



Deploy and manage k8s apps with **Kubeapps**

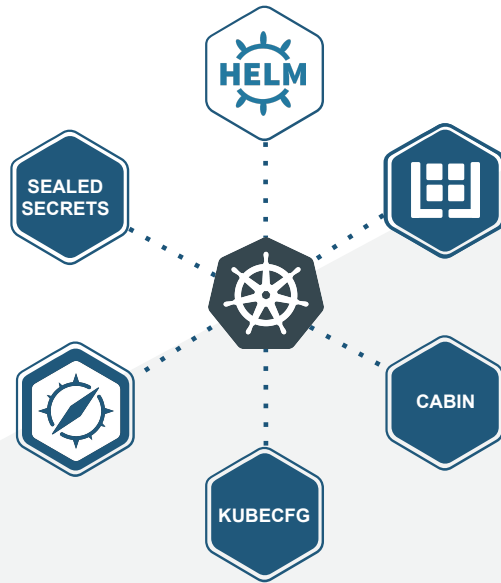
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\$ whoami

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- ❤️📦 DevOps, Developer Tools, OSS
- SIG-Apps co-chair
- Kubernetes Helm & Charts core maintainer



- Project Lead on 5 Kubernetes projects
- Kubernetes Training Provider
- Co-develop with Microsoft, IBM, Deis, Heptio
- O'Reilly Kubernetes Cookbook Author

Agenda

- A brief history of k8s app management
- Intro to Kubeapps
- DEMO!
- Roadmap & wrap-up

Kubernetes is easy to setup!



Managing your apps is the hard part





helped us go from
lots of YAML + kubectl
to
helm install repo/chart

| NAME | CHART VERSION | APP VERSION | DESCRIPTION |
|-------------------------------|---------------|-------------|--|
| stable/acs-engine-autoscaler | 2.1.4 | 2.1.1 | Scales worker nodes within agent pools |
| stable/aerospike | 0.1.7 | v3.14.1.2 | A Helm chart for Aerospike in Kubernetes |
| stable/anchore-engine | 0.1.6 | 0.1.9 | Anchore container analysis and policy evaluatio... |
| stable/artifactory | 7.1.2 | 5.10.1 | Universal Repository Manager supporting all maj... |
| stable/artifactory-ha | 0.1.7 | 5.10.1 | Universal Repository Manager supporting all maj... |
| stable/aws-cluster-autoscaler | 0.3.3 | | Scales worker nodes within autoscaling groups. |
| stable/bitcoind | 0.1.3 | 0.15.1 | Bitcoin is an innovative payment network and a ... |
| stable/buildkite | 0.2.2 | 3 | Agent for Buildkite |
| stable/burrow | 0.4.3 | 0.17.1 | Burrow is a permissionable smart contract machine |
| stable/centrifugo | 2.0.1 | 1.7.3 | Centrifugo is a real-time messaging server. |
| stable/cert-manager | 0.2.9 | 0.2.4 | A Helm chart for cert-manager |
| stable/chaoskube | 0.7.0 | 0.8.0 | Chaoskube periodically kills random pods in you... |
| stable/chartmuseum | 1.3.1 | 0.5.2 | Helm Chart Repository with support for Amazon S... |
| stable/chronograf | 0.4.3 | 1.2 | Open source web application written in Go and R... |
| stable/cluster-autoscaler | 0.6.1 | | s worker nodes within autoscaling groups. |
| stable/cockroachdb | 1.1.0 | | cockroachDB is a scalable, survivable, strongly... |
| stable/concourse | 1.3.0 | | course is a simple and scalable CI system. |
| stable/consul | 1.3.5 | | y available and distributed service discov... |
| stable/coredns | 0.9.0 | | COREDNS is a DNS server that chains plugins and... |
| stable/coscale | 0.2.1 | | le Agent |
| stable/dask | 1.0.3 | | istributed computation in Python with task sch... |
| stable/dask-distributed | 2.0.2 | | CATED: Distributed computation in Python |
| stable/datadog | 0.11.1 | | dog Agent |
| stable/dex | 0.1.0 | | S Dex |
| stable/docker-registry | 1.1.2 | | m chart for Docker Registry |
| stable/dokuwiki | 1.0.1 | | iki is a standards-compliant, simple to us... |
| stable/drupal | 0.11.1 | | the most versatile open source content m... |
| stable/elastalert | 0.1.4 | 0.1.29 | ElastAlert is a simple framework for alerting o... |
| stable/elasticsearch-exporter | 0.1.4 | 1.0.2 | Elasticsearch stats exporter for Prometheus |
| stable/etcd-operator | 0.7.6 | 0.7.0 | CoreOS etcd-operator Helm chart for Kubernetes |



Discover & launch great Kubernetes-ready apps

Search charts

WordPress, Jenkins, Kubeless...

180 charts ready to deploy



acs-engine-autoscaler

2.1.1

☆ 2

stable



aerospike

v3.14.1.2

☆ 1

stable

anchore

anchore-engine

0.1.9

☆ 4

stable



artifactory

5.10.1

☆ 18

stable



artifactory-ha

5.10.1

☆ 3

stable



bitcoind

0.15.1

☆ 0

stable



buildkite

3

☆ 2

stable



burrow

0.17.1

☆ 0

stable

Need an easy-to-use
interface for managing
apps in a cluster

The app ecosystem is growing





The Kubernetes Application Console

Grab the binary on GitHub

<https://github.com/kubeapps/kubeapps/releases>

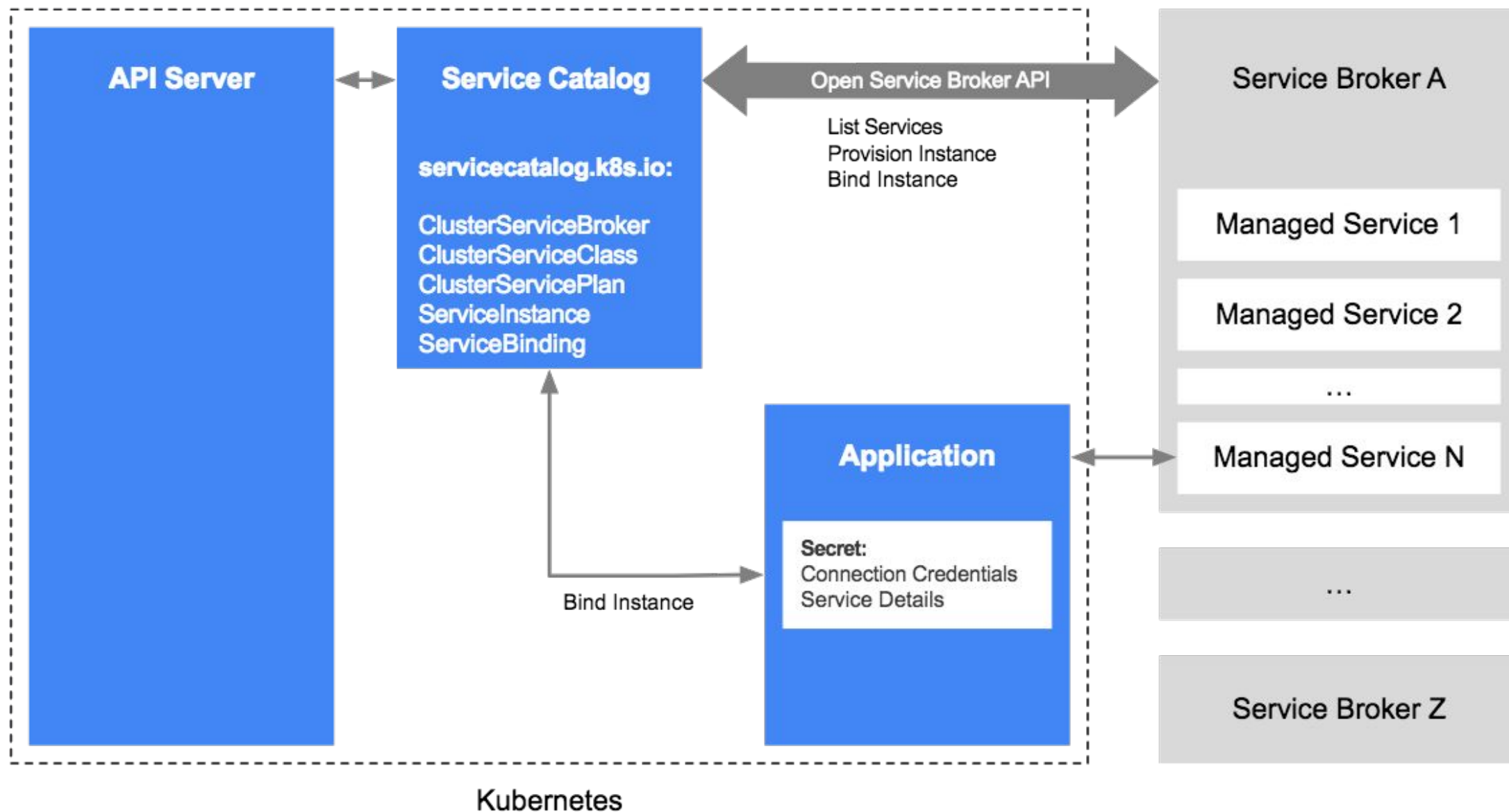
```
bash

$ kubeapps up
Creating non-existent deployments kube-system.default-http-backend
Creating non-existent deployments kube-system.nginx-ingress-controller
Creating non-existent deployments kubeapps.kubeapps-dashboard-api
Creating non-existent deployments kubeapps.kubeapps-dashboard-ui
Creating non-existent deployments kubeless.kubeless-controller
Creating non-existent deployments kubeapps.kubeless-ui
Creating non-existent deployments kubeapps.mongodb
Creating non-existent deployments kube-system.sealed-secrets-controller
Creating non-existent deployments kube-system.tiller-deploy
[ ... ]
```


No more empty clusters!

- › Complete application delivery environment
- › App-focused console UI
- › Simple browse and click deployment of apps
- › Deploy Helm Charts and Kubeless Functions
- › ...and now provision Service Instances and Bindings from the Kubernetes Service Catalog!

Let's see some WordPress!



What's next for Kubeapps?

The road to Kubecon and beyond

- Authentication and Authorization (leveraging Kubernetes RBAC)
- Support for authenticated chart repos (Artifactory, ChartMuseum, S3, etc.)
- Integrate with more awesome packaging tools
- Deeper integration between Charts and Service Catalog
- `kubeapps up --cloud=$YOUR_CLOUD`
 - automatically install the appropriate Service Broker for your cloud!

Thank You

<https://kubeapps.com>



Find us in the **#kubeapps** channel on the Kubernetes slack (slack.k8s.io)

Find me on Twitter/GitHub/Slack - @prydonius

