



Top AWS Architect Interview Questions and Answers

Amazon Web Services is a subsidiary of Amazon.com that provides on-demand cloud computing platforms. Cloud computing has gained a lot of market in the world with various advantages it offers to organizations. There are hundreds and thousands of customers which have benefitted from AWS across more than 190 countries in the world.

As more and more companies shift important processes of their businesses online, cloud architects and solution architects are in high demand. Being an AWS architect, you can be sure that you will be getting a lot of opportunities from some of the prominent companies in the world. [Cloud computing offers a lot of opportunities](#) and you can start your successful career as an AWS architect with a successful job interview.

According to Forbes, AWS Certified Solutions Architect Leads among the top-paying IT certifications. We are here to help you upgrade your career in alignment with company needs. With the following list of questions and answers, you can prepare for an interview in cloud computing and get a chance to advance your career.

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 SimpleDB?

Ans. It is a structured data store that supports indexing and data queries to both EC2 and S3.

Q5. What is an AMI?

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

Q6. What is the type of architecture, where half of the workload is on the public load while at the same time half of it is on the local storage?

Ans. Hybrid cloud architecture.

Q7. Can I vertically scale an Amazon instance? How do you do it?

Ans. Yes. Spinup 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.

Q8. How can you send a request to Amazon S3?

Ans. You can send requests by using the REST API or the AWS SDK wrapper libraries that wrap the underlying Amazon S3 REST API.

Q9. How many buckets can be created in AWS by default?

Ans. By default, 100 buckets can be created.

Q10. Should encryption be used for S3?

Ans. Encryption should be considered for sensitive data as S3 is a proprietary technology.



Q11. What are the various AMI design options?

Ans. Fully Baked AMI, JeOS (just enough operating system) AMI, and Hybrid AMI.

Q12. 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.

Q16. What is the use of Amazon ElastiCache?

Ans. Amazon ElastiCache is a web service that makes it easy to deploy, operate, and scale an in-memory data store or cache in the cloud.

Q17. Explain how the buffer is used in Amazon web services?

Ans. The buffer is used to make the system more robust to manage traffic or load by synchronizing different components.



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.

Q20. Give one instance where you would prefer Provisioned IOPS over Standard RDS storage?

Ans. When you have batch-oriented workloads.

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.

Q23. 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.

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

Q26. How do you send requests to Amazon S3?

Ans. We can achieve this by using the REST API or the AWS SDK wrapper libraries. These elements wrap the underlying Amazon S3 REST API.

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.

Q32. What are the popular DevOps tools?

Ans. The popular DevOps tools are –

- Chef, Puppet, Ansible, and SaltStack – Deployment and Configuration Management Tools
- Docker – Containerization Tool
- Git – Version Control System Tool
- Jenkins – Continuous Integration Tool
- Nagios – Continuous Monitoring Tool
- Selenium – Continuous Testing Tool

Q33. What is Hybrid cloud architecture?

Ans. It is a type of architecture where the workload is divided into two halves among which one is on public load and the other is on the local storage. It is a mix of on-premises, private cloud and third-party, and public cloud services between two platforms.

Q34. What Is Configuration Management?



Ans. Configuration management is used to manage the configuration of systems and the services that they provide entirely through code. This is a repetitive and consistent process that is achieved through –

- Intuitive command-line interface
- Lightweight and easily readable domain-specific language (DSL)
- Comprehensive REST-based API

Q35. What are the features of Amazon cloud search?

Ans. Amazon cloud search features:

- AutoComplete advice
- Boolean Searches
- Entire text search
- Faceting term boosting
- Highlighting
- Prefix Searches
- Range searches

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

Q38. If you hold half of the workload on the public cloud whereas different half is on local storage, in such case what type of architecture can be used?

Ans. In such cases, the hybrid cloud architecture can be used.

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.

Q43. What is the use of Connection Draining?

Ans. Connection Draining is a process used to support load balancer. It keeps tracking all of the instances if any instance fails connection draining drag all the traffic from that specific failed instance and re-route the traffic to the active instances.

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.

Q45. Explain the use of Amazon Transfer Acceleration Service?

Ans. Amazon Transfer Acceleration Service is used to boost your data transfer with the help of advanced network paths. It also transfers files fast and secures between your client and an S3 bucket.

Q46. How to update AMI tools at the Boot-Time on Linux?

Ans. To update AMI tools at the Boot-Time on Linux:

```
# Update to Amazon EC2 AMI tools
```



echo " + Updating EC2 AMI tools"

```
yum update -y aws-amitools-ec2
```

echo " + Updated EC2 AMI tools"

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

Q54. Mention the different layers of cloud architecture?



Ans. Following are the different types of layers in cloud architecture:

- Node controller
- Cloud controller
- Cluster controller
- Storage controller

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.

Q62. Name some examples of the DB engine that is used in AWS RDS?

Ans. Below are the few examples of DB engine that is used in AWS RDS:

- MS-SQL DB
- MYSQL DB
- Maria DB
- Oracle DB
- Postgre DB

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.

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