

wmtile User Guide

Version 0.9.2

<https://pypi.org/project/wmtile>

Carlo Alessandro Verre

carlo.alessandro.verre@gmail.com

january 29, 2021

Contents

- [1. Before Usage](#)
 - [1.1. Introduction](#)
 - [1.2. Installation](#)
- [2. Usage](#)
 - [2.1. CLI Usage](#)
 - [2.2. Parameters](#)
 - [2.3. Mouse Usage](#)
 - [2.4. Keyboard Usage](#)
- [3. Functions](#)
 - [3.1. Minimize](#)
 - [3.2. Tiles](#)
 - [3.3. Portraits](#)
 - [3.4. Landscapes](#)
 - [3.5. Stack](#)
 - [3.6. Big](#)
 - [3.7. Close](#)
- [4. Appendices](#)
 - [4.1. Known Bugs](#)
 - [4.2. Acronyms](#)
 - [4.3. Credits](#)
 - [4.4. Changelog](#)

1. Before Usage

1.1. Introduction

`wmtile` is a small CLI utility written in Python 3, aimed to reshape in seven various ways all the windows in current workspace.

Using `wmctrl` and `xdotool`, `wmtile` is compatible with the EWMH/NetWM specification, so it can work with many Window Mangers as XFCE, Enlightenment, Icewm, Kwin or Sawfish.

Under XFCE `wmtile` can install automatically the panel launchers needed for mouse usage, and the keyboard shortcuts needed for keyboard usage.

1.2. Installation

`wmtile` requires also `wmctrl` and `xdotool`, for instance on a Debian-derived Linux type:

```
$ sudo apt-get -y install wmctrl xdotool
```

If you lack `pip3` command, you must install it, for instance on a Debian-derived Linux type:

```
$ sudo apt-get -y install python3-pip
```

Now you can install `wmtile` typing (without `sudo`):

```
$ pip3 install wmtile
```

2. Usage

2.1. CLI Usage

usage: wmtile [-h] [-H] [-V] [-i] [-k] [-m] [-t] [-p] [-l] [-s] [-b] [-c]

optional arguments (give always one and only one):

```
-h, --help            show this help message and exit
-H, --user-guide      open User Guide in PDF format and exit
-V, --version         show program's version number and exit
-i, --launchers       Install 7 panel launchers (XFCE only)
-k, --shortcuts       install 7 Keyboard shortcuts (XFCE only)
-m, --minimize        Minimize
-t, --tiles           reshape as Tiles
-p, --portraits       reshape as Portraits
-l, --landscapes      reshape as Landscapes
-s, --stack           reshape as a Stack
-b, --big             reshape as Big = maximize
-c, --close           gracefully Close
```

2.2. Parameters

wmtile behavior is tuned by eight parameters:

PARAMETER	DEFAULT
top_margin	32
bottom_margin	0
left_margin	0
right_margin	0
bottom_space	36
right_space	12
top_stack	20
left_stack	20

Any value is an unsigned integer, denoting a number of pixels.

`top_margin`, `bottom_margin`, `left_margin` and `right_margin` give the reserved space on the screen where wmtile cannot put the windows. Default for `top_margin` is 32 because we imagine to have a single horizontal panel 32 pixels high at the top of the screen.

`bottom_space` and `right_space` is an additional reserved space below and to the right of each window. We need this to prevent window overlapping, because not all windows behave the same way.

`top_stack` and `left_stack` only affect the stack function (`wmtile -s`) and says howmany pixels any window goes down and right compared to the previous one. In particular `top_stack` must be sufficient to read the titles of all windows.

Default values can be altered by the content of the file `'~/ .config/wmtile/parameters.cfg'` which, if exists, should contain "assignment" lines with syntax:

```
name '=' integer [ '#' comment ]
```

or "empty" lines with syntax:

```
[ '#' comment ]
```

for example:

```
# wmtile configuration parameters
left_stack = 10 # for me, 10 is more than enough
top_margin = 36 # horizontal top panel, 36 pixels high
```

2.3. Mouse Usage

You can use `wmtile` directly from terminal, but is more convenient to use it either by mouse or by keyboard, depending on your tastes. For mouse usage you should create by hand seven panel launchers for the `wmtile` seven functions (minimize, tiles, portraits, landscapes, stack, big and close), but under XFCE you can invoke the automatic `wmtile` installer for panel launchers:

```
$ wmtile -i
installing 7 wmtile panel launchers
launcher --> wmtile -m # Minimize
launcher --> wmtile -t # reshape as Tiles
launcher --> wmtile -p # reshape as Portraits
launcher --> wmtile -l # reshape as Landscapes
launcher --> wmtile -s # reshape as a Stack
launcher --> wmtile -b # reshape as Big = maximize
launcher --> wmtile -c # gracefully Close
```



which will create the seven panel launchers:

If you have one panel only, the seven launchers will be added immediately at and of your panel.

If otherwise you have more than one, you will be asked seven times (sorry...) which panel you want to add each launcher to. Panels are numbered as 0, 1...

Beware: if you issue '`wmtile -i`' a second time, you create other seven launchers in your panel, and you will have to delete them one by one.

2.4. Keyboard Usage

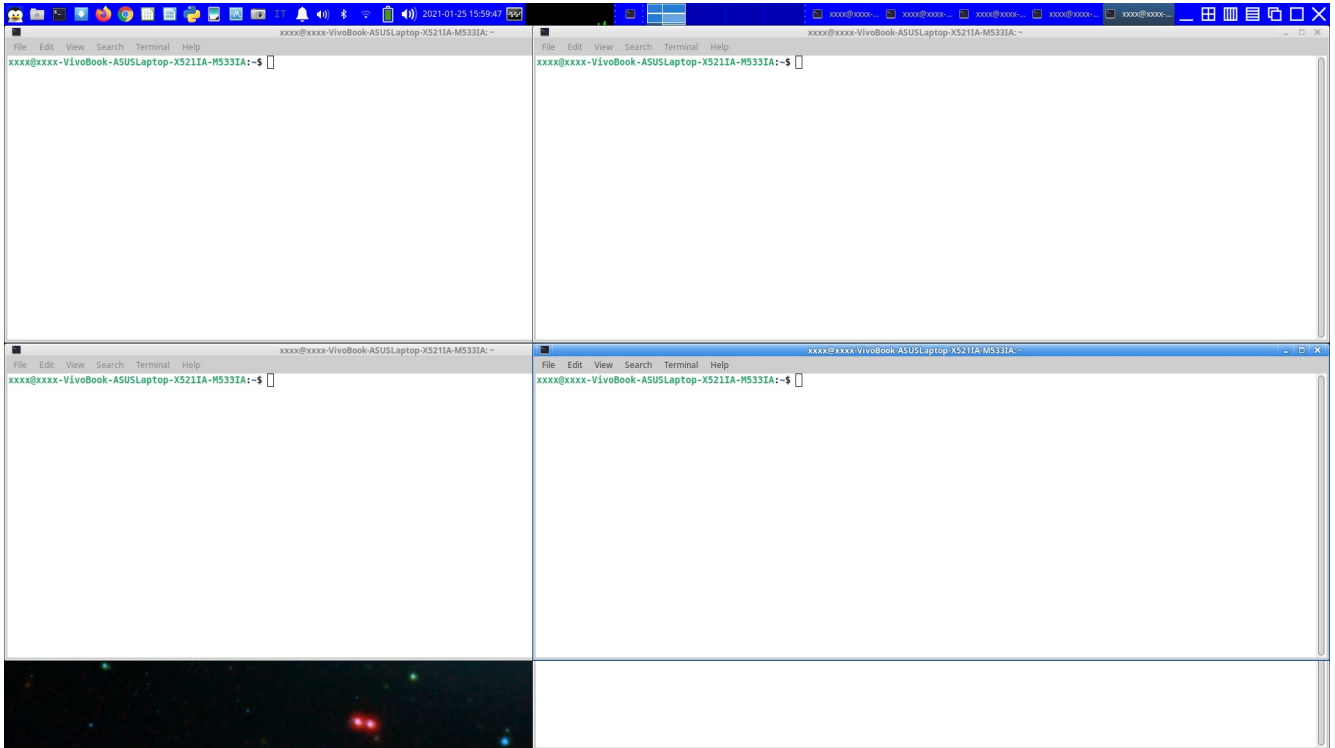
In order to use `wmtile` by keyboard, you should define by hand seven keyboard shortcuts for the `wmtile` seven functions (Minimize, Tiles, Portraits, Landscapes, Stack, Big and Close), but under XFCE you can invoke the automatic `wmtile` installer for keyboard shortcuts:

```
$ wmtile -k
installing 7 wmtile keyboard shortcuts
Alt+Shift+M --> wmtile -m # inimize
Alt+Shift+T --> wmtile -t # reshape as Tiles
Alt+Shift+P --> wmtile -p # reshape as Portraits
Alt+Shift+L --> wmtile -l # reshape as Landscapes
Alt+Shift+S --> wmtile -s # reshape as a Stack
Alt+Shift+B --> wmtile -b # reshape as Big = maximize
Alt+Shift+C --> wmtile -c # gracefully Close
please reboot in order to make wmtile keyboard shortcuts effective
```


If you issue '`wmtile -k`' a second time, don't worry, the new seven shortcuts overlap the previous ones, without duplication.

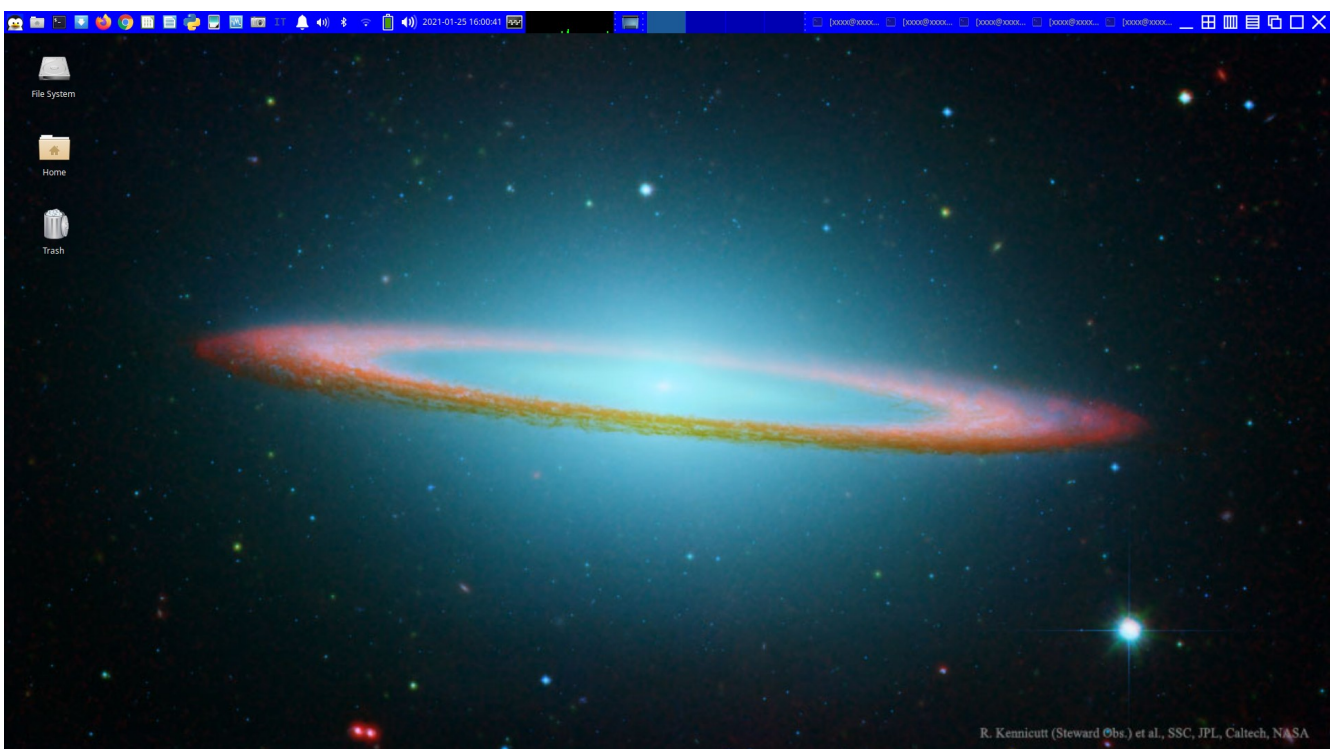
3. Functions

Now we'll illustrate the seven `wmtile` functions. If you have more than one workspace, functions operate on all windows in the current workspace only. Let's create, say, five terminal windows. They will all appear randomly overlapping.



3.1. Minimize

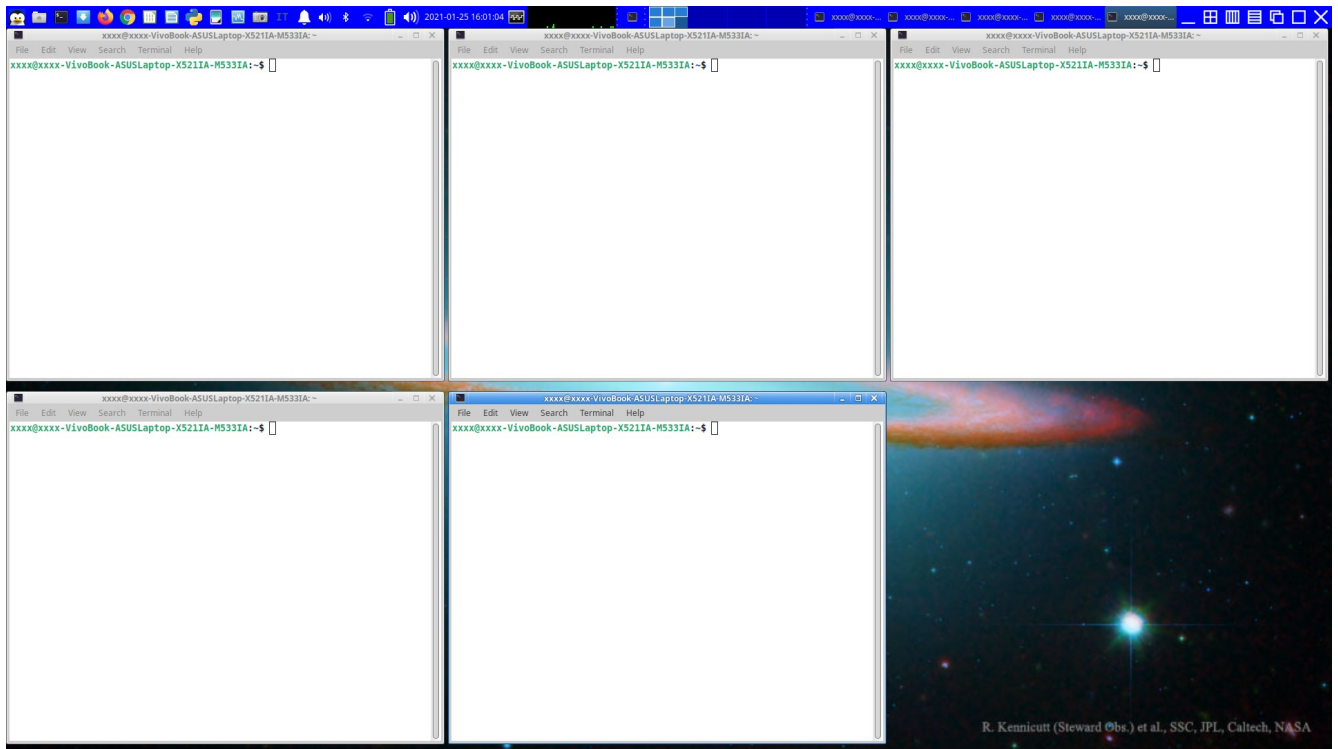
Left-clicking the Minimize panel launcher , or pressing `Alt+Shift+M`, all windows in current workspace are minimized and disappear.



3.2. Tiles



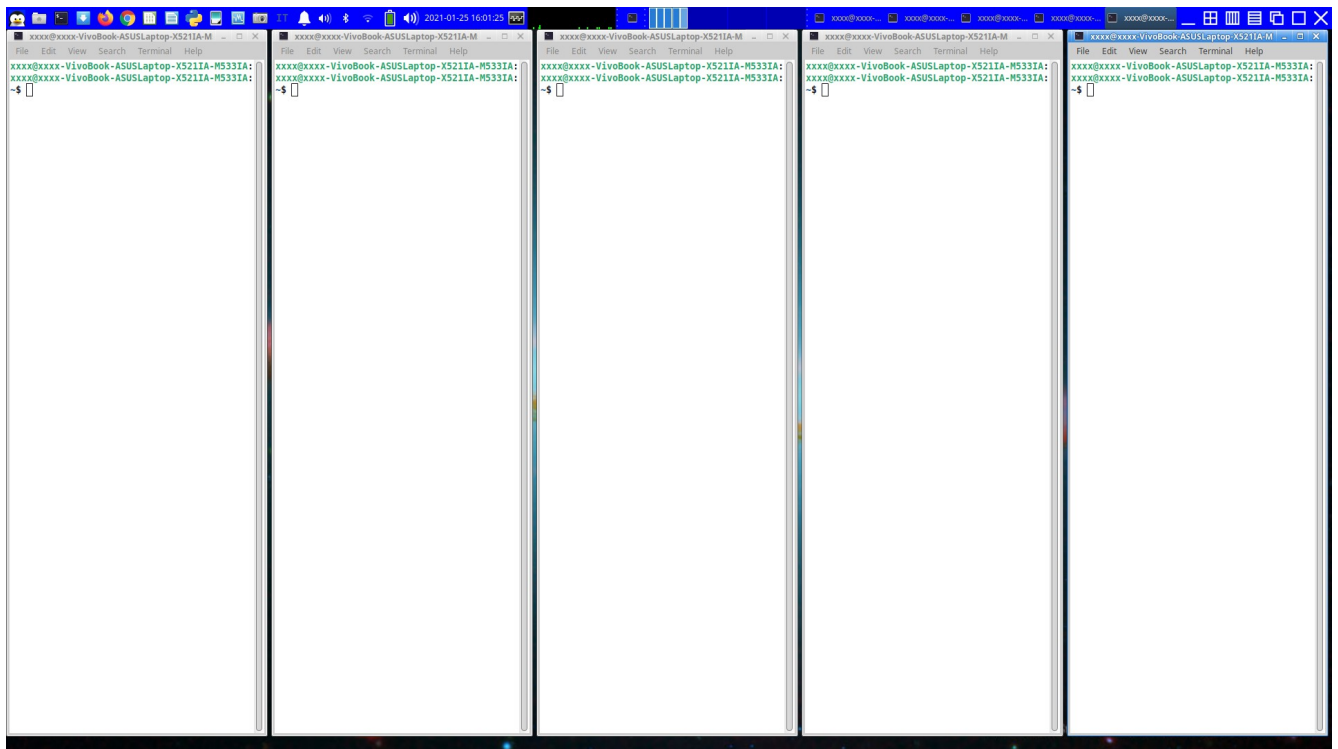
Left-clicking the Tiles panel launcher, or pressing Alt+Shift+T, all windows in current workspace are arranged in a grid, $n * n$ or $n * (n + 1)$.



3.3. Portraits



Left-clicking the Portraits panel launcher, or pressing Alt+Shift+P, all windows in current workspace are horizontally arranged in vertical portraits.



3.4. Landscapes




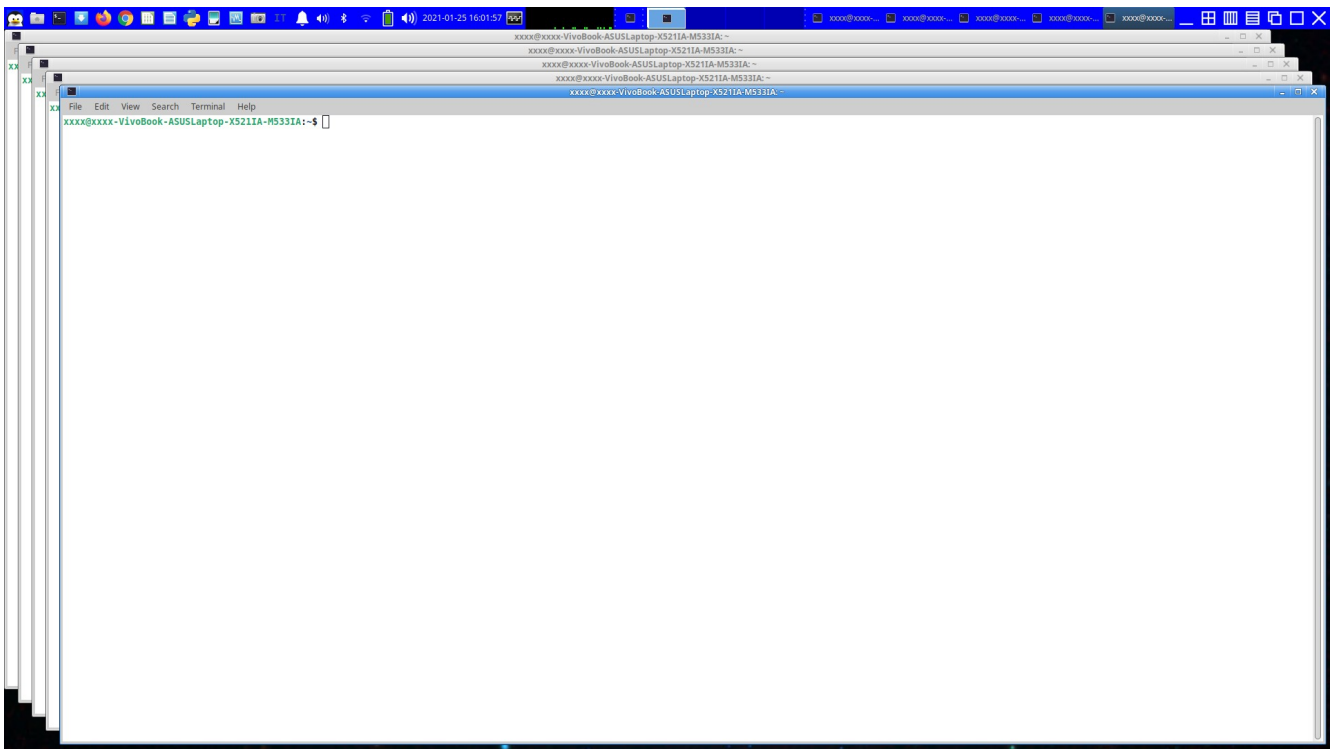
Left-clicking the Landscapes panel launcher , or pressing Alt+Shift+L, all windows in current workspace are vertically arranged in horizontal landscapes.



3.5. Stack



Left-clicking the Stack panel launcher , or pressing Alt+Shift+S, all windows in current workspace are reshaped in a stack.



3.6. Big



Left-clicking the Big panel launcher, or pressing Alt+Shift+B, all windows in current workspace are maximized, so you will see the most recent one only. Of course you can access the other windows by Alt-Tab or Alt-Shift-Tab.



3.7. Close



Left-clicking the Close panel launcher, or pressing Alt+Shift+C, all windows in current workspace are gracefully closed. Here "gracefully" means that if one of the windows to be closed belongs to an application processing an open file, then you will be asked whether to save the file before closing.



4. Appendices

4.1. Known Bugs

For some obscure reason, LibreOffice windows refuse to be reshaped by `wmtile`.

4.2. Acronyms

INITIALS	MEANING
CLI	Command Language Interface
DE	Desktop Environment
EWMH	Extended Window Manager Hints
GUI	Graphic User Interface
HTML	HyperText Markup Language
MD	MarkDown
PDF	Page Description Format
PyPI	Python Package Index
WM	Window Manager
XFCE	X Forms Common (or Cool) Environment

4.3. Credits

The `wmtile` project has been:

- developed in [Python](#) 3.8.6
- by [Idle](#) 3.8.6
- built and published on PyPI by [flit](#) 3.0.0 on [Linux Xubuntu](#) 20.10
- tested on [Linux Xubuntu](#) 20.10 and [GhostBSD-XFCE](#)

`wmtile` uses two CLI utilities in order to interact with WM:

- [xdotool](#) 1:3:20160805.1-4 for window minimization (which seems impossible by `wmctrl`)
- [wmctrl](#) 1.07-7build1 for any other function

The `wmtile` User Guide file you see by typing '`wmtile -H`' has been:

- written in MD format and exported in HTML format by [ReText](#) 7.1.0
- processed by [toc2md](#) 0.9.2 (see [toc2md](#) User Guide)
- translated from HTML into PDF format by [LibreOffice Writer](#) 7.0.3.1

Thanks to [APOD \(Astronomical Picture of the Day\)](#) for the [Sombrero Galaxy in Infrared](#) image used as desktop background.

4.4. Changelog

- Version **0.9.2** - 2021-01-29
 - Changed
 - Help and User Guide have been updated
- Version **0.9.1** - 2021-01-25
 - Changed
 - User Guide has been updated

- Version **0.0.1** - 2020-10-14
 - First version published on Pypi