

STUDENT VERSION (DevOps-Week-6)



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 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

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

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

3. Which command is used to download roles from the Galaxy server.(Ansible)

- A. ansible-playbook
- B. ansible-vault
- C. ansible-galaxy
- D. ansible-inventory

4. _____ encrypts variables and files so you can protect sensitive content such as passwords or keys rather than leaving it visible as plaintext in playbooks or roles. (Ansible)

- A. Ansible Galaxy
- B. Ansible Playbook
- C. Ansible Ad-Hoc
- D. Ansible Vault

5. What will be happen after runing this command?

```
---  
- name: Apache installation for ubuntu servers  
  hosts: ubuntu servers  
  tasks:  
    - name: install the latest version of Apache  
      yum:  
        name: apache2  
        state: latest
```

- A. Installs latest version of Apache to all ubuntu servers
- B. Installs latest version of Apache to all ubuntu servers and enables it
- C. Installs Apache to all ubuntu servers and starts it
- D. Gives Error

Interview/Certification Questions

20m

1. What is Ansible and what makes it stand out from the rest of the Configuration Management tools?

2. What is Ansible Galaxy?

3. You are an architect in your organization. Your organization would want to upload files to AWS S3 bucket privately through AWS VPC. In an existing VPC, you created a subnet and VPC endpoint for S3. You also created one route table which routes the traffic from the subnet to a NAT gateway and also the traffic to S3 through the internet via the NAT gateway. But in AWS S3 server logs, you noticed that the request to S3 bucket from an EC2 instance is not coming via the Internet through the NAT Gateway. What could be causing this situation?

- A. When NAT Gateway and VPC end-point exist on the same route table, NAT Gateway always takes precedence.
- B. EC2 instance is having an elastic IP address associated with it.
- C. The request was redirected through the VPC endpoint.
- D. AWS S3 is a managed service, all requests will always go through internet.

4. 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

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

- [How to use images from a private container registry for Kubernetes: AWS ECR, Hosted Private Container Registry.](#)

Video of the Week

10m

- [GitHub Workflow Strategies](#)

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: Cloning a Remote Repository Using Ansible Playbook](#)

Case study/Project

10m

Case study should be explained to the students during the weekly meeting and has to be completed in one sprint 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
