Discovering Helm

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Discovering Helm

Why Helm ?

What is Helm ?

- Concepts : Charts, Templates, Repositories.
- How it works ?

Application

Container

Pod

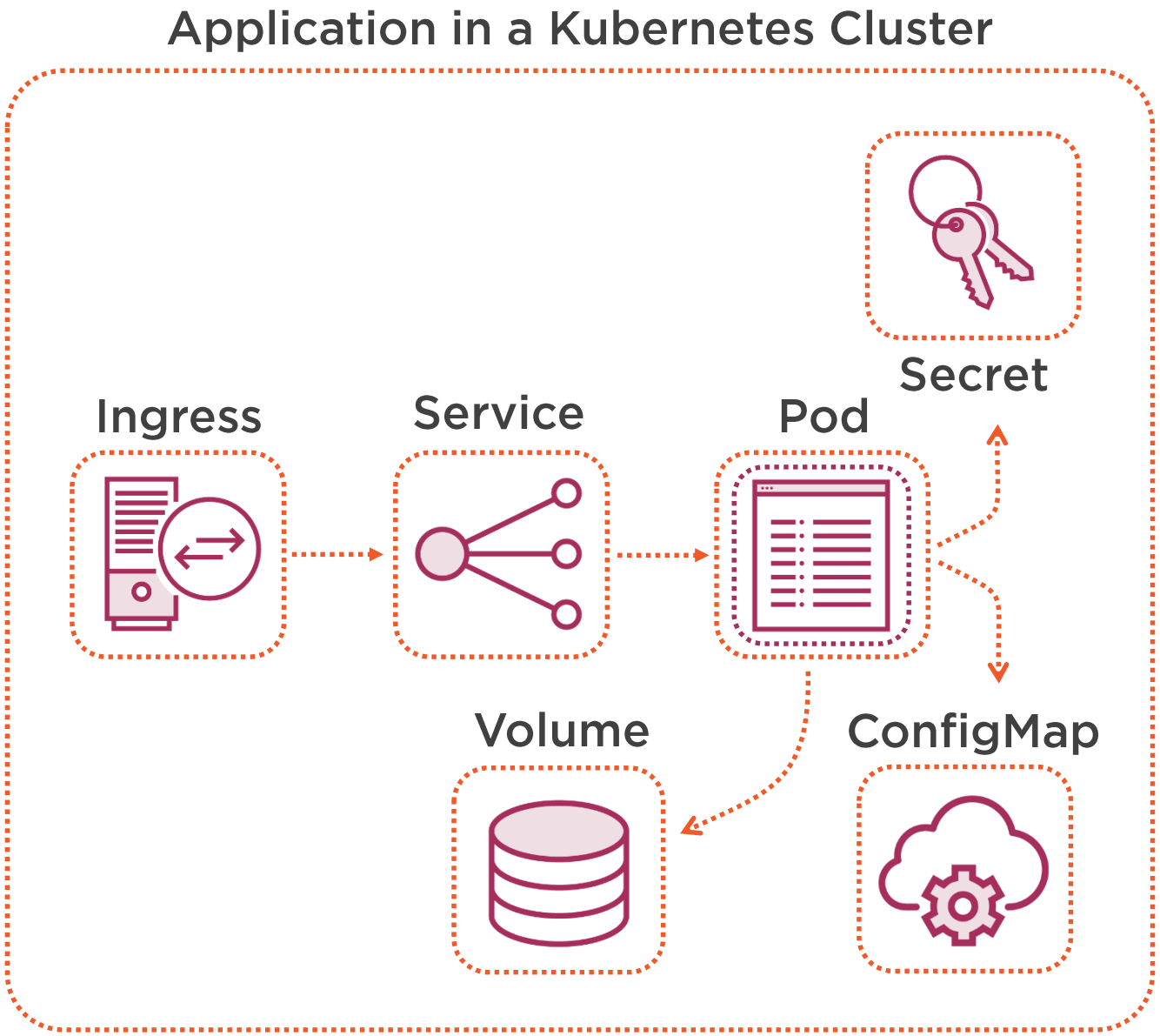
Service

Ingress

ConfigMap

Secrets

Volumes: PV, PVC, Storage



Kubernetes API :

REST Client

Go Client

Kubectl

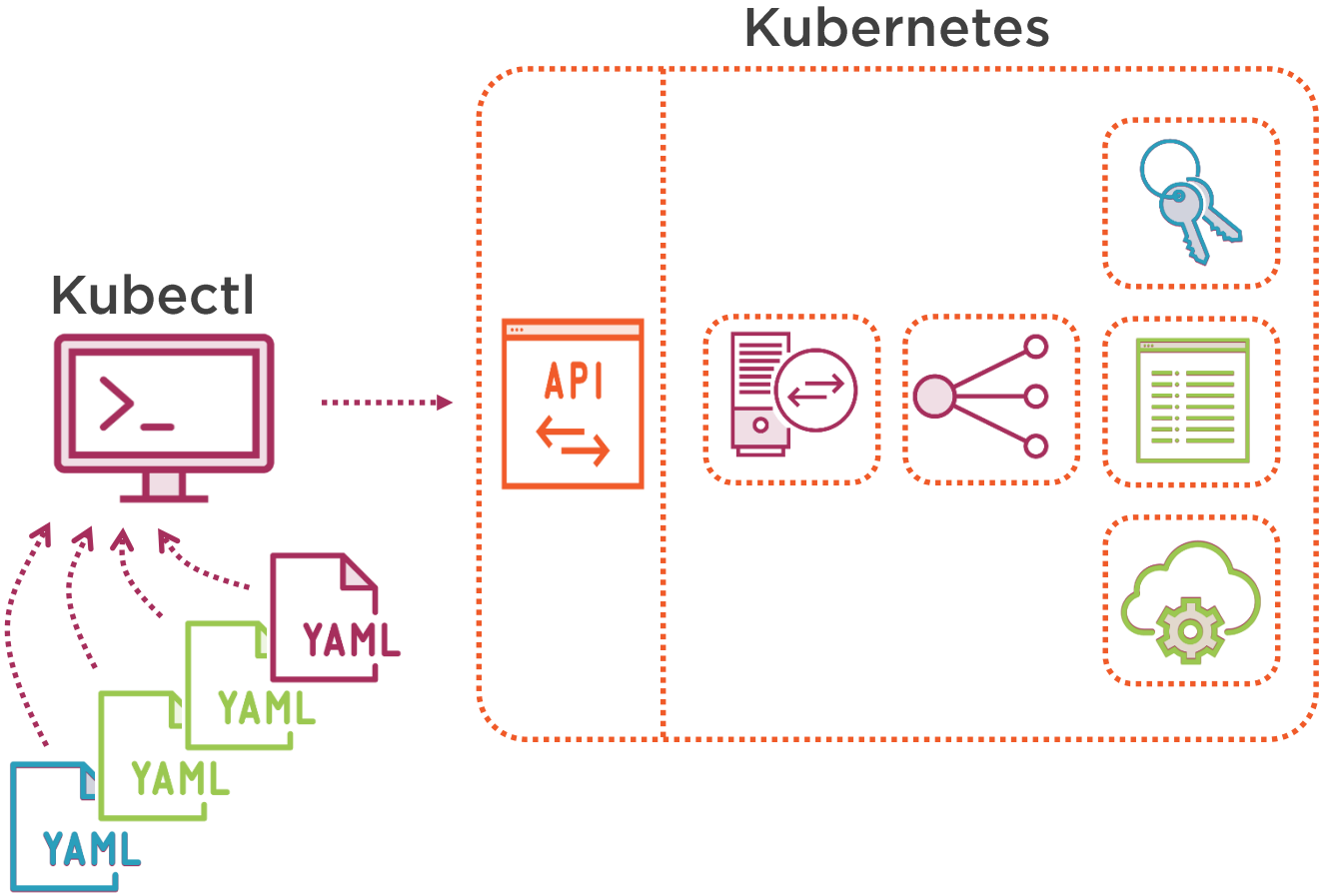
Limitations :

Packaging

Versioning

Customization

Dependencies



Demo

Demo application overview

Installing with Kubectl

Upgrading with Kubectl

GuestBook application : First Version

Frontend

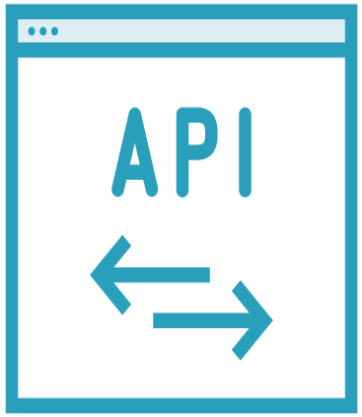
- ✓ Pod
- ✓ Service
- ✓ Ingress

http://github.com/phcollignon/helm/lab1_kubectl_version1

GuestBook application : Second Version

- ✓ ConfigMap
- ✓ Pod
- ✓ Service
- ✓ Ingress

Frontend



- ✓ Secret
- ✓ Pod
- ✓ Service

Backend API

- ✓ Secret
- ✓ PV
- ✓ PVC
- ✓ Pod
- ✓ Service

Database

http://github.com/phcollignon/helm/lab2_kubectl_version2

What is Helm ?

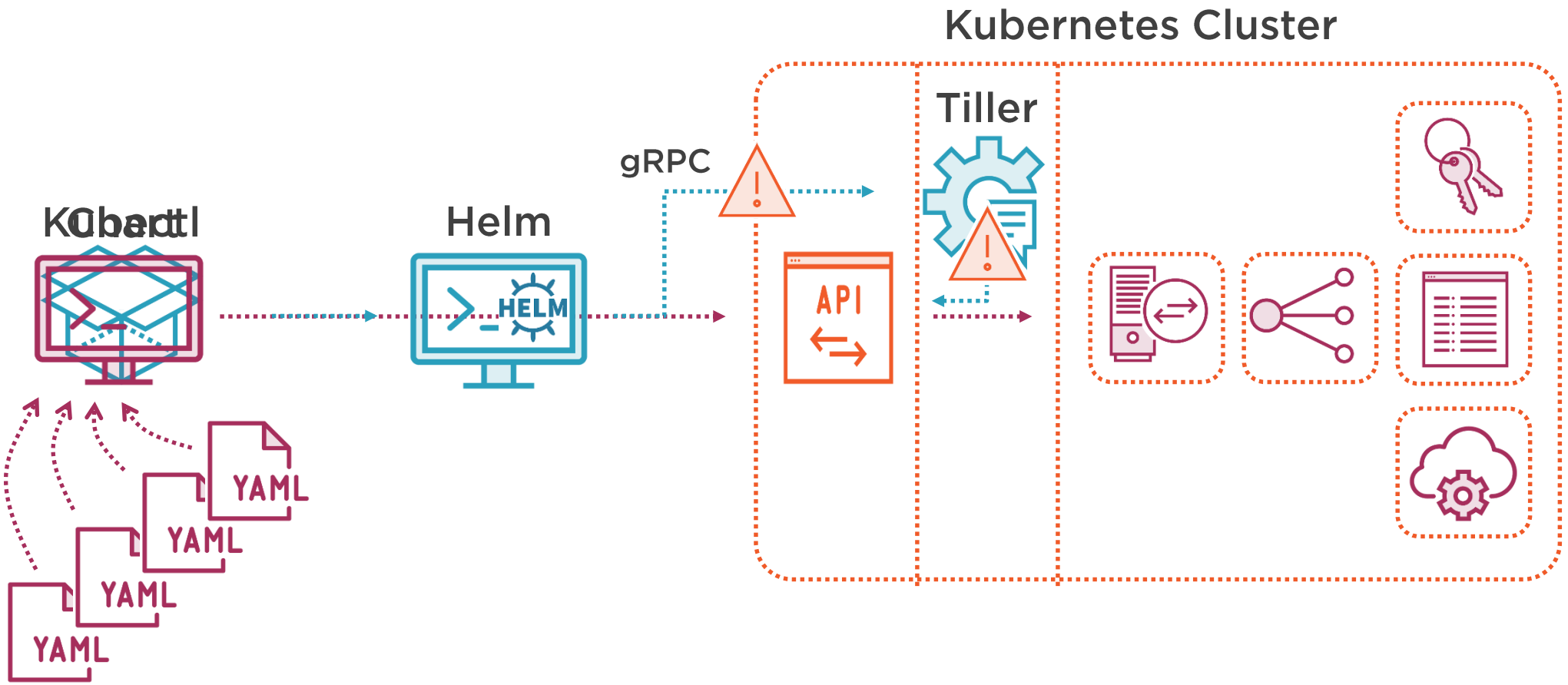
What is helm ?

Helm is a package manager for Kubernetes.

Analogy with other package managers

	Package manager	Packages
System	Apt	deb
	Yum	rpm
Dev	Maven	Jar, Ear, ...
	Npm	Node Modules
	Pip	Python packages
Kubernetes	Helm	Charts

How it works


Kubernetes Cluster
Tiller
gRPC
Helm
HELM
API
YAML
YAML
YAML
YAML

Helm features

Charts

Templates

Dependencies

Repositories