

Episode #116

Continuous delivery with Quarkus Helm and ArgoCD



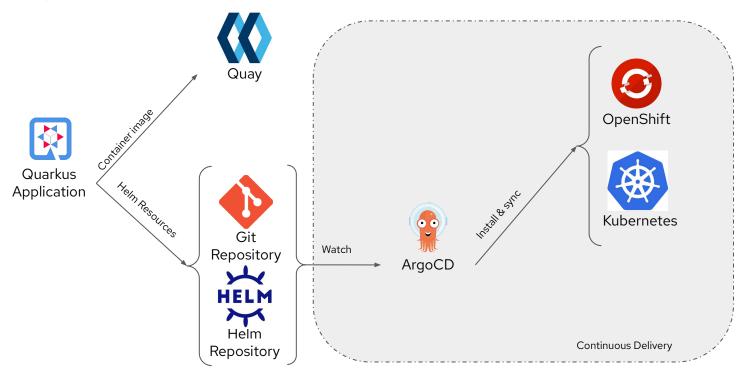


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Tooling





ArgoCD

- Continuous delivery tool for Kubernetes
- Part of Cloud Native Computing Foundation (CNCF)
- Follows the GitOps pattern of using Git repositories as the source of truth for defining the desired application state
- Support several sources like:
 - Helm charts
 - Kustomize applications
 - Plain directory of YAML/json manifests
 - ... and more



Helm

- Package manager for Kubernetes
- Part of Cloud Native Computing Foundation (CNCF)
- A chart packages YAML resources and <u>templates</u>

```
chart/

— Chart.yaml

— templates

| — deployment.yaml

| — ...

| — NOTES.txt

— values.yaml
```



Helm

- Installation:

helm install helm-example ./my-chart --values values.yaml

- Update:

helm upgrade helm-example ./my-chart --set app.replicas=1

- Delete:

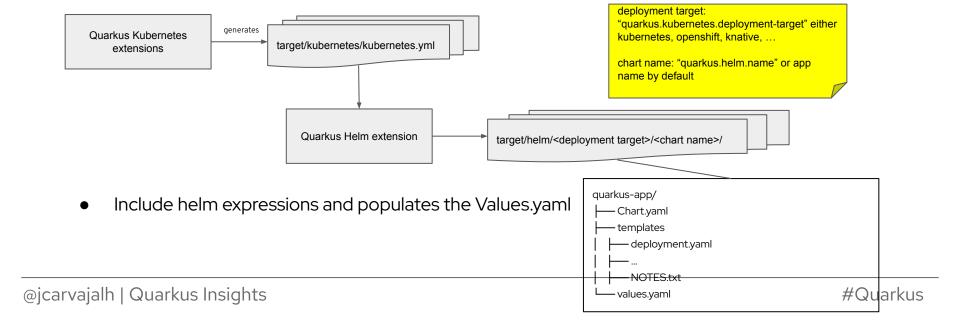
helm uninstall helm-example





Quarkus Helm Extension

- Documentation: https://quarkiverse.github.io/quarkiverse-docs/quarkus-helm
- It generates the Helm Chart manifests from the resources generated by the Quarkus Kubernetes extensions





Quarkus Helm Extension

- Automatically generate Helm charts
- Mapping of properties using <u>YAMLPath</u>
- Support of Helm profiles
- Support of Helm templates/functions/pipelines
- Push to Helm repositories

Thank You!!!



Quarkus and Kubernetes extension



Quarkus and OpenShift extension



Quarkus and Helm extension



Quarkus and Helm Insights Demo



<u>ArgoCD</u>



<u>Helm</u>

Q & A