

# **wmtile User Guide**

**Version 0.0.1**

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

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**october 15, 2020**

# 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. Appendices](#)
  - [3.1. Documentation](#)
  - [3.2. Acronyms](#)
  - [3.3. Credits](#)
  - [3.4. Changelog](#)

# 1. Before Usage

## 1.1. Introduction

wmtile is a small CLI utility written in Python 3, aimed to reshape in various manners 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

If you lack `pip` 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
```

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

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

## 2. Usage

### 2.1. CLI Usage

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

optional arguments:

```
-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, --panel-launchers
                    install 7 panel launchers (XFCE only)
-k, --keyboard-shortcuts
                    install 7 keyboard shortcuts (XFCE only)
-m, --minimize       Minimize all windows in current desktop
-t, --tiles          reshape as Tiles all windows in current desktop
-p, --portraits      reshape as Portraits all windows in current desktop
-l, --landscapes     reshape as Landscapes all windows in current desktop
-s, --stack          reshape as a Stack all windows in current desktop
-b, --big            reshape as Big (maximize) all windows in current
                    desktop
-c, --close          gracefully Close all windows in current desktop
```

Here "gracefully" means that if one of the windows to be closed belongs to an application that is dealing with an open file, then you will be asked whether to save the file before closing the application.

### 2.2. Parameters

wmtile behavior is tuned by eight parameters:

PARAMETER	DEFAULT VALUE
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 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:

```
left_stack = 10
top_margin = 36
```

## 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
```

which will create the seven launchers:



If you have one panel only, this will add seven launchers 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...
  Shift+Alt+M --> wmtile -m
  Shift+Alt+T --> wmtile -t
  Shift+Alt+P --> wmtile -p
  Shift+Alt+L --> wmtile -l
  Shift+Alt+S --> wmtile -s
  Shift+Alt+B --> wmtile -b
  Shift+Alt+C --> wmtile -c
...please reboot in order to make wmtile keyboard shortcuts effective
```

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

## 3. Appendices

### 3.1. Documentation

### 3.2. Acronyms

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

### 3.3. Credits

The wmtile project has been:

- developed in [Python](#) 3.8.2
- by [Idle](#) 3.8.2
- built and published on PyPI by [flit](#) 3.0.0
- on [Linux Xubuntu](#) 20.04 LTS

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 has been:

- written in MD format and exported in HTML format by [ReText](#) 7.1.0
- processed by [toc2md](#) 0.9.2
- translated from HTML into PDF format by [LibreOffice Writer](#) 6.4.3.2

### 3.4. Changelog

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