## Helm

- Helm helps you manage Kubernetes applications Helm Charts help you define, install, and upgrade even the most complex Kubernetes application
- o Helm is a graduated project in the **CNCF** and is maintained by the Helm

## The Purpose of Helm

Helm is a tool for managing Kubernetes packages called *charts* 

- 1. Create new charts(Helm) from scratch
- 2. Package charts(Helm) into chart archive (tgz) files
- 3. Interact with chart repositories where charts are stored
- 4. Install and uninstall charts into an existing Kubernetes cluster
- 5. Manage the release cycle of charts that have been installed with Helm

For Helm, there are three important concepts:

- 1. The *chart* is a bundle of information necessary to create an instance of a Kubernetes application.
- 2. The *config* contains configuration information that can be merged into a packaged chart to create a releasable object.
- 3. A *release* is a running instance of a *chart*, combined with a specific *config*.

## **Components**

**Helm Client** is a command-line client for end users Responsible:

- Local chart development
- Managing repositories
- Managing releases
- ❖ Interfacing with the Helm library
  - > Sending charts to be installed
  - > Requesting upgrading or uninstalling of existing releases
- The Helm client and library is written in the Go programming language.