



Deploying a Multi-Service App in Kubernetes

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Me

Lead a team of software engineers

Don't deploy anything important

Want my users to have a great experience



The Story

Pre-docker web application

Multiple services

Scales horizontally, but the “old” way

Community of users

- with varying infrastructure



One Machine or Many

Shared Storage

Shared Config and Secrets

How to Scale Services Independently



pulpproject.org



Python Web App

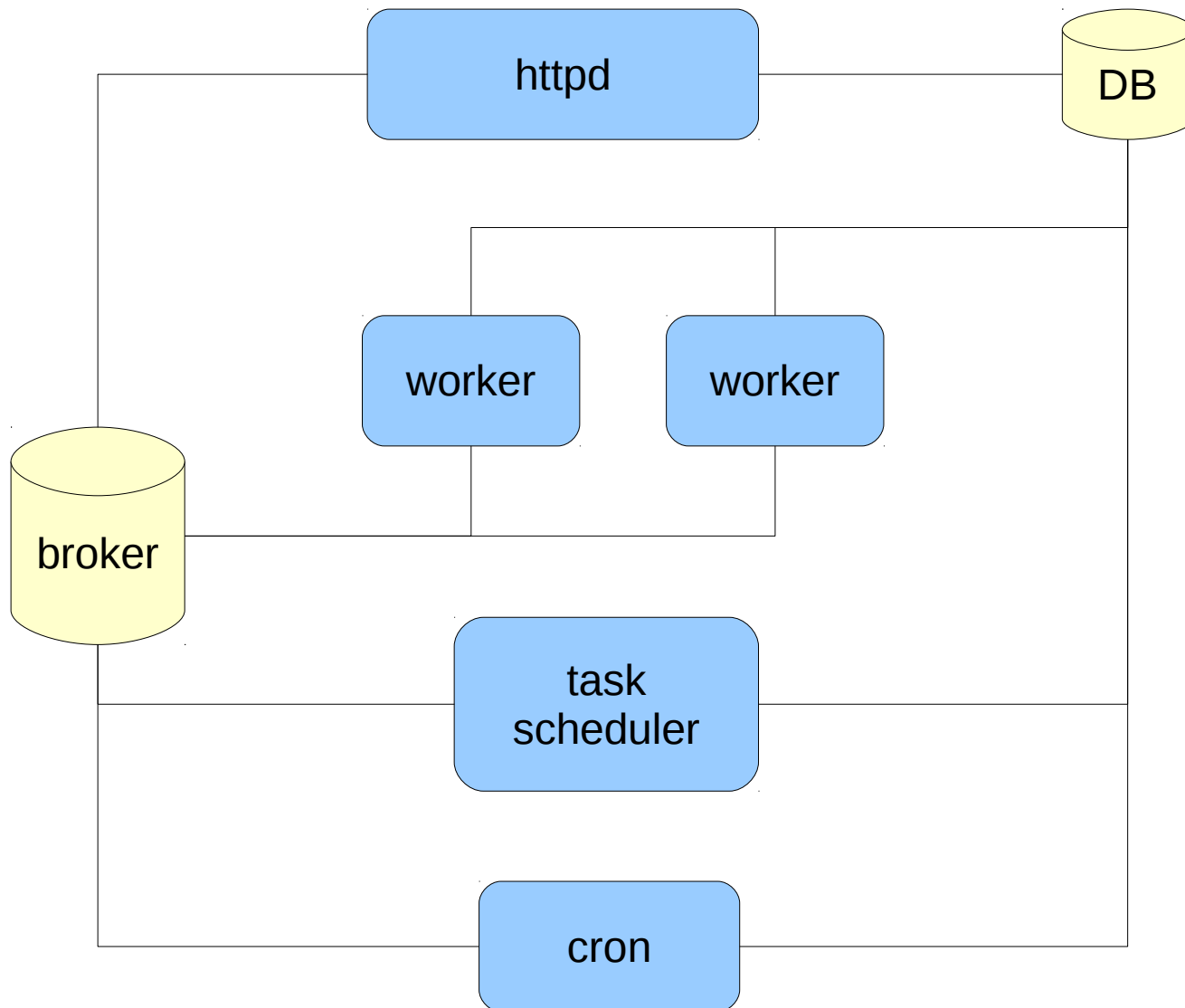
OSS

Manages Repositories of Software

REST API

Not Designed for Container Deployment





Quick Kubernetes Refresh



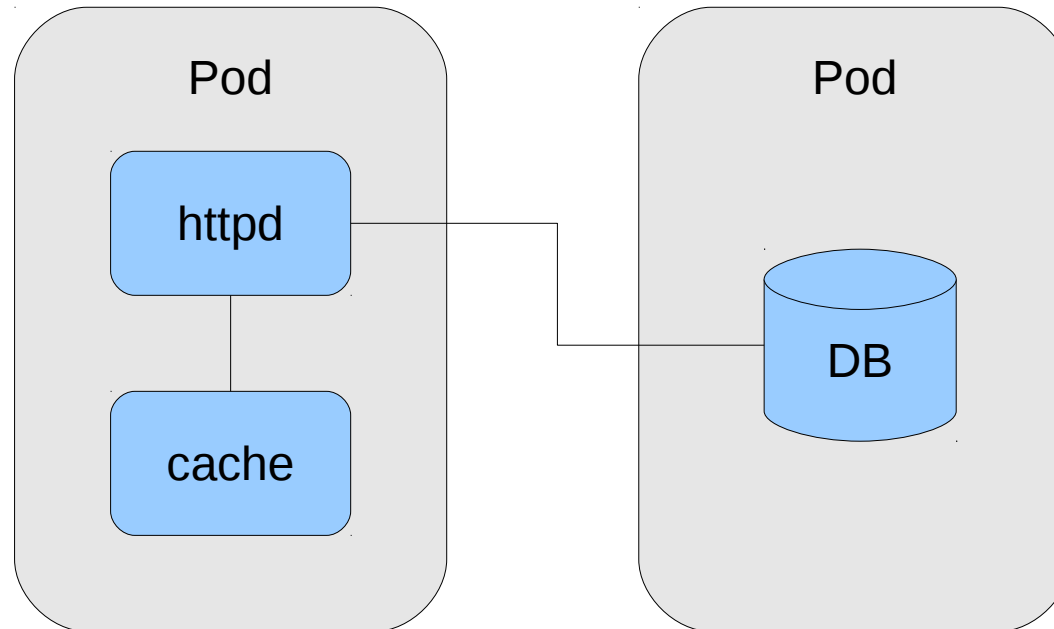
Kubernetes Node

Machine



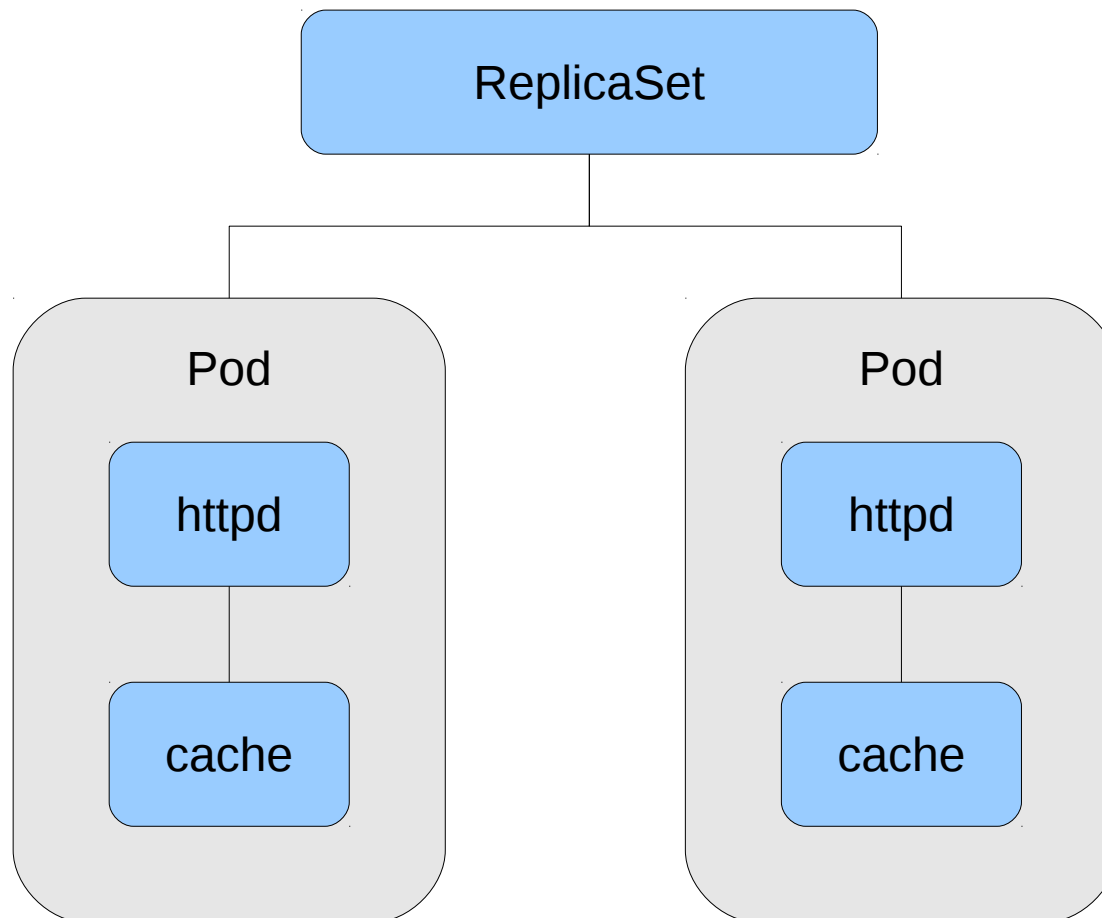
Kubernetes Pod

Co-located Containers



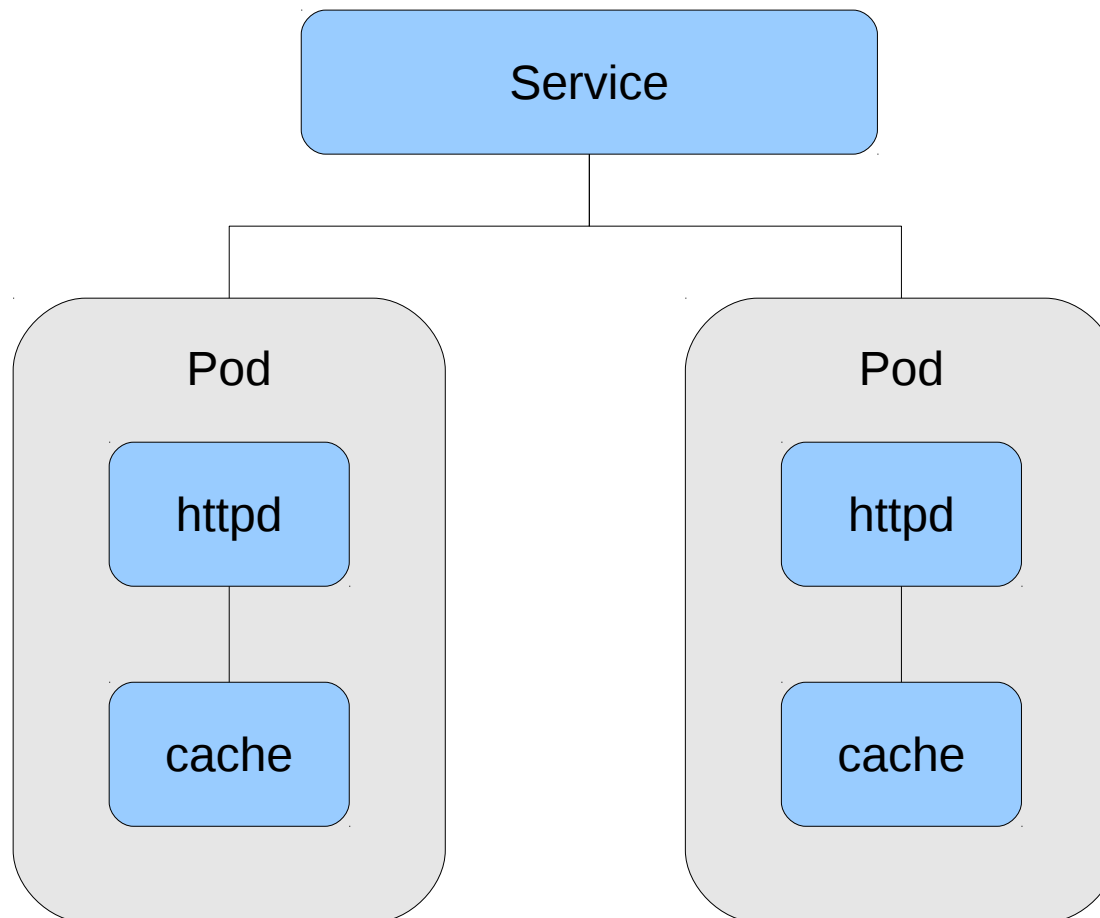
Kubernetes ReplicaSet

Scales / Manages Pods



Kubernetes Service

Network Presence for Pods



Kubernetes Secret

Small Blobs of Sensitive Data



Node
Pod
ReplicaSet
Service
Secret



Dashboard



Storage



How to Manage Configuration Files

Store Config as a Secret
Mount it as a Volume
Symlink to it



Secrets



Deployment



<https://github.com/mhrivnak/pulp-k8s>

Questions

