CONTINUOUS DELIVERY OF DOCKER IMAGES

A Customer case: ZorgDomein

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armin@cargonauts.io

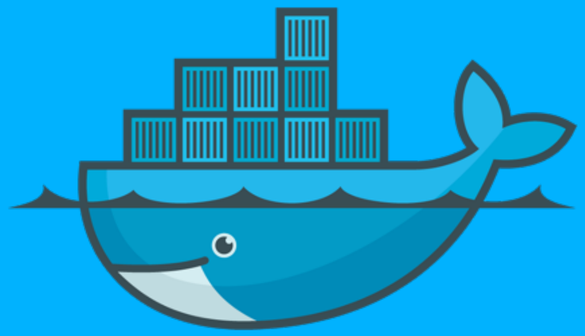
DELIVER SOFTWARE WITH THE SPEED OF THOUGHT

ZorgDomein

CARGONAUTS

WE AS

DOCKER + CONTINUOUS DELIVERY



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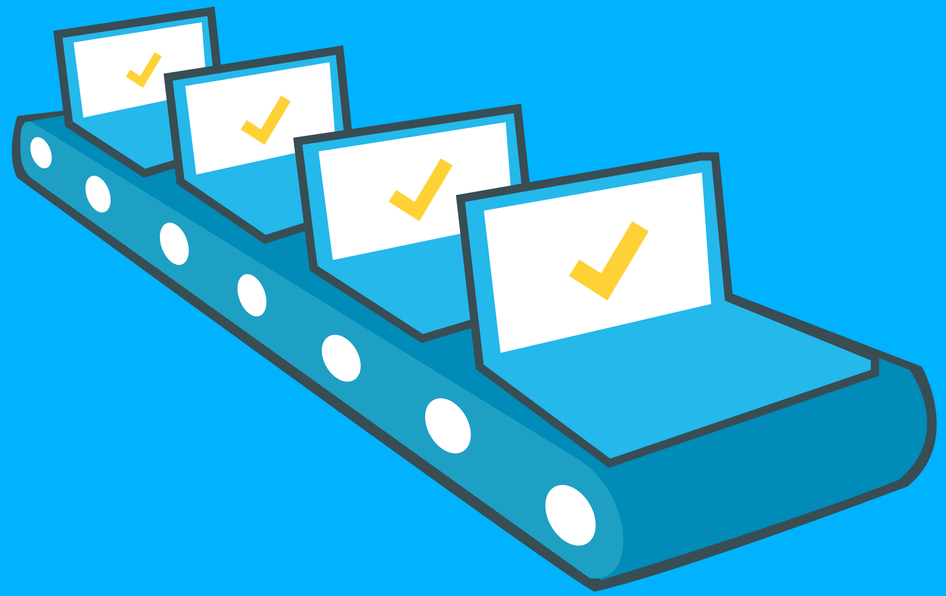

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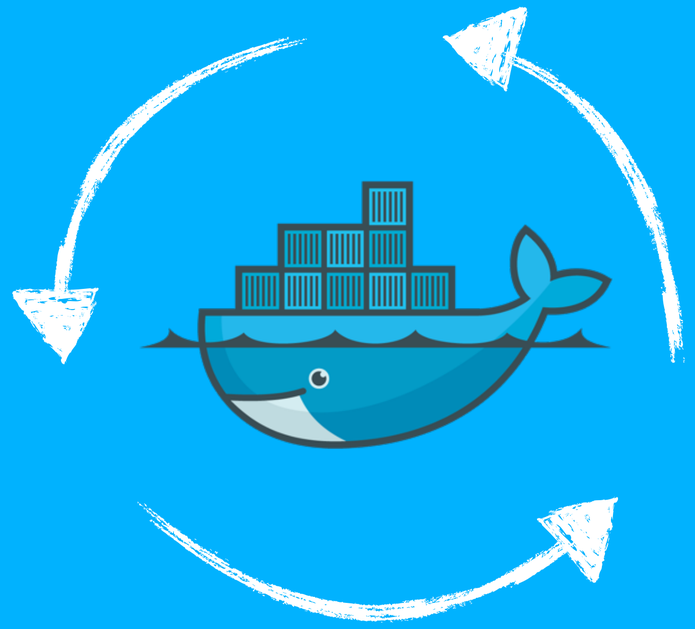

CARGONAUTS

CONTINUOUS DELIVERY OF DOCKER IMAGES

Platform to deploy your docker images to

Set up the logging, monitoring and alerting

Application versioning

Zero downtime deployment

Security

HIGH AVAILABLE PLATFORM

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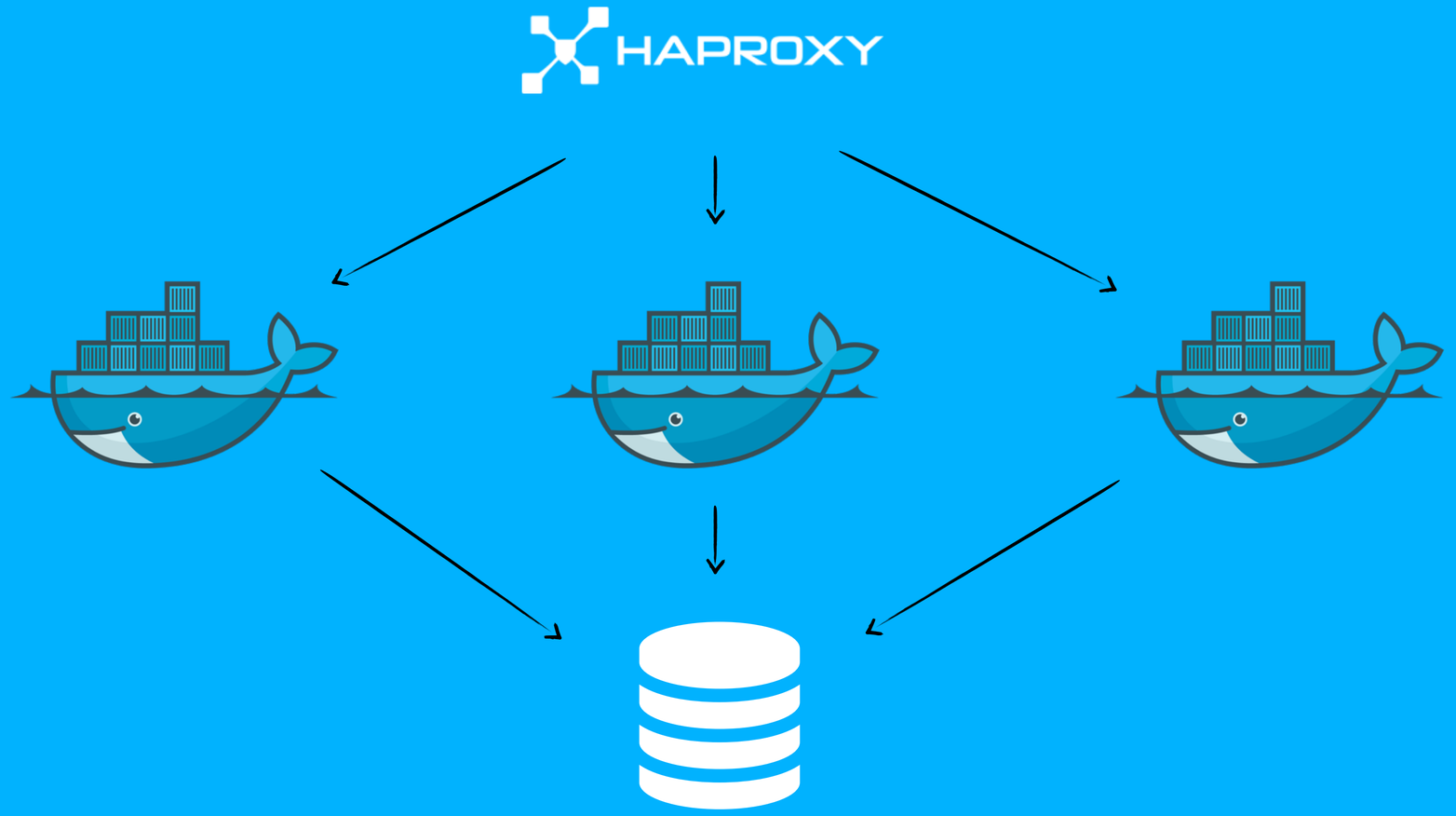


CARGONAUTS

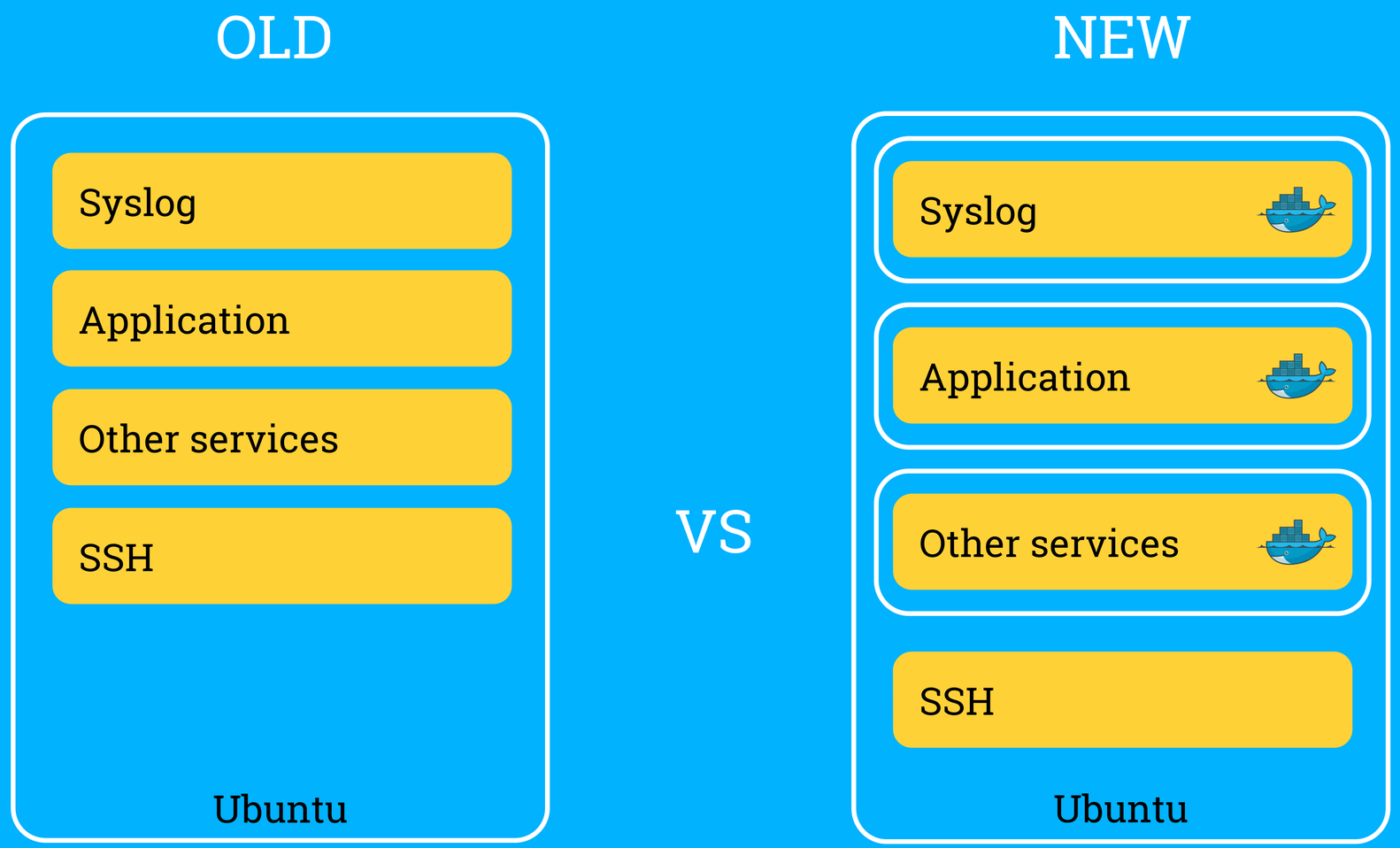
LOADBALANCER

```
frontend main
  bind *:80
  mode http
  maxconn 1000
  default_backend app
backend app
  mode http
  balance roundrobin
  option httpchk /health
  server intapp01 intapp01.zorgdomein.local:80 check port 8080
  server intapp02 intapp02.zorgdomein.local:80 check port 8080
  server intapp03 intapp03.zorgdomein.local:80 check port 8080
```

LOADBALANCER

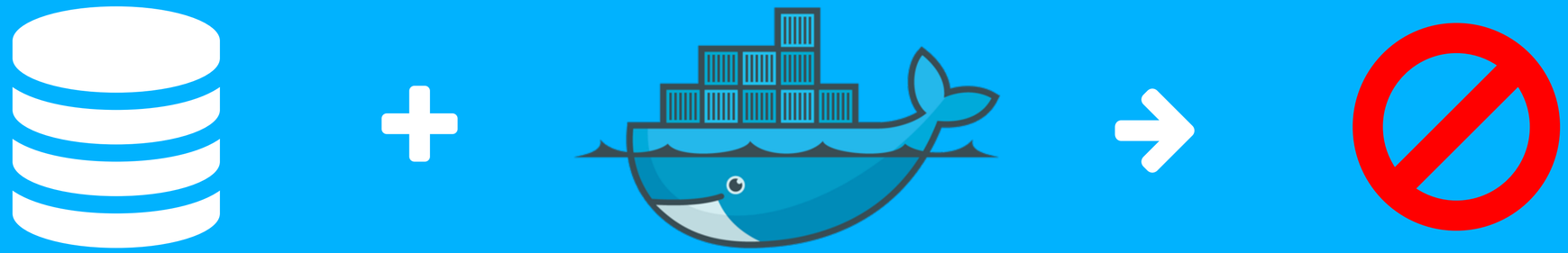
```
frontend main_ssl
  bind *:443 ssl crt /etc/pki/tls/private/dockerintegration.pem no-sslv3
  mode http
  maxconn 1000
  default_backend app
```

DOCKERHOST



CARGONAUTS

DATABASE AS SERVICE



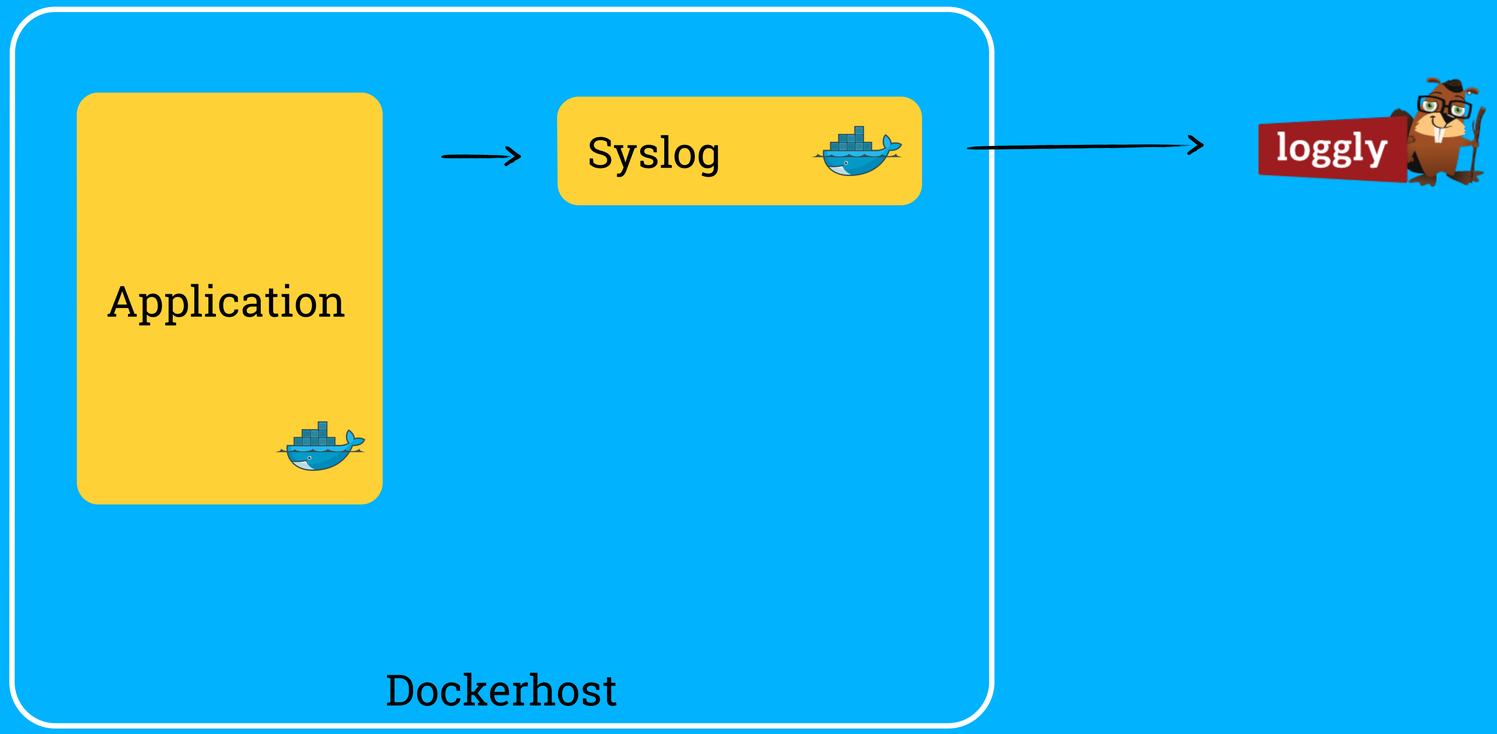
LOGGING, MONITORING AND ALERTING

LOGGING, MONITORING AND ALERTING

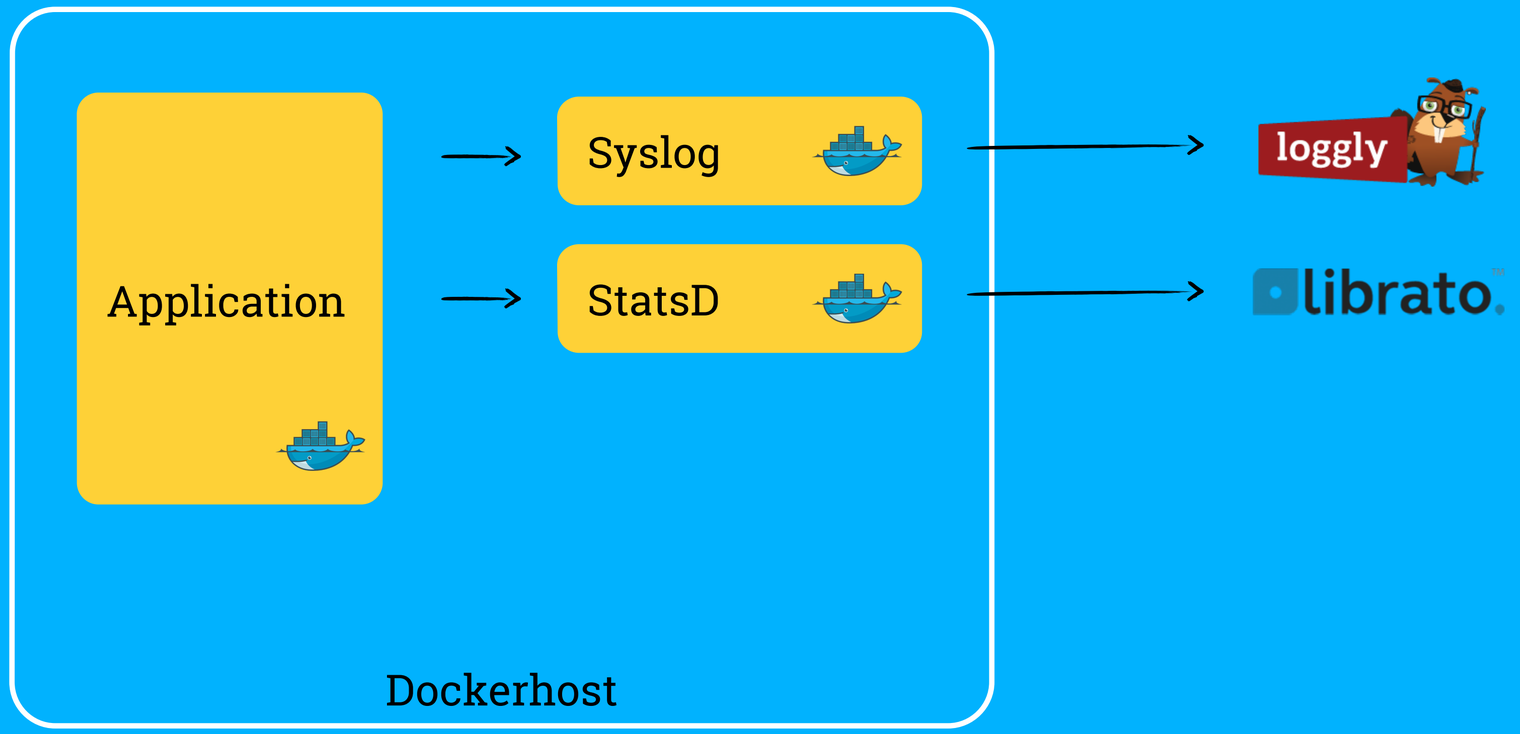
StatsD

CARGONAUTS

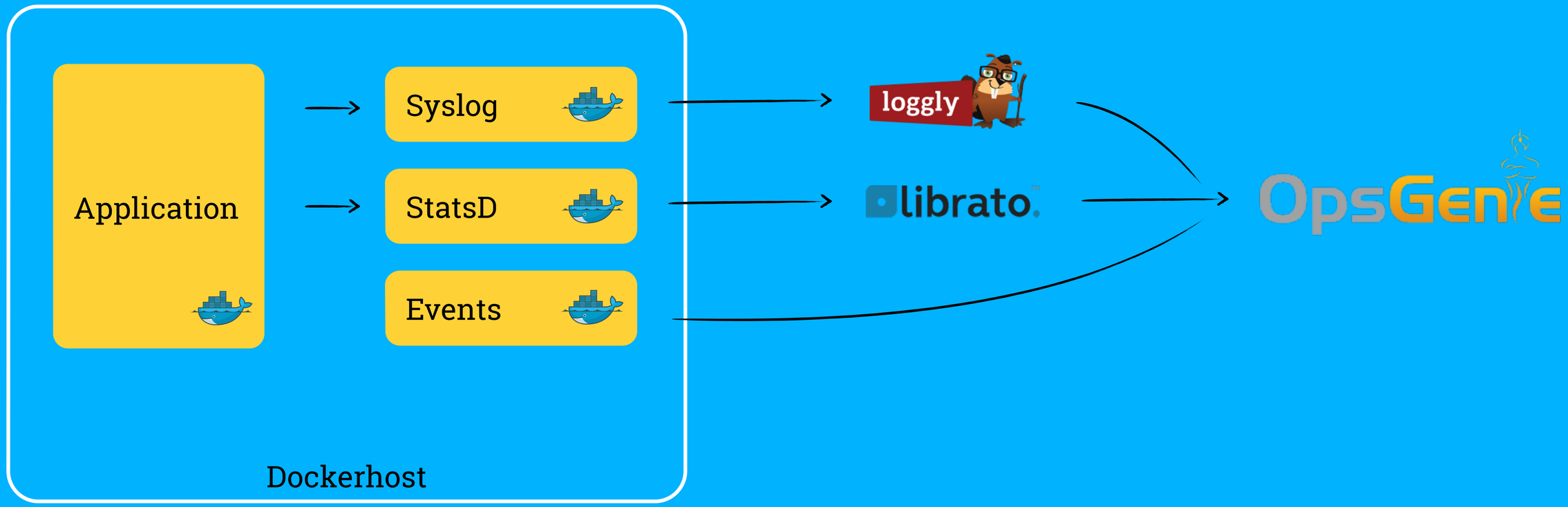
LOGGING



MONITORING



ALERTING



CARGONAUTS

APPLICATION VERSIONING

APPLICATION VERSIONING

OLD

commit

push

NEW

commit

push

CARGONAUTS

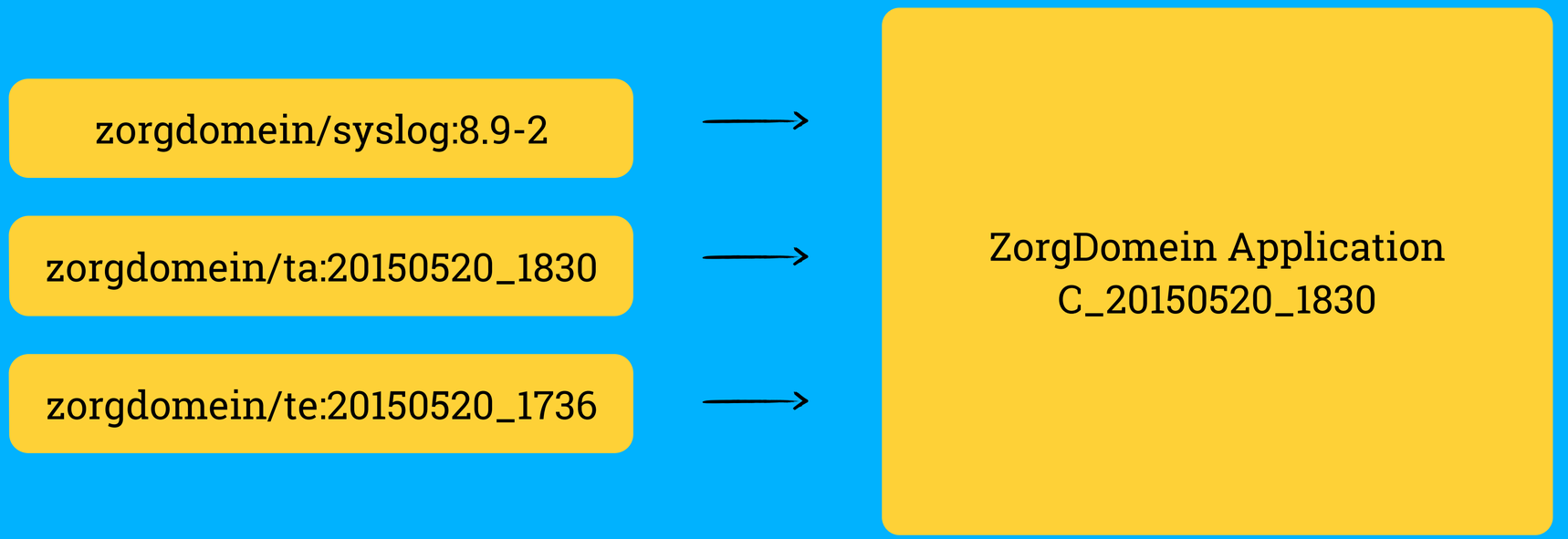
IMAGE VERSIONING

zorgdomein/syslog:8.9-2

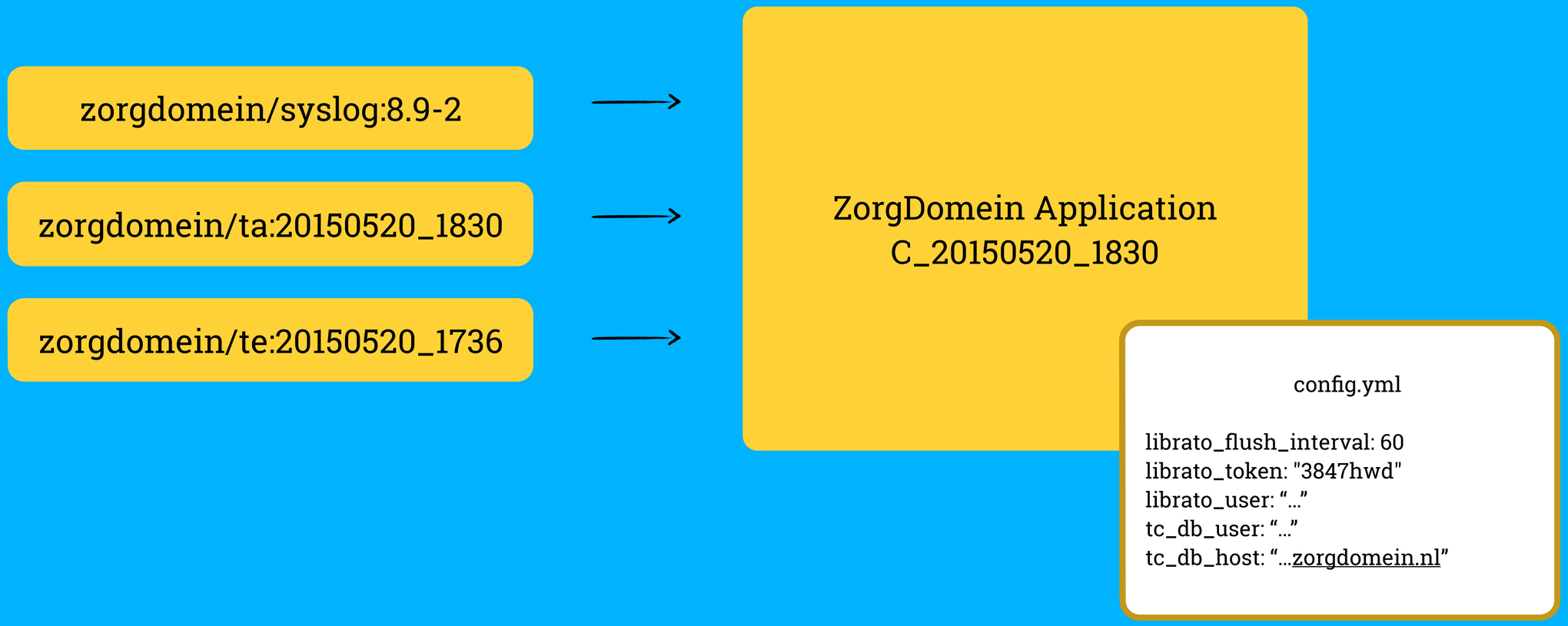
zorgdomein/ta:20150520_1830

zorgdomein/te:20150520_1736

APPLICATION VERSIONING



ENVIRONMENT VERSIONING



CARGONAUTS

ZERO DOWNTIME DEPLOYMENT

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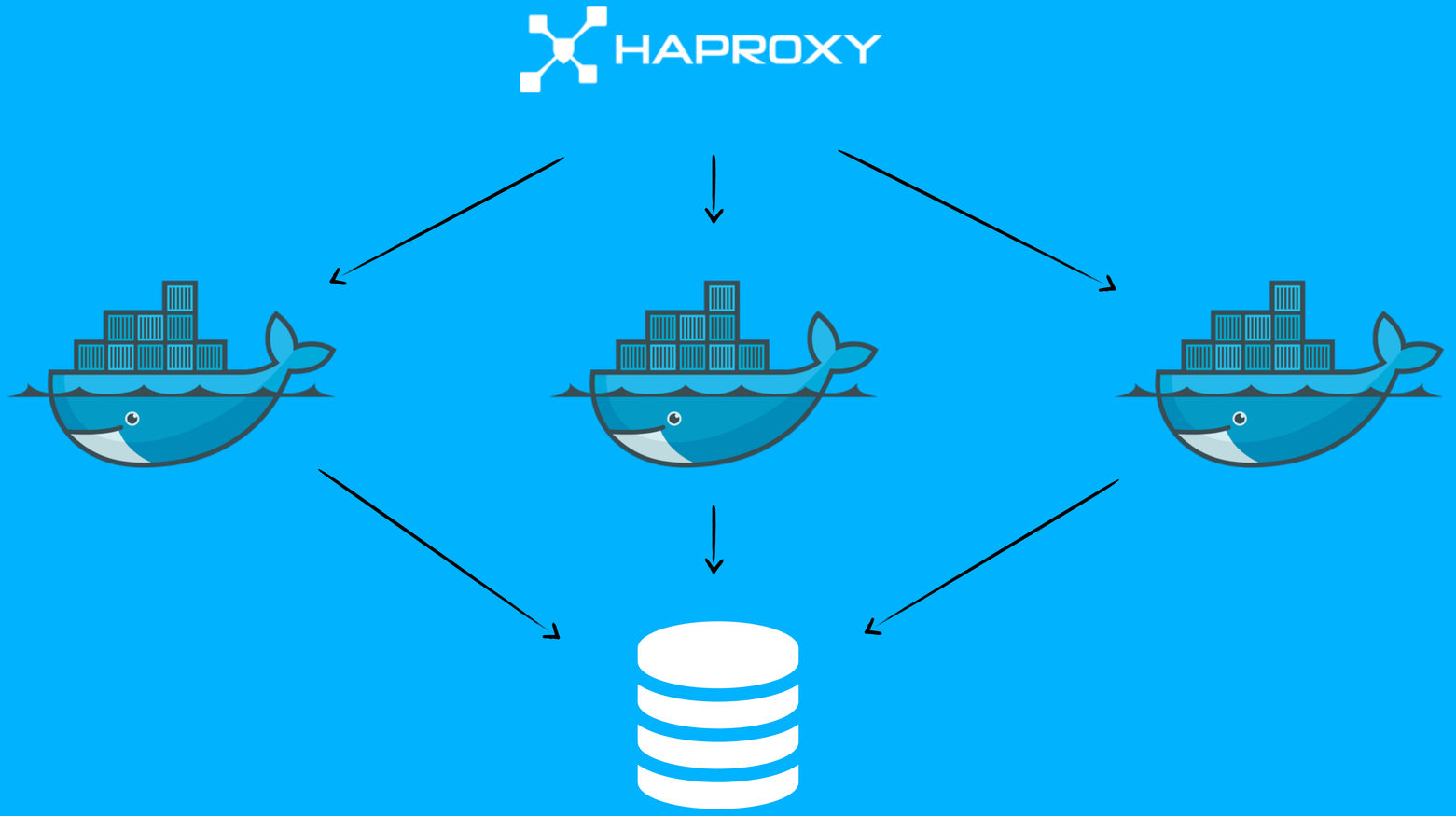
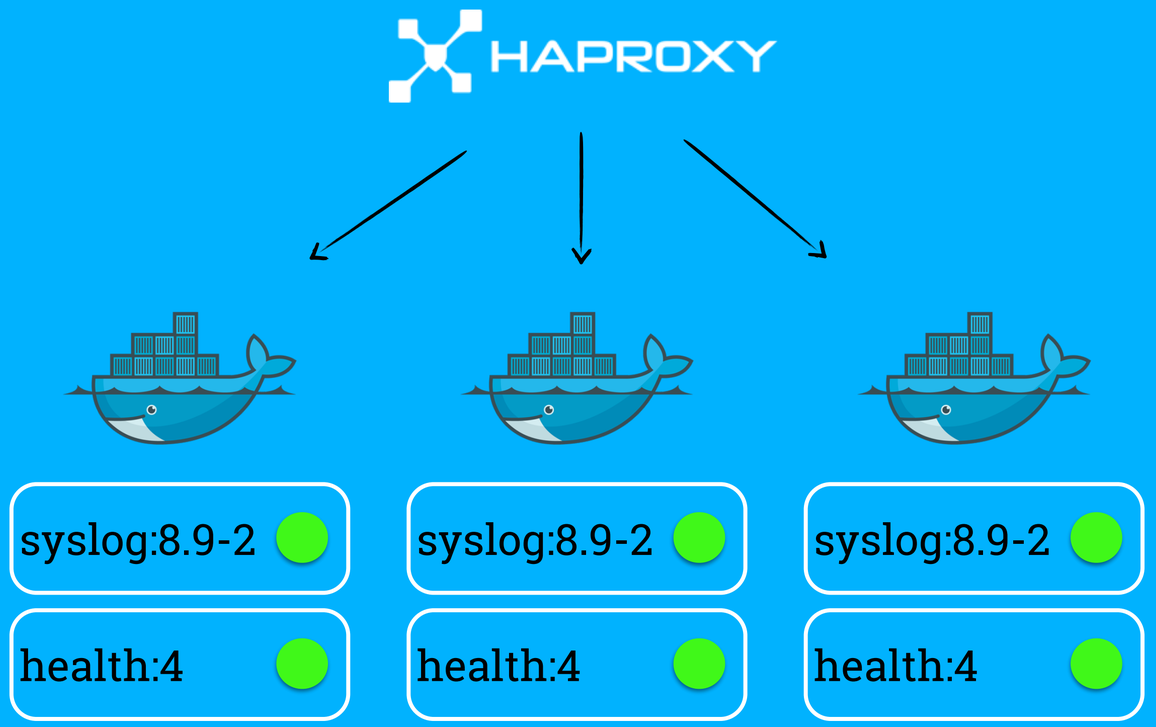


ZERO DOWNTIME DEPLOYMENT WITH ANSIBLE

```
---
- include: util/docker_update.yml
  vars:
    name: 'docker-stats'
    image: 'zorgdomein/docker-stats'
    image_version: "{{ version }}"
    container_state: "{{ state | default('present') }}"
    args:
      -v /var/run/docker.sock:/var/run/docker.sock
      -e 'STATSD_HOST={{ statsd_hostname }}'
      -e 'INTERVAL={{ stats_interval }}'
```

ZERO DOWNTIME DEPLOYMENT



CARGONAUTS

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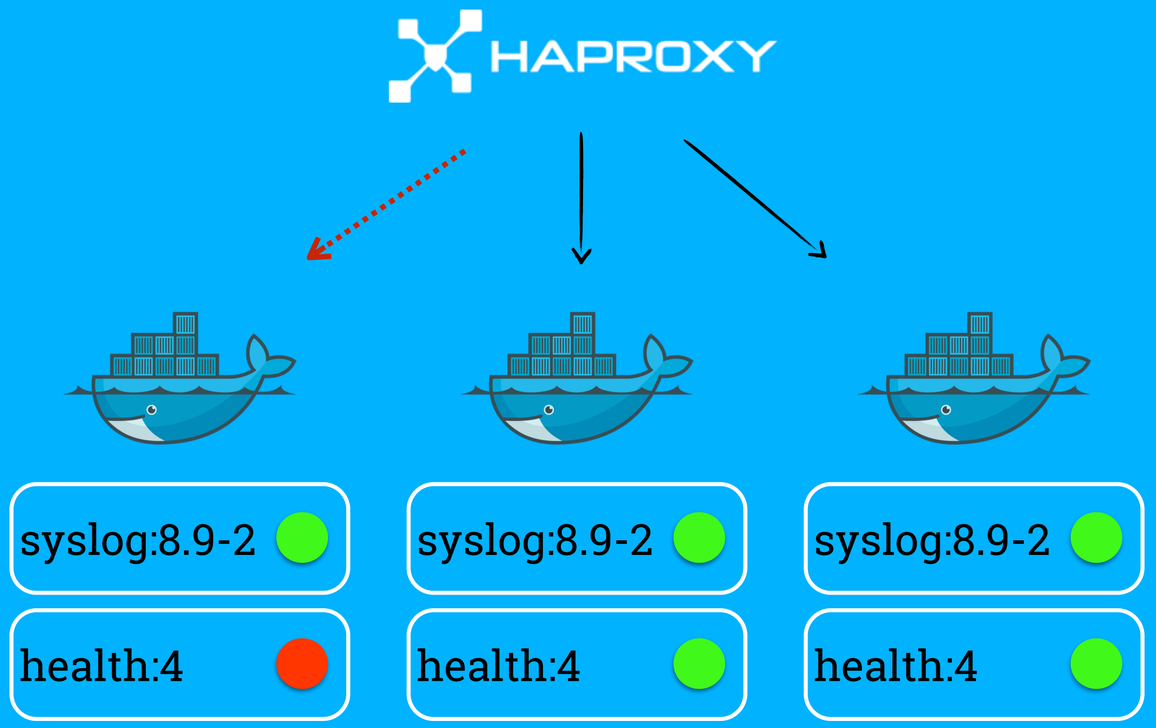

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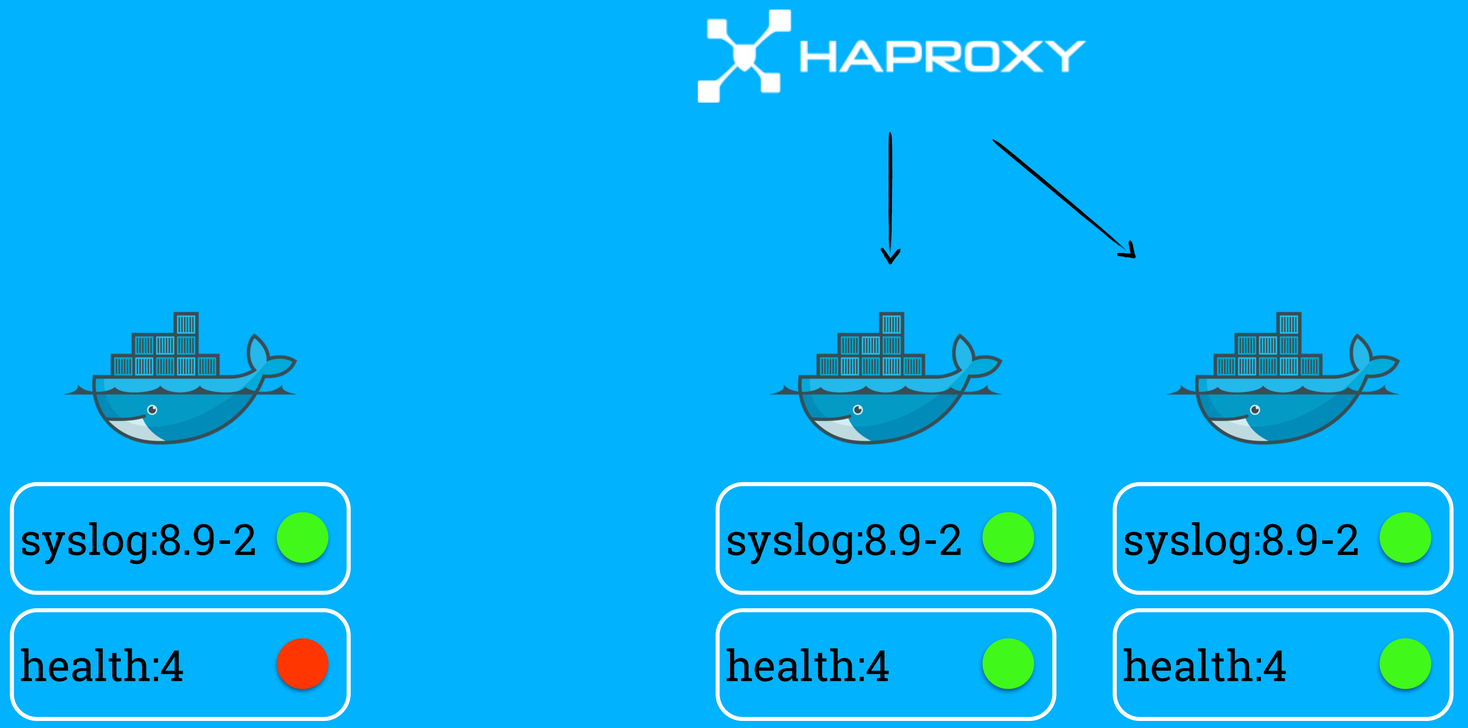

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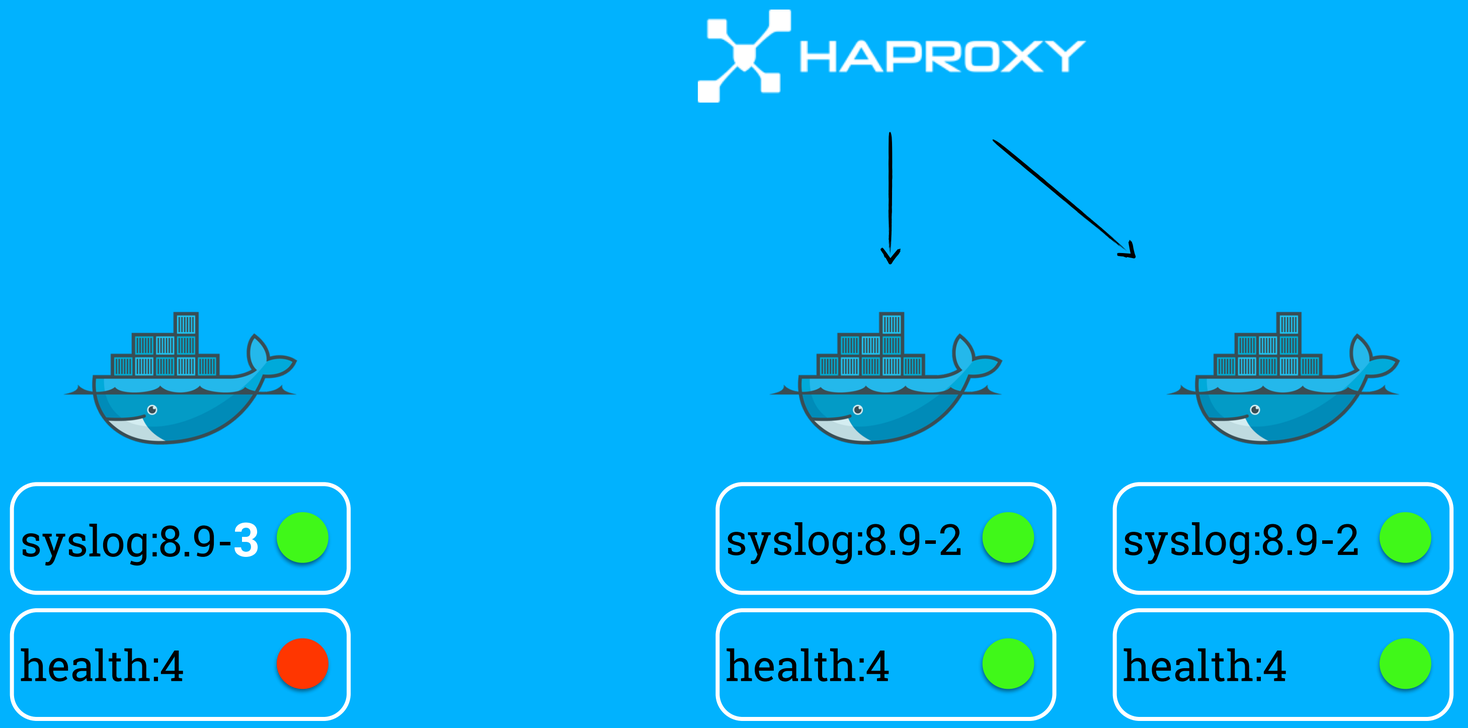

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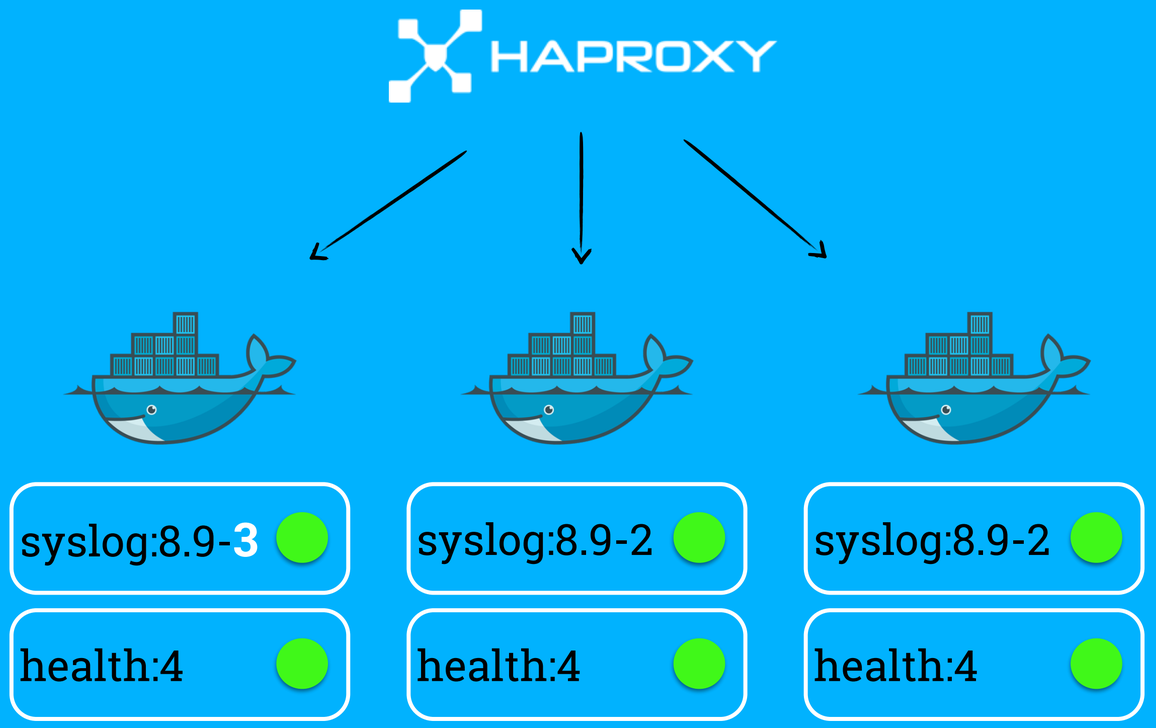

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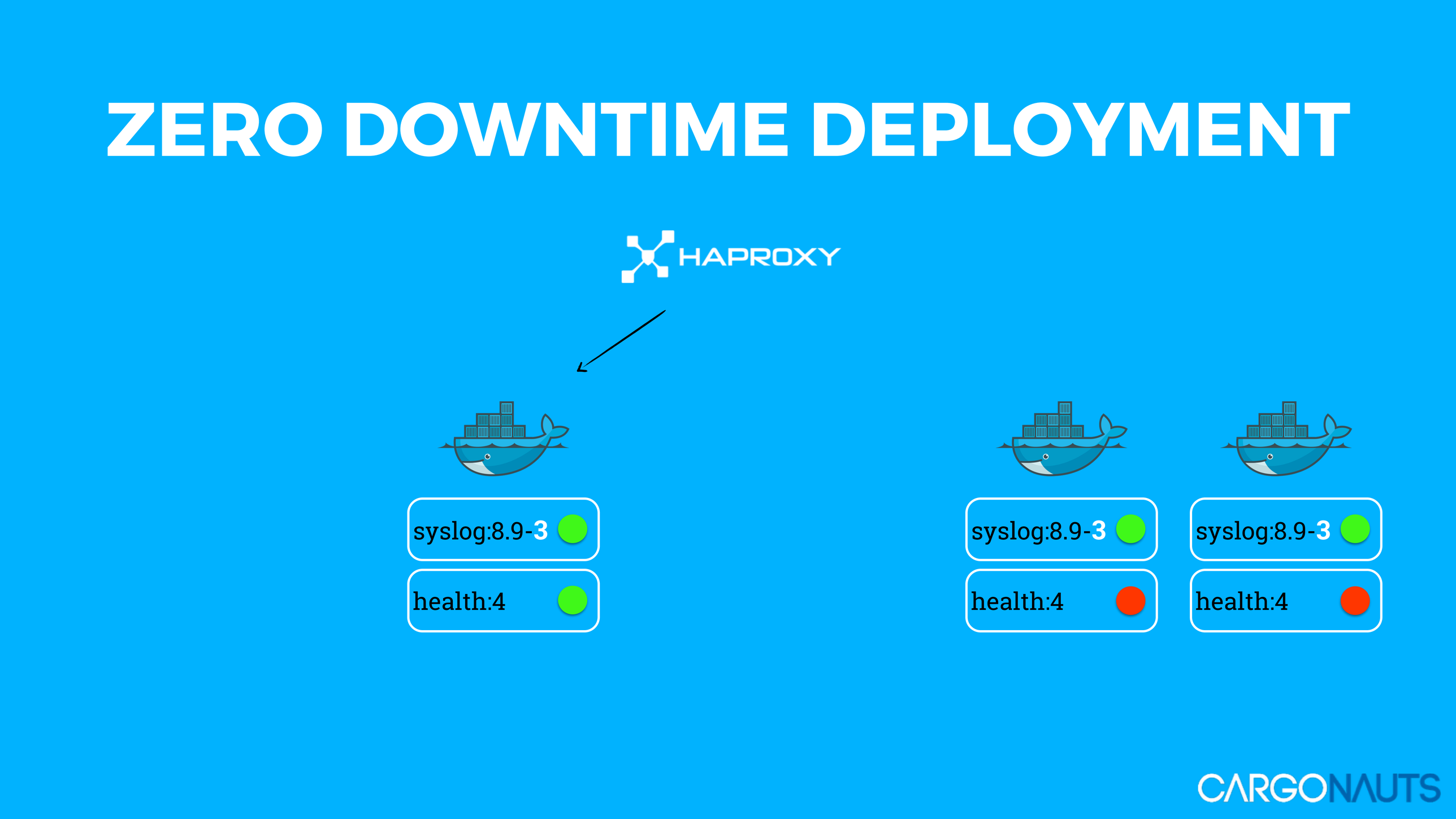
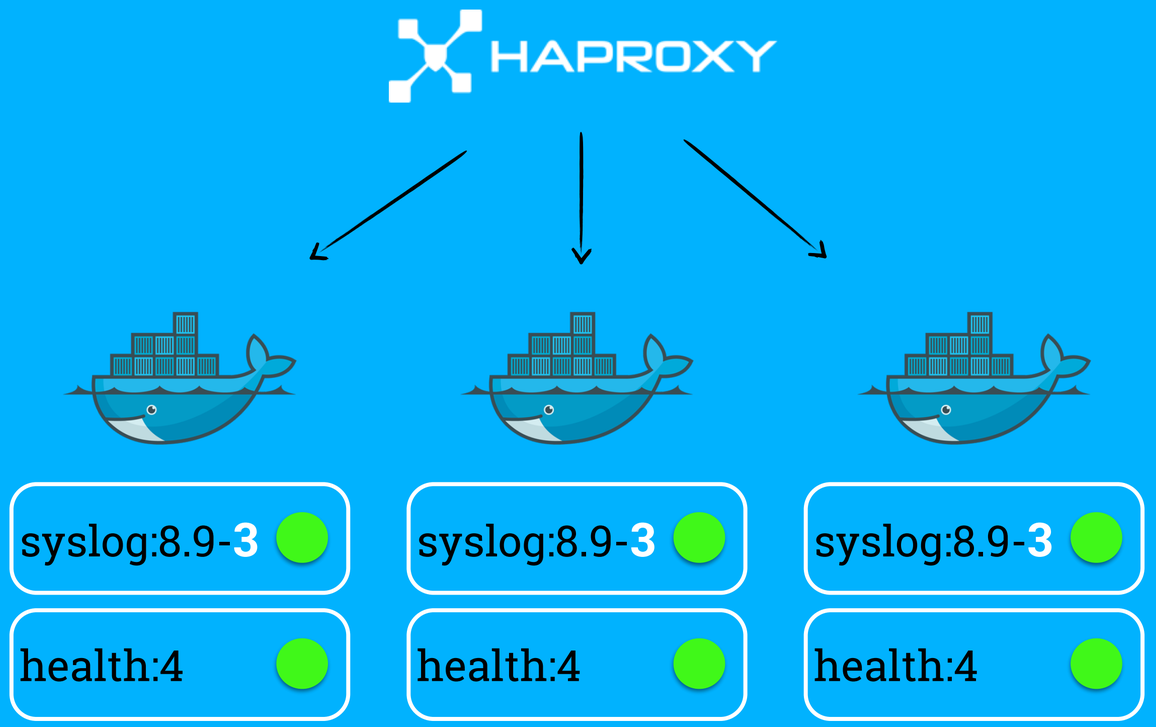


CARGONAUTS

ZERO DOWNTIME DEPLOYMENT



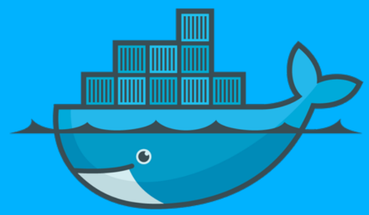
SECURITY

SECURITY

DOCKER API

Allow
run
stop
stats
events

Filter
inspect

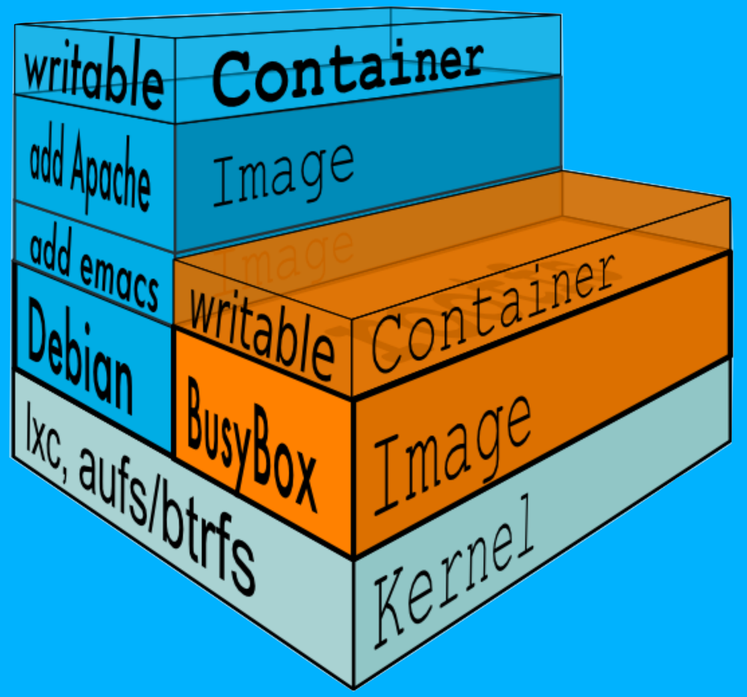


DOCKER API - FILTER EXAMPLE

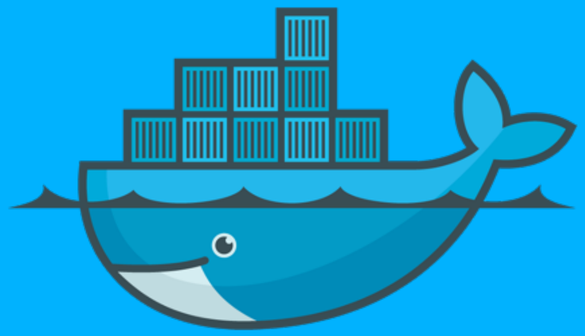
```
"Config": {
          "Cmd": [
              "./run_te.sh"
         ],
         "Env": [
    …..,
              "ZDDB_USERNAME=dbintuser",
              “ZDDB_PASSWORD=*********”
```

DOCKER IMAGE MANAGEMENT

Image	Size MB
Debian + Java	450
BusyBox + Java	300
Go	6



DOCKER + CONTINUOUS DELIVERY



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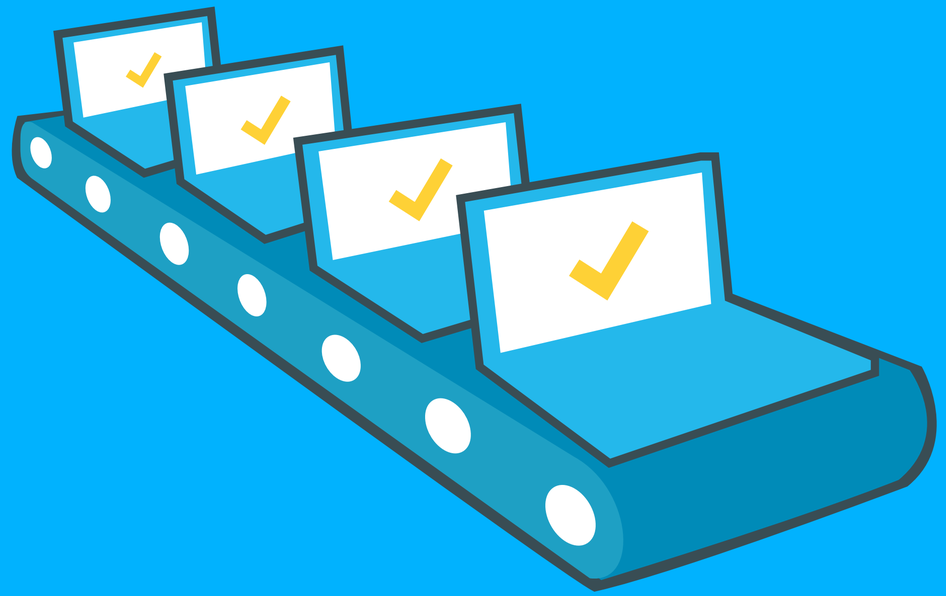

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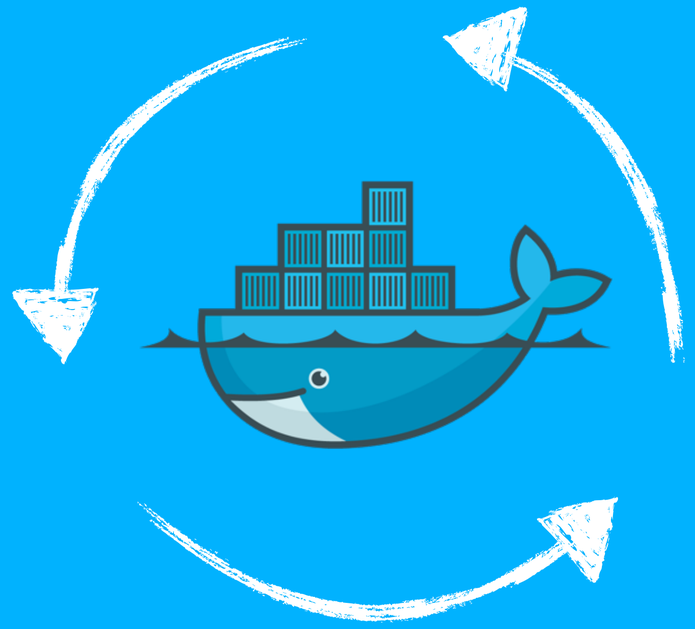

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CARGONAUTS

THE DATA CENTER AUTOMATION EXPERTS

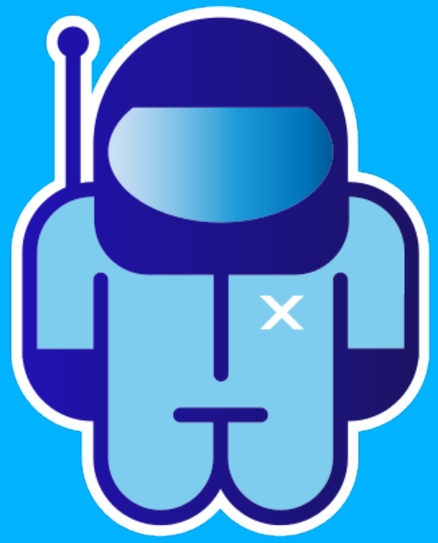
CARGONAUTS

WHAT WE DO

Automate, automate, automate!

Code the infrastructure!

Containerize all the things!



THANKS!

Armin Čoralić
armin@cargonauts.io