



# Packaging Session: Rust

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# What's new in rust2rpm?



# TOO MANY THINGS

[illegible]

# Notable changes in v26



# Prevent installation of executables and sources

## This used to be a manual process

- There was no documented way to prevent installation of unwanted “bin” targets other than to manually patch them out of Cargo.toml (other than overriding an RPM macro that is an internal implementation detail in the %cargo\_install macro)
- There was no way to prevent installation of library sources and creation of -devel packages, and this required manually editing generated spec files.

## Now available as rust2rpm.toml settings

The default remains to install “bin” targets (if present) and to install sources and generate -devel subpkgs (if a “lib” target is present).

```
1 [package]
2 cargo-install-bin = false
3 cargo-install-lib = false
```

# Inject custom commands into RPM scriptlets

This used to require manual editing

Now available as rust2rpm.toml settings

```
1 %install
2 # ...
3 target/rpm/ruff generate-shell-completion bash > ruff.bash
4 install -Dpm 0644 ruff.bash -t %{buildroot}/%{bash_completions_dir}
5 #...
```

```
1 [scripts]
2 install.post = [
3     "target/rpm/ruff generate-shell-completion bash > ruff.bash",
4     "install -Dpm 0644 ruff.bash -t %{buildroot}/%{bash_completions_dir}",
5 ]
```

# Add additional Source and Patch files

This used to require manual editing

Now available as rust2rpm.toml settings

```
1 [[package.extra-sources]]
2 number = 2
3 file = "foo.1"
4 comments = ["handwritten man page for foo"]
5
6 [[package.extra-patches]]
7 number = 2
8 file = "unconditionally-use-pkgconfig.patch"
9 comments = ["unconditionally dynamically link libfoo"]
```

# Persist Cargo.toml patch presence and comments

## This used to require manual editing

- If this setting is present in the rust2rpm.toml config file and not an empty list, an editor is opened automatically even if the CLI option for patching Cargo.toml was not passed.
- If no changes are made to Cargo.toml but a non-empty list of comments is present in configuration, rust2rpm exits with an error.

## Now available as a rust2rpm.toml setting

```
1 [package]
2 cargo-toml-patch-comments = [
3     "default to the OpenSSL crypto backend",
4 ]
```



# Notable changes in v27



# More ergonomic CLI

(passing version without name is possible now)

Old (name is required when passing version)

```
1 cd rust-remove_dir_all
2 rust2rpm -s remove_dir_all 1.0
3
```

New (name argument is truly optional)

```
1 cd rust-remove_dir_all
2 rust2rpm -s 1.0
3
```

# Automatic migration to new TOML based configuration format

Old (custom INI / configparser format)

```
1 [DEFAULT]
2 buildrequires =
3     pkgconfig(dbus-1) >= 1.6
4 lib.requires =
5     pkgconfig(dbus-1) >= 1.6
```

New (TOML with defined schema)

```
1 [requires]
2 build = [
3     "pkgconfig(dbus-1) >= 1.6",
4 ]
5 lib = [
6     "pkgconfig(dbus-1) >= 1.6",
7 ]
```

# Override %license and %doc file detection

## Fix detecting too many files

Project uses file names that confuse the license and doc file detection heuristics (like `src/license.rs`):

```
1 [package]
2 license-files.exclude = ["src/license.rs"]
3
```

→ supports include, exclude, override, and both file paths and path globs

## Fix detecting too few files

Project uses weird directory layout or files need to be installed manually from upstream version control:

```
1 [package]
2 license-files = ["LICENSE-*"]
```

→ prevents hard “missing license files” error too

# Option to re-apply existing Cargo.toml patch

Patching Cargo.toml was tedious



```
1 rust2rpm -p # patch things
2 # test build goes wrong
3 rust2rpm -p # patch things
4 # ...
5
```

Now patches can be reapplied automatically



```
1 rust2rpm -p # patch things
2 # test build goes wrong
3 # make more changes after re-applying existing patch:
4 rust2rpm -pr
5 # ...
```

**And even more  
improvements  
planned for v28!**



Source code on pagure.io (for now):  
<https://pagure.io/fedora-rust/rust2rpm>

Join us on Matrix:  
[#rust:fedoraproject.org](https://matrix.fedoraproject.org)