
tuulbachs

Dave Smith

May 30, 2020

CONTENTS:

1	tuulbash	3
2	tuulcli	5
2.1	cli_color.py	5
3	tuuldevops	7
3.1	pipeline_steps.py	7
3.2	tag_current_version.py	7
3.3	update_version.py	7
4	tuulgit	9
4.1	check_status.py	9
4.2	tag_commit.py	9
5	tuulpy	11
6	tuulver	13
6.1	version.py	13
7	tuulyaml	15
7.1	parse.py	15
7.2	update_simple_value.py	15
8	install	17
9	deploy	19
10	internal API	21
10.1	exceptions.py	21
11	Indices and tables	23
	Python Module Index	25
	Index	27

Low-level software tuuls, organized into drawers.

TUULBASH

kickpy - A bash script intended to kick a Python script from an environment that doesn't have an established Python environment yet. For example:

```
./kickpy.sh example.py
```


TUULCLI

Tuuls for command line interface (CLI).

2.1 cli_color.py

Define colors and font styles for use in CLI output

class `tuulcli.cli_color.CliColor`
Contain the list of colors and font styles

TUULDEVOPS

Automation tuuls for common tasks around software development

3.1 pipeline_steps.py

Provide routines for outputting automated pipeline steps consistently

`tuuldevops.pipeline_steps.major_step(title, description)`
Output title and description of a major step in the pipeline

3.2 tag_current_version.py

Git tag the commit on the current branch with the current version of this software

`tuuldevops.tag_current_version.tag_product_version(conf_filename)`
Git tag the commit on the current branch with the version of this software given in `conf_filename`

3.3 update_version.py

Update the version in the tuulbachs-formatted YAML version file

`tuuldevops.update_version.update_product_version(conf_filename, new_ver)`
Write a `new_ver` as the new value for the 'version' key in the `conf_filename`

TUULGIT

An opinionated set of Git tuuls.

4.1 check_status.py

Check the status of the local git working tree

```
tuulgit.check_status.has_staged_uncommitted()
    Return a boolean indicating whether the repository has staged, but uncommitted changes

tuulgit.check_status.has_unstaged_changes()
    Return a boolean indicating whether the working tree has unstaged changes

tuulgit.check_status.has_untracked_unignored_files()
    Return a boolean indicating whether the working tree has untracked, unignored files

tuulgit.check_status.is_clean_working_tree(check_if_working_tree=True)
    Return a boolean indicating whether the Git working tree is clean or not

tuulgit.check_status.is_working_tree()
    Check if this is a git working tree at all

    Raises TuulError – when the caller attempts to use this function outside of a git working tree

tuulgit.check_status.repo_toplevel_path()
    Return a string containing the path of the repo's top-level directory
```

4.2 tag_commit.py

Git tag the commit on the current branch, *only if* the working tree is clean

```
tuulgit.tag_commit.tag_current(tag)
    Git tag (annotated) the current commit from a clean working tree

    Raises TuulError – when the caller attempts to tag an unclean working tree or to use a tag that
    already exists on the repo

tuulgit.tag_commit.tag_current_signed(tag)
    Git tag (signed) the current commit from a clean working tree

    Raises TuulError – when the caller attempts to tag an unclean working tree or to use a tag that
    already exists on the repo

tuulgit.tag_commit.tag_delete_local(tag)
    Delete the named Git tag (local only). This function does not delete remote tags
```

Raises *TuulError* – if the tag delete fails

TUULPY

subpResult.py - Run a command from Python and return the result. Example:: `python subpResult.py`

TUULVER

Parsing tuuls for a tuulbachs-formatted version YAML input file.

6.1 version.py

Utility functions for managing a tuulbachs-formatted version YAML file

`tuulver.version.bump_build(filename)`
Bump the “build” portion of the version from the input YAML filename

`tuulver.version.bump_major(filename)`
Bump the major portion of the version from the input YAML filename

`tuulver.version.bump_minor(filename)`
Bump the minor portion of the version from the input YAML filename

`tuulver.version.bump_patch(filename)`
Bump the patch portion of the version from the input YAML filename

`tuulver.version.bump_pre(filename, prebase='pre')`
Bump the “pre” portion of the version from the input YAML filename

`tuulver.version.create_version_file(filename, product_name)`
Create an initial tuulbachs-formatted version YAML file

`tuulver.version.emit_product_name(filename)`
Return the product name value from the input YAML filename

`tuulver.version.emit_version(filename)`
Return the version value from the input YAML filename

TUULYAML

Low level tuuls for interacting with YAML files.

7.1 parse.py

Parse an input YAML file

```
tuulyaml.parse.parse_yaml (filename)  
    Given input path filename, parse YAML file.
```

7.2 update_simple_value.py

Update a simple top-level value in a YAML file

```
tuulyaml.update_simple_value.update_value (inout_path, existing_key, new_value)  
    Update existing_key to new_value in the existing inout_path YAML file.
```


INSTALL

Note that tuulbachs is not yet published at PyPi.

1. Set up and activate a Python [virtual environment](#) at the top level of this project
2. `python -m pip install -r requirements.txt`
3. `cd` to the local `auto` directory
4. `./install_local.sh`

DEPLOY

Guidance about how to deploy updates to tuulbachs itself

1. Decide which type of [semantic version](#) upgrade this is (major, minor, patch, etc.)
2. From `tuulver/version.py`, use the appropriate `bump_*` function to update the version string in `version.yaml`
3. Follow [install](#) guidance
4. Commit changes to Git
5. From `tuuldevops/tag_current_version.py`, use the `tag_product_version` function to properly tag this release
6. Push the Git update (including tags) to this repo's remotes

INTERNAL API

This is code intended for use by tuulbachs itself, not external users.

10.1 exceptions.py

This module contains the set of tuulbachs' exceptions.

exception `tuulbachs.exception.TuulError` (*msg=None*)

The parent exception from which all other Tuulbachs Python exceptions are derived.

INDICES AND TABLES

- `genindex`
- `modindex`

PYTHON MODULE INDEX

t

- `tuulbachs.exception`, [21](#)
- `tuulcli.cli_color`, [5](#)
- `tuuldevops.pipeline_steps`, [7](#)
- `tuuldevops.tag_current_version`, [7](#)
- `tuuldevops.update_version`, [7](#)
- `tuulgit.check_status`, [9](#)
- `tuulgit.tag_commit`, [9](#)
- `tuulver.version`, [13](#)
- `tuulyaml.parse`, [15](#)
- `tuulyaml.update_simple_value`, [15](#)

B

bump_build() (in module *tuulver.version*), 13
 bump_major() (in module *tuulver.version*), 13
 bump_minor() (in module *tuulver.version*), 13
 bump_patch() (in module *tuulver.version*), 13
 bump_pre() (in module *tuulver.version*), 13

C

CliColor (class in *tuulcli.cli_color*), 5
 create_version_file() (in module *tuulver.version*), 13

E

emit_product_name() (in module *tuulver.version*), 13
 emit_version() (in module *tuulver.version*), 13

H

has_staged_uncommitted() (in module *tuulgit.check_status*), 9
 has_unstaged_changes() (in module *tuulgit.check_status*), 9
 has_untracked_ignored_files() (in module *tuulgit.check_status*), 9

I

is_clean_working_tree() (in module *tuulgit.check_status*), 9
 is_working_tree() (in module *tuulgit.check_status*), 9

M

major_step() (in module *tuuldevops.pipeline_steps*), 7
 module
 tuulbachs.exception, 21
 tuulcli.cli_color, 5
 tuuldevops.pipeline_steps, 7
 tuuldevops.tag_current_version, 7
 tuuldevops.update_version, 7
 tuulgit.check_status, 9

tuulgit.tag_commit, 9
 tuulver.version, 13
 tuulyaml.parse, 15
 tuulyaml.update_simple_value, 15

P

parse_yaml() (in module *tuulyaml.parse*), 15

R

repo_toplevel_path() (in module *tuulgit.check_status*), 9

T

tag_current() (in module *tuulgit.tag_commit*), 9
 tag_current_signed() (in module *tuulgit.tag_commit*), 9
 tag_delete_local() (in module *tuulgit.tag_commit*), 9
 tag_product_version() (in module *tuuldevops.tag_current_version*), 7
tuulbachs.exception
 module, 21
tuulcli.cli_color
 module, 5
tuuldevops.pipeline_steps
 module, 7
tuuldevops.tag_current_version
 module, 7
tuuldevops.update_version
 module, 7
 TuulError, 21
tuulgit.check_status
 module, 9
tuulgit.tag_commit
 module, 9
tuulver.version
 module, 13
tuulyaml.parse
 module, 15
tuulyaml.update_simple_value
 module, 15

U

`update_product_version()` (*in module tuuldevops.update_version*), [7](#)

`update_value()` (*in module tuulyaml.update_simple_value*), [15](#)