

STUDENT VERSION (Week-30)



CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

- ▶ Icebreaking
- ▶ Questions
- ▶ Interview/Certification Questions
- ▶ Coding Challenge
- ▶ Video of the week
- ▶ Retro meeting
- ▶ Case study / project

Teamwork Schedule

Ice-breaking

10m

- 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

20m

1. Which Git command shows commit logs in one line?

- A. git log
- B. git checkout --oneline
- C. git log --oneline
- D. git branch --pretty=oneline

2. _____ runs on each node and ensures containers are running in a pod. (Kubernetes)

- A. Kubelet
- B. Etcd
- C. Scheduler
- D. Pod

3. Generally, what is a proxy service used for? (Kubernetes)

- A. To supplant an authentic webpage in a search engine's index and search page results
- B. To connect external parties and route data between internal and external containers
- C. To act as an intermediary between an endpoint device and another server
- D. To relay connection requests for inbound network traffic

4. Which is the intended use for etcd? (Kubernetes)

- A.** To store all the cluster data, maintain its state and provide access to critical data
- B.** To link a unique identifier to a value
- C.** To encrypt cluster data and send it to a secrets manager
- D.** To authenticate cluster data

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

- A.** Etcd
- B.** Kubectl
- C.** Scheduler
- D.** Flannel

Interview/Certification Questions**20m****1. A company requires an open-source system for automating the deployment, scaling, and management of containerized applications. Which of the following would be ideal for such a requirement?**

- A.** Use the Amazon Elastic Container Service for Kubernetes.
- B.** Install a custom orchestration tool on EC2 Instances.
- C.** Use SQS to orchestrate the messages between docker containers.
- D.** Use AWS Lambda functions to embed the logic for container orchestration.

2. Your company has a legacy application that uses the monolithic architecture. You need to design a new microservices architecture for the application and host it in AWS. The application should be dockerized so that it can be easily deployed.**Which of the following AWS services would you choose to host the application?**

- A.** Elastic Kubernetes Engine
- B.** Amazon Lambda
- C.** Elastic Container Registry
- D.** Elastic Container Service

3. Your company is planning on hosting an application that will be based on Docker containers. They need to setup an orchestration service that would automatically scale based on the load. As much as possible , the company does not want the burden of managing the underlying infrastructure. Which of the following can assist in this scenario?

- A. AWS ECS with service Auto Scaling
- B. Use an Elastic Load Balancer in front of an EC2 Instance. Use Docker containers on the EC2 Instance.
- C. Use Auto Scaling with Spot Instances for the Orchestration Service.
- D. Install and use Kubernetes on the EC2 Instance

4. Your organization is planning to use AWS ECS for docker applications. However, they would like to apply 3rd party monitoring tools on the ECS instances. They approached you asking for a recommendation. What do you suggest?

- A. AWS ECS is a managed service. Customers cannot install 3rd party softwares. Use CloudWatch for monitoring metrics.
- B. Customers will have control over AWS ECS instances and can setup monitoring like a normal EC2 instance.
- C. Raise a case with AWS to install 3rd party software on ECS. AWS will review the case and install if 3rd party software is in their trusted software entries.
- D. AWS ECS is a managed service. Customers cannot install 3rd party softwares. Use application level monitoring.

5. You have launched an ECS cluster with 5 EC2 instances with its task definitions. However, ECS is not getting any status information back from the container agent in each ECS instance. What could be the reason? (choose 3 options)

- A. IAM role used to run ECS instance does not have ecs:Poll action in its policy
- B. Key-pair information is missing in ECS cluster.
- C. ECS Instance security groups' outbound rules are not allowing traffic to ECS service endpoint
- D. Interface VPC endpoint is not configured for ECS service. E. You are running ECS on t2.micro instance type which is not supported.

Video of the Week

10m

- [Kubernetes in 5 mins](#)

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?

Presentation of Coding Challenge

20m

We assume that each group has two sub teams. If this is possible one of the sub teams will present the coding challenge of last week. The other sub team will present the solution to the previous problem of the week. If there is only one sub team then, the sub team will present both of the solutions.

Coding Challenge

5m

- [Find the Author](#)

Presentation of Case Study of Previous Sprint

20m

We assume that each group has two sub teams. Each week, one of the sub-teams will present their solution.

Case study/Project

10m

Case study should be explained to the students during the weekly meeting and has to be completed in one week by the students. Students should work in small teams to complete the case study.

- [Project-204: Jenkins Pipeline for Dockerized Phonebook Application \(Python Flask & MySQL\) Deployed on Docker Swarm](#)

Closing

5m

-Next week's plan

-QA Session
