

## Scanning Manual

Scanning has been automated by a shell script called `run_scan.sh`, which is a fork of [nirda/UnixScanningManager](#). The script may be used with or without a configuration file, at the user's discretion. It is simplest to run the script without a configuration file, as the necessary parameters detailed below will be requested automatically. If these parameters do not change across runs, a configuration file containing set parameters may be modified and passed to the script. The required parameters are listed below.

### Parameters

- Directory
  - Where the script will save the images. Must exist when specified.
- Parent
  - Where the script itself resides.
- Wait Time
  - The period for incubation before scanning starts, set in minutes.
- Interval
  - The period between two consecutive scans, set in minutes.
- Number of Scans
  - The total number of desired scans.
- File Prefix
  - Prepending to image filenames, as such: `prefix_scanner_YYYYMMDD_HH:MM.tif`
- Scanners
  - Specification of scanners to be used. May be set to 'ALL' to use all scanners or commented out by adding a '#' at the beginning of the line for manual specification when the script is run.

### Usage

- Turn on the PC and the scanners that will be used
- Place a white petri plate frame and sample petri plates on each scanner to be used
- Open the terminal using CTRL+ALT+T
- Navigate to the scanning software directory by typing and executing:  

```
cd ~/SANE
```
- Without a configuration file, simply type and execute:  

```
sudo ./run_scan.sh
```
- Using a configuration file, type and execute the code below, where `scan.cfg` is the configuration file, an example of which may be found [here](#).  

```
sudo ./run_scan.sh scan.cfg
```