



BUILDING FOR THE ROAD AHEAD

DETROIT 2022

Learn About Helm And Its Ecosystem

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What Is Helm?

The Package Manager for Kubernetes



What Is A Package Manager?

A package manager or package-management system is a collection of software tools that automates the process of installing, upgrading, configuring, and removing computer programs for a computer's operating system in a consistent manner.

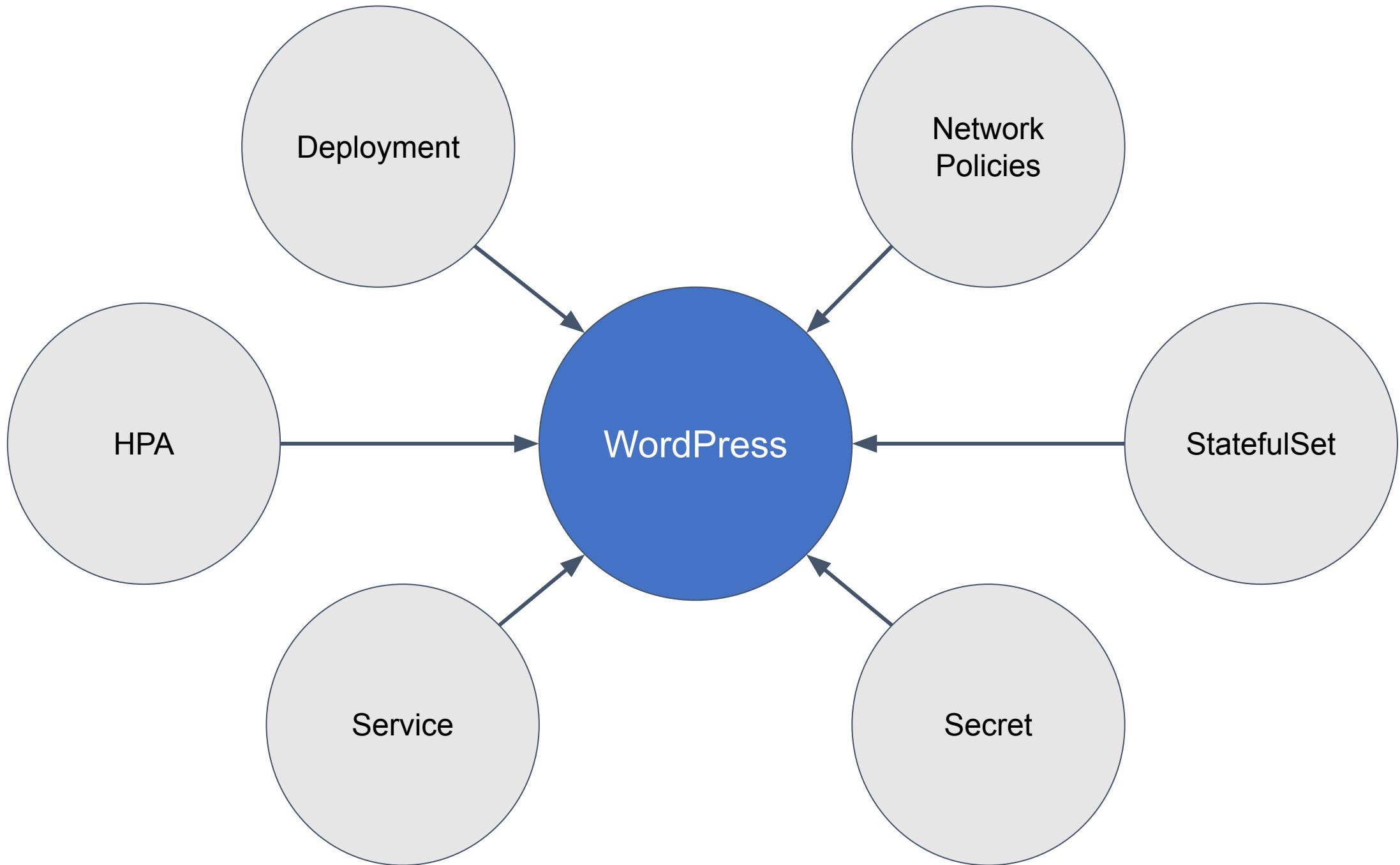
Source: Wikipedia

Helm helps you manage Kubernetes applications — Helm Charts help you define, install, and upgrade even the most complex Kubernetes application.

Charts are easy to create, version, share, and publish — so start using Helm and stop the copy-and-paste.

Source: helm.sh

Package Management: Tooling that enables someone who has knowledge of an application and a platform to package up an application so that someone else who has neither extensive knowledge of the application or the way it needs to be run on the platform can use it.



Three Parts To Helm



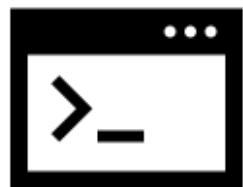
1. Charts - The packages.



```
wordpress/
  Chart.yaml          # A YAML file containing information about the chart
  LICENSE            # OPTIONAL: A plain text file containing the license for the chart
  README.md          # OPTIONAL: A human-readable README file
  values.yaml        # The default configuration values for this chart
  values.schema.json # OPTIONAL: A JSON Schema for imposing a structure on the values.yaml file
  charts/             # A directory containing any charts upon which this chart depends.
  crds/               # Custom Resource Definitions
  templates/          # A directory of templates that, when combined with values,
                      # will generate valid Kubernetes manifest files.
  templates/NOTES.txt # OPTIONAL: A plain text file containing short usage notes
```

Three Parts To Helm

2. Helm Client (i.e. the CLI)



```
● ● ● Title

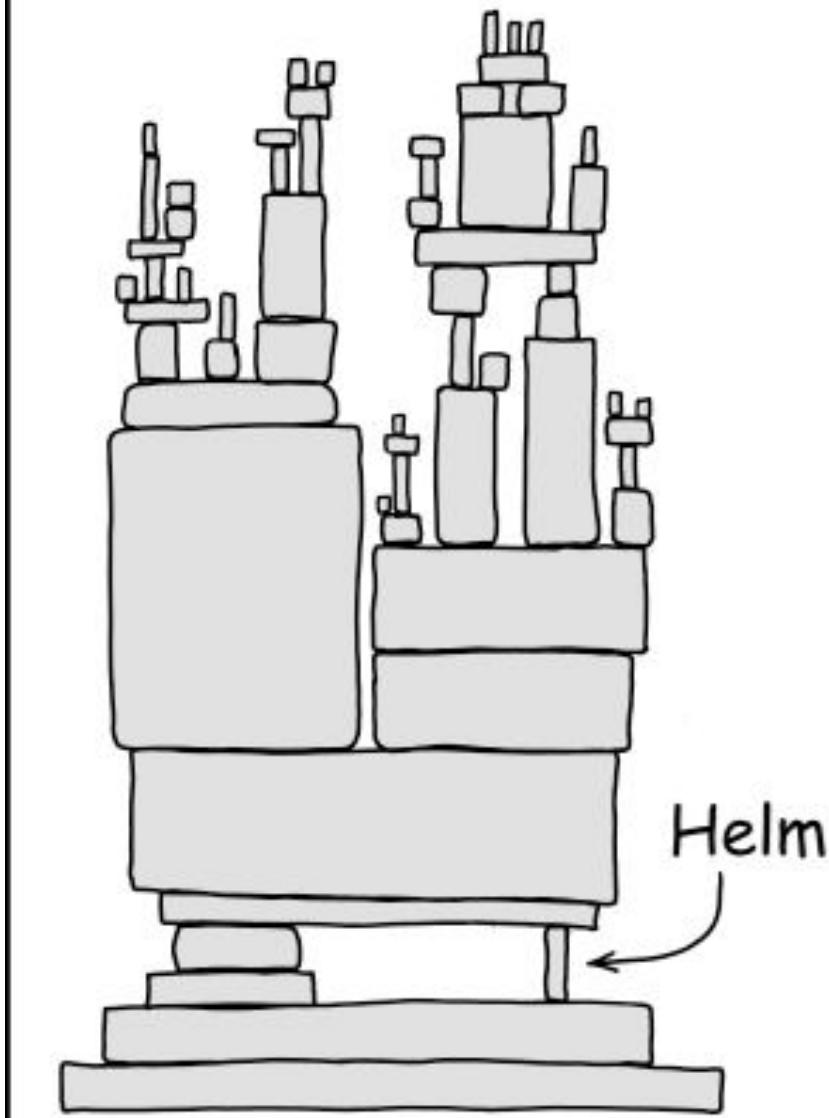
$ helm install wp bitnami/wordpress
NAME: wp
LAST DEPLOYED: Mon Oct 10 17:36:30 2022
NAMESPACE: default
STATUS: deployed
REVISION: 1
```

Three Parts To Helm

3. Helm SDK



```
pkg
├── action
├── chart
├── chartutil
├── cli
├── downloader
├── engine
├── gates
├── getter
└── helmpath
...
...
```



Helm Is Stable Software

The screenshot shows a GitHub repository page for the Helm community. The repository is named `helm/community` and is public. The main tab selected is `Code`, showing a file named `community/hips/hip-0004.md`. The file was last updated on May 16 by `mattfarina` with the commit message "Adding an exception to back compat". The file has 115 lines and 90 SLOC, and is 9.05 KB in size. It contains a table defining backwards-compatibility rules:

hip	title	authors	created
0004	Document backwards-compatibility rules	Marc Khouzam <marc.khouzam@montreal.ca> Matt Butcher <matt.butcher@microsoft.com>	2020-09-18

Abstract

Define and document the backwards-compatibility rules that apply to Helm minor and patch releases.

Motivation

Helm Is Stable Software

v3.10.1



Major breaking changes are rare

Minor feature additions are 3 times per year

Patch releases are monthly on months w/o feature release



GRADUATED

INCUBATING

SANDBOX

THE CHASM

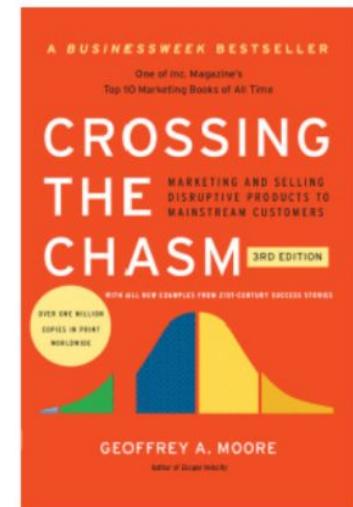
INNOVATORS
“TECHIES”

EARLY ADOPTERS
“VISIONARIES”

EARLY MAJORITY
“PRAGMATISTS”

LATE MAJORITY
“CONSERVATIVES”

LAGGARDS
“SKEPTICS”



The Ecosystem



Configuration Manager

Package Manager

Binaries

Config

Operating System

Chef, Puppet, Ansible, etc

apt, zypper, yum, etc

ELF Binaries

/etc

GNU/Linux

A bunch of options...

Helm

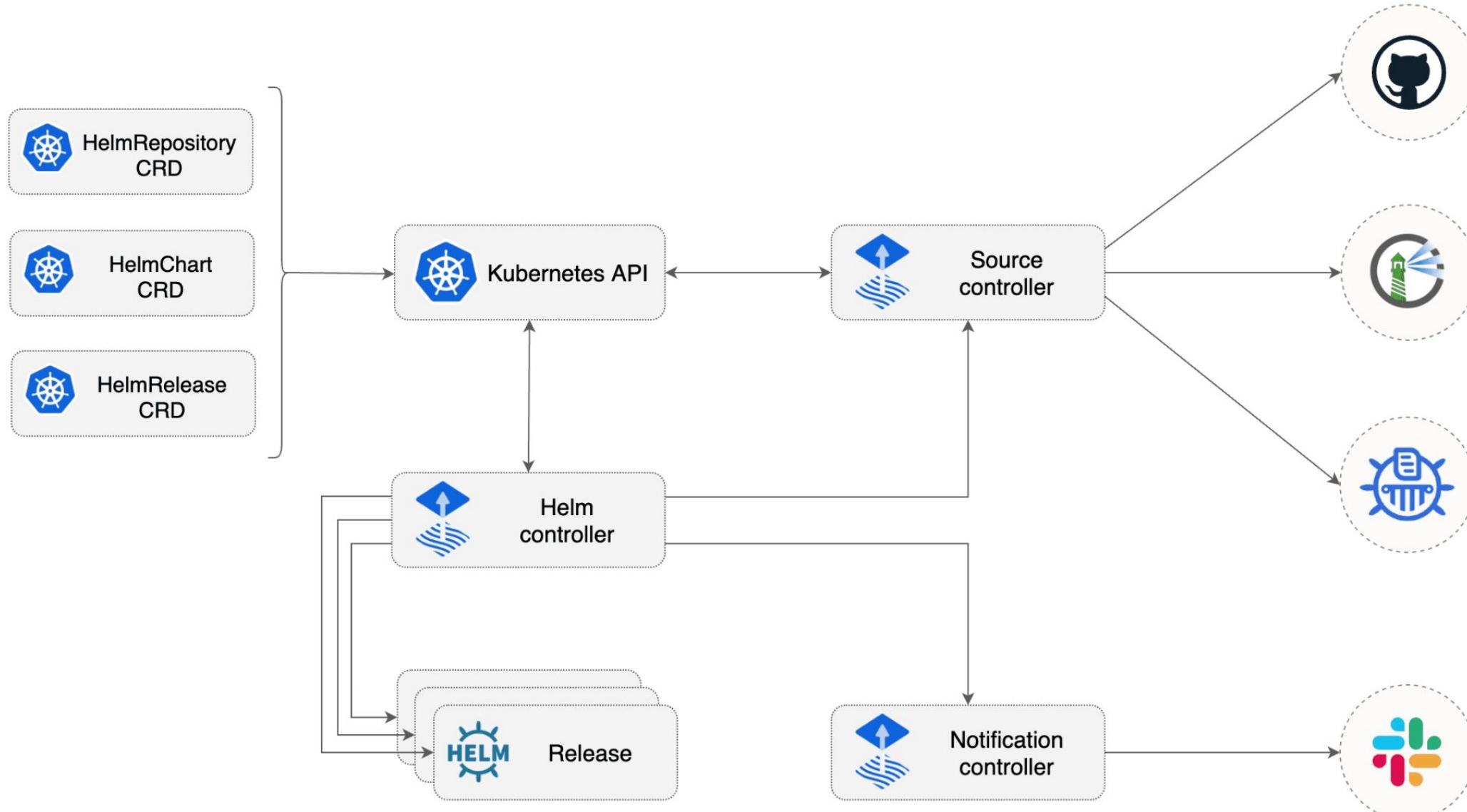
Images

K8s Resources

Kubernetes

GitOps for
Platform &
App management





The screenshot shows a web browser displaying the Argo CD documentation at argo-cd.readthedocs.io. The page is titled "Helm".

Table of contents:

- Declarative
- Values Files
- Helm Parameters
- Helm Release Name
- Helm Hooks
- Hook Tips
- Random Data
- Build Environment
- Helm plugins
- Modifying the ArgoCD container image
- Using initContainers
- Helm Version
- Helm --pass-credentials
- Helm --skip-crds

Declarative

You can install Helm charts through the UI, or in the declarative GitOps way. Here is an example:

```
apiVersion: argoproj.io/v1alpha1
kind: Application
metadata:
  name: sealed-secrets
  namespace: argocd
spec:
  project: default
  source:
    chart: sealed-secrets
    repoURL: https://bitnami-labs.github.io/sealed-secrets
    targetRevision: 1.16.1
    helm:
      releaseName: sealed-secrets
  destination:
    server: "https://kubernetes.default.svc"
    namespace: kubeseal
```

Values Files

Helm has the ability to use a different, or even multiple "values.yaml" files to derive its parameters from. Alternate or multiple values file(s), can be specified using the `--values` flag. The flag can be repeated to support multiple values files:

The screenshot shows the GitHub repository page for 'helmfile/helmfile'. The repository is public and has 1.1k stars. The 'Code' tab is selected, showing the main branch and the file 'helmfile / README.md'. The README.md content is displayed below, featuring the title 'Helmfile' and a subtitle 'Deploy Kubernetes Helm Charts'. It also lists CI/CD status for Go, image, slack, and docs. The 'About' section describes Helmfile as a declarative spec for deploying helm charts. A note at the bottom states that the executable delegates to helm.

helmfile / helmfile Public

Code Issues 8 Pull requests 3 Discussions Actions Projects Security Insights

main helmfile / README.md Go to file ...

yxxhero fix README.md users.md to USERS.md (#410) ... ✓ Latest commit 1449640 6 days ago History

110 contributors +82

124 lines (81 sloc) | 4.93 KB

Helmfile

Go passing image latest v0.147.0 slack 6188 docs passing

Deploy Kubernetes Helm Charts

About

Helmfile is a declarative spec for deploying helm charts. It lets you...

- Keep a directory of chart value files and maintain changes in version control.
- Apply CI/CD to configuration changes.
- Periodically sync to avoid skew in environments.

To avoid upgrades for each iteration of `helm`, the `helmfile` executable delegates to `helm` - as a result, `helm` must be installed.

A screenshot of a web browser displaying the Terraform Registry at registry.terraform.io. The URL bar shows the site's address. A banner at the top indicates an update regarding Terraform Partner Integration Programs. The main navigation bar includes links for 'Browse', 'Publish', and 'Sign-in'. The left sidebar shows a 'HELM DOCUMENTATION' section with a 'helm provider' entry under 'helm'. The main content area is titled 'Helm Provider' and describes its use for deploying software packages in Kubernetes. It includes sections for 'Resources' (listing 'Resource: helm_release') and 'Data Sources' (listing 'Data Source: helm_template'). A 'Documentation' tab is selected, and a 'USE PROVIDER' button is visible. A sidebar on the right lists various documentation categories like 'Resources', 'Data Sources', and 'Example Usage'.

UPDATE | Our Terraform Partner Integration Programs tags have changes [Learn more](#)

Terraform Registry

Providers / hashicorp / helm / Version 2.7.1 ▾ Latest Version

helm

HELM DOCUMENTATION

Filter

helm provider

> Guides

> Resources

> Data Sources

Helm Provider

The Helm provider is used to deploy software packages in Kubernetes. The provider needs to be configured with the proper credentials before it can be used.

Try the [hands-on tutorial](#) on the Helm provider on the HashiCorp Learn site.

Resources

- Resource: [helm_release](#)

Data Sources

- Data Source: [helm_template](#)

ON THIS PAGE

Resources

Data Sources

Example Usage

Requirements

Authentication

Exec plugins

Argument Reference

Experiments

Report an issue

Chart Storage



Push Charts To Container Registries

The screenshot shows a Microsoft Edge browser window displaying the Microsoft Learn Azure Container Registry documentation. The URL is learn.microsoft.com. The main content is titled "Push and pull Helm charts to an Azure container registry". It includes sections like "In this article" with links to "Helm 3 or Helm 2?", "Prerequisites", and "Create a sample chart". A sidebar on the left lists "Push and pull Helm chart" under "Push and pull an OCI artifact". Other navigation links include "Documentation", "Training", "Certifications", "Q&A", "Code Samples", "More", "Search", "Sign in", "Portal", and "Free account". The footer contains links for "Product documentation", "Architecture", "Learn Azure", "Develop", "Resources", and "Download PDF".

The screenshot shows a Microsoft Edge browser window displaying the AWS Documentation Amazon ECR User Guide. The URL is docs.aws.amazon.com. The main content is titled "Pushing a Helm chart to a public repository". It includes sections like "To push a Helm chart to an Amazon ECR public repository" with steps 1 and 2, and a terminal command example. Another section shows a terminal command example for creating a ConfigMap. The footer contains links for "Contact Us", "English", "Create an AWS Account", "Feedback", and "Preferences".

Harbor Support Charts Two Ways

The screenshot shows a web browser displaying the Harbor documentation at goharbor.io. The page title is "Managing Helm Charts". On the left, there's a sidebar with navigation links for Harbor version 2.0.0, installation, administration, and project management. The main content area discusses Helm as a package manager for Kubernetes and its integration with Harbor. It mentions the ChartMuseum and the OCI-compatible registry. A section titled "Manage Helm Charts with the ChartMuseum in Harbor Interface" is highlighted. On the right, there's a sidebar titled "On this page" with links to other Helm-related pages and a "Contributing" section with "Page source" and "Create issue" buttons.

HARBOR VERSION 2.0.0

HARBOR INSTALLATION AND CONFIGURATION

HARBOR ADMINISTRATION

WORKING WITH PROJECTS

Create Projects

Project Configuration

Working with Images, Tags, and Helm Charts

Pulling and Pushing Images in the Docker Client

Managing Labels

Deleting Artifacts

Detagging Artifacts

Repositories

Managing Helm Charts

Helm is a package manager for [Kubernetes](#). Helm uses a packaging format called [charts](#). Since version 1.6.0, Harbor is a composite, cloud-native registry which supports both container image management and Helm charts management. Access to Helm charts in Harbor is controlled by [role-based access controls \(RBAC\)](#) and is restricted by projects.

There are two places to manage Helm charts.

- The ChartMuseum, provided by Harbor since version 1.6.0
- The OCI-compatible registry, provided by Harbor since version 2.0.0

This means you can manage Helm charts alongside your container images through the same set of projects and repositories.

Manage Helm Charts with the ChartMuseum in Harbor Interface

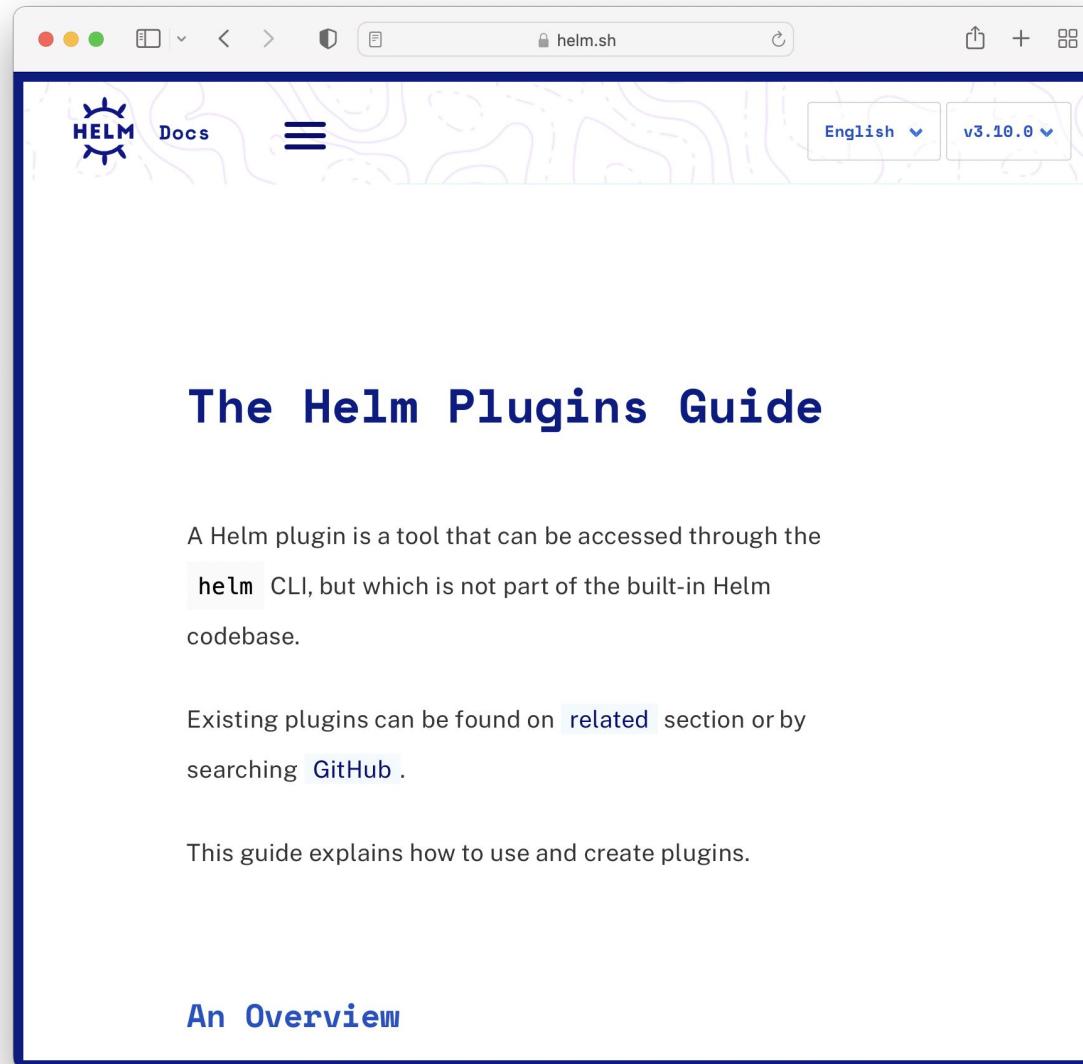
On this page

- Manage Helm Charts with the ChartMuseum in Harbor Interface
- Working with ChartMuseum via the Helm CLI
- Manage Helm Charts with the OCI-Compatible Registry of Harbor

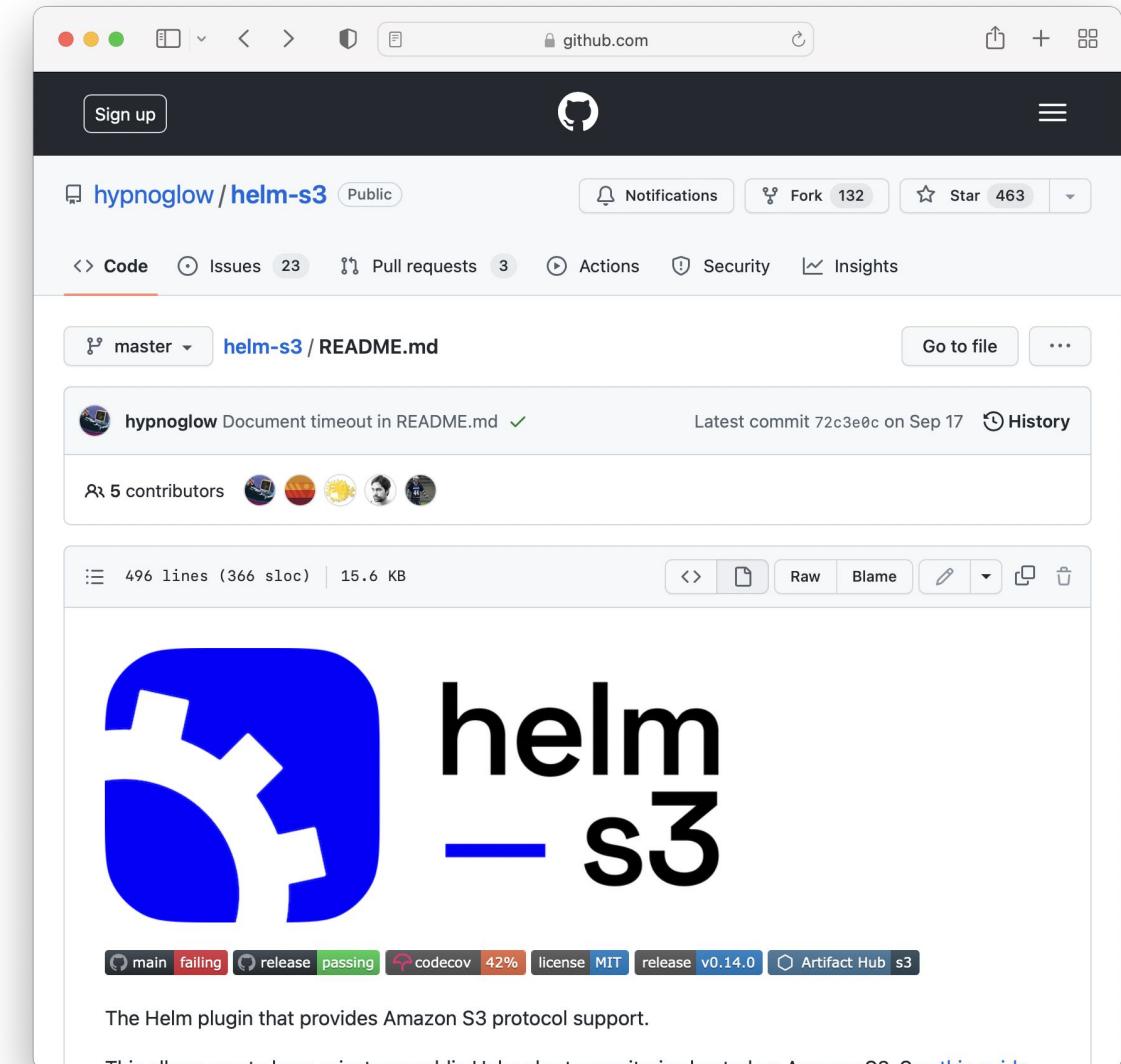
Contributing

[Page source](#) [Create issue](#)

Helm Plugins To Upload/Download

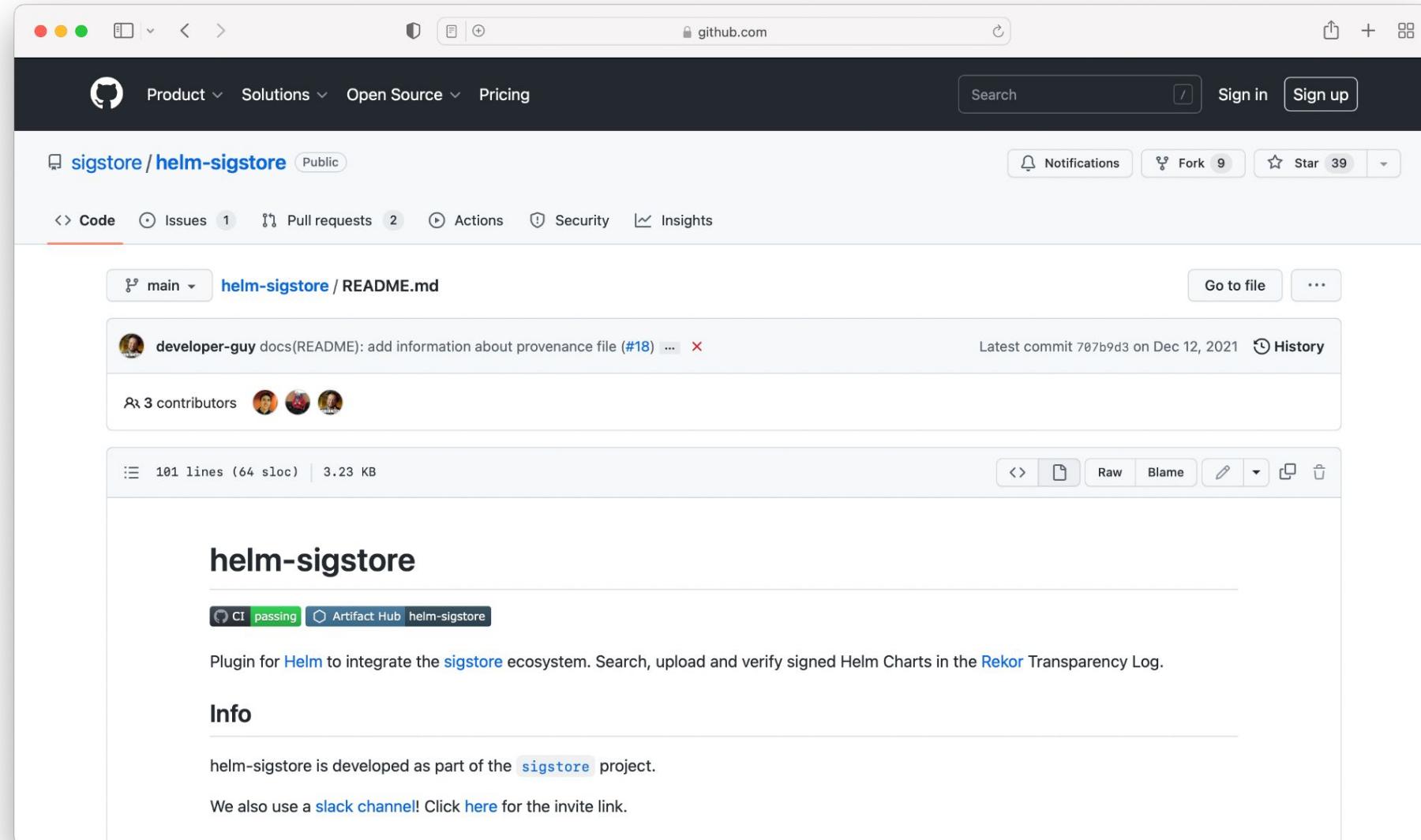


The Helm Plugins Guide page is displayed in a browser window. The title "The Helm Plugins Guide" is prominently shown. Below it, a paragraph explains what a Helm plugin is: "A Helm plugin is a tool that can be accessed through the `helm` CLI, but which is not part of the built-in Helm codebase." Further down, instructions say "Existing plugins can be found on [related](#) section or by searching [GitHub](#)." A "This guide explains how to use and create plugins." link is also present. At the bottom, a "An Overview" section is mentioned.



The GitHub repository for "hypnoglow/helm-s3" is shown. The repository is public, has 132 forks, and 463 stars. The README.md file is displayed, featuring the Helm logo and the text "helm - s3". It includes a badge for "main failing" and another for "release passing". The repository has 496 lines of code and a size of 15.6 KB. A description below states: "The Helm plugin that provides Amazon S3 protocol support. This allows you to have private or public Helm chart repositories hosted on Amazon S3. See [this guide](#)".

Speaking of Plugins

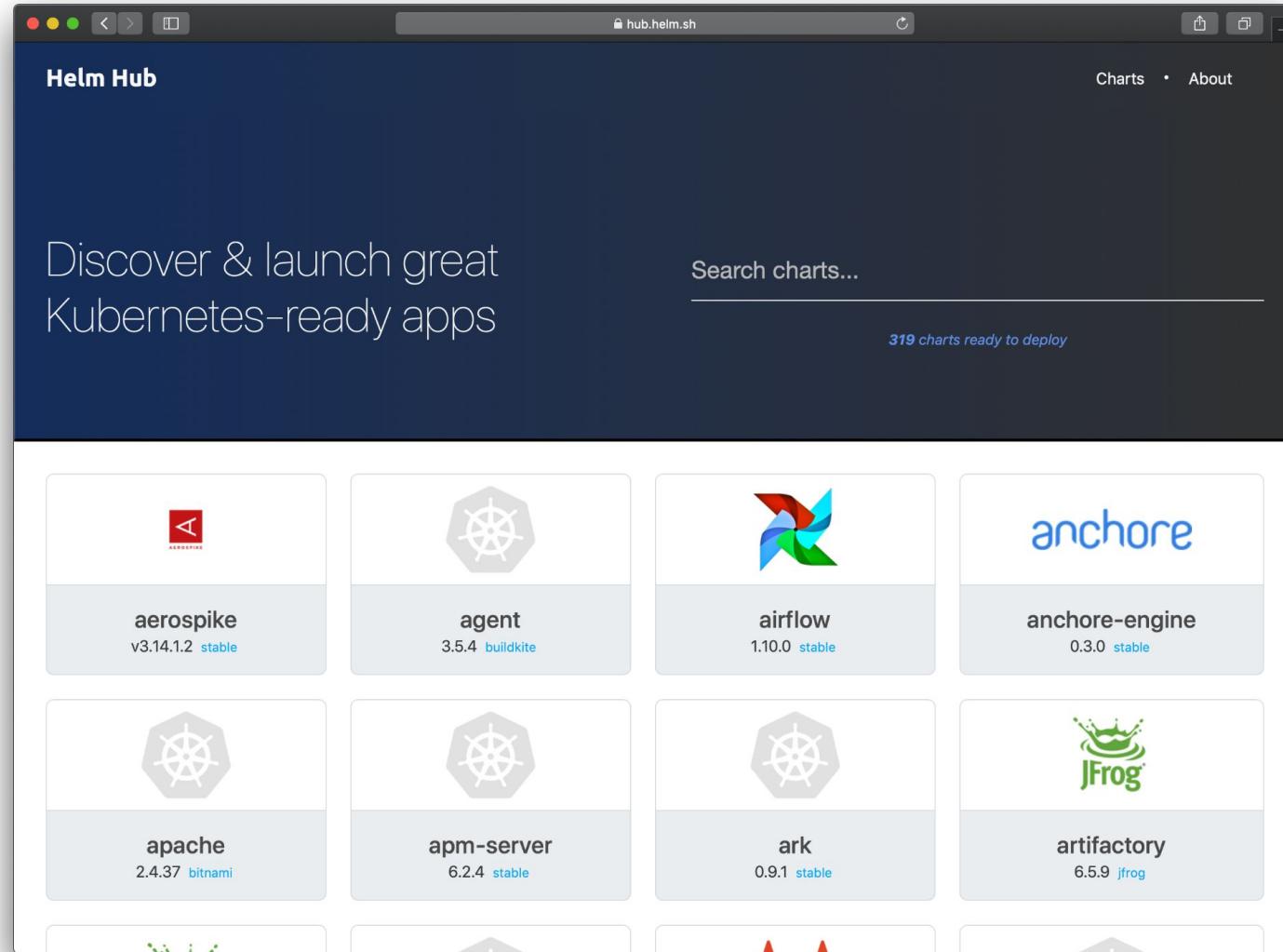


There are many plugins...

Discovery



Helm Hub (now deprecated)



The screenshot shows the Artifact Hub website interface. At the top, there's a navigation bar with a search bar containing "artifacthub.io". Below the search bar, the Artifact HUB logo is on the left, and a navigation menu with links for DOCS, STATS, SIGN UP, SIGN IN, and a settings icon is on the right. The main heading "Find, install and publish Kubernetes packages" is centered above a search bar with a placeholder "Search packages". A tip below the search bar says "Tip: Use multiple words to refine your search. Example: kafka operator". Below the search bar, there's a section for sample queries with links like "Falco rules for CVE", "OPA policies with MIT license", "Packages from verified publishers", "OLM operators in the monitoring category", and "Kubectl plugins". Two large numbers are displayed: "10847" under "PACKAGES" and "172599" under "RELEASES". Below these numbers, it says "Artifact Hub is an Open Source project" and provides links to GitHub, Slack, and Twitter.

artifacthub.io

DOCS STATS SIGN UP SIGN IN

Artifact HUB

Search packages

Tip: Use multiple words to refine your search. Example: **kafka operator**

You can also [browse all packages](#) - or - try one of the sample queries:

[Falco rules for CVE](#) [OPA policies with MIT license](#) [Packages from verified publishers](#)

[OLM operators in the monitoring category](#) [Kubectl plugins](#)

10847 | 172599

PACKAGES RELEASES

Artifact Hub is an [Open Source](#) project

[GitHub](#) [Slack](#) [Twitter](#)

Please see the [repositories guide](#) for more information about how to list your content on Artifact Hub.

Artifact Hub

The screenshot shows a web browser window displaying the artifacthub.io website. The URL is visible in the address bar. The page is for the `artifact-hub` Helm chart, published by the `Artifact Hub` organization.

Header:

- Artifact HUB logo
- Search bar: Search packages
- Navigation links: DOCS, STATS, SIGN UP, SIGN IN, Settings icon

Page Content:

`artifact-hub` Official
ORG: Artifact Hub REPO: [Helm chart](#) Artifact Hub Verified Publisher

Artifact Hub is a web-based application that enables finding, installing, and publishing Kubernetes packages.

SUBSCRIPTIONS: 16 WEBHOOKS: 1 PRODUCTION USERS: 1

Artifact Hub Section:

Introduction: This chart bootstraps an Artifact Hub deployment on a Kubernetes cluster using the [Helm](#) package manager.

Installing the Chart:

Security note: please review carefully all the configuration options available before deploying Artifact Hub in a production environment. The default values are just intended to provide users with a quick and easy way to try the software.

To install the chart with the release name `hub` run:

```
$ helm repo add artifact-hub https://artifacthub.github.io/helm-charts
$ helm install hub artifact-hub/artifact-hub
```

Actions: Report issue, INSTALL, TEMPLATES, DEFAULT VALUES, VALUES SCHEMA, CHANGELOG, SCREENSHOTS

Application Version: 1.10.0

Chart Versions: 1.10.0 (5 Oct, 2022) Contains security updates

Artifact Hub

The screenshot shows the Artifact Hub website interface. The top navigation bar includes the logo, a search bar, and links for DOCS, STATS, SIGN UP, SIGN IN, and settings. The main content area displays search results for "kube-prometheus-stack", "cert-manager", and "prometheus". Each result card provides details like version, repository, and security ratings.

FILTERS (Left sidebar)

- Official ⓘ
- Verified publishers ⓘ

KIND

- Helm charts (159)
- Containers images (1)

CATEGORY

- Database
- Integration and Delivery
- Logging and Tracing
- Machine learning
- Monitoring
- Networking
- Security
- Storage
- Streaming and Messaging

Search Results

kube-prometheus-stack

ORG: Prometheus REPO: prometheus-community VERSION: 41.4.0 APP VERSION: 0.60.1

400 Helm chart Updated 6 hours ago

kube-prometheus-stack collects Kubernetes manifests, Grafana dashboards, and Prometheus rules combined with documentation and scripts to provide...

cert-manager

ORG: cert-manager REPO: cert-manager VERSION: 1.9.1 APP VERSION: v1.9.1

306 Helm chart Updated 3 months ago

A Helm chart for cert-manager

prometheus

ORG: Prometheus REPO: prometheus-community

228 Helm chart Updated 2 days ago

Artifact Hub

The screenshot shows the Artifact Hub website interface. On the left, there is a sidebar with a red border around the 'KIND' section. The 'KIND' section contains a list of package types with their counts: Helm charts (9469), Tekton tasks (432), OLM operators (285), Krew kubectl plugins (212), Containers images (72), Gatekeeper policies (40), Keptn integrations (39), Helm plugins (34), Kubewarden policies (25), Falco rules (23), Tinkerbell actions (11), OPA policies (5), KEDA scalers (3), and Tekton pipelines (3). Below this is a 'CATEGORY' section with checkboxes for Database, Integration and Delivery, Logging and Tracing, Machine learning, and Monitoring.

The main content area displays three package cards:

- ingress-nginx**: Published by Kubernetes. Version 4.3.0, App Version 1.4.0. Rating: ★ 345, Helm chart. Last updated 11 days ago. Production users: 14. Security rating: D.
- cert-manager**: Published by cert-manager. Version 1.9.1, App Version v1.9.1. Rating: ★ 306, Helm chart. Last updated 3 months ago. Production users: 18. Security rating: B.
- prometheus**: Published by Prometheus. Version 2.28, App Version v2.28. Rating: ★ 228, Helm chart. Last updated 2 days ago. Production users: 18. Security rating: F.

At the top right of the main content area, there are links for DOCS, STATS, SIGN UP, SIGN IN, and a settings gear icon.

Discover Helm Plugins

The screenshot shows the ArtifactHub.io website interface. At the top, there is a search bar with the placeholder "Search packages". Below the search bar, the page displays "1 - 20 of 34 results" for "Helm plugins". On the left side, there are two filter sections: "FILTERS" and "KIND". The "FILTERS" section includes checkboxes for "Official" and "Verified publishers". The "KIND" section includes checkboxes for various types of packages, with "Helm plugins" being checked. The main content area lists three Helm plugin packages:

- helm-git**: USER: crunchtime-ali, REPO: git, VERSION: 0.13.0. It has 5 stars and was updated 7 days ago. Description: Get non-packaged Charts directly from Git.
- release**: ORG: JovianX, REPO: Helm Release, VERSION: 0.4.0. It has 4 stars and was updated 2 months ago. Description: Update values of a releases, pull charts from releases. It is marked as having 1 production user and a verified publisher.
- 2to3**: ORG: Helm, REPO: Helm 2to3. It has 3 stars and was updated a month ago.

Bitnami Application Catalog

The screenshot shows the Bitnami Application Catalog website, specifically the Helm Charts section. The header includes the Bitnami logo, navigation links for Applications, Kubernetes, Developers, Company, and a Sign In button. The main heading is "Helm Charts" with the sub-instruction "Find your favorite application in our catalog and launch it." Below this, there's a link to "Learn more about the [benefits of the Bitnami Application Catalog](#)". The breadcrumb navigation shows "Home > Applications > Helm Charts". A note at the top states: "These software listings are packaged by Bitnami. The respective trademarks mentioned in the offerings are owned by the respective companies, and use of them does not imply any affiliation or endorsement. The software is licensed to you subject to one or more open source licenses and VMware provides the software on an AS-IS basis." A search bar contains the placeholder text "WordPress, MongoDB, TensorFlow...". A "Find your solution" section features buttons for Single-Tier, Multi-Tier, Docker, **Kubernetes**, Win / Mac / Linux, Virtual Machines, and Optimized Solutions. Below this, four application icons are displayed: Drupal, Joomla!, DokuWiki, and WordPress.

bitnami by vmware

Applications Kubernetes Developers Company Sign In

Helm Charts

Find your favorite application in our catalog and launch it.

Learn more about the [benefits of the Bitnami Application Catalog](#).

Home > Applications > Helm Charts

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Search applications

WordPress, MongoDB, TensorFlow...

Find your solution

Single-Tier Multi-Tier Docker **Kubernetes** Win / Mac / Linux Virtual Machines Optimized Solutions

Drupal Joomla! DokuWiki WordPress

Nvidia Catalog

The screenshot shows the Helm Charts section of the Nvidia Catalog. The URL in the browser is catalog.ngc.nvidia.com. The page title is "Helm Charts". A sidebar on the left shows a navigation tree: Catalog > Helm Charts. On the right, there is a "Learn More" button and a search/filtering bar with a magnifying glass icon and placeholder text "Search or click the filtering icon...". The results are sorted by "Last Modified". There are four main card components displayed:

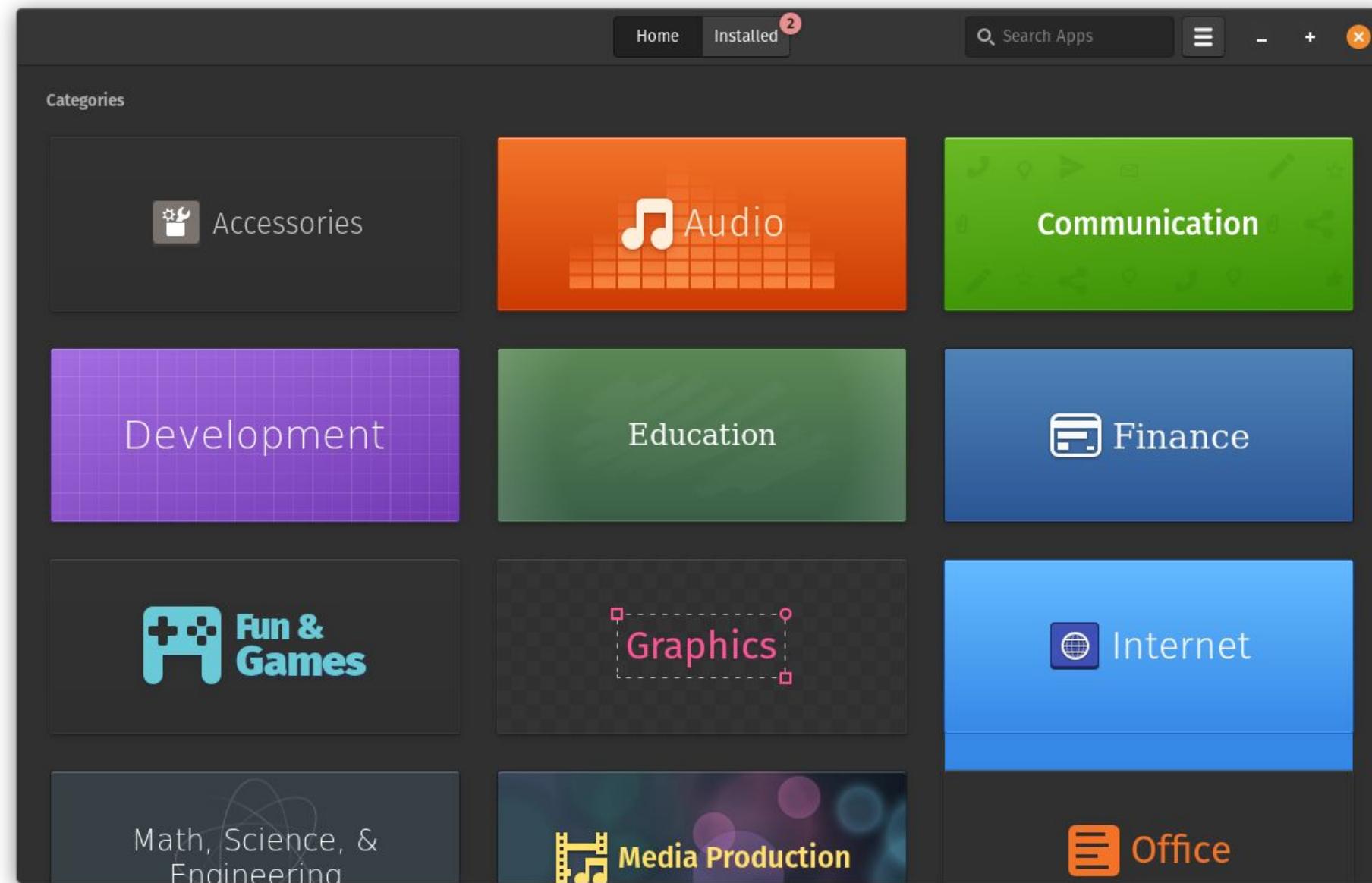
- Morpheus AI Engine**: NVIDIA TRITON INFERENCE SERVER. This card features the NVIDIA logo and a green circular icon. It includes a "Fetch Helm Chart" button.
- Morpheus SDK CLI**: NVIDIA TRITON INFERENCE SERVER. This card features a complex 3D visualization of neural network layers. It includes a "Fetch Helm Chart" button.
- Morpheus MLflow Triton Plugin**: NVIDIA TRITON INFERENCE SERVER. This card features the NVIDIA logo and a green circular icon. It includes a "Fetch Helm Chart" button.
- Triton Inference Server**: NVIDIA TRITON INFERENCE SERVER. This card features the NVIDIA logo and a green circular icon. It includes "View Labels" and "Fetch Helm Chart" buttons.

Below these cards, there are two more cards partially visible, each featuring the NVIDIA logo and a green circular icon.

**Discovery &
Install**



Linux App Installs

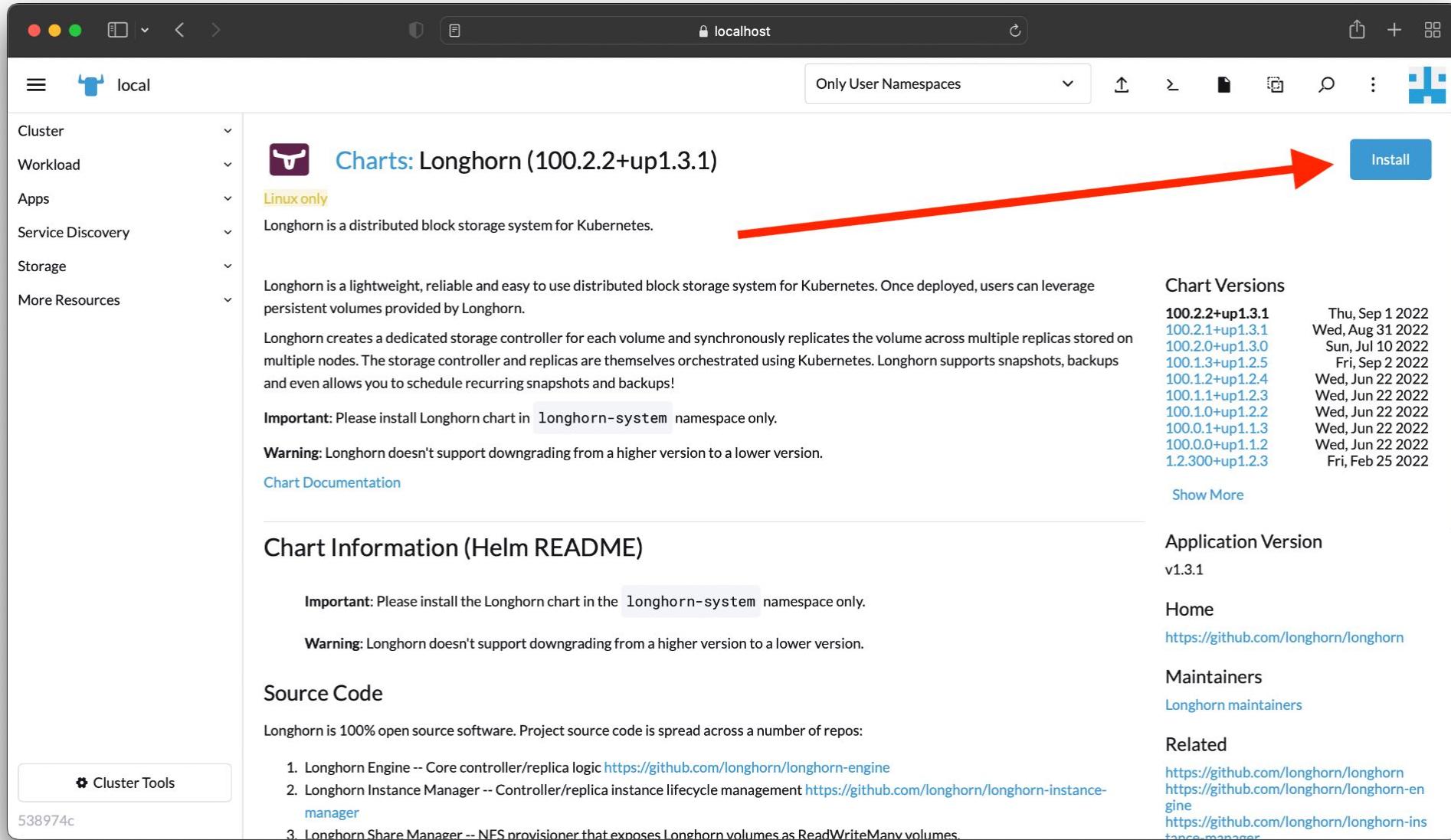


Rancher Charts Catalog

The screenshot shows the Rancher Charts Catalog interface. On the left is a sidebar with navigation links: Cluster, Workload, Apps (with Charts selected), Installed Apps, Repositories, Recent Operations, Service Discovery, Storage, and More Resources. Below the sidebar is a button for Cluster Tools and a cluster ID (538974c). The main area is titled "Charts" and contains a grid of 16 cards, each representing a different Helm chart. The cards are arranged in four rows of four. Each card includes an icon, the chart name, a brief description, and additional details like "Experimental" status or deployment requirements.

Category	Chart Name	Description	Notes
All	Alerting Drivers	The manager for third-party webhook receivers used in Prometheus...	
All Categories	CIS Benchmark	The cis-operator enables running CIS benchmark security scans on a...	
	Epinio	The official way to install Epinio	Experimental
	External IP Webhook	Deploy the external-ip-webhook to mitigate k8s CVE-2020-8554	
	Harvester Cloud Pro...	A Helm chart for Harvester Cloud Provider	
	Harvester CSI Driver	A Helm chart for Harvester CSI driver	
	Istio	A basic Istio setup that installs with the istioctl. Refer to...	
	Logging	Collects and filter logs using highly configurable CRDs. Powered by...	Deploys on Windows
	Longhorn	Longhorn is a distributed block storage system for Kubernetes.	Linux only
	Monitoring	Collects several related Helm charts, Grafana dashboards, and...	Deploys on Windows
	NeuVector	Helm feature chart for NeuVector's core services	Linux only
	OPA Gatekeeper	Modifies Open Policy Agent's upstream gatekeeper chart that...	
	Prometheus Federator	Prometheus Federator	
	Rancher Backups	Provides ability to back up and restore the	
	rancher-wins-upgrader	Manages upgrading the wins server version and	
	sriov	SR-IOV network	Experimental

With Installer



Charts: Longhorn (100.2.2+up1.3.1)

Linux only

Longhorn is a distributed block storage system for Kubernetes.

Longhorn is a lightweight, reliable and easy to use distributed block storage system for Kubernetes. Once deployed, users can leverage persistent volumes provided by Longhorn.

Longhorn creates a dedicated storage controller for each volume and synchronously replicates the volume across multiple replicas stored on multiple nodes. The storage controller and replicas are themselves orchestrated using Kubernetes. Longhorn supports snapshots, backups and even allows you to schedule recurring snapshots and backups!

Important: Please install Longhorn chart in `longhorn-system` namespace only.

Warning: Longhorn doesn't support downgrading from a higher version to a lower version.

[Chart Documentation](#)

Chart Information (Helm README)

Important: Please install the Longhorn chart in the `longhorn-system` namespace only.

Warning: Longhorn doesn't support downgrading from a higher version to a lower version.

Source Code

Longhorn is 100% open source software. Project source code is spread across a number of repos:

1. Longhorn Engine -- Core controller/replica logic <https://github.com/longhorn/longhorn-engine>
2. Longhorn Instance Manager -- Controller/replica instance lifecycle management <https://github.com/longhorn/longhorn-instance-manager>
3. Longhorn Share Manager -- NFS provisioner that exposes Longhorn volumes as ReadWriteMany volumes.

Chart Versions

100.2.2+up1.3.1	Thu, Sep 1 2022
100.2.1+up1.3.1	Wed, Aug 31 2022
100.2.0+up1.3.0	Sun, Jul 10 2022
100.1.3+up1.2.5	Fri, Sep 2 2022
100.1.2+up1.2.5	Wed, Jun 22 2022
100.1.1+up1.2.4	Wed, Jun 22 2022
100.1.1+up1.2.3	Wed, Jun 22 2022
100.1.0+up1.2.2	Wed, Jun 22 2022
100.0.1+up1.1.3	Wed, Jun 22 2022
100.0.0+up1.1.2	Wed, Jun 22 2022
1.2.300+up1.2.3	Fri, Feb 25 2022

[Show More](#)

Application Version
v1.3.1

Home
<https://github.com/longhorn/longhorn>

Maintainers
[Longhorn maintainers](#)

Related

<https://github.com/longhorn/longhorn>
<https://github.com/longhorn/longhorn-engine>
<https://github.com/longhorn/longhorn-instance-manager>

OpenShift Developer Console

The screenshot shows the OpenShift Developer Console interface. The left sidebar has a dark theme with white text and icons. It includes sections for Developer (+Add), Topology, Observe, Search, Builds, Helm, Project, ConfigMaps, and Secrets. The main area is titled "Helm Charts" under "Developer Catalog > Helm Charts". It displays a grid of 39 Helm chart repositories. Each card includes a thumbnail, the name, the provider (e.g., Red Hat, Broadpeak), a brief description, and a "Helm Charts" badge.

Chart Repository	Provider	Description	Actions
.NET	Provided by Red Hat	A Helm chart to build and deploy .NET applications	Helm Charts
BkS400 Helm chart for Kubernetes	Provided by Broadpeak	BkS400 Helm chart for Kubernetes	Helm Charts
Cryostat	Provided by Red Hat	Securely manage JFR recordings for your containerized Java workloads	Helm Charts
Data Grid	Provided by Red Hat	A Helm chart that lets you build and deploy Red Hat Data Grid clusters	Helm Charts
Eap Xp3	Provided by Red Hat	Build and Deploy EAP XP3 applications on OpenShift	Helm Charts
Eap Xp4	Provided by Red Hat	Build and Deploy EAP XP4 applications on OpenShift	Helm Charts

Weave GitOps GUI

weavegitops

Applications > weave-gitops-app

weave-gitops-app

Release reconciliation succeeded

SYNC **SUSPEND**

GRAPH DETAILS EVENTS DEPENDENCIES YAML

The screenshot shows a dependency graph for the 'weave-gitops-app'. At the top level, there is a 'weave-gitops' node containing a 'GitRepository' and 'flux-system'. Below it is a 'weave-gitops-app' node containing a 'HelmRelease' and 'flux-system'. This is followed by two rows of components. The first row contains 'weave-gitops-app' (ClusterRoleBinding), 'test-admin-user-read-resources...' (ClusterRoleBinding), 'test-admin-user-read-resources' (RoleBinding), 'weave-gitops-app' (Service), another 'weave-gitops-app' (Deployment), 'oidc-auth' (Secret), and 'cluster-user-auth' (Secret). The second row contains 'weave-gitops-app-6d5c7ff449' (ReplicaSet), 'weave-gitops-app-8b8784d7d' (ReplicaSet), 'weave-gitops-app-54b68989b9' (ReplicaSet), 'weave-gitops-app-9f598fb48' (ReplicaSet), 'weave-gitops-app-7f9c49dbb9' (ReplicaSet), 'weave-gitops-app-6b9dbd86d' (ReplicaSet), and 'weave-gitops-app-5994f649f5' (ReplicaSet). A vertical bar on the right indicates a progress of 61%.

With Installer

Weave GitOps Applications > Add new application

SELECT CLUSTER: app-promo-stg14 | SELECT SOURCE: weaveworks-charts | https://weaveworks.github.io/weave-gitops-profile-examples/

Helm Releases

Name	Version	Namespace	Yaml
cert-manager	0.0.8	flux-system	Values.yaml
dex	0.0.12	flux-system	Values.yaml
elk-stack	0.0.9	flux-system	Values.yaml
flagger	0.0.4	flux-system	Values.yaml
ingress-nginx	0.0.11	flux-system	Values.yaml
local-path-provisioner	0.0.3	flux-system	Values.yaml
metallb	0.0.3	flux-system	Values.yaml
prometheus	0.0.11	flux-system	Values.yaml
weave-policy-agent	0.5.2	flux-system	Values.yaml

GitOps

CREATE BRANCH: add-application-branch-9aiuv | PULL REQUEST TITLE: Add application

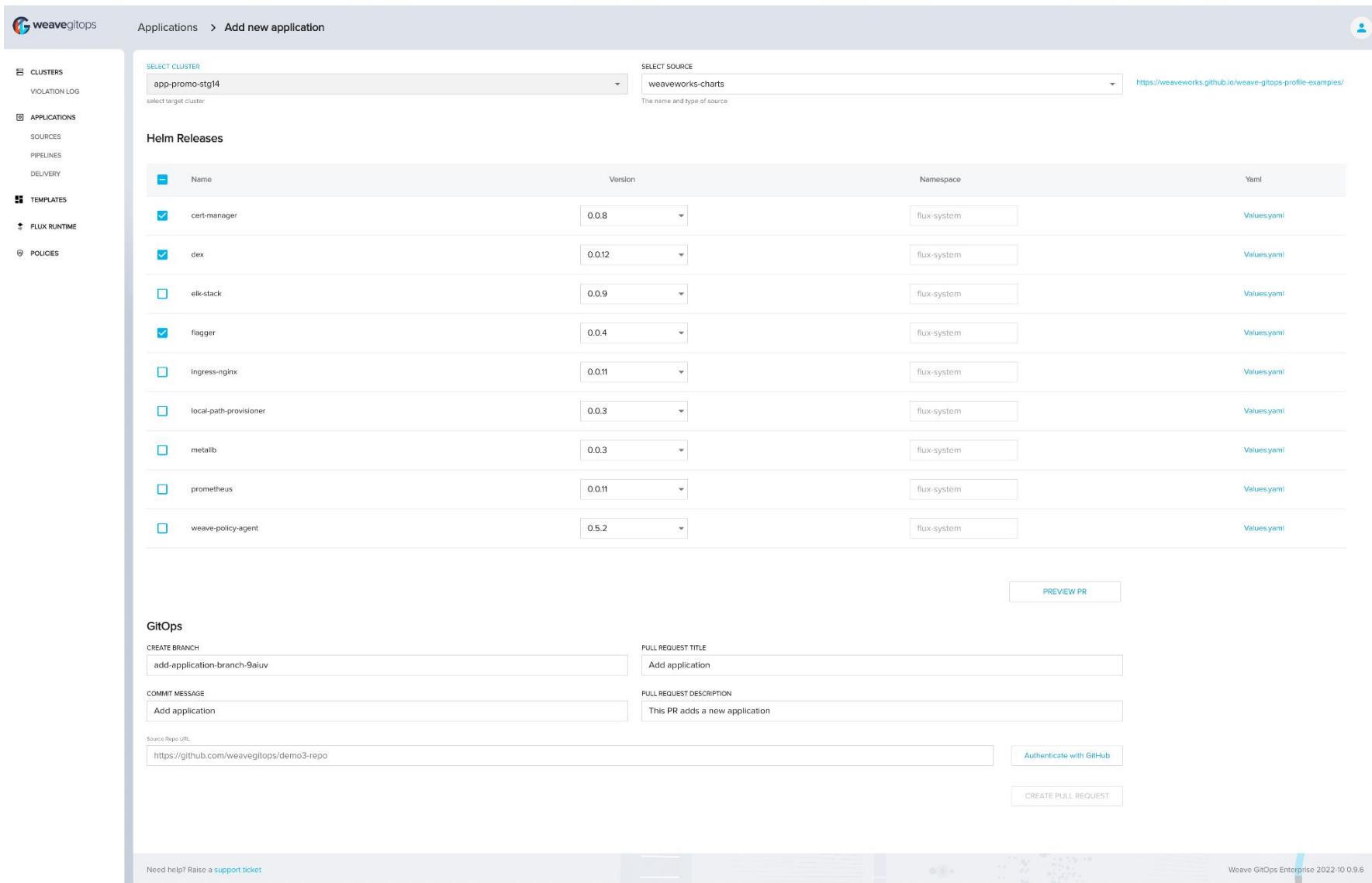
COMMIT MESSAGE: Add application | PULL REQUEST DESCRIPTION: This PR adds a new application

Source Repo URL: https://github.com/weavegitops/demo3-repo | Authenticate with GitHub

CREATE PULL REQUEST

Need help? Raise a support ticket

Weave GitOps Enterprise 2022-10 0.9.6



Dev Tools



The screenshot shows a web browser window displaying the [Helm package page](https://pkg.go.dev/helm) on the pkg.go.dev platform. The page has a dark theme with a teal header. The navigation bar includes links for "Why Go", "Get Started", "Docs", "Packages" (which is underlined to indicate it's the current page), "Play", and "Blog". The main content area shows the "helm" module details: Version v3.10.1 (Latest), Published: Oct 12, 2022, License: Apache-2.0. It lists validation status: Valid go.mod file, Redistributable license, Tagged version, and Stable version. Below this are sections for Repository (github.com/helm/helm) and Links (Report a Vulnerability, Open Source Insights). A "README" section is expanded, showing the title "Helm" and a list of build status badges: circleci (passing), go report (A+), godoc (reference), and openssf best practices (passing). A brief description states: "Helm is a tool for managing Charts. Charts are packages of pre-configured Kubernetes resources." A "Use Helm to:" section lists several benefits:

- Find and use popular software packaged as Helm Charts to run in Kubernetes
- Share your own applications as Helm Charts
- Create reproducible builds of your Kubernetes applications
- Intelligently manage your Kubernetes manifest files

Generate JSON Schema From Values

This screenshot shows the GitHub repository page for `amurant/helm-jsonschema-gen`. The repository is public and has 0 stars, 0 forks, and 0 issues. It contains 8 pull requests, 1 action, and 0 projects. The main branch is `main`. The repository description is: "Tool for generating Helm 'values.schema.json', 'values.yaml' and documentation". It includes links to `Readme`, `MIT license`, and `0 stars`. The `Releases` section shows a `v0.0.2` release from Oct 26, 2021. The `Packages` section indicates "No packages published".

This screenshot shows the GitHub repository page for `holgerjh/helm-schema`. The repository is public and has 1 star, 0 forks, and 0 issues. It contains 17 pull requests, 0 actions, and 0 projects. The main branch is `main`. The repository description is: "Plugin for helm that adds a 'schema' command to generate JSON Schemas from charts". It includes links to `Readme`, `Apache-2.0 license`, and `1 star`. The `Releases` section shows 2 tags. The `Packages` section indicates "No packages published".

Helm React UI

The screenshot shows a GitHub repository page for 'gimlet-io/helm-react-ui'. The repository is public and has 1 fork and 6 stars. The 'Code' tab is selected, showing the master branch. The repository contains files like fixtures, src, test, .babelrc, .gitignore, README.md, index.js, package-lock.json, and package.json. There is one open pull request from dzsak. The 'About' section indicates no description, website, or topics provided. The 'Releases' section shows no releases published. The 'Packages' section shows no packages published. The 'Contributors' section lists laszloph and Laszlo Fogas.

The screenshot shows the Helm React UI configuration interface. It includes sections for Basics, Resources, Health, Environment Variables, Sealed Secrets, and Host Names. Under Basics, the 'Image' section specifies 'nginx' as the repository and '1.19.3' as the tag. The 'Port' is set to 80. The 'Replicas' field is set to 2. A red button at the bottom right says 'Log the YAML'.

<https://github.com/gimlet-io/helm-react-ui-test-bed>

Red Hat Chart Verifier

The screenshot shows the GitHub repository page for 'redhat-certification/chart-verifier'. The repository is public and has 410 commits. The 'Code' tab is selected, showing a list of recent commits. The repository has 14 branches and 13 tags. The 'About' section describes it as a rules-based tool to certify Helm Charts. It includes links to Readme, Apache-2.0 license, and statistics like 40 stars and 6 watching. The 'Releases' section shows a latest version of 0.1.0 from 14 days ago, with 13 total releases. The 'Packages' section indicates no packages have been published.

This Helm Chart is provided by a trusted partner and has been verified for ease of integration.

Vault Provided by HashiCorp

Additional level of trust for chart consumers in OpenShift Console

Chart Testing

The screenshot shows a GitHub repository page for the 'chart-testing' tool. The URL in the address bar is <https://github.com/helm/chart-testing/blob/main/README.md>. The repository is public and has 179 forks and 863 stars. The 'Code' tab is selected, showing the main branch and the README.md file. The README.md file content is as follows:

Chart Testing

[License Apache 2.0](#) [go report A+](#) [ci passing](#)

`ct` is the the tool for testing Helm charts. It is meant to be used for linting and testing pull requests. It automatically detects charts changed against the target branch.

Installation

Prerequisites

Helm Project Actions

This screenshot shows the GitHub repository for the `helm/chart-releaser-action`. The repository is public, has 124 forks, and 335 stars. The main tab is selected, showing a list of recent commits. A prominent callout at the top encourages using the GitHub Action with your project. The repository's purpose is described as turning a GitHub project into a self-hosted Helm chart repo using the `helm/chart-releaser` CLI tool. It includes links to the GitHub Action page and the `helm/chart-releaser` repository. The sidebar contains links to `README.md` and the `chart-releaser Action`.

This screenshot shows the GitHub repository for the `helm/chart-testing-action`. The repository is public, has 54 forks, and 151 stars. The main tab is selected, showing a list of recent commits. A prominent callout at the top encourages using the GitHub Action with your project. The repository's purpose is described as linting and testing Helm charts. It includes links to the GitHub Action page and the `github.com/helm/chart-testing` repository. The sidebar contains links to `README.md` and the `chart-testing Action`.

Many Helm GitHub Actions

The screenshot shows a Mac OS X browser window displaying the GitHub Marketplace search results for "helm". The search bar at the top contains "helm". The results page shows 137 results for "helm". On the left, there are filters for Types (Actions selected), Categories (Actions selected), and other options like Apps and Actions. The main area displays a grid of actions:

- Kind Cluster** By helm: Create a kind (Kubernetes IN Docker) cluster. 172 stars.
- Helm Chart Testing** By helm: Install the Helm chart-testing tool. 146 stars.
- Helm Chart Releaser** By helm: Host a Helm charts repo on GitHub Pages. 327 stars.
- Helm tool installer** By Azure: Install a specific version of helm binary. Acceptable values are latest or any semantic version string like 1.15.0. 68 stars.
- Deploy Helm to EKS** By bitovi: Deploy a helm chart to an EKS cluster using IAM authentication. 7 stars.
- Helm Chart Testing Helm 3** By HexF: Run the Helm chart-testing tool.
- Red Hat Helm Chart Certifier** By redhat-actions: Action for Red Hat Helm Chart Certification.
- Helm & Helmfile Action** By hiberbee: Setup Helm and plugins, update.

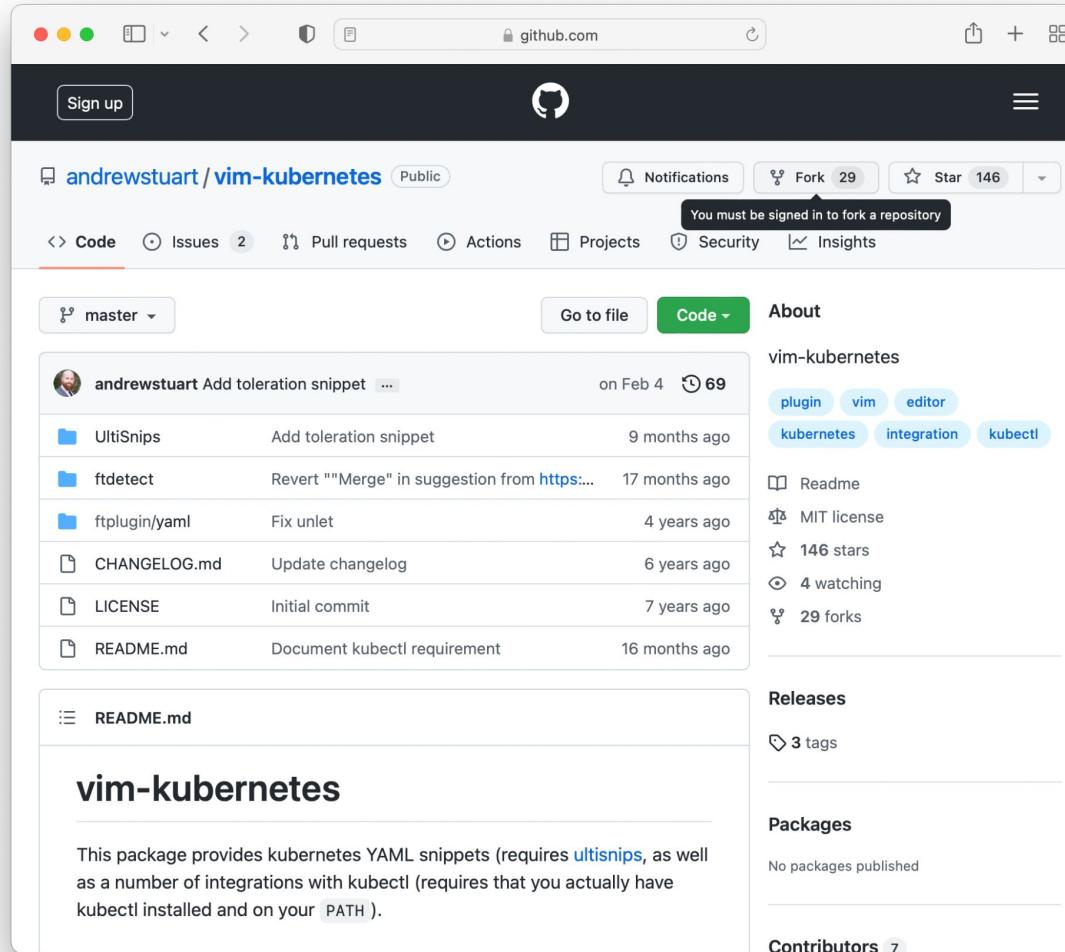
IDE Integration



The screenshot shows the Visual Studio Code interface with the 'Inspect' extension for Helm. The title bar says 'Inspect — helm'. The left sidebar has sections for KUBERNETES, CLUSTERS (with 'rancher-desktop' selected), HELM REPOS (with 'bitnami' selected), CLOUDS (empty), and a gear icon. The main area displays the YAML configuration for the 'airflow' chart version 13.1.6 from the 'bitnami' repository. The configuration includes annotations, dependencies, description, home URL, icon URL, keywords, maintainers, sources, and version.

```
annotations:
  category: WorkFlow
  apiVersion: v2
  appVersion: 2.3.4
dependencies:
- condition: redis.enabled
  name: redis
  repository: https://charts.bitnami.com/bitnami
  version: 17.x.x
- condition: postgresql.enabled
  name: postgresql
  repository: https://charts.bitnami.com/bitnami
  version: 11.x.x
- name: common
  repository: https://charts.bitnami.com/bitnami
  tags:
    - bitnami-common
  version: 2.x.x
description: Apache Airflow is a tool to express and execute workflows as directed acyclic graphs (DAGs). It includes utilities to schedule tasks, monitor task progress and handle task dependencies.
home: https://github.com/bitnami/charts/tree/master/bitnami/airflow
icon: https://bitnami.com/assets/stacks/airflow/img/airflow-stack-220x234.png
keywords:
- apache
- airflow
- workflow
- dag
maintainers:
- name: Bitnami
  url: https://github.com/bitnami/charts
name: airflow
sources:
- https://github.com/bitnami/containers/tree/main/bitnami/airflow
- https://airflow.apache.org/
version: 13.1.6
```

At the bottom, there are status icons for Analysis Tools Missing, Go Update Available, Spell, and a bell icon.



The screenshot shows the GitHub repository page for `andrewstuart / vim-kubernetes`. The repository is public and has 146 stars, 29 forks, and 69 issues. The code tab is selected, showing a list of pull requests and commits. The sidebar includes sections for `About`, `Releases`, `Packages`, and `Contributors`.

Code

- andrewstuart Add toleration snippet ... on Feb 4 ⏲ 69
- UltiSnips Add toleration snippet 9 months ago
- ftdetect Revert ""Merge" in suggestion from https:... 17 months ago
- ftplugin/yaml Fix unlet 4 years ago
- CHANGELOG.md Update changelog 6 years ago
- LICENSE Initial commit 7 years ago
- README.md Document kubectl requirement 16 months ago

About

vim-kubernetes

plugin vim editor
kubernetes integration kubectl

Readme
MIT license
146 stars
4 watching
29 forks

Releases

3 tags

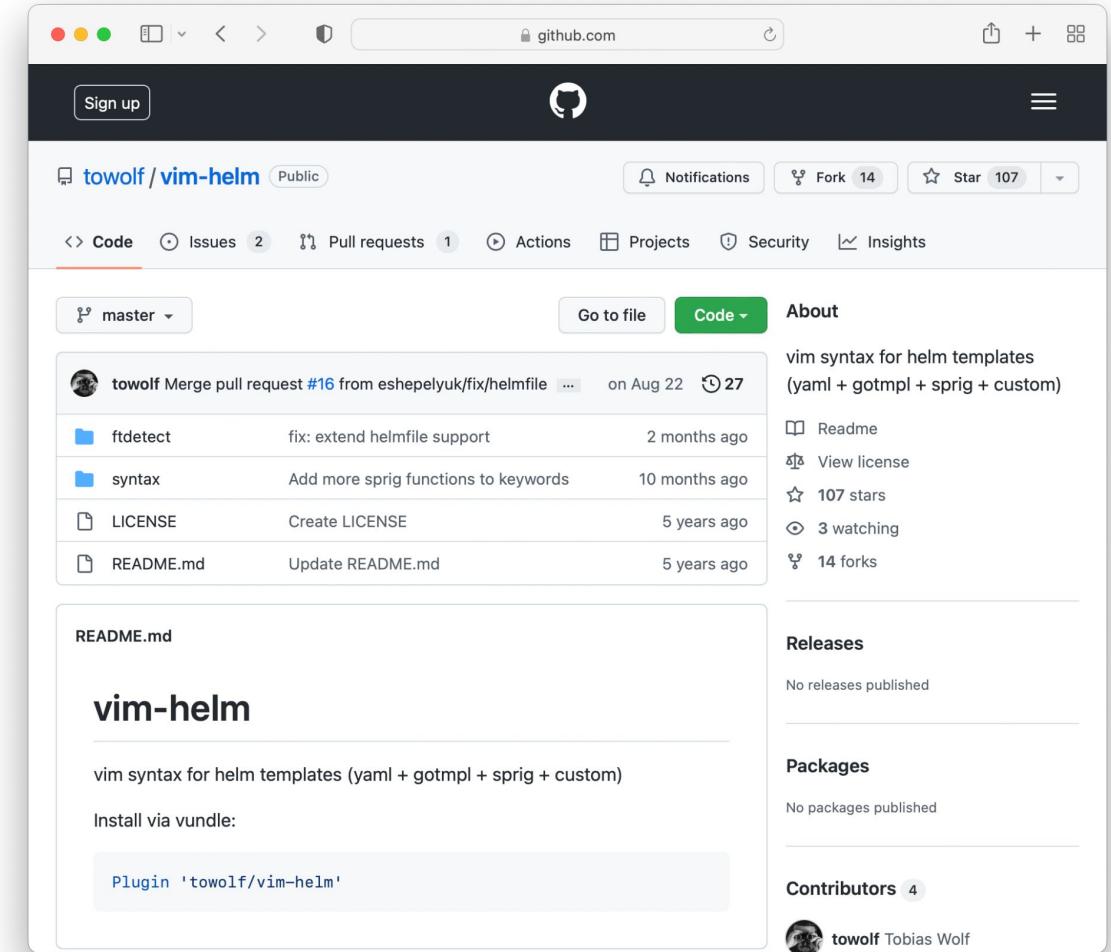
Packages

No packages published

Contributors 7

vim-kubernetes

This package provides kubernetes YAML snippets (requires [ultisnips](#), as well as a number of integrations with kubectl (requires that you actually have kubectl installed and on your PATH).



The screenshot shows the GitHub repository page for `towlf / vim-helm`. The repository is public and has 107 stars, 14 forks, and 2 pull requests. The code tab is selected, showing a list of pull requests and commits. The sidebar includes sections for `About`, `Releases`, `Packages`, and `Contributors`.

Code

- towlf Merge pull request #16 from eshepelyuk/fix/helmfile ... on Aug 22 ⏲ 27
- ftdetect fix: extend helmfile support 2 months ago
- syntax Add more sprig functions to keywords 10 months ago
- LICENSE Create LICENSE 5 years ago
- README.md Update README.md 5 years ago

About

vim syntax for helm templates (yaml + gotmpl + sprig + custom)

Readme
View license
107 stars
3 watching
14 forks

Releases

No releases published

Packages

No packages published

Contributors 4

towlf Tobias Wolf

vim-helm

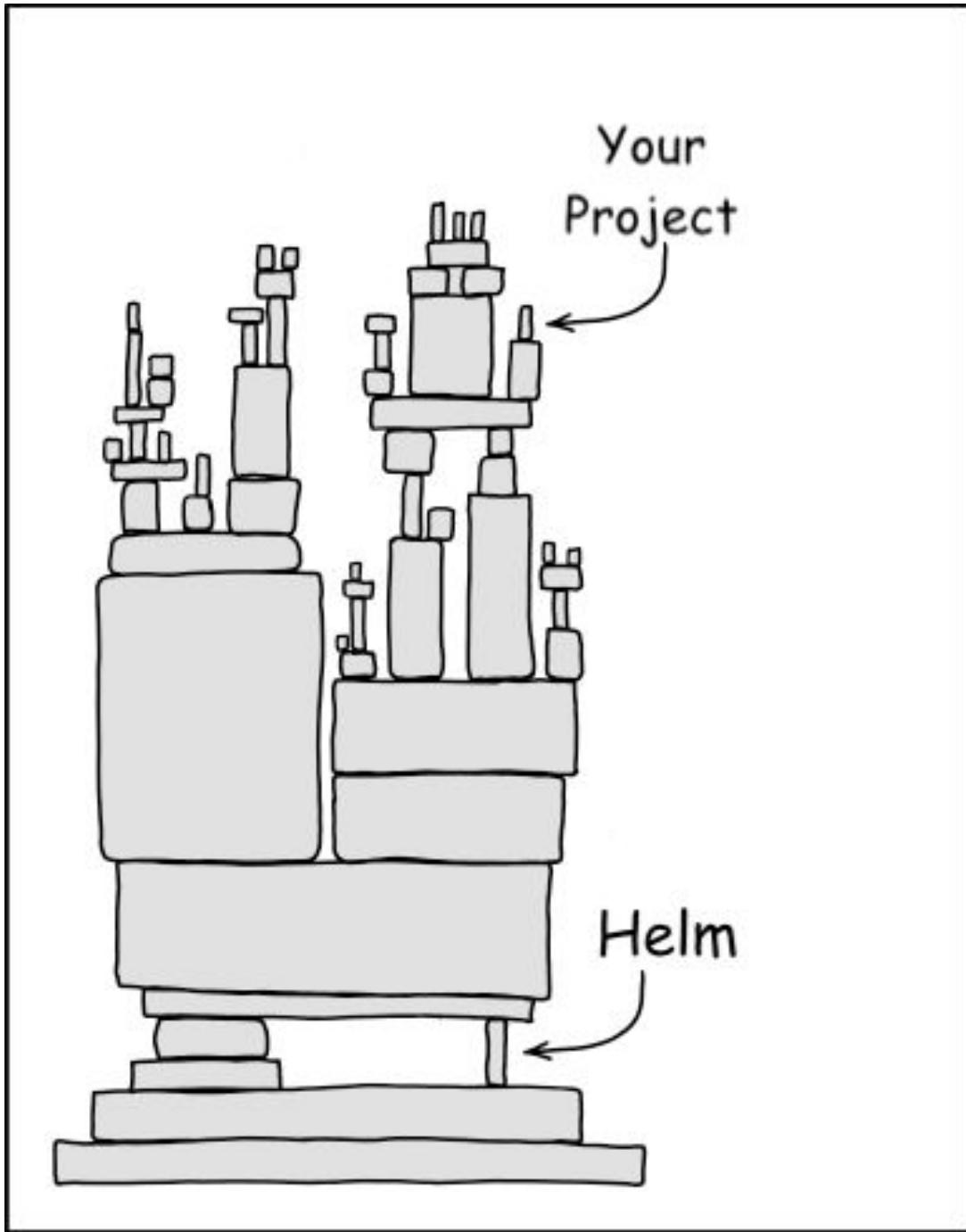
vim syntax for helm templates (yaml + gotmpl + sprig + custom)

Install via vundle:

Plugin 'towlf/vim-helm'

Getting Involved





Helm Source Code

Product Solutions Open Source Pricing Search Sign in Sign up

helm / helm Public Notifications Fork 6.4k Star 22.9k

< Code Issues 285 Pull requests 258 Actions Projects Wiki Security 10 Insights

main 44 branches 170 tags Go to file Code

 **sabre1041** Merge pull request #11436 from mattfarina/fix-deploy2 ... ✓ d79ae9f 6 days ago 6,711 commits

.circleci Updating the deb location for azure cli 6 days ago

.github bump Go 1.18 4 months ago

cmd/helm Merge pull request #11336 from mattfarina/bump-version-3.10 15 days ago

internal bump version to v3.10.0 last month

pkg Merge pull request #11172 from crenshaw-dev/cleanup-after-find-ch... 7 days ago

scripts bump Go 1.18 4 months ago

testdata Updating the certificates used for testing 2 months ago

.gitignore add flag trimpath in the go build command 2 years ago

.golangci.yml Replace golint with revive 9 months ago

ADOPTERS.md add softonic to adopters (#7918) 3 years ago

CONTRIBUTING.md chore: Spelling (#9410) 2 years ago

KEYS new key for technosophos (#9478) 2 years ago

LICENSE fix(LICENSE): add copyright year and authors 6 years ago

Makefile Allow CGO_ENABLED to be overridden for build 13 days ago

OWNERS Added sabre1041 as project maintainer 6 months ago

README.md chore: Spelling (#9410) 2 years ago

SECURITY.md Adding security file 3 years ago

code-of-conduct.md Fixing the code of conduct pointer 3 years ago

go.mod Updating to kubernetes 1.25.2 packages 7 days ago

go.sum Updating to kubernetes 1.25.2 packages 7 days ago

About
The Kubernetes Package Manager
[helm.sh](#)
kubernetes chart charts helm cncf
Readme Apache-2.0 license Code of conduct 22.9k stars 518 watching 6.4k forks

Releases 164
[Helm 3.10.1](#) (Latest)
6 days ago + 163 releases

Packages
No packages published

Used by 90

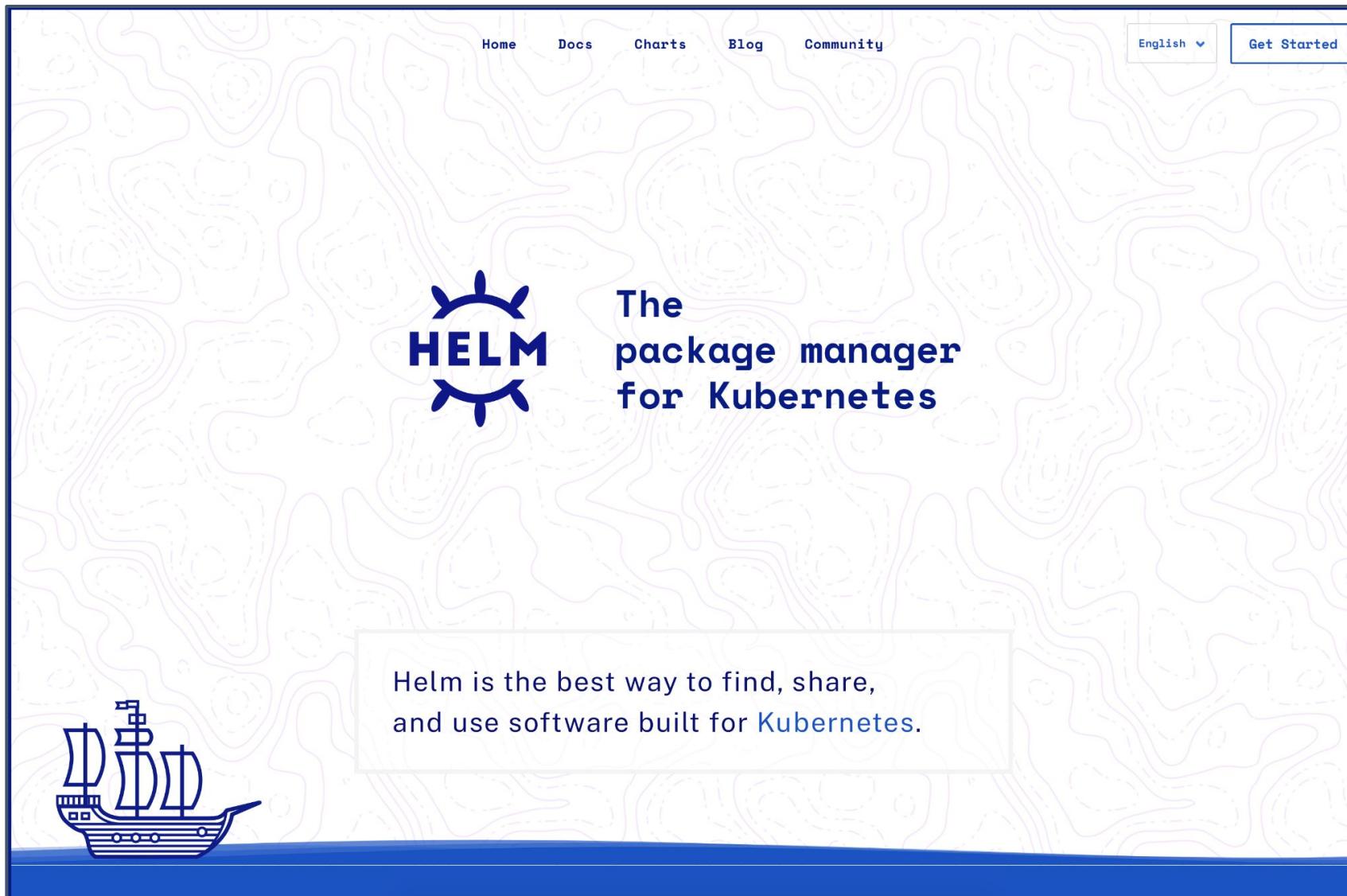
 + 82

Contributors 574



<https://github.com/helm/helm>

Helm Website



Location

<https://helm.sh>

Source Code

<https://github.com/helm/helm-www>

Helm Community



Slack

[Kubernetes Slack](#)

[#helm-users](#)

[#helm-dev](#)

[#charts](#)



Community Meeting

Thursday's at 1630 UTC
([Agenda](#))



Mailing List

<https://lists.cncf.io/g/cncf-helm>

Jump In!

