STUDENT VERSION (DevOps-Week-3)

TEAMWORK

CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

▶ Icebreaking

▶ Questions

▶ Interview/Certification Questions

▶ Coding Challenge

▶ Article of the week

▶ Video of the week

▶ Retro meeting

▶ Case study / project

Teamwork Schedule

Ice-breaking   5m

- Personal Questions (Stay at home & Corona, Study Environment, Kids etc.)
- Any challenges (Classes, Coding, AWS, studying, etc.)
- Ask how they're studying, give personal advice.
- Remind that practice makes perfect.

Team work   10m

- Ask what exactly each student does for the team, if they know each other, if they care for each other, if they follow and talk with each other etc.

Ask Questions   15m

1. What is a Kubernetes volume?

A. The software within an OS that controls capacity allocation for nodes
B. A directory for the data accessible to containers in a pod
C. Layering software that puts apps into compartments for easier deployment
D. Code that enables two software programs to communicate

2. What is the function of labels? (Kubernetes)

A. To classify functions
B. To tag containers and link them together in groups
C. To assign functions to pods
D. To be ignored by millennials

3. Which of the following forms the core kubernetes objects? (Kubernetes)

A. Pod
B. Service
C. Volume
D. All of the Above

4. _____ manages the assigning nodes to pods depending on resource availability? (Kubernetes)

A. Etcd
B. Kubectl
C. Scheduler
D. Flanneld

5. _____ is a special namespace that is used for special purposes like bootstrapping a cluster (Kubernetes)

A. Kube-public
B. Kube-private
C. Kube-system
D. Default

6. An abstraction in kubernetes which defines a logical set of pods and a policy to access them. (Kubernetes)

A. Kubelet
B. Service
C. Node
D. Container

7. The Service Type _____ works only if your cluster is setup to work with a cloud provider. (Kubernetes)

A. ClusterIP
B. NodePort
C. LoadBalancer
D. ExternalName

8. This volume type can be used to share contents within containers in a pod, but will not persist beyond the life of a pod. (Kubernetes)

A. EmptyDir
B. FlexVolume
C. ConfigMap
D. Local

9. _____ service is automatically created for you k8s cluster creation and takes care of the internal routing of the cluster. (Kubernetes)

A. NodePort
B. ClusterIP
C. Headless
D. Load Balancer

10. The command to create Kubernetes service is _____. (Kubernetes)

A. Kubectl expose
B. Kubectl set service
C. Kubectl run
D. Kubectl deploy

Interview/Certification Questions   20m

1. Which AWS services can be used to host and scale an application, in which the NGINX load balancer used? (SELECT TWO)

A. AWS EC2
B. AWS Elastic Beanstalk
C. AWS RDS.
D. AWS ELB

2. You are launching the AWS ECS instance. You would like to set the ECS container agent configuration during the ECS instance launch. What should you do?

A. Set configuration in the ECS metadata parameter during cluster creation.
B. Set configuration in the user data parameter of ECS instance.
C. Define configuration in the task definition.
D. Define configuration in the service definition.

3. Your development team has just finished developing an application on AWS. This application is created in .NET and is hosted on an EC2 instance. The application currently accesses a DynamoDB table and is now going to be deployed to production. Which of the following is the ideal and most secure way for the application to access the DynamoDB table?

A. Pass API credentials to the instance using instance user data.
B. Store API credentials as an object in Amazon S3.
C. Embed the API credentials into your JAR files.
D. Assign an IAM role to the EC2 Instances

4. You have an application that has been dockerized. You plan to deploy the application in an AWS ECS cluster. As the application gets configuration files from an S3 bucket, the ECS containers should have the AmazonS3ReadOnlyAccess permission. What is the correct method to configure the IAM permission?

A. Add an environment to the ECS cluster configuration to allow the S3 read only access.

B. Add the AmazonS3ReadOnlyAccess permission to the IAM entity that creates the ECS cluster.

C. Modify the user data of ECS instances to assume an IAM role that has the AmazonS3ReadOnlyAccess permission.

D. Attach the AmazonS3ReadOnlyAccess policy to the ECS container instance IAM role. Attach this role when creating the ECS cluster

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Article of the Week   10m

- How to use s3 backend with a locking feature in Terraform to collaborate more efficiently? (easily and visually explained)

Video of the Week   10m

- A Guide to the DevOps Technical Interview

Retro Meeting on a personal and team level   10m

Ask the questions below:

- What went well?
- What could be improved?
- What will we commit to do better in the next week?

Coding Challenge   5m

- Coding Challenge: Generate Password

Case study/Project   10m

- There is no project for this week.

Closing   5m

-Next week's plan

-QA Session