**DSort**

DICOM File Sorter

Jim Irrer 8 July 2025

DSort sorts DICOM files into the folder hierarchy:

Patient 🡪

Study 🡪

Series 🡪

DICOM file

This tool is useful for dealing with situations where a large number of DICOM files have been dumped but are not organized.

It does not change the content but does rename the files to help users understand what is in them.

**Installation**

To install the program, put the two files into a folder on your machine:

* dsort.cmd
* ScalaUtil\_2.12-0.0.19-jar-with-dependencies.jar

**Execution**

This program requires Java to be installed.

Using Windows File Explorer, drag and drop a folder containing DICOM files onto the dsort.cmd file.

A command window will popup and run the program:

A screenshot of a computer

AI-generated content may be incorrect.

Each dot represents one DICOM file. The number of patients, studies, series, and files is for the user’s information.

It will create a new folder named by appending ‘output’ to the original:

MyDICOM 🡪 MyDICOMoutput

After running, if the original folder is empty, it will be deleted. If it finds non-DICOM files, they will be left in place.

**Naming**

The new folder hierarchy will name files and folders:

**Patient**: Patient ID, unless there is just one patient, in which case this level is skipped.

**Study**: The study date, prefixed with “Study\_”, as in

*Study\_2025-07-02*

**Series**: Series date and time, modality, number of files, frame of reference, and study description, as in:

*2025-07-02T06-35-58\_RTIMAGE4\_FOR3\_6x\_MV\_\_600\_MU\_min\_\_ModeId\_Dosi*

Which has a series date of 2 July 2025, modality of RTIMAGE, contains 4 files, uses Frame Of Reference (FOR) of 3, and has a series description of *6x\_MV\_\_600\_MU\_min\_\_ModeId\_Dosi* (truncated)

Note that native FOR (Frame Of Reference) UIDs are over 50 characters and not user friendly, so in the series folder name they are replaced with small integers. This allows the users to more easily find image series, registration files, plans, and dose files that reference the same FOR.

**File**: Named with the modality, an incrementing number, and for RTIMAGE files the collimator and gantry angles.

**Other Notes**

* Non-DICOM files are ignored.
* If there is more than one DICOM file with the same UID, then only one of them will be moved. This essentially removes duplicate files.
* It will recursively process any folders contained in the top level folder.