

MedDream Viewport installation with Orthanc

Important: please note that instruction below is for Linux Docker.

1. Install MedDream, Orthanc and Nginx:

1.1 Create application.properties file and put it in /home/meddream/application.properties with the following information

```
server.port=8080
logging.file.name=mdjavacore
logging.level.com.softneta=ERROR

spring.profiles.include=auth-inmemory,auth-his
authentication.inmemory.users[0].userName=demo
authentication.inmemory.users[0].password=demo
authorization.users[0].userName=demo
authorization.users[0].role=SEARCH,EXPORT_ISO,EXPORT_ARCH,FORWARD,REPORT_VIEW,REPORT_UPLOAD,PATIENT_HISTORY,UPLOAD_DICOM_LIBRARY,3D_RENDERING,ADMIN,DOCUMENT_VIEW,
FREE_DRAW_VIEW,FREE_DRAW_EDIT,BOUNDING_BOX_VIEW,BOUNDING_BOX_EDIT,SMART_DRAW_VIEW,SMART_DRAW_EDIT
authentication.his.valid-his-params=study
authorization.defaultHisPermissions=EXPORT_ISO,EXPORT_ARCH,FORWARD,REPORT_VIEW,REPORT_UPLOAD,PATIENT_HISTORY,UPLOAD_DICOM_LIBRARY,3D_RENDERING,DOCUMENT_VIEW,
FREE_DRAW_VIEW,FREE_DRAW_EDIT,BOUNDING_BOX_VIEW,BOUNDING_BOX_EDIT,SMART_DRAW_VIEW,SMART_DRAW_EDIT
authorization.defaultLoginPermissions=SEARCH,EXPORT_ISO,EXPORT_ARCH,FORWARD,REPORT_VIEW,REPORT_UPLOAD,PATIENT_HISTORY,UPLOAD_DICOM_LIBRARY,3D_RENDERING,DOCUMENT_VIEW,
FREE_DRAW_VIEW,FREE_DRAW_EDIT,BOUNDING_BOX_VIEW,BOUNDING_BOX_EDIT,SMART_DRAW_VIEW,SMART_DRAW_EDIT

com.softneta.meddream.pacs.configurations[0].type=Orthanc
com.softneta.meddream.pacs.configurations[0].id=Orthanc
com.softneta.meddream.pacs.configurations[0].baseUrl=http://orthanc:8042
com.softneta.meddream.pacs.configurations[0].username=orthanc
com.softneta.meddream.pacs.configurations[0].password=orthanc
```

1.2 Download integration example from https://meddream.com/files/integrations/meddream_viewport_api/vp-integration-example-clients850.zip and unzip.

1.3 Open Terminal in location where unzipped files are located for example: /home/meddream/vp-integration-example-clients850/

You will need to run docker command in this terminal window.

1.4 Please ask from integrations@meddream.com for npm registry NPM_TOKEN which need to be used in Step 1.5

1.5 Install MedDream, Orthanc and Nginx using the following docker commands:

Important: Run this command from location in Step 1.3

Important: Change NPM_TOKEN=XXXXXXXXXX with Token which you received in Step 1.4

```
docker network create orthanc;

docker run -v "$PWD":/usr/src/app -w /usr/src/app -it --rm -e NPM_TOKEN=XXXXXXXXXX node:18-alpine sh -c 'npm i && npm run build'

docker run --rm --entrypoint=cat jodogne/orthanc-python /etc/orthanc/orthanc.json > ./orthanc.json

curl -o meddream.py www.softneta.com/files/meddreampacs/lite/meddream.py

sed -i '/orthanc\plugins\"/{n;N;d}' orthanc.json && sed -i '/orthanc\plugins\"/a ],\n"PythonScript" : "/etc/orthanc/meddream.py",' orthanc.json

docker run --restart=always --network=orthanc --name orthanc -itd -p 4242:4242 -p 8042:8042 -v ${PWD}/meddream.py:/etc/orthanc/meddream.py -v
${PWD}/orthanc.json:/etc/orthanc/orthanc.json -v ${PWD}/orthanc-db:/var/lib/orthanc/db/ jodogne/orthanc-python

docker run --restart=always --network=orthanc --name meddream -itd -p 8080:8080 -v /home/meddream/application.properties:/opt/meddream/application.properties
meddream/dicom-viewer:8.5.0

docker run --restart=always --network=orthanc --name his -itd -p 80:80 -v "$PWD"/build:/usr/share/nginx/html nginx

docker run --rm --network=orthanc meddream/dicom-studies:latest storeescu -cSENDTOPACS@orthanc:4242 /opt/DICOM

docker exec -i his sh -c "sed -i '2 i location /his {proxy_pass http://meddream:8080/his;}' /etc/nginx/conf.d/default.conf && sed -i '3 i location /studies {proxy_pass
http://meddream:8080/studies;}' /etc/nginx/conf.d/default.conf && nginx -s reload"
```

1.6 Try if URL integration is working using the following URL command:

<http://localhost:8080/?study=1.2.826.0.1.3680043.8.1055.1.20161012115812848.450575715.8637545>
<http://localhost:8080/?study=1.2.826.0.1.3680043.8.1055.1.20200514151934839.648013404.6215014>
<http://localhost:8080/?study=1.2.826.0.1.3680043.8.1055.1.20200514152440924.84843799.73760067>
<http://localhost:8080/?study=1.2.840.113619.2.55.3.4271045733.996.1449464144.595>

1.7 Open ViewportAPI example in browser: <http://localhost:80/>

More information on how to use the package can be found in the documentation file. `README.min.md`.