Docker Workshop

Plamen Kalchev

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Resources

https://github.com/icnbg/docker-workshop

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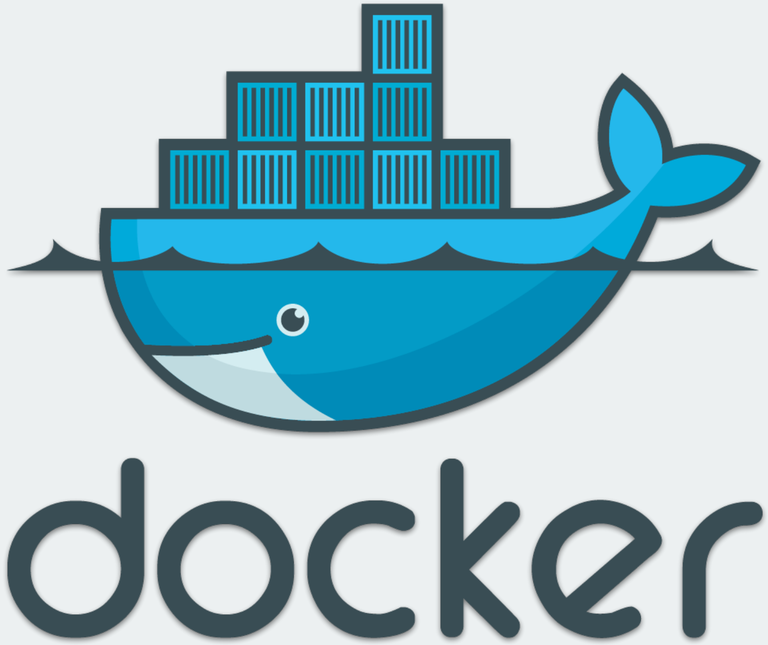
What is Docker?



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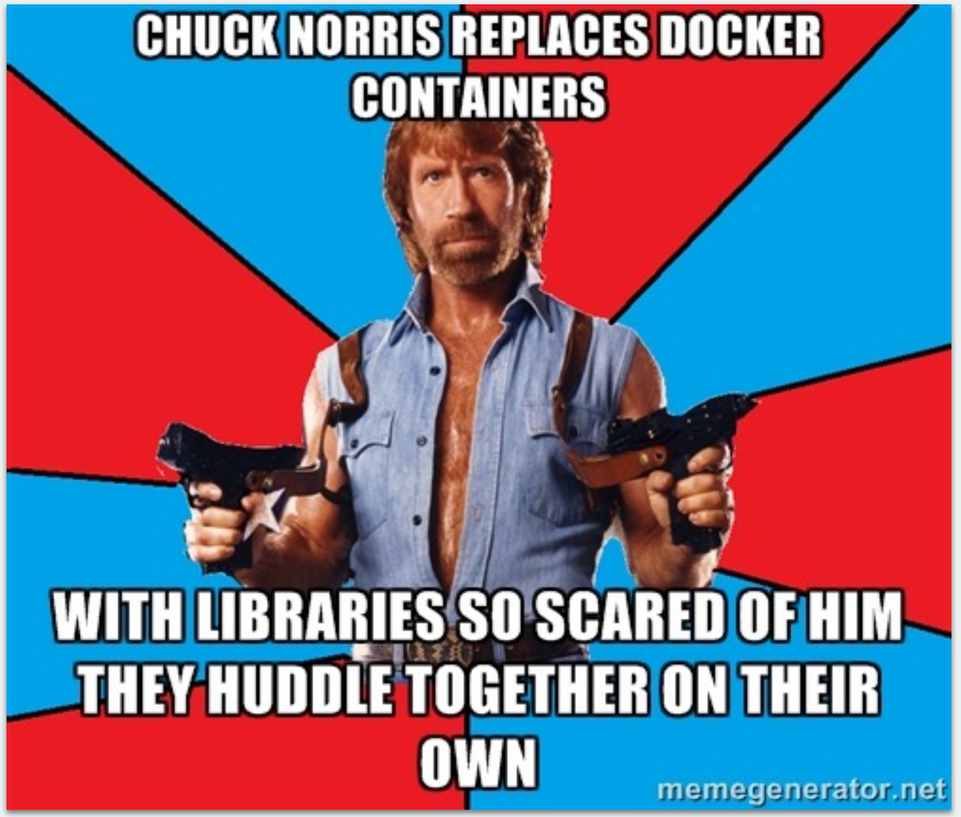
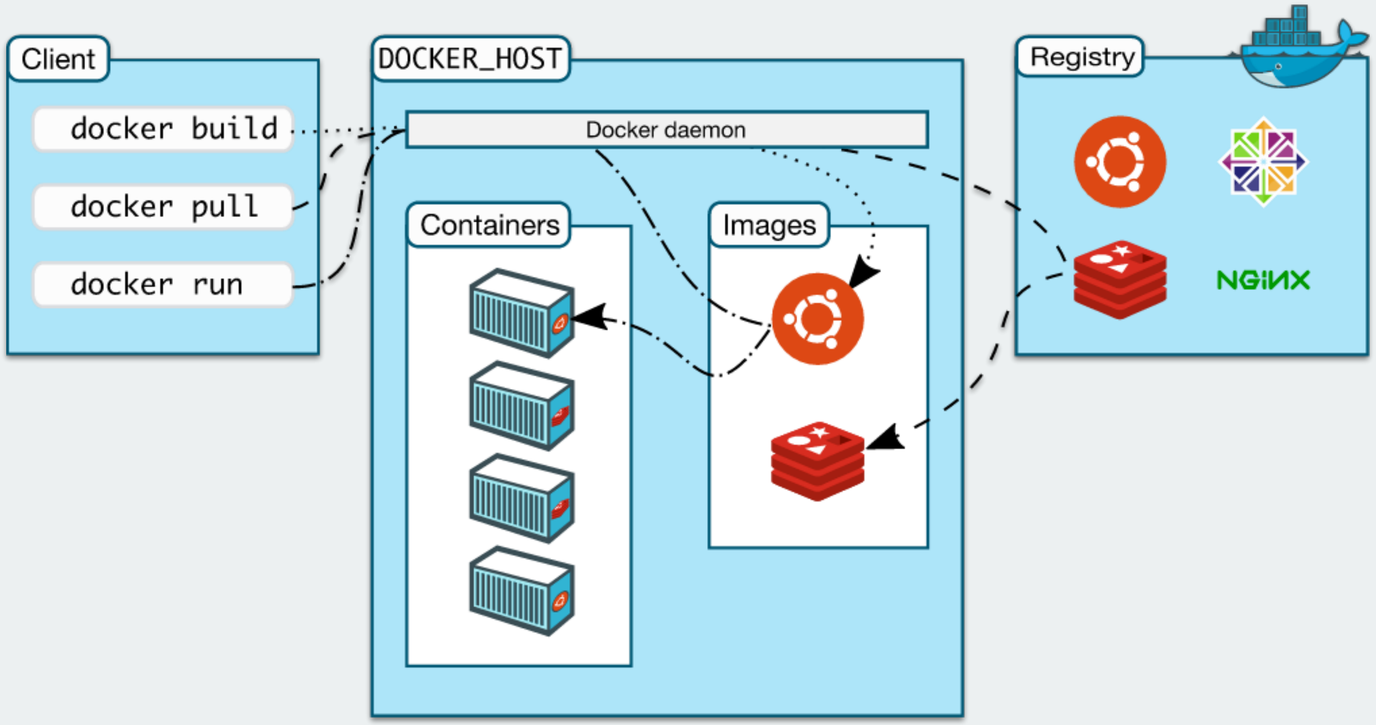
Why use it?


CHUCK NORRIS REPLACES DOCKER CONTAINERS
WITH LIBRARIES SO SCARED OF HIM THEY HUDDLE TOGETHER ON THEIR OWN
memegenerator.net

The Docker Platform



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Containers and Images

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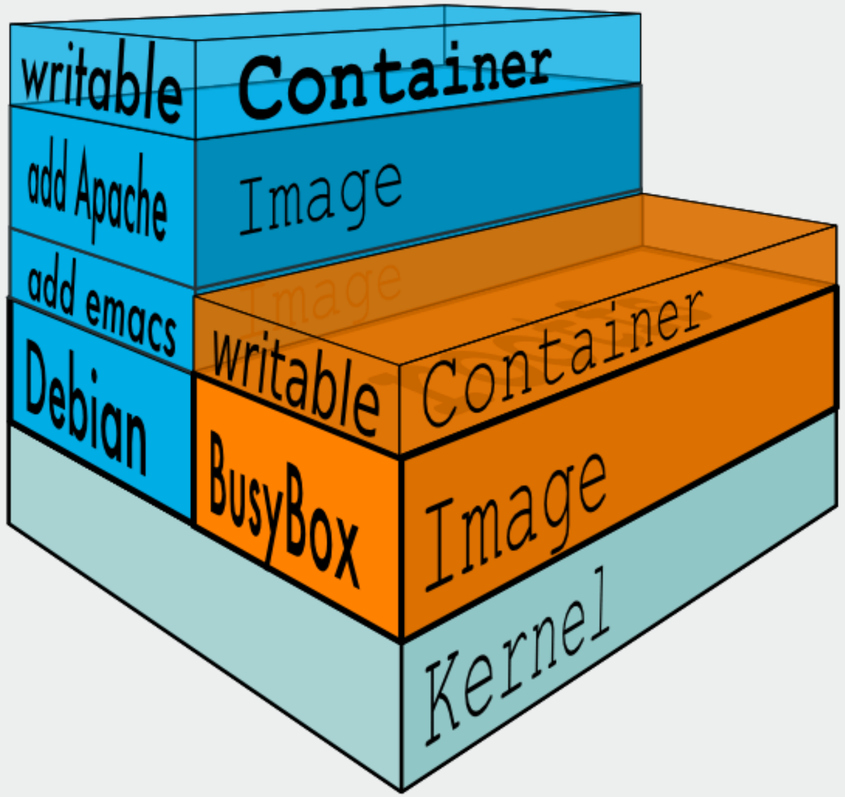
Storage and Volumes



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Building our own images

23 lines (14 sloc) | 673 Bytes — Raw | Blame | History

```
1  FROM debian:jessie
2
3  MAINTAINER NGINX Docker Maintainers "docker-maint@nginx.com"
4
5  RUN apt-key adv --keyserver hkp://pgp.mit.edu:80 --recv-keys 573BFD6B3D8FBC641079A6ABABF5BD827BD9BF62
6  RUN echo "deb http://nginx.org/packages/mainline/debian/ jessie nginx" >> /etc/apt/sources.list
7
8  ENV NGINX_VERSION 1.9.6-1~jessie
9
10 RUN apt-get update && \
11     apt-get install -y ca-certificates nginx=${NGINX_VERSION} && \
12     rm -rf /var/lib/apt/lists/*
13
14 # forward request and error logs to docker log collector
15 RUN ln -sf /dev/stdout /var/log/nginx/access.log
16 RUN ln -sf /dev/stderr /var/log/nginx/error.log
17
18 VOLUME ["/var/cache/nginx"]
19
20 EXPOSE 80 443
21
22 CMD ["nginx", "-g", "daemon off;"]
```

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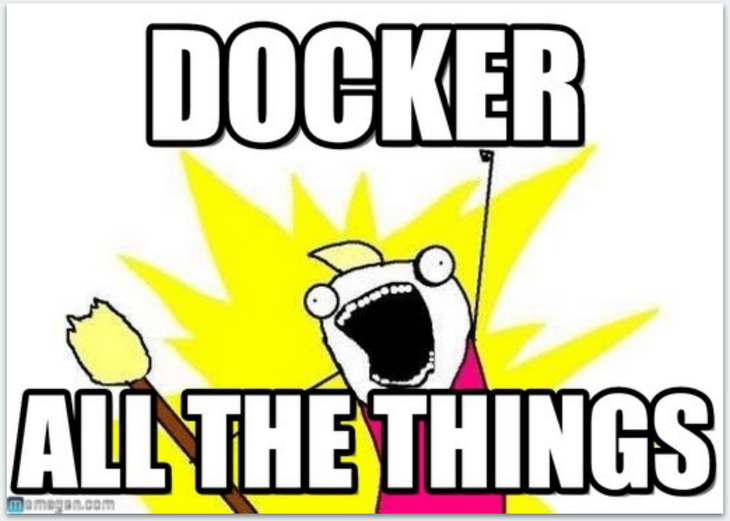
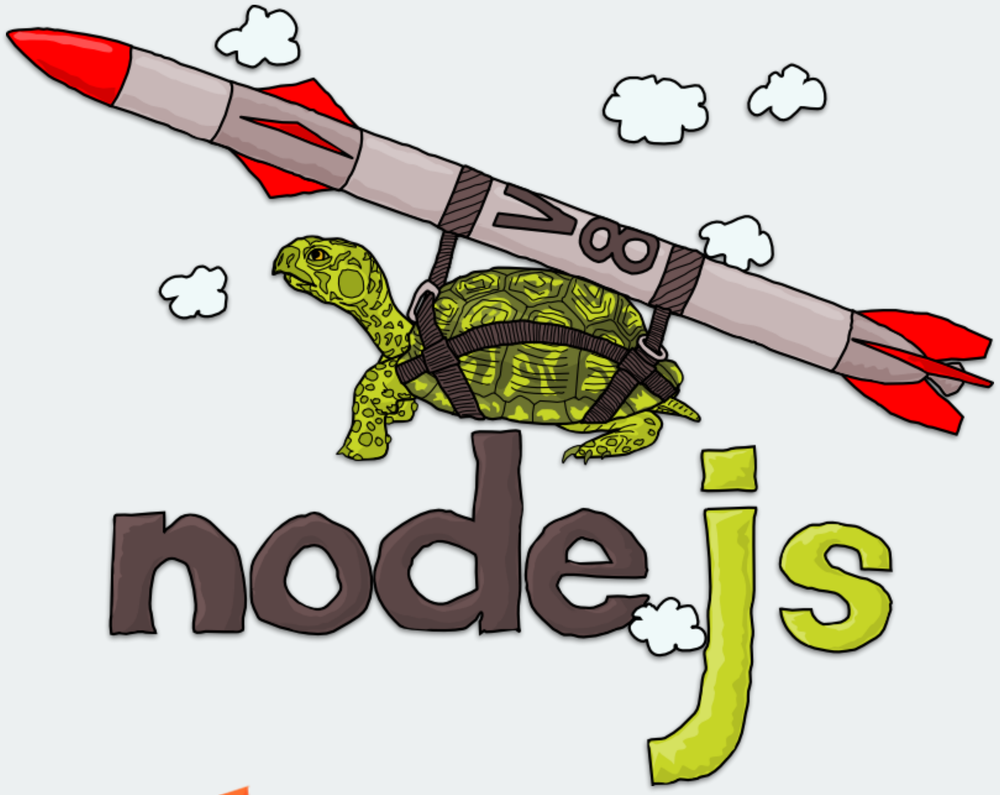
Examples



Hello



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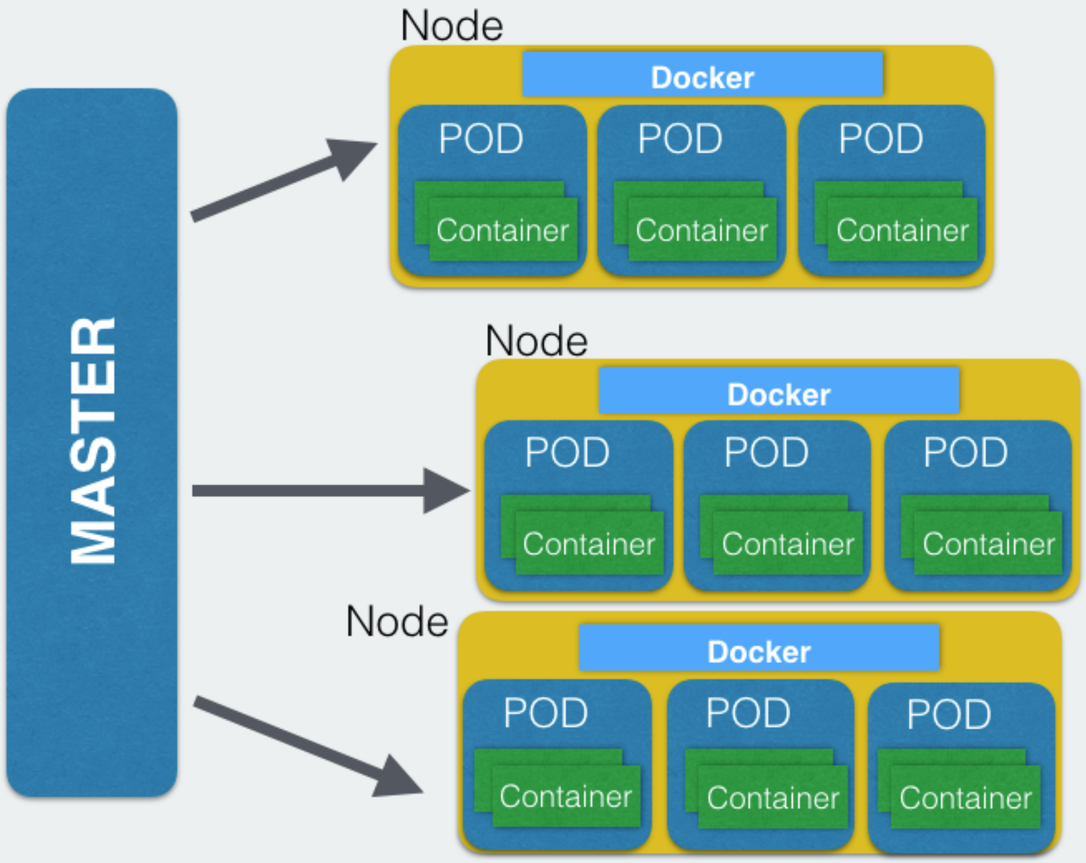
What is Kubernetes?

Why use it?



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Kubernetes building blocks

Pods
RC
Services
Labels
Selectors

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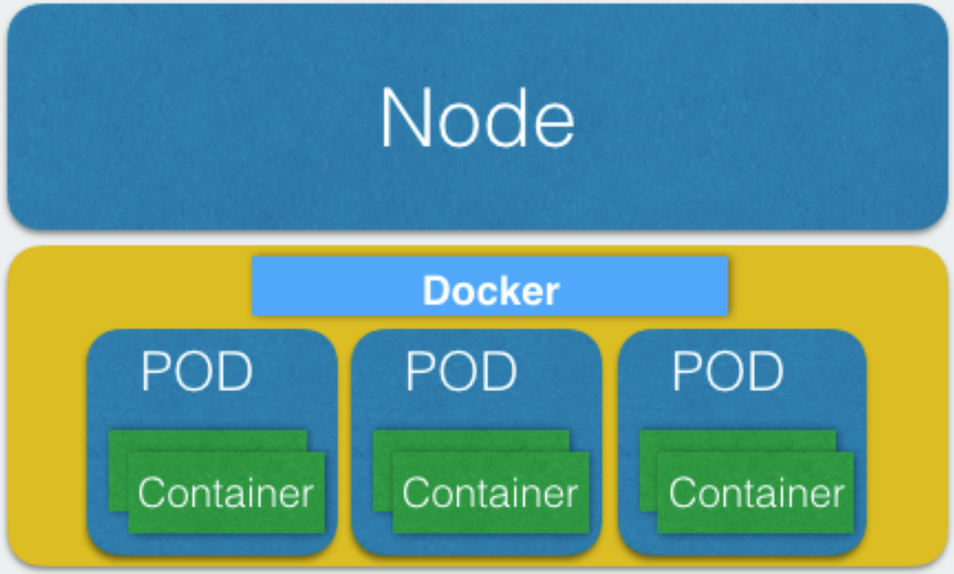
Pods



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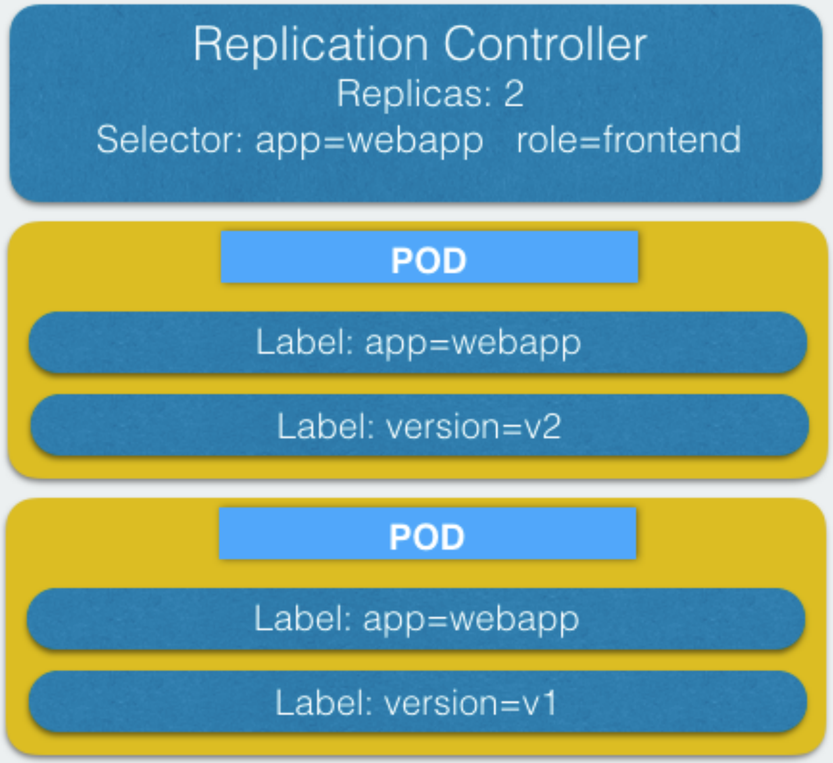
Replication Controllers



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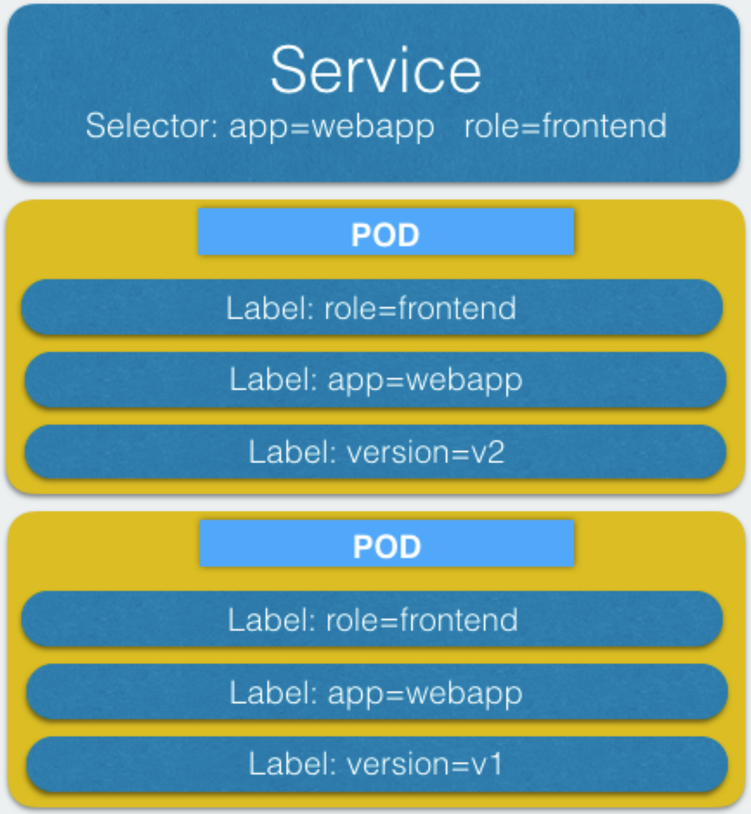
Services



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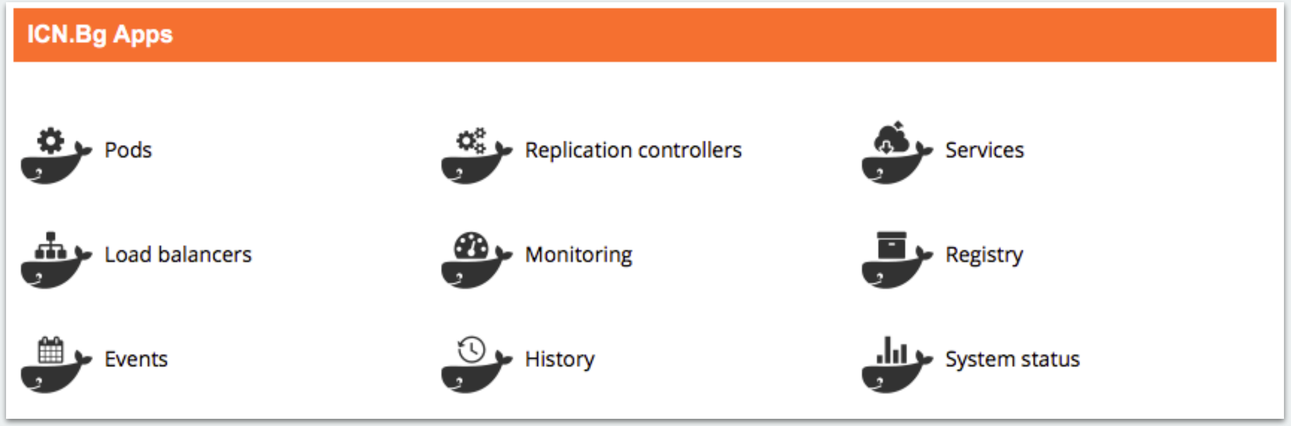
ICN.Bg Apps



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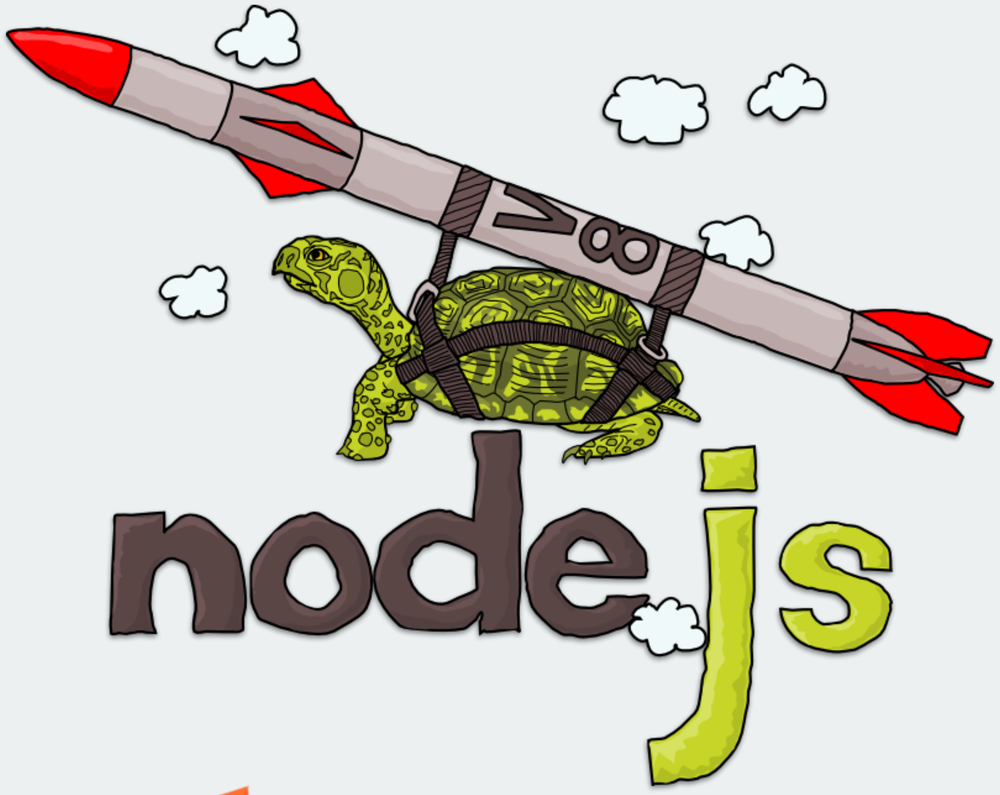
Hello



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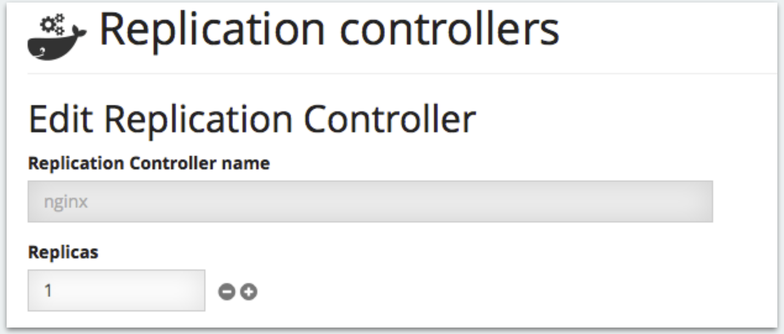
Scaling Up and Down




```
"spec": {
    "replicas": 1,
    "selector": {
      "name": "nginx"
    },
```

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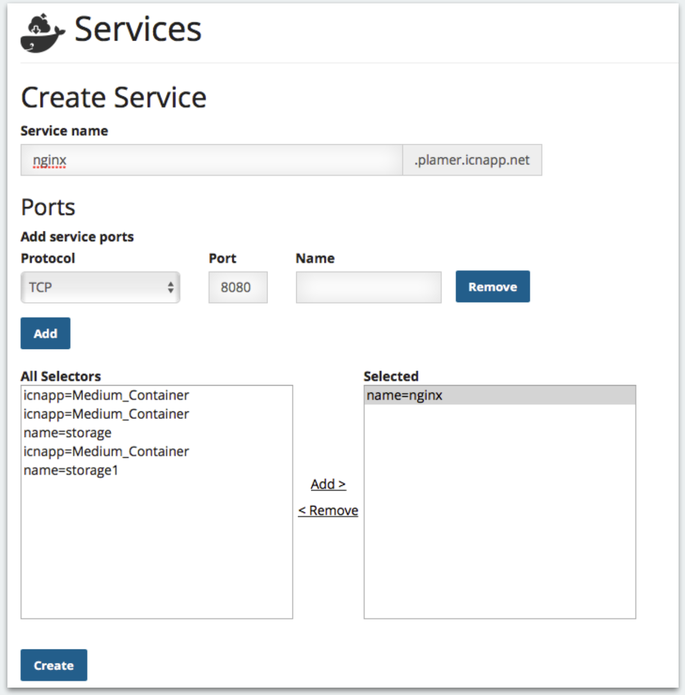
Accessing our apps from the outside world



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Migrating from local Docker to the cluster

Build
Tag
Push
Deploy via UI

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php/redis

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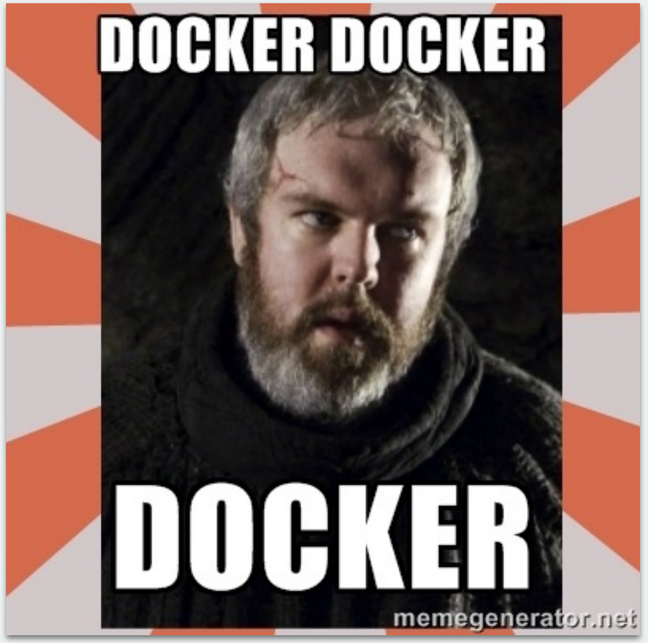
Questions?



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