



**Copr**

Build your own RPM repositories

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[copr.fedorainfracloud.org](http://copr.fedorainfracloud.org)

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# Agenda

- What is Copr and why use it
- Demo: Web UI — project, build, results
- Demo: copr-cli — same thing from the terminal
- Installing a package from Copr
- Integration, automation & links
- Q&A

# What is Copr?



## Source

You provide SRPM, spec file, or Git URL



## Build

Copr builds in desired mock chroot



## Install

`dnf copr enable + dnf install`

- Like PPA or AUR - but for Fedora, EPEL, CentOS Stream, ...
- All you need: [FAS account](#) - free, no approval
- No need to be a Fedora packager



Resulting repo is public!

# Copr vs. Koji



<b>For</b>	Personal / community	Official Fedora
<b>Access</b>	Anyone (FAS)	Sponsored
<b>Repo</b>	Own per-project	Fedora repos
<b>Guidelines</b>	Not required	Required

## Supported sources

- Upload SRPM / URL
- SCM (Git) — rpkg, tito, make srpm
- DistGit — Fedora / CentOS
- PyPI / RubyGems
- </> Custom script

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## Demo: Copr Web UI

- FAS account needed

**Test SRPM:** <https://github.com/fedora-copr/copr-test-sources/raw/main/hello-2.8-1.src.rpm>

⚠ Project name cannot be changed later!



# Demo: copr-cli — setup

## 1. Install

```
sudo dnf install copr-cli
```

## 2. Get API token

👉 [copr.fedorainfracloud.org/api](https://copr.fedorainfracloud.org/api)

## 3. Save config

```
# ~/.config/copr
[copr-cli]
login = <generated-login>
username = <your-username>
token = <generated-token>
copr_url = https://copr.fedorainfracloud.org
```



⚠ Without this config file, copr-cli won't work (except read-only commands).

# Demo: copr-cli — commands

```
# Create a project
copr create workshop-cli-demo \
    --chroot fedora-rawhide-x86_64 \
    --chroot fedora-41-x86_64

# Submit a build (from URL)
copr build workshop-cli-demo \
    https://github.com/fedora-copr/copr-test-sources/raw/main/hello-2.8-1.src.rpm

# Submit a build from a local SRPM
copr build workshop-cli-demo ./hello-2.8-1.src.rpm

# Build status / list builds
copr status <BUILD_ID>
copr list-builds workshop-cli-demo

# Download results
copr download-build <BUILD_ID> --dest ./results/
```



Without `--nowait`, the CLI tracks the build progress in real time.

# Installing a package from Copr



**Enable**

```
sudo dnf copr enable <user>/<project>
```



**Install**

```
sudo dnf install hello
```

```
dnf copr list          # list active Copr repos  
sudo dnf copr disable <USER>/workshop-demo # disable (keeps packages!)  
sudo dnf remove hello  # uninstall
```

**Alternative:** Download .repo file from the UI → Overview tab → button next to chroot.

# Integration & automation



## Webhooks

GitHub / GitLab / Bitbucket  
Auto-rebuild on push or tag  
Settings → Integrations

## Packit

Copr builds from GitHub PRs  
Results posted in the PR  
[packit.dev](https://packit.dev)

## API

Full REST API Python lib [python-copr](#)  
[Swagger docs](#)

**SCM builds:** `.copr/Makefile` - monorepo with multiple packages, custom SRPM build script

# Summary



## Source

SRPM, URL, Git, PyPI...



## Build

Multi-distro, multi-arch



## Install

Web UI + CLI + REST API + webhooks

 [copr.fedorainfracloud.org](https://copr.fedorainfracloud.org)

 Documentation · API

 GitHub · `man copr-cli`

# Q&A

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## Frequently Asked Questions

- **How long are builds kept?** - latest successful forever, old/failed after 14 days
- **Build timeout?** - default 5h
- **Is it safe?** - FAS accounts, GPG signing, public SRPM, you can verify
- **Koji vs Copr?** - Koji = official Fedora, Copr = community / personal
- **Packaging guidelines?** - recommended, but not required



# Happy building!



[copr.fedorainfracloud.org](https://copr.fedorainfracloud.org) • [docs](#) • [github](#)

#fedora-buildsys (Matrix) • #copr (Slack) • GitHub Issues