TEAM LEAD VERSION (Week-9)

Meeting Agenda

▶ Icebreaking

▶ Interview/Certification Questions

▶ Coding Challenge

▶ Video of the week

▶ Retro meeting

▶ Case study / project

Teamwork Schedule

Ice-breaking   10m

- 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.

Interview/Certification Questions   20m

1. An organization runs several EC2 instances inside a VPC using three subnets, one for Development, one for Test and one for Production. The Security team has some concerns about the VPC configuration and requires to restrict the communication across the EC2 instances using Security Groups.

Which of the following options is true for Security Groups?

A. You can change a Security Group associated to an instance if the instance state is stopped or running.
B. You can change a Security Group associated to an instance if the instance state is stopped but not if the instance state is running.
C. You can change a Security Group only if there are no instances associated to it.
D. The only Security Group you can change is the Default Security Group.
E. The only Security Group you can change is the Default Security Group.

Answer: *A*

2. You are the architect of a custom application running inside your corporate data center. The application runs with some unresolved bugs that produce a lot of data inside custom log files generating time-consuming activities to the operation team who is responsible for analyzing them.

You want to move the application to AWS using EC2 instances, and at the same time, take the opportunity for improving logging and monitoring capabilities but without touching the application code.

What AWS service should you use to satisfy the requirement?

A. AWS Kinesis Data Streams
B. AWS CloudTrail
C. AWS CloudWatch Logs
D. AWS Application Logs

Answer: *C*

3. While reviewing the Auto Scaling events for your application, you notice that your application is scaling up and down multiple times in the same hour.

What changes would you suggest in order to optimize costs while preserving elasticity? (SELECT TWO)

A. Modify the Auto Scaling group termination policy to terminate the older instance first.
B. Modify the Auto Scaling group termination policy to terminate the newest instance first.
C. Modify the Auto Scaling group cool down timers.
D. Modify the Auto Scaling group to use Scheduled Scaling actions.
E. Modify the CloudWatch alarm period that triggers your Auto Scaling scale down policy

Answer: *C and E*

4. Your company currently has a set of EC2 Instances hosted in AWS. The states of these instances need to be monitored and each state needs to be changed when a metric breaches a threshold value. Which step could be helpful to fulfill this requirement? (SELECT TWO)

A. Use CloudWatch logs to store the state change of the instances.
B. Create an Amazon CloudWatch alarm that monitors an Amazon EC2 instance
C. Use SQS to trigger a record to be added to a DynamoDB table.
D. Use AWS Lambda to store a change record in a DynamoDB table.

Answer: *A and B*

5. You have been designing a CloudFormation template that creates one elastic load balancer fronting two EC2 instances. Which section of the template should you edit so that the DNS of the load balancer is returned upon creation of the stack??

A. Resources
B. Parameters
C. Outputs
D. Mappings

Answer: *C*

6. 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.

Answer: *C*

7. 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.

Answer: *C*

8. There is a website hosted in AWS that might get a lot of traffic over the next couple of weeks. If the application experiences a natural disaster at this time, what should be used to reduce potential disruption to users?

A. Use an ELB to divert traffic to an Infrastructure hosted in another region.
B. Use an ELB to divert traffic to an Infrastructure hosted in another AZ.
C. Use CloudFormation to create backup resources in another AZ.
D. Use Route53 to route requests to another instance in a different region.

Answer: *D*

9. You are working as an AWS Architect for a start-up company. The company has web-servers deployed in all AZ's in the eu-central-1 (Frankfurt) region. These web servers have German news & local web content for people accessing these websites within Germany. These web servers have multiple records created for a single domain. The company is looking for a random selection of web-servers that will increase its availability. What would be the most appropriate routing policy for this requirement?

A. Latency routing policy
B. Weighted routing policy
C. Multivalue answer routing policy
D. Geolocation routing policy

Answer: *C*

10. A company has an entire infrastructure hosted on AWS. It requires to create code templates used to provision the same set of resources in another region in case of a disaster in the primary region. Which AWS service can be helpful in this regard?

A. AWS Beanstalk
B. AWS CloudFormation
C. AWS CodeBuild
D. AWS CodeDeploy

Answer: *B*

Coding Challenge   10m

- Find the Author

Video of the Week   5m

- Using CloudFormation Intrinsic Functions

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?

Case study/Project   15m

Case study 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-006 : Kittens Carousel Static Website deployed on AWS Cloudfront, S3 and Route 53 using Cloudformation

Closing   5m

-Next week's plan

-QA Session