WHAT'S AN APPLICATION IN KUBERNETES





Europe 2020



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Why are you using Kubernetes?

"To manage our applications"



What's an application in Kubernetes?

"A set of Kubernetes resources"

"A helm Chart"

"All the resources in a namespace"

(many other variations)



Application is an **undefined** concept in Kubernetes

ApplicationCRD



		20	descriptor:
4	apiVersion: app.k8s.io/v1beta1	21	type: "wordpress"
5	kind: Application	22	keywords:
6	metadata:	23	- "cms"
7	name: "wordpress-01"	24	- "blog"
8	labels:	25	- "wordpress"
		26	links:
9	app.kubernetes.io/name: "wordpress-01"	27	- description: About
10	spec:	28	url: "https://wordpress.org/"
11	selector:	29	description: Web Server Dashboard
12	matchLabels:	30	url: "https://metrics/internal/wordpress-01/web-app"
13	app.kubernetes.io/name: "wordpress-01"	31	description: Mysql Dashboard
14	componentKinds:	32	url: "https://metrics/internal/wordpress-01/mysql"
	•	33	version: "4.9.4"
15	- group: v1	34	description: "WordPress is open source software you can use to create a beautifu
16	kind: Service	35	icons:
17	- group: apps	36	<pre>- src: "https://s.w.org/style/images/about/WordPress-logotype-wmark.png"</pre>
18	kind: StatefulSet	37	type: "image/png"
		38	size: "1000x1000"
		39	<pre>- src: "https://s.w.org/style/images/about/WordPress-logotype-standard.png"</pre>
		40	type: "image/png"

41

43

size: "2000x680"

- name: Wordpress Dev

email: dev@wordpress.org

maintainers:

Health Status







<pre>ant31@Antoines-MacBook-Pro ~ - 14:01:45 \$ kubectl get applications -A</pre>						
NAMESPACE	NAME	TYPE	VERSION	OWNER	READY	AGE
default	etcd-1	etcd	3.3.13-20200630-074834		9/9	8m51s
default	prometheus-operator-1	Prometheus Operator	0.34.0-20200726-144335		3/3	21m
drupal	drupal-1	Drupal	8.8.8-20200726-143316		11/12	7m48s

GKE











Deployment tool Marketplace

Some components are pending

Components

Туре	Name ↑	Status
Service	drupal-1-apache-exporter-svc	⊘ ok
Secret	drupal-1-deployer-config	⊘ ok
Stateful Set	drupal-1-drupal	▲ Pods have warnings
Persistent Volume Claim	drupal-1-drupal-pvc-drupal-1-drupal-0	Bound
Secret	drupal-1-drupal-secret	⊘ ok
Service	drupal-1-drupal-svc	⊘ ok
Stateful Set	drupal-1-mariadb	⊘ ok
Persistent Volume Claim	drupal-1-mariadb-pvc-drupal-1-mariadb-0	Bound
Secret	drupal-1-mariadb-secret	⊘ ok
Service	drupal-1-mariadb-svc	⊘ ok
Secret	drupal-1-mysqld-exporter-secret	⊘ ok
Service	drupal-1-mysqld-exporter-svc	⊘ ok

Kappnav.io







drupal-1 • Normal

> Basic Details

Application Specific Details

Туре	Detail
Description	Drupal is content management system used to create websites. # Su pport Google does not offer support for this solution. However, community support is available on [Stack Overflow](https://stackoverflow.com/questions/tagged/drupal/). Additional support is available on [community forums](https://www.drupal.org/forum).
Match Labels	app.kubernetes.io/name=drupal-1
Match Expressions	-
Component Kinds	v1/Secret, v1/Service, apps/v1/StatefulSet, v1/PersistentVolumeClai m
Keywords	-
Links	User Guide: Google Click to Deploy Drupal Drupal documentation
Icons	
Maintainers	Google Click to Deploy/undefined
Owners	-
Туре	Drupal
Version	8.8.8-20200726-143316

Components

Q Search

Status 📤	Name	Kind	Namespace	Platform		Action	
Normal	drupal-1-apache-exporter-svc	Service	drupal	Kube			
Normal	drupal-1-deployer-config	Secret	drupal	Kube			
Normal	drupal-1-drupal	StatefulSet	drupal	Kube			
Normal	drupal-1-drupal-pvc-drupal-1-drupal-0	PersistentVolumeClaim	drupal	Kube			
Normal	drupal-1-drupal-secret	Secret	drupal	Kube			
Normal	drupal-1-drupal-svc	Service	drupal	Kube			
Normal	drupal-1-mariadb	StatefulSet	drupal	Kube			
Normal	drupal-1-mariadb-pvc-drupal-1-mariadb-0	PersistentVolumeClaim	drupal	Kube			
Normal	drupal-1-mariadb-secret	Secret	drupal	Kube			
Normal	drupal-1-mariadb-svc	Service	drupal	Kube			
Normal	drupal-1-mysqld-exporter-secret	Secret	drupal	Kube			
Normal	drupal-1-mysqld-exporter-svc	Service	drupal	Kube			
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Interoperability



Common definition to build UI/UX

Questions



github.com/kubernetes-sigs/application Join #sig-apps

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