Dekorate

A set of tools for generating Kubernetes manifests

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Agenda

- Who am I?
- Cloud native era
- Kubernetes manifests vs Kubernetes resources
- What is Dekorate?
- Generation Process Pipeline with Dekorate
- Demo
- More Dekorate features
- Dekorate resources
- Questions

Who am I?



Auri Muñoz Senior Software engineer auri@redhat.com Red Hat - Snowdrop team





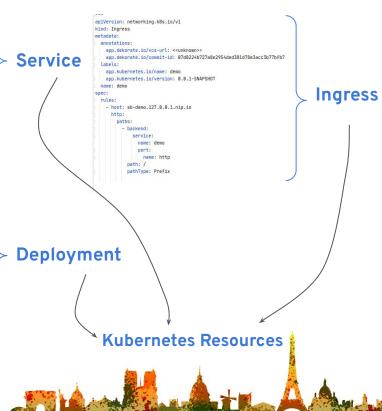




Kubernetes manifest & Kubernetes resource



```
apiVersion: v1
kind: Service
metadata:
 labels:
    app.kubernetes.io/name: demo
    app.kubernetes.io/version: 0.0.1-SNAPSHOT
  ports:
- name: http
    port: 8888
    targetPort: 8080
  selector:
    app.kubernetes.io/name: demo
    app.kubernetes.io/version: 0.0.1-SNAPSHOT
type: ClusterIP
apiVersion: apps/v1
kind: Deployment
metadata:
labels:
    app.kubernetes.io/version: 0.0.1-SNAPSHOT
    app.kubernetes.io/name: demo
  replicas: 4
  selector:
      app.kubernetes.io/version: 0.0.1-SNAPSHOT
      app.kubernetes.io/name: demo
  template:
    metadata:
        app.kubernetes.io/version: 0.0.1-SNAPSHOT
        app.kubernetes.io/name: demo
    spec:
      containers:
       - name: KUBERNETES_NAMESPACE
          valueFrom:
            fieldRef:
              fieldPath: metadata.namespace
        image: amunozhe/demo:0.0.1-SNAPSHOT
        imagePullPolicy: IfNotPresent
        name: demo
        - containerPort: 8080
          name: http
          protocol: TCP
```



What is Dekorate?

Dekorate is a collection of annotations and processors that generates Kubernetes manifests during the compilation of your application

- Works for all build tools and all jvm languages
- Allows fine grained customization.
- Can be used as a library, a Kubernetes manifest manipulation framework.
- The simplest out of the box experience: framework detection

Generation Process Pipeline with Dekorate



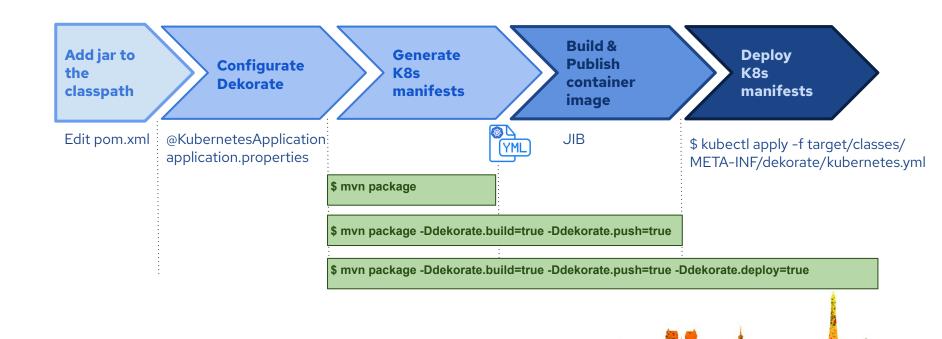


Live Demo

Using Dekorate in a Spring Boot application



Demo Summary





Dekorate features

- Kubernetes
- OpenShift
- Knative
- Tekton
- Operator custom resources
 - Prometheus
 - Jaeger

- Spring
- Quarkus
- Micronaut
- Frameworkless
- ...more



Dekorate resources



https://github.com/dekorateio/dekorate



Complete reference of the properties



Dekorate examples



https://snowdrop/zulipchat.com



Using Dekorate for frameworkless Java applications



Let's Dekorate! Merci!!

