

rebase-helper, the tool for fast rebases

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Introduction

- Use case
- Rebase-helper introduction
- The package rebase workflow
- Features in version 0.8.0
- Q&A

Use case

- Helps package maintainers with updating package to the latest upstream version.
- Many task during rebases are boring from developer point of view.

Rebase-helper introduction

- Downloads new sources
- Rebases downstream patches on top of the latest upstream version
- Builds „**old**” and „**new**” versions of RPMS
 - **mock**, **rpmbuild**, **fedpkg**, **copr** (upstream)
- Run various checks on build RPMS and produces logs
 - **pkgdiff**, **rpmdiff**, **abipkgdiff**
- Support for non-interactive mode
- Report data are presented in text format

The rebase workflow – part 1

1. Just run rebase-helper in the dist-git dir
`$ rebase-helper <new_version>`
2. New sources are automatically downloaded
3. Apply all patches on new sources
 - patch is dropped if already merged
 - if patch doesn't apply -> let the user resolve the conflict (using some mergetool)
4. Build binary packages from old and new sources

The rebase workflow - part 2

5. Run tests to identify possible issues
added/changed/removed files/binaries/headers
library soname version bumps
check API/ABI changes
(try to rebuild dependent packages)
you name it... ;-)

6. Provide logs to user for review

New features in 0.8.0

- COPR support (already implemented in upstream)
- Using COPR as a build system for Upstream Release Monitoring
- Csmock checker as a static analysis tool
- JSON output format.

Summary

- rebase-helper can **rebase downstream patches** on top of new version and **run checks on produced RPMs**
- **Rebase-helper saves developer's time** by automating the monotonous tasks thus **making them more effective**
- Rebase-helper is able to provide **information about RPM, ABI/API changes**
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Information

- GitHub repository:

<https://github.com/phracek/rebase-helper>

- Documentation: <https://rebase-helper.readthedocs.org/en/latest/>
- **#rebase-helper** on freenode
- mojefedora.cz
<http://mojefedora.cz/rebase-helper-nastroj-pro-rebasovani-a-pro-monitorovaci-sluzby-upstreamu/>
- [Fedoramagazine.org](https://fedoramagazine.org):
<https://fedoramagazine.org/rebase-helper-tool-rebases-upstream-monitoring-services/>
- Available as EPEL-7 package
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Q&A