Discovering Helm



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Discovering Helm



Why Helm?

What is Helm?

- Concepts: Charts, Templates, Repositories.
- How does it work?



Application

Container

Pod

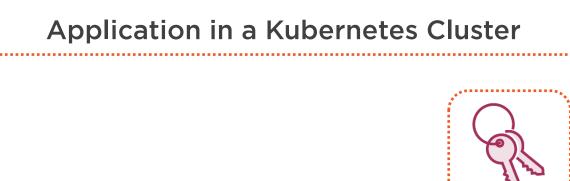
Service

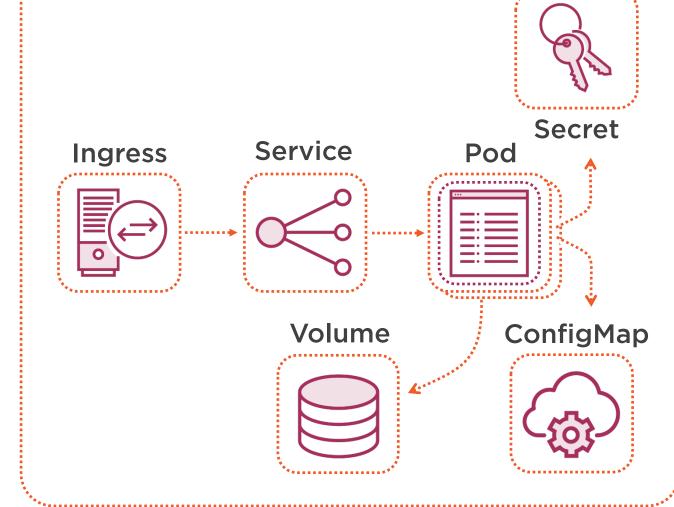
Ingress

ConfigMap

Secrets

Volumes: PV, PVC, Storage







Kubernetes API:

REST Client

Go Client

Kubectl

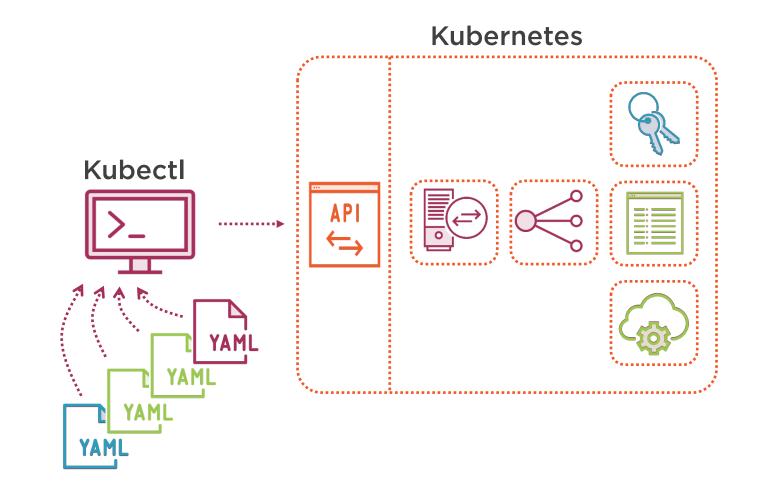
Limitations:

Packaging

Versioning

Customization

Dependencies





Demo



Demo application overview
Installing with Kubectl
Upgrading with Kubectl



GuestBook Application: First Version



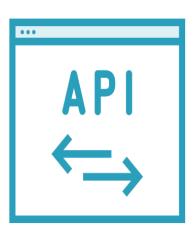
- ✓ Pod
- ✓ Service
- ✓ Ingress

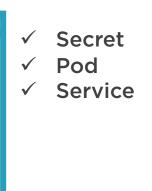
Frontend

http://github.com/phcollignon/helm3

GuestBook Application: Second Version









Frontend

Backend API

http://github.com/phcollignon/helm3

What is Helm?

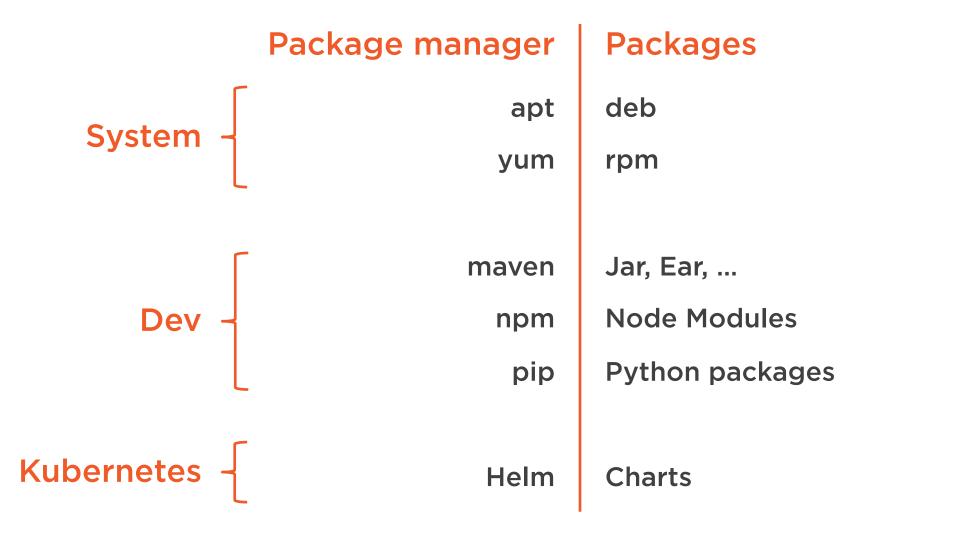


What is Helm?

Helm is a package manager for Kubernetes.

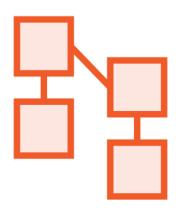


Analogy with Other Package Managers





Helm Analogy



System & apt:

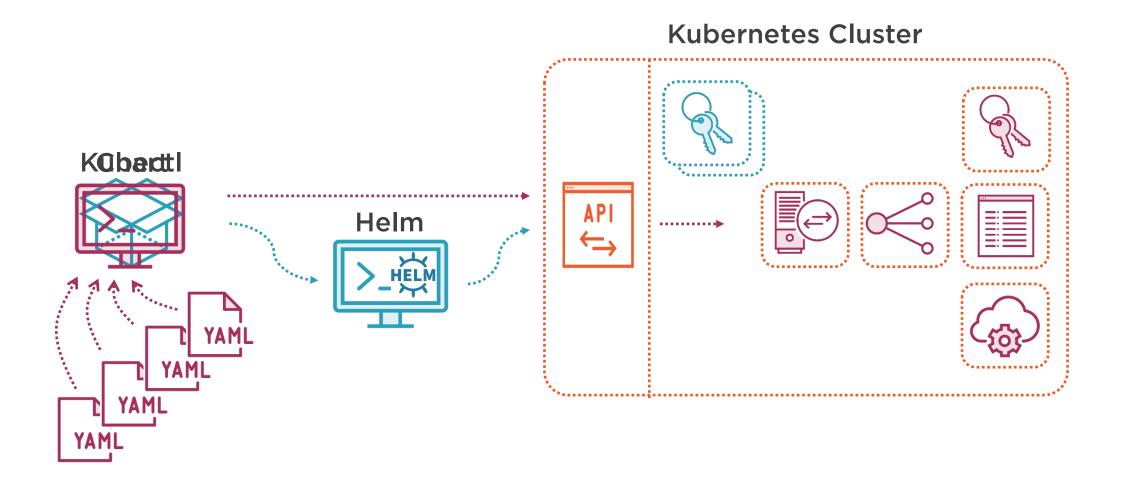
- > apt install mysql
- > apt update

Kubernetes & helm:

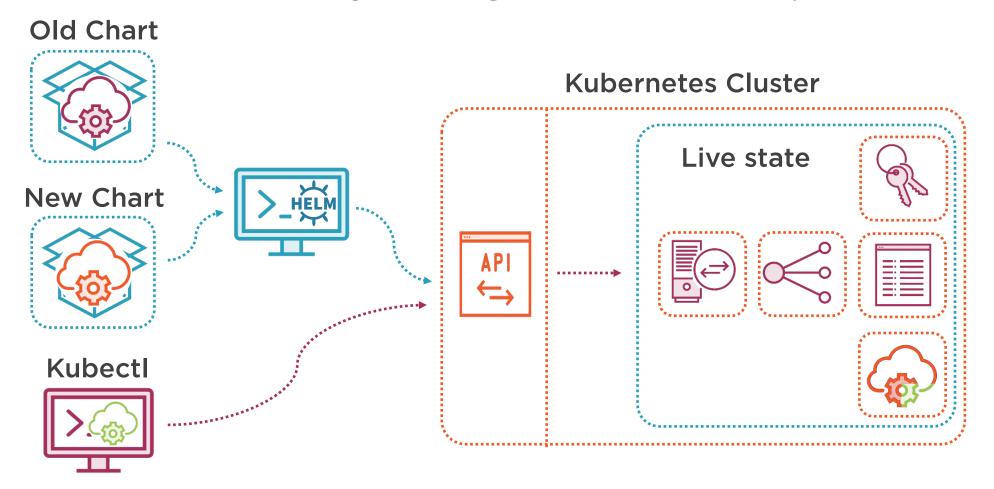
- > helm upgrade mysql
 stable/mysql



How Does Helm Work?

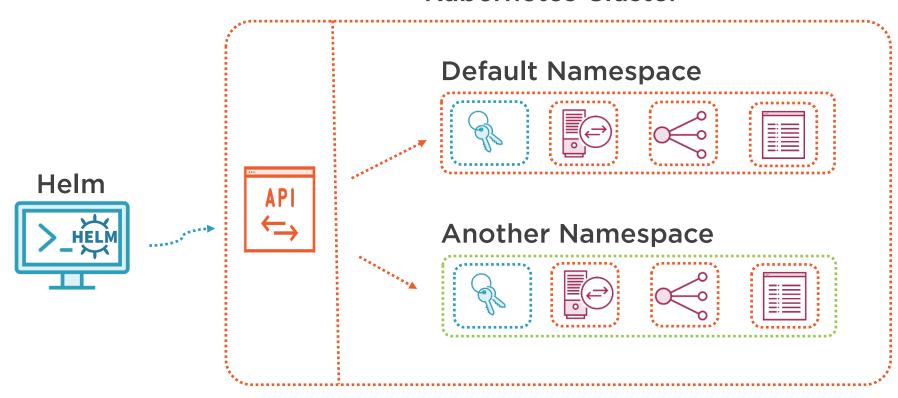


Three-Way Merge Patches Update

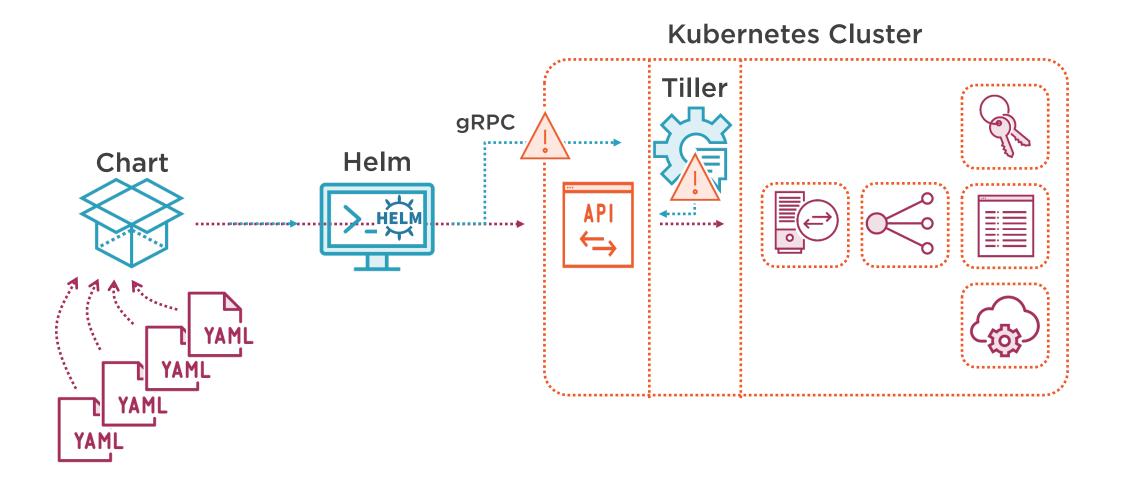


Namespaces

Kubernetes Cluster



A Word About Helm 2



Helm Features







Templates



Dependencies



Repositories

