

WFU MoJoe v1.0

**The Functional MRI Laboratory
Wake Forest University School of Medicine**



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WFU MoJoe 1.0 User Manual

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1. Software Description, Installation and Setup

1.1 Description

MoJoe is a suite of programs for automated FTP, automated archival to CD, and automated background reconstruction and processing of functional MRI data for use with GE LX MRI scanners. The software was developed in the Functional MRI Laboratory at the Wake Forest University School of Medicine. MoJoe provides a widget interface to the EPIFLEX psd, as well as command line operation. Questions can be referred to maldjian@wfubmc.edu.

1.2 Downloading the Software

MoJoe can be obtained from www.rad.wfubmc.edu/fmri.

1.3 Program Installation

Untar the tar file into the sdc home directory of the MRI scanner:

```
tar -xvf MoJoe.tar
```

1.4 Compatibility

MoJoe is designed to run on GE LX MRI scanners.

Software Use

MoJoe can be called from the command line at the scanner console with:

```
mojoe
```

MoJoe will provide a list of examinations in the scanner database, and selectors for CD archival and FTP remote directory. MoJoe will also automatically initiate when using the EPIFLEX psd.

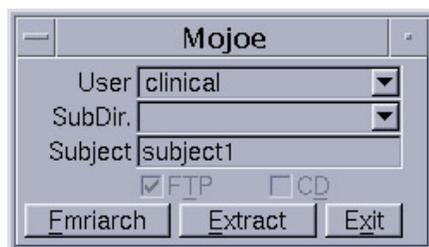


Figure 1. MoJoe. MoJoe startup widget provides pull-down menu for FTP directory on RAID (user), any subdirectory to be used or created (SubDir), and subject label to be used for labeling fMRI Raw data (Subject). The Fmriarch button initiates FMRI archival monitoring. The Extract button is used for archiving and transferring structural images from scanner database. FTP burning and CD archival can be turned on or off.

FMRI Acquisitions

MoJoe has been interfaced to the EPIFLEX psd. When a raw data acquisition is initiated with EPIFLEX, the MoJoe widget will pop open. The CD burning and ftp options can be selected, as well as the directory for ftp to the offline RAID. The user will need to enter a name for labeling the data. MoJoe automatically monitors for any new raw data files. When a raw data file is detected, it is renamed with the subject label, given a time-date stamp, and ftp'd to the offline RAID. The file is then burned to CD at the scanner console while scanning continues. When the burn is complete, the raw data file is removed from the scanner hard drive and the program continues to monitor for additional raw data acquisitions.

Anatomic Image Archival

When the functional imaging has been completed, the structural images can be archived from MoJoe by clicking on the Extract button. Pull down menus and selectors will appear for selecting the anatomic series to be transferred. Once selected, the anatomic images are extracted from the scanner database, assembled into a tar file, ftp'd to the offline RAID, and then burned to the same CD used for storing the functional scans.

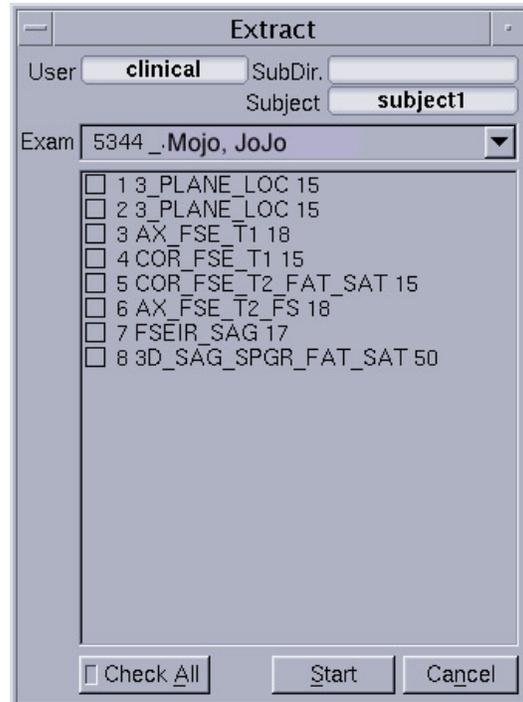


Figure 2. MoJoe Extract widget. Extract widget provides pull-down menu listing exam number and subject names for data in scanner database (Exam). Subject label (subject 1) is used to label data during transfer and archival. Selected series to be transferred can be checked off in the check boxes within the list of series.