



Kamal, known and missing
pieces



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- from Belgrade
- Glorified SysAdmin (DevOps, SRE etc)
- prefers simplicity
- all over Internet with nick `vandot`

Kamal, known and missing pieces

Kamal is a new deployment tool by 37signals for the container era

- **zero-downtime deployments**
- **rolling restarts**
- **asset bridging**
- **local and remote builds**
- **auxiliary services management**



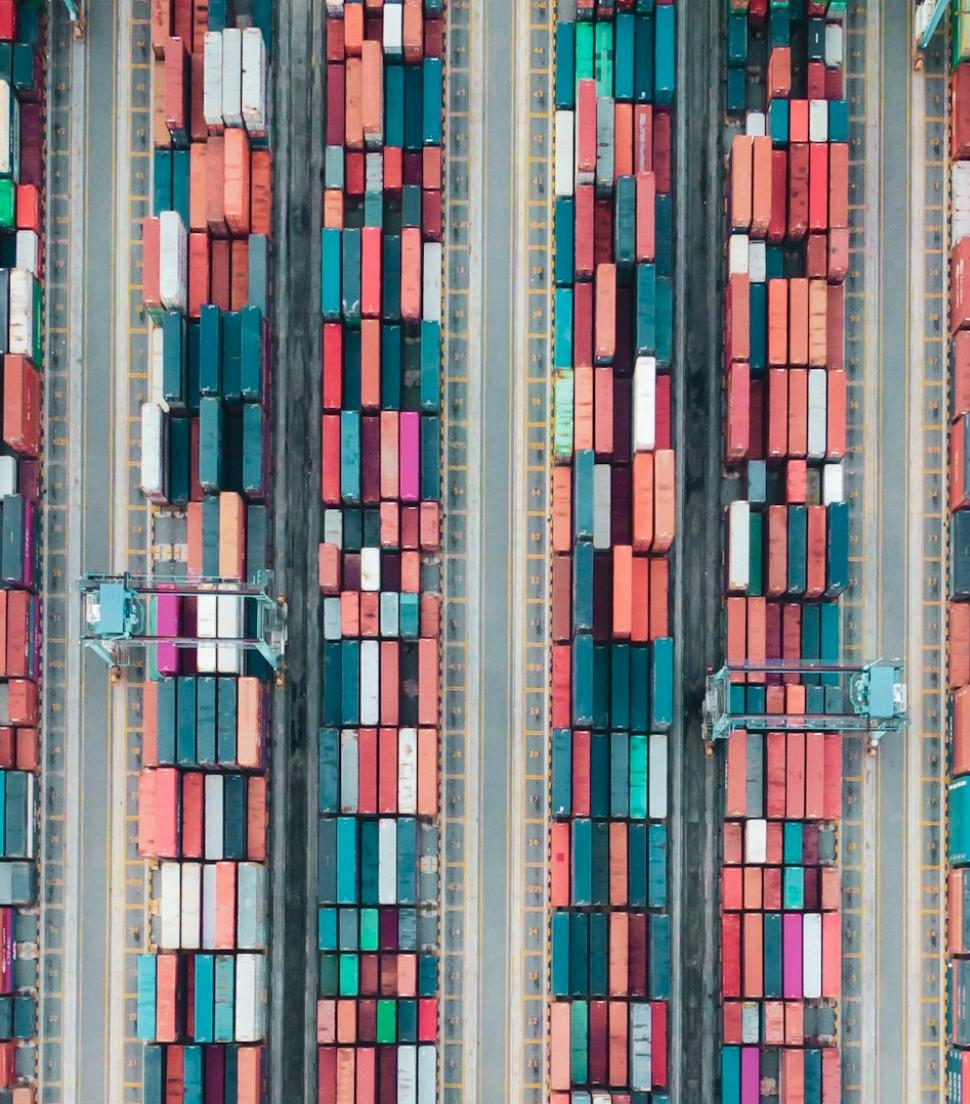
Philosophy

Build and push the image



Deploy the image to the server



An aerial photograph showing a large number of shipping containers stacked in a grid pattern at a port. The containers are of various colors, including red, blue, green, and white. They are arranged in long rows along a paved area with yellow and white markings. Some containers are on flatbed trucks or being moved by port cranes.

Components

- SSHKit
- Docker
- Traefik

Installation and initializations

Install

```
# as a Ruby gem
gem install kamal

# dockerized version mac
alias kamal='docker run -it --rm -v "${PWD}:/workdir" -v "/run/host-services/ssh-auth.sock:/run/host-services/ssh-auth.s

# dockerized version linux
alias kamal='docker run -it --rm -v "${PWD}:/workdir" -v "${SSH_AUTH_SOCK}:/ssh-agent" -v /var/run/docker.sock:/var/run/
```

Init

```
kamal init
```

.env, .kamal/hooks/*, config/deploy.yaml



Zero-downtime deployments

cord file

Cord file mounted inside docker container

```
.kamal/cords/[SERVICE]-web-[HASH] -> /tmp/kamal-cord
```

Health command patched to check for
cord file as well

```
... && (stat /tmp/kamal-cord/cord > /dev/null || ex:
```

Deployment

First time

```
kamal setup
```

- ensures Docker is installed
- pushes your environment from the environment files
- starts accessories like databases
- runs deploy step

Second and beyond

```
kamal deploy
```

Or

```
kamal deploy --version=x.x.x --skip-push
```





Tasks and destinations

Run tasks on service

```
kamal app exec --reuse "bin/rails about"
```

```
kamal app exec -i "bin/rails console"
```

Run tasks on accessory services

```
kamal accessory exec [NAME] [CMD]
```

A destination-specific configuration is at
config/deploy.[TARGET].yml

```
kamal app exec --reuse "bin/rails about" -d staging
```



Willkommen im Parkhaus Einflüsse

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WILKESBURG
DIE UNTERSTÜTZUNG
VON

RE

EE

Limitations

- can't run multiple applications on the same server
- doesn't know state of the servers
- multiple servers with HTTPS support





END