

STUDENT VERSION (DevOps-Week-7)



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. Which command is used to create a new Helm chart ? (Helm)

- A. helm init
- B. helm install
- C. helm create
- D. helm upgrade

2. Which version of Helm introduced support for declarative releases ? (Helm)

- A. Helm 2
- B. Helm 3
- C. Helm 4
- D. Helm 5

3. What is the purpose of Kubernetes container probes ? (Kubernetes)

- A. To monitor the CPU usage of a container
- B. To monitor the memory usage of a container
- C. To check the health of a container
- D. To manage the network connectivity of a container

4. How can you define a custom command for a Kubernetes container probe ? (Kubernetes)

- A. Using the "command" field in the container spec
- B. Using the "args" field in the container spec
- C. Using the "exec" field in the probe spec
- D. Using the "httpGet" field in the probe spec

5. What is the maximum number of Pods that can be scheduled on a Kubernetes node by default ? (Kubernetes)

- A. 50
- B. 75
- C. 110
- D. 250

Interview/Certification Questions

20m

1. What is a pod in Kubernetes?

2. 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

3. What is Kubectl ?

4. You are the architect of a custom application running inside your corporate data center. The application runs with some unresolved bugs that produce a lot of data inside custom log files generating time-consuming activities to the operation team who is responsible for analyzing them.

You want to move the application to AWS using EC2 instances, and at the same time, take the opportunity for improving logging and monitoring capabilities but without touching the application code.

What AWS service should you use to satisfy the requirement?

- A. AWS Kinesis Data Streams
- B. AWS CloudTrail

- C. AWS CloudWatch Logs
- D. AWS Application Logs

5. 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

Article of the Week

10m

- [Installation of a WordPress Page and a Database with Docker-Compose Using Secrets](#)

Video of the Week

10m

- [What is Helm?](#)

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

- [Watching Free Disk Space](#)

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-206: Microservice Architecture for Phonebook Web Application \(Python Flask\) with MySQL using Kubernetes.](#)

Closing

5m

-Next week's plan

-QA Session
