Docker Workshop

Plamen Kalchev

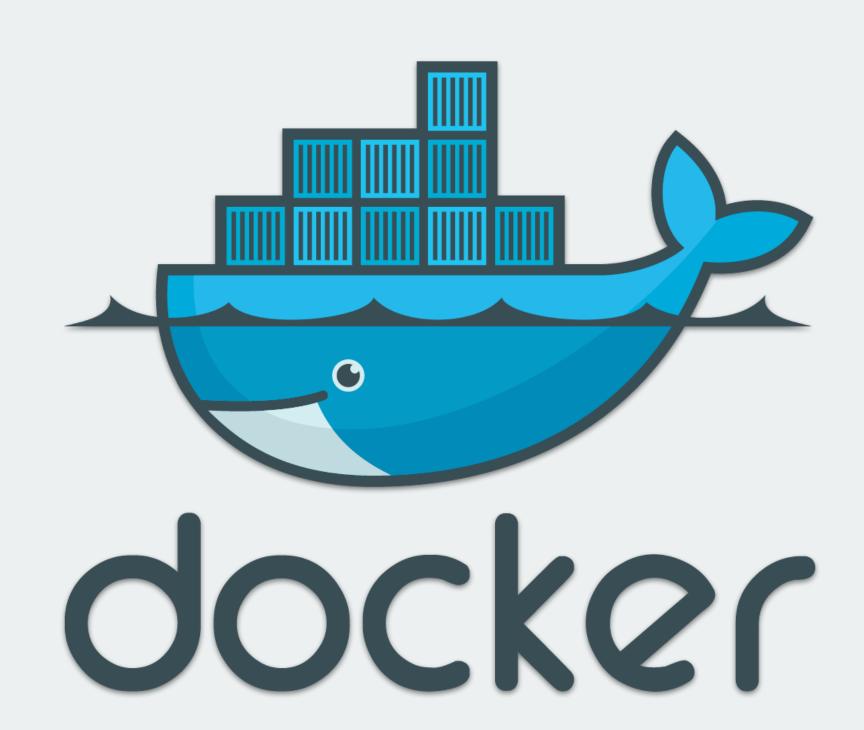


Resources

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



What is Docker?

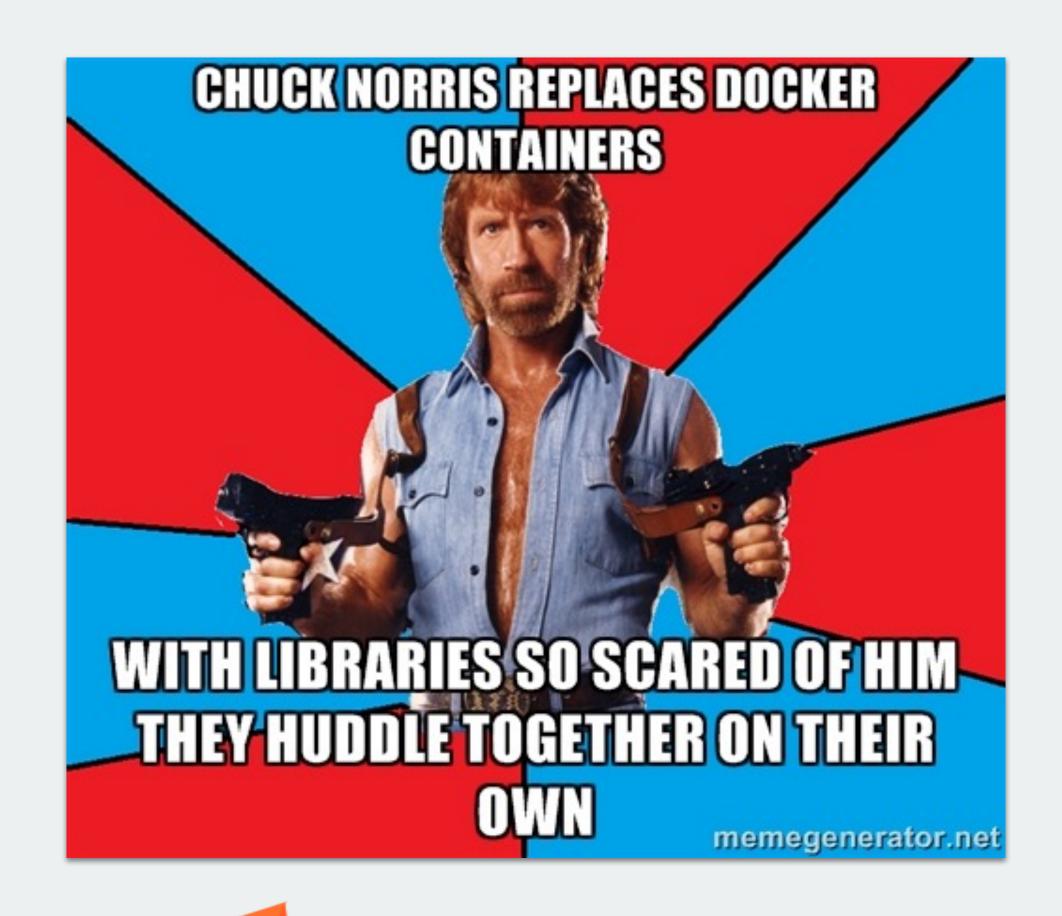




Microservices Immutable Infrastructure Stateless Applications

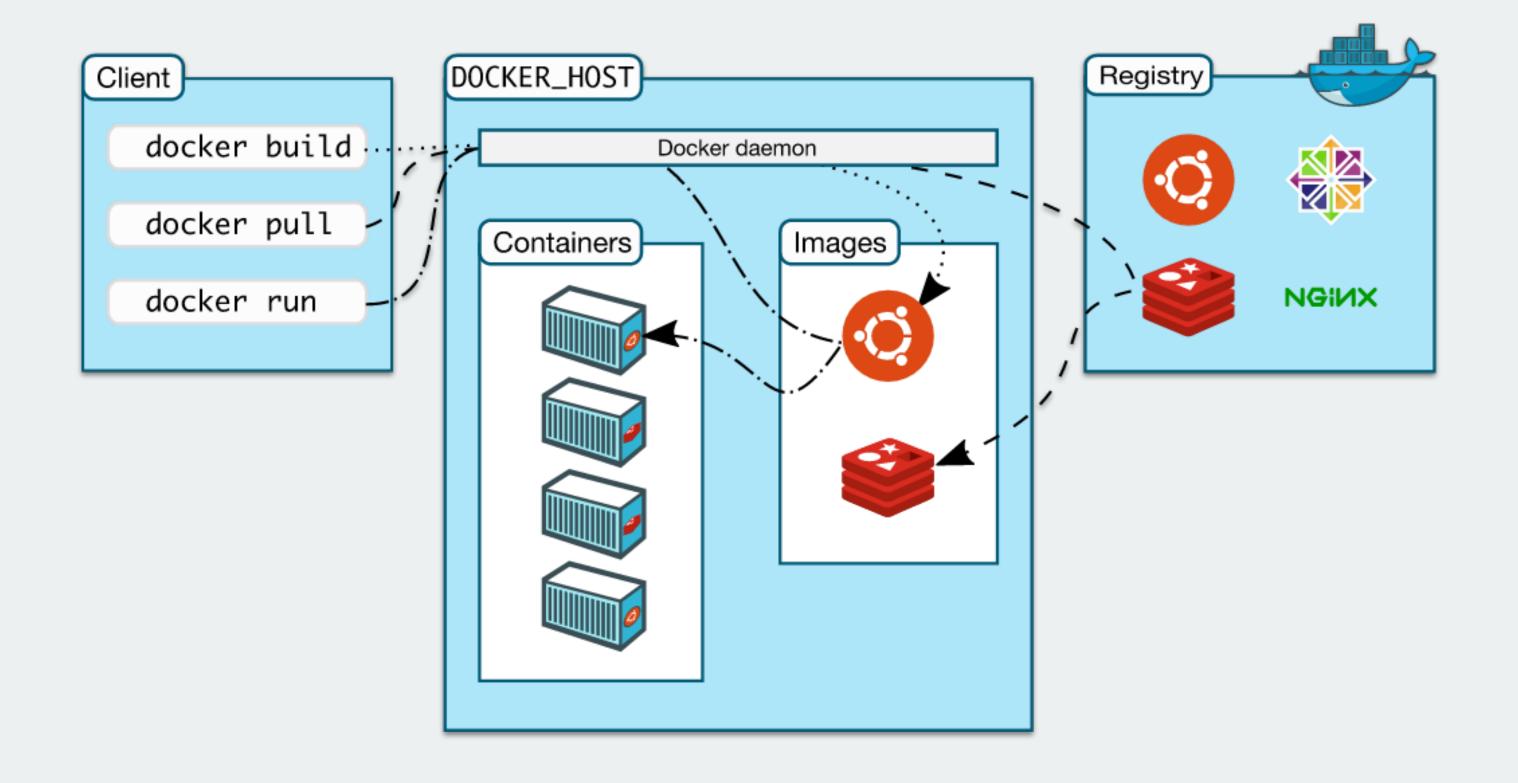


Why use it?



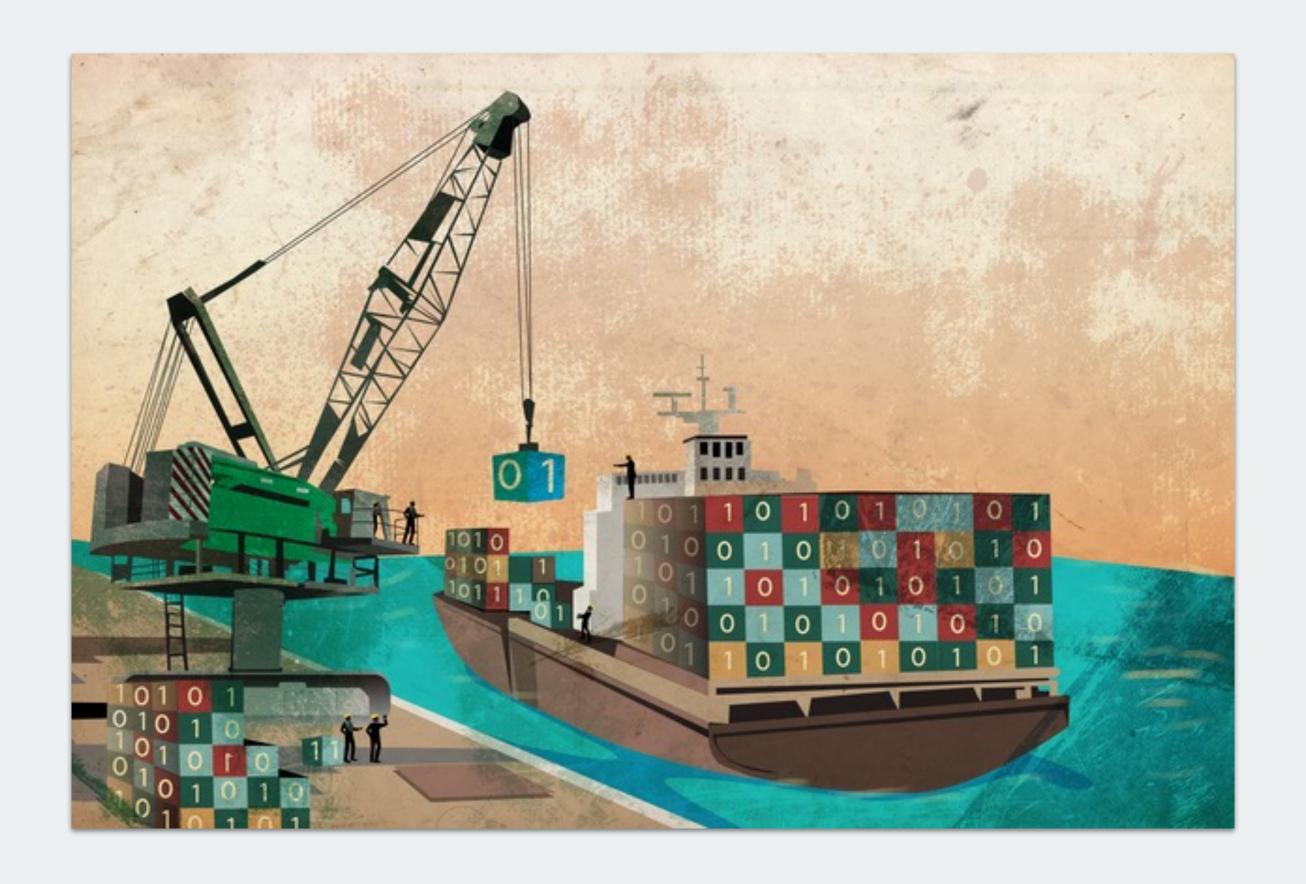


The Docker Platform



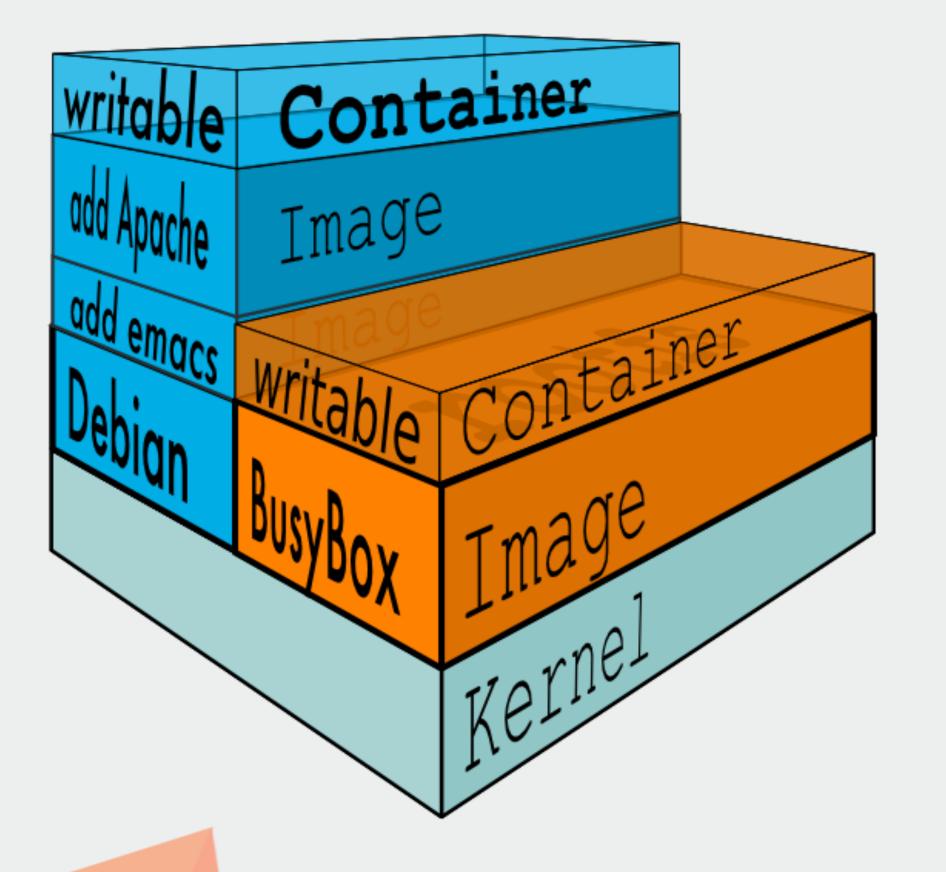


Containers and Images





Storage and Volumes





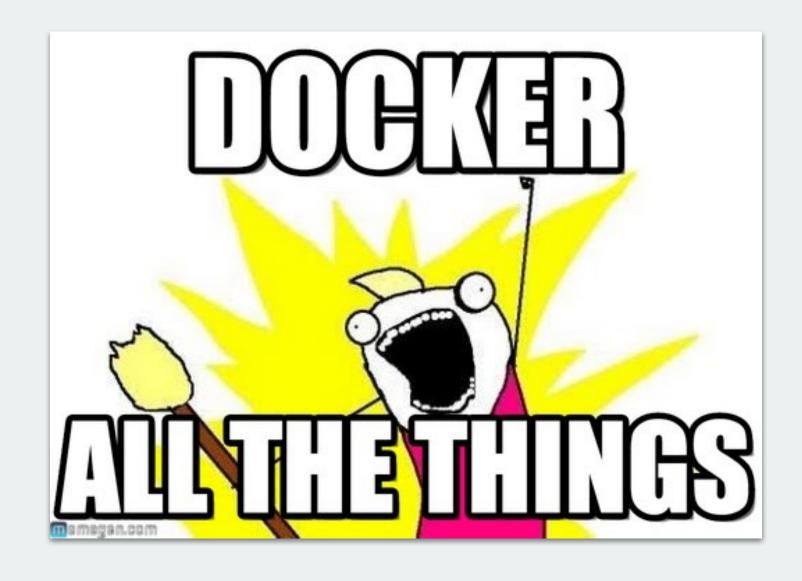
Building our own images

```
Blame History 

23 lines (14 sloc) 673 Bytes
       FROM debian:jessie
       MAINTAINER NGINX Docker Maintainers "docker-maint@nginx.com"
       RUN apt-key adv --keyserver hkp://pgp.mit.edu:80 --recv-keys 573BFD6B3D8FBC641079A6ABABF5BD827BD9BF62
       RUN echo "deb http://nginx.org/packages/mainline/debian/ jessie nginx" >> /etc/apt/sources.list
       ENV NGINX_VERSION 1.9.6-1~jessie
       RUN apt-get update && \
          apt-get install -y ca-certificates nginx=${NGINX_VERSION} && \
  11
          rm -rf /var/lib/apt/lists/*
  12
  13
       # forward request and error logs to docker log collector
       RUN ln -sf /dev/stdout /var/log/nginx/access.log
       RUN ln -sf /dev/stderr /var/log/nginx/error.log
  17
       VOLUME ["/var/cache/nginx"]
  19
       EXPOSE 80 443
       CMD ["nginx", "-g", "daemon off;"]
```

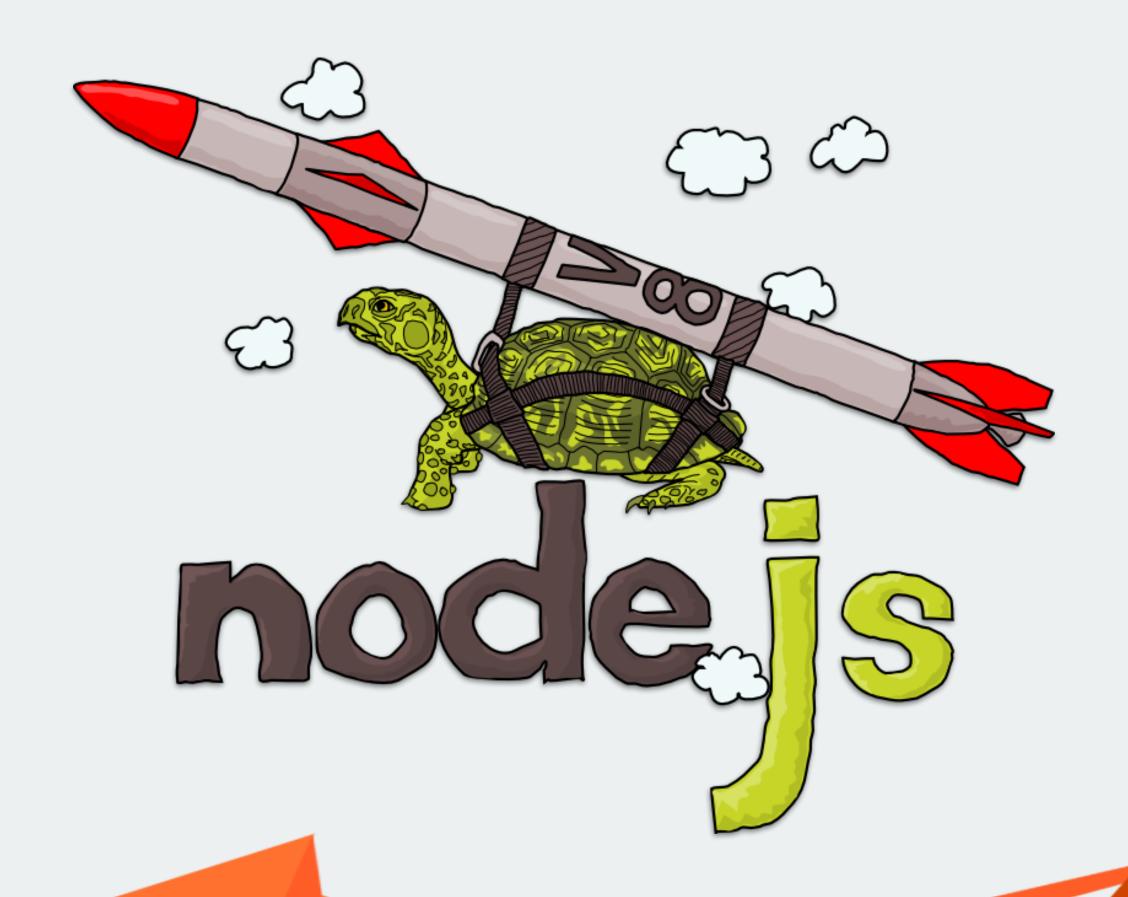


Examples





Hello





Docker summary

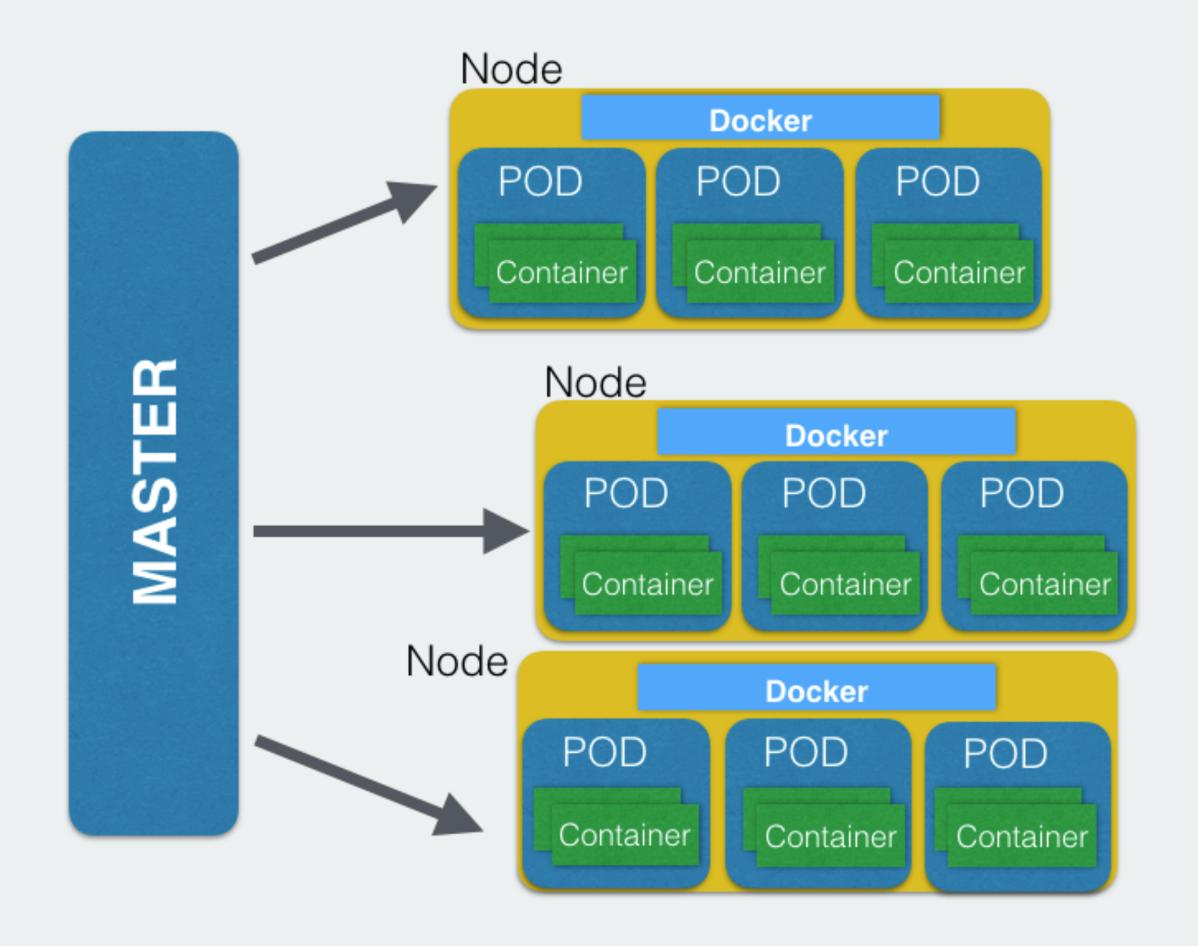


What is Kubernetes?



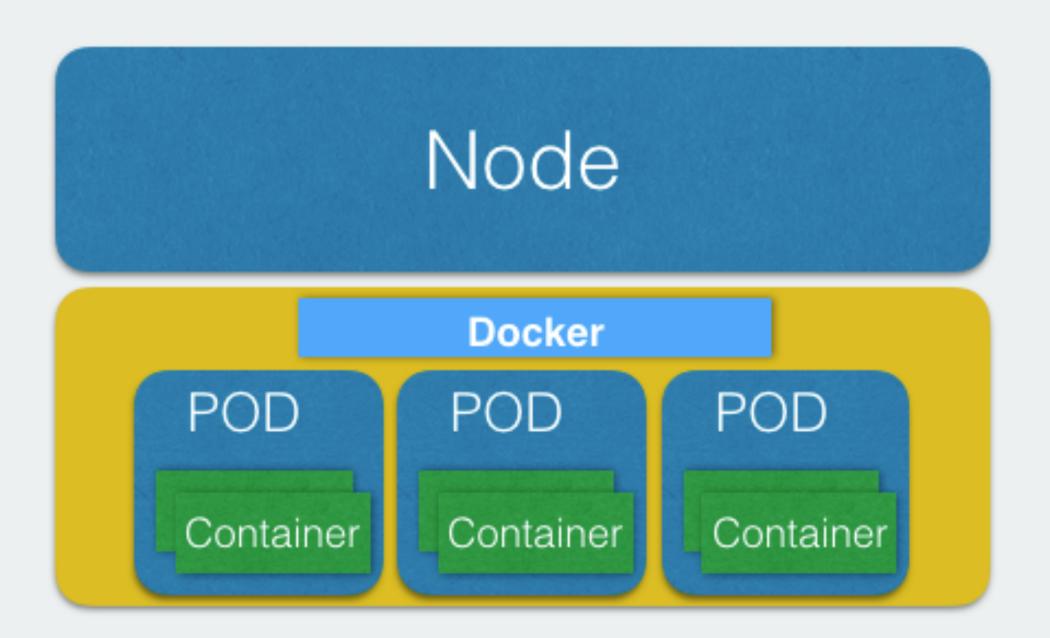


How it works?



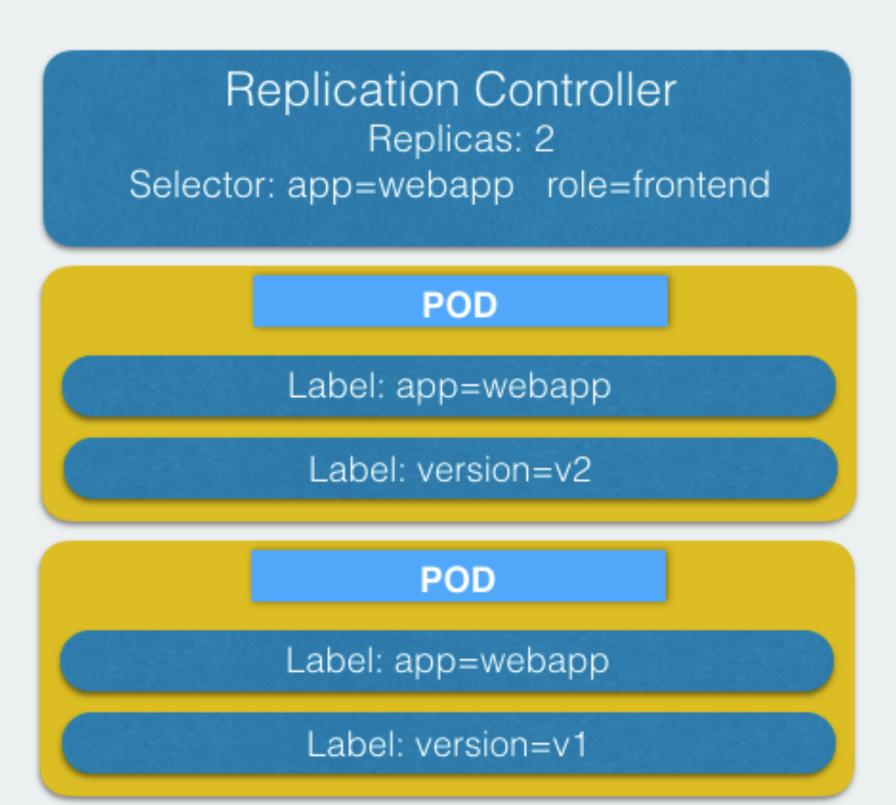


Pods





Replication Controllers





Services

Service

Selector: app=webapp role=frontend

POD

Label: role=frontend

Label: app=webapp

Label: version=v2

POD

Label: role=frontend

Label: app=webapp

Label: version=v1

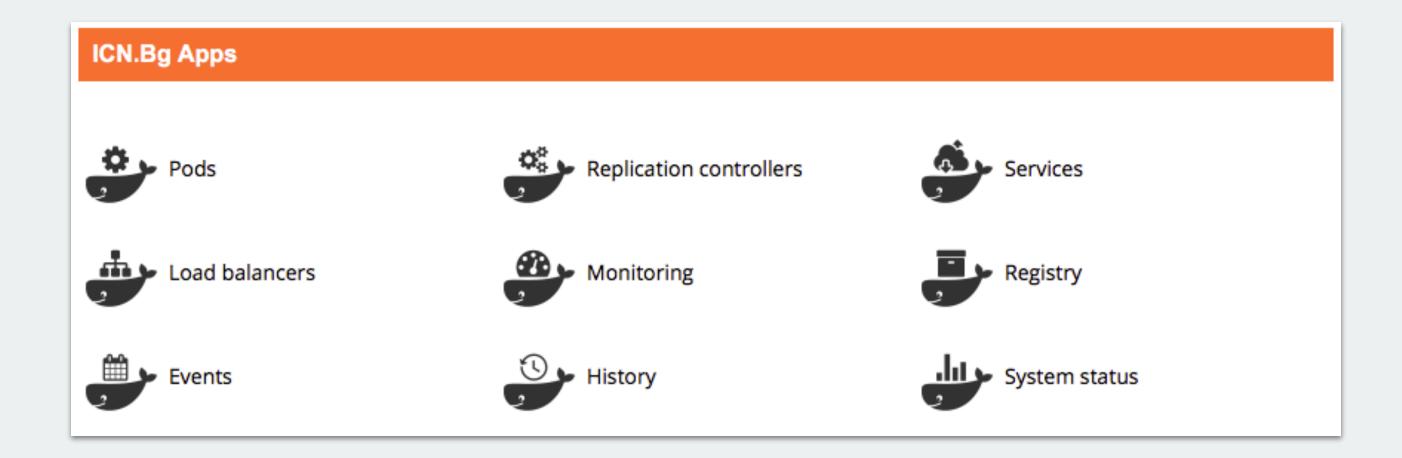


Kubernetes summary

Pods RC Services Labels Selectors

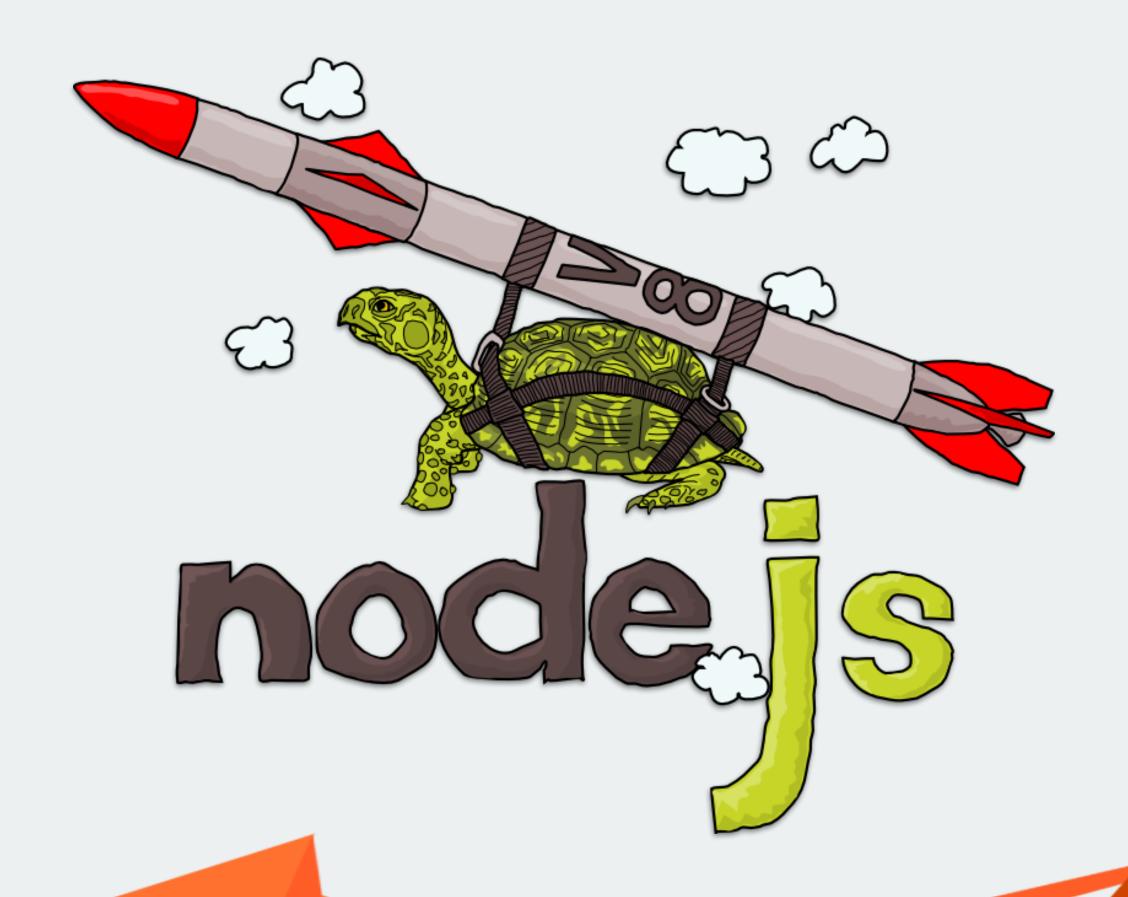


ICN.Bg Apps





Hello





Migrating from local Docker to the cluster

Build Tag Push Deploy via UI



Questions?



