

TEAM LEAD VERSION (DevOps-Week-3)



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

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 this command used for? (Docker)

```
$ sudo docker run -i -t alpine /bin/bash
```

- A. to stop the docker container
- B. to see all running container in Docker
- C. to run the image as a container
- D. to copy the docker container

Answer: C

2. You can't create multiple containers from the same image?

- A. True
- B. False

Answer: B

3. How many containers can run per host?

- A. 1
- B. 100
- C. 947
- D. unlimited

Answer: D

4. What are the advantages of Jenkins?

- A. At integration stage, build failures are cached
- B. For each code commit changes an automatic build report notification generates
- C. To notify developers about build report success or failure, it is integrated with LDAP mail server
- D. All of the above

5. Which of the following commands runs Jenkins from the command line?

- A. java -jar jenkins.war
- B. java -war jenkins.jar
- C. java -jar jenkins.jar
- D. java -war jenkins.war

Answer: A

Interview/Certification Questions

20m

1. 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.

Answer: B

Options A and D are not correct. AWS ECS uses EC2 instances with ECS-optimized AMI. You will have root access to the instances and you can manage them.

Option C is not a valid statement

For more information on ECS instances, [Link](#)

2. You have a set of Docker images that you use for building containers. You want to start using the Elastic Container Service and utilize the Docker images. You need a place to store these Docker images. What would you use for this purpose?

- A.** Use AWS DynamoDB to store the Docker images.
- B.** Use AWS RDS to store the Docker images.
- C.** Use EC2 Instances with EBS Volumes to store the Docker images.
- D.** Use the ECR Service to store the Docker images.

Answer: D

Amazon Elastic Container Registry (ECR) is a fully-managed Docker container registry that makes it easy for developers to store, manage, and deploy Docker container images. Amazon ECR is integrated with Amazon Elastic Container Service (ECS), simplifying your development to production workflow.

For more information on the Elastic Container Service, please visit the [Link](#)

3. Which of the following are the parameters specified in task definition? (Amazon ECS) (choose 3 options)

- A.** The Docker images to use with the containers in your task.
- B.** EC2 instance types to be used as container instances.
- C.** How much CPU and memory to use with each container.
- D.** AWS VPC and subnets to launch containers in.
- E.** The command the container should run when it is started.

Answer: A, C and E

Option B and D are parameters specified in creating an ECS cluster.

4. What is Maven? What is the benefit of integrating Maven with Jenkins?

Answer:

Maven is a build management tool. It uses a simple pom.xml to configure all the dependencies needed to build, test and run the code. Maven manages the full lifecycle of a test project. Once integrated with Jenkins, the maven Webdriver will build the project and execute all tests efficiently.

5. What are the advantages of Jenkins?

Answer:

Advantage of Jenkins includes:

- *Bugs tracking are easy at early stage in development environment.*
- *Provides a large numbers of plugin support.*
- *Iterative improvement to the code.*
- *Build failures are cached at integration stage.*
- *For each code commit changes an automatic build report notification generates.*
- *To notify developers about build report success or failure, it is integrated with LDAP mail server.*
- *Achieves continuous integration agile development and test driven development.*

- *With simple steps, maven release project is automated.*

Video of the Week

10m

- [What is Continuous Integration?](#)

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: Fibonacci](#)

Case study/Project

10m

- [Project-202: Phonebook Application \(Python Flask\) deployed on AWS Application Load Balancer with Auto Scaling and Relational Database Service using Terraform](#)

Closing

5m

-Next week's plan

-QA Session
