

Deploying an Application on Kubernetes

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What do we need to know about an app before we deploy on Kubernetes?

What are the different parts of this app?

Which part faces the users?

Who are the admins?

Which parts are stateful?

What resources does this app require?

What is the baseline for use?

Containerizing the Application



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- Developed internally
- Deployed to an internal container registry
- Usually the end result of a CI/CD pipeline

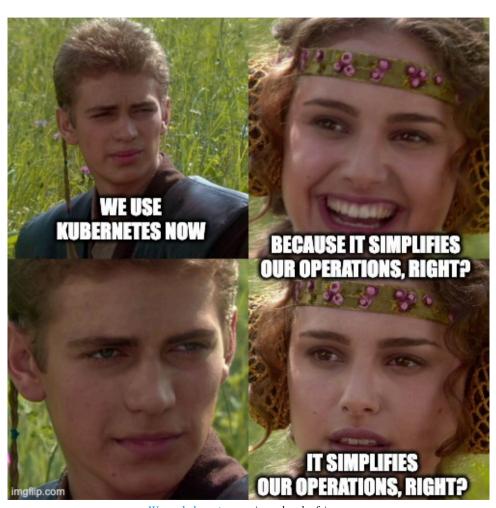
Designing K8s Objects

- Deployments
- Services
- Volumes



<u>"Kubernetes Icons Set"</u> by <u>Etienne Coutaud</u> is licensed under <u>CC BY 4.0</u>

Testing

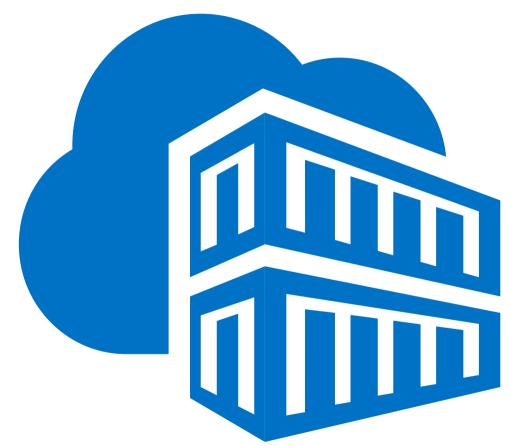


We use kubernetes now is used under fair use

- Can users use it?
- Can the admins use it?
- Does is scale?
- Can you update?
- Can you rollback?

Container Registry Options

- self-hosted
- <u>Docker Hub</u> (not private)
- ECR
- GCR
- ACR



Azure Container Registry Logo is used under fair use

Kubernetes Cluster Options



<u>"Kubernetes logo without workmark.svg"</u> by <u>Google, Inc</u> is licensed under <u>CC BY 4.0</u>

- Self-hosted
- k8s on IaaS
- k8s as a service: (<u>EKS</u> , <u>AKS</u> , <u>GKE</u>)
- What's the container registry (CR) interop?