

STUDENT VERSION (DevOps-Week-5)



CLARUSWAY
WAY TO REINVENT YOURSELF

Meeting Agenda

- ▶ Icebreaking
- ▶ Microlearning
- ▶ 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 Kubernetes object allows you to store and manage sensitive information, such as passwords or API keys ?

- A. Secret
- B. ConfigMap
- C. Vault
- D. Keyring

2. In Kubernetes, what is the role of an Ingress controller ?

- A. To manage container networking
- B. To schedule Pods to nodes
- C. To expose services externally to the cluster
- D. To monitor the health of nodes and Pods

3. What is the purpose of a Kubernetes ReplicaSet ?

- A. To manage stateful applications with persistent identities for Pods
- B. To ensure a specified number of replicas of a Pod are running at all times
- C. To manage auto-scaling of Pods based on CPU usage
- D. To provide a secure network tunnel between two Pods

4. How can you scale a Deployment in Kubernetes ?

- A.** By manually updating the number of replicas in the Deployment's YAML file
- B.** By creating a new Deployment with the desired number of replicas
- C.** By scaling the Pods individually using the "kubectl scale" command
- D.** Scaling is not supported in Kubernetes Deployments

5. What is a Kubernetes ConfigMap used for?

- A.** To store and manage sensitive information, such as passwords or API keys
- B.** To organize containers into logical groups
- C.** To handle incoming network traffic
- D.** To store configuration data separately from the Pod's specification

Interview/Certification Questions**20m**

- 1. What is the purpose of Kubernetes Persistent Volumes (PVs) and Persistent Volume Claims (PVCs) ?**
- 2. Explain the role of the Kubernetes kubelet and kube-proxy components in the cluster.**
- 3. How does Kubernetes handle communication between Pods in a cluster ?**
- 4. What is the purpose of a Kubernetes Deployment, and how does it handle updates to applications ?**
- 5. How does Kubernetes handle high availability for applications running on worker nodes ?**

Article of the Week**10m**

- [Kubernetes 101: Pods, Nodes, Containers, and Clusters](#)

Video of the Week**10m**

- [Kubernetes](#)

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 004 : Validate Combination of Brackets](#)

Closing

5m

-Next week's plan

-QA Session

-Next week's plan

-QA Session
