
How to become a Kubernetes Ninja (no really)

By Christopher Coffey

Whoami ?

Things to Learn:

- Understanding of core K8s system building and troubleshooting
 - K8s security layers (RBAC, Namespaces)
 - Deploying Apps natively using Helm
 - CI/CD Apps deployment pipelines
 - Monitoring
 - Extra Credit: Network service mesh such as Istio
-

Get some free cloud accounts to get your learn on...

Google Cloud

<https://console.cloud.google.com/freetrial>

AWS

<https://aws.amazon.com/free>

Core Kubernetes building and administration

Kubernetes the Hard Way by Kelsey Hightower

<https://github.com/kelseyhightower/kubernetes-the-hard-way>

Core how to build K8s manually to get a deeper understanding of the underlying systems and their components

Namespaces, RBAC and Basic App deployment...

Understanding Namespaces:

<https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces/>

Understanding RBAC:

<https://kubernetes.io/docs/reference/access-authn-authz/rbac/>

Helm:

<https://helm.sh/>

Putting it all together:

<https://medium.com/@amimahloof/how-to-setup-helm-and-tiller-with-rbac-and-namespaces-34bf27f7d3c3>

CI/CD pipeline of the App layer in Kubernetes: Understanding how to go from code, to image, to production.

What is CI/CD on K8s:

<https://engineering.opsgenie.com/cloud-native-continuous-integration-and-delivery-tools-for-kubernetes-e6ea34d308c>

Setup Spinnaker on GCP using GKE and other tools:

<https://cloud.google.com/solutions/continuous-delivery-spinnaker-kubernetes-engine>

<https://www.spinnaker.io/guides/tutorials/codelabs/gcp-kubernetes-source-to-prod/>

Monitoring solutions for K8s:

State of Monitoring report:

<https://thenewstack.io/5-tools-monitoring-kubernetes-scale-production/>

Using your cloud providers Monitoring Solution

Guide to using Prometheus:

<https://itnext.io/kubernetes-monitoring-with-prometheus-in-15-minutes-8e54d1de2e13>

Extra Credit: Learning the Service Mesh layer

Istio

<https://istio.io/>

And this is really just scratching the surface, other things to see and learn:

<https://kubernetes.io/blog/>

<https://www.cncf.io/>

KubeCon:

<https://events.linuxfoundation.org/events/kubecon-cloudnativecon-north-america-2018/>

Questions ?
