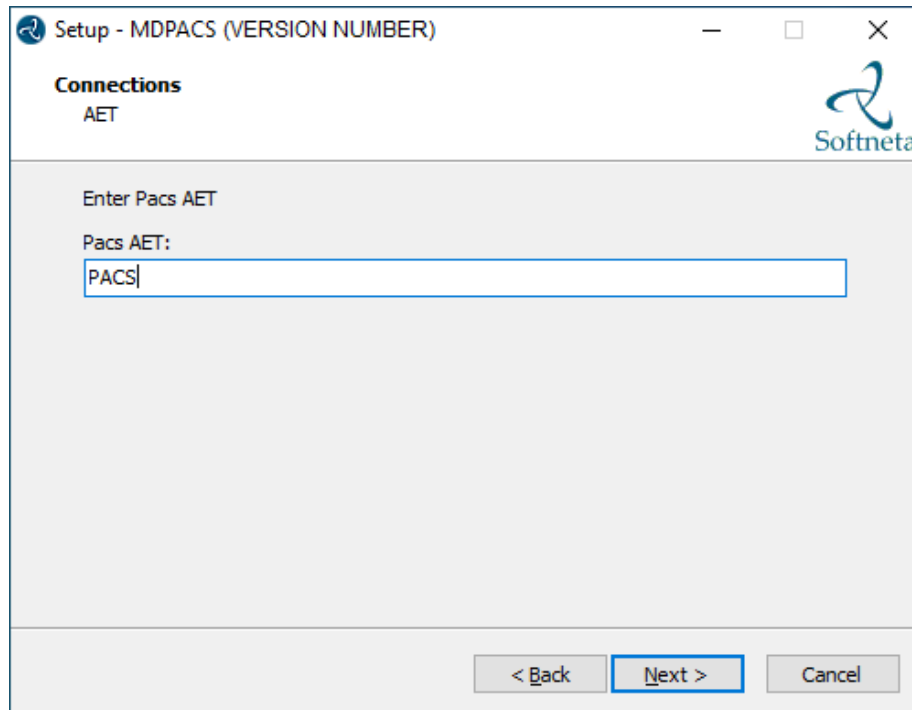
- Execute **MedDream-PACS-Premium-7.2.1.760.exe** and click **Next >** button:



- Choose **C:\MDPACS** and click **Next >** button:



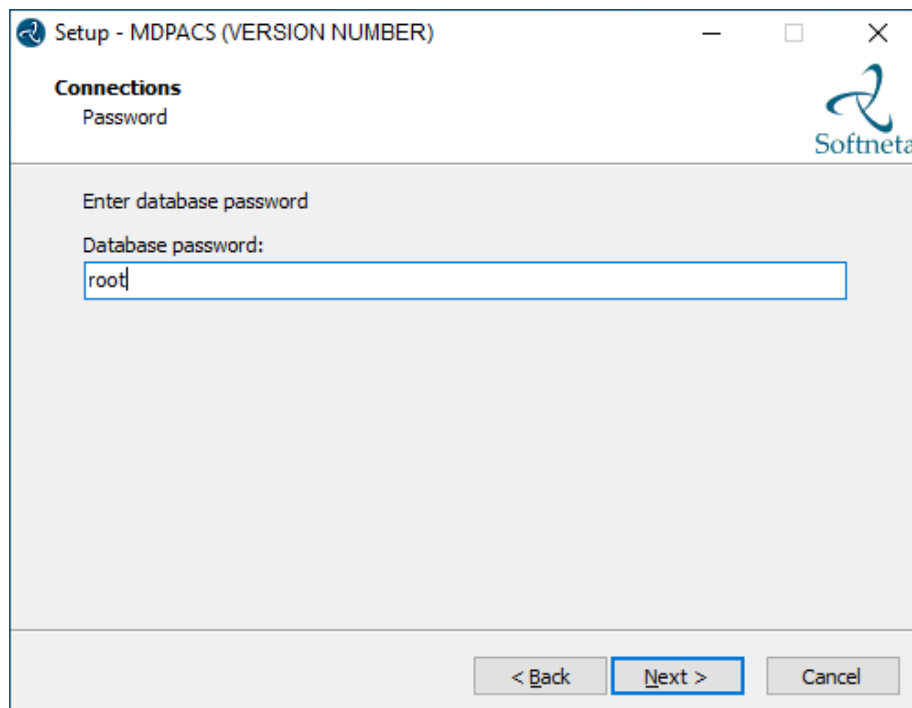
- **Enter** Pacs AET, such as PACS. Remember it, you will need to specify the exact same AET name in the PACS configuration. Then click **Next >** button:



The screenshot shows a Windows-style dialog box titled "Setup - MDPACS (VERSION NUMBER)". The window has a title bar with standard minimize, maximize, and close buttons. The main content area is divided into two sections. The top section is titled "Connections" and has a sub-header "AET". The bottom section is titled "Enter Pacs AET" and contains a label "Pacs AET:" followed by a text input field containing the text "PACS". At the bottom right of the dialog, there are three buttons: "< Back", "Next >" (which is highlighted with a blue border), and "Cancel". The Softneta logo is visible in the top right corner of the dialog.

TIP: Pacs AET will be saved in the C:\MDPACS\MedDream\application.properties file.

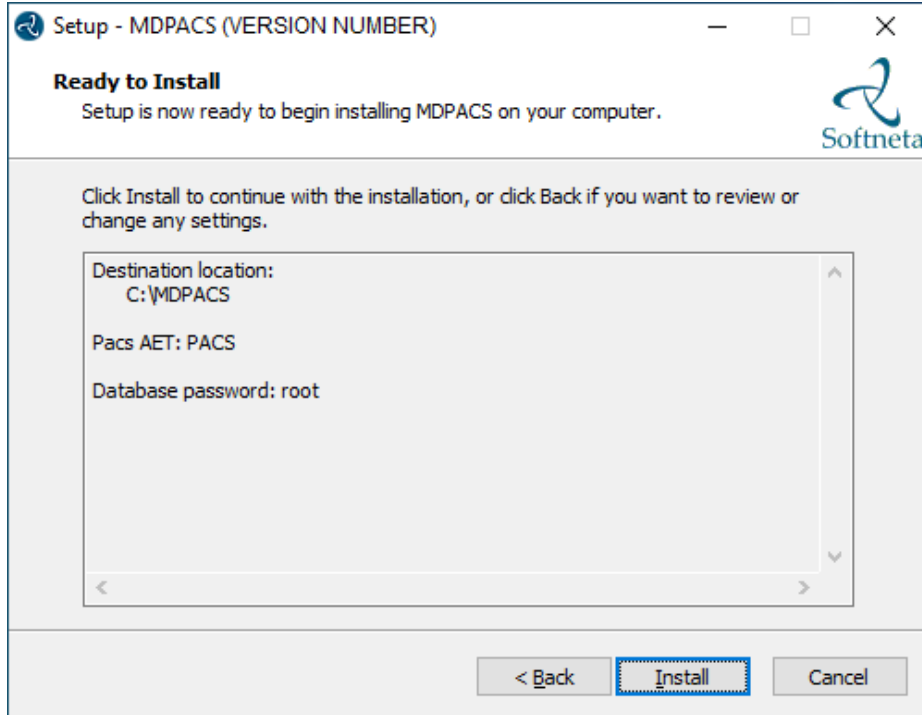
- **Enter** database password. Remember it. Then click **Next >** button:



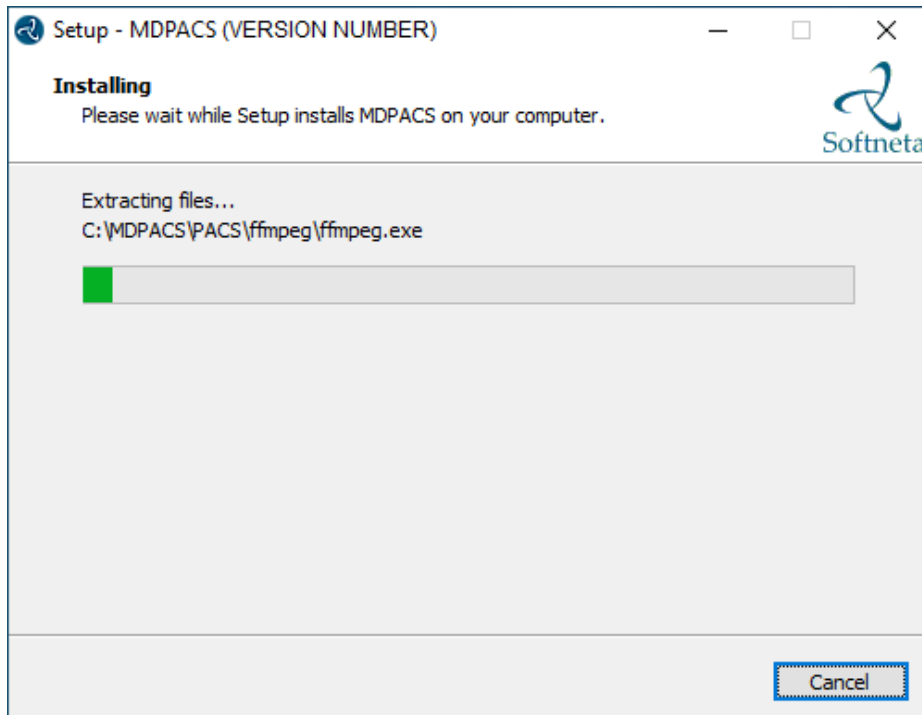
The screenshot shows a Windows-style dialog box titled "Setup - MDPACS (VERSION NUMBER)". The window has a title bar with standard minimize, maximize, and close buttons. The main content area is divided into two sections. The top section is titled "Connections" and has a sub-header "Password". The bottom section is titled "Enter database password" and contains a label "Database password:" followed by a text input field containing the text "root". At the bottom right of the dialog, there are three buttons: "< Back", "Next >" (which is highlighted with a blue border), and "Cancel". The Softneta logo is visible in the top right corner of the dialog.

TIP: Database password will be saved in the C:\MDPACS\MedDream\application.properties file.

- Click **Install** to continue with the installation:



- A progress bar will be displayed during the MedDream Viewer installation process:



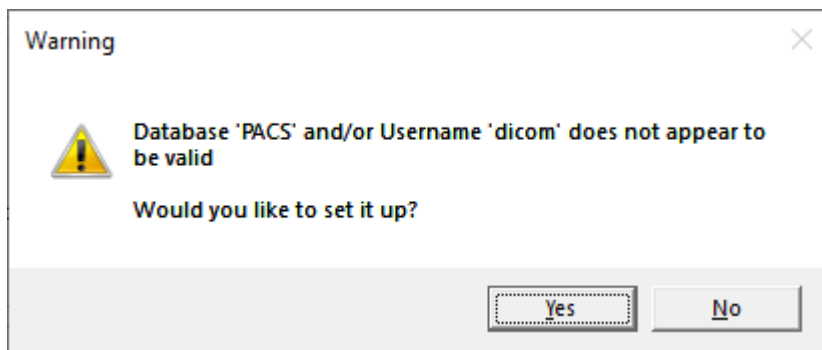
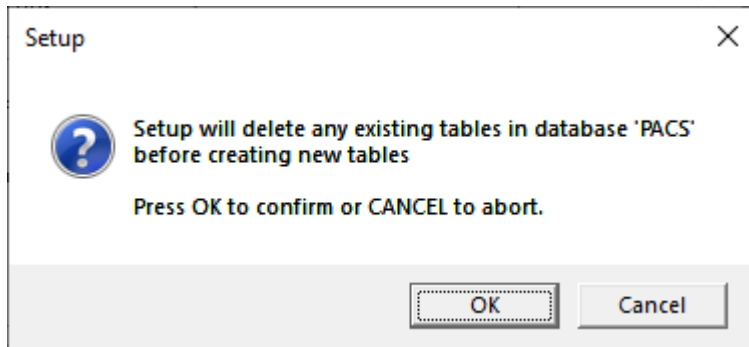
- Once MedDream Viewer is installed, the MedDream PACS configuration begins. **Follow the steps below to install and configure the MedDream PACS server.**
 - **DICOM part:**
 - **Change** “Application Entity Title” to the same AET you specified before, e.g., PACS.
 - **Change** “Server Port” to e.g., 104.
 - **Database part:**
 - **Change** “Database Name” to e.g., PACS.
 - **Enter** “Password” for database user “dicom”.
 - **Storage part.**
 - **Specify** the storage location for the DICOM files, e.g., C:\MDPACS\DICOM.
 - **Click Install** button.

The screenshot shows the 'MedDream PACS Premium Installer' window with the following configuration details:

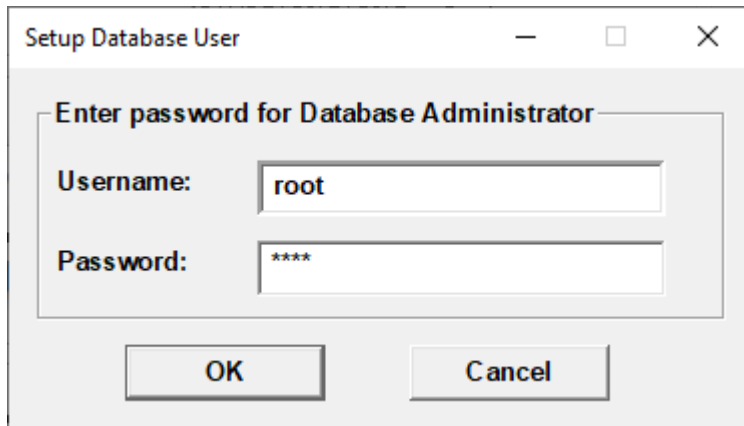
- DICOM section:**
 - Application Entity Title: PACS
 - Server Port: 104
 - Log File Directory: C:\MDPACS\PACS\log
 - Enable TLS/SSL Option
 - TLS Port: 5678
 - SSL Certificate: C:\MDPACS\PACS\PacsOne.crt (with Browse... button)
 - SSL Private Key: C:\MDPACS\PACS\PacsOne.key (with Browse... button)
- Database section:**
 - Database Host: localhost
 - Database Name: PACS
 - Username: dicom
 - Password: xxxxxx
- Storage section:**
 - Default Archive Directory: C:\MDPACS\DICOM
 - Archive Format: DicomPart10 (Default) (dropdown menu)
- HL-7 Message Listener Option section:**
 - Enable HL-7 Message Listener Option
 - HL-7 Listener Port: 7777
 - HL-7 Message Persistence: 90 Days

At the bottom of the window, there are four buttons: Upgrade, Install, Uninstall, and Cancel.

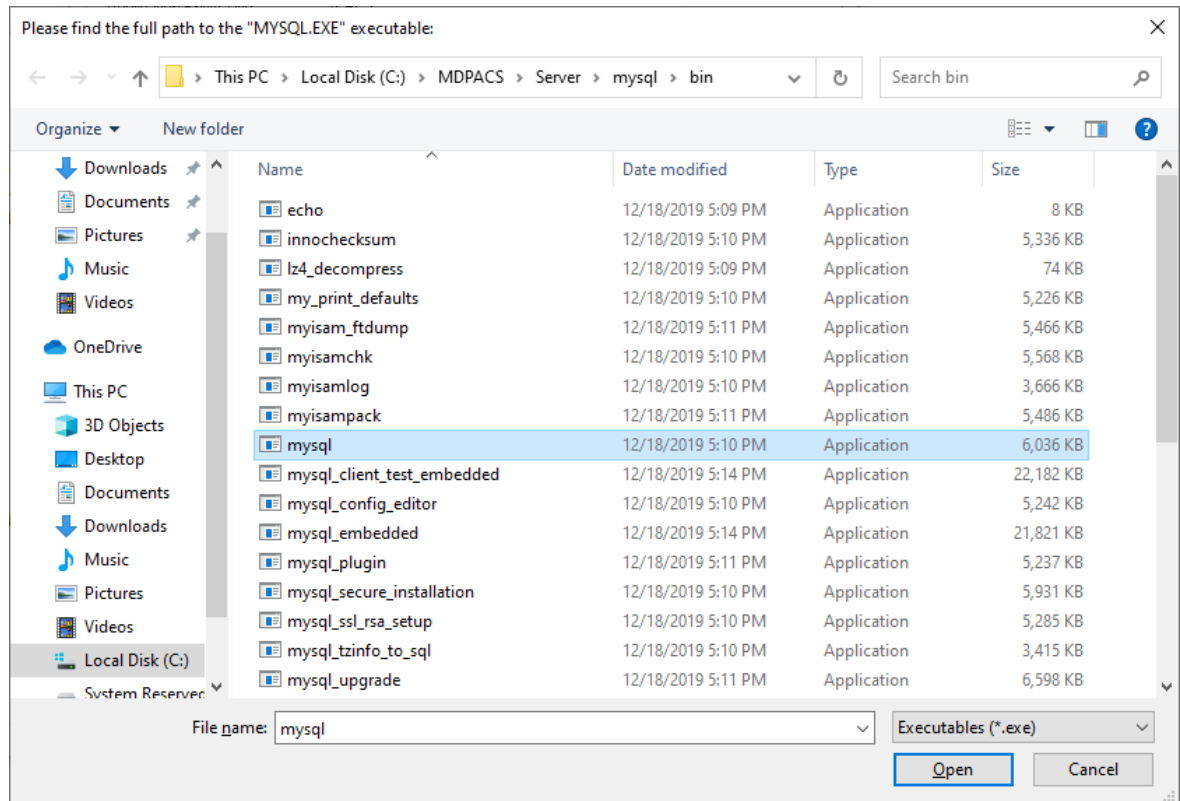
- You will be notified by two messages. It is recommended to press **<OK>** button in the first message and **<Yes>** in the second:



- Enter** database password for "root" user. Enter **the same password** you specified in the MedDream Viewer installation.

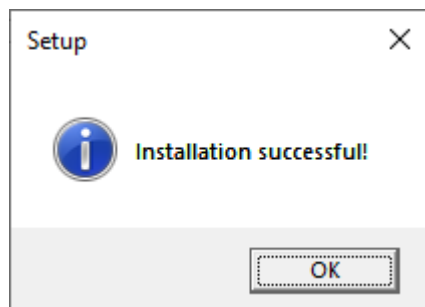


- Find the full path to the “mysql.exe”. Usually, you can find it here: C:\MDPACS\Server\mysql\bin\mysql.exe. Select the file and then click Open:

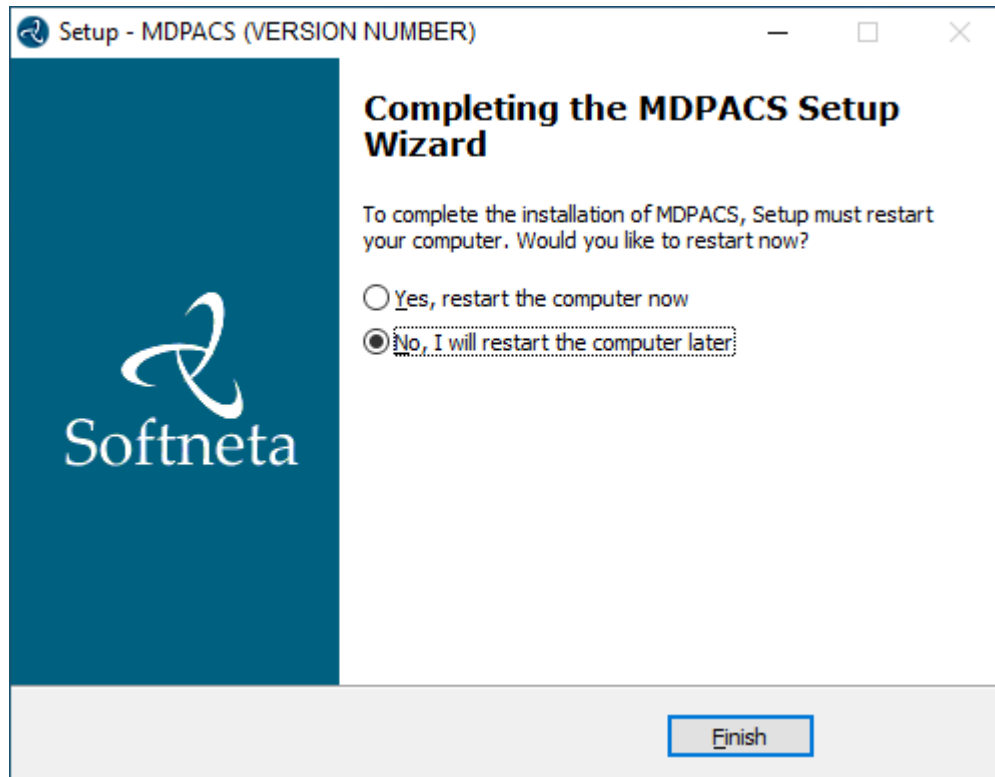


TIP: You can have several MySQL databases installed on your computer, choose correct database.

- When the MedDream PACS installation is complete, a success message is displayed.



- MedDream PACS Premium installation is complete. Click **Finish** button.



CONFIGURATION

1

MedDream Viewer settings. You can add additional MedDream settings or change existing ones in the C:\MDPACK\MedDream\application.properties file. **The minimum MedDream DICOM Viewer configuration** for opening studies stored on the MedDream PACS Premium server is given below:

```
server.port=8080
```

```
com.softneta.preparation.coreThreadCount=40
```

```
com.softneta.preparation.maxThreadCount=50
```

```
com.softneta.preparation.multiFrameThreadCount=20
```

```
com.softneta.tempCleaner.cleanRateMilliSec=1800000
```

```
# incidental leftovers from Export
```

```
com.softneta.tempCleaner.tempItems[0].directory=${com.softneta.meddream.tempDir}  
/archive
```

```
com.softneta.tempCleaner.tempItems[0].pattern=*
com.softneta.tempCleaner.tempItems[0].olderThanSec=7200

# incidental leftovers from Burn
com.softneta.tempCleaner.tempItems[1].directory=${com.softneta.meddream.tempDir}
com.softneta.tempCleaner.tempItems[1].pattern=*_export
com.softneta.tempCleaner.tempItems[1].olderThanSec=21600
com.softneta.tempCleaner.tempItems[1].matchAnyDepth=false

# incidental leftovers from Forward
com.softneta.tempCleaner.tempItems[2].directory=${com.softneta.meddream.tempDir}
com.softneta.tempCleaner.tempItems[2].pattern=forward_*.dcm
com.softneta.tempCleaner.tempItems[2].olderThanSec=7200
com.softneta.tempCleaner.tempItems[2].matchAnyDepth=false

# leftovers from MPR (no cleaning by other means so far)
com.softneta.tempCleaner.tempItems[3].directory=${com.softneta.meddream.tempDir}/3d
com.softneta.tempCleaner.tempItems[3].pattern=*
com.softneta.tempCleaner.tempItems[3].olderThanSec=7200

# incidental leftovers from viewing some videos
com.softneta.tempCleaner.tempItems[4].directory=${com.softneta.video.convertedDir}
com.softneta.tempCleaner.tempItems[4].pattern=*
com.softneta.tempCleaner.tempItems[4].olderThanSec=3600

# files prepared both on demand and in background (no cleaning by other means so far)
com.softneta.tempCleaner.tempItems[5].directory=${com.softneta.preparation.cacheDir}
com.softneta.tempCleaner.tempItems[5].pattern=*
com.softneta.tempCleaner.tempItems[5].olderThanSec=604800

# incidental leftovers from Share
com.softneta.tempCleaner.tempItems[6].directory=${com.softneta.dicom.library.
upload.tempDir}
com.softneta.tempCleaner.tempItems[6].pattern=*
com.softneta.tempCleaner.tempItems[6].olderThanSec=86400
```

Miscellaneous

Number of times a failed background job will be restarted.

Default value: 3

spring.batch.job.maxFailedJobRestarts=10

spring.profiles.include=auth-pacsone

authorization.defaultLoginPermissions=SEARCH,EXPORT_ISO,EXPORT_ARCH,FORWARD,
REPORT_VIEW,REPORT_UPLOAD,PATIENT_HISTORY,UPLOAD_DICOM_LIBRARY,3D_RENDERING,ADMIN,
DOCUMENT_VIEW

authorization.users[0].userName=root

authorization.users[0].role=SEARCH,EXPORT_ARCH,FORWARD,REPORT_VIEW,REPORT_UPLOAD,
PATIENT_HISTORY,UPLOAD_DICOM_LIBRARY,3D_RENDERING,ADMIN,VIEW_PRIVATE,DOCUMENT_VIEW

com.softneta.meddream.loginEnabled=true

logging.file.name=mdjavacore.log

logging.level.com.softneta=ERROR

com.softneta.dicom.library.upload.anonymized=true

com.softneta.meddream.pacs.configurations[0].type=PacsOne

com.softneta.meddream.pacs.configurations[0].id=Pacs

com.softneta.meddream.pacs.configurations[0].username=root

com.softneta.meddream.pacs.configurations[0].searchApiEnabled=true

com.softneta.meddream.pacs.configurations[0].imageApiEnabled=true

##To enable "Save annotation" and "SHARE" functions configure and uncomment below 3
lines. Add MEDDREAM AETitle into PACS system to accept annotations.

#com.softneta.meddream.pacs.configurations[0].storeScpAet=PACS

#com.softneta.meddream.pacs.configurations[0].storeScpIp=127.0.0.1

#com.softneta.meddream.pacs.configurations[0].storeScpPort=104

com.softneta.meddream.pacs.configurations[0].encoding=ISO-8859-1

com.softneta.meddream.pacs.configurations[0].encodingTo=

com.softneta.meddream.pacs.configurations[0].password=root

authentication.database.databaseName=PACS

```
authentication.database.jdbcUrl=jdbc:mysql://127.0.0.1:3306/PACS  
com.softneta.meddream.pacs.configurations[0].url=  
jdbc:mysql://127.0.0.1:3306/PACS?characterEncoding=latin1
```

NOTE: In the C:\MDPACK\MedDream\ApTemplates you can find examples of MedDream Viewer configurations with explanations. All MedDream settings are stored in the application.SAMPLE.properties file.

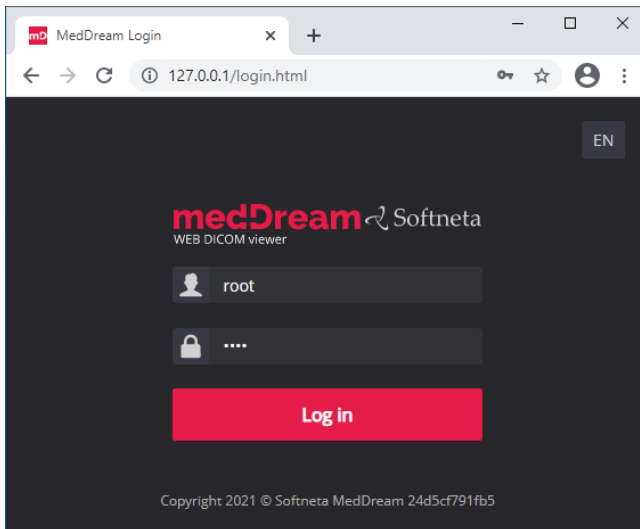
VERIFICATION

1

Open a browser and enter the MedDream URL <http://127.0.0.1/> in the address bar.

2

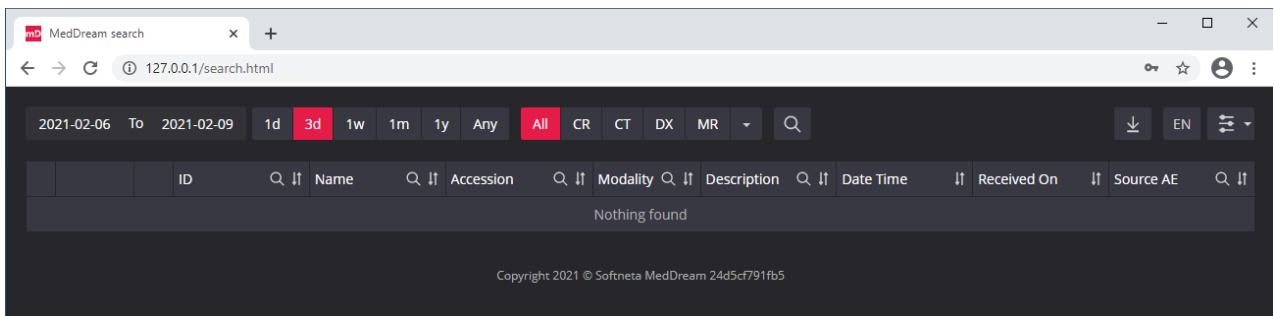
In the login window, enter the username “root” and the password of this user. Press **Log in** button:



TIP: If you can't connect, restart Windows services (run in cmd line: services.msc and restart MedDream service).

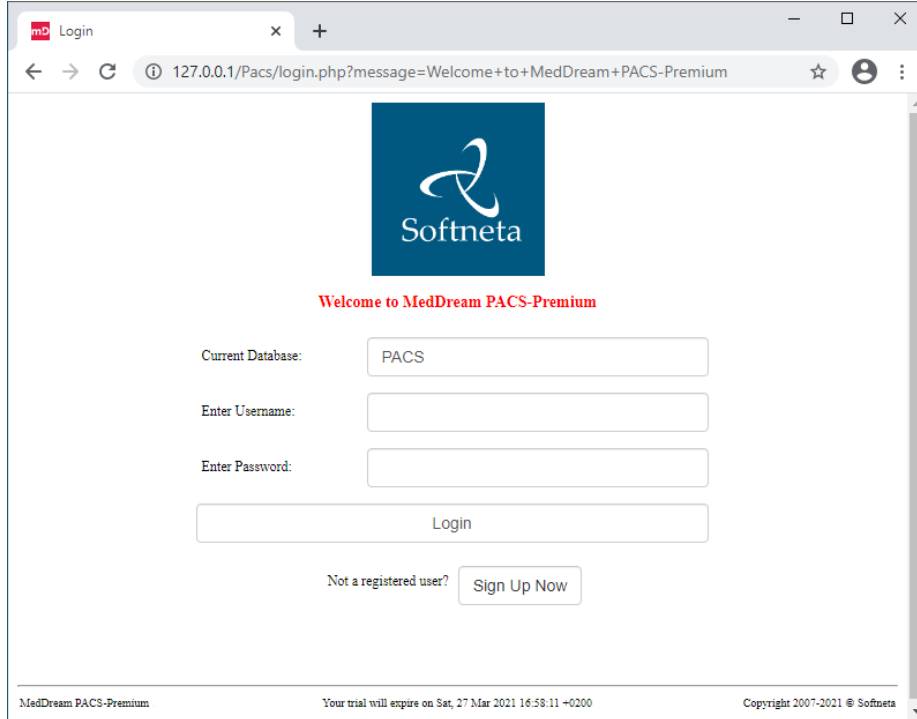
3

If you did not upload the studies using the MedDream PACS user interface, you will see an empty list of studies:

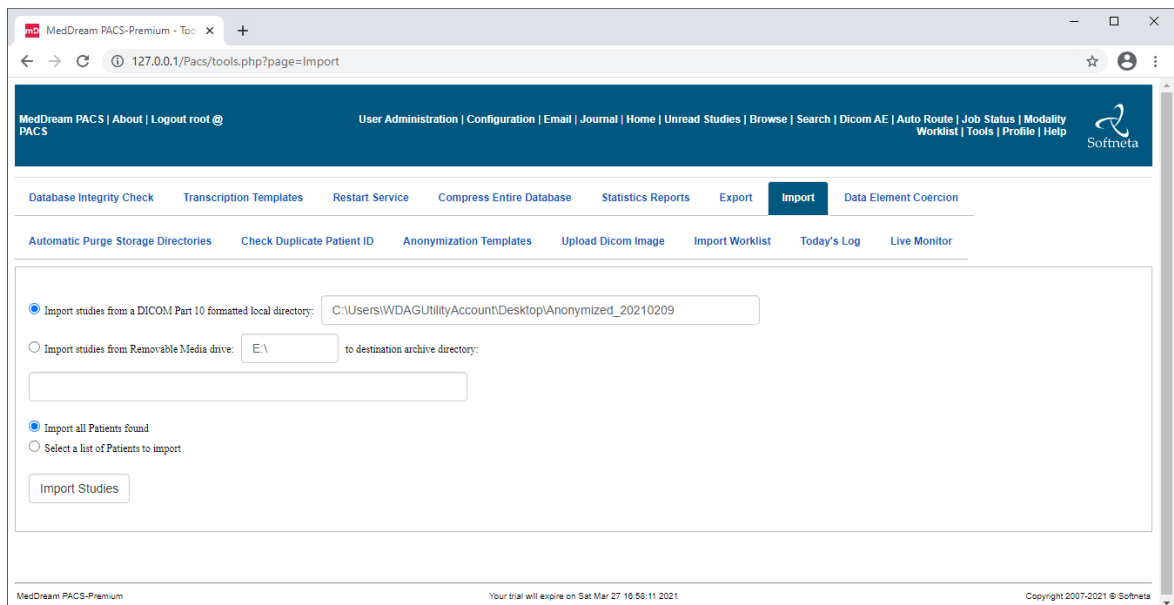


4 Upload studies to the PacsOne PACS server, follow these steps:

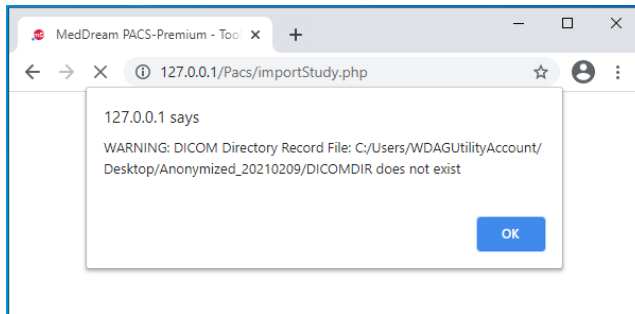
- **Open** a browser and **enter** the PacsOne PACS URL <http://127.0.0.1/Pacs> (P must be a capital letter). **Enter** your login credentials and press **<Login>** button:



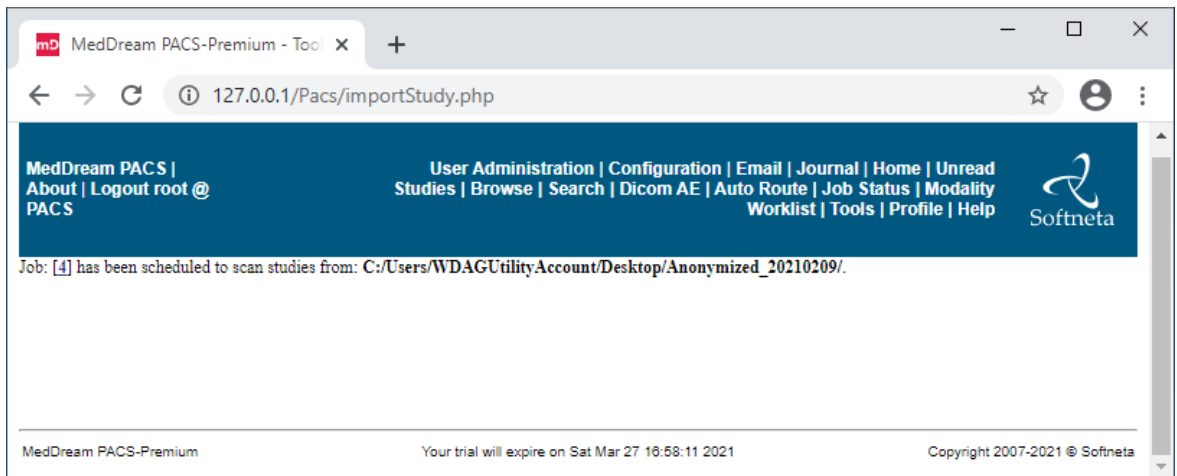
- **Click “Tools”** menu. DICOM images can be uploaded to the server by importing a directory with DICOM files. **Click “Import”** submenu and **enter** the full path to the local directory with files. Press **<Import Studies>** button.



- Press **<OK>** button in the warning message:



- **Click** on the link with job number:



- **Review jobs.** In the “My Submitted Jobs” table you can verify if the import was successful and how many files were imported to the server:

MedDream PACS | About | Logout
root @ PACS

User Administration | Configuration | Email | Journal | Home | Unread Studies | Browse | Search | Dicom AE | Auto Route | Job Status | Modality Worklist | Tools | Profile | Help

Softneta

My Submitted Jobs:
1 completed jobs. Completed jobs will be deleted after a period of 24 hours

Previous Next Displaying 1-1 of 1 Jobs:

ID	Username	AE Title	Type	Class	Universally Unique ID (UUID)	Schedule	Priority	Submit Time	Start Time	Finish Time	Status	Retries	Details	Retry Interval	N/A	
<input type="checkbox"/>	3	root	N/A	import	study	2021-02-10 17:36:41	Immediately	Medium	2021-02-10 17:36:41	2021-02-10 17:36:42	2021-02-10 17:36:47	success	0	2 images imported.	0	N/A

0 pending or failed jobs. Failed jobs will be deleted after a period of 24 hours

Other User's Jobs:

0 Completed 0 Pending 0 Failed 0 Scheduled Immediately 0 Scheduled Later 0 Warning

0 completed jobs. Completed jobs will be deleted after a period of 24 hours

MedDream PACS-Premium Your trial will expire on Sat Mar 27 16:58:11 2021 Copyright 2007-2021 © Softneta

TIP: Samples of anonymized studies can be downloaded from <https://demo.softneta.com/> (Login → Open the selected study → Click Export → Select the DICOM format and click Export again → Press the Download link).

5 Review uploaded studies in the MedDream Viewer:

- **Type <http://127.0.0.1/>** into your browser's address bar again. **Login** with user **demo**, password **demo** and **change** the date range selection by pressing **<Any>** button. Now you can see your studies in the list:

MedDream search

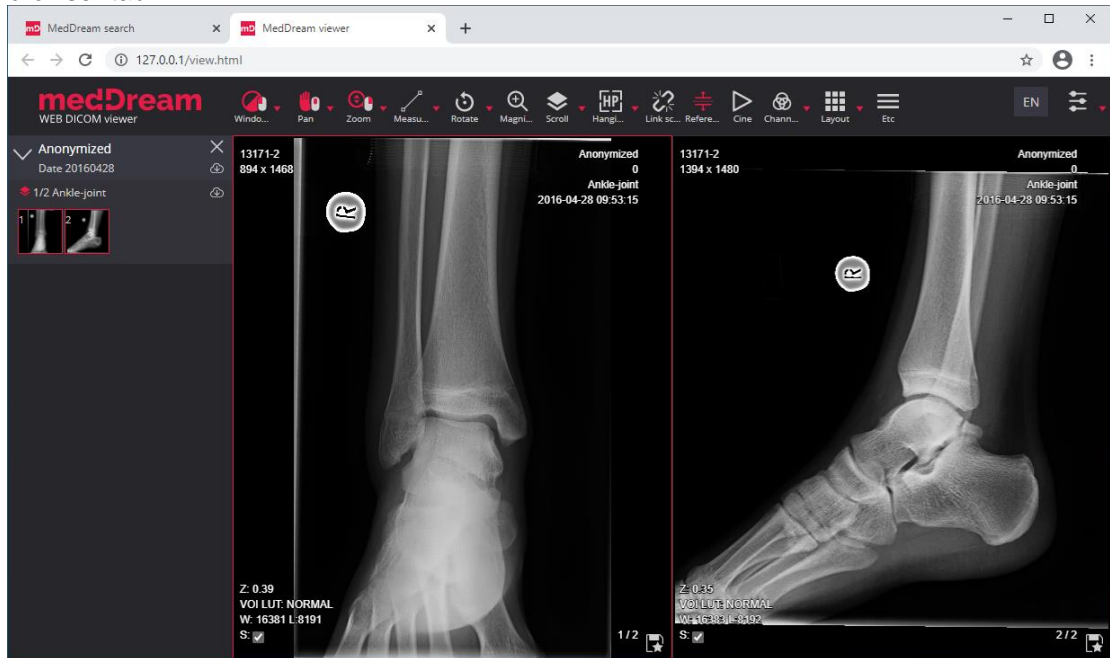
127.0.0.1/search.html

To: 1d 3d 1w 1m 1y **Any** All CR CT DX MR

ID	Name	Accession	Modality	Description	Date Time	Received On	Source AE
0	Anonymized	KP	DX	CIURNA	20160428 095315.000		

1 to 1 of 1 Previous **1** Next

- **Click** once on the study with the left mouse button. MedDream Viewer opens the study in a new browser tab:



6

Now you can try and see how powerful and useful this tool is.

TROUBLESHOOTING



You must restart the MedDream service each time after changes to the application.properties file or if something went wrong. You can restart the service by running in cmd line: `services.msc` -> then selecting MedDream service and clicking Restart on the left.



If you can't open the studies, clearing your browser's cache may help. Open a browser and press **CTRL+SHIFT+DEL**. Then select which old data you want to delete and click **Clear** data.



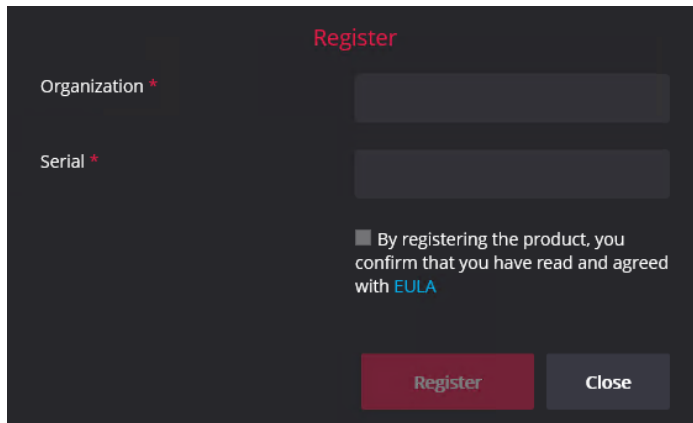
MedDream DICOM Viewer logs are stored in the **C:\MDPACK\MedDream\meddream.main.log**. The standard logging level in the application.properties file is set to INFO. If the log contains too little information, you can change the logging level to **DEBUG** by changing the value of the logging.level.com.softneta parameter.

LICENSE

MedDream DICOM Viewer licensed under the Commercial License. Please contact info@softneta.com to get TRIAL or Commercial license. If you have a License Serial number, follow these instructions:

1

Press **Register** button. The system opens a license registration window:



2

Enter the name of the organization and the license **Serial** number you received.

3

Click on the link **EULA** and read Software License Agreement. After reading, close the window by clicking the **<Close>** button.

4

Check the box to confirm that you accept license agreement.

5

Press **Register** button. The license will be successfully registered.

NOTE: If you have any questions about MedDream licenses and prices, please contact our SALES team by e-mail info@softneta.com or by phone +370 670 15991.

HELP AND RESOURCES



Detailed MedDream installation and configuration instructions are provided in the install manual. You can download it from here: <https://www.softneta.com/files/meddreamviewer/doc/MedDream-DICOM-Viewer-Install-Manual.pdf>



We are constantly improving this product. Get the most out of your MedDream Viewer with updated features and performance.



Download the User manual from <https://www.softneta.com/files/meddreamviewer/doc/MedDream-DICOM-Viewer-User-Manual.pdf> and get more information about this device.



Read short instructions and watch tutorial videos here: <https://www.softneta.com/documentation/user-guide/user-introduction/>



Our great SUPPORT team is always ready to help you. If you have any questions, please write an email to support@softneta.com or call +370 645 06960.