

Freedom Fone Sweepers Documentation

The Freedom Fone sweeper functions are divided into three major components:

1. GUI sweeper
 - Front-End GUI
 - Back-End GUI
2. Core sweeper

GUI sweeper

The GUI sweeper is responsible for sweeping sensitive information visible from the graphical interface. Such information includes callers phone numbers, names, email addresses, Skype id's and organizational names.

The GUI sweeper consists of two parts, a Front-End GUI Sweeper and a Back-End GUI Sweeper. Both sweepers have the same sweeping effect on sensitive data, the difference lies in how and to whom they are accessible.

The Front-End GUI Sweeper is only accessible for Admin system users through the main menu (User Management → Front-end Sweeper).

The Back-End GUI Sweeper is accessible to anyone with root access to the machine, and is automatically run by means of a cronjob. The Back-End GUI Sweeper is not enabled by default (cron/crontab).

Configuration

Both GUI sweepers can be configured in the file `config/gui_config_sweeper.php`

The following parameters can be configured:

1. Enable/disable GUI sweepers
Values: 0 or 1
Comment: Enable GUI sweepers by setting value to 1.
Disable GUI sweepers by setting value to 0.
2. Sweeper mode
Vales: low or high
Comment: "low" mode will only sweep phone numbers, while "high" mode will also sweep callers names, surnames, email, Skype and organizational names.
3. Fallback data
The fallback values (after sweeping) of callers numbers, names etc. can be configured under "SWEEP_SETTINGS". The default value for callers name is for example "John Doe".

Core Sweeper

The Core Sweeper handles the following operations (none of them is enabled by default as a cronjob):

1. Sweeps audio meta data of MP3 and WAV files

Documentation: `sweeper/INSTALL.sweeper.metadata`

2. Extra log information

The script `sweeper/sweeper.sh` allows a user to re-configure the system to disable syslog, mail, webserver and telephony logs. The script replaces the configuration file of `iwatch`, `apache2`, `freeswitch` to disable logging.

Documentation/Script: `sweeper/sweeper.sh`

3. Delete all logs

All logs are stored under `/opt/freedomfone/log`. The script `sweeper/sweeper.sh` will prompt to delete all logs. Alternatively a cron job can be created to delete the logs periodically.

The function `delete_logs()` in the script shows how to stop and start the services.

More on cleaning meta data from audio files

This information is extracted from the file `sweeper/INSTALL.sweeper.metadata`

Note that if you run the script `sweeper/sweeper.sh` you will be given the option to clean the meta data from your audio files.

MP3

mp3 files with ID3 meta tags can be deleted using `mp3info`.

The audio filter `/opt/freedomfome/sweeper/sweeper_audio_metadata.sh` takes as input an mp3 file and removes its ID3 tags info.

WAV

Standard wav files do not support any meta data but some WAV files can contain meta data taking advantage of Resource Interchange File Format (RIFF) INFO extended header.

A possible way to delete the meta data is to re-encode the file using a utility like `sox`.

The audio filter `/opt/freedomfome/sweeper/sweeper_audio_metadata.sh` takes as input a wav file and converts it to a standard file without meta header.

In both cases the original file is overwritten.

How do I run the sweeper for audio meta data?

It is up to you to decide how you want to customize this feature and the level of personal identifiable

information that you expect to be in your files.

You can run the sweeper as part of a cronjob, a daily task or integrate it in the audio_bot daemon.

Cleaning metadata for WAV files is as simple as running the following command:

```
# find /opt/freedomfone/freeswitch/scripts/ . -type f -name "*.wav" -exec /opt/freedomfone/sweeper/sweeper_audio_metadata.sh {} \;
```

Notice that we are using **sox** for re-encoding so it can take sometime when you have thousands of files to sweep.

If you want to sweep MP3 files:

```
# find /opt/freedomfone/freeswitch/scripts/ . -type f -name "*.mp3" -exec /opt/freedomfone/sweeper/sweeper_audio_metadata.sh {} \;
```

or for both types of files

```
# find /opt/freedomfone/freeswitch/scripts/ . -type f \( -name '*.mp3' -o -name '*.wav' \) -exec /opt/freedomfone/sweeper/sweeper_audio_metadata.sh {} \;
```