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Europe 2018

Happy Helming With Service Catalog

Jeremy Rickard

03/05/2018



About Me...



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Software Engineer @ Azure



jeremy.rickard@microsoft.com



[jrickard](https://twitter.com/jrickard)



Jeremy Rickard @ kubernetes.slack.com



[jeremyrickard](https://github.com/jeremyrickard)

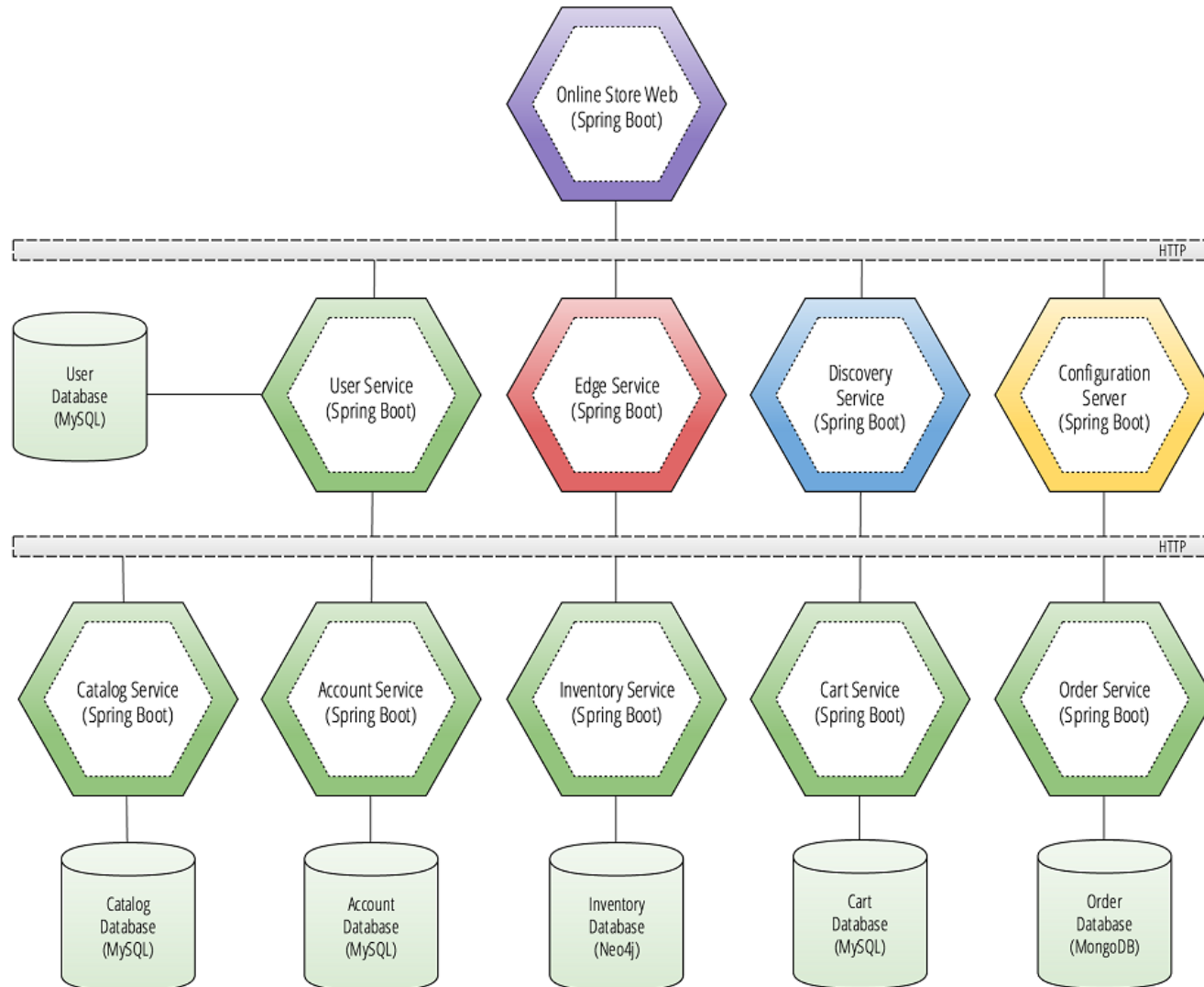


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Credit: [Kenny Bastani](#) [@kennybastani](#)



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HELM





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But what about the database?



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Let me *Helm* you with that



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kubernetes / charts

<> Code

Issues 364

Pull requests

Branch: master

charts / stable /

- [mariadb](#)
- [mongodb](#)
- [neo4j](#)
- [postgresql](#)
- [redis](#)

Operators!

<https://crunchydata.github.io/postgres-operator/installation/helm-chart/>

<https://github.com/oracle/mysql-operator/tree/master/mysql-operator>

<https://github.com/kubernetes/charts/tree/master/stable/etcd-operator>

The canonical example....



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dependencies:

- name: mariadb

version: 2.1.1

repository: <https://kubernetes-charts.storage.googleapis.com/>

condition: mariadb.enabled

tags:

- wordpress-database


```
jeremyrickard@jeremys-mbp:~$ helm install --name wp stable/wordpress --namespace wp
```

```
NAME: wp
```

```
LAST DEPLOYED: Sun Apr 15 18:29:03 2018
```

```
NAMESPACE: wp
```

```
STATUS: DEPLOYED
```

```
RESOURCES:
```

```
==> v1/Secret
```

NAME	TYPE	DATA	AGE
wp-mariadb	Opaque	2	2s
wp-wordpress	Opaque	2	2s

```
==> v1/ConfigMap
```

NAME	DATA	AGE
wp-mariadb	1	2s
wp-mariadb-tests	1	2s

```
==> v1/PersistentVolumeClaim
```

NAME	STATUS	VOLUME	CAPACITY	ACCESS MODES	STORAGECLASS	AGE
wp-mariadb	Pending	default	1s			
wp-wordpress	Pending	default	1s			

```
==> v1/Service
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
wp-mariadb	ClusterIP	10.0.30.113	<none>	3306/TCP	1s
wp-wordpress	LoadBalancer	10.0.196.190	<pending>	80:31446/TCP,443:32486/TCP	1s

```
==> v1beta1/Deployment
```

NAME	DESIRED	CURRENT	UP-TO-DATE	AVAILABLE	AGE
wp-mariadb	1	1	1	0	1s
wp-wordpress	1	1	1	0	1s

```
==> v1/Pod(related)
```

NAME	READY	STATUS	RESTARTS	AGE
wp-mariadb-989740693-rfw0n	0/1	Pending	0	1s
wp-wordpress-2624698528-9cgm4	0/1	Pending	0	1s



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Matt Farina

@mattfarina

Følg

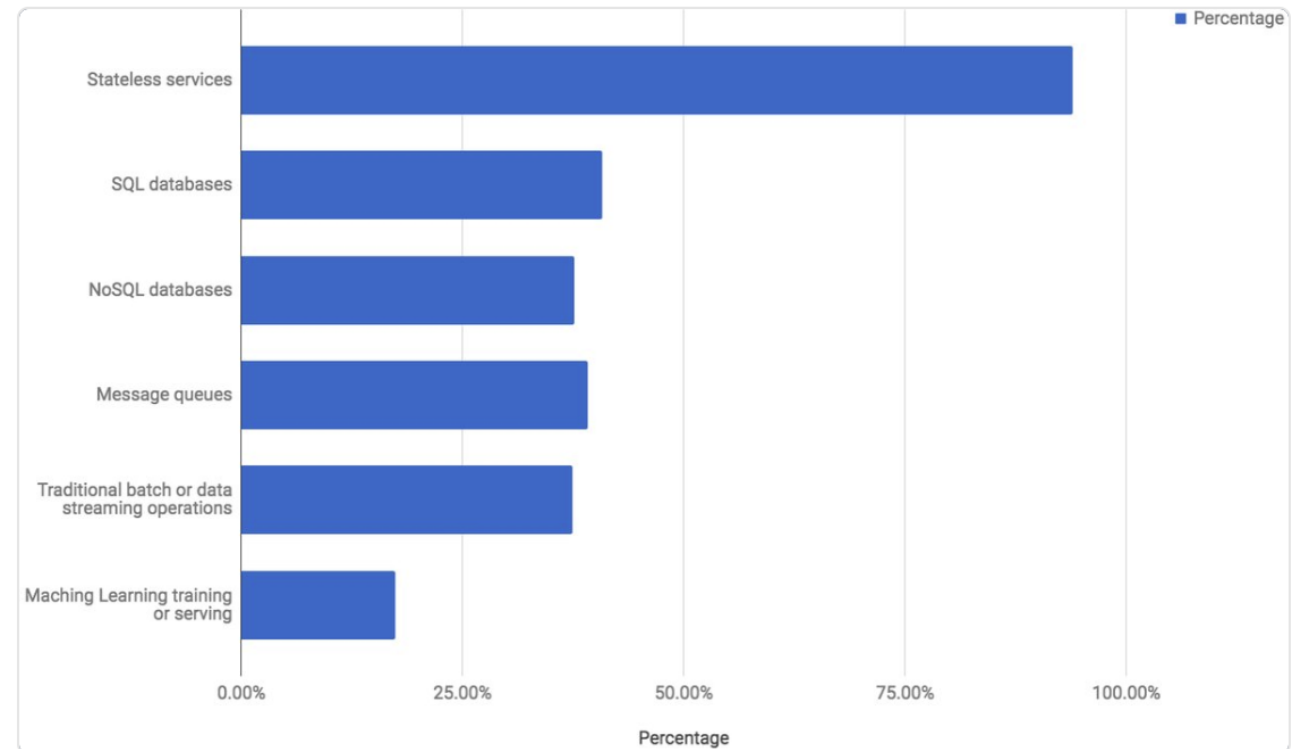
People are running databases and other systems that handle state in Kubernetes.

This is from the Kubernetes Apps Survey.

You can learn more at

[kubernetes.io/blog/2018/04/2 ...](https://kubernetes.io/blog/2018/04/2...)

#Kubecon2018 #KubeCon #Kubernetes





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Kelsey Hightower ✓

@kelseyhightower

Following

Kubernetes has made huge improvements in the ability to run stateful workloads including databases and message queues, but I still prefer not to run them on Kubernetes.

7:04 AM - 13 Feb 2018



Kelsey Hightower ✓

@kelseyhightower

Following

The solution I've been using: isolate stateful services to a dedicated set of machines or leverage a managed service. If I really need to run stateful services on a shared Kubernetes cluster, I isolate them to a dedicated node pool and disable dynamic scheduling.

7:24 AM - 13 Feb 2018

How do we make this happen?

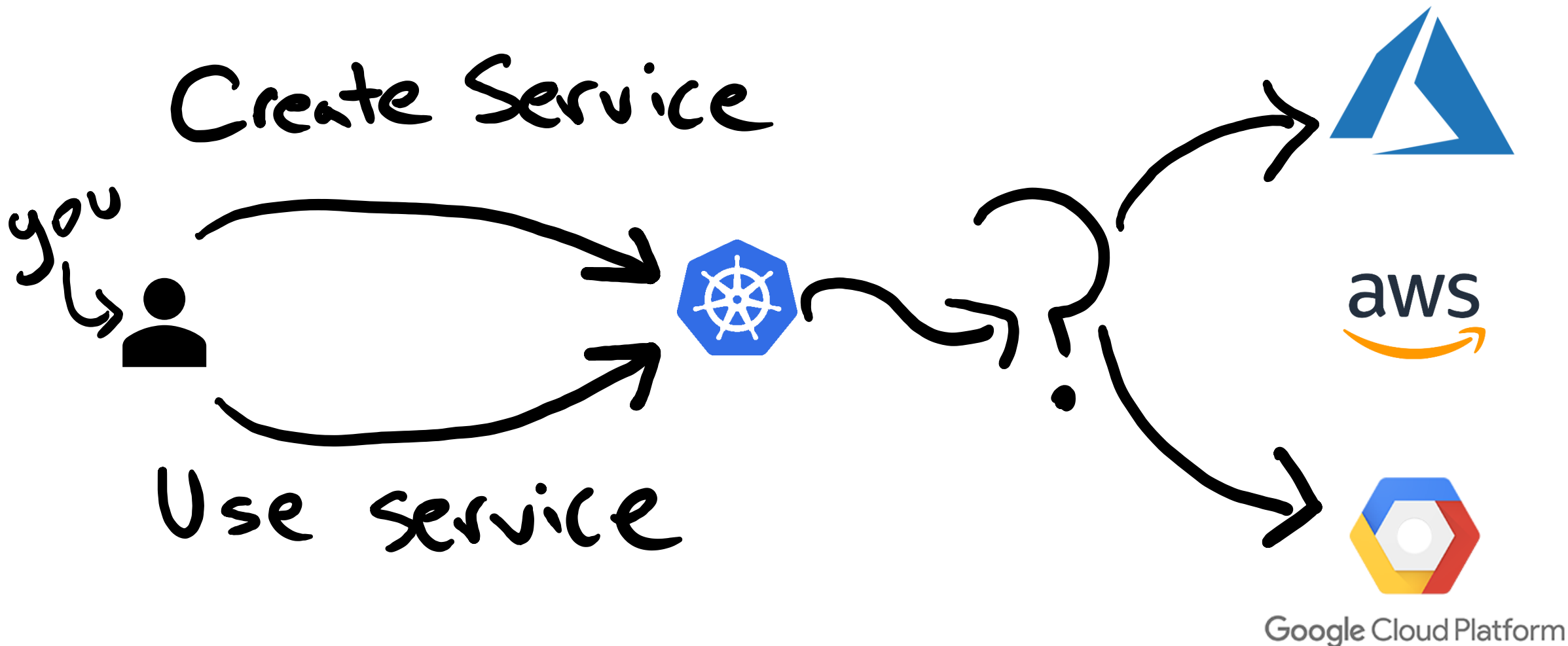


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- Catalogue
- Provision
- Bind
- Update
- Unbind
- Deprovision



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The Broker



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ClusterServiceBroker

The Catalogue



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ClusterServiceClass

ClusterServicePlan

The Service



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ServiceInstance

How you use the service



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ServiceBinding

And then...



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Keep
Calm

Here To
Help



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+

Service
Catalog

In Action

[Examples are Here](#)

Thanks!



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- Questions?