STUDENT VERSION (DevOps-Week-8)

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 kind of a repository do you need if you to connect to other repositories in order to obtain different binaries? (Nexus)

A. Proxy
B. Hosted
C. General
D. Dynamic

2. What is the main difference between an artifact repository manager and a version control system? (Nexus)

A. You store what you develop in a version control system and what you build in an artifact repository
B. Artifact repository can only be used by 1 person whereas version control systems are for teams
C. Artifact repositories give more memory for less price.
D. Version control systems are slower to obtain the code.

3. Which of the following is a log integration system of Grafana?

A. Prometheus
B. Loki
C. MySQL
D. Graphite

4. How does Prometheus collect its metrics?

A. By scraping HTTP endpoints based on pull mechanism

B. By using service discovery

C. By adding custom code to set which metrics will be monitored

D. Metrics are set through a YAML configuration file

5. What are the default ports for Prometheus and Grafana?

A. Prometheus: **8080** Grafana: **3306**

B. Prometheus: **9000** Grafana: **3030**

C. Prometheus: **9090** Grafana: **3000**

D. Prometheus: **3306** Grafana: **9090**

Interview/Certification Questions   20m

1. For which of the following scenarios should a Solutions Architect consider using ElasticBeanStalk? (Choose Two)

A. A web application using Amazon RDS

B. An Enterprise Data Warehouse

C. A long-running worker process

D. Capacity provisioning and load balancing of website

E. A management task run once on nightly basis

2. You have 2 development environments hosted in 2 different VPCs in an AWS account in the same region. There is now a requirement to access the resources of one VPC from another. How could this be accomplished?

A. Establish a Direct Connect connection.

B. Establish a VPN connection.

C. Establish VPC Peering.

D. Establish Subnet Peering.

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

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

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-207 : Web Page Application (Postgresql-Nodejs-React) deployed on EC2's with Ansible, Docker and Nginx Proxy Server

Closing   5m

-Next week's plan

-QA Session