# Packaging Rails applications for Linux

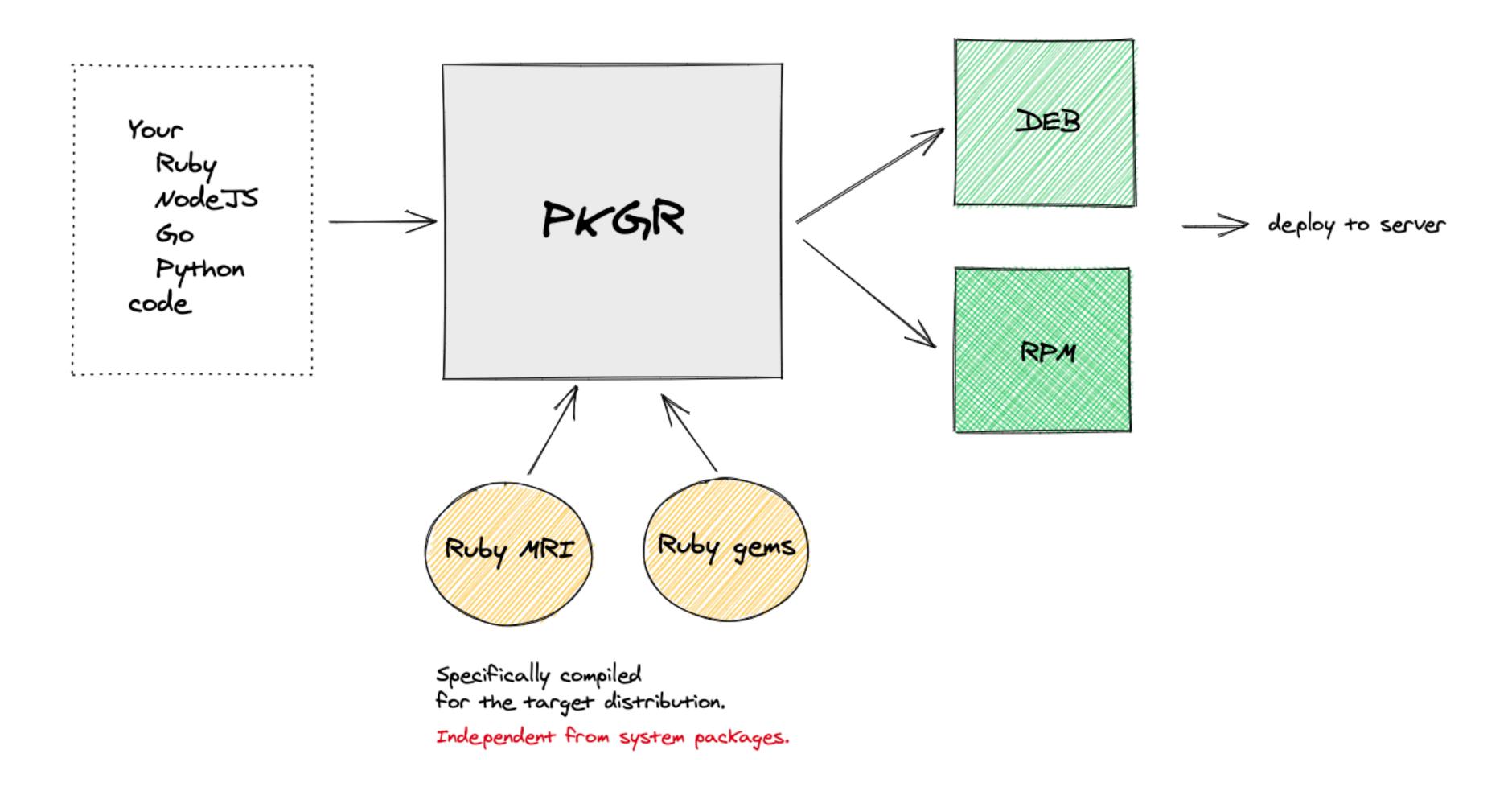
From bare code to deployed app in 5 minutes

## ...why bother?

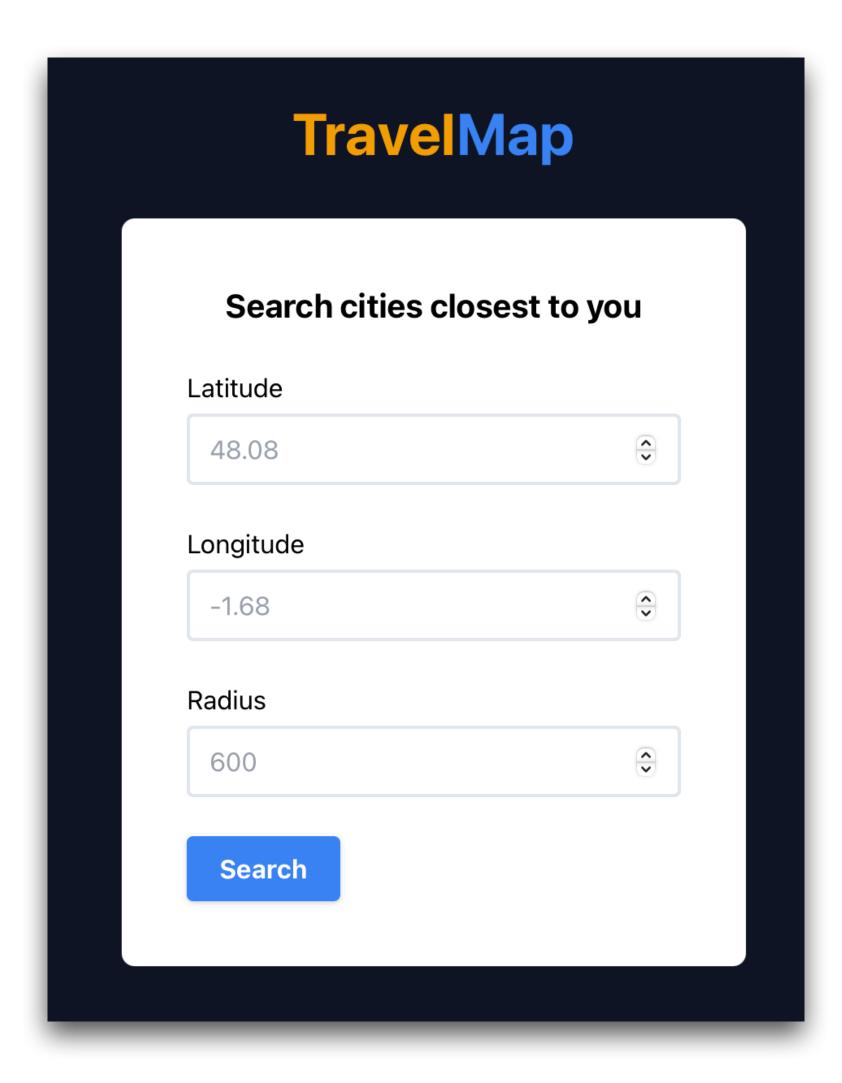
- Only way to deploy apps for a lot of enterprises.
- Smaller size than shipping docker images.
  - embed only the ruby runtime and gems, leave the rest to the system.
- Good for security.
  - system packages can auto-upgrade without much fuss.
- Most end-users / customers are already familiar with them.
  - [apt|yum] install my-app is attractive
- Integrates well with Puppet, Ansible, Chef, etc.

### How it works

https://github.com/crohr/pkgr



# Demo



#### Build

Example app: <a href="https://github.com/crohr/travelmap">https://github.com/crohr/travelmap</a>

```
$ git clone https://github.com/crohr/travelmap
$ cd travelmap
$ docker run --rm -it \
                             # mount your app directory
 -v $ (pwd):/app \
 -v /tmp/cache:/cache \
                             # cache gems to speedup next builds
 pkgr/ubuntu:20.04 \
                              # target distribution
 --name travelmap \
                             # name of your package
 --version 1.0.0
                              # version of your package
$ ls *.deb
travelmap 1.0.0-20210524133445 amd64.deb
```

## Deploy

```
# you might want a server, here is a way to provision a cheap one on Hetzner
$ hcloud server create --image ubuntu-20.04 --name travelmap \
 --type cx11 --ssh-key crohr
# copy your package to the server
$ scp travelmap 1.0.0-20210524132949 amd64.deb root@SERVER_IP:~
# connect to the server
$ ssh root@SERVER IP
# install package
$ apt install \
 ./travelmap 1.0.0-20210524132949 amd64.deb \
 nginx # note: could also be added as a package dependency
```

## Configure and run

```
# set any env variable your app requires
$ travelmap config:set DATABASE URL=postgres://...
# create, migrate, and seed the database
$ travelmap run rails db:create db:migrate db:seed
# start one web process (default port=6000)
# also setup init script (systemd, sysvunit, upstart)
$ travelmap scale web=1
# expose app to the world
$ echo 'server { listen 80; location / { proxy pass http://127.0.0.1:6000; } } ' \
 > /etc/nginx/sites-enabled/default
$ systemctl reload nginx
# it's live!
$ curl http://SERVER IP
```

# And much more

- Automatic log rotation
- Can specify system dependencies to install in addition to the package
- Support for cron tasks
- Support for before/after installation scripts
- Support for shipping CLI tools
- Support for custom user/group

https://doc.packager.io/documentation/customizing-the-build

# Thanks!

- OpenSource tool available at <a href="https://github.com/crohr/pkgr">https://github.com/crohr/pkgr</a>
  - supports Debian/Ubuntu/RHEL/CentOS/SLES/AmazonLinux distributions
  - project active since 2014
- Hosted service available at <a href="https://packager.io">https://packager.io</a>
  - automatic build from a GitHub repository
  - supports publishing packages into your own APT/YUM repositories
- Questions ? @crohr | https://ouestcode.com