

Kubernetes Package Administration with Helm

INSTALLING AND CONFIGURING HELM



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Overview



Helm Overview

Installing Helm

Configuring Helm



Helm Overview



What Is Helm?



A package manager for Kubernetes

Charts help define Kubernetes applications

With Helm you can: -

- Manage complexity
- Easily update and rollback
- Share charts

History of Helm

Helm was created in 2015 at Deis

Helm Classic was introduced at KubeCon in November 2015

Helm Classic was merged with Google's Deployment Manager in January 2016

Open source at github at <https://github.com/helm/helm>

More than 2 million downloads a month

Graduated status within the CNCF in April 2020



Helm Statistics

13,874	9,454	14.5k	128.7K	1,694
Contributors	Code Commits	Pull Requests	Contributions	Contributing Companies

Source - <https://www.cncf.io/cncf-helm-project-journey/>
Statistics as of June 2020



Helm V3

Tiller

Search

Commands

Dependencies

Other



This Course Focuses on Helm V3



What Are Charts?

Deployment



Service



Secret



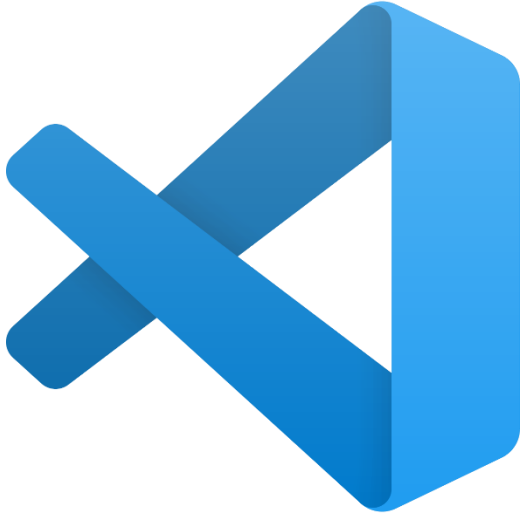
```
Kubectl apply -f Deployment.yaml  
Kubectl apply -f Service.yaml  
Kubectl apply -f Secret.yaml
```



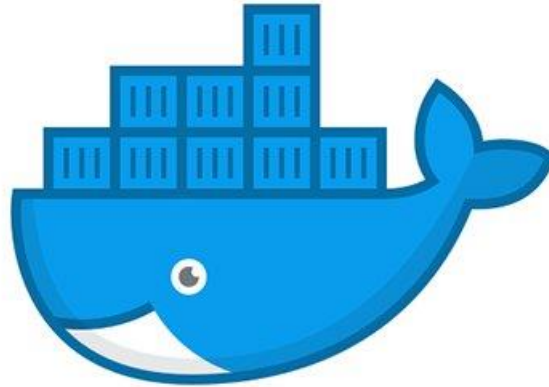
Setting up Your Environment



Tools



Visual Studio Code



Docker



Kubernetes

Installing Helm



Installing Helm



From the binary releases

From script

Via snap

Through a package manager

- Chocolatey

Demo



Configuring our environment
Installing Helm



Configuring Helm



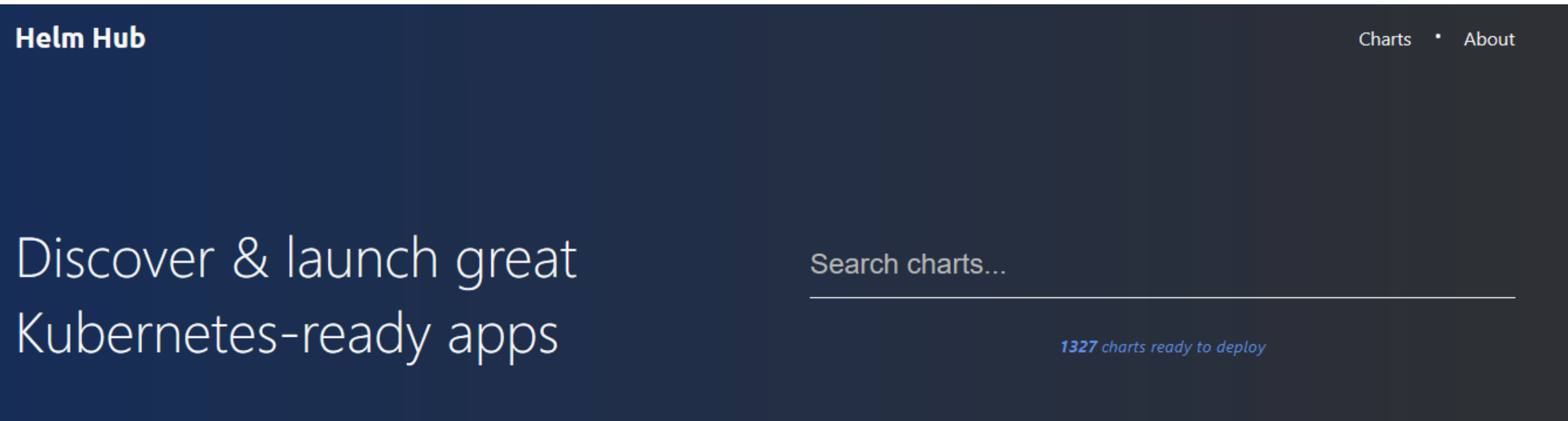
Helm Commands

Helm Version	Helm Repo Add
Helm Search Repo	Helm Install
Helm List	Helm Upgrade
Helm Rollback	Helm History
Helm Create	Helm Package



Adding the Stable Repository

```
Helm repo add stable https://kubernetes-charts.storage.googleapis.com/
```



Demo



Exploring the stable repository

