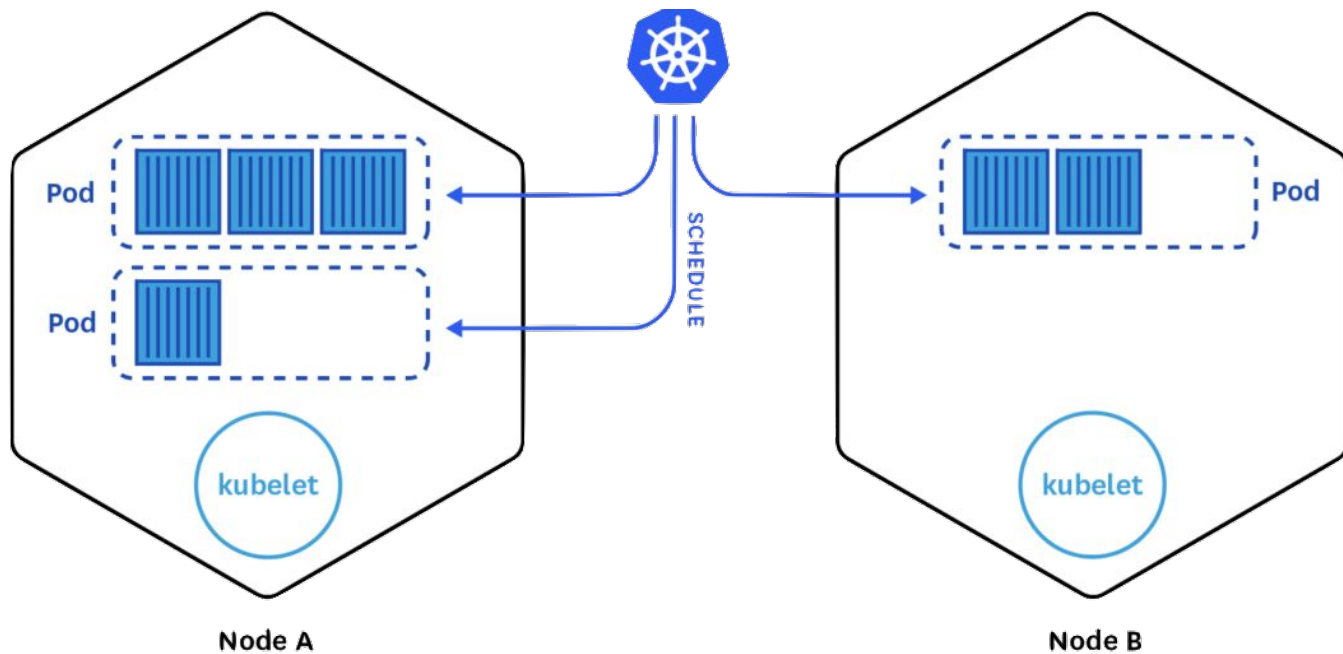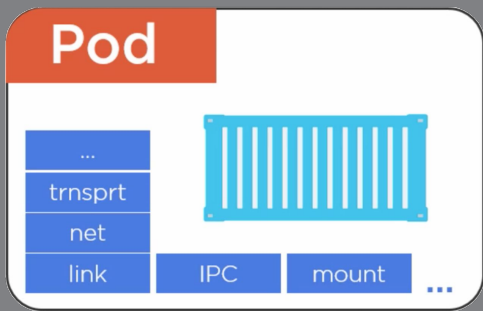ThoughtWorks®

PODS

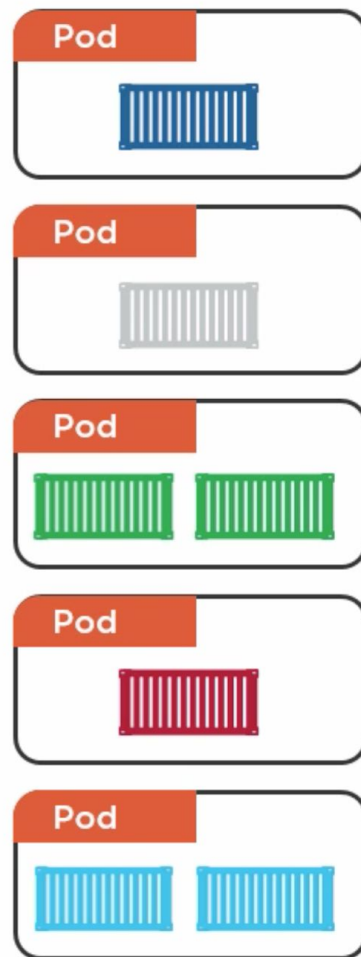*Rise of the Containers* Workshop

Pods runs inside Node

Pod

Pods are the smallest deployable units of computing that can be created and managed in Kubernetes.

Containers always run
inside of pods

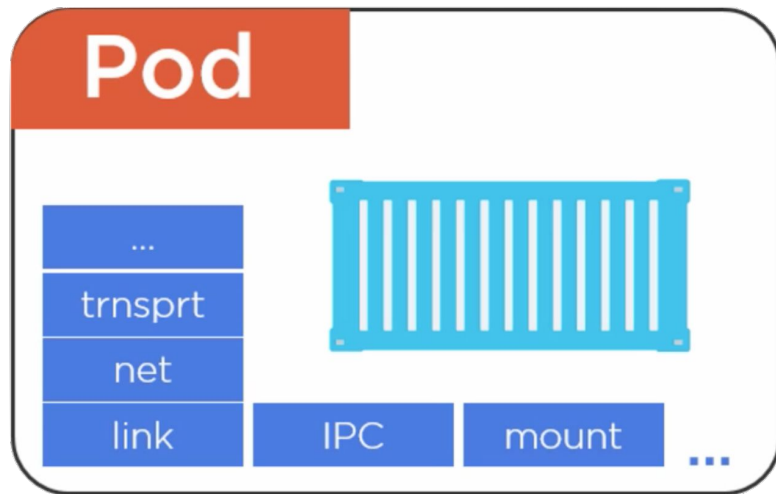Pods can have multiple
containers
(advanced use-case)
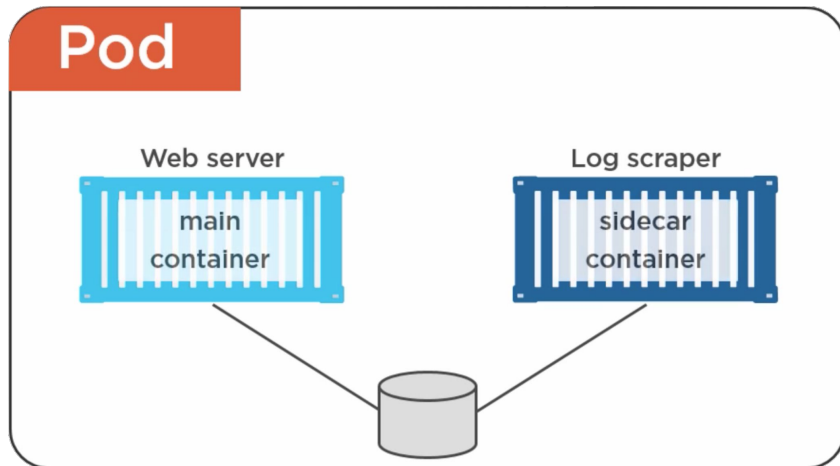
Pod

Ring-fenced Environments

- Network stack
- Volume Mounts
- Kernel namespace
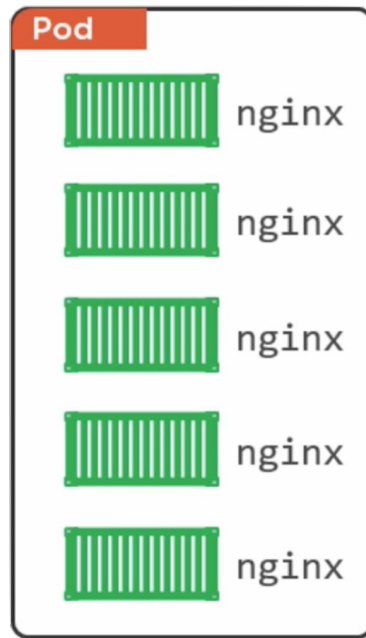- ...

N containers inside a Pod
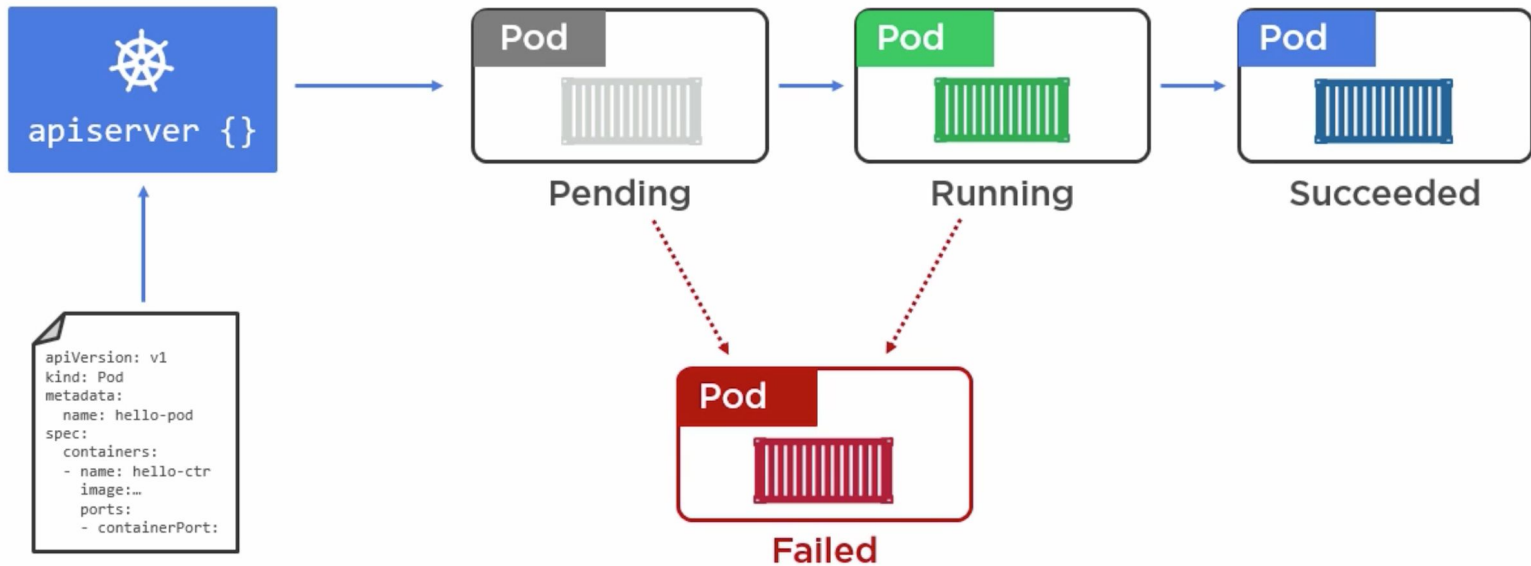
All containers in pod share the pod environment

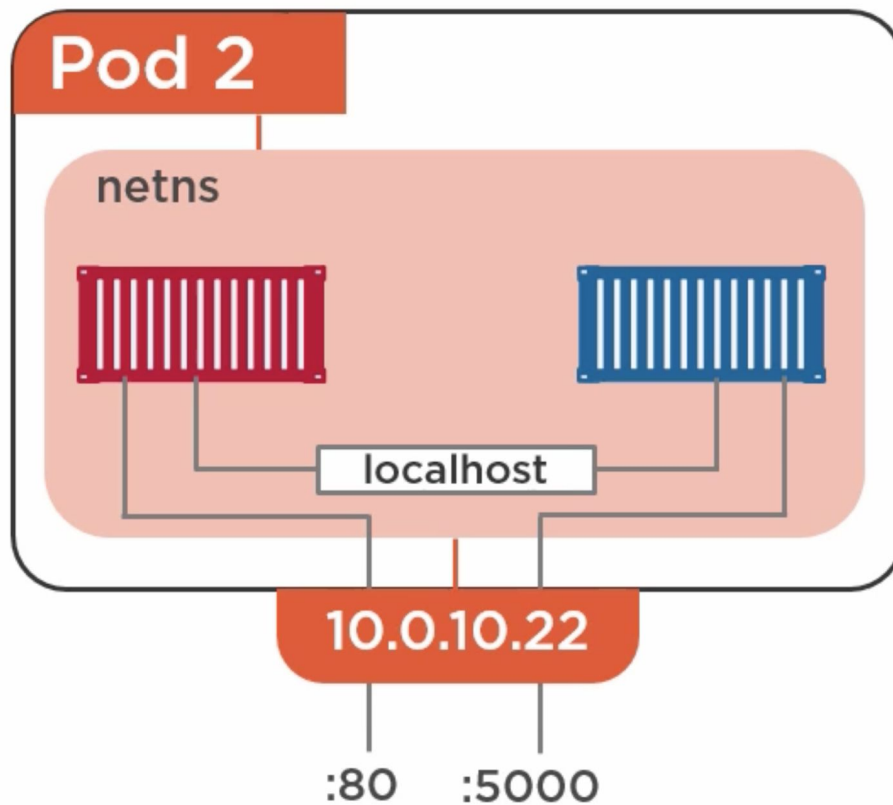# Multi-container Pod

Pods and Scaling

Pod Lifecycle

Pod Networking (Inter-Pod Communication)

Intra-Pod Communication

Pod Configuration

Descriptor conforms
to version vl of
Kubernetes API

You're
describing a pod.

```
apiVersion: v1
kind: Pod
metadata:
  name: kubia-manual
spec:
  containers:
  - image: luksa/kubia
    name: kubia
    ports:
    - containerPort: 8080
      protocol: TCP
```

The name
of the pod

Container image to create
the container from

Name of the container

The port the app
is listening on
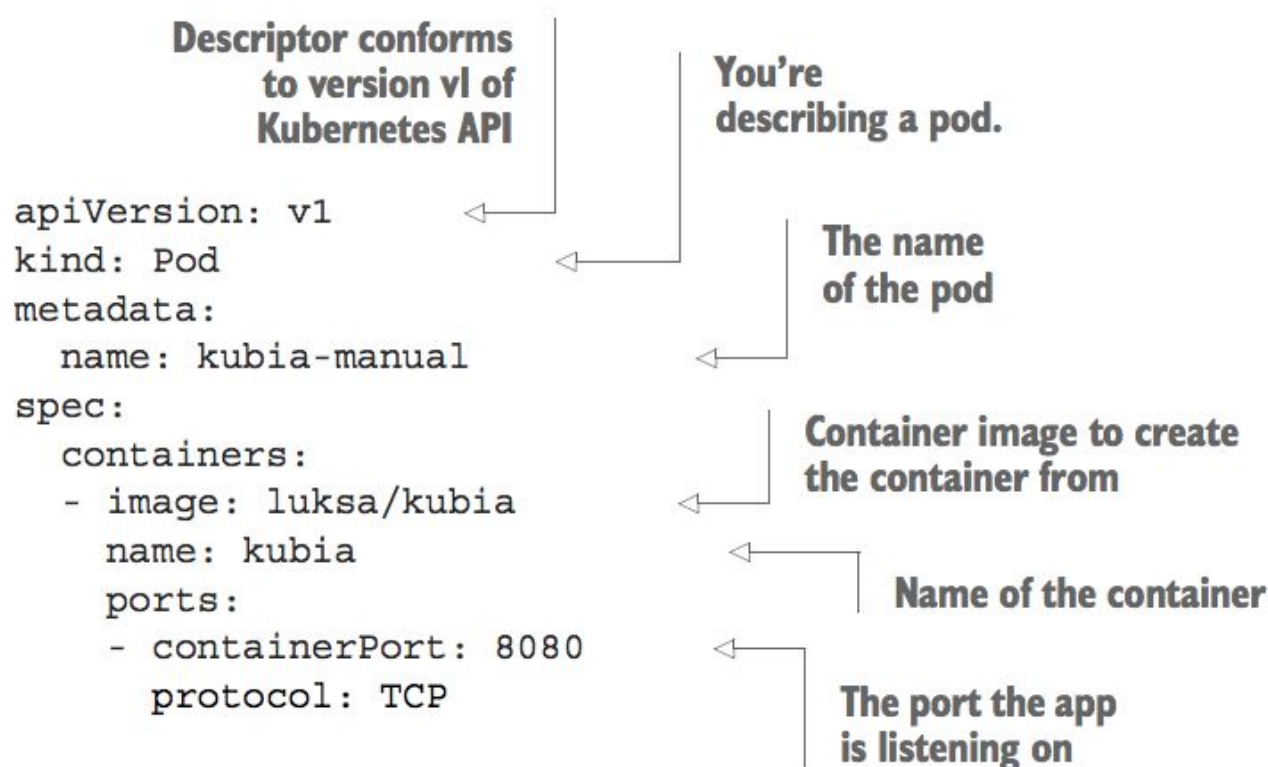
Important tag: containers

name

image

command

args

workingDir

ports

env

resources

volumeMounts

livenessProbe

readinessProbe

lifecycle

terminationMessagePath

imagePullPolicy

securityContext

stdin

stdinOnce

tty

Pod Demo

simple pod

probes

HANDS-ON

1. Create a Pod configuration(yaml) for Metadata Service and create a Pod using kubectl create command.
2. Get inside the container and see if your application is working fine.

THANK YOU

For questions or suggestions:

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