***INTRODUCTION***

Hello, good morning, afternoon/ evening…

First of all, thank you for giving me this opportunity to interview in your established organization.

My name is \_\_\_\_\_\_. I have completed my (graduation/ post-graduation) in the year \_\_\_\_\_ From this ­­­­\_\_\_\_\_\_ college or university.

Initially I started working as a Trainee Cloud Engineer 3 year (mention experience as per your conveinient) back with “Capgemini” (mention your company) and currently I am Working as a AWS Cloud Engineer.

I have around 3.2 years (mention your experience) of experience in working on cloud technologies also I worked on **automating the services** to reduce the manual efforts.

1. What did you automated?

* Any infra related service automation. E.g lambda service for automation.
* Refer projects for use cases.

My responsibilities were to understand the business requirement specification and automate the services, also I handled the client request and **troubleshooting.**

1. What kind of troubleshooting you did?

* If client is facing issues in infrastructure then we used to resolve it.
* Example1: Suppose client wants to allow different security group then we used to change existing one.
* Example 2: suppose client wants custom AMI for his application to run then we used to create a custom AMI.

Custom AMI means GOLDEN AMI. If you want to launch your application and that is supported by linux (port 22), windows (port 3389) operating system. Suppose you picked linux AMI (Amazon linux 2) (port 22) client will request change the port number (2222)

Default AMI it is valid for 1 year, after year you need to change the password and update AMI. Custom AMI password reset and update AMI schedule after 3 years or 5 Years.

* Example 3: Changing the bucket policy as per the client requirement. GET, PUT, DELETE actions should be enable in bucket policy.

Also, my prior responsibility was **managing** & **monitoring the server** and also **monitoring the guard duty & cloud trail activities** such as taking appropriate action on findings if any malicious activity has been performed in an account guard duty informs us in a form of findings. Also worked on creating incidents on backup failures & automation set up (cloudformation) & testing

What is managing and monitoring the servers?

* **Managing servers** means checking up the volumes and snapshots is volume is throttled then add up a new volume or modifying the existing one also using load balancer and auto scaling we used **to manage the load** and directed that load to the targets. Also managing the infrastructure created to support application which is hosted on ec2 instance.
* **Monitoring servers** means checking up the metrics of the instances e.g CPU utilization, network in utilization, network out utilization, disk utilization, memory utilization. Also monitoring the cloud watch (to monitor ec2 instance metrics and also to monitor lambda logs) and cloud trail logs. I used to monitor the Guard duty findings. **Guard duty is basically a service which helps us to inform if any malicious activity has been performed in any aws account in the form of gurd duty findings.**

1. What malicious activities guard duty used to inform you?

* If someone tried to change the s3 bucket policy without having authenticated access. Then guard duty used to inform us.
* Somebody tried to delete the snapshot without having permission to access snapshots
* Somebody tried to allow particular port or IP address in security group which is not supposed to be allowed then also we used to get findings for the same.

Apart from this I worked on **DR setup** if any server fails in any availability zone my responsibility was to maintain the Data bases server in a s3 by syncing up s3 bucket with DR setup. Also I was involved in deployment support activities and billing audit meetings.

Also I was a part of deployment activities. I have supported devops teams for their pipeline to be executed on AWS. Creating and managing infra was my responsibility.

What is deployment activities?

We used to deploy devops pipeline on aws so I was part of that pipeline deployment activity where I used to provide support to devops teams. Like creating a suitable infra for pipeline deployment also installing the pipeline supported tools on VM (Virtual machine). And also if any infra related changes they want I used to make those.

These were my jobs and responsibilities in previous organization.

Use cases description:

1. Serverless computing: Automated EBS Backup Via Lambda:

In that we used IAM, Lambda, CloudWatch, EC2 service. We are creating snapshot for our server / EBS Volumes by using automated method. I created one IAM role Gave Ec2 full access permission, then I created one lambda function and attached existing role to my function and I wrote one code in python boto3 and I deployed this code in my lambda function and test code and I attached one Event-bridge (cloud watch) trigger and schedule the expression for 1hour.

So, every hour it was creating snapshot for my volume in case my server goes down or in a stopped state to manage this scenario I took backup of my EBS volume using this automated method without disturbing my server.

1. Server Scheduling Via Lambda:

As per the client requirement we scheduled some servers on desirable time using lambda function and cloudwatch service. The aim was is to start and stop servers on desirable time. I have created a lambda function to perform this activity and also used cloudwatch event. Also I have created cron job to perform this start/stop activity on given time on weekly basis.

1. Designing of CI/CD Pipeline infrastructure on AWS:

my key responsibility was to understand the requirement of Tools used in CI/CD pipeline. Installation of that tools on AWS Server. Understanding of infra server configuration. Selection of AMI and Instance type as per the requirement. Also I have done Jenkins installation on AWS server so that pipeline will run on AWS VM.

Managing data backup using S3 service and sometimes for storage as per the client requirement we have hosted JFrog artifactory on AWS Vm . Building an Infra and managing an infra for pipeline execution was my responsibility.

1. Automating alerts for Server metrics:

the aim was to send alerts if the Instance metrics such as CPU Utilization, Disk utilization, network utilization, Memory utilization. If the threshold crosses for any of these metrices it should send an email to the respected stake holders. We made use of lambda function the script was written in python language.

The working of the scipt was to check the threshold of the server metrics if it has crossed the threshold notification should go the stakeholders using SNS services. We also have made use of cloudwatch service to create alarms and also for monitering the metrics. For the lambda function we have used cloudwatch as a trigger so that whenever threshold crosses cloudwatch will invoke lambda function and In the destination we have configured SNS topic. If cpu utilisation goes beyond 75% or below 20% we should get a notification that instance has scaled up or scaled down. If it is going more than 75% scaled up has happened so that it will automatically reduce the task running under server. If CPU utilisation goes below 20% that means scaled down has happened it will automatically add up task on the server. This was the main functionality of this task

Role: - AWS Cloud Engineer

Responsibility: -

1. Monitoring Servers

2.Created backup report in Excel sheet.

3 .Handled client request and troubleshooting.

4. Writing cloud formation templates for automation

5. Creating an infra structure and architecture diagram for infra designing.

6. Supporting devops team for pipeline integration with AWS

7. Accessing and managing security of resources

8. Managing the access for Users