Top AWS Architect Interview Questions & Answers

**Q1. What is auto-scaling?**

Ans. Auto-scaling is a feature of AWS which allows you to configure and automatically provision and spin-up new instances without the need for your intervention.

**Q2. What are the different types of cloud services?**

Ans. Different types of cloud services are:

 Software as a Service (SaaS)

 Data as a Service (DaaS)

 Platform as a Service (PaaS)

 Infrastructure as a Service (IaaS)

**Q3. What is Amazon S3?**

Ans. Amazon S3 (Simple Storage Service) is an object storage with a simple web service

Interface to store and retrieve any amount of data from anywhere on the web.

**Q4. What is an AMI?**

Ans. AMI (Amazon Machine Image) is a snapshot of the root filesystem.

**Q5. Can I vertically scale an Amazon instance? How do you do it?**

Ans. Yes. Spin up a new larger instance than the one you are running, then pause that instance to detach the root EBS volume from this server and discard. After that, stop the live instance and detach its root volume. Note the unique device ID and attach that root volume to the new server, and start again. This way you will have scaled vertically.

**Q6. How many buckets can be created in AWS by default?**

Ans. By default, 100 buckets can be created.

**Q7. Will you use encryption for S3?**

Ans. Yes I will, as it is a proprietary technology. It’s always a good idea to consider encryption for sensitive data on S3.

**Q8. What is Geo Restriction in CloudFront?**

Ans. Geo restriction, also known as geoblocking, is used to prevent users in specific geographic locations from accessing content that you’re distributing through a CloudFront web distribution.

Q13. Explain what is a T2 instance?

Ans. T2 instances are designed to provide moderate baseline performance and the capability to burst to higher performance as required by workload.

Q14. What is AWS Lambda?

Ans. AWS Lambda is a compute service that lets you run code in the AWS Cloud without provisioning or managing servers.

Q15. What is a Serverless application in AWS?

Ans. The AWS Serverless Application Model (AWS SAM) extends AWS CloudFormation to provide a simplified way of defining the Amazon API Gateway APIs, AWS Lambda functions, and Amazon DynamoDB tables needed by your serverless application.

Q18. Differentiate between stopping and terminating an instance

Ans. When an instance is stopped, the instance performs a normal shutdown and then transitions to a stopped state.

When an instance is terminated, the instance performs a normal shutdown, then the attached Amazon EBS volumes are deleted unless the volume’s deleteOnTermination attribute is set to false.

Q19. Is it possible to change the private IP addresses of an EC2 while it is running/stopped in

a VPC?

Ans. The primary private IP address cannot be changed. Secondary private addresses can be unassigned, assigned or moved between interfaces or instances at any point.

Q21. What is AWS?

Ans. It is the acronym for Amazon Web Service. It is a comprehensive, evolving cloud- computing platform of Amazon. It is also known as Infrastructure as a Service (IaaS).

Q22. What is the boot time for an instance store backed instance?

Ans. The boot time for an Amazon Instance Store -Backed AMI is less than 5 minutes.

Q24. What is Identity Access Management and how is it used?

Ans. It is a web service, which is used to securely control access to AWS services. Identity Access Management allows you to manage users, security credentials, and resource

permissions.

Q25. Explain the advantages of AWS’s Disaster Recovery (DR) solution.

Ans. Following are the advantages of AWS’s Disaster Recovery (DR) solution:

 AWS offers a cost-effective backup, storage, and DR solution, helping the companies to reduce their capital expenses

 Fast setup time and greater productivity gains

 AWS helps companies to scale up even during seasonal fluctuations

 It seamlessly replicates on-premises data to the cloud

 Ensures fast retrieval of files

Q27. What is DynamoDB?

Ans. DynamoDB is a fully managed proprietary NoSQL database service, supporting key-value and document data structures. It can be used when a fast and flexible NoSQL database with a flexible data model and reliable performance is required.

Q28. What is Redshift?

Ans. Redshift is a petabyte size data warehouse service by Amazon. It is easy, cost-effective, and scalable, and can be fully configured to analyze your entire data with the existing business intelligence tools.

Q29. Which data centers are deployed for cloud computing?

Ans. There are two data centers in cloud computing, one is Containerized Data centers, and another is Low-Density Data Centers.

Q30. Which AWS services will you use to collect and process e-commerce data for near real-

time analysis?

Ans. Following are the AWS services will be used to collect and process e-commerce data for near real-time analysis:

 Amazon DynamoDB

 Amazon ElastiCache

 Amazon Elastic MapReduce

 Amazon Redshift

Q31. What is SQS?

Ans. Simple Queue Service (SQS) is a distributed message queuing service that acts as a mediator for two controllers. It is a pay-per-use web service.

Q36. How do you access the data on EBS in AWS?

Ans. Data cannot be accessible on EBS directly by a graphical interface in AWS. This process includes assigning the EBS volume to an EC2 instance. Here, when the volume is connected to any of the instances either it can be Windows or Unix, you can write or read on it. First, you can take a screenshot from the volumes with data and build unique volumes with the help of screenshots. Here, each EBS volume can be attached to only a single instance.

Q37. What is the difference between Amazon RDS, Redshift, and Dynamo DB?

Ans. Differentiate between Amazon RDS, Redshift and Dynamo DB:

Features Amazon RDS Redshift Dynamo DB

Primary Usage Feature

Conventional Databases

Datawarehouse

Database for dynamically modified data

Database Engine

MySQL, Oracle DB, SQL Server, Amazon Aurora, Postgre SQL

Redshift

NoSQL

Computing Resources

Instances with 64 vCPU and 244 GB RAM

Nodes with vCPU and 244 GB RAM

Not specified, SaaS- Software as a Service.

Multi A-Z Replication

Additional Service

Manual

In-built

Maintenance Window

30 minutes every week.

30 minutes every week.

No impact

Q39. Mention the possible connection issues you encounter when connecting to an EC2

instance?

Ans. Following are the possible connection issues you encounter when connecting to an EC2 instance:

 Server refused key

 Connection timed out

 Host key not found, permission denied.

 Unprotected private key file

 No supported authentication method available

Q40. What are lifecycle hooks in AWS autoscaling?

Ans. Lifecycle hooks can be added in the autoscaling group. It enables you to perform custom

actions by pausing instances where the autoscaling group terminates and launches them. Every auto-scaling group consists of multiple lifecycle hooks.

Q41. What is a Hypervisor?

Ans. A Hypervisor is a type of software used to create and run virtual machines. It integrates physical hardware resources into a platform which are distributed virtually to each user. Hypervisor includes Oracle Virtual Box, Oracle VM for x86, VMware Fusion, VMware Workstation, and Solaris Zones.

Q42. Explain the use of Route Table?

Ans. Route Table is used to control the network traffic where each subnetwork of VPC is associated with a route table. Route table consists of a large number of information, whereas

connecting multiple subnetworks to a route table is also feasible.

Q44. Explain the role of AWS CloudTrail?

Ans. AWS CloudTrail is a service designed for monitoring and auditing actions of API calls. With AWS CloudTrail, the user can monitor and retain account activity connected with actions covering the AWS infrastructure.peed

Q47. How does Encryption is done in S3?

Ans. Encryption is done in S3 by using:

 In Transit: SSL/TLS

     

At Rest

Server-Side in Encryption

S3 Managed Keys – SSE-S3

AWS Key Management Service, Managed of Keys – SSE-KMS

6.Server-Side Encryption with Customer Provided Keys – SSE-C Client-Side Encryptions

Q48. Explain Amazon Route 53?

Ans. Amazon Route 53 is defined as a scalable and highly available Domain Name System (DNS). It is created for the benefit of developers and companies to route end users to internet applications by translating names which is the most reliable and cost-effective process.

Q49. What are the pricing models for EC2 instances?

Ans. Following are the different pricing model for EC2 instances:

 Dedicated

 Reserved

 On-demand

 Scheduled

 Spot

Q50. What are the parameters for S3 pricing?

Ans. Following are the parameters for S3 pricing:

 Transfer acceleration

 Number of requests you make

 Storage management

 Data transfer

 Storage used

Q51. What are the best security practices for Amazon EC2?

Ans. Below are the steps to follow for secure Amazon EC2 best practices:

 Using AWS identity and access management to manage access to the AWS resource.

 Exclude access by initializing trusted host or network to access ports on our instance.

 Evaluate the rules in your security groups.

 Stop passport login, for instance, opened from your AMI

Q52. How do you add a current instance to a new Autoscaling group?

Ans. Follow the steps to know how you can add an existing instance to a new auto-scaling group:

 Launch EC2 console

 Under instances select your instance

 Choose the action, instance setting and attach to the auto-scaling group

 Select a new auto-scaling group

 Comply with this group to the instance

 If needed edit the instance

 In the end, you can add the instance to a new auto-scaling group successfully.

Q53. Name the different types of instances?

Ans. Following are the different types of instances:

 Memory-optimized

 Accelerated computing

 Computer-optimized

 General-purpose

 Storage optimize

Q55. What are the edge locations?

Ans. An edge location is defined as the place where the content is used to be cached. If a user finds to access some content, then the given content will be searched in the edge location. If it is not available, then the content will be accessible from the origin location, and a copy will be

stored.

Q56. What are NAT gateways?

Ans. NAT(Network Address Translation) used to enable instances in a private subnet that helps to connect to the internet but avoid the internet from starting a connection with those instances.

Q57. Name the database types in RDS?

Ans. Following are the types of databases in RDS:

 MYSQL server

 Postgresql

 SQL server

 Aurora

 Oracle

 MariaDB

Q58. What are EBS Volumes?

Ans. Elastic Block Store(EBS) is a block-level storage device, wherein each block acts as a separate hard drive. These volumes are used with EC2 instances, and each EBS volume can be attached to only one EC2 instance.

Q59. Name the types of backups in the RDS database?

Ans. Following are two types of backups in the RDS database:

 Automated backups

 Manual backups

Q60. Mention the benefits of auto-scaling?

Ans. Following are some of the benefits of auto-scaling:

 Better availability

 Better fault tolerance

 Better cost management

Q61. How can Amazon SQS be used?

Ans. Amazon SQS (Simple Queue Service) is a message passing mechanism used to make a connection between different connectors that are connected with each other. It is also used as an interlink between multiple components of Amazon.

Q63. Is it possible to minimize an EBS volume?

Ans. No, it is not possible to minimize volume, we can only increase it.

Q64. Is there any possible way to restore the deleted S3 bucket?

Ans. We can only restore it when versioning is enabled.

Q65. Name the types of AMI provided by AWS?

Ans. Following are two types of AMI provided by AWS:

 Instance Store backed

 EBS Backed

These are some of the popular questions asked in AWS architect interviews. If you are someone who has recently started your career in cloud computing, you can always get certified in one of the technical courses like AWS Architect to get the requisite knowledge and skills.