

Inobitec DICOM Viewer

1. Launch from the Command Line

```
viewer.exe [ --help ] | [ --studyfolder <path>
[ --open-series-images | --open-series-mpr | --open-series-volume |
--openseries-endoscopy [ --series-uid <uid> | --series-index
<index>]]] | [ --pacs-aetitle <aetitle> [ --patient-id <patientID>]
[ --study-uid <studyUID>] [ --series-index <seriesIndex> |
--series-uid <seriesUID>] [ --open-series-images ] ] | [ --aet <aet>]
| [ --import-settings <path> [ --use-imported-listener-aetitle |
--aet <aet>] [ --update-scuaetitle ] ] | [ --export-settings <path>]
```

--study-folder <path> - path to the folder with dicom data. If there are no other parameters then the list of studies on the specified folder will be displayed.

--open-series-images - display the first series in the flat image view mode;

--open-series-mpr - display the first series in the multiplanar reconstruction mode;

--open-series-volume – display the first series in the volume reconstruction mode;

--open-series-endoscopy – display the first series in the virtual endoscopy mode;

--series-uid <seriesUID> – display the series with the specified *seriesUID*;

--series-index <seriesIndex> - display the series with the specified *seriesIndex* (beginning from 0).

--open-series-images, --open-series-mpr, --open-series-volume and

--open-series-endoscopy keys must be used with the **--study-folder** key. If **--series-uid** or **--series-index** keys are not used then a first series will be displayed.

--series-uid and **--series-index** keys must be used with the **--open-seriesimages, --open-series-mpr, --open-series-volume or --open-series-endoscopy** keys.

--pacs-aetitle <aetitle>- open study list from PACSServer which AETitle matches the specified aetitle. The following options can be used with whis option in different combinations:

--patient-id <patientID>: show the study with the specified patientID. Parameter has higher priority than **--study-uid**

--study-uid <studyUID>: show the series with the specified studyUID

--series-uid <seriesUID>: select the series with the specified seriesUID. If several studies are found, the first one in the list is used

--series-index <seriesIndex>: select the series with the specified seriesIndex. If several studies are found, the first one in the list is used

--open-series-images: display the selected series in the flat image view window. If series is not selected, the first one of the first study is used

Examples of using commands (path to executable file must be contained in the *PATH* variable or the command must be executed in the directory with the executable file):

1) display the 3th series of the specified study in the flat image view mode (file *startup_2d.bat* in the *demo* filder):

```
viewer.exe --study-folder D:\DICOM\Examples\CT\MANIX
--open-series-images --series-index 2
```

2) display the series with the specified seriesUID in the volume reconstruction mode (file *startup_3d.bat* in the *demo* folder):

```
viewer.exe --study-folder D:\DICOM\Examples\CT\MANIX
--open-series-volume --series-uid
```

```
1.2.840.113704.1.111.5600.1107859570.17
```

2. HTTP RPC service

The Inobitec DICOM Viewer provides an HTTP RPC Service that allows you to execute commands. Now two commands are supported:

- a) *downloadAndOpenStudy*;
- b) *DisplayStudy*.

a) *downloadAndOpenStudy* command allows you to download the study from the PACS Server to the Local Storage and then open it. When this command is received, the Viewer searches the required study in the Local Storage. If the study is in the Local Storage, then the Viewer opens its first series in flat images view mode. If the required study is not found in the Local Storage, the Viewer will send a download request to the PACS Server and after the start of the downloading files will open study in the flat images view mode.

To execute the *downloadAndOpenStudy* command:

- 1) Enable DICOM and HIS/HTTP Services in the Viewer (*Network* main menu → *Services* item).
- 2) Send HTTP RPC request to open study by sending POST request containing xml file in the special format (e.g. *downloadAndOpenStudy.xml* in the *demo* folder).

Specify the following parameters in the *downloadAndOpenStudy.xml* file:

- **PatientID** (optional) - ID of the patient whose study should be opened;
- **StudyInstanceUID** - UID of the study to be opened;
- **AET** - AETitle of the PACS Server;
- **IP** - network address of the PACS Server;
- **port** - DICOM port of the PACS Server;
- **CommandType** (optional) - method to download images from the PACS Server to the Viewer. The values *C-GET* (by default) and *C-MOVE* can be used. If you use the *C-MOVE* method then the PACS Server must be configured appropriately.

Also you can use the test page (*testpage.html* in the *demo* folder):

- 1) Enable DICOM and HIS/HTTP Services in the Viewer (*Network* main menu → *Services* item).
- 2) Open the *testpage.html* file.
- 3) Fill in the following fields:
 - **AET** - AETitle of the PACS Server;
 - **IP** - network address of the PACS Server;
 - **Port** - DICOM port of the PACS Server;
 - **StudyUID** - UID of the study to be opened;
 - **Destination IP** - network address of the Viewer;
 - **Destination port** - HTTP port of the Viewer.
- 4) Press the **Send command** button.

b) *DisplayStudy* command allows you to open study from the Local Storage. When this command is received, the Viewer searches the required study in the Local Storage. If the study is in the Local Storage, then the Viewer opens its first series in the flat images view mode. At the moment to obtain this command the study should already be stored in the Local Storage.

To execute *DisplayStudy* command:

- 1) Enable DICOM and HIS/HTTP Services in the Viewer (*Network* main menu → *Services* item).
 - 2) Send HTTP RPC request to open study by sending POST request containing xml file in the special format (e.g. *displayStudy.xml* in the *demo* folder).
- Specify the following parameters in the *displayStudy.xml* file:

- **PatientID** (optional) - ID of the patient whose study should be opened;
- **StudyInstanceUID** - UID of the study to be opened;

Also you can use the *display.bat* test script from the *demo* folder:

1) Enable DICOM and HIS/HTTP Services in the Viewer (*Network* main menu → *Services* item).

2) Specify the following parameters in *displayStudy.xml* file:

- **PatientID** (optional) - ID of the patient whose study should be opened;
- **StudyInstanceUID** - UID of the study to be opened;

3) Execute the script in the command line with the following parameters:

```
display.bat [ip] [port]
```

where:

- **ip** - network address of the Viewer;
- **port** - HTTP port of the Viewer.