

TEAM LEAD VERSION (DevOps-Week-7)



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. In which language Ansible modules written?

- A. Ruby
- B. Java
- C. Python
- D. YAML

Answer: C

2. Ansible uses agent/master architecture.

- A. True
- B. False

Answer: B

3. Which of the following has highest priority for Ansible configuration settings?

- A. ansible.cfg (in the current directory)
- B. .ansible.cfg (in the home directory)
- C. ANSIBLE_CONFIG (an environment variable)
- D. /etc/ansible/ansible.cfg

Answer: C

4. 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

Answer: D

5. What is a Kubernetes volume?

- A. The software within an OS that controls capacity allocation for nodes
- B. A directory for the data accessible to containers in a pod
- C. Layering software that puts apps into compartments for easier deployment
- D. Code that enables two software programs to communicate

Answer: B

Interview/Certification Questions

20m

1. What are Ad-hoc commands?

Answer:

Ad-hoc commands are simple one-line commands which are used to perform a certain task. You can think of Ad-hoc commands as an alternative to writing playbooks.

For example, if we want to reboot all hosts in a particular group(web servers). Then you can write a playbook or simply run a one-off ad-hoc command.

2. What is "idempotency"?

Answer:

idempotency is an important Ansible feature. It prevents unnecessary changes in the managed hosts. With idempotency, you can execute one or more tasks on a server as many times as you need to, but it won't change

anything that's already been modified and is working correctly. To put it in basic terms, the only changes added are the ones needed and not already in place.

3. Your development team has just finished developing an application on AWS. This application is created in .NET and is hosted on an EC2 instance. The application currently accesses a DynamoDB table and is now going to be deployed to production. Which of the following is the ideal and most secure way for the application to access the DynamoDB table?

- A.** Pass API credentials to the instance using instance user data.
- B.** Store API credentials as an object in Amazon S3.
- C.** Embed the API credentials into your JAR files.
- D.** Assign an IAM role to the EC2 Instances

Answer: D

You can use roles to delegate access to users, applications, or services that don't normally have access to your AWS resources.

It is not a best practice to use IAM credentials for any production based application. It is always a good practice to use IAM Roles.

For more information on IAM Roles, please visit the [Link](#)

4. You have an application that has been dockerized. You plan to deploy the application in an AWS ECS cluster. As the application gets configuration files from an S3 bucket, the ECS containers should have the AmazonS3ReadOnlyAccess permission. What is the correct method to configure the IAM permission?

- A.** Add an environment to the ECS cluster configuration to allow the S3 read only access.
- B.** Add the AmazonS3ReadOnlyAccess permission to the IAM entity that creates the ECS cluster.
- C.** Modify the user data of ECS instances to assume an IAM role that has the AmazonS3ReadOnlyAccess permission.
- D.** Attach the AmazonS3ReadOnlyAccess policy to the ECS container instance IAM role. Attach this role when creating the ECS cluster

Answer: D

ECS containers have access to permissions that are supplied to the container instance role. Details please check the ECS documentation in [Link](#)

Option A is incorrect: Because ECS cluster uses the container instance IAM role instead of environment variables to control its permissions.

Option B is incorrect: Because the IAM entity that creates the ECS cluster does not pass its permissions to the ECS cluster. You need to configure an IAM role and attach it to the ECS cluster.

Option C is incorrect: This is not the correct method to configure IAM permissions for an ECS cluster.

Option D is CORRECT: After the AmazonS3ReadOnlyAccess policy is attached to the IAM role, the ECS instances can use the role to get objects from S3.

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Video of the Week

10m

- [What is Ansible?](#)

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: Draw Box](#)

Case study/Project

10m

Project should be explained to the students during the weekly meeting and has to be completed in one Sprint (2 weeks) 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
