



review



review questions

Introduction to AWS V01-010



Course title

**BackSpace Academy
AWS Certified Associate**



Question

A company would like to have durable storage for static content and infinitely scalable data storage infrastructure at the lowest cost. Which service below should the company choose?

Answers

- A. Amazon Elastic Block Store (Amazon EBS)
- B. Amazon S3
- C. AWS Storage Gateway
- D. Amazon Elastic File System (Amazon EFS)

B

Amazon Simple Storage Service (Amazon S3) is an object storage service that offers industry-leading scalability, data availability, security, and performance. This means customers of all sizes and industries can use it to store and protect any amount of data for a range of use cases, such as data lakes, websites, mobile applications, backup and restore, archive, enterprise applications, IoT devices, and big data analytics.

<https://aws.amazon.com/s3/?nc=sn&loc=1>

Question

A company has a 500 TB image repository and would like it to be transported to AWS for processing. Which AWS service can import this data MOST cost-effectively?

Answers

- A. AWS Snowball
- B. AWS Direct Connect
- C. AWS VPN
- D. Amazon S3

A

When planning on getting your data into the cloud as a part of an application migration or a data center shutdown, you will run into the hard limits of data transport. When your Internet speeds are not enough to keep up with your data migration plan, it's time to consider AWS Snowball. The Snowball appliance allows you to move archives, data lakes, and whatever data you have at faster-than Internet speeds right into Amazon S3 buckets. From Amazon S3, data can be archived into Glacier or analyzed by other services such as AWS Redshift or EMR. This implementation guide will get you started with AWS Snowball's quick, simple, and secure process for migrating large amounts of data into AWS.

<https://aws.amazon.com/getting-started/projects/migrate-petabyte-scale-data/>

Question

Which of the following AWS services are serverless? (Choose two.)

Answers

- A. AWS Lambda
- B. Amazon Elasticsearch Service
- C. AWS Elastic Beanstalk
- D. Amazon DynamoDB
- E. Amazon Redshift

A D

You can use cloud services like AWS Lambda, Amazon API Gateway, and Amazon DynamoDB to implement serverless architectural patterns that reduce the operational complexity of running and managing applications.

<https://aws.amazon.com/lambda/serverless-architectures-learn-more/>

Question

Which of the following AWS can be used to distribute traffic between one or more Amazon EC2 instances?

Answers

- A. NAT gateway
- B. Elastic Load Balancing
- C. Amazon Athena
- D. AWS PrivateLink

B

Elastic Load Balancing automatically distributes incoming application traffic across multiple targets, such as Amazon EC2 instances, containers, IP addresses, Lambda functions, and virtual appliances.

<https://docs.aws.amazon.com/elasticloadbalancing/latest/userguide/what-is-load-balancing.html>

Question

Which action should you take if you are planning to launch two additional Amazon EC2 instances to increase availability?

Answers

- A. Launch the instances across multiple Availability Zones in a single AWS Region.
- B. Launch the instances as EC2 Reserved Instances in the same AWS Region and the same Availability Zone.
- C. Launch the instances in multiple AWS Regions, but in the same Availability Zone.
- D. Launch the instances as EC2 Spot Instances in the same AWS Region, but in different Availability Zones.

A

Launching across multiple Availability Zones in a single AWS Region is a good approach for availability, as if an availability zone goes down there will be other resources available in other availability zones to continue the workload.

<https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/using-regions-availability-zones.html#concepts-availability-zones>

Question

An Enterprise company is building an application that requires the ability to send, store, and receive messages between application components. The company has another requirement to process messages in first-in, first-out (FIFO) order. Which service below should the company use?

Answers

- A. AWS Step Functions
- B. Amazon Simple Notification Service (Amazon SNS)
- C. Amazon Kinesis Data Streams
- D. Amazon Simple Queue Service (Amazon SQS)

D

You can now use Amazon Simple Notification Service (Amazon SNS) FIFO topics, in combination with Amazon Simple Queue Service (Amazon SQS) FIFO queues, to build applications that require messages to be sent and processed in a strict sequence and without duplicates. SNS FIFO is intended for customer use cases where it is critical to maintain the consistency in processing messages across multiple independent services in a strictly ordered manner.

<https://aws.amazon.com/sqs/>

Question

Which AWS service or feature is used to send both text and email messages from distributed applications?

Answers

- A. Amazon Simple Notification Service (Amazon SNS)
- B. Amazon Simple Email Service (Amazon SES)
- C. Amazon CloudWatch alerts
- D. Amazon Simple Queue Service (Amazon SQS)

A

Amazon Simple Notification Service (Amazon SNS) is a fully managed messaging service for both application-to-application (A2A) and application-to-person (A2P) communication.

The A2A pub/sub functionality provides topics for high-throughput, push-based, many-to-many messaging between distributed systems, microservices, and event-driven serverless applications. Using Amazon SNS topics, your publisher systems can fanout messages to a large number of subscriber systems including Amazon SQS queues, AWS Lambda functions and HTTPS endpoints, for parallel processing, and Amazon Kinesis Data Firehose. The A2P functionality enables you to send messages to users at scale via SMS, mobile push, and email.

<https://aws.amazon.com/sns/>

Question

Which service below is designed to transfer petabytes of data in and out of the cloud?

Answers

- A. AWS Storage Gateway
- B. Amazon S3 Glacier Deep Archive
- C. Amazon Lightsail
- D. AWS Snowball

D

When transferring petabytes of data, we recommend that you plan and calibrate your data transfer between the Snowball you have on-site and your workstation according to the following guidelines. Small delays or errors can significantly slow your transfers when you work with large amounts of data.

<https://docs.aws.amazon.com/snowball/latest/ug/transfer-petabytes.html>

Question

Which service below can be used to provide an on-demand, cloud-based contact center?

Answers

- A. AWS Direct Connect
- B. Amazon Connect
- C. AWS Support Center
- D. AWS Managed Services

B

Customers can call into your Amazon Connect contact center using any phone and speak to an agent. You can define other interactions with your customers in contact flows.

<https://aws.amazon.com/connect/faqs/>

Question

Which service below can be used to privately store and manage versions of source code?

Answers

- A. AWS CodeBuild
- B. AWS CodeCommit
- C. AWS CodePipeline
- D. AWS CodeStar

B

AWS CodeCommit is a version control service hosted by Amazon Web Services that you can use to privately store and manage assets (such as documents, source code, and binary files) in the cloud. For information about pricing for CodeCommit.

<https://docs.aws.amazon.com/codecommit/latest/userguide/welcome.html>

Question

A company wants to make sure that its infrastructure is designed for fault tolerance and business continuity in the event of an environmental disruption. Which infrastructure component should the company replicate across?

Answers

- A. Edge locations
- B. Availability Zones
- C. Regions
- D. Amazon Route 53

B

An Availability Zone (AZ) is one or more discrete data centers with redundant power, networking, and connectivity in an AWS Region. AZs give customers the ability to operate production applications and databases that are more highly available, fault tolerant, and scalable than would be possible from a single data center.

https://aws.amazon.com/about-aws/global-infrastructure/regions_az/

Question

An Enterprise company wants to connect to AWS over a private, low-latency connection from its remote office. What is the recommended service to meet these requirements?

Answers

- A. Create a VPN tunnel
- B. Connect across the public internet
- C. Use VPC peering to create a connection.
- D. Use AWS Direct Connect.

D

AWS Direct Connect enables you to securely connect your AWS environment to your on-premises data center or office location over a standard 1 gigabit or 10 gigabit Ethernet fiber-optic connection. AWS Direct Connect offers dedicated high speed, low latency connection, which bypasses internet service providers in your network path.

<https://aws.amazon.com/directconnect/>

Question

An Enterprise company wants to transfer petabytes of data as quickly as possible from on-premises locations to the AWS Cloud. Which service below should the company use?

Answers

- A. AWS Snowball
- B. AWS Global Accelerator
- C. Amazon S3 Transfer Acceleration
- D. Amazon Connect

A

AWS Snowball is a data transport solution that accelerates moving terabytes to petabytes of data into and out of AWS using storage appliances designed to be secure for physical transport. Using Snowball helps to eliminate challenges that can be encountered with large-scale data transfers including high network costs, long transfer times, and security concerns.

<https://aws.amazon.com/getting-started/projects/migrate-petabyte-scale-data/>

Question

Which statement is true about AWS global infrastructure?

Answers

- A. Availability Zones can span multiple AWS Regions.
- B. A VPC can have different subnets in different AWS Regions.
- C. AWS Regions consist of multiple Availability Zones.
- D. A single subnet can span multiple Availability Zones.

C

AWS delivers the highest network availability of any cloud provider. Each region is fully isolated and comprised of multiple AZs, which are fully isolated partitions of our infrastructure.

<https://aws.amazon.com/about-aws/global-infrastructure/>

Question

The AWS global infrastructure consists of Regions, Availability Zones, and what else?

Answers

- A. VPCs
- B. Data centers
- C. Dark fiber network links
- D. Edge locations

D

AWS Global Infrastructure has 230+ Points of Presence 218+ Edge Locations and 12 Regional Edge Caches

<https://aws.amazon.com/about-aws/global-infrastructure/>

Question

A new company is required to store its data close to its primary users. Which benefit of the AWS Cloud supports this requirement?

Answers

- A. Security
- B. High availability
- C. Elasticity
- D. Global footprint

D

AWS has the largest global infrastructure footprint of any provider, and this footprint is constantly increasing at a significant rate. When deploying your applications and workloads to the cloud, you have the flexibility in selecting a technology infrastructure that is closest to your primary target of users.

<https://aws.amazon.com/about-aws/global-infrastructure/>

Question

Which AWS infrastructure below enables global deployment of compute and storage?

Answers

- A. Availability Zones
- B. Regions
- C. Tags
- D. Resource groups

B

The AWS Global Infrastructure is built for performance. AWS Regions offer low latency, low packet loss, and high overall network quality. This is achieved with a fully redundant 100 GbE fiber network backbone, often providing many terabits of capacity between Regions.

<https://aws.amazon.com/about-aws/global-infrastructure/>

Question

Which service below is designed to help users who want to use machine learning for natural language processing (NLP) but do not have experience in machine learning?

Answers

- A. Amazon Comprehend
- B. Amazon SageMaker
- C. AWS Deep Learning AMIs (DLAMI)
- D. Amazon Rekognition

A

Amazon Comprehend uses natural language processing (NLP) to extract insights about the content of documents. Amazon Comprehend processes any text file in UTF-8 format. It develops insights by recognizing the entities, key phrases, language, sentiments, and other common elements in a document.

<https://docs.aws.amazon.com/comprehend/latest/dg/what-is.html>

Question

Which service or feature below allows a user to establish a dedicated network connection between a company's on-premises data center and the AWS Cloud?

Answers

- A. AWS Direct Connect
- B. VPC peering
- C. AWS VPN
- D. Amazon Route 53

A

AWS Direct Connect links your internal network to an AWS Direct Connect location over a standard Ethernet fiber-optic cable. One end of the cable is connected to your router, the other to an AWS Direct Connect router. With this connection, you can create virtual interfaces directly to public AWS services (for example, to Amazon S3) or to Amazon VPC, bypassing internet service providers in your network path.

<https://docs.aws.amazon.com/directconnect/latest/UserGuide/Welcome.html>

Question

Which type of AWS infrastructure deployment below puts AWS compute, storage, database, and other select services closer to end users to run latency-sensitive applications?

Answers

- A. AWS Regions
- B. Availability Zones
- C. Local Zones
- D. Edge locations

C

AWS Local Zones are a type of AWS infrastructure deployment that place compute, storage, database, and other select services closer to large population, industry, and IT centers, enabling you to deliver applications that require single-digit millisecond latency to end-users.

<https://aws.amazon.com/about-aws/global-infrastructure/localzones/features/#:~:text=AWS%20Local%20Zones%20are%20a,millisecond%20latency%20to%20end-users.>

Question

Which service is an AWS-managed Hadoop framework that makes it easy, fast, and cost-effective to process large amounts of data across dynamically scalable Amazon EC2 instances?

Answers

- A. Amazon EMR
- B. Amazon EC2
- C. AWS Elastic Beanstalk
- D. Amazon Redshift

A

HBase integrates seamlessly with Apache Hadoop and the Hadoop ecosystem and runs on top of the Hadoop Distributed File System (HDFS) or Amazon S3 using Amazon Elastic MapReduce (EMR) file system, or EMRFS. HBase serves as a direct input and output to the Apache MapReduce framework for Hadoop and works with Apache Phoenix to enable SQL-like queries over HBase tables.

<https://aws.amazon.com/big-data/what-is-hbase/>

Question

An upcoming company needs to transfer a large volume of data from an on-premises data center to the AWS Cloud. The company's internet connectivity is slow and unreliable. Which service below can facilitate this data transfer?

Answers

- A. Amazon S3 Glacier
- B. AWS Snowball
- C. AWS Storage Gateway
- D. Amazon Elastic File System (Amazon EFS)

B

AWS Snowball, a part of the AWS Snow Family, is an edge computing, data migration, and edge storage device that comes in two options. Snowball Edge Storage Optimized devices provide both block storage and Amazon S3-compatible object storage, and 40 vCPUs. They are well suited for local storage and large scale-data transfer.

<https://aws.amazon.com/snowball/?whats-new-cards.sort-by=item.additionalFields.postDateTime&whats-new-cards.sort-order=desc>

Question

An up and coming video company wants to distribute video content to millions of users worldwide over the internet. The company wants to use the AWS global network backbone to distribute cached content with low latency and high data transfer speeds. Which service below will meet these requirements?

Answers

- A. Amazon CloudFront
- B. AWS Global Accelerator
- C. AWS Direct Connect
- D. Amazon Connect

A

Amazon CloudFront automatically maps network conditions and intelligently routes your user's traffic to the most performant AWS edge location to serve up cached or dynamic content.

<https://aws.amazon.com/cloudfront/>

Question

Which AWS Services below can be used to deploy applications on AWS? (Choose two.)

Answers

- A. AWS Elastic Beanstalk
- B. AWS Config
- C. AWS OpsWorks
- D. AWS Application Discovery Service
- E. Amazon Kinesis

A C

AWS Elastic Beanstalk is an easy-to-use service for deploying and scaling web applications and services developed with Java, NET, PHP, Node.js, Python, Ruby, Go, and Docker on familiar servers such as Apache, Nginx, Passenger, and IIS.

AWS OpsWorks is an application-management service that makes it easy for both developers and operations personnel to deploy and operate applications of all shapes and sizes

<https://aws.amazon.com/elasticbeanstalk/faqs/>

<https://docs.aws.amazon.com/opsworks/latest/userguide/welcome.html>

Question

Which services below offer compute capabilities? (Choose two.)

Answers

- A. Amazon EC2
- B. Amazon S3
- C. Amazon Elastic Block Store (Amazon EBS)
- D. Amazon Cognito
- E. AWS Lambda

A E

Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides secure, resizable compute capacity in the cloud. It is designed to make web-scale computing easier for developers.

AWS Lambda lets you run code without provisioning or managing servers. You pay only for the compute time you consume—there is no charge when your code is not running.

<https://docs.aws.amazon.com/whitepapers/latest/aws-overview/compute-services.html>

Question

How should a company web application be deployed to ensure high availability in the AWS Cloud?

Answers

- A. Deploy multiple instances of the application in multiple Availability Zones.
- B. Deploy multiple instances of the application in a single Availability Zone.
- C. Deploy the application to a compute-optimized Amazon EC2 instance in a single Availability Zone.
- D. Deploy the application in one Amazon EC2 instance in an Auto Scaling group.

A

Deploy across multiple availability zones.

https://aws.amazon.com/about-aws/global-infrastructure/regions_az/

Question

Which of the following can be used to describe infrastructure as code in the AWS Cloud?

Answers

- A. AWS CLI
- B. AWS CloudFormation
- C. AWS CodeDeploy
- D. AWS Amplify

B

AWS CloudFormation is a convenient provisioning mechanism for a broad range of AWS and third-party resources. It supports the infrastructure needs of many different types of applications such as existing enterprise applications, legacy applications, applications built using a variety of AWS resources, and container-based solutions (including those built using AWS Elastic Beanstalk).

<https://aws.amazon.com/cloudformation/faqs/>