

# Python packaging in openSUSE

Advantages against other distributions

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openSUSE Conference, June 2022

## Problems in the Python non-specific packaging

- ▶ Multiple interpreters
- ▶ Complicated commands
- ▶ Not enough checking

## Multiple interpreters

```
%build  
%if %{with python3}  
%py3_build  
%else  
%py2_build  
%endif
```

## Multiple interpreters

```
%build  
%if %{with python3}  
%py3_build  
%else  
%py2_build  
%endif
```

```
%build  
%python_build
```

## Complicated commands

`%check`

```
export PYTHONPATH=%{buildroot}%{python_sitelib} PYTHONDONTWRITEBYTECODE=1  
pytest --ignore=build.* -v
```

## Complicated commands

`%check`

```
export PYTHONPATH=%{buildroot}%{python_sitelib} PYTHONDONTWRITEBYTECODE=1
pytest --ignore=build.* -v
```

Or we do:

`%check`

`%pytest`

## Example

```
{?!python_module:%define python_module() python-%{**} python3-%{**}}
Name:                python-foobar
Version:             1.0.2
Release:             0
Summary:             Example foobar package
License:             MIT
URL:                 https://github.com/bumba/foobar
Source:              https://files.pythonhosted.org/packages/source/f/foobar/foobar-%{version}.zip
# PATCH-FIX-UPSTREAM remove_mock.patch bsc#123456 mcepl@suse.com
# we don't need stinking mock
Patch0:              remove_mock.patch
BuildRequires:      %{python_module appdirs}
BuildRequires:      %{python_module pytest}
BuildRequires:      fdupes
BuildRequires:      python-rpm-macros
Requires:           python-appdirs
BuildArch:          noarch
%python_subpackages
```

### %description

foobar is a collection of enhancements to the Python packages that allow you to build and distribute Python packages,

## Example (cont.)

```
%prep
%autosetup -p1 -n foobar-%{version}

%build
export NOBUMPA=1
%python_build

%install
%python_install
%python_expand %fdupes %{buildroot}%{$python_sitelib}

%check
%pytest

%files %{python_files}
%license LICENSE
%doc CHANGES.rst README.rst
%{_bindir}/foobar
%{python_sitelib}/foobar
%{python_sitelib}/foobar-%{version}*-info

%changelog
```



## Toil to machines!

- ▶ Given the number of packages we maintain (over 2,500 in Factory) we need to put as much work as possible on machines.
- ▶ Packages are auto-generated by 'py2pack'.
- ▶ Automatic rebuilds
- ▶ Every build in openSUSE ecosystem is checked by rpmlint and unless specifically permitted, failed rpmlint check means failed build.

Thank you!

My email is `mcepl@cepl.eu`.

$\LaTeX$  source of this presentation is available on <https://gitlab.com/mcepl/opensuseconf.git>.