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Kubernetes, Istio, Knative

The open cloud

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Google Cloud

Building and supporting inclusive open source communities is a positive sum game

Collaborating to reach a broader user base.





Kubernetes 1.13

Contributions fuel success

Many companies, one team



Kubernetes contributions by company, avg % over the past year

Source: CNCF k8s.devstats.cncf.io



Kubernetes is making an impact

108 companies

with a **total market cap of \$4.26T** and funding of \$2.83B, are dedicated to training, distributing, hosting and more, worldwide.



Kubernetes job postings increased

230%

from Sep 2017- Sep 2018

There is more to do...

Managing infrastructure and services weighs you down



The Kubernetes native stack lifts the burden,
so you're free to focus on what you do best.





Smooth Sailing with GKE

Resilient, secure, infrastructure for
any modern app

40+% of clusters run stateful apps

On Black Friday through Cyber
Monday, top retailers scaled their
business on GKE **with no outages**





Istio is a **map** for your services

A service mesh for **observability**,
security, and **control**.



Istio on GKE in Beta today
with a single click install

 Google Cloud





Write your application
and our **powerful**
portable serverless
layer handles the rest

```
build-step-build-and-push | INFO[0069] Skipping paths under /workspace, as it is a whitelisted directory
build-step-build-and-push | INFO[0069] COPY --from=0 /go/src/github.com/mcnary/simple-app/app .
build-step-build-and-push | INFO[0069] Taking snapshot of files...
build-step-build-and-push | INFO[0069] EXPOSE 8080
build-step-build-and-push | INFO[0069] cmd: EXPOSE
build-step-build-and-push | INFO[0069] Adding exposed port: 8080/tcp
build-step-build-and-push | INFO[0069] ENTRYPOINT ["/app"]
build-step-build-and-push | 2018/12/08 05:16:07 pushed blob sha256:481b855e183ca7fa200ca2286f219ec78976f770b3029943d79d64a1b1ee469
build-step-build-and-push | 2018/12/08 05:16:08 pushed blob sha256:295090461f791ed134076fd41603da11b0fc3385c4479c195929e0ed471fa9
build-step-build-and-push | 2018/12/08 05:16:08 tagging before: /app:sha256:295090461f791ed134076fd41603da11b0fc3385c4479c195929e0ed471fa9
build-step-build-and-push | 2018/12/08 05:16:08 gcr.io/rq-dmz-1/test:latest: digest: sha256:d96938639e2b40a500051f682631e143cd617eb48a37d133bf6b3f62eeb15e size: 428 bytes
build-step-build-and-push | Build successful
build-step-build-and-push | 2018/12/08 05:16:08 tagging before: /app:sha256:295090461f791ed134076fd41603da11b0fc3385c4479c195929e0ed471fa9
Waiting for new revision 'simple-app-00001' to be ready for up to 5m0s (logs below)...
build-step-build-and-push | 2018/12/08 05:16:10 no watching endpoints were found. falling back on new
simple-app-00001 > simple-app-00001-deployment-745888f0c-z9vr | 2018/12/08 05:16:13 Simple app server s
started...
simple-app-00001 > simple-app-00001-deployment-745888f0c-z9vr | 2018/12/08 05:16:13 Simple app server s
started...
Revision 'simple-app-00001' became ready
Continuing to watch logs for 5s before exiting @ build triggers
build-step-build-and-push | 2018/12/08 05:16:13 tagging before: /app:sha256:295090461f791ed134076fd41603da11b0fc3385c4479c195929e0ed471fa9
Succeeded
kubecon $
```



Building



Serving



Eventing



Google Cloud



We're all making waves

The industry is aligning around Knative as the **open**, portable functions layer.



IBM, Pivotal, RH, SAP & Google

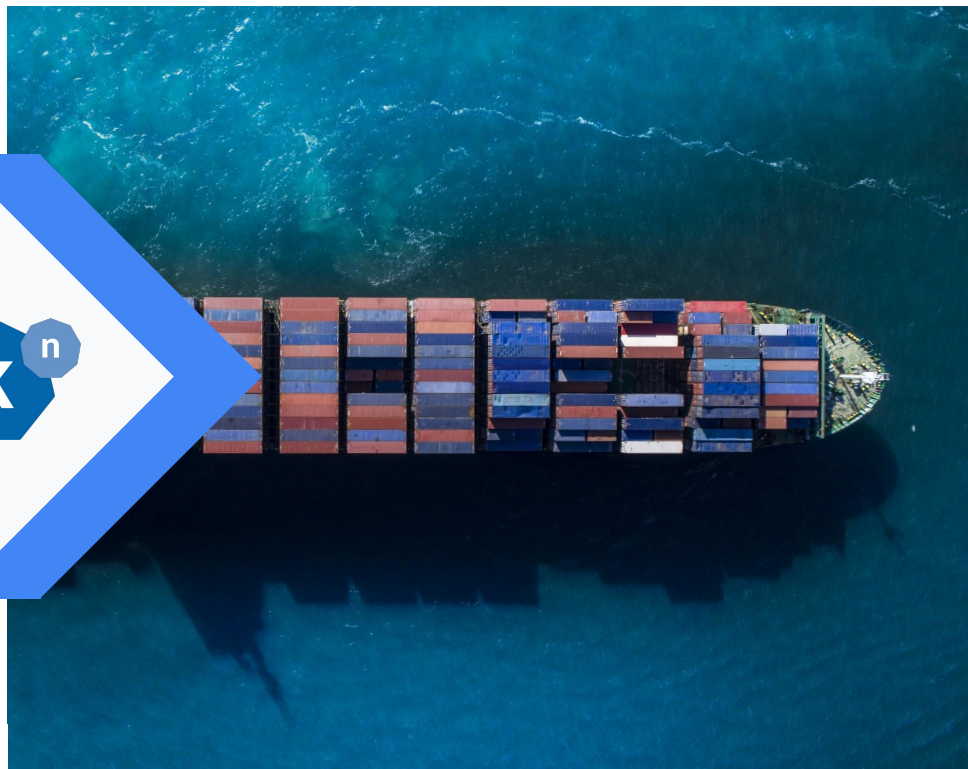


The cloud that propels you into the future

Any application, anywhere.
One platform

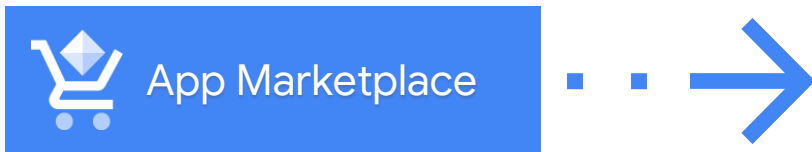


kubernetes



Kubernetes marketplace ISVs

The combination gives you an **extensible** stack that can in future be used for application lifecycle management



Thank you



**Kubernetes
Podcast**

from Google



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