WITH KUBERNETES TO SERVICE CATALOG

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WRITING APP ON K8S

I want to write an app, but even on k8s I need to:

- Deploy db
- Get db connection info
- Save connection info as secret
- Attach connection info to spec
- Repeat and repeat and repeat

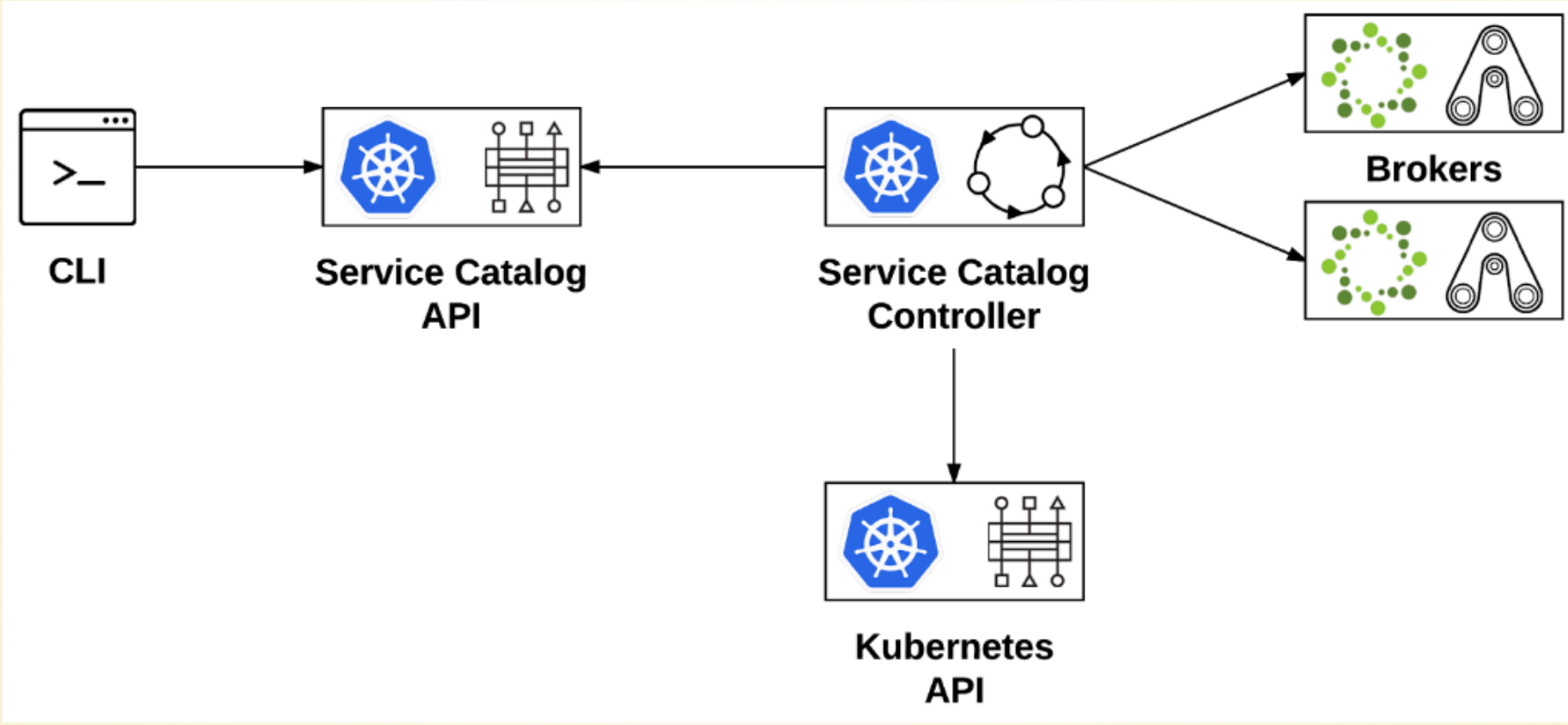
WRITING APP WITH SERVICE CATALOG

I actually want to:

- write my (hipster) app,
- ask for database and get it,
- not care about db any more,
- its ugly ops stuff, so...

DEMO

ARCHITECTURE



OPEN SERVICE BROKER API

- Actions
  - List Services
  - Provision (with parameters)
  - Bind
  - Unbind
  - Unprovision
- Objects
  - Service
  - ServiceClass
  - ServiceInstance

BROKER

Component of service that implements OSB API

Example Brokers:

- Ansible Broker
- AWS Brokers
  - S3,
  - RDS,
  - Elasticache, Redshift, ...

SERVICE CATALOG

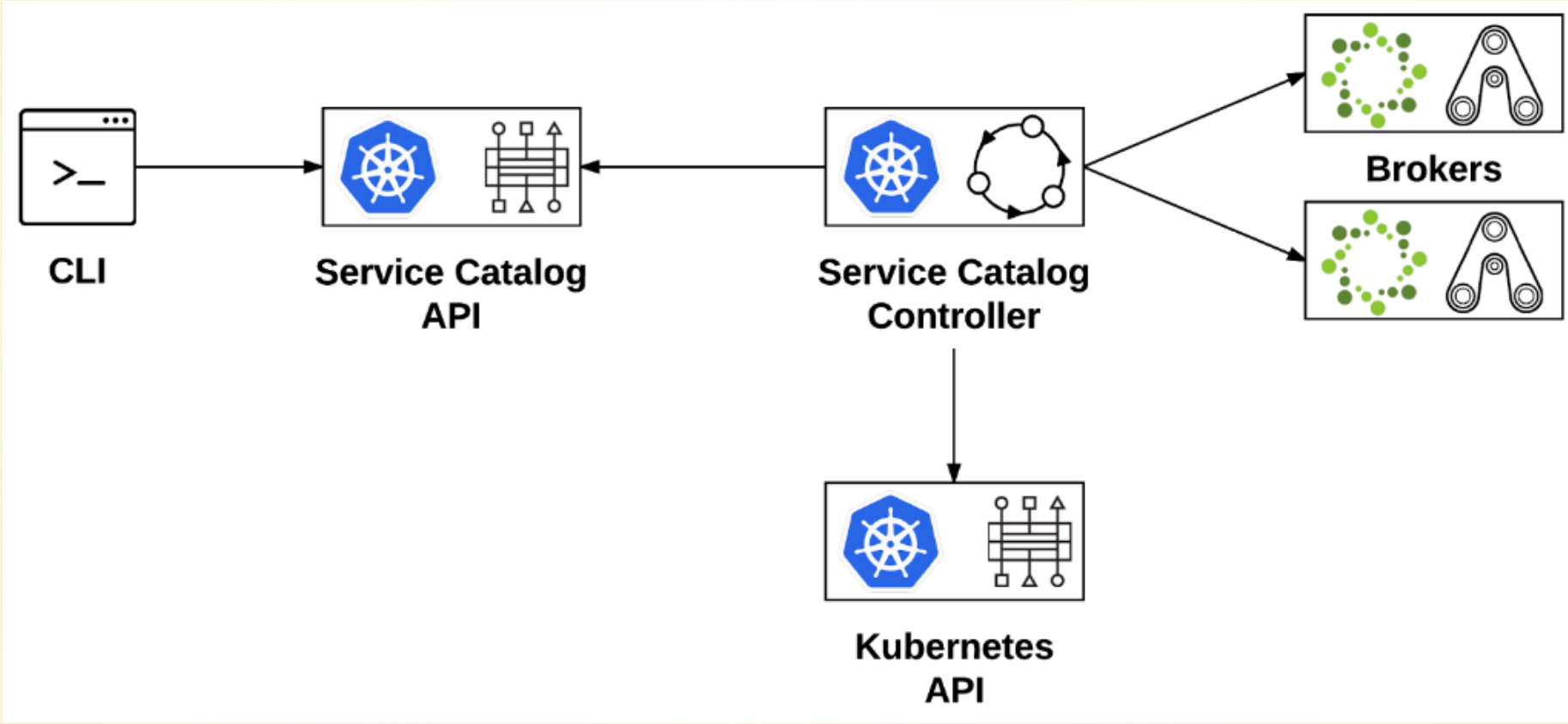
Operations

- List Offered services
- Provision
- Bind
- Unbind
- Deprovision

Concepts

- Service Broker
- Service Class
- Service Plan
- Service Instance
- Service Binding
- Application

ALL TOGETHER



EXPOSING APP AS SERVICE

via Ansible Broker

ADDING SERVICE TO ANSIBLE BROKER

~~DON'T~~ TRY THIS AT HOME

```
#!/usr/bin/env bash

# Setting up openshift cluster
export MINISHIFT_ENABLE_EXPERIMENTAL=y
minishift start --vm-driver kvm  --openshift-version 3.7.0 --service-catalog
oc login -u system:admin

# Verify Service Catalog
oc projects | grep kube-service-catalog

# List Brokers, Classes
kubectl  get clusterservicebrokers -o yaml
oc get clusterserviceclasses --all-namespaces \
  -o custom-columns=NAME:.metadata.name,DISPLAYNAME:spec.externalMetadata.displayName

# Create Ansible Service Broker
oc new-project ansible-service-broker
curl -s \
  https://raw.githubusercontent.com/openshift/ansible-service-broker/master/templates/simple-broker-template.yaml | \
  oc process -n "ansible-service-broker" -f - | oc create -f -

# List Service Classes from ASB
oc get clusterserviceclasses --all-namespaces \
  -o custom-columns=NAME:.metadata.name,DISPLAYNAME:spec.externalMetadata.displayName | grep APB

# Cleanup
minishift delete
```

SOURCES

- Open Service Broker API Spec
- Ansible playbook bundle
- Service Catalog