Renovate at Roche

How to automate dependency updates with the Renovate bot

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Roche at a glance

Who we are and what we do

127 years
founded in Basel in 1896

3 Nobel prizes and **44 Prix Galien,** since 1974

CHF 58.7 billion* in Roche Group sales in 2023

A leader in healthcare R&D with CHF 13.2 billion invested in 2023

>22 million people treated with our medicines in 2023

Multiple Roche medicines & diagnostics on the WHO List of Essential Medicines & Tests

103,000+ dedicated employees worldwide

29 billion tests conducted with our Diagnostics products in 2023

*Unless otherwise stated, all growth rates and comparisons to the previous year are at constant exchange rates (CER; average rates 2022) and all total figures quoted are reported in CHF.

Roche Informatics Poland
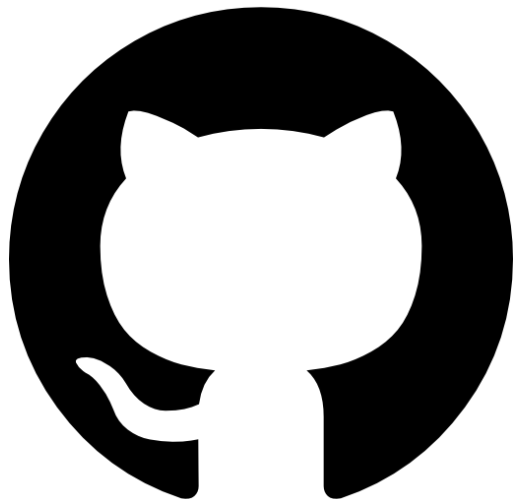
Where code meets care

Warsaw & Poznań
are among key strategic
locations for Roche Informatics

We are currently home to
around 550 employees
getting together under one
informatics organization

**40 people leaders
& 20 product managers**
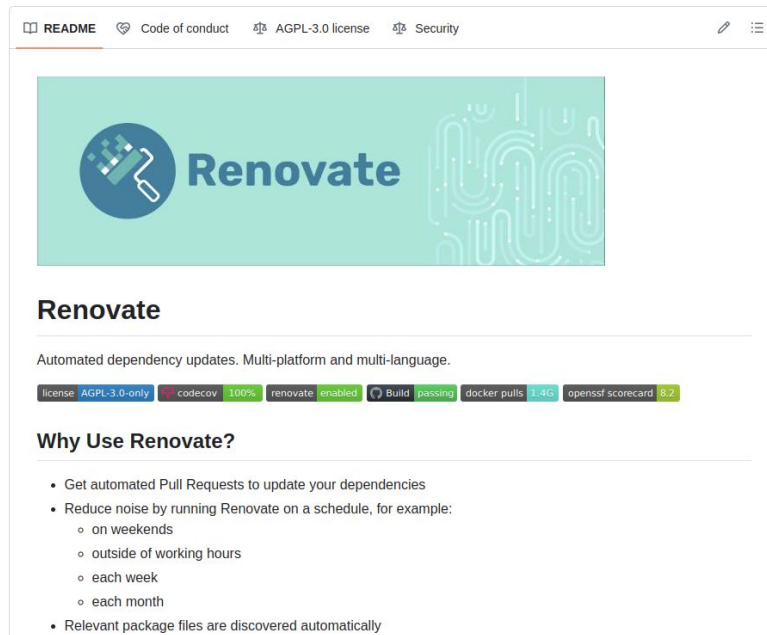from Poland are leading teams
around the globe

Poznań

Warsaw

Roche

Show of hands ✋
What version control platform do you use?

What is Renovate?

Open-source tool to get automated dependency updates

What is Renovate?
Supported package managers

Ansible	ansible	ansible, ansible-galaxy
Batect	batect	batect, batect-wrapper
Bazel	bazel	bazel, bazel-module, bazelisk
C and C++	c	conan
Continuous Delivery	cd	argocd, cdnurl, fleet, flux, helmfile, helmsman, html, tekton
Continuous Integration	ci	azure-pipelines, bitbucket-pipelines, buildkite, circleci, cloudbuild, droneci, github-actions, gitlabci, gitlabci-include, jenkins, tekton, travis, velaci, woodpecker
Dart	dart	pub
Docker	docker	devcontainer, docker-compose, dockerfile
.NET	dotnet	cake, nuget
Elixir	elixir	mix
Go	golang	gomod, ocb
Helm	helm	helm-requirements, helm-values, helmfile, helmsman, helmv3
Infrastructure as Code	iac	ansible, ansible-galaxy, bicep, crossplane, puppet, terraform, terragrunt

Java	java	deps-edn, gradle, gradle-wrapper, kotlin-script, leiningen, maven, maven-wrapper, sbt, scalafmt
JavaScript	js	bun, meteor, nodenv, npm, nvm
Kubernetes	kubernetes	argocd, crossplane, fleet, flux, helm-requirements, helm-values, helmfile, helmsman, helmv3, jsonnet-bundler, kubernetes, kustomize
Node.js	node	nodenv, nvm
Perl	perl	cpanfile
PHP	php	composer
Python	python	pep621, pip-compile, pip_requirements, pip_setup, pipenv, poetry, pyenv, setup-cfg
Ruby	ruby	bundler, puppet, ruby-version
Rust	rust	cargo
Swift	swift	cocoapods, mint, swift
Terraform	terraform	terraform, terraform-version, terragrunt, terragrunt-version, tflint-plugin
No Category	n/a	asdf, fvm, git-submodules, hermit, homebrew, nix, osgi, pre-commit, vendir, regex

Source: https://docs.renovatebot.com/modules/manager/
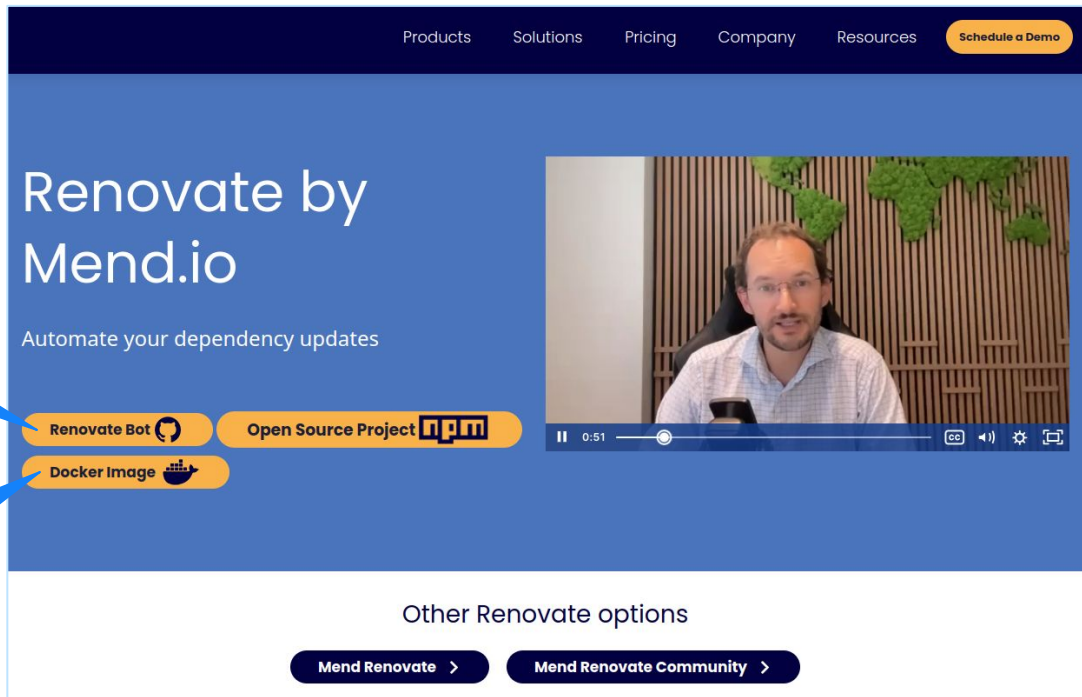
What is Renovate?

Different options to use Renovate

- Mend Renovate
- Mend Renovate Community
- **Renovate by Mend.io**

github.com/marketplace/renovate

hub.docker.com/r/renovate/renovate

Source: https://www.mend.io/renovate-free/

Customization
Extra set of configuration options for self-hosted instances

Demo time
What could go wrong? 🤔

Key takeaways
Three things to remember

1. Renovate gives you automated dependency updates

2. A self-hosted Renovate instance may simply be a GitLab project
   a. Git - store the configuration files
   b. GitLab CI - define and schedule the Renovate pipelines
   c. GitLab runners - run the scans

3. Renovate fits right into your existing development process

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Running Renovate at scale
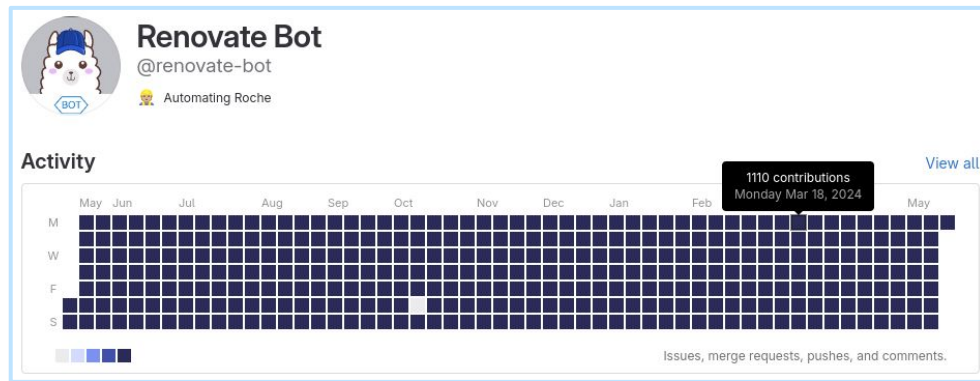
- **1000+ projects scanned**

- **Pipelines scheduled to run every 2 hours**

- **12 parallel jobs**
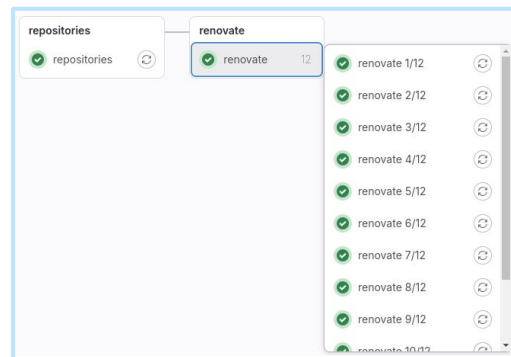
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Lesson learnt

1. Simple onboarding process

2. Constant promotion and education

3. Help users to customize their project configuration

4. Proactive support (i.e. monitor the logs for new errors or warnings)

5. DevOps practices implemented in projects are a foundation for Renovate

6. Parallelize the scans (see the `parallel` job option)

7. Configure access to internal and external registries, repositories and package indexes

8. Stale onboarding or update MRs (with 100s of edits) slow down the scans significantly

Thank you!
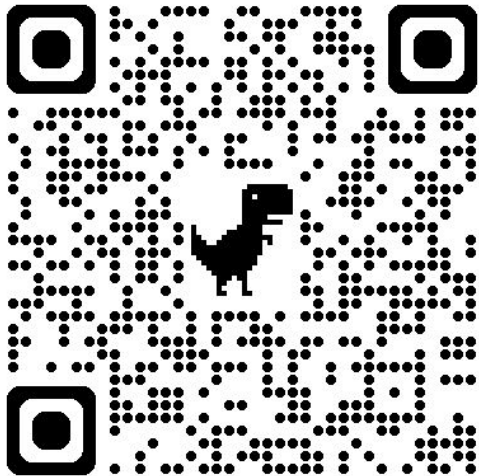
Code & slides:
go.roche.com/renovate

Doing now what patients need next