
Bump'R Documentation

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Bump'R is a version bumper and releaser allowing in a single command:

- Clean-up release artifact
- Bump version and tag it
- Build a source distribution and upload on PyPI
- Update version for a new development cycle

Bump'R intend to be customizable with the following features:

- Optionnal test suite run before bump
- Customizable with a config file
- Overridable by command line
- Extensible with hooks

The main goal is to provide a release workflow without manual intervention.

Compatibility

Bump'R requires Python 2.6+

Installation

You can install Bump'R with pip:

```
$ pip install bumpr
```

or with easy_install:

```
$ easy_install bumpr
```

Usage

You can use directly the command line to setup every parameter:

```
$ bumpr fake/__init__.py README.rst -M -ps dev
```

But Bump'R is designed to work with a configuration file (`bumpr.rc` by defaults). Some features are only available with the configuration file like:

- commit message customization
- hooks configuration
- multiline test, clean and publish commands

Here's an exemple:

```
[bumpr]
file = fake/__init__.py
vcs = git
tests = tox
publish = python setup.py sdist register upload
clean =
    python setup.py clean
    rm -rf *egg-info build dist
files = README.rst

[bump]
unsuffix = true
message = Bump version {version}

[prepare]
suffix = dev
message = Prepare version {version} for next development cycle

[changelog]
file = CHANGELOG.rst
bump = {version} ({date:%Y-%m-%d})
prepare = In development

[readthedoc]
id = fake
```

This way you only have to specify which part you want to bump on the command line:

```
$ bumpr -M -s rc4 # Bump the major with an 'rc4' suffix
$ bumpr          # Bump the default part aka. patch
```


4.1 Workflow

When you execute Bump'R it will follow the following workflow:

1. `clean`
2. `test`
3. `bump`
4. `publish`
5. `prepare`

If you have been using Maven, it's inspired by the Maven Release Plugin.

4.1.1 Clean phase

Optionnal phase that simply execute the commands provided by the `clean` configuration parameter.

4.1.2 Test phase

Optionnal phase that simply execute the commands provided by the `tests` configuration parameter.

4.1.3 Bump phase

This is the main phase in which Bump'R will:

1. Compute replacements
2. Execute the bump phase for each hook
3. Bump replacement in version file and extra files
4. Commit the changes if a VCS is configured with `commit=True`
5. Tag the previously created commit if `tag=True`

4.1.4 Publish phase

Optionnal phase that simply execute the commands provided by the `publish` configuration parameter.

Most of the time for Python project, you will want to execute:

```
python setup.py sdist register upload
```

4.1.5 Prepare phase

This is the second main phase in which Bump'R will:

1. Compute replacements
2. Execute the prepare phase for each hook
3. Bump replacement in version file and extra files
4. Commit the changes if a VCS is configured with `commit=True`

4.2 Configuration file

The `bump.r.c` configuration file is an inifile with the following possible sections and keys.

Note: You can also use the `setup.cfg` file to store the configuration. It's recommended to prefix section with `bump:` (ie. `[bump:bump]`). Be carefull, when using Python 3, `setup.cfg` is parsed with `ConfigParser` and perform string interpolation.

4.2.1 bump.r

This is the main section defining the common behavior and parameters.

file *Default:* None

The file containing the version string to extract.

regex *Default:* `r'(__version__|VERSION)\s*=\s*(\'|")(?P<version>.+?)(\'|")'`

The regex used to extract the version string. It must have a `version` named group.

encoding *Default:* `utf8`

The files encoding.

vcs *Default:* None

commit *Default:* `True`

If `True` and `vcs` is defined, commit the changes.

push *Default:* `False`

If `True` and `vcs` is defined, push the changes and the tags to the upstream repository.

tag *Default:* `True`

If `True` and `vcs` is defined, tag the version.

tag_format *Default:* {version}

Specify the format of the tag

verbose *Default:* False

If True, display verbose output and command line output.

dryrun *Default:* False

If True, no command or VCS operation will be executed. They will be displayed in the command output.

clean *Default:* None

Specify the commands to be executed on the *clean* phase. Should have a single command by line.

tests *Default:* None

Specify the commands to be executed on the *test* phase. Should have a single command by line.

publish *Default:* None

Specify the commands to be executed on the *publish* phase. Should have a single command by line.

files *Default:* []

Extra files to process. Those files will be processed by hooks to. Specify one file by line.

4.2.2 bump

This section define the bump phase behavior.

unsuffix *Default:* True

If True the current verion suffix will be removed.

suffix *Default:* None

If set, this suffix will ba appended to the version.

part *Default:* None

Specify the part to bump between major, minor or patch.

message *Default:* Bump version {version}

Specify the commit message that will be bumped. You can use the following token in your format pattern: version, major, minor, patch and date. All formating operations are accepted.

4.2.3 prepare

This section define the prepare phase behavior.

unsuffix *Default:* False

If True the current verion suffix will be removed.

suffix *Default:* None

If set, this suffix will ba appended to the version.

part *Default:* patch

Specify the part to bump between major, minor or patch.

message *Default:* Update to version {version} for next development cycle

Specify the commit message that will be bumped. You can use the following token in your format pattern: version, major, minor, patch and date. All formatting operations are accepted.

4.2.4 hooks

Each hook can contribute to configuration with its own section.

See [Hooks](#).

4.2.5 sample

Here a sample `bump.r.rc` file

```
[bump'r]
file = fake/__init__.py
vcs = git
tests = tox
publish = python setup.py register sdist upload
clean =
    python setup.py clean
    rm -rf *egg-info build dist
files = README.rst

[bump]
message = 'Commit version {version}'

[prepare]
suffix = dev
message = Prepare version {version} for next development cycle

[changelog]
file = CHANGELOG.rst
bump = {version} ({date:%Y-%m-%d})
prepare = In development

[readthedoc]
id = bump'r
```

4.3 Command line usage

The bump'r executable can be used in two way:

- one shot usage with all parameters on command line
- regular usage with most of the parameters in a configuration file

The default configuration file name is `bump.r.rc` but you can override it with the `-c` option.

All mandatory parameters not present in the configuration file should be on command line.

```
$ bump'r -h
usage: bump'r [-h] [--version] [-v] [-c CONFIG] [-d] [-st] [-b | -pr] [-M] [-m]
              [-p] [-s SUFFIX] [-u] [-pM] [-pm] [-pp] [-ps PREPARE_SUFFIX]
              [-pu] [--vcs {git,hg}] [-nc] [-P] [-nP]
```

```

[file] [files [files ...]]

Version bumper and Python package releaser

positional arguments:
  file          Versionned module file
  files         Files to update

optional arguments:
  -h, --help            show this help message and exit
  --version            show program's version number and exit
  -v, --verbose        Verbose output
  -c CONFIG, --config CONFIG
                        Specify a configuration file
  -d, --dryrun         Do not write anything and display a diff
  -st, --skip-tests    Skip tests
  -b, --bump           Only perform the bump
  -pr, --prepare       Only perform the prepare

bump:
  -M, --major          Bump major version
  -m, --minor          Bump minor version
  -p, --patch          Bump patch version
  -s SUFFIX, --suffix SUFFIX
                        Set suffix
  -u, --unsuffix       Unset suffix

prepare:
  -pM, --prepare-major Bump major version
  -pm, --prepare-minor Bump minor version
  -pp, --prepare-patch Bump patch version
  -ps PREPARE_SUFFIX, --prepare-suffix PREPARE_SUFFIX
                        Set suffix
  -pu, --prepare-unsuffix
                        Unset suffix

Version control system:
  --vcs {git,hg}       VCS implementation
  -nc, --nocommit      Do not commit
  -P, --push           Push changes to remote repository
  -nP, --no-push       Don't push changes to remote repository

```

4.4 Hooks

4.4.1 Read the doc

This hook allow to change the Read The Doc documentation URL in both bump and prepare phase.

- **key:** readthedoc
- **parameters**
 - id: None
 - url: `http://{id}.readthedocs.org/en/{tag}`
 - bump: {version}

- prepare: latest

Most of the the time, you will just have to specify your readthedoc project identifier.

```
[readthedoc]
id = myproject
```

You can customize the generated (and parsed) URL and the string to bump in.

```
[readthedoc]
url = http://custom.doc/{tag}
```

You can also customize the tag part in the url for the bump and prepare phase

```
[readthedoc]
bump = {version}
prepare = latest
```

4.4.2 Changelog

This hook allow to bump and prepare your changelog. In the bump phase it will bump the current developpement header with a versionned one. In the prepare phase, it will do the inverse operation.

- **key:** changelog
- **parameters**
 - file: None
 - separator: –
 - bump: {version} ({date:%Y-%m-%d})'
 - prepare: Current
 - empty: Nothing yet

The file parameter is mandatory and designate the changelog file.

The separator parameter spcify the character user to underline your changelog section.

```
Changelog
=====

In development
~~~~~

- Another feature

Version 1.0.1 (2013-08-23)
~~~~~

- Some new feature
```

To handle this changelog you will have the following configuration

```
[changelog]
file = CHANGELOG
separator = ~
bump = Version {version} ({date:%Y-%m-%d})
prepare = In development
empty = Empty
```

If you execute Bump'R, the changelog will be bumped like:

```
Changelog
=====

Version 1.0.2 (2013-08-24)
~~~~~

- Another feature

Version 1.0.1 (2013-08-23)
~~~~~

- Some new feature
```

And then prepared:

```
Changelog
=====

In development
~~~~~

- Empty

Version 1.0.2 (2013-08-24)
~~~~~

- Another feature

Version 1.0.1 (2013-08-23)
~~~~~

- Some new feature
```

4.4.3 Commands

This hook allow to execute custom commands during bump and prepare phases.

- **key:** commands
- **parameters**
 - bump: {version}
 - prepare: latest

Both bump and prepare command can be multiline (a command statement by line), and support the following format token:

- **version:** the current phase version string
- **major:** the current phase version major part
- **minor:** the current phase version minor part
- **patch:** the current phase version patch part
- **date:** the current date (aka. the release date)

In the bump phase, version will be the bumped version whereas in the prepare phase it will be the prepared/next version.

Exemple:

```
[commands]
bump = echo "{major}.{minor} - {date:%Y-%m-%d}"
prepare = echo "Next version: {version}"
```

4.5 Changelog

4.5.1 0.3.6 (2017-01-10)

- Make use of custom *tag_format* in readthedoc hook
- Expose *{tag}* in replace and command hook
- Expose *{tag}* in commit messages

4.5.2 0.3.5 (2017-01-10)

- Allow to specify a custom tag pattern

4.5.3 0.3.4 (2017-01-10)

- Added *-st/--skip-tests* option

4.5.4 0.3.3 (2017-01-08)

- Push action is verbose

4.5.5 0.3.2 (2017-01-08)

- Fix some boolean handling from commandline

4.5.6 0.3.1 (2017-01-08)

- Ensure push is executed
- Fix boolean parsing
- Fix error handling on version extraction

4.5.7 0.3.0 (2017-01-08)

- Support separator omission in changelog (for markdown)
- Add readthedoc badge support.
- **Breaking** Use https and readthedocs.io as default
- *setup.cfg* declaration support
- Optionnal *bump'r:* prefix support

- Switch to pytest

4.5.8 0.2.1 (2015-11-21)

- Use nosetests instead of custom discovery
- Some fixes on Python 3 (mostly encodings)
- Improve error handling
- Validate configuration

4.5.9 0.2.0 (2013-08-24)

- colored diff
- Added `--bump` and `--prepare` to only perform bump or prepare
- Rely on VCS for tracking files and ensure working copy is clean
- Added option `--nocommit`
- Ensure dry run does not write or execute anything
- Better output and error handling
- Group parameters in help
- Added optionnal hook validation
- Fix some Python incompatibilities (Python 2.6 and 3.X)
- More documentation

4.5.10 0.1.0 (2013-08-22)

- Initial release. Missing some parts but working!

Indices and tables

- `genindex`
- `modindex`
- `search`