Multi-Cloud & Kubernetes

쿠버네티스를 활용한 멀티클라우드 도입과 운영전략 - AWS, Azure, GCP 비교와 실습

2020년 3월 아인인텔리전스 권재원, Ph.D. Lab: Setting up Jenkins on Kubernetes Engine

Setting up Jenkins on Kubernetes Engine

- https://github.com/GoogleCloudPlatform/continuous-deployment-on-kubernetes
- Kubernetes Engine에서 Jenkins 사용

https://cloud.google.com/solutions/jenkins-on-kubernetes-engine

환경 준비

- gcloud config set compute/zone asia-northeast1-a
- git clone https://github.com/GoogleCloudPlatform/continuous-deployment-on-kubernetes.git
- cd continuous-deployment-on-kubernetes

Kubernetes cluster 준비

- gcloud container clusters create jenkins-cd \
- --num-nodes 2 \
- --machine-type n1-standard-2 \
- --scopes "https://www.googleapis.com/auth/projecthosting,cloud-platform"
- gcloud container clusters list
- gcloud container clusters get-credentials jenkins-cd
- kubectl cluster-info

Helm 설치

- wget https://storage.googleapis.com/kubernetes-helm/helm-v2.9.1-linuxamd64.tar.gz
- tar xfvz helm-v2.9.1-linux-amd64.tar.gz
- cp linux-amd64/helm .
- kubectl create clusterrolebinding cluster-admin-binding --clusterrole=clusteradmin --user=\$(gcloud config get-value account)
- kubectl create serviceaccount tiller --namespace kube-system
- kubectl create clusterrolebinding tiller-admin-binding --clusterrole=clusteradmin --serviceaccount=kube-system:tiller

Helm 초기화

- ./helm init --service-account=tiller
- ./helm repo update
- ./helm version

Jenkins 설치

- ./helm install -n cd stable/jenkins -f jenkins/values.yaml --version 0.16.6 –wait
- kubectl get pods
- export POD_NAME=\$(kubectl get pods -l "component=cd-jenkins-master" -o
 jsonpath="{.items[0].metadata.name}")
- kubectl port-forward \$POD_NAME 8080:8080 >> /dev/null &
- kubectl get svc
- * We are using the Kubernetes Plugin so that our builder nodes will be automatically launched as necessary when the Jenkins master requests them. https://plugins.jenkins.io/kubernetes/

Jenkins 연결

- Jenkins 비번 알아내기
- printf \$(kubectl get secret cd-jenkins -o jsonpath="{.data.jenkins-admin-password}" | base64 --decode);echo
- Preview on port 8080: (username admin)



