

## MedDream DICOM Viewer Communication API example for STUDY and TOKEN Integrations

### 1. Install MedDream if it is not installed.

**1.1 Download and install** MedDream from <https://www.softneta.com/products/meddream-dicom-viewer/> or Docker hub: <https://hub.docker.com/u/meddream>

For more information how to install MedDream please check installation manual:

<https://www.softneta.com/files/meddreamviewer/doc/MedDream-DICOM-Viewer-Install-Manual.pdf>

**1.2. Modify** application.properties file and add the following information:

**NOTE:** This configuration example is for Study integration. Token integration configuration explained in step 4.

**NOTE:** This configuration example is for Orthanc PACS, you can use other PACS as well.

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

authentication.his.valid-his-params=study
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
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
authorization.defaultLoginPermissions=SEARCH,EXPORT_ISO,EXPORT_ARCH,FORWARD,REPORT_VIEW,REPORT_UPLOAD,PATIENT_HISTORY,UPLOAD_DICOM_LIBRARY,3D_RENDERING,DOCUMENT_VIEW

com.softneta.meddream.loginEnabled=true
features.search=true

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

#Whitelist who can use PostMessages
security.postMessageWhitelist=*
```

**1.3 Download, unzip and upload** studies examples to your PACS (for example Orthanc) or use your own studies: [https://www.softneta.com/files/tmp/demo\\_post/StudiesExamples.zip](https://www.softneta.com/files/tmp/demo_post/StudiesExamples.zip)

**1.4 If you downloaded studies in 1.3 step** and uploaded to your PACS check if studies opening in MedDream viewer by the following URLs:

<http://localhost:8080/?study=1.2.840.113619.2.55.3.4271045733.996.1449464144.595>

<http://localhost:8080/?study=1.2.826.0.1.3680043.8.1055.1.20161012115812848.450575715.8637545>

<http://localhost:8080/?study=1.2.826.0.1.3680043.8.1055.1.20200514152440924.84843799.73760067>

<http://localhost:8080/?study=1.2.826.0.1.3680043.8.1055.1.20200514151934839.648013404.6215014>

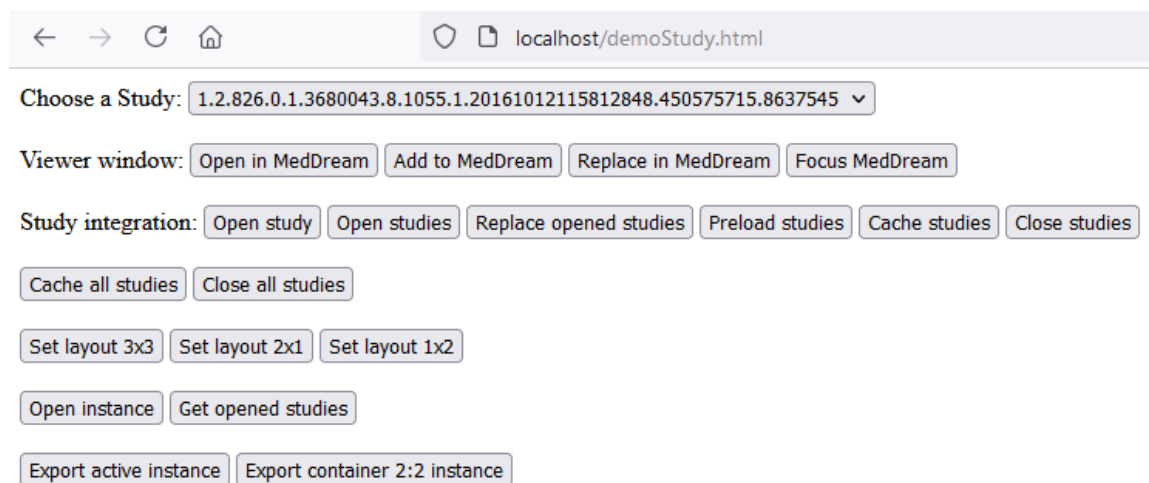
## 2. Communication API example for STUDY integration

**2.1 Download** Demo files [https://www.softneta.com/files/tmp/demo\\_post/Demo\\_POST.zip](https://www.softneta.com/files/tmp/demo_post/Demo_POST.zip) and unzip it.

**2.2 Copy** demoStudy.html and js\index.js files to your MedDream installation folder, for example C:\MDPACS\meddream\md5.

**2.3 Access demoStudy.html in browser** <http://localhost:8080/demoStudy.html> and try to open any study by clicking “Open in MedDream”, this will open a new MedDream viewer tab.

**2.4 You can test** various actions using Study integration:



**2.5** If MedDream is used in Docker environment it is possible to use Study integration example in dockers. More information can be found here: <https://hub.docker.com/r/meddream/dicom-viewer-integration>

## 3. Communication API example for TOKEN integration

**3.1 Install token-service** by going to MedDream installation location, rename token-service.NET4.exe to token-service.exe, open CMD and run command: *token-service.exe install*

For more information how to install token-service please check installation manual:

<https://www.softneta.com/files/meddreamviewer/doc/MedDream-DICOM-Viewer-Install-Manual.pdf>

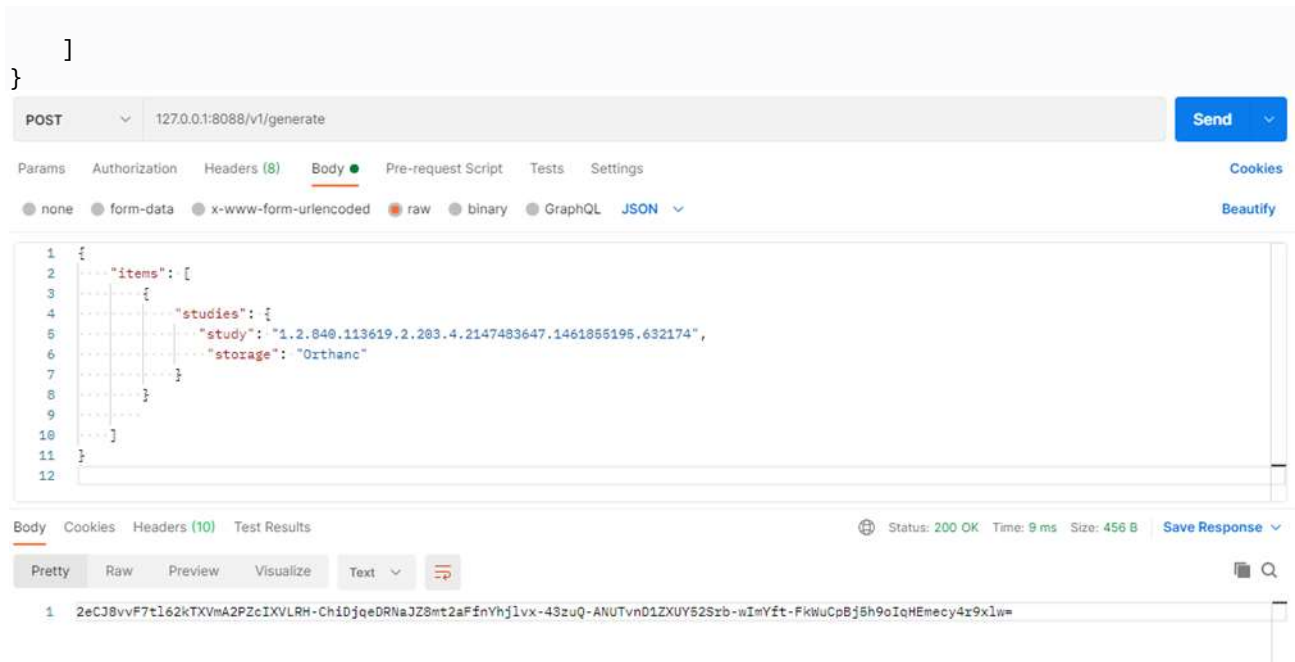
**3.2 Copy** demoToken.html and js\index.js files to your MedDream installation folder, for example C:\MDPACS\meddream\md5

**3.3 Edit MedDream application.properties** file by commenting study integration and adding token integration. Save and restart MedDream service.

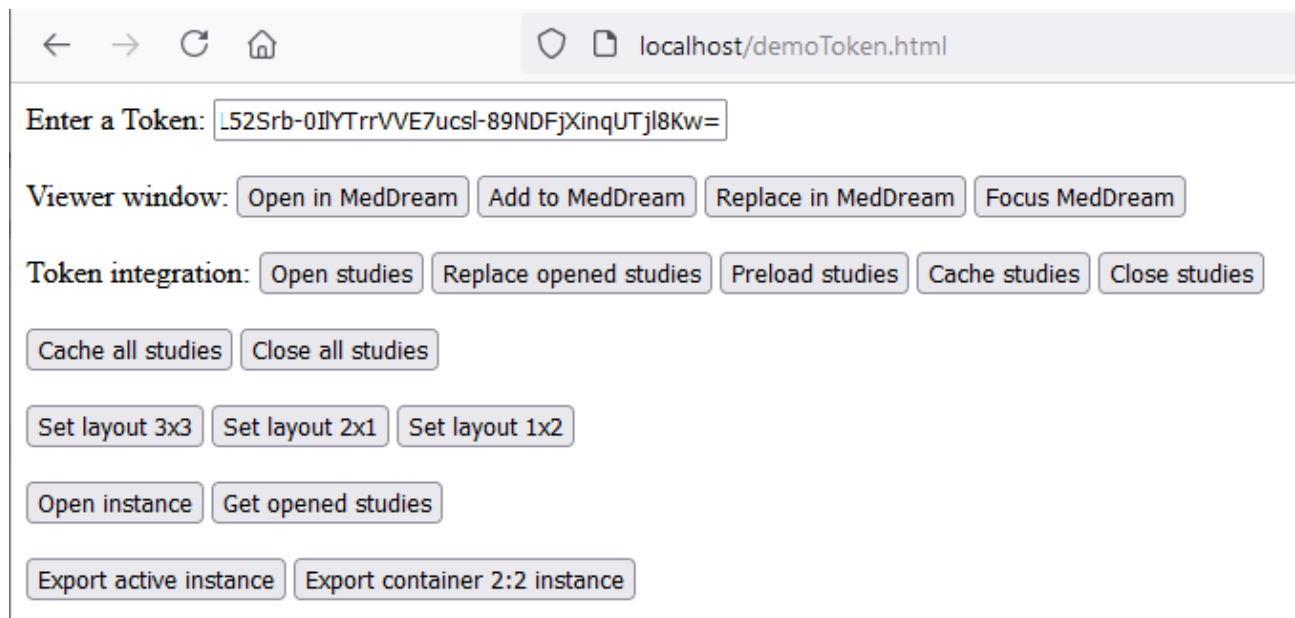
```
#authentication.his.valid-his-params=study  
authentication.his.token-service-address=http://127.0.0.1:8088/v1/validate
```

## 3.4 Generate a token for any existing study using Postman

```
{  
  "items": [  
    {  
      "studies": {  
        "study": "1.2.840.113619.2.203.4.2147483647.1461855195.632174",  
        "storage": "Orthanc"  
      }  
    }  
  ]  
}
```



**3.5 Copy generated token** and paste in to <http://localhost/demoToken.html> then click button **“Open in MedDream”**, study will open in new tab. You can test various actions using Token integration:



**3.6** If MedDream is used in Docker environment it is possible to use Token integration example in dockers. More information can be found here: <https://hub.docker.com/r/meddream/dicom-viewer-integration>